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ORIGINAL REPORT

Stage 4 Archaeological Assessment McCullough - 2 Site BhFw-111, Lot 6, Concession 3, Geographic Township of Nepean, City of Ottawa

Submitted to:

Mr. Hugo Lalonde
Minto Communities – Canada
200-180 Kent Street
Ottawa, Ontario
K1P 0B6

Licensee: Aaron Mior

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REPORT



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EXECUTIVE SUMMARY

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

Golder Associates was contracted by Minto Communities Inc. to undertake a Stage 4 Archaeological Assessment of the McCullough-2 Site (BhFw-111), located on Lot 6, Concession 3, Geographic Township of Nepean. The site was identified in a Stage 2 Archaeological Assessment of the planned Minto Barrhaven South Development (Golder 2015) and was subsequently investigated as part of a Stage 3 Archaeological Assessment (Golder 2016). The objective of the Stage 4 Archaeological Assessment was to document the archaeological context, cultural features and artifacts within the site.

Historical records indicated that the south half of Lot 6 was first occupied by the McCullough family around 1850, with the northern half been purchased in the early 1870s. The initial structure built on the property by the McCulloughs was a one story log shanty. This was later replaced by a more substantial log home and upgrades to the farm which included the addition of a number of barns. Prior to 1871, the archival information indicates that Alexander Dickinson was a tenant farmer on the north half of Lot 6.

The McCullough-2 site was identified on the basis of a scatter of 19th century artifacts located within close proximity to each other, within Operation 8 of the Stage 2 Study Area. The Stage 3 originally was intended to consist of a controlled surface pick-up followed by the hand excavation of 1 metre by 1 metre units on a 5 metre grid over the artifact scatter. However, upon arrival at the Stage 3 location it was evident that the area along with a large amount of adjacent lands had been stripped of all topsoil. The modified Stage 3 consisted of the observation of further soil stripping to identify any intact archaeological features within the subsoil. The results of the Stage 3 resulted in the identification of two possible post molds and a third unknown feature. As a consequence, Stage 4 block excavation of all three archaeological features was recommended.

A total of 294 artifacts were recovered from the McCullough-2 site (BhFw-111), with the assemblage predominantly dating to the mid-19th century. The paucity of late 19th century and early 20th century artifacts suggests that the site was in use for a relatively short period of time. The McCullough-2 site likely represented evidence of the first wave of pioneers that established themselves in this portion of Nepean Township.

Three features were excavated as part of the Stage 4 archaeological assessment. Feature 1 was a pit feature likely a root cellar. Feature 2 was a post mold while Feature 3 turned out to be natural and not a cultural feature.

McCullough-2 (BhFw-111) was subject to Stage 4 archaeological soil stripping and has been interpreted as a Euro-Canadian site with evidence of a possible root-cellar. Based on the combined results of the artifact analysis and the archival information, the possible root-cellar may have been associated with the Dickinson family who were tenant farmers on the north half of Lot 6 prior to 1871. **McCullough-2 (BhFw-111) has been fully excavated and documented to the extent required under the 2011 Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists. The area subject to Stage 4 mitigation through excavation at McCullough-2 (BhFw-111) has no further cultural heritage value or interest, no longer exists in the ground and no further mitigation is required.**

The MTCS is asked to review the excavation results presented and to accept this Original Report into the Provincial Register of archaeological reports. The MTCS is also asked to provide a letter to Minto Communities Inc. concurring with the recommendation in this report that archaeological concerns related to BhFw-111 have been addressed.



Project Personnel

Client Contact:	Hugo Lalonde, Minto Communities Inc.
Project Director	Hugh Daechsel, M.A. (P051)
Project Manager/Lead Archaeologist	Aaron Mior, M.MA. (P1077)
Senior Review	Hugh Daechsel
Licensed Archaeologist	Brandy Lockhart, (P386) and Ibrahim Nouredine (P350)
Material Culture Analyst	Helen Moore B.A. (R359)
Field Crew	Helen Moore B.A. (R359), Randy Hahn (R1107)
Report Preparation	Bradley Drouin, M.A. (P311) and Aaron Mior (P1077)
Geographic Services	Bojan Radojevic
Administrative Support	Katie Landry



Abbreviations

B.P.	Before Present, taken to be years before 1950
Can-Net	Cansel Network
CRE	Coarse Red Earthenware
Ins.	Instrument Number detailing land transfer information
MNE	Minimum Number of Elements
MNI	Minimum Number of Individuals
MTCS	Ministry of Tourism Culture and Sport
NISP	Number of Identified Species
RWE	Refined White Earthenware
VWE	Vitrified White Earthenware



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1.0 PROJECT CONTEXT

Golder Associates Ltd. (Golder) was contracted by Minto Communities Inc. (Minto) to undertake the Stage 4 Archaeological Excavation of the McCullough-2 site (BhFw-111), located in Lot 6, Concession 3, Geographic Township of Nepean (Map 1). This assessment follows the recommendations of the Stage 3 Archaeological Assessment of the Phase 2 Barrhaven South development (Golder 2016). The McCullough-2 site was located directly north of Barnsdale Road, and west of Greenbank Road and was set back 350 meters from Barnsdale Road (Map 2).

The site was originally identified during the Stage 2 testing based upon a large Historic Euro-Canadian artifact scatters (Map 3).

The Stage 3 Archaeological Assessment (Golder 2016) recommended further investigation based upon the documented presence of the McCullough family on the lot from the at least the 1850's onwards, and the recovery of early to mid-19th century material from the Stage 3 assessment (Map 3). This Stage 4 excavation was undertaken in order to mitigate and document the site.

Outlined in this report are the methodology and results of the Stage 4 investigation. An interpretation of the site is provided followed by a summary and recommendations. All cited references are listed and a photographic catalogue, artifact inventory, faunal inventory and archaeobotanical analysis are included as appendices.

1.1 Development Context

The study area falls within the boundaries of a large residential subdivision proposed by Minto Communities Inc. with the initial Stage 1 Archaeological Assessment (Golder 2011) having been triggered by the *Planning Act* as a condition for site plan approval. Following the recommendations of the Stage 1 report, the Stage 2 fieldwork located a large historic artifacts scatter in an open active agricultural field. Stage 3 field work was undertaken to determine the extent and archaeological significance of these deposits. Based on the findings of the Stage 3 work, the site was called the McCullough-2 and registered with the Ministry of Tourism, Culture and Sport as BhFw-111. The results of the Stage 3 made the recommendation that a Stage 4 Archaeological Assessment be undertaken for the McCullough-2 site. The triggering mechanism for the assessment continues to be the *Planning Act* as part of the conditions needed for site plan approval by the Municipality.

Permission to access the site to conduct all required archaeological fieldwork, including the recovery of artifacts, was granted by Mr. Hugo Lalonde of Minto.

1.1.1 Objectives

The objectives of this Stage 4 archaeological assessment follow the MTCS *Standards and Guidelines for Consultant Archaeologists* (2011):

- To address development impacts on an archaeological site with a level of cultural heritage value or interest that has been determined to require mitigation.
- 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 the future.



1.2 Historical Context

The St. Lawrence Iroquois disappeared in the sixteenth century following initial contact with Jacques Cartier in 1535. European use of the Ottawa Valley dates to the beginning of the seventeenth century with French exploration, missionary and fur trade activity. 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, however, by two of his emissaries, Étienne Brûlé around 1610 and Nicholas de Vignau in 1611. It is likely that all three traveled 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 traveling 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 first significant European settlement of the region did not occur until 200 years after Champlain, although the Ottawa River continued to be a major fur trade route providing access to the upper Great Lakes and Hudson Bay. Prior to 1820 the only method of transportation into the area was by river and the lack of roads hindered settlement.

The region was initially under the jurisdiction of France until the end of the Seven Year War in 1763 when it was ceded to Britain. During the American Revolutionary War many British subjects moved to British North America (Canada). Those who moved prior to the treaty of separation, in 1783, were dubbed United Empire Loyalists some of whom were granted tracts of land along the Ottawa, Rideau and St. Lawrence Rivers. Many who were granted land along the Ottawa River remained absentee land owners having already settled along the St. Lawrence.

Two years after the 1791 division of the Province of Quebec into Upper and Lower Canada, John Stegmann, the Deputy Surveyor for the Province of Upper Canada, undertook an initial survey of four townships (Nepean, Gloucester, North Gower and South Osgoode) straddling the Rideau River near its junction with the Ottawa River. At the same time, John Graves Simcoe, Lieutenant Governor of the Province of Upper Canada, issued a proclamation aimed at attracting new settlers to the region. United Empire Loyalists and other immigrants began to move to lands along the Ottawa and Rideau Rivers in the early nineteenth century.

The Township of Nepean, named in honour of the British Administrator Sir Evan Nepean (Elliott 1991), grew slowly over the decades following its initial survey with few people settling into the area. It was not until the mid nineteenth century that an influx of immigrants and settlers into the area began to occur. Due to the growing population in the County, the Township of Nepean necessitated a re-arrangement of the old districts into new ones. By 1849 the present day Carleton County was established with ten geographic townships designated with Nepean being one of the largest bordered to the north by March Township and the Ottawa River, to the east by the Rideau River, to the south by North Gower Township, and to the west by Goulbourn Township (Walker & Walker 1968).

1.2.1 Site Specific Historical Context

The original crown patent for both Lot 6 and Lot 7 was issued at the very early date of 1803 to Christine Mount; a grant which also included Lot 5 for a total of 600 acres. Mount was most likely an absentee landowner as a large amount of land was granted in the very early days of settlement to persons who most likely never saw the property. In 1839 Joseph Mount, presumably a son or other relative of Christine the original grantee, sold the property to Archibald Wilson (Instrument number 1470).

Soon after his purchase of the lot in 1839, Archibald Wilson sold the north half of the Lot 6 to Bernard Quinn (Inst. 1723) and the south half of the Lot to David Gilmour (Inst. 1774) in 1841.



The land registry records are unclear at this date, and it seems that the north half of the Lot was passed through a number of owners regularly including Timothy Hawley and Isaac Proud, in addition to Archibald Wilson and Bernard Quinn, while in 1850 William McCullough purchased the south half of Lot 6 from J. B. Lewis (Inst. 4421). The McCullough family would own most of the property until 1937.

The 1871 census records listed a tenant by the name of Alexander Dickson on the northern 100 acres of Lot 6. He lived with his wife Hannah and their 9 children. They had a fairly prosperous farm producing potatoes, oats, peas, beans, barley, buckwheat, butter and wool with horses, cows, sheep and a pig. This could explain why the ownership changed so often yet the land was still being successfully farmed. In 1873 William McCullough became owner of the northern portion of the lot through an order by "the Court of Chancery" (Inst. 1801). The Dickson family does not show up in later census records suggesting this change in ownership saw the family leave the land. In 1880 William McCullough sold the land to his son Alex McCullough (Inst. 6950).

The 1851 census listed William McCullough with his wife Elizabeth and their 6 young children living in a one storey log shanty. All of the children except for Margaret, the youngest at 1 year old, were listed as being born in Gloucester Township while Margaret was born in Nepean. This seems to match the land registry records in that William bought the land in 1850 moving his family to Nepean from Gloucester. By 1861 the family had changed little with the exception of older children leaving the home and another younger child being born. By 1871 William and Elizabeth were in their mid-fifties with 5 children still living at home aged 24 to 16. The two youngest sons, William and Thomas, were carriage makers while Alex, the eldest son still at home helped run the farm. At this time the farm was producing wheat, potatoes, hay, oats, rye, peas, apples, butter, honey and wool and had 33 animals including horses, cows, sheep and pigs.

As mentioned above, in 1880 William McCullough sold the northern portion of Lot 6 to his son Alex, yet the census records from 1881 show that he did not move to the property right away but rather ran both farms from home. Alex is listed as living in a household with both of his parents as well as his young wife Elizabeth and their infant son William. By 1891 Alex had moved his growing family and the census records list him and his wife with 6 children and a servant, while his parents William and Eliza occupy the original homestead. In 1899 William McCullough died leaving the southern half of Lot 6 to his wife and children (Inst. 18136).

In 1900 and 1911 the siblings sold their portions to their brother Alex making him owner of all of Lot 6 (Inst. 18443 and 24152). Alex sold the northern half of the lot to John McCullough, presumably his son, in 1916 (Inst. 30931) and the southern half to his son Alex Jr. in 1929 (Inst. 38358). In 1937 John and Alex Jr. McCullough sold all of their land to William L. Moloughney, owner of Lot 7 (Inst. 289689). The Moloughney family held the land until 1977.

Land records indicate that in 1878 William McCullough gave one half of an acre to School Section number 9 (Inst. 5613). Even though the transaction was in 1878, both the Walling 1863 and the Belden 1879 maps show the school house located in the south eastern corner of Lot 6. This school was a log structure and having been built in 1844 it was the first one room school house in the area. The school was replaced less than a decade later, in 1852, by another log structure and would end up being the last log school in the township. In 1877 it was replaced by a frame building which remained in operation until 1957 when a new two-room school house was built across the road. This new school was closed in 1965. In Bruce Elliott's book *The City Beyond* he comments on the conditions at the school claiming that "in the impoverished School Section No. 9 in the southeast of the township only 20 (students) were enrolled" (1991: 56).



1.3 Archaeological Context

1.3.1 Previous Archaeological Assessments of the Current Site

The Stage 2 Archaeological Assessment of what is now referred to as the McCullough-2 Site (BhFw-111) occurred in the summer of 2015 and resulted in the identification a cluster of 128 Historic Euro-Canadian artifacts in an area approximately 45 metres by 40 metres (Golder 2015).

The material primarily dated to the later part of the nineteenth and into the twentieth century. The results of the Stage 2 assessment formed the basis for the following Stage 3 recommendation:

That a Stage 3 archaeological assessment be carried out on the oldest portion of the McCullough Site (BhFw-104). This investigation should include the hand excavation of 1 m by 1 m units as per the MTCS Standards outlined in section 3.2.3 of the Standards and Guidelines (2011, p.50) within the east portion of Operation 16 (Map 10). An additional investigation of a second loci of this site should also be undertaken using 1 m by 1 m hand excavated units at 10 m spacing to determine the nature of the artifact deposit located in Operation 8 and if it warrants a full Stage 3 investigation at 5m intervals.

Based on the Stage 3 results, the McCullough-2 site was likely a mid to late nineteenth century archaeological site, possibly domestic, with an artifact assemblage and documented history that post-dates 1830 (Golder 2016). It was located within an area that had recent topsoil stripping that had removed all previously plough-disturbed topsoil, and did not contain any currently identified midden areas.

Taking these factors into consideration the site retains archaeological significance and this investigation has provided the basis for the following recommendation:

- 1) *Impacts by the proposed development to the site are unavoidable and that a Stage 4 archaeological investigation is required for the McCullough-2 Site (BhFw-111) and undertaken by a Professionally Licensed Archaeologist.*
- 2) *The Stage 4 site mitigations should follow Standards 4.2.1 and 4.2.2 of the Ministry of Tourism, Culture and Sports Standards and Guidelines for Consultant Archaeologist. Specifically, the Stage 4 mitigation through excavation should comprise of block excavation of 1x1m units targeted on the three archaeological features identified on Map 5. These features should be fully exposed before excavation by hand. All features should be drawn to scale in plan view before being excavated.*

1.3.2 Natural Environment

The study area lies within the boundary of two physiographic regions; the Russell and Prescott Sand Plains and the Ottawa Valley Clay Plains (Chapman and Putnam 1966:175). The sand plains offer moderately better drainage and were once part of the delta created by the discharge of the early Ottawa River into the Champlain Sea in the post-glacial period, while the clay plains are characterized by a flat, poorly drained topography. These two regions overlap near the Rideau River providing areas of both sand and clay in the general vicinity.

The study area lies within the Upper St. Lawrence sub-region of the Great Lakes – St. Lawrence Forest Region (Rowe 1977:94). The trees characterizing this sub-region include a variety of both coniferous and deciduous species, the most predominant of which include sugar maple and beech. Other deciduous species include red maple, yellow birch, basswood, white ash, largetooth aspen, red and burr oak. Coniferous varieties include eastern hemlock, eastern white pine, white spruce and balsam fir. It is assumed the study area was cleared of its original forest cover by the mid-nineteenth century.

With the exception of a few small woodlots, very little forest cover remains within the study area, mostly along fence lines and property boundaries, with the remainder having been cleared in the past for agriculture.



Approximately 2 km to the north of the study area runs the Jock River, a tributary of the Rideau River which itself flows 2 km to the east of the study area. The junction where these two rivers meet is located approximately 2.8 km to the north east of the subject property. Geological studies and air photos reveal ancient beach ridges visible in the topography in the central portions of both lots. During the property inspection, the prominence of these beach ridges in the topography was more fully understood.

The ridges were quite substantial making the evidence of a former significant waterway very obvious in the landscape. A large section of the ridge has been destroyed through ongoing sand pit activity since 2008.

The study area has severe limitations to waterfowl production (Arsenault 1970), slight limitations to ungulate production (Thomasson 1971), and moderate limitations for agricultural production (Schut 1987). Although the study area and immediately surrounding lands are for the most part being used for agricultural purposes, recent housing and commercial developments taking place to the north are rapidly spreading in the general vicinity.



2.0 STAGE 4 METHODOLOGY

This archaeological excavation was conducted according to the archaeological fieldwork standards and guidelines, as outlined in the MTCS's *Standards and Guidelines for Consultant Archaeologists* (2011). Fieldwork was conducted between November 16 and November 25, 2015. Work was conducted under ideal lighting conditions.

A Trimble S6 Robotic Total Station and a Trimble R8 Model 2 Global Navigation Satellite System (GNSS) unit was used to relocate the limits of the three archaeological features identified during the Stage 3 archaeological assessment of the McCullough-2 Site. The Trimble R8 Model 2 GPS receiver has built in Wide-Area Augmentation System and European Geostationary Navigation Overlay Service 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 corrections within the Can-Net Virtual Reference Station network. The Trimble R8 unit was used also used to establish control datum points within the study area which were incorporated into the total station survey. All observations collected with the Trimble R8 GNSS unit were taken within a tolerance of 0.02 m horizontal and 0.03 m vertical (elevation).

The topographical survey of the McCullough-2 site was completed after exposure of the three features on July 30, 2016 then again on November 16th to accurately relocate the features prior the initiation of the Stage 4 excavation. The GPS survey data incorporated the Universal Transverse Mercator (UTM) projection, Grid Zone 18, and the North American Datum (NAD) 83. The collected 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.

Feature 1 was excavated stratigraphically by hand in 1 m x 1 m as per the MTCS *Standards and Guidelines for Consultant Archaeologists* (2011). Each unit was designated by a unique alphabetical suffix. Within each unit the individual layers of soil, or lots, were given identifying numbers i.e. Lot 1 within Unit A would be 1A. All lot numbers were unique and therefore Lot 1 within Unit 1A was the same soil layer as Lot 1 within Unit 1B. Due to size, Features 2 and 3 were fully exposed in plan view then cross-sectioned and fully documented as per Section 4.2.1 and 4.2.2 (Government of Ontario 2011). Following cross-sectioning and documentation the remainder of the feature was excavated and soil samples were taken if appropriate.

2.1 Artifact Analysis Methods

This report and the following artifact inventory provides a record of the artifacts and other archaeological materials (samples, etc.) recovered from the site. This information provides a basis for interpretation of the site. This report aims to provide enough basic information that a future researcher may determine whether the study area/site is of relevance to their studies (MTCS 2011: 97).

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;
- the artifact's spatial location (provenience) within the study area/site (test pit, test unit, surface collection, stratum, etc.);
- artifact analysis (see below); and
- the quantity of any given entry



Artifact Analysis

The artifact analysis was based upon the MTCS standard requirements, as set out in their Tables 6.1, 6.2 and 6.3 (MTCS 2011: 99-109). Every artifact entry in the database includes composition material, the artifact type (object), the function which it served and if alterations had been made to the original artifact (such as burning). Further artifact description was based upon the type of artifact (see below).

Historic Artifacts

Historic artifacts include ceramics, glass, and all other inorganic and organic objects (metal, stone, bone, plastic, etc.). 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 as well as manufacturing technique when identifiable. As with ceramic, when a maker'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. Maker's marks were recorded, and references cited where possible.

Storage/Curation

The collection was packed for storage by spatial location (provenience). Once 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 bankers boxes (12"W x 15"D x 10"H).

Artifact collections are stored in the Golder Associates archaeology lab until the report has been submitted to the MTCS; after which they are moved to a secure, indoor, climate controlled storage facility until an appropriate repository is identified.

2.2 Faunal Analysis Methods

A total of 111 faunal fragments were recovered from the McCullough-2 site (BhFw-111). The assemblage was analyzed by a Golder faunal analyst to adhere to the Ontario Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (2011).

All bone fragments were counted (NISP=number of identified species) and identified to the lowest taxonomic level possible. Each fragment was described in terms of element, portion, side, cultural and natural modifications and age at death where possible. For many fragments, where only the element and taxonomic class could be identified, the specimen could sometimes be placed in a size category. In the faunal inventory mammals are described by size such that a large mammal is the size of a domestic horse or cattle, a medium mammal is the size of a pig or sheep and a small mammal is the size of a cat or dog or less (i.e. rodents). A large portion of the assemblage was highly fragmented and only the taxonomic class (i.e. Mammalia) could be identified. Each fragment was examined for alterations caused by heating, butchering, natural erosion, pathology and animal knawing. The faunal inventory is included as Appendix C.

General age at death was estimated using epiphyseal fusion of the bones (Wilson *et. al*, 1982). Diagnostic areas of the bone were scored 'yes' if present (Serjeantson, 2005). Bird bone identification was completed using Cohen and Serjeantson (1996).

The *Standards and Guidelines* require that NISP and either MNI (minimum number of individuals) or MNE (minimum number of elements) be tabulated.



The minimum number of individuals (MNI) for each species was determined by counting the number of the same side elements while taking into account differences in age and size. This measurement of abundance is a conservative estimate only. In addition, MNI estimates will vary depending on how the NISP is grouped. For the purpose of this report, MNI calculations were grouped by the entire site, as the small assemblage was sparingly distributed throughout the site.

Similarly, although historic faunal assemblages are often submitted to meat cut analysis, which provides a more accurate quantification of meat usage in a large market economy, the site collection did not lend itself well to this approach. Therefore, cut mark descriptions were included in the database, but were not, however, interpreted in great detail.

The faunal inventory is presented in Appendix C.

2.3 Soil Sample Methods

Soil samples from the McCullough-2 site (BhFw-111) were collected from two contexts, Feature 1 Unit D Lot 4 (1D4) and Feature 1 Unit F Lot 6 (1F6), as per Standard 4.4.3 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). 1D4 and 1F6 represented different soil layers within Feature 1. Soil samples were taken from 1D4 and 1F6 and were collected using a shovel and sample bag. This method was adopted to gather a cross-sectional representation of the feature and to gather any differences in artifact composition or other important constituents, which may have changed between the two lots.

In terms of soil sample size, soil samples of one to two litres in waterlogged contexts or of at least two litres in non-waterlogged contexts for historic root cellars and privies have been encouraged (Anne-Marie Faucher, personal communication, April 26, 2012). Samples of three litres have also been suggested (Dena Doroszenko, personal communication, April 11, 2012), while others have chosen four litre soil samples (Comer 2001: 36). At the McCullough-2 site (BhFw-111), the soil sample from Lot 1D4 comprised 3 litres of sampled soil and the soil sample from Lot 1F6 comprised 2.5 litres of sampled soil. The remainder of the soil from the feature was screened through six millimetre mesh.

Flotation and separation of soils into heavy and light fractions was conducted using a Flote-Tech A flotation system at the Golder archaeology lab in London, Ontario. Heavy fraction materials were caught in a tank insert fitted with fine fabric mesh of approximately one millimetre. Heavy fraction materials were transferred from the tank insert to fine fabric bundles, given flotation tag labels and allowed to dry. Once dry, these samples were transferred to bags with their flotation tag labels. After transfer to the analyst, heavy fraction bags were opened and split by nested brass sieves of the following mesh sizes: 6.3 mm, 4.75 mm, 2 mm and 0.6 mm as well as a 0.3 mm and the nested base plate, creating up to six sieve size cohorts per sample: >6.3 mm, >4.75 mm (but <6.3 mm), >2 mm (but <4.75 mm), >0.6 mm (but <2 mm) and >0.3 mm (but less than 0.6 mm). The >6.3 mm cohort was first examined without magnification for the presence of artifacts and charred organic remains and those large items were then transferred to a Petri dish for microscopic analysis. Following this, the >4.75 mm, >2 mm, >0.6 mm and 0.3 mm cohorts were then also sequentially transferred to a Petri dish for microscopic analysis.

Light fraction materials carried by water falling over the flotation tank weir were caught in either 0.285 mm fine woven polyester fabric mesh or in 0.3 mm fine heat set nylon monofilament mesh. Light fraction materials were tied into bundles within their fine fabric mesh, given flotation tag labels and allowed to dry. Once dry, these samples were transferred to bags with their flotation tag labels. Light fraction subsample bags were opened by the analyst and split by nested sieves of the following mesh sizes: 6.3 mm, 4.75 mm, 2 mm, 0.6 mm and 0.3 mm as well as the nested base plate, creating up to six sieve size cohorts per sample: >6.3 mm, >4 mm (but <6.3 mm), >2 mm (but <4 mm), >0.6 mm (but <2 mm), >0.3 mm (but <0.6mm) and <0.3 mm.



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The >6.3 mm cohort was first examined without magnification for the presence of artifacts and charred organic remains and those large items were then transferred to a Petri dish for microscopic analysis.

Following this, the >4.75 mm, >2 mm, >0.6 mm and 0.3 mm cohorts were then also sequentially transferred to a Petri dish for microscopic analysis.

Using an Ohaus CS Series balance, the heavy and light fraction portions of the soil sample from 1D4 weighed 239 g and 3.8 g, respectively. Using a Pyrex 25 ml and 250 mL graduated beaker, the same heavy and light fractions were c. 214 mL and 12 ml in volume, respectively. The heavy and light fraction portion of the soil sample from 1F6 weighed 111.2 g and 2.98 g, respectively. In terms of volumes, those same heavy and light fractions were c. 102 mL and 8 ml in volume, respectively.

Identifications of charred wood to lowest taxon are typically attempted only for the >6.3 mm sieve size cohort, since those pieces <6.3 mm are considered too small for consistent positive identification (Fecteau 1978: 5-6; cf. Fecteau 2008: 40). Identifications to the lowest taxon possible were attempted for charred and uncharred plant remains, seeds, nuts and other plant parts of all sieve size cohorts of both heavy and light fractions, except <0.6 mm (bottom/receiving pan materials).

The charred plant remains and charred wood specimens of both the heavy and light fractions were analysed and/or counted under a Nikon SMZ 745T microscope at 10 x 75 magnification. Identifications were made with the aid of standard texts (Martin and Barkley 1973; Montgomery 1977), the Golder archaeobotanical reference collection, and reference guides for wood and wood cross-sections (Hoadley 1990). At the smallest sieve size cohorts, frequencies of charred wood fragments and charcoal flecks were estimated.

2.4 Existing Conditions

The Stage 4 Mitigation through excavation of BhFw-111 was conducted by Golder over a period six days between November 10th and November 25th, 2015 under archaeological License issued to Aaron Mior of Golder Associates Ltd. (P1077-0009-2015). Aaron Mior also served as Licensed Field Director during the fieldwork.

The current land conditions at the time of the Stage 4 consisted of recently stripped topsoil down to subsoil. As outlined in earlier sections, the area of the proposed Stage 3 had been stripped of topsoil by an aggregate company associated with the client. The topsoil stripping had removed all traces of the plough disturbed topsoil down to subsoil. The Stage 3 assessment further removed 1 – 3 centimetres of subsoil to expose features that remained intact (Golder 2016).

The weather during the days of fieldwork was seasonal and at no time was the weather or lighting conditions detrimental to the identification or recovery of archaeological data or material as per MTCS *Standards and Guidelines for Consultant Archaeologists*, Section 7.9.1, Standard 1). Table 1 summarizes the days of fieldwork and weather conditions on those days

Table 1: Weather Conditions

Date	Weather	Temperature (Celsius)
November 16, 2015	Sunny	6 °C
November 17, 2015	Sunny	5 °C
November 20, 2015	Sun, overcast	6 °C
November 23, 2015	Sun	-4 °C
November 24, 2015	overcast	-4 °C
November 25, 2015	Overcast	3 °C



2.5 Disposition of Artifacts and Data

All recovered artifacts (currently stored in one banker box) will be housed at Golder's Ottawa Office until an appropriate repository can be identified.

All project related field notes, maps and digital photographs are housed in Golder's Ottawa Office.



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3.0 RECORD OF FINDS

The Stage 4 assessment of BhFw-111 was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by the fieldwork is provided in Table 2.

Fieldwork was documented in a field notebook maintained by the licensed Field Director, including a record of health and safety measures taken, field crew, weather and lighting conditions, location, depth and contents of units excavated, soil conditions, a log of photographs taken, and a field sketch of units excavated. For all Golder projects, each day upon completion of fieldwork, the field notes, photos and lot forms were routinely uploaded onto Golder's computer server and stored digitally.

Field notes, maps and digital photographs are housed in Golder's Ottawa office; a record of this documentation is provided in Table 2.

Table 2: Inventory of Documentary Record.

Document Type	Current Location of Documents	Additional Comments
Field Notes	Golder Ottawa Office	11 pages in original field book and photocopied in project file
Hand Drawn Maps/Profile and Plan View Drawings	Golder Ottawa Office	6 maps and photocopied in project file
1 m x 1m unit Lot Forms	Golder Ottawa Office	3 original unit lot forms and photocopied in project file
Digital Photographs	Golder Ottawa Office	70 digital photographs stored digitally on Golder server

3.1 BhFw-111 Overview

The McCullough-2 site area was located on a slightly elevated area with a small woodlot directly to the northwest and open agricultural fields in all other directions (Map 2). The area was subject to Stage 4 mitigation through excavation based on the identification of three possible cultural features all located within relatively close proximity to one another (Map 3).

Feature 1 was originally defined as a roughly rectangular feature containing a fill matrix not consisting of subsoil. Similarly, Features 2 and 3 also contained a non-native soil fill matrix. Lots within the various feature excavations were correlated in the field. Therefore Lot 1 is used to designate the same lot throughout the site and so on. To avoid unnecessary repetition all lots are described in Table 3.

Table 3: Feature 1: Soil Stratigraphy

Lot	Description	Colour	Compaction	Composition	Inclusions	# of Artifacts
1	Feature 2 fill	Yellow to beige	Dense	Sandy clay	None	0
2	Subsoil - A	Medium Brown	Dense	Sand with minor clay	Gravel, cobbles and boulders	0
3	Subsoil - B	Light grey	Moderate	Silt	Boulders	0
4	Feature 1 fill	Medium to dark brown	Compact	Silty clay	Pebbles, charcoal, wood ash	111
5	Rodent burrow	Dark brown	Moderate	Silty clay	Rodent bones	78
6	Feature 1 fill	Medium to dark brown	Compact	Silty clay	Pebbles, boulders (some heat altered), charcoal, wood ash	105



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3.1.1 Feature 1

Excavation of Feature 1 began after its surface had been completely exposed (S&G Section 4.2.2 Standard 7d). Feature 1 was at first determined to be roughly rectangular in shape and approximately 1 m by 2 m. When plans were made to begin excavating, Feature 1 was divided into units (S&G Section 4.2.7 Standard 3). A baulk was left in the centre of the feature, running north to south; in order to maintain control of soil and artifacts, as well as to provide a complete profile of the cross-section of Feature 1 (Images 1 to 5). As excavation continued, it became clear that Feature 1 was much larger than had originally been visible. The feature expanded in size, until 8 units (A, B, C, D, E, F, G & H) were excavated (Map 5). At completion, the feature was approximately 2 m by 4 m (Images 6 to 9). A total of 4 soil layers or lots were associated with Feature 1 (Table 3; Map 5).

A total of 294 artifacts were recovered from the interior of the feature. It is worth noting that 78 of these artifacts were small mammal bones from a single burrow (Lot 5). Therefore only 216 artifacts were historically related with Feature 1 (Tables 4 to 6). The artifacts were fairly evenly distributed between units, with a slight increase in Units B and C, roughly the centre of Feature 1 (Table 4). The 78 rodent bones have been removed from the table. All Feature 1 Fauna remains are examined in Section 3.2 and Appendix C. All of the artifacts were recovered from Lot 4 and 6 (besides the rodent). Lot 4 produced 111 artifacts, while Lot 6 produced 105. The fill composition of Lot 4 and 6 were the same, apart from the number of boulders present.

Table 4: Feature 1 Artifact Totals per Unit.

Unit	# of Artifacts
A	16
B	53
C	50
D	10
E	6
F	33
G	10
H	38
Total	216

Table 5: Feature 1 Material Totals.

Project Name	Stage	Prov 1	Material 1	Sum Of# of Artifacts
McCullough-2 Site	4	Feat.1	ceramic	94
McCullough-2 Site	4	Feat.1	composite	1
McCullough-2 Site	4	Feat.1	fauna	111
McCullough-2 Site	4	Feat.1	flora	5
McCullough-2 Site	4	Feat.1	glass	16
McCullough-2 Site	4	Feat.1	metal	63
McCullough-2 Site	4	Feat.1	mortar	4
Total				294



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Table 6: Feature 1 Function Totals.

Project Name	Stage	Prov 1	Function 1	Sum Of# of Artifacts
McCullough-2 Site	4	Feat.1	ecological	78
McCullough-2 Site	4	Feat.1	food/beverage	87
McCullough-2 Site	4	Feat.1	indeterminate	56
McCullough-2 Site	4	Feat.1	personal/societal	13
McCullough-2 Site	4	Feat.1	sample	1
McCullough-2 Site	4	Feat.1	structural	58
McCullough-2 Site	4	Feat.1	tools/equipment	1
Total				294

Unit A

Excavation began in the north east corner of Feature 1 with Unit A. Roughly vertical interfaces (or cuts) were immediately observed on the north and east sides, which divided the fill inside the feature (Lot 4) from the subsoil or natural soil (Lot 2) from which the feature was originally excavated. A total of 16 artifacts were collected. Lot 4 artifacts included: ceramic (5), fauna (3), six machine cut nails, a sherd of window pane and a sample of charcoal. Machine cut nails were available around 1805, and regularly used into the 1890s (Miller 2000:14, Smith 1966). Ceramic included four sherds of Refined White Earthenware (RWE) tableware and a sherd of clay smoking pipe. RWE was first produced in 1805, and is still produced today (Miller 2000:13). Decorative techniques included hand painted (pink) and sponged (green and blue). Hand painted decoration, in particular pink (from the late palette group of colours), dates from the 1830s to the 1870s (Miller 1991:8). Sponged decoration dates from the 1820s to 1830s (Maryland 2002).

Unit B

It was decided to excavate Unit B, to the south of Unit A, second, therefore cross-sectioning Feature 1 and leaving the long north-south profile to photograph and draw (Image 4). The east vertical cut continued through Unit B. The feature fill included Lot 4 and 6. A total of 52 artifacts were collected from Lot 4. Lot 4 artifacts included: ceramic (34), fauna (3), metal (12), a sherd of window pane and a sample of mortar and charcoal. Ceramic included sherds of RWE, coarse red earthenware hollowware, yellowware hollowware with a slipped rim line and two sherds of smoking pipe stem. All of the RWE sherds were from tableware sherds, besides five plain sherds that may have been from a chamber pot. Decoration techniques included: sponged (blue), transfer printed (blue) and a sherd of plate with an embossed edge. This embossed pattern was the same as the child's plate from Unit F, Lot 6 (discussed below). Transfer printed decoration was invented circa 1753 (Kybalova 1989:212), and was a popular decorative technique to the 1850s (Miller 1991:9). Metal artifacts included both wrought and machine cut nails, as well as a screw. Wrought nails, or those handmade by a blacksmith, were available throughout the 19th century, but slowly became less prevalent as machine cut nails became accepted. A single artifact was collected from Unit B, Lot 6; an incomplete machine cut nail.

Unit C

Unit C was on the west side of Feature 1. At first when Unit C was excavated, a baulk was left on the east side, dividing it from Unit B (Image 2 and 3). The baulk was removed after the long north-south profile was photographed and drawn (Map 5). The vertical cut for Feature 1 was identified on the west side of the unit, and continued to the north and south. The feature fill included Lot 4 and 6.

A total of 33 artifacts were collected from Lot 4. Lot 4 artifacts included: ceramic (15), fauna (5), metal (11), a sherd of window pane and a sample of mortar and brick.



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Ceramic included sherds of RWE tableware, three sherds of clay smoking pipe and a sherd of coarse red earthenware hollowware. RWE decoration techniques included: hand painted (late palette), sponged (blue), and transfer printed (blue). Metal artifacts included both wrought and machine cut nails, a piece of iron strap and a fragment of cast iron hollowware. A copper alloy button was also recovered.

A total of 17 artifacts were collected from Lot 6. Lot 6 artifacts included: ceramic (3), fauna (12), a wrought nail and a sample of charcoal. The three sherds of ceramic were RWE tableware; one plain, one sponged (blue) and one transfer printed (blue).

Unit D

Unit D was in the northwest corner of Feature 1 (Map 5). Vertical cuts were observed on the north and west sides. At first when Unit D was excavated, a baulk was left on the east side, dividing it from Unit A. The baulk was removed after the long north-south profile was photographed and drawn. The feature fill included Lot 4. A total of 10 artifacts were collected; including: ceramic (5), metal (3), a fragment of bone and a sherd of window pane. The ceramic was RWE tableware, and included sherds of hand painted (pink), transfer printed (blue) and edge decorated (blue). The edge decorated sherd had a scalloped edge and impressed curved lines, this specific type of decoration was produced between 1795 and 1845 (Miller 1987). Metal artifacts included two machine cut nails and one wrought.

Unit E

Unit E was on the east side of Feature 1 (Map 5). The east vertical cut continued through Unit E. The feature fill included Lot 6. A total of six artifacts were collected: a sherd of coarse red earthenware hollowware, a wrought nail, and four faunal fragments.

Unit F

Unit F was on the west side of Feature 1 (Map 5). The vertical cut for Feature 1 was identified on the west side of the unit, and continued to the north and south. The feature fill included Lot 6. At first when Unit F was excavated, a baulk was left on the east side, dividing it from Unit E. The baulk was removed after the long north-south profile was photographed and drawn.

A total of 33 artifacts were collected; including: ceramic (13), glass (8), metal (11) and a sample of charcoal. Ceramic included RWE tableware and a sherd of coarse red earthenware hollowware. RWE tableware decoration techniques included: banded industrial slip and transfer printed (blue and black). RWE decorated with black transfer print was produced from 1830 to 1850 (Miller 1987). The black transfer print sherds were particularly interesting as they formed part of a “children’s plate” or “motto plate” with a central scene and a verse, in this case “..OUR MAMMA SENDS HER LOVE, AND, SHE BID ME TO SAY/..CAKE’ T IS I KNOW”. These plates have embossed brims (this one is a floral motif) and include a central transfer printed motif which is often educational or religious. Children’s plates were popular between 1830 and 1860 (Burke 1991:59). It should be noted that a sherd of this children’s plate mends to a fragment from Lot 4 Unit B.

The eight glass sherds comprised of window pane and a hollowware vessel. Metal included seven machine cut nails, a fragment of iron sheet, the finial of a strap hinge and a mouth harp. The mouth harp, also known as a Jew’s harp is an ancient musical instrument, first known in North America in 1650 (Kenyon & Kenyon 2008).

Unit G

Unit G was on the east side of Feature 1 (Map 5). The vertical cuts which divided the fill inside the feature (Lot 6) from the subsoil or natural soil (Lot 2) were observed to the south and east. A total of 10 artifacts were collected: ceramic (5), three nails (one cut, two wrought) and two samples of mortar with white wash adhering. The ceramic included: one sherd of coarse red earthenware hollowware and four sherds of RWE tableware. Decoration techniques included transfer printed (blue) and sponged (blue).



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Unit H

Unit H was on the west side of Feature 1 (Map 5). The vertical cuts which divided the fill inside the feature (Lot 6) from the subsoil or natural soil (Lot 8) were observed to the south and west. A total of 38 artifacts were collected; including: ceramic (13), fauna (5), glass (4), metal (14) and a sample each of mortar and charcoal. All of the ceramic was RWE tableware. Decoration types included: sponged (blue), transfer printed (black), and hand painted (late palette). Metal artifacts included nine fragments of iron sheet, a machine cut nail, three fragments of iron strap and a large iron handle, possible from a large vessel, like a cauldron. Glass sherds included a bottle neck, a sherd of window pane and a sherd of opaque, light green saucer. This saucer sherd is likely a type of glass called Jadeite, which was popular in the 1940s and 1950s (<http://www.marthastewart.com/266055/jadeite>).

When the artifact assemblage is reviewed by culturally deposited lot rather than arbitrary units, a number of similarities become apparent. The overall assemblages between Lots 4 and 6 have essentially the types of ceramic wares and structural remains. In addition there are a number of artifacts found separately in Lots 4 and 6 that mend indicating that the lots are closely related. Tables 7 and 8 provide further details on the composition of the Lot 4 and 6 artifact assemblage.

Table 7: Feature 1 Ceramic Ware types by Lot.

Project Name	Stage	Prov 1	Lot	Material 1	Function 2	Material 2	Sum Of# of Artifacts
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	earthenware: ind. white	3
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	refined white earthenware	32
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	earthenware: ind. white	4
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	refined white earthenware	28
Total							67

Table 8: Feature 1 Ceramic Surface Treatments by Lot.

Project Name	Stage	Prov 1	Lot	Material 1	Function 2	Attribute 1	Sum Of# of Artifacts
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	edge decorated: blue	1
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	embossed	1
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	hand painted	3
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	hand painted/sponged	1
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	plain	14
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	sponged	7
McCullough-2 Site	4	Feat.1	04	ceramic	tableware	transfer printed	8



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Project Name	Stage	Prov 1	Lot	Material 1	Function 2	Attribute 1	Sum Of# of Artifacts
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	hand painted	10
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	indeterminate	4
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	industrial slip	1
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	plain	6
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	sponged	4
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	transfer printed	4
McCullough-2 Site	4	Feat.1	06	ceramic	tableware	transfer printed/embossed	3
Total							67

3.1.2 Feature 2

Excavation of Feature 2 began after its surface had been completely exposed (S&G Section 4.2.2 Standard 7d). Feature 2 was at first determined to be roughly rectangular in shape and approximately 30 cm x 30 cm (Map 5; Images 10 and 11). When plans were made to begin excavating, Feature 2 was fully exposed and cross-sectioned along its east-west axis (S&G Section 4.2.7 Standard 3). After fully exposing the feature on the surface and removing some additional overburden, it was determined that Feature 2 measured 40cm north-south by 43 cm east-west (Map 5). The initial excavation removed the southern half of the feature leaving a clean east-west cross section for drawing and photo documentation.

As Feature 2 was the first feature to be investigated as part of the Stage 4, the interior fill deposits and surrounding subsoil were assigned Lots 1, 2, and 3, respectively. Lot 1 consisted of the feature fill and was composed of dense yellow-beige sandy clay with little to no inclusions. Typical of this area there are two types of subsoil: a deposit of dense grey-brown silty clay with inclusions of gravel to cobbles (Lot 2) over blue-grey silty clay with a marked decrease/absence of inclusions (Lot 3). No artifacts were recovered from Feature 2.

3.1.3 Feature 3

Excavation of Feature 3 began after its surface had been completely exposed (S&G Section 4.2.2 Standard 7d). Feature 3 was at first determined to be roughly square in shape and measured 20 cm by 20cm. After careful investigation of the feature it was determined to not be cultural in origin but rather disturbance caused by the topsoil removal that occurred earlier in 2015.

3.2 Faunal Assemblage Analysis

The faunal assemblage consisted of 111 individual or fragmented bones (Appendix C). The faunal material recovered from the current archaeological investigation was relatively well preserved but in some cases very weathered and fragmentary. As a result, it was possible to identify only 21% (n=78) of the assemblage below taxonomic class. The collection contained bones of 7 distinct taxa identified of which at least 3 were of domestic species (Table 9).



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Table 9: Faunal Assemblage Summary.

Class/Taxon	Total Site		
	NISP	%	MNI
Mammals			
<i>Bos taurus</i>	2	2	1
<i>Ovis aries</i>	20	18	1
Unidentified Mammal			
Large	1	1	1
medium	6	5	2
Family Cricetidae	78	70	1
mouse, rat, leemming or vole			
Marmota Momax	1	1	1
groundhog			
Total mammal	110	99	7
Birds			
Class Aves			
medium bird	1	1	1
TOTAL FAUNAL	111		21

Species Discussion

Domestic mammals made up 27% (n= 30) of the collection with a total of 23 fragments identified and 7 unidentified fragments that likely belonged to domestics.

Sheep (*Ovis aries*) comprised the largest number of identified domestic mammals at 67% (18% of site, n= 20). One juvenile was represented by at least 11 fragments identified by tooth development and epiphyseal fusion of the vertebra. It is likely that some of the 6 unidentified medium-sized mammal bones also derived from sheep. Butchering evidence included a cut mark to a rib.

Cattle (*Bos taurus*) were represented by 2 fragments and one individual. Tooth development categorized the cow as a juvenile.

Birds (*Class Aves*) likely represented domestic fowl and consisted of a single metatarsus. Most of the bird remain likely belonged to chicken and birds in the size range of chicken and duck. The epiphysis of the bone was unfused and juvenile.

Other wild animals were represented in large numbers relative to the total faunal assemblage at 71% (n=79). This included an almost complete skeleton of a single mouse, rat, leemming or vole (n=78) and an unfused femur of a juvenile groundhog (n=1).

Alterations and Butchering

Evidence of butchering was visible on a single unidentified large mammal bone and a sheep rib. There was also evidence for heat altered bone on two fragments of the assemblage under medium mammal.

Summary

The taxa identified were consistent with the location and time period of the site. Most of the bone were from a single small rodent (mouse rat, leemming or vole; n=78) while the remaining assemblage appeared to represent domestic consumption and refuse.

3.3 Archaeobotanical Remains and Soil Sample Analysis from Feature 1

The soil samples from Feature 1 Lots 4 and 6, respectively, contained relatively large amounts of charred archaeobotanical remains. No charred wood specimens larger than 6.3mm were recovered which resulted in no charred wood identification. Tables 9 and 10 provide further details on the results of the archaeobotanical analysis.



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Table 10: Archaeobotanical Remains from Feature 1: Unit D Lot 4

Feature	SuperBag and SubBag	Fraction (HF, LF)	Sieve Size (mm)	Freq.	Botanical Remains	Family/ Genus/ Species	Common Name	NOTES
F1 Unit D Lot 4	1.1	HF	>6.3	0	N/A	N/A	N/A	N/A
		LF	>6.3	0	N/A	N/A	N/A	N/A
F1 Unit D Lot 4	1.2	HF	>4.75	1	charred wood	not analysed	not analysed	
		LF	>4.75	3	charred wood	not analysed	not analysed	
F1 Unit D Lot 4	1.3	HF	>2.0	2	charred wood	not analysed	not analysed	
		LF	>2.0	73	charred wood	not analysed	not analysed	
F1 Unit D Lot 4	1.4	HF	>0.6	87	charred wood	not analysed	not analysed	
		LF	>0.6	707	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		LF	>0.6	490	charred wood	not analysed	not analysed	
		LF	>0.6	3	charred seeds	<i>Caryophyllaceae</i>		heavily charred and incomplete
		LF	>0.6	2	charred seeds	<i>Amaranthaceae</i>		Both examples are incomplete
		LF	>0.6	2	Seeds	<i>Sambucus canadensis</i>	Common Elderberry	Uncharred
		LF	>0.6	1	Seeds	<i>Nicandra physalodes</i>	Apple-of-Peru	Uncharred
		LF	>0.6	1	charred seeds	<i>Oxalis stricta</i>	Yellow woodsorrel	
F1 Unit D Lot 4	1.5	HF	>0.3	>600	charred wood	not analysed	not analysed	
		HF	>0.3	7	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		LF	>0.3	>1000	charred wood	not analysed	not analysed	lots of uncharred rootlets
		LF	>0.3	769	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		LF	>0.3	6	charred seeds	<i>Portulaca oleracea</i>	Purslane	



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Table 11: Archaeobotanical Remains from Feature 1: Unit F Lot 6

Feature	SuperBag and SubBag	Fraction (HF, LF)	Sieve Size (mm)	Freq.	Botanical Remains	Family/ Genus/ Species	Common Name	NOTES
F1 Unit F Lot 6	1.1	HF	>6.3	0	N/A	N/A	N/A	
		LF	>6.3	0	N/A	N/A	N/A	
F1 Unit F Lot 6	1.2	HF	>4.75	0	N/A	N/A	N/A	
		LF	>4.75	4	charred wood	not analysed	not analysed	
F1 Unit F Lot 6	1.3	HF	>2.0	3	charred wood	not analysed	not analysed	
		LF	>2.0	98	charred wood	not analysed	not analysed	
F1 Unit F Lot 6	1.4	HF	>0.6	67	charred wood	not analysed	not analysed	
		LF	>0.6	>1000	charred wood	not analysed	not analysed	
		LF	>0.6	234	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		LF	>0.6	1	charred seeds	<i>Chenopodium</i>		
F1 Unit F Lot 6	1.5	HF	>0.3	>500	charred wood	not analysed	not analysed	
		HF	>0.3	50	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		HF	>0.3	2	charred seeds	<i>Portulaca oleracea</i>	Purslane	
		LF	>0.3	>2000	charred wood	not analysed	not analysed	
		LF	>0.3	413	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	

The soil samples from Feature 1, Unit D, Lot 4 contained substantial amounts of both charred wood and charred seed remains. In total over 2,150 charred wood fragments were recovered from 4 sieve cohorts. No charred wood samples greater than 6.3 mm were recovered so identification could not be made. In addition to the charred wood, a total of 1,498 charred seeds and 3 uncharred seeds were recovered from both the heavy and light fractions within 4 sieve cohorts and tentatively identified during the archaeobotanical analysis.

Of the total charred seed assemblage, *Hedeoma pulegioides* (False Pennyroyal) made up 98.9% with the remaining 1.1% consisting of 12 charred seeds and 3 uncharred seeds. The twelve charred seeds were six *Portulaca oleracea* (Purslane), three heavily charred and incomplete *Caryophyllaceae*, two incomplete *Amaranthaceae* specimens, and one *Oxalis stricta* (Yellow woodsorrel). The three uncharred seeds consisted of two *Sambucus Canadensis* (Common Elderberry) and one *Nicandra physalodes* (Apple-of-Peru).

In addition to the charred wood and seeds, five egg shell fragments, and a large number of snail shell fragments were also recovered from the 4.75 mm sieve cohort. The egg shell fragments were likely culturally deposited whereas the snail shells were natural in origin.



STAGE 4 ARCHAEOLOGICAL ASSESSMENT- BHFw-111

Similarly, the soil samples from Feature 1, Unit F, Lot 6 contained substantial amounts of both charred wood and charred seed remains. In total over 3,500 charcoal fragments were recovered from 4 of the 5 sieve cohorts. No wood samples greater than 6.3 mm were recovered so no identification could be made. A total 700 charred seeds were tentatively identified during the archaeobotanical analysis. Of the total seed assemblage, *Hedeoma pulegioides* (False Pennyroyal) made up 99.6% (n=697). The remaining three charred seeds consisted of two examples of *Portulaca oleracea* (Purslane) and one charred *Chenopodium*.

When comparing the archaeobotanical remains collected and analysed for Lots 4 and 6, a number of similarities and differences become very apparent. The dominant seed within both assemblages is *Hedeoma pulegioides*. Only one other seed, *Portulaca oleracea* appears in both assemblages. The main difference is that Lot 6 contained a much greater amount of charred wood compared to Lot 4 but contained fewer seed varieties.

False Pennyroyal is very common throughout the northeastern United States and eastern Canadian Provinces. It generally thrives in areas that have been previously been disturbed by human alteration (i.e. meadows and fields) and was commonly used for medicinal purposes. The leaves can be brewed to make an aromatic tea that can aid in digestion and respiration. It is also known to have been used by certain First Nation groups and European settlers to aid in the treatment of colds, whooping cough, and various other illnesses (www.pfaf.org). The presence of large quantities of the False Pennyroyal in a burnt context indicates that it was used in some form rather than entered the archaeological record as seed rain or as an accidental introduction.

As the remainder of the identified seeds are native to eastern Ontario, their presence in comparatively low numbers is likely the result of seed rain or accidental introduction rather than intention use by the early inhabitants.



4.0 ANALYSIS & CONCLUSIONS

4.1 Feature 1

Upon completion, Feature 1 measured 3.35 by 1.15 metres and was 53 cm at its deepest. All areas within Feature 1 were excavated more than 5 cm into subsoil. The obvious usage of the feature would have been a root cellar, however a definitive conclusion was not drawn. No organic structural remains were found within the feature, nor was a habitation surface of any type identified. Upon consultation of historic maps, no dwelling was noted in this immediate area however one does appear in the eastern third of the north half of the lot. The archival information indicates that a long time tenant by the name of Alexander Dickson lived on the north half of Lot 6 since at least 1871 and likely prior to.

The two main fill deposits within Feature 1 were very similar with Lot 4 consisting of a medium to dark brown silty clay with charcoal, mortar, artifacts and pebbles and gravel. Lot 6 consisted essentially of the same matrix however it also contained a large amount large cobbles and boulders. The boulders of Lot 6 appear to have fallen or been pushed into the feature from the south side. Some of the boulders were discoloured from heat. Many seem to have broken in place, perhaps having fallen from a height. The presence of a large amount of charcoal in the soil matrix itself and recovered from the archaeobotanical analysis possible indicate some association with a fire place. The presence of a large amount of charcoal within the Lot 6 archaeobotanical analysis supports the idea that the boulders could have been associated with a hearth or fireplace.

Interestingly, there were two examples of mends between Lots 4 and 6. The first was that of a child's plate while the second was a tea cup. The presence of artifact mends between Lots 4 and 6 indicate that they were closely associated with one another and the backfilling of Feature 1 may have occurred consecutively; first with the Lot 6 from the south then Lot 4 from the north.

Datable artifacts from both lots within Feature 1 suggest an early to mid-19th century date. Table 11 summarizes dates of importance. A single outlier was recognized, a sherd of Jadeite (Jade glass) saucer, from Unit H, Lot 6. This type of glass was popular in the mid-20th century. Artifacts which are not present confirm an early to mid-19th century date too. There were no vitrified ceramics, nor was there very much glass, or wire nails; all common artifacts on late 19th century archaeological sites.

Table 12: Artifact Dating

Artifact	Date	Reference
Refined White Earthenware (RWE)	1805 – present	(Miller 2000:13)
Hand painted: late palette	1830s to the 1870s	(Miller 1991:8)
Sponged	1820s to 1930s	(Maryland 2002)
Transfer printed	circa 1753 to 1850s	(Kybalova 1989:212), (Miller 1991:9).
Transfer printed: black (on RWE)	Produced 1830 to 1850	(Miller 1987)
Machine cut nails	1805 – 1890s	(Miller 2000:14), (Smith 1966)
Edge decorated: scalloped edge/impressed curved lines	1795-1845	(Miller 1987)
Children's plate	Popular between 1830 and 1860	(Burke 1991:59)
Jadeite	Developed in the 1920s	(Alice 2013:3)



STAGE 4 ARCHAEOLOGICAL ASSESSMENT- BHFw-111

The faunal assemblage of Feature 1 is what would be expected for a mid-nineteenth century site. When the rodent remains are removed from the total assemblage, the analysed faunal remains indicate that both cow and sheep were primarily consumed with one possible example of domestic fowl.

Based on the similarities in archaeobotanical remains, the nature of the overall artifact assemblage, the similarities in fill matrix and the presence of artifact mends it is concluded that the backfilling of Feature 1 likely occurred in a single event. The use of Feature 1 could not be positively determined, however it may have been a root cellar below an early homestead or an out building. The presence of the fire cracked rock in Lot 6 supports the possibility of the presence of early dwelling/homestead on this location as does the burnt botanical remains. This is further supported by the presence of a large square post mold located directly southwest of Feature 1. In addition, Unit G, Lot 6 contained two examples of white washed present on mortar fragments. White washed mortar is typically recovered from homestead sites rather than from outbuildings or barns. The presence of a large amount of domestic tableware as well as a children's plate indicate that BhFw-111 likely represents the remains of a domestic homestead site.

The features associated with McCullough-2 site and the early occupation of the north half of Lot 6 was part of much larger influx of early settlers to Nepean Township in the middle part of the nineteenth century. There are numerous other recorded and investigated mid-nineteenth century sites archaeological sites within close proximity to the BhFw-111. The most relevant of which is the McCullough-1 (BhFw-108) which is currently being investigated and is located approximately 300 m to the southeast of McCullough-2. A second location, situated 500 to the north east of McCullough-2 is the Latimer site. Interestingly, the Latimer site shared a number of similarities with what was recovered from the Stage 2 - 4 assessments for McCullough-2. Feature 100 at the Latimer site was a roughly square shaped depression with a fill matrix containing large quantities of historic artifacts as well as cobbles and boulders. The relative date assigned to the feature was 1849 to 1870, similar to that of Feature 1 for the McCullough-2 site. Interestingly, the archaeobotanical analysis completed on the Latimer site produced a seed assemblage completed different to that of the McCullough-2 site. No single seed was represented in both assemblages. Following completion of the Stage 4 for the Latimer site, it was concluded that the remains and the site was associated with a homestead rather than a barn or outbuilding.



5.0 RECOMMENDATIONS

McCullough-2 (BhFw-111) was subject to Stage 4 archaeological block excavation and has been interpreted as a Euro-Canadian site with evidence of a possible root-cellar. **McCullough-2 (BhFw-111) has been fully excavated and documented to the extent required under the 2011 Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists*. The area subject to Stage 4 mitigation through excavation at McCullough-2 (BhFw-111) has no further cultural heritage value or interest, no longer exists in the ground and no further mitigation is required.**

The MTCS is asked to review the excavation results presented and to accept this Original Report into the Provincial Register of archaeological reports. The MTCS is also asked to provide a letter to Minto Communities Inc. concurring with the recommendation in this report that archaeological concerns related to BhFw-111 have been addressed.



6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

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

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

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

The 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 Ministry of Consumer Services is also immediately notified.

Reports recommending further archaeological fieldwork or protection for one or more archaeological sites must include the following standard statement: "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."



7.0 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 Minto Communities Inc. (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 MTCS' *Standards and Guidelines for Consultant Archaeologists* (2011).



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9.0 IMAGES



Image 1: Crew exposing Feature 1, view northeast.



Image 2: Feature 1 with Units A & B open and C & D in progress, view northwest.



Image 3: Feature 1; complete west profile of Units A, B, E, and G.



Image 4: Feature 1; west profile of Units A and B, view west.



STAGE 4 ARCHAEOLOGICAL ASSESSMENT- BHFV-111



Image 5: Feature 1; west profile of Units E and G view west.



Image 6: Feature 1 at completion of Stage 4 block excavation, view east.



STAGE 4 ARCHAEOLOGICAL ASSESSMENT- BHFV-111



Image 7: Feature 1 at completion of Stage 4 block excavation, view east.



Image 8: Feature 1 at completion of Stage 4 block excavation, north wall profile.



STAGE 4 ARCHAEOLOGICAL ASSESSMENT- BHFV-111



Image 9: Feature 1 at completion of Stage 4 block excavation, west wall profile.



Image 10: Feature 1 at completion of Stage 4 block excavation, west wall profile, note portion of rodent burrow visible above north arrow.



STAGE 4 ARCHAEOLOGICAL ASSESSMENT- BHFV-111



Image 11: Feature 2 plan view after initial exposure.



Image 12: Feature 2 south profile cross-section, view north.



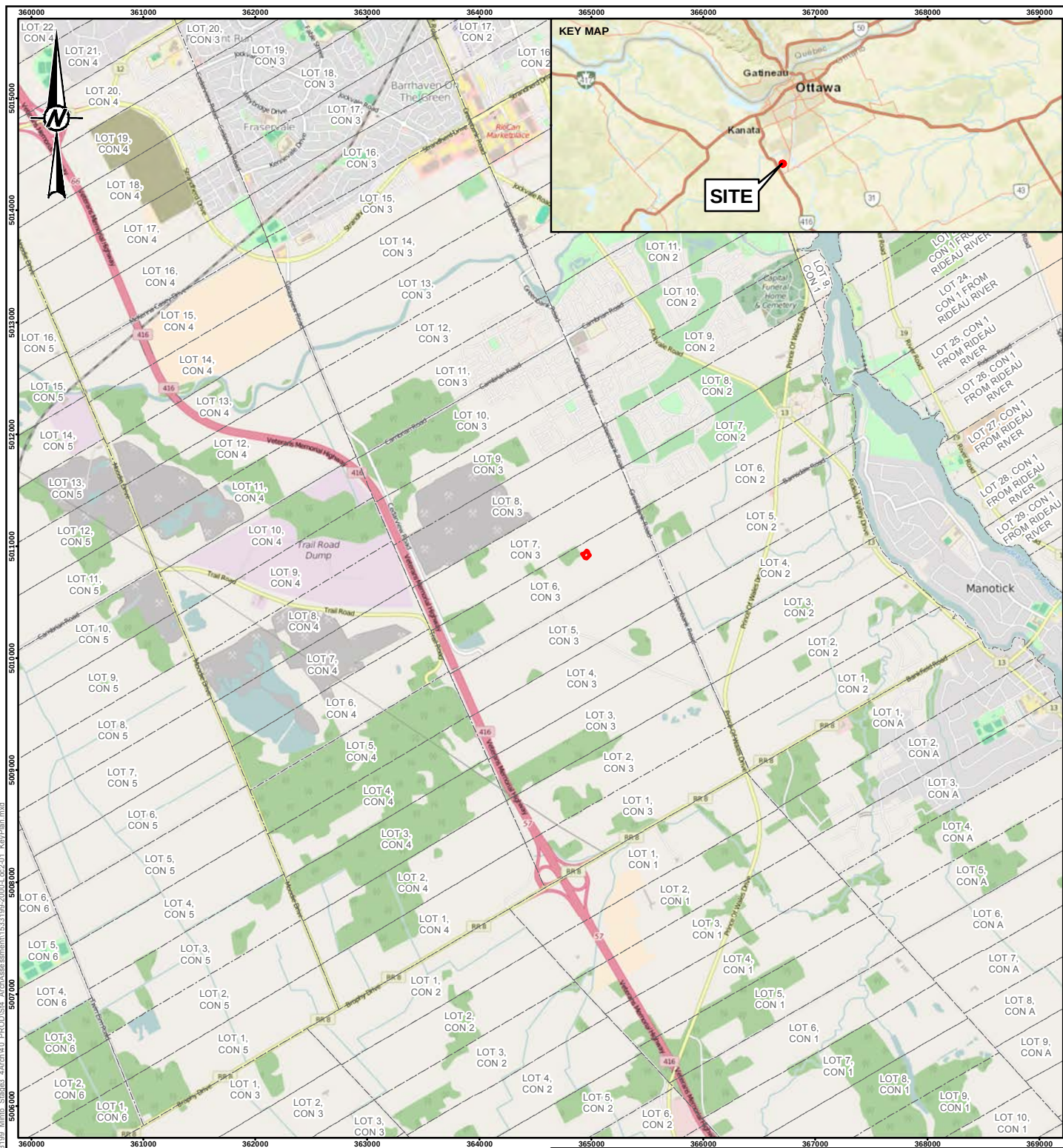
STAGE 4 ARCHAEOLOGICAL ASSESSMENT- BHFW-111



Image 13: Feature 3 after investigation. Note Lot 8 subsoil directly below Lot 2.

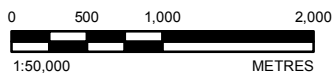


10.0 MAPS



LEGEND

 BhFw-111 STAGE 4 STUDY AREA



NOTE(S)

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COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

MINTO COMMUNITIES INC.

PROJECT

STAGE 4 ARCHAEOLOGICAL ASSESSMENT MINTO BARRHAVEN SOUTH, PHASE 2, LOT 6, CONCESSION 3 NEPEAN TOWNSHIP, CARLETON COUNTY, OTTAWA, ONTARIO

TITLE

KEY PLAN FOR BhFw-111

CONSULTANT



YYYY-MM-DD 2016-04-25

DESIGNED ----

PREPARED BR

REVIEWED ----

APPROVED ----

PROJECT NO.
1533199

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 25mm



LEGEND

- ROAD
- CONTOUR LINE, m
- WATERCOURSE, PERMANENT
- WATER AREA
- WETLAND
- STAGE 2 STUDY AREA (GOLDER, 2014)
- BhFw-111 STAGE 3 STUDY AREA
- BhFw-111 STAGE 4 STUDY AREA

KEY MAP

0 80 160 320
1:500 METRES

NOTE(S)

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4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

MINTO COMMUNITIES INC.

PROJECT

STAGE 4 ARCHAEOLOGICAL ASSESSMENT MINTO BARRHAVEN SOUTH, PHASE 2, LOT 6, CONCESSION 3 NEPEAN TOWNSHIP, CARLETON COUNTY, OTTAWA, ONTARIO

TITLE

SITE PLAN FOR BhFw-111

CONSULTANT	YYYY-MM-DD	2016-04-25
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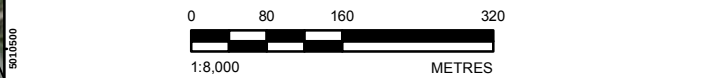
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MAP 2



LEGEND

- ROAD
- CONTOUR LINE, m
- WATERCOURSE, PERMANENT
- WATERCOURSE, INTERMITTENT
- WATER AREA
- WETLAND
- OPERATION LOCATION
- NO FURTHER ARCHAEOLOGICAL ASSESSMENT
- AREA RECOMMENDED FOR STAGE 3 ARCHAEOLOGICAL ASSESSMENT AT 5 m INTERVALS
- AREA RECOMMENDED FOR FURTHER INVESTIGATION AT 10 m INTERVALS TO DETERMINE IF CULTURAL HERITAGE VALUE AND INTEREST WARRANTS A FULL STAGE 3 ARCHEOLOGICAL ASSESSMENT
- STAGE 2 STUDY AREA (GOLDER, BhFw-111 STAGE 3 STUDY)



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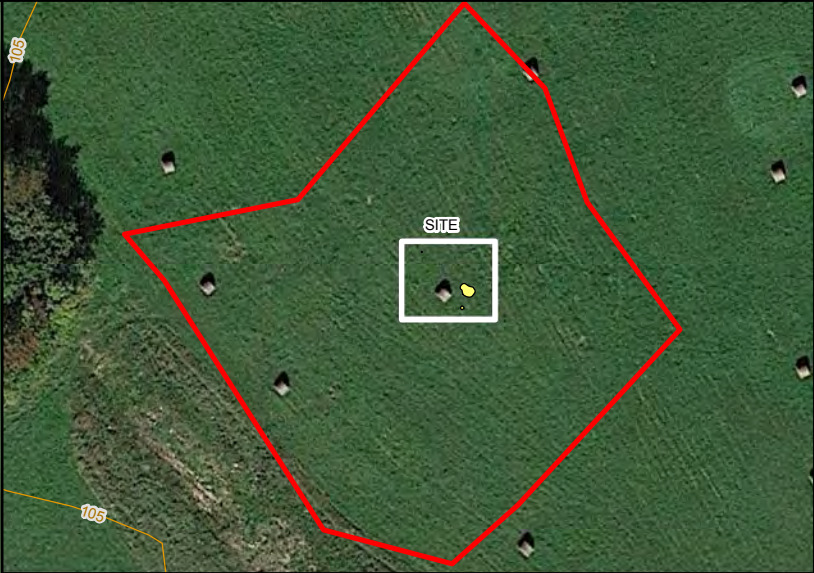
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PROJECT
STAGE 4 ARCHAEOLOGICAL ASSESSMENT MINTO BARRHAVEN SOUTH, PHASE 2, LOT 6, CONCESSION 3 NEPEAN TOWNSHIP, CARLETON COUNTY, OTTAWA, ONTARIO

TITLE
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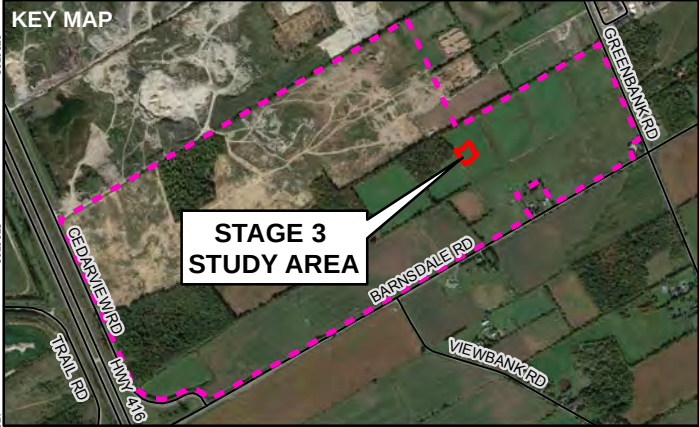
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APPROVED	----	



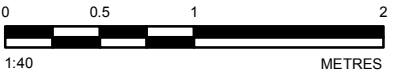


LEGEND

- FEATURE #
- STAGE 2 STUDY AREA (GOLDER, 2014)
- BhFw-111 STAGE 3 STUDY AREA



**STAGE 3
STUDY AREA**



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CLIENT
MINTO COMMUNITIES INC.

PROJECT
STAGE 3 ARCHAEOLOGICAL ASSESSMENT MINTO BARRHAVEN SOUTH, PHASE 2, LOT 6, CONCESSION 3 NEPEAN TOWNSHIP, CARLETON COUNTY, OTTAWA, ONTARIO

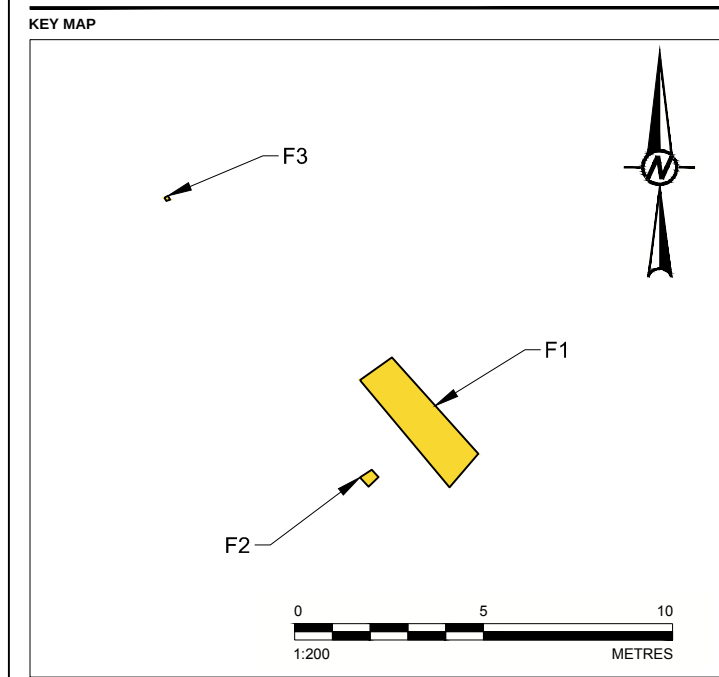
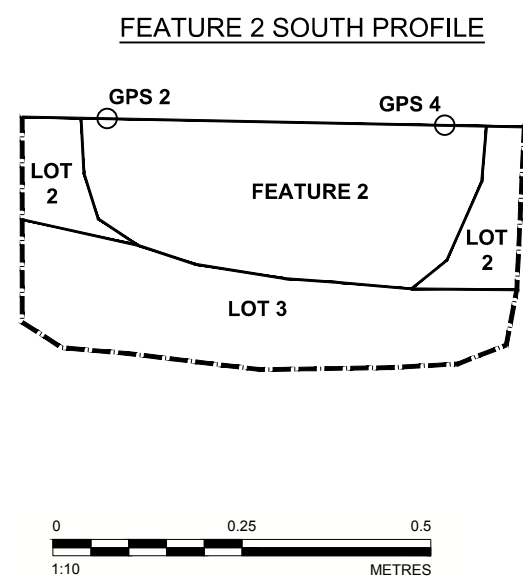
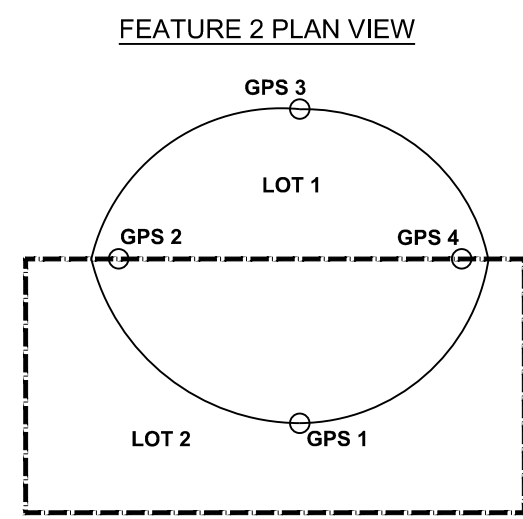
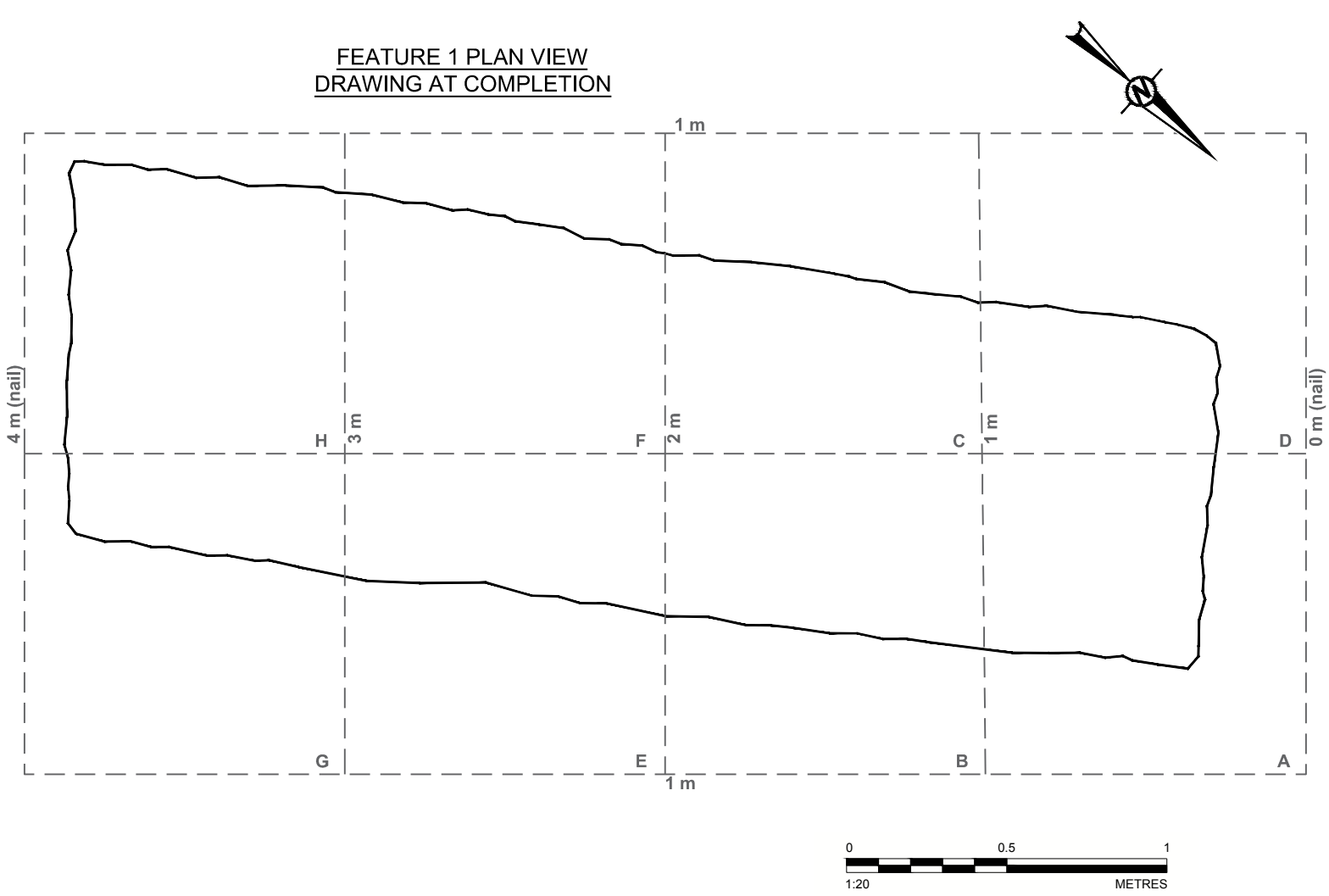
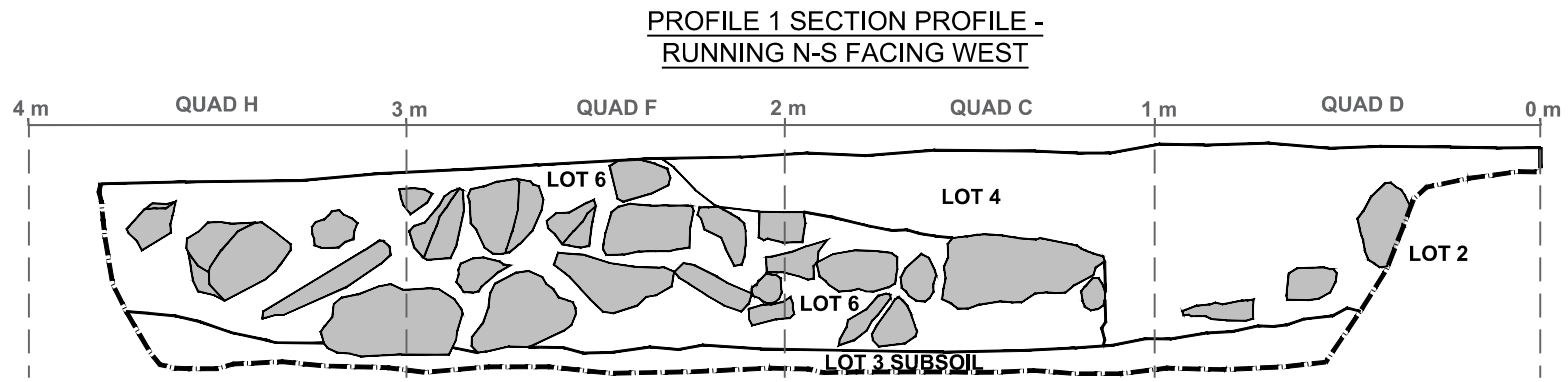
TITLE
STAGE 4 ARCHAEOLOGICAL ASSESSMENT RESULTS FOR BhFw-111

CONSULTANT	YYYY-MM-DD	2016-03-23
DESIGNED	----	
PREPARED	BR	
REVIEWED	----	
APPROVED	----	



PROJECT NO. 1533199	PHASE 2000	REV. 0	MAP 4
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Path: \\golder\gis\gait\ottawa\active\spatial\minto_communities\barhaven_south_development\09_PROJ\1533199_Minto_Stage3_4arch40_PROD\S4_ArchAssessment\1 File Name: 1533199-2000_Loc3-Profile.dwg



- LEGEND
- ROCK
 - BhFw-111 STAGE 4 FEATURE EXCAVATION LOCATIONS
- A QUADRANT
- LOT 1 DENSE YELLOW TO BEIGE SANDY CLAY - FILL
 - LOT 2 DENSE MEDIUM BROWN SAND WITH CLAY, AND GRAVEL COBBLE AND BOULDERS - SUBSOIL
 - LOT 3 LIGHT GREY SILT WITH ODD BOULDER - SUBSOIL
 - LOT 4 COMPACT MEDIUM BROWN SILTY CLAY WITH PEBBLES, CHARCOAL WOOD ASH AND ARTIFACTS - FILL
 - LOT 6 COMPACT MEDIUM TO DARK BROWN SILTY CLAY WITH PEBBLES BOULDERS, CHARCOAL, WOOD ASH AND ARTIFACTS - FILL

DRAFT

NOTE(S)
1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1533199.

CLIENT
MINTO COMMUNITIES INC.

PROJECT
STAGE 4 ARCHAEOLOGICAL ASSESSMENT MINTO BARRHAVEN SOUTH PHASE 2, LOT 6, CONCESSION 3 NEPEAN TOWNSHIP, CARLETON COUNTY, OTTAWA, ONTARIO

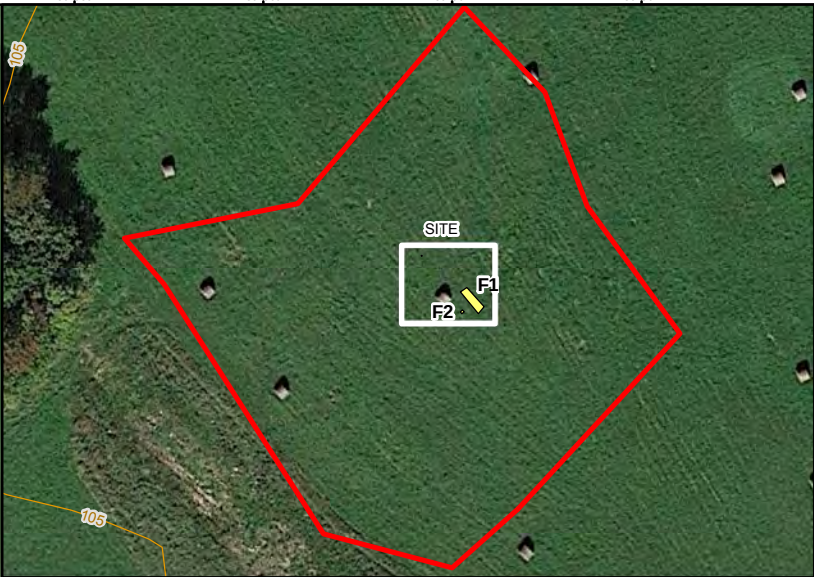
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PLAN AND PROFILE DRAWINGS FOR BhFw-111

CONSULTANT	YYYY-MM-DD	2016-04-25
DESIGNED	----	
PREPARED	BR	
REVIEWED	----	
APPROVED	----	

PROJECT NO. 1533199 PHASE 2000 REV. A MAP 5

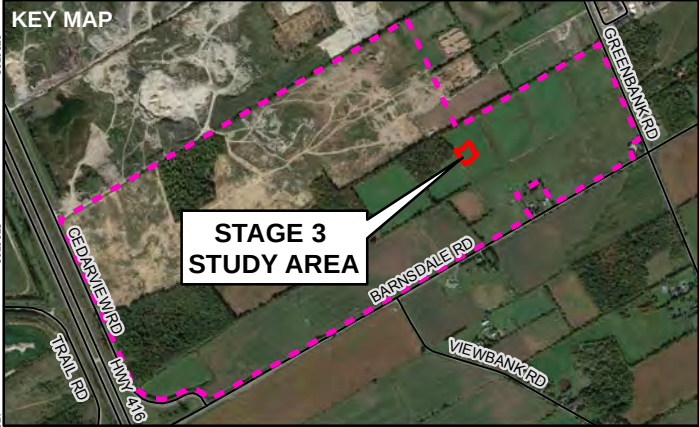


IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM A3/B

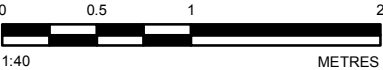


LEGEND

- PHOTO LOCATION AND DIRECTION
- BhFw-111 STAGE 4 FEATURE EXCAVATION LOCATIONS
- STAGE 2 STUDY AREA (GOLDER, 2014)
- BhFw-111 STAGE 3 STUDY AREA



STAGE 3 STUDY AREA



NOTE(S)
1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1533199.

REFERENCE(S)
1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2011.
2. GOOGLE EARTH PRO, 2014, IMAGE DATED 2013-09-24.
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
MINTO COMMUNITIES INC.

PROJECT
STAGE 4 ARCHAEOLOGICAL ASSESSMENT MINTO BARRHAVEN SOUTH, PHASE 2, LOT 6, CONCESSION 3 NEPEAN TOWNSHIP, CARLETON COUNTY, OTTAWA, ONTARIO

TITLE
STAGE 4 PHOTO LOCATION AND DIRECTION FOR BhFw-111

CONSULTANT	YYYY-MM-DD	2016-04-25
	DESIGNED	----
	PREPARED	BR
	REVIEWED	----
	APPROVED	----





11.0 CLOSURE

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.

Bradley Drouin, M.A.
Senior Archaeologist

Hugh J. Daechsel, M.A.
Principal and Senior Archaeologist

BD/HJD/mvrd/kl

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APPENDIX A

Photographic Catalogue



APPENDIX A

Photographic Catalogue

Photo. #	Feat./Sect. #	Description	Date	Direction	Photo'r
540	2	Open	16/11/2015	NE	
541	2	Open, close-up	16/11/2015		
542	2	Open, close-up	16/11/2015		
543	Site	Site overview, Brandy and Ibrahim	16/11/2015		
544	1	Open, markers outline shape of the feature	16/11/2015		
545	1	Open, markers outline shape of the feature	16/11/2015		
546	1	Open, markers outline shape of the feature	16/11/2015		
547	1	Open, markers outline shape of the feature	16/11/2015		
548	1	Open, markers outline shape of the feature	16/11/2015		
549	1	Open, quadrants divided by string	16/11/2015		
550	2	North profile, cross-section	16/11/2015	N	
551	2	North profile, cross-section	16/11/2015	N	
552	2	Close	16/11/2015	N	
553	2	Close	16/11/2015	N	
554	2	Close	16/11/2015	N	
555	3	Open/Close	16/11/2015	NW	
556	3	Open/Close	16/11/2015	NW	
557	1A	Profile	17/11/2015		
558	1A	Profile	17/11/2015		
559	1A, B, C	Site overview, Brandy and Ibrahim	17/11/2015	W	
560	1A, B, C	Site overview, Brandy and Ibrahim	17/11/2015	NW	
561	1A, B	West profile	17/11/2015	W	
562	1A, B	West profile	17/11/2015	W	
563	1	Plan view	20/11/2015	NW	
564	1	Plan view	20/11/2015	NW	
565	1	Plan view	20/11/2015	NW	
566	1	Site overview, Jo and Randy	20/11/2015	NW	
567	1	Site overview, Jo and Randy	20/11/2015	NW	
568	1	Site overview, Jo and Randy	20/11/2015	NW	
569	1A, B, C, D, E, F	Plan view	20/11/2015	NW	



APPENDIX A

Photographic Catalogue

Photo. #	Feat./Sect. #	Description	Date	Direction	Photo'r
570	1A, B, C, D, E, F	Plan view	20/11/2015	NW	
571	1C, D, E, F	Plan view, south end	20/11/2015	NW	
572	1C, D, E, F	Plan view, south end	20/11/2015	NW	
573	1A, B, C, D, E, F	Plan view	20/11/2015	SE	
574	1A, B, C, D, E, F	Plan view	20/11/2015	SE	
575	1A, B, C, D, E, F	Plan view	20/11/2015	SW	
576	1A, B, E	Profile	20/11/2015	SE	
577	1A	Profile	20/11/2015	SE	
578	1B	Profile	20/11/2015	SE	
579	1E	Profile	20/11/2015	SE	
580	1A, B, C, D, E, F	Plan view (Baulk D removed)	20/11/2015	SW	
581	1A, B, C, D, E, F	Plan view (Baulk D removed)	20/11/2015	SW	
582	1A, B, C, D, E, F	Plan view (Baulk D removed)	20/11/2015	NE	
583	1A, B, C, D, E, F	Plan view (Baulk D removed)	20/11/2015	NE	
584	1A, B, C, D, E, F	Plan view (Baulk D removed)	20/11/2015	SE	
585	1A, B, C, D, E, F	Plan view (Baulk D removed)	20/11/2015	SW	
586	1A, B, C, D, E, F	Plan view (Baulk D removed, Baulk C partially removed)	20/11/2015	N	
587	1A, B, C, D, E, F	Plan view (Baulk D removed, Baulk C partially removed)	20/11/2015	N	
588	1?	Rodent burrow (Lot ?)	24/11/2015	W	
589	1?	Rodent burrow (Lot ?)	24/11/2015	W	
590	1	Plan view (Baulks removed)	24/11/2015	NW	
591	1	Plan view (Baulks removed)	24/11/2015	NW	
592	1	Plan view (Baulks removed)	24/11/2015	NW	
593	1	Plan view (Baulks removed)	24/11/2015	NW	
594	1	Close	25/11/2015	NE	



APPENDIX A

Photographic Catalogue

Photo. #	Feat./Sect. #	Description	Date	Direction	Photo'r
595	1	Close	25/11/2015	NE	
596	1	Close	25/11/2015	NE	
597	1	Close	25/11/2015	NE	
598	1	Close	25/11/2015	N	
599	1	Close	25/11/2015	S	
600	1	Close	25/11/2015	W	
601	1A, D	North profile	25/11/2015	N	
602	1G, H	South profile	25/11/2015	E	
603	1A, B, E, G	East profile	25/11/2015	E	
604	1A, B, E, G	East profile	25/11/2015	E	
605	1A, B, E, G	East profile	25/11/2015	E	
606	1C, D, F, H	West profile	25/11/2015	W	
607	1C, D, F, H	West profile	25/11/2015	W	
608	1C, D, F, H	West profile	25/11/2015	W	
609	1?	Rodent burrow	25/11/2015	E	
610	1?	Rodent burrow	25/11/2015	E	

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APPENDIX B

Artifact Catalogue



APPENDIX B Artifact Inventory

Artifacts

	Prov 1	Prov 2	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	# of Artifacts	Note
9001	Feat.1	A	ceramic	clay: white	personal/societal	smoking	smoking pipe	spur	plain			1	
9000	Feat.1	A	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	hand painted	pink		1	
8999	Feat.1	A	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	sponged	blue		1	
8937	Feat.1	A	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	footring/footrim	plain	clear/colourless		1	
8998	Feat.1	A	ceramic	refined white earthenware	food/beverage	tableware	saucer	body	sponged	green		1	
9005	Feat.1	A	fauna	bone	food/beverage		mammal	incomplete				1	
9004	Feat.1	A	fauna	bone	food/beverage		mammal	incomplete				1	
9003	Feat.1	A	fauna	dentition	indeterminate		mammal	incomplete				1	
8936	Feat.1	A	flora	charcoal	sample		sample					1	
9002	Feat.1	A	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light		1	
9007	Feat.1	A	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut	3	
9006	Feat.1	A	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut	3	
8972	Feat.1	B	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain			2	
8964	Feat.1	B	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown		1	
8962	Feat.1	B	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	rim/body	glaze: lead	yellowish-green		7	
8968	Feat.1	B	ceramic	earthenware: ind. white	food/beverage	tableware	flatware	body/footrim	transfer printed	blue		3	
8965	Feat.1	B	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	sponged	blue		1	
8971	Feat.1	B	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless		8	
8966	Feat.1	B	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	transfer printed	blue		1	
8967	Feat.1	B	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	embossed	clear/colourless		1	same emb flowers as child's plate
8969	Feat.1	B	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	footring/footrim	plain	clear/colourless		1	
8970	Feat.1	B	ceramic	refined white earthenware	personal/societal	health/hygiene	chamber pot	footring/rim	plain	clear/colourless		5	possible chamber pot
8963	Feat.1	B	ceramic	yellowware	food/beverage	indeterminate	holloware: cylindrical	rim/footring	industrial slip	rim line: blue		4	



APPENDIX B Artifact Inventory

	Prov 1	Prov 2	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	# of Artifacts	Note
8976	Feat.1	B	fauna	bone	indeterminate		mammal	incomplete				3	
8975	Feat.1	B	flora	charcoal	indeterminate		sample					1	
8973	Feat.1	B	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate	1	
8982	Feat.1	B	metal	iron	indeterminate	hardware	screw: indeterminate	complete	countersunk head			1	
8977	Feat.1	B	metal	iron	structural	hardware	nail: common	complete	rosehead		wrought	1	
8961	Feat.1	B	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut	1	
8979	Feat.1	B	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut	6	
8978	Feat.1	B	metal	iron	structural	hardware	nail: common	incomplete	rosehead		wrought	1	
8980	Feat.1	B	metal	iron	structural	hardware	nail: lath	complete	rectangular head		cut	2	
8981	Feat.1	B	metal	iron	structural	hardware	nail: lath	incomplete	round head		wrought	1	
8974	Feat.1	B	mortar		structural	building component	sample					1	
9022	Feat.1	C	ceramic	clay: white	personal/societal	smoking	smoking pipe	bowl	plain			3	
9023	Feat.1	C	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: none			1	
9018	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	footring/footrim	plain	clear/colourless		2	
9020	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	hand painted/sponged	polychrome: late palette		1	
8949	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	sponged	blue		1	
9019	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body	sponged	blue		4	
9021	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless		1	
8950	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless		1	
9017	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	footring/footrim	transfer printed	blue		2	Willow pattern
8948	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	transfer printed	blue		1	Willow pattern
9016	Feat.1	C	ceramic	refined white earthenware	food/beverage	tableware	teacup	Footring/footrim	hand painted	polychrome: late palette		1	London shape, mends with 1H6
9036	Feat.1	C	composite	mortar/brick	structural	building component	sample					1	
9054	Feat.1	C	fauna	bone	ecological		mammal	incomplete				78	Sm rodent
9025	Feat.1	C	fauna	bone	food/beverage		mammal	incomplete				1	
9027	Feat.1	C	fauna	bone	indeterminate		bird	incomplete				1	
9026	Feat.1	C	fauna	bone	indeterminate		mammal	incomplete				3	



APPENDIX B

Artifact Inventory

	Prov 1	Prov 2	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	# of Artifacts	Note
8954	Feat.1	C	fauna	bone	indeterminate		mammal	incomplete				9	
8953	Feat.1	C	fauna	dentition	indeterminate		mammal					3	
8951	Feat.1	C	flora	charcoal	indeterminate		sample					1	
9024	Feat.1	C	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light		1	
9035	Feat.1	C	metal	copper alloy	personal/societal	clothing	button: flat: 1 piece	complete	impressed: lettering			1	'..STANDARD..'
9028	Feat.1	C	metal	iron	indeterminate		holloware: cylindrical	body	plain		cast	1	
9029	Feat.1	C	metal	iron	indeterminate		strap	incomplete				1	
9030	Feat.1	C	metal	iron	structural	hardware	nail: common	complete	rectangular head		cut	1	
8952	Feat.1	C	metal	iron	structural	hardware	nail: common	complete	rosehead		wrought	1	
9034	Feat.1	C	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		wrought	2	
9031	Feat.1	C	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut	2	
9033	Feat.1	C	metal	iron	structural	hardware	nail: common	incomplete	rosehead		wrought	2	
9032	Feat.1	C	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head		cut	1	
9044	Feat.1	D	ceramic	refined white earthenware	food/beverage	tableware	flatware	body	plain	clear/colourless		1	
9043	Feat.1	D	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	hand painted	pink		1	
9042	Feat.1	D	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	footring/ footrim	transfer printed	blue		2	Willow pattern
9041	Feat.1	D	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edge decorated: blue	impressed curved lines/scalloped		1	
9039	Feat.1	D	fauna	bone	indeterminate		mammal	incomplete				1	
9040	Feat.1	D	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate	1	
9037	Feat.1	D	metal	iron	structural	hardware	nail: common	complete	rosehead		wrought	1	
9038	Feat.1	D	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut	2	
9012	Feat.1	E	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	base	glaze: lead	brown		1	
9015	Feat.1	E	fauna	bone	indeterminate		mammal	incomplete				3	
9014	Feat.1	E	fauna	dentition	indeterminate		mammal	complete				1	
9013	Feat.1	E	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		wrought	1	
8988	Feat.1	F	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown		1	
8984	Feat.1	F	ceramic	earthenware: ind. white	food/beverage	tableware	indeterminate	body	indeterminate			4	
8986	Feat.1	F	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded		1	



APPENDIX B Artifact Inventory

	Prov 1	Prov 2	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	# of Artifacts	Note
8987	Feat.1	F	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	transfer printed	blue		1	
8985	Feat.1	F	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless		3	
8983	Feat.1	F	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	vessel portion	transfer printed/embossed	black		3	'..OUR MAMMA SENDS HER LOVE, AND, SHE BID ME TO SAY/..CAKE' T IS I KNOW'
8991	Feat.1	F	flora	charcoal	indeterminate		sample					1	
8989	Feat.1	F	glass	indeterminate	indeterminate		holloware: polygonal	body	plain	aqua: light	moulded: contact	2	
8990	Feat.1	F	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate	6	
8997	Feat.1	F	metal	iron	indeterminate		sheet					2	
8996	Feat.1	F	metal	iron	personal/societal	recreation	mouth harp	complete				1	
8995	Feat.1	F	metal	iron	structural	hardware	hinge: strap	finial				1	
8992	Feat.1	F	metal	iron	structural	hardware	nail: common	complete	rectangular head		cut	3	
8993	Feat.1	F	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut	3	
8994	Feat.1	F	metal	iron	tools/equipment	horse related	nail: common	complete	horseshoe head		cut	1	
9045	Feat.1	G	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown		1	
9046	Feat.1	G	ceramic	refined white earthenware	food/beverage	tableware	flatware	base	plain	clear/colourless		2	
9047	Feat.1	G	ceramic	refined white earthenware	food/beverage	tableware	flatware	footring/ footrim	transfer printed	blue		1	
9048	Feat.1	G	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	sponged	blue		1	
9050	Feat.1	G	metal	iron	structural	hardware	nail: common	complete	horseshoe head		cut	1	
9051	Feat.1	G	metal	iron	structural	hardware	nail: common	complete	rosehead		wrought	1	
9052	Feat.1	G	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		wrought	1	
9049	Feat.1	G	mortar		structural	building component	sample					2	with white wash
8955	Feat.1	H	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	sponged	blue		1	
8958	Feat.1	H	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	base	transfer printed	black		1	mends with _
8957	Feat.1	H	ceramic	refined white earthenware	food/beverage	tableware	saucer	base	hand painted	green		1	
8947	Feat.1	H	ceramic	refined white earthenware	food/beverage	tableware	saucer	body	sponged	blue		1	



APPENDIX B Artifact Inventory

	Prov 1	Prov 2	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	# of Artifacts	Note
8956	Feat.1	H	ceramic	refined white earthenware	food/beverage	tableware	teacup	vessel portion	hand painted	polychrome: late palette		9	London shape, mends with 1C4
8938	Feat.1	H	fauna	bone	indeterminate		mammal	incomplete				4	
8959	Feat.1	H	fauna	dentition	indeterminate		mammal	incomplete				1	
8940	Feat.1	H	flora	charcoal	indeterminate		sample					1	
8946	Feat.1	H	glass	indeterminate	food/beverage	tableware	saucer	footring/footrim	plain	green: opaque	indeterminate	1	Jadeite?, saucer?
8945	Feat.1	H	glass	indeterminate	indeterminate		bottle: indeterminate	neck	plain	clear/colourless	indeterminate	2	
8944	Feat.1	H	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate	1	
8960	Feat.1	H	metal	iron	indeterminate		holloware: cylindrical	handle			cast	1	lg handle - to a cauldron
8941	Feat.1	H	metal	iron	indeterminate		sheet	incomplete				9	
8942	Feat.1	H	metal	iron	indeterminate		strap					3	folded
8943	Feat.1	H	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut	1	
8939	Feat.1	H	mortar		structural	building component	sample					1	

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APPENDIX C

Faunal Catalogue

Project Num.	Prov. 1	Prov. 2	Lot	CF	Taxon (Species Name Binomial)	Species Common Name	Skeletal Element	1	2	3	4	5	6	7	8	Portion	Tooth	Side	Sex	No. of Fragments	MNI	Age Class	Proximal Fusion	Distal Fusion
1533199	Op A		4		Class Mammalia	medium mammal	rib									frag		ind	ind	1	1	ind		
1533199	Op A		4		Class Mammalia	large mammal	long bone									diaphysis		ind	ind	1	1	ind		
1533199	Op A		4		Bos Taurus	cow	tooth										dp3	left	ind	1	1	juvenile		
1533199	Op B		4		Class Mammalia	medium mammal	rib									frag		ind	ind	3	2	ind		
1533199	Op C		4		Class Aves	medium bird	metatarsus			1	1	1	1	1		diaphysis		ind	ind	1	1	juvenile	unfused	unfused
1533199	Op C		4		Marmota Monax	groundhog	femur	1	1	1	1	1	1			proximal		left	ind	1	1	juvenile	fusing	unfused
1533199	Op C		4		Class Mammalia	large mammal	skull											ind	ind	2	2	ind		
1533199	Op C		4		Class Mammalia	medium mammal	indeterminate									frag		ind	ind	1	1	ind		
1533199	Op C		6		Ovis Aries	sheep	tooth										dp1, 2 and 3	left	ind	3	1	juvenile		
1533199	Op C		6		Ovis Aries	sheep	mandible									frag		ind	ind	8	1	ind		
1533199	Op C		6		Ovis Aries	sheep	rib	1	1							frag		ind	ind	1	1	ind		
1533199	Op C		7		Family Cricetidae	mouse, rat or vole	miscellaneous											nd	ind	78	1	juvenile		
1533199	Op D		4		Class Mammalia	medium mammal	indeterminate									frag		ind	ind	1	1	ind		
1533199	Op E		6		Ovis Aries	sheep	rib									frag		ind	ind	3	1	juvenile		
1533199	Op E		6		Ovis Aries	sheep	tooth										incisor	ind	ind	1	1	juvenile		
1533199	Op H		6		Bos Taurus	cow	tooth									frag	incisor	ind	ind	1	1	juvenile		
1533199	Op H		6		Ovis Aries	sheep	vertebra									frag		mid	ind	4	1	juvenile	unfused	unfused

Project Num.	Prov. 1	Prov. 2	Lot	CF	Taxon (Species Name Binomial)	Species Common Name	Skeletal Element	Tooth eruption/wear	Taphonomy	Modifications	Type	Location/ Direction	Comments	Measured (y/n)	References	Picture
1533199	Op A		4		Class Mammalia	medium mammal	rib			burned	calcined					y
1533199	Op A		4		Class Mammalia	large mammal	long bone			butchered	saw	transverse				
1533199	Op A		4		Bos Taurus	cow	tooth									
1533199	Op B		4		Class Mammalia	medium mammal	rib									
1533199	Op C		4		Class Aves	medium bird	metatarsus		weathered							
1533199	Op C		4		Marmota Monax	groundhog	femur		weathered				ground hog			
1533199	Op C		4		Class Mammalia	large mammal	skull		weathered							
1533199	Op C		4		Class Mammalia	medium mammal	indeterminate			burned	calcined					
1533199	Op C		6		Ovis Aries	sheep	tooth									
1533199	Op C		6		Ovis Aries	sheep	mandible									
1533199	Op C		6		Ovis Aries	sheep	rib			butchered	cut					
1533199	Op C		7		Family Cricetidae	mouse, rat or vole	miscellaneous						mouse/rat			
1533199	Op D		4		Class Mammalia	medium mammal	indeterminate									
1533199	Op E		6		Ovis Aries	sheep	rib									
1533199	Op E		6		Ovis Aries	sheep	tooth									
1533199	Op H		6		Bos Taurus	cow	tooth									
1533199	Op H		6		Ovis Aries	sheep	vertebra		weathered							



APPENDIX D

Archaeobotanical Catalogue

Feature	SuperBag and SubBag	Fraction (HF, LF)	Sieve Size (mm)	Freq.	Botanical Remains	Family/ Genus/ Species	Common Name	NOTES
F1 Quad F Lot 6	1.1	HF	>6.3	0	N/A	N/A	N/A	
		LF	>6.3	0	N/A	N/A	N/A	
F1 Quad F Lot 6	1.2	HF	>4.75	0	N/A	N/A	N/A	
		LF	>4.75	4	charred wood	not analysed	not analysed	
F1 Quad F Lot 6	1.3	HF	>2.0	3	charred wood	not analysed	not analysed	
		LF	>2.0	98	charred wood	not analysed	not analysed	
F1 Quad F Lot 6	1.4	HF	>0.6	67	charred wood	not analysed	not analysed	
		LF	>0.6	>1000	charred wood	not analysed	not analysed	
		LF	>0.6	1	charred seeds	<i>Chenopodium</i>		
		LF	>0.6	234	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
F1 Quad F Lot 6	1.5	HF	>0.3	>500	charred wood	not analysed	not analysed	
		HF	>0.3	2	charred seeds	<i>Portulaca oleracea</i>	Purslane	
		HF	>0.3	50	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		LF	>0.3	>2000	charred wood	not analysed	not analysed	
		LF	>0.3	413	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
Feature	SuperBag and SubBag	Fraction (HF, LF)	Sieve Size (mm)	Freq.	Botanical Remains	Family/ Genus/ Species	Common Name	NOTES
F1 Quad D Lot 4	1.1	HF	>6.3	0	N/A	N/A	N/A	N/A
		LF	>6.3	0	N/A	N/A	N/A	N/A
F1 Quad D Lot 4	1.2	HF	>4.75	1	charred wood	not analysed	not analysed	
		LF	>4.75	3	charred wood	not analysed	not analysed	

F1 Quad D Lot 4	1.3	HF	>2.0	2	charred wood	not analysed	not analysed	five egg shell fragments, one calcined bone, three snail shells
		LF	>2.0	73	charred wood	not analysed	not analysed	six snail shells
F1 Quad D Lot 4	1.4	HF	>0.6	87	charred wood	not analysed	not analysed	
		LF	>0.6	490	charred wood	not analysed	not analysed	
		LF	>0.6	707	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		LF	>0.6	2	charred seeds	<i>Amaranthaceae</i>		Both examples are incomplete
		LF	>0.6	3	charred seeds	<i>Caryophyllaceae</i>		heavily charred and incomplete
		LF	>0.6	2	Seeds	<i>Sambucus canadensis</i>	Common Elderberry	Uncharred
		LF	>0.6	1	Seeds	<i>Nicandra physalodes</i>	Apple-of-Peru	Uncharred
		LF	>0.6	1	charred seeds	<i>Oxalis stricta</i>	Yellow woodsorrel	
F1 Quad D Lot 4	1.5	HF	>0.3	>500	Charred wood	not analysed	not analysed	
		HF	>0.3	7	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		LF	>0.3	>1000	charred wood	not analysed	not analysed	lots of uncharred rootlets
		LF	>0.3	769	charred seeds	<i>Hedeoma pulegioides</i>	False Pennyroyal	
		LF	>0.3	6	charred seeds	<i>Portulaca oleracea</i>	Purslane	

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For more information, visit golder.com

Africa	+ 27 11 254 4800
Asia	+ 86 21 6258 5522
Australasia	+ 61 3 8862 3500
Europe	+ 44 1628 851851
North America	+ 1 800 275 3281
South America	+ 56 2 2616 2000

solutions@golder.com
www.golder.com

Golder Associates Ltd.
1931 Robertson Road
Ottawa, Ontario
Canada, K2H 5B7
T: 1 613 592 9600

