

**STAGE 1 ARCHAEOLOGICAL ASSESSMENT OF
MACLEOD QUARRY V
NORTH HALF OF LOT 2, CONCESSION 4
FORMER GEOGRAPHIC TOWNSHIP OF
CORNWALL,
NOW TOWNSHIP OF SOUTH STORMONT,
UNITED COUNTIES OF STORMONT, DUNDAS
AND GLENGARRY**



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Prepared for: Mr. Mark Priddle, P.Geo.
Manager, Environmental Science & Engineering
McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road
R.R. #3
Carp, Ontario K0A 1L0

Phone: (613) 836-2184 x 2236
Email: m.priddle@mcintoshperry.com

Re: Aggregate Resources Act (Ontario)

Prepared by: Selena Barre and Jessalyn Miller
Student Archaeologist Staff Archaeologist
Past Recovery Archaeological Services Inc.
4534 Bolingbroke Road, R.R. #3
Maberly, Ontario K0H 2B0

Phone: (613) 267-7028
Email: pras@pastrecovery.com

PRAS Project No.: PR16-24

Licencee: Adam Pollock, Licence P336
Staff Archaeologist
Past Recovery Archaeological Services Inc.

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Original Report

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Mr. Travis Mitchell of Cornwall Gravel Co. Ltd., provided site access permission and transportation during the site visit.

PROJECT PERSONNEL

Licence Holder	Adam Pollock, M.A., Licence P336
Historical Research	Selena Barre
Site Visit	Jessalyn Miller, B.A., Licence R1111
Report Writing	Selena Barre Jessalyn Miller
Report Draughting	Jessalyn Miller
Report Review	Jeff Earl, M.Soc.Sc., Licence P031

EXECUTIVE SUMMARY

Past Recovery Archaeological Services Inc. was retained by McIntosh Perry Consulting Engineers Ltd. on behalf of Cornwall Gravel Co. Ltd. to undertake a Stage 1 archaeological assessment of MacLeod Quarry V, located on the north half of Lot 2, Concession 4 of the former geographic Township of Cornwall, now part of the Township of South Stormont, United Counties of Stormont, Dundas and Glengarry (Maps 1 to 3). The property is the subject of an *Aggregate Resources Act (Ontario)* Licence Application requiring the completion of a Stage 1 archaeological assessment.

The purpose of the Stage 1 investigation was to evaluate the archaeological potential of the study area and present recommendations for the mitigation of any significant known or potential archaeological resources. To this end, historical, environmental and archaeological research was conducted in order to make a determination of archaeological potential. The results of this study indicated that no portion of the subject property possessed potential for pre-Contact or post-Contact archaeological resources.

This report forms the basis for the following recommendation:

- 1) No further archaeological assessment of the study area as presently defined in Maps 2 and 3 is required. As a result, clearance of the archaeological condition placed on the property should be granted.

The reader is also referred to Section 4.0 below to ensure compliance with the *Ontario Heritage Act* as it may relate to this project.

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1.0 INTRODUCTION

Past Recovery Archaeological Services Inc. (Past Recovery) was retained by McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) on behalf of Cornwall Gravel Co. Ltd. to undertake a Stage 1 archaeological assessment of MacLeod Quarry V, located on the north half of Lot 2, Concession 4 of the former geographic Township of Cornwall, now part of the Township of South Stormont, United Counties of Stormont, Dundas and Glengarry (Maps 1 to 3). The study area is comprised of 38.92 hectares of land north of the City of Cornwall. A Stage 1 archaeological assessment was required under the *Aggregate Resources Act (Ontario)* as part of an extraction permit application.

The objectives of the Stage 1 archaeological assessment were as follows:

- To provide information concerning the study area's geography, history, previous archaeological fieldwork and current land condition;
- To evaluate the study area's archaeological potential; and,
- To recommend appropriate strategies for Stage 2 archaeological assessment in the event further assessment is warranted.

2.0 PROJECT CONTEXT

This section of the report provides the context for the archaeological work undertaken, including a description of the study area, the related legislation or directives triggering the assessment and any additional development related information.

2.1 Development Context

The study area is located within the north half of Lot 2, Concession 4 of the former geographic Township of Cornwall, now in the Township of South Stormont (see Maps 1 to 3). It is comprised of 38.92 hectares and is bound by private land and unoccupied lots to the north, quarried land to the west, and woodlots and agricultural fields to the east and south. The property consists of cleared wooded areas, quarry access roads, steep embankments and ditches and areas with large piles of aggregate. Much of northern portion of the property has been disturbed by access road construction and other quarrying activities. The southern portion appears to be undisturbed although it has been completely cleared of vegetation.

McIntosh Perry is preparing an application on behalf Cornwall Gravel Co. Ltd to have the property licensed for aggregate extraction under the *Aggregate Resources Act (Ontario)*. A Stage 1 archaeological assessment was required as part of the aggregate extraction permit application, and the services of Past Recovery were retained to complete the assessment.

2.2 Access Permission

Permission to access the subject property and complete all aspects of the archaeological assessment, including photography, was granted by the project proponent.

3.0 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

3.1 Historical Context

This section of the report includes an overview of human settlement in the region with the intention of providing a context for the evaluation of known and potential archaeological sites, as well as a review of property-specific detailed archival research presenting a record of land use history.

3.1.1 Previous Historical Research

Published resources on the history and development of the former Township of Cornwall include *Stormont, Dundas and Glengarry: A History, 1784-1945* (Harkness 1946), *Illustrated Historical Atlas of the Counties of Stormont, Dundas and Glengarry, Ontario* (Belden 1879), *The Mission of Cornwall, 1784-1812* (Young 1929), *Heritage Highlights of Cornwall Township* (St. Andrews Historical Society 1984) and *From Royal Township to Industrial City: Cornwall 1784-1984* (Senior 1983). Research was supplemented by a search of available census records held at Library and Archives Canada.

3.1.2 Regional Pre-Contact Cultural Overview

It should be noted that our understanding of the pre-Contact sequence of human activity in the area is very incomplete, stemming from a lack of systematic archaeological surveys in the region, as well as from the destruction of archaeological sites caused by development prior to legislated requirements for archaeological assessments to be completed. It is possible, however, to provide a general outline of pre-Contact occupation in the region based on archaeological, historical and environmental research conducted in eastern Ontario.

The earliest human occupation of southern Ontario began approximately 11,000 years ago with the arrival of small groups of hunter-gatherers referred to by archaeologists as Palaeo-Indians (Ellis and Deller 1990:39). These groups gradually moved northward as the glacial ice of the last Ice Age retreated and the water levels of the meltwater-fed glacial lakes decreased. While very little is known about their lifestyle, it is likely that Palaeo-Indian groups travelled widely, relying on the seasonal migration of caribou as well as small animals and wild plants for subsistence in a sub-arctic environment. They produced a variety of distinctive stone tools including fluted projectile points, scrapers, burins and graters. Most archaeological evidence for the Palaeo-Indian period has been found in southwestern and south central Ontario at sites located on the former shorelines of glacial Lake Algonquin in the area that is now southern Georgian Bay.

First Nation settlement of eastern Ontario was late in comparison to these other parts of the province as a result of the high water levels of the St. Lawrence Marine Embayment of the post-glacial Champlain Sea (Hough 1958:204). The St. Lawrence Valley remained very much on the fringe of the portions of the province occupied by Palaeo-Indian colonizers. Late Palaeo-Indian non-fluted lanceolate points have been found in the Thousand Islands and along the Cataraqui River, just north of Kingston, from Wolfe Island and at Thompson Island down-river from Cornwall (Heritage Quest 2000a; Ritchie 1969:18).

During the succeeding Archaic period (c.7000 to 1000 B.C.), the environment of southern Ontario approached modern conditions and more land became available for occupation as water levels in the glacial lakes dropped (Ellis, Kenyon, and Spence 1990:69). Populations continued to follow a mobile hunter-gatherer subsistence strategy, although there appears to have been a greater reliance on fishing and gathered food (e.g. plants and nuts) and more diversity between regional groups. The tool kit also became increasingly diversified, reflecting an adaptation to environmental conditions similar to those of today. This included the presence of adzes, gouges and other ground stone tools believed to have been used for woodworking activities such as the construction of dug-out canoes, grinding stones for processing nuts and seeds, specialized fishing gear including net sinkers and a general reduction in the size of projectile points. The middle and late portions of the Archaic period saw the development of trading networks spanning the Great Lakes, and by 6,000 years ago copper was being mined in the Upper Great Lakes and traded into southern Ontario. There is increasing evidence of ceremonialism and elaborate burial practices and a wide variety of non-utilitarian items such as gorgets, pipes and 'birdstones' were being manufactured.

More extensive First Nation settlement of eastern Ontario began during the Archaic period, sometime between 5,500 and 4,500 B.C. (Kennedy 1970:61; Ellis, Kenyon and Spence 1990:93). Artifacts from Archaic sites in eastern Ontario suggest a close relationship to the Laurentian Archaic stage peoples of New York State. Laurentian peoples occupied the Canadian biotic province transition zone between the deciduous forests to the south and the boreal forests to the north. The Laurentian Archaic artifact complex contains large, broad bladed, chipped stone and ground slate projectile points, and heavy ground stone tools. This stage is also known for the extensive use of cold-hammered copper tools including "*bevelled spear points, bracelets, pendants, axes, fishhooks, and knives*" (Kennedy 1970:59). The first evidence for significant occupation of the St. Lawrence Valley appears at this time. Archaic sites have been identified at Spencerville and to the north of Prescott. Late Archaic sites have been identified in the Rideau Lakes area, at Jessups Falls and in the Pendleton area along the South Nation River (Watson 1982; Daechsel 1980). Late Archaic components consisting of Narrow Point traditions have also been identified on Wolfe Island including the Armstrong site on Button Bay. Dailey and Wright (1955) identified a number of Laurentian or Middle Archaic sites in the vicinity of Cornwall.

The introduction of ceramics to Ontario marked the beginning of the Woodland period (c.1000 B.C. to A.D. 1550). Local populations continued to participate in extensive trade networks that, at their zenith at circa A.D. 200, spanned much of North America and included the movement of conch shell, fossilized shark teeth, mica, copper and silver. Social structure appears to have become increasingly complex, with some status differentiation evident in burials. It was in the Middle Woodland period (c.300 B.C. to A.D. 900) that distinctive trends or 'traditions' evolved in different parts of Ontario for the first time. The Middle Woodland tradition found in eastern and south central Ontario has become known as 'Point Peninsula' (Spence, Pihl and Murphy 1990:157). Investigations of sites with occupations dating to this time period have allowed archaeologists to develop a better picture of the seasonal round followed in order to exploit a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland 'family' hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish, hunt in the surrounding forest and socialize. This gathering would last through to the late summer when large quantities of food would be stored for the approaching winter.

Towards the end of the Woodland period (circa A.D. 800) domesticated plants were introduced in areas to the south of the Canadian Shield. Initially only a minor addition to the diet, the cultivation of corn, beans, squash, sunflowers and tobacco gained economic importance for late Woodland peoples. Along with this shift in subsistence, settlements located adjacent to corn fields began to take on greater permanency as sites with easily tillable farmland became more important. Eventually, semi-permanent and permanent villages were built, many of which were surrounded by palisades, evidence of growing hostilities between neighbouring groups.

The proliferation of sites suggests an increase in the population of eastern Ontario and it would appear that the Thousand Islands was an attractive location for Middle Woodland populations. A number of Middle Woodland sites, attributed to the Point Peninsula tradition, have been identified throughout the Thousand Islands and along the South Nation Drainage Basin. More specifically, Woodland period materials have been located in the Pike Farm collection, the Brophey's Point collection from Wolfe Island, on Gordon Island, in the Prescott-Spencerville area and in the interior reaches of the Gananoque River Basin. Burials reported from Tremont Island are also believed to date to this period. The Ault Park Site near Cornwall is one of the most significant sites in eastern Ontario with other important sites from this period including the Long Sault Mounds and the Malcolm Site (Dailey and Wright 1955; Fox 1990:183-186; Ritchie and Dragoo 1959).

Three distinct tribal groups are known to have occupied eastern Ontario in the final decades prior to the arrival of Europeans. While there appears to have been a hiatus in the occupation of the St. Lawrence Valley through the early stages of the Late Woodland period, by the end of this period a considerable population belonging to what archaeologists refer to as the St. Lawrence Iroquois had become established in the region. Settlement clusters have been identified near the Spencerville/Prescott area and lying just north of Lake St. Francis (sometimes identified as the 'Cornwall cluster;' see Adams 2003:43), with a large number of sites reported for Jefferson County in New York State and further east into Quebec. The material culture and settlement patterns of the fourteenth and fifteenth century St. Lawrence Iroquoian sites are directly related to the Iroquoian-speaking groups that Jacques Cartier and his crew encountered in 1535 at Stadacona (Quebec City) and Hochelaga (Montreal Island) (Jamieson 1990:386). Following Cartier's initial voyages, subsequent journeys by Europeans found only abandoned settlements along the St. Lawrence River. High mortality from the European diseases introduced by Cartier and continued conflict with their neighbours probably accounts for the disappearance of the St. Lawrence Iroquois. At this time, there was a significant increase of St. Lawrence Iroquoian ceramic vessel types on Huron sites, and segments of the St. Lawrence Iroquois population may have relocated to the north and west either as captives or refugees (Wright 1966:70-71; Sutton 1990:54). Mohawk oral tradition suggests that some of the people from the Hochelaga area joined the Mohawks.

The portions of eastern Ontario lying within the Ottawa River watershed, including the South Nation River, appear to have seen continued use by groups retaining a hunter and gatherer-based subsistence strategy, in some cases incorporating limited horticulture. The hunter-gatherers of this region are primarily regarded as having been Algonkian-speaking populations practicing lifeways with roots in the Archaic period. The origins of these groups and the nature of their relationships with their neighbours remains a matter of debate, which has been hampered by the low intensity of archaeological investigation in the area.

The population shifts of the late sixteenth and early seventeenth centuries were certainly in part a result of the disruption of traditional trade and exchange patterns among all First Nations peoples brought about by the arrival of the French, Dutch and British along the Atlantic seaboard. Control of the lucrative St. Lawrence River trade became a source of contention between neighbouring peoples as the benefits of trading with the Europeans became apparent. While prolonged occupation of the region may have been avoided as a result of hostilities between Iroquoian speaking populations to the south and Algonquin populations to the north, at least the northern reaches of the South Nation River basin were undoubtedly used as hunting territories by the Algonquin at this time. There is virtually no archaeological evidence for contact between Europeans and First Nations populations in this area during this time period, suggesting that the region remained largely abandoned and that any remaining Native groups may have deliberately avoided the newcomers.

3.1.3 Regional Post-Contact Cultural Overview

In the early seventeenth century, French explorers such as Samuel de Champlain and Etienne Brulé encountered groups of people speaking an Algonquian language along the Ottawa Valley. These were the Weskarini, Onontchataronon, Kichespirini, Matouweskarini, and Otaguottouemin Algonquins (Trigger 1987:279). The loosely aligned bands subsisted by hunting, fishing and gathering, and undertook limited horticulture. Champlain, while searching for the Northwest Passage in 1613, entered Algonquin territory and explored the Ottawa Valley as far north as Morrison and Allumette Islands (Trigger 1987). The summer village of the Matouweskarini was recorded at the mouth of the Madawaska River, but nothing more is known of this group other than their name and the general location of their hunting territory (Day and Trigger 1978:793; Hessel 1993:20). Since at least the late sixteenth century, all the Algonquin peoples were at war with the Mohawk Iroquois, the easternmost Five Nations Iroquois group. This warfare intensified over control of the St. Lawrence River trade.

With Contact, significant changes occurred in the pattern of settlement for aboriginal populations in the region. The endemic warfare of the age and severe smallpox epidemics in 1623-24 and again between 1634 and 1640 brought about drastic population decline among all First Nations peoples (Hessel 1993:63-65). Between 1640 and 1650, French unwillingness to provide direct military support against the Mohawk led to the defeat and dispersal of the Algonquin and Huron by the Five Nations Iroquois of New York State (Trigger 1987:610, 637-638). Survivors of the various groups often coalesced as a single First Nations people to the north and west of the Ottawa Valley, and at the French posts of Montreal, Sillery and Trois Rivières.

Following the dispersal of the St. Lawrence Iroquois and the Ottawa Valley Algonquin, the Five Nations of New York State (Mohawk, Oneida, Onondaga, Cayuga, and Seneca) eventually occupied a series of winter hunting bases and trading settlements near the mouths of the major rivers flowing into the north shore of Lake Ontario (Konrad 1981). The first recorded Five Nations settlements to relocate northward were two Cayuga villages established at the north-eastern end of Lake Ontario. Two French Sulpician missionaries joined the Cayuga in 1668 at their settlement known as Kente (now Carrying Place) near the narrows separating the western end of Prince Edward County from the Hastings County mainland. A second Cayuga settlement, known as Ganneious, may have been near the mouth of the Napanee River, or further south on the Bay of Quinte (Edwards 1984:10). As a result of increased tensions between the Five

Nations and the French, and declining population from disease and warfare, the Cayuga settlements were abandoned in 1680 (Edwards 1984:17). Subsequently, the Mississauga moved into the area, remaining on lands along the north shore of Lake Ontario through the late eighteenth and part of the nineteenth centuries.

Fort Frontenac was established by the French at the present site of Kingston in 1673, and another fort was constructed at La Presentation (Ogdensburg, New York) in 1700. These forts were erected both to solidify control of the fur trade and to enhance their ties with local Native populations. The French also encouraged the establishment of indigenous villages near their settlements to create closer alliances. This policy had some success; however, Haudenosaunee (Iroquois) traders cultivated ties with both the French on the St. Lawrence and the British in the Mohawk Valley, and eventually Oswego, to ensure that they had competing markets for furs. Akwesasne, part of the Haudenosaunee hunting grounds for over a century and a half, became their permanent settlement towards the middle of the eighteenth century. With the Royal Proclamation of 1763 the British acquired all French possessions in North America. The terms of the proclamation, which included rules for the purchase of 'Indian Land,' were communicated to the Mohawk settlement by the Imperial Indian Department at the Niagara Congress in 1764.

At first, the end of the French regime brought little change to eastern Ontario. Between 1763 and 1776 some British traders traveled to the Cataraqui area, but the British presence remained sporadic until 1783 when Fort Frontenac was officially re-occupied. The need for land on which to settle refugees of the American Revolution led the British government into hasty negotiations with their military allies, the Mississauga, who were assumed, erroneously, to be the only Native peoples inhabiting eastern Ontario.¹ Captain William Redford Crawford, who enjoyed the trust of the Mississauga chiefs living in the Bay of Quinte region, negotiated on behalf of the British government. In the so-called 'Crawford Purchase,' the Mississauga were cajoled into giving up Native title to most of eastern Ontario, including what would become the counties of Stormont, Dundas, Glengarry, Prescott, Russell, Leeds, Grenville and Prince Edward, as well as the front townships of Frontenac, Lennox, Addington and Hastings and much of what is now the City of Ottawa (Lockwood 1996:24). There were numerous problems with this transaction, as it ignored other Native groups' rights to some of the lands it purported to cover, including those of the Kaienkehaka, or Mohawk Nation, whose traditional territory extends approximately 20 miles to the north and south of the St. Lawrence River from Kingston to Montreal (Benedict 2004:438). Nevertheless, Major Samuel Holland, Surveyor General for Canada, began laying out these lands in 1784, with such haste that the newly established townships were assigned numbers instead of names. The westernmost surveyed township (Elizabethtown) was originally called Township No. 8, while the easternmost (Charlottenburg) was Township No. 1 (Leavitt 1879:17). Euro-Canadian settlement along the north bank of the St. Lawrence River and the eastern end of Lake Ontario began in earnest about this time. The lots adjacent to the St. Lawrence River in the vicinity of Cornwall were among the first to be settled, with Cornwall Township being primarily set aside for Scottish Presbyterian United Empire Loyalists.

¹ At this time, there was a significant Algonquin presence in eastern Ontario and Mohawk Reserves had been established at Tyendinaga near Desoronto and at St. Regis near Cornwall.

By the late 1780s the waterfront townships were full and more land was required to meet both an increase in the size of grants to all Loyalists and grant obligations to the children of Loyalists who were now entitled to 200 acres in their own right upon reaching the age of 21. Furthermore, in 1792 John Graves Simcoe, Lieutenant Governor of the Province of Upper Canada, offered free land grants to anyone who would swear loyalty to the King, a policy aimed at attracting more American settlers. As government policy also dictated the setting aside of one seventh of all land for the Protestant Clergy and another seventh as Crown reserves, pressure mounted to open up more of the interior. As a result, between 1790 and 1800 most of the remainder of the Crawford Purchase was divided into townships.

By October 1784, the muster returns show that Cornwall Township had 215 men, 87 women, and 214 children, although it is likely that only 99 people were actually living on their land at this point. In 1804, the township had a population of 1,080 living in 91 houses, making a total of 1,477 in the town of Cornwall and township (Senior 1983:74).

The study area was surrounded by mostly agricultural land, with the exception of a few small villages and the MacLeod Quarry site on Lots 4,5 and 6 of Concession 4. Extraction at the MacLeod quarry began in the early nineteenth century, resulting in the production of high quality building stone used in construction of the Cornwall Canal, which began in 1834. As many as eighty teams of horses were hauling stone from this quarry to the canal construction site during this period. The stone from the quarry was also used widely across Cornwall and the surrounding areas (St. Andrew's Historical Society 1984:153). Stone extraction has continued up to the present time.

Eamer's Corners is a small village about 3 kilometres southwest of the study area that was named for local resident Philip Eamer, who settled Lots 9 and 10 of Concession 4 in 1784. The village grew to include two hotels, a school, a Temperance Hall, and a Post Office by the end of the nineteenth century (Heritage Quest 2000b:11).

Four kilometers northwest of the study area is the Catholic community of St Andrews, established in 1786. It is situated on Lots 12 and 13 of Concession 5 and is home to one of the earliest Catholic churches in eastern Ontario, as well as the oldest stone church in the province. Historical records note that the stone for the large Catholic church in St. Andrew's came from a quarry located 3 miles southeast of the village; it is possible that this historic quarry was located in close proximity to the present MacLeod quarry (Heritage Quest 2000b:11-12).

3.1.4 Property History

According to the available historical maps, Lot 2, Concession 4 appears to have been occupied by the time the Walling map was published in 1862. The original patent plan of 1791 cites the west half of Lot 2 belonging to Paul Drew and the east half to John Christie (Map 4). No buildings are shown, however, nor is there other evidence that would suggest that the lot was inhabited for an extended period prior to 1862 when the Walling map was produced (Map 5). This map shows two names on the lot, that of David Christy [Christie] on the east half, and Robert Brown on the west half. Both farmers had built their houses and principal outbuildings on the south half of the lot, roughly 800 meters from the study area. By 1879, the Belden map shows James Brown to have been the occupant of the west half of Lot 2, with David Christy still

on the east half (Map 6). The patent plan, Walling Map and Belden Map also indicate that Headline Road (County Road 44) was not open during the mid-nineteenth century, which is why Christy and Brown had settled on the southern half Lot 2 (see Maps 4 to 6). Twentieth century topographic maps produced in 1909, 1917, 1928, 1937 and 1952 show some land use and occupation in the area (Maps 7 to 9). None of these subsequent maps depict any buildings in the north half of Lot 2.

Further information found in census records describes the early history of the property. David Christy [Christie] and Robert Brown both appear in the 1861 census. On the east half of Lot 2, David Christy owned 100 acres, with 92 under cultivation - 21 being used for crops and 71 being used for pasture. In 1861, the livestock on the Christy farm consisted of 2 cows, 4 horses, and 7 pigs. On the west half of the lot, Robert Brown had a somewhat larger farming operation. He owned the west half of Lot 2 and part of the adjacent lot(s) for a total of 290 acres, of which 200 acres were under cultivation. On the Brown farm there were 13 steers or heifers, 15 milk cows, 9 horses, 22 sheep, and 18 pigs. It is unclear from the Walling map whether any of Robert Brown's buildings were on Lot 2, as this part of the map is obscured by a fold (see Map 5). The 1861 census, however, lists a school house on this property. It is described as being a log building, 24 feet by 26 feet (LAC microfilm reel C-1074). In later topographic maps, the school house is recorded in the south half of Lot 2, Concession 4 (see Maps 7 to 9).

In the 1871 census, the east half of Lot 2 continues to be occupied by David Christy. Little seems to have changed, with the same number of acres in his lot under cultivation (approximately 90). His livestock consisted of 6 milk cows, 3 other cattle, 4 horses, 2 pigs, 14 sheep, and 1 hive. This census also gives additional data on the family living on the farm, mainly his wife and several older children or other family members. On the west half of lot, the ownership had changed to James Brown, perhaps a son (or other young relative) of the earlier Robert. An additional 20 acres of land had been put under cultivation since 1861, for a total of 220 on the 290 acre property. There is no indication, however, as to whether this occurred on Lot 2. Since the previous census, livestock on the farm had decreased to a total of 9 milk cows, 11 other cattle, 7 horses, 18 sheep, and 4 pigs. The school house described earlier was not mentioned in this census (LAC microfilm reel C-10008).

In a 1994 aerial image the study area looks to have been undisturbed by adjacent quarrying activities to the west (Map 10). Much the property was still forested and there does not appear to have been any roads running through it. A 2014 aerial image illustrates much of the appearance of the subject property at present (see Map 3). It is currently occupied by roads, large, cleared ground disturbances and piles of gravel associated with adjacent quarrying activity. At the southern end of the property, there was a section of plowed field and a wooded area, which have since been cleared of vegetation either piled or left on the ground surface.

3.2 Archaeological Context

This section describes the archaeological context of the study area, including known archaeological research, known cultural heritage resources (including archaeological sites), and environmental conditions. In combination with the historical context outlined above, this section provides the necessary background information to evaluate the archaeological potential of the property.

3.2.1 Previous Archaeological Research

Systematic archaeological work did not begin in the area until the mid-twentieth century. The National Museum of Man (precursor to the Canadian Museum of History) sponsored a survey of the St. Lawrence Valley in 1947 in anticipation of the construction of the St. Lawrence Seaway (Leachman & deLaguna 1949). James Wright and Robert Dailey of the University of Toronto followed up with another survey in 1954, which led to excavations at the Malcolm Site (Dailey and Wright 1955) and at Ault Park (Emerson 1956), both Middle Woodland occupations. David Gogo was conducting studies at the same time in the Lake St. Francis area which was followed by later work by James Pendergast, focused on the St. Lawrence Iroquoian occupation of the Upper St. Lawrence Valley (1966, 1981, 1984). Most of the recent archaeological work in the region has primarily consisted of cultural resource management studies related to specific properties or development projects. One archaeological assessment has been completed close to the study area. This was a Stage 1 and 2 archaeological assessment of the MacLeod Quarry 3 property on Lot 6, Concession 4 conducted by Heritage Quest Inc. in 2000. The assessment resulted in the discovery of a historic cemetery, discussed below in Section 3.2.5. No other archaeological resources were identified (Heritage Quest 2000b).

3.2.2 Previously Recorded Archaeological Sites

The primary source for information regarding known archaeological sites in Ontario is the *Archaeological Sites Database* maintained by the Ontario by the Ministry of Tourism, Culture, and Sport (MTC). The database largely consists of archaeological sites discovered by professional archaeologists conducting archaeological assessments required by legislated processes under land use development planning (largely since the late 1980s). A search of the Ontario Archaeological Sites Database indicated that no registered sites are located within a five kilometre radius of the study area.

3.2.3 Identified Cultural Heritage Resources

The recognition or designation of cultural heritage resources (here referring only to built heritage features and cultural heritage landscapes) may provide valuable insight into aspects of local heritage, whether identified at the local, provincial, national, or international level. As some of these cultural heritage resources may be associated with significant archaeological features or deposits, the background research conducted for this assessment included the compilation of a list of cultural heritage resources that have previously been identified within or immediately adjacent to the current study area. The following sources were consulted:

- Federal Heritage Buildings Review Office online Directory of Heritage Designations (<http://www.pc.gc.ca/eng/progs/beefp-fhbro/index.aspx>);
- Canada's Historic Places website (<http://www.historicplaces.ca/en/home-accueil.aspx>);
- Ontario Heritage Properties Database (<http://www.hpd.mcl.gov.on.ca/scripts/hpdsearch/english/default.asp>);
- Ministry of Tourism, Culture and Sport's List of Heritage Conservation Districts (http://www.mtc.gov.on.ca/en/heritage/heritage_conserving_list.shtml); and
- The Ontario Heritage Bridge List (MTO 2008).

A search of on-line databases identified no designated built heritage properties within or adjacent to the study area.

3.2.4 Heritage Plaques and Monuments

The recognition of a place, person, or event through the erection of a plaque or monument may also provide valuable insight into aspects of local history, given that these markers typically indicate some level of heritage recognition. As with cultural heritage resources (built heritage features and/or cultural heritage landscapes), some of these places, persons, or events may be associated with significant archaeological features or deposits. Accordingly, this study included the compilation of a list of heritage plaques and/or markers in the vicinity of the study area. The following sources were consulted:

- An extensive listing of Ontario's Heritage Plaques maintained by Alan Brown (<http://www.ontarioplaques.com/>); and,
- An extensive listing of historical plaques of Ontario maintained by Wayne Cook (<http://www.waynecook.com/historiclist.html>).

No plaques were located within or in the immediate vicinity of the current study area.

3.2.5 Cemeteries

The presence of historical cemeteries in proximity to a parcel undergoing archaeological assessment can pose archaeological concerns in two respects. First, cemeteries may be associated with related structures or activities that may have become part of the archaeological record, and thus may be considered features indicating archaeological potential. Second, the boundaries of historical cemeteries may have been altered over time, as all or portions may have fallen out of use and been forgotten, leaving potential for the presence of unmarked graves. For these reasons, the background research conducted for this assessment included a search of available sources of information regarding historical cemeteries. For this study, the following sources were consulted:

- A complete listing of all registered cemeteries in the province of Ontario maintained by the Consumer Protection Branch of the Ministry of Consumer Services;
- Field of Stones website (<http://freepages.history.rootsweb.ancestry.com/~clifford/>);
- Ontario Cemetery Locator website maintained by the Ontario Genealogical Society (<http://ogs.andornot.com/CemLocat.aspx>);
- Ontario Headstones Photo Project website (<http://canadianheadstones.com/on/cemeteries.php>); and,
- Available historical mapping and aerial photography.

No known cemeteries were located within or adjacent to the study area, although there is always the possibility of unrecorded burial plots on rural properties.

A report held by Past Recovery detailing a previous Stage 1 and 2 assessment conducted by Heritage Quest Inc. in 2000, records the presence of the historic Cameron Cemetery on Lot 6, Concession 4, located 1.3 kilometers west of the study area. This assessment was completed for

another section of the MacLeod Quarry, the cemetery now being excluded from that property. The extent of the graveyard was determined by stripping the topsoil and a 10 metre buffer was placed around it.

3.2.6 Local Environment

The study area lies within the Glengarry Till Plain physiographic region, characterized by undulating to rolling surfaces with drumlinoid ridges and drumlins cutting across clay flats (Chapman & Putnam 1966:162). Soils on the property consist of the Eamer Loam series (Map 11). This loam is moderately stony to bouldery and has good drainage. The soil profile consists of 18-23 centimetres of very dark grey loam grading to dark grey-brown loam with stones on a grey-brown-grey loamy calcareous till (Mathews & Richards 1954). The surficial geology of the study area is composed of Fort Covington glacial till, a compact grey bouldery sandy till and Malone till, a very compact blue-grey clay till (Map 12) (Geological Survey of Canada 1965).

The Cornwall region is part of the Upper St. Lawrence sub-region of the Great Lakes- St. Lawrence forest region (Rowe 1977:94). The original forest cover included sugar maple, beech, red maple, yellow birch, basswood, white ash, large tooth aspen, red and bur oak. In areas of acidic and course soils, eastern hemlock, eastern white pine, white spruce, balsam fir and eastern white cedar occurred. Most of the original forest cover had been cleared since the nineteenth century.

The study area lies within the Raisin River watershed. This river passes a few kilometres north of the property with the South Raisin River passing a similar distance to the south. The Raisin River empties into the St. Lawrence River at South Lancaster, located approximately 20 kilometers directly southeast.

3.2.7 Optional Property Inspection

In addition to the above research, Past Recovery completed an optional site inspection on September 7, 2016 (Images 1 to 11). The weather was sunny with a high of 29° C. This inspection was conducted according to the archaeological fieldwork standards outlined in *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011), with field conditions and features influencing archaeological potential documented through digital photography and field notes. The property inspection has been used to supplement the background information to help inform the archaeological potential model developed below.

The results of the Stage 1 property inspection were documented with fieldnotes, a field map, and digital photographs. An inventory of the records generated by the assessment is provided below in Table 1. The complete Stage 1 photographic catalogue is included as Appendix 1 and the locations and orientations of all photographs used in this report are shown in Map 13. As per the *Terms and Conditions for Archaeological Licences* in Ontario, curation of all field notes, photographs and maps generated during the Stage 1 archaeological assessment is being provided by Past Recovery pending the identification of a suitable repository.

Table 1. Inventory of the Stage 1 Documentary Record.

Type of Document	Description	Number of Records	Location
Photographs	Digital photographs documenting the subject property and conditions at the time of the property survey	61 digital photographs	On PRAS computer network – file PR16-24
Field Map	Printed high-resolution satellite image of the subject property	1 page	PRAS office - file PR16-24
Field Notes	Notes on the property survey	7 pages	PRAS office - file PR16-24

The site visit confirmed the current condition and any disturbances within the study area. There are four rough access roads which run through the property and have greatly disturbed the area; the north road, middle road, south road and east road (see Image 1). In some sections the road surface sits meters over the natural land surface (see Image 5). Ditches along the sides of the roads have also greatly disturbed the soil, with some excavated over a meter in depth (see Image 6). Along the west side of the south half of the study area, an extensive ditch marks the property boundary (see Image 7) and along the east side of the east access road there is an extensive embankment which runs to the eastern property boundary (see Image 8). Another embankment occurs along the north side of the north access road (see Image 4). There are small sections of the property where standing water is present, mainly to the north and south of the middle access road and the west of the east road (see Image 9). Large aggregate piles are also scattered across much of the property around the north, middle and east access roads (see Image 10). Most of the vegetation south of the northern access road has been cleared and either pushed into piles or left on the surface (see Image 11).

3.3 Analysis and Conclusions

This section of the report includes an evaluation of the archaeological potential within the study area, in which the results of the background research and property inspection described above are synthesized to determine the likelihood of the property to contain significant archaeological resources.

3.3.1 Determination of Archaeological Potential

A number of factors are used to determine archaeological site potential. For pre-Contact sites criteria are principally focused on physiographic features such as the distance from the nearest source of water and the nature of that water body, areas of elevated topography including features such as ridges, knolls and eskers, and the types of soils found within the area being assessed. For post-Contact sites, the assessment of archaeological site potential is more reliant on historical research (land registry records, census and assessment rolls, etc.), cartographic and aerial photographic evidence and the inspection of the study area for possible above ground

remains or other evidence of a demolished historical structure. Also considered in determining archaeological potential are known archaeological sites within or in the vicinity of the study area.

Archaeological assessment standards established by MTCS (*Standards and Guidelines for Consultant Archaeologists*, 2011) set minimum distances to be tested from features indicating archaeological potential. Areas that are considered to have pre-Contact site potential and therefore requiring testing include lands within 300 metres of water sources, wetlands or elevated features in the landscape including former river scarps. Areas of post-Contact archaeological site potential requiring testing include locations within 300 metres of sites of early Euro-Canadian settlement and 100 metres from historic transportation corridors. Further, areas within 300 metres of registered archaeological sites, designated heritage buildings or structures/ locations of local historical significance are considered to have archaeological potential requiring testing. These guidelines were refined and applied to the study area after the research described above, generating the Stage 1 recommendations presented below in Section 3.3.2.

In general, the study area does not exhibit characteristics that indicate potential for the presence of archaeological resources associated with pre- and post-Contact First Nations settlement and/or land uses. There are no topographic or physiological features, water bodies or favourable soil deposits on or adjacent to the property that would trigger a determination of pre- and post-Contact First Nations archaeological potential (see Maps 7 to 9, 11 and 12).

The study area also does not exhibit characteristics that indicate potential for the presence of archaeological resources associated with Euro-Canadian settlement and/or land uses. The only road in the vicinity adjacent to the north half of Lot 2 was not opened until the twentieth century, and all of the historic farm buildings were concentrated at the south end of the lot (see Maps 4 to 9, 11 and 12). Further, there does not appear to have been any historic quarrying or other industrial activities on the property.

Given the lack of features of archaeological potential identified within or in the immediate vicinity of the study area, the evaluation of potential began from the assumption that no portions of the study area contained archaeological potential. The site visit permitted the identification of further areas where any possible archaeological potential has been removed through deep and extensive disturbance. Areas considered to have been affected include the access roads which run through the study area and ground disturbances associated with the movement of soils around the north half of the property and ditching along the roads and property boundaries (see Section 3.2.7). The archaeological potential evaluation of the study area has been illustrated in Map 14. All areas shaded in blue indicate no archaeological potential as determined through documentary research, mapping and aerial photography. Areas shaded in red indicate deep and extensive disturbance as confirmed during the site visit. There are no sections of the property which will require a Stage 2 archaeological assessment.

3.3.2 Stage 1 Recommendations

The results of the background research discussed above indicate that none of the study area exhibits potential for the presence of significant archaeological resources. Accordingly, it is recommended that:

- 1) No further archaeological assessment of the study area as presently defined in Maps 2 and 3 is required. As a result, clearance of the archaeological condition placed on the property should be granted.

The reader is also referred to Section 4.0 below to ensure compliance with the *Ontario Heritage Act* as it may relate to this project.

4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

In order to ensure compliance with the *Ontario Heritage Act*, the reader is advised of the following:

- 1) This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- 2) 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*.
- 3) 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*.
- 4) The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.
- 5) 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.

5.0 LIMITATIONS AND CLOSURE

Past Recovery Archaeological Services Inc. 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.

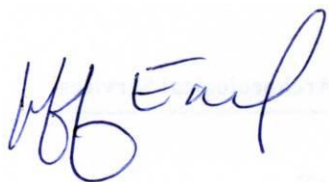
This report has been prepared for the specific site, design objective, developments and purpose prescribed in the client proposal and subsequent agreed upon changes to the contract. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

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, sample and testing program may fail to detect all or certain archaeological resources. The sampling strategies in this study comply with those identified in the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (2011).

The documentation related to this archaeological assessment will be curated by Past Recovery Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to an approved and suitable repository can be made to the satisfaction of the project owner(s), the Ontario Ministry of Tourism, Culture and Sport and any other legitimate interest group.

We trust that this report meets your current needs. If you have any questions or if we may be of further assistance, please do not hesitate to contact the undersigned.



Jeff Earl
Principal
Past Recovery Archaeological Services Inc.

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NMC 21998 Map of the counties of Stormont, Dundas, Glengarry, Prescott & Russell
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C-1074 1861 census of Cornwall Township
C-10008 1871 census of Cornwall Township

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Department of National Defence:

Cornwall Topographic Map, Sheet No. 17 - One-Inch-to-One-Mile (1909)

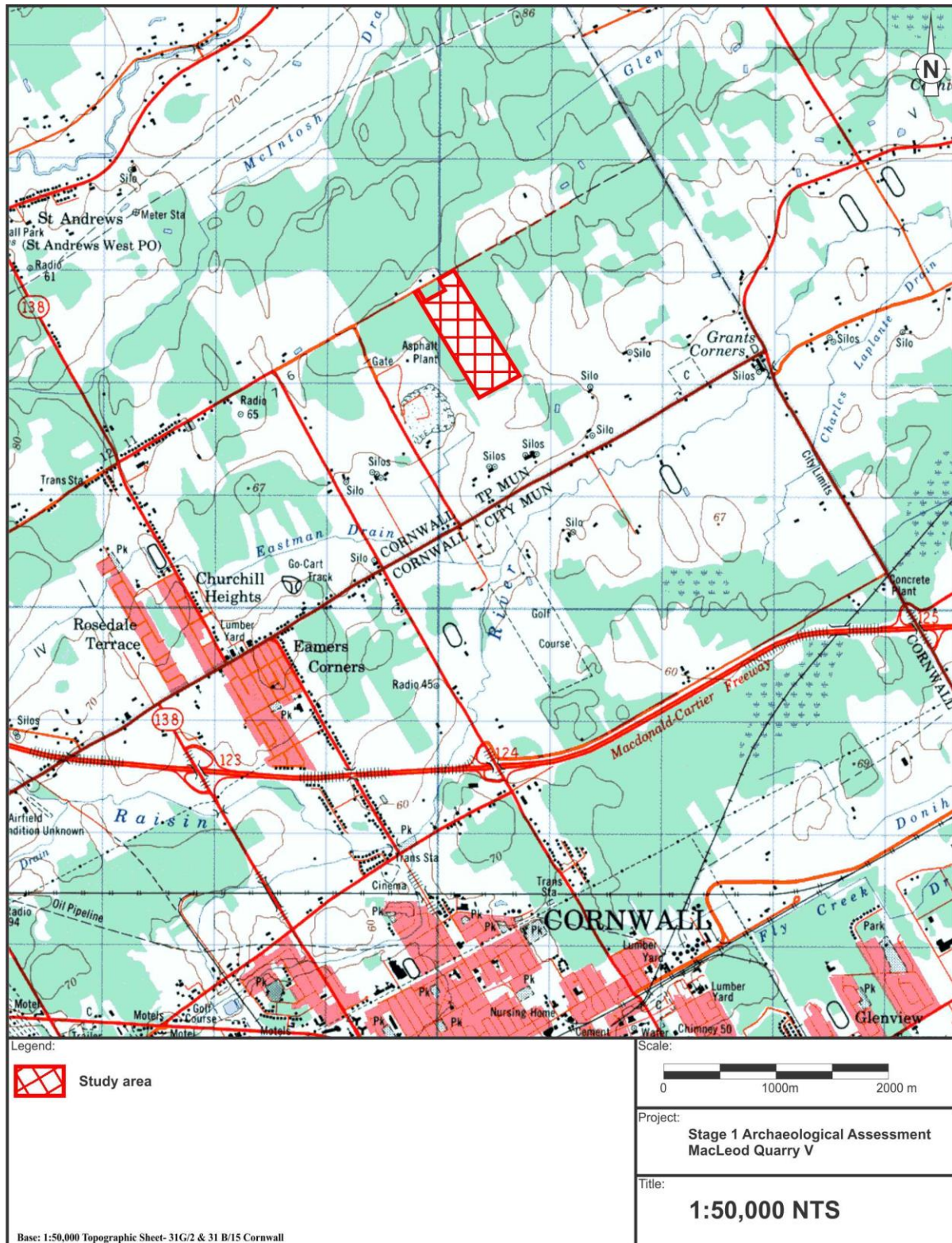
Cornwall Topographic Map, Sheet No. 17 - One-Inch-to-One-Mile (1917)

Cornwall Topographic Map, Sheet 31 G/2 - One-Inch-to-One-Mile (1928)

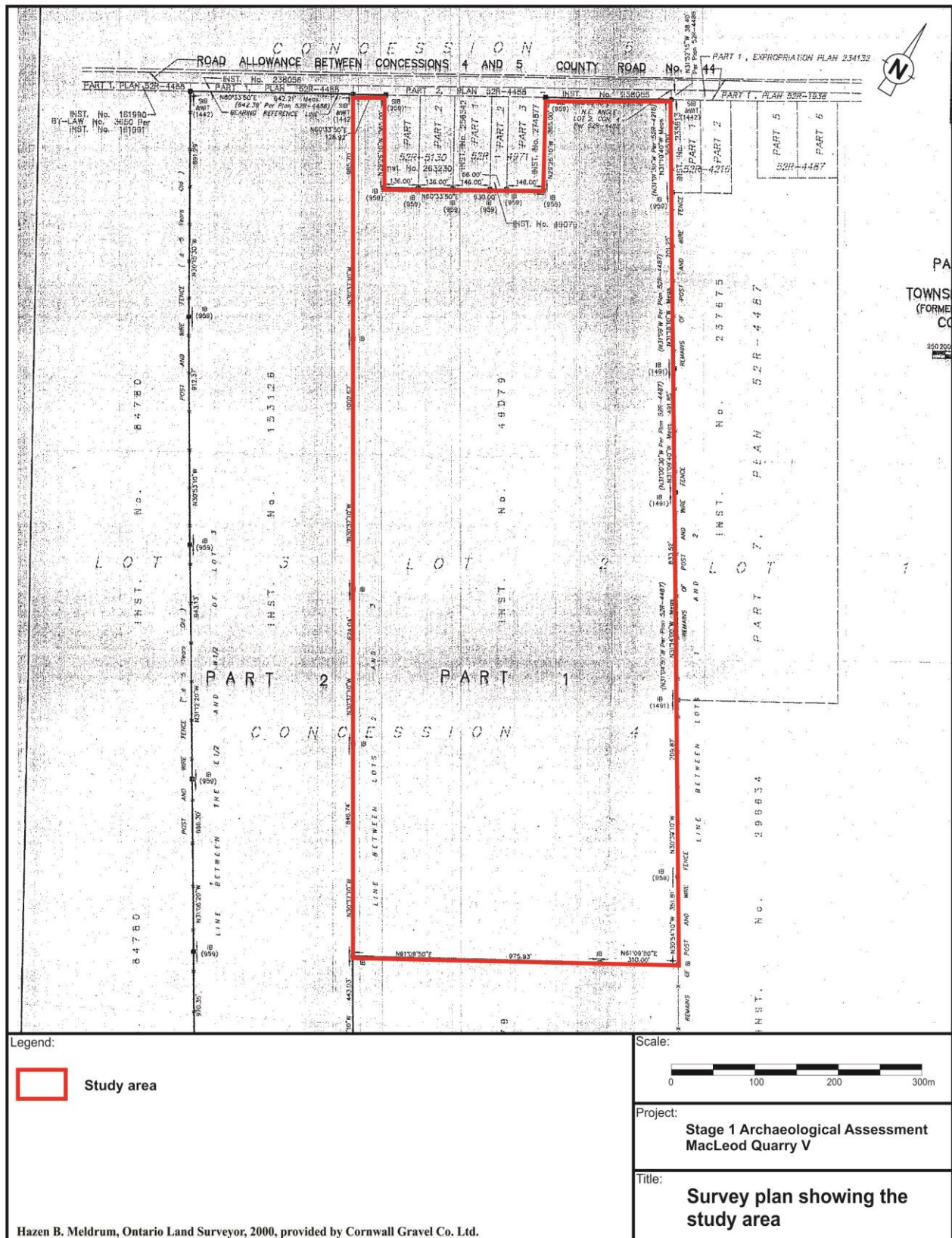
Cornwall Topographic Map, Sheet 31 G/2 - One-Inch-to-One-Mile (1937)

Cornwall Topographic Map, Sheet 31 G/2 east half, 2nd ed. – 1:50 000 (1952)

7.0 MAPS



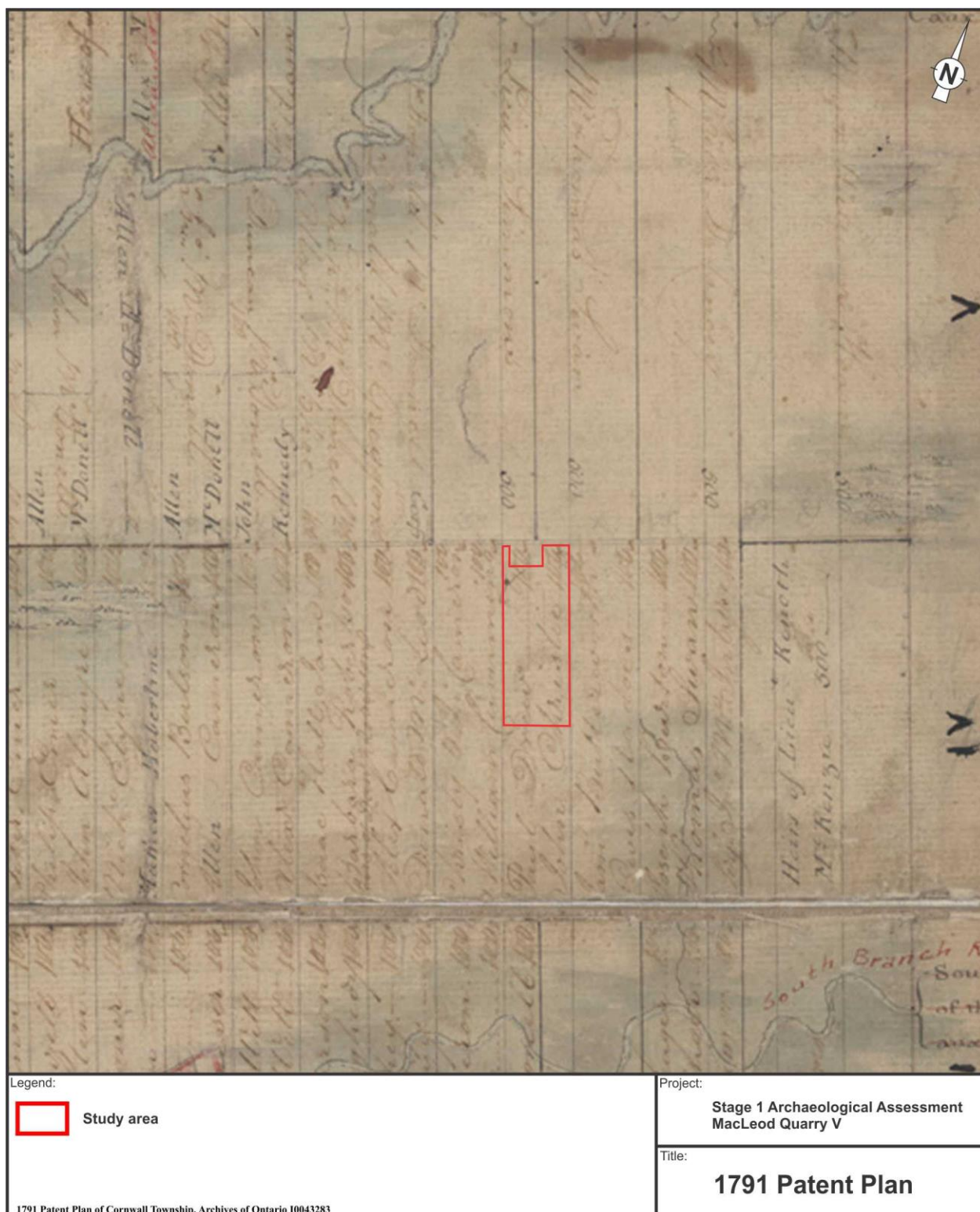
Map 1. Location of the study area.



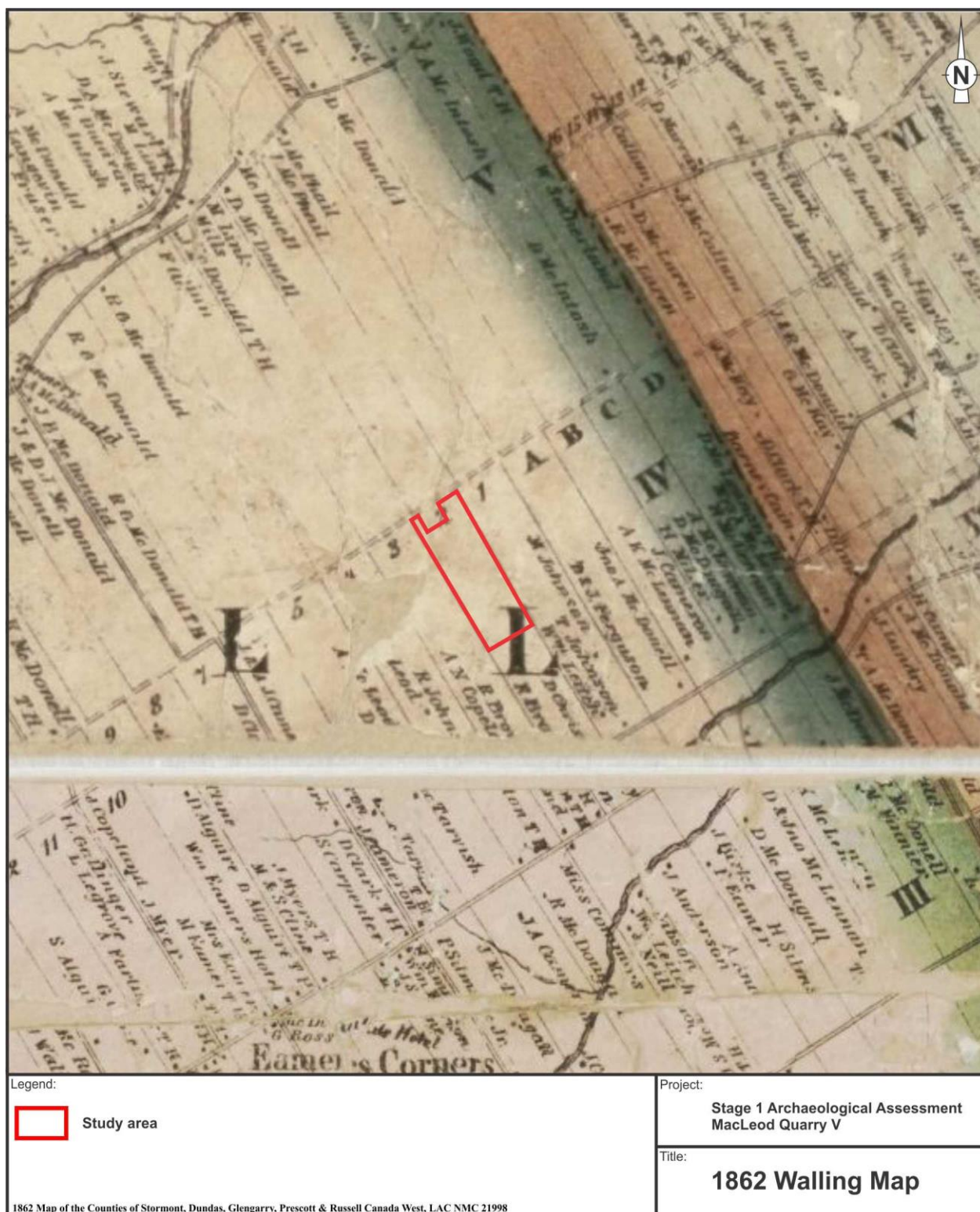
Map 2. Survey plan of the study area with the boundary for the licenced pit application.



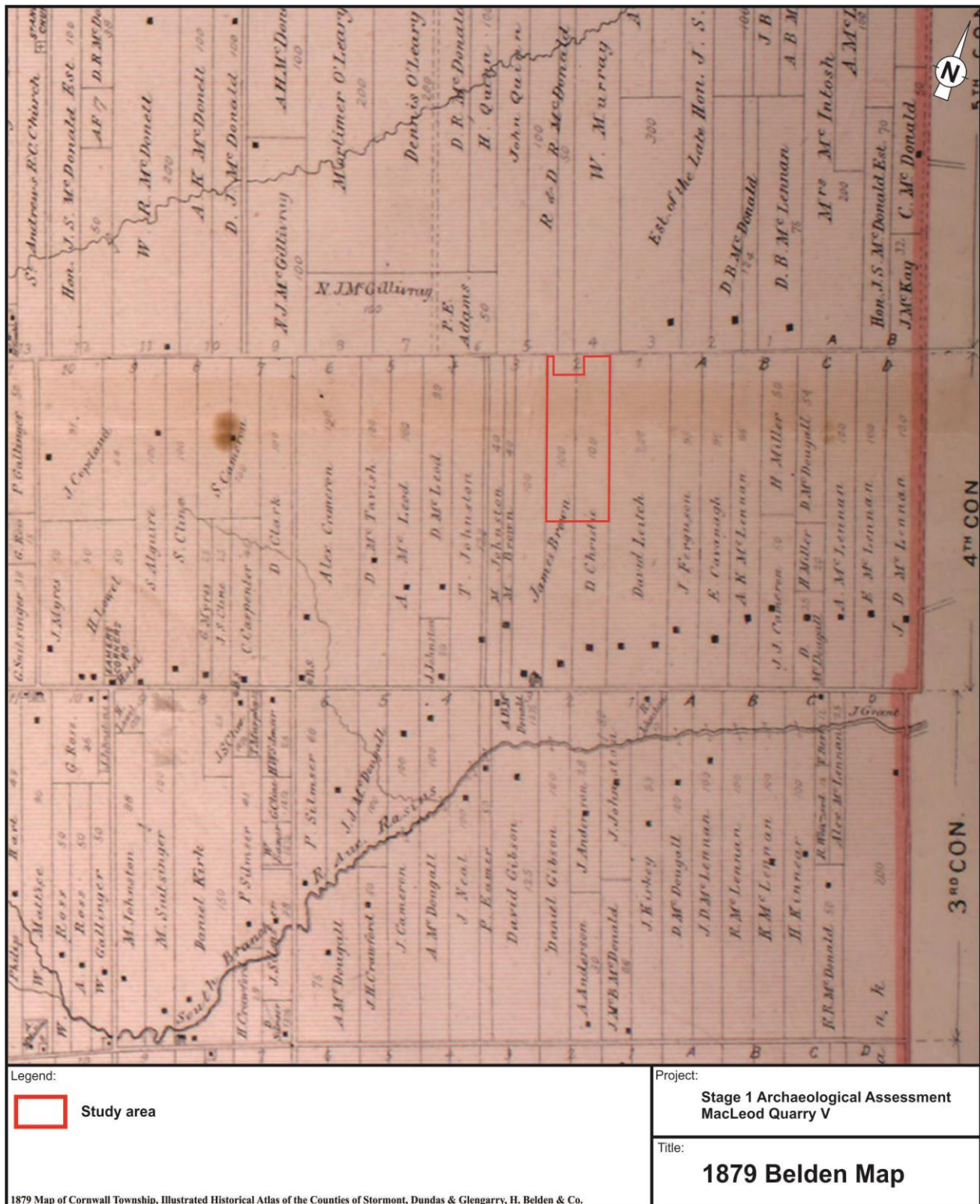
Map 3. Recent orthophotographic image showing the study area.



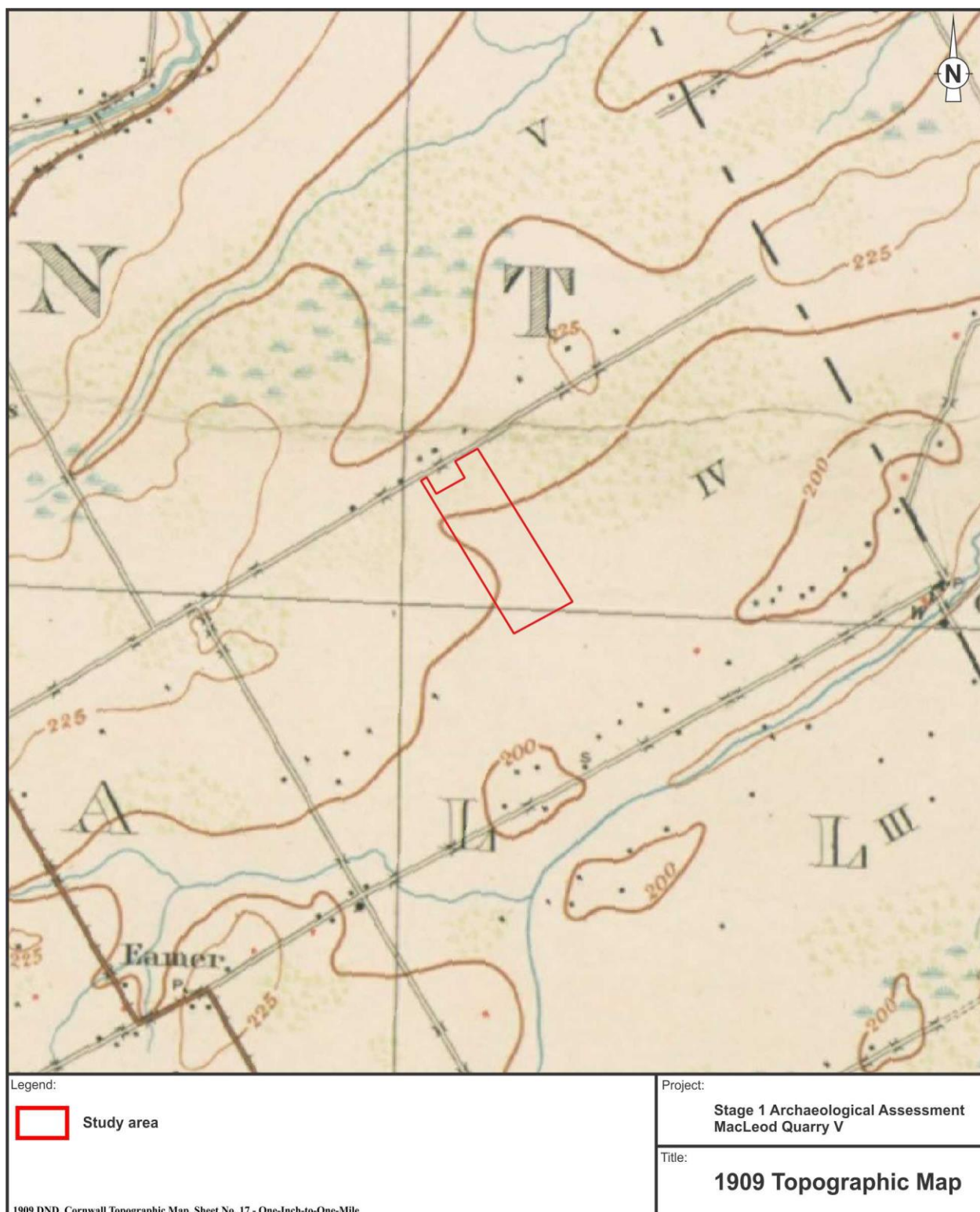
Map 4. Segment of the 1791 patent plan of Cornwall Township showing the approximate location of the study area.



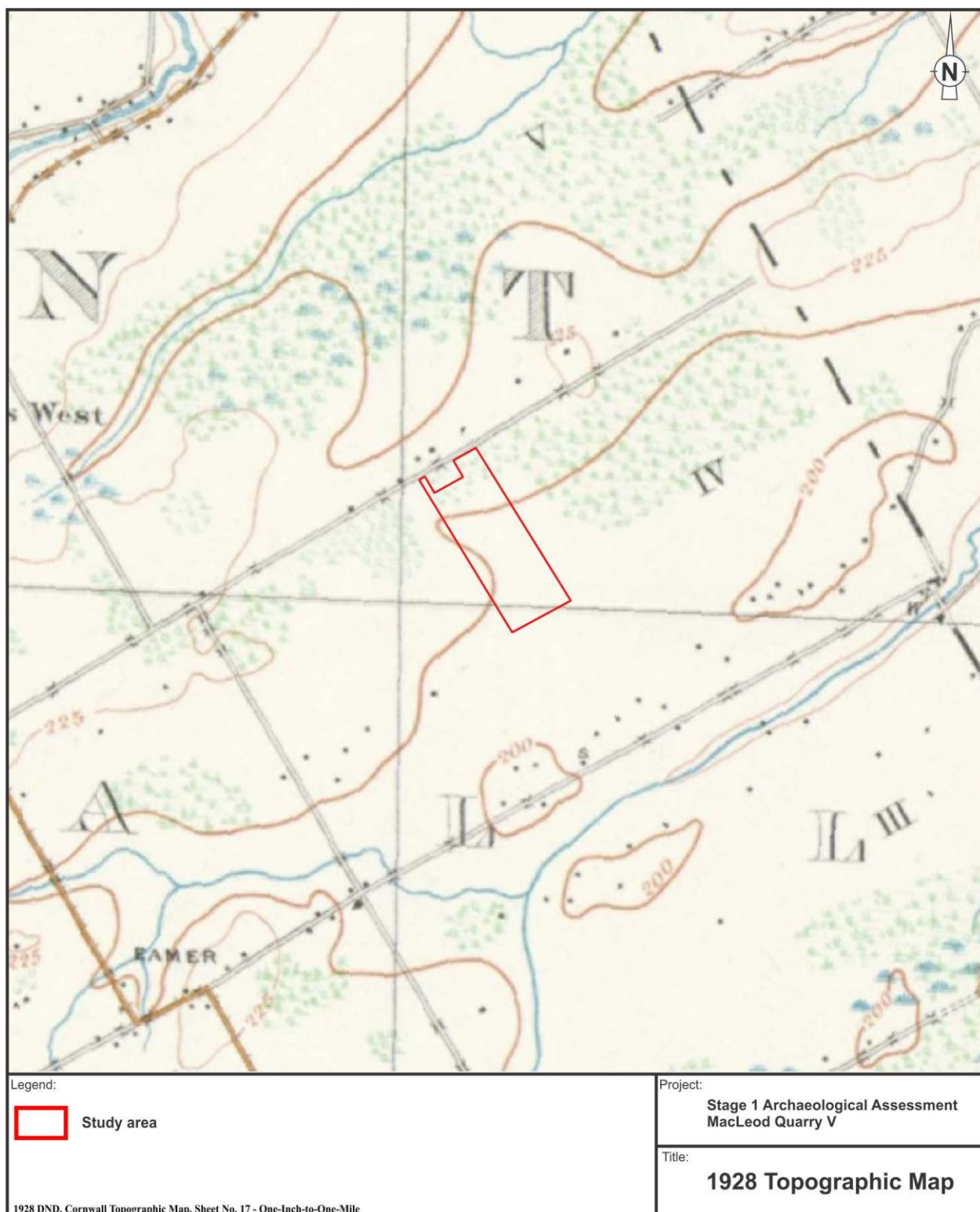
Map 5. Segment of the 1862 map of Cornwall Township by H. F. Walling showing the approximate location of the study area.



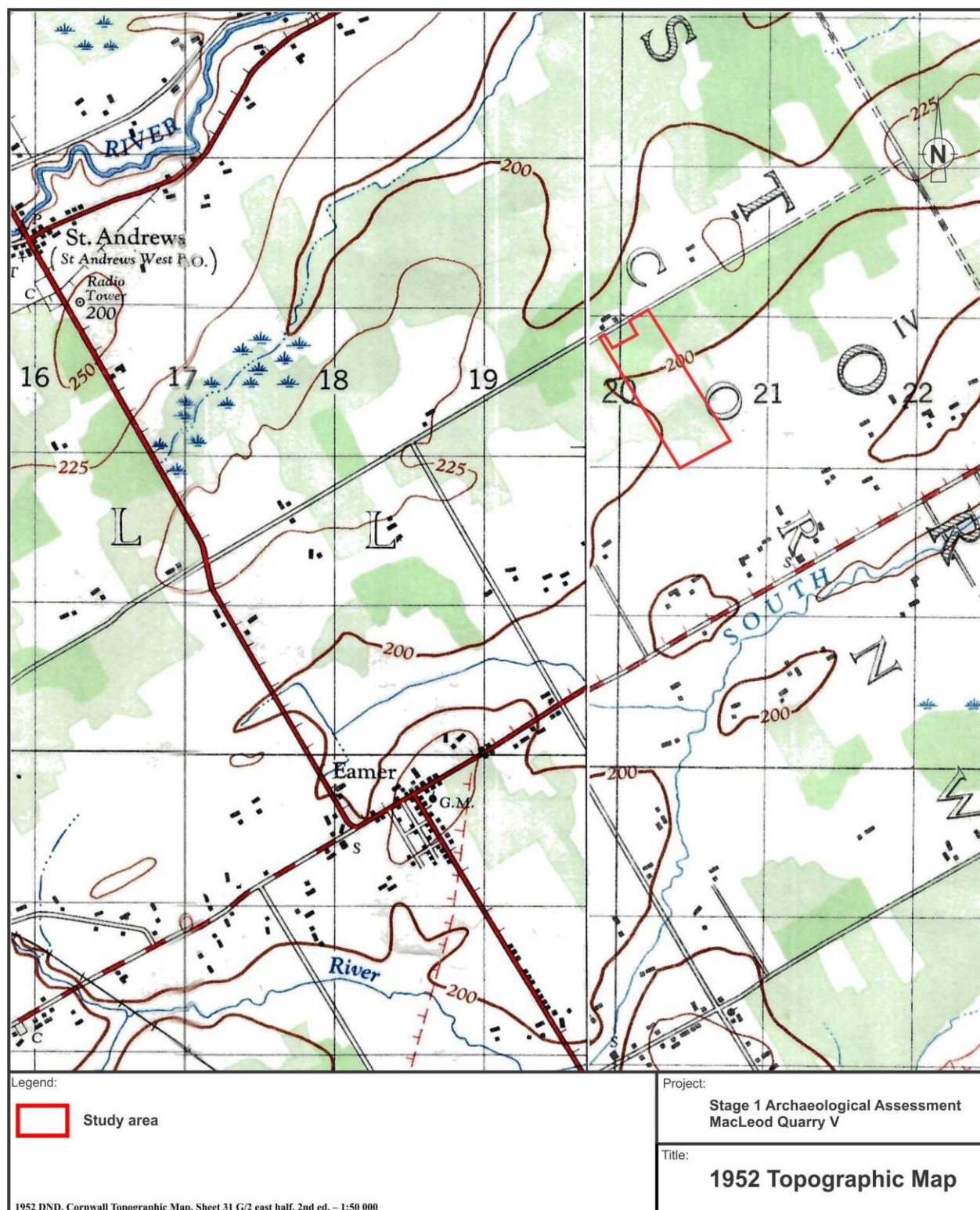
Map 6. Segment of the 1879 map of Cornwall Township by Belden & Co. showing the approximate location of the study area.



Map 7. Segment of a 1909 topographic map of the Cornwall region, based on surveys completed in 1904, showing the approximate location of the study area.



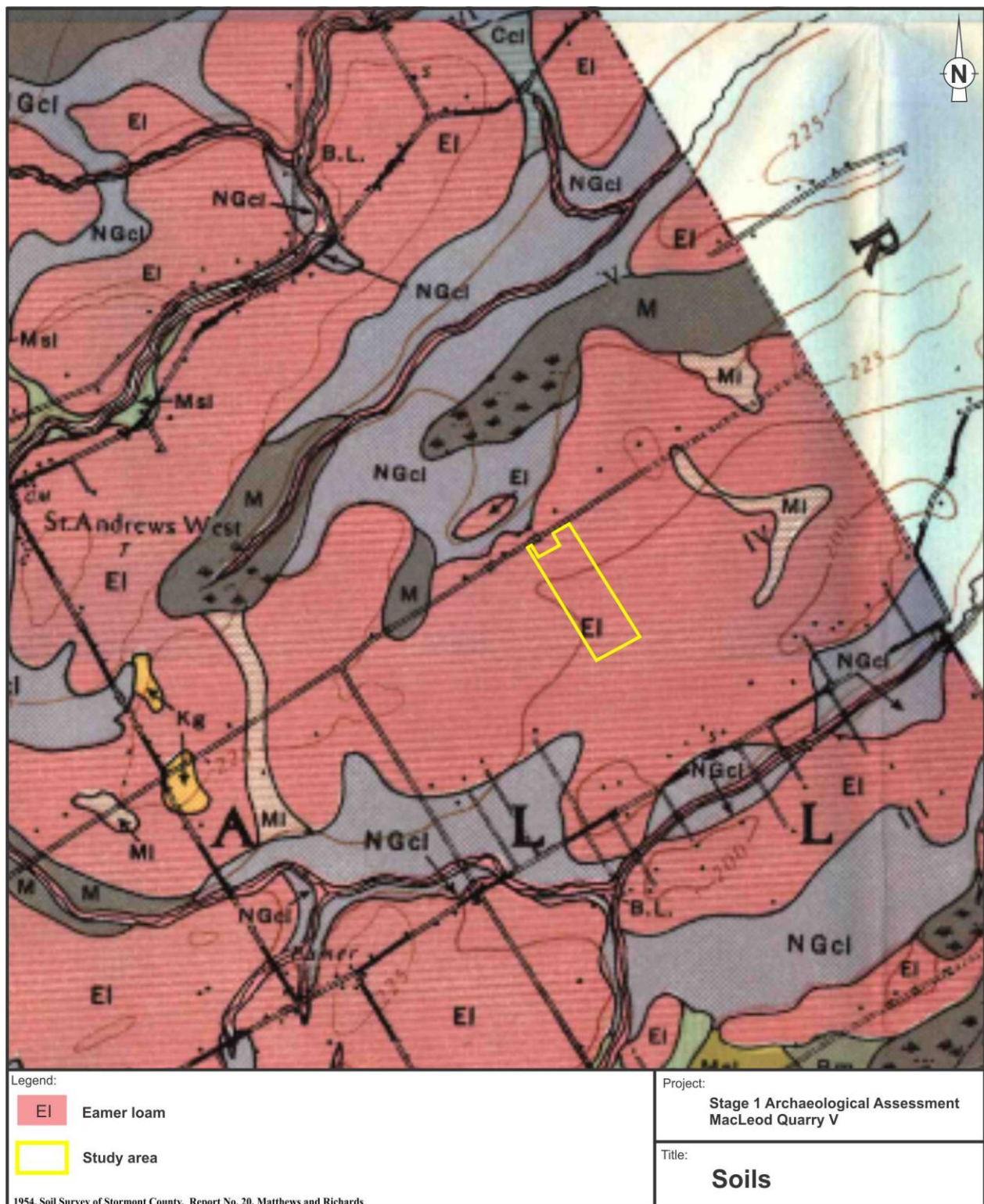
Map 8. Segment of a 1928 topographic map of the Cornwall region showing the approximate location of the study area.



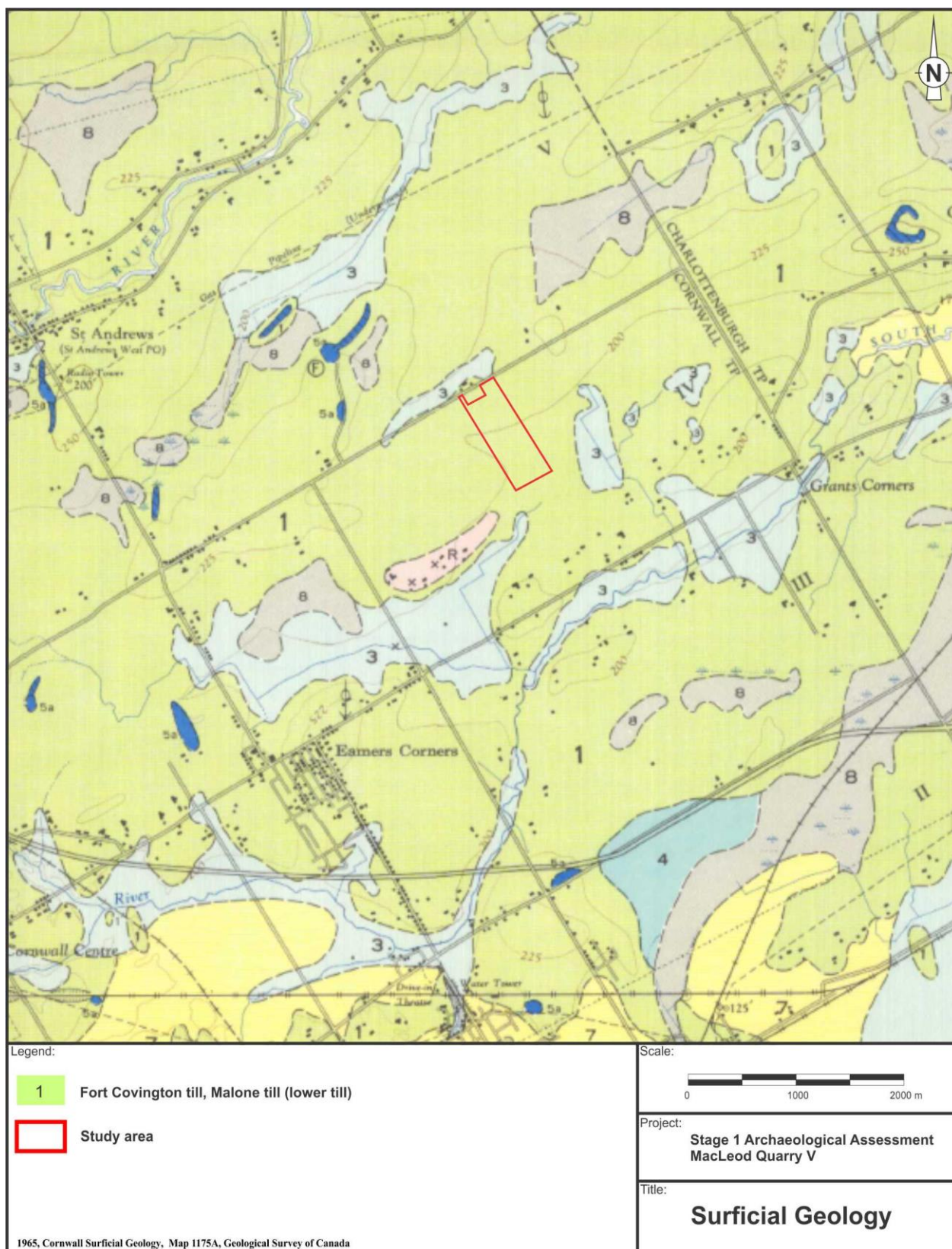
Map 9. Segment of a 1952 topographic map of the Cornwall region showing the approximate location of the study area.



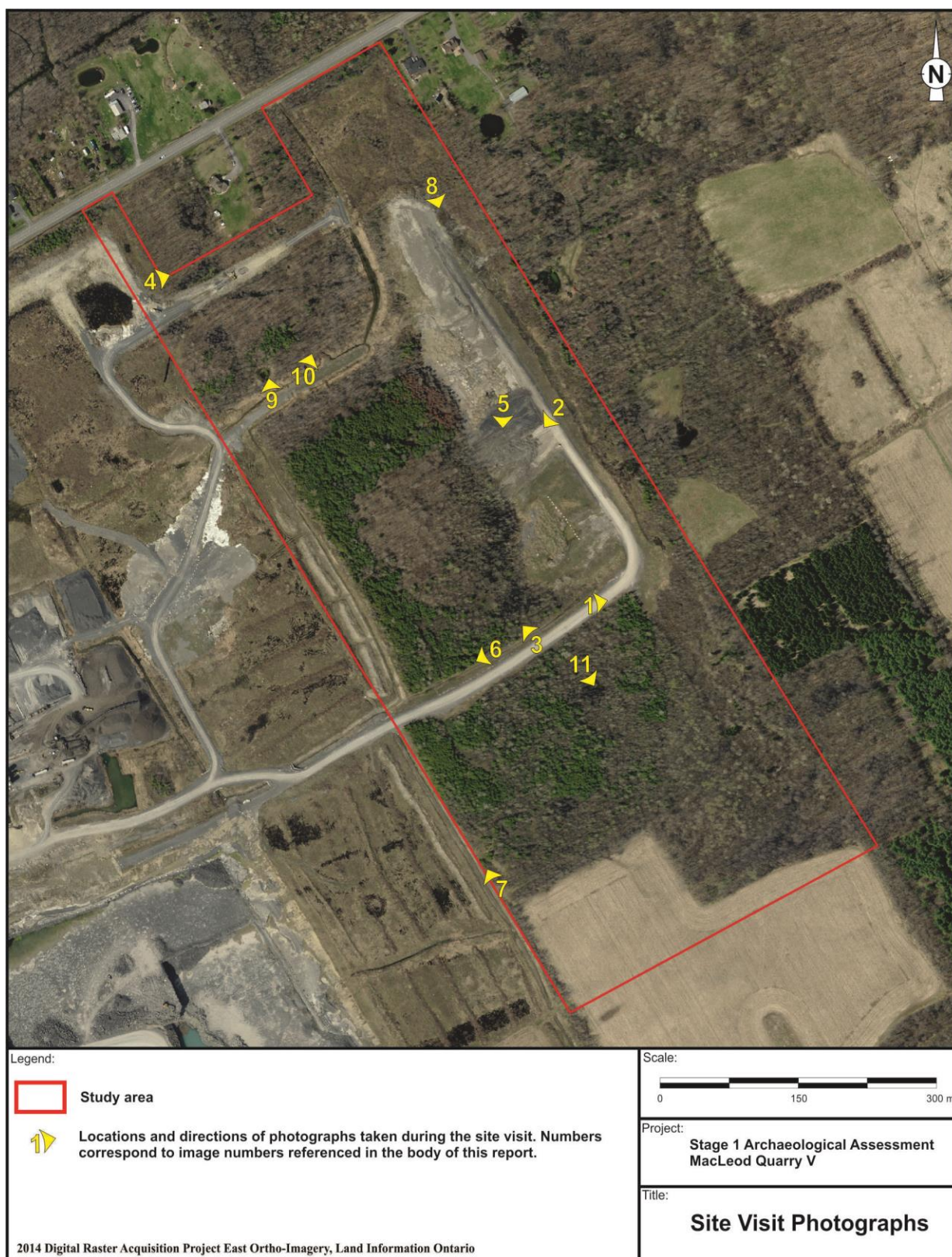
Map 10. Segment of an aerial photograph dating to 1994 showing the study area.



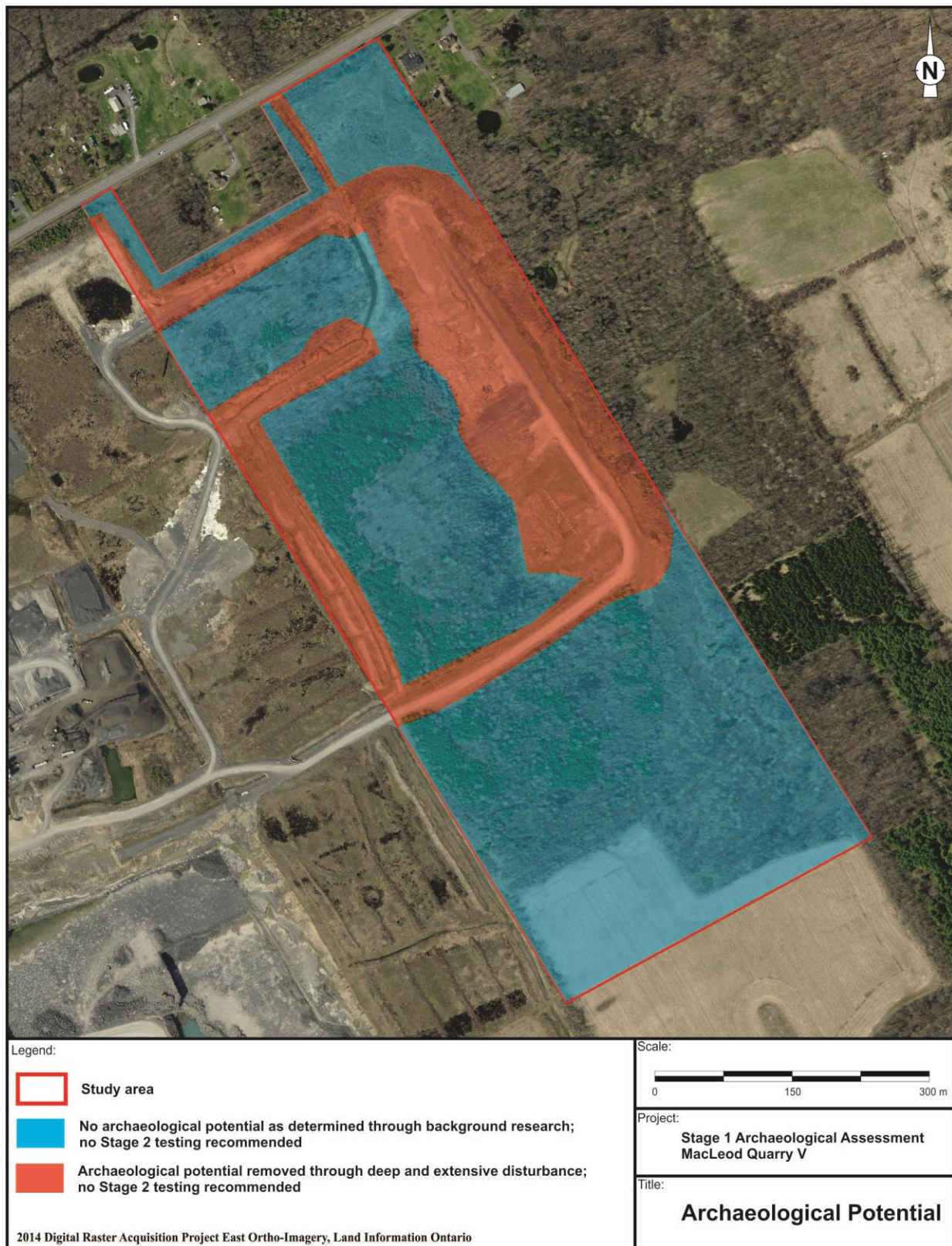
Map 11. Segment of the soil survey for Stormont County produced in 1954.



Map 12. Segment of the surficial geology map for the Cornwall region produced in 1965.



Map 13. Recent orthophotographic imagery indicating the locations and orientations of photographs used in this report.



Map 14. Recent orthophotographic imagery depicting the archaeological potential of the study area.

8.0 IMAGES



Image 1. View of the south access road, facing east. (PR16-24D015)



Image 2. Area with dumped aggregate and concrete blocks, facing southwest. (PR16-24D033)



Image 3. Rocky ground surface and ditching along south access road, facing northwest.
(PR16-24D018)



Image 4. North property boundary with the north access road embankment to the south, facing east. (PR16-24D051)



Image 5. Road built up metres above the surrounding surface, facing south. (PR16-24D034)



Image 6. Deep ditching along the south access road, facing west. (PR16-24D022)



Image 7. View of the ditch separating the west property boundary in the south half of the study area, facing north. (PR16-24D002)



Image 8. Embankment on the east side of the east access road, facing south. (PR16-24D037)



Image 9. Standing water near the middle access road, facing north. (PR16-24D043)



Image 10. Wet area with aggregate piles to the north, facing northeast. (PR16-24D045)



Image 11. Field conditions on the south half of the property, cleared of vegetation, facing south. (PR16-24D016)

APPENDIX 1: Photographic Catalogue

Camera: Panasonic Lumix DMC-TS3

Catalogue No.	Description	Dir.
PR16-24D001	View of ditch separating western property boundary in south half of study area	SE
PR16-24D002	View of ditch separating western property boundary in south half of study area	N
PR16-24D003	Field conditions of south half of study area	E
PR16-24D004	Field conditions of south half of study area	NE
PR16-24D005	Southern property boundary	E
PR16-24D006	Southwest corner of property	S
PR16-24D007	Southeastern corner of property	N
PR16-24D008	Drilled well in southeastern corner of property	NW
PR16-24D009	Eastern property boundary	N
PR16-24D010	Field conditions of southeast portion of property. Note cleared tree debris	N
PR16-24D011	Field conditions of southeast portion of property	W
PR16-24D012	Tree debris covering ground surface	NW
PR16-24D013	Field conditions of southeast portion of property, cleared vegetation	NW
PR16-24D014	Field conditions of southeast portion of property, cleared vegetation	N
PR16-24D015	South access road	E
PR16-24D016	Field conditions of south portion of property	S
PR16-24D017	View of gravel fill used to build south access road above natural land surface	W
PR16-24D018	Rocky terrain and ditching along south access road	NW
PR16-24D019	Ditching and culvert along south access road	NE
PR16-24D020	Rocky terrain and cleared vegetation	N
PR16-24D021	Rocky terrain and cleared vegetation	NE
PR16-24D022	South access road ditch	W
PR16-24D023	South access road ditch	E
PR16-24D024	Embankment on east side of east access road	N
PR16-24D025	Embankment on east side of east access road	E
PR16-24D026	Embankment on east side of east access road	NE
PR16-24D027	Embankment on east side of east access road	S
PR16-24D028	East access road and piled aggregate	SW
PR16-24D029	Land disturbance and piled aggregate	W
PR16-24D030	East access road and piled aggregate	NE
PR16-24D031	Wet area with piles of pushed soil and aggregate	W
PR16-24D032	Significant land disturbance and aggregate pile	NW
PR16-24D033	Storage area for aggregate and concrete blocks	SW
PR16-24D034	View of road surface meters above surrounding land and aggregate piles	S
PR16-24D035	Ditching	W
PR16-24D036	East access road	S
PR16-24D037	Embankment on east side of east access road	S
PR16-24D038	Embankment on east side of east access road	N

PR16-24D039	Embankment on east side of east access road	N
PR16-24D040	East access road	W
PR16-24D041	East access road. Note significant elevation difference to natural land surface	N
PR16-24D042	Standing water	N
PR16-24D043	Standing water	N
PR16-24D044	Wet area with aggregate piles in background	NE
PR16-24D045	Wet area with aggregate piles in background	NE
PR16-24D046	Cleared vegetation	S
PR16-24D047	Ditch along middle access road	W
PR16-24D048	Middle access road with ditch and aggregate mounds	NE
PR16-24D049	North access road and embankment	E
PR16-24D050	Eastern property boundary	N
PR16-24D051	Northern property boundary	E
PR16-24D052	North access road land disturbance	SW
PR16-24D053	Headline Road (44)	W
PR16-24D054	Drilled well	S
PR16-24D055	East property edge from Headline Road	S
PR16-24D056	East property edge from Headline Road	SW
PR16-24D057	East property edge from Headline Road	W
PR16-24D058	Eastern property boundary from northeastern corner	S
PR16-24D059	Eastern property boundary from northeastern corner	W
PR16-24D060	Eastern property boundary from northeastern corner	N
PR16-24D061	Eastern property boundary from northeastern corner	NW

APPENDIX 2: Glossary of Archaeological Terms

Archaeology:

The study of human past, both prehistoric and historic, by excavation of cultural material.

Archaeological Sites:

The physical remains of any building, structure, cultural feature, object, human event or activity which, because of the passage of time, are on or below the surface of the land or water.

Archaic:

A term used by archaeologists to designate a distinctive cultural period dating between 8000 and 1000 B.C. in eastern North America. The period is divided into Early (8000 to 6000 B.C.), Middle (6000 to 2500 B.C.) and Late (2500 to 1000 B.C.). It is characterized by hunting, gathering and fishing.

Artifact:

An object manufactured, modified or used by humans.

B.P.:

Before Present. Often used for archaeological dates instead of B.C. or A.D. Present is taken to be 1951, the date from which radiocarbon assays are calculated.

Backdirt:

The soil excavated from an archaeological site. It is usually removed by shovel or trowel and then screened to ensure maximum recovery of artifacts.

Chert:

A type of silica rich stone often used for making chipped stone tools. A number of chert sources are known from southern Ontario. These sources include outcrops and nodules.

Contact Period:

The period of initial contact between Native and European populations. In Ontario, this generally corresponds to the seventeenth and eighteen centuries depending on the specific area. See also Protohistoric.

Cultural Resource / Heritage Resource:

Any resource (archaeological, historical, architectural, artifactual, archival) that pertains to the development of our cultural past.

Cultural Heritage Landscapes:

Cultural heritage landscapes are groups of features made by people. The arrangement of features illustrate noteworthy relationships between people and their surrounding environment. They can provide information necessary to preserve, interpret or reinforce the understanding of important historical settings and changes to past patterns of land use. Cultural landscapes include neighbourhoods, townscape and farmscapes.

Diagnostic:

An artifact, decorative technique or feature that is distinctive of a particular culture or time period.

Disturbed:

In an archaeological context, this term is used when the cultural deposit of a certain time period has been intruded upon by a later occupation.

Excavation:

The uncovering or extraction of cultural remains by digging.

Feature:

This term is used to designate modifications to the physical environment by human activity. Archaeological features include the remains of buildings or walls, storage pits, hearths, post moulds and artifact concentrations.

Flake:

A thin piece of stone (usually chert, chalcedony, etc.) detached during the manufacture of a chipped stone tool. A flake can also be modified into another artifact form such as a scraper.

Fluted:

A lanceolate shaped projectile point with a central channel extending from the base approximately one third of the way up the blade. One of the most diagnostic Palaeo-Indian artifacts.

Historic:

Period of written history. In Ontario, the historic period begins with European settlement.

Lithic:

Stone. Lithic artifacts would include projectile points, scrapers, ground stone adzes, gun flints, etc.

Lot:

The smallest provenience designation used to locate an artifact or feature.

Midden:

An archaeological term for a garbage dump.

Mitigation:

To reduce the severity of development impact on an archaeological or other heritage resource through preservation or excavation. The process for minimizing the adverse impacts of an undertaking on identified cultural heritage resources within an affected area of a development project.

Multicomponent:

An archaeological site which has seen repeated occupation over a period of time. Ideally, each occupation layer is separated by a sterile soil deposit that accumulated during a period when the site was not occupied. In other cases, later occupations will be directly on top of earlier ones or will even intrude upon them.

Operation:

The primary division of an archaeological site serving as part of the provenience system. The operation usually represents a culturally or geographically significant unit within the site area.

Palaeo-Indian:

The earliest human occupation of Ontario designated by archaeologists. The period dates between 9000 and 8000 B.C. and is characterized by small mobile groups of hunter-gatherers.

Prehistoric:

Before written history. In Ontario, this term is used for the period of Native occupation up until the first contact with European groups.

Profile:

The profile is the soil stratigraphy that shows up in the cross-section of an archaeological excavation. Profiles are important in understanding the relationship between different occupations of a site.

Projectile Point:

A point used to tip a projectile such as an arrow, spear or harpoon. Projectile points may be made of stone (either chipped or ground), bone, ivory, antler or metal.

Provenience:

Place of origin. In archaeology this refers to the location where an artifact or feature was found. This may be a general location or a very specific horizontal and vertical point.

Salvage:

To rescue an archaeological site or heritage resource from development impact through excavation or recording.

Stratigraphy:

The sequence of layers in an archaeological site. The stratigraphy usually includes natural soil deposits and cultural deposits.

Sub-operation:

A division of an operation unit in the provenience system.

Survey:

To examine the extent and nature of a potential site area. Survey may include surface examination of ploughed or eroded areas and sub-surface testing.

Test Pit:

A small pit, usually excavated by hand, used to determine the stratigraphy and presence of cultural material. Test pits are often used to survey a property and are usually spaced on a grid system.

Woodland:

The most recent major division in the prehistoric sequence of Ontario. The Woodland period dates from 1000 B.C. to A.D. 1550. The period is characterized by the introduction of ceramics and the beginning of agriculture in southern Ontario. The period is further divided into Early (1000 B.C. to A.D. 0), Middle (A.D. 0 to A.D. 900) and Late (A.D. 900 to A.D.1550).