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**Stage 1 Archaeological Assessment
Edenvale Solar Project
5403 Highway 26, 1180 Sunnidale Sideroad 15/16 and
Part of the Sunnidale Sideroad 12/13 ROW
Township of Clearview
Part of Lots 13–15, Concession 10–12
Geographic Township of Sunnidale
Simcoe County, Ontario**

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&
The Ministry of Tourism, Culture and Sport

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MTCS Licence #P007
Project #P007-0691
PIF #P007-0691-2015

22/05/2015

Original Report

EXECUTIVE SUMMARY

Under a contract awarded by BluEarth Renewables Inc. in May 2015, Archaeological Research Associates Ltd. carried out a Stage 1 archaeological assessment of lands with the potential to be impacted by the Edenvale Solar Project in the Township of Clearview, Simcoe County, Ontario. This report documents the background research and fieldwork involved in the assessment, and presents conclusions and recommendations pertaining to archaeological concerns within the study area. The assessment was conducted in advance of initiating the Renewable Energy Approval process and in accordance with the requirements set out in Sections 21 and 22 of Ontario Regulation 359/09, issued under Part V.0.1 of the *Environmental Protection Act*.

The Stage 1 assessment was conducted in May 2015 under licence #P007, PIF #P007-0691-2015. At the time of assessment, the study area comprised parts of several open fields, parts of the Edenvale Aerodrome (i.e., runways, driveways and two structures), multiple wooded/overgrown areas and the road edge along Sunnidale Sideroad 12/13. Legal permission to enter and conduct all necessary fieldwork activities within the assessed lands was granted by the property owners.

The results of the assessment indicated that the study area currently comprises a mixture of areas of archaeological potential and areas of no archaeological potential. Archaeological Research Associates Ltd. recommends that all areas of archaeological potential that could be impacted by the project (i.e., the proposed project location) be subject to a Stage 2 property assessment in advance of construction. The identified areas of no archaeological potential are not recommended for further assessment.

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

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GLOSSARY OF ABBREVIATIONS

ARA – Archaeological Research Associates Ltd.
 CHVI – Cultural Heritage Value or Interest
 MTC – (Former) Ministry of Tourism and Culture
 MTCS – Ministry of Tourism, Culture and Sport
 O. Reg. – Ontario Regulation
 PIF – Project Information Form
 REA – Renewable Energy Approval
 ROW – Right-of-Way
 S&Gs – Standards and Guidelines for Consultant Archaeologists

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1.0 PROJECT CONTEXT

1.1 Development Context

Under a contract awarded by BluEarth Renewables Inc. in May 2015, ARA carried out a Stage 1 archaeological assessment of lands with the potential to be impacted by the Edenvale Solar Project in the Township of Clearview, Simcoe County, Ontario. This report documents the background research and fieldwork involved in the assessment, and presents conclusions and recommendations pertaining to archaeological concerns within the study area. The assessment was conducted in advance of initiating the REA process and in accordance with the requirements set out in Sections 21 and 22 of O. Reg. 359/09, issued under Part V.0.1 of the *Environmental Protection Act*.

The subject study area consists of an irregularly-shaped 141.62 ha parcel of land located at 5403 Highway 26, 1180 Sunnidale Sideroad 15/16 and along the eastern part of the Sunnidale Sideroad 12/13 ROW in the northeastern part of the Township of Clearview (see Map 1–Map 2). The proposed solar array area is generally bounded by the Edenvale Aerodrome to the north, Sunnidale Sideroad 15/16 to the east, a wooded area to the south and agricultural lands west, and the proposed collector line corridor is located in the eastern part of the Sunnidale Sideroad 12/13 ROW. At the time of assessment, the study area comprised parts of several open fields, parts of the Edenvale Aerodrome (i.e., runways, driveways and two structures), multiple wooded/overgrown areas and the road edge along Sunnidale Sideroad 12/13. In legal terms, the study area falls on part of Lots 13–15, Concession 10 and part of Lots 13, Concession 11–12 in the Geographic Township of Sunnidale (Simcoe County).

The Stage 1 assessment was conducted in May 2015 under licence #P007, PIF #P007-0691-2015. Legal permission to enter and conduct all necessary fieldwork activities within the assessed lands was granted by the property owners. In compliance with the objectives set out in Section 1.0 of the *S&Gs* (MTC 2011:13–23), this investigation was carried out in order to:

- Provide information concerning the study area’s geography, history and current land condition;
- Determine the presence of known archaeological sites in the study area;
- Present strategies to mitigate project impacts to such sites, if they are located;
- Evaluate in detail the study area’s archaeological potential; and
- Recommend appropriate strategies for Stage 2 archaeological assessment, if some or all of the study area has archaeological potential.

The assessment was conducted in accordance with the provisions of the *Ontario Heritage Act*, R.S.O. 1990, c. O.18. All notes, photographs and records pertaining to the project are currently housed in ARA’s processing facility located at 154 Otonabee Drive, Kitchener. Subsequent long-term storage will occur at ARA’s secure storage facility located in Kitchener. The MTCS is asked to review the results and recommendations presented in this report and provide their endorsement through a *Letter of Review and Entry into the Ontario Public Register of Archaeological Reports*.

1.2 Historical Context

After a century of archaeological work in southern Ontario, scholarly understanding of the historic usage of lands in Simcoe County has become very well-developed. What follows is a detailed summary of the archaeological cultures that have settled in the vicinity of the study area over the past 11,000 years; from the earliest Palaeo-Indian hunters to the most recent Euro-Canadian farmers.

1.2.1 Pre-Contact

1.2.1.1 Palaeo-Indian Period

The first documented evidence of occupation in southern Ontario dates to around 9000 BC, after the retreat of the Wisconsinan glaciers and the formation of Lake Algonquin, Early Lake Erie and Early Lake Ontario (Karrow and Warner 1990; Jackson et al. 2000:416–419). At that time small Palaeo-Indian bands moved into the region, leading mobile lives based on the communal hunting of large game and the collection of plant-based food resources (Ellis and Deller 1990:38; MCL 1997:34). Current understanding suggests that Palaeo-Indian peoples ranged over very wide territories in order to live sustainably in a post-glacial environment with low biotic productivity. This environment changed considerably during this period, developing from a sub-arctic spruce forest to a boreal forest dominated by pine (Ellis and Deller 1990:52–54, 60).

An Early Palaeo-Indian period (ca. 9000–8400 BC) and a Late Palaeo-Indian period (ca. 8400–7500 BC) are discernable amongst the lithic spear and dart points. Early points are characterized by grooves or ‘flutes’ near the base while the later examples lack such fluting. All types would have been used to hunt caribou and other ‘big game’. Archaeological sites from both time-periods typically served as small campsites or ‘way-stations’ (occasionally with hearths or fire-pits), where tool manufacture/maintenance and hide processing would have taken place. For the most part, these sites tend to be small (less than 200 sq. m) and ephemeral (Ellis and Deller 1990:51–52, 60–62). Many parts of the Palaeo-Indian lifeway remain unknown.

1.2.1.2 Archaic Period

Beginning in the early 8th millennium BC, the biotic productivity of the environment began to increase as the climate warmed and southern Ontario was colonized by deciduous forests. This caused the fauna of the area to change as well, and ancient peoples developed new forms of tools and alternate hunting practices to better exploit both animal and plant-based food sources. These new archaeological cultures are referred to as ‘Archaic’. Thousands of years of gradual change in stone tool styles allows for the recognition of Early (7500–6000 BC), Middle (6000–2500 BC) and Late Archaic periods (2500–900 BC) (MCL 1997:34).

The Early and Middle Archaic periods are characterized by substantial increases in the number of archaeological sites and a growing diversity amongst stone tool types and exploited raw materials. Notable changes in Archaic assemblages include a shift to notched or stemmed projectile points, a growing prominence of net-sinkers (notched pebbles) and an increased reliance on artifacts like bone fish hooks and harpoons. In addition to these smaller items,

archaeologists also begin to find evidence of more massive wood working tools such as ground stone axes and chisels (Ellis et al. 1990:65–67).

Towards the end of the Middle Archaic (ca. 3500 BC), the archaeological evidence suggests that populations were 1) increasing in size, 2) paying more attention to ritual activities, 3) engaging in long distance exchange (e.g. in items such as copper) and 4) becoming less mobile (Ellis et al. 1990:93; MCL 1997:34). Late Archaic peoples typically made use of shoreline/riverine sites located in rich environmental zones during the spring, summer and early fall, and moved further inland to deer hunting and fruit-gathering sites during late fall and winter (Ellis et al. 1990:114).

During the Late Archaic these developments continued, and new types of projectile points appeared along with the first true cemeteries. Excavations of burials from this time-frame indicate that human remains were often cremated and interred with numerous grave goods, including items such as projectile points, stone tools, red ochre, materials for fire-making kits, copper beads, bracelets, beaver incisors, and bear maxilla masks (Ellis et al. 1990:115–117). Interestingly, these true cemeteries may have been established in an attempt to solidify territorial claims, linking a given band or collection of bands to a specific geographic location.

From the tools unearthed at Archaic period sites it is clear that these people had an encyclopaedic understanding of the environment that they inhabited. The number and density of the sites that have been found suggest that the environment was exploited in a successful and sustainable way over a considerable period of time. The success of Archaic lifeways is attested to by clear evidence of steady population increases over time. Eventually, these increases set the stage for the final period of Pre-Contact occupation—the Woodland Period (Ellis et al. 1990:120).

1.2.1.3 Early and Middle Woodland Periods

The beginning of the Woodland period is primarily distinguished from the earlier Archaic by the widespread appearance of pottery. Although this difference stands out prominently amongst the archaeological remains, it is widely believed that hunting and gathering remained the primary subsistence strategy throughout the Early Woodland period (900–400 BC) and well into the Middle Woodland period (400 BC–AD 600). In addition to adopting ceramics, communities also grew in size during this period and participated in developed and widespread trade relations (Spence et al. 1990; MCL 1997:34).

The first peoples to adopt ceramics in the vicinity of the study area are associated with the Meadowood archaeological culture. This culture is characterized by distinctive Meadowood preforms, side-notched Meadowood points and Vinette 1 ceramics (thick and crude handmade pottery with cord-marked decoration). Meadowood peoples are believed to have been organized in bands of roughly 35 people, and some of the best documented sites are fall camps geared towards the hunting of deer and the gathering of nuts (Spence et al. 1990:128–137).

Ceramic traditions continued to develop during the subsequent Middle Woodland period, and three distinct archaeological cultures emerged in southern Ontario: ‘Point Peninsula’ north and northeast of Lake Ontario, ‘Couture’ near Lake St. Clair and ‘Saugeen’ in the rest of southwestern Ontario (see Map 3). These cultures all shared a similar method of decorating

pottery, using either dentate or pseudo-scallop shell stamp impressions, but they differed in terms of preferred vessel shape, zones of decoration and surface finish (Spence et al. 1990:142–43).

The Point Peninsula complex (400 BC–AD 900) extended through south-central and eastern Ontario, southern Quebec, western and northern New York and north-western Vermont. It is characterized mainly by small camp sites and seasonal village sites that would have been repeatedly used over the years. Point Peninsula material culture is characterized by the use of Vinette 2 ceramics (coil-built pottery with dentate or pseudo-scallop decoration), a wide variety of chipped stone tools, and influences from northern Ontario and the Hopewell area to the south (Spence et al. 1990:157–158). Hopewellian influence, for example, can be seen in the continued use of burial mounds (e.g. the Serpent Mounds near Peterborough) until ca. AD 400 (Wright 1972:44–51).

During the Middle to Late Woodland transition (AD 600–900), the first rudimentary evidence of maize (corn) horticulture appears in southern Ontario. Based on the available archaeological evidence, which comes primarily from the vicinity of the Grand and Credit Rivers, this pivotal development was not particularly widespread (Fox 1990:171, Figure 6.1). The adoption of maize horticulture instead appears to be linked to the emergence of the Princess Point complex, whose material remains include decorated ceramics (combining cord roughening, impressed lines and punctuate designs), triangular projectile points, T-based drills, steatite and ceramic pipes, and ground stone chisels and adzes (Fox 1990:174–188).

The distinctive artifacts and horticultural practices of Princess Point peoples have led to the suggestion that they were directly ancestral to the later Iroquoian-speaking populations of southern Ontario (Warrick 2000:427). These artifacts have not been found in the vicinity of the study area, however, suggesting that a gradual transition between Point Peninsula and Early Iroquoian lifeways took place here instead.

1.2.1.4 Late Woodland Period

In the Late Woodland period (ca. AD 900–1600), the practice of maize horticulture spread beyond the western end of Lake Ontario, allowing for population increases which in turn led to larger settlement sizes, higher settlement density and increased social complexity among the peoples involved. These developments are believed to be linked to the spread of Iroquoian-speaking populations in the area; ancestors of the historically-documented Huron, Neutral and Haudenosaunee Nations. Other parts of southern Ontario, including the Georgian Bay littoral, the Bruce Peninsula and the vicinity of Lake St. Clair, were inhabited by Algonkian-speaking peoples, who were much less agriculturally-oriented.

Late Woodland archaeological remains from the greater vicinity of the study area show three major stages of cultural development prior to European contact: ‘Early Iroquoian’, ‘Middle Iroquoian’ and ‘Late Iroquoian’ (Dodd et al. 1990; Lennox and Fitzgerald 1990; Williamson 1990).

Early Iroquoians (AD 900–1300) lived in small villages (ca. 0.4 ha) of between 75 and 200 people, and each settlement consisted of four or five longhouses up to 15 m in length. The houses contained central hearths and pits for storing maize (which made up 20–30% of their

diet), and the people produced distinctive pottery with decorative incised rims (Warrick 2000:434–438). The best documented Early Iroquoian culture in the local area is the Glen Meyer complex, which is characterized by well-made and thin-walled pottery, ceramic pipes, gaming discs, and a variety of stone, bone, shell and copper artifacts (Williamson 1990:295–304).

Over the next century (AD 1300–1400), Middle Iroquoian culture became dominant in southwestern Ontario, and distinct ‘Uren’ and ‘Middleport’ stages of development have been identified. Both houses and villages dramatically increased in size during this time: longhouses grew to as much as 33 m in length, settlements expanded to 1.2 ha in size and village populations swelled to as many as 600 people. Middle Iroquoian villages were also better planned, suggesting emerging clan organization, and most seem to have been occupied for perhaps 30 years prior to abandonment (Dodd et al. 1990:356–359; Warrick 2000:439–446).

During the Late Iroquoian period (AD 1400–1600), the phase just prior to widespread European contact, it becomes possible to differentiate between the archaeologically-represented groups that would become the Huron, Petun and the Neutral Nations. The study area itself falls within the territory of the Huron, who, in general, appear to have been very similar to the Petun (see Map 4). In the opinion of many scholars, the Huron and Petun likely belonged to the same cultural tradition prior to the 17th century (Ramsden 1990:361). In essence, they can effectively be discussed as one nation—the Huron/Petun.

Prior to European contact, Huron/Petun material culture is characterized by globular-shaped ceramic vessels, ceramic pipes, bone/antler awls and beads, ground stone celts and adzes, chipped stone tools, and even rare copper objects (Ramsden 1990:363–373). The Huron/Petun lived in large villages, often with palisades, and also made use of temporary hunting and fishing camps, cabin sites and small hamlets (Ramsden 1990:373–378). The best documented Huron/Petun sites between Georgian Bay and Lake Simcoe include the Penetang Cluster and the Auger, Ball, Baumann, Warminster, Sopher and Dougall sites (Ramsden 1990:Figure 11.1).

The end of the Late Woodland period can be conveniently linked to the arrival and spread of European fur traders in southern Ontario, and a terminus of AD 1600 effectively serves to demarcate some substantial changes in Aboriginal material culture. Prior to the establishment of the fur trade, items of European manufacture are extremely rare at Huron/Petun sites, save for small quantities of reused metal scrap. With the onset of the fur trade ca. AD 1580, European trade goods such as kettles, iron axes and knives, and glass beads become much more plentiful. Interestingly, a general deterioration in the quality of these metal goods is discernable over time, which may have been related to European cost-cutting efforts (Ramsden 1990:373).

1.2.2 Early Contact

1.2.2.1 European Explorers

The first European to venture into what would become southern Ontario was Étienne Brûlé, who was sent by Samuel de Champlain in the summer of 1610 to accomplish three goals: 1) to consolidate an emerging friendship between the French and the First Nations, 2) to learn their languages, and 3) to better understand their unfamiliar customs. Other Europeans would

subsequently be sent by the French to train as interpreters. These men became *coureurs de bois*, “living Indian-style ... on the margins of French society” (Gervais 2004:182). Such ‘woodsmen’ played an essential role in all later communications with the First Nations.

Champlain himself made two trips to Ontario: in 1613, he journeyed up the Ottawa River searching for the North Sea, and in 1615/1616, he travelled up the Mattawa River and descended to Lake Nipissing and Lake Huron to explore Huronia (Gervais 2004:182–185). He learned about many First Nations groups during his travels, including prominent Iroquoian-speaking peoples such as the Wendat (Huron), Petun (Tobacco) and ‘*la nation neutre*’ (the Neutrals), and a variety of Algonkian-speaking Anishinabeg bands.

Champlain’s *Carte de la Nouvelle France* (1632) encapsulates his accumulated knowledge of the area (see Map 5). Although the distribution of the Great Lakes is clearly an abstraction in this early map, important details concerning the terminal Late Woodland occupation of southern Ontario are discernable. Numerous Aboriginal groups are identified throughout the area, for example, and Huron lands are shown in the vicinity of Lake Simcoe. The absence of Huron sites along *Lac St. Louis* (Lake Ontario) reflects a settlement pattern shift towards Huronia that began in the early 17th century (Ramsden 1990:383).

1.2.2.2 *Trading Contacts and Conflict*

The first half of the 17th century saw a marked increase in trading contacts between the First Nations and European colonists, especially in southern Ontario. For the Huron in particular, this time was marked by intensive contact with French explorers and missionaries. The Jesuits established their first permanent mission among the Huron in 1634, and in 1639, under the guidance of Father Jerome Lalemant, Sainte-Marie was built as a central mission to the Huron (Heidenreich 1990:487). This fenced community, situated on the eastern bank of the Wye River, consisted of barracks, a church, workshops, residences, and a sheltered area for Aboriginal visitors. By 1648, 66 Frenchmen had come to reside at Sainte-Marie (SMATH 2015).

Initially, the missionaries from Sainte-Marie were assigned as parish priests to the major Huron villages in the area, but as the Jesuits grew more numerous, non-Huron groups were similarly engaged (Heidenreich 1990:487). During this period, pottery and pipe styles became more homogeneous amongst the Huron, and many of their lithic and bone tools began to be replaced by imported European items (Ramsden 1990:383).

Nicholas Sanson’s *Le Canada, ou Nouvelle France* (1656) provides an excellent representation of southern Ontario at this time of heightened contact. Here the lands of the Huron Nation are clearly labelled, and the settlement shift from Lake Ontario to the vicinity of Huronia and Lake Simcoe is apparent (see Map 6). Unfortunately, the increased contact between the First Nations and the Europeans had the disastrous consequence of introducing foreign diseases into many communities. Over the course of the 17th century, these diseases progressed from localized outbreaks to much more widespread epidemics (MCL 1997:35; Warrick 2000:457).

1.2.2.3 Five Nations Invasion

The importance of European trading contacts eventually led to increasing factionalism and tension between the First Nations, and different groups began to vie for control of the lucrative fur trade (itself a subject of competition between the French and British). In what would become Ontario, the Huron, the Petun, and their Anishinabeg trading partners allied themselves with the French. In what would become New York, the League of the Haudenosaunee (the Five Nations Iroquois at that time) allied themselves with the British. The latter alliance may have stemmed from Champlain's involvement in Anishinabeg and Huron attacks against Iroquoian strongholds in 1609 and 1615, which engendered enmity against the French (Lajeunesse 1960:xxix). Interposed between the belligerents, the members of the Neutral Nation refused to become involved in the conflict.

Numerous military engagements occurred between the two opposing groups during the first half of the 17th century, as competition over territories rich in fur-bearing animals increased. These tensions boiled over in the middle of the 17th century, leading to full-scale regional warfare (MNCFN 2010:5). In a situation likely exacerbated by epidemics brought by the Europeans and the decimation of their population, a party of roughly 1,000 Mohawk and Seneca warriors set upon Huronia in March 1649. The Iroquois desired to remove the Huron Nation altogether, as they were a significant obstacle to controlling the northern fur trade (Hunt 1940:91–92).

The Huron met their defeat in towns such as Saint Ignace and Saint Louis (Sainte-Marie was abandoned and burned by the Jesuits in the spring of 1649). Those that were not killed were either adopted in the Five Nations as captives or dispersed to neighbouring regions and groups (Ramsden 1990:384). The Petun shared a similar fate, and the remnants of the affected groups formed new communities outside of the disputed area, settling in Quebec (modern-day Wendake), in the area of Michilimackinac and near Lake St. Clair (where they were known as the Wyandot).

Anishinabeg populations from southern Ontario, including the Ojibway, Odawa and Pottawatomi, fled westward to escape the Iroquois (Schmalz 1977:2). The Neutral were targeted in 1650 and 1651, and the Iroquois took multiple frontier villages (one with over 1,600 men) and numerous captives (Coyne 1895:18). The advance of the Iroquois led to demise of the Neutral Nation as a distinct cultural entity (Lennox and Fitzgerald 1990:456).

For the next four decades, southern Ontario remained an underpopulated wilderness (Coyne 1895:20). This rich hunting ground was exploited by the Haudenosaunee to secure furs for trade with the Dutch and the English, and settlements were established along the north shore of Lake Ontario at places like Teiaiagon on the Humber River and Ganatswekwyagon on the Rouge River (Williamson 2008:51). The Haudenosaunee are also known to have traded with the northern Anishinabeg during the second half of the 17th century (Smith 1987:19).

Due to their mutually violent history, the Haudenosaunee did not permit French explorers and missionaries to travel directly into southern Ontario for much of the 17th century. Instead, they had to journey up the Ottawa River to Lake Nipissing and then paddle down the French River into Georgian Bay (Lajeunesse 1960:xxix). New France was consequently slow to develop in

southern Ontario, at least until the fall of several Iroquoian strongholds in 1666 and the opening of the St. Lawrence and Lake Ontario route to the interior (Lajeunesse 1960:xxxii).

1.2.2.4 Anishinabeg Influx

The fortunes of the Five Nations began to change in the 1690s, as disease and casualties from battles with the French took a toll on the formerly-robust group (Smith 1987:19). On July 19, 1701, the Haudenosaunee ceded lands in southern Ontario to King William III with the provision that they could still hunt freely in their former territory (Coyne 1895:28). However, this agreement appears to have lacked any sort of binding formality.

According to the traditions of the Algonkian-speaking Anishinabeg, Ojibway, Odawa and Potawatomi bands began to mount an organized counter-offensive against the Iroquois in the late 17th century (MNCFN 2010:5). Around the turn of the 18th century, the Anishinabeg of the Great Lakes expanded into Haudenosaunee lands, and attempted to trade directly with the French and the English (Smith 1987:19). This led to a series of battles between the opposing groups, in which the Anishinabeg were more successful (Coyne 1895:28).

Haudenosaunee populations subsequently withdrew into New York State, and Anishinabeg bands established themselves in southern Ontario. Many of these bands were mistakenly grouped together by the immigrating Europeans under the generalized designations of ‘Chippewa/Ojibway’ and ‘Mississauga’. ‘Mississauga’, for example, quickly became a term applied to many Algonkian-speaking groups around Lake Erie and Lake Ontario (Smith 1987:19), despite the fact that the Mississaugas were but one part of the larger Ojibway Nation (MNCFN 2010:3).

The Anishinabeg are known to have taken advantage of the competition between the English and French over the fur trade, and they were consequently well-supplied with European goods. The Mississaugas, for example, traded primarily with the French and received “everything from buttons, shirts, ribbons to combs, knives, looking glasses, and axes” (Smith 1987:22). The British, on the other hand, were well-rooted in New York State and enjoyed mutually beneficial relations with the Haudenosaunee.

As part of this influx, many members of the Algonkian-speaking Ojibway, Potawatomi and Odawa First Nations came back to Lake Huron littoral. Collectively, these people came to be known as the Chippewas of Saugeen Ojibway Territory (also Saugeen Ojibway Nation). These Algonkian-speakers established themselves in the Bruce Peninsula, all of Bruce and Grey Counties, and parts of Huron, Dufferin, Wellington, and Simcoe Counties (Schmalz 1977:233).

Throughout the 1700s and into the 1800s, Anishinabeg populations hunted, fished, gardened and camped along the rivers, floodplains and forests of southern Ontario (Warrick 2005:2). However, their ‘footprint’ was exceedingly light, and associated archaeological sites are both rare and difficult to detect. Historical records often play a pivotal role in reconstructing Anishinabeg lifeways during the timeframe, as the first European colonists often wrote about the locations of Aboriginal camps and hunting grounds. As an example, a French ‘survey’ of the Aboriginal population in the vicinity of Lake Simcoe conducted in 1736 indicates that Matchedash Bay was

a principal area of Ojibway settlement, a situation that would not have been apparent based on excavated evidence alone (Innisfil Library 2012).

Historical maps from the 18th century likewise shed valuable light on the contemporary cultural landscape. H. Popple's *A Map of the British Empire in America* (1733), for example, does not show any prominent settlements in the vicinity of the study area, which is a result of the ephemeral environmental impact of the mobile Ojibway (see Map 7). Interestingly, this map also depicts the 'Toronto' and 'Tanaovate' waterways, which are widely held to represent the Severn and Humber Rivers, respectively. J.B. D'Anville's *Canada Louisiane et Terres Angloises* (1755) shows the approximate location of the ruin of Sainte-Marie, and proclaims that it was 'destroyed by the Iroquois' over a century after the event (see Map 8).

1.2.2.5 Relations and Ambitions

The late 17th and early 18th centuries bore witness to the continued growth and spread of the fur trade across all of what would become the Province of Ontario. The French, for example, established and maintained trading posts along the Upper Great Lakes, offering enticements to attract fur traders from the First Nations. Even further north, Britain's Hudson Bay Company dominated the fur trade. Violence was common between the two parties, and peace was only achieved with the Treaty of Utrecht in 1713 (Ray 2014). Developments such as these resulted in an ever-increasing level of contact between European traders and local Aboriginal communities.

As the number of European men living in Ontario increased, so too did the frequency of their relations with Aboriginal women. Male employees and former employees of French and British companies began to establish families with these women, a process which resulted in the ethnogenesis of a distinct Aboriginal people: the Métis. Comprised of the descendants of those born from such relations (and subsequent intermarriage), the Métis emerged as a distinct Aboriginal people during the 1700s (MNO 2015).

Métis settlements developed along freighting waterways and watersheds, and were tightly linked to the spread and growth of the fur trade. These settlements were part of larger regional communities, connected by "the highly mobile lifestyle of the Métis, the fur trade network, seasonal rounds, extensive kinship connections and a shared collective history and identity" (MNO 2015).

In 1754, hostilities over trade and the territorial ambitions of the French and the British led to the Seven Years' War (often called the French and Indian War in North America), in which many Anishinabeg bands fought on behalf of the French. After the French surrender in 1760, these bands adapted their trading relationships accordingly, and formed a new alliance with the British (Smith 1987:22). In addition to cementing British control over the Province of Quebec, the Crown's victory over the French also proved pivotal in catalyzing the Euro-Canadian settlement process. The resulting population influx caused the demographics of many areas to change considerably.

R. Bonne's *Partie de l'Amérique Septentrionale* (1783) provides an excellent view of the ethnic landscape of southern Ontario prior to the widespread arrival of European settlers (see Map 9). This map depicts Fort Toronto on the north shore of Lake Ontario, for example, which was

abandoned and burned by the French garrison during their retreat from the British in 1759 (Williamson 2008:56). The remainder of what would become southern Ontario appears to have been largely untouched by British colonialism at this time.

1.2.3 The Euro-Canadian Era

1.2.3.1 British Colonialism

With the establishment of absolute British control came a new era of land acquisition and organized settlement. In the *Royal Proclamation* of 1763, which followed the Treaty of Paris, the British government recognized the title of the First Nations to the land they occupied. In essence, the ‘right of soil’ had to be purchased by the Crown prior to European settlement (Lajeunesse 1960:cix). Numerous treaties and land surrenders were accordingly arranged by the Crown, and great swaths of territory were acquired from the Ojibway and other First Nations. These first purchases established a pattern “for the subsequent extinction of Indian title” (Gentilcore and Head 1984:78).

The first land purchases in Ontario took place along the shores of Lake Ontario and Lake Erie, as well as in the immediate ‘back country’. Such acquisitions began in August 1764, when a strip of land along the Niagara River was surrendered by Six Nations, Chippewa and Mississauga chiefs (NRC 2010). Although many similar territories were purchased by the Crown in subsequent years, it was only with the conclusion of the American Revolutionary War (1775–1783) that the British began to feel a pressing need for additional land. In the aftermath of the conflict, waves of United Empire Loyalists came to settle in the Province of Quebec, driving the Crown to seek out property for those who had been displaced. This influx had the devastating side effect of sparking the slow death of the fur trade, which was a primary source of income for many First Nations groups.

By the mid-1780s, the British recognized the need to 1) secure a military communication route from Lake Ontario to Lake Huron other than the vulnerable passage through Niagara, Lake Erie and Lake St. Clair; 2) acquire additional land for the United Empire Loyalists; and 3) modify the administrative structure of the Province of Quebec to accommodate future growth. The first two concerns were addressed through the negotiation of numerous ‘land surrenders’ with Anishinabeg groups north and west of Lake Ontario, and the third concern was mitigated by the establishment of the first administrative districts in the Province of Quebec.

The alternate military communication route was the Toronto Carrying Place, which was an important overland trade and transit route linking Lake Ontario to Georgian Bay. In August 1785, Deputy Surveyor General John Collins was sent to acquire the northern part of this trail from the Ojibway of *Lac La Clie* (Lake Simcoe), and he negotiated for the purchase of “one mile on each side of the foot path from the Narrows at Lake Simcoe to Matchedash Bay with three miles and a half square at each end of the road, as well as one mile on each side of the Severn River” (Surtees 1994:106).

The ‘Collins Purchase’ was very problematic, however, as no copy of the actual treaty was ever found and the content of the agreement was based entirely on the accounts of Collins and his interpreter (see Map 10). No payment was made to the Ojibway, and Collins noted that “they left

it to ‘their good father’ to determine the amount to be paid” (Surtees 1994:106). Two years later, in September 1787, Collins would negotiate for the purchase of the southern part of the Toronto Carrying Place. This ‘Toronto Purchase’ was also poorly documented, and had to be renegotiated in August 1805 (NRC 2010).

On July 24, 1788, Sir Guy Carleton, Baron of Dorchester and Governor-General of British North America, divided the Province of Quebec into the administrative districts of Hesse, Nassau, Mecklenburg and Lunenburg (AO 2011). The vicinity of the study area fell within the Nassau District at this time, which consisted of a massive tract of land extending due north from the head of Bay of Quinte in the east and the tip of Long Point on Lake Erie in the west. According to early historians, “this division was purely conventional and nominal, as the country was sparsely inhabited ... the necessity for minute and accurate boundary lines had not become pressing” (Mulvany et al. 1885:13).

Further change came in December 1791, when the Parliament of Great Britain’s *Constitutional Act* created the Provinces of Upper Canada and Lower Canada from the former Province of Quebec. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada, and he became responsible for governing the new province, directing its settlement and establishing a constitutional government modelled after that of Britain (Coyne 1895:33).

Simcoe initiated several schemes to populate and protect the newly-created province, employing a settlement strategy that relied on the creation of shoreline communities with effective transportation links between them. These communities, inevitably, would be composed of lands obtained from the First Nations, and many more purchases were subsequently arranged.

In July 1792, Simcoe divided the province into 19 counties consisting of previously-settled lands, new lands open for settlement and lands not yet acquired by the Crown. These new counties stretched from Essex in the west to Glengarry in the east. Three months later, in October 1792, an Act of Parliament was passed whereby the four districts established by Lord Dorchester were renamed as the Western, Home, Midland and Eastern Districts (AO 2011).

The vicinity of the study area fell nominally within the boundaries of the Kent County at this time, which comprised all of the territory of Upper Canada that what not included in the other 18 counties (AO 2011). In essence, Kent was the largest county ever created, stretching from Lake Erie to Hudson’s Bay (McGeorge 1939:36). This arrangement would not last, however, and the ‘northern’ parts of Kent County would soon be removed to form separate counties.

In 1793, Simcoe visited the Lake Simcoe area in order to discern the ideal location for a new naval harbour. He quickly settled on the site of Penetanguishene, and subsequently began planning for the fort that would secure British control over Georgian Bay and Lake Huron. During negotiations on May 19, 1795, the Chippewas agreed to relinquish the northern tip of the Penetanguishene Peninsula to the British (see Map 10), and the lands were formally acquired on May 22, 1798 (NRC 2010). The surrender was arranged by William Claus for a sum of 101 Quebec pounds, and the Ojibway assured Simcoe that the price included the lands discussed in the Collins Purchase (Hunter 1909a:12; Surtees 1994:107).

1.2.3.2 Simcoe County

Shortly after the creation of Upper Canada, the original arrangement of the province's districts and counties was deemed inadequate. As population levels increased, smaller administrative bodies became desirable, resulting in the division of the largest units into more 'manageable' component parts. The first major changes in the vicinity of the study area took place in 1798, when an Act of Parliament called for the realignment of the Home and Western Districts (AO 2011). Simcoe County came into existence at this time, although its status as a 'county' existed only on paper for military and enlistment purposes (Hunter 1909a:16).

The vicinity of the study area became part of Simcoe County in the Home District at this time. D.W. Smyth's *A Map of the Province of Upper Canada* (1800) and J. Purdy's *A Map of Cabotia* (1814) clearly show the layout of the earliest townships between Lake Ontario and Lake Simcoe, and demonstrates that the vicinity of the study area remained largely untouched by early British colonialism (see Map 11–Map 12). The only settlement indicated is the town plot for the military base at Penetanguishene.

When the Euro-Canadian settlement process accelerated in the early 19th century, the Crown moved to acquire additional lands in Simcoe County. S.S. Wilmot was sent to explore the territory between Kempenfelt Bay and the Penetanguishene Peninsula in March 1808, and an 'agreement to purchase' was made for a substantial tract of land in the same year. In 1811, Wilmot surveyed the Penetanguishene Road so that the Northwest Company could transport their furs from Lake Huron to the Town of York (Hunter 1909a:13). The treaty was not formally ratified until November 18, 1815, as the War of 1812 disrupted the Crown's plans. With the completion of the 'Lake Simcoe Land Purchase' (see Map 10), the government acquired 101,250 ha in exchange for 4,000 Quebec pounds worth of goods (NRC 2010).

The remainder of Simcoe County was formally obtained on October 17, 1818, when the 'Lake Simcoe-Nottawasaga Purchase' was completed with the Ojibway (Hunter 1909a:12–15). This purchase, also arranged by William Claus, involved the acquisition of approximately 644,760 ha of land to the west of Lake Simcoe (see Map 10). Chief Yellowhead, the leader of the Ojibway delegates, agreed to sell this massive tract for an annuity of 1,200 pounds of currency in goods, although there was no mention of how the annuity was to be distributed (NRC 2010). Unlike the earlier land purchases in the area, which were geared towards military or trade-related goals, the 1818 purchase was carried out for the purpose of acquiring lands for Euro-Canadian settlement (Innisfil Library 2012). These lands would eventually be divided amongst Simcoe, Grey, Wellington and Dufferin Counties.

After the cession of this large tract of land, the government moved swiftly to establish townships for settlement (Hunter 1909a:39). By 1821, the majority of the surveys were complete, and the boundaries of Simcoe County were formally set out in an Act of Parliament (AO 2011). All of the lands were fully surveyed by the mid-1830s, at which time Simcoe County comprised 30 townships (see Map 13).

The first Euro-Canadian settlers in Simcoe County consisted of a band of six fugitive Scottish families from Lord Selkirk's Red River Settlement. In 1819, these families settled southwest of Bradford, in what was known as the Scotch Settlement. That same year, three Irish families

settled near the Holland River, two families settled along the edge of the Township of Tecumseth, and one family settled at Big Bay Point. A dozen families also settled along the Penetanguishene Road in the Townships of Oro and Vespra in 1819. Other families homesteaded in Penetanguishene after the garrison was transferred from Nottawasaga in 1818. Growth in the area was slow, however, mainly due to a lack of good roads (Smith 1846:171). Settlers did not arrive quickly or in great numbers until 1831, when the Reform Bill riots in Britain caused many people to emigrate to more peaceful areas (Hunter 1909a:62–63).

In the 1830s and early 1840s, the layout of what would become southern Ontario was significantly altered through the creation of the Huron, Brock, Wellington, Talbot and Simcoe Districts (AO 2011). An Act of Parliament provided for the issue of a Proclamation to declare Simcoe as a separate and distinct district in 1837 (Hunter 1909a:236). In that same year, the southwestern Townships of Proton, Melancthon, Luther and Amaranth were added to Waterloo County prior to the incorporation of the Wellington District. In 1838, the easternmost Townships of Rama, Mara and Thorah were ceded to York County (see Map 14). In February 1841, Simcoe became part of Canada West in the new United Province of Canada.

The best-settled areas in the mid-19th century included West Gwillimbury and Tecumseth, and good farms were also established on the road from Barrie to Penetanguishene (Smith 1846:171). The District Town was Barrie, and other significant early villages developed at Bradford, Bond Head, Middleton, Penetanguishene, Orillia and Coldwater. Simcoe County boasted a population of 12,592 by 1842. A total of 18,079 ha were under cultivation at that time, and 10 grist mills and 23 saw mills were in operation. By 1844, the cultivated lands increased to 20,931 ha, and there were 12 grist mills and 29 saw mills in operation (Smith 1846:171).

Following the abolition of the district system in 1849, the counties of Canada West were reconfigured once again. The boundaries of Simcoe County were redefined, and the western Townships of St. Vincent, Euphrasia, Artemesia, Collingwood and Osprey were transferred to the newly-formed Grey County in 1851 (see Map 15). Reasons behind this change were linked to the construction of the Ontario, Simcoe & Huron Union Railway (the Northern Railway) between Toronto and Georgian Bay (approved by Acts of Parliament in 1849 and 1851). Simcoe agreed to take on a debt of 50,000 pounds for this project, which the distant Townships of St. Vincent, Collingwood, Euphrasia, Artemisia and Osprey strongly opposed (Hunter 1909a:163–165).

Simcoe County acquired a large tract of land extending from the Severn River to the French River in 1851 following the completion of the ‘Robinson Purchase’. These lands would later be incorporated into the Muskoka and Parry Sound Districts, however (Hunter 1909a:243). Simcoe was reduced in size when the Townships of Mulmer and Mono were transferred to the newly-formed Dufferin County (see Map 16). The Act of Parliament to create Dufferin County was passed in 1874, and it was officially proclaimed in 1881 (AO 2011). Simcoe County came to consist of the Townships of Adjala, Tecumseth, West Gwillimbury, Tosorontio, Essa, Innisfil, Nottawasaga, Sunnidale, Flos, Vespra, Oro, Medonte, Tiny, Tay, South Orillia, North Orillia and Matchedash (see Map 17).

1.2.3.3 Township of Sunnidale

In historic times, the Township of Sunnidale was bordered by the Townships of Flos and Vespra to the northeast, the Townships of Tosorontio and Essa to the southeast, the Township of Nottawasaga to the west and Nottawasaga Bay to the north. The early settlers here enjoyed a favourable environmental setting, as the township was well-watered by the Nottawasaga River in the east, the Mad River in the southeast, Coates Creek in the south-centre, McIntyre Creek in the centre, as well as Warrington Creek and Lamont (Riley's) Creek in the northwest. According to one historical source, "much of the land in the township is hilly and broken" (Smith 1846:185).

This area made its first appearance in Euro-Canadian history during the War of 1812, well before the land was purchased from the Anishinabeg and subsequently surveyed for settlement. With the outbreak of hostilities between Britain and the United States, Upper Canada bore the brunt of the American attack, and in a decisive battle on September 9, 1813, the Americans gained control of the Upper Great Lakes (Watson 2009:1). The last surviving British ship was the *HMS Nancy*, which was originally a fur-trading vessel built at Fort Detroit in 1789 (FNIWBP 2011). On August 13, 1814, three American ships arrived at the mouth of the Nottawasaga River and found the *Nancy*, sinking her and shutting down the vital supply route.

The war ended soon after the sinking of the *Nancy*, and the British regained full control of the Upper Great Lakes and Upper Canada. In 1816, they founded a fort about 6.4 km from the mouth of the Nottawasaga, which they called Fort Nottawasaga, or Schoonertown (Watson 2009:1). The fort was constructed of logs and artificially-elevated earthworks, and was manned by approximately 20 soldiers garrisoned under the command of Lieutenant Caldwell (Morrison 1997:16). Although originally intended to be the principal military establishment on Lake Huron, Schoonertown only functioned for two years. In 1818, the British moved their military establishment to Penetanguishene (Watson 2009:1). The fort is known to have been located near the modern Schoonertown Bridge.

Despite the area's early military importance, Euro-Canadian settlement in the area was relatively slow. Although the neighbouring Township of Flos was surveyed by John Goessman in 1821 and 1822 (Hunter 1909a:41), the Township of Sunnidale was not surveyed until 1831/1832 (Cumming 1970:16). Thomas Kelly laid out the main lots and concessions at this time, save for a small portion in the southeast. William Hawkins conducted the Sunnidale Road Survey in 1883, which included the road between the Nottawasaga River and Nottawasaga Bay as well as the lots on either side. Hawkins also surveyed the town plots of Rippon in the southeast and Hythe in the northwest, but neither were ever settled (Cumming 1970:17).

In 1834, two ranges of 2.0 ha lots ('Park Lots') were laid out west of the Sunnidale Road in the first, second and third concessions, and these were given as free grants to Henry Seelor, John Donald, Duncan and James Shaw, Alexander and James Gillespie, Samuel Lamont, Alexander McNeill and others. The Park Lots were soon given up in exchange for other properties in the township, however, and the government subsequently ignored the survey. Henry Seelor was the first to take up land near Sunnidale Corners, and Alexander Gillespie, Samuel Lamont and several of the Shaws also took up lots to the north. McNeill built a tavern and stable between the second and third concessions, which eventually developed into the community of Brentwood (Cumming 1970:17).

Population growth was relatively stagnant following the surveys, and although it has been argued that the area's sandy soils were unattractive to early farmers (Watson 2009:1), the lack of roads, mills and markets was the more likely reason (Cumming 1970:17). By 1846, only 1,272 ha had been taken up in the township, 153 ha of which were under cultivation. The population of the Township of Sunnidale was 174 at that time (Smith 1846:184–185).

The majority of the forest remained untouched by the mid-19th century, save for the Park Survey, the new settlement at Sunnidale and the narrow limits of a few wagon roads. In 1853, the Patons settled at New Lowell, and Martin and Neil Harkin established themselves on Crown Hill in the southwest ca. 1854. A mill was also built by Henry Boyce opposite the old fort on the Nottawasaga River at this time, representing the first improvements in the northern part of the township (Cumming 1970:17). In 1860, Sunnidale was separated from Vespra for municipal purposes, and its first council was created. In 1861, the settlers in the southeastern part of the township called for the survey of the area, and Henry Creswick, Jr. was ultimately commissioned to complete the survey (Cumming 1970:17).

Although the land was not ideal for farming, the presence of many large trees in the Wasaga Beach area resulted in the development of a very successful logging industry in the northern part of the township. This industry boomed throughout the 19th century on account of the Nottawasaga River, which served as a natural transportation corridor for floating timber up river and across the Nottawasaga Bay to Collingwood (Watson 2009:2). By 1846, there was already one saw mill operating within the township (Smith 1846:185).

In order to take advantage of this successful industry, the Ontario, Simcoe & Huron Union Railway (the Northern Railway) was proposed to link York (Toronto) and Georgian Bay. Construction began in 1851 on the first leg to Barrie, and it reached Kempenfeldt Bay in 1853 (Hunter 1909a:165). Plans were initially made to develop Hythe as a station along one of the proposed railway alignments near the mouth of the Nottawasaga River, but the sandy soil prevented the creation of a proper harbour, and the railway was re-routed to Collingwood (FNIWBP 2009; Watson 2009:2). The opening of the railway through Sunnidale in 1855 had a major impact on the development of the area, as farmers now had access to markets and timber could be readily transported. By the late 19th century, the timber resources became exhausted, but much of the land had been cleared and fine farms developed (Cumming 1970:17).

The area of Wasaga Beach in the northeast remained a locale for logging and small-scale fishing over the ensuing decades. However, in 1870, John Van Vlack purchased 28 ha near the Nottawasaga River in the northwestern corner of the Township of Flos. As one of the area's first residents, Van Vlack built a saw mill, ran a store and served as the area's first postmaster. As additional settlers arrived to work for Van Vlack or to start their own businesses, the village quickly developed. By the end of the 1880s, the beach area around the Van Vlack settlement became known as Wasaga Beach, a derivative of 'Nottawasaga'. By the turn of the 20th century, this area had a hotel and a few cottages, and it became a favoured locale for picnics and vacations (Watson 2009:2–3).

Aside from the Wasaga Beach in the northeast, the most prominent communities in the Township of Sunnidale included Sunnidale Corners, Sunnidale Village, New Lowell and Brentwood. The majority of these settlements were located in the southern part of the township along or near the Northern Railway (see Map 18).

Sunnidale Corners contained the first post office in the township, and it comprised an extensive farming settlement. By the late 19th century, the community contained a brick church (Presbyterian), and other churches were located to the north (Wesleyan Methodist, the first church in the township) and east (Methodist). Sunnidale developed as a result of the opening of a station on the Northern Railway and the erection of a hotel. Mr. Hutchinson laid out the village plot, but no plan was registered until June 1869. Following a fire in 1868 which destroyed all but one shanty and the railway water tank, a saw & shingle mill was opened and several houses were constructed (the station and post office were not rebuilt). New Lowell developed mainly as a result of the activities of Jacques & Hay, a furniture manufacturer in Toronto. This company established large mills at New Lowell and employed 40 to 50 labourers to produce flour, lumber, furniture in the rough and curled hair for upholstery. Brentwood was laid out in July 1868, and it contained two saw mills, two churches, a brick schoolhouse, a post office, two hotels, a general store as well as blacksmith and shoemaker shops by the late 19th century (Cumming 1970:17).

1.2.3.4 Study Area

As discussed in Section 1.1, the study area falls on part of Lots 13–15, Concession 10 and part of Lots 13, Concession 11–12 in the Geographic Township of Sunnidale (Simcoe County). The lots in this area were laid out in the early 19th century, and the vicinity of the study area was relatively well-settled for the bulk of the Euro-Canadian period.

In an attempt to reconstruct the historic land use of the study area, ARA examined three historical maps that documented past residents, structures (e.g., homes, businesses and public buildings) and features during the mid- and late 19th century. Specifically, the following maps were consulted:

- W. Hawkins' *Plan of the Township of Sunnidale* (1842) at an unidentified scale (AO 2015);
- J. Hogg's *Hogg's Map of the County of Simcoe* (1871) at a scale of 80 chains to 1 inch (OHCMP 2015); and
- The *Map of Sunnidale Township* from H. Belden & Co.'s *Illustrated Atlas of the Dominion of Canada: Simcoe Supplement* (1881) at a scale of 100 chains to 1 inch (McGill University 2001).

The consulted historical maps were georeferenced and integrated into ARA's GIS database, and the limits of the study area are illustrated in Map 19–Map 21.

W. Hawkins' *Plan of the Township of Sunnidale* (1842) lists Alexander Macgines and Patrick Quin as the owners of Lot 13, Concession 10, John O. Fitch as the owner of 14, Concession 10 and David Thompson as the owner of Lot 15, Concession 10. Lots 13,

Concessions 11–12 were occupied by Dorothy G(raft?) and A(llan?) Campbell, respectively (see Map 19). No structures or cultural features are illustrated within the study area, however.

J. Hogg's *Hogg's Map of the County of Simcoe* (1871) identifies properties owned by I. Spicher and J. Risbrough on Lot 13, Concession 10, J. Davis on Lot 14, Concession 11, Melville & Fair and J. Dott on Lot 15, Concession 12 and M. Spicher on Lot 13, Concession 11 (see Map 20). The owner of Lot 13, Concession 12 is not listed, and no structures are depicted on any the properties.

The *Map of Sunnidale Township* from H. Belden & Co.'s *Illustrated Atlas of the Dominion of Canada: Simcoe Supplement* (1881) lists John Risebrough as the owner of half (40.5 ha) of Lot 13 and Michael J. Burkholder as the owner of the entirety (80.9 ha) of Lot 14 (see Map 21). The Risebrough homestead is shown in the west-central of part Lot 13 along Sunnidale Sideroad 12/13, and the associated biographical entry states that Risebrough was a farmer who was born in York County in 1838, settled in Sunnidale in 1869 and collected his mail from the Stayner post office. The Burkholder homestead is illustrated in the north-central portion of Lot 14 along Highway 26, and the associated biographical entry states that Burkholder was a farmer who was born in 1854, settled in Sunnidale in 1880 and also collected his mail from Stayner. Interestingly, a historic Methodist church is illustrated in the northwestern corner of Lot 13 along Highway 26, which likely once stood to the east of the proposed collector line corridor.

The owners of Lot 15, Concession 10 and Lots 13, Concession 11–12 are not listed in H. Belden & Co.'s *Illustrated Atlas of the Dominion of Canada: Simcoe Supplement* (1881). This does not mean that these lots were unoccupied, however, as typically only subscribers to the *Illustrated Atlas* would be shown on the map. The possibility exists, therefore, that the residents of these lots were simply not subscribers, and were accordingly omitted (McGill University 2001).

In December 1939, the signing of the British Commonwealth Air Training Plan (BCATP) agreement resulted in the creation of additional Royal Canadian Air Force (RCAF) airfields and hangers across Canada, and numerous relief fields were created to mitigate the closure of any main airfield (EA 2010). The No. 1 Service Flying Training School (1 SFTS) at Station Camp Borden required two relief airfields, which typically contained either grass or paved runways, one hanger, maintenance facilities and barracks for overnight stays. The No. 1 Relief Landing Field (RCAF Detachment Edenvale) was built on Lots 13–15, Concession 10 and the No. 2 Relief Landing Field (RCAF Detachment Alliston) was built south of Alliston (Forsyth 2003).

Interestingly, the field at Edenvale was assessed as a suitable location in November 1939, even before the BCATP agreement was signed. The site was described as being located “on slight rolling hills, with 500 acres cleared and 150 acres lightly wooded ... the drainage was excellent and there were three gravel pits on the site” (EA 2010). RCAF Detachment Edenvale consisted of three 914 m asphalt runways and a total of 12 buildings (including a single hangar, barracks, an airmen's mess and an administration building), and the first recorded landing was in August 1941, even before the field was fully operational. Due to construction activities at Camp Borden, No. 2 Squadron of the SFTS found accommodations at Edenvale. The Detachment was also the site of the Advanced Tactical Training Unit (ATU), a sub-unit of No. 1 SFTS, which conducted bombing training. Students spent three weeks at the ATU, living

in the original farmhouse on the property, while the instructors stayed in the barracks. All training activities at Edenvale ceased in February 1945, although a small staff of caretakers remained behind. The last recorded flying operation was an accident on August 9, 1945, and the field was formally closed on September 10, 1945 (EA 2010; Forsyth 2015).

Following the closure, Edenvale was turned over the Department of Transport with the caveat that the RCAF could use it as a relief field, and 11 buildings were scheduled for demolition. However, a freeze was placed on all activities that could alter the field, and the demolitions never occurred. In April 1949, Edenvale was transferred back to the RCAF to allow Camp Borden to salvage fixtures and equipment (EA 2010).

ARA consulted a historic aerial image from 1954 to gain a better understanding of the study area's more recent land use (see Map 22). The subject lands comprised the abandoned No. 1 Relief Landing Field (RCAF Detachment Edenvale), the southern fence line, as well as adjacent agricultural lands and wooded areas at this time. No other structural features or land use details could be gleaned from the aerial photograph (University of Toronto 2009).

In 1950, the former RCAF Detachment Edenvale was sold to Summervale Farms, and the site was used as a racetrack for cars and motorcycles (organized by the Canadian Automobile Sports Club). The field was known as the Stayner Speedway and the Edenvale Raceway at various times, and it was again abandoned in 1959. In 1962, the site was re-activated by the Canadian Army as a remote radio communications station for Camp Borden. A single level underground bunker was constructed in the south at this time for communications personnel. The bunker was vacated in 1988 and closed in 1994, when the property was abandoned (Forsyth 2015).

The airfield was later resurrected by Toronto businessman Milan Kroupa Sr., who acquired Lots 13–14 from the federal government and began to restore the field. By 2004, the main building had been renovated to accommodate residential apartments, administrative offices, a flight school and a new restaurant, and the former RCAF Detachment Edenvale became the Edenvale Flying Club/Edenvale Aerodrome. Initially, only Runway 08-26 (the east-west runway) was reopened and a new 15.2 x 45.7 x 4.3 m steel-sided hangar was built to the north. In 2006, two new hangars were constructed, providing 40 new spaces for aircraft, and three additional hangars were added shortly afterwards. In 2009, a new paved 1,219 m runway opened alongside one of the original abandoned runways. A 1,579 sq. m manufacturing facility was also built near the bunker. A seventh hangar was built in 2014. Other than the airfield, the roadways and the hangar pad, very little remains of the former RCAF Detachment Edenvale, as the other buildings were either demolished or relocated (EA 2010; Forsyth 2015).

1.2.4 Summary of Past and Present Land Use

During Pre-Contact and Early Contact times, the vicinity of the study area would have comprised a mixture of deciduous trees, coniferous trees and open areas. It seems clear that the First Nations managed the landscape to some degree, but the extent of such management is unknown. During the early 19th century, Euro-Canadian settlers arrived in the area and began to clear the forests for agricultural purposes. Over the course of the Euro-Canadian era, this locality would have comprised primarily agricultural lands along the Barrie to Owen Sound Road (Highway 26), east of the community of Sunnidale Corners. The construction of

RCAF Detachment Edenvale in 1939 resulted in significant changes to the function of the area. At the time of assessment, the study area comprised parts of several open fields, parts of the Edenvale Aerodrome (i.e., runways, driveways and two structures), multiple wooded/overgrown areas and the road edge along Sunnidale Sideroad 12/13.

1.2.5 Additional Background Information

Given that no other archaeological assessment reports have been prepared for the project, and that no other assessments have been documented in the immediate area (see Section 1.3.1), additional relevant background information was not available to inform ARA's archaeological potential modelling or recommendations (MTC 2011:125).

1.3 Archaeological Context

1.3.1 Previous Archaeological Work

In order to determine whether any archaeological assessments had been previously conducted within the limits of, or immediately adjacent to the study area, ARA submitted an inquiry to the Archaeology Data Coordinator (MTCS 2015) and conducted extensive independent background research. As a result of these investigations, it was determined that there are no reports on record documenting past work within a 50 m radius.

1.3.2 Summary of Registered or Known Archaeological Sites

An archival search was conducted using the MTCS's Ontario Archaeological Sites Database in order to determine the presence of any registered archaeological resources which might be located within a 1 km radius of the study area (MTCS 2015). The results of this search indicate that there are no previously-identified archaeological sites within these limits. The lack of documented archaeological sites in the vicinity of the study area should not be taken as an indicator that the area was unattractive or undesirable for human occupation. Instead, this absence of sites is likely related to a lack of local archaeological exploration.

1.3.3 Natural Environment

Environmental factors played a substantial role in shaping early land-use and site selection processes, particularly in small Pre-Contact societies with non-complex, subsistence-oriented economies. Euro-Canadian settlers also gravitated towards favourable environments, particularly those with agriculturally-suitable soils. In order to fully comprehend the archaeological context of the study area, the following four features of the local natural environment must be considered: 1) forests; 2) drainage systems; 3) physiography; and 4) soil types.

The study area lies within the Great Lakes–St. Lawrence forest, which is a transitional zone between the southern deciduous forest and the northern boreal forest covering approximately 20,000,000 ha. This forest extends along the St. Lawrence River across central Ontario to Lake Huron and west of Lake Superior along the border with Minnesota, and its southern portion extends into the more populated areas of Ontario. This forest is dominated by hardwoods, featuring species such as maple, oak, yellow birch, white and red pine. Coniferous

trees such as white pine, red pine, hemlock and white cedar commonly mix with deciduous broad-leaved species, such as yellow birch, sugar and red maples, basswood and red oak. Much of the Great Lakes–St. Lawrence forest is unevenly aged, meaning that young and old trees can be found within the same group of trees (MNR 2014).

Only part of the original forest cover remains standing today, however, as early Euro-Canadian agriculturalists conducted large-scale clearing operations to prepare the land for cultivation. In Pre-Contact times, however, this dense forest would have been particularly bountiful. It is believed that the First Nations of the Great Lakes region exploited close to 500 plant species for food, beverages, food flavourings, medicines, smoking, building materials, fibres, dyes and basketry (Mason 1981:59–60). Furthermore, this diverse vegetation would have served as both home and food for a wide range of game animals, including white tailed deer, turkey, passenger pigeon, cottontail rabbit, elk, muskrat and beaver (Mason 1981:60).

In terms of local drainage systems, the study area lies entirely within the Lower Nottawasaga River subwatershed, which forms part of the Nottawasaga Valley Conservation Authority (NVCA 2015). The Lower Nottawasaga River subwatershed extends from Angus downstream through the Minesing Wetlands, emerges at Edenvale, cuts through the Edenvale Moraine, pauses briefly at Jack’s Lake and then cuts through the sand dunes of Wasaga Beach. Specifically, the study area is 1) traversed in the south by a modified tributary of the Nottawasaga River and part of the Strongville Swamp, 2) traversed in the north by part of the Jacks Lake Provincial Swamp and 3) located 1.7 km northeast of McIntyre Creek, 3.9 km northwest of the Minesing Provincial Swamp and 6.5 km southeast of Nottawasaga Bay.

Physiographically, the study area is located in the region known as the Simcoe Lowlands, which consists of an approximately 284,899 ha area bordering Georgian Bay and Lake Simcoe. Specifically, the study area lies within western part of the region (the Nottawasaga basin), which was once flooded by glacial Lake Algonquin and is bordered by shorecliffs, beaches and boulder terraces. The Nottawasaga basin is limited to the broad flats bordering the river, and its surface beds comprise deposits of deltaic and lacustrine origin rather than glacial outwash (Chapman and Putnam 1984:177–180). These physiographic elements have accumulated over limestone bedrock belonging to the Middle Ordovician Simcoe Group (Trenton-Black River) formation (Davidson 1989:42).

A variety of soil types occur within the study area, including Sargent gravelly sandy loam (Stsl), Granby sandy loam (Gsl) and Tioga loamy sand (Tis) along the proposed collector line corridor and Smithfield silty clay loam (Smsc), Edenvale sandy loam (Es), organic Muck (M), Warton loam (Wl) and Tioga loamy sand (Tis) in the proposed solar array area. The specific characteristics of these soil types are summarized in Table 1 (Hoffman et al. 1962:Soil Maps).

Table 1: Summary of Soil Types

Soil Code	Soil Type	Materials	Drainage Qualities	Topography
Stsl	Sargent gravelly sandy loam	Pale brown, calcareous outwash sand	Good	Smooth, gently sloping
Gsl	Granby sandy loam	Grey, calcareous outwash sand	Poor	Level
Tis	Tioga loamy sand	Grey, calcareous outwash sand	Good	Smooth, gently to irregular, steeply sloping
Smsc	Smithfield silty clay loam	Calcareous, lacustrine, varved silt loam and clay	Imperfect	Smooth, gently sloping
Es	Edenvale sandy loam	Outwash sand underlain by grey calcareous loam or sandy loam till at depths of 3 feet (0.91 m) or less	Imperfect	Smooth, very gently sloping
M	Muck	Well decomposed organic material over 1 foot (0.30 m) deep underlain by rock, sand, silt or clay	Very Poor	Depressional
Wl	Warton loam	Pale yellow, calcareous, loam and silt loam till	Imperfect	Smooth, gently sloping

In summary, the study area possesses a number of environmental characteristics which would have made it attractive to both Pre-Contact and Euro-Canadian populations. The rich Great Lakes–St. Lawrence forest and the nearby waterways would have attracted a wide variety of game animals, and consequently, early hunters. The areas of well-drained soils would have likely been ideal for the maize horticulture of Middle to Late Woodland peoples and the mixed agriculture practiced by later Euro-Canadian populations. The proximity of the study area to the Nottawasaga River—a principal transportation route in both Pre-Contact and Euro-Canadian times—would also have influenced its settlement and land-use history.

1.3.4 Archaeological Fieldwork and Property Conditions

The Stage 1 property inspection was carried out on May 14, 2015 under licence #P007, PIF #P007-0691-2015. The assessment involved the visual survey of the study area and the documentation of all areas of no archaeological potential. Legal permission to enter and conduct all necessary fieldwork activities within the assessed lands was granted by the property owners.

Key personnel involved in the assessment included P.J. Racher, Project Director; C.E. Gohm, Operations Manager; C.J. Gohm, Deliverables Manager; V. Cafik, Assistant Project Manager; and H. Mooser (Buckton), Field Director.

At the time of assessment, the study area comprised parts of several open fields, parts of the Edenvale Aerodrome (i.e., runways, driveways and two structures), multiple wooded/ overgrown areas and the road edge along Sunnidale Sideroad 12/13. The specific weather and lighting conditions for the day of assessment are summarized in Section 2.2. No unusual physical features were encountered during the property inspection that affected the results of the Stage 1 assessment, although one sizable area containing piled logs was documented that could affect Stage 2 assessment strategies and should be removed prior to further assessment.

2.0 STAGE 1 BACKGROUND STUDY

2.1 Summary

The Stage 1 assessment, conducted under licence #P007, PIF #P007-0691-2015, was accomplished through an examination of the archaeology, history, geography and current land condition of the vicinity of the study area. This background study was carried out using archival sources (e.g., historical publications and records) and current academic and archaeological publications (e.g., archaeological studies and reports). It also included the analysis of modern topographic maps (at a 1:50,000 scale), recent satellite imagery, and historical maps/atlas of the most detailed scale available (i.e., 80 chains to 1 inch and 100 chains to 1 inch).

With occupation beginning in the Palaeo-Indian period approximately 11,000 years ago, the greater vicinity of the study area comprises a complex chronology of Pre-Contact and Euro-Canadian histories (see Section 1.2). Evidence of Archaic period, Woodland period and Early Contact period remains are well-attested in Simcoe County, and Euro-Canadian archaeological sites dating to pre-1900 and post-1900 contexts are likewise common. The lack of documented archaeological sites in the vicinity of the study area should not be taken as an indicator that the area was unattractive or undesirable for human occupation. Instead, this absence is more likely related to a lack of local archaeological exploration (see Section 1.3.2).

As mentioned in Section 1.3.3, the natural environment of the study area would have been attractive to both Pre-Contact and Euro-Canadian populations as a result of proximity to several water sources (the Strongville Swamp, Jacks Lake Provincial Swamp, McIntyre Creek and the Nottawasaga River). The areas of well-drained soils and the diverse local vegetation would also have encouraged settlement throughout Ontario's lengthy history. Euro-Canadian populations would have been particularly drawn to Sunnidale Sideroad 12/13, Sunnidale Concession 12, Sunnidale Sideroad 15/16 and Highway 26, all of which were historically-surveyed thoroughfares.

In summary, the Stage 1 assessment included an up-to-date listing of sites from the MTCS's Ontario Archaeological Sites Database (within at least a 1 km radius), the consideration of previous local archaeological fieldwork (within at least a 50 m radius), the analysis of topographic and historic maps (at the most detailed scale available), and the study of aerial photographs/satellite imagery. In this manner, the standards for background research set out in Section 1.1 of the *S&Gs* (MTC 2011:14–15) were met.

2.2 Field Methods (Property Inspection)

In order to gain first-hand knowledge of the geography, topography and current condition of the study area, a property inspection was conducted on May 14, 2015. Although optional, Section 1.2 of the *S&Gs* (MTC 2011:15–17) outlines the appropriateness of such an option when a greater level of detail is needed to recommend further assessment strategies. Legal permission to enter and conduct all necessary fieldwork activities within the assessed lands was granted by the property owners.

Environmental conditions were ideal during the property inspection, with sunny skies, a high of 18 °C and excellent lighting. ARA therefore confirms that fieldwork was carried out under weather and lighting conditions that met the requirements set out in Section 1.2 Standard 2 of the *S&Gs* (MTC 2011:16).

Given the size of the study area, the lands were subjected to random spot-checking rather than a systematic inspection at a set interval, in accordance with the requirements set out in Section 1.2 of the *S&Gs* (MTC 2011:15–16). Specifically, spot-checking began in the northeastern part of the proposal solar array area and progressed clockwise around the southern and western parts, and all areas of interest were documented. The road edge along Sunnidale Sideroad 12/13 was not inspected. The visually surveyed areas were examined under ideal weather and lighting conditions with high ground surface visibility.

The property inspection/visual survey confirmed that all features of archaeological potential (e.g., historically-surveyed roadways, etc.) were present where they were previously identified, and did not result in the identification of any additional features of archaeological potential not visible on mapping (e.g., relic water channels, patches of well-drained soils, etc.). No new structures or built features (e.g., heritage structures, plaques, monuments, cemeteries, etc.) were identified that would affect assessment strategies (MTC 2011:16–17). The property inspection resulted in the identification of numerous disturbed areas, which are discussed in Section 2.3. One sizable area containing piled logs was documented, which could affect Stage 2 assessment strategies and should be removed prior to any further assessment.

2.3 Analysis and Conclusions

In addition to the relevant historical sources and the results of past excavations and surveys (see Section 1.2–Section 1.3), the archaeological potential of a property can be assessed using its soils, hydrology and landforms as considerations. What follows is an in-depth analysis of the archaeological potential of the study area, which incorporates the results of the property inspection conducted in May 2015.

Throughout southern Ontario, scholars have noted a strong association between site locations and waterways. Young, Horne, Varley, Racher and Clish, for example, state that "either the number of streams and/or stream order is always a significant factor in the positive prediction of site presence" (1995:23). They further note that certain types of landforms, such as moraines, seem to have been favoured by different groups throughout prehistory (Young et al. 1995:33). According to Janusas (1988:1), "the location of early settlements tended to be dominated by the proximity to reliable and potable water resources." Site potential modeling studies (Peters 1986; Pihl 1986) have found that most prehistoric archaeological sites are located within 300 m of either extant water sources or former bodies of water, such as post-glacial lakes.

While many of these studies do not go into detail as to the basis for this pattern, Young, Horne, Varley, Racher and Clish (1995) suggest that the presence of streams would have been a significant attractor for a host of plant, game and fish species, encouraging localized human exploitation and settlement. Additionally, lands in close proximity to streams and other water courses were highly valued for the access they provided to transportation and communication routes. Primary water sources (e.g., lakes, rivers, streams and creeks) and secondary water

sources (e.g., intermittent streams and creeks, springs, marshes and swamps) are therefore of pivotal importance for identifying archaeological potential (MTC 2011:17).

Section 1.3.1 of the *S&Gs* (MTC 2011:17–18) emphasizes the following six features and characteristics as being additional indicators of positive potential for Pre-Contact archaeological materials: 1) features associated with extinct water sources (glacial lake shorelines, relic river channels, shorelines of drained lakes, etc.); 2) the presence of pockets of well-drained soils (for habitation and agriculture); 3) elevated topography (e.g. drumlins, eskers, moraines, knolls, etc.); 4) distinctive landforms that may have been utilized as spiritual sites (waterfalls, rocky outcrops, caverns, etc.); 5) proximity to valued raw materials (quartz, ochre, copper, chert outcrops, medicinal flora, etc.); and 6) accessibility of plant and animal food sources (spawning areas, migratory routes, prairie lands, etc.).

Conversely, it must be understood that non-habitational sites (e.g., burials, lithic quarries, kill sites, etc.) may be located anywhere. Potential modeling appears to break down when it comes to these idiosyncratic sites, many of which have more significance than their habitational counterparts due to their relative rarity. The Stage 1 archaeological assessment practices outlined in Section 1.4.1 of the *S&Gs* (MTC 2011:20–21) ensure that these important sites are not missed, as no area can be exempted from further work unless it has been subjected to a Stage 1 property inspection or Stage 2 property survey.

With the development of integrated 'complex' economies in the Euro-Canadian era, settlement tended to become less dependent upon local resource procurement/production and more tied to wider economic networks. As such, proximity to transportation routes (roads, canals, etc.) became the most significant predictor of site location, especially for Euro-Canadian populations. In the early Euro-Canadian era (pre-1850), when transport by water was the norm, sites tended to be situated along major rivers and creeks—the 'highways' of their day. With the opening of the interior of the province to settlement after about 1850, sites tended to be more commonly located along historically-surveyed roads. Section 1.3.1 of the *S&Gs* (MTC 2011:18) recognizes trails, passes, roads, railways and portage routes as examples of such early transportation routes.

In addition to transportation routes, Section 1.3.1 of the *S&Gs* (MTC 2011:18) emphasizes three other indicators of positive potential for Euro-Canadian archaeological materials: 1) areas of early settlement (military outposts, pioneer homesteads or cabins, early wharfs or dock complexes, pioneer churches, early cemeteries, etc.); 2) properties listed on a municipal register, designated under the *Ontario Heritage Act* or otherwise categorized as a federal, provincial or municipal historic landmark/site; and 3) properties identified with possible archaeological sites, historical events, activities or occupations, as identified by local histories or informants.

Based on the location, drainage and topography of the subject lands and the application of land-use modelling, it seems clear that the study area, in its pristine state, would have potential for both Pre-Contact and Euro-Canadian archaeological sites. Local indicators of archaeological potential include two primary water sources (McIntyre Creek and the Nottawasaga River), two secondary water sources (the Strongville Swamp and Jacks Lake Provincial Swamp) and four historically-surveyed roadways (Sunnidale Sideroad 12/13, Sunnidale Concession 12, Sunnidale Sideroad 15/16 and Highway 26).

In its current state, however, the study area retains only part of this archaeological potential (see Image 1–Image 4). Section 2.1 of the *S&Gs* (MTC 2011:28) states that only those lands that 1) are sloped greater than 20°, 2) are permanently wet, 3) consist of exposed bedrock or 4) have been subject to extensive and deep land alterations can be considered exempt from requiring Stage 2 assessment. These guidelines serve as effective criteria for identifying areas of no archaeological potential.

ARA's visual survey, coupled with the analysis of modern satellite imagery and topographic mapping, resulted in the identification of several areas of disturbance within the assessed area (see Image 5–Image 12). Specifically, deep land alterations have resulted in the removal of archaeological potential from 1) paved/gravelled driveways and runways associated with the Edenvale Aerodrome, 2) a rectangular building footprint and artificial bunker embankment in the southwest, 3) deeply-cut artificial drainage ditches in the southeast and south, 4) artificial berms adjacent to the drainage ditches, 5) a quarried/stripped area in the south-centre and 6) a stripped area in the southeast. Natural areas of no archaeological potential included several permanently wet lowlands/marshes in the northeastern portion of the proposal solar array area (see Image 13–Image 14). The remainder of the assessed area either has potential for Pre-Contact and Euro-Canadian archaeological materials or requires test-pitting to confirm disturbance.

Based on the results of the visual survey, the study area currently comprises a mixture of areas of archaeological potential and areas of no archaeological potential. In total, 39.06% (55.31 ha) of the study area was found to have archaeological potential and requires pedestrian survey, 48.59% (68.81 ha) was found to have archaeological potential and requires test pit survey, 11.64% (16.49 ha) was identified as disturbed and 0.71% (1.01 ha) was found to be permanently wet. The identified areas of no archaeological potential are depicted in Map 23–Map 27.

3.0 RECOMMENDATIONS

The results of the assessment indicated that the study area currently comprises a mixture of areas of archaeological potential and areas of no archaeological potential (see Map 23–Map 27). ARA recommends that all areas of archaeological potential that could be impacted by the project (i.e., the proposed project location) be subject to a Stage 2 property assessment in advance of construction.

In accordance with the requirements set out in Section 2.1 of the *S&Gs* (MTC 2011:28–39), the following assessment strategies should be utilized:

- For recently cultivated or actively cultivated lands, the assessment must be conducted using the pedestrian survey method at an interval of ≤ 5 m. All ground surfaces must be recently ploughed, weathered by one heavy rainfall, and provide at least 80% visibility. If archaeological materials are encountered in the course of the pedestrian survey, the transect interval must be closed to 1 m and a close inspection of the ground must be conducted for 20 m in all directions.
- For lands where ploughing is not possible or viable (e.g., wooded areas; pasture with high rock content; abandoned farmland with heavy brush and weed growth; and gardens, parkland or lawns which will remain in use for several years after the survey), the assessment must be conducted using the test pit survey method at an interval of either of ≤ 5 m or ≤ 10 m. A test pit survey interval of ≤ 5 m is required in all areas less than 300 m from any feature of archaeological potential, and a test pit survey interval of ≤ 10 m is required in all areas more than 300 m from any feature of archaeological potential. Each test pit must be excavated into the first 5 cm of subsoil, and the resultant pits must be examined for stratigraphy, cultural features and/or evidence of fill. The soil from each test pit must be screened through mesh with an aperture of no greater than 6 mm and examined for archaeological materials.

The identified areas of no archaeological potential are not recommended for further assessment. It is requested that this report be entered into the *Ontario Public Register of Archaeological Reports*, as provided for in Section 65.1 of the *Ontario Heritage Act*.

4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

Section 7.5.9 of the *S&Gs* requires that the following information be provided for the benefit of the proponent and approval authority in the land use planning and development process (MTC 2011:126–127):

- 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.
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.
- The *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.

5.0 IMAGES



Image 1: Current Land Conditions
(Photo Taken on May 14, 2015; Facing Northwest)



Image 2: Current Land Conditions
(Photo Taken on May 14, 2015; Facing Southeast)



Image 3: Current Land Conditions
(Photo Taken on May 14, 2015; Facing East)



Image 4: Current Land Conditions
(Photo Taken on May 14, 2015; Facing Northeast)



Image 5: Area of No Archaeological Potential – Disturbed
(Photo Taken on May 14, 2015; Facing Southwest)



Image 6: Area of No Archaeological Potential – Disturbed
(Photo Taken on May 14, 2015; Facing Southeast)



Image 7: Area of No Archaeological Potential – Disturbed
(Photo Taken on May 14, 2015; Facing Southeast)



Image 8: Area of No Archaeological Potential – Disturbed
(Photo Taken on May 14, 2015; Facing Southwest)



Image 9: Area of No Archaeological Potential – Disturbed
(Photo Taken on May 14, 2015; Facing Northwest)



Image 10: Area of No Archaeological Potential – Disturbed
(Photo Taken on May 14, 2015; Facing Northeast)



Image 11: Area of No Archaeological Potential – Disturbed
(Photo Taken on May 14, 2015; Facing East)



Image 12: Area of No Archaeological Potential – Disturbed
(Photo Taken on May 14, 2015; Facing Southeast)



Image 13: Area of No Archaeological Potential – Permanently Wet
(Photo Taken on May 14, 2015; Facing East)

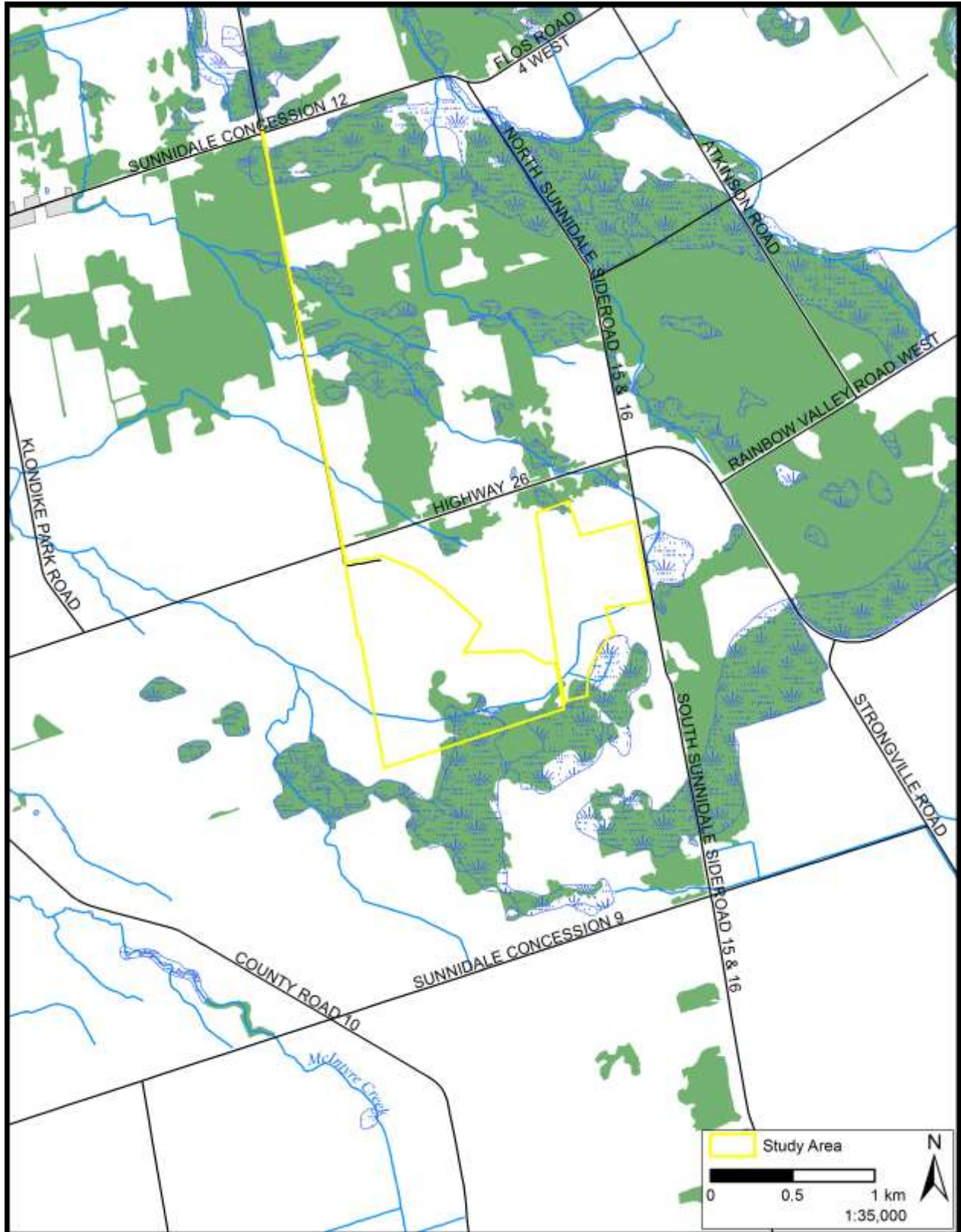


Image 14: Area of No Archaeological Potential – Permanently Wet
(Photo Taken on May 14, 2015; Facing East)

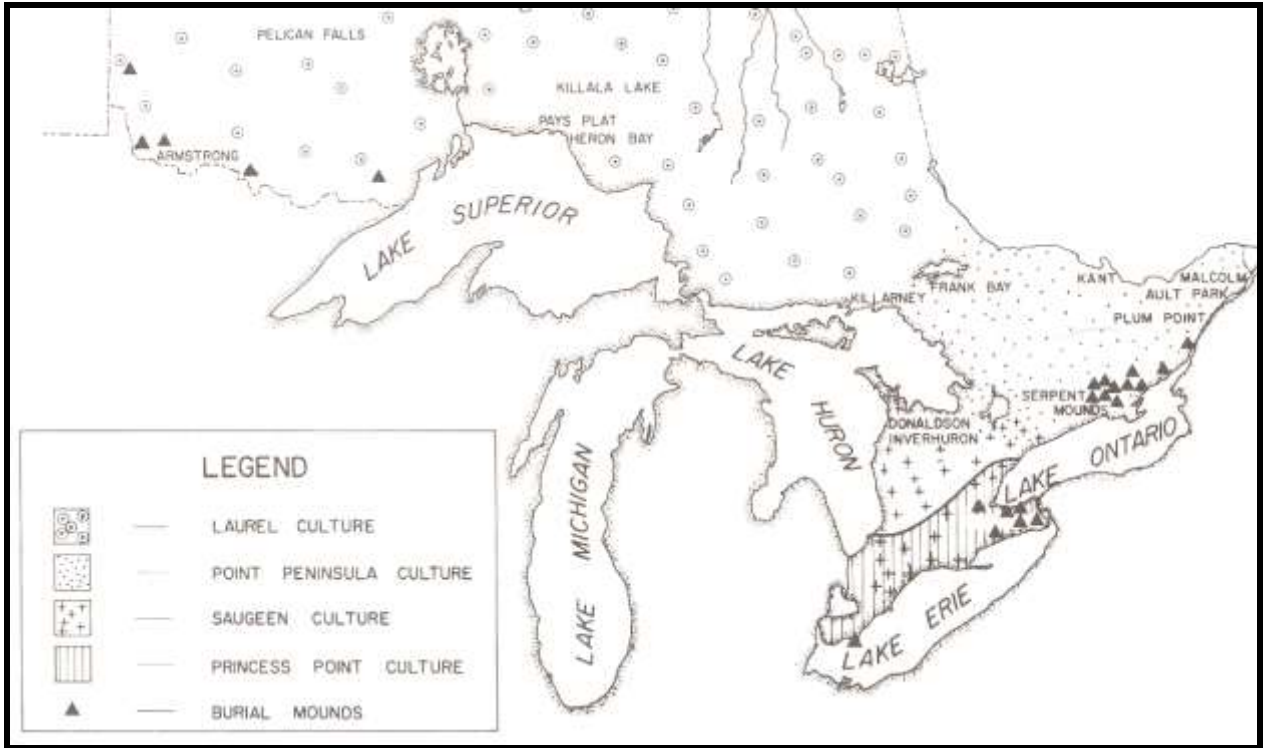
6.0 MAPS



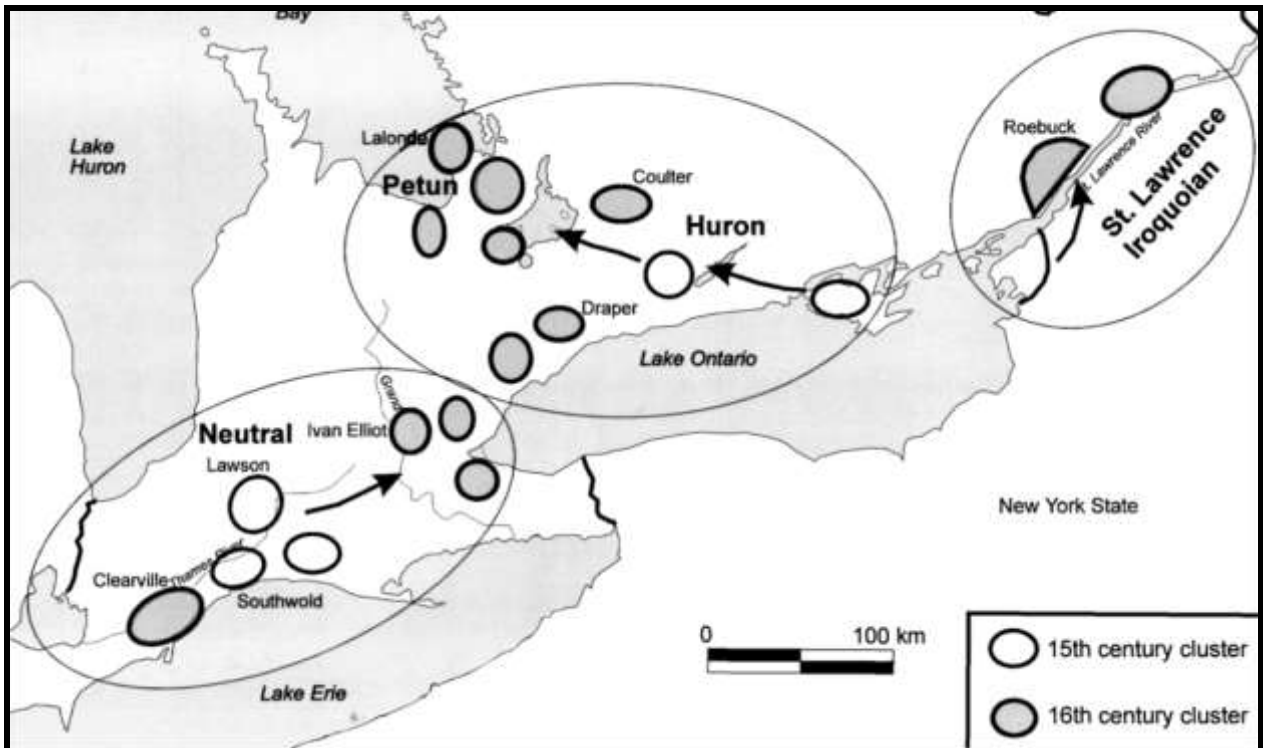
Map 1: Location of the Study Area in the Province of Ontario (NRC 2002)



Map 2: Location of the Study Area in the Township of Clearview
(Produced by ARA under licence from Ontario MNRF, © Queen's Printer 2015)



Map 3: Map of Middle Woodland Period Complexes
(Wright 1972:Map 4)



Map 4: Pre-Contact Iroquoian Site Clusters
(Warrick 2000:Figure 10)



Map 5: Detail from S. de Champlain's *Carte de la Nouvelle France* (1632)
(Gentilcore and Head 1984:Map 1.2)



Map 6: Detail from N. Sanson's *Le Canada, ou Nouvelle France* (1656)
(Gentilcore and Head 1984:Map 1.10)



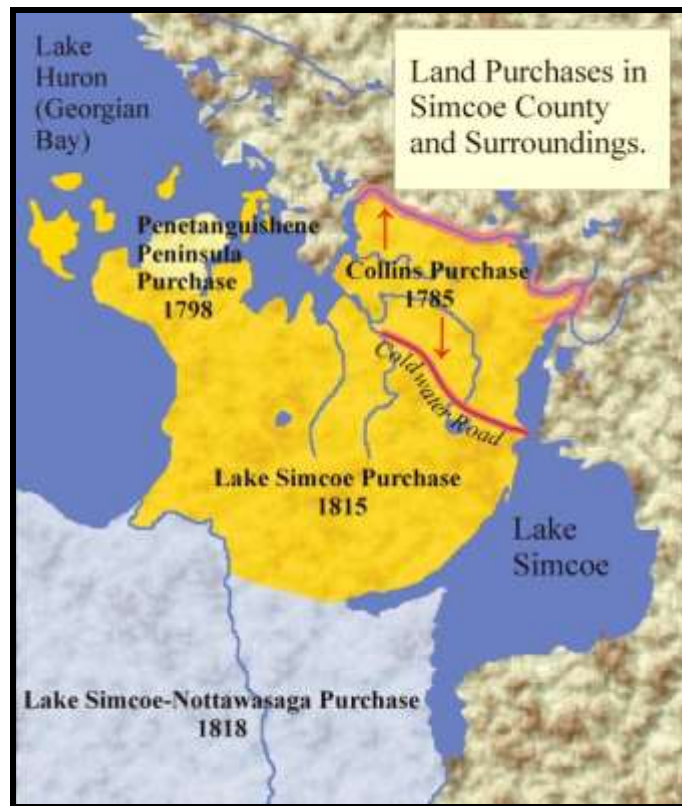
Map 7: Detail from H. Popple's *A Map of the British Empire in America* (1733)
(Cartography Associates 2009)



Map 8: Detail from J.B. D'Anville's *Canada Louisiana et Terres Angloises* (1755)
(Cartography Associates 2009)



Map 9: Detail from R. Bonne's *Partie de l'Amérique Septentrionale* (1783)
(Cartography Associates 2009)



Map 10: Land Purchases in Simcoe County
(Innisfil Library 2010)



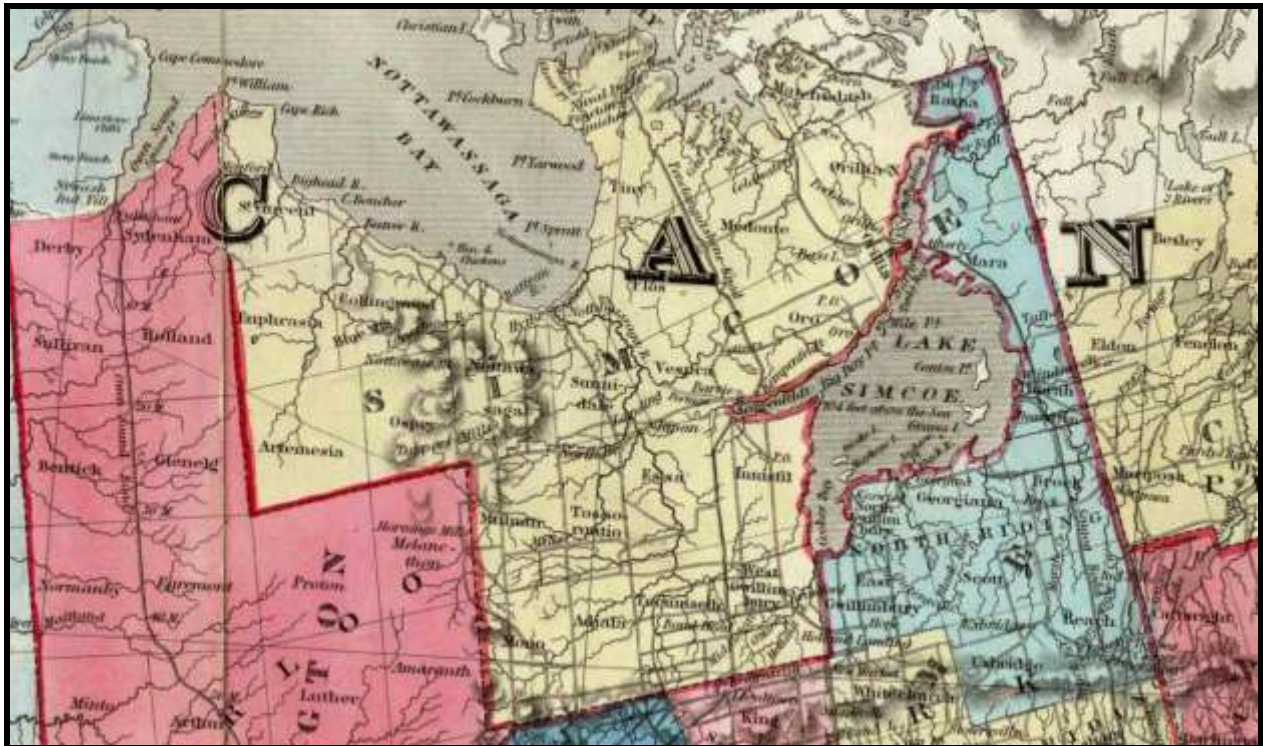
Map 11: Detail from D.W. Smyth's *A Map of the Province of Upper Canada* (1800)
(Cartography Associates 2009)



Map 12: Detail from J. Purdy's *A Map of Cabotia* (1814)
(Cartography Associates 2009)



Map 13: Detail from J. Arrowsmith's *Upper Canada* (1837)
(Cartography Associates 2009)



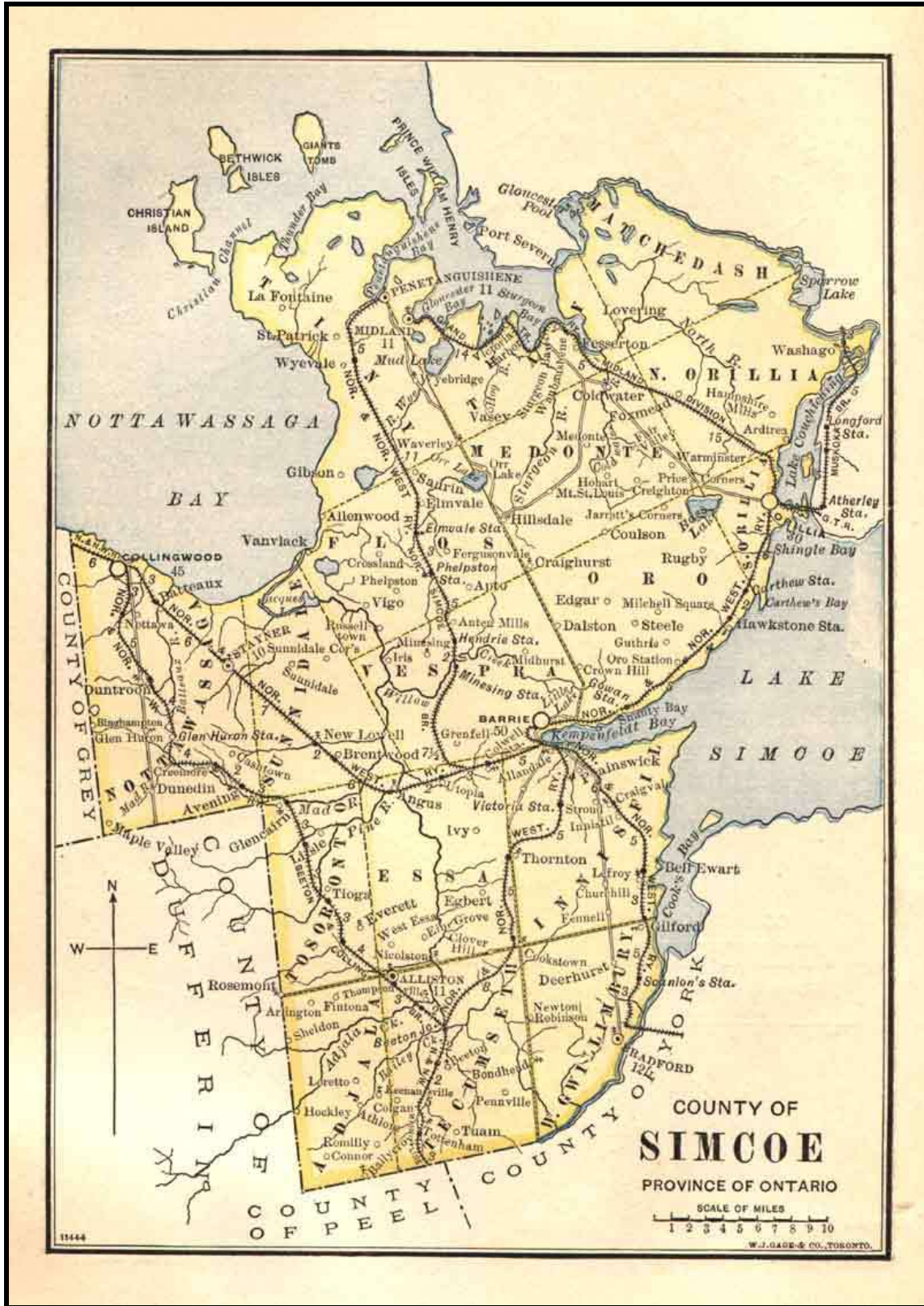
Map 14: Detail from J. Bouchette's *Map of the Provinces of Canada* (1846)
(Cartography Associates 2009)



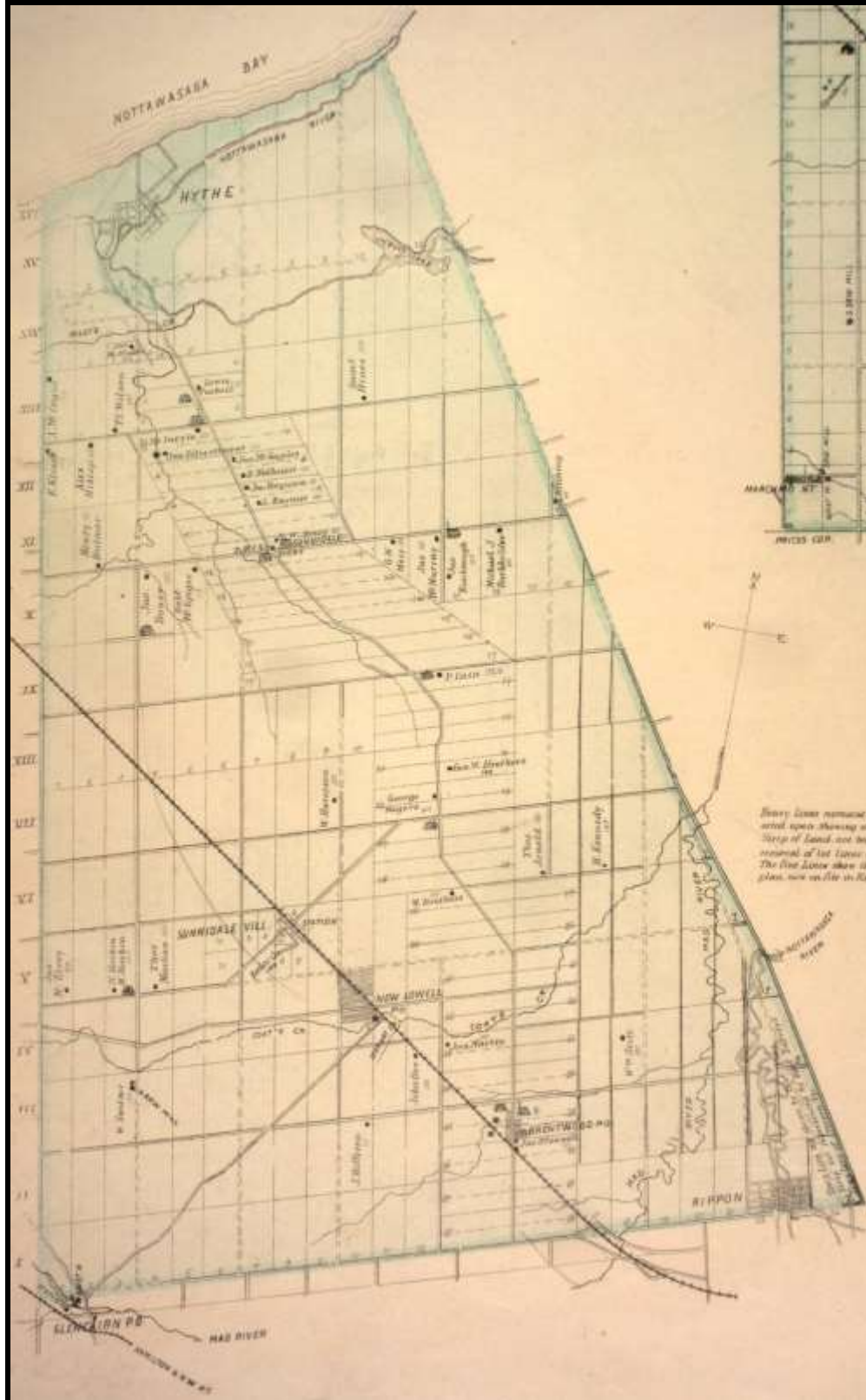
Map 15: Detail from G.W. Colton's *Canada West* (1856)
(Cartography Associates 2009)



Map 16: Detail from W. & A.K. Johnston's *Dominion of Canada* (1912)
(Cartography Associates 2009)



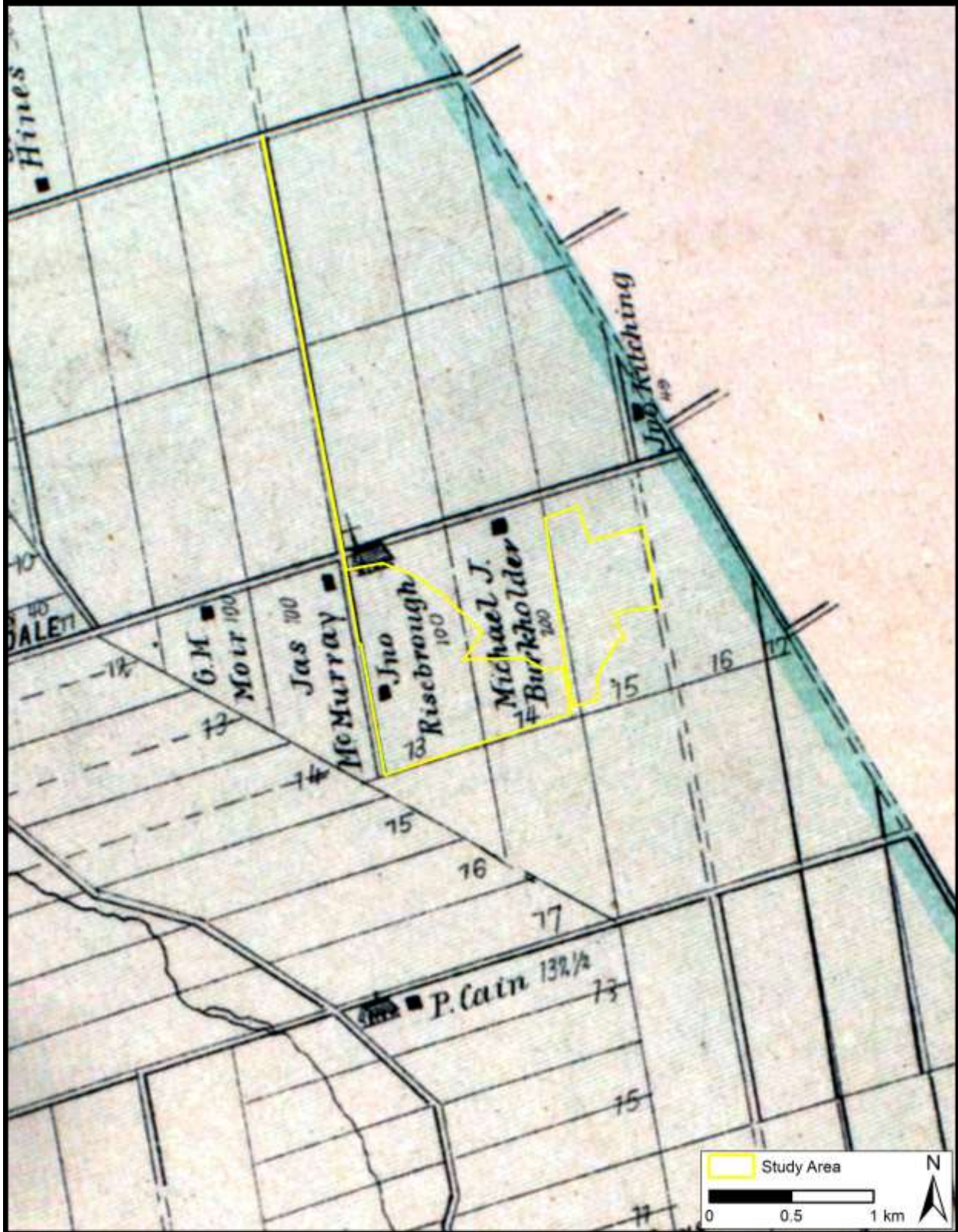
Map 17: Simcoe County from W.J. Gage and Co.'s *Gage's County Atlas* (1886) (W.J. Gage and Co. 1886)



Map 18: The Map of Sunnidale Township from H. Belden & Co.'s Illustrated Atlas of the Dominion of Canada: Simcoe Supplement (1881) (McGill University 2001)



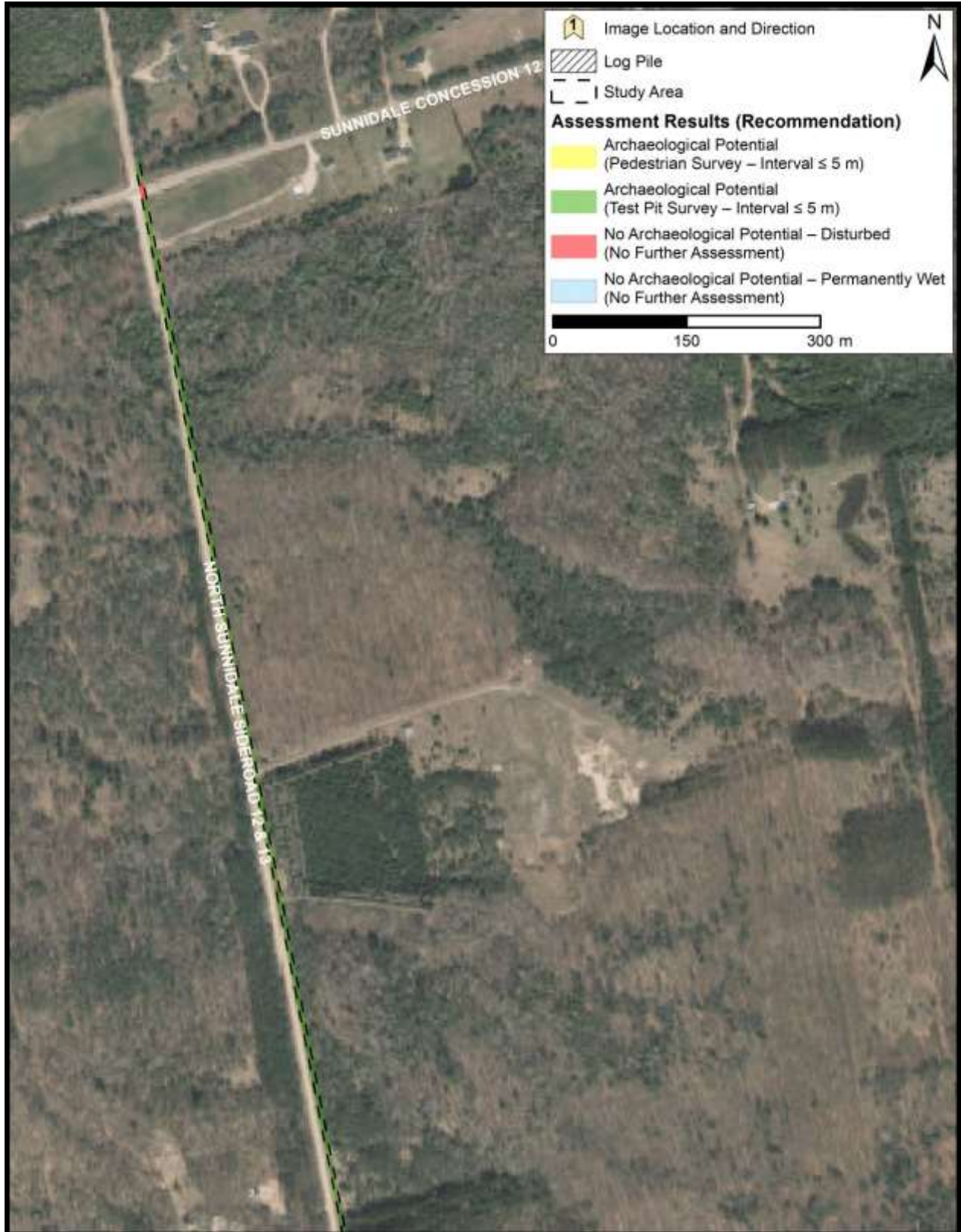
Map 19: Detail from W. Hawkins' *Plan of the Township of Sunnidale* (1842), Showing the Study Area (AO 2015)



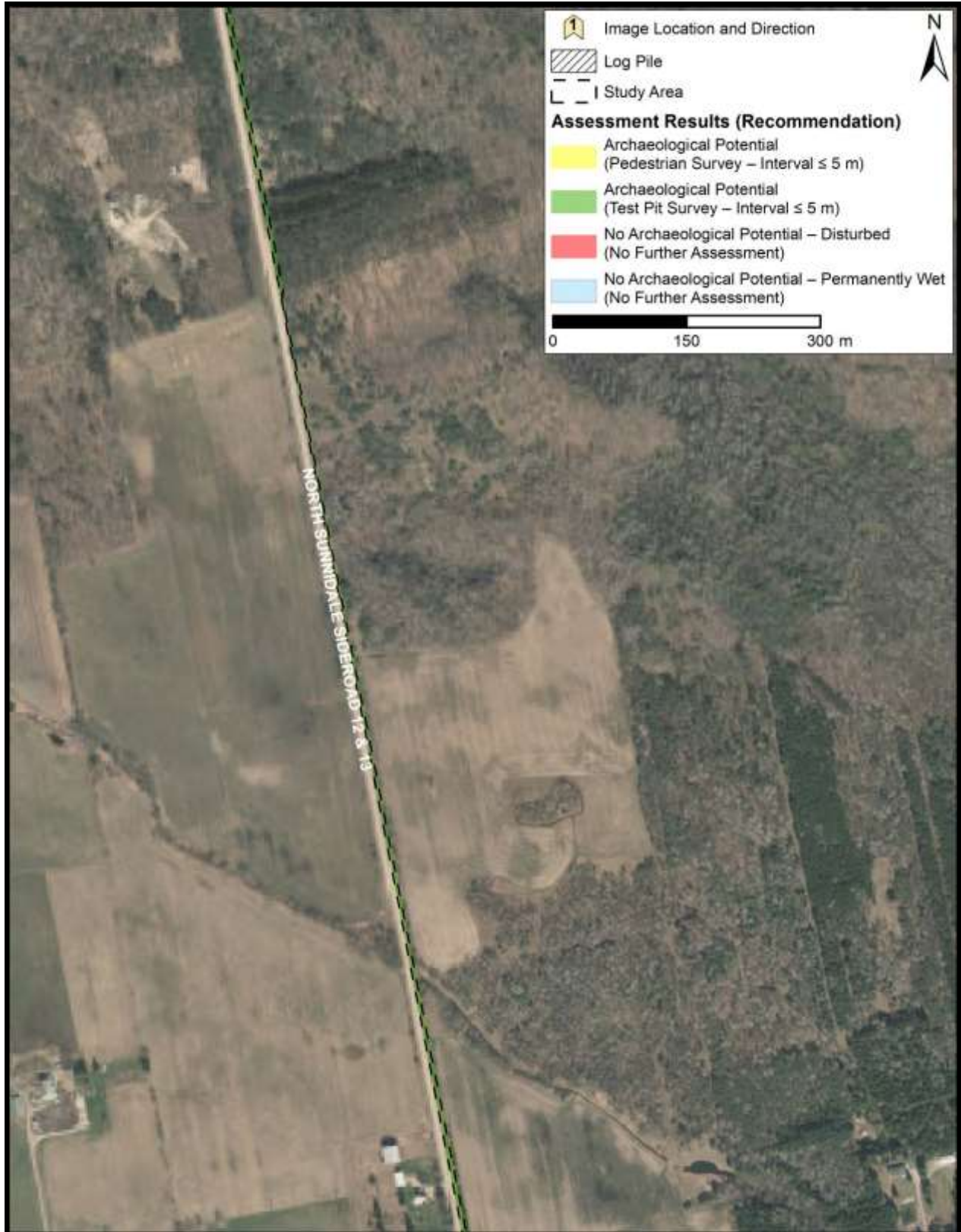
Map 21: Detail of the Map of Sunnidale Township from H. Belden & Co.'s *Illustrated Atlas of the Dominion of Canada: Simcoe Supplement* (1881), Showing the Study Area (McGill University 2001)



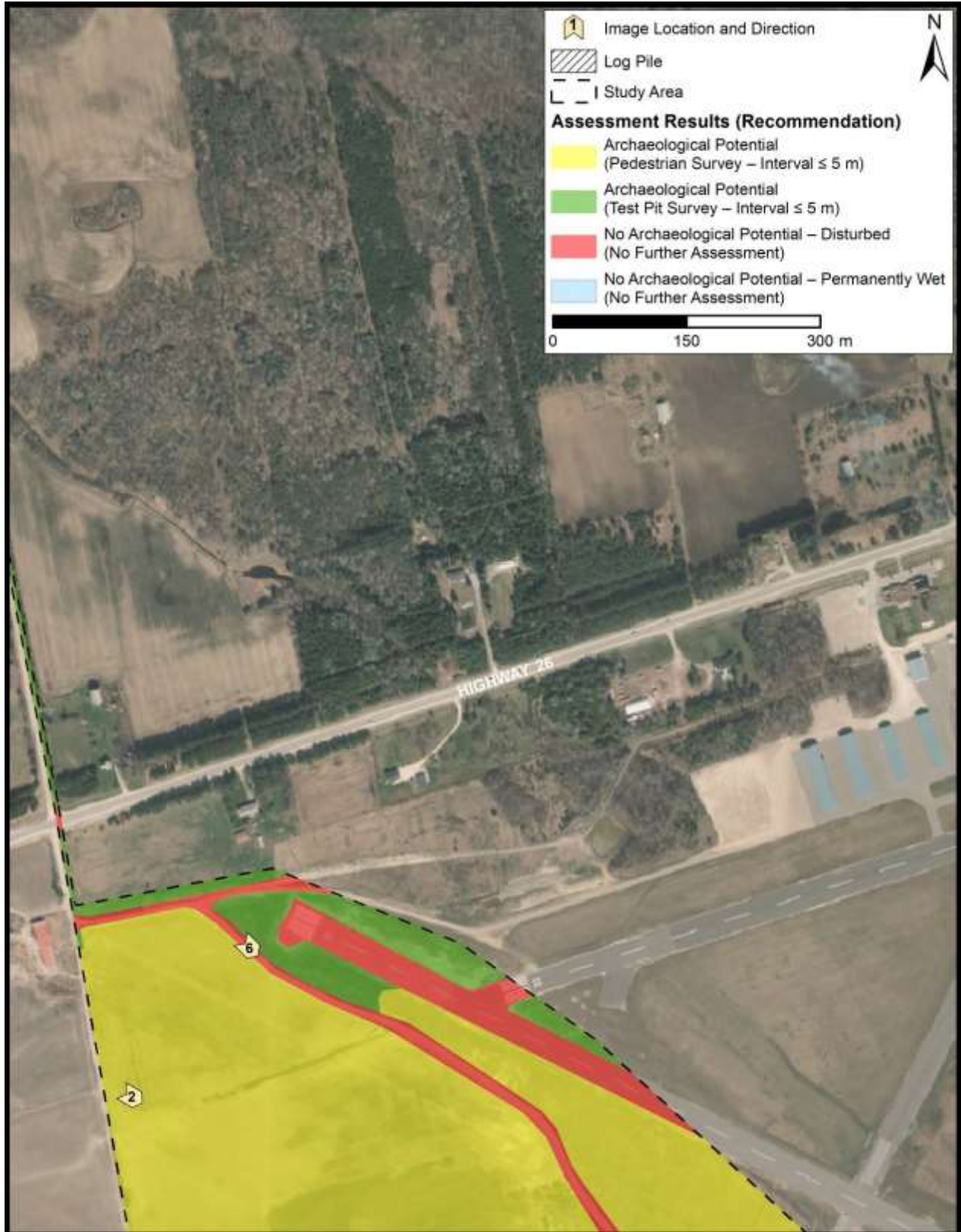
Map 22: Historic Aerial Imagery (1954), Showing the Study Area
(University of Toronto 2009)



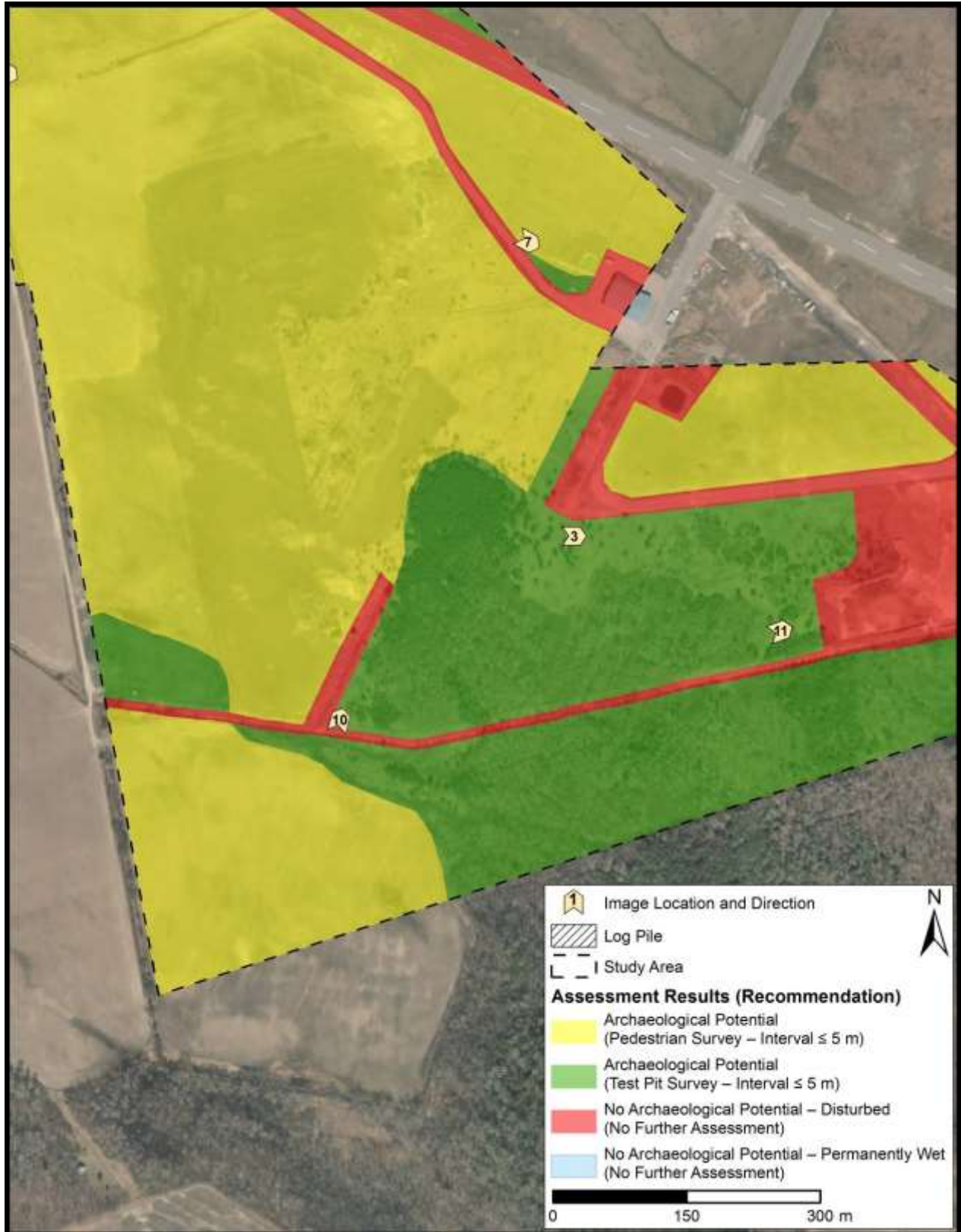
Map 23: Assessment Results
(County of Simcoe 2014)



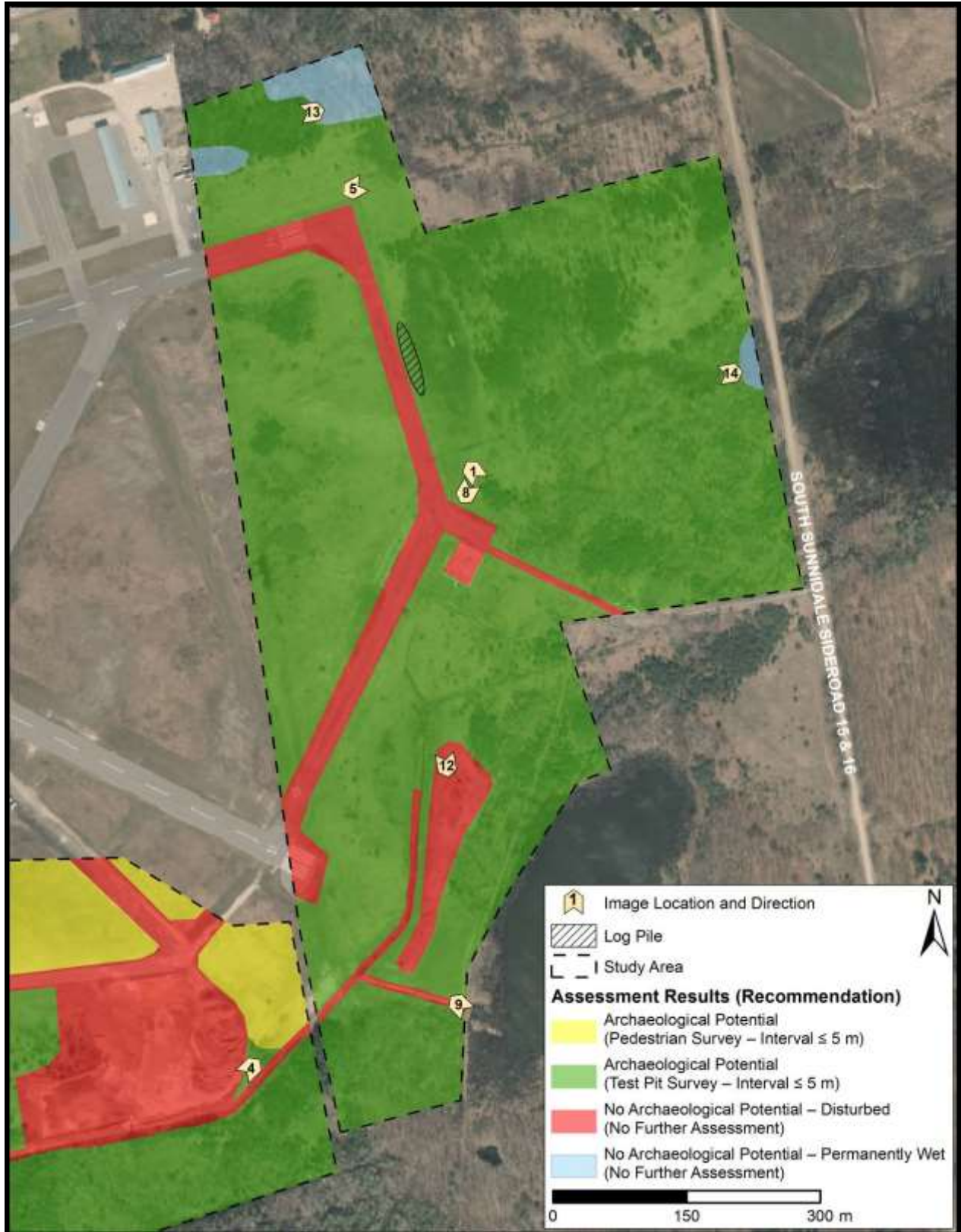
Map 24: Assessment Results (Continued)
(County of Simcoe 2014)



Map 25: Assessment Results (Continued)
(County of Simcoe 2014)



Map 26: Assessment Results (Continued)
(County of Simcoe 2014)



Map 27: Assessment Results (Continued)
(County of Simcoe 2014)

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