



Stage 1 and 2 Archaeological Assessment for Station Meadows West - Part Lots 8 & 9, Concession 9, Town of Smithville, Township of Lincoln, Formerly the Township of South Grimsby, Regional Municipality of Niagara, ON

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Licensee: Alexandra Mullan P1006

Parslow Heritage Consultancy Ltd. (PHC Inc.)

PIF Number: P1006-0010-2020

Proponents: Peter Budd

Address: 6 Admiral Circle, Grimsby ON L3M 5C7

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1. Executive Summary

Parslow Heritage Consultancy Inc. (PHC) completed a Stage 1 archaeological background assessment and Stage 2 archaeological property survey on Part of Lots 8 & 9, Concession 9, in the Town of Smithville, formerly the Township of Grimsby (now West Lincoln Township), Regional Municipality of Niagara, ON (**Map 1**). This assessment is required by Peter Budd (P. Budd Developments Inc.) in advance of proposed development under the *Planning Act* (1990).

The objectives of the Stage 1 archaeological assessment are to gather information about the project location's geography, history, current land conditions as well as any previous archaeological research and listed archaeological sites on or within the vicinity. Methods to achieve these objectives include:

- ▶ Review of relevant historic and environmental literature pertaining to the study area;
- ▶ Review of an updated listing of archaeological sites within 1 km from the MTCS Archaeological Sites Database;
- ▶ Review of all archaeological assessments within 50 m of the study area;
- ▶ Consultation with individuals knowledgeable about the study area; and
- ▶ Review of historic maps of the study area.

The objectives of the Stage 2 assessment are to determine if there are archaeological resources present on the property and to assess whether the identified resources have cultural heritage value or interest.

The study area primarily consists of ploughed agricultural lands, as well as scrubland, manicured lawns, and several warehouse structures. As such, the study area was assessed with both pedestrian survey at 5 m transects and test pit survey at 5 m transects as per Section 2.1.1 and 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). No archaeological resources were found during this assessment. Prior to PHC beginning the Stage 1-2 archaeological assessment a portion of the study area was disturbed by construction activity and piled with soil and aggregate materials. As such, all areas that were assessed during this study can be considered clear of further archaeological concern.

2. Project Personnel

Project Manager	Carla Parslow, Ph.D. (P243)
Field Director/Licensee	Alexandra Mullan, M.A. (P1006)
Field Crew	Tina Kagi (R1173)
Report Writing	Alexandra Mullan, M.A. (P1006)
Report Graphics	James Wright
Report Review	Carla Parslow

ACKNOWLEDGEMENTS

Peter Budd, Property Owner

Brian Treble, Town of West Lincoln

Paul Hecimovic, P.Eng., Senior Project Engineer, The Odan/Detech Group Inc.

3. Project Context

This section of the report provides the context for the archaeological assessment and covers three areas: development context, historical context and archaeological context.

3.1 Development Context

Parslow Heritage Consultancy Inc. (PHC) completed a Stage 1 archaeological background assessment, and Stage 2 archaeological property survey on Parts of Lots 8 & 9, Concession 9, within the Town of Smithville, formerly the Township of Grimsby (now West Lincoln Township), Regional Municipality of Niagara, ON (**Map 1**). This assessment is required by Peter Budd (P. Budd Developments Inc.) in advance of proposed development under the *Planning Act* (1990).

The objectives of the Stage 1 archaeological assessment are to gather information about the project location's geography, history, current land conditions as well as any previous archaeological research and listed archaeological sites on or within the vicinity. Methods to achieve these objectives include:

- ▶ Review of relevant historic and environmental literature pertaining to the study area;
- ▶ Review of an updated listing of archaeological sites within 1 km from the MTCS Archaeological Sites Database;
- ▶ Review of all archaeological assessments within 50 m of the study area;
- ▶ Consultation with individuals knowledgeable about the study area; and
- ▶ Review of historic maps of the study area.

The objectives of the Stage 2 assessment are to determine if there are archaeological resources present on the property and to assess whether the identified resources have cultural heritage value or interest.

The study area consists primarily of ploughed agricultural lands, as well as scrubland and manicured lawn. There are two existing structures on the property as well as several piles of refuse and scrap (**Map 2**). As such, in accordance with Section 2.1.1 and 2.1.2 of the Standards and Guidelines for Consultant Archaeologists (MHSTCI 2011) the study area was assessed with a combination of test pit and pedestrian survey.

All archaeological work documented in this report was completed under the Ministry of Heritage, Sport, Tourism, and Culture Industries (MHSTCI) *Standards and Guidelines for Consultant Archaeologists*.

3.2 Historical Context

This section describes the past and present land use and the settlement history, and any other relevant historical information gathered through the background research (MHSTCI Section 7.5.7 Standard 1).

3.2.1 Indigenous History

Indigenous peoples of southern Ontario have left behind archaeologically significant resources throughout the province which show continuity with past peoples, even if they were not recorded in historic Euro-Canadian documents. **Table 1** illustrates this continuity demonstrating over 11,000 years of Indigenous occupation of southern Ontario (Ellis and Ferris 1990).

Table 1: Overview of the cultural chronology for southern Ontario.

Period	Characteristics	Time	Comments
Early Paleo	Fluted Points	9,000 – 8,400 BC	Caribou hunters
Late Paleo	Hi-Lo Points	8,400 – 8,000 BC	Smaller but more numerous sites
Early Archaic	Kirk, Nettling and Bifurcate Base Points	8,000-6,000 BC	Slow population growth
Middle Archaic I	Stanley/Neville, Stemmed Points	6,000-4,000 BC	Environment similar to present
Middle Archaic II	Thebes, Otter Creek Points	4,000- 3,000 BC	
Middle Archaic III	Brewerton Side and Corner Notched Points	3,000 – 2,000 BC	
Late Archaic I	Narrow Point (Lamoka, Normanskill)	2,000-1,800 BC	Increasing site size
	Broad Point (Genesee, Adder Orchard)	1,800-1,500 BC	Large chipped lithic tools
	Small Point (Crawford Knoll, Innes, Ace-of-Spades)	1,500-1,100 BC	Introduction of bow hunting
Terminal Archaic	Hind Points	1,100-950 BC	Emergence of true cemeteries
Early Woodland	Meadowood Points	950-400 BC	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 BC-AD 500	increased sedentism
	Princess Point	AD 550-900	Introduction of Corn
Late Woodland	Early Ontario Iroquoian	AD 900-1,300	Emergence of agricultural villages
	Middle Ontario Iroquoian	AD 1,300-1,400	Large longhouses (100m +)
	Late Ontario Iroquoian	AD 1,400-1,650	Tribal warfare and displacement

Contact Period	Various Algonkian Groups	AD 1,700-1,875	early written records and treaties
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European contact with Indigenous peoples in the Niagara Region began with the arrival of Samuel de Champlain in 1615. Although there appears to have been no direct contact, Champlain described a group of Native peoples throughout the Niagara Peninsula whom he called “la nation neutre” as they were situated between the Huron and the New York Iroquois and remained at peace (Lennox and Fitzgerald 1990:405). Estimates of the population of the Neutral Iroquois in Ontario have ranged between 12,000 to 40,000 people distributed between 28 and 40 villages and smaller settlements; while population estimated vary, it has been documented that the Neutral were dispersed by the Five Nations Iroquois between 1647 and 1651 (Lennox and Fitzgerald 1990:405- 406). Throughout the middle of the 17th century, the Iroquois sought to expand upon their territory and to monopolize the local fur trade as well as trade between the European markets and the tribes of the western Great Lakes region. A series of conflicts followed known as the Beaver Wars, or the French and Iroquois Wars, contested between the Iroquois confederacy and the Algonkian speaking communities of the Great Lakes region. This led to the dispersal, or rather absorption of the Neutral into the various warring Iroquois and Algonkian parties.

Prior to the dispersion of the Neutral in the mid-17th century Jesuits and missionaries had visited Neutral settlements in the Niagara region, including Joseph de la Roche Daillon in 1626 and Jean de Brebauf and Joseph Pierre-Marie Chaumonot in 1640. Following the dispersal of the Neutral, the Five Nations Iroquois briefly settled along the Niagara River.

The late 17th and early 18th centuries represent a turning point in the evolution of the post-contact Indigenous occupation of Southern Ontario. It was at this time that various Iroquoian-speaking communities began migrating from New York State, followed by the arrival of new Algonkian speaking groups from northern Ontario (Konrad 1981; Schmalz 1991).

The study area is part of a large swath of land that made up the 19 July 1701 Deed, or Nanfan Treaty, between the Five Nations of the Iroquois Confederacy and John Nanfan, on behalf of the British Crown. The deed granted a large area of the Five Nations as beaver hunting grounds to the Crown, “after mature deliberation out of a deep sence of the many Royall favours extended to us by the present great Monarch of England King William the third” (Six Nations n.d.). New France, aligned with the Algonquin, also had claim on this territory and therefore, did not recognized the deed of land to the Iroquois. Both the French claims to the land and the British deed to the land were completed solely for domination over each other in the fur trade industry and were a direct response to the Beaver Wars, or the French and Iroquois Wars. The Canadian Federal Government does not currently recognize this Deed/Treaty.

The area first enters the Euro-Canadian historic record as part of Treaty Number 3 made with the Mississauga Indians on December 7th, 1792, though purchased as early as 1784. This purchase was to procure for that part of the Six Nation Indians coming into Canada a permanent abode. The counties encompassed by this Treaty are: Lincoln County (except Niagara Township), and townships in Wentworth County; Brant County; Oxford County; Middlesex County; Elgin County; and all of Norfolk County.

All that parcel or tract of land lying and being between the Lakes Ontario and Erie, beginning at Lake Ontario, four miles south' westerly from the point opposite to Niagara Fort, known by the name of Mississaugue Point, and running from thence along the said lake to the creek that falls from a small lake, known by the name of Washquarter into the said Lake Ontario, and from thence north forty-five degree west, fifty miles; thence south forty-five degrees west, twenty miles; and thence south until it strikes the River La Tranche; then down the stream of the said river to that part or place where a due south course will lead to the mouth of Catfish Creek emptying into Lake Erie, and from the above mentioned part or place of the aforesaid River La Tranche, following the south course to the mouth of the said Catfish Creek; thence down Lake Erie to the lands heretofore purchased from the Nation of Mississague Indians; and from thence along the said purchase at Lake Ontario at the place of beginning as above mentioned together with all the woods, ways, paths, waters, watercourses and appurtenances thereunto belonging

(J. Morris 1943:18)

3.2.2 Euro-Canadian Settler History

Settlement History

Following the Toronto Purchase, the Province of Quebec (which then included Ontario) was divided into four political districts: Lunenburg, Mechlenburg, Nassau, and Hesse. When the Province of Upper Canada was formed in 1791, the names of the four districts were changed to Eastern, Midland, Home, and Western, respectively. The study area fell within the Home District.

The Home District, which originally included all lands between an arbitrary line on the west running from Long Point on Lake Erie to Georgian bay, and a line on the east running north from Presqu'île Point on Lake Ontario to the Ottawa River. In 1792, John Graves Simcoe, the first Lieutenant Governor of Upper Canada then further subdivided each district into counties and townships. The study area is located in Lincoln County (now Regional Municipality of Niagara), former Township of Grimsby (now West Lincoln Township).

Township of Grimsby

Lincoln County was formally established through a Provincial Act in 1798, and included the townships of Clinton, Grimsby, Saltfleet, Barton, Ancaster, Glanford, Binbrook, Gainsborough, and Caistor in its first riding (Lincoln County Council, 1956). Grimsby township was initially designated "Township No. 6", but was later named "Grimsby" after a town on the east coast of England, which had been named after the ancient "Grimsbi" mentioned in "The Lay of Havelock the Dane" (Lincoln County Council, 1956). Grimsby is bounded by Clinton to the east, Gainsborough and Caistor to the south, Saltfleet and Binbrook to the west and Lake Ontario to the north.

The First Municipal Council meeting in Upper Canada was held at the home of John Green on April 5, 1790 in Grimsby. At this meeting officials were elected to a variety of positions within the township, including "clark, constable, overseer of poore, overseer of roads, viewers of fences, and prisers of damage". Municipal Council meetings were held in the town of Grimsby until 1837, after which they alternated between Grimsby and Smithville until the division of the township into North Grimsby and South Grimsby in 1833 (Lincoln County Council, 1956).

Several small rivers and creeks flow through South Grimsby, the main one being The Twenty, known by local Indigenous as “Kenachdaw”, which translates into “Lead River”. The name comes from the lead found along the shores of The Twenty which were collected by both local Indigenous and European settlers from the Smithville and Morse’s Rapids (Lincoln County Council, 1956).

Euro-Canadian settlement of the Township had began in the 1780s, and primarily consisted of United Empire Loyalists who had fled the United States during the Revolutionary War. Augustus Jones completed the first official survey of the Township in 1788; however settlement was quicker in the northern section of the township due to its proximity to Lake Ontario (Lincoln County Council, 1956). Most of the original land grants awarded 200 acres where settlers built log homes and barns and began clearing the land for farming. Over the years, as mixed farming has given way to fruit growing, many of the farms have been subdivided to 50 acres or less. The Toronto, Hamilton, and Buffalo Railway was built in 1896, running through Smithville it gave railway service to the southern portion of Grimsby Township.

Town of Smithville

The Town of Smithville was first settled by the Griffin family, United Empire Loyalists who fled upstate New York in 1787. They settled on Lots 8, 9, and 10, Concession 9, which is located on the historical route connecting Grimsby and Dunnville. Originally known as Griffintown, the settlement’s name was later changed to Smithville, after the maiden name of Mrs. Griffin – Smith (Lincoln County Council, 1956). The town is located along Twenty Mile Creek, which allowed for the establishment of several mills along the creek. The first school in Smithville was built in 1795, and the first church was built by Wesleyan Methodists in 1821 (Lincoln County Council, 1956). By 1846, the population had grown to 150 people, and included a post office, saw mill, gristmill, cloth factory, machine shop, two blacksmiths, two shoemakers, and tannery (Smith, 1846).

Part Lots 8 and 9, Concession 9

To understand the specific land use history of Euro-Canadian settlement in the study area, historical mapping was consulted. A Grimsby Township map from 1791, the 1862 Tremaine Illustrated Map of the Counties of Lincoln and Welland, as well as the 1876 Illustrated Historical Atlas of Lincoln and Welland Counties show multiple landowners for the study area (**Map 3-4**). These are shown below in **Tables 2-4**, including the presence or absence of structures within each. The study area appears to be primarily agricultural, with several orchards being present.

A map of Grimsby Township from 1791 is likely the earliest map available for the area. It shows that both Lot 8 and Lot 9, Concession 9 were owned by the Griffin family. Lot 8 Concession 9 is shown to be owned by Richard Griffin who is known to be the first settler of Smithville. He and his family came to the area in 1787 from Nine Partners, New York State (Lincoln County Council, 1956). He had seven sons, Abraham, Edward, Nathaniel, Isaiah, Smith, Jonathan, and Richard Jr. One of his sons, Jonathan Griffin, is listed as the owner of Lot 9 Concession 9.

In the intervening time between 1791 and the publishing of the Tremaine Map of the Counties of Lincoln and Welland in 1862 both Lot 8 and Lot 9 Concession 9 were subdivided multiple times. In 1862 there were seven separate parcels owned within Lot 8 Concession 9, and four separate parcels within Lot 9 Concession 9. According to the 1877 Historic Atlas there are parcels within Lot 8 Concession 9, and two on Lot 9 Concession 9. By this time the Griffin family seems to have only retained the southern most section of both Lots.

Table 2: Land use history from 1791 Grimsby Township Map

Landowner Name	Lot and Concession	Structures present
Richard Griffin	Lot 8, Concession 9	No
Jonathan Griffin	Lot 9, Concession 9	No

Table 3: Land use history from 1862 Tremaine Map of the Counties of Lincoln and Welland

Landowner Name	Lot and Concession	Structures present
N. Wardell	Part N. ½ Lot 8, Concession 9	No
Rob Waddell	Part N. ½ Lot 8, Concession 9	No
F. Waddell	Part N. ½ Lot 8, Concession 9	No
Robert H. Waddell	Part N. ½ Lot 8, Concession 9	No
Abraham Marredeth	Part S. ½ Lot 8, Concession 9	Yes, at south
M. Lally	Part S. ½ Lot 8, Concession 9	No
Martin Lally	Part S. ½ Lot 8, Concession 9	Yes, Grammar School at south
Henry Smith J.P	Part N. ½ Lot 9, Concession 9	Yes, six structures at south
A. Marredeth	Part N. ½ Lot 9, Concession 9	No
Henry Smith J.P	Part S. ½ Lot 9, Concession 9	No
Richard C. Griffin J.P	Part S. ½ Lot 9, Concession 9	

Table 4: Land use history from 1877 Illustrated Historical Atlas

Landowner Name	Lot and Concession	Structures present
Nathaniel Wardell	Part N. ½ Lot 8, Concession 9	No
Rob H. Waddell	Part N. ½ Lot 8, Concession 9	Yes, and orchard both at south east
R. West & R. Florida	Part N. ½ Lot 8, Concession 9	Yes, and orchard both at south east
A. Marredeth	Part S. ½ Lot 8, Concession 9	No
M. Lally	Part S. ½ Lot 8, Concession 9	No
Henry Smith Estate	Part N. ½ Lot 9, Concession 9	No
R. C. Griffin Estate	Part N. ½ Lot 9, Concession 9	Yes, two structures and two orchards at north east and south east

3.3 Archaeological Context

3.3.1 Archaeological Sites and Assessments

For an inventory of archaeological resources to be compiled, the registered archaeological site records kept by the MHSTCI were consulted. In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MHSTCI. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 km east to west and approximately 18.5 km north to south. Each Borden block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The study area is located within Borden block AgGv.

In accordance with Section 7.5.8, Standard 1 of the Standards and Guidelines, all registered or known archaeological sites within a minimum one-kilometre distance from the study area are to be listed, a total of 34 archaeological sites were found in the OASD. These are listed below in **Table 4**.

Table 4: Registered archaeological sites within 1 km of study area.

Borden Number	Site name	Time Period	Affinity	Site Type	Further CHVI
AgGv-84		Pre-Contact	Aboriginal	findspot	No Further CHVI
AgGv-85		Woodland	Aboriginal	Findspot	No Further CHVI
AgGv-86	Wolf	Late Archaic	Aboriginal	findspot	
AgGv-83		Pre-Contact	Aboriginal	findspot	No Further CHVI
AgGv-82		Pre-Contact	Aboriginal	findspot	No Further CHVI
AgGv-81		Pre-Contact	Aboriginal	findspot	No Further CHVI
AgGv-80		Pre-Contact	Aboriginal	findspot	No Further CHVI
AgGv-79		Pre-Contact	Aboriginal	findspot	No Further CHVI
AgGv-78		Early Woodland	Aboriginal	findspot	No further CHVI
AgGv-77	Bartel Bridge	Pre-Contact	Aboriginal	Othercamp/campsite	
AgGv-76	Area 12	Pre-Contact	Aboriginal	Othercamp/campsite	
AgGv-75	Area 11	Pre-Contact	Aboriginal	Othercamp/campsite	
AgGv-74	Area 10	Woodland, Early	Aboriginal	Othercamp/campsite	
AgGv-73	Area 9	Pre-Contact	Aboriginal	Othercamp/campsite	
AgGv-72	Area 8	Archaic, Early	Aboriginal	Othercamp/campsite, scatter	
AgGv-71	Area 7	Pre-Contact	Aboriginal	Othercamp/campsite	
AgGv-70	Area 6	Woodland, Late	Aboriginal, Iroquoian, Neutral	Othercamp/campsite	
AgGv-69	Area 5	Archaic, Late	Aboriginal	Othercamp/campsite, scatter	

AgGv-68	Area 4	Pre-Contact	Aboriginal	Othercamp/campsite	
AgGv-67	Area 3	Archaic, Early	Aboriginal	Othercamp/campsite	
AgGv-66	Area 2	Archaic, Early	Aboriginal	Othercamp/campsite, scatter	
AgGv-65	Area 1	Pre-Contact	Aboriginal	Othercamp/campsite	
AgGv-64	Streamside 2	Pre-Contact	Aboriginal	Camp/campsite	No Further CHVI
AgGv-63	Streamside 1	Pre-Contact	Aboriginal	Camp/campsite	No Further CHVI
AgGv-62		Pre-Contact	Aboriginal	Findspot	
AgGv-61		Pre-Contact	Aboriginal	Unknown	
AgGv-60		Pre-Contact	Aboriginal	Other camp/campsite	
AgGv-54	Riverview Estates	Other		Other camp/campsite	
AgGv-145					Further CHVI
AgGv-142	Location 7	Pre-Contact	Aboriginal	Scatter	No Further CHVI
AgGv-141	Location 2	Late Archaic	Aboriginal	Findspot	No Further CHVI
AgGv-138	AC 45	Pre-Contact	Pre-Contact	Scatter	No Further CHVI
AgGv-103		Pre-Contact	Aboriginal	Unknown	No Further CHVI
AgGv-102		Pre-Contact	Aboriginal	Scatter	No Further CHVI

Per MHSTCI Section 7.5.8 Standard 4, A search of the OASD was carried out to look for any previous work completed within the study area or immediately adjacent to it (within 50 m), which showed that one previous assessment had been carried out within 50 m of the present study area. In 2016, Stantec carried out a Stage 1-2 archaeological assessment on the lands west of South Grimsby Road 5 and north of the railway, immediately west of the current study area. This survey resulted in a single isolated find of a scraper tool made of Onondaga chert. No further archaeological materials were found during this assessment and no further work was recommended (Stantec 2016.)

3.3.2 The Natural and Physical Environment

The study area is situated within the “Haldimand Clay Plain” physiographic region that spans the Niagara Peninsula, south of the Niagara Escarpment:

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

“The southeastern part of the peninsula might almost be considered as a separate subregion, characterized by levelness and poor drainage. The main part of Welland county comprises heavy clay, while the lowest part of the plain lies in the southern portion of that country. Here the watershed is provided by the Onondaga cuesta, which, though quite low and lying close to the shore of Lake Erie, nevertheless forces the drainage to the north and east”

(Chapman and Putnam, 1984: 157)

Examination of topographic mapping and aerial photography indicates the presence of several seasonal and relic streams running throughout the study area, likely small tributaries of the Twenty Mile Creek which is in close proximity of the study area.

4. Field Methods

The Stage 2 property survey was conducted under archaeological consulting license P1006 issued to Alexandra Mullan by the MTCS (P1006-0010-2020) who was also the field director for this archaeological assessment. The field director delegated the responsibility of undertaking the archaeological fieldwork at the study area as per Section 12 of the MTCS 2013 *Terms and Conditions for Archaeological Licenses*, issued in accordance with clause 48(4)(d) of the *Ontario Heritage Act*.

Fieldwork was conducted over 2 days, the conditions of which are included in **Table 2**. On both days conditions were appropriate for proper identification and recovery of archaeological materials. All results can be seen depicted on **Map 5**.

Table 2: Weather Conditions

Date	Temperature	Conditions
May 26, 2020	Low to mid 30s°C	Sunny
May 27, 2020	High 20s°C	Sunny

The majority of the study area consists of agricultural fields, with some areas of grassland and scrub meadow as well as a gravel access road and three warehouse buildings. In accordance with Section 2.1.1 of the *Standards and Guidelines for Consultant Archaeologists* the agricultural field was subject to pedestrian survey at 5 m intervals. The field was well ploughed and weathered with excellent visibility at 95%. The topsoil consisted of a light brown clay and the topography was generally flat. These conditions can be seen in **Images 1-4**. No archaeological resources were found in this area.

Upon arrival on the subject property it was discovered that construction was actively taking place in an area approximately 1 acre in size located at the south west corner of the study area along South Grimsby Road 5 and the railway. The topsoil had been removed and a large amount of soil and aggregate material had been brought to the site and piled. In discussions with the construction crew on site and the property owner it was discovered that an archaeological assessment had not been previously conducted in this area, and that the work being done was to construct a berm between the railway and adjacent property. This area was photo documented (**Images 5-6**) and the limits of disturbance recorded with GPS coordinates (**Map 5**).

Some sections within the study area consists of grassland, and therefore was subject to test pit survey at 5 m intervals, as per Section 2.1.2 of *The Standards and Guidelines for Consultant Archaeologists* (2011). As can be seen on **Map 5**, deep and extensive land disturbance was encountered in the area surrounding the structures, at the south east corner adjacent to the agricultural field, and in the greenspace located to the south east. The area surrounding the buildings was extensively disturbed during their construction (**Images 10-12**). A hard packed gravel driveway and lot surrounds these buildings and extends to the edge of the agricultural field and to the edge of each structure. A large mound 10 m in height is south of these buildings and extends to the edge of the agricultural field. Soil mounding was also encountered at the south east section of this property in the space between the agricultural field and railway. Additionally, areas that are low lying and permanently wet were encountered adjacent to the driveway and at the south east

of the property (**Images 14, 16**). These areas were photo documented and not subject to further assessment. A large brush pile was located adjacent to the gravel driveway (**Image 13**), and was not assessed.

Areas within the eastern section of the property were found to be largely intact and test pit survey was conducted at 5 m intervals (**Images 12-14, 24**). Test pits in these areas averaged from 15 – 25 cm in depth and consisted of a light brown clay topsoil overlaying light orange clay subsoil. While test pitting the area between the agricultural field and residential homes along the south east section of the study area disturbance was encountered and the intervals were adjusted to 10 m. The disturbed test pits consisted of very compact light brown, medium brown, and orange mottled clay with gravel inclusions (**Image 17**).

A smaller property located to the south east was also captured during this archaeological assessment. This study area has residential homes to the north, a storm drain pond to the east, and a large slope up to the railway to the south (**Images 18-19**). This area consists of a manicured lawn and was test pit at 10 m intervals to confirm the presence of disturbance. Test pits in this consisted of very compact medium brown clay mottled with light brown and orange clay, with gravel inclusions. The entirety of this area was found to be disturbed from previous construction and grading activity.

All test pits were approximately 30 cm in diameter and excavated by hand 5 cm into subsoil. The stratigraphy was examined for the presence of cultural features and all soils screened through 6 mm mesh to facilitate the recovery of archaeological materials. All test pits were backfilled upon completion. No archaeological materials were found.

5. Record of Finds

The purpose of this section is to document all finds according to the standards (MTCS Section 7.8.2). An inventory of the documentary record generated by the property Inspection is provided in Table 3 (MTCS Section 7.8.2 Standard 2).

Table 3: Record of Documentation.

Document Type	Location of Document	Additional Comments	Quantity
Field Notes	PHC Office	Field notes, observation and photo log	2 pages, hand written
Maps Provided by Client	PHC Office	In project file (Site Map)	1
Digital Photographs	PHC Office	Stored digitally in project file	30

6. Analysis and Conclusion

6.1 Analysis and Conclusion

While a search of the OSAD database did not find any registered archaeological sites within close proximity of the property (i.e. within 300m) and the background study did not find evidence of previous structures within the study area, the proximity of a railway and Twenty Mile Creek suggested that there was high potential for Indigenous and Euro-Canadian archaeological resources. However, the results of the Stage 1-2 archaeological assessment did not result in the discovery of any archaeological materials and as such the study area can be considered clear of further archaeological concern.

7. Recommendations

Based on the findings of this Stage 1-2 assessment, it is determined that the study area does not hold any further cultural heritage value or interest under S&G Section 2.2, Standards 1 and 2 (MTCS, 2011) and is free of any further archaeological concern.

It is requested that this report be entered into the Ontario Public Register of Archaeological Reports, as provided for in Section 65.1 of the Ontario Heritage Act.

STUDY LIMITATIONS: All information, recommendations and opinions provided 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 the Client's or PHC's express written consent. 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, if any, comply with those identified in the Ministry of Heritage, Sport, Tourism, and Cultural Industries' 2011 Standards and Guidelines for Consultant Archaeologists.

8. Advice on Compliance with Legislation

Advice on the compliance with legislation is not part of the archaeological record. However, for the benefit of the proponent and approval authority in the land use planning and development process, the report must include the following standard statements:

- ▶ This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c O.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 regards 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 licenced 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 licenced archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating 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 representative of a new archaeological site or sites 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.

As per MTCS *Standards and Guidelines* (MTCS 2011, Section 7.5.9 Standard 2):

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

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10. Images



Image 1: Ground conditions; field well weathered.



Image 2: Overview of agricultural field. View west.



Image 3: Crew at work conduction pedestrian survey. View south.



Image 4: Overview of agricultural field. View north west.



Image 5: Construction activity within study area. View west.



Image 6: Construction activity within study area. View south.



Image 7: Area between agricultural field and structures, test pit at 5m. View north.



Image 8: Typical intact test pit, light brown clay overlaying light orange-brown clay.



Image 9: Crew at work test pitting at 5m. View east.



Image 10: Disturbance around structures. View south.



Image 11: Disturbance around structures. View south.



Image 12: Gravel driveway and large mound. View south.



Image 13: Brush pile. View east.



Image 14: Low and wet area. View west.



Image 15: Area along eastern edge of agricultural field, test pit at 5m. View south.



Image 16: Wetland area in southeast section of study area. View south.



Image 17: Disturbed test pit, very compact light brown, medium brown, and orange mottled clay with gravel inclusions.



Image 18: Overview of parkland area, test pit at 10m to confirm disturbance. View west.

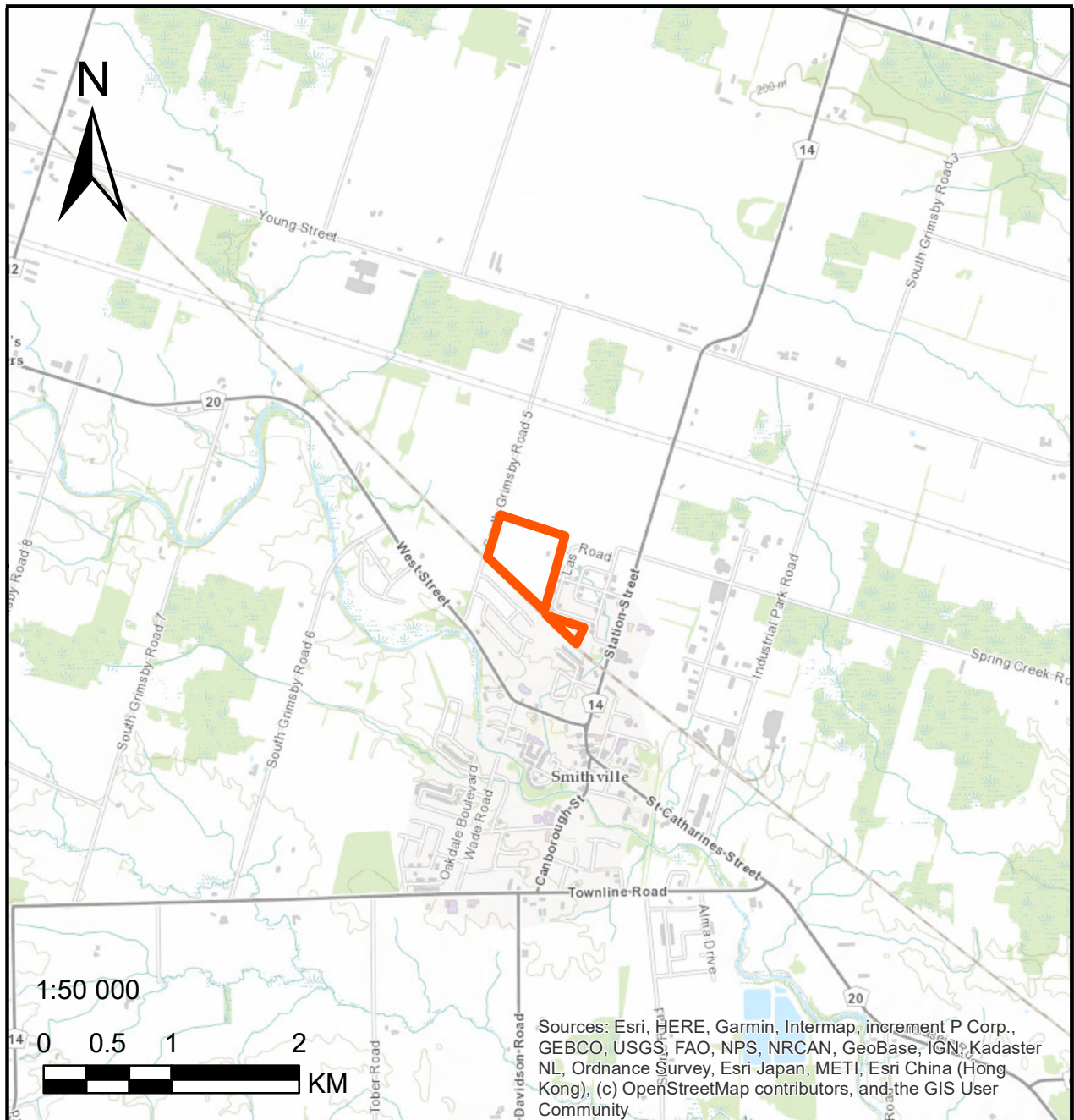


Image 19: Disturbed test pit. Very compact medium brown clay mottled with light brown and orange clay with gravel inclusions.

11. Maps

All maps on succeeding pages.

Map 1 - Study Area on Topographic Map



Stage 1 and 2 Archaeological Assessment Station Meadows West

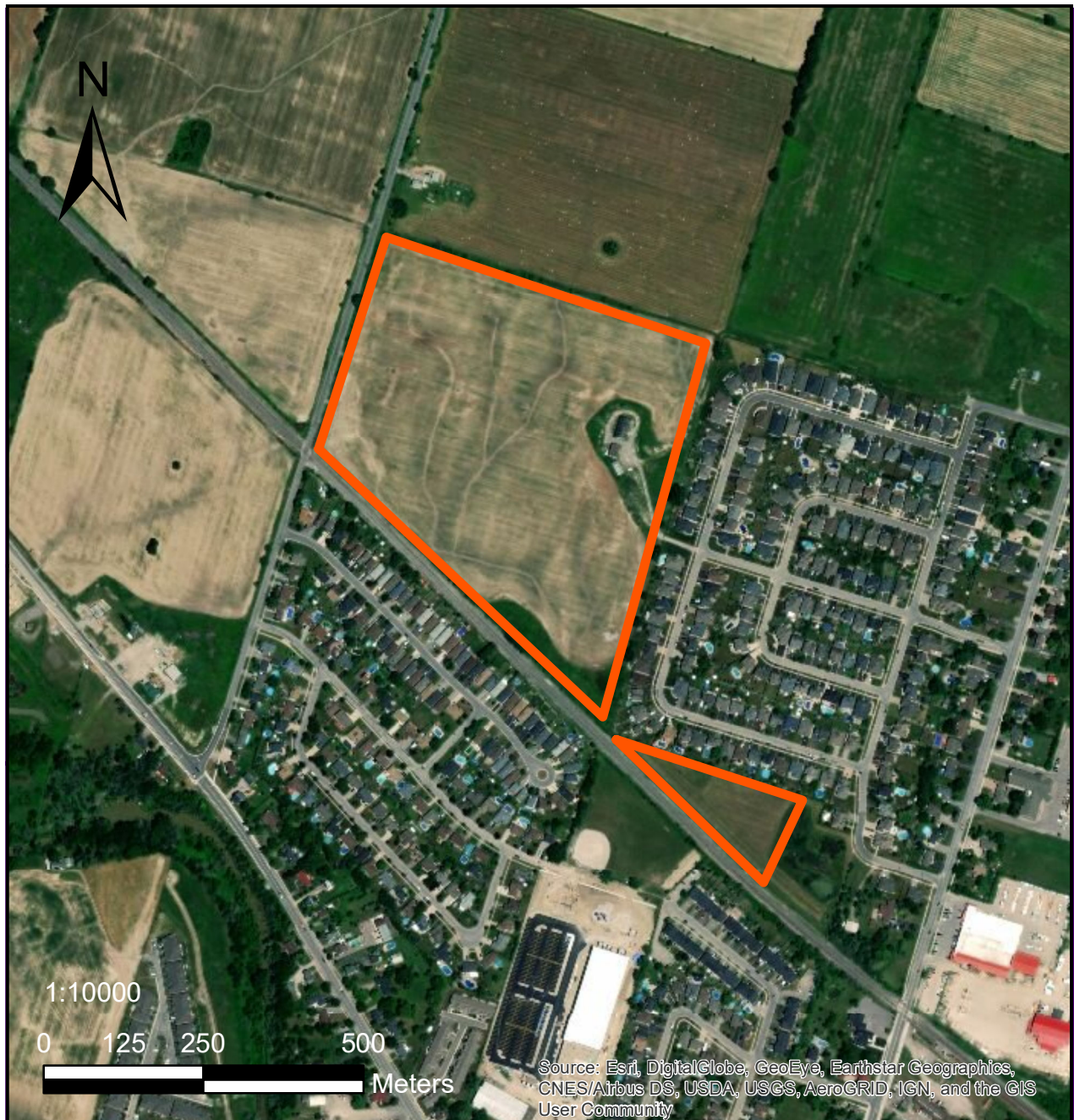
Legend



Date: 2020-06-04



Map 2 - Study Area on Modern Aerial Imagery



Stage 1 and 2 Archaeological Assessment Station Meadows West

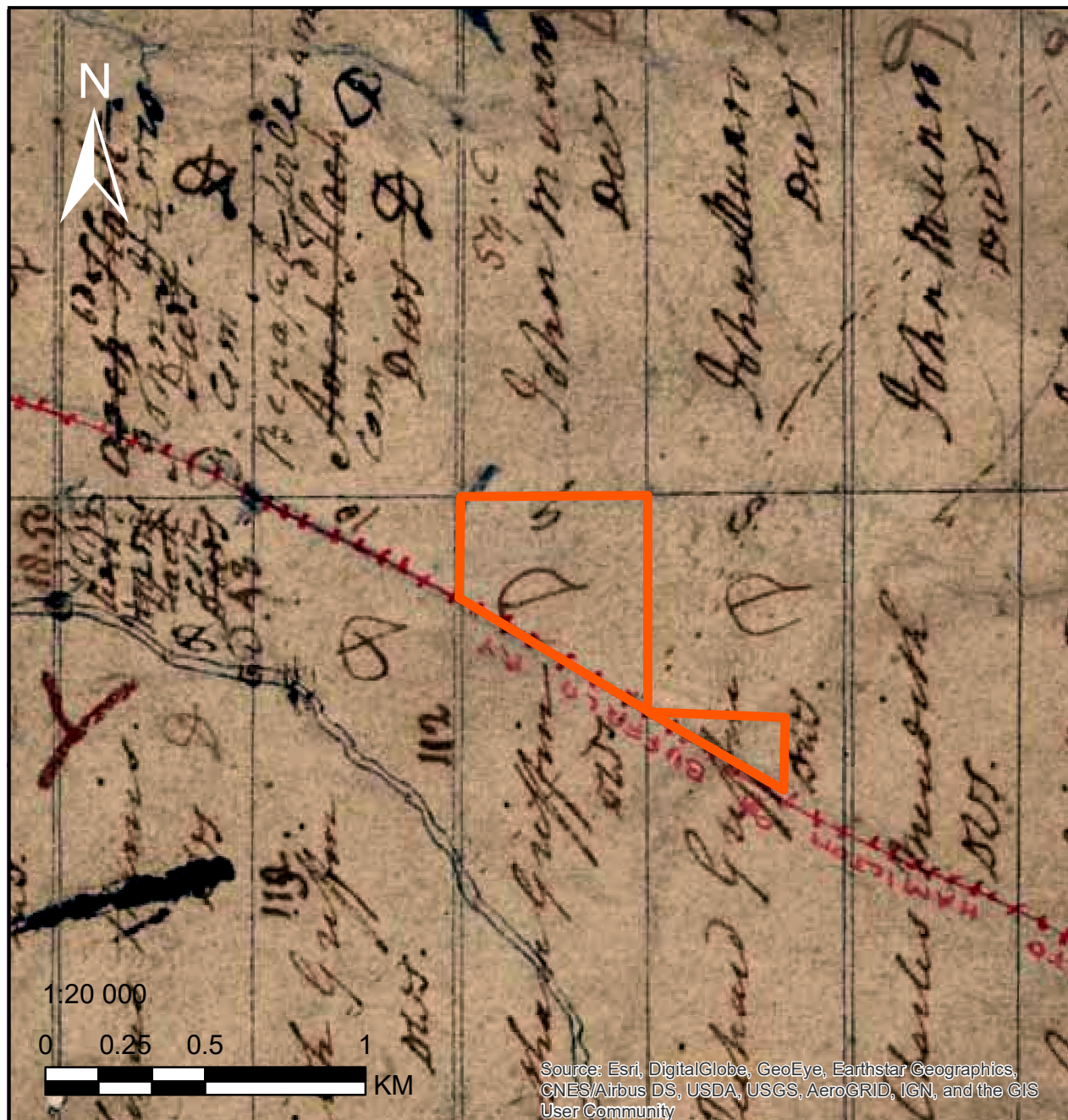
Legend

 Study Area

Date: 2020-06-04



Map 3 - Study Area on 1791 Historical Map (Includes Railway Route)



Stage 1 and 2 Archaeological Assessment Station Meadows West

Legend



1:20 000

0 0.25 0.5 1

KM

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend



Study Area

Date: 2020-06-04



Map 5 - Stage 2 Results and Photo Direction



Stage 1 and 2 Archaeological Assessment Station Meadows West

Legend

- Ground Shot
- Angle**
- ▶ Photo Direction
- Active Disturbance
- Pedestrian Survey at 5m
- Test-Pitting at 5m
- Disturbed Test-Pitting at 10m
- Disturbed
- Wet



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136 Geary Ave., Suite 215, Toronto, ON, M6H2R4

Telephone: 647-348-4887

Email: info@phcgroup.ca

Website: www.phcgroup.ca