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REVISED REPORT

Stage 3 Archaeological Assessment Applewood Site, BhFv-25 Lot 21, Concession 4 Geographic Township of Gloucester City of Ottawa

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Submitted to:

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REPORT

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Distribution:

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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 The Regional Group to undertake a Stage 3 Archaeological Assessment of the Applewood Site, BhFv-25, located on Lot 21, Concession 4, Geographic Township of Gloucester. The site was identified during a Stage 2 archaeological assessment of a planned residential development (Golder 2014a). The objective of the Stage 3 archaeological assessment was to determine the nature and extent of the site and to make recommendations as to whether additional archaeological work will be recommended.

The Applewood Site was identified on the basis of a single complete Saugeen style projectile point found in a test pit during typical Stage 2 test pit grid survey. A grid was established over the site with the location of the positive test pit as the central location. A total of eleven 1 m x 1 m units were hand excavated during the course of the Stage 3 fieldwork. All backdirt was screened through 6 mm mesh. The methods used to assess the Applewood Site comply with current Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (2011). The Stage 3 archaeological assessment resulted in the recovery of no further archaeological materials and the discovery of no cultural features.

BhFv-25 was determined to be a single isolated find spot by this assessment. The site has been fully mitigated and no features of archaeological or cultural heritage value or interest remain within. This archaeological assessment has provided the basis for the following recommendation:

- No further archaeological investigations are required for BhFv-25.



Project Personnel

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Abbreviations

B.P.	Before Present, taken to be years before 1950
Can-Net	Cansel Network
Ins.	Instrument Number detailing land transfer information
MTCS	Ministry of Tourism Culture and Sport



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1.0 PROJECT CONTEXT

Golder Associates Ltd. (Golder) was contracted by the Regional Group (Regional) to provide a Stage 3 Archaeological Assessment of the Applewood Site, located in Lot 21, Concession 4, Geographic Township of Gloucester (Map 1, pg. 25). This assessment follows the recommendations of the Stage 2 Archaeological Assessment of the Remer Lands (Golder 2014a). The Applewood Site was located within the first agricultural field at the front of the property (Map 2, pg. 26). The site was identified during the Stage 2 testing based upon the recovery of a single complete Saugeen projectile point (Image 1, pg. 19).

The Stage 2 Archaeological Assessment (Golder 2014a) recommended further investigation based upon the recovery of a single diagnostic aboriginal artifact as per the MTCS Standards and Guidelines Section 2.2 (MTCS 2011:40). This Stage 3 excavation was undertaken in order to determine if the projectile was an isolated find, or if it indicated the presence of a settlement.

Outlined in this report are the methodology and results of the Stage 3 investigation. An interpretation of the site is provided followed by a summary and recommendations. All cited references are listed and a photographic catalogue is included as Appendix A.

1.1 Development Context

The study area falls within the boundaries of a large residential subdivision proposed by Regional, with the initial Stage 1 Archaeological Assessment (Golder 2013a) being triggered by the *Planning Act*. This residential development was split into two project areas by Regional due to property ownership agreements and labeled the property in question, Remer Lands and the remainder of the project area, Idone Lands. Following the recommendations of the Stage 1 report on the property, Stage 2 fieldwork was conducted and located a projectile point identified as a Saugeen style projectile point (Golder 2014a). This find fulfilled the criteria for a Stage 3 Archaeological Assessment as per the Ministry of Tourism, Culture and Sports (MTCS) *Standards and Guidelines for Consultant Archaeologists* (2011:40) and was subsequently designated as the Applewood Site, BhFv-25. Stage 3 fieldwork was undertaken to determine the extent and archaeological significance of the deposit. 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 Steve Cunliffe at the Regional Group.

1.1.1 Objectives

The objectives of this Stage 3 archaeological assessment follow the MTCS *Standards and Guidelines for Consultant Archaeologists* (2011:45).

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



1.2 Historical context

1.2.1 Historical Documentation

Prior to this Stage 3 archaeological excavation several archaeological assessments were conducted in the area which include information relevant to the present study area, these include:

- Stage 1-2 archaeological assessment of the Findlay Creek Subdivision in Lot 20 to the north of the property by McGovern Heritage Archaeological Associates in 2007 (PIF# P051-116-2006).
- Stage 1 archaeological assessment of Bank Street Widening EA Leitrim Road to Rideau Road which runs along the east edge of the study area conducted by Golder Associates Ltd. in 2012 (PIF# 311-090-2012).
- Stage 1-2 archaeological assessment of Proposed Estate Lot Subdivision Development in the south half of Lot 22 by Adams Heritage in 2003 (CIF# P003-003/004).
- Stage 1 archaeological assessment on the property in question for the proposed residential development, completed by Golder Associates Ltd. in 2013 (Remer Lands) (PIF#P385-003-2013).
- Stage 2 archaeological assessment on the property in question for the proposed residential development, completed by Golder Associates Ltd. in 2013 (Remer Lands) (PIF#P386-004-2013).
- Stage 1 and 2 archaeological assessments on Lot 22 Concession 4, one lot south of the project, for the proposed residential development, completed by Golder in 2013 (Idone Lands) (PIF#s P385-004-2013 and P386-005-2013).

1.2.2 Pre-European Contact History

The Ottawa valley was covered by the Laurentide Ice sheet up until approximately 11,000 before present (BP). After the period of deglaciation, the Ottawa Valley was covered by the Champlain Sea. This sea extended from Rideau Lakes Ontario in the south, along the Ottawa Valley, St. Lawrence area ending at approximately Petawawa in the west. The exact western boundary is unknown as current elevation levels reflect the isostatic rebound of the land after the melting of the glaciers, and cannot be used to determine the location of the Champlain Sea at the time of its existence. The eastern portion of the sea extended into the Atlantic.

The earliest possible settlement in the Ottawa area would have been after the Champlain Sea disappeared and vegetation and wildlife had sufficiently occupied the area to sustain humans (Watson G. D. 1999a: 28). The pre-European contact sequence of occupation for the Ottawa Valley is not completely understood. During the early and middle Paleo-Indian Period (12,000–10,000 BP) Ottawa would have remained inundated by the Champlain Sea, or would have had the resources required for occupation. However, during the late Paleo-Indian Period (10,000–9,000 BP) as the Champlain Sea receded, it is possible that Paleo-Indians migrated along the changing waterfront eventually moving into the Ottawa Valley (Watson G. D. 1999a:38).

Paleo-Indians were characterized by their nomadic lifestyle. These highly mobile hunter and gatherers relied on the caribou, small game, fish and wild plants found in the sub-arctic environment of the time. Although evidence exists of Paleo-Indian occupation in Ontario as early as 11,000 BP, very little evidence exists for the occupation of the Ottawa Valley by Paleo-Indians. Due to the existence of the Champlain Sea, significant occupation of the Ottawa area did not occur until the Archaic Period (9,500–2,500 BP). By 8,000 BP the lakes and rivers were approximately in their present locations and deciduous forests would have been established. Evidence of earlier occupation by Paleo-Indians in the Ottawa Valley consists of two bi-facially fluted projectile points found near Rideau Lakes.



This location would have been near the shore of the Champlain Sea during the time fluted points were being used (Watson 1999b:35). Also Ken Swayze has found what he believes to be Paleo-Indian material near Greenbank Road (Swayze 2003) and, possibly, at Albion Road and Rideau Road (Swayze 2004).

Pre-European contact Aboriginal sites in the Ottawa Valley provide evidence of occupation during the Archaic Period. While hunting and gathering was still the main subsistence strategy, migration was more restricted to local areas. Lithic technologies also changed during this period. Although there were a broader range of tool types the necessary skill and workmanship decreased from the Paleo-Indian standards. Ground stone tools appeared, such as adzes and gouges, tool types which indicate increased wood working.

The Archaic Period included the development of trade networks over large areas. Two sites which demonstrate this network include Morrison's Island and Allumette Island in the Outaouais region of the Ottawa River (Clermont 1999:45-46). Other sites with Archaic Period components in the Ottawa Valley during the Archaic Period include; Jessup Falls and Pendleton, along the South Nation River and at Rideau Lakes.

The Archaic Period was followed by the Woodland Period, beginning around 2,500 BP in Ontario, and lasting until 450 BP. This period is characterized by the introduction of pottery. There is evidence of ceremonial rituals including the inclusion of elaborate grave goods with Early Woodland burials. Early Woodland subsistence strategies were still based on hunting and gathering. Although Woodland people were nomadic, their migratory routes followed seasonal patterns to proven hunting locations rather than following migrating herds (Watson G. D. 1999b:56). Trade networks continued to flourish through the Woodland Period. By 1,800 BP the trade networks had reached their peak and covered much of North America.

Initial pottery forms were crude and imitated vessels made in the Archaic Period out of steatite. One example of this type of pot was located along the Ottawa River at a site (CaGi-1) in Hull Quebec (Watson G. D. 1999b:59). Over time pottery became more refined and began to include elaborate decorative patterns. These decorative styles are distinct for specific regional populations as well as specific date ranges (Laliberté 1999:73). The decorative styles found in eastern and south-central Ontario during this period are part of what has been identified as the "Point Peninsula" Tradition. The western region of Ontario was occupied by Saugeen populations and the north-western area was occupied by the Laurel populations (Laliberté 1999:73).

Towards the end of the Middle Woodland Period (approximately 1,500 BP) agriculture was introduced and began to take on a larger role in subsistence. It began with the cultivation of corn, beans and tobacco and eventually led to the establishment of semi-permanent and permanent villages. Many of these villages were surrounded by large palisades, indicating increased hostilities between neighbouring groups. By the end of the Late Woodland period distinct regional populations occupied specific areas of southern Ontario separated by vast stretches of largely unoccupied land. This settlement pattern was more common in regions of arable land such as southern Ontario, while many groups in other regions retained a semi-nomadic lifestyle.

Saugeen Complex

The projectile point found within the site during the Stage 2 archaeological assessment of the area was identified as a Saugeen style projectile. The Saugeen style is associated with a Middle Woodland period of use of between 500 B.C.E. and 500 C.E. with the majority that have been dated falling into the latter half of this time range (Kenyon 1979). The Saugeen Tradition is considered to be a cultural variation on the same adaptive theme of many cultures within the St. Lawrence Lowlands during this period including the Laurel Tradition (northern Ontario, parts of Manitoba, Michigan and Minnesota), the Couture Tradition (Lake St. Clair and western Lake Erie) and the Point Peninsula Tradition (central and eastern Ontario, New York State and Quebec) (Fagan 2005:496).



The Saugeen Tradition is typically associated with the Bruce Peninsula but sites are commonly found throughout southwestern Ontario as well. However, it is not clear how ethnically distinct the various St. Lawrence Lowlands groups were (Fagan 2005:496).

These cultural groups are typified by a general continuity in subsistence and social life from the Archaic time period with a small widely scattered indigenous population living in small bands. Each of these bands had their own territory and were exploiting game, aquatic and plant resources for their subsistence in new and more efficient ways from earlier periods (Fagan 2006:496-497). During the spring and summer these groups would congregate at river and lake side fishing stations to trade as well as hold burial and marriage ceremonies. During the autumn and winter the groups would disperse into smaller family units and moved inland to exploit nut and terrestrial game resources (Williamson 2013:49). Portions of Eastern Ontario, such as the Ottawa Valley area, were more intensely utilized during the Middle Woodland Period which suggests increased population densities.

The Saugeen point style is largely a continuation of earlier Hopewellian typologies; particularly for Ontario the Meadowood typology. Saugeen points are commonly made of Onondaga chert, like the one found on this site (Kenyon 1979). As local sources of chert in the Ottawa area are rare and of poor quality; Onondaga, which is found in the Niagara area, is a common source type for lithic tools in Eastern Ontario during the Middle Woodland period (Gates-St.Pierre and Chapdelaine 2013:73).

1.2.3 Post-European Contact History

At the time of initial contact, in the seventeenth century, the French documented three Algonquin groups residing in the vicinity of the study area (Heindenreich & Wright 1987). These included the Matouweskariini along the Madawaska River to the west, the Onontcharonon in the Gananoque River Basin to the southwest, and the Weskarini, the largest of the three, situated in the petite River Basin north of the study area. The Algonquin groups may not have created permanent settlements in the area as a result of hostilities with Iroquoian speaking populations to the south; however, it is known that the northern reaches of the South Nation River basin were used as hunting territories by the Algonquin at this time. Algonquin people continue to be a presence in the Ottawa Valley.

Etienne Brulé is reported to be the first European in the region. He travelled up the Ottawa River in 1610, three years before Champlain visited the area. The first significant European settlement of the region did not occur until 200 years following this visit, 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. The lack of roads hindered the settlement of the region; however, in the eighteenth century fur trading posts were erected along the shores of the Ottawa River to trade with the Algonquin, including a post at present day Buckingham.

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 United Empire Loyalists and many of them were granted tracks 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. The scarcity of roads and poor state of transportation beyond the Ottawa River shore slowed settlement in other parts of the townships (Belden 1879:61). 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.



Gloucester Township

Gloucester Township was established in 1772 as Township B. It was originally part of Russell County but became part of Carleton County in 1838, and was incorporated as Gloucester Township in 1850. The Township is bounded by the Rideau River to the west, the Ottawa River to the north, Russell County to the east and Osgoode Township to the south.

Land registry records indicate that patents for some of the lots in Gloucester Township were issued as early as 1802 but most of these were granted to United Empire Loyalists or their family members who never actually settled on the lots. The first documented permanent settler in the township was Braddish Billings who settled on Lot 17 in the Junction Gore in 1812. Billings, whose family was originally from Massachusetts, felled trees for Philemon Wright (Kemp 1991:9). The earliest available assessment roll for Gloucester Township dated to 1823 and notes three families on lots immediately to the south of the Billings property: James Doxey on Lot 19, Junction Gore, Duncan McKenzie on Lot 20, Junction Gore and Captain Andrew Wilson on Lot 2, Concession I, Rideau Front (Kemp 1991:9). The Coffin map of 1825 illustrates the early land grants in Gloucester Township and the study area but it is not an accurate reflection of settlement at that time for the reason noted above (Map 3, pg. 27).

Although most of the early settlers travelled by water as much as possible, roads soon became a necessity both to reach inland lots and to travel economically between developing settlements. Perhaps the earliest road in the region ran through Nepean Township from the Ottawa River to the Rideau River shore opposite Captain Andrew Wilson's property in Gloucester Township. Another early forced road was built along a ridge from the Rideau River crossing on Captain Wilson's property through Bowesville and southeast to Johnston's Corners. Much of this original road alignment has disappeared as a result of the airport development except for a small section of Bowesville Road to the north of the airport as well as High Road to the south (Johnston 1988:168).

Most of the lots in the Rideau Front portion of Gloucester Township remained largely rural through the nineteenth and, indeed most of the twentieth century. The Walling map of 1863 and the Belden map of 1879 illustrate the intensification of rural settlement that occurred through the late nineteenth century and the development of several villages assisted by the construction of roads such as Bank Street (Maps 4 and 5, pgs. 28 and 29).

To the north of the study area, the village of Leitrim developed at the crossroads of Bank Street and Leitrim Road. Belden's 1879 map shows St. James Anglican Church and associated cemetery on David Cowan's property (Lot 16, Concession 4) (Map 5, pg. 29). Documents indicate that there may have been services on the site from as early as 1840. Across the street the first school house was located on land also donated by Cowan sometime before 1860. The Belden map also shows the Methodist church and cemetery on the east side of Bank Street on the northeast corner of Lot 18, Concession 5. The land for the church was donated by William Fenton sometime around 1840 when a small clapboard building was built followed by a brick structure erected in its place in 1878. The village was initially known as Cowan's Settlement until 1883 when a post office was opened by William Fenton and David Cowan (Clark 2012).

Bank Street

The construction of the Rideau Canal (1826-1832) accelerated settlement in the region with additional roads developing to connect outlying communities. In 1828 Braddish Billings initiated the construction of a bridge across the Rideau River to facilitate travel along the old 1815 road from Chaudière which, up until then, had required a ferry crossing. Subsequently, the Metcalfe Road (Bank Street) was built from this bridge through the Rideau Front lots of Gloucester Township to the village of Metcalfe and on to the St. Lawrence.



According to by-law No. 19, the District of Dalhousie Council (now Carleton County) designated the route of the Metcalfe Road (Bank Street) in 1844 to be “established in the Township of Gloucester, commencing on the 4th Concession Line, on Lot No. 13, then in a straight line on Lot No. 11, 3rd Concession, again commencing on the East side of the swamp” (Clark 2006:13). This meant that the route of the present day Bank Street from Conroy Road to Billings Bridge would become one of the more direct routes to Osgoode and Prescott and later become the main road to the south replacing the Bowesville Road.

By the late 1800s, road improvements were necessary to sustain the population increase of Gloucester Township. A private company called the Ottawa and Gloucester Road company, maintained ownership and macadamized the road at a cost of \$60,560 in 1875 (Clark 2006:15). The road became a toll road running south from Ottawa to Metcalfe and consisted of crushed stone quarried from Hog’s Back. One of the tollgates was located at the corner of Bank Street and Conroy Roads.

Carleton County eventually gained ownership of Bank Street in 1903 and soon after eliminated the tollgates under the *Provincial Highways Act*. The road was paved and widened when the Provincial King’s Highway system was recognized in 1925 and inaugurated Bank Street as Highway 31 in 1927 to meet proper standards for a suburban road.

1.2.4 Study Area Specific History

The earliest data for the historic occupation of the project area comes from the Coffin map of 1825 which shows a James Bradshaw on Lot 21 at this time (Map 3, pg. 27). The next documentation for the occupation of the property comes from the 1834 Census in which a Philip Clegg and Thomas Duncan are both recorded on Lot 22 Concession 4 (LAC M-7735). Lot 21 is not shown to be occupied during this census but the state of both men’s property is telling of the level of development and the length of occupation for the area. Clegg is registered with 100 acres of which 5 acres are cultivated while having no buildings and one milch cow. The Thomas Duncan on Lot 22 Concession 4 is recorded as having 91 uncultivated and 9 cultivated acres of land with no building and two milch cows. The 5 and 9 acres of cultivated land both indicate fairly recent occupations of the lot.

By the 1836 census Clegg has disappeared from the record but Thomas Duncan is recorded as being in the south half of Lot 22, Concession 4 outside the study area. The next occupation of the study area recorded in the census was in 1838 when a Robert Lee was recorded in the north half of Lot 22, Concession 4 and a Henry MacLauchlan was identified on Lot 21, Concession 4 (LAC M-7735).

Henry MacLauchlan is recorded as having 5 of 200 acres under cultivation; four residents, one man over the age 16, two males under the age of 16 and one woman above the age of 16; one horse under the age of 3; one milch cow; and no structures (LAC M-7735). MacLauchlan does not show up on any subsequent historical documentation.

Robert Lee goes on to have a long occupation of the project area in both lots ending with his death in 1903. The 1838 census recorded Robert Lee as having 6 of 100 acres of land under cultivation; two residents a man and woman over 16; two milch cows; and no structures on the property (LAC M-7735). By the 1851 census the 35-year-old Robert now had a large family of five sons and one daughter all born in Canada and under the age of 14 (LAC C-11716). The only further information on the Lee family in this census is that they were living in a log house rather than the log shanties of their neighbours hinting at a longer occupation of the area than their neighbours.

Land registry records conflict slightly with the earlier census data recording that Lot 22 was first granted in 1832 to the Canada Company. The Canada Company was a large British land development company first incorporated in 1825 to aid in the colonization of Upper Canada.



The Canada Company was then listed as selling the property in two halves: the south half in 1849 to a Thomas Duncan and the north half to a Robert Lee in 1850 (OCLR Instrument RO 4989). It is possible that Duncan and Lee were tenants until this time or that the registry date is incorrect. The 1863 Walling map is the first map of the area to identify Robert's occupation of Lot 22 with a single structure shown offset from Bank Street (Map 4, pg. 28). A Thomas Duncan is shown with a structure and church at the west end of the lot at this time. Lot 21 is shown by the Walling map as unoccupied.

Land registry records indicate that the Lee's remained the owners of this section of Lot 22 until 1875 when a Thomas Lee and wife sold the part of the lot in question to a Thomas Robinson (OCLR Instrument GL2619). The Robinsons maintain ownership of the area until 1921 when the area was sold to an Issac Brown (OCLR Instrument GL32157).

In 1875, the Lee's appear to have moved their residence to Lot 21, Concession 4, the second lot within this study area. Land registry records indicated that Lot 21 was first granted from the Crown in two parts: the north 2/3s (133.5 acres) to a George Byron Lyon in 1846 and the south 1/3 (66.66 acres) to a Robert Lee in 1849. In 1856, Robert Lee purchased the remaining 2/3 of the lot from Lyon (OCLR Instrument RO 9680). The movement of the Lees to Lot 21 and the occupation of the Robinsons in Lot 22 in the 1870s is captured well by the 1879 Belden map of the area (Map 5, pg. 29). The Belden map shows a Robert Lee in all of Lot 21 with a structure in the northeast corner of the property with a T. Robinson now occupying the northwest quarter of Lot 22 with a small structure in the centre of the property offset from Albion Road outside the study area.

Land registry records show no further sale of the property outside of the families until 1910 when the Robinson family acquired Lot 21 from the Lees (OCLR Instrument GL22478).

1.3 Archaeological Context

1.3.1 Archaeological Sites

A search of the Ministry of Tourism, Culture and Sport sites database indicated that there is one known archaeological site previously identified within a 1-km radius of the study area (MTCS 2013). The site, BhFv-1, is a Euro-Canadian homestead dated to 1870-1940 located two lots north of the project.

The site was found during the Stage 2 archaeological assessment of subdivision 06T-93011 by Mount McGovern Co. Ltd in 2001. The site yielded a total of 1,200 artifacts from a surface collection, primarily in two probable midden locations near an exposed cellar feature (McGovern 2001). The later date of the structure was not considered significant at the time and the site was not investigated further.

1.3.2 Study Area Description

The site is located within the Russell and Prescott Sand Plains physiographic region is typified by flat topography and few streams with sandy soil underlain by stratified red and grey clays (Chapman and Putnam 1984:209). The site is located in soil conditions classified as Grenville Loam which typically consists of a brown loam over light and dark brown loam over greyish till with stone inclusions throughout. Soil conditions within the site were typical of the soil classification and other soil conditions seen throughout the property. The topsoil was a medium brown loam while the subsoil was a grey brown sandy clay till.

The property on which the site is located was used as agricultural land during the nineteenth and twentieth centuries but was abandoned at some point between 1945 and 1985 (Map 6, p.). As a result the site is located on the border of a mixed meadow environment and an open deciduous woodland environment (Image 2, pg.19).



The gentle undulation of the area allows for the site to be located on one of the higher areas within the field but is not in itself a micro topographic feature (Map 2, p.26). The site itself gently slopes from the SW to the NE with a change in elevation of 32cm over a 14m distance (between unit N95E95 and N105E105).

To the west of the site a distinct drop in elevation (approximately 50cm) occurs which follows a trending slope down to the wetland at the west end of the property. To the south a large depression is located in the southwest corner of the field which was moist during the Stage 2 archaeological assessment of the property in September but was filled with over a foot of water in some areas at the time of the Stage 3 archaeological assessment at the end of October.

Due to the topography of the area, the region drains into the South Nation watershed to the east, despite the fact the site's located much closer to the Rideau River to the west than the major rivers of the South Nation watershed to the east. No sizeable drainages are visible in the modern landscape near the site. The closest is Findlay Creek, approximately 1km to the north, which drains the provincially significant wetlands between Albion Road and Bank Street immediately west of the proposed development. Findlay Creek eventually flows into the North Castor River.

1.3.3 Previous Archaeological Fieldwork

Stage 2 archaeological fieldwork on the area was conducted by Stephen Jarrett M.A. (P385), Tim Rangecroft M.Sc. (R383) and Cameron McNaughton M.Sc. on September 20, 2013 under PIF P386-0004-2013 (Golder 2014a). No further artifacts were recovered from the continuation of standard Stage 2 archaeological assessment grid survey at this time. As a Stage 3 archaeological assessment was required from the discovery of the single diagnostic pre-European contact aboriginal artifact found during test pit survey; no intensified testing was conducted on the site at that time as per MTCS Standards Section 2.2.

Previous Stage 2 fieldwork in the surrounding area consisted of a pedestrian survey of the lot immediately north of the project (McGovern 2001), a test pit survey of the lot immediately south of the project (Golder 2014b) and a test pit survey of the second lot south of the study area (Adams 2003). None of these projects recovered Aboriginal archaeological materials. The remainder of the Stage 2 fieldwork conducted under PIF P386-0004-2013 did not identify further Aboriginal archaeological materials.



2.0 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 on October 29 and 30, 2013. Work was conducted during the daylight hours to ensure that lighting conditions were appropriate. Weather conditions over the two day excavation were clear to overcast and cold (-9 to +8°C); which in no way impeded the archaeologist's ability to complete the work.

A Trimble R8 Model 2 Global Navigation Satellite System (GNSS) unit was used to lay out the grid and to collect all survey observations. 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 capable of real time kinematic corrections within the Can-Net Virtual Reference Station network. The accuracy of the locations collected range from less than 1 cm to 5 cm depending on the number of satellites in view, the position of satellites in relation to each other, the strengths of the satellite signals and the distance of the base station from the GPS receiver. The positions recorded are typically accurate to a centimeter or less.

The topographical survey of the Applewood Site was completed on October 29, 2013. The GPS survey data incorporated the Universal Transverse Mercator (UTM) projection, Zone 17, and NAD 83. The Global Positioning System (GPS) data was differentially corrected using the Cansel base station network with the Ottawa base station representing the primary base station used for the present survey. 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.

The site was excavated stratigraphically by hand in 1 m x 1 m units as per the MTCS *Standards and Guidelines for Consultant Archaeologists* (2011). Each 1 m x 1 m unit was designated by a grid reference, formatted in metres, centred upon Datum 1 as N100 E100. Within each unit the individual layers of soil, or lots, were given identifying numbers and correlated across the site. All lot numbers were unique and therefore Lot 1 within unit N105E105 was the same soil layer as Lot 1 within unit N95E95.

The test unit excavation strategy entailed the excavation of 1m x 1m units in a 5m grid around the single positive test pit for a total of nine 1m x 1m units. Two infill units were placed within this grid, the first was located immediately east of the central unit (N100E101) and the second was located immediately north of the central eastern unit (N101E95). One unit, N96E105, was moved one metre north from typical grid location due to dense tree cover within this unit (Image 3, p.20). This excavation strategy complies with the MTCS Standards for small lithic scatters (MTCS 2011:51).

A total of eleven Stage 3 units were excavated into subsoil using shovels and trowels. The dirt from each unit was screened through a 6 mm mesh screen. The units were examined for artifacts and/or features of archaeological interest. Upon encountering subsoil, the surface was shovel shined for features before excavation continued for a minimum of 5 cm. Representative profiles at a 1:10 scale were recorded. Photographs were taken of each newly exposed lot and at the completion of each unit. All the dirt from the excavation was backfilled into the units upon the completion of all other fieldwork activities (Image 4, p.19).

The details of each test unit are described in the following section. A full photographic catalogue is included as Appendix A, with the location of photographs indicated on Map 7 (pg.30). Documents created in the field included: one field book (four pages), twenty two lot forms, two profile drawings and ninety digital photographs. All field documents are stored at the Golder Associates Ltd. Kanata Location and all digital photographs are stored on the Golder Associates Ltd. server.



3.0 RECORD OF FINDS

As typical of areas which have been ploughed; the soil stratigraphy on the site consisted of two lots, the topsoil or plough zone (Lot 1) and subsoil (Lot 2) (Table 1, Image 5, p.21). The soil matrix did not vary across the site (Images 6-8, pgs.22-23). However, certain areas had wetter conditions than others particularly in the southeast corner of the site (Image 9, pgs. 23). No artifacts were recovered from any of the units excavated as part of this Stage 3 archaeological assessment.

Table 1: Lot Descriptions

Lot	Description
1	Topsoil/plough zone – medium to dark brown clay loam with rock inclusions; moderate compaction
2	Subsoil – light grey brown sandy clay with rock inclusions; moderate compaction

The depth of the units did not vary to any great degree across the site. Each unit’s depth in detailed below from a point recorded using the Trimble device; this point was then used to measure the depths of each lot via a string and level (Table 2). The infill units were not recorded using the Trimble device and hence their depth of excavation was measured using the closest recorded point.

Table 2: Unit Depths

Unit	Geodetic Elevation at Surface of SW Corner	Depth of Lot 1 (In cm) (SW, NW, NE, SE)	Depth of Excavation into Lot 2 (In cm) (SW, NW, NE, SE)	Notes
N105 E95	100.917	27, 31, 32, 31	41, 39, 40, 37	
N105 E100	100.841	33, 34, 33, 35	42, 45, 42, 41	
N105 E105	100.75	37, 38, 38, 39	46, 44, 43, 44	
N101 E95	Not recorded	29, 28, 30, 27	37, 34, 36, 36	
N100 E95	100.924	26, 28, 26, 24	33, 36, 36, 34	
N100 E100	100.898	28, 29, 30, 28	36, 35, 37, 35	
N100 E101	Not recorded	27, 29, 28, 26	35, 34, 35, 33	
N100 E105	100.87	33, 32, 30, 32	41, 43, 44, 41	Subsoil saturated
N95 E95	101.07	30, 32, 32, 32	39, 45, 43, 39	
N95 E100	100.952	29, 34, 33, 30	39, 41, 38, 42	Subsoil saturated
N96 E105	100.914	26, 30, 28, 26	31, 37, 35, 31	Subsoil saturated

The depth of subsoil on the site was consistent with the general topography of the area depicted in Map 2 (p.26). Subsoil was located at a depth of between 26 to 39 cm from the geodetic elevation surveyed; with the majority of the depths between 28 and 32 cm. The units with the greatest depth to subsoil were N105E105, N100E105 and N105E100, located along the northeast corner of the site. This drop in elevation follows the gentle northeast slope seen in the general topography of the agricultural field.



4.0 ANALYSIS

The Applewood Site consists of a single projectile point manufactured during the Middle Woodland Period (2400 to 1000 BP) in a similar style to those attributed to the Saugeen cultural complex. This side notched Saugeen-style projectile point appears to be a continuation of earlier Hopewellian typologies; particularly the Meadowood typology for Ontario. Similar to many other Saugeen-style projectile points discovered in Ontario, the Applewood Site artifact was manufactured from Onondoga chert. As local sources of chert in the Ottawa area are rare and of poor quality; Onondoga, which is sourced from the Niagara area, is a common source type for lithic tools in Eastern Ontario during the Middle Woodland period (Gates-St.Pierre and Chapdelaine, 2013).

The principal culture inhabiting Eastern Ontario during the Middle Woodland Period is identified as the Point Peninsula, whose sites are generally small and feature evidence of hunting and gathering activities (Daechsel, 1981, 1980). The identification of Middle Woodland occupation sites along the South Nation River in Casselman and near Winchester (Daechsel, 2006), the mouth of Kittle Creek just south of Chesterville and Osgoode Township (Daechsel, 1980) east of the study area, the Roebuck Site (Wintemberg, 1936) and Wyght Site (Spence *et al*, 1990) south of the study area and Middle Woodland sites northwest of the subject property within the Ottawa River drainage basin, including those at Constance Bay, Marshall Bay and Sawdust Bay (Daechsel, 1981) document the settlement pattern throughout the surrounding area during this period.

The Point Peninsula lithic industry has a wide variety of projectile points (Spence *et al*, 1990) with many varying typological examples poorly defined within a specific cultural context. The identification of the Applewood Site projectile point manufactured in a Saugeen-style, and that the material used to manufacture this point may have originated from the Niagara region, may suggest a trade network or exchange system was developed between the inhabitants of Eastern and Southern Ontario during this period.

The Saugeen cultural complex is primarily identified with the Middle Woodland occupation of Southern Ontario, and is represented, especially during the early part of the Middle Woodland, as a hunting and gathering society (Daechsel, 1981). In most respects, the Saugeen culture was very similar to the previously described Point Peninsula culture, with differences between the two populations primarily the result of their slightly different Laurentian Archaic ancestry and their different geographic regions (Wright, 1972). The interpretation that the people associated with the Saugeen culture spoke the Algonkain language (Fiedel, 1999), may suggest a common bond beyond the similarities in material culture between the inhabitants of Eastern and Southern Ontario during the Middle Woodland Period.

The majority of Middle Woodland Sites found throughout Ontario are generally located near major water sources. The fact that the projectile point affiliated with the Applewood Site was discovered 8 kilometers west of the Rideau River and 17 kilometers south of the Ottawa River may provide evidence for the expanded hunting territory utilized by the inhabitants of the area during the Middle Woodland Period. The Leitrim Wetlands (also known as the Albion Road Wetlands) are located within close proximity to the Applewood Site and would have provided an excellent source of water and food for game animals hunted by the local inhabitants.



5.0 CONCLUSIONS AND RECOMMENDATIONS

The Applewood site is an example of a single isolated find spot of a Middle Woodland projectile point. This site reveals no new information on settlement during the Woodland period in the area but the projectile point recovered during the Stage 2 in of itself is informative on several key points of Middle Woodland utilization of the landscape and larger points on Middle Woodland culture in the area.

The location of this site is informative on the utilization of the landscape by Middle Woodland peoples due to its location away from any major drainage, such as a large creek or river, and its proximity to the Leitrim Wetlands (also known as the Albion Road Wetlands). The Rideau River is the closest major waterway to the site at over 8km away to the west but the topography of the area drains to the east into the South Nation watershed. The closest drainage is the small Findlay creek approximately 1km to the north which drains the Leitrim Wetlands located approximately 500m to the west of the site. This location within the landscape provides important insight onto the distances travelled on foot in search for game, such as deer, by Middle Woodland populations from the locations which settlements have been found which are predominately along major waterways.

The Applewood Site was identified on the basis of a single complete Saugeen style projectile point found in a test pit during typical Stage 2 test pit grid survey. A grid was established over the site with the location of the positive test pit as the central location. A total of eleven 1 m x 1 m units were hand excavated during the course of the Stage 3 fieldwork. The Stage 3 archaeological assessment resulted in the recovery of no further archaeological materials and the discovery of no cultural features.

The lack of further archaeological resources from the Stage 3 fieldwork leads to the conclusion that this is an isolated find not related to any type of settlement at this location. Isolated projectile point sites are a common site typology in Ontario. As a result of the determination of the site typology as a single isolated find spot; the site is considered to be fully mitigated and contains no features of archaeological or cultural heritage value or interest.

This archaeological assessment has provided the basis for the following recommendation:

- No further archaeological investigations are required for BhFv-25.



6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Ministry of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism and Culture, 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.

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 The Regional Group (the Client). The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

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

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

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



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C-11716 Census returns for the Canadas 1851-1852

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1945 Roll Number A9609 Photo Number 85 Scale 1:15000

1985 Roll Number A31402 Photo Number 18 Scale 1:15000

1996 Roll Number A31732 Photo Number 211 Scale 1:15000



9.0 IMAGES



Image 1: Saugeen point found during the Stage 2 archaeological assessment (13-1121-0083-1021-D090).



Image 2: View Northeast of the general conditions on the site, D55.



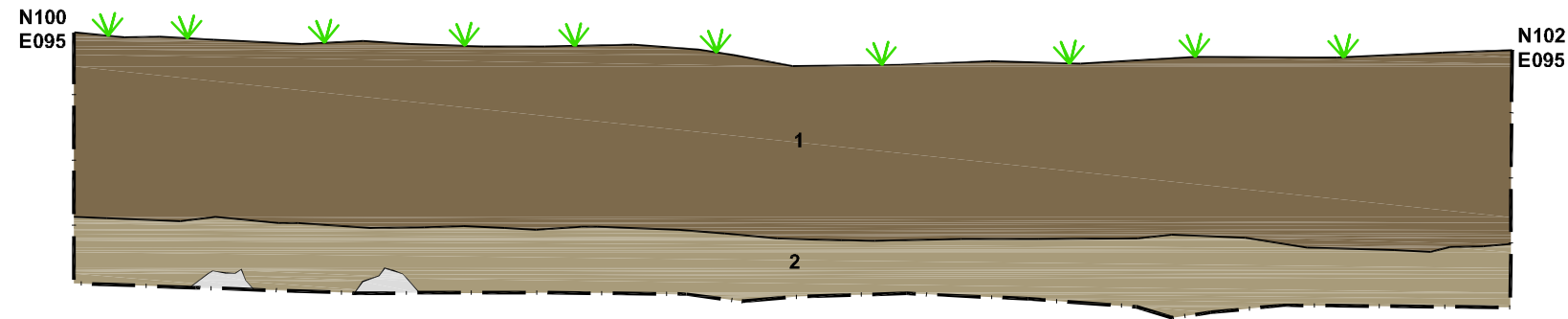
Image 3: View Southeast of thicket located over the grid unit N95E105, D29.



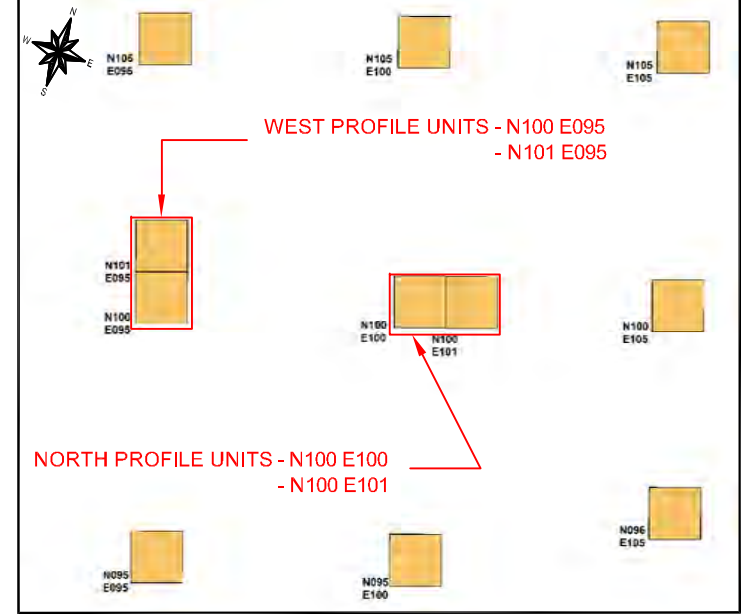
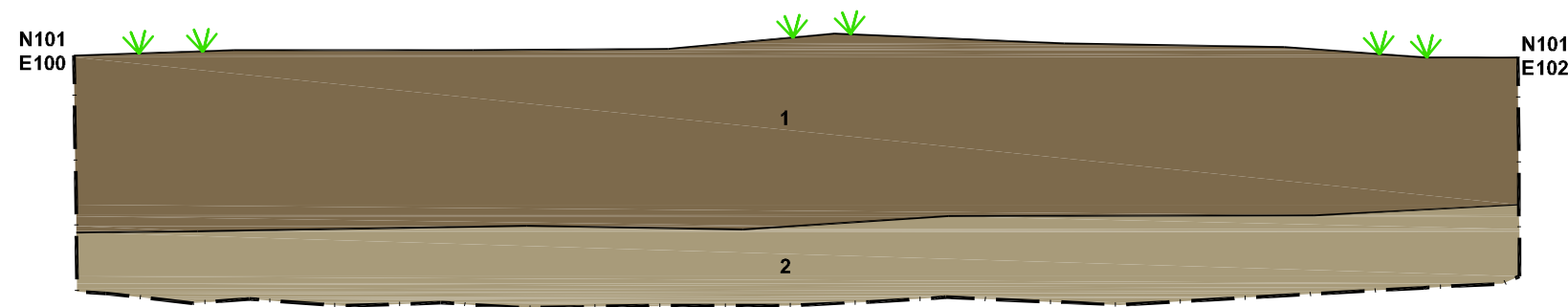
Image 4: View East of backfilled units N95E95 and N95E100, D85.

FILENAME: \\golder.gds\gal\Ottawa\Active\2013\1121 - Geotechnical\13-1121-0083 Remer and Idone Lands\Spatial\IM\GIS\Autocad\Phase1022_Arch\1311210083-1022-IMG5.dwg

WEST PROFILE UNITS N100 E095 AND N101 E095



NORTH PROFILE UNITS N100 E100 AND N100 E101



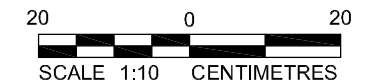
SITE PLAN

LEGEND

ROCK

LOT DESCRIPTIONS

LOT 1 - TOPSOIL / PLOUGH ZONE - MEDIUM BROWN CLAY LOAM WITH ROCK INCLUSIONS, MODERATE COMPACTION
 LOT 2 - SUBSOIL - LIGHT BROWN SANDY CLAY WITH ROCK INCLUSIONS, MODERATE COMPACTION



NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 13-1121-0083/1022.

PROJECT		APPLEWOOD SITE BhFv-25	
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CADD	BR 2014-01-31		
CHECK	SRJ 2014-10-30		
REVIEW	HJD 2014-10-30		





Image 6: View North of the end of excavation for Unit N96 E105, D29.



Image 7: View North of the end of excavation for Unit N105E105, D43.



Image 8: View North of the end of excavation for Unit N95 E95, D21.

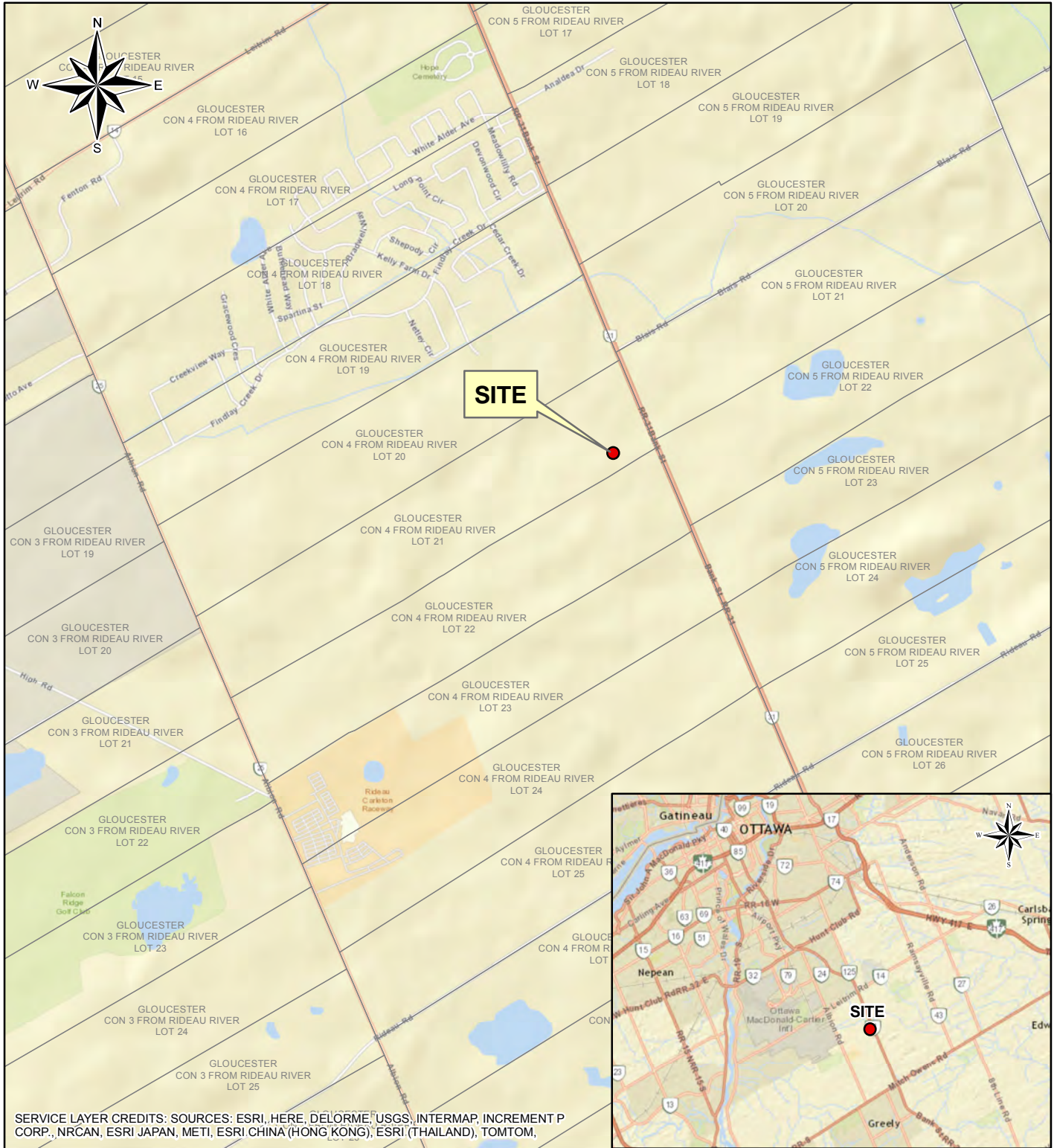


Image 9: View North of the end of excavation for Unit N100 E105, D40.



10.0 MAPS

\\golder.gds\gall\Ottawa\Active\2013\1121 - Geotechnical\13-1121-0083 Remer and Idome Lands\Spatial_ILM\GISMXD\Reporting\Phase 1022_Arch\1311210083-1022-01.mxd



SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, DELORME, USGS, INTERMAP, INCREMENT P CORP., NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI (THAILAND), TOMTOM,

LEGEND

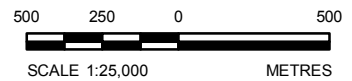
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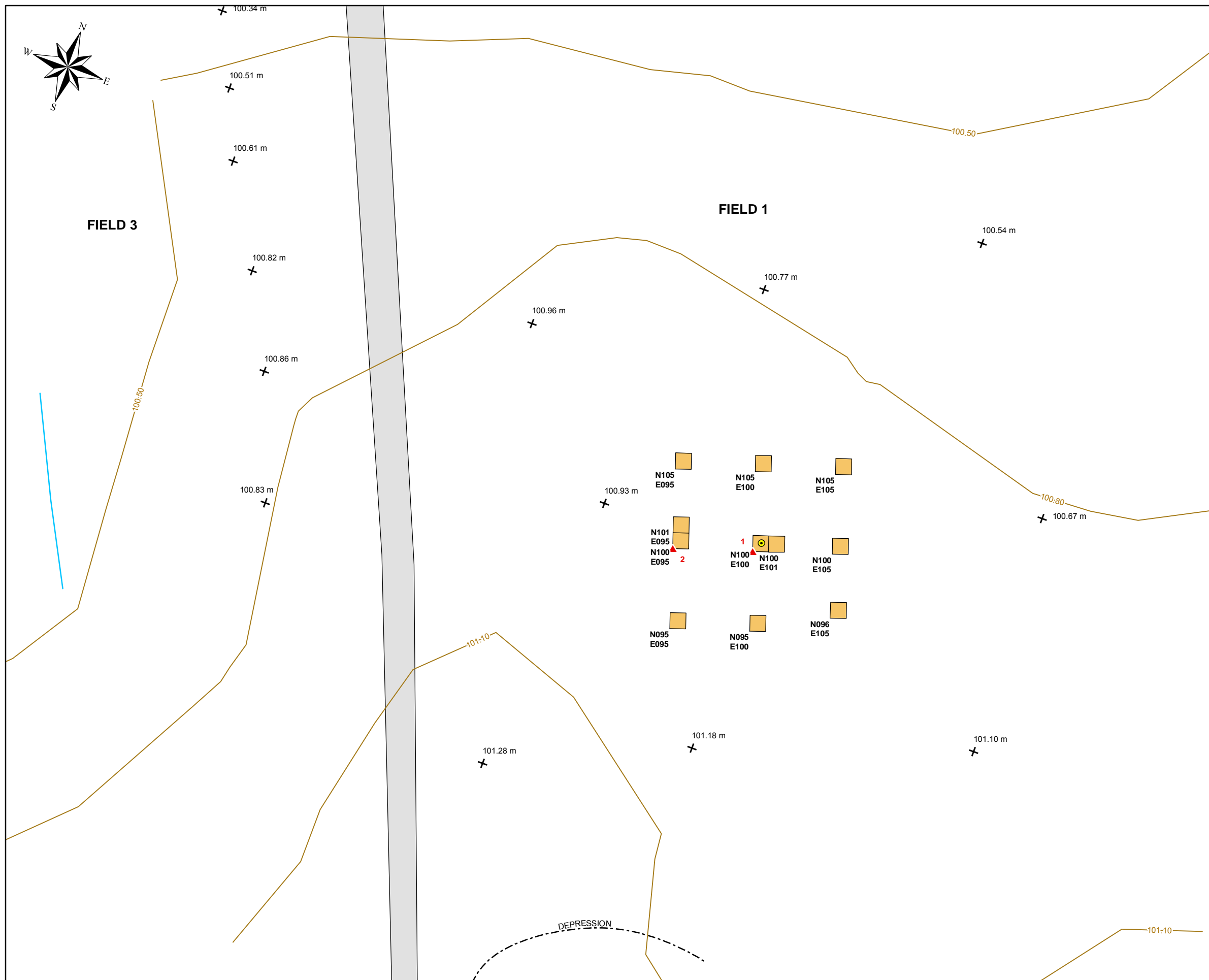
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REFERENCE

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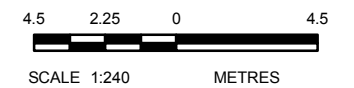


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KEY PLAN			
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GIS	BR	2014-01-09	
CHECK	SRJ	2014-10-30	
REVIEW	HJD	2014-10-30	



LEGEND

- + SPOT HEIGHT (m)
- ▲ DATUM 1 (X - 453730.392657, Y - 5017534.395128)
- ▲ DATUM 2 (X - 453735.146514, Y - 5017535.94377)
- STAGE 2 POSITIVE TEST PIT
- CONTOUR LINES, (m)
- DITCH CENTRE LINE
- - - DEPRESSION
- █ ROCK FIELD WALL
- █ STAGE 3 EXCAVATION UNIT



NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 13-1121-0083/1022.

REFERENCE


DATA OBTAINED FROM TRIMBLE SURVEY. CONTOUR LINES INTERPOLATED FROM SURVEY ELEVATION POINTS.
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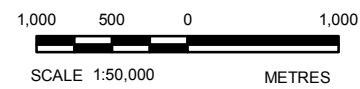
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CHECK	SRJ	2014-10-30	
REVIEW	HJD	2014-10-30	





LEGEND

 STUDY AREA




NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 13-1121-0083/1022.


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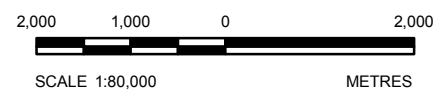
COFFIN, WILLIAM, 1825, PLAN OF CARLETON COUNTY. ARCHIVES AND LIBRARY CANADA NMC 3425. DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9

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			MAP 3



LEGEND

 STUDY AREA




NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 13-1121-0083/1022.

REFERENCE

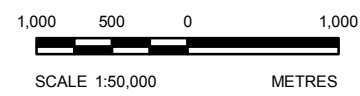
WALLING, HENRY FRANCIS, 1863, MAP OF THE COUNTY OF CARLETON, CANADA WEST. PRESCOTT, ONTARIO, D. P. PUTNAM, NMC-43061-21.
DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9

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REVIEW	BR 2014-10-30		
			MAP 4



LEGEND

STUDY AREA




NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 13-1121-0083/1022.

REFERENCE

BELDEN, H., 1879. ILLUSTRATED HISTORICAL ATLAS OF THE COUNTY OF CARLETON. TORONTO, H. BELDEN & CO.
 DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9

PROJECT			
APPLEWOOD SITE BHFV-25			
TITLE			
1879 BELDEN MAP			
 Golder Associates Ottawa, Ontario	PROJECT No.	13-1121-0083	SCALE AS SHOWN
	DESIGN	SRJ	2014-01-09
	GIS	BR	2014-01-09
	CHECK	SRJ	2014-10-30
	REVIEW	HJD	2014-10-30
			MAP 5

Path: \\golder.gds\gal\Ottawa\Active\2013\1121 - Geotechnical\13-1121-0083 Remer and Idone Lands\Spatial\MIG\SMXD\Reporting\Phase 1022_Arch\1311210083-1022-06.mxd

1945



1985




1996



2012



LEGEND

 STUDY AREA


200 100 0 200
SCALE 1:12,000 METRES

NOTE

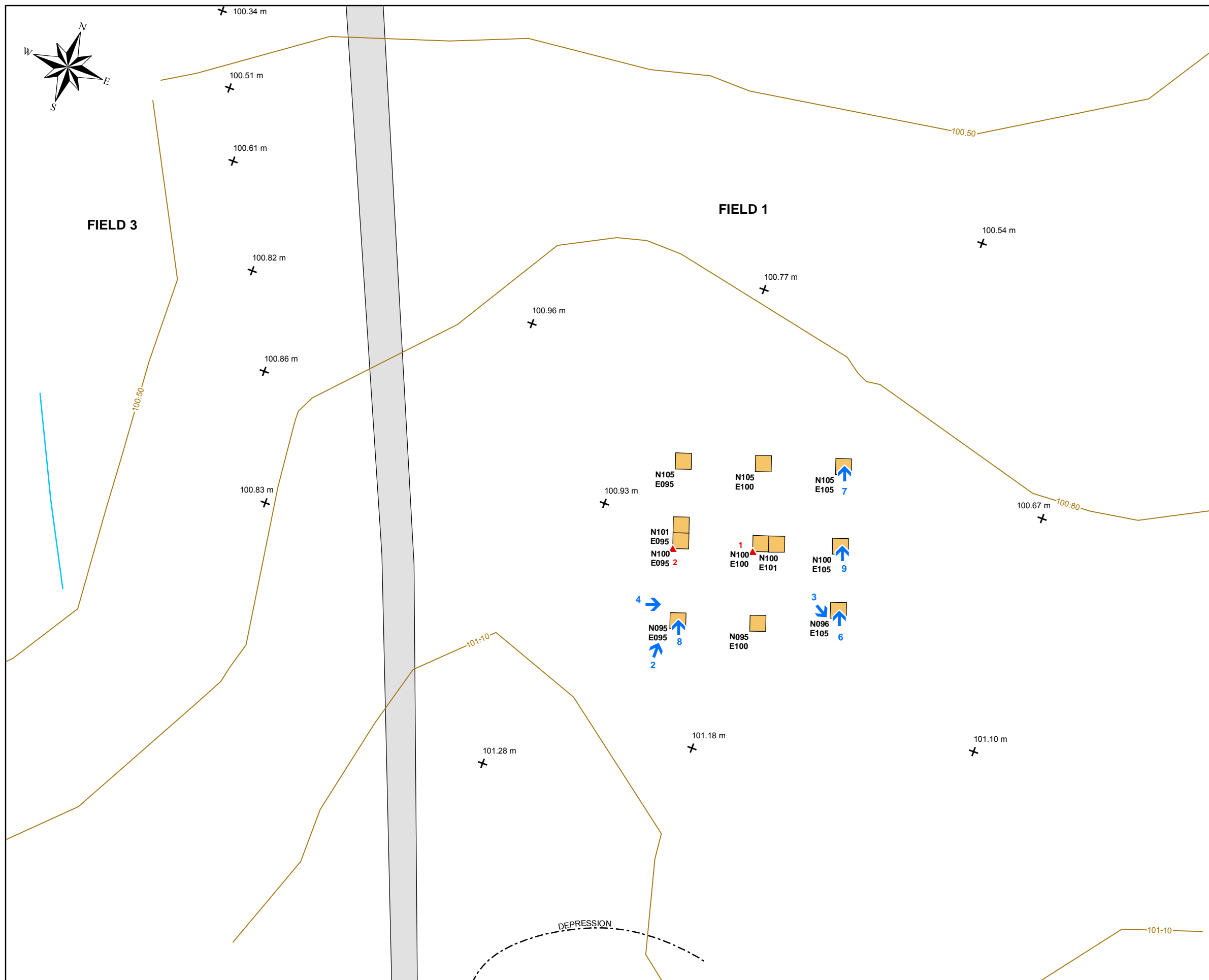
THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 13-1121-0083/1022.

REFERENCE

1945 AIR PHOTO, NATIONAL AIR PHOTO LIBRARY, ROLL # A9609, PHOTO # 85, DATE: 10/30/1945, SCALE: 1:15000.
1985 AIR PHOTO, NATIONAL AIR PHOTO LIBRARY, ROLL # A31402, PHOTO # 18, DATE: 6/20/1985, SCALE: 1:15000.
1996 AIR PHOTO, NATIONAL AIR PHOTO LIBRARY, ROLL # A31732, PHOTO # 211, DATE: 5/29/1996, SCALE: 1:15000.
BING MAPS AERIAL PHOTO, (C) 2010 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, MARCH, 2012.
PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: MTM ZONE 9

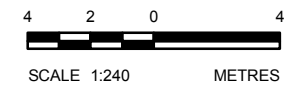
PROJECT			
APPLEWOOD SITE BhFv-25			
TITLE			
AERIAL PHOTOGRAPHS			
	PROJECT No. 13-1121-0083		SCALE AS SHOWN
	DESIGN	SRJ	2014-01-09
	GIS	BR	2014-01-09
	CHECK	SRJ	2014-10-30
	REVIEW	HJD	2014-10-30
			REV. 0
			MAP 6

Path: \\golder.gds\gal\Ottawa\Active\2013\1121 - Geotechnical\13-1121-0083 Remer and Idone Lands\Spatial\MIG\SMX\Ds\Reporting\Phase 1022_Arch\1311210083-1022-07.mxd



LEGEND

- PHOTO LOCATION AND DIRECTION
- SPOT HEIGHT (m)
- DATUM 1 (X - 453730.392657, Y - 5017534.395128)
- DATUM 2, (X - 453735.146514, Y - 5017535.94377)
- CONTOUR LINES, (m)
- DITCH CENTRE LINE
- DEPRESSION
- ROCK FIELD WALL
- STAGE 3 EXCAVATION UNIT



NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 13-1121-0083/1022.

REFERENCE

DATA OBTAINED FROM TRIMBLE SURVEY. CONTOUR LINES INTERPOLATED FROM SURVEY ELEVATION POINTS.
PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 18

PROJECT				
APPLEWOOD SITE BhFv-25				
TITLE				
PHOTO LOCATIONS				
	PROJECT No. 13-1121-0083		SCALE AS SHOWN	REV. 0
	DESIGN	SRJ	2014-01-09	MAP 7
	GIS	BR	2014-01-29	
	CHECK	SRJ	2014-10-30	
	REVIEW	HJD	2014-10-30	



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.

Stephen Jarrett, M.A.
Archaeologist

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

SJ/HJD/clb/ca/kl

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APPENDIX A

Photo Inventory



APPENDIX A Photo Inventory

Photo Number	Description	Direction	Date	Photographer
1311210083-D001	N100 E100 Lot 1 Close	N	Oct 29 2013	SJ
1311210083-D002	N105 E100 Lot 1 Close	N	Oct 29 2013	EW
1311210083-D003	N105 E100 Lot 1 North Profile	N	Oct 29 2013	EW
1311210083-D004	N100 E100 Unit Close	N	Oct 29 2013	SJ
1311210083-D005	N100 E100 Unit Close	N	Oct 29 2013	SJ
1311210083-D006	N100 E100 Unit North Profile	N	Oct 29 2013	SJ
1311210083-D007	N105 E100 Unit Close	N	Oct 29 2013	EW
1311210083-D008	N105 E100 North Profile	N	Oct 29 2013	EW
1311210083-D009	N105 E95 Lot 1 Close	N	Oct 29 2013	EW
1311210083-D010	N105 E95 Lot 1 North Profile	N	Oct 29 2013	EW
1311210083-D011	N100 E95 Lot 1 Close	N	Oct 29 2013	SJ
1311210083-D012	N100 E95 Lot 1 Close	N	Oct 29 2013	SJ
1311210083-D013	N105 E95 Unit Close	N	Oct 29 2013	EW
1311210083-D014	N105 E95 North Profile	N	Oct 29 2013	EW
1311210083-D015	N100 E95 Unit Close	N	Oct 30 2013	SJ
1311210083-D016	N100 E95 Unit Close	N	Oct 30 2013	SJ
1311210083-D017	N100 E95 North Profile	N	Oct 30 2013	SJ
1311210083-D018	N95 E95 Lot 1 Close	N	Oct 30 2013	EW
1311210083-D019	N95 E95 Lot 1 North Profile	N	Oct 30 2013	EW
1311210083-D020	N95 E95 Unit Close	N	Oct 30 2013	EW
1311210083-D021	N95 E95 Unit Close	N	Oct 30 2013	EW
1311210083-D022	N95 E100 Unit Close	N	Oct 30 2013	TR
1311210083-D023	N95 E100 North Profile	N	Oct 30 2013	TR
1311210083-D024	N96 E105 Lot 1 Close	N	Oct 30 2013	SJ
1311210083-D025	N96 E105 Lot 1 Close	N	Oct 30 2013	SJ
1311210083-D026	Trees blocking N95 E105 location with N96 E105 in evidence	SE	Oct 30 2013	SJ
1311210083-D027	Crew digging units N96E105 and N100E105	NE	Oct 30 2013	SJ
1311210083-D028	N96 E105 Unit Close	N	Oct 30 2013	SJ
1311210083-D029	N96 E105 Unit Close	N	Oct 30 2013	SJ
1311210083-D030	N96 E105 North Profile	N	Oct 30 2013	SJ
1311210083-D031	N100 E105 Lot 1 Close	N	Oct 30 2013	CM
1311210083-D032	N100 E105 Lot 1 Close	N	Oct 30 2013	CM
1311210083-D033	N100 E105 Lot 1 Close	N	Oct 30 2013	CM
1311210083-D034	N100 E105 Lot 1 Close	N	Oct 30 2013	CM
1311210083-D035	N100 E105 Lot 1 Close	N	Oct 30 2013	CM



APPENDIX A Photo Inventory

Photo Number	Description	Direction	Date	Photographer
1311210083-D036	N100 E105 North Profile	N	Oct 30 2013	CM
1311210083-D037	N100 E105 North Profile	N	Oct 30 2013	CM
1311210083-D038	N105 E105 Lot 1 Close	N	Oct 30 2013	SJ
1311210083-D039	N105 E105 Lot 1 Close	N	Oct 30 2013	SJ
1311210083-D040	N100 (incorrectly on board as N95) E105 Unit Close	N	Oct 30 2013	EW
1311210083-D041	N100 (incorrectly on board as N95) E105 Unit Close	N	Oct 30 2013	EW
1311210083-D042	N105 E105 Unit Close	N	Oct 30 2013	SJ
1311210083-D043	N105 E105 Unit Close	N	Oct 30 2013	SJ
1311210083-D044	N100 E101 (N105 E105 on board) Lot 1 Close	N	Oct 30 2013	EW
1311210083-D045	N100 E101 (N105 E105 on board) Lot 1 Close	N	Oct 30 2013	EW
1311210083-D046	View of excavations from NE corner of site	S	Oct 30 2013	SJ
1311210083-D047	View of excavations from NE corner of site	SW	Oct 30 2013	SJ
1311210083-D048	View of excavations from NE corner of site	W	Oct 30 2013	SJ
1311210083-D049	View of excavations from NE corner of site	SE	Oct 30 2013	SJ
1311210083-D050	Water level in freshly excavated unit (N100E105)	N/A	Oct 30 2013	SJ
1311210083-D051	View of excavations from SE corner of site	W	Oct 30 2013	SJ
1311210083-D052	View of excavations from SE corner of site	W	Oct 30 2013	SJ
1311210083-D053	View of excavations from South edge of site	NE	Oct 30 2013	SJ
1311210083-D054	View of excavations from SW corner of site	N	Oct 30 2013	SJ
1311210083-D055	View of excavations from SW corner of site	NE	Oct 30 2013	SJ
1311210083-D056	View of excavations from west edge of site	E	Oct 30 2013	SJ
1311210083-D057	View of excavations from west edge of site	NE	Oct 30 2013	SJ
1311210083-D058	N101 E95 Lot 1 Close	N	Oct 30 2013	SJ
1311210083-D059	N101 E95 Lot 1 Close	N	Oct 30 2013	SJ
1311210083-D060	N100 E101 Unit Close	N	Oct 30 2013	EW
1311210083-D061	N100 E101 Unit Close	N	Oct 30 2013	EW
1311210083-D062	Units N100E100 and N100E101 North Profile	N	Oct 30 2013	EW
1311210083-D063	Units N100E100 and N100E101 North Profile	N	Oct 30 2013	EW
1311210083-D064	Units N100E100 and N100E101 North Profile	S	Oct 30 2013	EW
1311210083-D065	Units N100E100 and N100E101 North Profile	S	Oct 30 2013	EW
1311210083-D066	Units N100E95 and N101E95 West Profile	W	Oct 30 2013	CM
1311210083-D067	Units N100E95 and N101E95 West Profile	W	Oct 30 2013	CM
1311210083-D068	Units N100E95 and N101E95 West Profile	W	Oct 30 2013	CM
1311210083-D069	Units N100E95 and N101E95 East Profile	E	Oct 30 2013	CM



APPENDIX A Photo Inventory

Photo Number	Description	Direction	Date	Photographer
1311210083-D070	Units N100E95 and N101E95 East Profile	E	Oct 30 2013	CM
1311210083-D071	Units N100E95 and N101E95 East Profile	E	Oct 30 2013	CM
1311210083-D072	Units N100E95 and N101E95 East Profile	E	Oct 30 2013	CM
1311210083-D073	Units N100E95 and N101E95 East Profile	NE	Oct 30 2013	CM
1311210083-D074	N101 E95 Unit Close	N	Oct 30 2013	CM
1311210083-D075	N101 E95 Unit Close	N	Oct 30 2013	CM
1311210083-D076	N101 E95 Unit Close	N	Oct 30 2013	CM
1311210083-D077	N101 E95 Unit Close	N	Oct 30 2013	CM
1311210083-D078	N101 E95 Unit Close	N	Oct 30 2013	CM
1311210083-D079	N101 E95 North Profile	N	Oct 30 2013	CM
1311210083-D080	N105E95 backfilled	W	Oct 30 2013	SJ
1311210083-D081	N105E100 backfilled	N	Oct 30 2013	SJ
1311210083-D082	N105E105 backfilled	E	Oct 30 2013	SJ
1311210083-D083	N100E105 backfilled	E	Oct 30 2013	SJ
1311210083-D084	N95E95 backfilled	SW	Oct 30 2013	SJ
1311210083-D085	N95E95 and N95E100 backfilled	E	Oct 30 2013	SJ
1311210083-D086	EW recording N101E95	N	Oct 30 2013	SJ
1311210083-D087	N95E100 backfilled	E	Oct 30 2013	SJ
1311210083-D088	N96E105 backfilled	E	Oct 30 2013	SJ
1311210083-D089	N100E95 and N101E95 backfilled	NW	Oct 30 2013	SJ
1311210083-D090	N100E100 and N100E101 backfilled	S	Oct 30 2013	SJ

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