

## **APPENDIX 3**

# STAGE 1 ARCHAEOLOGICAL ASSESSMENT REPORT



# Stage 1 Archaeological Assessment Safari Road (Lot 18 to Lot 24, Concession 6 and Lot 19 to Lot 25, Concession 7, Beverly Geographical Township, County of Wentworth) City of Hamilton

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## Original Report

Prepared for:

### **R.V. Anderson Associates Limited**

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## Executive Summary

Archaeological Services Inc. was contracted by R.V. Anderson Associates Limited, on behalf of the City of Hamilton, to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Safari Road project. This project involves the reconstruction of Safari Road. The Project Area along Safari Road includes a 20-metre buffer, is over 2.5 kilometres in length, and extends from Kirkwall Road in the west, to 20 metres east of Valens Road.

Stage 1 background research determined there are no previously registered archaeological sites located within one kilometre of the Project Area. The property inspection determined that parts of the Project Area exhibit archaeological potential and will require archaeological assessment.

The following recommendations are made:

- 1) Parts of the Project Area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit and pedestrian survey at five metre intervals, where appropriate. Stage 2 is required prior to any proposed construction activities on these lands;
- 2) The remainder of the Project Area does not retain archaeological potential on account of deep and extensive land disturbance and low and wet conditions. These lands do not require further archaeological assessment; and,
- 3) Should the proposed work extend beyond the current Project Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.



## Project Personnel

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## 1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by R.V. Anderson Associates Limited, on behalf of the City of Hamilton, to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Safari Road project. This project involves the reconstruction of Safari Road. The Project Area along Safari Road includes a 20-metre buffer, is over 2.5 kilometres in length, and extends from Kirkwall Road in the west, to 20 metres east of Valens Road (Figure 1).

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (1990, as amended in 2024) and the 2011 *Standards and Guidelines for Consultant Archaeologists (S & G)*, administered by the Ministry of Citizenship and Multiculturalism (MCM 2011).

### 1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act, RSO* (Environmental Assessment Act, R.S.O. c. E.18, 1990 as amended 2024) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the *Municipal Class Environmental Assessment* process (Municipal Engineers Association, 2023).

The City of Hamilton *Archaeological Management Plan* (City of Hamilton, 2016) was also consulted.

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment and property inspection was granted by R.V. Anderson Associates Limited on October 4, 2024.

#### 1.1.1 Treaties and Traditional Territories

The Project Area is within Treaty #3 – The Between the Lakes Purchase.

Following the American Revolutionary War (1775-1783), the British Crown needed to find lands on which to settle United Empire Loyalists, including



approximately 2,000 members of the Six Nations confederacy who had fought alongside British troops. Led by Sir Frederick Haldimand who was the governor of Quebec at that time, the Crown was initially planning on providing lands for Loyalist settlers in Quebec and Southeastern Ontario, including providing land in the Bay of Quinte for Six Nations refugees. This was not suitable for many of the members of Six Nations and a contingent of approximately 1,800 community members, led by Chief Joseph Brant, requested land north of Lake Erie along the Grand River. Brant felt that the location in the Bay of Quinte was too isolated and that his followers could be better served by being closer to the Six Nations communities that chose to remain in the United States in western New York (Surtees, 1984, p. 21).

Recognizing that, under the terms of the Royal Proclamation of 1763, the land needed to be purchased prior to settlement, Colonel John Butler was sent to negotiate with the Mississaugas of the Credit for lands east of Lake Ontario and north of Lake Erie. On May 22, 1784, the Mississaugas of the Credit agreed to cede approximately 3,000,000 acres (1,214,057 hectares) of land containing all or part of Brant, Elgin, Middlesex, Oxford, and Wellington Counties as well as the Regions of Haldimand-Norfolk, Halton, Hamilton-Wentworth, Niagara, and Waterloo. In exchange for these lands, the Mississaugas received £1180.74 worth of trade goods (Crown-Indigenous Relations and Northern Affairs 2016; Surtees 1984). Of the 3,000,000 acres (1,214,057 hectares), approximately 550,000 acres (222,577 hectares) was set aside for the settlement of Six Nations people.

However, due to uncertainties with the description of the lands in the original surrender, Treaty 3 was renegotiated on December 7, 1792, to clarify what was ceded. This largely revolved around the northern boundary of the Treaty area, and particularly the area set aside for Six Nations settlement along the Grand River (see Haldimand Tract and Treaty 4). The signees on the side of the British included Lieutenant Governor John Graves Simcoe, John Butler, Robert Kerr, Peter Russell, John McGill, and Davie William Smith. The signees on the side of the Mississauga included Chiefs Wabakayne, Wabanip, Kautabus, Wabaniship and Mottotow (Crown-Indigenous Relations and Northern Affairs, 2016; Mississaugas of the Credit First Nation, 2017; Surtees, 1984).



The original text stipulated that the north-west boundary of the parcel was an imaginary line between Burlington Bay and the Thames River, which is inconsistent with the geography of the area. The boundaries of the parcel were corrected to create a polygon encompassing the Niagara peninsula up to Burlington Bay and then up north to the present-day town of Arthur then south to the present-day town of Woodstock to finally meet Lake Erie at Port Bruce. Treaty 3 lands exclude a corridor along the Grand River set aside for Six Nations (Crown-Indigenous Relations and Northern Affairs, 2016; Native Land Digital, 2018).

## 1.2 Historical Context

### 1.2.1 Indigenous Land Use and Settlement

Current archaeological evidence indicates humans were present in southern Ontario approximately 13,000 years before present (B.P.) (Ferris, 2013). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 B.P., the environment had progressively warmed (Edwards & Fritz, 1988) and populations now occupied less extensive territories (Ellis & Deller, 1990).

Between approximately 10,000-5,500 B.P., the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 B.P.; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest archaeological evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is interpreted by archaeologists to be indicative of increased social organization and the investment of labour into social infrastructure (Brown, 1995, p. 13; Ellis et al., 1990, 2009).



Between 3,000-2,500 B.P., populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 B.P. and exchange and interaction networks broaden at this time (Spence et al., 1990, pp. 136, 138) and by approximately 2,000 B.P., evidence exists for small community camps, focusing on the seasonal harvesting of resources (Spence et al., 1990, pp. 155, 164). By 1,500 B.P. there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier phytolith evidence for maize in central New York State by 2,300 B.P. – it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch & Williamson, 2013, pp. 13–15). As is evident in detailed Anishinaabek ethnographies, winter was a period during which some families would depart from the larger group as it was easier to sustain smaller populations (Rogers, 1962). It is generally understood that these populations were Algonquian speakers during these millennia of settlement and land use.

From the beginning of the Late Woodland period at approximately 1,000 B.P., lifeways became more similar to those described in early historical documents. Between approximately 1000-1300 Common Era (C.E.), larger settlement sites focused on horticulture begin to dominate the archaeological record. Seasonal dispersal of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson, 1990, p. 317). By 1300-1450 C.E., archaeological research focusing on these horticultural societies note that this episodic community dispersal was no longer practised and these populations now occupied sites throughout the year (Dodd et al., 1990, p. 343). By the mid-sixteenth century these small villages had coalesced into larger communities (Birch et al., 2021). Through this process, the socio-political organization of these First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed. Other First Nation communities continued to practice residential mobility and to harvest available resources across landscapes they returned to seasonally/annually.

By 1600 C.E., the Confederation of Nations were encountered by the first European explorers and missionaries in Simcoe County. Samuel de Champlain in



1615 reported that a group of Iroquoian-speaking people situated between the Haudenosaunee and the Huron-Wendat were at peace and remained “la nation neutre”. Like the Huron-Wendat, Petun, and Haudenosaunee, the Neutral or Attawandaron people were settled village agriculturalists.

By the 1640s, devastating epidemics and the traditional enmity between the Haudenosaunee<sup>1</sup> and the Attawandaron and the Huron-Wendat (and their Algonquian allies such as the Nippissing and Odawa) led to their dispersal from southern Ontario. Shortly afterwards, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. Peace was achieved between the Haudenosaunee and the Anishinaabe Nations in August of 1701 when representatives of more than twenty Anishinaabe Nations assembled in Montreal to participate in peace negotiations. Peace was confirmed again at council held at Lake Superior when the Haudenosaunee delivered a wampum belt to the Anishinaabe Nations. This agreement between the Haudenosaunee and Anishinaabe nations is referred to as the Dish with One Spoon.

In 1763, following the fall of Quebec, New France was transferred to British control at the Treaty of Paris. The British government began to pursue major land purchases to the north of Lake Ontario in the early nineteenth century. The Crown acknowledged the Mississaugas of the Credit as the owners of the lands between Georgian Bay and Lake Simcoe and entered into negotiations for additional tracts of land as the need arose to facilitate European settlement.

## 1.2.2 Post-Contact Settlement

Historically, the Project Area is located in the Geographical Beverly Township, County of Wentworth, in Lot 18 to 24 of Concession 6 and Lot 19 to 25 of Concession 7.

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<sup>1</sup> The Haudenosaunee are also known as the New York Iroquois or Five Nations Iroquois and after 1722 Six Nations Iroquois. They were a confederation of five distinct but related Iroquoian-speaking nations - the Seneca, Onondaga, Cayuga, Oneida, and Mohawk. Each lived in individual territories in what is now known as the Finger Lakes district of Upper New York. In 1722 the Tuscarora joined the confederacy.



The S & G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the Ontario Heritage Act or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those that are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Indigenous pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006). Early European settlements occupied similar locations as Indigenous settlements as they were generally accessible by trail or water routes and would have been in locations with good soil and suitable topography to ensure adequate drainage.

Throughout the period of initial European settlement, Indigenous groups continued to fish, gather, and hunt within their traditional and treaty territories, albeit often with legal and informal restrictions imposed by colonial authorities and settlers. In many cases, Indigenous peoples acted as guides and teachers, passing on their traditional knowledge to settlers, allowing them to sustain



themselves in their new homes. Indigenous peoples entered into economic arrangements and partnerships, and often inter-married with settlers. However, pervasive and systemic oppression and marginalization of Indigenous peoples also characterized Euro-Canadian colonization, with thousands being displaced from their lands, denied access to traditional and treaty hunting, fishing, and collecting grounds, and forced to assimilate with Euro-Canadian culture through mandatory attendance at Day and Residential Schools (Ray, 2005; Rogers & Smith, 1994).

### **1.2.2.1. Beverly Township**

The township of Beverly was established in 1798. The southern half of the township was surveyed in 1794 and a year later the family of United Empire Loyalist William Cope settled in Beverly. The village of Copetown was named after him. In 1820 Beverly's first schoolhouse, a log building, was erected in the settlement of Sheffield.

Beverly was originally apart of Halton County however in 1853 the township was transferred to Wentworth County. The first township council was elected in 1850 after the Municipal Act had been passed. Later that year Beverly Township erected its town hall in the village of Rockton. There, the first session of the Division Court was held in 1852. Beverly Township organized its Agricultural Society as early as 1853 and the society sponsored the first annual "Rockton World's Fair" in 1878.

For municipal purposes the township became part of the Township of Flamborough in the newly created Regional Municipality of Hamilton-Wentworth on January 1, 1974 (Mika & Mika, 1977, pp. 190–191).

### **1.2.3 Map Review**

The 1859 *County of Wentworth Map*, 1875 *Illustrated Historical Atlas of the County of Wentworth*, and topographic maps from 1916 and 1994 (Tremaine, 1859; Page & Smith, 1875; Department of Militia and Defence, 1916; National Topographic Service, 1994) were examined to determine the presence of



historic features within the Project Area during the nineteenth and twentieth centuries (Figure 2 to Figure 5).

It should be noted that not all features of interest were mapped systematically in the Ontario series of historical atlases. For instance, they were often financed by subscription limiting the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases. The use of historical map sources to reconstruct or predict the location of former features within the modern landscape generally begins by using common reference points between the various sources. The historical maps are geo-referenced to provide the most accurate determination of the location of any property on a modern map. The results of this exercise can often be imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including differences of scale and resolution, and distortions introduced by reproduction of the sources.

The 1859 map (Figure 2) shows the Project Area situated between Concession 6 and Concession 7 along what is now named Safari Road. Kirkwall Road is illustrated at the western end of the Project Area. Valens Road is shown at the eastern end of the Project Area, as well as the eastern limit of the historic Ward 4. No built historic structures are shown on this map however each land parcel lining Safari Road has a landowner identified by name.

The 1875 map (Figure 3) shows several homesteads and orchards in the properties north and south of Safari Road. Several kilometres north of the Project Area the village of Kirkwall is labelled at the northwest end of Lot 19 in Concession 7. A schoolhouse is also shown in this lot, approximately 500 metres north of Safari Road. South of the east end of the Project Area White Stone Quarry is identified over a kilometre away.

The 1916 map (Figure 4) shows two bridges along Safari Road which pass over large patches of wetland within the Project Area. A drumlin (outlined in red) crosses Safari Road within the west half of the Project Area. Several structures are drawn within 100 metres of Safari Road.



The 1994 map (Figure 5) shows the land near and within the Project Area remains largely undeveloped. The drumlin feature and Beverly Swamp are shown north and south of Safari Road. A tributary of Barlow Creek is located just east of the Project Area, which connects to the Beverly Swampland / Sheffield Rockton Wetland Complex. Small areas of pooling water are drawn north of Safari Road. Figure 4

### **1.2.4 Aerial and Orthoimagery Review**

Figure 6 shows historical aerial imagery from 1960 (McMaster University, 1960). This image shows the swampland and agricultural plots within and adjacent to the Project Area. Only two built structures are shown near the northern border of the Project Area, none are visible within it. An expansive white area shows disturbed land within the Project Area along the northside of Safari Road. This area is marked as Disturbed in Figure 10.

A review of available Google satellite imagery between 2004 and 2023 shows no instances of significant land alterations to the Project Area within this timeframe.

## **1.3 Archaeological Context**

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Project Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the MCM through “Ontario’s Past Portal”; published and unpublished documentary sources; and the files of ASI.

### **1.3.1 Geography**

In addition to the known archaeological sites, the state of the natural environment is a helpful indicator of archaeological potential. Accordingly, a description of the physiography and soils are briefly discussed for the Project Area.



The S & G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 B.P. (Karrow & Warner, 1990, Figure 2.16), proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

Other geographic characteristics that can indicate archaeological potential include elevated topography (eskera, drumlins, large knolls, and plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential (S & G, Section 1.3.1).

### **1.3.1.1. Physiography**

The Project Area is located within the limestone plains and drumlin physiographic landforms of the Flamborough Plain physiographic region of southern Ontario (Chapman & Putnam, 1984). Just west of the middle of the Project Area a Drumlin intersects with Safari Road.



The Flamborough Plain is an area of 241 hectares on an elevation of 1200 to 900 feet (366 to 274 metres) above sea level, extending from Acton in the north, the Galt moraine in the northwest, and the glacial Lake Warren in the south (Chapman and Putnam, 1984:129). A dolostone bedrock plain, it is characterized by wetlands, scattered drumlins, and thin, rocky glacial till or sand and gravel soils (Carolinian Canada, 2022). The landscape consists mainly of wooded areas and pasture due to poor drainage and thin, sand and gravel soils; areas where agriculture is possible are mainly on the drumlins (Chapman and Putnam, 1984:130). The Beverly Swamp is an important natural landscape that extends into the Flamborough Plain, spanning much of the physiographic region on its west and south sides (Carolinian Canada, 2022). It forms one of the largest forested wetlands in southern Ontario that is crucial to the stability of the region's ecology and water systems. The extensive wetland areas are drained by the Fairchild Creek, Spencer Creek, and Bronte Creek stream systems, which drain into Lake Erie and Lake Ontario.

### **1.3.1.2. Surficial Geology**

The surficial geology of the Project Area (Figure 7) contains Paleozoic bedrock and coarse-textured glaciolacustrine deposits of sand, gravel, minor silt and clay (Ontario Geological Survey, 2012).

### **1.3.1.3. Soil Types and Drainage**

Soil types within the Project Area include:

- Colwood, a silt loam with poor drainage
- Farmington, a well drained loam
- Flamboro, a poorly drained sandy loam
- Grimsby, a well drained sandy loam (Soil Research Institute, 1967).

Soil drainage for the Project Area is shown in Figure 8.

### **1.3.1.4. Water Sources**

The Project Area is situated within the Lower Grand River watershed and is located within 300 metres of a Barlow Creek tributary. The Sheffield-Rockton



Provincially Significant Wetland is located within the middle of the Project Area. This wetland is also identified as the Beverly Swamp.

The Beverly Swamp is 2324 hectares in size and spans three watersheds Fairchild, Spencer, and Bronte creek. It is one of the best and largest lowland swamp forest representations in south-central Ontario. The area functions as a natural sponge and drains into both Lake Erie and Lake Ontario (Hamilton Conservation Authority, 2024).

### **1.3.2 Previously Registered Archaeological Sites**

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MCM. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres 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 Project Area under review is in Borden block *AiHa*.

According to the Ontario Archaeological Sites Database, there are no previously registered archaeological sites located within one kilometre of the Project Area (MCM 2024).

### **1.3.3 Previous Archaeological Assessments**

Background research reveals that there are no previous archaeological assessments that detail fieldwork within 50 metres of the Project Area.

## **2.0 Property Inspection**

### **2.1 Field Methods**

A Stage 1 property inspection must adhere to the S & G, Section 1.2, Standards 1-6, which are discussed below. The entire property and its periphery must be inspected. The inspection may be either systematic or random. Coverage must be sufficient to identify the presence or absence of any features of



archaeological potential. The inspection must be conducted when weather conditions permit good visibility of land features. Natural landforms and watercourses are to be confirmed if previously identified. Additional features such as elevated topography, relic water channels, glacial shorelines, well-drained soils within heavy soils and slightly elevated areas within low and wet areas should be identified and documented, if present. Features affecting assessment strategies should be identified and documented such as woodlots, bogs or other permanently wet areas, areas of steeper grade than indicated on topographic mapping, areas of overgrown vegetation, areas of heavy soil, and recent land disturbance such as grading, fill deposits and vegetation clearing. The inspection should also identify and document structures and built features that will affect assessment strategies, such as heritage structures or landscapes, cairns, monuments or plaques, and cemeteries.

The Stage 1 archaeological assessment property inspection was conducted under the field direction of Douglas Todd (#R055) on November 5, 2024, in order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the Project Area. It was a systematic visual inspection from public right-of-ways only and did not include excavation or collection of archaeological resources. Fieldwork was conducted when weather conditions were deemed clear with good visibility (partly cloudy with seasonal temperatures), per S & G Section 1.2., Standard 2. Field photography is presented in Section 7.1 (Image 1 to Image 21), and field observations are overlaid onto the existing conditions of the Project Area in Section 8.0 (Figure 9 to Figure 12).

## 2.2 Current Land Use and Field Conditions

Safari Road, between Kirkwall Road and Valens Road, is an arterial road in Rural Hamilton. Historically, this low-lying roadway has experienced flooding, which in-turn has led to multiple road closures to maintain public safety. In addition to road drainage issues, flooding has also been experienced in the abutting properties along Safari Road. The roadway is currently closed to general traffic (Image 1 and Image 15), however its access remains open to private properties (City of Hamilton, 2024a).



A large portion of the Project Area lies within the designated Sheffield Rockton Provincially Significant Wetland Complex that is part of a larger and interconnected complex of regenerating natural areas known as the Hyde-Rockton-Beverley Complex. This wetland complex is identified as Environmentally Significant Area #22 in the City of Hamilton Official Plan (City of Hamilton, 2024b).

The flooding on Safari Road may be due to the disruption of natural flow of an adjacent watercourse and the overall surface water drainage in the area. (City of Hamilton, 2024b; Nickerson, 2024).

Field observations determined the roadside conditions dry out beyond the wetland and continue east towards Valens Road. Along the eastern stretch of Safari Road many deep to shallow ditches exist parallel to the road. The section of Safari Road from Kirkwall Road to the actual western edge of the wetland is characterized by secondary woodland growth and sporadic residences and associated driveways. The section of Safari Road from its eastern edge to Valens Road consists of sporadic residences and driveways and flat agricultural lands.

### 3.0 Analysis of Archaeological Potential

The S & G, Section 1.3.1, lists criteria that are indicative of archaeological potential. The Project Area meets the following criteria indicative of archaeological potential:

- Water sources within 300 metres: primary, secondary, or past water source (Barlow Creek);
- Elevated topography (drumlin);
- Well-drained soils (Farmington, Grimsby);
- Early settlements within 100 metres (homesteads, farmsteads, etc.);
- Early historic transportation routes within 100 metres (Safari Road, Kirkwell Road, Valens Road).

According to the S & G, Section 1.4 Standard 1e, no areas within a property containing locations listed or designated by a municipality can be recommended for exemption from further assessment unless the area can be documented as



disturbed. The City of Hamilton's Cultural Heritage Resources Map (City of Hamilton, 2022) was consulted and no properties within the Project Area are Listed or Designated under the *Ontario Heritage Act*.

The City of Hamilton *Archaeological Management Plan* (City of Hamilton, 2016) was reviewed for background information and to help inform any indicators of archaeological potential not captured in other research. Generally speaking, archaeological management plans are high-level analyses of archaeological potential for non-specialists but cannot be considered a replacement for Stage 1 archaeological assessments. ASI's review of the above archaeological management plan indicates the majority of the Project Area may have archaeological potential.

The property inspection determined that parts of the Project Area exhibit archaeological potential. These areas will require Stage 2 archaeological assessment prior to any construction activities or other proposed impacts. According to the S & G Section 2.1.1, pedestrian survey is required in actively or recently cultivated fields (Image 19, Image 20; Figure 11, Figure 12: areas highlighted in orange). According to the S & G Section 2.1.2, test pit survey is required on terrain where ploughing is not viable, such as wooded areas, properties where existing landscaping or infrastructure would be damaged, overgrown farmland with heavy brush or rocky pasture, and narrow linear corridors up to 10 metres wide (Image 1 to Image 5, Image 8 to Image 10, Image 17 to Image 21; Figure 9 to Figure 12: areas highlighted in green).

A part of the Project Area is located within low lying wet areas, and according to the S & G Section 2.1 do not retain potential (Image 6, Image 7, Image 11 to Image 16; Figure 9 to Figure 11: areas highlighted in blue). These areas do not require further survey.

Part of the Project Area has been subjected to deep soil disturbance events due to land grading and fill (Figure 6), road and driveway construction and water management ditches, drains and culverts. According to the S & G Section 1.3.2 these areas do not retain archaeological potential (Image 1 to Image 5, Image 8 to Image 10, Image 17 to Image 21; Figure 9 to Figure 12: areas highlighted in yellow) and do not require further survey.



## 3.1 Conclusions

The Stage 1 background research determined there are no previously registered archaeological sites located within one kilometre of the Project Area. The property inspection determined that parts of the Project Area exhibit archaeological potential and will require archaeological assessment (Figure 9 to Figure 12: areas highlighted in orange and green).

## 4.0 Recommendations

The following recommendations are made:

- 1) Parts of the Project Area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit and pedestrian survey at five metre intervals, where appropriate (Figure 9 to Figure 12). Stage 2 is required prior to any proposed construction activities on these lands;
- 2) The remainder of the Project Area does not retain archaeological potential on account of deep and extensive land disturbance and low and wet conditions. These lands do not require further archaeological assessment; and,
- 3) Should the proposed work extend beyond the current Project Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

**NOTWITHSTANDING** the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Archaeology Programs Unit of the MCM should be immediately notified.

The above recommendations are subject to MCM approval, and it is an offence to alter any archaeological site without MCM concurrence. No grading or other



activities that may result in the destruction or disturbance of any archaeological sites are permitted until notice of MCM approval has been received.

## 5.0 Advice on Compliance with Legislation

ASI advises compliance with the following legislation:

- This report is submitted to the Minister 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 Citizenship and Multiculturalism 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 Archaeological 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 human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Public and Business Services Delivery.
- 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.

## 6.0 Bibliography and Sources

A.S.I. (2006). Historical Overview and Assessment of Archaeological Potential Don River Watershed, City of Toronto.

Birch, J., Manning, S. W., Sanft, S., & Conger, M. A. (2021). Refined Radiocarbon Chronologies for Northern Iroquoian Site Sequences: Implications for Coalescence, Conflict, and the Reception of European Goods. *American Antiquity*, 86(1), 61–89.

Birch, J., & Williamson, R. F. (2013). *The Mantle Site: An Archaeological History of an Ancestral Wendat Community*. Rowman & Littlefield Publishers, Inc.

Brown, J. (1995). On Mortuary Analysis – with Special Reference to the Saxe-Binford Research Program. In L. A. Beck (Ed.), *Regional Approaches to Mortuary Analysis* (pp. 3–23). Plenum Press.

Carolinian Canada. (2022). Beverly Swamp.  
[https://caroliniancanada.ca/legacy/CarolinianSites\\_BeverlySwamp.htm](https://caroliniancanada.ca/legacy/CarolinianSites_BeverlySwamp.htm)

Chapman, L. J., & Putnam, F. (1984). *The Physiography of Southern Ontario* (3rd ed., Vol. 2). Ontario Ministry of Natural Resources.

City of Hamilton. (2016). *City of Hamilton Archaeology Management Plan—Appendix A*.



City of Hamilton. (2022). City of Hamilton: Cultural Heritage Resources Map. <https://spatialolutions.maps.arcgis.com/apps/webappviewer/index.html?id=ef361312714b4caa863016bba9e6e68f>

City of Hamilton. (2024a). Safari Road: Kirkwall Road to Valens Road Municipal Class Environmental Assessment. City of Hamilton. <https://engage.hamilton.ca/SafariRdEA>

City of Hamilton. (2024b). Safari Road: Kirkwall Road to Valens Road Municipal Class Environmental Assessment FAQ. City of Hamilton. <https://engage.hamilton.ca/safarirdea/widgets/186698/faqs>

Crown-Indigenous Relations and Northern Affairs. (2016). Saugeen Peninsula Treaty (1854) No. 72. Treaty Texts – Upper Canada Land Surrenders. <https://www.rcaanc-cirnac.gc.ca/eng/1370372152585/1581293792285#ucls24>

Department of Militia and Defence. (1916). Topographic Map—Galt Sheet (40P8 ed.) [Map].

Dodd, C. F., Poulton, D. R., Lennox, P. A., Smith, D. G., & Warrick, G. A. (1990). The Middle Ontario Iroquoian Stage. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 321–360). Ontario Archaeological Society Inc.

Edwards, T. W. D., & Fritz, P. (1988). Stable-Isotope Paleoclimate Records from Southern Ontario, Canada: Comparison of Results from Marl and Wood. *Canadian Journal of Earth Sciences*, 25, 1397–1406.

Ellis, C. J., & Deller, D. B. (1990). Paleo-Indians. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 37–64). Ontario Archaeological Society Inc.

Ellis, C. J., Kenyon, I. T., & Spence, M. W. (1990). The Archaic. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 65–124). Ontario Archaeological Society Inc.



Ellis, C. J., Timmins, P. A., & Martelle, H. (2009). At the Crossroads and Periphery: The Archaic Archaeological Record of Southern Ontario. In T. D. Emerson, D. L. McElrath, & A. C. Fortier (Eds.), *Archaic Societies: Diversity and Complexity across the Midcontinent*. (pp. 787–837). State University of New York Press.

Ferris, N. (2013). Place, Space, and Dwelling in the Late Woodland. In M. K. Munson & S. M. Jamieson (Eds.), *Before Ontario: The Archaeology of a Province* (pp. 99–111). McGill-Queen’s University Press.  
<http://www.jstor.org/stable/j.ctt32b7n5.15>

Hamilton Conservation Authority. (2024). Beverly Swamp. Hamilton Conservation Authority. <https://conservationhamilton.ca/beverly-swamp/>

Karrow, P. F., & Warner, B. G. (1990). The Geological and Biological Environment for Human Occupation in Southern Ontario. In *The Archaeology of Ontario to A.D. 1650* (pp. 5–36). London Chapter, Ontario Archaeological Society.

McMaster University. (1960). Hamilton Orthoimagery [Map].  
<https://library.mcmaster.ca/maps/aerialphotos/index.html>

Mika, N., & Mika, H. (1977). Places In Ontario: Their Name Origins and History, Part I, A-E: Vol. I (<https://archive.org/details/placesinontarior0001mika>). Mika Publishing Company; Internet Archive.

Ministry of Citizenship and Multiculturalism. (1990). Ontario Heritage Act, R.S.O. c. O.18.

Ministry of Citizenship and Multiculturalism. (2022). Ontario’s Past Portal. PastPortal. <https://www.pastport.mtc.gov.on.ca>

Ministry of Citizenship and Multiculturalism. (2024). Ontario’s Past Portal. <https://www.pastport.mtc.gov.on.ca>

Ministry of the Environment. (1990). Environmental Assessment Act, R.S.O. c. E.18.



Mississaugas of the Credit First Nation. (2017). 12 Mile Creek, 16 Mile Creek and Credit River Reserves – Treaty Nos. 22 and 23 (1820). Mississaugas of the New Credit First Nation. <https://mncfn.ca/between-the-lakes-treaty-no-3-1792/>

MTC, (Ministry of Tourism and Culture). (2011). Standards and Guidelines for Consultant Archaeologists. Archaeology Programs Branch, Ontario Ministry of Tourism and Culture.

Municipal Engineers Association. (2023). Municipal Class Environmental Assessment.

National Topographic Service. (1994). Cambridge Sheet [Map].

Native Land Digital. (2018). Treaty 3, 1792. Native Land. <https://native-land.ca/>

Nickerson, C. (2024, February 9). Safari Road flooding caused by one man and his dirt pile, say neighbours. Flamborough Today. <https://www.flamboroughtoday.com/local-news/safari-road-flooding-caused-by-one-man-and-his-dirt-pile-say-neighbours-8277655>

Ontario Geological Survey. (2012). Surficial geology of Southern Ontario. Miscellaneous Release—Data 128 – Revised. [Map]. <https://data.ontario.ca/dataset/surficial-geology-of-southern-ontario>

Page & Smith. (1875). Illustrated Historical Atlas of the County of Wentworth Ont. [Map].

Ray, A. J. (2005). I Have Lived Here Since the World Began: An Illustrated history of Canada's Native People. Key Porter Books.

Rogers, E. S. (1962). The Round Lake Ojibwa. Royal Ontario Museum.

Rogers, E. S., & Smith, D. B. (Eds.). (1994). Aboriginal Ontario: Historical Perspectives on the First Nations. Dundurn Press.

Soil Research Institute. (1967). Soil Map of Wentworth County, Ontario. [Map]. Ontario Department of Agriculture, Toronto, and Canada Department of



Agriculture, Ottawa.

[http://sis.agr.gc.ca/cansis/publications/surveys/on/on32/on32\\_report.pdf](http://sis.agr.gc.ca/cansis/publications/surveys/on/on32/on32_report.pdf)

Spence, M. W., Pihl, R. H., & Murphy, C. (1990). Cultural Complexes of the Early and Middle Woodland Periods. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650*. Ontario Archaeological Society Inc.

Surtees, R. (1984). *Indian Land Surrenders in Ontario 1763-1867*. Research Branch, Corporate Policy, Department of Indian and Northern Affairs Canada.

Tremaine, G. C. (1859). *Tremaine's Map of the County of Wentworth* [Map]. George C. Tremaine.

Williamson, R. F. (1990). The Early Iroquoian Period of Southern Ontario. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 291–320). Ontario Archaeological Society Inc.



## 7.0 Images

### 7.1 Field Photography



**Image 1: Safari Road closure warning sign due to localized flooding. Test pit survey required beyond disturbed, elevated roadbed.**



**Image 2: Safari Road and Kirkwell Road intersection. Test pit survey required beyond disturbed, elevated roadbed.**



**Image 3: Safari Road and Kirkwell Road intersection. Test pit survey required beyond disturbed, elevated roadbed.**



**Image 4: Safari Road. Archaeological potential beyond disturbed roadbed; test pit survey required.**



**Image 5: Safari Road. Archaeological potential beyond disturbed roadbed; test pit survey required.**



**Image 6: Low and wet conditions within the Provincially Significant Wetland. Low archaeological potential.**



**Image 7: Low and wet conditions within the Provincially Significant Wetland. Low archaeological potential.**



**Image 8: Safari Road. Archaeological potential beyond disturbed roadbed; test pit survey required.**



**Image 9: Safari Road. Archaeological potential beyond disturbed roadbed; test pit survey required.**



**Image 10: Safari Road. Archaeological potential beyond disturbed roadbed and waterlogged ditch; test pit survey required.**



**Image 11: Low and wet conditions due to permanently saturated soil beyond Safari Road. Low archaeological potential.**



**Image 12: Low and wet conditions due to permanently saturated soil beyond Safari Road. Low archaeological potential.**



**Image 13: Low and wet conditions beyond Safari Road within the Provincially Significant Wetland. Low archaeological potential.**



**Image 14: Low and wet conditions beyond Safari Road within the Provincially Significant Wetland. Low archaeological potential.**



**Image 15: Low and wet conditions beyond Safari Road within the Provincially Significant Wetland. Low archaeological potential.**



**Image 16: Low and wet conditions beyond Safari Road within the Provincially Significant Wetland. Low archaeological potential.**



**Image 17: Safari Road. Archaeological potential beyond disturbed roadbed; test pit survey required.**



**Image 18: Safari Road. Archaeological potential beyond disturbed roadbed; test pit survey required.**



**Image 19: Safari Road. Archaeological potential beyond disturbed roadbed. Test pit survey required in wooded area and pedestrian survey required in agricultural field.**



**Image 20: Safari Road. Archaeological potential beyond disturbed roadbed. Test pit survey required in wooded area and pedestrian survey required in agricultural field.**



**Image 21: Safari Road and Valens Road intersection. Test pit survey required beyond disturbed roadbed.**

## 8.0 Maps

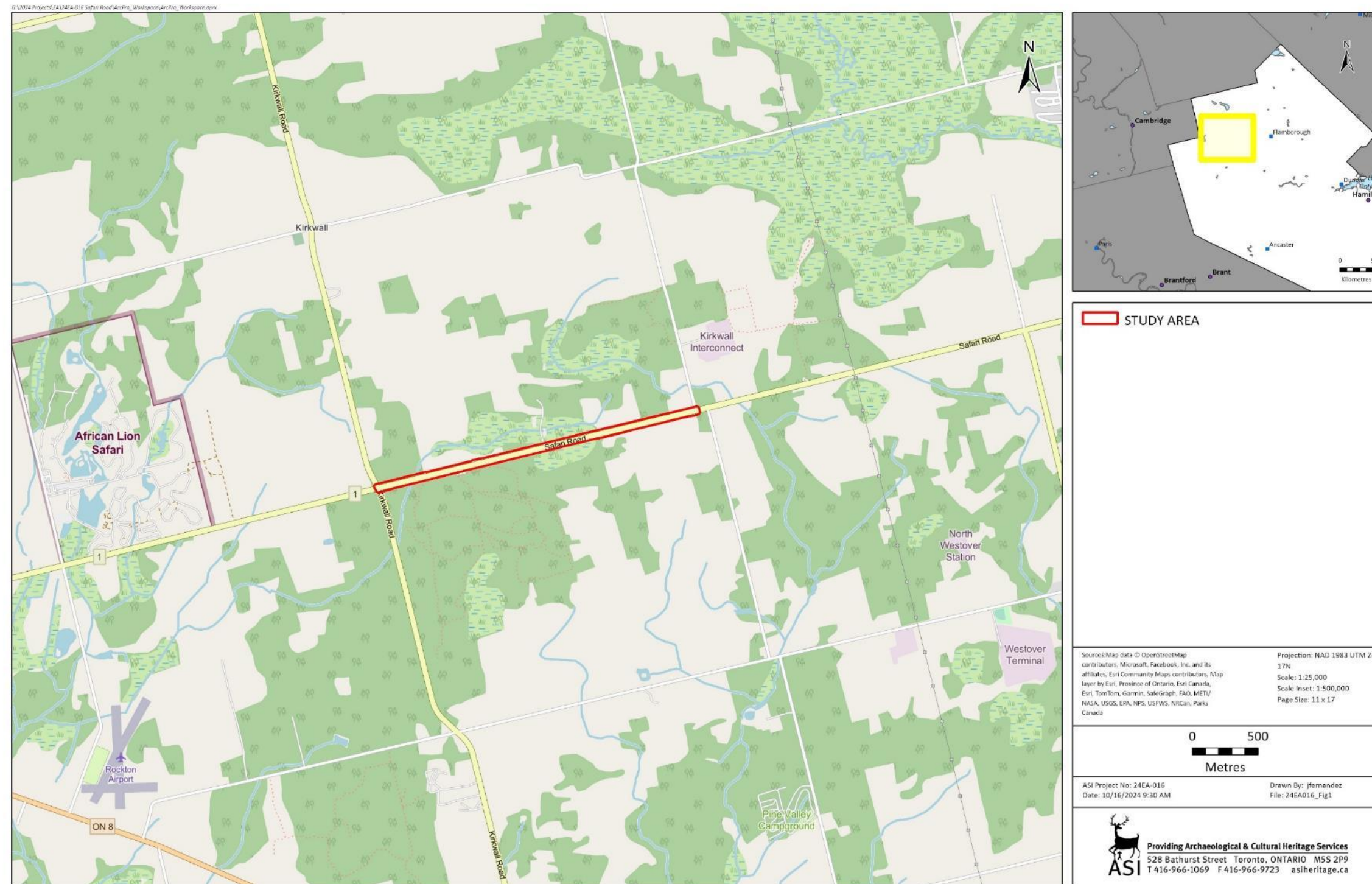


Figure 1: Safari Road - Stage 1 Project Area

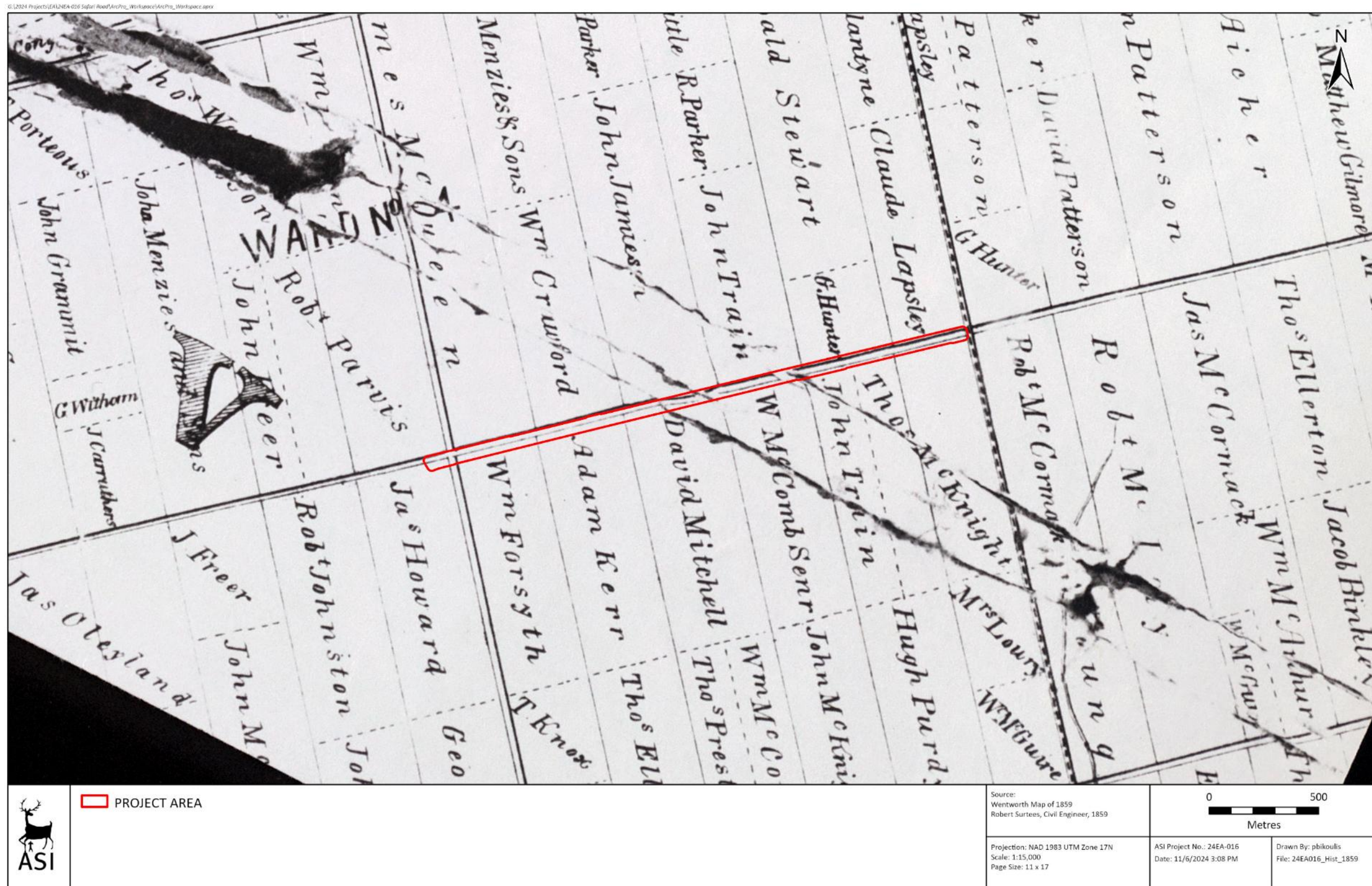


Figure 2: The Project Area (approximate location) overlaid on the 1859 County of Wentworth Map



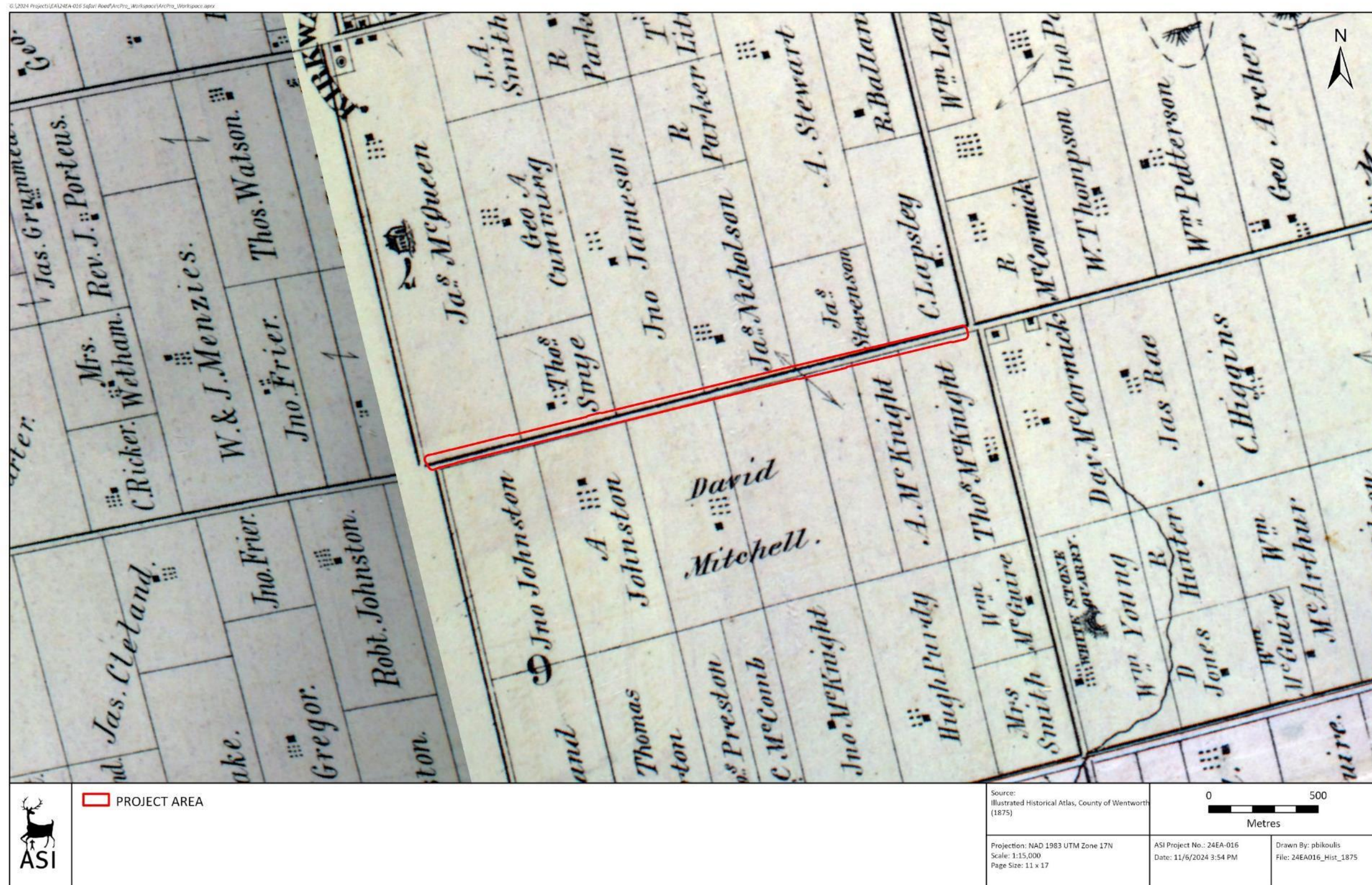


Figure 3: The Project Area (approximate location) overlaid on the 1875 Illustrated Historical Atlas of the County of Wentworth



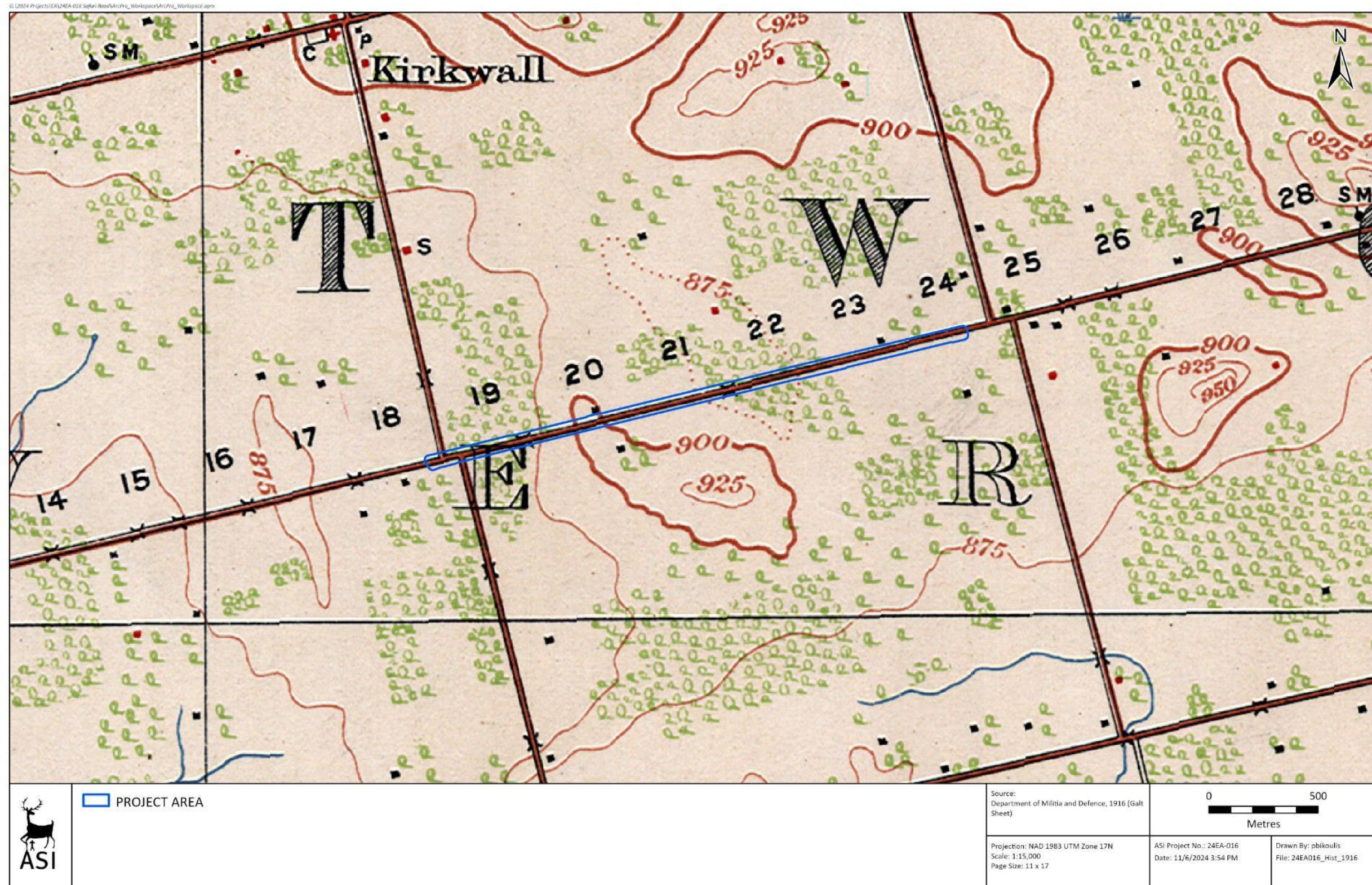


Figure 4: The Project Area (approximate location) overlaid on the 1916 topographic map – Galt sheet

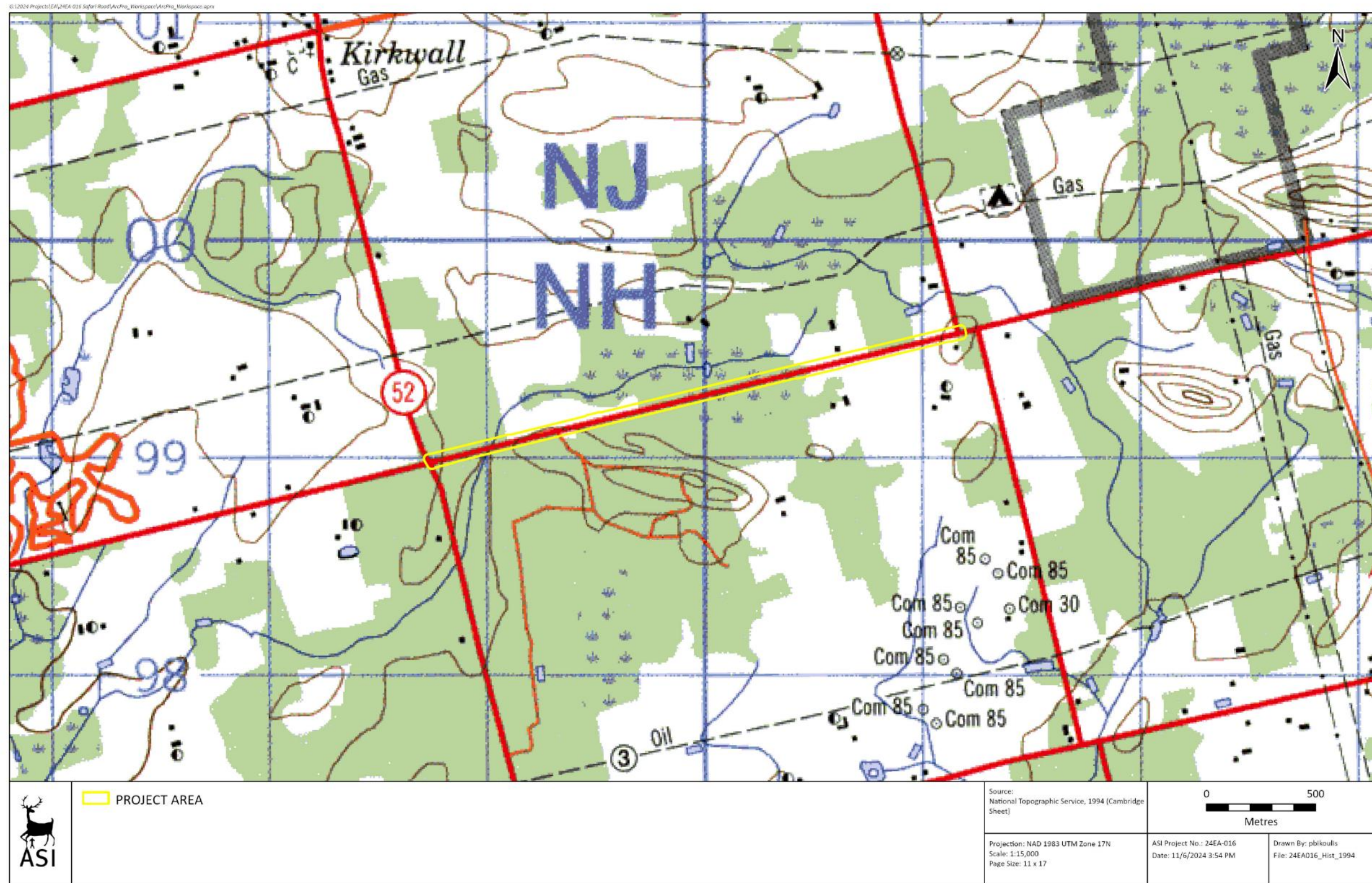


Figure 5: The Project Area (approximate location) overlaid on the 1994 topographic map – Cambridge sheet



Figure 6: The Project Area (approximate location) overlaid on 1960 aerial photography

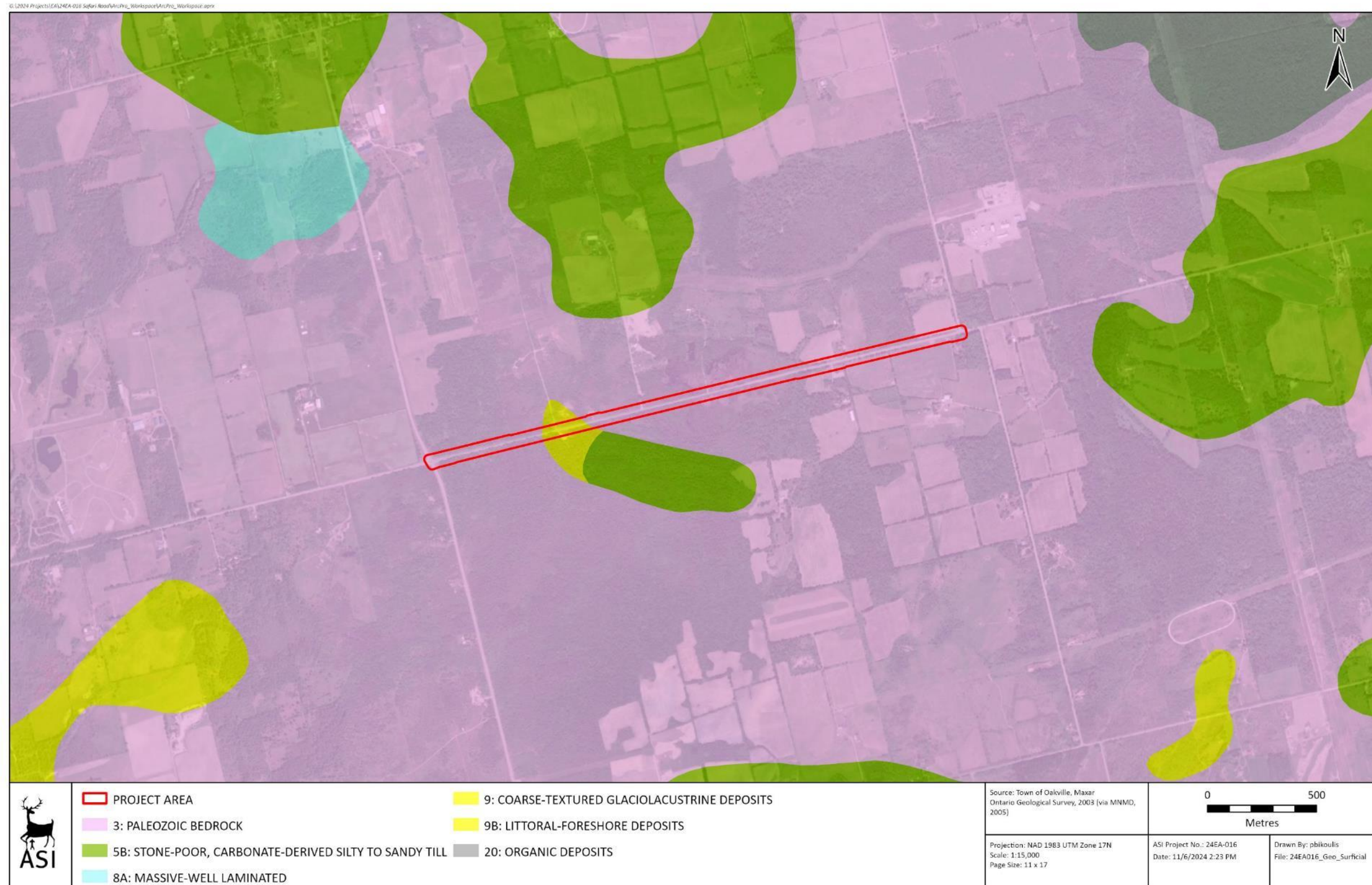


Figure 7: Project Area – Surficial Geology



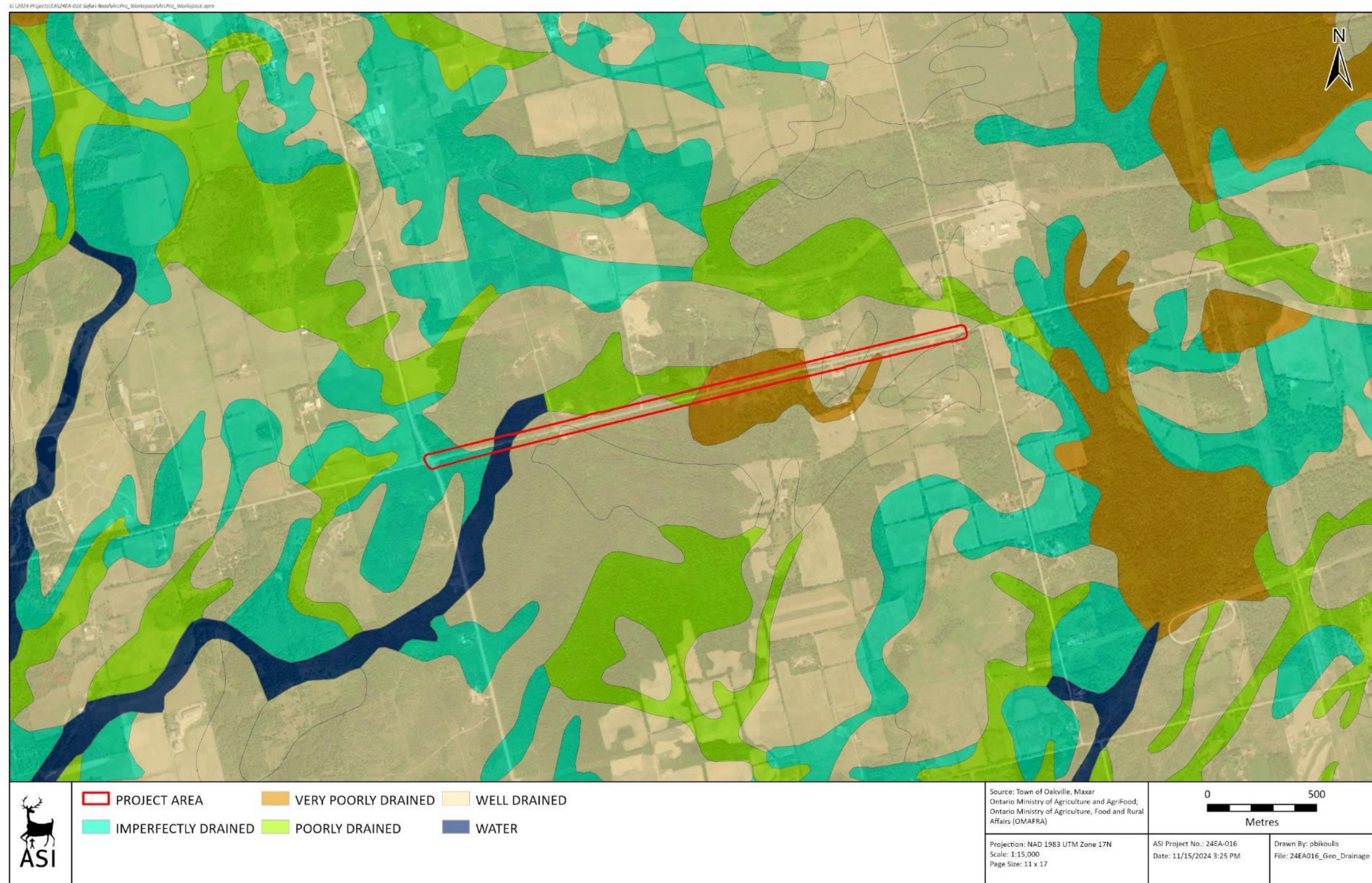


Figure 8: Project Area – Soil Drainage





Figure 9: Safari Road Project Area – Stage 1 Results – Sheet 1



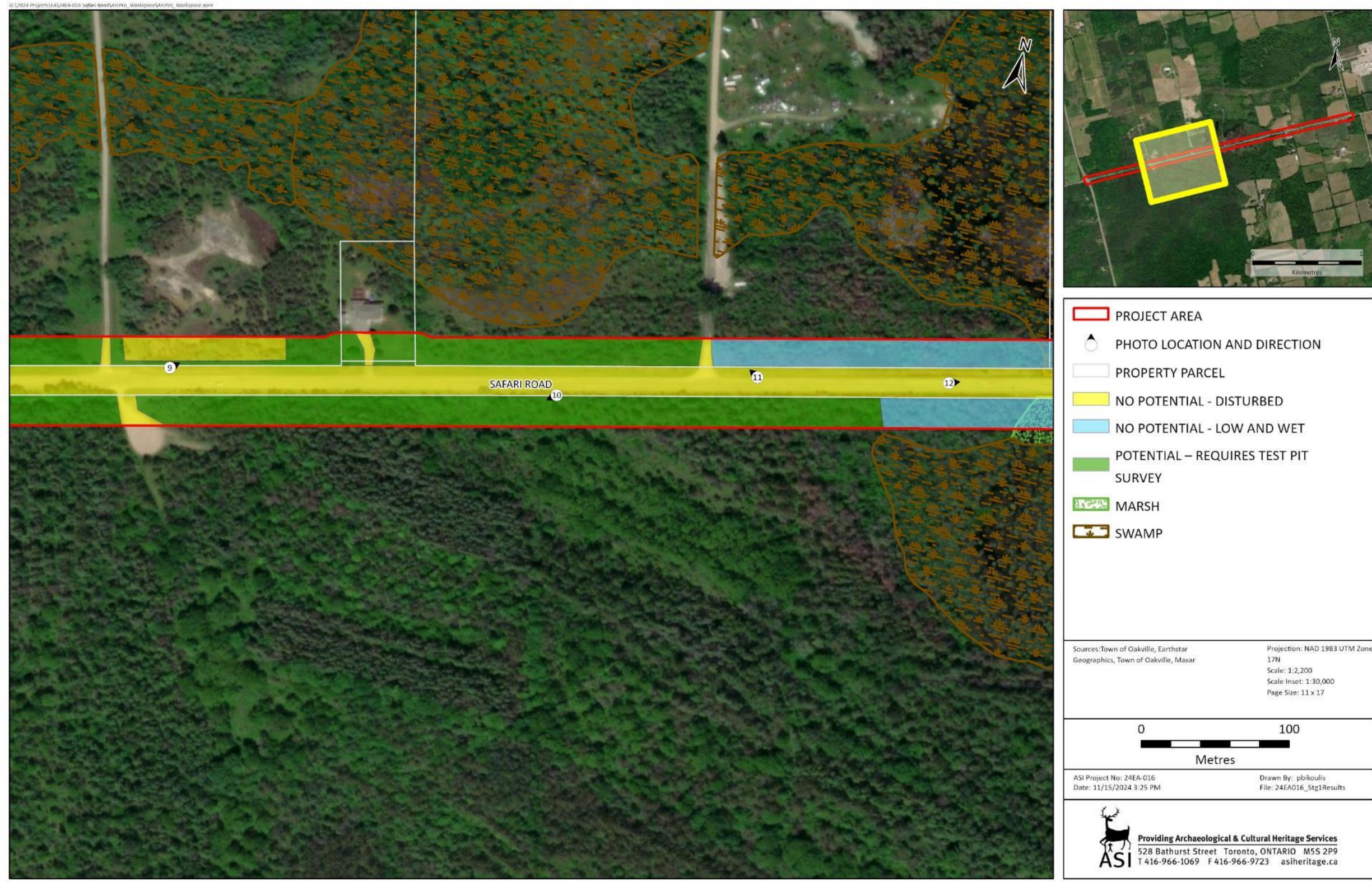


Figure 10: Safari Road Project Area – Stage 1 Results – Sheet 2





Figure 11: Safari Road Project Area – Stage 1 Results – Sheet 3



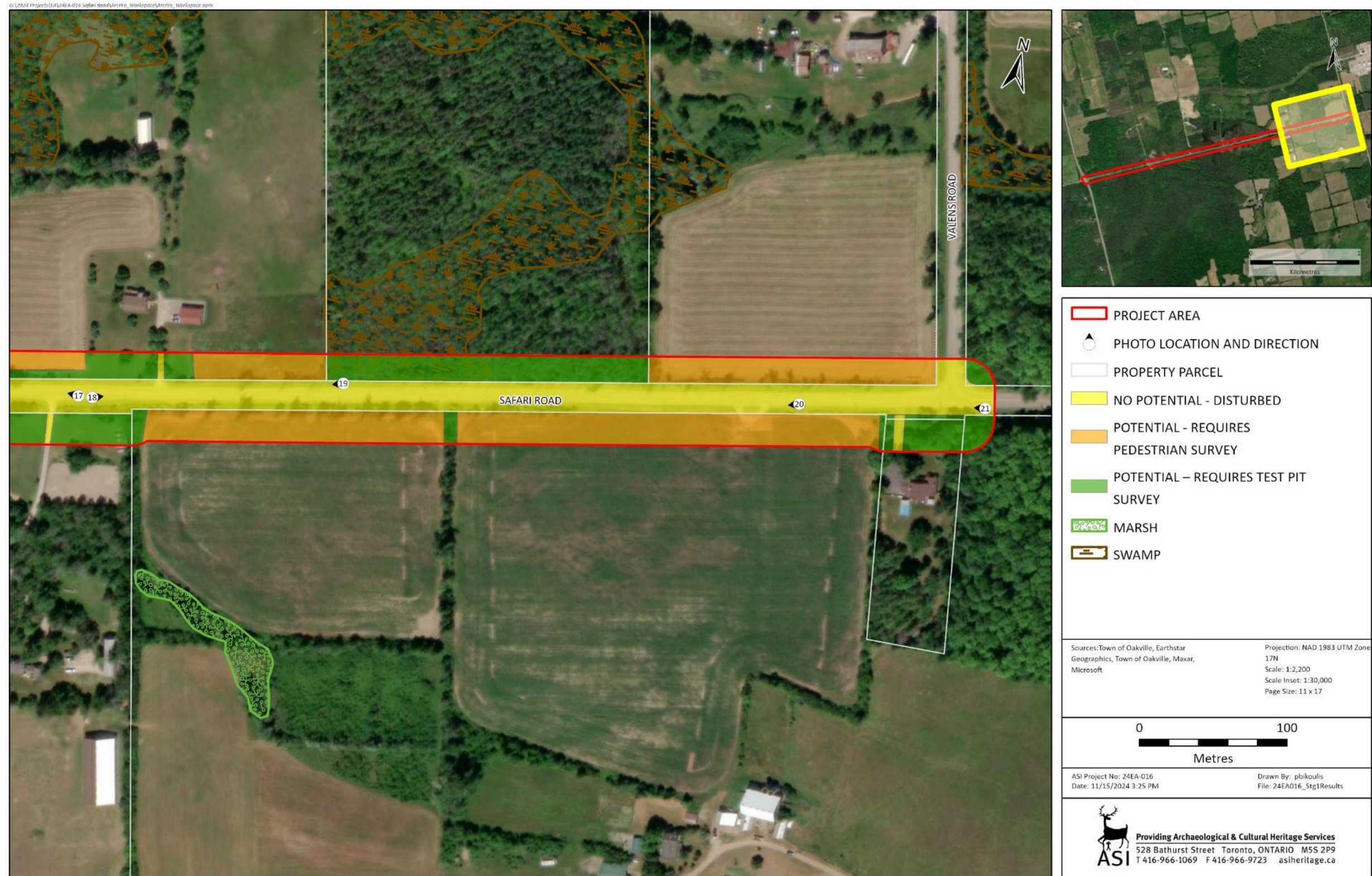


Figure 12: Safari Road Project Area – Stage 1 Results – Sheet 4

