

#### **REVISED REPORT**

## Stage 4 Archaeological Mitigation

Duncan Site (BfGd-9), Part of Lot 5, Concession 10, Dalhousie Township, Lanark County, Ontario

Licensee: Randy Hahn, Ph.D. (P1107)

PIF Number: P1107-0032-2020

Submitted to:

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## **Executive Summary**

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

Golder Associates Ltd. (Golder) was retained by Thomas Cavanagh Construction Limited to complete a Stage 4 archaeological mitigation of impacts for the Duncan Site (BfGd-9) in support of an *Aggregate Resources Act* (ARA) license application for the proposed Highland Line Pit located within part of Lot 5, Concession 10, Dalhousie Township, Lanark County, Ontario (Maps 1 and 2).

The objectives of this Stage 4 mitigation of impacts are to document the archaeological context, cultural features and artifacts for all parts of the archaeological site, to document the removal of the site, and to preserve the information about the site for future study.

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 in copper mined 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<sup>th</sup> century. The Duncan Site (BfGd-9) is likely associated with the mid-19<sup>th</sup> century Duncan farmstead shown on a 1863 map (Map 3) approximately 100 m to the north.

The Duncan Site (BfGd-9) was identified during the Stage 1 and 2 archaeological assessment for the proposed Highland Line Pit (Golder 2020). The Stage 2 pedestrian survey and CSP resulted in the discovery of 106 historical artifacts dating to the mid- 19<sup>th</sup> century. Stage 3 excavation resulted in the recovery of 291 historical artifacts and the identification of one possible cultural feature.

The Stage 4 mitigation was conducted on September 17 and 18, 2020, under the field supervision of the licensee, Randy Hahn (P1107). An excavator equipped with a flat-edged bucket was used to conduct mechanical topsoil removal. Following mechanical topsoil removal, Feature 1 was cross sectioned and hand excavated with its soil screened through 6 mm mesh. A total of 49 artifacts were collected during the hand excavation of Feature 1. No additional features were identified following the mechanical topsoil removal.

Feature 1 may be the result of modern ground disturbance. As the Duncan Site is in an agricultural field, subsequent ploughing may have removed surface evidence of the excavation from the plough zone. As such Feature 1 likely does not date to the historical occupation of the site.

The Stage 4 mitigation supports the interpretation of the Duncan Site made in Golder's (2021) Stage 3 archaeological assessment that the site is a mid-19<sup>th</sup> century domestic refuse scatter. The refuse was likely deposited by the Duncan family whose farmstead is shown on 1863 map of Lanark County located outside of the present study area approximately 100 m to the northwest. Although the Duncan family occupied the farmstead until 1895, the artifacts suggest the Duncan Site dates to the mid-19<sup>th</sup> century.



This Stage 4 mitigation of development impacts resulted in the following recommendations:

1) The Duncan site (BfGd-9) has been fully mitigated and requires no additional archaeological assessments.

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.



# **Project Personnel**

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## **Abbreviations**

ASDB Archaeological Site Database

BP Before Present, taken to mean before 1950 and used as an alternative to BC/AD

CHVI Cultural Heritage Value or Interest

Golder Associates Ltd.

m Metre(s)

MHSTCI Ministry of Heritage, Sport, Tourism and Culture Industries

PIF Project Information Form



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## **APPENDIX A**

Artifact Inventory



## 1.0 PROJECT CONTEXT

## 1.1 Development Context

Golder Associates Ltd. (Golder) was retained by Thomas Cavanagh Construction Limited to complete a Stage 4 archaeological mitigation of impacts for the Duncan Site (BfGd-9) in support of an *Aggregate Resources Act* (ARA) license application for the proposed Highland Line Pit located within part of Lot 5, Concession 10, Dalhousie Township, Lanark County, Ontario (Maps 1 and 2).

Permission to access the property was provided by the client.

## 1.2 Objectives

The objectives of this Stage 4 mitigation of impacts follow the Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011: 4):

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



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### 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 and 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 (± 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 16<sup>th</sup> 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 16<sup>th</sup> 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 Matouweskarini along the Madawaska River to the west, the Onontchataronon 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-19<sup>th</sup> 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 17<sup>th</sup> 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 Riviére, 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 17<sup>th</sup> 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-Rivieres, Riviere Lievre 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-18<sup>th</sup> 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 n.d.).

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 began 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-20<sup>th</sup> 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-20<sup>th</sup> 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 19<sup>th</sup> and 20<sup>th</sup> 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 begin 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 west half of Lot 5, Concession 10 was granted by the Crown in 1859 to someone whose name is illegible in the land registry records. The property was purchased by James Duncan in 1870 who appears to have owned the property until 1895. John Duncan purchased the west half of the lot in 1928 where it has stayed in the family throughout the 20<sup>th</sup> century.

The 1863 Walling Map of Lanark County (Map 3) shows that Duncan resided on the property before the land registry indicates he purchased it. His farmstead is depicted approximately 100 m to the north of the Duncan Site. Canada Census Records for 1861 list James Duncan as a 49-year-old farmer born in Scotland living with his wife Joan (48) and their children Anne (18), Euphemia (15), Jane (12), and John (8). The family is listed as living in a one storey log house.

Further information on the Duncan family comes from a cemetery located along Highland Line approximately 2 km east of the study area. James Duncan's tombstone (Image 1: 25) indicates that he passed away in 1897 at age 88. A tombstone for a John Duncan (Image 2: 26) may be the resting place of the John Duncan who purchased the property in 1928. John Duncan is listed as passing away in 1935 and is buried with his wife Mary and daughter Sarah.

No structures are shown on the property in the 1880-1881 Belden Map of Dalhousie Township (Map 3). As Duncan still owned the property at this time, his farmstead may still have been occupied.



### 3.0 ARCHAEOLOGICAL CONTEXT

## 3.1 Study Area Environment

The Duncan Site 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 Duncan Site is located in an agricultural field with gently sloping topography.

## 3.2 Previous Archaeology

The MHSTCl's Archaeological Report Database was searched on February 4, 2021 for previous archaeological assessments completed within 50 m of the study area. This search determined that there are no previous archaeological assessments conducted within 50 m of the study area.

Archaeological assessments within Dalhousie Township have been few. The only known archaeological assessments conducted nearby were all for the McKinnon-Crain Pit located approximately 170 m north of the present study area. In 2006, Adams Heritage conducted a Stage 1 archaeological assessment for the east half of Lot 6, Concession 11, and southwest half of Lot 6 Concession 10 under PIF# P003-111-2006. The report was not available on the MHSTCI's report database, so the boundaries of the study area and recommendations made in the report are unknown. Kinickinick Heritage Consultants conducted the Stage 2 portion of the assessment under PIF# P039-097-2006. Again, information available on Kinickinick's assessment is limited but it appears to have identified two pre-contact archaeological sites which are described in Section 3.3 of this report. Kinickinick Heritage Consultants conducted a Stage 3 assessment of one of the two sites under PIF# P039-125-2007. The findings and recommendations of this assessment were not available.

A Stage 1 and 2 archaeological assessment was completed by Golder (2020) for the current project under PIF P1107-0027-2020. The Stage 2 portion of the archaeological assessment resulted in the identification of two historical archaeological sites dating to the mid-19<sup>th</sup> century, the Duncan Site (BfGd-9) and the Turnbull Site (BfGd-8). Both the Duncan (Golder 2021) and Turnbull Sites underwent Stage 3 archaeological assessment and were recommended for Stage 4 mitigation. The recommendations for the Duncan Site (BfGd-9) are provided in Section 3.3 below.

## 3.3 Stage 3 Recommendations

Golder's (2021) Stage 3 archaeological assessment made the following recommendations:

- 1) The Duncan site (BfGd-9) is of sufficient cultural heritage value or interest to warrant mitigative measures through a Stage 4 mitigation of development impacts.
- 2) As complete avoidance of the site is not considered to be a viable option, Stage 4 mitigation would entail mechanical topsoil removal followed by the hand excavation of cultural features. This strategy was developed in consultation with an MHSTCI review officer on September 10, 2020.
- 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 (MHSTCI 2011).
- 4) As per Standard 1 of Section 4.3 of the Standards and Guidelines for Consultant Archaeologists (MHSTCI 2011), mechanical excavation must extend to a minimum of 10 m beyond uncovered cultural features or to the end of the project boundary.



### 4.0 METHODOLOGY

## 4.1 Field Methodology

The Stage 4 archaeological mitigation was completed on September 17 and 18, 2020 under the field supervision of the licensee, Randy Hahn (P1107). The weather conditions observed during these activities are summarized in Table 1. At no time were the conditions detrimental to the recognition and recovery of archaeological material; field visibility and lighting conditions were appropriate.

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

Date	Weather	High Temperature (degrees Celsius)				
September 17, 2020	Partly Cloudy	15				
September 18, 2020	Partly Cloudy	13				

The area of the site was mechanically topsoil stripped by an excavator with a smooth-edged bucket (Images 3 to 5: 26-27) following the methods outlined in Standards 1 to 6 of Section 4.2.3 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). Mechanical topsoil stripping was implemented in order to identify additional cultural features. As the Duncan site is in an agricultural field that has been subject to ploughing for many years and no cultural strata had been identified beneath the ploughzone, the site meets Standard 1 of Section 4.2.3 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). Furthermore, the Stage 2 and 3 archaeological assessments have provided a representative sample of ploughzone artifacts and their distribution so the collection of additional ploughzone artifacts was determined to be unnecessary. The topsoil removal extended a distance of 10 m around all Stage 3 excavation units and cultural features.

The mechanical topsoil removal stopped at the topsoil/subsoil interface and the subsoil surface was cleaned by shovel to help in the identification of features. The exposed subsoil surface was not allowed to dry out before being examined for cultural features.

The 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 site grid was then staked in using tape measures and the 10 m Trimble grid. Feature 1, which was identified during the Stage 3 excavation, was fully exposed, recorded using the site grid and hand excavated. Each half of the feature was excavated separately so the profile of the feature could be drawn and photographed.



All feature fill was screened through 6 mm wire mesh so that artifacts could be identified and collected. The methodology of the artifact analysis and curation methods are described in Section 4.2.

All photo locations were surveyed with Garmin GPS MAP64 units and documented with digital photographs. The Garmin MAP64 GPS unit is a 12 channel SiRFstar III high-sensitivity GPS receiver (WAAS-enabled), which continuously tracks and uses up to 12 satellites to compute and update plotted positions. The accuracy of the unit is <3 m when averaged. The positions recorded for this Stage 4 investigation were typically accurate to <3 m. The projection used was Universal Transverse Mercator (UTM), Grid Zone 18, and referenced to the North American Datum (NAD) 1983.

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 basic 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. Historical artifacts included: 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 446 artifacts (106 from the Stage 2, 291 from the Stage 3, and 49 from the Stage 4) and is packed in one banker's box.



### 5.0 RECORD OF FINDS

The Stage 4 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 4 mitigation 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. 2 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. 42 photos.			
GPS Data	Golder Associates Ltd. Ottawa Office	Stored electronically in the project file.			
Artifact Assemblage	Golder Associates Ltd. Ottawa Office	Stored in 1 banker's box.			

## 5.1 Stratigraphy and Features

The soil stratigraphy of the Duncan Site consists of 5 lots which are summarized in Table 3.

**Table 3: Lot Summaries and Descriptions** 

Lot	Description Soil Type		Colour	Compaction	Average Thickness (cm)	Inclusions	
1	Topsoil	Loamy Sand	Medium Brown	Loose	25	Roots	
2	Natural/Subsoil	Sand	Orange-Brown	Loose	-	-	
3	Redeposited Subsoil	Sandy Loam	Mottled Grey and Brown	Loose	8	-	
4	Natural/Subsoil	Sand	Light Grey	Loose	-	-	
5	Feature 1 – Likely Modern Trench	Loamy Sand	Dark Grey	Loose	15	-	

Feature 1 (Lot 5), which was first identified during the Stage 3 assessment (Golder 2020), is a rounded rectangular feature measuring approximately 3 m by 1.9 m (Images 6 to 9: 28-29). It extends between 10 to 20 cm into sterile subsoil.

#### 5.2 Artifacts

A total of 49 artifacts were found during the Stage 4 archaeological mitigation of the Duncan Site. All artifacts were found within Feature 1 which was divided into two halves and hand excavated. A total of 27 artifacts were found in the eastern half while a total of 22 artifacts were found in the western half. The artifacts are summarized by function in Table 4.



Table 4: Summary of Artifacts by Function

FUNCTION	# of Artifacts
food/beverage	46
indeterminate	2
structural	1
Total	49

The majority of artifacts found in Feature 1 had a food/beverage related function. The two indeterminate function artifacts were fragments of iron sheet metal, the single structural artifact was a sherd of melted windowpane glass. Food/beverage function artifacts can be further divided into beverage containers, indeterminate and tableware. A single sherd of dark olive-green wine bottle glass was found. Eight sherds of coarse buff earthenware were identified which could be from either a storage vessel or a food preparation vessel.

The other 37 artifacts in the food/beverage function group were from ceramic tableware vessels. This includes sherds from a saucer, a plate and vessels that could not be identified more distinctly than flatware and holloware. 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 Image 10 (p. 30). Relevant date information is stated where available. Decoration types that are starred have further detail below.

**Table 5: Summary of Ceramic Decoration Types** 

Decoration Type	# of Artifacts	Date	Reference	
edged: symmetrical scalloped/impressed lines*	3	1800 to 1830	(Miller 2013: 488)	
hand painted: late palette	7	appeared around 1835 and remained common into the 1870s	(Samford 2014)	
plain	22	n/a		
sponged (closely spaced, dabbed colour)	2	common from the 1820s to the 1860s, most popular in the 1830s	(Samford 2013: 500)	
transfer printed*	3	1820 to 1840 was the period of peak production	(Little 1969: 15)	
TOTAL	37			

#### **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 of edged wares have distinct date ranges. Green edge decoration becomes rare by around 1840 while blue edge decoration becomes rare by around 1860 but is produced up to 1890s (Miller 1991: 6). All of the sherds found in Feature 1 were blue.



## **Transfer Printed Ceramics**

Three sherds of transfer printed ceramics were recovered. 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. Two sherds were blue, and one sherd was black, peak production dates are noted in the table.

**Table 6: Summary of Important Dates for Transfer Printed 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 <sup>th</sup> century	(Samford 1997: 18)				
blue, peak production 1817 to 1848	(MACL 2002)				
black, peak production 1825 to 1838	(MACL 2002)				



### 6.0 ANALYSIS AND CONCLUSIONS

Feature 1 was the only possible cultural feature identified at the Duncan Site and was fully exposed during the mechanical topsoil removal. Hand excavation of the feature identified 49 historical artifacts within the feature fill, but as the width of Feature 1 was approximately the width of an excavator bucket and Feature 1 is in an area of the site which appears to be outside of the core of the site, Feature 1 is likely the result of modern ground disturbance. The feature fill is likely redeposited topsoil and subsoil when the trench was backfilled with all the artifacts found within originally located within the topsoil. The limits of the trench in the topsoil would have been obscured during subsequent ploughing, including the ploughing completed in preparation for the Stage 2 pedestrian survey of this portion of the study area. Feature 1 is therefore unlikely to be related to the historical occupation of the site and therefore has no further cultural heritage value or interest.

The lack of cultural features within the Duncan Site, low number of structural artifacts, and absence of a structure in the location of the site on the historical maps (Map 3) supports Golder's (2021) interpretation in the Stage 3 report that the site as a domestic refuse scatter. The artifacts indicate that the site dates to the mid-19<sup>th</sup> century and background research suggests a date range of 1859 to 1895. The deposition of household refuse at a distance from the house was a practice that became common on farmsteads in Ontario during the late 19<sup>th</sup> century (MacDonald 1997: 60). The site is likely associated with the occupation of the Duncan Farmstead which is shown on the 1863 map (Map 3) approximately 100 m to the northwest.

The Duncan Site contrasts with the Turnbull Site (BfGd-8), a neighbouring farmstead located approximately 1 km to the east and likely occupied during the same time period. Stage 4 excavation at the Turnbull Site (Reporting in Progress) uncovered seven cultural features which include the remains of at least two buildings and a fence line. Structural artifacts also made up a much larger portion of the artifact assemblage. The differences between the two sites provide further evidence the Duncan Site is not the remains of the Duncan family farmstead or an associated outbuilding.



## 7.0 RECOMMENDATIONS

This Stage 4 mitigation of impacts resulted in the following recommendations:

1) The Duncan site (BfGd-9) has been fully mitigated and requires no additional archaeological assessments.



#### 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.

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

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

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

Chapman, D.H.

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

Chapman, L.J., & 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

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

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

"Chronology of Late Quaternary Events in the Ottawa Region." In Quarternary 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.
- 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.
- Stage 3 Archaeological Assessment Duncan Site (BfGd-9), 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 P1107-0029-2020.

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.

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.
- 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.

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.

Kvbalova, 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

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.

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 Post-Colonial Ceramics: Printed Wares. Diagnostic Artifacts in Maryland.

https://apps.jefpat.maryland.gov/diagnostic/Post-Colonial%20Ceramics/index-PostColonialCeramics.htm. Accessed August 18, 2020.

McAndrews, John H.

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.
- 2013 Identifying and Dating Shell-Edged Earthenwares. In **Ceramic Identification on Historical Archaeology: The View from California, 1822-1940.**

Ontario

2020 Map of Ontario Treaties and Reserves. https://www.ontario.ca/page/map-ontario-treaties-and-reserves

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.

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

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

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 Pilod, 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) p. 1-30.
- 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 <a href="http://www.jefpat.org/Documents/Colonial-PostColonialCeramics.pdf">http://www.jefpat.org/Documents/Colonial-PostColonialCeramics.pdf</a> [September 26, 2016].

Shaw, Simeon

1829 **History of the Staffordshire Potteries.** Scott and Greenwood, London.

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.

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.

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.

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 riviére 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.

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.

Wright, James V.

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



## **11.0 IMAGES**



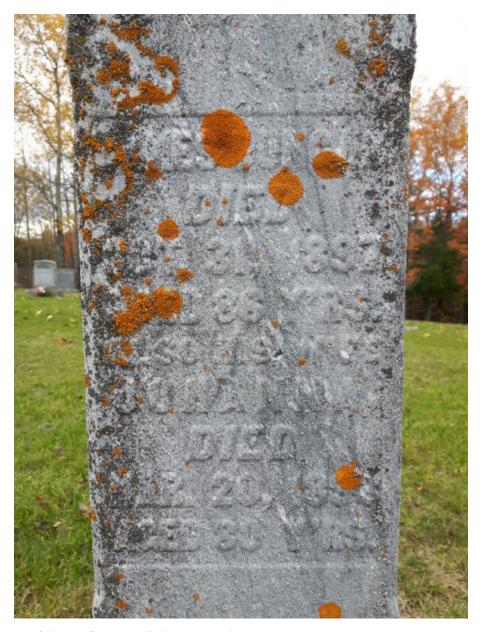


Image 1: Tombstone of James Duncan, died at age 88 in 1897.



Image 2: Tombstone of John, Mary, and Sarah Duncan.



Image 3: Excavator conducting mechanical topsoil removal, view west.



Image 4: Excavator conducting mechanical topsoil removal, view northeast.



Image 5: The Duncan Site (BfGd-9) following mechanical topsoil removal, view west.



Image 6: Cross section of Feature 1 (Lot 5), view northeast.



Image 7: Field crew conducting hand excavation of Feature 1, view north.



Image 8: Feature 1 following excavation, view southeast.

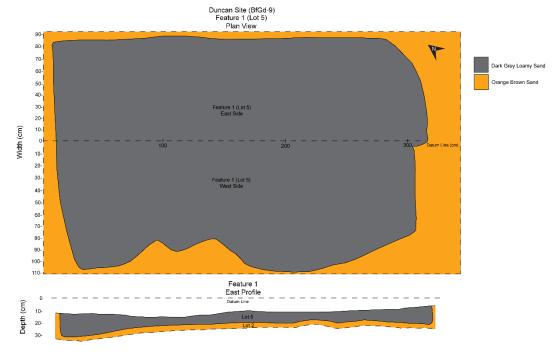


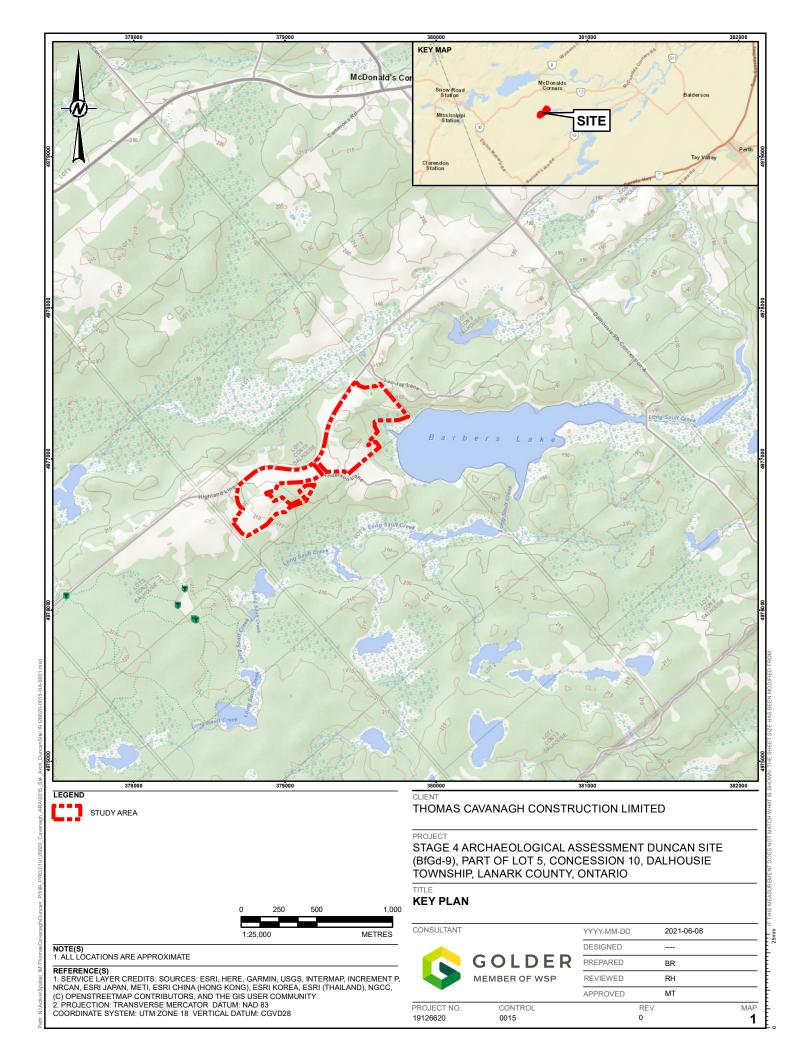
Image 9: Plan and profile drawing of Feature 1.

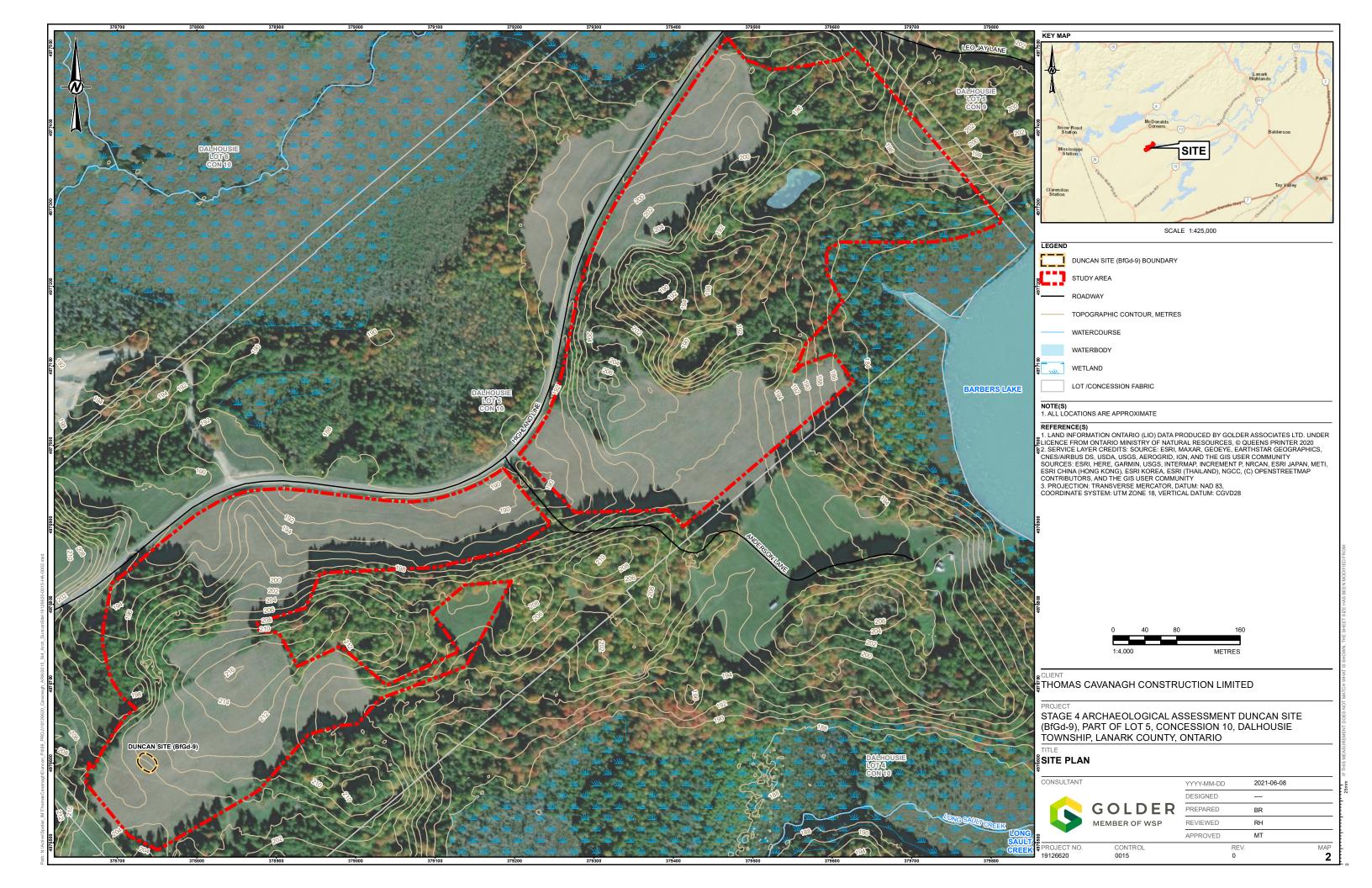


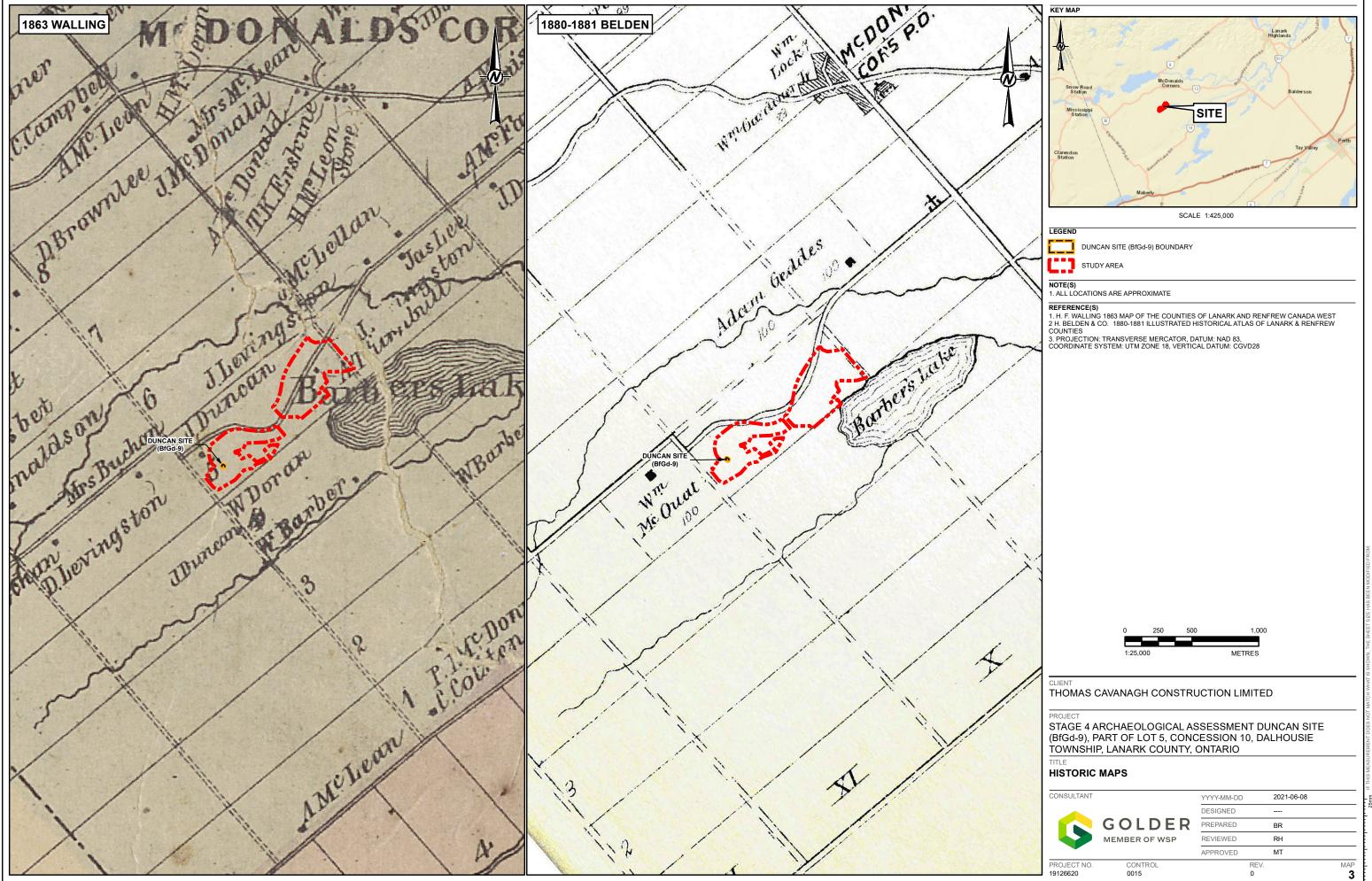
Image 10: Ceramic tableware decoration types: top row, left to right: edged: symmetrical scalloped/impressed lines and sponged; bottom row, left to right: hand painted: late palette, black transfer printed and blue transfer printed.

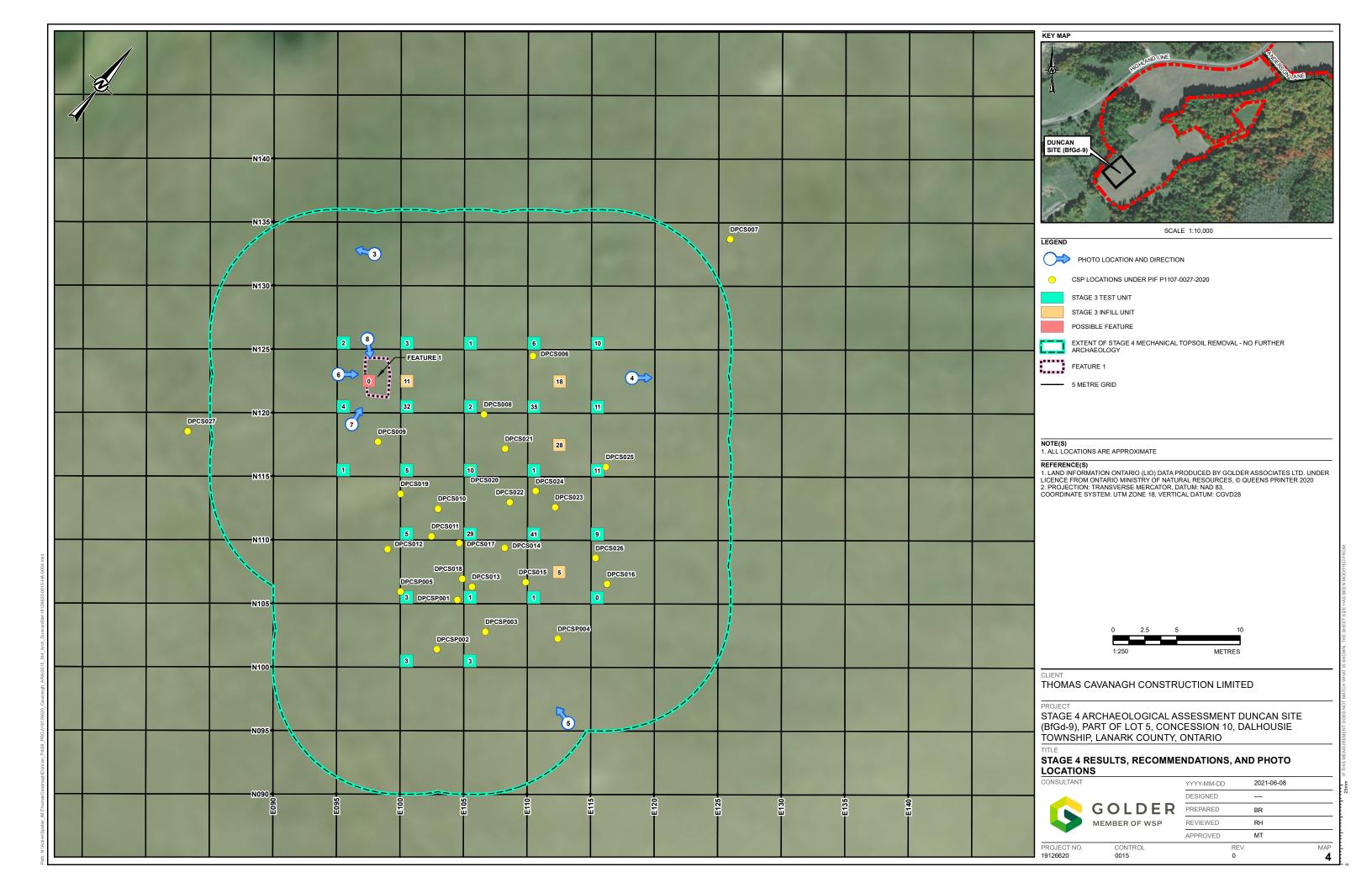
## 12.0 MAPS











# 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. Staff Archaeologist

Michael Teal, M.A.

Associate, Senior Archaeologist

#### RH/MT/ca

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## **APPENDIX A**

# **Artifact Inventory**



ID	PROV 1	PROV 2	MATERIAL 1	MATERIAL 2	FUNCTION 1	FUNCTION 2	OBJECT	FRAGMENT	ATTRIBUTE 1	ATTRIBUTE 2	MANUFACTURE	AI TERATION	# OF ARTIFACTS
5854	Feat, 01	SE	metal		indeterminate	TOROTION 2	sheet	incomplete	ATTRIBUTE	ATTRIBUTE	III/(IVOI / IO I O I C	ALIENTION	2
5855	Feat. 01	SE	glass	indeterminate	food/beverage	beverage container	bottle: wine	body	plain	green: dark olive			1
5856	Feat. 01	SE	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate	heat altered: melted	1
5857	Feat. 01	SE	ceramic	coarse earthenware: buff	food/beverage	indeterminate	holloware: cylindrical	body	glaze: none				1
5858	Feat. 01	SE	ceramic	refined white earthenware	food/beverage	tableware	flatware	base	transfer printed	blue			2
5859	Feat. 01	SE	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	transfer printed	black			1
5860	Feat. 01	SE	ceramic	earthenware	food/beverage	tableware	saucer	rim/body	hand painted	polychrome: late palette			5
5861	Feat. 01	SE	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			10
5862	Feat. 01	SE	ceramic	refined white earthenware	food/beverage	tableware	flatware	footring/footr im	plain	clear/colourless			4
5863	Feat. 01	sw	ceramic	coarse earthenware: buff	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown: light			7
5864	Feat. 01	sw	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: symmetrical scalloped/imp. lines	blue			3
5865	Feat. 01	sw	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	rim	sponged	blue		heat altered: burnt	2
5866	Feat. 01	sw	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			2
5867	Feat. 01	sw	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			8
													49





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