

First Nations Cultural Overview

In the following section a generalized pre-contact First Nations history of Peterborough County is provided to assist in determining the potential for discovery of pre-contact remains in the project area.

The Palaeo-Indian Period. The Paleo-Indian Period represents the arrival of First Nations groups in Ontario around 11,500 years ago following the retreat of the Laurentide ice sheets that covered most of Canada and the northern United States beginning approximately 95,000 years ago. Although there is considerable debate about whether the Paleo-Indian people were the first to cross into the Americas from Asia via Beringia, they are most likely the first culture to inhabit Ontario. The Paleo-Indian Period is represented by two distinct cultures based on the use of different tools. The Clovis culture comprised the early Paleo-Indian Period, whereas the Plano culture occupied the latter half of the Period. The Clovis culture is defined by distinctive fluted chipped stone projectile points that are generally lance-shaped or lanceolate that lack notches or stems with a concave base and a grinding of the lower side edges. Although it is certain that these points were used as projectiles, based on evidence of distinctive tip damage, it is unknown whether they were hafted onto long shafts and used as a thrusting spear or if they were mounted onto smaller shafts and used as a hand-propelled spear or in combination with a spear-thrower.

Plano projectile points differ in that they lack the Clovis flute and they exhibit fine ripple flaking that is distinctive for the latter half of the Paleo-Indian Period. A number of sites dating to approximately 9,000 years ago have been found along the north shore of Lake Superior and on Manitoulin Island. High quality siliceous stone quarries exploited by Plano people have also been found along the shore of Lake Huron.

The Clovis and Plano cultures likely shared a similar subsistence strategy. They hunted migrating herds of caribou (*Rangifer tarandus*) along the shores of glacial lakes that appeared as the massive ice sheets receded. They also hunted large mammals such as mammoth (*Mammuthus primigenius*) and mastadon (*Mammut americanum*). Paleo-Indian groups likely hunted smaller mammals and fish as well, and gathered wild fruits and berries.

Although archaeological sites dating to this period in the region surrounding the project area are scarce, a number of Paleo-Indian components have been identified south of Rice Lake along post-glacial ridges around the Plainville Valley. A number of Paleo-Indian sites have also been identified along the high ground surrounding Rice Lake and probably represent caribou hunting and processing sites (Jackson 1986; 1991). As archaeological research progresses more Paleo-Indian sites can be expected.

The Archaic Period. Solid evidence for the beginning of the Archaic Period in Ontario dates to around 4,000 BCE with the advent of the Laurentian Archaic. The early Archaic culture likely evolved from the Paleo-Indian Period. However, it is possible that as more people migrated into the region, there was an introduction of new ideas and technology. The elaborately manufactured points representative of the Paleo- Indian Period were abandoned in favour of more crude manufacturing techniques but with a greater variety of stone being exploited. This likely represents a change in the types of flora and fauna available for consumption. There is certainly a shift in subsistence practices by early Archaic groups from long seasonal migration movements to a focus on regionally available food sources.

The Archaic Period also represents a technological shift in the methods used in the manufacturing of stone tools with the introduction of grinding and pecking. A wide variety of axe forms are introduced indicating a shift from a more sub-arctic environment to a temperate climate. It is also during the Archaic Period that the atlatl superseded the use of handheld thrusting spears predominately used during the Paleo- Indian Period. Elaborately polished and decorated stone tools believed to be atlatl counterweights appear in the archaeological record. Archaic people were also producing tools and ornaments manufactured from native copper found along the north shore of Lake Superior.

Based on evidence from discarded animal bones, the Laurentian Archaic people hunted predominantly large mammals, such as deer, elk, and bear. However, smaller game like the beaver was also exploited. The Laurentian Archaic people also fished and gathered shellfish and plant material. The religious beliefs during the Archaic Period can also be discerned from the burial methods practiced. This included the internment of burial goods with the deceased and sprinkling of red ochre over the body. Burial goods included stone, bone, and native copper tools and ornaments.

While the Paleo-Indian and early Archaic origins of Upper St. Lawrence culture are poorly defined, a widespread and distinctive Laurentian Archaic tradition is evident by 4,000 BCE thanks to increased archaeological visibility with cultural elaboration and population growth following the trend to a more broadly based subsistence pattern (Mason 1981). Archaic Period sites are well represented in the region, especially around Rice Lake. However, most sites date to the Late Archaic or Laurentian Tradition (MCR 1981:39). Laurentian groups occupied the biotic province transition zone between the deciduous forests to the south and the boreal forests to the north.

The Woodland Period. The Woodland Period is generally associated with the introduction of ceramic technology. Early Woodland sites in the region surrounding the project area are scarce due to the shorter duration of the period and the low visibility of sites (Ellis et al. 1990:78). Jackson (1980) suggests that subsistence and settlement patterns during the Early Woodland Period were similar to those of the Laurentian Archaic, but with greater emphasis on processing nuts and perhaps experimentation with plant cultivation.

The Middle Woodland Period in the region is defined by a number of burial mound sites located around Rice Lake with numerous associated middens and villages (Boyles 1897; Johnston 1968; Spence and Harper 1968; Stothers 1974). The mound sites tend to be

located on promontories near river mouths and may have been used to define ancestral territory. Based on the wealth and variety of burial goods, the Middle Woodland people also had access to a wide-spread network of exotic goods, which extended as far away as Ohio and Indiana (Spence et al. 1990).

During the Late Woodland Period there was a shift in the subsistence and settlement patterns which included the occupation of seasonal hunting and fishing camps on Rice Lake, often on former Middle Woodland village sites, and larger interior longhouse villages, where early domesticated corn, beans, and squash were cultivated.

The end of the Woodland Period is well known in the region due to the discovery of a number of Huron village sites (Damkjar 1990; Ramsden 1989; Ramsden 1990; Sutton 1990). These sites seem to represent both Huron and St. Lawrence Iroquois occupation, but the exact origin of the occupants is still unknown (Sutton 1990:54; Ramsden 1990). The Huron abandoned the region as a centre of occupation sometime during the late sixteenth century and afterwards it was used as a buffer zone between the Huron and New York Iroquois.

Table 2. Summary of the pre-contact archaeological sequence in southern Ontario.

Period	Date	Characteristics
Palaeo-Indian	11,500 - 9,000 BP	*first evidence of human occupation in Ontario *family groups hunting large game *seasonal occupations along lakeshore environments
Archaic	9,000 - 3,000 BP	*hunting and gathering subsistence economy *seasonal occupation of resource rich environments *territorial band level society *groundstone tool technology
Early Woodland	3,000 - 2,200 BP	*hunting and gathering subsistence economy *seasonal occupation of resource rich environments *extensive trade networks for exotic raw material *crude pottery vessels with little decoration
Middle Woodland	2,200 - 1,300 BP	*hunting and gathering subsistence economy *seasonal occupation of resource rich environments *band level society with well defined territory *elaborate mortuary ritual with mound burials *extensive trade networks for exotic raw material *elaborately decorated, coiled pottery vessels
Late Woodland	1,300 - 300 BP	*first evidence of corn, squash and tobacco *complex socio-political structure *large, palisaded longhouse villages *subsistence economy based on horticulture *rapid population growth *elaborately decorated ceramic vessels and pipes
Historic	300 BP - Present	

Euro-Canadian Cultural Overview

The following section outlines the period from European contact to the present day in Peterborough County. This background information is provided to assist in determining the potential for discovery of contact period First Nations and Euro- Canadian remains in the project area.

The Contact Period. In the historic period of the last 300 years, Euro-Canadian settlement has greatly altered Canada's environment. Settlement commenced first on the eastern coast of the country in the early seventeenth century and moved west so that the area of south- central Ontario, within which Peterborough County is situated, underwent European settlement some 200 years later in the first half of the nineteenth century.

French Era to 1763. The land that would later encompass the County of Peterborough was traversed by the French traveling between Montreal and Quebec and Huron territory and the French mission at Fort Marie to the west. It is believed that Samuel de Champlain was the first European to make the journey, having crossed Chemong Lake to the Otonabee River (Trigger 1985:157, 180). However, the main transportation corridor into the interior of Ontario and beyond was through the Ottawa River drainage. Thus, it appears that no permanent French settlement was attempted north of Rice Lake in the Kawartha Lakes region. The nearest French settlement was at the Quinte Mission, somewhere near the present City of Belleville, and Fort Frontenac, in what would later become the City of Kingston.

British Settlement after 1763. After the conquest of New France in 1763, the area of Canada west of Montreal remained largely ignored by the British. French military and commercial installations constructed prior to the war and surrendered to the British were either abandoned or severely neglected. However, rebellion to the south and subsequent loss of the Thirteen Colonies upon conclusion of the American Revolution in 1783 left the British government with the task of resettling thousands of refugees who had remained loyal to the British Crown (known as the United Empire Loyalists) fleeing retribution from their neighbours who supported the Colonial Army during the war, as well as a number of disbanded regular army and militia units. Many found their way overland and by water north of the St. Lawrence and the Great Lakes, into British territory demarcated by the Mitchell Map in the Treaty of Paris.

To ease the governance of the new settlers, the British Constitutional Act of 1791 divided what remained of British North America into Upper and Lower Canada, which were further subdivided into administrative districts. Initially settlement occurred along the shores of the Great Lakes and the St. Lawrence River, but as this land became scarce, new arrivals were forced inland. However, land had to first be acquired from the local First Nations.

Settlement in what would later become the County of Peterborough in 1850, began in 1818 in what would become Monaghan Township north of Rice Lake. This land was acquired from the local Mississauga as part of the 1.951 million acre Rice Lake purchase of 1818. By 1825, approximately 2000 Irish immigrants settled in the townships of Asphodel, Douro, Emily, Ennismore, Otonabee, and Smith (Brunger 1975:41). Although these early settlers were mostly poor, uneducated immigrants from Ireland, there were wealthier settlers from England.

Prior to the establishment of roads, settlement was originally facilitated by inland water routes, such the Trent River, Otonabee River, Rice Lake, the Kawartha Lakes, and various overland portage routes. In 1833 plans were made for a canal system that would link the Kawartha Lakes with Lake Ontario. Work commenced in 1837, but was largely abandoned shortly thereafter as a result of interference from the lumber industry, which was opposed to the construction of a lock system that would greatly hinder the transportation of timber.

By 1838, the area that would become the County of Peterborough, was organized into the District of Colborne, which also included parts of present day Victoria and Haliburton counties (Brunger 1975:40). Eventually a commercial and administrative centre grew up as more immigrants congregated around the area of Scott's Plains in what is today the City of Peterborough. The location of Scott's Plains was chosen to establish a community because the townships of Douro, North Monaghan, Otonabee, and Smith intersected there (Jones and Dyer 1987:11). As more immigrants moved into the district, the settlement expanded.

Scott's Plains prospered over the next decade and in 1850 was incorporated into the Town of Peterborough with a population of just over 2000 residents. By 1872 Peterborough had extended east and north into parts of the townships of Douro and Smith (Cole 1975:32). Peterborough became the most important commercial centre north of Rice Lake. Industry included several mills, a tannery, and blacksmith shops which employed hundreds of workers.

The first transportation routes to be established in the area followed early aboriginal trails. Local roads were initially cleared by the grantees of adjacent land as part of their settlement duties, although the many creeks and swampy areas of the region posed a challenge to the road system, and nineteenth century maps detail the many detours and abrupt turns necessary to avoid bad crossings. Although water transportation greatly assisted with the settlement and early development of the County of Peterborough, the construction of the railway between the Town of Peterborough and Cobourg in 1854 resulted in its exponential growth. Peterborough became the hub of other rail lines, including a line built to Port Hope in 1858 which runs through the middle of the project area.

Past Archaeological Research

Archaeological research in the Peterborough area is often limited to discoveries made during development activities. However, there are many references to evidence of pre-contact First Nations occupation made by the first Euro-Canadian settlers to the region, which sometimes resulted in sites being “recreationally” excavated by non-professional archaeologists (Cole 1993:132; Young 1975:34-35). Professional archaeological research did not take place to any great degree until 1954 with the discovery of the Peterborough Petroglyphs site, north of Stony Lake and subsequent studies undertaken to determine its regional and temporal context. In the 1960s, Trent University initiated a multi-season survey project to identify high potential areas throughout the Trent-Severn waterway (Hakas 1967).

The lower Trent Valley is one of the most intensely studied regions in southern Ontario. Middle Woodland burial mounds near Rice Lake drew the attention of researchers at an early date (Boyle 1897). Archaeological investigations of the burial mounds at Rice Lake continued into the 1960s and 1970s, contributing to a great wealth of knowledge of the pre-contact period in southern Ontario with all major periods of occupation being represented.

The archaeological sites discovered to date reveal the rich history of Peterborough beginning to emerge as more archaeological survey projects are being conducted in the region. The number of archaeological sites within the vicinity, the proximity of the Otonabee River, and the early development of the project area increases the potential for the discovery of both pre-contact First Nations and post-contact First Nations and Euro-Canadian sites.

A number of pre-contact First Nations archaeological sites (28) have been recorded within a 10 km radius of the project area (Table 2). Of the 28 recorded sites, six are findspots; Pleasant Point (point fragment and flake of Onondaga chert), Kawartha Downs 1 (corner notched Trent Valley chert point), Kawartha Downs 2 (side-notched Trent Valley chert projectile), BbGn-12 (single copper point), 19376 (one point and one stone axe), Big Tree (side notched point and re-worked biface), BbGn-28 (one projectile point), Foster (one stone axe), Anderson (a single point), Might (a large, black point) and Larmer (one axe). The Dawson site is a village site of indeterminate cultural affiliation. The Bartlett site is a pre-contact artifact scatter in indeterminate date consisting of a single celt, four chert flakes, one retouched flake, and a fragment of a projectile point.

In 1978, a Mr. Robinson stated that he found a number of projectile points and axes on his farm near the Otonabee River in 1918. Designated BbGn-10, this site was never excavated and its cultural affiliation has not been determined beyond that of a potential Archaic assemblage. Similar to BbGn-10, site BbGn-11 has been reported to be an pre-

contact First Nations campsite. Local lore indicates that it set the stage for a large-scale battle. It is presumed that a number of points were found although there is no physical proof of this. The Brown site is a Late Woodland campsite. Bensfort, a Late Archaic site, is comprised of a number of lithics recovered while conducting a pedestrian survey along the ridge of a field overlooking Steamboat Creek.

The Big Mosquito site is a lithic site consisting of six flakes, three pieces of shatter and one retouched flake. It is located approximately 200 metres to the east of a relict channel of the Otonabee River. The Golden Sand and Midfield sites are both multi-component sites with lithics, ceramics and glass occurring within the assemblage. The Bandana site is one of the largest site recorded in this area. It is comprised of 55 lithic artifacts, including chert and quartz flakes, shatter, scrapers and bifaces. Clustered in two locations and dated to the Archaic period, it was found during pedestrian and test pit survey.

The Kawartha Trails site consisted largely of expedient tools made of chert, quartz and metamorphic lithics. Of particular note is a pecked rod that may have served as a pressure flaker (Swayze 2006).

The Brock Street Burials include only one burial of which a number of grave goods were recovered. Interred in a flexed position, the individual was placed on its back in an oval grave (Kenyon 1961). Grave goods included a hafted beaver incisor, a harpoon, an antler base, two antler points, two antler flaking tools, two bone discs, seven points, eight cache blades, two gorgets, and one celt. Determined by Ritchie to be of the Kipp Island Phase, it is thought to link directly with components recovered on Rice Lake. Located along a ridge, a surface collection conducted in 1976 by L. Jackson resulted in the recovery of 16 lithic artifacts, comprised mostly of flakes and shatter.

Comprised of 6200 artifacts, the BbGn-29 site was excavated in 2007 by York North Archaeological Services. Dating back to the Middle Archaic, it extends into the historic period with a number of glass, ceramic, metal and mortar fragments recovered along with lithic tools and pre-contact First Nations pottery. A number of points were collected from the BbGn-14 site by a local farmer. It is unknown to which culture period this site can be attributed, although Archaic was posited by Roberts in 1978. The Tate Farm and Finnie sites consist of a number of lithic artifacts and excavations at the Lily Lake site, likely an encampment, resulted in the recovery of pre-contact pottery, lithic fragments and faunal remains.

Table 3. Registered pre-contact First Nations archaeological sites within a 10 kilometre radius of the project area.

Site Name	Borden Designation	Culture	Site Type
Dawson	BaGn-60	unknown	village
Pleasant Point	BbGn-17	pre-contact	findspot
Bartlett	BbGo-14	pre-contact	scatter
Kawartha Downs 1	BbGo-15	Archaic	findspot

Site Name	Borden Designation	Culture	Site Type
Kawartha Downs 2	BbGo-16	Archaic	findspot
	BbGn-12	Archaic	findspot
193976	BbGn-13	pre-contact	undetermined
	BbGn-10	Archaic	undetermined
	BbGn-11	pre-contact	undetermined
Brown	BaGo-18	Woodland	campsite
Bensfort	BbGn-6	Archaic	undetermined
Big Mosquito	BbGo-20	pre-contact	campsite
Golden Sand	BbGo-21	multi-component	multi-component
Midfield	BbGo-22	multi-component	multi-component
Big Tree	BbGo-19	pre-contact	campsite
Bandana	BbGn-24	Archaic	undetermined
Kawartha Trails	BbGn-26	Archaic	undetermined
Brock Street Burials	BbGn-3	Middle Woodland, Iroquoian, Point Peninsula	burial
*	BbGn-28	Early Woodland	undetermined
Brock	BbGn-4	Archaic	village
*	BbGn-29	multi-component	multi-component
	BbGn-14	Archaic (?)	undetermined
Tate Farm	BbGo-25	pre-contact	undetermined
Lily Lake	BbGo-26	Early to Late Woodland	village
Finnie	BbGn-7	Archaic	undetermined
Foster	BbGo-6	pre-contact	findspot
Anderson	BbGo-8	Archaic	findspot
Larmer	BbGo-3	pre-contact	undetermined
Might	BbGo-4	Archaic	findspot

Early Euro-Canadian settlement and development of Peterborough has resulted in the discovery of numerous early Euro-Canadian archaeological sites; the Peterborough

County Jail, Intersports, Kawartha Downs 3, BbGn-15, Baby Bird, BbGn-30, BbGo-18, Golden Sand, Midfield, Clarke Homestead and McCreef sites (Table 3). The Peterborough County Jail site consisted of a number of burials, a foundation, pit features and an assemblage of ceramics, glass, faunal remains and metal. The artifact assemblage from the Intersports Site, a nineteenth century homestead, consisted of edgeware, spongeware, black and polychrome printed transfer print, coarse earthenware, clay fish, clay marble, container glass, slate, and various miscellaneous fragments (YNAS 2002). The Kawartha Downs 3 Site (BbGo-17), an Euro-Canadian homestead and associated dump which dates between 1840s and 1930, was comprised of edgeware, spongeware, black transfer print, brown transfer print, container glass, nails, a dog tag dated to 1928, and a chert reduction fragment.

BbGn-15 is a Euro-Canadian site with an intact foundation. The artifact assemblage consisted of 2125 artifacts comprised mostly of coarse earthenware fragments and glass bottles. Artifacts recovered from sites BbGn-30 and BbGo-18, both homestead sites, were comprised of similar assemblages, with the majority of materials being ceramics. The Baby Bird site, a Euro-Canadian midden, was excavated in 2005 by York North Archaeological Services. A large site, it consisted of 9456 artifacts, including refined white earthenware, machine cut nails, container glass, and miscellaneous materials. One partial projectile point, of indeterminate cultural affiliation, was also recovered.

The Golden Sand and Midfield sites both contain multi-component assemblages with an indeterminate pre-contact First Nations affiliation. Artifacts recovered from excavations at the Clarke Homestead and McCreef sites included ceramics, glass and metal.

Table 4. Registered Euro-Canadian archaeological sites within a 10 kilometre radius of the project area.

Site Name	Borden Designation	Culture	Site Type
Peterborough County Jail	BbGn-16	Euro-Canadian	jail
Intersports	BbGo-13	Euro-Canadian	homestead
Kawartha Downs 3	BbGo-17	Euro-Canadian	homestead
*	BbGn-15	Euro-Canadian	foundation
Baby Bird	BbGn-23	Euro-Canadian	midden
*	BbGn-30	Euro-Canadian	cabin
*	BbGo-18	Euro-Canadian	homestead
Golden Sand	BbGo-21	multi-component	cabin
Midfield	BbGo-22	multi-component	undetermined
Clarke Homestead	BbGo-9	Euro-Canadian	undetermined
	BbGn-29	multi-component	multi-component

Site Name	Borden Designation	Culture	Site Type
McCreef	BbGo-10	Euro-Canadian	homestead

Although 40 archaeological sites were recorded within a 10 km radius of the project area, this may not necessarily reflect the known and unknown, yet unrecorded archaeological history of the area. Throughout the nineteenth and early twentieth century, as Euro-Canadian settlers and loggers penetrated the forests and lakes of the region, some would encounter and collect evidence of past First Nations activities, in the form of stone and copper tools, or organic paraphernalia. This practice continued well into the twentieth century and is still carried out to this day by cottagers, tourists, and local residents, some who have amassed significant collections. When reconstructing the First Nations history of an area, if time permits, it is prudent to examine town and townships histories, where there is often reference to particularly exciting finds by local residents or to the journals and accounts of the early settlers, surveyors, and loggers, who were some of the first Euro-Canadians to encounter untouched and preserved camps or other First Nations sites before the landscape was drastically altered from logging and farming.

Archaeological Potential

There are a number of criteria used to establish archaeological potential. The Ministry of Tourism and Culture has set guidelines that establish archaeological potential within the distance of certain natural and human-made features on the landscape. Natural features include the presence of potable water, primary water sources (i.e., lakes, rivers, streams, and creeks), secondary water sources (i.e., intermittent streams and creeks, springs, marshes, and swamps), elevated landforms (i.e., eskers, drumlins, knolls, ridges, and plateaux), especially in low and wet areas, distinctive land forms that may have special or spiritual significance (i.e., waterfalls, rock outcrops, caverns, mounds, and promontories), and soils suitable for habitation (i.e., pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground), and cultivation (i.e., fertile soil). Human-made features that can influence potential are transportation routes (i.e., portages, trails, roads, and railways), early settlement (i.e., homesteads, schools, and early industry), and known archaeological sites.

In addition, features that are no longer present on the landscape are also considered, including relic water channels (indicated by a clear dip or swale in the topography) and glacial shorelines (indicated by the the presence of raised sand or gravel beach ridges).

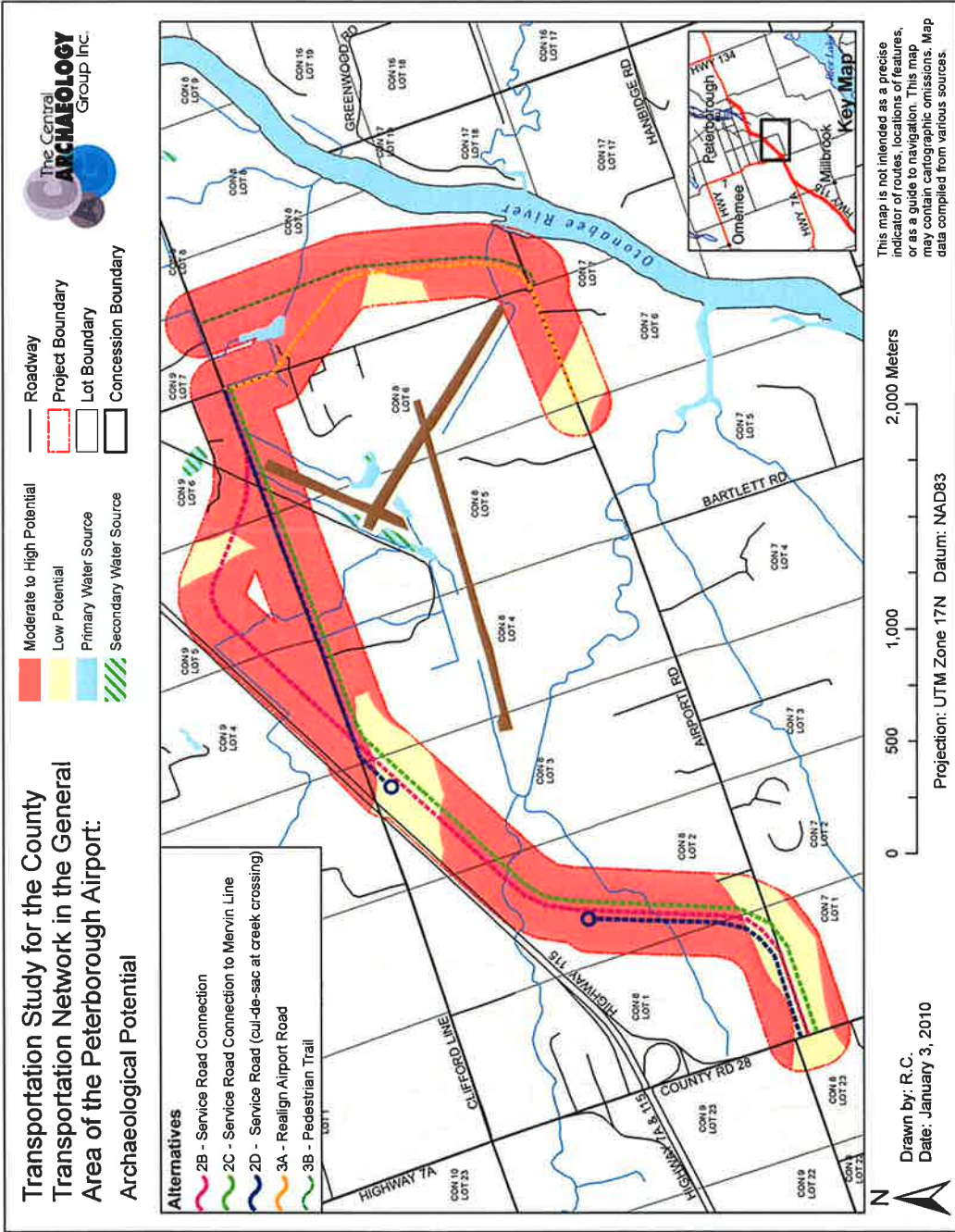
Past and present resources available on the landscape are also considered. These can include certain species of plants for food and medicinal purposes, animals, including their migratory routes and spawning areas, and raw materials (i.e., chert outcrops, quartz, copper, etc.), and early Euro-Canadian industry (i.e., logging, prospecting, and mining). There are features on the landscape that can also lower archaeological potential. These include areas that have a slope of greater than 20°, permanently wet areas (both in the past and the present), or lands that have undergone major landscaping or development involving grading below topsoil.

Considering the criteria above that was gathered from various sources during the Stage 1 background study, a database of all natural and man-made features discussed was created and a buffer, indicating a moderate to high potential for the discovery of archaeological resources, was plotted on an Ontario Basic Map from the Ministry of Natural Resources using ArcGIS 9.3. Areas that did not possess any of these features, had a slope greater than 20°, or had undergone extensive below topsoil grading were deemed to have low archaeological potential. Elevated areas (eskers, drumlins, knolls, ridges and plateaux) were highlighted to distinguish them from the surrounding landscape. In addition, primary water sources were set apart from secondary water sources.

Portions of the project area that have archaeological potential and thus require further testing, unless extensive disturbance can be determined, are areas that are within 300 m of primary water sources (lakes, rivers, streams, and creeks) and past water sources, 200

m from secondary water sources (intermittent streams and creeks, springs, marshes, and swamps), 100 m from historic features, such as homesteads, schools, churches, roads, and railways. In addition, there is archaeological potential within 250 m of known archaeological sites.

For this project area, features that contribute to archaeological potential within the project boundaries include the presence of the Otonabee River, Cavan Creek and other secondary water sources, remnants of the Midland Railway line, running diagonally through the property, and the surrounding historic roads, which today are paved routes (Mervin Line, Moncrief Line, and Airport Road). Factors that diminished potential in certain areas were the extensive grading and filling activities as result of the construction of the present runway and airport facilities and the low-lying and wet nature of large portions of the property (Figure 11).



This map is not intended as a precise indicator of routes, locations of features, or as a guide to navigation. This map may contain cartographic omissions. Map data compiled from various sources.

Figure 11. Archaeological potential for the proposed alternatives.

Conclusions and Recommendations

The Central Archaeology Group Inc. was retained by Charlene Buske, GENIVAR, to undertake a Stage 1 archaeological background study for a Transportation Study for the County Transportation Network in the General Area of the Peterborough Airport in the Geographic Township of North Monaghan, Peterborough County (Figure 1 and Figure 2). The project area is comprised of Lots 1 to 6, Concession 7, Lots 1 to 7, Concession 8 and Lots 1 to 9, Concession 9 and straddles a number of water sources, including low-lying and wet areas, the Otonabee River and Cavan Creek. The purpose of the Stage 1 background study is to provide a baseline level of data on known and potential cultural heritage resources, determine the potential for the discovery of archaeological resources within the project limits and present recommendations for further management strategies.

First Nations people began to settle in southern Ontario approximately 11,000 years ago with the arrival of Palaeo-Indian groups. Although Palaeo-Indian sites have not been found within the immediate vicinity of the project area, their presence has largely been recorded around Rice Lake. Archaic and Woodland period sites have been found throughout Peterborough County, especially along the Trent-Severn Waterway. The original Crown patents for the project area were granted during the early and middle nineteenth century. The properties changed hands over the next century and a half, with large tracts being acquired by the now defunct Midland Railway, which ran between Peterborough and Port Hope. In the 1950s, a small private airfield was established, but by the late 1960s, it had been acquired by the City of Peterborough for the construction of a municipal airport.

Although the resultant disturbance from construction activity and the low-lying and wet nature of the property has resulted in diminished archaeological potential within certain portions of the project area, especially in the vicinity of the existing runways and airport facilities, given the presence of the Otonabee River, Cavan Creek and other secondary water sources, historic concession roads (Mervin Line, Airport Road, and Moncrief Line), and the former Midland Railway, it has been determined that there is a moderate to high potential for the discovery of both First Nations and Euro-Canadian archaeological remains.

Based on the results of the Stage 1 background study for the detailed transportation study for a future road network project area, the following recommendations are provided for consideration by the Ministry of Tourism and Culture and GENIVAR, and are subject to approval by the Ministry of Tourism and Culture:

1. There is a moderate to high potential for the discovery of both First Nations and Euro-Canadian archaeological resources within 300 m of Cavan Creek and the Otonabee River and Euro-Canadian archaeological resources within 100 m of Mervin Line, Airport

Road, Moncrief Line, a number of unnamed secondary water sources and the former Midland Railway line. Thus, it is recommended that these areas (identified in Figure 11) undergo a Stage 2 archaeological survey, where shovel-sized test-pits, no smaller than 30 cm in diameter, be excavated at 5 m intervals, into the first 5 cm of glacial subsoil and the resultant material screened through mesh no greater than 6 mm. Should large pockets of disturbance be encountered, survey intervals can be extended to 10 m, but must return to 5 m intervals if undisturbed soil is detected or archaeological resources are encountered.

2. The remaining portions of the property have low archaeological potential. Thus, no further action is required.
3. The licensee shall hold the archaeological collections, including copies of study material and original notes generated during the course of research, in trust, unless it is transferred to an appropriate public institution as per the terms and conditions of holding a professional license.
4. 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 Sec. 48 (1) of the Ontario Heritage Act.
5. The Cemeteries Act requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries, Ministry of Small Business and Consumer Services.

The Stage 1 archaeological assessment was conducted under the project and field direction of Derek Paauw, under professional licence P272 issued to Mr. Paauw in accordance with the Ontario Heritage Act (R.S.O. 1990). The archaeological assessment was undertaken according to the requirements of the Ontario Heritage Act (R.S.O. 1990), the Environmental Assessment Act (R.S.O. 1990), the Ontario Ministry of Culture Standards and Guidelines for Consultant Archaeologists (2009), and the Planning Act (R.S.O. 1990).

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Appendix A - Glossary of Terms

Archaeology - is the scientific study of the physical evidence of past human societies recovered through excavation.

Archaeological Site - is a place in which physical evidence of past human activity is preserved and which has been, or may be, investigated using the discipline of archaeology.

BP - Before Present. Years before present (1950), used in dating sites and/or artifacts from an archaeological site.

Burial Goods or Burial Paraphernalia - items interred with an individual (or group) burial that may give clues to their social and/or economic and/or political position within their culture.

Chert - is a fine-grained, sedimentary rock, similar to flint. In antiquity, chert was one of the universally preferred materials for making stone tools.

Cultural Resources - are sites, structures, landscapes, and objects of particular importance to a culture or community.

Disturbed - refers to a study area that has recently been excavated or altered.

Environmental Assessment Act - sets up a process for reviewing the environmental impact of proposed activities prior to the granting of government funds.

Excavation - is the systematic digging and recording of an archaeological site.

Feature - is a collection of one or more contexts representing some human activity that has a vertical characteristic to it in relation to site stratigraphy.

Fluted - grooved or channeled. A fluted point is a projectile point which has had one or more long thinning flakes removed from the base along one or both faces.

Historic Period - the period when written records become available, 300 BP to the present.

Mitigation - measures undertaken to limit the adverse impact of construction methods on archaeological sites or cultural resources.

Ontario Heritage Act - allows municipalities and the provincial government to designate individual properties and districts in Ontario as being of cultural heritage value or interest.

Projectile Point - is an artifact used to tip an arrow, atlatl dart, spear, or harpoon. Usually made of chipped or ground stone, however, some are also made of copper.

Stage 1 Background Study - The purpose of a Stage 1 assessment is to investigate the cultural land use, archaeological history, and the present conditions of a property. The majority of the Stage 1 process is conducted in the office and involves the examination of records such as historic settlement maps, land titles, and documents, historical land use and ownership records, primary and secondary documentary sources, and the Ministry of Tourism and Culture's archaeological site database. The study may also involve interviews with individuals who can provide information about the property and consultation with local First Nations communities. The background study is followed by a property inspection to examine

geography, topography and current conditions, and to determine the potential for archaeological resources. Stage 1 background research is usually completed in conjunction with a Stage 2 property survey.

Stage 2 Property Survey - The Stage 2 property survey involves the documentation of archaeological resources by collecting artifacts and mapping cultural features. Depending on the nature of the property environment, two methods are employed in the survey: 1) pedestrian survey, and; 2) test-pit survey.

Stratigraphy - the layering of deposits on archaeological sites. Cultural remains and natural sediments become buried over time, forming strata.

Survey - is used to accurately determine the terrestrial or three-dimensional space position of points and the distances and angles between them.