



City of Hamilton Archaeology Management Plan 2016

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#### A Guide to the Reader

This Archaeology Management Plan (AMP) guides the City of Hamilton on managing its archaeology. The plan is written for a wide range of users, providing both general information about archaeology in Hamilton and policies and protocols for specific users. The AMP document is focussed on providing basic information on how it works, and is implemented: its plans, schedules and appendices supply detailed information on how and why the plan was formulated, and how to use it.

Sections 1, 2 and 3 can be consulted by all readers as an introduction to archaeology in Hamilton. Section 1 is a brief outline of the City's archaeology, a summary of how archaeology is administered, and the reasons for developing the AMP. An overview of First Nations and Native interests in their archaeology is provided in Section 2, and how the City of Hamilton will respect these interests by working with them. Section 3 summarizes the City's priorities and responsibilities in the management of the City's archaeology, and identifies the four roles the City plays, as: Landowner; Proponent; Approval Authority; and, Trustee.

**Sections 4 through 7** provide detailed information on each of these roles the City plays that affect archaeology, and are of principle interest to specialists working within these areas. Each colour-coded section details how the City's role affects archaeology, and provides detailed policies and protocol on how to manage these responsibilities.

**Section 4 – Landowner (Green)**: This section can be used by companies and staff working on or managing City-owned properties, such as parks and real-estate.

**Section 5 – Proponent (Blue)**: Centered on infrastructure projects within the City, primarily through the Class Environmental Assessment process, this can be used by staff and consultants.

Section 6 – Approval Authority (Red): Focussed on work arising through applications and development arising through the Planning Act, this section can be used by property owners or their agents and staff.

**Section 7 – Trustee (Yellow)**: The City's broader role in the management of public archaeology for its citizens is outlined in this section, and is of general interest.

**Section 8 – Implementation**: The logistics of delivery, maintenance and evolution of the Archaeology Management Plan is addressed in this section.

Eight appendices provide detailed background information behind the Archaeology Management Plan. The mapping for the Archaeology Management Plan is found in **Appendix A**. Four maps are used to represent different measures of archaeological potential across the City, such as distance to water, known archaeological sites, historic settlements, and geographic features. Appendix B outlines some basic principles and practice behind archaeology, while Appendix C describes the archaeology of the City of Hamilton. Archaeological potential modeling and the data used to build Hamilton's AMP model are presented in Appendix D. The background legislation and administration are both discussed and provided in Appendix E, with Provincial guidance on these laws and regulations in **Appendix F**. Templates for archaeology conditions and comments used by staff to meet the Provincial interest are in **Appendix G**, while **Appendix H** contains the City of Hamilton's Protocol for Consultation and Engagement with First Nations.

#### Acknowledgements

Six Nations:

Chief Roberta Jamieson, Chief Phil Monture Lonnie Bomberry, Paul General, Joanne Thomas, Kate Cave, Barb Harris, Joanne Green Norm Jacobs, Paul Williams, Arnie General, Jamie Hill, Six Nations Clan Mothers, Tom Deer, Leroy Hill, Tom Hill, Aaron Detlor, Hazel Hill

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This Archaeology Management Plan provides policy and protocol for the City of Hamilton's management of archaeology. The AMP does not affect landowners in the management of archaeology on their own property. It only applies to properties subject to *Planning Act* or *Environmental Assessment Act* legislation. However, private owners with archaeological resources on their property are invited to adopt the policy and protocol outlined here in order to manage these resources with due diligence, and are welcome to contact City staff for further information and assistance:

71 Main Street West, Sixth Floor Hamilton, ON L8P 4Y5 905-546-2424 x1214 www.hamilton.ca/heritageplanning

The *Provincial Policy Statement (PPS)* provides policy direction on matters of provincial interest related to land-use planning and development, including archaeology:

2.6 Cultural Heritage and Archaeology

2.6.2 Development and site alteration shall only be permitted on lands containing archaeological resources or areas of archaeological potential if the significant archaeological resources have been conserved by removal and documentation, or by preservation on site. Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site may be permitted.

## 1.0 City of Hamilton Archaeology Management Plan

### 1.1 Introduction

**Purpose:** This Archaeology Management Plan (AMP) provides guidance on the management of archaeology within the City of Hamilton. It outlines the City's roles and responsibilities, and provides the policy and protocol for implementation, ensuring that the management of archaeology is systematic and consistent across the City's jurisdiction.

**Format:** The City of Hamilton AMP consists of eight sections, each designed to be read independently according to the user's needs. As a result, there is repetition of material between sections.

**Section 1:** Introduces the AMP, outlining archaeology within the municipal government context in Ontario, the role of an AMP, and how Hamilton's was developed.

**Section 2:** Describes the significant interest and role of First Nations and Natives in the archaeology of the City of Hamilton.

**Section 3:** Provides an overview of the City's priorities and interests in the management of the City's archaeology, and identifies four roles for the City in this context:

- Landowner (Section 4 at the Green tab);
- Proponent (Section 5 at the Blue tab);
- Approval Authority (Section 6 at the Red tab); and,
- Trustee (Section 7 at the Yellow tab).

Implementation and monitoring of the AMP are detailed in Section 8.

The eight appendices provide details behind the construction and implementation of the AMP.

**Appendix A** comprises four maps detailing archaeological potential across the City, using criteria identified or defined by the Province (see the page 10 sidebar for summary of criteria used):

- **Appendix A-1: Overall Archaeological Potential** depicts cumulative archaeological potential for both Native and EuroCanadian archaeology across the City, as derived through the following three maps;
- **Appendix A-2: Archaeological Sites and Water** displays archaeological potential based on mapping of catchment areas around:
  - o Registered and reported archaeological sites; and,
  - Watercourses (such as creeks, streams and rivers) and waterbodies (including lakes, natural ponds, marshes and swamps).
- *Appendix A-3: Historical Potential* maps archaeological potential in catchment areas for:
  - Historic EuroCanadian archaeology, based on recorded historic transportation routes, areas of pioneer EuroCanadian settlement, properties designated under the Ontario Heritage Act, or some association with recorded events, activities or occupations.
- **Appendix A-4: Physiographic Features** outlines archaeological potential based on catchment areas around:
  - Physiographic features, including elevated topography, unusual landforms, favourable soil conditions, and resource locations.

Provincial Policy Statement (continued)

The PPS also provides definitions for terms it uses:

Archaeological resources: includes artifacts, archaeological sites and marine archaeological sites. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with the Ontario Heritage Act.

Areas of archaeological potential: means areas with the likelihood to contain archaeological resources. Criteria for determining archaeological potential are established by the Province, but municipal approaches which achieve the same objectives may also be used. Archaeological potential is confirmed through archaeological fieldwork undertaken in accordance with the Ontario Heritage Act.

*Development*: means the creation of a new lot, a change in land use, or the construction of buildings and structures, requiring approval under the Planning Act, but does not include: activities that create or maintain infrastructure authorized under an environmental assessment process; or works subject to the Drainage Act.

Significant: means (g) in regard to cultural heritage and archaeology, resources that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people. Criteria for determining significance for the resources identified in section (g) are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation.

*Site alteration*: means activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site.



Archaeological data are used to accurately recreate an Iroquoian Village, and replicate the activities that occurred there.

- Appendix B discusses archaeology in general;
- Appendix C outlines archaeology in the City of Hamilton;
- **Appendix D** presents the archaeological potential modelling and data used to generate Hamilton's AMP mapping;
- Appendix E is the background legislation and administration;
- **Appendix F** comprises Provincial guidance on these laws and regulations
- **Appendix G** provides templates for conditions and comments to address the City's legislative responsibilities for meeting the Provincial interest in archaeology; and,
- **Appendix H** is a protocol for First Nations consultation and engagement regarding archaeology as directed by the Province.

## 1.2 Background

The City of Hamilton has some of the most culturally valuable *archaeology* in Ontario, with over 1,200 known sites registered with the Province. They span some 13,000 years, from the first Native peoples arriving after the last Ice-Age to EuroCanadian pioneers, and later settlers and industry in the eighteenth, nineteenth and early twentieth centuries.

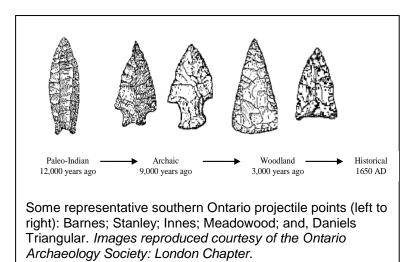
Most of the City's archaeology is in the top 30 centimetres (12 inches) of soil. This thin layer of topsoil represents the only record of Hamilton's past for which there are no written documents, making it a valued and limited resource to be conserved. The discipline of archaeology is the accurate mapping, careful excavation and precise analysis of artifacts from the soil. The information that context provides is permanently lost if a site is disturbed before being studied by archaeologists. It is very important that archaeology is completed before the soil is disturbed in these sensitive areas.

Archaeological sites may only cover a few square metres, and so can be impacted by small projects like excavations for swimming pools, concrete pads for outbuildings, house foundations, service trenches, and paths. Commercial and residential developments, road-building or widening, creek-diversion and landscaping for golf courses can easily remove multiple small and large archaeological sites. While agriculture generally does not harm archaeological sites to the same degree, treeand sod-farming, or opening new areas to cultivation, can seriously damage the archaeological record.

In Ontario, Provincial legislation directs how or where archaeology is to be undertaken, reflecting the Crown's interests, which are partially administered by municipalities. The principal objective of this Archaeology Management Plan (AMP) is to co-ordinate the City of Hamilton's management of archaeological resources under the Provincial Acts, to ensure the engagement of First Nations and the appropriate conservation and protection of the archaeological record.

#### 1.3 What is archaeology?

Archaeology recovers information from sites by the accurate mapping, controlled excavation and comprehensive study of artifacts recovered from an archaeological site (a full discussion of archaeology is in *Appendix B: Archaeological Principles and Practice*). From this work archaeologists can find out where and how people lived, and who came before and followed after them, and adds to the overall cultural and scientific understanding of these societies. Archaeological sites are the record of people's activities in the past and their only physical traces of existence if there is no written documentation. Interpretation of the archaeological record relies on the recovery of artifacts from these activities, studying where they were located, and analyzing the artifacts themselves. The type of artifacts recovered from archaeological sites varies with the age of the site, and while artifacts are usually understood



*Horticulture* is practiced when an area of forest is cleared and sown with domesticated plants for several years, then left to regenerate by moving to another area of freshly cleared forest.

Hunter-Gatherers or foragers live by harvesting wild plants and game, and are often mobile groups, briefly but repeatedly using the same locations over a large area of land.

Native *cabin* sites are smaller settlements of one or two longhouses, representing a seasonal occupation of one or more families, representing a dozen or more people.

Native *villages* are large, long-term settlements consisting of multiple longhouses, often surrounded by a palisade, and populated by hundreds of people.

to be objects like tools, they can also represent human impact on landscapes, such as increased erosion with the introduction of Native *horticulture* and later EuroCanadian agriculture.

## 1.3.1 Who was here?

The first Natives in Hamilton were Paleo-Indians ('paleo' means 'before the beginning'), who lived here as *hunter-gatherers* between 13,000 and 9,000 years ago. Usually only their stone tools are recovered: points for spears, scrapers for processing food and hides, and other stone tools for specialized tasks. The Archaic ('earlier ancestors') Natives lived here between 9,000 and 3,000 years ago, with mostly stone and some copper tools recovered from Early Archaic sites. In Middle and Late Archaic times, more bone, shell and wood remnants are recovered. The Woodland culture (referring to their wooded environment) marks the adoption of pottery and horticulture, from 3,000 to 400 years ago, from which more bone, shell, wood, seeds and plants are preserved, along with stone tools. Historic EuroCanadian settlement in the area began in the late 1700s, and intensified in the nineteenth and twentieth centuries.

#### **1.3.2** What are archaeological sites?

An *archaeological site* is a location where people left a physical record of their activities that can be relocated at a later date. Sites representing Native cultures vary from individual lost tools to overnight and seasonal family camps, and larger gatherings of multiple families. As populations grew over time, so did the number and size of sites. In the Woodland period, larger *cabin* sites and *villages* appear, marking a notable growth in population. The Historic period follows from the seventeenth century onward, and the material preserved and recovered for both Natives and EuroCanadian settlers from Europe and the United States of America represents farmsteads, settlements, military encampments and battlefields, industrial sites, and transportation infrastructure and

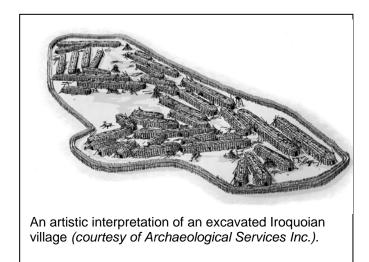
landscapes, among others. Archaeological significance diminishes with sites representing twentieth century occupations, as comprehensive written and photographic documentation is readily available: *Appendix C: Hamilton Archaeology* is a synopsis of Hamilton's archaeological record.

The Head-of-the-Lake, and what specifically later became Hamilton, has been a popular settlement area for thousands of years. It has a temperate climate, is the focus of transportation routes, and is a regional headland. Hamilton is also the location of many essential subsistence resources, notably water, stone for tools and construction, clay for pottery and bricks, and rich soils. With a broad range of topographic features, its landscape comprises a variety of closely-knit microenvironments. These ecological patches yielded a larger number of plants and animals in the past, and now form highly productive agricultural land for a wide spectrum of crops.

In Hamilton, licensed archaeologists have registered over 1,200 terrestrial sites (see **Appendix A** for maps) with the Province, which maintains a database of all registered sites in Ontario. Sites also occur underwater, but require management outside the scope of this AMP.

#### 1.3.3 What are artifacts?

As we do today, people in the past used wood, bone, stone, clay, charcoal, pottery, iron, glass, china, bricks, nails, glass and myriad other materials. Once they are left on or buried in the ground, organic materials like wood, charcoal and bone begin to decay immediately, and most will usually disappear between one or two thousand years. Some metals such as iron rust quickly and disintegrate, while copper artifacts can last for thousands of years, and stone tools will last for tens of thousands of years. Generally, the older the site, the less there is to find: the younger it is, a larger number and wider variety of artifacts are found.





The interior of a longhouse, used by the Iroquois (courtesy of The American Museum of Natural History).



An artistic interpretation of a historic Iroquois village being visited by a Jesuit priest (courtesy of Stewart Leslie; artist, Ivan Kocis).

## 1.4 What affects archaeology?

The more that soil making up an archaeological site is disturbed, the less information the site can provide. The most informative archaeological site is one that is disturbed least: not at all by humans after being formed, and as little as possible by later factors, such as plant and root growth and decay, and the burrowing of insects and animals. Disturbance by people takes many forms. Traditional agriculture and gardening displace artifacts by mixing the soil, and the order in which they were deposited, but their location is still relatively intact, and much information can still be gleaned from these sites.

Development activities often pose the greatest threat to archaeological resources. These involve more intensive disturbance to the soil, and so cause more damage to the archaeological record.

## 1.4.1 What are development activities?

Other types of soil disturbance caused by people, beyond traditional agricultural or gardening, are referred to here as 'development activities'. These activities include the construction or installation of buildings, roads, utilities, recreational areas, water control, or any other modifications to landform and land-use that disrupt or displace the upper layers of soil. Both small and large scale development activities have the potential to impact archaeology. Sod and tree farms are included in this category, as they are more disruptive than traditional farming with the removal of topsoil in every harvest, taking artifacts and sites with them.

Even where development activities have already taken place, there can remain significant archaeological features intact. For example, when City maintenance work was being conducted on Tecumseh Avenue, an archaeological site associated with the Dundurn Castle property of Sir Allan MacNab was identified under the existing roadway. The site has been conserved, and the area identified as being archaeologically sensitive in order to regulate future work in the vicinity.

#### **1.4.2** What archaeology can small-scale development reveal?

Smaller projects, like the installation of gravel or asphalt for driveways, concrete pads for outbuildings, or excavating private swimming pools, remove topsoil and can displace any archaeological resources with them. Excavations for a private backyard swimming pool uncovered the 'Ashbaugh Pottery' site in Westdale, significant to the early history of Hamilton, and the expansion of a private driveway in rural Flamborough revealed a pioneer EuroCanadian cemetery.

The construction of private or public walkways and paths can also impact sites. A gravel multi-use trail was inadvertently built by the former City of Hamilton through the 'Recliner' site, a Woodland camp registered with the Province at the time. The remainder of site was later excavated by archaeologists, falling within the alignment of the Red Hill Valley Parkway and Queen Elizabeth Way (QEW) interchange. The Bruce Trail, on the Mount Albion bluffs overlooking the Red Hill Valley, passed through what was later identified as the 'Mount Albion' site, the largest early Paleo-Indian site identified on the Niagara Peninsula to date.Small landscaping projects like garden relocation have uncovered archaeological sites in Hamilton, like Native sites at Battlefield House and Whitehern.

#### 1.4.3 What effects do large-scale developments have?

Large scale, extensive land developments affect archaeological resources more consistently and substantially than small scale projects. These can be:



Gravel multi-use trail built through the 'Recliner' Site



An archaeological excavation at the 'King's Forest' site, underneath a baseball diamond, within the Red Hill Valley Parkway corridor.



Construction of the Red Hill Valley Parkway through the Red Hill Valley corridor has required extensive grading and soil displacement. Archaeological assessment carried out through the project resulted in the archaeological excavation of several significant Native and EuroCanadian archaeological sites.

- Private projects, like the construction of residential, commercial or industrial developments;
- Construction and development of government facilities and properties, such as buildings and parks; or,
- Publicly-driven infrastructure projects, including roads and utilities.

New development on former agricultural land typically has the greatest effect on areas of archaeological potential. The Meadowlands development in Ancaster, for example, resulted in the identification of more than 100 archaeological sites.

Landscaping and other landscape-altering activities are also disruptive even though they may not result in the construction of a building or other structure. Grading undertaken for the King's Forest recreational field removed most of a large Woodland village, remnants of which were still found underneath the playing field and along its edges. Golf courses, due to regrading, landscaping, new vegetation planting, and the installation of bunkers, have major impacts due to the earthmoving involved, and often disrupt archaeological resources.

The alteration of waterbodies is another activity impacting archaeological resources because of the link between humans and water sources. When Conservation Authorities built dams which created lakes Niapenco, Christie and Valens for watershed management, these flooded archaeological sites located along the former watercourses. The infill of lots along Hamilton and Dundas harbours also capped or destroyed many archaeological resources.

To summarize, the management of soil disturbance activities is critical to the conservation of archaeological resources in a systematic and consistent manner across the City.

# 1.5 How is archaeology addressed in the planning and development process?

The Province administers archaeology under the authority of the Ontario Heritage Act (OHA). The legislation stipulates that any archaeology carried out in the Province must be conducted under licence granted by the Province to individuals. Work conducted under a license is reviewed by the Province to ensure that the technical standards and guidelines are being met.

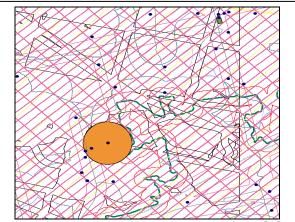
Failure to comply with the *OHA* by altering an archaeological site without a license is punishable by fines up to \$1,000,000.00. Hamilton is the location of the first charges and convictions for unlicensed alterations to an archaeological site under the *Ontario Heritage Act*.

This Provincial interest in archaeology is also reflected in other legislation, including the *Planning Act, Provincial Policy Statement*, and *Environmental Assessment Act.* Projects undertaken under these and other legislation are evaluated for their impact on archaeological sites, or areas that meet *Provincial criteria* for having archaeological potential.

The Province's criteria for archaeological potential have been refined substantially through the 1970s, 1980s and 1990s. As a result, older determinations of what were deemed "low" archaeological potential, now outdated, will often be overturned by the Province when, if projects are delayed, the question of their potential is revisited. Review of standards in 2004-2005 resulted in substantial updates and refinements to Provincial standards and guidelines that were put into effect on January 1, 2011.

For example, a public housing project on Winterberry Drive in Stoney Creek yielded a significant archaeological site, when an archaeological assessment was carried out in 2004. It required excavation, despite the The *Provincial criteria* for determining archaeological potential are proximity to:

- Known archaeological sites;
- Water;
- Elevated topography;
- Sandy soil in areas of clay or stone;
- Unusual landforms;
- Source areas for subsistence resources;
- Areas of Pioneer Euro-Canadian settlement;
- Historic transportation routes;
- Ontario Heritage Act designated properties;
- Areas associated with historic events, activities or occupations; and,
- Areas not recently subjected to intensive and extensive recent land disturbance.



The image above illustrates a snapshot of the GIS mapping to be used to determine archaeological potential. The circle denotes the catchment area (a 250 metre radius around the centre) of a known archaeological site. Other fields shown in this map include watercourses, historic transportation routes, and historic activity points such as farmsteads.

The four stages Stage 1:	s of archaeological activities are: Evaluation of archaeological potential. No fieldwork is conducted, other than a site visit, but background research is carried out on the property's history and prehistory to determine its archaeological potential.			
Stage 2:	Property assessment. Fieldwork is carried out to determine whether the subject property encompasses one or more archaeological sites.			
Stage 3:	Site-specific assessment. Testing is conducted on archaeological sites to determine their spatial extent, cultural affiliation, and archaeological significance.			
Stage 4:	Mitigation through preservation (avoidance) or excavation, and potential monitoring during construction activities.			
See Appendix E for more details on these activities.				

property being described as having "no further potential" 20 years earlier. Reviewing these outdated decisions and applying current standards indicates that the City is performing due diligence in its administration of archaeology, and is fulfilling its responsibilities to the provincial interest in archaeology.

## 1.6 What is an Archaeology Management Plan?

An Archaeology Management Plan (AMP) is a complete framework and set of policies and protocols used by a municipality to assume a comprehensive role in managing its archaeology. Traditionally, a key tool of the AMP is the use of a 'potential model' customized for the local area to graphically represent where archaeological sites or resources are most likely to be found. The potential model maps areas of archaeological potential based on variables or criteria including where known sites have been found and what cultural and natural features these resources may be close to, such as water for drinking or transportation routes.

These potential maps provide a "yes/no" answer for planners to determine whether archaeological work is required. If an area is identified as having archaeological potential, a *Stage 1-2 Archaeological Assessment* must be completed prior to development to determine whether any archaeological sites are present: if there are, further *Stage 3* and *Stage 4* work may be required. Alternatively, if an area is shown to retain no archaeological potential, no archaeology is required.

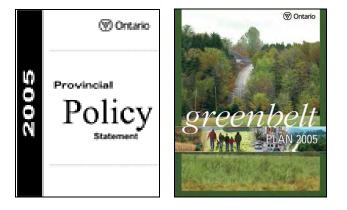
With its AMP the City seeks to ensure that the consideration of archaeology is built into those projects that will disturb the soil in areas of archaeological potential, or known sites, and that there is no confusion of responsibilities among the various parties involved. It also tracks what work has been carried out in the past, to reduce duplication of efforts. Built into the City's AMP (see Section 8.0) is a schedule to implement, maintain and monitor the plan.

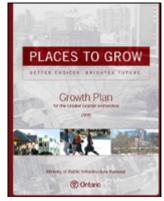
When the OHA was enacted in 1975, archaeology was fully administered by the Province: it licensed archaeologists, and reviewed and approved all archaeological activity subject to the *Planning Act* and *Environmental Assessment Act*. The Province also reviewed development applications, for their impact on identified sites and areas of archaeological potential.

With some of these responsibilities since downloaded to the City of Hamilton through a Memorandum of Understanding (MoU) with the Province in 1996, City planning staff determines the archaeological potential of a planning application using the Provincial criteria, using the same tools to address archaeological resources.

Over the past 20 years in Ontario, at least four First Nations (Sheguiandah, Wahta Mohawks, Ojibways of Sucker Creek, and Walpole Island) and 14 municipal governments (Brantford, Caledon, East Gwillimbury, Fort Erie, Howland Township, London, Muskoka, Niagara-on-the-Lake, Ottawa-Carleton, Peterborough, Richmond Hill, Toronto, Waterloo and Windsor) in Ontario have adopted Archaeology Master Plans. These are largely mapping exercises, defining areas of archaeological potential by using a subset of the Provincial criteria.

In most of these existing AMPs, the attributes of these criteria are then adjusted to assure they capture a minimal proportion of registered sites. Fore example, the Province's 250 metres 'distance-to-water' criterion may be reduced to 230 metres in such an AMP to capture a minimum of 80% of registered sites. In theory this reduces the number of properties under development requiring archaeological assessment, although the effectiveness of this approach is not usually demonstrated in practice.





Aside from the mapping exercise, traditional archaeology master plans largely comprise a background chronology for the Native and EuroCanadian colonization and occupation of the subject lands. The above master plans and their various strategies were reviewed and evaluated for their efficacy, as were others elsewhere in Canada, and internationally.

The City of Hamilton Archaeology Management Plan (the Province issued guidelines in 2010 using this term) goes beyond this mapping exercise to focus on effective implementation by the City through a number of definitive policies and protocols. Stress is placed on the AMP priorities being consistently applied across the different roles the City plays in the management of archaeological sites and resources. While there are details on the City's Native and EuroCanadian chronologies, and how the archaeological potential mapping was carried out, these background details are in the appendices.

It is also important to emphasize that the Province still reviews all consulting archaeology reports in Ontario, whether triggered by a potential call made through an AMP, a Memorandum of Understanding, or by the Province. When the Province's interest in the archaeology of a development project has been met the Province signs-off on the concern to the municipality. The municipality may then allow the work to proceed once it is satisfied that its own concerns have been addressed. This relationship between the Province and the City of Hamilton may evolve in the future, with the municipality playing a larger role in determining whether the Provincial interest is being adequately addressed.

#### 1.7 Why is an Archaeology Management Plan needed?

When the OHA was enacted it identified archaeology as a finite resource that required conservation, protection and care. Following this lead, other legislation was updated to include the Provincial interest in archaeology,

including the *Planning Act, Provincial Policy Statement (2005), Places to Grow, the Greenbelt Act, Green Energy Act, Cemeteries Act,* and *Environmental Assessment Act,* among others. These legislative instruments require municipalities to address the Provincial interest in archaeology. The City of Hamilton's responsibility for archaeology is reiterated by the Memorandum of Understanding signed with the Province in 1996.

The City of Hamilton AMP provides for efficient, co-ordinated and effective planning, combined with consistent and sound management of archaeology. It combines the most accurate and current data available with a comprehensive set of policies and protocols, providing clear guidance for planning decisions. In so doing, the AMP:

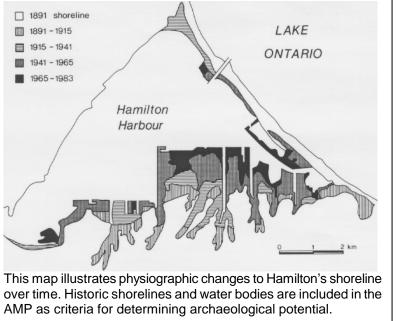
- o Identifies areas of archaeological concern up front; and,
- o Eliminates delays due to archaeology later in the process.

This AMP provides a Hamilton-specific potential model, a more accurate tool because it uses local information in the evaluation and determination of potential, rather than the Province's 'broad-brush' approach. Scheduled reviews of the AMP will result in revisions to the plan and update the dataset to maintain its accuracy.

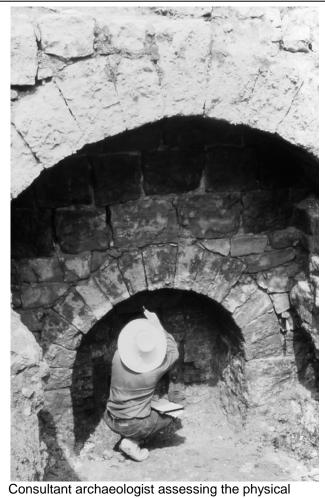
#### 1.8 How was the Archaeology Management Plan developed?

Development of an AMP for the City of Hamilton was identified in the work plan for the Department of Planning and Economic Development 2002, and assigned to the Heritage and Urban Design (HUD) group within the Community Planning and Design Section of the Planning Division.

As the lead, HUD staff met, consulted and held dialogue with a broad range of governments, organizations, and individuals that hold interests



Natives are Indians as defined by the Indian Act of Canada, entered on the Federal Indian Register. Non-status Indians may have Native ancestry, but are not included in this register.



condition of the Marshall Lime Kiln

in archaeology, including First Nations, the Province, Hamilton municipal staff, non-governmental organizations, archaeologists and citizens. The comments and priorities of these groups were evaluated and integrated into the AMP where possible. Priority was placed on producing a document that could be used by staff, the development community, First Nations, Natives, businesses, organizations and citizens not specialized in archaeology.

Preparation of the AMP began with a review of existing municipal policy and protocols for archaeology of the former municipalities within the amalgamated City of Hamilton, and a review of existing AMPs within and outside of the Province of Ontario. To provide City staff with information more current than the original maps, interim mapping of archaeological potential was developed in 2002 using three key Provincial criteria:

- Distance to water (300 metres);
- Proximity to registered and reported sites (250 metres); and,
- Proximity to the Niagara Escarpment (100 metres).

As more data were compiled for the final potential mapping and modelling for this plan, they were included in later updates of this initial model. At the same time, new Official Plan text was prepared to replace those portions of the official plans dealing with archaeology for the former municipalities amalgamated under the City of Hamilton.

A five-year review of the AMP will be conducted to assess its effectiveness, implement changes required, and roll the plan forward for another five-year cycle. Archaeological data will be updated on an annual basis, based on provision of data from the Province.

#### 1.9 Who was involved?

Archaeology Management Plan

#### 1.10 Who should use this Archaeological Management Plan?

The City of Hamilton AMP is developed for a wide range of users, within and outside of the City government. Inside the City, this includes planners and staff in the Planning and Economic Development, Public Works, and Community Services Departments, for the evaluation of archaeological resources and potential. A wide range of users outside of City staff will also use the AMP, and may include:

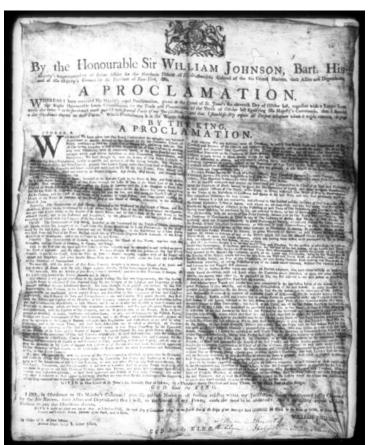
- First Nations and Native individuals and organizations;
- Federal and Provincial government staff;
- Conservation Authorities;
- Property owners, developers and their consultants and agents;
- Consulting, academic and avocational archaeologists;
- Historical and archaeological societies; and,
- Citizens in general.

These individuals and groups will likely use the AMP for economic, environmental, research and personal purposes.



EuroCanadian features considered to be of archaeological significance include ruins and remnants of historical farmhouses, barns, and mills.

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The Royal Proclamation of 1763

A *First Nation*, as defined in legislation, is a band as defined by the *Indian Act*. A *band* is a body of Indians in whose interest the Crown holds land and/or money, or has been declared a band under the *Indian Act*.

## 2.0 First Nations, Natives and Archaeology in Hamilton

## 2.1 Preamble

Archaeology within the City of Hamilton reflects two central cultures: Native and EuroCanadian. The majority of registered archaeological sites in Hamilton are Native, starting from the early ancestors who first colonized the area nearly 13,000 years Before Present (BP – see Appendix C for details on the dating terminology used in this document) through to and including the 'historic' period, with the arrival in southern Ontario of EuroCanadian explorers, traders and settlers approximately 300 years BP (1650 AD).

EuroCanadian archaeology is generally referred to as 'historic', and represents the intensive re-settlement and re-organization of the Hamilton region by people of primarily European extraction, but including other ethnic groups within this overall cultural framework.

After the British defeat of the French in 1759, each colonial nation having their respective Native allies, the Royal Proclamation of 1763 recognized Native groups as sovereign nations, with whom the Crown negotiated treaties on land transfers to the Crown and relegation of Natives to land reserves. Various First Nations retain claims and treaty rights to lands outside of these reserves.

Natives have an inherent interest in the archaeology of their ancestors who signed these treaties, and the lands they occupied and used. Within the Hamilton area, three Nations retain such interests:

- The Mississauga;
- The Huron-Wendat; and
- The Iroquois Confederacy.

The lands or Indian Reserves of these Nations closest to Hamilton are, in order of proximity:

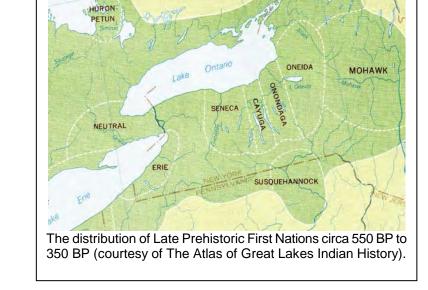
- Six Nations of the Grand River Territory, of the Iroquois Confederacy, based in Ohsweken;
- Mississaugas of the New Credit First Nation, Hagersville; and,
- The Wendake Nation, of the Huron-Wendat, near Quebec City.

These First Nations are represented by elected and traditional Councils, and are hereafter referred to as the Nations in this AMP.

## 2.2 First Nations and Archaeology in Hamilton

Although First Nations in Canada negotiate primarily with the Crown (the Federal and Provincial governments), as a 'creature' of the Crown the City of Hamilton recognizes that its activities and decisions affect the Nations. The City of Hamilton seeks to partially address this through the AMP, within the scope of the municipality's authority. In so doing, the City of Hamilton commits to:

- Respect the distinct practices, customs, traditions, lifeways, and governance of First Nations and Native peoples;
- Recognize and respect the interests of modern Natives and Nations in the Native archaeology;
- Maintain dialogue with representatives of the Nations on matters involving Native archaeology;
- Develop policy and protocol on best practices for Native archaeology and graves;
- Enter into agreements with the Nations as needed on the policies and protocols arising through this AMP;
- Engage and confer with the Nations regularly on long-range planning directions such as areas of long range growth and development within the City;



*Native archaeology* in this Archaeology Management Plan refers to archaeological sites and artifacts that represent ancestors of the Nations, including their cultures, beliefs and lifeways, within the present City of Hamilton.

- Circulate to the Nations, to their scope of interest for review, notices of private and public development and construction within the City that may impact identified Native archaeological sites or areas of archaeological potential;
- Act in good faith and perform due diligence in meeting its archaeological responsibilities;
- Promote the education of both residents of Hamilton and of the Nations on archaeology in the city;
- Contribute to a practicable strategy for the curation of artifacts from Native archaeological sites in Hamilton;
- Require participation of members and/or representatives of the Nations in City projects involving Native archaeology; and,
- Encourage participation of members and/or representatives of the Nations in private projects involving Native archaeology.

Archaeology Management Plan



The historic barrel vault under Tecumseh Street in Hamilton is partially exposed for inspection by temporarily raising the overlying protective steel plate in the roadway. This landscape feature was built for Sir Allan MacNab on his Dundurn Castle estate before 1848,

## 3.0 Municipal Archaeology

## 3.1 Introduction

The key principle of Hamilton's AMP is the conservation of archaeology. This is the City's corporate commitment to the sound and prudent care of these valued and scarce cultural heritage features located within its jurisdiction. In dealing with archaeology, the City has a number of separate functions and roles often defined through legislation:

- Landowner;
- Proponent;
- Approval authority; and,
- Trustee.

These are described in greater detail in Section 3.3. In these various roles, the City works with the Nations, Native groups and individuals, citizens, property owners, developers and their consultants and agents, businesses, interest groups, non-governmental organizations, and other government agencies. In organizing the AMP, and in recognition of these four roles, the AMP has been structured around a framework of policies and protocols. These policies and protocols provide the City with standards, guidelines and procedures to meet its archaeology resource management goals:

- The AMP **Policies** provide guidance on best practices for managing archaeology at the project level down; and,
- The **Protocols** outline procedures to follow when dealing with unforeseen and/or mitigating situations involving archaeology.

#### 3.2 Key directive

City of Hamilton policies and protocols are guided by over-riding ethical planning principles, community dialogue and legislation, reflecting a broad consensus of overall community values and those of vested professions, groups and individuals within and outside of the City organization. Such consensus is achieved through dialogue, combined with Provincial legislation, as outlined in Part I, and negotiation between the City and Province. In summary, the City is responsible for ensuring:

- **Due diligence** for archaeology when carrying out all municipal functions;
- Avoidance as the preferred alternative to disturbance of an archaeological site; and,
- Trusteeship in the management of archaeological resources.

#### 3.3 Municipal roles, scope, policy and protocol

As a corporate entity, the City of Hamilton plays several specific roles in relation to archaeology, as a:

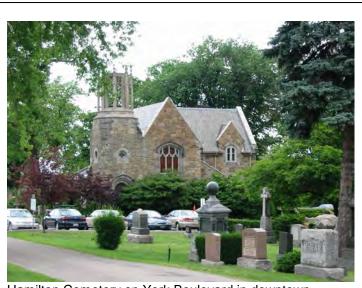
- Landowner responsible for archaeological sites and areas of archaeological potential on properties owned by the City;
- Development proponent overseeing development of lands for municipal infrastructure or facilities which have archaeological potential or contain archaeological sites;
- Approval Authority administering development applications under the *Planning Act* which may impact archaeological sites and areas of archaeological potential; and
- *Trustee* on behalf of the common interest for archaeology within the City as a whole.

*Due diligence* is the level of judgment, care, prudence, determination and activity an individual or organization can be reasonably expected to do under specific circumstances.



When archaeological sites are identified late in the development process, excavations may take place alongside construction.

The following outlines these roles with respect to archaeology. Each role is described, detailing how typical activities disturb soil, and potentially archaeological resources. City policies ensuring that such soil disturbance does not inadvertently impact potential and known archaeological resources are detailed for each of the City's roles. Finally, protocols are provided giving clear direction as to how archaeology is to be conducted when archaeological resources are inadvertently affected by soil disturbance activities. These protocols are in place to ensure that archaeology is dealt with appropriately when unanticipated sites are encountered. Archaeology Management Plan



Hamilton Cemetery on York Boulevard in downtown Hamilton is the largest city owned cemetery comprising 21,500 monuments.

*Site Alteration* entails activities, such as grading, excavation, and the placement of fill that would change the landform and natural vegetative characteristics of a site.

## 4.0 City as Landowner

## 4.1 Role

Currently, in 2012, the City of Hamilton owns just over 1,500 properties across the City, totalling approximately 4,100 hectares (10,000 acres). These holdings include parks, land reserves, greenspace, brownfields, properties held in tax-arrears, recreational facilities, libraries, historic sites and landscapes, museums, cemeteries, offices, roads, trails and other rights-of-way, maintenance yards, and airport lands.

The City is responsible for archaeology on lands under its ownership, and is obliged to perform due diligence in considering archaeology when carrying out activities resulting in soil disturbance on its properties.

## 4.2 Soil Disturbance Activities

The activities specifically described here do not constitute "development" in a formal sense, but are considered here as routine maintenance and upkeep activities, and do not require legislated development approvals. The City must still comply with the *OHA*, which stipulates that any *site alteration* of an "identified archaeological site" may be conducted only under the direction of a Provincially licensed archaeologist.

The Ontario Heritage Act stipulates that any soil disturbance on a site beyond normal agricultural cultivation is an impact warranting this requirement, regardless as to whether it triggers any other approval procedure. On some City heritage properties like Dundurn National Historic Site there are land-use restrictions in place protecting archaeology, while other City managed archaeological sites, like Battlefield Park, require detailed management plans to ensure their ongoing conservation and interpretation. Potential soil disturbance activities include but are not limited to:

- Planting and removal of trees or sod;
- Creating and maintaining planting beds;
- Installing or expanding utility/construction trenches and services;
- Installation of fencing or other barriers;
- Grubbing (mechanical clearing) and grading of land;
- Staging of equipment and stockpiling of materials;
- Landscaping, including fill activities;
- Installing, restoring or expanding foundations and pads for outbuildings;
- Installing, restoring or expanding driveways, paths, and access roads;
- Installing, maintaining or expanding swimming pools, ice-rinks, playing fields and other recreational facilities;
- Maintaining or upgrading roads and other infrastructure which do not fall under the *Environmental Assessment Act* or Municipal Class Environmental Assessment;
- Building, maintaining and cleaning of roadside ditches; and,
- Declaration of properties as surplus for future development.

Other uncontrolled forms of soil disturbance can occur on City-owned lands, which may not be the deliberate result of project activities, including:

- Erosion caused by water action on shores or banks and gullies;
- Unforeseen erosion of trails and pathways;
- Looting activities;
- Flooding and other catastrophic events; and,
- Unauthorized use of public lands (for example dumping, camping, mountain biking and tobogganing, among other activities that may cause uncontrolled erosion or other impacts to soil integrity).



The repeated use of public lands has formed an informal recreational trail in the Red Hill Valley between Mud St. and the Niagara Escarpment. Such activities can cause uncontrolled erosion along the path, and damage to archaeological sites transected by the trail and impacted by related activities.

*Mitigation* of an archaeological site is a description of how possible disturbance of a site will be managed: by ensuring its protection in place through a site management plan, or conserving as much of the physical artifacts and information a site contains by properly excavating it.



An archaeological excavation underway at Princess Point Park in Coote's Paradise, this is the type site for the Princess Point horizon, transitional between Middle and Late Woodland cultures (with permission of Dr. Helen Haines).

## 4.3 Policy

#### a) Archaeological Conservation

The City of Hamilton shall perform due diligence by meeting the principal goal of the Archaeology Management Plan: archaeological conservation. Prior to initiating projects that involve soil disturbance, the City shall ensure that:

- All City departments and appropriate staff shall be provided with the AMP;
- The AMP protocols detailed in 4.4 will be included within the terms of Requests for Proposals, Tenders and Quotations; and,
- City Cultural Heritage Planning staff shall be informed when projects are identified as requiring archaeological work by their project managers.

#### b) Archaeological Sites and Mitigation

When proposed work will impact one or more registered and/or recorded archaeological sites:

- The preferred strategy is mitigation through preservation in place;
- When the archaeological mitigation is addressed through preservation, the proposed work shall not start until the Province has indicated that the strategy meets the Provincial interest in archaeology, in concurrence with the City's Cultural Heritage Planning staff;
- If mitigation through preservation is not practicable, archaeological mitigation by excavation shall be carried out;
- If archaeological mitigation through excavation will be conducted, relevant parties shall be informed, including representatives of the

Nations in the event of Native archaeological sites;

- Archaeological consultants, when conducting Stage 3 and 4 mitigation of Native archaeological sites through excavation on behalf of the City, shall include in their excavating and reporting teams one or more Native representatives of the Nations serving either as a monitor or archaeological crew member;
- Where warranted by City priorities, Cultural Heritage Planning staff may use standards more stringent than the Province to evaluate the City's archaeological interest in specific sites, based on the City's heritage inventory and designation criteria and cultural heritage policies of the Official Plan; and,
- After archaeological mitigation is complete, City project managers and contractors on the job site shall remain diligent in the identification of sensitive archaeological artifacts and features, especially burials, through the life of the project.

As a condition of their license, archaeologists are responsible for the appropriate conservation and storage of artifacts and data arising from work under their license. These materials shall be archived through the Sustainable Archaeology Project.

## c) Areas of archaeological potential

When work is proposed within an area of archaeological potential or sites described in the archaeological potential mapping:

- Project contractors will be informed of archaeological concerns by the Project Manager;
- The Province will be informed of this work by the Project Manager;
- A strategy to address archaeology will be developed and implemented prior to soil disturbance;
- Archaeological consultants, when conducting stand-alone Stage 1



Temporary snow-fencing is erected to establish a buffer area of 20 meters surrounding an identified archaeological site, to temporarily protect it from disturbance by construction activities on adjacent lands, until permanent protection is put in place.

background studies, shall conduct visits to document and evaluate current conditions; and,

- Where this process results in the identification of one or more archaeological sites, AMP policy 4.3.b will apply.
- d) Site documentation management

A record of sites and areas signed-off for any further archaeological concerns shall be maintained and copies of the related reports provided to Cultural Heritage Planning staff for compilation into the AMP mapping.

Archaeological reports arising from any work for which the City was the client in the landowner role shall be retained and archived by Cultural Heritage Planning staff, in addition to reports and records retained by the City unit undertaking the archaeological work.

#### e) Information distribution

A summary of City properties encompassing archaeological sites that retain cultural heritage value shall be maintained. This information shall be established and maintained by the Planning and Economic Development Department, and distributed to the appropriate Divisions and Sections of the Departments of Planning and Economic Development, Public Works, Community Services, and other relevant staff to ensure that these resources will be monitored, protected, and conserved.

## 4.4 Protocol

#### a) Unanticipated archaeological sites

In the event that archaeological materials are unexpectedly exposed in the absence of an archaeologist, City staff and contractors at the job site

#### shall :

- Ensure that all work within a 20 metre buffer of the discovery cease;
- Secure the site by fencing and/or other means as required, such as stabilization; and,
- Contact the City project manager, who shall inform City Cultural Heritage Planning staff.

City Cultural Heritage Planning staff, delegated staff, and/or archaeological consultants acting on behalf of the City, shall:

- Conduct a site visit to assess the situation;
- Inform representatives of the Nations for Native archaeological sites, and other relevant parties as needed; and,
- Formulate and implement a site-specific remediation plan after conferring with the above parties, the Province and/or Registrar of Cemeteries as needed.
- b) Unauthorized activities

The City does not condone the unauthorized disturbance or looting of any archaeological sites or resources on City of Hamilton property, and shall ensure that such activities cease as soon as City staff is made aware of the unauthorized activity.

The sale of archaeological artifacts is illegal in the Province of Ontario.

A *Proponent* is the person, company, organization or government responsible for a project. Private proponents are often land-developers, governments are often building infrastructure such as roads, and others may be conservation authorities or non-governmental organizations managing land or carrying out community projects.



Extensive capital projects such as this combined sewer overflow pipe installed in the area of the Red Hill Valley Parkway Project result in large-scale soil disturbance and are subject to archaeological assessment.

## 5.0 City as Proponent

#### 5.1 Role

The City is a proponent of various types of developments and projects. These include responsibility for constructing, maintaining and upgrading roads, bridges, water mains, sewage and storm-water management systems, and municipal buildings and facilities. As the proponent for these projects, the City is responsible for ensuring they are carried out with due diligence for archaeology when they entail soil disturbance.

Many of these projects are subject to either the *Environmental Assessment Act* (*EAA*) and the *Municipal Class Environmental Assessment* process, or the *Planning Act* and *Provincial Policy Statement*. Projects subject to an EAA may be exempted or preapproved owing to their minimal environmental impact. Other projects will not require archaeology due to prior intensive and extensive disturbance. All projects that may affect archaeology are subject to the *OHA*, and so must take into consideration any impact on archaeological resources.

When these activities require permits or approvals, the need to address archaeology is often included in the review process. Due diligence must be maintained, however, to ensure that archaeology is considered in all projects, and that these concerns are fully addressed throughout the entire planning, design and construction of municipal infrastructure.

## 5.2 Soil Disturbance Activities

These activities constitute City-managed construction or development projects falling under the Provincial legislation and policies identified above. Examples of these development activities include construction, maintenance and upgrades related to:

- Roads, bridges, and highways;
- Transit infrastructure:
- Water and waste-water facilities:
- Offices, work yards, museums and residential buildings; ٠
- Sanitary landfill sites; ٠
- Recreational trails and facilities such as ice rinks, pools, parks and playing fields;
- Brownfield remediation; ٠
- Utility corridors;
- Airports; •
- Cemeteries; and,
- Slope, bank or shore stabilization.

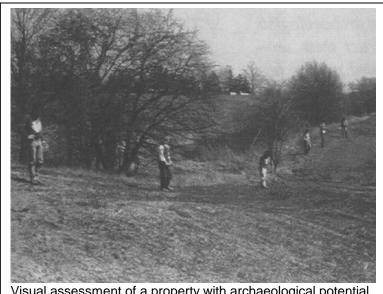
The scope of archaeological consideration with soil disturbance in such projects is not only limited to the footprints of the development projects, but also includes any new access routes to the projects within the project scope, and associated layover, staging and stockpiling areas.

#### 5.3 Policy

#### a) Archaeological conservation

The City of Hamilton shall perform due diligence by meeting the key goal of the Archaeology Management Plan: archaeological conservation. These policies apply when the City is acting as proponent during:

- Planning and design;
- Pre-construction;
- Construction;
- Operations and maintenance; and,
- Reclamation and decommissioning. ٠



Visual assessment of a property with archaeological potential.

*Mitigation* of an archaeological site is a description of how possible disturbance of a site will be managed: by ensuring its protection in place through a site management plan, or conserving as much of the physical artifacts and information a site contains by properly excavating it.



When following processes and carrying out activities that involve soil disturbance, the City shall ensure that:

- This work shall comply with the *Environmental Assessment Act*, the *Planning Act*, *Provincial Policy Statements*, and the *OHA* by meeting or exceeding any archaeological requirements;
- All City departments and appropriate staff shall be provided with the AMP;
- The AMP protocol detailed in 5.4 will be included within the terms of Requests for Proposals, Tenders and Quotations;
- City Cultural Heritage Planning staff shall be informed when projects are identified as requiring archaeological work during all stages of planning, design and construction by their project managers; and,
- City contractors and subcontractors shall adhere to the key goal of the AMP by meeting archaeological conservation requirements,

## b) Archaeological sites and mitigation

When proposed work is identified as impacting registered and/or reported archaeological site or sites, the following apply:

- The preferred strategy is mitigation through preservation in place;
- When the archaeological mitigation is addressed through preservation, the proposed work shall not start until the Province has indicated that the strategy meets the Provincial interest in archaeology, in concurrence with the City's Cultural Heritage Planning staff;
- If mitigation through preservation is not practicable, archaeological mitigation by excavation shall be carried out;
- If archaeological mitigation through excavation will be conducted, relevant parties shall be informed, including representatives of the

Nations in the event of Native archaeological sites;

- Archaeological consultants, when conducting Stage 3 and 4 mitigation of Native archaeological sites through excavation on behalf of the City, shall include in their excavating and reporting teams one or more Native representatives of the Nations serving either as a monitor or archaeological crew member;
- Where warranted by City priorities, Cultural Heritage Planning staff may use standards more stringent than the Province to evaluate the City's archaeological interest in specific sites, based on the City's heritage inventory and designation criteria and cultural heritage policies of the Official Plan; and,
- After archaeological mitigation is complete, City project managers and contractors on the job site shall remain diligent in the identification of sensitive archaeological artifacts and features, especially burials, through the life of the project.

As a condition of their license, archaeologists are responsible for the appropriate conservation and storage of artifacts and data arising from work under their license. These materials shall be archived through the Sustainable Archaeology Project.

#### c) Areas of archaeological potential

When proposed work is identified as being located within an area of archaeological potential or sites, the following apply:

- Project contractors will be informed of archaeological concerns by the Project Manager;
- The Province will be informed of this work;
- A strategy to address archaeology will be developed and implemented prior to soil disturbance;
- Archaeological consultants, when conducting stand-alone Stage 1 background studies, shall conduct visits to document and



Site visits to proposed development projects are important to confirm archaeological potential based on photographed, reported or mapped field conditions.

evaluate current conditions; and,

- Where this process results in the identification of one or more archaeological sites, AMP policy 5.3.b will apply.
- d) Site documentation management

A record of sites and areas signed-off for any further archaeological concerns shall be centrally maintained and copies of the related reports provided to Cultural Heritage Planning staff for compilation into the AMP mapping.

Archaeological reports arising from any work for which the City was the client under the proponent role shall be retained and archived by Cultural Heritage Planning staff, in addition to reports and records retained by the City unit undertaking the archaeological work.

## 5.4 Protocol

## a) Unanticipated archaeological sites

In the event that archaeological materials are unexpectedly discovered in the absence of an archaeologist, City staff, contractors and subcontractors at the job site shall:

- Ensure that all work within a 20 metre buffer of the discovery cease;
- Secure the site by fencing and/or other means as required, such as stabilization; and,
- Contact the City project manager, who shall inform City Cultural Heritage Planning staff.

City Cultural Heritage Planning staff, delegated staff, and/or archaeological consultants acting on behalf of the City, shall:

- Conduct a site visit to assess the situation;
- Inform representatives of the Nations for Native archaeological sites, and other relevant parties as needed; and,
- Formulate and implement a site-specific remediation plan after conferring with the above parties, the Province and/or Registrar of Cemeteries as needed.

#### b) Unauthorized activities

The City does not condone unauthorized disturbance or looting of any archaeological sites or resources involving City of Hamilton work sites, and shall ensure that such activities cease as soon as City staff is made aware of the unauthorized activity.

The sale of archaeological artifacts is illegal in the Province of Ontario.





Permanent perimeter fencing around a historical burial site ensures protection from nearby construction activities.

Under the terms of the 1996 Memorandum of Understanding between the City and Province, and as a creature of the Crown on behalf of the Province, the City is responsible for implementing all Provincial interests under the *Planning Act* that have been downloaded to the municipal level. This includes such matters as archaeology, agriculture, water and wastewater, natural environment impacts, transportation, housing, aggregates, fisheries, and forestry, among others.

#### 6.0 City as Approval Authority

#### 6.1 Role

The City of Hamilton is the principal approval authority for any development on lands within the City that is subject to the *Planning Act*. Section 2.d of the *Act* states:

"2. The Minister, the council of a municipality, a local board, a planning board and the Municipal Board, in carrying out their responsibilities under this Act, shall have regard to, among other matters, matters of Provincial interest such as:

(d) The conservation of features of significant architectural, cultural, historical, archaeological or scientific interest."

The associated *Provincial Policy Statement* (PPS) provides further guidance on the evaluation of the appropriateness of development:

"2.6.2 Development and site alteration shall only be permitted on lands containing archaeological resources or areas of archaeological potential if the significant archaeological resources have been conserved by removal and documentation, or by preservation on site. Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site may be permitted."

The City is also the successor to the former Regional Municipality of Hamilton-Wentworth, and has assumed a number of primary roles and responsibilities. In 1996, the former Region of Hamilton-Wentworth entered into a *Memorandum of Understanding (MoU)* with the Province of Ontario. The *MoU* gave the Region a clear role in managing archaeology under the *Planning Act*, undertaking reviews of whether the

following categories of development applications comply with the *PPS*, and identifying areas of archaeological potential and their need for an archaeological review:

- "Official Plans;
- Secondary Plans;
- Plans of Subdivision and Condominium;
- Zoning;
- Site Plans;
- Consents to sever or convey; and,
- Variances."

More recently, in 2005 and 2006, the Province of Ontario initiated strategic planning and growth strategies that provide not only for direction and containment of urban development but also encourage a conservation agenda. The *Greenbelt* and *Places to Grow* legislation provide some direction on archaeology as well: the Province has set a priority for a "culture of conservation" in the *Places to Grow Plan* (4.2.4.1.):

"Municipalities will develop and implement official plan policies and other strategies in support of the following conservation objectives:

> e) Cultural heritage conservation, including conservation of cultural heritage and archaeological resources where feasible, as built-up areas are intensified."

The City works within this framework to ensure the consideration and conservation of archaeology in planning matters from broad policy initiatives such as GRIDS (the Growth Related Integrated Development Strategy), to the Official Plan and Secondary Plans, and through the



Archaeological excavations on surplus lands owned by the City of Hamilton prior to development or sale of surplus land may be warranted if the property has been flagged as meeting any of the Province's criteria for archaeological potential.

development approvals process. Due diligence is also required to ensure that archaeology is considered in all planning matters, and that these concerns are fully addressed throughout the development process.

The City of Hamilton is also the approval authority for applications under the *Building Code Act*. While this is not enabling legislation for the *OHA*, Section 41 (1) of the *OHA* states that no-one who is not licensed in Ontario as an archaeologist shall:

"2. Knowing that a site is a marine or other archaeological site, within the meaning of the regulations, alter the site or remove an artifact or any other physical evidence of past human use or activity from the site."

Not all building activities that may result in archaeological site alterations require *Planning Act* approvals. For example, the construction of individual residential buildings generally requires only *Building Code Act* approval. Although not common, such activities may also impact archaeological sites: one residential lot on Weir's Lane in Ancaster identified several archaeological sites, one requiring excavation. In order to comply with the *OHA* 41(1)2, the City has a responsibility to inform and advise any landowner, agent or proponent of any potential impacts on registered and/or reported sites and contraventions of the *OHA*. The City addresses this concern through policy in section 6.3.d of this AMP.

#### Archaeological planning priorities

The critical physical areas that concern the City of Hamilton in managing archaeology under the *Planning Act* are:

- Greenfield developments;
- Areas of suburban intensification;
- The historic urban cores;

- Decommissioned and/or surplus lands;
- Urban or suburban 'islands' of archaeological potential or identified sites; and,
- Known archaeological sites.

*Greenfield* properties are a priority because they usually have experienced minimal disturbance. It is important that all green field development applications are reviewed by the City to determine whether they impact known sites or areas of archaeological potential.

Suburban intensification, while often taking place in and around existing 'modern' (post-1945) subdivisions, can also affect areas of significant archaeological potential. Earlier settlement along transportation corridors often resulted in large and deep lots, which have remained relatively undisturbed. With intensification, these large lots are now subject to further subdivision and development.

In the *Historic urban cores*, areas of archaeological potential remain for several reasons. Early historic development is in and of itself a significant archaeological resource, while early residential development also had a less intensive impact on the overall landscape, resulting in back-lots that remain relatively undisturbed and so retain archaeological potential. This pattern also occurs within existing historic estates and parks, resulting in sizable patches of relatively undisturbed soils. Vacant areas may also be capped, thereby preserving the original soil horizon and any archaeological potential, as documented at Dundurn Castle.

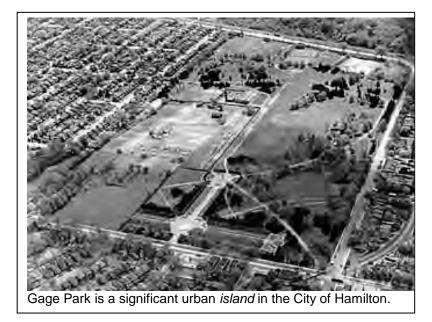
The *decommissioning* and *surplusing* of properties and subsequent redevelopment and intensification also impacts areas of archaeological potential. This class of activity can include the closure of utility corridors, schools, parks, road allowances and other rights-of-way, miscellaneous properties, and within modern subdivisions undeveloped lands previously reserved for school sites, roadways, recreational space, or



Some green field sites have unusual land formations, potentially associated with Native or Euro-Canadian settlement.



The archaeological remains of early settlers may be located throughout Hamilton's historic urban core, such as this gravesite associated with the early settlement of Richard Beasley.



which otherwise have been relatively undisturbed.

*Urban islands* are individual or groups of lots within the urban or suburban area, which retain archaeological potential owing to minimal property and spot disturbance. These include former estates, private or public parks, or institutions which may now be subject to adaptive re-use and/or more intense redevelopment activities, such as the redevelopment by Good Shepherd at the former Loretto Academy.

Known archaeological sites are those sites that have been identified and registered and/or reported with the Province and/or City. While many sites registered as a result of development activities are no longer extant, having been mitigated through excavation, a large number remain in place, and therefore remain sensitive to soil disturbance through development, however small the scale.

As an approval authority, the City of Hamilton's effective integration of archaeology into the development review process is critical to its management of archaeology. Where development, redevelopment and intensification affect archaeology, it is important that planning applications are reviewed for archaeological potential, that building permit applications are reviewed for their impact on registered and/or reported archaeological sites, and that the appropriate planning tools are used prudently to conserve these archaeological resources.

The AMP document and mapping will also be used to guide broader scale planning initiatives such as the Official Plan, Secondary Plans, and Neighbourhood Plans, and any amendments to these documents.

#### 6.2 Soil Disturbance Activities

The soil disturbance activities described here generally constitute private development for which the City of Hamilton is the principal approval

authority, subject to the Provincial legislation and policies identified previously. Falling under the *Planning Act*, these include activities arising from development related to:

- Official Plans;
- Secondary Plans;
- Plans of Subdivision and Condominium;
- Zoning;
- Site Plans;
- Consents to sever and convey; and,
- Variances.

Property development under the *Planning Act* can entail a wide variety of activities resulting in soil disturbance associated with construction on all residential, business, retail, institutional and industrial building sites, such as:

- Grading;
- Excavation for building foundation(s);
- Construction of roads, bridges, and parking areas;
- Utility installation;
- Storm-water management facilities;
- Recreational trails and facilities such as ice rinks, pools, parks and playing fields; and,
- Landscaping.

The Province requires that scope of archaeological assessment for projects conducted under the *Planning Act* applies to the area within the boundaries of the development application. As mandated by the Province, if part or all of the property subject to a development application has archaeological potential, the entire area subject to the *Planning Act* application must be assessed. The City of Hamilton complies with this requirement.



Griffin House in Ancaster is an early African-Canadian farmstead associated with refugees from the United States that arrived via the underground railway. Such properties may yield potential archaeological artifacts related to these early pioneer activities.

## 6.3 Policy

#### a) Archaeological Conservation

The City of Hamilton shall perform due diligence by meeting the key goal of the Archaeology Management Plan: archaeological conservation.

- This work shall comply with the *Planning Act* and *Provincial Policy Statement* by meeting, or exceeding where warranted by City priorities, based on the City's heritage inventory and designation criteria and cultural heritage policies of the Official Plan, the archaeological requirements defined by Provincial legislation, regulations, standards and guidelines;
- The proponent and relevant City staff shall be informed of Provincial and Municipal policy on archaeology;
- Appropriate City departments and staff shall be provided with four maps to determine archaeological potential, comprising:
  - Appendix A-1: Overall Archaeological Potential, summarizing all areas of archaeological potential identified by the constituent maps described below;
  - Appendix A-2: Archaeological Sites and Water, mapping registered and reported sites with catchment areas of 250 metres, and catchment areas based on proximity to water using 300 metres for primary and pre-historic watercourses and lakeshores, and 200 metres for secondary watercourses;
  - Appendix A-3: Historical Potential, delineating archaeological potential related to pioneer EuroCanadian activities including 250 metre catchments around areas of historic settlement and activity, 100 metres around historic transportation routes, and areas bounding early historic villages, towns and cities; and

- Appendix A-4: Physiographic Features identifying 100 metre catchment areas of archaeological potential arising from proximity to physiographic features including drumlins, eskers, moraines, escarpments, related elevated areas, and favourable soil configurations.
- Plans Examiners shall be provided with *Appendix A-2: Archaeological Sites and Water* to determine whether building permit applications may impact registered and/or reported archaeological sites; and,
- The proponent shall adhere to the key goal of the AMP by meeting archaeological conservation requirements.

Applicants will be advised to conduct archaeological work as early in the development as possible; to facilitate the mitigation of archaeology through preservation by designing around identified sites.

The *Planning Act* requires:

- Subdivision draft plan applications to be submitted with a completed archaeological assessment, where they encompass known archaeological resources or areas of archaeological potential;
- A conservation plan for any archaeological resources identified in such archaeological assessments; and,
- Those notices of planning applications are provided to the Council Chief of a First Nation when a proposed plan of subdivision is within 1 km of a First Nation. This includes any OP, OPA or By-Law applying to or covered by the proposed plan of subdivision.

The Province requires "Stage 3: Test Excavation" and a conservation strategy in place before permitting archaeological sites to be mitigated by preservation in place (see Appendix F), and the City of Hamilton may

*Mitigation* of an archaeological site is a description of how possible disturbance of a site will be managed: by ensuring its protection in place through a site management plan, or conserving as much of the physical artifacts and information a site contains by properly excavating it.

apply additional conditions, including the formulation of a site management plan to ensure the ongoing integrity of the site.

b) Archaeological sites and mitigation

When proposed work is identified as impacting an archaeological site or sites:

- Archaeological consultants shall inform City Cultural Heritage Planning staff of project initiation when submitting Provincial Project Information Forms by providing copies to the City;
- The preferred alternative to impacting a site is mitigation through preservation in place;
- If mitigation through preservation is not practicable, archaeological mitigation shall be carried out;
- If archaeological mitigation through excavation is being conducted, relevant parties will be informed, including Native representatives in the event of Native archaeological sites;
- Archaeological consultants, when conducting Stage 3 and 4 mitigation of Native archaeological sites through excavation on behalf of the City, should include in their excavating and reporting teams one or more Native representatives of the Nations serving either as a monitor or archaeological crew member;
- When the archaeological mitigation is addressed through preservation, the proposed work shall not start until the Province has indicated that the strategy meets the Provincial interest in archaeology, in concurrence with the City's Cultural Heritage Planning staff;
- Where warranted by City priorities, Cultural Heritage Planning staff may use standards more stringent than the Province to evaluate the City's archaeological interest in specific sites, based on the City's heritage inventory and designation criteria and cultural heritage policies of the Official Plan; and,

• After archaeological mitigation is complete, City staff overseeing the project and contractors on the job site shall remain diligent in the identification of sensitive archaeological artifacts and features, especially burials, through the life of the project.

As a condition of their license, archaeologists are responsible for the appropriate conservation and storage of artifacts and data arising from work under their license. The City's preferred alternative is that these materials will be archived through the Sustainable Archaeology Project.

#### c) Areas of Archaeological Potential

When reviewing all development planning applications resulting in soil disturbance, City staff shall use the AMP potential mapping to determine whether some or all of the subject property either occurs within an area of archaeological potential or impacts one or more registered and/or reported archaeological sites. Where development does impact areas of archaeological potential or archaeological site(s):

- The proponent shall be made aware of any archaeological concerns by the appropriate City planning staff;
- The Province will be informed of this work;
- A strategy will be formulated and implemented to address these concerns prior to soil disturbance;
- Archaeological consultants shall inform City Cultural Heritage Planning staff of project initiation when submitting Provincial Project Information Forms by providing copies to the City;
- Archaeological consultants, when conducting stand-alone Stage 1 background studies, shall conduct visits to document and evaluate current conditions; and,
- Where this process results in the identification of one or more archaeological sites, AMP policy 6.3.b will apply.



Archaeologists conducting test excavations for The City of Hamilton to evaluate a site's archaeological significance.

When development applications have been identified as impacting areas of archaeological potential and/or archaeological sites, the City shall provide recommendations or requirements to the applicant on how to address them as provided in *Appendix G: Archaeology Conditions and Comments*.

#### d) Building Permits

Permits and approvals under Parts IV and V of the Ontario Heritage Act are considered applicable law and are a pre-requisite to the issuance of a building permit. Under the Building Code Act (BCA), the issuance of a building permit may be withheld in certain circumstances. As applicable law under BCA regulation 350/06, a heritage permit is required as a prerequisite to the issuance of a building permit under Parts IV and V of the Ontario Heritage Act (OHA).

The *Building Code Act* does not cite archaeological matters as being applicable law that would prohibit the issuance of a building permit. However, the disturbance or destruction of a registered and/or reported archaeological site is illegal and an offence under Part VII of the *Ontario Heritage Act*. Permitted building activities may therefore potentially impact archaeological sites and be subject to fines and other penalties. In this light, and with the City's obligation to perform due diligence, it is prudent to review building permit applications for their potential impact on registered and/or reported archaeological sites.

When reviewing building permit applications causing soil disturbance such as new buildings, substantial additions, swimming pools and driveways, City staff shall use the AMP *Appendix A-2: Archaeological Sites and Water* mapping to determine whether the proposed construction will impact registered and/or reported archaeological sites. Where development does impact one or more archaeological site(s):

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- The proponent shall be made aware of archaeological concerns and legislative requirements by Cultural Heritage Planning staff;
- A plan shall be formulated and implemented to address these concerns prior to soil disturbance;
- The Province will be informed of this work; and,
- AMP policy 6.3.b will apply.

When building permit applications have been identified as impacting one or more archaeological sites, the City shall provide recommendations or requirements to the applicant on how to address them as provided in *Appendix G: Standard Planning Conditions and Comments*.

e) Site documentation management

A record of sites and areas signed-off for any further archaeological concerns shall be centrally maintained and copies of the related reports provided to Cultural Heritage Planning staff for compilation into the AMP mapping.

Archaeological reports arising from any work for which the City was the approval authority under the *Planning Act* shall be retained and archived by Cultural Heritage Planning staff.

#### 6.4 Protocol

#### a) Unanticipated archaeological sites

In the event that archaeological materials are unexpectedly uncovered in the absence of an archaeologist, the onus to carry out this protocol with due diligence rests with the landowner and their agents, including professional planners and engineers, contractors and subcontractors, to adhere to their professional ethics (for example, Registered Professional Planners, and Professional Engineers). In fulfilling their collective responsibilities, these representatives shall:

- Ensure that all work within a 20 metre buffer of the discovery cease;
- Secure the site by fencing and/or other means as required, such as stabilization; and,
- Contact City Cultural Heritage Planning staff.

City Cultural Heritage Planning staff, delegated staff, or an archaeologist acting on their behalf, shall, when notified of the unexpected discovery of archaeological materials:

- Conduct a site visit to assess the situation;
- Require the landowner and their agent(s) to inform relevant parties, including Native representatives for Native archaeological sites, and other relevant parties as needed;
- Hire an archaeologist, where the landowner has declined to appropriately address the matter, to address the immediate concern and bill back for these services; and,
- Advise on the formulation and implementation of a site-specific remediation plan after conferring with the above parties, the Province and/or Registrar of Cemeteries as needed.

## b) Unauthorized activities

The City does not condone unauthorized disturbance or looting of any archaeological sites or resources, and shall ensure that such activities cease as soon as City staff is made aware of the unauthorized activity.

The sale of archaeological artifacts is illegal in the Province of Ontario.

Archaeology Management Plan

"Our relationship to the land defines who we are; we are the caretakers of Mother Earth. What is sacred then is more than a single burial location. The location of medicines, ceremonies, stories, burial sites, traditional harvesting and hunting grounds, villages and trading areas are all locations that are "sacred". The locations of these sites are living; they are not "artifacts" relegated to antiquity. As well, instruments created to celebrate stories and ceremonies, protect medicines and honour our ancestors are sacred. Most importantly, the definition of what is "sacred" is determined by the First Nation community itself and reflective of the community's values of what is sacred." Chiefs of Ontario. Final Submission to the Ipperwash Inquiry. July 2006, paragraph 76.

Public Archaeology is the practice, by public bodies and agencies such as the City of Hamilton, of supporting and participating in archaeology through public excavations, education, interpretive displays, lectures, and general outreach. It can arise from larger projects, such as the Red Hill Valley Parkway, to make available the knowledge gained from archaeology carried out as part of the overall project.

#### Planning and Economic Development Department, Planning Division

## 7.0 City as Trustee

## 7.1 Role

The City of Hamilton plays the role of Trustee for *public archaeology* within its boundaries. This role extends beyond resource administration in the development and landowner contexts to the public interest, recognizing the many different and varied interests in segments of the public and other parties with vested interests in Hamilton's archaeology.

As Trustee, the City's responsibilities are varied, but fall into several categories:

- Recognizing, and establishing and maintaining a dialogue with, parties who have various cultural values vested in Hamilton's archaeology;
- Acknowledging that these perspectives may impart different meanings and values to archaeological sites and artifacts, but that the City's responsibility for these resources must transcend these differences;
- Conserving archaeological resources, including known sites, and areas with potential for sites;
- Curating artifacts appropriately, to ensure their proper conservation, use and storage; and,
- Supporting *public archaeology* through municipal education and programs.

## 7.2 Policy

The City of Hamilton shall perform due diligence by meeting the key goal of the Archaeology Management Plan: archaeological conservation.

There are a limited number of archaeological sites, and if not recognized

as a concern can be easily destroyed. While archaeology is part of the City's development and landowner roles, there are additional situations where substantial soil disturbance can take place without coming under review for its potential impact on archaeological resources.

These activities may take place on public or private lands, and can be part of a planned alteration, be incidental to other activities, or occur as a result of accident, misadventure or natural activities.

#### a) Archaeological conservation

The City shall protect archaeological sites and areas of archaeological potential by:

- Utilizing conservation easements to ensure that archaeological resources are protected;
- Including archaeology in reasons for designation under Part IV and Part V of the OHA such that any proposed impacts to archaeological resources are subject to review;
- Informing City staff and contractors of archaeological sensitivities outside of formal project areas, and instructing them to monitor for any notable soil-disturbance activities; and,
- Engaging the Nations and stakeholders in monitoring areas of cultural sensitivity.

#### b) Native Archaeology

The City shall establish and maintain appropriate dialogue with the Nations, including the identification, circulation and maintenance of contact lists for representatives of:

- The Nations; and,
- Representatives of Hamilton's urban Aboriginal residents.



Excavations at Dundurn castle conducted as part of a McMaster University field school (with permission of Dr. John Triggs).



When artifacts are recovered from a site, The City of Hamilton shall conserve the artifacts appropriately according to their cultural association.

Planning and Economic Development Department, Planning Division

#### c) Community Archaeology

The City shall establish and maintain appropriate dialogue with the Nations, including the identification, circulation and maintenance of contact lists for representatives of:

- The development and construction industry;
- Professional and avocational archaeologists;
- Hamilton and Ontario archaeological associations; and,
- Other relevant or interested parties.

## d) Public Archaeology

The City shall promote, where practicable and appropriate, the incorporation of public archaeology into City operations, projects, programs, and service delivery. Examples may include:

- Publicizing archaeological excavations;
- Publishing archaeological reports and documents;
- Educating citizens, vested parties, stakeholders and City staff;
- Collaborating with education institutions including public and private schools, colleges and universities;
- Collaborating with community and cultural groups, and the public at large; and,
- Commemorating, where appropriate, archaeological sites and the peoples they represent through use of:
  - o Markers;
  - o Plaques; and,
  - o Commemorative features or structures.

#### e) Archaeological Curation

The City shall work towards the appropriate co-ordinated and practicable curation of:

- Archaeological artifacts;
- Archaeological reports;
- Oral histories; and,
- Other archaeological documentation.

The City's preferred alternative is that these materials will be archived through the Sustainable Archaeology Project.

f) Collections

Existing municipal collections of artifacts and related material will be conserved through the City of Hamilton Tourism and Culture Division or its successor, assisted by Cultural Heritage Planning staff. The scope will include the culturally and physically appropriate recording, packing and storage of artifacts and materials. The Nations will be engaged to ensure that the treatment of Native artifacts is appropriate.

The curation of these materials will entail their disposition at existing City of Hamilton museums and archive facilities or as achieved through Policy 7.2.e. Artifacts may be displayed at these facilities: in the case of artifacts from Native sites, this will be done in co-ordination with the Nations to ensure the appropriate selection and treatment of artifacts.

Where appropriate, artifacts and data from Municipal collections may be transferred to the Sustainable Archaeology Project.



# g) Transfers

The City will not receive artifact transfers from other facilities or licensed archaeologists when not related to archaeology conducted under the authority of the City's Tourism and Culture Division. Requests for such artifact transfers will be referred to the Sustainable Archaeology Project, which is the preferred alternative for the appropriate conservation and storage of artifacts and data arising from archaeological work.

A record of any archaeology conducted under the City's role as trustee shall be centrally maintained and copies of the related reports provided to Cultural Heritage Planning staff for compilation into the AMP mapping.

Archaeological reports arising from any work for which the City was the client under the trustee role shall be retained and archived by Cultural Heritage Planning staff.

#### 7.3 Protocol

When it has been brought to the attention of City staff that archaeological materials have been unexpectedly uncovered, in the absence of an archaeologist, outside of the City's role as Landowner, Proponent, or Approval Authority, the City's authority is limited. City staff shall:

• Contact City Cultural Heritage Planning staff.

City Cultural Heritage Planning staff shall:

- Convey this information to the Province; and,
- Aid the Province in subsequent actions.

The City does not condone unauthorized disturbance or looting of any

archaeological sites or resources, and shall endeavour to ensure that such activities cease as soon as City staff is made aware of the unauthorized activity.

If unsolicited artifacts are turned over to the City, they shall be accepted, and supplementary information collected including:

- Contact information for the individual(s) or group(s) associated with their recovery;
- Information on whether the artifacts were excavated or surface collected;
- The date(s) on which the artifacts were recovered; and,
- The location(s) from which the artifacts were recovered.

The City shall retain the artifacts until their proper disposition at the Sustainable Archaeology Project can be arranged. Their recovery shall be reported to the Province by Cultural Heritage Planning staff. When they are Native artifacts, the Nations will be informed and invited to engage in their disposition.

The sale of archaeological artifacts is illegal in the Province of Ontario.

#### 8.0 AMP Implementation and Monitoring

#### 8.1 Introduction

Two key tasks for a successful and effective Archaeology Management Plan are:

- Ensuring that the AMP is effectively implemented by providing suitable documentation, support information and training to the Plan's users; and,
- Having a system of monitoring in place to maintain and update the Plan to ensure its continued relevance and efficacy through its delivery and operation.

Undertaking these tasks will permit the delivery of the AMP and measure the effectiveness of the City of Hamilton in managing archaeology:

These measures permit an evaluation of how well the City is meeting its broader responsibilities under the *Planning Act, Environmental Assessment Act, Ontario Heritage Act,* and other related legislation. This ensures that any work conducted by, or on behalf of, the City performs due diligence with respect to archaeology.

Section 8.2 outlines how the AMP is implemented, and 8.3 describes the means by which it will be monitored and maintained through its lifespan.

#### 8.2 Archaeology Management Plan Implementation

#### 8.2.1 Introduction

The City of Hamilton plays four primary roles in the administration of its archaeology:

- Landowner;
- Proponent;
- Approval Authority; and,
- Trustee.

To ensure the authority of the City of Hamilton Archaeology Management Plan, it shall be adopted by Council as municipal policy.

#### 8.2.2 First Nations

Natives, and their Nations, are strongly vested in the archaeological sites and artifacts reflecting their cultural legacy in the City of Hamilton, the vast majority of which reflects their past lifeways. Ongoing dialogue between the City and these Nations is critical to maintaining the positive relationship between respective governments.

Physical copies of these AMP documents will be distributed to:

- The Nations; and,
- The Hamilton Executive Directors Aboriginal Coalition (HEDAC).

The City shall explore appropriate ways to:

- Ensure the continuing effectiveness of the AMP;
- Co-operate with the Nations by engaging in exchanges of information, training and education; and,

• Identify and address Native concerns with the AMP.

Amendments to the AMP may be required from time to time between the City and one or more of the Nations to develop, clarify, and/or amend any of the AMP policies or protocols.

A copy of the biannual AMP report to Council shall be sent to the Nations and HEDAC (see Part 8.3.1).

A protocol shall be developed providing guidance for City of Hamilton consultation and dialogue with First Nations. This is to ensure that the City engages in consistent and systematic engagement with the Nations (see *Appendix H: First Nations Consultation and Engagement Protocol*).

#### 8.2.3 Culturally Sensitive Areas

Select archaeological sites, both Native and EuroCanadian, have a high level of cultural significance and value. Examples of these include burial sites, areas of extended occupation, and sites of significant historical events such as the War of 1812 battlefields and encampments.

Such *Culturally Sensitive Areas* (CSAs) will be identified as part of the biannual review, with a strategy for their retention and commemoration, as appropriate. These CSAs may be incorporated into the appropriate Official Plan and Secondary Plan schedules, according to their sensitivity. The evaluation of archaeological sites for their potential candidacy as CSAs shall utilize criteria outlined in the "Hamilton's Cultural Heritage: Guidelines on processes and procedures for inventorying and designating the City's cultural heritage properties" document (PED08211).

#### 8.2.4 Land Use and Project Planning

For the City's roles as landowner, proponent and approval authority, one main role for this AMP is its use by City staff is to determine whether an area of land has archaeological potential, and whether it contains one or more identified sites. If this is the case, staff then need to know how to address the archaeological concerns within the planning process or project management. Three fundamental requirements to fulfill this role of the AMP are:

- Delivery of the potential mapping and documentation to staff;
- Training staff in the use of mapping and documentation; and,
- Integrating the evaluation of archaeological resources into the planning process, work plan, or administrative procedures.

Four maps of archaeological sites and areas of archaeological potential have been produced through data mapping and potential modelling (*Appendix D*). A standard set of conditions and comments have been drafted for use in the management of archaeological concerns through the planning process (*Appendix G*).

- The AMP and maps will be distributed to the General Managers of Planning and Economic Development, Public Works and Community Services, with copies and web-links to all staff who review or oversee *Planning Act* applications and *Environmental Assessment Act* projects;
- Planning staff will provide training in the use of these tools; and,
- One or more AMP maps will also be distributed via GISNet for internal City staff use.

## 8.2.5 Building Permits

While not normally under the purview of the Ontario Heritage Act, City

approvals under the *Building Code Act* can impact archaeological sites through soil disturbance (Section 6.1). The City uses this AMP to determine whether construction activities arising from permitted building will impact identified archaeological sites. In situations where a building permit activity may impact a registered and/or reported site, City Cultural Heritage Planning staff shall advise on how to recognize when an archaeological site may be impacted, and will advise plan examiners on how to address the archaeology. Three fundamental requirements to fulfill this role of the AMP are:

- Delivery of archaeological site mapping and documentation to staff;
- Training staff in the use of mapping and documentation; and,
- Integrating the evaluation of archaeological resources into the building permit application review process.

As part of this AMP, a map of Archaeological Sites and Water has been produced (*Appendix A-2*), and template of archaeology conditions and comments have been drafted for provision to plan examiners by City Heritage Planning Staff to manage archaeological concerns through the building application process (*Appendix G*).

- The AMP, *Appendix A-2* map and *Appendix G* document will be distributed to Directors of Building and Licensing, with copies and web-links to all staff who review or oversee *Building Code Act* applications;
- A data field shall be added to the City's property management database to flag properties that contain registered and/or reported archaeological sites;
- Cultural Heritage Planning staff will provide training for the use of these tools; and,
- Additional AMP maps will also be distributed digitally for internal City staff use.

'AMANDA' is the property management computer program used by the City of Hamilton for building and other permits.

### 8.2.6 City Staff Use

Under the City's four primary roles, the AMP can be used for a variety of reasons by City staff.

To meet these various needs:

- The AMP shall be publicized to all (part- and full-time, temporary and permanent) inside and outside City of Hamilton staff;
- Summary information on the AMP and contacts shall be produced for distribution to staff as needed or requested;
- Key outside worker positions shall be identified for their likelihood of encountering archaeological materials during work-related activities;
  - Planning staff shall provide basic documentation and/or training in artifact and feature recognition to these outside workers;
- Key staff responsible for handling City-owned properties through their acquisition, disposal, transfer, maintenance and decommissioning shall be identified;
  - Planning staff shall provide basic documentation and/or training to these key staff to recognize and appropriately seek guidance on properties of potential archaeological interest;
- The overall AMP document will be available on-line through the City web-site; and,
- Appendix A-1: Overall Archaeological Potential will be made available to staff through the internal GISNet site.

## 8.2.7 Public Use

Under the City's four primary roles, the AMP can be used for a variety of reasons by external users, including the Nations, stakeholders, and the

*Public Archaeology* is the practice, by public bodies and agencies such as the City of Hamilton, of supporting and participating in archaeology through public excavations, education, interpretive displays, lectures, and general outreach. It can arise from larger projects, such as the Red Hill Valley Parkway, to make available the knowledge gained from archaeology carried out as part of the overall project. public. In order to serve these clients:

- The overall AMP document will be available on-line through the City web-site;
- Appendix A-1: Overall Archaeological Potential will be made available through the external GISNet site; and,
- Physical copies of these AMP documents will be distributed to the Municipal Service Centres for on-site public use.

## 8.2.8 Public Archaeology

All City of Hamilton Departments, Divisions, Sections and staff will be informed of the AMP document through ENET, and made available on request. Training and supplementary information will be provided on request.

The City shall maintain both ongoing and scheduled dialogue with the Nations vested in the archaeology of Hamilton.

The City may provide a public forum for the exchange and discussion of City archaeology on an annual basis. This may be integrated into existing programs and events, such as Heritage Week in Hamilton.

The City shall support ongoing publicizing of Hamilton archaeology through the news media, publications, speaking engagements, collaboration with educational institutions, community groups and citizens.

The City shall commemorate and celebrate, where appropriate, archaeological sites in consultation with their modern representatives.

The City shall work towards the appropriate curation of archaeological artifacts, collections and documentation with partner agencies.

The City shall establish a library of archaeology reports, and make a list of titles available for public information.

#### 8.2.9 The Province

As described in Section 1 (under the heading "How is archaeology addressed in the planning and development process"), the Province administers archaeology with the *Ontario Heritage Act*, enabled through such legislation as the *Planning Act*, *Environmental Assessment Act*, and *Cemeteries Act*. Some of these responsibilities, such as the identification of areas of archaeological potential subject to applications under the *Planning Act*, have been downloaded to the City of Hamilton.

The drafting of this AMP has identified issues bearing on the relationship between the City of Hamilton and Province with respect to the sound management of archaeology within the City:

- Qualified City staff can provide more rapid turn-around than the Province for the review of archaeological reports arising from development projects;
- City staff are more aware of Municipal priorities, and their coordination of the AMP with the City's Official Plan, Secondary Plans, and other special planning projects;
- The City is the approval authority for the *Planning Act*, responsible for placing and removing conditions or zoning, while the Province has no such authority;
- City databases are capable of tracking and mapping areas of previous archaeological work carried out, to ensure duplication of efforts does not occur;
- Qualified City staff are better able to conduct site inspections of properties for evaluation of archaeological potential;
- Qualified City staff can readily perform site inspections to ensure

that developers and archaeological consultants comply with methodological standards and guidelines;

- The City can maintain a higher set of methodological standards and guidelines for archaeological work under its authority;
- The City is in direct communication and negotiation with the relevant First Nations and Natives regarding archaeological work (and *Planning Act* matters in general) in the City;
- The City has a set of criteria for evaluating the significance of archaeological resources (outlined in the "Hamilton's Cultural Heritage: Guidelines on processes and procedures for inventorying and designating the City's cultural heritage properties" PED08211) that is specific to the City's frame of reference; and,
- The City is often the first point of contact for individuals, businesses and institutions regarding unusual or unanticipated archaeological finds, features and artifacts.

As a result, the City of Hamilton is in a position to more closely manage archaeology within the City's jurisdiction, and where practicable implement more locally appropriate standards than the Province. In this context:

- The City will negotiate with the Province for access to Project Information Forms (PIFs) to track archaeological work within Hamilton, and Provincial correspondence signing off in whole or in part the Provincial interest in archaeology for any PIFs issued;
- The City will explore with the Province the logistical requirements of partially or fully assuming the role of reviewer and approval authority for reports on archaeological work arising from development projects – preliminary analysis indicates that this would represent one-half of a full-time position;
- The City shall explore the opportunity for qualified City staff to be designated as "archaeological Inspectors" under the *Ontario*

Heritage Act; and,

• A working group of key staff will be struck to track the effectiveness of the policies, protocols and mapping.

## 8.2.10 Conservation Authorities

The Hamilton Conservation Authority (HCA) administers the majority of watersheds within the City of Hamilton. Portions of the City fall within the jurisdiction of three other conservation authorities:

- Conservation Halton for the Bronte Creek and Grindstone Creek watersheds in northeast Hamilton;
- Niagara Peninsula Conservation Authority for the Welland River, Twenty Mile Creek and Forty Mile Creek watersheds in southeast Hamilton; and,
- The Grand River Conservation Authority in southwest Hamilton.

Conservation authorities manage waterways, which were historically a strong draw to Native and EuroCanadian settlement. Therefore, activities of these authorities may have a substantial impact on archaeological resources.

The City of Hamilton shall co-ordinate with the actions of these conservation authorities to:

- Distribute relevant archaeological potential and resource mapping to these conservation authorities;
- Provide guidance on conservation authority projects or actions that may impact archaeological resources; and,
- Partner with conservation authorities in the education of staff in the management of archaeology by conservation authorities.

## 8.2.11 Niagara Escarpment Commission

The Niagara Escarpment Commission (NEC) uses the *Niagara Escarpment Planning and Development Act* to administer the Niagara Escarpment, a portion of which occurs within the City of Hamilton. majority of watersheds within the City of Hamilton. As a result, activities regulated by the NEC may have a substantial impact on archaeological resources.

The City of Hamilton shall co-ordinate with the NEC to:

- Distribute relevant archaeological potential and resource mapping to the NEC;
- Provide guidance on NEC applications that may impact archaeological resources; and,
- Partner with the NEC to aid in management of archaeology under its jurisdiction.

## 8.3 AMP Monitoring

Meaningful evaluation of the Archaeology Management Plan requires the collection of measurable information, as well as a survey of all parties involved in its operation.

Cultural Heritage Planners shall monitor changes in Federal and Provincial Legislation, to ensure AMP compliance with these laws. Cultural Heritage Planners shall also monitor Municipal By-Laws, to ensure their compliance with the AMP.

Cultural Heritage Planning staff shall track data annually that will provide measures of the effectiveness of the AMP, including:

• The number of development and municipal infrastructure projects

carried out within the City under the:

- o Planning Act; and,
- Environmental Assessment Act.
- The number of these projects identified as requiring archaeology;
- The number of these projects identifying archaeological sites;
- The number of archaeological sites requiring further Stage 3 testing;
- The number of archaeological sites requiring further Stage 4 mitigation through preservation or excavation; and,
- Tabulations of any reported errors.

Comments will be collected from representatives of the Nations, City staff, stakeholders and the public to assess their opinions of the AMP.

Evaluation of these measures will ensure that the AMP:

- Engages and addresses the interests of the vested Nations;
- Meets its key directives of due diligence, stewardship, and conservation in managing archaeology;
- Works effectively and consistently across the City; and,
- Is consistent with legislative changes to use the full effect of Municipal Authority to manage and conserve archaeology.

## 8.3.1 Biannual Reviews

The biannual reviews are formal processes evaluating and updating one or more components of the AMP. The biannual reviews will involve meetings with both internal and external groups and representatives, and the committees struck as part of the AMP. The scope of these biannual reviews includes:

• The receipt and data-processing of updated Provincial registered sites data;

- Integration of the above data into the AMP to update the archaeological potential mapping;
- Collection and mapping of areas with sign-off of Provincial and municipal interest;
- Scheduled meetings with the Nations to review compliance and function of the AMP;
- Interdepartmental staff meetings to review compliance and function of the AMP;
- Review of archaeological consultant roster criteria, to ensure their compliance with the AMP policies and protocol;
- The identification of Culturally Sensitive Areas; and,
- Community meetings with Stakeholders for discussions on the AMP scope and function.

Annual reports on the status of the AMP, as determined by the following monitoring activities, shall be submitted to Council.

## 8.3.2 Five-Year Reviews

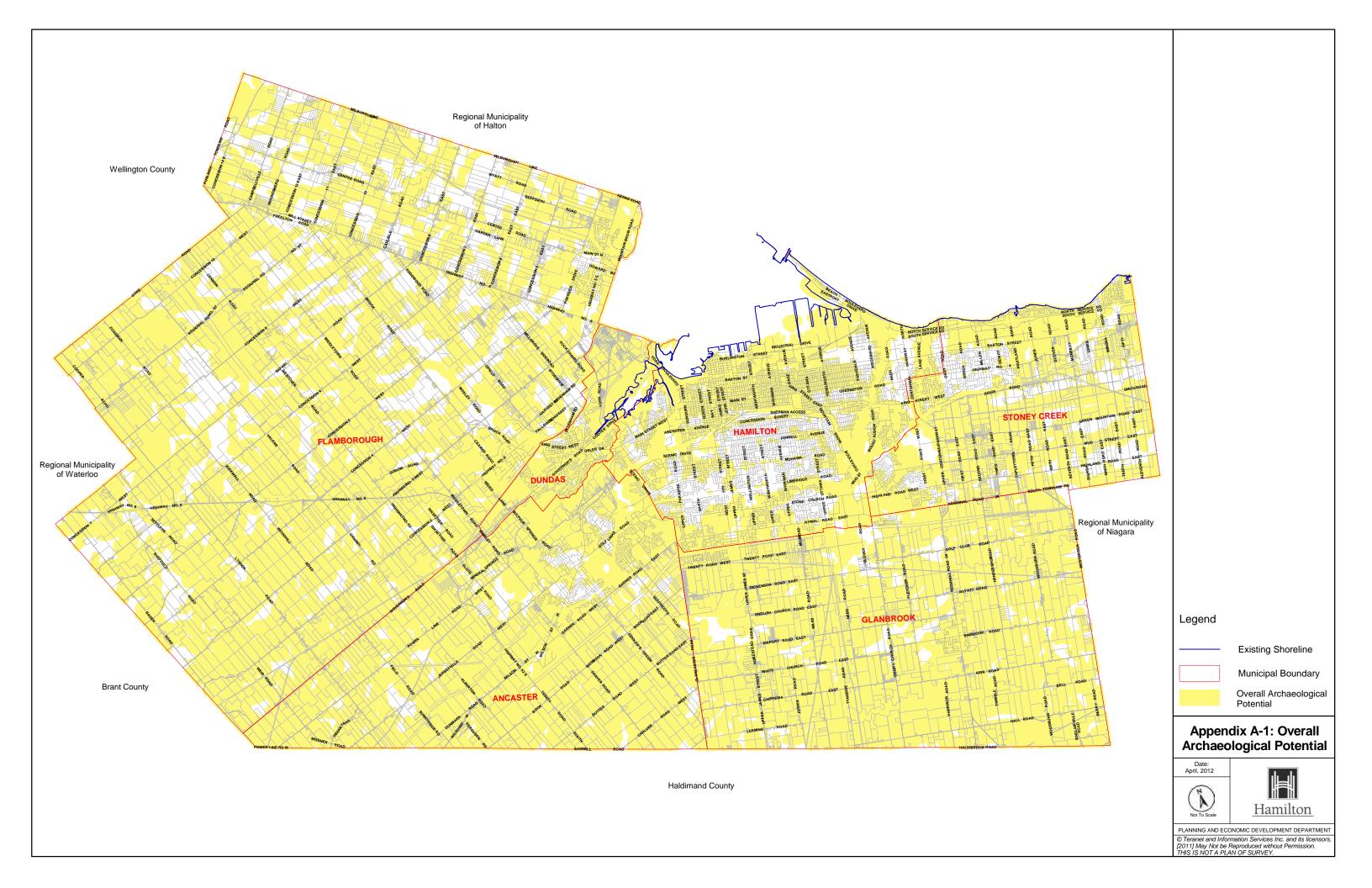
These major five-year reviews cycle will address any larger systemic requirements and issues with the AMP. They will comprise:

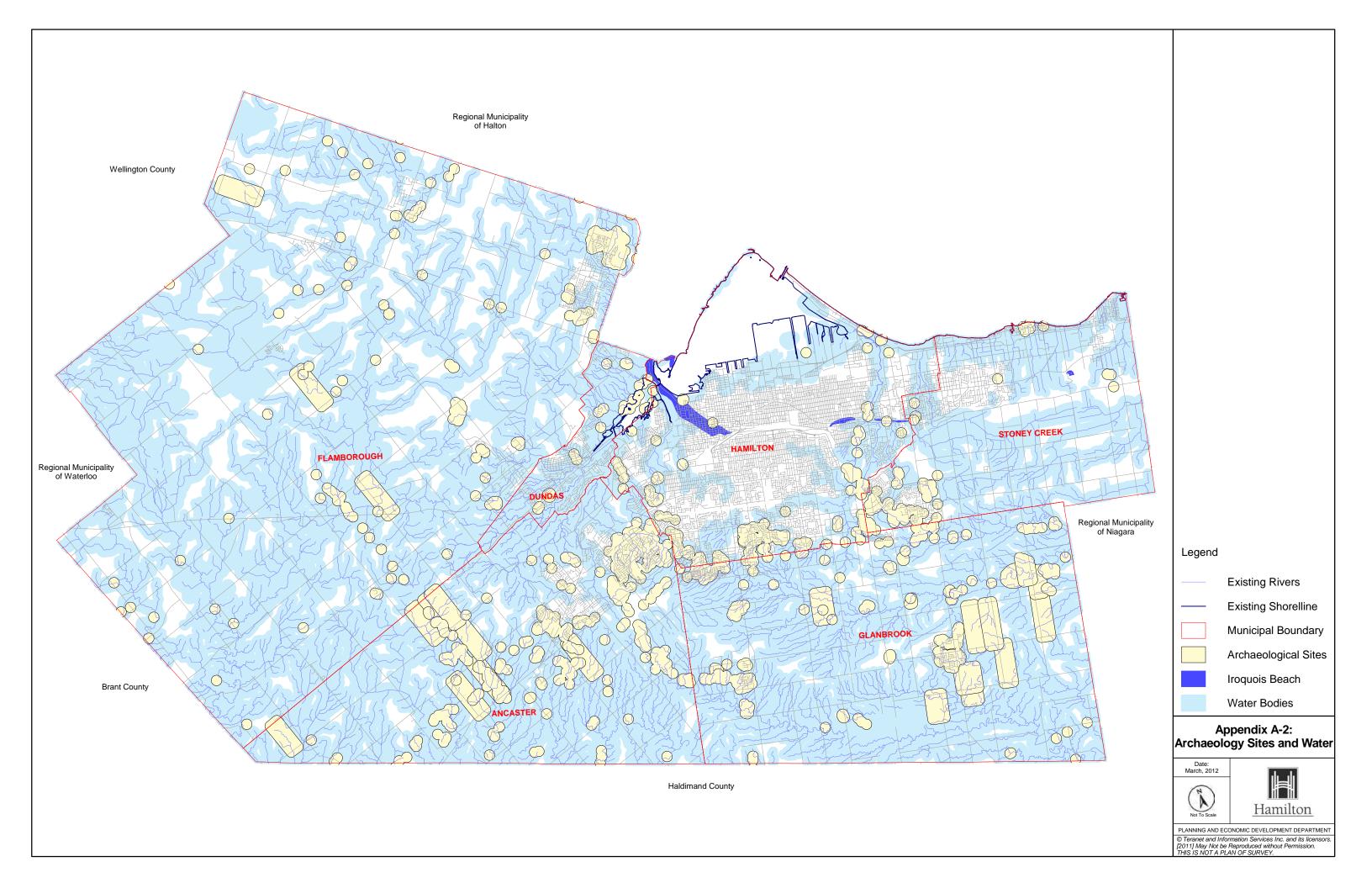
- A systematic and comprehensive evaluation of the AMP;
- A re-evaluation of the currency, accuracy, effectiveness of the archaeological potential evaluation data, criteria, modelling, and mapping;
- A re-evaluation of AMP best practices within all four Municipal roles;
- An examination of the scope of the AMP;
- Bringing the AMP in compliance with any changes in legislation and City policies and by-laws;
- Using the full effort of the City's authority to manage and conserve archaeology; and,

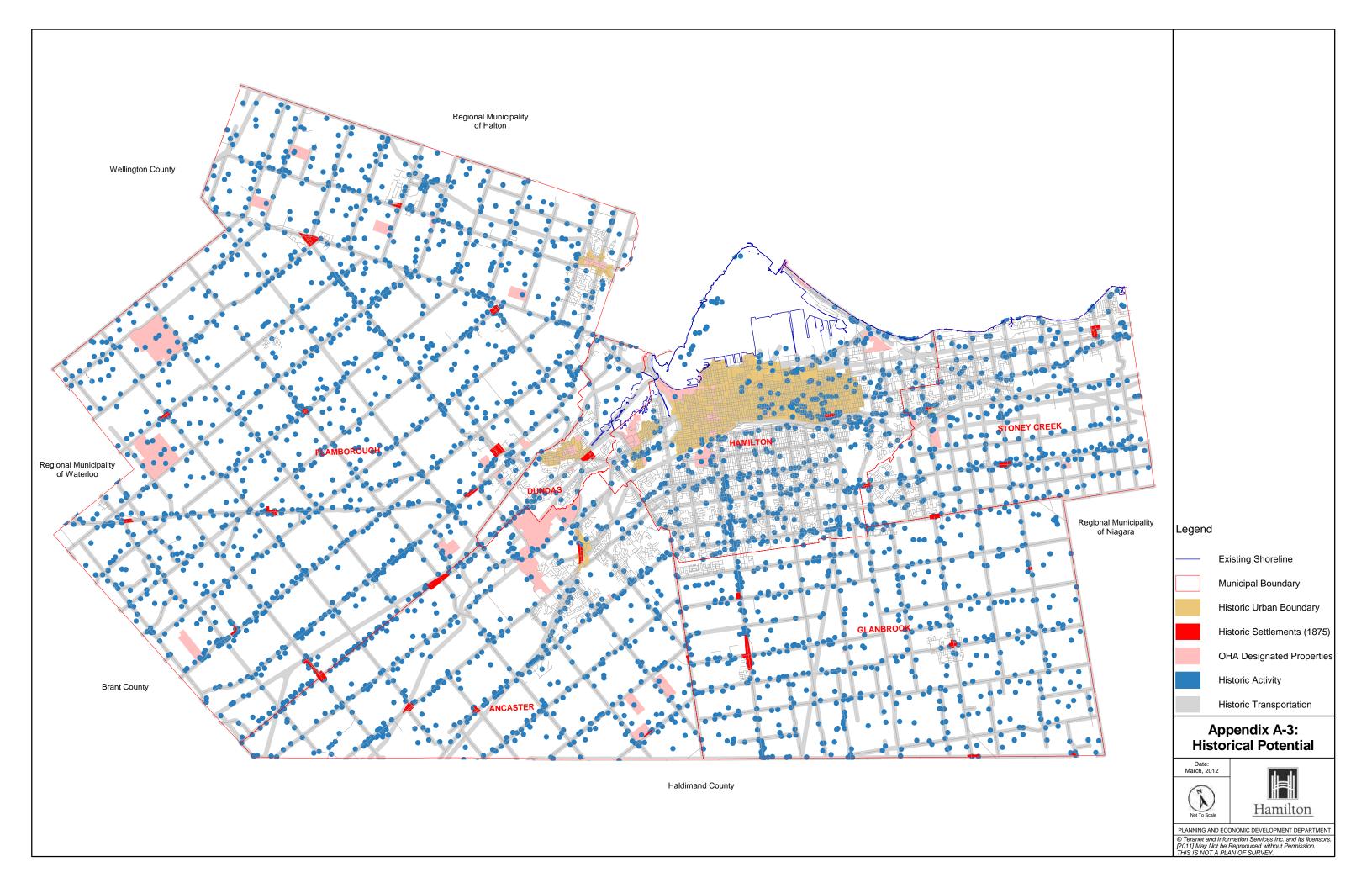
• Meetings with all parties involved in the preparation of this AMP, and those that express an interest not previously identified.

The City of Hamilton Archaeology Management Plan is in effect as of January 1, 2013.

Appendix A: Archaeological Potential Mapping









#### Legend

Drumlins
 Existing Shoreline
 Surficial Geology Line
 Iroquois Beach
 Surficial Geology Moraine
 Niagara Escarpment
 Municipal Boundary

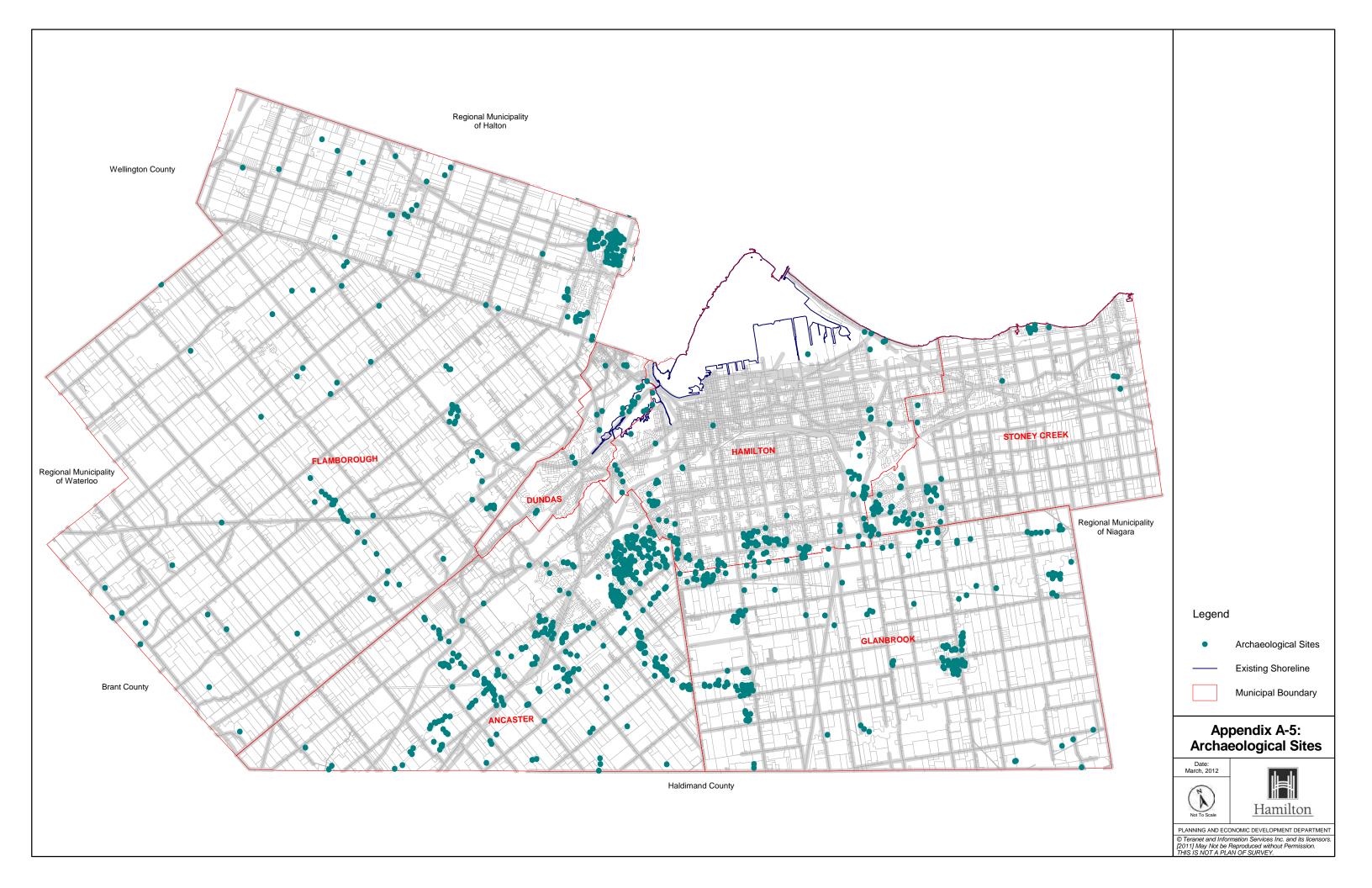
# Appendix A-4: Physiographic Features

Date: March, 2012





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# Professional Archaron

Canadian Archaeological Association canadienne d'archéologie



# Appendix B:

## **Archaeological Principles and Practice**

## **Archaeological Principles**

In Ontario archaeology may only be undertaken by formally licensed archaeologists. Archaeologists licensed in Ontario are obliged to adhere to a set of standards and guidelines for archaeology and Best Practices for human burials. In addition, while there are no governmentally recognized organizations of professional archaeologists in Ontario, there are several self-declared professional groups of archaeologists in Ontario, Canada, and the United States of America. Members of all of these associations are required to follow their respective codes of ethics and conduct, which are detailed: their full examination is beyond the scope of this outline. Readers are urged to visit the web-sites of these organizations to view these codes in detail:

- <u>www.apaontario.ca</u> for the Association of Professional Archaeologists (Ontario);
- <u>www.canadianarchaeology.com</u> for the Canadian Association of Archaeologists
- <u>www.rpanet.org</u> for the Register of Professional Archaeologists; and,
- <u>www.caphc.ca</u> for the Canadian Association of Heritage Professionals (formerly the Canadian Association of Professional Heritage Consultants).

The general tenets of these professional archaeological organizations are to:

• Recognize the link between Natives and the archaeology of their ancestors, respect Native interests in this archaeology, and

encourage their participation, input and guidance;

- Identify the preservation of archaeological sites as the preferred alternative;
- Follow best and current archaeological excavation practices with integrity where preservation is not an available option;
- Report on archaeological work quickly and promote their dissemination to specialists and the public;
- Acknowledge that archaeology is a public resource, not a private possession;
- Abide by the laws as they pertain to archaeology;
- Report violations of the law and/or ethics, and conflicts of interest; and,
- Not plagiarize, lie, engage in malicious intent or otherwise besmirch the professionalism of archaeology.

While the above synopsis is not a comprehensive examination of the various codes of ethics and practice, it outlines the common goals of professional archaeology to practice archaeology to minimum standard, publish and publicize the work conducted, be respectful of fellow professional archaeologists, follow the law, and contribute positively to the discipline.

In addition, the International Council on Monuments and Sites (ICOMOS) is a group of heritage professionals created by and advising the United Nations Educational, Scientific and Cultural Organization (UNESCO) on World Heritage Sites. ICOMOS' scope includes the definition of international principles for archaeology and excavation practices set out by UNESCO in 1956 and formalized under the Venice Treaty of 1964 (article 15). ICOMOS subsequently formed both the International Committee on Archaeological Heritage Management (ICAHM) and the International Committee on the Underwater Cultural Heritage (ICUCH). Further information on the principles of these Committees can be found at www.icomos.org.



International Council on Monuments and Sites

**Conseil International des Monuments et des Sites** 

## **Archaeological Practice**

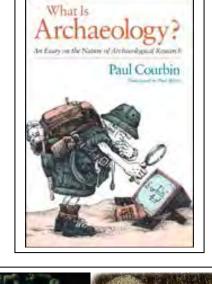
This section provides a basic outline to some common questions asked about archaeology, including:

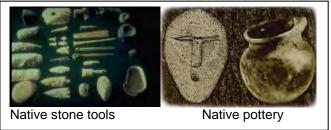
- the goals of the discipline;
- who is involved;
- what is studied;
- why it is studied;
- what is done with the materials and information excavated; and,
- Some of the theoretical groundings and debates in the field.

The following is not a comprehensive review of the discipline, but rather a brief summary of some of the fundamental facts and issues in archaeology.

What is archaeology? Archaeology is a sub-discipline of anthropology, which is the study of humans. Archaeology specializes in the systematic study of humans through their material culture – physical possessions, the garbage they produce, their tools, buildings, and other such *artifacts*. Usually, archaeologists focus their work on past cultures, either prehistoric (before written records), or historic, to supplement written records, oral histories, or other information that may be available. Some archaeologists also study the artifacts of our modern culture, to compare what people say they do with material culture representation of what they actually do.

*What are artifacts?* As mentioned above, artifacts are 'material culture': the physical objects that result from human behaviour. These include deliberate artifacts, such as tools that are produced by humans, or incidental artifacts, arising as a by-product of human actions, such as the waste resulting from the manufacture of a tool. Archaeologists recover





artifacts from the surface of the ground, buried within the soil, or underwater. These artifacts of human activity can include tools, waste material, features in the soil such as pits, hearths, cellars, buildings, landscapes and burials, to name just a few. The effect of humans on their environment can also be treated and studied as an artifact of human behaviour. Examples of this include the increased sedimentation in lakes due to more erosion caused by deforestation and agriculture, or increases in ground-cover pollen due to the modification of the landscape by humans, which is evident in southern Ontario both during Native prehistory and the EuroCanadian colonization of the region.

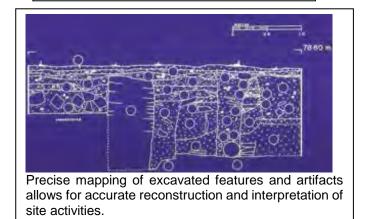
What are archaeological sites? Where human activity takes place, an archaeological site is formed. While the effects of such activities can extend well beyond where they actually took place, archaeology usually focuses on where the activities occurred, while taking the broader consequences into consideration, as part of the big picture. For example, the palisade walls of a Native Iroquoian village would generally be considered to be the boundaries of the archaeological site. The wider effects of deforestation and subsequent erosion that took place to build and support the village would not be considered part of the site, although this ecological footprint would be included in the overall picture.

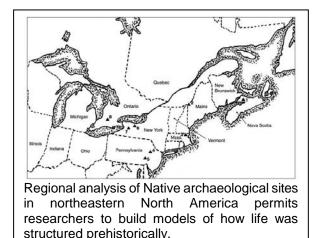
How is archaeology done? Archaeology studies humans at a variety of levels. First and foremost, archaeology looks at individual archaeological sites and gathers data by using a variety of methods, as described below. Laboratory processing and analysis of artifacts and data recovered in the field can show who made the site, how the site was spatially organized, what the inhabitants were doing there, where exactly on the site specific activities took place, how long the site was occupied, whether it was re-occupied, and whether the re-occupations were by the same or different cultural groups. Other information collected from the site can indicate when the site was occupied, whether seasonally or year-round, what the climate was like when the site was active, and





An artistic interpretation of an excavated lroquoian village (courtesy of Archaeological Services Inc.).







A field school archaeological excavation underway at Princess Point Park in Coote's Paradise (with permission of Dr. Helen Haines).

where the inhabitants had come from prior to arriving at the site.

In short, the range of information that a site may provide is vast, limited more by the methods of the archaeologist and the questions posed than what is in the ground.

Beyond studying individual sites, archaeologists examine the archaeological record regionally to gain overall perspectives of the people that a set of sites represents. These inter-site comparisons can show how the sites are related to each other, which can show whether they were occupied year-round, or reflect temporary camps occupied seasonally. Changes in patterns of behaviour and cultures themselves can be identified, and tracked over time and across the landscape – for example, following the spread of Native agriculture across North America, or of table-china among EuroCanadian settlers.

*Who does archaeology?* There are generally three types of archaeology, largely defined by who does it. In Ontario, the provincial government licenses three types of archaeologists:

- Researchers;
- Avocationals; and
- Consultants.

Archaeology is often conducted for research by academic archaeologists or archaeology students. They may be affiliated with educational or governmental institutions, or with non-governmental organizations (NGOs). Overall, though, pure research forms only a small portion of the archaeological work carried out in Ontario.

Avocational archaeology refers to private work carried out by "amateur" archaeologists, although many of these individuals or groups have extensive experience in carrying out various types of archaeological

activities. This is also the oldest tradition of archaeology carried out in southern Ontario, as documented by reports on amateur research in the 1800s. Such research by individuals or groups continues to present day. Because this category of archaeology is less formally administered, it is difficult to quantify the amount carried out, but it entails a significant volume of archaeological survey, if not excavation.

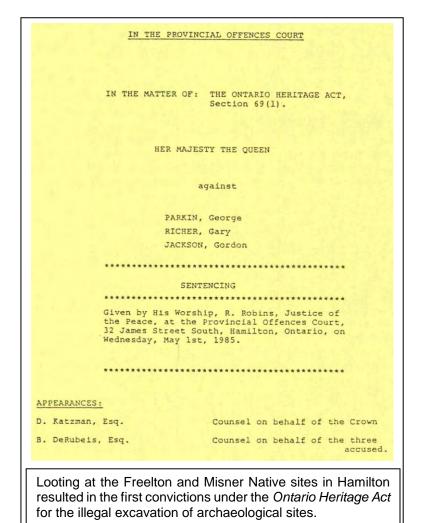
Consulting archaeology, or Archaeological Resource Management (ARM), comprises the bulk of archaeology carried out in Ontario. It consists of archaeological background research, survey, test excavation and excavation in advance of, and in concert with, land development or construction. This work has been organized or structured into four stages of archaeological assessment that are described in further detail below:

- Stage 1: Evaluation of Archaeological Potential
- Stage 2: Property Assessment
- Stage 3: Site-Specific Assessment; and,
- Stage 4: Avoidance and Protection, Excavation, or Construction Monitoring.

The scope of archaeological work arising from requirements or direction from the *Planning Act* and the *Provincial Policy Statement* includes Official Plan Amendments, subdivisions, zoning changes, severances, consents, and site-plans. Other projects and undertakings, including roadwork, utility-corridors, bridges, water and sewage, pipelines, and other infrastructure, are administered through the *Environmental Assessment Act*, and associated Class Environmental Assessment regulations. Regardless as to which type of archaeology is being carried out (research, avocational or consulting), under the *Ontario Heritage Act* any alteration of an archaeological site is only legal when carried out under the direction of a licensed archaeologist.



A construction-related archaeological excavation at a portion of the King's Forest Site, preserved beneath a baseball diamond, within the Red Hill Valley Parkway corridor.



Archaeology often involves other specialists, either to provide further information from archaeological data, or to obtain more detailed information by the interpretation of these data. Specialists in chemistry, physics, biology, geology, mathematics and other disciplines can aid in the study of soil chemistry, bones, seeds, wood, pollen, and statistical or spatial analysis, for example.

What kind of archaeology is illegal? Conducting archaeology without a license is commonly referred to as looting, or pot-hunting. It is illegal under the *Ontario Heritage Act*, and the City of Hamilton is the location of the first convictions in Ontario under the *Act*. Aside from being illegal, it is highly unethical, does not inform the community at large of the information it could otherwise provide, promotes the illegal trade and commerce in artifacts, and raises the ire of those whose ancestors are being illegally disturbed.

*Why is archaeology done?* Archaeology is carried out for many reasons. The discussion here will identify some of these reasons, but gives only some examples of why archaeology is conducted.

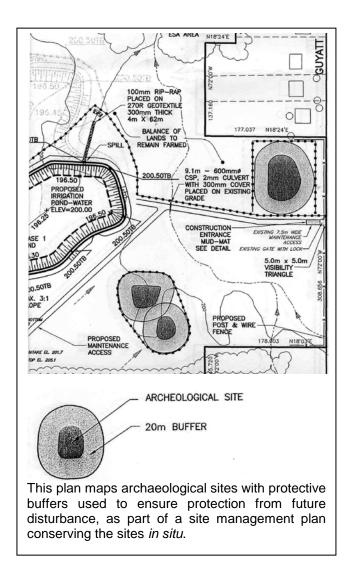
Some of these reasons reflect who is doing the archaeology (see *Who does archaeology?*). In general, archaeologists enter the field of archaeology because of a personal interest in the discipline.

Researchers typically conduct archaeology in order to answer specific research questions – whether they are students in archaeology conducting fieldwork for theses or dissertations with a particular research design, or faculty or staff specialists pursuing personal or collective research goals. Avocational archaeologists enter the field out of personal interest, perhaps spurred by discovering artifacts on their own, with others, general curiosity, or media exposure to the discipline.

Consulting archaeologists conduct archaeology as part of their business. The construction activities and the development of land often have the potential to disturb or destroy archaeological sites. The role of the consulting archaeologist is to conserve archaeological resources by determining whether archaeological resources are present in the area to be developed, and evaluating their significance. The conservation of the legacy and information inherent in the archaeology can be ensured by their preservation within the development plan, or excavating and reporting on the site prior to the development project going forward.

Apart from the research, avocational, and consultant participants in archaeology, there are many others involved, with their myriad of reasons for participating. Natives can be very interested in archaeology: the majority of archaeology in Ontario is Native, and while the connection may be tenuous with very early cultural horizons, modern Natives in Ontario are close descendants of the people whom these archaeological sites represent. This is also true for EuroCanadian descendants of sites representing EuroCanadians, African Canadian descendants of people represented by African Canadian archaeological sites, and so on. Ancestral connections to the past through archaeology can be a major influence on people developing an interest in both the general field of archaeology, and in specific sites or cultures.

Another reason for conducting archaeology may be political or legal. Modern First Nations may be interested in establishing or supporting land claims, and have used archaeology to support such claims by showing that their ancestral Nations were present in the past. Forensic archaeology is also used in the legal context, to establish how and when potentially illegal activities took place, and who was involved. Archaeology may also be done for medical reasons, to recover evidence of patterns of life, disease and death in populations, or to recover specific bacteria associated with epidemics, like the Spanish influenza.





and documented for future reference

In general, however, curiousity in past cultures is an over-riding reason for why archaeology is carried out, as well as the desire to ultimately disseminate information about these archaeological sites.

What happens to artifacts once they are excavated? When artifacts are removed from the soil or water, some like iron, wood or bone may require special treatment to ensure that they do not decay: this is particularly the case with artifacts recovered from underwater sites. The majority of recovered artifacts such as stone, pottery, and ceramics do not require special treatment. They are often washed, although this may not be done on specific artifacts in order to analyze use-related residues to better determine their original use(s). Other artifacts, such as samples of soil, trees, plants or bones that require special treatment for preservation or analysis, may be carefully sealed on site. Some may be destroyed as part of their analysis, like carbon-dating or pollen analysis.

The basic treatment for most artifacts, after being counted and bagged or otherwise organized in the field is washing, labeling, and analysis. Individual artifacts may be photographed and/or diagrammed if they are considered noteworthy or diagnostic artifacts. After the archaeologist and any other specialists have completed their study of the artifacts, they are typically placed in storage, although some notable artifacts may be placed on display temporarily or permanently.

The display of such noteworthy artifacts can be a matter of dispute, as some of the more aesthetically appealing artifacts may have a high degree of ceremonial and/or spiritual significance attributed to them by living descendents. Ethically, consultation with relevant parties is in order when it comes to selecting artifacts for display.

Under the *Ontario Heritage Act*, the curation of artifacts obtained through licensed archaeological excavations is the responsibility of the licensee. As a result, many archaeologists, and the institutions with which they are

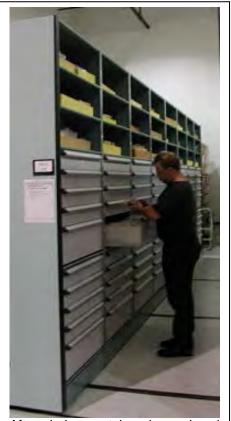
associated (whether schools, museums, companies or private individuals), have accrued large collections of boxed artifacts over the years. Some of these may be transferred to other institutions, on approval by the Ministry of Culture of an artifact transfer form. Regardless as to where they eventually end up, the vast majority are destined for placement in boxes on shelves in long-term storage. Their access and availability for researchers who wish to study them must be assured, however.

When human remains are recovered, a specific protocol is followed to ensure that they are treated properly and relevant parties are included in the process: please see *Appendix E: Administration and Legislation*.

*What happens to the information gathered?* After the excavation, artifact cleaning, analysis and writing of reports on archaeological work, there are a variety of possible destinations for the information that has been obtained. Ideally this work is disseminated by publication in academic or popular-press periodicals and books, and happens frequently with research-driven archaeology, although there can be a significant turn-around time between the fieldwork and publication.

Avocational work is generally less often published, although the submission of licence reports to the Ministry of Culture is required. These are kept on file, and are available at the Ministry of Culture library.

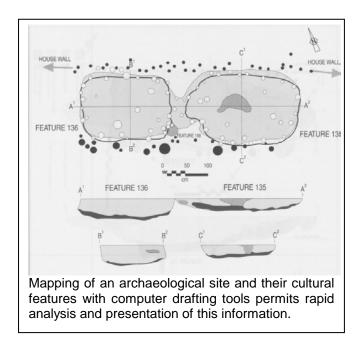
The proportion of reports and information from consulting archaeology that is broadly circulated varies widely, only partially attaining one of the goals of consulting archaeology: the collection of information from sites that would otherwise be lost due to construction and development. A complicating factor is the effect of the *Freedom of Information and Protection of Privacy Act (FIPPA)*, which prevents the Ministry of Culture from releasing archaeology reports without the permission of both the proponent and consultant. This problem is being addressed in a variety



After being cataloged, analyzed photographed and documented, artifacts are retained in archival facilities.



Deliberate and careful recording of excavation activities ensures that sites can be accurately documented and their information conserved.



of ways including appeals to consultants for permission to release information, general waivers for reports submitted in the future, and a proposed on-line index of report titles hosted by the Ministry of Culture.

In general, the community of consulting archaeologists is interested in spreading information about archaeology to the general public, except where it involves sensitive sites. Some consulting reports are also published in periodicals and/or books, although these tend to be for higher profile sites. The issue of information distribution for many sites excavated through consulting archaeology, or even of artifact data for broader analysis, remains problematic and mired in legal constraints for the foreseeable future.

How is archaeology done? Context, or knowing where artifacts come from and how they were recovered, is critical to their information value. Archaeology can be a destructive science: after excavating a site, it has been permanently removed save for the artifacts and the record of how they were recovered. Such records include maps, measurements, notes, and photographs. This is not the case if a site is mitigated through preservation, but to date that approach is the exception in consulting, while excavation is often the focus of research. Avocational archaeology does not usually involve excavation by individual amateur archaeologists, who generally concentrate on surveying for and identifying archaeological sites. However, some archaeological nongovernmental organizations, such as the Ontario Archaeological Society or its constituent Chapters, do conduct excavations to meet local research interests and educate members.

Because archaeological excavations are inherently destructive, they must be conducted in a rigorous and scientific fashion, accurately recording where physical artifacts were recovered in relation to each other, mapping cultural features evident or implicit in the soil, recording site stratigraphy, and documenting the site overall. Typically, soil samples are taken, along with photographs, and soil *stratigraphy* is mapped. With this information, the site can be partially 'reconstructed' in the laboratory through plotting and mapping, and hopefully answering questions about who occupied the site when, and what they did there, among other questions.

The actual techniques used in the field to excavate a specific site depend on the nature of the archaeological site and the reasons behind why the work is taking place. Factors taken into consideration when designing the site excavation strategy include whether the site or archaeology is:

- Native or EuroCanadian;
- A non-invasive site survey or full-scale excavation;
- A large or small site;
- A single occupation site, or was reoccupied repeatedly;
- Relatively undisturbed, or in a highly altered state;
- A site with simple or complex stratigraphy; and,
- Being studied for development or research reasons.

These are only a few of the factors determining the appropriate field methodology for *terrestrial* archaeology, while there are other similar but specialized methodologies used for *underwater* and *cave* archaeology, as outlined in the following general description of Ontario archaeology.

# Terrestrial archaeology

While not all archaeology happening in Ontario results from consulting work, it does comprise the vast majority of archaeological work. The Ministry of Culture (MCL) formalized four stages of archaeological work in consulting which can also be applied to non-commercial projects in describing their scope of work. More details on the rationale and evolution of these stages is found in *Appendix E: Administration and* 

*Stratigraphy* refers to layers and pockets of soil at an archaeological site, deposited naturally and culturally, before, during and after the occupation(s) at the site. Determining how and when they were deposited aids archaeologists in their interpretation of what activities took place at the site.



*Terrestrial archaeology* takes place above the land, on normally dry land, and is the most common and traditional form of archaeology in Ontario.

*Underwater archaeology* is conducted on archaeological sites fully or partially underwater.

*Cave archaeology* specializes in archaeological sites located in underground caves that may be dry or underwater.



A Stage 2 Property Assessment entails a physical examination of the study area for archaeological resources, in this case shovel-testing for a proposed hiking trail parking facility.

*Legislation*, but the following discussion summarizes Stages 1 through 4 of archaeological consulting work, to provide a framework for how most terrestrial archaeology is carried out in Ontario.

Stage 1: Evaluation of Archaeological Potential is background work conducted prior to or in association with an archaeological fieldwork project. This background work determines the areas of archaeological potential and resources within a study area, and how they will be addressed in the field. While focused on library and data-file research, a property inspection is usually conducted to confirm the physical attributes and recorded descriptions of the property. If the background work confirms that the study area retains archaeological potential, further work in the form of Stage 2 fieldwork will be recommended. In research and avocational archaeology, this is part of the research design.

*Stage 2: Property Assessment* consists of a physical archaeological survey of the study area by field archaeologists. In terrestrial archaeology this primarily takes two forms: visual inspection and shovel-testing. Visual assessment entails walking in rows on ploughed and weathered fields at 5 or 10 metre intervals, visually scanning the surface for artifacts. Where some or all of the project area cannot be tilled in preparation for visual assessment, shovel-testing at 5 or 10 metre intervals is permitted. Shovel-testing consists of digging holes with a radius of approximately 30 centimetres to the bottom of the topsoil, and screening the soil removed through 6 millimetre wire mesh to recover artifacts.

In select circumstances, survey may be conducted through other means, for example when archaeological sites or where areas of archaeological potential are capped by fill, asphalt or other material. Soil borehole data may determine whether the original soil horizon is present underneath the capping material. When it is, mechanical removal of the capping material to uncover the buried soil horizon will allow excavation of the site or inspection of the exposed surface to determine whether archaeological material remains. These approaches, and remote sensing, may be used where appropriate: typically in areas of existing urban development where archaeological sites or potential remain.

In all cases, when archaeological resources are identified through assessment, they are evaluated for their level of significance. If warranted, further work in the form of test excavation is recommended. These methods of surveying for sites are also used in research and avocational archaeology.

Stage 3: Site-Specific Assessment is also called test excavation of an archaeological site. It determines the boundaries of a site, can more accurately identify the culture(s) it represents, and further evaluates the site's significance. Artifacts on the surface are mapped, and limited but controlled archaeological test-units are excavated, usually individual one-metre squares on an established grid, at an interval of between 5 and 20 metres. Estimates of site size, density, and culture are based on the analysis and interpretation of the data from the test excavations. Mitigation of the site may be recommended if it is determined to be significant. Test excavation is likewise used in research and (sometimes) avocational archaeology.

Stage 4: Protection and Avoidance, Excavation or Construction Monitoring is used to 'manage' a significant archaeological site. In consulting archaeology, a site may be completely excavated by a licensed archaeologist, or the site may be preserved in perpetuity through the adoption of a site conservation strategy. When a site is to be preserved, a buffer will be established around the site boundaries defined by the Stage 3 work, and a set of physical barriers and planning tools put in place to ensure the conservation of the site during and after construction and development. The site is protected into the future by protective administrative measures, preventing detrimental impacts on



A Stage 3 Site Specific Assessment often involves excavating a 1m<sup>2</sup> test unit like this one, screening the soil removed to recover artifacts, and examining the exposed surface of the subsoil for cultural features.

*Contiguous* excavation is when an entire area of adjacent excavation units is being removed.



Using a grid system helps archaeologists precisely map artifact and feature locations while excavating an archaeological site.

the site and monitoring it to ensure the site's integrity. While research archaeologists are often focussed on excavation, sites may only be partially excavated, and so long term site conservation is also a concern. Avocational archaeology rarely entails site excavation, and site integrity may be ensured by monitoring or more formal measures.

When mitigation by excavation is necessary, the methodology to be used is determined by the site type, as defined by prior archaeological work. Research archaeology can entail the complete excavation of sites, although the work may proceed at a slower pace due to the differing priorities of the research design from those of the consulting discipline.

Ground-based archaeological excavation begins by establishing a measured horizontal and vertical reference grid on the surface of the archaeological site. Any artifacts removed from the surface of the ground, or from the soil, are measured in relation to this reference grid, so that their original locations can be mapped in three dimensions. Excavation is usually manual, by trowel or shovel, with excavated soil screened through 3 or 6 mm mesh to recover artifacts, or more finely examined where warranted using other recovery techniques.

Excavation can be by set intervals, like 5 or 10 cm, or following the natural or cultural layers evident in the soil, if present and visible or evident through artifact distribution patterns. Individual one metre by one metre squares measured at the surface are often the basic units of excavation and measurement, whether *contiguous* during full excavation, or scattered during site testing. When the topsoil or upper horizons have been excavated for any single unit, the underlying soil horizon, like subsoil, is cleaned off and examined for any cultural intrusions, referred to as features. On Native sites these can be post-moulds, representing the remnants of posts for longhouses, palisades, cabins or other structures. They can originate from hearths where the ground was burned and discoloured by fire, or storage pits, cellars, sweat-baths,

burials, middens, or from a wide variety of other activities. EuroCanadian archaeological sites extend the range of features types to cellars and other architectural features arising from individual houses or farmsteads to roads and industrial features.

Cultural features that extend into the subsoil are mapped in plan view, excavated in cross-section or quadrants for larger features, and their profiles mapped. Items recovered from features are plotted and recorded for analysis and mapping. If no features are evident at the top of the subsoil horizon, excavation continues downward in set intervals, or following stratigraphy, until no further artifacts are recovered.

In consulting archaeology, very large (multiple-hectare), late-prehistoric Native sites in ploughed fields, like Iroquoian villages, may be subject to different excavation techniques. In these cases, after approximately 10% of the plough zone has been excavated manually and screened for artifacts, the Ministry of Culture may permit the remaining plough-zone to be removed mechanically using heavy construction equipment, when appropriately guided and monitored by the archaeologist. The exposed subsoil surface is then cleaned off by "shovel-shining" to identify any cultural features present, which are mapped, excavated and recorded. This compromise allows for the expedient mitigation of large sites, with the rationale that the utility of recovering artifacts from the plough-zone reaches a limit of utility once the cultural identity of the inhabitants and extent of the site have been confirmed.

Such mechanical topsoil stripping is also permitted on EuroCanadian sites, for the same reasons: to focus on the subsoil features that yield more precise information on the nature and timing of activities occurring at a site. Because features arising from EuroCanadian settlement can be extensive, and may be supplemented with some written documentation, broader sampling through trenching and other methods can be used to confirm large features such as lanes and gardens.



Under direction of an archaeologist, a Gradall with a 'toothless' bucket is being used to mechanically strip topsoil from a site. The last few centimetres of topsoil are removed manually by shovel, to clean the top of the subsoil surface and expose any cultural features present( 'shovel-shining'). They can then be mapped, excavated and recorded. (Image courtesy of Archaeological Services Inc.)



The Hamilton and Scourge are two sunken ships, part of the American armada sunk during the War of 1812, that the City of Hamilton manages.

While the above description addresses typical conditions, it is understood and recognized that every site is unique in its nature, location, and context. More complex sites typically require different approaches. Stratigraphically complex sites can be excavated and recorded using the Harris Matrix, which allows archaeologists to manage of a large number of strata typical of Native sites in floodplains, larger EuroCanadian sites and industrial archaeology. Underwater, cave and industrial archaeology, while conducted in a similar fashion to the terrestrial form, require specialized excavation and recording techniques due to their distinct environments and methodological constraints.

#### Underwater archaeology

Work on archaeological sites that are permanently underwater or regularly awash fall under the category of underwater archaeology. In part due to the logistical complexity of conducting archaeology underwater, and its relative infancy as a result of the recent development of self-contained underwater breathing apparatus (SCUBA) technology, the amount of underwater archaeology that has taken place in Ontario is quite low relative to terrestrial archaeology. The majority of underwater archaeology in Ontario is limited to survey and focused on site identification and mapping.

Excavating archaeological sites underwater is complicated by a wide variety of logistical difficulties, including the limited length of time excavators can remain under water, limited visibility reduced by the excavation of sediments, working in currents, vegetation and animal growth on artifacts, lower accuracy of underwater equipment, recording notes underwater, control of spatial reference co-ordinates, severe health and safety issues, and accessibility problems for deepwater sites, to name but a few. As a result, preservation is the preferred alternative, and excavations that have taken place occur solely when preservation is not possible as a preferred alternative.

When underwater excavation occurs, the spatial reference system used changes according to the situation. For historic shipwrecks, a base line may be established along the long axis of the ship, with measurements of features and artifacts taken from this reference. Organic and metal artifacts usually require extensive treatment in order to stabilize their conservation on removal from the water. An underwater version of the terrestrial grid reference grid is less frequently used, typically when the site does not comprise a shipwreck but a submerged habitation or fishing weir complex. Self-contained grid frames may instead be brought down to the site, to record artifact and feature locations.

The methodology used for the excavation of underwater archaeological sites depends on the nature of the site. For more recent sites, artifacts such as weirs and shipwrecks remain exposed and samples can be recovered after their locations are recorded through measurement, mapping and photography. To reduce clouding caused by disturbing the sediments of buried sites, a 'vacuum' excavator can be used to remove the materials overlying sites, which are screened at the surface for artifact recovery: this method does pose problems for determining the original artifact location. Features and artifacts exposed by the removal of this overburden that remain in place can then be documented. The infrastructure, time and staffing requirements for full-scale underwater excavations preclude their practice in all but extenuating conditions.

Underwater archaeological sites identified to date in Hamilton are as yet exclusively EuroCanadian shipwrecks, although it is highly probable that there are Native sites underwater. There are several shipwrecks identified offshore from Confederation Park, and the Hamilton and Scourge, two War of 1812 schooners sunk off of St. Catharines, are also administered by the City of Hamilton.



The Eramosa Karst complex in Stoney Creek is one of the largest limestone cave systems in southern Ontario, and numerous historic and modern artifacts have been recovered from the Olmstead, Nexus and Hatchback caves.

## Cave Archaeology

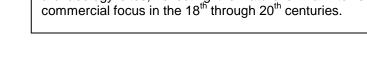
A sub-discipline of terrestrial archaeology, this specialty focuses on archaeology within underground cavities and crevices. Cave archaeology requires adaptations of terrestrial archaeology tools and methods.

Like underwater archaeology, the limitations arising from working underground can result in some compromises resulting from access and space limitations, lighting constraints, and the complex stratigraphy arising from frequent but localized roof collapses and the influx of sediments from above the cave, and through undergound watercourses. Because caves often exist due to chemical and physical erosion through water action, caves that are subject to active erosion can have saturated soil deposits, and may be subject to flooding that can result in rapid deposition and/or removal of sediments. Prehistorically and historically caves were also used as convenient refuse pits, and are frequently inhabited by wildlife, complicating their stratigraphy and accessibility.

Despite these complications, the general methodologies remains similar to those for above ground archaeology. Reference grids are established on the cave floor and/or ceiling, and stratigraphic excavation carried out. Cave archaeology remains a relatively minor discipline in archaeology, owing to the relatively low frequency of caves in the Province, and infrequency with which they appear to have been occupied. Hamilton has at least one large cave complex (the Eramosa Karst), in addition to crevices in the Niagara Escarpment, which have yielded EuroCanadian and Native artifacts.

## Industrial Archaeology

This archaeological discipline arises from its marriage to a specific branch of historical research related to EuroCanadian archaeology. The focus of industrial archaeology is on supplementing historical





Hamilton has a substantial number of industrial archaeology sites, reflecting the nature of Hamilton's

documentation of industrial sites, along with other data available. Such data sources including existing architecture and landscapes, transportation systems, mines, smelters, factories, mills and any other industrial records and artifacts. Industrial archaeology provides background information on industrial processes occurring at and across sites, confirming and providing greater details than the associated historical documentation. While Native sites such as lithic quarries and mineral mines for materials like native copper can be described as industrial sites, the discipline defines itself as focusing on the cultural horizon defined by the European Industrial Revolution. As a City with a significant industrial focus, Hamilton has a significant inventory of sites with industrial archaeology, although they are not always registered with the Province.

The field methodology for industrial archaeology is essentially the same as that for stratigraphically complex EuroCanadian sites. The usual large scale of these sites, and the availability of historical documentation, means that archaeology is largely conducted through testing, or with excavation limited to areas being impacted by infrastructure maintenance or redevelopment on site. Examples of industrial sites in Hamilton on which archaeology has been or is regularly conducted include the Hamilton Steam and Technology Museum (the original pump house for the City water supply), and Ashbaugh Pottery site (an early ceramics factory).

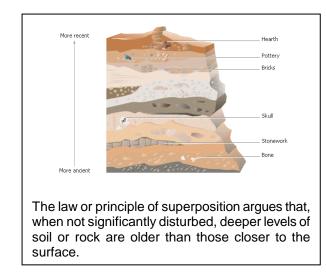
## **A Theoretical Perspective**

The practice of archaeology does not occur within a philosophical or theoretical vacuum: it is done for many reasons, and a variety of arguments are used to rationalize or organize theory in archaeology. The following is a very short summary of some of the over-riding ideas in archaeology.

The practice of modern archaeology, while its origins are not well documented, was established as a field of study in Victorian England. These antiquarian interests spread to the New World colonies and beyond. It was undoubtedly practiced earlier and in other parts of the world by other cultures, notably China, but as a modern discipline has its roots in the early modern era of the western world.

Early European archaeology can be described as a mix between an interest in the study of antiquities (classical archaeology – studying the ancient Greek and Roman civilizations), and the collection of exotic and/or valuable artifacts. Archaeological sites have been looted through the ages, but in the nineteenth century a more widespread, if not gentlemanly and colonial, interest developed with the systematic excavation of archaeological sites for artifacts, and the information they conveyed about past cultures.

Partially as an attempt to distinguish itself from anthropology, in the midtwentieth century there was an effort to define archaeology as being scientific. This became known as the processual school, where methods were clearly defined, as were fundamental archaeological 'laws' that closely followed geological tenets outlined a century or two earlier (such as the law of superposition, that younger strata would overly older strata). At the root of this was a genuine need to establish a more rigorous approach to conducting and recording archaeology, which was largely achieved.



However, the hard practice of archaeology as a science, and objectification of not only artifacts but also the cultures they represented, caused some reaction to the inference that as purely objective scientists, archaeologists were there to reveal the one truth that their studies could yield. The reaction to this, in the late 1970s and 1980s, was the advance of post-processual archaeology. Appearing from the opposite end of the spectrum from science, its proponents asserted that archaeology told many equally valid and parallel narratives, and that rather than there being solely one truth, there could be many, relative to the narrator's identity and place. Their argument was that scientists were no more objective (or less subjective) than anyone else, and so their rational studies and explanations were but one narrative in the tapestry of a meta-narrative, which included Marxist, feminist, cultural ecology, human ecology, and reflexive perspectives, among others.

There is a pattern of archaeological theory originating from specialists who argue for one extreme or another. It might be proposed that all archaeologists bring some bias to their work. Such individual or collective perspectives would undoubtedly affect the approach that archaeologists take to the discipline, affecting the questions asked or methodology used in the excavation, cleaning, analysis, interpretation and reporting on archaeology. Notably, it has been observed that the questions asked by a researcher reveals as much about them as their answers reflect the material they are studying. It might therefore be prudent to advise that archaeologists take note of and acknowledge these biases, rather than argue that they have none.

The conclusion of this summary on theory might be: all people have biases, including archaeologists and their readers, and they may recognize or state them. The reader is advised to take this into consideration when reviewing archaeological literature (including this one): not to be overly skeptical, but to take into account the perspective(s) from which the author is recounting the narrative to the reader. Many perspectives and interpretations overlap, but an astute observer is aware of the origins of both their commonalities and differences.



A historic painting of Cootes Paradise, the site of frequent activities and occupation by Natives and EuroCanadians alike.

*Carbon* is an element that is a critical part of essentially all life forms on earth, including all terrestrial plants and animals. *Radiocarbon* (also known as "Carbon 14" or "C<sup>14</sup>") is the radioactive isotope of Carbon used to date artifacts.

#### Appendix C:

#### Hamilton Archaeology

#### Introduction

The following provides a general outline of Native and EuroCanadian archaeology in the City of Hamilton. It is not a detailed examination of the City's archaeology, but provides a general chronology and description of its previous inhabitants, and some information on the archaeology representing them. While a detailed archaeological summary of Hamilton's archaeology has not yet been published, "The Archaeology of Southern Ontario to AD 1650" (1990) provides an exhaustive chronology for the Native archaeology of southern Ontario: an equivalent for the province's EuroCanadian archaeology does not yet exist.

In addition, a discussion of past and present archaeological activity within Hamilton is provided here for critical context to the City's Archaeology Management Plan (AMP). This appendix summarizes the City's roles with respect to archaeology, and provides an outline of the types of archaeology taking place in Hamilton.

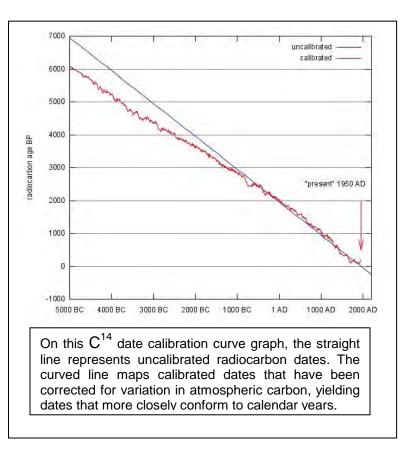
#### **Dating Terminology**

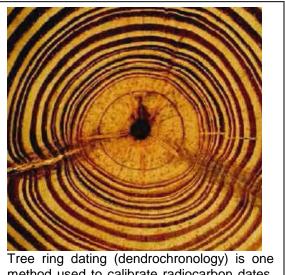
The following cultural chronology, and the rest of Hamilton's AMP, refers to dates using the time-scale of calibrated radiocarbon years before present ("calBP") for prehistoric occupations. Before Present is measured from AD 1950, when carbon dating was first used and calibrated. Calibrated radiocarbon years are used in this AMP document because they are equivalent to modern calendar (sidereal) years, and provide an accurate sense of the scale of time over which people have occupied Hamilton. Uncalibrated radiocarbon dates ("BP") are also provided, both to allow comparison to the calibrated dates ("calBP"), and dates found in other publications.

#### **Radiocarbon Dating**

Radiocarbon dating is very useful for approximating the ages of human occupations in the recent past. Essentially all life on earth absorbs carbon molecules from their surroundings, through their food, water and air. As long as an organism is alive, it continues to actively taken in carbon as part of its life, and the ratios of stable to radioactive carbon remain the same as their surrounding environment. As soon as an organism dies, it stops taking in carbon, and these carbon ratios start to change as radioactive carbon decays at a constant rate: it has a 'half-life' of 5,730 years, meaning that when this time period has passed, half of the C<sup>14</sup> present in an object decays to the more common and stable C<sup>12</sup> (Carbon-12 isotope). After another 5,730 years, half of the remaining C<sup>14</sup> decays, and so the older an organic material is, the less C<sup>14</sup> remains: the precise ratio of normal and remaining radioactive carbon is used to provide an age for the material in radiocarbon years. The practical limits of radiocarbon dating limit it to a maximum age of approximately 60,000 years BP.

Radiocarbon dating is complicated somewhat by evidence that the levels of atmospheric C<sup>14</sup> have not been constant in the past: it fluctuates according to varying levels of solar radiation, and now as a result of nuclear testing and fossil-fuel use, among other reasons. However, these radiocarbon years can be calibrated by referring to other data, including dendrochronology (dating through tree-rings, which provides dates to approximately 10,000 years calBP), and other annually deposited sequences (for example ice-cores in Greenland and Antarctica, sediments, coral samples, and cave deposits, which have provided calibration data to approximately 50,000 years calBP).





I ree ring dating (dendrochronology) is one method used to calibrate radiocarbon dates, with overlapping sequences of tree rings dating back several thousand years. Radiocarbon dates are not exact, but refer to an interval of time within which the object being dated has most probably existed. This time span is described as having either one or two 'standard-deviations' of statistical resolution, also referred to as 67% or 95% confidence intervals respectively indicating the probability of the object falling within that range of time. As the confidence interval numbers suggest, a two standard deviation date range is more accurate than a one standard deviation date: increased accuracy is achieved by subjecting samples to longer and/or more sophisticated analysis.

Radiocarbon can also be calibrated (indicated as "calBP"), because of variation in the levels of atmospheric carbon over time, as discussed below. Most published dates are un-calibrated ("BP"), and so will differ somewhat from those given here: for example, an un-calibrated date of 11,000 radiocarbon years before present (BP) will be roughly the same as 13,000 calibrated radiocarbon years ("calBP"). The approximation of these dates is appropriate, given the relatively arbitrary boundaries used to define Native cultural horizons.

## **Calendar Dates**

When referring to the historic settlement of Hamilton, the Julian calendar is used, with the implied suffix AD, for *Anno Domini* ("The Year of Our Lord"). The seventeenth century (1600s onwards) marks the onset of use of this terminology in the AMP.

#### PRE-EUROCANADIAN CONTACT NATIVE CHRONOLGY

Archaeology within Hamilton spans a history and prehistory (before written records and the large-scale arrival of European and North American settlers, referred to in this AMP as "EuroCanadian" settlement) of approximately 13,000 calendar years. The area has been attractive from the beginning of human occupation to the present for much the same reasons, including a relatively temperate climate, the wide diversity and productivity of its natural environment, and its location along land and water transportation routes. Approximately 1,000 archaeological sites, dating from the early Paleo-Indian period onward, have been registered on the Ontario Archaeological Sites Database (OASDB) within Hamilton. Because many of these locations were chosen due to their proximity to specific resources or other factors, they were often reoccupied on many occasions for the same or similar reasons.

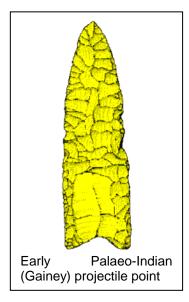
The prehistory of Ontario (and North America in general) is organized into a chronology of cultural horizons and outlined below. Originating from Europe, avocational and academic archaeology in Ontario dates to EuroCanadian settlement of the area when the presence of "Indian" village sites were noted in early reports. Systematic reporting on archaeological sites in Ontario began with the publication of Annual Archaeological Report, Ontario between 1887 and 1928 by the Government of Ontario.

# Paleo-Indian Period: 13,000 calBP – 10,800 calBP (11,000 – 9,500 BP)

Southern Ontario in general, and the Hamilton area in particular, was colonized by Paleo-Indians ('before the beginning' Indians) after the retreat of the Wisconsinan glaciation, which covered all of what is now southern Ontario, about 16,800 years calBP (14,100 BP). While their entry into Ontario has not been directly dated, it was most likely after the

The term *Indian* originates with the early misconception that the "New World" (North- and South America) was part of India (Christopher Columbus, among many other explorers, was seeking a shorter shipping route to India, and thought he had found it in 1492). As a result, the Native inhabitants of the Americas were inaccurately described as Indians, a term that has persisted to modern day, both in legislation like the *Indian Act* in Canada, and the prehistoric chronology for the Native habitation of the Americas.

Appendix C



Paleo-Indian and later Native archaeological cultural horizons span thousands of years across the Americas. The classification by archaeologists of cultural horizons into shorter time periods and smaller geographic areas, representing regional groups, is by diagnostic toolkits and patterns of settlement and subsistence, often named after the type sites on which these technologies and traditions were first identified.

In the lower Great Lakes area the Paleo-Indian cultural horizon comprises Gainey, Barnes, Crowfield, Holcombe, and Hi-Lo traditions, so-named after the archaeological sites as the namesake distinctive projectile points were found. draining of several large glacial meltwater lakes which isolated southern Ontario until approximately 13,900 years calBP (12,000 BP). Radiocarbon dates from other North American Paleo-Indian sites suggest that the earliest sites found in Ontario date between approximately 13,000 and 12,500 years calBP. (11,000-10,750 BP).

Our knowledge of the Paleo-Indians is limited since they were few in number, perhaps between 50 and 100 people in Ontario, and little remains of their material culture. Artifacts identified as marking their presence in Ontario are primarily stone tools, and the by-products of their manufacture and use such as incomplete, broken or imperfect tools, and debris (stone flakes) arising from their use or resharpening.

Because of the generally poor preservation conditions across the province, only a minute quantity of animal bone associated with the Paleo-Indians has been recovered here. Only enough material to identify three animals at the genus or species level on Ontario Paleo-Indian sites has been recovered and reported to date, and there has not been enough material to provide radiocarbon dates. Radiocarbon dates obtained elsewhere in the lower Great Lakes, along with inferred geological dates, are used to provide the age estimates for the Paleo-Indian presence in Ontario.

Artifacts associated with Paleo-Indians include fluted stone points for thrusting spears, attributed to the Gainey, Barnes and Crowfield types of the Early Paleo-Indian period. Fluted points are distinctive in that they have channels or grooves parallel to their long axis and usually on both faces of the tool. These grooves are created by the removal of long, thin, singular flakes from the base of the point, allowing the point to be hafted onto a wooden shaft. Certain cherts were preferentially used by Paleo-Indians, often using material from up to two or three hundred kilometres away rather than local sources. This may be one reason Paelo-Indians had a very formalized toolkit, maximizing the utility of the chert they carried to make these tools, and minimizing the amount (and weight) of waste material.

The projectile points of the Late Paleo-Indian period (starting at approximately 12,300 calBP, or 10,400 BP, identified by Holcombe, Crowfield, Hi-Lo points which were not fluted or had minimal fluting) may represent a transition from the use of thrusting to throwing spears. This technological change is interpreted as a shift in the subsistence and lifeways of Paleo-Indians, adapting as they responded to changes in the environment and possible smaller seasonal ranges.

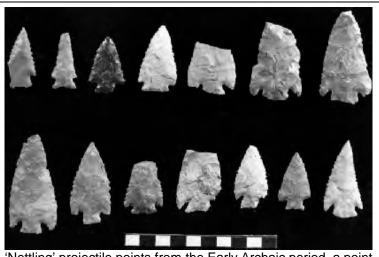
The environment during the Paleo-Indian colonization and occupation of Hamilton was in a major transition: the climate had warmed rapidly, resulting in the rapid overall decline of the glaciers. The resulting landscape was open spruce parkland analogous to the transitional zone between modern northern boreal forest and tundra, but was notably warmer. Through the Paleo-Indian period the parkland environment became a closed, spruce-dominant forest, and then a pine climax boreal forest at the end of the Paleo-Indian cultural horizon.

The mobility of Paleo-Indians was very high, with evidence that seasonal movements of several hundred kilometers were not unusual, seeking food and other resources. Paleo-Indians were likely adapted to living in both the spruce parkland in the north, and closed boreal forest in their southern range.

Paleo-Indian settlement sites are often small, covering as little as 25-100  $m^2$ , although there are several in Hamilton, such as the Mount Albion site on the edge of the Niagara Escarpment, that are one or two hectares in area. These large sites may represent seasonal gatherings of smaller groups, repeated occupations of the same locations over time, or some combination of the two. There are approximately ten identified Paleo-Indian sites in Hamilton: the largest is the Mount Albion site,



View northwest from Mount Albion Road across the Mount Albion West site (AhGw-131), an Early Paleo-Indian site in Hamilton that is the largest of its kind in the Niagara Peninsula.



'Nettling' projectile points from the Early Archaic period, a point type identified on the Nettling archaeological site in southwestern Ontario. approximately one hectare in area, excavated in advance of the Red Hill Expressway. The remaining Paleo-Indian sites in the City are smaller sites or isolated find spots, such as a single fluted point at the Christie Site in Ancaster. While the low number of sites may in part reflect the difficulty with which such small sites are found, it is also indicative of the low population levels during this time period.

## Archaic Period: 10,800 calBP – 3,100 calBP (9,500 - 2,500 BP)

The Archaic period is commonly divided into three sub-periods, based on changes in point styles or types and the presence of specific artifacts, as discussed below: Early Archaic (approximately 10,800 calBP – 8,900 calBP [9,500 - 8,000 BP]), Middle Archaic (*circa* 8,900 calBP – 5,200 calBP [8,000 - 4,500 BP]), and Late Archaic (*circa* 5,200 calBP – 3,100 calBP [4,500 - 2,900 BP]). The transition from Paleo-Indian to Archaic is marked by a gradual shift to:

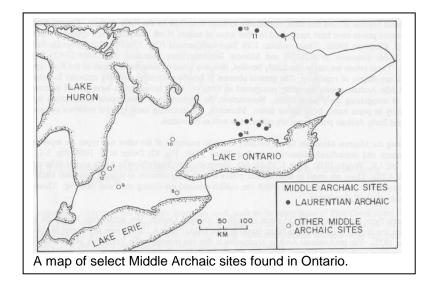
- Notched points;
- A reduced formality of the toolkit and manufacturing process;
- The use of a wider range of lithic materials for these tools;
- The appearance of ground-stone tools like axes;
- The appearance of un-smelted or native copper artifacts;
- The appearance of net-fishing with worked-stone notched netsinkers;
- More regional variation in point styles;
- More sedentary populations; and,
- Larger populations, reflected by more and more extensive sites.

Because Archaic sites are not as old, more artifacts and materials are preserved and more easily recovered. The larger amount of information available for interpretation allows archaeologists to provide more detailed descriptions of the lifeways of the Archaic peoples. During the Archaic Period in southern Ontario, the closed boreal forest became a mixed coniferous and deciduous one in the Early Archaic. By the start of the Middle Archaic, it was predominantly deciduous in the Hamilton area, as it remains to this day, notwithstanding deforestation for agriculture and modern property development. The plants and animals associated with the mixed and later fully deciduous forest are much like those respectively found in northern and southern Ontario today, and would have guided the subsistence opportunities of their Native inhabitants: hunting, trapping, fishing, and the gathering of food from plant sources, such as nuts, berries, mushrooms, 'wild rice', and other nutritive crops.

There are 34 Early Archaic sites in Hamilton. The Early Archaic period is marked by the appearance of notched or stemmed points. These changes in form from the Paleo-Indian fluted points arise from different methods of hafting them to spear shafts. Basic ground stone tools such as rough adzes and axes also appear during this period, indicating work with wood, and potentially processing more fibrous vegetation for use as netting, baskets and food.

The Middle Archaic is represented by 18 sites in Hamilton, a tradition marked by more refined ground and polished stone tools, including formal axes, netsinkers used to weight fishing nets, and ceremonial and/or decorative tools/items. Native copper (recovered from pure veins of copper in rock or nuggets, rather than being smelted from ore) appears towards the end of this period. This copper is indicative of established trade networks, integrated within a more sedentary settlement pattern, as these copper sources have been confirmed to be at the west end of Lake Superior.

More stable settlements may have arisen with larger populations, with less movement due to land being more intensively occupied by more people. The sedentism is relative, however, as there is evidence of





seasonal movement following food sources between smaller, interior camps in the fall and winter (for hunting game and harvesting nuts), and larger camps along rivers and lakes during the spring and summer (for fish, waterfowl, and other game).

The spear points of this period are typified by side and corner notches, though there is a wide variety of styles within these broad classes of points, which in part reflects an increase in the regional variation of point types. This increase in variety may also represent less movement across the land and interaction with other groups of Natives, as local styles evolved independently.

The Late Archaic is marked by an increase in the number of sites, represented by 41 registered archaeological sites in Hamilton. It is noted, however, that a large number of sites (57) are ascribed to the Archaic horizon in general, bringing the overall number up substantially.

With these younger sites come increased artifact preservation, and the first confirmed evidence of ceremonial funerary practices, and the burial of ritually or culturally valuable items with individuals. The recovery of more organic artifacts also provide a better picture of wood, bone and shell tools, and provide evidence of a wide range of foods in the diet. Fish weirs are used during this time period, too.

The stone points of this period fall into three broad categories over time, starting with Narrow Points, leading to Broad Points, and ending with Small Points at the end of the Late Archaic, and the Archaic horizon overall. These Small Points may represent the first stone 'arrowheads', mounted on arrows instead of spears. The relatively large size of earlier lithic points made their use on arrow shafts unlikely, while arrows with tips of other material may have been present previously, but have not been detected due to poor preservation of non-lithic materials. The subsistence practices of the Late Archaic do not change drastically, although more grinding stones associated with food preparation appear.

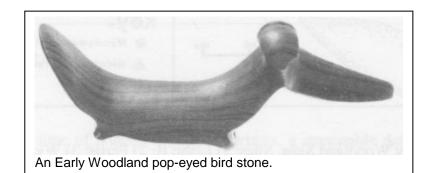
## Woodland Period: 3,100 calBP - AD 1650 (2,900 BP - AD 1650)

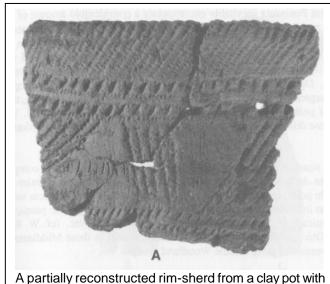
The Woodland cultural horizon is relatively complex, as the most recent and populous prehistoric occupation in the Hamilton area. The division between the Woodland and preceding Archaic cultural horizons is again arbitrary, but has been defined by the appearance of early pottery and horticulture, along with further changes in point styles. This cultural horizon is well represented in Hamilton by 121 registered archaeological sites, and a dozen or so reported but unregistered sites.

The Woodland period is divided into four sub-periods: Early (3,100 calBP - 2,000 calBP [2,900 - 1,950 BP]), Middle (2,200 calBP - 1,100 calBP [2,250 - 1,150 BP]), Transitional (1,300 calBP - 950 calBP [1,350-1,050 BP]) and Late Woodland (1,325 calBP - AD 1650 [1,450 BP - AD 1650 ]). With even more detail available during the Late Woodland, and after exponential growth in the population, it was further divided into the Early, Middle and Late Iroquoian stages.

*Early Woodland*: Aside from the appearance of early pottery, and some changes in point styles (Meadowood blades and points, finely ground gorgets and pop-eye birdstones), the Early Woodland is a continuation of the Late Archaic, with similar subsistence patterns, technology, and funerary practices, though population likely increased. Incipient horticulture appears, as well, with evidence of favoured plants being aided by Native horticulturalists in their growth.

*Middle Woodland*: Although similar to the preceding period, one difference is an increase in the scale of some funerary practices, reflecting external Hopewell cultural influences from the Ohio Valley, south of Lake Erie. This included the construction of burial mounds,





A partially reconstructed rim-sherd from a clay pot with cord impressions from a Middle Woodland site.

*Horticulture* is practiced when an area of forest is cleared and sown with domesticated plants for several years, then left to regenerate by moving to another area of freshly cleared forest. *Agriculture* reflects more continuous and industrialized use of land for cultivated crops.



sometimes taking advantage of convenient natural features like eskers or dunes. Two examples are reported from the Hamilton area: one on the grounds of Dundurn Castle, and another possible mound near Emerald Avenue North, near the original Burlington Bay shoreline, which is now in an industrial area.

**Transitional Woodland**: This phase of the Woodland cultural horizon is marked by the increased use of horticultural crops, and importing corn as a crop from the Hopewell cultural, south of Lake Erie. The beginning of this shift in subsistence strategies resulted in a similar change in the balance of settlement patterns – with an increased intensity and longevity of occupations that approaches small-scale 'urbanization': permanent villages of up to 1,500 people. Because site occupations were more permanent, logistical concerns such as access to water, and disposal of waste, as well as proximity to cropland, resulted in tactical preferences for defensive site locations, such as bluffs overlooking the floodplains of large rivers, on floodplains, or the shores of extensive marshes such as Cootes Paradise. With larger single settlements came a need for internal organization, as well.

**Late Woodland**: This period reflects the peak in development and growth of the Woodland cultural horizon, with acceleration in the evolution of changes begun in the Early and Middle phases. These Natives were named Iroquoians because early European traders noted the language they shared with other Natives south of the Great Lakes, which differed from the Algonquians to the north. This period is subdivided into Early (950 calBP – 600 calBP, or 1,050-650 BP), Middle (600 CAL – 550 calBP, or 650-550 BP) and Late Iroquoian Phases (550 calBP/BP - A.D. 1650).

*Early Iroquoian*: This phase is characterized by a gradual increase in the role of horticulture, leading to the later development of formal agriculture. It also saw increases in settlement sizes, overall population

and its density, and social complexity. These changes were reflected by settlements comprising small, palisaded compounds with multiple longhouses occupied by nuclear and extended families. The extended families became more the norm, and functioned socio-politically and organizationally. Outlying camps and cabin sites would support foraging activities, while horticulture played a growing role in the overall subsistence strategy.

*Middle Iroquoian*: During this phase, the principal subsistence strategy became focussed on agriculture, with the adoption of the classic cornbean-squash ('three-sisters') cropping. Along with an increase in population, population density and village sizes, social organization became a priority. This was and remains based on matrilineal kinship (clans), and the development of regional alliances between villages. These are seen to be reflected in similar decorative styles in pottery and smoking pipes. Another effect of increased population size and density may have been more inter-Iroquoian conflict, in addition to conflict between the Iroquoian and Algonquian nations, suggested to explain villages that were being located in more defensible positions, with more extensive palisades erected, which are interpreted as defensive walls.

Late Iroquoian: Concluding at the time of direct contact with EuroCanadian explorers and traders, this phase is associated with the development of the political and social organization of the Nations present to this day. The original Iroquois Confederacy comprised the Five Nations (Mohawk, Oneida, Seneca, Onondaga and Cayuga), later becoming Six Nations with the addition of the Tuscarora in 1720. The Native population peaked at the beginning of this phase, evidenced by regional clusters of larger villages. There is evidence of higher levels of conflict, both within Iroquoian groups locally and regionally, and between Iroquoian and other surrounding Nations. This may be related to some movement of settlements late in this phase.



A mapping of Native groups prior to EuroCanadian entry into the lower Great Lakes area (ca. 1400 to 1600 bp), using ethnographic information, such as records kept by Jesuit missionaries.

When observed during the earliest EuroCanadian contact, the Iroquoian villages are described as being under the direction of various chiefs elected from the main clans. The villages then aligned within one of three major tribal confederacies within the overall Iroquois nation: the Huron, Petun and Neutral, which shared complicated political relationships amongst each other, and their non-Iroquoian neighbours.

The Huron had occupied the area north from Lake Ontario towards Peterborough, Kingston and Simcoe, and possibly as far west as the Niagara Escarpment, although at this phase they were concentrated in the Lake Simcoe area. The Petun, many of whom had previously settled in the Huron territory, were based in the Collingwood area. The Neutrals were located through the Niagara peninsula. These three confederacies were displaced by 1650 as a result of conflict with the Five Nations Iroquois of south of the Great Lakes, with the surviving Huron assimilated into the Iroquois, seeking refuge with the Jesuits in Christian Island, or withdrawing to Wendake, near Quebec City. The Petun who did not follow the Huron found refuge in the mid-west, while the Neutrals were fully dispersed through assimilation or death. In combination with European diseases, there is little trace of these Nations in the living Native cultures of Hamilton today.

# POST-EUROCANADIAN CONTACT NATIVE CHRONOLOGY (post-A.D. 1650)

The earliest recorded European presence in the Hamilton area were those by Samuel de Champlain in 1615, and the missionary Joseph de la Roche Daillon in 1626. Daillon confirmed the presence of the Neutral in the Hamilton area prior to their dispersal by the Five Nations. After 1651, the New York Iroquois subsequently settled along strategic trade routes on the north shore of Lake Ontario for a brief period during the late 17th-century.

In 1701, two relevant treaties that remain in effect were signed by the French and British with various First Nations respectively. The Montreal Treaty was a peace treaty between the French, Five Nations Iroquois, Huron-Wendat, and some Algonquin Nations of the Great Lakes - not including the Mississauga. The Fort Albany or Nanfan Treaty was between the British and Five Nations Iroquois ensuring that the Iroquois would retain hunting rights over a large portion of southern Ontario, including Hamilton.

When the Six Nations Iroquois moved south of Lake Ontario, the Mississauga occupied the Niagara region during the late 17th and early 18th centuries. The British Crown recognized the Mississauga as the 'owners' of these lands in the EuroCanadian sense, including Hamilton. Consequently the British negotiated with the Mississauga for additional tracts of land during the colonization of southern Ontario by EuroCanadian settlers. Sir Haldimand's "Between the Lakes Purchase" of 1784 signed over to the Crown some one million acres of land, from near the head of Lake Ontario, along the north shore of Lake Erie, to Catfish Creek.

The Six Nations Iroquois were allied with the British Crown during the American Revolutionary War, and displaced by the British surrender of



The grey area indicates the extent of the Haldmand Tract granted in 1784 to the Six Nations of the Grand River Territory, averaging six miles on either side of the Grand River, placing it in a modern context, and showing the remaining area held by this First Nation (courtesy of Six Nations).

their traditional lands south of Lake Ontario to the Americans under the terms of the Treaty of Paris in 1783. In compensation for the loss of these lands, the Haldimand tract was granted to Six Nations from part of Sir Haldimand's 1784 "Between the Lakes Purchase", and comprised an area averaging six miles on either side of the Grand River from its mouth on Lake Erie at Port Maitland to its source near Dundalk in Grey County. Based on claims by the hereditary Mohawk chief Joseph Brant that the grant was for fee-simple title, he proceeded to sell or lease approximately half of the original grant lands to EuroCanadian settlers.

These sales and leases were initially contested by the Crown, leading to the Simcoe Patent of 1793 stating that all land leased and sold required Crown approval. This Patent was not accepted by Brant and the other confederacy chiefs, who continued to lease or sell land to EuroCanadians. On re-evaluation by the Crown in 1834, it was determined that there was no recourse but to confirm the leases and sales to the EuroCanadian settlers.

EuroCanadian settlement of the area continued through the 1830s and 1840s. By 1847, the Six Nation lands were amalgamated in a common reserve comprising some 18,000 hectares in area. Additional, smaller holdings from the original Haldimand tract have also been retained elsewhere along the Grand River.

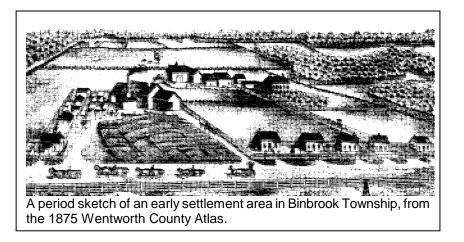
While portions of Glanbrook and Ancaster are within six miles of the Grand River, the Haldimand Tract as mapped does not extend into Hamilton, but conforms to the boundary between Hamilton and Haldimand, and Hamilton and Waterloo.

An additional tract of land at the head of Lake Ontario was also granted to Joseph Brant through the Brant Treaty, and while disputed by the Mississauga, was subsequently sold by Brant's heirs. The 1805 Claus Treaty between the British Crown and Mississaugas of the New Credit established their interest in 200 acres at Burlington Heights and the lakeshore encompassed by the Brant Treaty.

The Mississaugas of the New Credit are now based on a land reserve of approximately 2,400 Hectares adjacent to the southern boundary of the main Six Nations land reserve, near Hagersville. This land was originally a gift from the Six Nations Confederacy in 1864-1865, eventually purchased outright by the Mississaugas in 1903.

The registered population of the Six Nations of the Grand River Territory is now approximately 21,500, and that of the Mississaugas of the New Credit is 1,800: not all registered citizens live on their respective First Nations.

While Hamilton does not encompass any First Nations, the Native population within the City is recorded as 7,625 in the 2006 census. A wide variety of Native non-governmental organizations (NGOs) are active within Hamilton, including the Hamilton Regional Indian Centre, Native Women's Centre, Urban Native Homes, Sacajawea Native Housing, Métis Nation of Ontario Training Initiatives, Métis Women's Circle, and the Hamilton Executive Directors Aboriginal Coalition (HEDAC), an umbrella organization comprising executive directors from Hamilton's Native NGOs. Appendix C





The EuroCanadian Henry Site (1997) located is to the northwest of the photo location at Albion Road: the foundation of this early cabin is in the sumacs.

## EUROCANADIAN CHRONOLOGY

EuroCanadian archaeology is generally referred to as 'historic', and represents the intensive re-settlement and re-organization of the Hamilton region by people of primarily European extraction, but including other ethnic groups within this overall cultural framework.

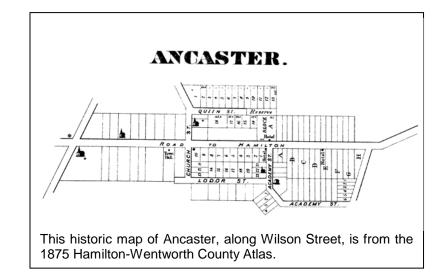
As described previously, the Native occupation of the Hamilton area was active for approximately 12,500 calendar years before the influence of European culture became a significant regional factor. During this time, settlement patterns and transportation routes were well established, and so the cultural landscape was organized by the Nations around the physical environment and resources.

The arrival of EuroCanadian settlers (the earliest significant wave comprised primarily United Empire Loyalists, seeking settlement in British North America after the American revolution in 1776), and the governmental representatives implementing this colonization process, took some of the existing land use patterns into account, but largely imposed a new and arbitrary order on the land. For example, while certain established Native trails in what is now Hamilton became early roadways, like King Street, the remainder of the area was organized into rectilinear lots and concessions, for distribution to future patent-holders, regardless of the actual landscape and existing topographic features. As a result, concession roads on early maps were shown to lead through swamps and watercourses, and over escarpments and drumlins, which led to some later need to adjust the roadway layout. Poor initial mapping by surveyors, in addition to the need for correcting deviations arising from the curvature of the earth's surface, resulted in a need for significant corrections of such surveys at township and county boundaries.

Subsequent uses of the landscape were influenced by its character: proximity to water; the inability to cultivate bedrock; and, the need to drain clay-soils and irrigate sandy ones are some examples shared with their Native predecessors. In order for prospective EuroCanadian landowners to obtain the patent for their land grant, the Crown had specific requirements to be met within a limited time frame. A certain portion of their properties had to be cleared of timber and brought under cultivation, a permanent residence had to be built, and concession rights-of-way adjacent to their property had to be cleared.

These activities had rapid effects on the landscape. EuroCanadian settlers treated trees on their properties as an initial 'cash-crop', to be removed in preparation for traditional agriculture. These mandated activities led to an early sawmill industry centered on the many watercourses descending down the escarpment leading to early villages and towns like Waterdown, Ancaster and Dundas. The sawmills were frequently refitted as grain-mills once the lumber had been largely cleared and grains became the staple farm crops. As a focus of commercial activity centered around water, these mill sites often became areas of early urban settlement.

A combination of planning, location and chance resulted in the development and distribution of historic settlements. For example, while Dundas was an early focus of settlement and industry, originally foreseen as a major harbour and shipping centre due to its proximity to the head of the lake, insufficient water access forced it to later cede this role to Hamilton with its more accessible, larger and deeper harbour. Other settlements were centred around ground transportation routes, such as Governors Road, Dundas Street, Wilson Street, and Hamilton-Port Dover Plank Road (including Dundas, Waterdown, Ancaster and Ryckman's Corners respectively, among many examples).



These hamlets, villages and towns, together with the original City of Hamilton, developed as a combination of government direction, competition and co-operation, along with market factors guiding business and residential uptake. Over time these settlements grew, declined, expanded and contracted, resulting in the landscape we see today, and the historical archaeology underlying reflecting these past patterns.

Geopolitically, Wentworth County was organized by the Government of Upper Canada as part of the Gore District that covered an area of over a half a million acres in western Ontario. As part of the 1850 reorganization of Upper Canada into counties, Wentworth and Halton formed one single organized county until 1854, when they were split into their final alignment, aside from the later annexation of the southern portion of Flamborough East by Burlington (Halton County).

The boundaries of present-day Hamilton conform to what was Wentworth County comprising seven townships: Ancaster, Barton, Beverly, Binbrook, Flamborough East and Flamborough West, Glanford and Saltfleet, with the City of Hamilton (in Barton) as the county seat. The County of Wentworth became the Regional Municipality of Hamilton Wentworth in 1974. This arrangement of upper and lower tier municipal government remained until 2001, when all of the municipal governments were amalgamated to form the new City of Hamilton.

## **EuroCanadian Sites**

A total of 84 EuroCanadian archaeological sites are registered in Hamilton. These date from the late 1700s to the 1900s. One of the earliest of these sites subject to excavation is Richard Beasley's trading wharf, at the foot of Dundurn Castle on the Dundurn National Historical Site (also the location of numerous other archaeological sites associated with the settlement of this area, both Native and EuroCanadian). Other notable sites include the Stoney Creek War of 1812 Battlefield, and the associated Smith's Knoll burial ground. Additional historic sites include farmsteads, estates, urban homes, parks and middens, to name but a few.

Industrial archaeology as a specialized subject area falls within the discipline of historic archaeology, and excavated sites in Hamilton include infrastructure such as roads, bridges and water facilities, along with factories including lime kilns and pottery manufacturers.



Archaeological excavations were carried out at the King's Forest site before construction of the Red Hill Valley Parkway (courtesy of Archaeological Services Inc.).

## ARCHAEOLOGICAL ACTIVITY IN HAMILTON

Archaeological activity in Hamilton encompasses a wide variety of types, including amateur or avocational work, consulting, and academic study. The vast majority of archaeology in the City is terrestrial, conducted on and below the ground. A subset of this category is cave archaeology, conducted wholly underground. Underwater archaeology is also carried out in Hamilton: these are all discussed below.

The roles of the City of Hamilton within the context of the archaeological activity discussed below are outlined in more detail in the main Archaeology Management Plan (AMP) document. In brief, the City serves as a landowner with archaeological resources on some of its properties, a proponent for infrastructure projects that impact archaeological resources, an approval authority for development projects on private lands that impact archaeological resources, and a trustee responsible for the public interest in archaeology. The Hamilton AMP provides specific policies and protocols for the City's responsibilities in these roles, and how these will be reviewed and refined in the future, to ensure that they are being met efficiently and effectively. The local archaeological community, including avocational, consulting, student and academic archaeologists are and will be engaged in both the delivery and maintenance of the Hamilton AMP.

#### **Terrestrial Archaeology**

To date, most archaeology conducted in Hamilton is terrestrial, as a product of research and amateur archaeology, or is associated with development activity, which has grown to dominate the field over the past three decades.

Most terrestrial archaeological resources in Ontario generally occur within the first 30-45 cm (12-18") or so of soil below the ground surface,

and Hamilton is no exception. The majority of artifacts are recovered from the topsoil or cultivated portion of the soil where impacted by agricultural activities. When truncated by ploughing or other disturbance of the topsoil, some features do extend into the subsoil, representing structural supports, cellars, storage pits, and caches, to name but a few examples. Historical archaeology work can include excavating the floors of basements in existing buildings, for example, to study construction methods and sequences.

While the practice and principles of archaeology are discussed in more detail in *Appendix B*, it is noted that archaeology has been practiced in Hamilton since at least the late 1800s. Early archaeological ventures were more oriented to a combination of colonial interest in the previous Native occupants of the area, and quests for collectable and/or valuable artifacts. During this earlier period, the scientific method was not well-defined or practiced, though the precedents of Schliemann in the Old World and Jefferson in North America (along with other luminaries) did set examples for the practice and goals of archaeology.

Sometimes the local Hamilton press did report the identification and amateur exploration of local burial mounds and other archaeological sites and artifacts. Such work was also documented in the *Annual Archaeological Reports for Ontario* (AARO) from the late 1800s through to the 1930s. Traditionally, such amateur and later avocational archaeological activities focus on Native archaeology, not EuroCanadian, although the collection of antique bottles and other historic artifacts can also be described as a subset of unlicensed archaeological activities.

The City also has compiled archival copies of notes drafted by avocational archaeologists in the Hamilton area from the 1930s to the 1950s, and indeed such work continues to this day under the auspices of the Ministry of Culture licensing program. Academic archaeology became predominant in the area in the post-World War II era, with formal research carried out in Hamilton by faculty and students/researchers based at McMaster and other universities, postsecondary institutions, and museums. This too continues, although to a lesser degree, and is again largely focused on the study of Native archaeology in the area with the exception of regular archaeological field-school activities at Dundurn Castle.

The vast majority of archaeology conducted today, and since the early 1980s, is through consulting: work that precedes the development of land by private and public proponents. However, there remains a core group of individuals who retain an interest in archaeology at the avocational, personal or professional level. Many of these people are members of the Hamilton Chapter of the Ontario Archaeological Society.

The City of Hamilton continues to be a focus of archaeological research in Ontario, due both to the high number of archaeological sites within the City, and the intensity of ongoing development of land by residential, commercial, industrial and infrastructure projects such as roads and government facilities. Over the past five years, an average of approximately 100 archaeological projects per year have been initiated as a result of development activities: this is both a reflection of the pace of development activity in the City, and the degree to which development projects impact areas of archaeological potential across the City.

As indicated by the archaeological potential mapping (see Schedule A), there are few areas in Hamilton overall that do not have archaeological potential, reflecting the intensity by which the City has been occupied in the past, for the same reasons that it continues to be a popular area for settlement including location, climate, resources, and physiography. As an indicator, Hamilton has the most registered archaeological sites of any municipality in Ontario, with approximately 1,200 registered to date.



The Ontario Archaeological Society (OAS) is a provincial organization focused on public archaeology. Further information can be found at <u>http://ontarioarchaeology.on.ca</u>.

The Hamilton Chapter of the OAS is a local organization centred around archaeology within the City of Hamilton and adjacent areas (<u>http://hamilton.ontarioarchaeology.on.ca</u>).

Many Native sites were likely not identified or recorded during the early settlement of the City, and most registered sites have been identified as part of the development process since the mid-1970s, In addition, the majority of the City is not developed and will remain rural in nature, and so unexamined for archaeological sites. As a result, the number of known and registered archaeological sites undoubtedly represents a small fraction of all archaeological sites in the City.

The likelihood that there are many more as-yet unidentified terrestrial sites in Hamilton is supported by the results of archaeological assessments across areas that will otherwise remain undeveloped, such as highway or utility corridor transects. These linear surveys in areas that are otherwise unlikely to be developed or assessed have identified archaeological sites throughout the rural areas of Ancaster, Dundas, Flamborough, Glanbrook, and Stoney Creek. These results suggest that the large areas without archaeological sites in Hamilton's Archaeology Management Plan (AMP) mapping reflect a lack of archaeological work rather than an absence of sites: future work will test this conjecture.



The Olmstead Cave is located within the Eramosa Karst complex, and has yielded late-historic and modern artifacts, as early EuroCanadian settlers started a tradition of filling them in with refuse and field stones. They may have been occupied or used prior to this, but due to seasonal flushing of the caves during spring floods, no Native artifacts have been recovered here to date.

## Cave and underwater archaeology in Hamilton

The vast majority of archaeology and archaeological work in Hamilton is terrestrial or land-based, comprising the traditional and popular view of what archaeology is and how it is practiced, as outlined in *Appendix B*.

While Hamilton also has cave (limestone or dolostone karst caves) and underwater archaeological resources, substantial work within these archaeological specialties has yet to be carried out in Hamilton. The work or research that has taken place to date have primarily been the pursuit of either avocational archaeologists or as part of public archaeology programs.

## Cave Archaeology

Two main cave formations occur in Hamilton: fissure caves associated with the Niagara Escarpment, and karst caves largely associated with the Eramosa karst complex.

The Niagara Escarpment in the City of Hamilton has been the location of numerous crevice caves reported throughout the historic period. These crevice caves result largely from physical erosion along and near the face of the escarpment. However, many of these have been removed as a result of development associated with the construction of access routes up and down the escarpment, in addition to quarrying and building activities. Many of these crevice caves are also very small, and of limited use and/or accessibility to humans.

Karst or solution caves are formed by chemical erosion within limestone or dolostone rock formations – water dissolves these stones, forming underground cavities. The Eramosa Karst complex in Hamilton is one of the largest in Ontario, and comprises numerous caves, with lengths up to 335 metres. Regularly flushed by water, they are unlikely to retain prehistoric sites: EuroCanadian settlers used them as middens for domestic garbage and fieldstones, which has slowed the action and effectiveness of water flushing the caves. As a result, historic artifacts are being retained within these caves, representing either historic middens subject to future investigation, or future middens representing this modern era.



The Hamilton and Scourge were two merchant vessels confiscated during the War of 1812 by the U.S. Navy and sunk during a squall on Lake Ontario. These marine archaeological sites and war graves, including this anchor at the site, are managed by the City of Hamilton.

## Underwater Archaeology

Since much of modern archaeology in southern Ontario is driven by development impacts on areas of archaeological potential, little of which directly impacts underwater areas, there is little professional pressure for work in this subdiscipline. However, transportation and utility corridor work over rivers and narrows are a notable exception to this, where the installation of piers have impacted identified sites and required mitigation measures. In the future, such work may also be required for the installation of utility services across lakebeds, such as pipelines or data and power cables, among other development projects.

The majority of underwater archaeology to date in Ontario is driven by avocational and academic archaeologists. Historic shipwrecks are a strong lure to avocational archaeologists and recreational divers alike, and are also a potentially significant tourist draw. More so than with terrestrial sites, underwater archaeological sites are subject to unregulated visits and looting of artifacts, often resulting in the rapid loss of significant resources and information once their locations become common knowledge.

This issue of control over underwater archaeological sites is significant to the City of Hamilton because Hamilton Harbour and Burlington Bay have yielded identified shipwrecks, and in all probability contain further unreported and/or as yet unidentified wrecks, in addition to submerged Native sites. The Desjardins Canal through Cootes Paradise will also yield substantial underwater archaeological artifacts and features. While technically not falling within the jurisdiction of the City of Hamilton, because the Province holds authority for all but a few underwater archaeological sites in Ontario, the sites often occur within the City's boundaries, and the City is often the first point of contact for local amateur divers and avocational archaeologists, and the local chapter of Save Ontario Shipwrecks (www.saveontarioshipwrecks.on.ca). The City also owns, administers and manages two War of 1812 shipwrecks and war graves: the *Hamilton* and the *Scourge*, located off the St. Catharines shoreline in Lake Ontario. The unique nature and sensitivities of these wrecks is a strong incentive for Hamilton to apply its Archaeology Management Plan to underwater archaeological resources and sites.

These two schooners were originally commercial ships that were pressed into service for the American navy prior to the onset of the War of 1812. Converted to form part of the American flotilla seeking dominance over Lake Ontario, they sank in a squall on the night of August 8<sup>th</sup>, 1813, with the loss of approximately 100 crew members. Information on the City's management of these shipwrecks can be found at <u>http://www.hamilton-scourge.hamilton.ca/</u>.



Catchment areas of 250 metres around known archeological sites are one of the 11 criteria used to determine archaeological potential in City of Hamilton's Archaeology Management Plan.

## Appendix D:

#### **Archaeological Potential Modeling**

#### Introduction

The management of archaeological resources works with two fundamental sets of data: where archaeological sites are located, and where they may be located. Managing identified sites is relatively simple, as they are known entities. However, determining where archaeological sites may be located is a more complex matter, and has become a specialty called archaeological potential modeling.

Archaeological potential is used to decide whether or not a given parcel or bounded area of land may contain an archaeological site. The measure of archaeological potential can be:

- A binary decision, where archaeological potential is present or absent; or,
- An ordered measure of potential such as high, medium or low or an indexed calculation, where potential is graded along a continuous scale.

This measure of archaeological potential can then be used to guide subsequent decisions, such as whether an archaeological assessment may be required prior to a property being disturbed through development or construction.

The determination of archaeological potential is achieved through an archaeological potential model, which uses cultural and physiographic information such as the presence of identified archaeological sites or proximity to water upon which to calculate potential, and typically map this information over a study area. Such models can be deductively based on rules, inductively based on presumed associations, some combination of the two, and as testable hypotheses.

#### City of Hamilton Archaeological Potential Model

The archaeological potential modeling for the City of Hamilton Archaeology Management Plan is primarily deductive in nature, based on criteria which, if met, define archaeological potential. However, this model is inductive in the sense that associations between archaeological sites and criteria are presumed, and forms a testable hypothesis as a model whose effectiveness will be measured, evaluated, and modified.

Ministry of Culture archaeological potential criteria as specified in "Conserving a Future for our Past: Archaeology, Land Use Planning & Development in Ontario – An Educational Primer and Comprehensive Guide for non-Specialists" ("the Primer": see Appendix F) were used for the evaluation of archaeological potential within the context of Hamilton's archaeological site inventory and cultural chronology. These criteria were then customized to build the archaeological potential model for the City of Hamilton, and examined for their degree of capture or loss of known archaeological sites within the entire set of sites reported and/or registered within the City of Hamilton.

To minimize edge effect in the calculation of archaeological potential along the boundaries of Hamilton, all data used within this analysis extended beyond the borders of Hamilton by a minimum of:

- 250 metres for archaeological sites;
- 300 metres for primary watercourses;
- 300 metres for prehistoric watercourses and water bodies;
- 200 meters for secondary watercourses;
- 100 metres for physiographic, geological and soil features; and,
- 100 metres for all historic features.

250 metre catchment areas for registered archaeological sites;

250 metre catchment areas for unregistered but known or reported archaeological sites;

300 metre catchment areas for primary watercourses and water bodies;

100 metre catchment areas for historic activities;

100 metre catchment areas for historic transportation corridors;

100 metre catchment areas for unusual landforms;

Pockets of sandy soil in predominantly clay areas.

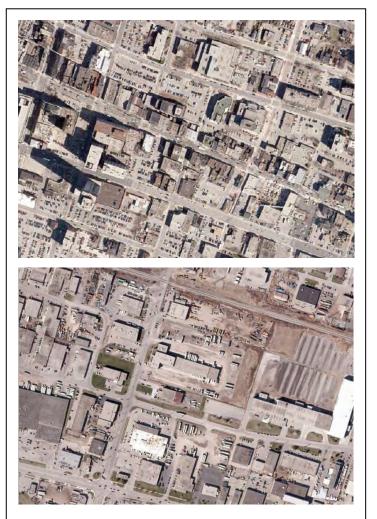
Areas within the historic urban boundary that have not been substantially disturbed.

Rural historic settlements.

Properties designated under the Ontario Heritage Act

Modern and historic aerial photography

The examples above demonstrate the various data sources and types used by the City of Hamilton Archaeology Management Plan to evaluate archeological potential.



Areas of both intensive and extensive soil disturbance generally negate archaeological potential that might otherwise be indicated by other criteria.

## Ministry of Culture Criteria for Determining Archaeological Potential

The Ministry of Culture criteria for calculating archaeological potential, as described in the Primer, are:

A. Known Archaeological Resources;

(1) Within 250 metres of known archaeological sites.

## B. Physiographic Features;

(2) Water:

(2a) Within 300 metres of a primary watercourse or waterbody;

(2b) Within 200 metres of a secondary watercourse or waterbody; or,

(2c) Within 300 metres of a prehistoric watercourse or waterbody.

- (3) In an area of elevated topography.
- (4) In an area of sandy soil in areas of clay or stone; or,
- (5) In the vicinity of distinctive or unusual landforms.
- C. Historic Cultural Features;
  - (6) Near source areas for subsistence resources;
  - (7) In areas of pioneer EuroCanadian settlement;
  - (8) Along historic transportation routes; or,
  - (9) Within a property designated under the Ontario Heritage Act.

- D. Features specific to the Development Application or Study Area
  - (10) Local knowledge associates areas with historic events/ activities/occupations.
  - (11) Areas subjected to extensive and intensive soil disturbances.

Some of these criteria require one criterion to be present to identify a property or area as having archaeological potential:

- Proximity to known archaeological resources (A-1);
- Proximity to water (B-2a, B2b, B2c); and,
- Local knowledge (D-10).

The remaining measures of potential, if none of the above values are present, require two or more other criteria to be met:

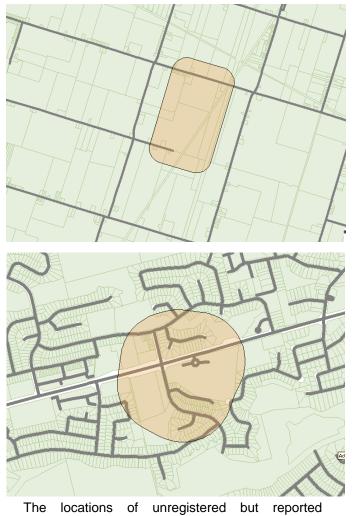
- Elevated topography (B-3);
- Sandy soil (B-4);
- Distinct landforms (B-5);
- Subsistence source areas (C-6);
- EuroCanadian pioneer settlement areas (C-7);
- Historic transportation routes (C-8); and,
- Designated properties (D-10).

If the eleventh criterion is positive, as documented by historic records and/or field data, a property does not retain archaeological potential:

• Areas subject to extensive and intensive soil disturbance (D-11).



All criteria used to measure archaeological potential can be plotted on one key map, indicating which ones may affect individual properties.



The locations of unregistered but reported archeological sites may be attributed to lot and concession (above), or given a detailed site location (below). Catchment areas around reported sites are used to map archaeological potential, and ensure this sites are not overlooked.

## Hamilton AMP Archaeological Potential Modeling

The above Ministry of Culture criteria for determining archaeological potential as defined in the Primer were utilized for the AMP mapping of archaeological potential across the City of Hamilton, with the exception of criterion (11): areas subjected to extensive and intensive soil disturbances. These data were not available citywide, and the treatment of such site-specific features is, along with the rest of these criteria, discussed below.

The mapping of archaeological potential was an exercise that compiled and mapped data specific to Hamilton using all of the Ministry of potential criteria identified above, excluding soil disturbance. These different classes of criteria where overlain to arrive at a binary measure of archaeological potential being present, or not.

## A. Archaeology

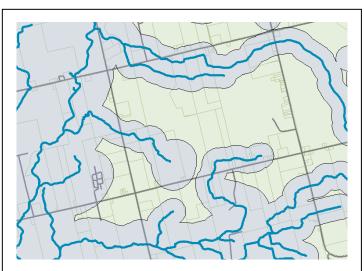
Two classes of datasets were used to develop catchment boundaries for archaeological potential: sites registered in the Ontario Archaeological Sites Database (OASDB) and Geographic Information System (GIS), and those sites reported not registered with the Province.

The former comprise archaeological sites for which Borden Forms have been submitted, and the data entered into both the OASDB and GIS. The difference between the number of Borden numbers issued to archaeologists identifying sites within Hamilton (approximately 1,000), and the number of archaeological sites recorded and mapped in the OASDB/GIS (735) largely reflects the data-lag caused by three processes: the submission of Borden forms by archaeologists to the Ministry of Culture; the entry of the submitted Borden form data into the OASDB and GIS at the Ministry of Culture; and, the transfer of data from the Province to the City of Hamilton. Reported but unregistered sites represent site locations typically recorded by avocational archaeologists but not as yet registered by Borden form to the Ministry. Some of these have since been confirmed and registered, but a number remain out of the Provincial OASDB/GIS. The primary source material for these sites was examined, and mapped as accurately as possible. In some cases the maps of avocational archaeologists provided exact site locations, while others could only be resolved to the level of Block (where applicable), Lot and Concession within former townships. In cases where archaeological sites were precisely located, the standard 250-metre catchment area surrounding the site was used. Where there was no precise site location, an extended catchment was not used, but potential ascribed to the property parcel associated with the reported site. These catchment areas for reported but unregistered sites capture 7.3% of the registered sites in the City.

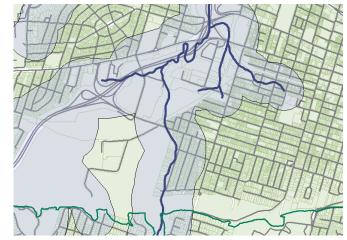
The standard Ministry of Culture catchment of 250 metres for identified archaeological is common practice, and used for the archaeological potential modeling of this AMP. Sites were not sorted for significance: their registration by licensed archaeologists is sufficient justification.

## B) Water

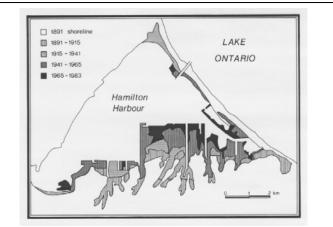
Two classes of datasets were used to define water catchment boundaries. The primary dataset is watercourse and waterbody GIS data managed by the City of Hamilton. The secondary dataset was based on historic and prehistoric mapping of prehistoric and historic water bodies and watercourses no longer extant due to post-glacial geological processes or urbanization of the landscape. The association between both Native and EuroCanadian sites and sources of water is well established, and is widely used in archaeological potential modeling.



A 300 metre catchment area is used with a primary watercourse to calculate archaeological potential.



A 300 metre catchment area is used to calculate archaeological potential around past waterbodies and watercourses – here a historic stream in downtown Hamilton that has since been urbanized.



Hamilton harbour has infilled water lots: the original shoreline, far from the existing shore, has been capped. and may retain archaeological potential.



Historic mapping was used to map urbanized watercourses.



Such urbanized watercourses identify areas within the City that may retain archaeological potential.

The dataset of existing watercourses was divided into first-order and second-order classes. First-order watercourses are minor or seasonal with no tributaries, and equivalent to the secondary watercourses in the Primer. Second-order are more substantial watercourses with tributaries. The catchment parameters are 200 metres for first-order watercourses, and 300 metres for second order watercourses, with results summarized below. The catchment area for permanent water bodies is a linear distance of 300 metres.

A combination of geological and historical data was used to map watercourse and waterbody features that are no longer active. The most significant prehistoric water feature is the Iroquois Beach Ridge, the former lakeshore of Lake Iroquois. Lake Iroquois was a glacial water body, with water levels 20-30 metres higher than modern Lake Ontario, which existed between approximately 12,000 calibrated radiocarbon years Before Present (BP) to sometime after 9,500 BP. Lake Iroquois formed a prominent beach in Hamilton, now a prominent height of land in Hamilton after water levels changed to those of modern Lake Ontario. Active beaches are strongly associated with human activities and occupations. Even after the water level drop, the subsequent stranded beach or strand line attracted Native and EuroCanadian occupation due to its elevation, good drainage due to sandy soils, and convenient span of the gap between the north and south shores of what is now Hamilton Harbour. A 300-metre catchment parameter was used for this feature.

A significant historic water feature is the original shoreline of Hamilton Harbour, prior to the water lots being filled. Because these lots have been built out into the harbour, original soil horizons may remain buried under the fill where capping has occurred. In addition to the archaeological potential defined by the immediate proximity of water, eighteenth-century accounts from Lady Simcoe (wife of John Graves Simcoe, first Lieutenant Governor of Upper Canada) describe the original shoreline area of Hamilton as being thickly settled by prehistoric and historic Natives. An additional significant historic water features is urbanized streams: originally watercourses that transected the lower and upper urban City of Hamilton, but have been covered by development. A 300-metre catchment boundary was used with these features.

Such urbanized water features retain archaeological potential that may require specialized evaluations of work to impact these areas. For example, soil borehole testing may indicate whether buried soil horizons are present below fill, confirming areas of archaeological potential.

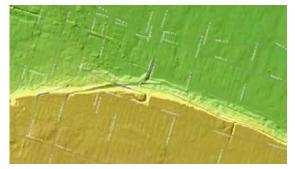
As the variable widely held to represent the most significant feature responsible for the majority of site catchment, proximity to water should encompass a substantial majority of archaeological sites already identified. Using the parameters described above, approximately 83.4% of registered sites fall within the proscribed catchment area, and is comparable to the results from other southern Ontario municipalities. These parameters were therefore evaluated as being appropriate and were therefore retained.

# C) Elevated Topography and Unusual Landforms

This class of catchment variables provides some opportunity to include physiographic features, resource-procurement locales, and liminal environmental factors that usually play a role in Native and EuroCanadian archaeology. The two main sub-categories within this group of variables are geological and physiographic features.

The geology of Hamilton is marked primarily by escarpment and related geological attributes. Most notable is the Niagara Escarpment, which is:

- A significant height of land;
- A physical boundary and funnel for human and animal movement;
- The principle source of the one chert material found locally in



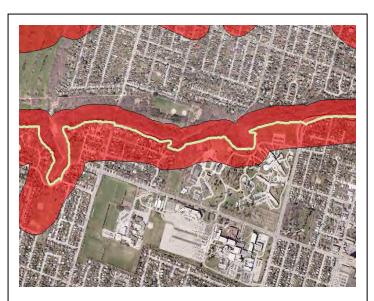
Landforms such as the Niagara Escarpment, in this digital elevation model, attract and direct land use.



Historic perspective maps show how the Niagara Escarpment acted as a boundary for the early City.



Landforms like drumlins (left) and valleys (right) affect land use and settlement patters, and are a measure of archaeological potential



The Niagara Escarpment has also guided both Native and EuroCanadian settlement patterns.



Pockets of sandy soil in areas that are otherwise predominantly clay attract settlement, and are areas of archaeological potential. Hamilton (Haldimand);

- The cause of substantial micro-environmental effects; and,
- A focus for waterfalls and waterpower.

The smaller Eramosa escarpment has effects that are more modest, but is associated with a large karst complex. Both escarpments have been the focus of historic and prehistoric quarries, and have been substantially modified along much of their transects through Hamilton by the building of transportation routes, urbanization and EuroCanadian settlement in general. The footprints of each of these escarpments and the Eramosa karst complex, with a 100-metre catchment boundary, are identified as areas of archaeology potential.

Distinctive physiographic features in Hamilton are primarily glacial in origin, and include moraines, drumlins, eskers, and kames. These elevated features are scattered across Hamilton, are often well drained, and can provide commanding viewsheds for hunting and defensive purposes. Such locations are often selectively chosen for both Native and EuroCanadian occupations and activity areas. In addition, the Freelton drumlin field is specifically associated with Woodland settlements adjacent to and/or between drumlins. Eskers and kames are well drained owing to their sand and gravel composition, which makes them a preferred locale for occupation and activity areas for both Natives and EuroCanadians. Even when their elevation is relatively modest and not associated with well-drained soils, such as the Fort Erie, Niagara and Vineland moraines in the Binbrook and Waterdown areas, they are often the focus of Native and EuroCanadian settlement, as they provide what little relief there is on the flat Haldimand plain, which is the pattern elsewhere in Hamilton where these features are higher in elevation. A 100-metre catchment area beyond the footprint of these features is used in the potential model, to accommodate activity associated with these features.

Well-drained, sandy soils also act as a factor attracting Native and EuroCanadian settlement, particularly when surrounded by poorlydrained, clayey soils, and is mapped as another physiographic feature.

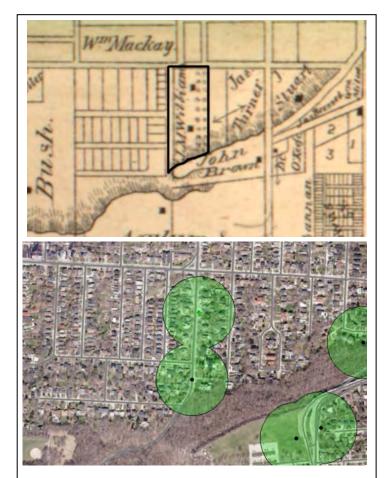
While these geological and physiographic features and a 100 metre catchment area surrounding them comprise a minor (<5%) portion of the City of Hamilton's geographic area, approximately 5.7% of registered sites occur within these features. This representation of sites is sufficient to warrant their inclusion areas in the archaeology potential modeling.

# D) Areas of Historical Activity

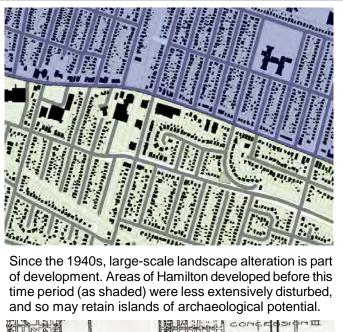
Catchment variables that fall under the class of areas of historical activity include occupation areas like farmsteads, early settlements, areas of early urbanization, and historical transportation routes.

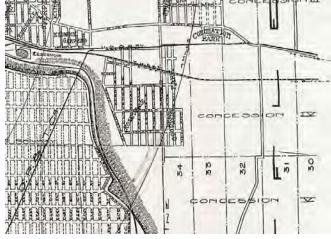
Most historical data were digitized from the 1859 Surtees map and 1875 Historical Atlas of Wentworth County, with supplementary data from the 1898 Insurance maps of Hamilton and original Military Topographic Survey of Canada map series dating to the early 20<sup>th</sup> century. Data checking was conducted using the City of Hamilton's GIS attribute data, as well as aerial photography and historical topographic mapping data.

The term "historical occupation areas" refers to individual structures or building complexes associated with specific uses, included farmsteads, churches, cemeteries, post-offices, schools, inns, tolls, quarries, and other businesses as represented on the source mapping. Properties designated under Parts IV and V of the *Ontario Heritage Act* were also incorporated in this dataset, as were areas within the boundaries of historical rural settlements, to identify the potential for historical archaeological components of these early properties and settlements respectively. A 100-metre catchment area was used around these features, resulting in the capture of 7.9% of the registered archaeological



Urbanization can leave relatively intact pockets of land that retain archaeological potential. When these islands of archaeological potential are subject to intensification or infill development, they warrant evaluation for archaeological potential, particularly if they are originally large or as a result of land consolidation. As illustrated above in the lower-right corner, two early residences remain within such urban islands.





Urbanization prior to the 1940s expanded the existing grid system, although an early stage of large-scale tract or survey development did appear in the 1920s in Westdale as part of the City Beautiful movement.

# sites in Hamilton.

Historical transportation routes comprise road, rail and water routes established during the historic period in Hamilton, using a 100 metre catchment parameter. These were predominantly concession roads and early roadways rail-lines in historically rural areas, but include additional roads, rail-yards, canals, and locks in early urban areas when mapping this category of archaeological potential. The transportation catchment accounts for 18.1% of registered archaeological sites in the City.

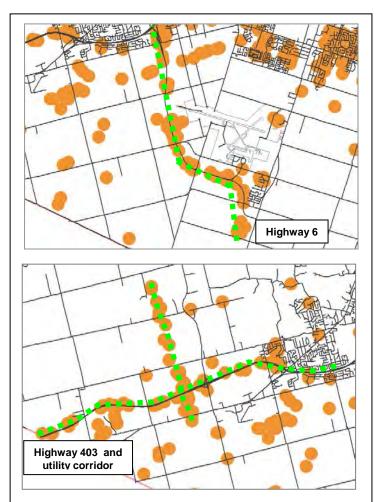
Historic Urban Core areas account for a minute number of registered archaeological sites within the City (0.1%). Early urbanization of the overall City took place when archaeology was not a consideration and most sites reported historically are no longer extant and not recorded. Prior to World War II, outside of the downtown commercial cores, development did not proceed through terraforming significant tracts of land prior to construction, with the exception of parts of Westdale-Ainslie Wood and the McMaster University core, but was instead largely restricted to building footprints. This approach to historic development left remnant portions of land relatively untouched, as is also the case with estate lots and parks where remnant portions of the landscape and soil profiles retain archaeological potential, confirmed by the identification of archaeological sites in highly urbanized City areas.

As a result, those portions of the original City of Hamilton, and towns/villages of Ancaster, Dundas, Stoney Creek, Waterdown, Westdale, and Ainslie Wood which were developed prior to 1939 are identified as retaining archaeological potential based on their historical nature and because the private lands surrounding original structures retain archaeological potential for the Native and EuroCanadian occupations that preceded intensification of development on these lands. Local knowledge is a general category of data obtained from mapping and informants, in addition to popular press reports and unpublished accounts. Examples of this include reports of burial mounds from local newspapers, undocumented cemeteries from word of mouth and historic letters, paintings of estates, mapping of confirmed battlefields, and other relatively reliable sources of information regarding archaeological sites and/or areas of archaeological potential. These have yielded significantly positive (confirmed) results, and so are sufficient on their own to flag areas as having archaeological potential. `

### Summary

The potential modeling used with the Hamilton Archaeology Management Plan is deductive: hypothesizing the distribution of archaeological sites on the basis of identified variables, measuring the fit according to sites identified and registered to date. The sum fit of the potential model is 90.1% of all registered archaeological sites within the City: not a complete capture, but sufficient to accommodate conservation requirements for archaeology within the municipal context. These results compare favourably to a capture rate of approximately 80% of sites deemed 'significant' by Archaeology Master Plans in other municipalities.

The effectiveness of this archaeological potential modeling, within its application in the AMP, will be evaluated on a regular basis (see Section 8.3.2). Required refinements will be made as a result of these reviews, to further streamline this process. It is anticipated that future iterations of the Archaeology Management Plan, including evaluations and recalculations of the archaeology potential modeling, will re-examine the availability and resolution of future datasets. If feasible and effective, they may be incorporated in the potential modeling.



Archaeological surveys for infrastructure like roads, pipelines and hydro corridors transect portions of the City. As above, those conducted for highways 6 and 403, and a utility corridor, identified a large number of archaeological sites: these linear surveys strongly suggest that many more archaeological sites remain to be identified in Hamilton.

#### Meta-Data

Meta-data can be described best as "data about data": a description about the origins and specifications of the data being used within a project. In this case, these meta-data are descriptions and specifications for the data used in the generation of the potential modeling for the City of Hamilton's Archaeology Management Plan (AMP).

Projection is the means by which the earth's globe is projected onto a flat surface, such as a computer screen or paper, and the means by which the location of features on the landscape measured. The mapping system used for this AMP is the Universal Transverse Mercator Projection, specified for UTM Zone 17N (southern Ontario), and the NAD83 North America Datum for reference of cadastral (mapping) location measurements.

### Datasets:

# Archaeology;

- The principle set of mapped sites comprises Ontario Ministry of Tourism and Culture (MTC) Ontario Archaeological Sites Database (OASDB) data for Hamilton from MapInfo/Shapefile exports, current to November 2010. These data were obtained from the MTC in UTM Zone 17N, NAD27 North America, and were re-projected to the City's standard projection for mapping. These are point data that do not specify mapped site boundaries, and the sole attribute data are Borden numbers, used for site identification and indexing;
- Data on several reported but unregistered sites data were digitized from manual entries on copies of 1:50,000 National Topographic Survey maps provided to the upper municipal tier as part of the original Memorandum of Understanding between the Region of Hamilton-Wentworth and Province of Ontario (MTC);

- The notes of J.C. Bonham, an avocational archaeologist, were examined for recorded but unregistered archaeological sites. Any unregistered sites were digitized some of these were mapped in detail with respect to physiographic or structural features, in addition to property lines these were digitized in matching detail. Additional sites were identified but located only to the precision of Lot/Concession and Township these lots were identified as encompassing archaeological resources. J.C. Bonham's notes span the years *ca.* 1939-1948, and access to these notes was provided by the MTC archaeology office in London, Ontario;
- The notes of Doug Bell, an avocational archaeologist, were examined for recorded but unregistered archaeological sites. Any unregistered sites were digitized some of these were mapped in detail with respect to physiographic or structural features, in addition to property lines these were digitized in matching detail. Additional sites were identified but located only to the precision of Lot/Concession and Township these lots were identified as encompassing archaeological resources. Doug Bell's notes span the years *ca.* 1937-1951, and a copy of these notes was provided by the Department of Archaeology, at the University of Toronto downtown campus in Toronto, Ontario;
- Further interpretation and refinement of several site locations was made possible with help from Art French and other volunteers at the Glanbrook archives, based on collection material;
- Some reported but unregistered site information was digitized by Municipal staff through research and consultation with professional and academic archaeologists using City and private files, in addition to personal communication;
- All publications of the Annual Archaeology Report for Ontario spanning 1880-1920 were reviewed for archaeological information concerning the then County of Hamilton-Wentworth. Relevant site locations were digitized;
- Mapped sites, outside of the MTC OASDB side data, include

attribute data on the origin of that data; and,

Additional site data were obtained from MTC current to 2002 that comprised further attribute data, providing details on site type, cultural horizons present, archaeological activities carried out on site, site conditions, descriptions of the site size and shape, site access, a description and location for artifact collections, who worked on a site and what and where documentation and publications on a site are archived or located. These data are not spatial, but are used to further evaluate sites by staff. They were obtained in analog format, and digitized by City staff and consultant Andrew Murray.

## Historical Data;

- Features from the 1875 Illustrated Historical Atlas for the County of Wentworth were digitized by the GIS laboratory at Lakehead University, with further spatial corrections and quality control carried out by consultant Phil Simm and City staff (Shane Thombs and Richard Paola). Digitized data include:
  - Historical transportation routes, comprising:
    - Waterways, canals and harbours;
    - Roadways; and,
    - Railways.
  - The Hamilton Harbour shoreline prior to infill of water lots;
  - o Urbanized watercourses in historically urban Hamilton;
  - o Rural historic settlements;
  - Historical activity areas, including:
    - Farmsteads;
    - Post-offices;
    - Schools;
    - Churches;
    - Cemeteries;
    - Mills;
    - Quarries;

- Battlefields; and,
- Miscellaneous businesses.
- Historical land-use data were also obtained from historical (pre-World War II national survey) topographic maps. Select data from these maps were digitized and used for quality control by consultant Phil Simm for:
  - Historical urban boundaries (for early residential development) for Hamilton, Dundas, Ancaster, Stoney Creek;
  - Historical transportation routes;
    - Road;
    - Rail; and,
  - The original Hamilton Harbour shoreline.

Modern City Geographic Information Systems (GIS) data were incorporated into the historic data sets to provide the backdrop of extant infrastructure and development, in addition to modern physiographic features, including drainage. This dataset includes:

- Roadways;
- Lot and concession lines and property parcels;
- Quality Control for churches, cemeteries, and farmsteads data;
- Rail lines;
- Trails (rail to trail);
- Watercourses (modern);
- Waterbodies (modern);
- The Niagara Escarpment;
- The Eramosa escarpment and karst complex; and,
- 2010 orthographic aerial photography.

Additional physiographic data were incorporated in to the GIS, for supplementary features including:

- From the Province of Ontario MNR dataset
  - o Drumlins;
  - o Eskers;
  - o Kames;
  - o Moraines; and,
  - Niagara Escarpment.
- The Iroquois beach ridge was also digitized from earlier physiographic studies in southern Ontario (notably "The Physiography of Southern Ontario").

#### Appendix E:

#### Administration and Legislation

The administration and regulation of archaeology in Ontario is grounded in the *Ontario Heritage Act* and its associated Regulations, with implementation through enabling legislation and law including the:

- Planning Act and related Provincial Policy Statement (2005);
- Places to Grow Act;
- Green Belt Act,
- *Environmental Assessment Act* and related Class Environmental Assessment policies;
- Green Energy Act;
- Niagara Escarpment Planning and Development Act,
- Cemeteries Act;
- Crown Forest Sustainability Act, and,
- Aggregate Resources Act.

In addition, the City of Hamilton, under the former Regional Municipality of Hamilton-Wentworth, entered into a *Memorandum of Understanding* (*MoU*) with the Province of Ontario in 1996. This *MoU* was assumed by the City of Hamilton through its municipal amalgamation, including the Region, in 2001. The scope of this *MoU* included, among other items, the downloading of some archaeological tasks to the municipal level, including the determination of archaeological potential for all applications under the *Planning Act* and attachment of conditions to these applications to address the Province's remaining interest in archaeology.

This appendix is an overview of how archaeology is administered by the City of Hamilton. It includes a brief outline of the process of archaeology provided by consultants to the development industry, and selections of relevant legislation, policy and regulations.

#### Administration

Archaeology in Ontario is administered by the Ontario Ministry of Tourism and Culture (MTC), as mandated through Part VI of the *Ontario Heritage Act*. The Ministry is responsible, among other things, for:

- Licensing archaeologists to conduct archaeology;
- Reviewing work carried out under these licenses;
- Maintaining a database of registered archaeological sites and files associated with work conducted on these sites; and,
- Designating archaeological sites, where appropriate.

The *Ontario Heritage Act* Ontario Regulation 170/04, amongst other things, defines what the Ministry of Tourism and Culture has identified as key archaeology terms:

"archaeological fieldwork" means any activity carried out on, above or under land or water for the purpose of obtaining and documenting data, recovering artifacts and remains or altering an archaeological site and includes monitoring, assessing, exploring, surveying, recovering and excavating;

"artifact" means any object, material or substance that is made, modified, used, deposited or affected by human action and is of cultural heritage value or interest;

"Archaeological site" means any property that contains an artifact or any other physical evidence of past human use or activity that is of cultural heritage value or interest; and,

"**Marine archaeological site**" means an archaeological site that is fully or partially submerged or that lies below or partially-below the high water-mark of any body of water." The conservation of archaeological sites and data has been an established activity in the Province of Ontario since the 1970s. The former municipalities that now comprise the amalgamated City of Hamilton initiated a variety of actions in response to the inclusion of archaeological resource management requirements under the *Ontario Heritage Act*, the *Planning Act*, and the *Environmental Assessment Act*. In 1996 the former Regional Municipality of Hamilton-Wentworth entered into a Memorandum of Understanding (MoU) with the Province assuming responsibilities that included managing archaeology within the development process. The Ministry of Tourism and Culture retained, as it does today, the authority of licensing archaeologists, reviewing archaeological work carried out under those licenses, and maintaining an inventory of registered archaeological sites.

Under this MoU, Hamilton assumed the role of using Ministry criteria to identify areas of archaeological potential, and to address the Provincial interest in archaeology under the *Planning Act* by ensuring that applications under the *Act* conserve archaeological resources. The City of Hamilton is the approval authority for any archaeology conducted under the *Planning Act*.

### Archaeological Assessment

In 1993 the Ministry of Citizenship and Culture defined a set of criteria for conducting and reporting on consulting archaeology called the *Archaeological Assessment Technical Guidelines* (AATG). The AATG defined four sequential stages of archaeological assessment that may be required in a land development context. A Stage 1 assessment report will recommend whether additional work is required, as will subsequent stages, based on the most recent findings work. For expediency, Stage 1 and 2 are often bundled together, where Stage 2 is presumed to be necessary based on field conditions and archaeological potential.

On January 1, 2011, the Ministry of Tourism and Culture put into effect the new *Standards and Guidelines for Consulting Archaeologists* (SGCA), based on the AATG. The new SGCA provide more detailed field methodology and reporting requirements, select criteria for the evaluation of archaeological sites representing specific cultural horizons and contexts, and broader policy and protocols for the profession.

The following is a brief summary of how consulting archaeology is conducted: the full details are provided in *Appendix F: Ministry of Culture Technical Standards and Guidelines*.

Prior to initiation of any of these stages of archaeological assessment, a consulting archaeologist submits a Project Initiation Form to the Ministry of Tourism and Culture, detailing the location, nature and scope of the proposed work.

**Stage 1: Evaluation of Archaeological Potential** is background work conducted prior to and/or in association with an archaeological survey. This is carried out to determine what archaeological potential and identified resources a subject property or project have, and where and what methodology will be used to assess the potential and resources. This is a background research stage, although a property inspection must be conducted to confirm the reported descriptions and evaluate surface conditions on the subject property. If this background work concludes that a study area retains potential for archaeological resources, further work in the form of Stage 2 property assessment will be recommended.

**Stage 2: Property Assessment** consists of a physical archaeological survey of the property or project area by field archaeologists. In terrestrial archaeology, the focus of Hamilton's Archaeology Management Plan, this primarily takes two forms: visual inspection and

shovel-testing. Visual assessment is typically carried out at 5 or 10 metre intervals on the surface of ploughed and weathered fields, with the soilsurface being visually scanned by field archaeologists for cultural artifacts. In areas within the project scope that cannot be tilled and weathered in preparation for visual assessment, shovel-testing at 5 or 10 metre intervals is permitted. Shovel-testing comprises digging holes of approximately 30 centimetres radius to the bottom of the topsoil, and screening the soil removed through 6 millimetre wire mesh to recover artifacts. In areas that show evidence of being intensively and extensively disturbed, shovel-testing at a larger interval is permitted, to confirm and document the extent and nature of the soil disturbance.

Occasionally, alternative methods of survey may be employed, such as mechanical removal of fill or the use of augers to penetrate overburden permitting confirmation of buried soil horizons. The presence of such buried soil horizons can also be confirmed or refuted by the examination of soil borehole or other remote-sensing and sampling data and methods. This may be permitted by the Ministry of Tourism and Culture in areas of existing urban or industrial development, where archaeological potential is recognized within a context of prior impact. The identification of buried soil horizons with archaeological potential makes it difficult to conduct traditional survey, and so subsequent monitoring of mechanical removal of fill or overburden before or during construction, to examine and/or test the exposed soil horizon for cultural artifacts and/or features, is deemed by the Ministry to fall within the category of Stage 4 archaeological assessment.

Where archaeological resources have been identified through property assessment, they are evaluated for their level of significance. If warranted, excavation may be required.

*Stage 3: Site-Specific Assessment* is commonly referred to as the test excavation of an archaeological site. Stage 3 goals include definition of

site boundaries, more precise identification of the culture(s) represented at the site, and further evaluates the significance of the site. These tasks are accomplished through the mapping of artifacts on the ground surface at sites in cultivated fields and conducting limited but controlled archaeological testing: typically excavation of single one metre by one metre units on an established grid, at an interval ranging between 5 and 20 metres. Based on the interpretation and evaluation of data recovered from the Stage 3 field work, including site size, density, and culture based on artifact analysis of a larger sample than that obtained during Stage 2 activities, Stage 4 mitigation of the entire site may be required if it is of sufficient significance (as discussed in detail below). This may take the form of short and long term plans for preservation of the site *in situ*, or more intensive excavation of the entire site prior to it being impacted by any soil disturbance activities, as discussed in detail below.

#### Stage 4: Protection and Avoidance, Excavation or Construction

**Monitoring** determines the means by which a significant archaeological site is to be managed. With the exception of construction monitoring, two Municipally and Provincially directed options are available at this stage:

- the complete controlled excavation of the archaeological site; or,
- the preservation of the entire site in place through adoption of a site conservation strategy.

When excavation is chosen, methodology is determined by site type, as defined by the prior archaeological work on the site (Stages 1 through 3). On complete excavation of the entire archaeological site, the Ministry of Tourism and Culture reviews the report on work, including excavation, cataloging, analysis, interpretation and conclusions. On acceptance of a satisfactory report, MTC will sign-off on the Provincial interest in archaeology.

With the conservation approach, both short- and long-term site protection measures are required. While construction activities are taking

place, the site boundaries as defined by the Stage 3 work, will typically be bordered by a protective buffer and temporary fencing, to prevent machinery, soil erosion or other factors from disturbing the site. Postconstruction, a set of physical and legal planning protection mechanisms must be put in place to ensure the conservation of the site *in perpetuity*. The long-term preservation of the site is ensured through a site management plan that uses a variety of *Planning Act* and other tools to prevent detrimental impacts on the site, and puts into place a monitoring program to maintain the site integrity. On acceptance of a satisfactory site management plan, MTC will sign-off on the Provincial interest in archaeology.

The use of Construction Monitoring as a Stage 4 mitigation strategy is used only in specific scenarios, such as where soil disturbance activities may cap or otherwise impact a deeply buried archaeological site or area of archaeological potential, or in flood plains where sites may be subject to significant natural capping due to flood activities. One example is where construction activities are taking place within areas previously subject to surface soil disturbance that is neither intensive nor extensive enough to preclude remnant archaeological potential or sites. For example, construction monitoring confirmed that large portions of the Kings Forest site in Hamilton's Red Hill Creek Valley were present under previously developed recreational fields: subsequent excavations in these areas contributed significantly towards interpretation of the site.

# Site Significance

The determination of a site's significance is based on a variety of factors including the:

- Integrity or degree of disturbance at a site;
- Rarity or representativeness of a site;
- Productivity of a site to yield information;

Page 8

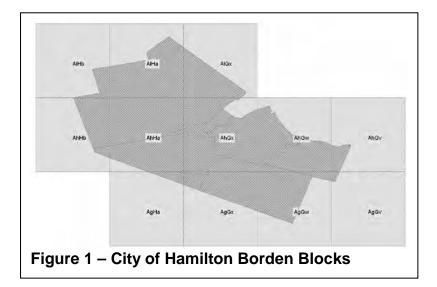
- Age of a site;
- Potential of a site to include human remains;
- Association of the site with a location or culture;
- Community interest in or association with a site; and
- Historical association of a site with an event/person/group.

Within the context of consulting archaeology, an archaeological consultant reports to the Ministry of Tourism and Culture (MTC) on work carried out to date at the end of a project phase. This will include recommendations either that further work is required, or that no further archaeological concerns remain. The Ministry may then concur with, amend or reject these recommendations, in whole or in part. Once MTC has accepted recommendations from a consultant that no further archaeological concerns remain with a project, they will then 'sign-off' on these concerns with the consulting archaeologist.

Archaeological work sometimes identifies human burials, which fall under the administration of the *Cemeteries Act*, as managed by the Cemeteries Branch of the Ministry of Small Business and Consumer Services.

### Archaeological Site Registration and Data

When archaeologists register a previously unknown or unregistered site, the Ministry of Culture provides a unique index value known as a Borden number, and relevant data are recorded on site registration forms. This information includes details on the site's name (if given), location, type, culture, status and the nature of work conducted on it, location of any records linked with the work, and the identity of researchers who participated in this work. These data are then entered into the Ontario Archaeological Sites Database (OASDB) and the Ministry of Culture Geographic Information System (GIS). The Ministry has provided information from the OASDB on all registered archaeological sites within

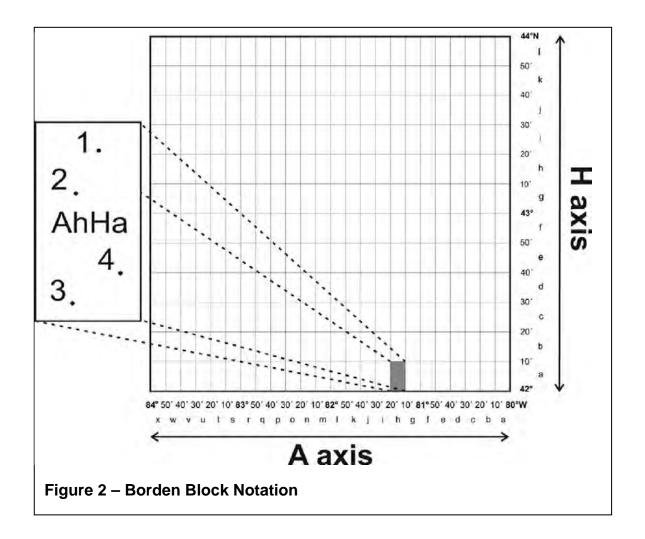


the City of Hamilton to the City's Heritage Staff, current to November, 2010. The sites contained in this database form two broad classes:

• Those which remain largely in situ, and

• Those which are no longer present in situ, but have been fully or partially excavated by archaeologists or otherwise removed.

Owing to the sensitive nature of archaeological sites, their exact spatial location is made available only to qualified specialists, researchers or vested parties. This seeks to protect the resource from unnecessary and harmful impacts such as illegal looting activities. However, general locational information is provided by the Borden numbering system. The Borden system comprises basic mapping units measuring 10 minutes longitude (approximately 14 kilometres) by 10 minutes latitude (approximately 19 kilometres), within a national index system measuring two degrees latitude by four degrees longitude. The City of Hamilton is encompassed by all or parts of 12 Borden Blocks (Figure 1). Each unit is defined by a sequence of four upper and lower case letters denoting the location of the block, and a sequential number assigned to the site within that block (for example AhHa-3 is the 3<sup>rd</sup> archaeological site registered within the AhHa mapping unit) (Figure 2). Conventions for naming sites are not fixed. Historic sites are often named after the families, groups, or events with which they are associated or the original recipients of the land patents from the Crown. Native sites have no nomenclature guidelines to date.



#### Legislation

As noted above, archaeology is addressed through a variety of laws, legislation, regulations, and associated policy. This section provides the relevant excerpts of these various document as a useful compendium of law pertaining to archaeology in Ontario.

The principal legislation overseeing archaeology in Ontario is the Ontario Heritage Act. While the preamble to the Act provides some relevant definitions, Part VI of the Act specifically addresses archaeology, the licensing of archaeologists, and the general Provincial authority over matters archaeological. Part VII details offences to the Act, and how these are penalized. The regulations deal with a variety of topics, including the provision of further legal definitions of archaeological terms, designation of specific archaeological sites, identifying criteria for determining whether such cultural heritage resources are of general or Provincial interest, more specific protocol on archaeological licensing, and prescribing marine archaeological sites. These excerpts are all provided below, under the Ontario Heritage Act heading (pages 13-41).

Additional legislation serves to further enable the *Ontario Heritage Act*. First among these is the *Planning Act* (pages 43-44) and related legislation, including the *Provincial Policy Statement* (pages 45-48), *Places to Grow* (page 49) and *Green Belt Act* (pages 51-52) serve to reflect and implement the Province's interest in archaeology through any and all *Planning Act* decisions. Relevant excerpts of all of these documents are provided below under the *Planning Act* heading.

The *Memorandum of Understanding* into which the original Region of Hamilton-Wentworth entered with the Province of Ontario details the scope of responsibilities downloaded to the municipality in 1996, including archaeology (pages 53-78).

*The Niagara Escarpment Planning and Development Act* also applies to those portions of Hamilton that fall within the Niagara Escarpment Commission (NEC) scope of authority. The NEC has specific policies on archaeology, to guide its management within the Niagara Escarpment Area (pages 79-81).

The Environmental Assessment Act addresses archaeology through the definition and requirements of Class Environmental Assessments. The Municipal Class EA is most pertinent to archaeology within the municipal context, as it addresses archaeology conducted on behalf of municipalities for infrastructure projects such as roads and water/wastewater facilities. Large projects, such as the Red Hill Valley Parkway, may require their own EA. Additional class EAs that may be in effect within the municipality, but outside of the City's jurisdiction, include class EAs for pipelines, hydro-electric corridors, provincial highways, and aggregates, among others. Those portions of these class EAs which address archaeology are excerpted under the Environmental Assessment Act heading below (pages 83-85).

The Ontario Heritage Act and its regulations are identified as matters that supersede the Green Energy Act, meaning that heritage resources, including archaeology, are managed under the OHA. The portions of the Green Energy Act and its regulations that pertain to archaeology follow below (pages 86-90).

Finally, the *Cemeteries Act* addresses archaeology involving unmarked burial sites and their identification as an unapproved aboriginal peoples cemetery, unapproved cemetery or irregular burial site. The *Cemeteries Act* legislation oversees the examination, evaluation and ultimate disposition of burials, relevant extracts of which are provided here (pages 85-98). A supplementary agreement entitled "*The Discovery of Human Remains – Best Practices*" was signed by representatives in 1997, and is also included in this section (pages 92-104).

#### **ONTARIO HERITAGE ACT**

#### DEFINITIONS

# Definitions

1. In this Act,

"alter" means to change in any manner and includes to restore, renovate, repair or disturb and "alteration" has a corresponding meaning; ("transformer", "transformation")

"Board" means the Ontario Municipal Board; ("Commission")

"building permit" means a building permit issued under section 8 of the *Building Code Act, 1992*; ("permis de construire")

"donation" includes any gift, testamentary disposition, deed or trust or other form of contribution; ("don")

"heritage attributes" means, in relation to real property, and to the buildings and structures on the real property, the attributes of the property, buildings and structures that contribute to their cultural heritage value or interest; ("attributs patrimoniaux")

"inspect" includes to survey, photograph, measure and record; ("inspecter")

"licence" means a licence issued under this Act; ("licence")

"Minister" means the member of the Executive Council to whom the administration of this Act is assigned by the Lieutenant Governor in Council; ("ministre")

"municipality" means a local municipality and includes a band under the *Indian Act* (Canada) that is permitted to control, manage and expend its revenue money under section 69 of that Act; ("municipalité")

- "owner" means the person registered on title in the proper land registry office as owner; ("propriétaire")
- "permit" means a permit issued under this Act; ("permis")
- "person" includes a municipality; ("personne")
- "regulations" means the regulations made under this Act; ("règlements")
- "Review Board" means the Conservation Review Board; ("Commission de révision")
- "Trust" means the Ontario Heritage Trust continued under section 5. ("Fiducie") R.S.O. 1990, c. O.18, s. 1; 1993, c. 27, Sched.; 2002, c. 17, Sched. F, Table; 2002, c. 18, Sched. F, s. 2 (1, 2); 2005, c. 6, s. 2.

#### ONTARIO HERITAGE ACT - PART VI

### CONSERVATION OF RESOURCES OF ARCHAEOLOGICAL VALUE

Definitions, Part VI

47. In this Part,

"designated property" means property that is designated by the Minister under this Part; ("bien désigné")

"property" means real property, but does not include buildings or structures other than ruins, burial mounds, petroglyphs and earthworks. ("bien") R.S.O. 1990, c. O.18, s. 47.

Licence, activity on archaeological sites

48. (1) Subject to subsection (2), no person shall do any of the following unless the person applies to the Minister and is issued a licence under this Part that allows the person to carry out the activity in question:

1. Carry out archaeological fieldwork.

2. Knowing that a site is a marine or other archaeological site, within the meaning of the regulations, alter the site or remove an artifact or any other physical evidence of past human use or activity from the site.

3. With respect to a marine archaeological site that is prescribed by regulation,

i. Dive within 500 metres of the site or within such other distance of the site as may be prescribed by regulation.

ii. Operate any type of submersible vehicle, including remotely operated vehicles, autonomous underwater vehicles, submarines or towed survey equipment such as side scan sonars or underwater cameras within 500 metres of the site or within such other distance of the site as may be prescribed by regulation. 2002, c. 18, Sched. F, s. 2 (27); 2005, c. 6, s. 35.

No licence required

(2) A licence is not required if,

(a) the site is prescribed, or belongs to a class of sites prescribed, by the regulations;

(b) the activity undertaken can be classified as normal agricultural work or the routine maintenance of property; or

(c) the activity undertaken is prescribed, or belongs to a class of activities prescribed, by the regulations. 2002, c. 18, Sched. F, s. 2 (27).

(3) Repealed: 1996, c. 4, s. 59.

Limits of licence

(4) A licence issued under this Part,

(a) is effective only in the geographic area specified in the licence;

(b) subject to subsection (9), is effective only for the term specified in the licence or, if the licence does not specify a term, is effective indefinitely;

(c) permits the carrying out of a type of archaeological fieldwork only if that type of archaeological fieldwork is specified in the licence; and (d) may contain such other terms and conditions to give effect to the purposes of this Part as the Minister may direct. 2002, c. 18, Sched. F, s. 2 (28).

## Licence not transferable

(5) A licence is not transferable. R.S.O. 1990, c. O.18, s. 48 (5).

#### Application

(6) An application to the Minister for a licence or renewal of a licence to carry out archaeological fieldwork may be made only by an individual. 2002, c. 18, Sched. F, s. 2 (29).

#### Same

(7) The application shall contain such information as the Minister may require and shall be submitted in such form and manner as the Minister may require. 2002, c. 18, Sched. F, s. 2 (29).

#### Issuance of licence

(8) The Minister may issue a licence to an applicant if the applicant proves, to the satisfaction of the Minister, that,

(a) the applicant is competent to conduct archaeological fieldwork in a responsible manner in accordance with this Part and the regulations;

(b) the past conduct of the applicant does not afford reasonable grounds for the belief that the archaeological fieldwork will not be carried out in accordance with this Part and the regulations;

(c) the activities proposed by the applicant are consistent with the conservation, protection and preservation of the heritage of Ontario; and (d) the applicant is in compliance with such eligibility criteria and other requirements for the issuance of the licence as may be prescribed by the regulations. 2002, c. 18, Sched. F, s. 2 (29).

Revocation and refusal to renew

(9) Subject to section 49, the Minister may refuse to renew or may suspend or revoke a licence,

(a) for any reason that would prevent the Minister from issuing a licence to the licensee under subsection (8) if the licensee were an applicant; or

(b) if the licensee is in breach of a term or condition of the licence. 2002, c. 18, Sched. F, s. 2 (29).

Refusal or revocation, etc., of licence

49. (1) Where the Minister proposes to refuse to issue or renew a licence or proposes to suspend or revoke a licence, he or she shall serve notice of the proposal, together with written reasons therefor, on the applicant or licensee. R.S.O. 1990, c. O.18, s. 49 (1); 2002, c. 18, Sched. F, s. 2 (30).

### Notice requiring hearing

(2) A notice under subsection (1) shall inform the applicant or licensee of the entitlement to a hearing by the Review Board if the applicant or licensee mails or delivers to the Minister, within fifteen days after the notice under subsection (1) is served, notice in writing requiring a hearing, and the applicant or licensee may so require such a hearing. R.S.O. 1990, c. O.18, s. 49 (2); 1993, c. 27, Sched.

Powers of Minister where no hearing

(3) Where an applicant or licensee does not require a hearing by the Review Board in accordance with subsection (2), the Minister may carry out the proposal stated in the notice under subsection (1). R.S.O. 1990, c. O.18, s. 49 (3).

#### Referral to Review Board

(4) Where an applicant or licensee requires a hearing by the Review Board in accordance with subsection (2), the Minister shall refer the matter to the Review Board for a hearing and report. R.S.O. 1990, c. O.18, s. 49 (4).

#### Hearing

(5) Pursuant to a reference by the Minister under this section, the Review Board shall, as soon as is practicable, hold a hearing to determine whether the Minister should refuse to issue or renew a licence or should suspend or revoke a licence, as the case may be, and the Minister, the applicant or licensee and such other persons as the Review Board may specify are parties to the hearing. R.S.O. 1990, c. O.18, s. 49 (5); 2002, c. 18, Sched. F, s. 2 (31).

# Place of hearing

(6) A hearing under subsection (5) shall be held at such place as the Review Board may determine. 2005, c. 6, s. 36.

(7) Repealed: 2005, c. 6, s. 36.

# Report

(8) The Review Board shall, within thirty days after the conclusion of a hearing under this section, make a report to the Minister setting out its findings of fact, its recommendations and any information or knowledge used by it in reaching its recommendations, and the Review Board shall send a copy of its report to the other parties to the hearing. R.S.O. 1990, c. O.18, s. 49 (8).

# Failure to report

(9) If the Review Board fails to make a report within the time limited by subsection (8), such failure does not invalidate the procedure. R.S.O. 1990, c. O.18, s. 49 (9).

# Decision of Minister

(10) After considering the report under this section, the Minister without a further hearing shall carry out the proposal or refrain from carrying it out or take such action as he or she considers proper in accordance with this Part and the regulations, and the Minister's decision is final. R.S.O. 1990, c. O.18, s. 49 (10).

### Request for cancellation

(11) Despite subsection (1), the Minister may cancel a licence if the licensee requests its cancellation in writing. 2002, c. 18, Sched. F, s. 2 (32).

# Withdrawal of hearing request

(12) An applicant or licensee who has submitted a notice requiring a hearing under subsection (2) may withdraw the notice at any time before the conclusion of a hearing into the matter by serving a notice of withdrawal on the Minister and on the Review Board and, upon receipt of the notice of withdrawal, the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the Minister may carry out the proposal stated in the notice under subsection (1) as if no notice had been submitted under subsection (2). 1996, c. 4, s. 60.

### Extension of time

50. (1) The Minister may extend the time for requiring a hearing under section 49, either before or after expiration of the time fixed therein, if satisfied that there are apparent grounds for granting relief to the applicant or licensee pursuant to a hearing and that there are reasonable grounds for applying for the extension, and may give such directions as he or she considers proper consequent upon the extension. R.S.O. 1990, c. O.18, s. 50 (1).

### Continuance pending renewal

(2) If a licensee applies for renewal of a licence before the end of the term of the licence, the licence shall be deemed to continue,

(a) until the renewal is granted; or

(b) where the licensee is served with notice under section 49 that the Minister proposes to refuse to grant the renewal, until the time for giving notice requiring a hearing has expired, or until the Minister after considering the report of the Review Board carries out the proposal stated in the notice under subsection 49 (1). R.S.O. 1990, c. O.18, s. 50 (2); 2002, c. 18, Sched. F, s. 2 (33).

Provisional refusal or revocation, etc.

51. Despite sections 49 and 50, the Minister, by notice to a licensee and without a hearing, may provisionally refuse renewal of, suspend or revoke a licence where in the Minister's opinion it is necessary to do so for the immediate protection and preservation of a property or an artifact for the purposes of this Part or where the continuation of archaeological fieldwork under the licence is in the Minister's opinion an immediate threat to the public's interest and the Minister so states in such notice, giving his or her reasons therefor, and thereafter section 49 applies as if the notice given under this section were a notice of a proposal to revoke the licence under subsection 49 (1). R.S.O. 1990, c. O.18, s. 51; 1993, c. 27, Sched.; 2002, c. 18, Sched. F, s. 2 (34).

Appointment of inspectors

51.1 (1) The Deputy Minister may appoint inspectors for the purposes of carrying out inspections under section 51.2. 2005, c. 6, s. 37.

Certificate of appointment

(2) The Deputy Minister shall issue to every inspector a certificate of appointment bearing his or her signature or a facsimile of his or her signature. 2005, c. 6, s. 37.

Production of certificate

(3) An inspector conducting an inspection under section 51.2 shall produce his or her certificate of appointment upon request. 2005, c. 6, s. 37.

## Inspection

51.2 (1) An inspector may conduct an inspection for the purpose of ensuring that a person licensed under section 48 is complying with the Act and the regulations and remains entitled to a licence under the Act. 2005, c. 6, s. 37.

# Power of entry

(2) An inspector conducting an inspection may enter and inspect any of the following places:

1. An archaeological site or any other land on which a licensee is carrying out archaeological fieldwork.

2. An archaeological site or any other land on which archaeological fieldwork is no longer being carried out but was carried out by a licensee within the one-year period preceeding the inspection.

3. A laboratory at which artifacts and other materials found on an archaeological site are analysed.

4. A building or structure in which the licensee stores artifacts and other materials found at an archaeological site.

5. A licensee's business premises. 2005, c. 6, s. 37.

# Dwellings

(3) An inspector entering a place under subsection (2) shall not enter any part of the place that is used as a dwelling without the consent of the occupant. 2005, c. 6, s. 37.

Powers of inspector

(4) While carrying out an inspection, an inspector may,

(a) take up and examine any artifact, device, article, thing or material;

(b) require a person at the place being inspected to produce any artifact, drawing, field notes, specifications, licence, document, record, report, photograph, video or other visual recording or any other material or thing that is relevant to the inspection and examine, audit or make copies of such material or things;

(c) upon giving a receipt therefore, remove, for the purpose of making copies or extracts, any material or thing referred to in clause (b);

(d) conduct tests at the place being inspected or take samples from the place, including tests conducted on, or samples taken from, artifacts found at the place;

(e) require in writing that any test or sample referred to in clause (d) be conducted or taken by a person specified by the inspector, including a person having special, expert or professional knowledge or qualifications accompanying the inspector under subsection (6);

(f) require the person conducting or taking tests or samples to provide a report to the inspector within such time as the inspector may specify;

(g) take photographs, video or other visual recording, make acoustic recordings or make notes of the field or site conditions, of the conditions of any other place being inspected or of the artifacts or materials found at the place and take with him or her such equipment or recording materials required for this purpose;

(h) make such inquiries of any person working at the place being inspected as are relevant to the inspection;

(i) observe on-going field work being carried out on an archaeological site or on other lands on which archaeological fieldwork is carried out or observe laboratory work taking place in a laboratory;

(j) prohibit persons from entering an archaeological site or other lands on which archaeological fieldwork is carried out, a laboratory or storage area or parts thereof for a reasonable period of time for the purposes of carrying out an examination, excavation or test. 2005, c. 6, s. 37.

# Return of things removed

(5) An inspector who removes any material or other thing from a place under clause (4) (c) shall return them to the licensee from whom they were taken within a reasonable time. 2005, c. 6, s. 37.

## Experts, etc.

(6) An inspector entering premises under subsection (2) may be accompanied by a person having special, expert or professional knowledge of any matter relevant to the inspection. 2005, c. 6, s. 37.

# Use of force

(7) An inspector is not entitled to use force to enter and inspect a place. 2005, c. 6, s. 37.

# Time of entry

(8) An inspector may enter a place referred to in subsection(2),

(a) in the case of a place referred to in paragraphs 2, 3, 4 and 5 of subsection (2), during normal business hours; and

(b) in the case of a place referred to in paragraph 1 of subsection

(2), at any time at which archaeological fieldwork is being carried out. 2005, c. 6, s. 37.

### Obstruction of inspector

(9) No person shall obstruct an inspector conducting an inspection under this section or withhold from him or her or conceal or destroy any artifact, document, material or thing that is relevant to the inspection. 2005, c. 6, s. 37.

## Obligation to assist

(10) Any person shall, on request by an inspector, provide such assistance as is reasonably necessary. 2005, c. 6, s. 37.

# Obligation to produce

(11) A person who is required to produce an artifact, document, material or thing under clause (4) (b) shall produce it. 2005, c. 6, s. 37.

## False information

(12) No person shall knowingly furnish an inspector with false information or neglect or refuse to furnish information to an inspector. 2005, c. 6, s. 37.

# Report by inspector

51.3 If an inspector believes that a person licensed under section 48 has failed to comply with the Act, the regulations or a term of the licence, the inspector shall prepare a report and provide a copy of the report to the Minister and to the licensee. 2005, c. 6, s. 37.

# **Designation process**

52. (1) Where the Minister, after consultation with the Trust, intends to designate a property to be of archaeological or historical significance, he or she shall cause notice of intention to designate to be given by the Trust in accordance with subsection (2). R.S.O. 1990, c. O.18, s. 52 (1); 2005, c. 6, s. 1.

# Notice of intention

(2) Notice of intention to designate under subsection (1) shall

be,

(a) served on the owner of the property and on the clerk of the municipality in which the property is situate; and

(b) published in a newspaper having general circulation in the municipality in which the property is situate. R.S.O. 1990, c. O.18, s. 52 (2).

Contents of notice

(3) Notice of intention to designate under subsection (1) shall contain,

(a) an adequate description of the property so that it may be readily ascertained;

(b) a statement of the reason for the proposed designation;

(c) a statement of the period of time that the designation of the property is to remain in effect; and

(d) a statement that notice of objection to the designation may be served on the Minister within thirty days of the date of publication of the notice of intention in a newspaper having general circulation in the municipality in which the property is situate. R.S.O. 1990, c. 0.18, s. 52 (3); 1996, c. 4, s. 61 (1).

# Objection

(4) A person who objects to a proposed designation may, within thirty days of the date of publication of the notice of intention in a newspaper having general circulation in the municipality in which the property is situate, serve on the Minister a notice of objection setting out the reason for the objection and all relevant facts. R.S.O. 1990, c. O.18, s. 52 (4); 1996, c. 4, s. 61 (2).

Where no notice of objection

(5) Where no notice of objection is served within the thirty-day period under subsection (4), the Minister shall,

(a) make an order designating the property for the period provided for in the notice of intention referred to in subsection (3) and cause a copy of the order together with the reasons for the designation,

(i) to be registered against the property affected in the proper land registry office, and

(ii) to be served on the owner and on the clerk of the municipality in which the property is situate,

and publish a notice of such order in a newspaper having general circulation in the municipality in which the property is situate; or

(b) withdraw the notice of intention to designate the property by serving and publishing notice of such withdrawal in the manner and to the persons as required for the notice of intention to designate under subsection (2). R.S.O. 1990, c. O.18, s. 52 (5).

## Referred to Review Board

(6) Where a notice of objection has been served under subsection (4), the Minister shall, upon expiration of the thirty-day period under subsection (4), refer the matter to the Review Board for a hearing and report. R.S.O. 1990, c. O.18, s. 52 (6).

## Hearing

(7) Pursuant to a reference by the Minister under subsection (6), the Review Board, as soon as is practicable, shall hold a hearing open to the public to determine whether the property in question should be designated, and the Minister, the owner, any person who has filed an objection under subsection (4) and such other persons as the Review Board may specify, are parties to the hearing. R.S.O. 1990, c. O.18, s. 52 (7).

### Place of hearing

(8) A hearing under subsection (7) shall be held at such place in the municipality in which the property is situate as the Review Board may determine, and notice of such hearing shall be published in a newspaper having general circulation in the municipality in which the property is situate at least ten days prior to the date of such hearing. R.S.O. 1990, c. O.18, s. 52 (8).

## Review Board may combine hearings

(9) The Review Board may combine two or more related hearings to conduct them in all respects and for all purposes as one hearing. R.S.O. 1990, c. O.18, s. 52 (9).

(10) Repealed: 2005, c. 6, s. 38.

### Report

(11) Within thirty days after the conclusion of a hearing under subsection (7), the Review Board shall make a report to the Minister setting out its findings of fact, its recommendations as to whether or not the property should be designated under this Act and any information or knowledge used by it in reaching its recommendations, and the Review Board shall send a copy of its report to the other parties to the hearing. R.S.O. 1990, c. O.18, s. 52 (11).

### Failure to report

(12) Where the Review Board fails to make a report within the time limited by subsection (11), such failure does not invalidate the procedure. R.S.O. 1990, c. O.18, s. 52 (12).

### **Decision of Minister**

(13) After considering the report under subsection (11), the Minister without a further hearing shall,

(a) make an order designating the property for the period provided for in the notice of intention referred to in subsection (3)

and cause a copy of the order together with the reasons for the designation,

(i) to be registered against the property affected in the proper land registry office,

(ii) to be served on the owner and on the clerk of the municipality in which the property is situate,

and publish a notice of such order in a newspaper having general circulation in the municipality in which the property is situate; or

(b) withdraw the notice of intention to designate the property by serving and publishing notice of such withdrawal in the manner and to the persons as required for the notice of intention to designate under subsection (2),

and the decision is final. R.S.O. 1990, c. O.18, s. 52 (13).

#### Withdrawal of objection

(14) A person who has served a notice of objection under subsection (4) may withdraw the objection at any time before the conclusion of a hearing into the matter by serving a notice of withdrawal on the Minister and on the Review Board and, upon receipt of the notice of withdrawal, the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the Minister shall act in accordance with subsection (5) as if no notice of objection had been served. 1996, c. 4, s. 61 (3).

## Application of s. 56

53. Where a notice of intention to designate a property has been served and published under subsection 52 (2) and has not been withdrawn under clause 52 (5) (b) or 52 (13) (b), section 56 applies as if such property were designated property. R.S.O. 1990, c. O.18, s. 53.

Revocation of designation, Minister's initiative

54. The Minister may at any time, after consultation with the Trust, order the designation of a property designated under this Part to be revoked and where the designation is revoked shall,

(a) cause a copy of the revoking order to be served on the owner and on the clerk of the municipality in which the property is situate;

(b) cause notice of the revoking order to be published in a newspaper having general circulation in the municipality in which the property is situate;

(c) cause reference to the property to be deleted from the Register referred to in section 23; and

(d) cause a copy of the revoking order to be registered against the property affected in the proper land registry office. R.S.O. 1990, c. O.18, s. 54; 2005, c. 6, s. 1.

Revocation of designation, owner's initiative

55. (1) An owner of property designated under this Part may apply to the Minister to have the designation revoked. R.S.O. 1990, c. O.18, s. 55 (1).

## **Decision of Minister**

(2) The Minister after consultation with the Trust shall consider an application under subsection (1) and may consult with the council of the municipality in which the designated property is situate and within ninety days of receipt thereof shall,

(a) refuse the application and cause notice of the decision to be given to the owner; or

(b) consent to the application and order the designation of the property to be revoked, and shall cause,

(i) a copy of the order to be served on the owner and the clerk of the municipality in which the property is situate,

(ii) reference to the property to be deleted from the Register referred to in section 23,

(iii) notice of such revocation of the designation of the property to be published in a newspaper having general circulation in the municipality in which the property is situate, and

(iv) a copy of the order to be registered against the property affected in the proper land registry office. R.S.O. 1990, c. O.18, s. 55 (2); 2005, c. 6, s. 1.

## Extension of time

(3) The applicant and the Minister may agree to extend the time under subsection (2) and, where the Minister fails to notify the applicant of the decision within ninety days after receipt of the application or within such extended time as may be agreed upon, the Minister shall be deemed to have consented to the application. R.S.O. 1990, c. O.18, s. 55 (3).

## Application for hearing

(4) Where the Minister refuses an application under subsection (2), the owner may, within thirty days after receipt of the notice under subsection (2), apply to the Minister for a hearing before the Review Board. R.S.O. 1990, c. O.18, s. 55 (4).

## Referral to Review Board

(5) The Minister shall, upon receipt of a notice under subsection (4), refer the matter to the Review Board for a hearing and report, and shall publish a notice of the hearing in a newspaper having general circulation in the municipality in which the designated property is situate at least ten days prior to the date of the hearing. R.S.O. 1990, c. O.18, s. 55 (5).

## Hearing

(6) The Review Board shall, as soon as is practicable, hold a hearing open to the public to review the application and the Minister and the owner and such other persons as the Review Board may specify are parties to the hearing. R.S.O. 1990, c. O.18, s. 55 (6).

## Place of hearing

(7) A hearing under subsection (6) shall be held at such place in the municipality in which the property is situate as the Review Board may determine. R.S.O. 1990, c. O.18, s. 55 (7).

(8) Repealed: 2005, c. 6, s. 39.

## Report

(9) Within thirty days after the conclusion of a hearing under subsection (6), the Review Board shall make a report to the Minister setting out its findings of fact, its recommendations as to whether or not the application should be approved, and any information or knowledge used by it in reaching its recommendations, and shall send a copy of its report to the other parties to the hearing. R.S.O. 1990, c. O.18, s. 55 (9).

## Failure to report

(10) Where the Review Board fails to make a report within the time limited by subsection (9), such failure does not invalidate the procedure. R.S.O. 1990, c. O.18, s. 55 (10).

## Decision of Minister

(11) After considering the report under subsection (9), the Minister without a further hearing shall,

(a) refuse the application and cause notice of the decision to be given to the owner; or

(b) consent to the application and order the designation of the property revoked, and cause,

(i) a copy of the order to be served on the owner and the clerk of the municipality in which the property is situate,

(ii) reference to the property to be deleted from the Register referred to in section 23,

(iii) notice of the revocation to be published in a newspaper having general circulation in the municipality in which the property is situate, and

(iv) a copy of the order to be registered against the property affected in the proper land registry office,

and the decision is final. R.S.O. 1990, c. O.18, s. 55 (11).

Withdrawal of application

(12) The owner may withdraw an application made under subsection (4) at any time before the conclusion of a hearing into the matter by serving a notice of withdrawal on the Minister and on the Review Board and, upon receipt of the notice of withdrawal, the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the Minister shall act in accordance with subsection (2) as if no application had been made under subsection (4). 1996, c. 4, s. 62.

Permit for excavation, etc.

56. (1) No person shall excavate or alter property designated under this Part or remove any artifact therefrom without first applying to the Minister and receiving a permit therefor. R.S.O. 1990, c. O.18, s. 56 (1); 2002, c. 18, Sched. F, s. 2 (35).

## Issuance of permit

(2) An applicant is entitled to a permit or renewal of a permit by the Minister to excavate or alter designated property and remove artifacts therefrom except where the Minister is of the opinion that such excavation, alteration or the taking or removal of artifacts would impair or interfere with the protection of the designated property. R.S.O. 1990, c. 0.18, s. 56 (2); 2002, c. 18, Sched. F, s. 2 (36).

Terms and conditions of permit

(3) A permit is subject to such terms and conditions to give effect to the purposes of this Part, including terms of rehabilitation and security therefor as are consented to by the applicant, imposed by the Minister or prescribed by the regulations. R.S.O. 1990, c. O.18, s. 56 (3).

Permit not transferable

(4) A permit is not transferable. R.S.O. 1990, c. O.18, s. 56 (4).

Permit, grounds for revocation and refusal to renew

57. Subject to section 58, the Minister may refuse to renew or may suspend or revoke a permit for any reason that would disentitle the permittee to a permit under section 56 if the permittee were an applicant or where the permittee is in breach of a term or condition of the permit. R.S.O. 1990, c. O.18, s. 57; 2002, c. 18, Sched. F, s. 2 (37).

Refusal or revocation, etc., of permit

58. (1) Where the Minister proposes to refuse to issue or renew a permit or proposes to suspend or revoke a permit, he or she shall serve notice of the proposal together with written reasons therefor on the applicant or permittee. R.S.O. 1990, c. O.18, s. 58 (1); 2002, c. 18, Sched. F, s. 2 (38).

## Contents of notice

(2) A notice under subsection (1) shall state that the applicant or permittee is entitled to a hearing by the Review Board if the applicant or permittee mails or delivers to the Minister a written request for a hearing within fifteen days after service of the notice under subsection (1). R.S.O. 1990, c. O.18, s. 58 (2).

### Minister may carry out proposals

(3) Where the applicant or permittee does not request a hearing by the Review Board in accordance with subsection (2), the Minister may carry out the proposals stated in the notice under subsection (1). R.S.O. 1990, c. O.18, s. 58 (3).

## Referral to Review Board

(4) Where an applicant or permittee requests a hearing by the Review Board in accordance with subsection (2), the Minister shall refer the matter to the Review Board for a hearing and report. R.S.O. 1990, c. O.18, s. 58 (4).

### Hearing

(5) Pursuant to a reference by the Minister under this section, the Review Board shall, as soon as is practicable, hold a hearing as to whether the permit to which the hearing relates should be issued or renewed or should be suspended or revoked, as the case may be, and the applicant or permittee and such other persons as the Review Board may specify shall be parties to the hearing. R.S.O. 1990, c. O.18, s. 58 (5).

## Place of hearing

(6) A hearing under subsection (5) shall be held at such place in the municipality in which the property is situate as the Review Board may determine and notice of such hearing shall be published in a newspaper having general circulation in the municipality in which the property is situate at least ten days prior to the date of such hearing. R.S.O. 1990, c. O.18, s. 58 (6).

(7) Repealed: 2005, c. 6, s. 40.

Report

(8) Within thirty days after the conclusion of a hearing under subsection (5), the Review Board shall make a report to the Minister setting out its findings of fact, its recommendations as to the issue, renewal, suspension or revocation of the permit to which the hearing relates, as the case may be, and any information or knowledge used by it in reaching its recommendations, and shall send a copy of its report to the other parties to the hearing. R.S.O. 1990, c. O.18, s. 58 (8).

## Decision of Minister

(9) After considering a report made under this section, the Minister shall without a further hearing confirm or revise the decision under subsection (1) with such modifications as the Minister considers proper and shall give notice of the decision and the reasons therefor to the applicant or permittee and to the other parties to the hearing, and the decision is final. R.S.O. 1990, c. O.18, s. 58 (9).

## Withdrawal of hearing request

(10) An applicant or permittee who has requested a hearing under subsection (2) may withdraw the request at any time before the conclusion of a hearing into the matter by serving a notice of withdrawal on the Minister and on the Review Board and, upon receipt of the notice of withdrawal, the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the Minister may carry out the proposal stated in the notice under subsection (1) as if the applicant or permittee had not requested a hearing. 1996, c. 4, s. 63.

## Extension of time

59. (1) The Minister may extend the time for requiring a hearing under section 58, either before or after expiration of the time fixed therein, if satisfied that there are apparent grounds for granting relief to the applicant or permittee pursuant to a hearing and that there are reasonable grounds for applying for the extension and may give such directions as he or she considers proper consequent upon the extension. R.S.O. 1990, c. O.18, s. 59 (1).

Continuance pending renewal

(2) If a permittee applies for renewal of a permit before the end of the term of the permit, the permit shall be deemed to continue,

(a) until the renewal is granted; or

(b) where the permittee is served with notice under section 58 that the Minister proposes to refuse to grant the renewal, until the time for giving notice requiring a hearing has expired, or until the Minister after considering the report of the Review Board carries out the proposal stated in the notice under subsection 58 (1). 2002, c. 18, Sched. F, s. 2 (39).

Provisional refusal or revocation, etc.

60. Despite sections 58 and 59, the Minister, by notice to a permittee and without a hearing, may provisionally refuse renewal of, or suspend the permittee's permit where the continuation of operations under the permit is, in the Minister's opinion an immediate threat to the public's interest and the Minister so states in such notice, giving reasons therefor, and thereafter section 58 applies as if the notice given under this section were a notice of a proposal to revoke the permit under subsection 58 (1). R.S.O. 1990, c. O.18, s. 60.

Licence or permit not authority to enter

61. The issue of a licence under section 48 or a permit under section 56 does not authorize the holder of such licence or permit to enter upon any property. R.S.O. 1990, c. O.18, s. 61.

Stop order

62. (1) Where the Minister after consultation with the Trust is of the opinion that property is of archaeological or historical significance and is likely to be altered, damaged, or destroyed by reason of commercial,

industrial, agricultural, residential or other development, the Minister may issue a stop order directed to the person responsible for such commercial, industrial, agricultural, residential or other development prohibiting any work on the property for a period of no longer than 180 days, and within that period the Minister or any person authorized by the Minister in writing may examine the property and remove or salvage artifacts from the property. R.S.O. 1990, c. O.18, s. 62 (1); 2002, c. 18, Sched. F, s. 2 (40); 2005, c. 6, s. 1.

### Compensation

(2) Where a stop order is made by the Minister under subsection (1) and no agreement as to payment of compensation has been reached by the Minister and the person affected by the stop order, the person affected by the stop order shall be entitled to compensation for personal or business damages resulting from the stop order, and the Expropriations Act with respect to the negotiation, payment and fixing of compensation applies with necessary modifications as if the stop order imposed by this Part were an expropriation of rights. R.S.O. 1990, c. O.18, s. 62 (2).

### Compensation where property designated

63. Where property is designated under section 52 and no agreement as to the payment of compensation has been reached by the Minister with the owner, the owner shall be entitled to compensation for personal or business damages for the period provided for in the order designating the property, and the Expropriations Act with respect to the negotiation, payment and fixing of compensation applies with necessary modifications as if the designation and the resulting restrictions imposed by this Act were an expropriation of rights. R.S.O. 1990, c. O.18, s. 63.

#### Inspection

64. (1) For the purpose of carrying out this Part, any person authorized by the Minister in writing may, upon producing proper identification, inspect at any reasonable time property designated or

property proposed to be designated under this Part where a notice of intention to designate has been served and published under subsection 52 (2).

Obstruction of investigator

(2) No person shall obstruct a person authorized to make an investigation under this section or conceal or destroy anything relevant to the subject-matter of the investigation. R.S.O. 1990, c. O.18, s. 64.

Reports

65. (1) When so required by the Minister, a licensee shall file with the Minister a report, containing full details of work done under the licence and such other information as the Minister may require. 2005, c. 6, s. 41 (1).

Report of archaeological sites

(2) When so required by the Minister, a person, organization or corporation shall prepare and file with the Minister particulars of all property of archaeological or historical significance in Ontario, known to such person, organization or corporation. R.S.O. 1990, c. O.18, s. 65 (2).

Form and manner

(3) A report under subsection (1) and particulars under subsection (2) shall be filed with the Minister in such form and manner as the Minister may require. 2005, c. 6, s. 41 (2).

Provincial register

65.1 (1) The Minister shall establish and maintain a register of the reports referred to in subsection 65 (1). 2005, c. 6, s. 42.

Excluding information from register

(2) The Minister may exclude from a record that is entered in the register information relating to the location of an archaeological site. 2005, c. 6, s. 42.

#### Inspection

(3) The register shall be available for inspection by any person during regular business hours at such location as may be prescribed. 2005, c. 6, s. 42.

### Artifacts may be held in trust

66. (1) The Minister may direct that any artifact taken under the authority of a licence or a permit be deposited in such public institution as the Minister may determine, to be held in trust for the people of Ontario. 2002, c. 18, Sched. F, s. 2 (43).

## Same

(2) Any artifact that is taken by a person who is not a licensee or by a licensee in contravention of a licence or this Part may be seized by a person authorized to do so by the Minister and deposited in such public institution as the Minister may determine, to be held in trust for the people of Ontario. 2002, c. 18, Sched. F, s. 2 (43).

## Offences and restoration costs

69. (1) Subject to subsection (2), every person who,

(a) knowingly, furnishes false information in any application under this Act or in any statement, report or return required to be furnished under this Act or the regulations;

(b) fails to comply with any order, direction or other requirement made under this Act; or

(c) contravenes this Act or the regulations,

and every director or officer of a corporation who knowingly concurs in such furnishing of false information, failure or contravention is guilty of an offence and on conviction is liable to a fine of not more than \$50,000 or to imprisonment for a term of not more than one year, or to both.

### R.S.O. 1990, c. O.18, s. 69 (1).

## Corporations

(2) Where a corporation is convicted of an offence under subsection (1), the maximum penalty that may be imposed upon the corporation is \$250,000 and not as provided therein. R.S.O. 1990, c. O.18, s. 69 (2).

(2.1) Repealed: 2005, c. 6, s. 44 (1).

## Exception

(3) Despite subsections (1) and (2), if a person is convicted of the offence of contravening section 34 or 34.5, demolishing or removing a building or structure in contravention of section 42 or contravening subsection 48 (1) or if a director or officer of a corporation is convicted of knowingly concurring in such an act by the corporation, the maximum fine that may be imposed is \$1,000,000. 2005, c. 6, s. 44 (2).

## PLANNING ACT, 1990

The *Planning Act* (1990) sets the ground rules for all land use planning in Ontario. The *Planning Act* recognizes cultural heritage conservation as a key component of good land use planning and lays out a process through which this translates into local policy.

Section 2 of the *Act* provides a listing of those matters of provincial interest that shall be regarded when certain authorities, including the council of a municipality, carry out their responsibilities under the *Act*. One of these provincial interests is directly concerned with:

(d) The conservation of features of significant architectural, cultural, historical, archaeological or scientific interest;

This provides the context not only for discrete planning activities detailed in the *Act*, but also for the issuance of policy statements under Section 3 of the *Act*. Policy statements issued under the *Act*, assembled as the *Provincial Policy Statement*, identify matters of provincial interest and direct municipalities to create official plan policies to represent this provincial interest at the local level. These in turn can be implemented through an array of approval and implementation mechanisms that have the potential to protect cultural heritage, as described below:

Section 16: Official Plan policies implement the provincial planning interests and "shall contain goals, objectives and policies established primarily to manage and direct physical change and the effects on the social, economic and natural environment of the municipality", including policies directed towards the conservation of cultural heritage resources. Official Plan Amendments that provide policies specific to a neighbourhood (e.g. Secondary Plans), development or property, may identify heritage features to be retained and conserved.

Section 34: A Zoning By-Law is the primary tool used for implementing the policies of the official plan and is key to successful conservation. Subsection 34(1)(3.3) specifically provides for the protection of significant archaeological resources by prohibiting land uses, buildings and structures on land that is the site of a significant archaeological resource.

The recent *Planning and Conservation of Land Statute Amendment Act* (2006) amends Section 34 by adding Subsection 16, which enables municipalities to institute conditional zoning. The use of this tool may be defined and/or limited by Provincial Regulation or the implementing by-law, however, generally the municipality may use it to permit a use of land or the erection, location or use of buildings subject to prescribed conditions. This tool allows for further protection of specific cultural heritage resources through conditions, while at the same time permitting the appropriate use of the land within an overall zoning scheme.

Section 41: This section enables a municipality to institute site plan control, requiring plans or drawings to be submitted as part of a site plan application, which may be approved subject to conditions regarding: parking facilities and driveways, walkways, lighting, walls, fences, hedges, trees, shrubs or groundcover, garbage facilities, easements, grading and provisions for the disposal of water from property.

Whereas built heritage conservation is usually concerned primarily with the details of changes to individual buildings, site plan control focuses on the acceptable development of the overall property and typically seeks to ensure that an acceptable standard of site amenity and maintenance is achieved. This can often provide opportunities to enhance the surroundings of valued heritage features or guide development away from sensitive areas, such as archaeological sites.

### **PROVINCIAL POLICY STATMENT (2005)**

## PART 5- POLICIES

### 2.6 Cultural Heritage and Archaeology

**2.6.1** Significant built heritage resources and significant cultural heritage landscapes shall be conserved.

**2.6.2** Development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential if the significant archaeological resources have been conserved by removal and documentation, or by preservation on site. Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site may be permitted.

**2.6.3** Planning authorities shall not permit development and site alteration on *adjacent lands* to *protected heritage property* except where the proposed *development* and site alteration has been evaluated and it has been demonstrated that the *heritage attributes* of the *protected heritage property* will be *conserved*.

**2.6.4** Planning authorities should consider and promote archaeological management plans and cultural plans in conserving cultural heritage and archaeological resources.

**2.6.5** Planning authorities shall consider the interests of Aboriginal communities in conserving cultural heritage and archaeological resources.

Mitigative measures and/or alternative development approaches may be required in order to conserve the *heritage attributes* of the *protected heritage property* affected by the adjacent *development* or *site alteration*.

### PART 6- DEFINITIONS

### Adjacent lands:

#### means

- a. for the purposes of policy 2.1, those lands contiguous to a specific natural heritage feature or area where it is likely that development or site alteration would have a negative impact on the feature or area. The extent of the adjacent lands may be recommended by the Province or based on municipal approaches which achieve the same objectives; and
- b. for the purposes of policy 2.6.3, those lands contiguous to a protected heritage property or as otherwise defined in the municipal official plan.

### Archaeological resources:

includes artifacts, archaeological sites and marine archaeological sites, as defined under the *Ontario Heritage Act*. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with the Ontario Heritage Act.

### Areas of archaeological pontential:

means areas with the likelihood to contain *archaeological resources*. Methods to identify archaeological potential are established by the Province, but municipal approaches which achieve the same objectives may also be used. The *Ontario Heritage Act,* or included on local, provincial and/or federal

#### registers.

### Conserved:

means the identification, protection, management and use of *built heritage resources*, *cultural heritage landscapes* and *archaeological resources* in a manner that ensures their cultural heritage value or interest is retained under the *Ontario Heritage Act.* This may be achieved by the implementation of recommendations set out in conservation plan, archaeological assessment, and/or heritage impact assessment. Mitigative measures and/or alternative development approaches can be included in these plans and assessments.

## **Development:**

means the creation of a new lot, a change in land use, or the construction of buildings and structures, requiring approval under the Planning Act, but does not include:

- a. activities that create or maintain infrastructure authorized under an environmental assessment process;
- b. works subject to the Drainage Act; or
- c. for the purposes of policy 2.1.3(b), underground or surface mining of minerals or advanced exploration on mining lands in significant areas of mineral potential in Ecoregion 5E, where advanced exploration has the same meaning as under the Mining Act. Instead, those matters shall be subject to policy 2.1.4(a).

#### Heritage attributes:

means the principal features or elements that contribute to a *protected heritage property's* cultural heritage value or interest, and may include the property's built or manufactured elements, as well as natural landforms, vegetation, water features, and its visual setting (including significant views or vistas to or from a *protected heritage property*).

#### Protected heritage property:

means real property designated under Parts IV, V or VI of the *Ontario Heritage Act*; property subject to a heritage conservation easement under Parts II or IV of the *Ontario Heritage Act*; property identified by the Province and prescribed public bodies as provincial heritage property under the Standards and Guidelines for Conservation of Provincial Heritage Properties; property protected under federal legislation, and UNESCO World Heritage Sites.

### Significant:

means in regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest for the important contribution they make to our understanding of the history of a place, an event, or a people.

Criteria for determining significance for the resources identified in sections (c)-(g) are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used.

While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation.

#### Site alteration:

means activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site.

For the purposes of policy 2.1.3(b), site alteration does not include underground or surface mining of minerals or advanced exploration on mining lands in significant areas of mineral potential in Ecoregion 5E, where advanced exploration has the same meaning as in the Mining Act. Instead, those matters shall be subject to policy 2.1.4(a).

### PLACES TO GROW ACT, 2005

The Growth Plan for the Greater Golden Horseshoe, 2006, was prepared and approved under the Places to Grow Act, 2005. Conservation of cultural heritage resources, including archaeology is refered to in *Section 4: Protecting What is Valuable* of The Plan as documented below:

#### 4.1 Context

The Greater Golden Horseshoe is blessed with a broad array of unique natural heritage features and areas, irreplaceable cultural heritage sites, and valuable renewable and non-renewable resources that are essential for the long-term economic prosperity, quality of life, and environmental health of the region. These valuable assets must be wisely protected and managed as part of planning for future growth.

Some of these features, areas and sites are already protected through legislation such as the Ontario Heritage Act, statements of provincial policy such as the Provincial Policy Statement, 2005, and provincial plans such as the Greenbelt, Niagara Escarpment and Oak Ridges Moraine Conservation Plans. This Plan supports and builds on these initiatives. A balanced approach to the wise use and management of all resources, including natural heritage, agriculture, and mineral aggregates, will be implemented.

### 4.2.4 A Culture of Conservation

 Municipalities will develop and implement official plan policies and other strategies in support of the following conservation objectives: e) Cultural heritage conservation, including conservation of cultural heritage and archaeological resources where feasible, as built-up areas are intensified.

## **GREENBELT ACT, 2005**

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Greenbelt Plan Area within the City of Hamilton. More Information on Greenbelt Protection may be obtained from the Ministry of Municipal Affairs and Housing (MAH) website: http://www.mah.gov.on.ca The Greenbelt Act, 2005 enables the creation of a Greenbelt Plan to protect about 1.8 million acres of environmentally sensitive and agricultural land in the Golden Horseshoe from urban development and sprawl. It includes and builds on about 800,000 acres of land within the Niagara Escarpment Plan and the Oak Ridges Moraine Conservation Plan.

Approved by the Lieutenant Governor in Council, The Greenbelt Plan was established under Section 3 of the *Greenbelt Act, 2005*, to take effect on December 16, 2004.

## THE GREENBELT PLAN

### 4.4 Cultural Heritage Resources

For lands within the Protected Countryside, the following policies shall apply:

- 1. Cultural heritage resources are defined as man-made or natural features, including structures, objects, neighbourhoods, landscapes and archaeological sites, that have been identified as *significant* by the local municipality or the province for being meaningful components of a community's cultural heritage or identity.
- 2. Greenbelt municipalities should work with aboriginal groups and other stakeholders to identify and protect cultural heritage resources and plan toward maintaining, developing and using these resources in a manner that will benefit the local community and be compatible with the Greenbelt's vision and goals.
- 3. Municipalities should build cultural components into their municipal plans and planning processes, including creating

inventories of cultural heritage resources and planning for their ongoing protection and appropriate use. Municipal cultural plans should draw from and promote an integrated vision of local cultural development that emphasizes connections across the full range of arts, heritage, cultural industries, libraries, archives and other cultural activity.

#### Memorandum of Understanding

#### Between

#### The Province of Ontario

and

#### The Regional Municipality of Hamilton-Wentworth

#### Regarding

#### Municipal Plan Review

#### 1. Purpose:

The purpose of this Memorandum of Understanding (also referred to herein as the "MOU") is to:

- a) describe a framework within which the Regional Municipality of Hamilton-Wentworth, also referred to herein as the "Region", no longer circulates certain planning applications to provincial ministries for review (described in Appendix A);
- b) establish the intent of the Region and Province to begin an iterative and ongoing process for eliminating duplication of plan review (including a!! actions, analysis and processes undertaken by the Region to ensure that municipal and provincial land use policy interests are reflected in municipal decisions related to applications under the Planning Act) between both parties and identifying opportunities for further streamlining the approvals process; and
- establish timeframes within which decisions are made to implement changes intended by this MOU.

#### 2. Goals:

The Region and the Province of Ontario, also referred to herein as the "Province", share the following goals in respect of municipal plan review:

- to enhance the Region's responsibility for matters which are directly linked to its assigned and delegated planning authority and operational processes in recognition of its capabilities and familiarity with local circumstances;
- b) to maintain an adequate level of provincial support for the Region through training and education, transfer of data and municipal decision support in order to ensure effective implementation of provincial policy and to minimize transitional problems and risks associated with future decisions;
- c) to provide improved planning service delivery to development proponents and area municipalities in the Region;
- d) to ensure that the Region is responsible for protecting provincial land use policy interests as they relate to municipal plan review as set out in Section 2 of the Planning Act and the relevant applicable Province of Ontario Policy Statements and Implementation Guidelines as required by Sections 3 (5) and 3 (6) of the Planning Act;
- to support municipal autonomy by ensuring that the Province only becomes involved in those planning matters where it is necessary and where this involvement contributes to better planning decisions;
- f) to make more effective use of limited planning resources;
- g) to clarify the relationship between plan review functions, provincial land use policy interests and approved regional policies to permit regional staff to resolve conflicting or duplicated requirements as they apply at the site-specific level;
- to implement a risk management strategy to ensure sound planning decisions are made based on the best available information; and
- to work towards a mutually agreeable end state where the Region is responsible for reviewing all types of planning applications to ensure the protection of provincial land use policy interests, but in the interim adopting a phased approach to municipal plan review for certain areas of responsibility (e.g., comprehensive lower-tier official plan amendments) based upon mutually agreeable performance criteria.

#### 3. Roles and Responsibilities:

The Province and the Region will use their best efforts to achieve the spirit and intent of the roles and responsibilities set out in this Memorandum of Understanding.

- In order to effectively implement this Memorandum of Understanding, the <u>Province</u> commits to:
- a) provide the Region, at no cost to the Region, with adequate training and education on provincial policies, operational practices and regulatory requirements (unless such training is provided within a commercial context) so that ongoing capacity exists at the Region to carry out plan review functions. Where new provincial land use policy interests are established, the Province will provide training and education on same;
- b) use the Ministry of Municipal Affairs and Housing as a "one window" through which provincial positions will be communicated to the Region in respect of planning matters, including the co-ordination of provincial input on official plans and amendments and development of policy performance monitoring systems;
- c) respond as appropriate and in a timely manner in respect of all matters covered by the Memorandum of Understanding. In making a decision in respect of such matters, e.g., development of a provincial position, the Province will consult with the Region;
- provide the Region with ongoing access to available staff resources, information, and technical or policy expertise in respect of planning matters;
- provide, where feasible, policy and technical advice or comments early in the approvals process in respect of official plans and policy matters on which the Region has requested provincial input. Such early involvement will include participation in pre-consultation meetings;
- f) make provision, on request of the Region, for provincial staff to appear before a standing committee of Regional Council in respect of a provincial land use policy interest where there may be an evolving issue which could negatively impact that interest;
- g) where MMAH is a party before the Ontario Municipal Board to protect a provincial land use interest, present a co-ordinated provincial position;

- b) provide the Region with information (including, but not limited to, mapping, screening criteria, interpretation of specialized guidelines or procedures and technical data), at no cost to the Region which the Province possesses that will assist the Region in implementing provincial and local land use policy objectives;
- provide staff resources to assist in the implementation of municipal planning. Such activities may include the provision of technical expertise and advice during the development and/or defence of official plan policies or the provision of policy interpretation tailored to local circumstances;
- consider legislative and/or regulatory changes requested and/or agreed to by the Region to strengthen and clarify the authority of the Region to make decisions in respect of plan review functions, including, but not limited to, the ability to impose financial charges/fees relating to these functions;
- k) bring together provincial ministries and individual regions (through, for example, the Regional Planning Commissioners forum) in order to assess the effectiveness of the system and the need for possible changes and to monitor the overall progress of the Region in protecting matters of provincial interest through local decision-making; and
- I) review and provide comments in a timely fashion to the Region and its area municipalities on applications which the Province is circulated so that the Region and its area municipalities may make their decisions as approval authorities within the legislated timeframes. If the Province cannot provide the Region or its area municipalities with its comments as aforesaid, then the Province is to notify the Region or the area municipalities, whichever is the appropriate approval authority, of that fact within a reasonable timeframe prior to the expiration of the relevant legislated timeframe.

- In order to effectively implement this Memorandum of Understanding, the <u>Region</u> commits to:
- make available appropriate staff to be trained with respect to provincial policies, operational practices and regulatory requirements which relate to the Region's responsibilities for certain plan review functions;
- b) make plan review submissions and comments on applications for which it has approval authority with the goal of protecting provincial land use policy interests;
- c) require that its staff use the operational procedures and guidelines mutually agreed to with the individual ministries. In implementing its responsibilities, the Region may develop its own procedures, and will consult with ministries on their development;
- d) monitor the state of planning within the Region as per clause 3 iii) e);
- e) if required and based on mutual agreement between the Region and the Province, initiate a process for amending its official plan policies which relate to provincial land use policy matters within one (1) year of execution of this Memorandum of Understanding so that those policies have regard to provincial planning policies;
- f) inform the Province, prior to making a decision, of its intention to stop carrying out or significantly change how it carries out plan review functions which may affect the protection of provincial land use interests; and
- g) co-ordinate municipal plan review in such a way that related functions (as described in Appendix A) may be undertaken in cooperation with other agencies (e.g., area municipalities or conservation authorities), if it is appropriate to do so in the opinion of the Region. Such processes will be carried out in accordance with the principles of this Memorandum of Understanding.

- iii) In order to effectively implement this Memorandum of Understanding, the <u>Province and the Region</u> jointly commit to:
- a) develop a strategy for linking area municipalities in the Regional Municipality of Hamilton-Wentworth, other local agencies and the development industry into planning processes and the delivery of municipal plan review functions;
- explore options for creating alternative plan review mechanisms and procedures which result in a more cost-effective, streamlined and efficient approvals process;
- develop administrative/operational practices which will streamline and reduce duplication for plan review functions;
- develop operational procedures and guidelines (including, where required, screening criteria) on a ministry by ministry basis which will clarify details of how the Region and ministries interface with each other;
- develop an agreement to share information which supports a policy-based monitoring system for provincial and regional land use policy interests based on mutually agreeable performance measures. Such monitoring shall be undertaken on a regular basis;
- establish a mutually agreeable system for maintaining, updating and improving information and data which is shared between the Province and the Region in support of provincial land use planning interests;
- g) clearly identify the respective parties' responsibilities where technical clearance/permit granting conditions are imposed under the Planning Act as well as other legislation (e.g., water-taking permits, certificates of approval) with a view to ultimately providing the Region, where requested, with the authority to grant such permits, licenses, Certificates of Approval and monitoring and enforcement thereof;
- h) use existing dispute resolution mechanisms (or where appropriate, develop new, mutually agreeable alternative procedures) for addressing disagreements which arise in the context of this Memorandum of Understanding and/or plan review processes;

- develop, on a ministry by ministry basis, agreements which proactively facilitate the clearance of conditions by ministries during the transition to the municipal plan review system and subsequently permit the Region to clear conditions on behalf of the ministry, where such conditions remain outstanding. In the case of complex conditions or conditions which have been in effect for extremely long periods of time, the Ministry of Municipal Affairs and Housing will assist the Region in resolving outstanding issues; and
- j) discuss any changes resulting from other provincial and/or municipal initiatives which may affect the Region's ability to deliver municipal plan review functions.

This MOU may be amended in writing from time to time with the consent of both the Province and the Region.

#### 4. Timeframe for Actions:

- The Province and the Region commit to establishing timeframes for implementation of municipal plan review by the Region in respect of the following matters:
  - ministry by ministry operational procedures and guidelines, training and education schedules/requirements, data transfer, and performance measures.

#### 5. List of Appendices:

- Appendix A List of Specific Plan Review Functions
- Appendix B Protocol for Data Sharing

SIGNED,

the PROVINCE PROVINCE OF ONTARIO May 30, 1990 Minister of Municipal Affairs and Housing Date

the REGION

THE REGIONAL MUNICIPALITY OF HAMILTON-WENTWORTH

Per: 1c

Regi

Per:

Approved mnot, ot-es Legal Services

**Regional** Chair Date 1ay 13 Date nal Clerk

OFFICE OF THE CLERK TO BY COUNCIL APPROV 0.00 DATE d REPOR 17 EM YEAR FILE 96 -1 INTL FINAMOAL

# APPENDIX A (TO THE MEMORANDUM OF UNDERSTANDING)

PROVINCE OF ONTARIO - REGIONAL MUNICIPALITY OF HAMILTON-WENTWORTH

LIST OF SPECIFIC PLAN REVIEW FUNCTIONS

#### INDEX

SCHEDULE 1	(GENERAL)	CIRCULATION STATUS BY APPLICATION TYPE
SCHEDULE 2	(OMAFRA)	MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS
SCHEDULE 3	(MCZCR)	MINISTRY OF CITIZENSHIP, CULTURE AND RECREATION
SCHEDULE 4	(MOEE)	MINISTRY OF ENVIRONMENT AND ENERGY
SCHEDULE 5	(MMAH)	MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING
SCHEDULE 6	(MNR)	MINISTRY OF NATURAL RESOURCES
SCHEDULE 7	(MTO)	MINISTRY OF TRANSPORTATION

#### SCHEDULE 1 CIRCULATION STATUS BY APPLICATION TYPE

 The Province advises The Regional Municipality of Hamilton-Wentworth that it wishes not to be notified of or circulated the following types of development/planning applications, except where otherwise indicated in Schedules 2-7 of this Appendix A:

> Subdivisions; Condominiums; Consents; Validations of Title; Part-Lot Control By-Laws; Site-Specific Local Official Plan Amendments; Site-Specific Regional Official Plan Amendments; Site-Specific Zoning By-Law Amendments; Minor Variances; and, Site Plans.

\* Note: Site-Specific Regional Official Plan Amendments must still be sent to the Province for approval.

 The Regional Municipality of Hamilton-Wentworth agrees to notify and circulate to the Province the following types of planning/development applications:

> Policy Related Local and Regional Official Plan Amendments, i.e., those that would have an adverse impact on any Provincial Land Use Policy interest as set out in the Provincial Policy Statements;

Policy Related Zoning By-Law Amendments, i.e., those that would have an adverse impact on any Provincial Land Use Policy interest as set out in the Provincial Policy Statements;

All New Local and Regional Comprehensive Official Plans; and,

All New Comprehensive Zoning By-Laws.

#### TRANSFER OF REVIEW - MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS

_	MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS (OMAFRA)	SUBDIVIS	AN REVIEW FU	NUMS, CONSENT	S, SITE-SPECIFIC LOPA'S/ROPA ENTS, MINOR VARIANCES AND 1	VS, STIT PLANS
	DESCRIPTION OF FUNCTION	PLAN REVIEW	TECHNICAL CLEARANCE	PERMIT/ CERTIFICATE OF APPROVAL/ LICENSE	TRAINING/INFORMATION & MAPPING TO BE SUPPLIED BY MINISTRY	TOOLS TO BE PROVIDED BY MINISTRY
R	General - Commont on whether application complies with the Provincial Policy Statement and comment on compliance of application with Implementation Guidelines	×				A Comprehensive Set of all OMAFILA Policies,
R	Review for minimum distance separation (MDS   & I)	х			Training/MDS software	Any Policy Interpretation Handbook
R	Identify if development on prime agricultural soils or specialty croplands as per Agricultural Soils Capability Maps	x			Soil Capability/Suitability/Types Maps and Reports	Best Practices Manual
R	Identify need for and conduct technical review of reports on: agriculturat/farm viability, production and perceit atce impleations	. ×	x		Training	Other Studies/Information relevant to Hamilton-Wentworth
•	identity need for and conduct technical review of: justification reports, agricultural area analyzes and site assessments	×	×			
A,	Review background reports	×				

LEGEND:

R = Region is primary source of exportise A = Atternative Review Mechanism - Conservation Authority, consultant(s) or other primary source of expertise

PAGE 3.1

# SCHEDULE 3

### TRANSFER OF REVIEW - MINISTRY OF CITIZENSHIP, CULTURE AND RECREATION

MINISTRY OF CITIZENSHIP, CULTURE AND RECREATION (MCZCR)	SUBDIVIS	IONS/CONDOM!	NUMS, CONSENT	S, SITE-SPECIFIC LOPA'S/ROPA ENTS, MINOR VARIANCES AND :	FAGE 3
DESCRIPTION	PLAN REVIEW	TECHNICAL	PERMIT/ CERTIFICATE OF APPROVAL/ LICENSE	TRAINING/INFORMATION & MAPPING TO BE SUPPLIED BY MINISTRY	TOOLS TO BE PROVIDED BY MINISTRY
General - Comment on whether application complias with the Provincial Policy Statement and comment on compliance of application with implementation Guidelines	×				A Comprehensive Set of all MC2CR Polidee.     Any Policy Interpretation Handbooks (Primer For Cultural Heritage and
identify potential archeeological sites and need for an archaeological review	х			Maps, Information and training	Preservation)     Any Projection Methodology Guidelines     Best Practices Manual     Other Studies/Information relevant to
	General - Comment on whether application complex with the Provincial Policy Statement and comment on compliance of application with Implementation Guidelines	RECREATION (MC2CR)         SUBDIVIS SITE-SPE           DESCRIPTION         PLAN REVIEW           General - Comment on whether application compliance of application with implementation Guidelines         X           Identify potential archeeological sites and need for an X         X	RECREATION (MC2CR)         SUBDIVISIONS/CONDOMINATE           DESCRIPTION         PLAN REVIEW         TECHNICAL CLEARANCE           General - Comment on whether application complex with the Provincial Policy Statement and comment on compliance of application with implementation Guidelines         X           Identify potential archeeological alias and need for an         X	RECREATION (MC2CR)         SUBDIVISIONS/CONDOMINIUMS, CONSENT           DESCRIPTION         SUBDIVISIONS/CONDOMINIUMS, CONSENT           DESCRIPTION         PLAN           REVIEW         TECHNICAL           OF         APPROVAL/           UCENSE         OF           General - Comment on whether application compliance         X           of application with implementation Guidelines         X           Identify potential archeeological sites and need for an         X	RECREATION (MCZCR)         SUBDIVISIONS/CONDOMINIUMS, CONSENTS, SITE-SPECIFIC LOPA'S/ROPA           DESCRIPTION         PLAN         TECHNICAL         PERMIT/ CLEARANCE         TRAINING/INFORMATION & MAPPING TO BE SUPPLIED BY MINISTRY           General - Comment on whether application complex with the Provincial Policy Statement and comment on compliance of application with implementation Guidelines         X         X         Image: Constant Statement and comment on compliance         X           Identify potential archeeological alias and need for an         X         X         Mapping To BE SUPPLIED

#### LEGEND:

R - Region is primary source of expertise

A = Alternative Review Mechanism - Conservation Authority, consultant(s) or other primary source of experise

MINISTRY OF ENVIRONMENT AND ENERGY (MOEE)	SUBDIVIS	PLAN REVIEW FU IONS/CONDOMIN CIFIC ZONING BY	IUMS, CONSEN	TS, SITE-SPECIFI	C LOPA'S/ROPA'S, /ILANCES AND SITE PLANS	PAGE
DESCRIPTION	PLAN	CONCEPTUAL FEASIBILITY		PERMIT/ CERTIFICATE OF APPROVAL/ LICENSE	TRAININGANFORMATION 4 MAPPING TO BE SUPPLIED BY MINISTRY	TOOLS TO BE PROVIDED BY MINISTRY

R	General - Comment on whether application complies with the Provincial Policy Statement and comment on compliance of application with Implementation Guidelines	×				A comprehensive set of all MOEE policies     Any Policy Interpretation Handbooks     Any Projection Nethodology Guidelines     Dect Resident Methodology Guidelines
*	Identify potential soil contamination, identify need for, and conduct technical review of soil contamination reports	x	x	x	Checklast of uses, screening criteria, and putolines Available spiil reports, violations, records of soil reports and records of decommissioning, all in computerized format Standard clearance letter	Best Practices Manual     Other Studios/Information relevant to     Hamilton-Wentworth     Watershed Planning Guidelines     Torms of Reference Guidelines     Water and Sewage Treatment Capacity     Guidelines     Savage Treatment Plant Setback     Guidelines
•	Identify potential ground water contamination, identify need for, and conduct technical review of ground water contamination reports	×	× .	x		

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 Region responsible for watershell planning in conjunction with Conservation Authorities and MOEE
 Shelpion have expensive in consultation with MOEE
 4 Joint technical determore in consultation with MOEE

LEGEND;

IR = Region is primary source of expertise A = Alternetive Review Hischarders - Conservation Authority, consultant(s) or other primary source of expertise

#### TRANSFER OF REVIEW - MINISTRY OF ENVIRONMENT AND ENERGY PAGE 4-2 MINISTRY OF ENVIRONMENT AND ENERGY (MOEE) LIST OF PLAN REVIEW FUNCTIONS FOR: SUBDIVISIONS/CONDOMINIUMS, CONSENTS, SITE-SPECIFIC LOPA'S/ROPA'S, SITE-SPECIFIC ZONING BY-LAW AMENDMENTS, MINOR VARIANCES AND SITE PLANS DESCRIPTION PLAN CONCEPTUAL TECHNICAL PERMIT/ TRAINING/INFORMATION TOOLS TO BE PROVIDED BY MINISTRY REVIEW FEASIBILITY CLEARANCE CERTIFICATE & MAPPING TO BE OF SUPPLIED BY MINISTRY APPROVAL/ LICENSE

A	'Review for site specific (on-site) stormwater	X	x		
	planning issues	Ŷ	*	×	Training to Improve Regional Review     Updated Best Practices Menual
^	Review for site specific (off-site) stormwater planning issues	×	х	x	Marian .
A	Identity need for and conduct technical review of stormwater management facilities design reports	×	х	×	- Training
R/ A	'Review for sub-watershed planning/master drainage planning	×	х		Watershed Planning Guidelines
۸	identity need for and review servicing options reports (municipal, communal, individual)	x	х	х ·	Terms of Balarance     Guidalines
R	<sup>1</sup> Comment on and monitor water supply capacity and sewage treatment capacity (within Certificate of Approval limits)	x	х	x	Capacity Guidelines
R	Prepare certificate of approval for municipal Intrastructure (Schedulo A for Class EA Projects)	×	x	x	

Region already responsible
 Region anaponalble for watershed planning in conjunction with Conservation Authorities and IAGEE
 Region texts expendes in area of authors exatersher chackarge
 Admit technical clearance in consultation with IAGEE

#### LEGEND;

R - Region is primary source of expertise

A = Attenditys Review Mechanism - Conservation Authority, consultant(s) or other primary source of expertise

SCHEDULE 4	TRANSFER OF REVIEW - MINISTRY OF ENVIRONMENT AND ENERGY
MINISTRY OF ENVIRONMENT AND SHORE OF	LIST OF PLAN REVIEW FUNCTIONS FOR:

MINISTRY OF ENVIRONMENT AND ENERGY (MORE)	LIST OF I SUBDIVIS	LAN REVIEW FU	NCTIONS FOR:	TS. SITE-SPECIF	IC LOPA'S/ROPA'S,	PAGE 4-3
DESCRIPTION	PLAN REVIEW	CONCEPTUAL FEASIBILITY	TECHNICAL CLEARANCE	PERMIT/ CERTIFICATE		TOOLS TO BE PROVIDED BY MINISTRY

A	'Comment on setbacks from sewage treatment plants	х			Setback Guidelines     Manual of Procedures
^	Comment on and conduct technical review of reports on communal water supply systems (MOBE input required for surface water supply projects)	×	x	×	Surface Water Data and Guidelines
R.	Review for municipal ownership of communal water supply facilities	x			
^	Identity need for and conduct technical neview of reports on Individual drinking water quality and quantity for all development proposals	x	х	x	Training     Water Supply Assessment Guidelines (Part 8)
R	Identify need for groundwater and surface water taking permit (MOEE responsible for permit issuance if over \$0,000 litres per day)	x			Agreement
A	Identify need for, comment on, and conduct technical review of reports on: communal wastewater discharge feasibility (Inground)	×	х	. ×	

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 Region responsible
 Region responsible for walanched planning in conjunction with Conservation Authorities and MOEE
 Seguri scalar aspective in rese of surface washemate decharge
 Joint sectimized clearance in consultation with MOEE

LEGEND;

R + Region is primary source of expertise A = Atternetive Review Mechanism - Contervation Authority, consultant(p) or other primary source of expertise

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#### SCHEDULE 4

#### TRANSFER OF REVIEW - MINISTRY OF ENVIRONMENT AND ENERGY

	SUBDIVIS	AN REVIEW FU IONS/CONDOMIN CIFIC ZONING BY	IUMS, CONSEN	TS. SITE-SPECIF	IC LOPA'S/ROPA'S, ARIANCES AND SITE PLANS	PAGE 4-4
DESCRIPTION	PLAN REVIEW	CONCEPTUAL FEASIBILITY	TECHNICAL CLEARANCE	CERTIFICATE	TRAINING/INFORMATION & MAPPING TO BE SUPPLIED BY MINISTRY	TOOLS TO BE PROVIDED BY MINISTRY

Pl <sup>3</sup> identity need for reports on: communal wastewater discharge feasibility ( <u>surface water</u> )	x	_			
A identify need for, commant on, and conduct technical review of reports on: communal weetewater system design ( <u>Inground</u> )	x	x	*x		Communal Waste Water System Guidelines
R <sup>h</sup> dentity need for reports on: communal wastewater system design (surface water)	×				
R Review for municipal ownership of communal wastewater facilities	×				
A Comment on individual wastewater capacity monitoring and commitment	×	x			Training for monitoring of broader impacts
A <sup>3</sup> Identity need for, conduct technical review, and issue permit for individual inground westewater discharge systems (MOEE responsible for issuing permits if greater than 4,500 litres per day)	x	×	x	×	arrester myskills
R Comment on energy and water conservation	x				

Region alreedy responsible
 Region responsible to vesterined planning in conjunction with Conservation Authorities and MOEE
 Seguin subjects expected in area of auflace vesteredar discharge
 Admit technical diseases in consultation with MOEE

LEGEND:

R = Region is primary source of expertise A = Attemative Review Mechanism - Conservation Authority, consultantis) or other primary source of expertise

MINISTRY OF ENVIRONMENT AND ENERGY (MOEE)	SUBDIVIS		IUMS, CONSEN		C LOPA'S/ROPA'S, MIANCES AND SITE PLANS	
DESCRIPTION	PLAN REVIEW	CONCEPTUAL FEASIBILITY	TECHNICAL CLEARANCE	PERMIT/ CERTIFICATE OF APPROVAL/ LICENSE	TRAINING/INFORMATION & MAPPING TO BE SUPPLIED BY MINISTRY	TOOLS TO BE PROVIDED BY MINISTRY

R	Identify need for and conduct technical review for traffic noise studies	x	х	x	Training and noise     software
R	Identify need for and conduct technical raview for relivery noise studies	x	x	x	Training and noise     software
R	Identify need for and review conceptual leasibility of stationary noise/vibration source studies (Section 9 certificate of approval for MOEE)	x	x		Guidelines
^	identity need for and review conceptual leasibility of studies for development adjacent to a stationary noise/vibration source	x	x		
R	identity industrial/commercial aetbacks from residential and other development	x			Noise Assessment Criteria In Land Use Planning Guidelines (Publication I,V-131)
я	Identify need for and conduct technical review of reports on development subject to airport noise (using NEF contours)	x	x	×	

Region already responsible
 Region responsible to watershell planning in conjunction with Conservation Authorities and MOEE
 Region lacks expertise in area of surface watershell declarge
 A Just technical desarrors in consultation with MOEE

LEGEND:

R = Region is primary source of expertise A = Attenuitive Review Mechanism - Concernation Authority, consultant(a) or other primary source of experime

#### SCHEDULE 5 r ~

### TRANSFER OF REVIEW - MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING

	MINISTRY OF MUNICIPAL APPAIRS AND HOUSING (MMAH)	HEVEW - MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING PAGE LIST OF PLAN REVIEW FUNCTIONS FOR: SUBDIVISIONS/CONDOMINIUMS, CONSENTS, SITE-SPECIFIC LOPA/S/ROPA/S, SITE-SPECIFIC ZONING BY-LAW AMENDMENTS, MINOR VARIANCES AND SITE PLANS							
	DESCRIPTION	PLAN REVIEW	TECHNICAL	PERMIT/ CERTIFICATE OF APPROVAL/ LICENSE	TRAINING/INFORMATION & MAPPING TO BE SUPPLIED BY MINISTRY	TOOLS TO BE PROVIDED BY MINISTRY			
A	General - Comment on whether application complies with the Provincial Policy Statement and comment on compliance of application with Implementation Guidelines	х				A Comprohensive Set of all Provincial Housing Policies			
A	Review and comment on impact of application on: - housing type and density mix targets; - 3 and 10-year residential land supply targets	×				Policy Interpretation Handbook     Projection Methodology Guidelines     Alternative Development Standards			
R	Assess application to ensure no barriers to and provisions for alternative development standards	x				Guideline     Annual Affordability Information     Builetin			
A.	Review background studies submitted in support of application as per MMAH guidelines	х				Best Practices Manual     Other housing market     Information/studies relevant to     Hamilton-Wentworth			

LEGEND:

R = Region is primary source of expertise A = Ahemative Review Mechanism - Conservali. n Authority, consultant(s) or other primary source of expertise

MINISTRY OF NATURAL RESOURCES (MNR)	SUBDIVI	RANSFER OF REVIEW - MINISTRY OF NATURAL RESOURCES LIST OF PLAN REVIEW FUNCTIONS FOR: SUBDIVISIONS/CONDOMINUMS, CONSENTS, SITE-SPECIFIC LOPA'S/ROPA'S, SITE-SPECIFIC ZONING BY-LAW AMENDMENTS, MINOR VARIANCES AND SITE PLANS						
DESCRIPTION	PLAN REVIEW	TECHNICAL	PERMIT/ CERTIFICATE	TRAINING/INFORMATION &	TOOLS TO BE PROVIDED BY MINISTRY			

R	General - Comment on whether application complias with the Provincial Policy Statement and comment on compliance of application with Implementation Guidalines	x				•	A Comprehensive Set of all MNR Policies
1	Comment on impact on aggregate resources and identify need for Aggregate Resources impact Study	x			Mineral apgregate maps and inventories	:	Any MNR Policy Interpretation Handbooks MNR Best Practices Manual
A	Comment if impact on Petroleum Resources Act	×			Well mapping, criteria and information	ŀ	Cambridge District Plan Review Guidelines
٨	Comment on wayside pit terminals	х				·	Plan Review Manual
٨	'Comment on hazardous geology	X ·		-		1.	Statutory Referral Guidelines
A	<sup>b</sup> identity need for and conduct technical review of reports on: wetland areas impacts and mitigation measures	х	x		Maps, information and training		Fish Habitat Fisk Assessment Model
^	Review and comment on impacts on groundwater recharge/discharge areas (where there is a fisheries impact, application will be circulated to MNR)	x			Maps Criteria to determine if there is		Data Sets contained in the Cambridge Data Transfer Matrix Other studies/Information relevant to Hamilton-
^	<sup>3</sup> identify wildlife habitats and comment on wildlife hebitat impacts and mitigation measures	×			a fisheries impact Maps, information and training		Wentworth

<sup>1</sup> Region will eccept only in consultant, with Conservation Authorities <sup>2</sup> ESAIDS could be used.

LEGEND;

R = Region to primary source of expertise A = Attemptive Review Mechanism - Conservation Authority, consultant(s) or other primary source of experise

# TRANSFER OF REVIEW - MINISTRY OF NATURAL RESOURCES

	LIST OF P SUBDIVIS	PAGE 6-2 'S, ATE PLANS			
DESCRIPTION	PLAN REVIEW	TECHNICAL CLEARANCE	PERMIT/		TOOLS TO BE PROVIDED BY MINISTRY

^	Comment on impacts on endangered and threatened species	×			
۸	*Comment on and conduct technical review of reports on fish habitat impacts and mitigation (MNR) to be consulted if there is a fisherios impact)	x	x		Maps and training
۸	Identify ANSI's and comment on ANSI Impects and mitigation measures (MNR to be consulted if necessary)	х			Maps, data and training
A	Comment on woodlands Impect (Greenlands Study may be used)	×			Maps of woodlots by classification
٨	Comment on flood hazards	x			Casaricason
٨	Comment and issue permit for development in floodplains	x		×	
A	Comment on lakes and rivers impacts (except fisheries) MNR to be notified if there is a faheries impact	x			
٨	'Comment on shorelines impact	x			
۸	Review and comment on top of bank erosion limits	×			Maps

<sup>1</sup> Region will acc. 'I only in consultation with Conservation Authorities <sup>2</sup> ESA/EG could be used

LEGEND:

R = Region is primery source of expertise

A = Alternative Review Mechanism - Conservation Authority, consultant(s) or other primary source of experime

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#### TRANSFER OF REVIEW - MINISTRY OF NATURAL RESOURCES

	LIST OF I SUBDIVIS SITE-SPE	PAGE 6-3			
DESCRIPTION	PLAN	TECHNICAL	PERMIT/ CERTIFICATE		TOOLS TO BE PROVIDED BY MINISTRY

R	Identify need for and conduct technical review of stormwater management plans	×	×	Training	
L				Critoria needed to datermine if there is fisheries impact	
Ĺ	Identity If Crown Land Involved and notify MNR if applicable	x		Criteria (e.g., bed of naxigable streams, bed of Lake Ontario, all Crown Lands)	
R	Identify need for and clear reports on sediment and ercelon control - Region already does (Roads and Environmental Services Departments)	×	x	an crown canosy	

<sup>1</sup> Region will accept only in consultation with Conservation Authorities <sup>2</sup> ESAIEG could be used

LEGEND.

R = Region is primary source of expertise A = Attemptive Review Machanism - Conservation Authority, consultant(s) or other primary source of expertise

MINISTRY OF TRANSPORTATION (MTO)	LIST OF PLAN REVIEW FUNCTIONS FOR: SUBDIVISIONS/CONDOMINUMS, CONSENTS, SITE-SPECIFIC LOPA'S/ROPA'S, SITE-SPECIFIC ZONING BY-LAW AMENDMENTS, MINOR VARIANCES AND SITE PLANS							
DESCRIPTION	PLAN REVIEW	TECHNICAL REVIEW	PERMIT/ CERTIFICATE OF APPROVAL/ LICENSE	TRAININGANFORMATION & MAPPING TO BE SUPPLIED BY MINISTRY	TOOLS TO BE PROVIDED BY MINISTRY			
Note: All types of applications listed under 1) in Schedule 1 will be orculated to the Ministry of Transportation only it directly accessing or edjacent to a Provincial highway								

#### APPENDIX B (TO THE MEMORANDUM OF UNDERSTANDING)

#### Protocol for Data Sharing

For the review of Planning Act applications at the Region, the Region should have the data that is currently available to a Provincial ministry in reviewing planning applications. This protocol sets out the understanding under which this ministry data will be transferred to the Region.

The Provincial ministries involved are: the Ministry of Municipal'Affairs and Housing, Ministry of Natural Resources, Ministry of Environment and Energy, Ministry of Agriculture, Food and Rural Affairs, Ministry of Citizenship, Culture and Recreation, and the Ministry of Northern Development and Mines, which are referred to in this protocol as the "Ministries".

#### A) General Principles that guide this protocol:

- That the Region requires the data now held by the Ministries to do an effective review of Planning Act applications;
- That there are mutual benefits to the sharing of land-use planning related information between the Region and the Ministries at no cost to either party;
- That copyright and confidentiality of specified data bases will be respected by the parties, except as modified by this protocol;
- 4) That this protocol is limited to the non-commercial use of the data, and for commercial use of the data, a separate agreement(s) will be required; and
- 5) The protocol is required in this form at this time, but that it will not prejudice further discussions, agreement, or protocols that will improve the efficiency and/or benefits of sharing land-use planning related data.

#### B) Ministries will:

 provide the Region with the data they currently have and use in reviewing land use applications, in a format that is readily available, by April 1, 1996, as set out in Schedules 2-7 of Appendix A to the MOU (depending on the location of the data sets) and any documentation including manuals, handbooks, software and programmes related to the creation, modelling, limitations, use and maintenance of the data bases. If requested by the Region, digital data will be provided also in hard copy;

- 2) provide to the Region that data at no cost and with any fees normally charged waived, but the Region is responsible for converting digital data into a format other than the one provided by the ministry or hard copy into a digital format if the ministry is not undertaking this as part of some other program. The ministry will provide an additional free copy of each map, if this does not require manual copying, for each lower-tier municipality or other agency in the Region that is conducting the planning review formerly undertaken by the ministry;
- allow the Region to copy and distribute the data in its current or modified form only for the purposes of municipal planning (except as noted in C2 below), provided that appropriate recognition is provided to the ministry as the source, and that it is for non-commercial, non-profit purposes;
- 4) provide the Region with updated data on a regular basis if the data is being updated by the ministry, with attention to timeliness where there is a liability issue, and improved data if it becomes available, e.g. data on a GIS system;
- the data is provided "as is" without any warranty of any kind, expressed or employed as to its accuracy or completeness; and
- 6) direct to the Region all requests for copies of the Region's data not otherwise permitted to be released by the Province under this protocol.

#### C) The Region will:

- use, copy and distribute the data only for the purposes of municipal planning (except as noted in C2 below), provided that appropriate recognition is provided to the ministry as the source, and that it is for non-commercial, non-profit purposes;
- keep in confidence information on threatened and endangered species, and on archaeological heritage. In support of this commitment:
  - a) The Region shall not use such data provided by a ministry for any purpose other than for internal municipal planning or mapping and shall keep the data in a physically secure location which is accessible only to staff of the Region who require the information for the purpose of carrying out plan review functions in respect of planning policy matters or site-specific applications;

- b) The Region shall not in any manner or in any way make any such data available to any body or to any person, except that the Region may make such data available for the proper management of, or planning for, the resource to:
  - property owners and their agents who require data regarding the property owner's property and the Region is satisfied that the requester is the true property owner or the agent of the true property owner and that the property owner requires the data for legitimate land use planning related purposes; or
  - a lower-tier municipality that agrees in writing to use the information only in the same manner as the Region may use it in connection with a land use planning matter;
- c) The Region will notify the appropriate ministry in writing immediately upon becoming aware that any data has been released to or becomes available in any way to any person or any body not permitted by the above sections; and
- d) Notwithstanding paragraph a) above, copies of the data may be provided by the Region to consultants and contractors for work to be performed for the Region or other municipalities within the Region, provided that the consultant or contractor agrees in writing not to disseminate the data and when the work is completed not to retain any copies of the data.
- direct to the Province all requests for copies of the Province's data not otherwise permitted to be released by the Region under this protocol.
- a) update the data if they have appropriate new information that will assist the Region in meeting its statutory and other plan review functions, if possible using standards agreeable to the originating ministry;
  - b) make available (including the provision of copies if requested) to the Province for municipal planning or provincial planning purposes any land use related maps, records, or computer-generated digital data the Region produces, and allow the province to copy and distribute the data only for the purposes of land use, environmental, economic and social planning, provided that appropriate recognition is provided to the Region as the source, and that it is for non-commercial, non-profit purposes;

in addition, the Province is responsible for converting digital data into a format other that the one provided by the Region or hard copy into a digital format if the Region is not undertaking this as part of some other program.

- provide the Ministries with updated versions of data bases, or the new data; and
- d) provide the data listed in b) and c) "as is" without any warranty of any kind, expressed or implied as to its accuracy or completeness.

#### D) The Ministries and the Region jointly:

- commit to develop expeditiously a data sharing agreement, when requested by either of the parties, to deal with longer term data sharing issues:
  - The data sharing model to be explored is a group of data supplying participants (including Regions and Ministries) each of which has a "right to use" the other's data in pursuing activities agreed to among the parties, e.g. municipal planning; and
  - Some of the issues that will have to addressed are data maintenance, minimum standards, ownership, resale of data, liability and access to the data.

#### THE NIAGARA ESCARPMENT PLANNING AND DEVELOPMENT ACT, 1990

The Niagara Escarpment Plan (1994, 2005), which is required under the *Niagara Escarpment Planning and Development Act* (1990), is the principal provincial planning document for the Niagara Escarpment and supersedes municipal policies within the Niagara Escarpment Plan Area. Its purpose is to provide for the maintenance of the Niagara Escarpment and the land adjacent to it as a continuous natural environment, and to ensure that only appropriate, compatible development occurs.

The City of Hamilton contains a large tract of land designated as Niagara Escarpment Plan Area, within which select portions are subject to development control while still under the jurisdiction of the Niagara Escarpment Commission. Many of the Plan's policies are directed at the conservation of natural heritage features and ecological function; however, the Plan also contains several policies concerning cultural heritage features. The Escarpment has played a major role in the development and history of the area and, consequently, the local, regional and provincial cultural heritage significance of the Escarpment is comparable with its natural heritage value.

Part 2 of the Plan provides Development Criteria which determine how a proposed development should be carried out to minimize the impact on the Escarpment environment. The detailed policies contained in Section 2.12 outline the criteria for cultural heritage resources within the Niagara Escarpment Plan Area:

#### 2.12 Heritage

The objective is to inventory, interpret, evaluate, maintain and conserve the cultural heritage features of the Niagara Escarpment Plan Area. 1. Care should be taken to discover unknown and to preserve known archaeological sites (especially native burial sites) and areas where such sites might reasonably be expected to exist.

2. Existing heritage features, areas and properties should be retained and reused. To determine whether such actions are feasible, consideration shall be given to both economic and social benefits and costs.

3. New development including reconstruction, alterations and consideration of a second dwelling under Part 2.2.7.b) should be in harmony with the area's character and the existing heritage features and building(s) in general mass, height and setback and in the treatment of architectural details, especially on building facades.

4. Where new development involves a heritage feature it should express the feature in some way. This may include one or more of the following:

a) Preservation and display of fragments of the former buildings' features and landscaping;

b) Marking the traces of former locations, shapes and circulation lines;

c) Displaying graphic verbal descriptions of the former use; or

d) Reflection of the former architecture and use in the new development.

5. Where development will destroy or significantly alter cultural landscapes or heritage features, actions should be taken to salvage information on the features being lost. Such actions could include archaeological salvage and excavation, and the recording of buildings or structures through measured drawings or photogrammetry or their physical removal to a different location.

6. Where the implementing authority has approved the construction of a

second single dwelling on an existing lot of record to preserve the local, provincial or national heritage value or interest of an existing single dwelling on the same lot, the property and details regarding its size and location shall be recorded and listed in Appendix 3. Removal of the property from the list on Appendix 3 shall require an amendment to the Niagara Escarpment Plan.

#### **ENVIRONMENTAL ASSESSMENT ACT, 1990**

The *Environmental Assessment Act* (1990) applies to public sector projects and certain private sector infrastructure projects (roads, hydro generation and transmission, sewage, water, landfills, etc.). The *Environmental Assessment Act* essentially defines a planning and design process that must be followed to ensure that all environmental impacts are considered, and that any effects are appropriately mitigated before any project is implemented.

The "environment" is very broadly defined in the Act as "the social, economic and cultural conditions that influence the life of humans or a community" [Section 1(c)(iii)] and "any building, structure, made by humans" [Section 1(c)(iv)]. Therefore, "environment" includes archaeological artifacts and sites, built heritage, cultural heritage landscapes, and traditional knowledge, activities, and events.

Accordingly, any project that falls under the jurisdiction of the *Environmental Assessment Act* must be comprehensively assessed for its impact on cultural heritage resources.

#### MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT, 2000

Reference to archaeological sites has been noted in the subsequent sections of the Municipal Class Environmental Assessment (2000) report:

#### Part B: Municipal Road Projects

B.1 Description of the Projects, Purpose and Alternatives

In consideration the alternative solutions to road and traffic problems in Phase 2, the proponent shall bear the following considerations in mind:

(4) Cultural Heritage Features

Significant cultural heritage features should be avoided where possible. Where they cannot be avoided, then effects should be minimized where possible, and every effort made to mitigate adverse impacts. Significant cultural heritage features include resources or features of historical, architectural or archaeological interest. Cultural heritage features should be identified early in the process in order to determine the significant features and potential impacts.

### Part C: Municipal Water and Wastewater Projects

C.1 Description of the Projects, Purpose and Alternatives

In considering the alternative solution to water, storm water management and sewage problems in Phase 2, the proponent shall bear the following in mind:

(4) Cultural Heritage Features

Significant cultural heritage features should be avoided where possible. Where they cannot be avoided, then effects should be minimized where possible, and every effort made to mitigate adverse impacts. Significant cultural heritage features include resources or features of historical, architectural or archaeological interest. Cultural heritage features should be identified early in the process in order to determine the significant features and potential impacts.

### **GREEN ENERGY ACT, 2009**

Under Part II, Section 5, of the *Green Energy Act*, the *Ontario Heritage Act* is deemed to apply to the permit process for renewable energy projects, etc.

5. (1) The Lieutenant Governor in Council may, by regulation, designate renewable energy projects, renewable energy sources or renewable energy testing projects for the following purposes:

- 1. To assist in the removal of barriers to and to promote opportunities for the use of renewable energy sources.
- To promote access to transmission systems and distribution systems for proponents of renewable energy projects. 2009, c. 12, Sched. A, s. 5 (1).

### Effect of designation

(2) A person is permitted to engage in activities with respect to a designated renewable energy project, a designated renewable energy source or a designated renewable energy testing project in such circumstances as may be prescribed, despite any restriction imposed at law that would otherwise prevent or restrict the activity, including a restriction established by a municipal by-law, a condominium by-law, an encumbrance on real property or an agreement. 2009, c. 12, Sched. A, s. 5 (2).

Same

(3) A restriction imposed at law that would otherwise prevent or restrict an activity with respect to a designated renewable energy project, a designated renewable energy source or a designated renewable energy testing project is inoperative to the extent that it would otherwise prevent or restrict the activity. 2009, c. 12, Sched. A, s. 5 (3).

Exception

(4) Subsections (2) and (3) do not apply,

(a) with respect to a restriction imposed by an Act or regulation; or

(b) with respect to prescribed by-laws, instruments or other restrictions or prescribed classes of by-laws, instruments or other restrictions. 2009, c. 12, Sched. A, s. 5 (4).

Section 4.17 of Ontario Regulation 15/10 Specifies that archaeology is not exempt under the *Green Enerty Act*.

### Exception, restrictions imposed under prescribed Acts

**4.** Restrictions at law imposed under the following Acts are prescribed for the purposes of clause 5 (4) (b) of the Act:

17. The Ontario Heritage Act.

Archaeology is specifically addressed under Part IV, Section 20 of Ontario Regulation 359/09 (Renewable Energy Approvals Under Part V.0.1 of the *Environmental Protection Act*).

### Consideration of archaeological and heritage resources

**20.** (1) A person who proposes to engage in a renewable energy project shall consider whether engaging in the project may have an impact on any of the following:

1. An archaeological resource at the project location.

2. A heritage resource at the project location, other than at a part of the project location that is on a property described in Column 1 of the Table to section 19.

3. A property described in Column 1 of the Table to section 19 that abuts the parcel of land on which the project location is situated. O. Reg. 359/09, s. 20 (1).

(2) If, as a result of the consideration under subsection (1), the person mentioned in subsection (1) concludes that there is no possibility of impact on a resource or a property described in paragraph 1, 2 or 3 of subsection (1), the person shall submit, as part of an application for the issue of a renewable energy approval, a written summary of the matters addressed in the consideration of the resource or property. O. Reg. 359/09, s. 20 (2).

(3) This section does not apply to a person who proposes to engage in a renewable energy project in respect of,

(a) a Class 2 wind facility;

(b) a Class 1 or 2 anaerobic digestion facility;

(c) a Class 1 thermal treatment facility, if the generating unit of the facility is located at a farm operation; or

(d) a Class 2 thermal treatment facility. O. Reg. 359/09, s. 20 (3).

### Consideration of archaeological resources

**21.** (1) This section applies to a person who proposes to engage in a renewable energy project in respect of,

(a) a Class 2 wind facility;

(b) a Class 1 or 2 anaerobic digestion facility;

(c) a Class 1 thermal treatment facility, if the generating unit of the facility is located at a farm operation; or

(d) a Class 2 thermal treatment facility. O. Reg. 359/09, s. 21 (1).

(2) A person mentioned in subsection (1) shall,

(a) contact the Ministry of Culture to determine whether the project location is,

(i) within 250 metres of an archaeological resource that is set out by that Ministry in records it maintains, or

(ii) on property designated as an archaeological site under Regulation 875 of the Revised Regulations of Ontario, 1990 (Archaeological Sites) made under the *Ontario Heritage Act*; and

(b) contact the clerk of each local municipality and upper-tier municipality in which the project location is situated to determine whether the project location is in an area that has been identified on an archaeological management plan. O. Reg. 359/09, s. 21 (2); O. Reg. 521/10, s. 13 (1, 2).

(3) If the person mentioned in subsection (1) concludes that there is no possibility of impact on an archaeological resource or site described in clause (2) (a) or on an archaeological resource located in an area described in clause (2) (b), the person shall submit, as part of an application for the issue of a renewable energy approval, a written summary of the matters addressed in the consideration of the archaeological resource or site, or the area identified in an area archaeological management plan. O. Reg. 521/10, s. 13 (3).

#### Archaeological assessment

22. (1) This section applies to a person if,

(a) as a result of the consideration mentioned in subsection 20 (1), the person concludes that engaging in the renewable energy project may have an impact on an archaeological resource described in paragraph 1 of subsection 20 (1); or

(b) the person concludes, after complying with section 21, that the project location is situated as described in subclause 21 (2) (a) (i) or (ii) or clause 21 (2) (b). O. Reg. 359/09, s. 22 (1).

(2) A person to whom this section applies shall ensure that,

(a) an archaeological assessment is conducted by a consultant archaeologist; and

(b) an archaeological assessment report is prepared by the consultant archaeologist mentioned in clause (a) and submitted to the Ministry of Culture. O. Reg. 359/09, s. 22 (2).

(3) As part of an application for the issue of a renewable energy approval, a person to whom this section applies shall submit,

(a) written comments provided by the Ministry of Culture in respect of the archaeological assessment conducted under clause (2) (a);

(b) the archaeological assessment report prepared under clause (2) (b); and

(c) if the project location is on property described in subclause 21 (2) (a) (ii), a copy of the permit issued by the Minister of Culture to excavate or alter the property or to remove an artifact from that property, as the case may be. O. Reg. 359/09, s. 22 (3).

(4) In this section, a reference to a consultant archaeologist is a reference to a consultant archaeologist within the meaning of Ontario Regulation 8/06 (Licences under Part VI of the Act — Excluding Marine Archaeological Sites) made under the *Ontario Heritage Act*. O. Reg. 359/09, s. 22 (4).

### **CEMETERIES ACT, 1990**

The *Cemeteries Act* applies to those archaeological sites in Hamilton that contain human remains, and supersedes the *Ontario Heritage Act* with respect to the management of burials within an archaeological site.

#### Abandoned cemeteries

60. (1) An application to declare a cemetery abandoned may be made to a judge of the District Court if the owner of the cemetery,

- (a) cannot be found or is unknown;
- (b) is unable to maintain it;
- (c) was a corporation that was dissolved; or
- (d) is not licensed as an owner under this Act. R.S.O. 1990, c. C.4, s. 60 (1).

### Application

(2) An application to declare a cemetery abandoned may be made by the owner of the cemetery, the municipality or the Registrar. R.S.O. 1990, c. C.4, s. 60 (2).

### Notice of application

(3) An applicant under subsection (2) must give notice of the application to the other persons referred to in subsection (2). R.S.O. 1990, c. C.4, s. 60 (3).

#### Costs

(4) The municipality is responsible for the cost of an application under this section including the cost of a survey of the land involved. R.S.O. 1990, c. C.4, s. 60(4).

(5) Despite subsection (4), an owner who makes an unsuccessful application is responsible for the costs referred to in subsection (4). R.S.O. 1990, c. C.4, s. 60 (5).

### Declaration

(6) A judge to whom an application is made under subsection (1), upon being satisfied that there is a basis for the application, shall, by order, declare the cemetery that is the subject-matter of the application to be abandoned. R.S.O. 1990, c. C.4, s. 60 (6).

#### Municipality becomes owner

(7) Upon a declaration that a cemetery is abandoned being registered in the appropriate land registry office, the municipality becomes the owner of the cemetery with all the rights and obligations in respect to the cemetery and the assets, funds and trust accounts related thereto that the previous owner had. R.S.O. 1990, c. C.4, s. 60 (7).

### Exemptions

(8) A declaration under this section may exempt the municipality being declared the owner from any provision of this Act or the regulations that it would be inappropriate, in the circumstances, for a new owner to be subject to. R.S.O. 1990, c. C.4, s. 60 (8).

### Maintenance

(9) Upon an application being made to declare a cemetery abandoned, the municipality within which the cemetery is situated is responsible for the maintenance of the cemetery until the application is disposed of. R.S.O. 1990, c. C.4, s. 60 (9).

### **Dual interest**

61. The Registrar may require any owner who has an interest in a cemetery that appears to be abandoned or neglected to maintain that cemetery as a condition of retaining a licence to own a cemetery or crematorium. R.S.O. 1990, c. C.4, s. 61.

#### Disturbing burial site prohibited

68. No person shall disturb or order the disturbance of a burial site or artifacts associated with the human remains except,

(a) on instruction by the coroner; or

(b) pursuant to a site disposition agreement. R.S.O. 1990, c. C.4, s. 68.

#### Unmarked burial sites

69. Any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. R.S.O. 1990, c. C.4, s. 69.

### Investigation

70. (1) The Registrar may order the owner of land on which a burial site is discovered to cause an investigation to be made to determine the origin of the site. R.S.O. 1990, c. C.4, s. 70 (1).

### Idem

(2) Section 68 does not apply to a person investigating the nature or origin of the site who is disturbing the site in the course of the investigation. R.S.O. 1990, c. C.4, s. 70 (2).

#### Idem

(3) A person conducting an investigation shall do so with the minimum disturbance to the site that is reasonable in the circumstances. R.S.O. 1990, c. C.4, s. 70 (3).

#### Idem

(4) If the Registrar is of the opinion that an investigation under subsection (1) would impose an undue financial burden on the land owner, the Registrar shall undertake the investigation. R.S.O. 1990, c. C.4, s. 70 (4).

#### Declaration

71. (1) As soon as the origin of a burial site is determined, the Registrar shall declare the site to be,

- (a) an unapproved aboriginal peoples cemetery;
- (b) an unapproved cemetery; or
- (c) an irregular burial site. R.S.O. 1990, c. C.4, s. 71 (1).

### Interpretation

(2) An irregular burial site is a burial site that was not set aside with the apparent intention of interring therein human remains. R.S.O. 1990, c. C.4, s. 71 (2).

### Idem

(3) An unapproved cemetery is land set aside with the apparent intention of interring therein, in accordance with cultural affinities, human remains and containing remains identified as those of persons who were not one of the aboriginal peoples of Canada. R.S.O. 1990, c. C.4, s. 71 (3).

### ldem

(4) An unapproved aboriginal peoples cemetery is land set aside with the apparent intention of interring therein, in accordance with cultural affinities, human remains and containing remains identified as those of persons who were one of the aboriginal peoples of Canada. R.S.O. 1990, c. C.4, s. 71 (4).

### Definition

(5) For the purposes of this section and section 72,

"unapproved" means not approved in accordance with this Act or a predecessor of this Act. R.S.O. 1990, c. C.4, s. 71 (5).

# STANDARDS AND GUDLINES FOR CONSULTANT ARCHAEOLOGISTS

#### The Discovery of Human Remains: Best Practices

This document is a "best practices" guideline describing the procedures for the treatment of human skeletal remains discovered outside a licensed cemetery. It reflects an agreement among members of the various ministries and agencies involved in the resolution of such burials.

The document is intended to serve as a guide to approval authorities as a discovery goes through the many different steps involved in a reburial to ensure that human remains are treated with respect and dignity and processed in a timely and efficient manner.

It is intended that this guide be reviewed periodically to reflect experiences with the topic. The signatories to this guideline have agreed to ensure that staffs within their jurisdictions have access to this guideline.

Should clarification be required, please refer to the *Cemeteries Act* (*Revised*) or contact one of the signatories.

Original signed by representatives of:

- First Nations Burial Committee of Ontario
- Toronto Police Service
- Ministry of Citizenship, Culture and Recreation (now Ministry of Culture)
- Cemeteries Regulation Section of Ministry of Consumer and
- Commercial Relations (now with the Ministry of Government Services)
- Ministry of Transportation
- Office of the Chief Coroner

Note: this document was last updated July 15, 1998

Note: for Aboriginal burial grounds this best practices document is provided here only as an example of how archaeology may assist in addressing a discovery of human remains within the required process stipulated in the Coroner's and Cemeteries Acts. While based on the wishes and emphases of particular communities at the time, Individual circumstances will vary, and individual Aboriginal communities may prefer differing practices be followed. Ultimately, the archaeologist will be directed by the Cemeteries Registrar, for completing the initial investigation, and landowner and First Nations representative, with respect to undertaking the requirements of the specific disposition agreement reached in a particular instance.

### Introduction

The following is designed to assist all those involved in responding to and addressing discoveries of human skeletal remains outside of a licensed cemetery. The advice is presented as a series of best practices among the many overlapping interests and jurisdictions of several ministries, agencies, police services and other government bodies that are triggered when human skeletal remains are uncovered. This approach has been developed with the support and approval of the First Nations Burial Committee of Toronto. The practices outlined here are equally applicable to discoveries of human remains across Ontario. These best practices support the existing regulatory and statutory mechanisms in Ontario. Responsibility for a burial passes through a number of jurisdictions (i.e. Police, Coroner, Cemeteries Regulation Section) and the intent of this document is to ensure this flow is effective and seamless.

#### A Note on Public Notification

Getting through the entire discovery and disposition process when human remains are found will see the authority of the issue shift among several agencies. As such, until all investigations have been carried out and the disposition resolved, formal press releases or contacting the media should only occur if all affected authorities have concurred (i.e. police, coroner and Cemeteries Registrar). In addition, after all investigations have been completed, the concerns of the landowner and group acting as representative for the deceased (e.g. First Nation), should be considered before media contact. Premature media notification, particularly prior to having accurate identification of the deceased, will lead to misinformation, misplaced concerns being raised, and potentially a hardening of attitudes. This can make a final disposition agreement more difficult to reach.

Any media interest should be directed to the agency that has authority over the burial site at the time of the media contact (i.e. police, Coroner's Office or Cemeteries Registrar). Media photography of the remains should be avoided: a publicly displayed photograph of skeletal remains is both disrespectful to the deceased and offensive to representatives for the deceased.

#### A Note on Archaeology

It is important to note that the discovery of human remains will occur in two basic contexts: either through accidental discovery by an individual in unexpected circumstances, or through discovery as part of an archaeological examination/excavation of a locale by a trained archaeologist, licensed by the Ministry of Culture under the *Ontario Heritage Act.* In the latter case, the archaeologist will possess the skills, knowledge and expertise to assist both the police and coroner in determining the age of the interment, as well as to assist the landowner in generating the information the Cemeteries Registrar will require to determine the nature, extent and cultural affiliation of the persons buried. His or her presence at the front end of the discovery process will greatly aid all authorities in making quick and accurate determinations, and should be relied on as much as possible in such circumstances.

### Under the Coroner's Act

1. A person finding skeletal material may first contact staff in an agency other than the police or coroner (e.g. Ministry of Culture or Ministry of Government Services staff). When that occurs, the person is to be immediately instructed to report the find to the local police or coroner. An appropriate contact list (e.g. Regional Coroner's offices) should be maintained by all agencies that may be first contacted about such a discovery.

2. When the police are first contacted they will attend the scene, protect the site and contact the local coroner. The coroner, or the police on behalf of the coroner, will conduct an investigation to determine if: a) the skeletal material is human and b) if the site represents a crime scene. The investigators will need to obtain all the information required to make a determination. However, efforts should be made at this stage to minimise site disturbance. All bone and associated grave goods still embedded in the ground should not be disturbed unless removal is essential for the coroner to make a determination. Poking, pulling, and digging up the bone in an uncontrolled manner can quickly destroy critical data essential to making accurate identifications.

3. Whenever possible, the police and coroner should seek the assistance of an archaeologist in conducting the investigation. This is especially critical since burials are archaeological deposits in their own right, and are often found as part of more extensive archaeological deposits. As such, confirming an association of the burial with a

surrounding archaeological site will help determine whether or not the human remains are part of a crime scene. Also, the archaeologist can help ensure that the larger heritage resource is not destroyed or damaged during investigation of the skeletal material. Ministry of Culture staff can sometimes be called on to visit the scene with the police.

4. Archaeologists will consider issues such as the condition and discoloration of the bone, presence of artifacts around the discovery site, and knowledge of known archaeological sites in the area to determine chronological (and cultural) associations. If intact deposits are examined, features such as the presence/absence of a coffin, depth of remains, position of body, presence of grave goods, etc., will also assist the determination.

5. When skeletal material is found and it is not readily obvious that this material is either a burial or crime scene, coroners will often employ the services of a physical anthropologist or osteologist to examine the bone in detail. While the coroner requires only a basic determination of age (i.e. recent vs. historic/ancient) and nature of the interment, the physical anthropologist's study can also determine cultural affiliation (based on the presence/absence of specific skeletal traits), age of the individual at death, sex, and even funerary practices. This information will be essential for both the Cemeteries Registrar's investigation, as well as for the deceased's representative in determining the appropriate reinterment requirements. As such, latitude in allowing the physical anthropologist to complete a full, basic descriptive analysis of the skeletal material as a part of the coroner's investigation will greatly aid in addressing remaining issues associated with this process.

6. When the Coroner is satisfied the discovery site is not a crime scene, it is essential that he/she notifies the Registrar of Cemeteries of the discovery, and passes along any relevant information (e.g. contacts, results of any analyses, etc.). It is also essential that the landowner understand that he/she will need to preserve and protect the site from the point when the police are no longer involved, and until a disposition is made under the *Cemeteries Act (Revised)*.

# Under the Cemeteries Act (Revised)

1. Under the *Cemeteries Act (Revised)* the Registrar will be required to determine and formally declare what the locale is: either an irregular burial site (unintentional interment), or an unapproved cemetery or unapproved Aboriginal Peoples cemetery. When the information is not already in hand (i.e. based on archaeological findings or the results of the coroner's investigation) the landowner normally will be required to undertake an investigation. Such an investigation will generate the information necessary for the Registrar to make an accurate declaration.

2. In most cases, such investigations will be undertaken by a licensed and qualified archaeologist hired by the landowner. Ministry of Culture ensures that the Cemeteries Registrar has a current list of such licensees that can be made available to the landowner.

3. The intent of the investigation is to provide the Cemeteries Registrar with the data necessary to make a declaration. As such, burial investigations will minimise normal archaeological fieldwork and reporting requirements. It will be determined following the Registrar's declaration and disposition agreement reached between landowner and deceased's representative whether disinterment is necessary.

4. The investigation for the Registrar must determine whether or not the interment(s) were intentional, and the basis on which this is made, the cultural affiliation of the deceased, the defined limits of the area containing burials, the style and manner in which the remains are interred, and a description of the artifacts determined to form part of the burial site. It may also be necessary to determine the exact number of

discrete burials present in the area. Excavation methods should maximize recovery of these data, while minimizing disturbances to the remains. Recording should also be limited to that required by the Registrar (e.g. emphasis on mapping location of burials and in relation to property lines, existing structures, or other reference points). Ministry of Culture will advise licensed archaeologists of the appropriate archaeological methods.

5. During the investigation, the remains must be treated with respect and care. All artifacts found in the burial are to be considered grave goods, and should be treated as part of the burial, and kept with the skeletal remains. Burials must not be unnecessarily exposed to the elements or to casual viewing, and must be covered over as soon as possible following identification. The landowner continues to be responsible for preserving and protecting the site during this investigation, and until a disposition is made under the *Cemeteries Act (Revised)*.

6. At the conclusion of the investigation a report must be submitted to the Registrar. This report will need to include the information required in Point 4. For sites that date to the last 200 years, historical research (e.g. land title search, newspapers, local informant interviews, etc.) may be required to answer some of the information points outlined in Point 4. This report will also serve to address the archaeologist's reporting requirements for the license issued by Ministry of Culture under the *Ontario Heritage Act*.

7. Once the Registrar can make a declaration, and the locale is determined to be an unapproved cemetery, he/she will locate a representative for the deceased. If the locale is an unapproved Aboriginal Peoples cemetery, the Registrar will contact the nearest First Nation Government. Another community of Aboriginal People whose members have a close cultural affinity to the interred person may also act as representative. As well, if agreed-to and established before-hand,

a designated "Burials Committee" can serve as the first point of Aboriginal contact for the Registrar. If the burial is non-aboriginal, the Registrar will attempt to find a representative through media notification. Where no descendant is found, a representative of the same religious denomination as the person buried can act for the deceased.

8. The representative and landowner will agree to a disposition agreement outlining what is to be done with the burials. Where there is no agreement, binding arbitration is provided under the *Cemeteries Act* (*Revised*). Typically there are three options: 1) leave the remains intact and establish the site as a cemetery; 2) establish a cemetery nearby, remove the remains and re-inter them there; 3) remove the remains and re-inter them there; 3) remove the remains and re-inter them in an existing cemetery. The option selected with respect to an unapproved cemetery or unapproved Aboriginal Peoples cemetery will be negotiated between the landowner and representative for the deceased.

9. If the discovery is declared to be an irregular burial site, there are three options: 1) leave the remains intact and establish the site as a cemetery; 2) establish a cemetery nearby, remove the remains and reinter them there; 3) remove the remains and re-inter them into an existing cemetery. The landowner will choose the option and is responsible for all costs.

10. In respect to an unapproved cemetery or unapproved Aboriginal Peoples cemetery, if a disinterment/reburial option is selected, the burials will need to be fully uncovered, removed and re-interred with a minimum of damage and time. Costs associated with a disposition agreement will be negotiated by the landowner and representative. While the time it takes to complete this work will be subject to the wishes of the landowner and representative, factors such as the number and nature of interments, level of observations required by the representative for re-interment purposes, etc., will affect the length of time needed to complete the removal and re-interment. Consequently, in order to minimize time while maximizing care and documentation, this work is best done by a licensed archaeologist under the direction of the disposition agreement.

11. During removal, detailed observations will need to be made of the archaeological context of the burial to ensure that all associated remains and grave goods are fully recovered. Age at death and sex of the individual should also be noted. This information will assist in determining the appropriate methods of re-interment, as well as to assist in determining what specific ceremonies need to accompany the reburial. Basic mapping can be used to aid in making these observations. No scientific analysis of the skeletal remains or grave goods can occur during this process without the consent of the representative of the deceased.

12. Should the disposition agreement impact on adjacent archaeological remains, or should concerns be raised for these deposits during negotiations, Ministry of Culture will advise and work closely with the Cemeteries Registrar and others concerned to determine what is the most appropriate course of action. Ministry of Culture will also assist in mediating any issues that might arise between the licensed archaeologist and other parties.

*Regulations* provide details to give effect to policy established by an *Act*, and may include definitions and delegations of authority.

*Class Environmental Assessments (EAs)* provide overall process requirements for broad classes of infrastructure projects such as municipal (roads, water and wastewater), utility corridors, highways, landfills, *et cetera*. They ensure consistent fulfillment of the Provincial interest in archaeology

Consulting archaeology is conducted as part of development or infrastructure work under enabling legislation such as the *Planning Act* and *Environmental Assessment Act*.

# Appendix F:

# Ministry of Tourism and Culture Technical Standards and Guidelines

The Ontario Heritage Act provides the legislative framework behind archaeology in the province. Further details and information on its implementation and scope are provided in the related *regulations*, while enabling legislation takes the form of the *Planning Act, Provincial Policy Statement, Environmental Assessment Act* and related *Class Environmental Assessments* (EAs) such as the Municipal Class EA.

The Ministry of Tourism and Culture defines standards for *consulting archaeology* through supplementary standards and guidelines. The first set of "Archaeological Assessment Technical Guidelines" (AATG) for Ontario was published in 1993. The AATG outline four stages in the process of consulting archaeology, and providing details on the scope, criteria and methodology for Stages 1 through 3:

- Stage 1: Archaeological Overview/Background Study;
- Stage 2: Field Assessment; and,
- Stage 3: Archaeological Site Documentation.

Similar direction was not provided for Stage 4: mitigation work (excavation or conservation *in situ*) in the original AATG, but informal standards were developed over the intervening years. The new "Standards and Guidelines for Consultant Archaeologists" (SGCA) were placed into effect on January 1, 2011, along with supplementary bulletins issued dealing with specific topics that include the engagement of aboriginal communities in archaeology, archaeology within forest operations on Crown land, and details on the submission of project initiation forms (PIFs) and the archaeology report review process. The SGCA provide an update to the original AATG, with more

comprehensive standards and guidelines for all four stages of consulting archaeology:

- Stage 1: Evaluation of Archaeological Potential;
- Stage 2: Property Assessment;
- Stage 3: Site-Specific Assessment; and
- Stage 4: Protection and Avoidance, Excavation, or Construction Monitoring.

While the titles of these four stages have changed, the scope of each of these stages remains largely unchanged.

In addition, "Archaeology, Land Use Planning & Development in Ontario" was published by the Ministry of Culture in 1997, with a revised draft released in 1998. Subtitled "An Educational Primer and Comprehensive Guide for non-Specialists", this title encapsulates the publication's content. It provides background material for archaeology in Ontario, specific guidance on its role within the development process, and an outline of the four stages of consulting archaeology.

This appendix contains the Standards and Guidelines for Consulting Archaeology, in addition to the Primer. The Primer remains in effect, and while supplanted by Hamilton's Archaeology Management Plan within the City, it is provided for further background information as one of the bases for the AMP.

Page 3: Standards and Guidelines for Consultant Archaeologists Page 61: Conserving a Future for Our Past.

CONSERVING A FUTURE FOR OUR PAST:

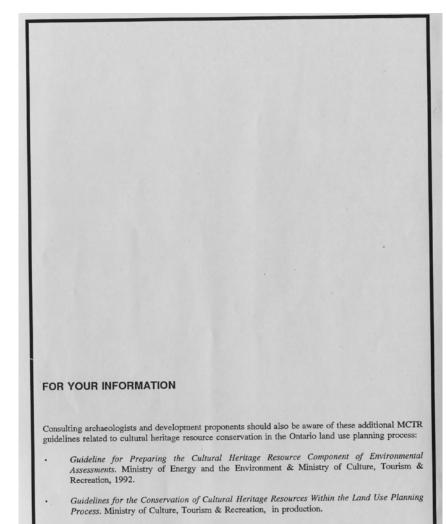
Archaeology, Land Use Planning & Development In Ontario

## AN EDUCATIONAL PRIMER AND COMPREHENSIVE GUIDE FOR NON-SPECIALISTS





1997 (in Revision 2005) MINISTRY OF CULTURE Heritage & Libraries Branch, Heritage Operations Unit



Copies can be obtained from the Archaeology and Heritage Planning offices of MCTR.

## PREFACE

This primer is intended to review all aspects of conserving the province's archaeological heritage in various land use planning and development review processes. This document is intended both for those individuals involved with the day to day requirements of addressing issues associated with archaeological resource conservation under these processes, as well as anyone else interested in the conservation and management of Ontario's heritage.

- *Section 1* Provides introductory and explanatory information, and the legislative context for archaeological conservation within Ontario's development processes.
- Section 2 Summarises the means by which municipal approval authorities and provincial development agencies can incorporate and plan for archaeological conservation needs into their respective activities.
- Section 3 Outlines the concept of archaeological potential, and how to identify archaeological concerns, when considering possible impacts to archaeological sites tied to any particular development project or study area.
- Sections 4-6 Reviews the activities that occur when archaeological concerns are identified for a development property, and details how archaeological sites, once found on these properties, are managed.

Additionally, placed throughout this manuscript are a series of ARCHAEOLOGY 101 pages, which provide an illustrated review of some of the key, basic concepts concerning the practice of archaeology, and the conservation of archaeological resources as a part of land use development activities.

### Author Credits

Staff of the Heritage Operations Unit, Heritage Libraries Branch Ontario of Ministry and Culture (Neal Ferris, co-ordinator)

1997 (in revision 2005)

## - IMPORTANT NOTE -

The technical advice and direction in this guide derives from the Ministry of Culture, which has been mandated the provincial interest and responsibility for Ontario's archaeology under the *Ontario Heritage Act RSO 1990*.

It is important to note, however, that the protection and conservation of these heritage resources, when tied to particular development activities, is also enabled by statutes such as the *Environmental Assessment Act, Aggregates Resources Act, Planning Act*, etc. It is important to recognise, therefore, that this guide is not intended to insert an additional layer of interpretation on those legislative processes. Rather, this guide should be read as providing background and technical "how to" advice for addressing archaeological site conservation needs and Ontario Heritage Act requirements when the need for that conservation is being addressed through a legislated development process.

Any questions regarding the interpretation or intent of these broader land use processes should be directed to the relevant Ministry or agency. The following are some general inquiry numbers for some of the development planning agencies in Ontario:

AGGREGATE RESOURCES ACT, CROWN LANDS, ONTARIO PARKS, FORESTRY

	Ministry of Natural Resources Information Centre	1-800-667-1940
CEMETERIE	ES ACT	
	Ministry of Government Services	
	Cemeteries Regulation Unit	1-800-268-1142
ENVIRONM	ENTAL ASSESSMENT ACT Ministry of Environment	
	Environmental Assessment & Approvals Branch	1-800-461-6290
NIAGARA E	SCARPMENT PLANNING AND DEVELOPMENT ACT	
	Niagara Escarpment Commission	1-905-877-5191
PLANNING	ACT*	
	Ministry of Municipal Affairs & Housing	
	Provincial Planning & Environmental Services Branch	1-416-585-6014
*If the music	in a liter in second and is the annual authomity contact them di	us stiles

\*If the municipality in your area is the approval authority, contact them directly.

#### Who to Contact in the Ministry of Culture - Archaeology

The main contact in Ontario for information and guidance with regard to archaeological conservation is the Heritage Operations Unit of the Heritage & Libraries Branch, in the Ministry of Culture (MCL). At the Toronto office a provincial database on archaeological sites is maintained, as well as other data useful for addressing archaeological resource concerns. Separate offices of this Unit are also maintained in London and Thunder Bay. The heritage databases and specialist staff at these facilities can assist approval authorities, development agencies, planners, proponents, heritage consultants and the public with all aspects of conserving and managing Ontario's archaeological heritage. The following is a key to the people in the Ministry of Culture you should contact regarding Ontario's archaeological heritage. As staff positions, addresses, and even phone numbers can change from time to time, any of the people listed below can assist you in locating the specific person you need to contact:

 Who should I contact in MCL regarding archaeological conservation matters if my municipality or development project is located in:

GTA, CENTRAL & EASTERN ONTARIO (east of the Niagara Escarpment)? Malcolm Horne malcolm home@mcl.gov.on.ca (416) 314-7146 Shari Prowse shari.prowse@mcl.gov.on.ca (416) 314-7143 Chris Andersen <u>chris andersen@mcl.gov.on.ca</u> (416) 314-7159 Winston Wong <u>winston wong@mcl.gov.on.ca</u> (416) 314-7159 Winston Wong <u>winston wong@mcl.gov.on.ca</u> (416) 314-7147 900 University Ave, 4<sup>th</sup> Floor Toronto, Ontario M7A 2R9 Fax: (416) 314-7175

SOUTHWESTERN ONTARIO (the Niagara Escarpment and all points west)? Neal Ferris <u>neal ferris@mcl.gov.on.ca</u> (519) 675-6898 John MacDonald john <u>macdonald@gov.on.ca</u> (519) 675-7742 900 Highbury Ave London, Ontario NSY 1A4

#### Fax: (519) 675-7777 NORTHERN ONTARIO Andrew Hinshelwood <u>andrew hinshelwood@mcl gov on ca</u> (807) 475-1632 435 James St. Suite 334 Thunder Bay, Ontario P7E 5N7 Fax: (807) 475-1297

2. Who should I contact for information about the Ministry's ARCHAEOLOGICAL SITE'S DATABASE?

Robert Von Bitter <u>robert vonbitter@mcl.gov.on.ca</u> (416) 314-7161 900 University Ave, 4<sup>th</sup> Floor Toronto, Ontario M7A 2R9 Fax: (416) 314-7175

3. Who should I contact for further information about MARINE ARCHAEOLOGY?

Erika Laanela <u>erika laanela@mcl.gov.on.ca</u> (416) 314-7154 900 University Ave, 4<sup>th</sup> Floor Toronto, Ontario M7A 2R9 Fax: (416) 314-7175

#### Perceived Value Potential:

This refers to the perceived value a site may have to the local community or specific interest groups. A site having a low information potential may still be of significance if it is of interest to the local community, heritage groups, or specific cultural groups; or if the site has the potential to be used as part of an education or economic opportunity.

#### 7) Report Recommendations

A final component of the Assessment Report is the preparation of recommendations arising from the survey findings and, where applicable, site investigations.

- If no sites were found during survey, or if those sites found do not warrant further investigation, a recommendation should be acluded requesting that the property be cleared of any further archaeological concerns.
- If significant archaeological remains were identified, a detailed impact mitigation strategy should be provided. If site avoidance (preservation) is recommended, possible long and short term avoidance strategies available for the site should be provided. If salvage excavation is proposed, recommendations must include an explicit excavation strategy appropriate to the site's significance. In lieu of Stage 4 guidelines, avoidance and excavation mitigation strategies proposed for significant archaeological sites should be reviewed with MCTR Archaeology & Heritage Planning staff, to insure Ministry support for the recommendations.
- If artifacts have been collected during the assessment, a recommendation regarding the short and long term care and disposition of the collections, consistent with the licence holder's obligations under the Ontario Heritage Act and Ontario Regulation 212/82, should be included.

In addition, all reports must contain the following recommendations:

- Should deeply buried archaeological remains be found on the property during construction activities, MCTR should be notified immediately.
- In the event that human remains are encountered during construction, the proponent should immediately contact both MCTR, and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Commercial Relations, (416) 326-8392.

#### ARCHAEOLOGY INFORMATION PAGE ACKNOWLEDGEMENTS

The various illustrations appearing on the Archaeology 101 pages are derived from a number of sources. Specific acknowledgements are listed below. Graphics not otherwise acknowledged come directly from the Ministry of Culture's Southwestern Archaeology Office photo and graphic archive.

#### Page 1 - What is an....Archaeological Site?

Upper graphic courtesy of the Ska Nah Doht Iroquoian Village & Museum, Lower Thames Valley Conservation Authority, RR #1 Mt. Brydges, Ontario NOL 1W0.

#### Page 2 - What is an....Artifact?

Upper graphic adapted from various Projectile Point Types, <u>Kewa</u>, Newsletter of the Ontario Archaeological Society. Lower graphic adapted from *A Native Ceramic Vessel From Owen Sound* by Janie Ravenhurst. <u>Kewa</u> 84-3. Page 3 - What is A....Cultural Feature?

Graphics developed by Nick Adams of Adams Heritage Consultants for this Primer, and based on the site plan of the early Late Woodland Little site.

#### Page 4 - What Are....Settlement Patterns?

Upper graphic adapted from *The Early Iroquoian Period of Southern Ontario* by R. Williamson. In: <u>The Archaeology of Southern Ontario to AD 1650</u> (edited by C. Ellis & N. Ferris), Occasional Publication of the London Chapter, OAS, 5 1990.

Lower graphic adapted from A Preliminary Report on the 1987-1988 London Chapter Excavations at the Van Bemmel Site, Kent County, Ontario by Neal Ferris. Kewa 89-6, and enhanced by Nick Adams of Adams Heritage Consultants. Page 5 - What Are....Burial Features?

Lower graphic adapted from *The Archaeology of the St. Lawrence Iroquoians* by Bruce Jamieson. In: <u>The Archaeology</u> of <u>Southern Ontario to AD 1650</u> (edited by C. Ellis & N. Ferris), Occasional Publication of the London Chapter, OAS, 5 1990.

#### Page 7 - What is an....Archaeological Survey?

Upper and lower graphics provided courtesy of the Ministry of Transportation, Southwestern Region. London. Page 8 – What is an... Archaeological Consultant?

Lower graphic provided by Nick Adams of Adams Heritage Consultants for this Primer. Page 9 - What are....Site Alterations?

Lower graphic provided courtesy of the Ministry of Transportation, Southwestern Region. London. Page 11 - What is...Archaeological Significance?

Upper graphic adapted from *The Culture History and Archaeology of the Neutral Iroquoians* by Paul Lennox & William Fitzgerald. In: <u>The Archaeology of Southern Ontario to AD 1650</u> (edited by C. Ellis & N. Ferris), Occasional Publication of the London Chapter, OAS, 5 1990.

Lower graphic adapted from The Kassel and Blue Dart Sites: Two Components of the Early Archaic, Bifurcate Base Projectile Point Tradition, Waterloo County, Ontario by Paul Lennox. <u>Ontario Archaeology</u> Number 56. Page 12 - What Are...Lithic Scatters?

Upper graphic adapted from *The Little Shaver Site: Exploring Site Structure and Excavation Methodology on an Unploughed Site in the Region of Hamilton-Wentworth, Ontario* by Peter Timmins. <u>Ontario Archaeology Number 61</u>. Lower graphic adapted from *The Archaeology* Of Southern Ontario to AD 1650 (edited by C. Ellis & N. Ferris), Occasional Publication of the London Chapter, OAS, 5 1990.

#### Page 13 - What Are....Historic Sites?

Upper graphic adapted from Investigations at Mohawk Village, 1983 by Ian Kenyon and Neal Ferris. Arch Notes, Newsletter of the Ontario Archaeological Society 84-1.

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## ARCHAEOLOGY INFORMATION PAGE No. 1 WHAT IS AN....ARCHAEOLOGICAL SITE?

Archaeological sites represent the remains of any past human use of a locale. This could be the place where a large Iroquoian village once stood, a place where a hunter butchered a kill, the site of a shanty built by an early pioneer, or the bottom of a lake where a shipwreck rests. At these places are found the things left behind, including refuse. the remains of structures, things forgotten like a cache of stone knives, or even things intentionally left, such as the burial of a family member.

The most important aspect of an archaeological site is the context within which everything is found. Because there has been no appreciable soil accumulation over the last several thousand years, the remains left behind at a site will be found where they were placed originally. The value of context, then, is knowing more than just that an artifact came from a site. For example, knowing that a pot sherd came from a specific corner of the site, next to many other pot sherds, burnt bone, and a stone knife, tells us what the people who left those remains were doing at that location (ie. cooking).



Archaeological Sites -During Use

Any place where people lived or used a locale in the past will accumulate the materials and features created by those people. So this village, occupied by a few hundred people busy doing all those things associated with village life, will be occupied for a brief period of time (between 15-30 years). And during the course of that occupation the village inhabitants will create large amount of material refuse and settlement patterns, all of which will stay behind after these people have moved on from this locale.



Archaeological Sites -Afterwards

Hundreds of years after that village site was abandoned, overgrown, then cleared for farming, only a few artifacts turned up every year by the plough offers an indication of what once stood there. The site, with all its information about that ancient community, is hidden and silent until the archaeologists begin the task of carefully uncovering its history and retelling its story.

## ARCHAEOLOGY INFORMATION PAGE No. 2 WHAT IS AN....ARTIFACT?

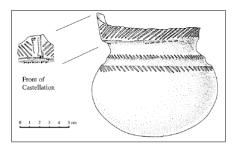
Artifacts are the tangible items found on archaeological sites during survey or excavation. Only those items which have not decayed over time (stone. bone, clay pottery, etc.) are found. Because most artifacts left at a site represent garbage created during occupation, they are mostly broken items or waste by-products from things like stone tool manufacture or the preparation of meals (animal bones).

Much as the shape of a car fender or the popularity of big hair-dos and disco music changed over time, so too did prehistoric artifacts change in form, shape and decoration. Because of this, the shape of an arrowhead or the style of decoration on a clay pot can help the archaeologist determine when the artifact was made. and sometimes tell to which cultural group the maker belonged. Artifacts that are analysed for this purpose are often referred to as "Diagnostics."



#### Projectile Points

The spear point on the left is found only on sites dating over 10,000 years ago, used by the first people to settle in Ontario. The point in the centre was made around 3,500 years ago and may represent the earliest use of a bow and arrow. The point on the right represents one of the last stone point forms used by Aboriginal peoples in southern Ontario. Points are depicted at actual size.



#### Prehistoric Ceramics

Clay pots, used primarily for cooking and storage, are usually found broken into many sherds. Decoration is usually applied to the upper portion of the vessel (referred to as the rim) and applied with a stylus (for example a pointed stick or bone) pressed into the wet clay before firing. Pottery first appears on sites in Ontario some 3,000 years ago.

# SECTION 1 INTRODUCTION

### 1.0 ARCHAEOLOGY IN ONTARIO

Ontario has a rich, diverse and ancient archaeological history. This section of the primer explains how archaeology is managed for and conserved in the province today, and the role both the Ministry of Culture and various land development approval authorities play in assuring good conservation.

#### 1.1.1 Archaeological Sites

Under Ontario Heritage Act (OHA) Regulation 170/04, archaeological sites are defined as *any* property that contains an artifact or any other physical evidence of past human use or activity that is of cultural heritage value or interest. Additionally, the regulation defines a marine archaeological sites as an archeological site that is fully or partially submerged or that lies below or partially below the high-water mark of any body of water; while an artifact is defined as any object, material or substance that is made, modified, used, deposited or affected by human action and is of cultural heritage value or interest.

These definitions capture the full range of Ontario's archaeological heritage, which extends back over 12,000 years and covers the rich heritage of Ontario's Aboriginal communities, as well as the non-Aboriginal peoples who arrived and settled here in the past 400 years. Archaeology, then, is uniquely important in documenting the vast majority of Ontario's past, and in emphasising the significance and antiquity of the role Aboriginal communities have in shaping Ontario's heritage.

Archaeological sites consist of both individual objects (artifacts), and cultural features (settlement patterns) created as a result of the past habitation and activities carried out by the people who occupied a specific place. As well, the context within which these objects and features are found is a critical component in documenting and understanding the site. Thus archaeological sites are extremely fragile records of the past and unlicensed alterations, through land use activities or site looting, can destroy them and so are prohibited under Section 48(1) of the OHA. Additionally, since most archaeological resources are located below ground and thus not readily visible, they need to be physically identified and documented by qualified archaeologists holding a license also issued under Section 48(1) of the OHA, before they can be added to the heritage record. Presently, only an estimated 10% of all archaeological sites in the province have been identified, so much of our future ability to understand and appreciate the past will come from finding and documenting these resources before they are destroyed.

It should also be noted that archaeological resources, particularly those dating from the last 2,000 years, can contain human burials. The requirements for properly caring for, disinterring and reinterring those remains are set out in the Cemeteries Act. These requirements are complex and involve, in the case of Aboriginal remains, entering into a disposition agreement with the identified First Nation acting as the representative for the deceased. As such, when associated with any kind of development project leading to land impacts, potential human interment issues should be identified as early as is possible in the project planning process.

All archaeological resources are considered significant, in recognition of their fragile, nonrenewable nature, the potential information they hold for understanding Ontario's past, and the value of this information to future generations. However, once a particular archaeological resource has been identified and assessed, the degree to which it can contribute to our understanding of the past will determine its relative level of significance and thus the appropriate level of conservation.

Also, it is important to realise that the majority of archaeological resources documented in this province are an important part of the heritage of Ontario's Aboriginal peoples. Thus, where appropriate, opportunities for local Aboriginal communities to comment on decisions affecting their archaeological heritage should be provided.

Lastly, it is important to recognise that, while archaeological remains can be associated in the ground around standing built structures of heritage significance, under the operation of the OHA a standing structure is not considered an archaeological site per se. Rather, standing structures of heritage significance are administered under Parts IV and V of the OHA, while provisions under Part VI are exclusively for addressing archaeological sites and the licensed activities of qualified archaeologists.

#### 1.1.2 Archaeology, the Ontario Heritage Act & the Ministry of Culture

Under the OHA all individuals conducting archaeological fieldwork must hold a valid archaeological licence issued by the Minister, and no alterations to known archaeological sites can occur through the fieldwork of a licensed archaeologist. These provisions, set out under Section 48(1), Part VI of the OHA, defines the specific relationship the Ministry of Culture has with the conservation of archaeological sites, namely through the licensed activities of archaeologists.

This relationship is articulated through the development of license qualifications, standards and guidelines for the practice of archaeology, and by providing technical advice on matters of archaeology to stakeholders. Importantly, archaeological activities undertaken by licensees must be reported on, and these must be submitted to the Ministry of Culture where they are reviewed against provincial standards and guidelines for fieldwork and determination of site significance. Once received, reports are also filed with the Archaeological Report Registry, which provides the public with access to the ongoing discoveries and contributions to Ontario's archaeological heritage.

This review, though articulated between the Ministry of Culture and licensee, also facilitates

archaeological conservation requirements under land use development processes. This is done through the review and clearance of the archaeological reports submitted from licensees by Ministry staff. The correspondence from the Ministry of Culture at the conclusion of the report review to the licensee confirms that all fieldwork and reporting has met provincial Standards and Guidelines. Copies of this correspondence are also shared with proponents and approval authorities as confirmation that archaeological conservation requirements tied to a particular development project have been met. The correspondence also confirms that any known archaeological sites present on the subject property, either because of fieldwork on the site, or determination of level of significance, are no longer subject to licensed only fieldwork alteration provisions of the OHA. Thus the landowner or proponent can thus proceed to develop (i.e., alter) in the area of the known archaeological site confident that they are not in violation with the intent of the OHA.

Also, the OHA, associated regulations, and terms and conditions all work to ensure the proper care and long term curation of the important archaeological collections made from sites found during fieldwork. It is the licensee's responsibility to care for archaeological collections generated under their license. The Act also empowers the Minister of Culture to direct where artifact collections can be deposited if the licensee wishes to transfer the care provisions of a collection. Collections can only be directed to a public institution or donated to the province, and ensures the perpetual care and maintenance of these important components of Ontario's heritage.

## 1.2 ARCHAEOLOGICAL CONSERVATION IN LAND USE DEVELOPMENT

All land use activities have the potential to impact archaeological sites. In Ontario, the identification and conservation of archaeological sites that may be impacted by development are requirements identified in the Environmental Assessment Act and Planning Act, as well as in numerous other legislative, regulatory, and protocol initiatives. However, it is important to keep in mind that conserving archaeological remains within development and planning processes detailed below does <u>not</u> mean putting a halt to a development application. Rather the intent is to document the vital information for a significant archaeological site in advance of its destruction, or to protect the site long term and while development proceeds around it. This ensures that crucial information about Ontario's heritage is not lost, while permitting development to proceed once conservation measures have been taken.

#### 1.2.1 The Environmental Assessment Act

The Environmental Assessment Act (EAA) provides for the protection, conservation and wise management of the environment in Ontario; environment broadly defined to include cultural heritage. The EAA promotes sound environmental planning by requiring the proponent of an EA project to prepare an environmental assessment for public and government review before a decision on the approval of the project can occur. Section 5 (3) (c) of the EAA requires that all heritage aspects of the environment to be affected by the proposed undertaking be identified as a

part of that environmental assessment. This will entail reviewing the known archaeological record for the study area, evaluating the archaeological potential for the lands in question, describing the results of an archaeological survey of the proposed impact area in archaeological potential is determined, evaluating the resources identified, and recommending impact mitigation strategies for sites identified. Comparable assessment and mitigation work is conducted as a part of a scoped-down, Class EA process, which is conducted for projects such as for municipal roads, sewers, watermains, etc. The Ministry of Culture can act as a reviewer of Class EA and individual EA projects to identify when archaeological potential requires archaeological investigations or a licensed archaeologist can conduct the appropriate background review. All fieldwork components are undertaken by a licensed archaeologist and the Ministry of culture reviews the background study and fieldwork reports for the undertaking.

Under the auspices of the Environmental Assessment Act large-scale public sector development agencies address archaeological conservation concerns, usually associated with Class EA categories issued to these agencies under the Act. Notably the Ministry of Transportation undertakes archaeological assessment and mitigation of all impacts (the "affected" environment) arising from projects associated with the construction, maintenance and improvement of provincial highways, along with proposed wayside pits, etc. This is accomplished either through the use of in-house archaeological expertise, or use of private sector consultant archaeologists. Ontario Hydro addresses archaeological concerns associated with the establishment and maintenance of transmission corridors, power and transmission facilities. Under their Class EA, provincial Conservation Authorities address archaeological concerns primarily associated with erosion and shoreline stabilisation projects, as well as facility development projects which may impact significant archaeological resources. The Ontario Realty Corporation, responsible for the purchase and sale of provincial property, identifies archaeological concerns associated with such land transactions, as well as for projects associated with the development of a provincial facility on a parcel of land.

The Ministry of Natural Resources is responsible for evaluating archaeological potential in areas proposed for operations under the terms of a forest management plan, and for ensuring that the planning team develops appropriate prescriptions for protecting all classes of cultural heritage values. MNR Parks also addresses archaeological concerns tied to development of provincial parks, as well as regulates through separate permits archaeological research conducted in parks.

Finally, some projects which fall under Federal EA jurisdiction will require archaeological investigations, either directly, or as a result of a federally based dictate ensuring the undertaking will adhere to provincial requirements. Such undertakings include energy pipeline construction or refurbishment, telecommunications corridors, construction or expansion of airports, or facility construction and improvements associated with Port or Bridge Authorities.

#### 1.2.2 The Planning Act

In the Planning Act the conservation of Ontario's heritage is recognised as a matter of provincial

co-operation with the Ministry of Culture. Review of the resulting archaeological investigations remains the responsibility of this ministry, as that work arises from OHA licensed activity. This ministry also administers all matters related to the management of the resources documented, mitigation strategies proposed, and any disputes arising from the conservation of archaeological resources under the land use planning process.

Municipalities have adopted variable approaches to decisions made under the Planning Act with respect to Section 41 Site Plan applications. This arises from the structure of Section 41 itself, and whether or not the specific reference to some dimensions of the PPS 2005 necessary means omission of the rest of the PPS. Regardless of interpretation, it is important to keep in mind that an archaeological site present within a site plan application property, whether discovered during construction or known beforehand, is still subject to OHA licensed only alteration provisions. In other words, such sites are protected by provincial statute. As such, it is recommended that approvals of Site Plans where archaeological potential or known sites have been identified ensure that required archaeological site conservation needs be completed, so that the proponent is not, operating under a Site Plan approval, still potentially in contradiction to Section 48(1) of the OHA. This can be done through imposition of a condition, as some municipalities practice, through pre-submission resolution of the issue (see Section 2.1.3), deferral of a decision until archaeology is completed, or rejection of the application, should the approval authority not wish to otherwise ensure their decision is consistent with the PPS 2005.

#### 1.2.3 Other Legislation

The conservation of archaeological resources in Ontario is also addressed in other land use undertakings. For example the Aggregates Resources Act, administered by the Ministry of Natural Resources, recognises the potential impact quarrying activities can have on cultural features such as archaeological remains. The process for addressing archaeological concerns can be similar to that outlined for EA related projects, and is detailed in the MNR document entitled *Provincial Standards under the Aggregate Resources Act*. Specifically a background study, field survey and detailed archaeological site investigations are all identified as required Technical Reports under Part 2.2 of the Provincial Standards document. Proponents can obtain an initial determination of potential (and thus a determination of whether or not the subject property requires survey) either directly from Ministry of Culture staff, or through the use of a consultant archaeologist hired for the purpose. All subsequent field investigations, when determined to be required, will need to be undertaken by a consultant archaeologist employed by the proponent, and the findings reviewed by this ministry.

Cultural heritage and archaeological conservation is also identified under the Niagara Escarpment Planning and Development Act. As a result, the Niagara Escarpment Commission ensures that development projects within the Niagara Escarpment properly consider impacts to archaeological resources. And the Ministry of Culture is developing an archaeological conservation protocol with the Ministry of Northern Development and Mines, related to mining extraction activities. It is also worth noting that archaeological conservation will sometimes impinge on the Cemeteries Act, arising from the discovery of unmarked burials and associated human remains on archaeological sites. In effect, burial locations found on archaeological sites are in land not registered as a cemetery, and thus in violation of the Cemeteries Act. The discovery of human remains, then, usually will entail the need to define the extent and number of burials, and the registration of the location in question as a cemetery, or the removal of the remains and reinterment in an established cemetery. While the details of the process involved will vary depending on whether the burial is an isolated occurrence or part of a more formal cemetery, and whether or not the remains are Aboriginal, it is a complex procedure which requires the cooperation of landowner, next of kin or other group acting as representative for the deceased, and the Cemeteries Registrar. The Ministry of Culture assists by co-ordinating contact and negotiations between the various interested parties, and ensuring that any resulting archaeological investigations meet provincial standards (see Section 6 for further information).

# SECTION 2 MUNICIPAL & DEVELOPMENT AGENCY PLANNING FOR ARCHAEOLOGICAL CONSERVATION

Municipal planning authorities and development agencies can take steps to plan for archaeological conservation requirements well in advance of having to ensure particular development projects have been assessed. For example, while the Ontario Heritage Act provides both the province and municipalities with responsibilities for the conservation of cultural heritage resources, municipalities with approval authority under the Planning Act can and should assume a lead responsibility for cultural heritage resource conservation in their local land use planning process. This can be accomplished through the development of inventories, planning tools, guidelines and even Official Plan policies, which can assist in focussing archaeological concerns, and identify where those concerns will need to be addressed in advance of a particular development project being submitted for approval.

## 2.1 POLICIES, PROTOCOLS AND GUIDELINES

Effective planning for the conservation of archaeological resources within land use planning processes should include defining the particular role and responsibility of the planning or development agency, as well as that for any advisory agencies involved. For example, under most EA Act processes, protocols or guidelines can be established with Ministry of Culture to detail how archaeological conservation concerns will be addressed for a particular type of undertaking. With such agreements in place, agencies can plan for archaeological conservation concerns well in advance of a given undertaking, and know what actions will be necessary to satisfy those concerns.

In a municipal context, the key direction for the conservation of archaeological resources should be found in the heritage policies of the Official Plan. Since archaeological sites are found in all municipalities, are non-renewable and can be vital to a community's sense of identity, all municipalities need to address archaeological conservation in their official plans. It is recommended that official plan policies which implement the Cultural Heritage Policy 2.6 of the Provincial Policy Statement minimally recognise the importance of cultural heritage and incorporate policies for any built heritage and cultural landscapes. There should also be a policy for archaeology, such as following sample:

• The municipality will ensure that archaeological resources are conserved, by requiring the preparation of an archaeological assessment by a licensed archaeologist when a development or site alteration proposal may adversely affect an archaeological resource or area of archaeological potential, and by requiring that impacts to identified archaeological resources of significance are mitigated through excavation or preservation.

Additional policies can be developed to outline implementation of the goal, establishment and maintenance of inventories, pre-submission best practices for proponents, and integration of archaeological policy with policies related to PPS 2005 2.6.1 (built heritage and landscapes), and 2.6.3 (adjoining lands). The Ministry of Culture maintains a range of sample heritage policies that can be of assistance in the development of municipality-specific OP policies.

## 2.2 PLANNING TOOLS

## 2.2.1 Inventories

The effective management of archaeological resources within any development or planning process will depend on the extent and quality of the data collected. For example, knowing the location of a large prehistoric village site, which would cost hundreds of thousands of dollars to excavate in advance of development, can help any planning or development agency ensure that development avoids that location, or plan to avoid the location during the initial concept design stage for the project.

Thus a first step is the compilation of all known archaeological sites within the lands of the planning or development agency (e.g. within a municipal boundary, within established easements or rights-of-way, within all property holdings of a particular development agency, etc.). The Ministry of Culture, which maintains and regularly updates all registered archaeological sites in Ontario, can provide this data in order that an inventory is created for planning purposes. This transfer of data is usually facilitated through the adoption of a data sharing protocol. Municipalities should review with the ministry the best way of accessing and utilising this database for their region. Also, it should be emphasised that the provincial database reflects only the extent of previous archaeological survey that has occurred across the province, and not the full extent of the archaeological record. This can limit the extent of data available for a particular region.

### 2.2.2 Archaeological Master Plans

Since the known database is limited to the extent of previous archaeological investigations undertaken in a given area, any inventory will need to be augmented by identifying lands that exhibit the potential to contain undocumented sites. Establishing potential is based on identifying the presence of a wide range of geographic and historic features which would have directly influenced where ancient settlement occurred (See Section 3).

While the general criteria defined by the ministry in Section 3 for determining archaeological potential are effective for addressing broad archaeological conservation concerns, it is also possible to develop more focussed, municipality or property specific measurements of potential through the development of an Archaeological Master Plan. Undertaking an Archaeological Master Plan is an intensive process of compiling all available archaeological, historic and

interest, as detailed in the Provincial Policy Statement 2005 (PPS 2005). A critical element of the intent of these policies, as detailed in Section 3.5 of the Planning Act, is that: *in exercising any authority that affects a planning matter, the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board commission or agency of the government, including the Municipal Board and Ontario Hydro, must be consistent with the policy statements issued under subsection (1).* Thus all decisions made for all types of development will need to address potential heritage resource conservation needs arising from the impacts associated with those development activities. The policies of provincial interest addressing cultural heritage resources are found in Section 2.6 of the PPS 2005. Archaeological resources are the specific topic of policy 2.6.2, which states:

Policy 2.6.2: Development and site alteration may be permitted on lands containing archaeological resources or areas of archaeological potential if significant archaeological resources have been conserved by removal and documentation, or preservation on site. Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site will be permitted.

Since every municipality contains archaeological sites of significance, and all land use activities have the potential to impact those resources, municipalities, approval authorities and development proponents need to address and conserve Ontario's heritage.

Within the Planning Act process, conserving archaeological sites means enabling well-planned development. This goal is accomplished by implementing policies in municipal Official Plans, and by condition on the appropriate development application or enabling vehicle in order to ensure that lands containing archaeological sites, or exhibiting archaeological potential, are examined by a licensed archaeologist through formal assessment. Any significant archaeological sites identified on the development property will need to be protected while development proceeds around it. Section 34(1) of the Planning Act includes provisions for a prohibitive zoning by-law specifically to aid in protecting significant archaeological sites. Alternatively, the proponent can mitigate development impacts by having the site fully documented through excavation by a licensed archaeologist in advance of development; in effect removing the vital information and artifacts which make the site significant before construction disturbs that location.

Under recent changes to the land use planning process in Ontario, the review of site specific development applications for the purpose of determining if archaeological sites or areas of archaeological potential are present will be made directly by the planning approval authority (either the Ministry of Municipal Affairs and Housing under a provincial One Window review process, or delegated municipal planning authority). This is accomplished either through the use of screening criteria developed by the Ministry of Culture (see Section 3), or through the use of municipality-specific archaeological master plans, consisting of inventories, policies and procedures for implementation, and utilising GIS systems and evaluative software developed in

geographic data to map areas which exhibit potential. The end result is a master plan which summarises the culture history of the study area and inventories all lands which have the potential to contain undocumented sites. The mapping layers that accompany such a master plan can then be used by non-specialists (e.g. planners, engineers, proponents, etc.) to effectively determine archaeological potential effectively and accurately, and thus meet provincial expectations of good conservation. Typically this is achieved by having the data layers run through a Geographic Information Systems (GIS) evaluative program that can evaluate the archaeological potential for any given parcel of land, and provide a simple yes/no response. Thus non-specialists can effectively address archaeological conservation concerns without having to rely on trained staff.

#### 2.2.3 Pre-Submission Strategies

Typically in other development processes (e.g., EA or Aggregate undertakings), determining archaeological potential, and even conducting surveys of property exhibiting potential or mitigating planned impacts to archaeological sites, are undertaken prior to the formal submission of an undertaking or pit permit application. Likewise, some municipalities have begun to identify archaeological conservation requirements as a study that a development proponent needs to undertake prior to submitting a development application. In this way, archaeological conservation concerns are addressed pre-submission, and so avoiding the need for an archaeological condition to be attached to the development application.

A pre-submission requirement can work for municipalities with archaeological master plans, since determining if a parcel of land has potential is straight-forward. It can also be done without an archaeological master plan, through application of provincial screening criteria, or through the technical advice Ministry of Culture staff can provide a proponent directly on a question of archaeological potential for a given parcel of land. While pre-submission addressing of archaeological concerns can be undertaken for any type of project, it is particularly effective for managing large property holdings, or projects that will be on a quick development schedule from formal application onwards, or for projects (e.g., site plans, zonings, etc.) where it may be necessary to resolve archaeological matters when it is difficult to ensure archaeology can be addressed subsequently, and so may preclude approval of the application.

# SECTION 3 REVIEWING DEVELOPMENT APPLICATIONS FOR ARCHAEOLOGICAL CONSERVATION

## 3.1 ARCHAEOLOGICAL POTENTIAL

Archaeological potential identifies those lands likely to contain archaeological sites. Whether to satisfy EA or Aggregate Resources Act requirements or Policy 2.6.2 of the Provincial Policy Statement within the Planning Act, field assessment of lands identified as having potential will be needed in order to confirm the presence or absence of significant archaeological remains.

Determining archaeological potential is difficult and complex, due primarily to two characteristics inherent to this type of heritage resource:

- Archaeological sites are not readily visible someone needs to have physically located and identified a site for its location to be known.
- Archaeological potential involves predicting where past human behaviours and settlement
  practices occurred in a given area. So while general trends can be observed and used to
  inform potential determinations, it isn't possible to determine exactly where
  archaeological resources will be found, just where they're likely to be found.

## 3.2 EVALUATING ARCHAEOLOGICAL POTENTIAL FOR DEVELOPMENT PROPERTY

Evaluating the potential for a specific property or study area is based on determining the land's association with a wide range of geographic and cultural-historic features which would have directly influenced use and settlement by the past inhabitants of a region. Thus the presence or absence of these features within and around a parcel of land will serve as an indicator of past human use.

**IMPORTANT NOTE**: When potential determinations are done by professional archaeologists, they have the training and expertise necessary to critically evaluate all applicable geographic and cultural-historic features. But when potential is determined by non-specialists, no such expertise can inform their findings of potential. Thus the criteria are intended solely for non-specialist use to answer a simple "yes/no" question in order to identify those development applications which will need archaeological assessment. So when used, these criteria must be used without modification to be effective and supported by the ministry. Subsequent evaluation of lands identified as having potential will be conducted by a licensed archaeologist. They will apply their expertise to further inform their survey strategies, which are also defined by the ministry of Culture's Standards and Guidelines for licensed professionals (see Section 4).

#### 3.2.1 Archaeological Potential Criteria

The following are the key geographic and cultural-historic features that need to be considered when a non-specialist reviewer of a property is determining potential. Potential is determined by posing a series of questions respecting the property against the features listed (see the checklist in Appendix B which can be used by the reviewer when making a potential determination for a particular development application). These questions can be grouped into four headings:

### A. Known Archaeological Resources:

(1) Are there known archaeological resources on or adjacent to the development application?

The Ministry of Culture provides the locational data for all registered archaeological sites in a given municipality or study area. So, a first consideration in evaluating potential is to determine whether or not an archaeological site is on or within 250 metres of the proposed development.

## B. <u>Physiographic Features</u>:

The features under this category refer to physical characteristics of the land that are easily identifiable "as found" data on topographic and soils maps, air photos, etc. These features will require a minimum of technical expertise on the part of the reviewer - just a basic knowledge and familiarity of the geography of the study area. To ensure accurate determinations, the reviewer must examine detailed topographic maps.

(2) Is there a water source on or adjacent to the development property?

The association of a parcel of land to a water source is one of the most important features to consider, since water played an important part in all settlement and land use decisions made by all Aboriginal and early non-Aboriginal settlers. However, it is important to distinguish between different types of water sources, and the different landforms associated with those water sources. Likewise it will be important to distinguish "natural" waterforms from channelized ditches, artificial lakes or shorelines modified by previous damming activities, which in of themselves would not necessarily determine potential.

- (2a) Is any part of the development property within 300 metres of a primary water source (accessible lakeshores, rivers and large creeks), or the confluence of two or more smaller watercourses?
- (2b) Is the development property within 200 metres of a secondary water source (smaller creeks, intermittent or seasonally wet streams, springs, marshes or swamps)?

And since the occupation of Ontario extends back several thousand years, it is important to be able to recognise past water drainages. So:

- (2c) Is the development property within 300 metres of a relict or ancient primary source of water, such as glacial lake shorelines (as indicated by the presence of raised sand or gravel beach ridges), or relic river channels (as indicated by a visible linear, channelized dip or swale in the topography)?
- (3) Is the development property situated in an area of elevated topography?

Past settlement and land use can be associated with higher ground, defined by surrounding low or level topography. Consequently development property containing eskers, drumlins, sizeable knolls, plateaus next to lowland, or other such topographic features, exhibit archaeological potential.

(4) Is the development property on well-drained, sandy soil?

Past settlement can be associated with sandier, better drained soils. This is particularly true in regions of the province where there are small pockets of sandy soil in an area otherwise characterised by heavy soils or rocky ground.

(5) Is the development property associated with distinctive or unusual land formations?

Certain locales, such as waterfalls, rock outcrops, rock faces, caverns, mounds, etc., often were important to past peoples as special or spiritual places. This significance is often indicated by the presence of burials, structures, offerings, rock paintings or carvings, etc.

C. <u>Historic Cultural Features:</u>

These features refer to historic locales, particularly associated with the 18th and 19th century heritage of Ontario. For the most part these features are not readily observable on maps or other accessible data. As such, determining whether or not one of these features is relevant for a development application requires a compilation of historic information specific to the municipality. This information may be accessed from municipal heritage committees, local historical societies or local histories and atlases, or may need to be compiled directly as part of an archaeological master plan. Until available in an accessible format, many of these features cannot inform the review process, thus limiting the overall accuracy of the resulting potential determinations.

(6) Is the development property associated with a particular resource-specific feature that would have attracted past subsistence or extractive uses?

Some locales provided past peoples access to a scarce resource (e.g. stone or mineral

outcrops, etc.), served to concentrate plant or animal resources (e.g. migratory routes, spawning areas, etc.), or attracted early Euro-Canadian industrial activity (e.g. logging, prospecting, etc.). The presence of such a feature can suggest potential.

(7) Is the development in an area of initial, Non-Aboriginal settlement?

This included places of early military or pioneer settlement, the older core of a town or city, early wharf or dock complexes (which would include the potential for shipwreck sites), pioneer churches and/or early cemeteries, etc. Sometimes these areas contain well-known local, provincial or federal monuments or heritage parks and can be readily identified for review purposes.

(8) Is the development property associated with an early historic transportation route, such as a trail, pass, road, rail, portage route or canal?

Initial Euro-Canadian settlement into a region is often closely linked to early transportation routes. Also, some Aboriginal sites, particularly in the north and on the Canadian Shield, are found along portages and land traverses.

(9) Does the development contain a property designated under the Ontario Heritage Act?

This information is readily available from the municipal heritage advisory committee or clerk's office.

D. Features Specific to the Development Application or Study Area:

These features refer to characteristics specific to the development application or study area which may reverse a potential determination.

(10) Has evidence from documentary sources, local knowledge or Aboriginal oral history, associating the property with historic events, activities or occupations, been brought to the reviewer's attention?

Groups or individuals can bring information, not normally available for review purposes, to the attention of the municipality or review agency for the property in question. This information should be accepted when determining potential. Ministry staff can assist the approval authority or development agency in evaluating the importance and accuracy of the information presented.

(11) Has the development property or study area been subjected to extensive, intensive land disturbances?

Recent land uses can affect potential. Such land disturbances need to be intensive (e.g.

past quarrying, major landscaping, recent built and industrial uses, sewage and infrastructure development, etc.), as opposed to "passive" (e.g. gardening, minor landscaping or grading, etc.). As well, this disturbance would have to be extensive, covering the vast majority of the development property. In an area of high potential even an acre or less of intact land may still contain significant archaeological remains. **NOTE: Agricultural cultivation (ploughing, disking, etc.), is NOT an acceptable form of land disturbance for negating archaeological potential.** 

#### 3.2.2 Archaeological Potential Criteria - Scoring the Results

After considering the above criteria, a determination of archaeological potential can be made. As indicated in the review checklist provided in Appendix B, if the answer to Question 1 or any part of Questions 2 or 10 is yes for <u>any</u> of the property or study area, then it exhibits archaeological potential. If the answer to at least two of Questions 3, 4, 5, 6, 7, 8 or 9 is yes, then the property exhibits archaeological potential. If the answer to Question 1 is an unqualified yes, then the property has low archaeological potential. When potential is confirmed for <u>any</u> of the property, the archaeological assessment requirement will apply to the <u>entire</u> parcel of land (excluding any extensively disturbed areas or specific areas determined to be of low potential by the consultant archaeologist). This is achieved through application of an archaeological condition placed on the approved application.

When determining if criteria of potential apply or not for a parcel of land, a non-specialist must rely on the available data to facilitate the review. Known site databases, topographic features such as water and elevation, local information and possible disturbances all will be known, other data may not. If an answer to some of these secondary features is "not available" the reviewer is to assume these criteria d not apply (i.e., count as "no).

In general, for non-specialists utilising these archaeological potential criteria, you will find that some percentage of the development projects examined will clearly exhibit potential, while others will clearly have low potential. There will always be, however, some percentage that falls into a middle area, where determining potential is difficult, particularly if you lack technical expertise in archaeology or an archaeological master plan to inform determinations. In such cases you will need to contact the appropriate Ministry of Culture staff person to assist in making the final determination of potential.

### 3.2.3 Applying Potential Criteria to Linear Corridor (EA) Projects

Some EA projects consist of developing a linear corridor (e.g. highway right of way, pipeline or hydro corridor, water line, etc.), in effect a narrow width of land extending great distances, and traversing many areas of high and low archaeological potential. As such, a simple yes/no answer to a determination of potential is not adequate for linear corridor study areas. Rather, for these kinds of projects the potential criteria can only be used to map sections of the corridor that have archaeological potential. This mapping would then define all areas along the corridor requiring archaeological assessment.

#### 3.2.4 Determining Archaeological Potential Criteria for Forestry Projects

The Ministry of Natural Resources is responsible for evaluating archaeological potential in areas proposed for operations under the terms of a forest management plan. The evaluation is based on the output of the archaeological potential model developed by MNR and reviewed by this ministry. The approach uses a weighted intersect model where weights and values are ascribed to specific landscape elements. Pre-testing of the model includes reviewing the locations of registered archaeological sites, and other cultural heritage values, to the underlying landscape. Higher values are ascribed to landform types which show stronger associations with registered archaeological sites, or other cultural heritage values within the forest management unit. As part of the development of the archaeological potential mapping for planning, MNR also undertakes to confirm the preliminary potential map by reviewing additional information available through the planning team, local citizen's committee or other local information sources, such as local knowledge if past land use or ground conditions, aerial photography, historic mapping, etc. The final area of archaeological potential mapped for the plan includes only areas of potential that overlap with areas proposed for forest operations (i.e., that will lead to impacts). When forest operations are proposed within areas of archaeological potential that are expected to result in soil disturbance, an archaeological assessment is required.

## 3.3 SMALL SCALE PLANNING ACT DEVELOPMENTS

It is important to recognise that small-scale developments, particularly under the Planning Act, can impact a significant archaeological site. So, while impacts related to smaller development projects are more restricted in extent and will be a less frequent concern, the approval authority will need to recognise when a small scale Planning Act development application should have regard for Policy 2.6.2.

### 3.3.1 Consent Applications

The following, taken from the MMAH Consent Manual, can assist in determining whether or not a particular consent application should be identified as having archaeological potential:

(1) Will the application lead to land impacts, such as soil grading or ground disturbances?

If no, there are no further archaeological concerns for this application.
 If yes, proceed to Question #2.

(2) Is the property presently undisturbed (e.g. woodlots, agricultural field or pasture, etc.)?

If no, there are no further archaeological concerns for this application.
If yes, proceed to Question #3.

(3) Does the property contain a known archaeological site?

- If no, proceed to Question #4.

- If yes, attach an archaeological condition on the application or direct the applicant to consult with Ministry of Culture Archaeology staff prior to approval.

- (4) Will the application lead to impacts greater than one residential building envelope (one building envelope is equivalent to the following: a main building foundation with minor outbuildings & services), either alone or in tandem with several adjacent applications?
- If no, there are no further archaeological concerns for this application.
   If yes, proceed to Question #5.
- (5) Are the subject lands within 100 metres of a major water source (i.e. river, accessible lake shore, large creek or the confluence of two or more water sources)?

- If no, there are no further archaeological concerns for this application.

- If yes, attach an archaeological condition on the application or direct the applicant to consult with Ministry of Culture Archaeology staff prior to approval.

- (6) Will the proposed development directly affect a federal, provincial or municipal historic landmark, monument, site or designated heritage property?
- If no, there are no further archaeological concerns for this application.

- If yes, attach an archaeological condition on the application or direct the applicant to consult with Ministry of Culture Archaeology staff prior to approval.

Infrequently a large consent application, or multiple, consecutive applications will be submitted for review. These are, in effect, a subdivision broken down into continuous consent applications and must be reviewed as a plan of subdivision, utilising the full potential screening criteria.

### 3.3.2 Zoning Amendments

While most zone change applications will not raise a heritage concern, occasionally an application will be put forward for large parcels of land having high archaeological potential. As well, many of these zonings will be in advance of development that will not otherwise be subject to an application review for provincial interests. This is particularly the case with zonings proposed for recreational, industrial or commercial projects on large, undisturbed lands (e.g. golf courses, trailer parks, industrial parks, shopping malls, etc.). In such cases the property must be reviewed for potential like any plan of subdivision, utilising the full screening criteria detailed in this manual. In cases where the zoning does have potential, then an archaeological condition will form part of the implementing document (e.g. site plan, etc.), otherwise archaeological investigations need to be completed prior to an approval of the zoning application.

#### 3.3.3 Pre-Consultation for Planning Act Consents & Zonings

Under Planning Act processes MMAH is the point of contact when seeking a formal provincial response to a development application. However, the Ministry of Culture is the provincial point of contact for all archaeological-specific or technical matters related to heritage conservation. Municipalities are also welcome to encourage development proponents to pre-consult directly with Ministry of Culture staff. Pre-consultation will ensure that the proponent has addressed heritage concerns as early as possible in the review process, thus minimising delays. As well, particularly for municipalities where internal plans review capacity is limited, this should assist in minimising municipal staff workload.

## 3.4 ONCE ARCHAEOLOGICAL POTENTIAL HAS BEEN DETERMINED FOR A DEVELOPMENT PROPERTY

When potential has been identified, the proponent will then need to assess the extent of significant archaeological sites present on the subject property. This is ensured by attaching an archaeological condition to the development application or implementing approval mechanism, or identifying the requirement in the EA, which will require the proponent to have all appropriate studies completed prior to construction proceeding:

## STANDARD ARCHAEOLOGICAL CONDITION

The proponent shall carry out an archaeological assessment of the subject property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No grading or other soil disturbances shall take place on the subject property prior to the approval authority and the Ministry of Culture confirming that all archaeological resource concerns have met Ontario Heritage Act related Standards, and known sites no longer are subject t, or protected by, OHA Section 48(1) alteration prohibitions.

Since these investigative studies will be carried out by an archaeologist licensed under the Ontario Heritage Act, fulfilment of the condition or EA requirement is integrated with licence reporting and technical guideline requirements arising from the Ontario Heritage Act. Following the Ministry of Culture review of the relevant study reports, the licensee, and by copy of letter, the approval authority and proponent are formally notified that heritage concerns have met provincial standards. In this manner, the particular development review process concern for archaeological resource conservation, and MCL's heritage resource concerns arising from the Ontario Heritage Act, are addressed and satisfied in one streamlined and integrated mechanism.

**CAUTION**: While an archaeological report submitted by a licensee will always include recommendations on the extent of archaeology conducted and status for all sites documented, these recommendations cannot be acted on <u>until</u> the Ministry of Culture has completed its review

and cleared the archaeological investigation. Until that time, OHA provisions remain in effect for all archaeological sites identified in the investigation, regardless of the report's recommendations.

#### 3.4.1 Ministry of Culture Support

In the process of reviewing development proposals for archaeological potential, the approval authority, development agency or proponent can consult with ministry staff for technical assistance and advice. There are four areas where on-going support will be provided:

#### (1) Potential Reviews

For those development projects where determination of potential is proving difficult, approval authority or development agency staff can contact the appropriate ministry staff to review the matter, or directly circulate the particular application to the ministry to get a formal statement on potential.

#### (2) On-going Monitoring of Planning Act-Related Potential Determinations

The Ministry of Culture will monitor municipal or provincial approval authority determinations of potential to ensure accuracy of determinations, and to assist in refining and improving the review process. Milestones can be established in order to narrow down the number of files to be monitored, as local capacity is established and improved. It is important to note, however, that the ministry will need to continually monitor applications where archaeological potential has been confirmed, in order to track subsequent archaeological investigations, and integrate license review with plans review needs.

(3) Mediating Disputes Arising From Determinations of Potential

Occasionally, a proponent will dispute a potential determination made for a particular application, or a local heritage group or Aboriginal First Nation will dispute a low potential determination. As well, occasionally a dispute will arise over the level of documentation needed for a significant resource, or over the discovery of human remains. The Ministry of Culture will serve as a mediator of these disputes, by reviewing the file and any additional information brought forward. Where warranted meetings between parties can be held and visual inspections of the property in question can be made.

(4) Proponent Pre-Consultation

Ministry of Culture staff can be consulted directly by development proponents prior to the formal submission of any kind of development project, on all aspects of potential archaeological conservation matters related to the property in question.

# SECTION 4 ARCHAEOLOGICAL SURVEY AND SITE EVALUATION FOR A DEVELOPMENT PROPERTY

## 4.1 ARCHAEOLOGICAL SURVEY

Structures and cultural landscapes of heritage significance can be readily identifiable on a development property. However, as archaeological sites are below ground, they are not obvious features of the landscape and are difficult to recognise. Consequently, if a development property exhibits the potential for the discovery of archaeological remains, an archaeological field assessment will be necessary. This entails hiring a consultant archaeologist - who must be licensed under the Ontario Heritage Act - to survey the full extent of the property in a systematic matter, in order to identify all archaeological remains present. Survey assessment is a relatively straight-forward process, which will usually take a short period of time to complete (depending on field conditions, size of the field crew, number of archaeological sites present on the property, whether the land is ploughed or not, etc.). This work will be completed well in advance of any servicing, grading, topsoil stripping, landscaping, or other land disturbance activities. It is also important to note that **survey can only be completed in warm weather**; the frozen ground and snow cover conditions common between December and March or April across most of Ontario prohibits the ability of an archaeologist to survey land in winter.

The aim of an assessment is for the consultant to compile an inventory and evaluate the significance of all archaeological sites present on the property. There are four components to this process which the consultant will follow to obtain the end result, as detailed in the Ministry of Culture's Standards and Guidelines for the Practice of Consulting Archaeology in Ontario:

Stage 1 - Background Study

The consultant evaluates archaeological sensitivities for a particular property or properties to determine if the potential for finding sites exists or not, as well as to inform the appropriate assessment methodologies to be used during the survey of the property. The archaeologist can review available archaeological and historical data for the area, interview local archaeologists, or even conduct an initial reconnaissance to map past disturbances and other features of interest.

Stage 2 - Field Survey

The consultant will conduct a surface survey of the development property to identify all sites present. The survey must include all lands that are part of the development proposal, with the exception of areas disturbed by previous, fully destructive activities or lands which are permanently wet (e.g. swamps, marshes, etc.), exposed bedrock, or are steeply sloped (greater than 20°). Survey consists either of walking a ploughed field at 5 metre intervals, looking for

artifacts lying on the surface of the ground, or shovel-test pitting unploughable areas (woodlots, old pasture, etc.) at 5 or 10 metre intervals, and screening fill to identify artifacts. Interval spacing for test pits are determined by potential for the lands, as set out in the Standards and Guidelines, and by the consultant's in the field judgment.

In terms of determining how long it will take to survey a particular property, the consultant's Standards and Guidelines defines the minimal methodologies to be used during survey. Given those standards, studies have consistently demonstrated that when walking ploughed fields under ideal field conditions (i.e., well weathered soils with moderate discoveries of artifacts during survey) each crewmember will be capable of covering a maximum of around 25 acres in a day. In ideal test pit conditions (i.e., not traversing heavy undergrowth or woods and limited artifact discoveries), a crewmember will be capable of excavating a maximum of around 90 test pits in a day (100 test pits can cover an acre when using a 5 metre interval, while 100 test pits can cover 4 acres when using a 10 metre survey interval). Proponents can factor these standards of practice into expectations of how long a survey will take for a given parcel of land, and can also assist in the timely completion of the survey by ensuring ahead of time that conditions are ideal (e.g., land ploughed and weathered by the time the crew begins the survey).

Stage 3 - Site Assessment

When an archaeological site is identified, the consultant will need to collect sufficient information about the age, size and artifact frequency of the site to evaluate its significance. This is done by mapping the extent of the artifact scatter or extent of artifact yielding test pits, and excavating a limited number of test units (1 metre in size). The consultant may choose to do this work in tandem with the Stage 2 survey, or subsequent to the Stage 2 work.

Documentation - The Assessment Report

At the conclusion of this work the consultant will generate a report detailing the fieldwork conducted, sites found, and whether or not any of those sites are significant enough to require the mitigation of development impacts. At that point The Ministry of Culture will review the report (which may also entail a follow up inspection of the development property), in order to confirm that the consultant has adhered to provincial standards and licensing requirements, and to advise the proponent what further work will be required, if any, to satisfy the provincial interest in archaeological resource conservation. If insufficient fieldwork or reporting is determined based on the provincial Standards and Guidelines, the consultant will be required to conduct additional investigations or revise the report prior to the ministry concurring with its recommendations.

### 4.1.1 Assessing for Possible Marine Archaeological Impacts

It should be noted that while most undertakings within the development processes described in this primer are land based and will not impact marine archaeological sites, it is also the case that some activities will alter such sites. This can range from pipeline or cable alignments laid across the bed of a lake or river, piling or footing placement for bridges or hydro towers, harbour development, dredging or other kinds of waterbed or shoreline alterations. Such undertakings can alter shipwrecks and other marine structures, dropped cultural remains, or land based remains that, through the passage of time or alterations to water levels (e.g., dams), are now submerged.

When development impacts encompass areas that have the potential for marine heritage, a marine assessment will need to take into account known historical data about potential marine deposits. It may also be necessary to undertake a scan of the water bed to identify possible marine archaeological sites. A visual inspection of such anomalies and other locales of concern will need to be conducted by an archaeologist with a marine archaeological license to confirm significance and avoidance options. Contact the ministry's Marine Archaeologist for further information.

### 4.1.2 Hiring an Archaeological Consultant

Given that costs and delays can occur if the investigations carried out by an archaeological consultant do not meet provincial Standards and Guidelines, the proponent is encouraged to be familiar with those standards when hiring an archaeological consulting firm or individual. However, it is also recognised that the proponent, or agent acting for the proponent, will be limited in terms of understanding of the technical terminology employed and assessment process described in the bids submitted by consultants. The following practices will ensure that accurate bids are received from consultants and that the work proposed will satisfy provincial requirements for the project in question:

- Only seek bids from firms with individuals holding valid Professional Licenses.
- A license is not in itself a guarantee of the quality of the work performed. Therefore, seek bids from several firms or individuals in order to ensure a representative price range is received and to ensure that the details of individual bids are comparable.
- Obtain references. Consultants should be able to provide a list of previous clients and indicate how frequently or if at all they ever had projects delayed due to concerns raised by the ministry.
- The more information the consultant receives, the more detailed and accurate bids will be. Information provided should include a description of the project, size of property, and current field conditions (e.g. ploughed vs. fallow field, extent of major land disturbances, etc.). A detailed map depicting contours, drainage and woodlots, as well as proposed development layout (e.g. building lots, roads, services, parklands, etc.), is helpful.
- It is important to indicate if there is a need for the survey to be completed quickly. If time
  is a concern the consultant can propose to bring in extra crew, although this may increase
  the bid significantly.

- Recognise that not all firms offer the same product, so compare bids to make sure they
  propose similar levels of fieldwork, reporting and hours of work. While items such as
  salaries, report costs, etc. will vary, all bids should indicate that the provincial Standards
  and Guidelines will be met. For example, a bid to survey land should broadly reflect the
  expectations of how much time it physically will take people to survey the property at the
  Standards established for survey methodologies and intervals.
- If one bid is significantly higher or lower than the others, there is likely to be a reason. Because of this variability, one selection strategy often recognised as being most effective in levelling the bid process consists of seeking 3-5 bids, eliminating the high and low bids, and selecting one of the middle range bids. Another method is to select the bid that most closely meets the average price determined from all the bids received. Such practices will often ensure the proponent avoids problems arising from a low bid, or from an excessive bid proposing much more than is necessary.
- Finally, when in doubt the proponent may review the assessment process and proposals
  received with the ministry. While the ministry cannot evaluate the business practices of
  individual consultants, and will not comment on specific dollar figures, staff can review
  with the proponent the typical requirements needed to address archaeological concerns
  for their development project, and point out omissions or other differences between bids
  regarding proposed methodology and levels of reporting.

## 4.2 ARCHAEOLOGICAL SITE SIGNIFICANCE EVALUATIONS

Once all archaeological sites have been identified, an evaluation of their significance is required in order to determine what, if any, mitigation of development impacts is required.

Many archaeological sites identified during assessment, though an important contribution to our understanding of the past, will not be significant enough to warrant further documentation. This may be true for sites occupied very briefly, sites occupied in the recent past, or sites completely mixed up as a result of many differing occupations. As a result, the archaeological consultant investigating the site may recommend that it does not warrant further consideration. In these instances, and where the ministry concurs with the finding, the information that appears in the assessment report is considered sufficient for the purpose of documenting the site.

For other sites the importance of the data they contain, and thus the significance of their contribution to our understanding of the past, will be so great as to warrant steps being taken to protect them, or at least to ensure that the site data is not lost through impacts. Within a development context, this responsibility of ensuring such important resources are not lost falls to the proponent, as the initiator of the development impacts. While every effort will be made to balance the cost of mitigating development impacts with the financial burden this places on the developer, documenting or preserving such important components of Ontario's past is essential,

and will justify the cost and effort required for such work.

An archaeologist will consider a number of key features that can indicate the importance, and thus significance, of a particular site. These features are a reflection of our understanding of Ontario's archaeological record and the archaeologist's evaluation of the physical characteristics of the site in question. These will not include a consideration of development circumstances, such as the nature of the development proposal, work schedules, etc., because these factors can be addressed when determining an appropriate impact mitigation strategy <u>after</u> the site's significance has been confirmed. The key features an archaeologist considers when evaluating significance includes:

- Integrity (e.g. is the site in pristine or near pristine condition; despite past disturbances, can important data still be recovered; etc.?).
- (2) Rarity or Representativeness (e.g. is the site one of a kind, locally, regionally or provincially; is it a good comparison to similar sites from other regions; etc.?).
- (3) Productivity (e.g. does the site have the potential to contain large quantities of artifacts or exceptionally detailed data about what occurred there; etc.?).
- (4) Age (how old is the site?).
- (5) Potential for human remains to be found on the site.
- (6) Geographic of Cultural Association (e.g. does the site have a clear and distinct relationship with the surrounding area or to a particular geographic feature, such as with a unique rock formation, historic transportation corridor, etc.; is the site associated with a distinctive cultural event, ceremony or festival, etc.?).
- (7) Historic Significance (is the site associated with a renowned event, person or community?).
- (8) Community Interest (e.g. is the site important to a particular part of the community; does it represent a significant local event; etc.?).

These features of significance are detailed more fully, and specific technical measurements of significance detailed, in the province's Standards and Guidelines for the Practice of Consulting Archaeology in Ontario.

Significance evaluations made by a consultant will be evaluated during the Ministry of Culture's review of the consultant's report. The ministry will then advise the licensee if the ministry concurs with the consultant's recommendations, as well as indicate what minimal mitigation work will be required to satisfy the provincial interest in conserving the resource.

# SECTION 5 MITIGATING DEVELOPMENT IMPACTS TO ARCHAEOLOGICAL SITES

Where a significant archaeological site has been identified on lands proposed to be developed under the EA or Planning Acts or other land use process, the adverse impacts which will occur to the site must be mitigated. Mitigation may take the form of avoidance & protection (retention or preservation of the resource), or documentation (excavation and recording of the resource). While avoidance allows development to proceed while the site is left intact, documentation effectively "removes" the site, thus allowing development to subsequently proceed in that locale.

## 5.1 MITIGATION THROUGH AVOIDANCE & PROTECTION

There are a number of avoidance and protection options available to mitigate adverse impacts to archaeological resources. Avoidance usually allows development to proceed while avoiding or protecting the area around the resource. The advantage of this method is that it can be an inexpensive form of mitigation in the case of large or complex archaeological sites, while serving to preserve the resource intact. However, long term protection associated with an avoidance strategy must be secured. Long term protection will be based on a binding agreement between the proponent and municipality, Crown, or other permanent owner of the site. This can be done through the use of heritage easement agreements, zoning by-law provisions, restrictive covenants or inhibiting orders placed on title, incorporation in established setbacks, designation, or by other means which ensure the resource will not be destroyed in the future. Proponents will need to work with the Ministry of Culture and the municipality to develop long term protection strategies, and the ministry will need to review the final wording, prior to archaeological conservation concerns being satisfied for the development project.

#### 5.1.1 Archaeological Site Avoidance Options

Avoidance as a mitigation strategy is most clearly defined in Policy 2.6.2 of the Provincial Policy Statement, which states: ... Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site will be permitted. Several options are available to meet this aim, which are also effective under most other land use development processes:

### Incorporation -

This may involve the re-design of the project (e.g., lot layouts, parkland, road alignments, etc.), to incorporate the site into the development scheme. The site must be protected during construction by physically defining a "buffer zone" around it (i.e., minimally 10 metres plus snow fencing or other visible barriers), instructing construction crews to avoid the location, and providing written assurances that the site will not be disturbed

after development. Long term protection provisions also will be required.

### Park/Open Space Dedication -

When a site is located entirely on a parcel of land to be dedicated as parkland, greenspace, left as open space, within a protected easement, alignment or within a formally defined setback or restricted area, avoidance may be possible. However, no landscaping, infilling or grading can be planned for that block of land. The long term or permanent owner must be made aware of the resource, and must agree to long term protection measures (e.g. condition on title, restrictive zoning by-law, etc.)

Archaeological Site Capping -

Site capping is not an objection for archaeological not currently sealed. It is viable in very limited circumstances when a deposit is found already sealed (e.g., in an urban setting underneath fill), and will be left sealed at the conclusion of project work (e.g., a deep trench is filled in). In these circumstances temporary measures need to be taken (e.g., shoring up the exposed face of the sealed deposit), and the proponent will need to confer with Ministry of Culture staff on specific strategies to be employed.

## 5.1.2 Long Term Protection Measures After Archaeological Avoidance

Regardless of which avoidance option is employed, long term protection measures must be a part of the avoidance plan. The preferred method available for Planning Act approval authorities and proponents is a prohibitive zoning by-law. Paragraph 3.3 of subsection 34(1) of the Planning Act states that the council of local municipalities can pass a zoning by law, the intent of which is: ... for prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures on land that is the site of a significant archaeological resource. As such, the municipality can adopt a zoning by law which reiterates this section of the Planning Act. Wording of the zoning by-law could be similar to the following:

### Municipal Zoning By-Law #xxx

No Soil Disturbance or the erection of any structures shall take place on Part x, defined as [locational information], because this property is identified as containing a significant archaeological site.

Additionally, there may be opportunities for tying avoidance of significant archaeological sites to restrictive setbacks, provisions in the subdivider's or development agreement, or placing a restrictive condition or inhibiting order on title. Sample wording for such a condition is offered below. Any such option will require the co-operation and agreement of the local municipality.

No soil disturbances shall take place within [locational information: e.g. xx metres from edge of lot, part x of registered plan xx; Lots x-x of the development plan, etc.] until the archaeological remains within this area have been excavated by a licensed archaeologist, and to the satisfaction of the Ministry of Citizenship,

#### Culture & Recreation and municipal approval authority.

Other, less effective options that should only be utilised when a prohibitive zoning by-law or restrictive condition on title are not viable, include easements placed on the site area, dedication of the property to the municipality or other protective land holder, subdivider's agreement, etc. As well, for Crown development agencies, such Ontario Hydro, bridge authorities, etc., protection agreements and easements can be developed with the ministry to ensure long term protection. Ultimately, the intent is to ensure that a permanent record of the presence of the resource is maintained and is flagged if any development for that location is proposed years or decades later. This ensures that the avoidance strategy developed is not simply delaying destruction and loss of the resource to a later time.

#### 5.2 MITIGATION THROUGH EXCAVATION

A number of removal measures are available to mitigate unavoidable impacts to archaeological resources. Removal usually will consist of excavating all or part of the resource in question by a licensed archaeologist. The intent is to recover the important contextual and artifact data present on the site in advance of development disturbance. Given this, removal is actually a process of documentation, wherein the field excavations convert the resource into transportable data that can be taken away from the area of impact and preserved through analysis, artifact curation and report writing. In this way, the presence of a significant archaeological site will not prohibit development from proceeding, as long as the site's pertinent data are removed through excavation. However, it should be noted that removal through excavation is often a more expensive mitigation option than avoidance and protection, so should be undertaken only when avoidance of development impacts is not feasible. Also, the extent and complexity of the documentation measures required will vary as a result of the type and significance of the specific archaeological resource.

#### 5.2.1 Archaeological Resource Excavation Options

Documentation through removal requires site excavation, which will often be referred to as a Stage 4 excavation by the archaeological consultant. The methods used to excavate a site, and extent of site excavated, will be based on its relative significance and condition. There are three means of mitigating development impacts through excavation:

#### 1) Limited Excavation -

For some sites, a limited excavation may be sufficient. This entails handexcavating one metre square units by shovelling off the topsoil or ploughzone (i.e. top 10-30 cm of soil in the 1 metre unit) and placing the fill through a screen, sifting out and recovering all artifacts present in that fill. The data recovered provide sufficient information to define site size, artifact yield, and confirm cultural and temporal affiliations. Occasionally, limited excavations will yield data demonstrating that the site requires full documentation. In such instances a complete excavation will be required.

#### 2) Complete Excavation -

An archaeological site found during assessment may demonstrate that it is significant enough to warrant a complete excavation. Alternatively, limited excavations of the site will yield data confirming that it requires a complete excavation. In either case, the site can be completely excavated through the continued hand excavation of topsoil units, along with any sub-surface cultural features uncovered (i.e., extending limited excavations outward, or "block" excavations). Alternatively, a full excavation can consist of mechanically stripping the topsoil over a site area, followed by the hand cleaning of the exposed subsoil surface (often referred to as "shovel shining"), then recording and hand excavating all sub-surface cultural features exposed by this stripping and shovel shining. Often, particularly for large or complex sites, a combination of hand excavation and topsoil stripping may be necessary. The determination of a particular excavation strategy required for a specific site will be based on the type of site, its significance, and its current condition (integrity).

#### 3) Monitoring -

Very rarely, impacts will occur in areas that have undergone substantial disturbance, but may still contain significant archaeological deposits sealed by fill (e.g. within urban areas). In areas exhibiting a very high potential for containing deeply buried deposits, on-site monitoring of development-related construction work by a qualified archaeologist may be an appropriate method of documentation. The archaeologist's task is to spot and document any significant deposits encountered during construction-related deep excavations. If deposits are found, the archaeologist must be given sufficient opportunity to examine and record the deposit and its contextual setting. All portions of the deposit to be impacted will need to be documented. Deposits extending beyond impacted areas can be recorded and left sealed. This work must be conducted within appropriate on-site safety regulations.

The determination of a particular excavation methodology for a significant archaeological site will be base don the ministry of Culture Standards and Guidelines for the Practice of Consulting Archaeology in Ontario. Every consideration will be made to balance the need to document the resource before it is destroyed by development impacts, on the one hand, with the impact of the excavation cost on the proponent or development agency, on the other.

Two key caveats should be kept in mind when determining an appropriate excavation strategy: first, excavations, regardless of the method employed, can only occur in warm weather. So the excavation of a site needs to be completed prior to the start of winter. Secondly, undisturbed sites in pristine condition are extremely important and fragile heritage resources. If there is absolutely no way to protect the site, then documentation will always require an intensive, and very expensive, form of hand excavation, consisting of the removal of unit fill by trowel, with careful recording of both vertical and horizontal location for each artifact in the unit.

#### 5.2.2 Excavation Reporting and Care of Collections

After an archaeological site has been removed and documented through excavation, the consultant is required to submit a license report to the ministry. This report will need to describe the excavation methods used, data recorded in the field, and artifacts recovered. While the report is intended to satisfy the proponent's development responsibilities, it also must satisfy the archaeological consultant's license requirements established under the Ontario Heritage Act and provincial Standards and Guidelines. The intent is to ensure that the report will be detailed enough so that any archaeologist reading it can easily understand why the site was excavated in the manner chosen and what potential the site findings may have for further, detailed or comparative research. As such, a discussion of specific excavation methodologies, recording grids and datums, measurements and detailed mapping of cultural features and deposits all need to be included in the report. Likewise, the report will require descriptive and analytical analyses for all major diagnostic artifact categories, descriptive analyses for other artifact categories, as well as temporal and cultural comparative analyses. Background research, maps, photographs, an artifact catalogue and other relevant information are also expected.

In terms of the disposition of any artifacts recovered during excavation, Section 6 of Regulation 881 of the Ontario Heritage Act identifies as a standard term and condition of any archaeological license:

...that the licensee keep in safekeeping all objects of archaeological significance that are found under the authority of the license and all field records that are made in the course of the work authorised by the licensee, except where the objects and records are donated to Her Majesty the Queen in right of Ontario, or are directed to be deposited in a public institution under subsection 66(1) of the Ontario Heritage Act.

As a result, an on-going responsibility for any archaeologist who has conducted a site excavation by license issued under the Ontario Heritage Act is the continual care and maintenance of all artifact collections, materials, field notes and other documentation made during the excavation. This responsibility can only be terminated if the licensee donates all site objects (artifacts, soil samples, etc.) and field records (field notes, maps, recordings, photos and slides, etc.) to the Province. Alternatively, i a public institution (museum, heritage centre, etc.) may accept the ongoing responsibility for caring and maintaining the collections recovered from a site excavation. The Minister will normally accede to such a transfer provided that:

- The receiving institution is indeed public.
- The entire collection, consisting of both archaeological objects <u>and</u> field records, are to be transferred.
- It can be confirmed that the receiving institution has adequate storage facilities for both collections and field records.

- The receiving institution has reasonable researcher access policies and the capacity to accommodate such researchers.
- The receiving institution agrees that it cannot transfer or dispose of the collections and field records without provincial approval.

These provisions need to be confirmed prior the transfer being approved. Please note: it is a violation of the licensee's responsibilities under the Ontario Heritage Act to transfer collections without first receiving Minister's direction. Likewise, as a result of these regulatory provisions, private ownership of archaeological collections made under license is circumvented. As such, it is a violation of the Ontario Heritage Act for a collection made under license to be held by another individual, or transferred by the licensee to any private institution or corporation.

# SECTION 6 CLEARANCES, CONCURRENCES & CONTINGENCIES

The final step in addressing archaeological conservation concerns is the confirmation from the Ministry of Culture that completed archaeological measures have satisfied provincial Standards and Guidelines, and that licensed only alteration restrictions for all identified archaeological sites arising from Ontario Heritage Act section 48(1) can be waived (in the case of sites excavated and removed), or retained (in the case of avoidance and protection). Such a confirmation will be provided following the submission of an assessment report, when no significant archaeological resources have been documented, or following the submission of a mitigation report, once all development impact mitigation measures have been completed. This confirmation will take the form of a copy of the clearance letter sent to the licensee, and will indicate that the copy serves to demonstrate that archaeological requirements have met provincial interests in the conservation of archaeology tied to the development.

In the case of large-scale excavations the submission of a preliminary report can be accepted as an interim submission, for the purpose of issuing a concurrence that all fieldwork has met provincial standards, thus allowing for development clearance. The licensed archaeologist will still need to submit a final report to the Ministry of Culture within normal reporting deadlines.

## 6.1 PARTIAL CLEARANCE OR SIGN-OFF

Occasionally, development schedules and excavation needs may conflict. Consequently, when a significant archaeological site has been found on part of a development property, and impacts to the site are to be mitigated through excavation, the proponent may be able to obtain a partial clearance for areas of the development away from the site. For example, in the case of an aggregate pit permit, some portions of the property may not be scheduled for extraction for several years. If a significant archaeological site is present on a latter stage of the proposed extraction, it may well be preferable to seek a clearance for the earlier phases of the operation. So when Stage 3 work is completed a partial clearance is possible.

The proponent is responsible for ensuring adverse impacts to the site or sites of concern are mitigated prior to obtaining final clearance for the affected portion(s) of the development. This is done through avoidance and protection strategies (see avoidance options outlined in Section 5 of this manual). The proponent is also responsible for ensuring construction crews avoid the area of remaining concern during development, usually by establishing a temporary, physical barrier (e.g. snow-fencing, etc.) around the site, as well as a minimal additional 10 metre buffer beyond the edge of the site. By instructing construction crews to avoid such areas, this will ensure no incidental impacts occur (e.g. from heavy machinery turnarounds or temporary access roads, storage and parking of equipment and machinery, etc.).Until excavation is completed, the sites are also protected through Section 48(1) licensed only alteration provisions of the OHA.

## 6.2 CONTINGENCY PLANNING

Modifications to lot or parkland layouts, changes in servicing requirements, re-alignments, changing access routes, and many other modifications will occasionally create unforeseen impacts to identified archaeological resources or previously unexamined areas of archaeological potential. In such cases the proponent will need to change a mitigation strategy or the timing of that work, or undertake additional assessment. It is also possible that deeply buried archaeological deposits may be encountered during construction. In such instances ministry Archaeology staff should be notified immediately.

#### 6.2.1 Unmarked Burials

Despite every effort of the archaeological consultant, deeply buried deposits can be missed during assessment of a property. This is particularly the case for unmarked burials, which may only be uncovered during construction. While burial practices varied considerably in the past, it is reasonable to state that there exist thousands of unmarked burials across Ontario. As a result, there is always a chance that land disturbance will lead to the discovery of human remains.

As soon as human remains are encountered, either during an archaeological site excavation or during construction or extraction activities, provisions of the Coroner's and Cemeteries Acts are triggered. Once the discovery is determined not to be a crime scene, Cemeteries Act provisions require that no person disturb or order a burial site to be disturbed. The landowner will need to ensure the remains are removed and reinterred into an existing cemetery, or that the location of the discovery is itself registered as a cemetery. When the remains are of Aboriginal peoples, the landowner will need to negotiate with the nearest First Nations community or identified First Nations representative in the process of determining what appropriate actions should be taken.

Ministry Archaeology staff can assist in negotiating a resolution of burial site concerns between the many parties with an interest in the discovery. Generally, either dis-interment and reburial into an existing cemetery, or dis-interment and reburial into a small area of greenspace on the development, registered as a closed cemetery, can commonly satisfy most concerns. However, dealing with human remains often and quite naturally is an emotional issue, and immediate notification of both the Cemeteries Registrar of the Ministry of Government Services and Ministry of Culture can greatly assist in reaching a rapid and mutually acceptable solution for both the landowner and the representatives of the deceased.

## **APPENDIX A:**

## A SUMMARY OF ONTARIO'S ARCHAEOLOGICAL CULTURE HISTORY

#### An Overview of Ontario's Archaeological Record (Southern)

Southern Ontario's archaeological heritage extends back some 12,000 years to the time when humans, following the retreat of glaciers north first inhabited this part of the world. Occupation of the region has continued uninterrupted since that time, with diverse groups inhabiting this region and exploiting the abundance of natural resources found here. Archaeologists divide this occupation into several broad time periods, which reflect changes in ways of life and artifact patterns. Dates provided here are given in years BP (Before Present).

#### Paleo-Indian Time Period (11,000 BP - 10,000 BP)

Southern Ontario was an Arctic-like environment during this period, and the people who lived here followed a seasonally nomadic way of life, living in small groups and travelling wide areas over the course of a year, and hunting big game such as mastodon and caribou. Very few traces are left of this early time period, consisting almost exclusively of the tools and waste by-products associated with a chipped stone technology, one characterised by the use of large spear points with a distinctive "fluting" or groove down their length. Because the environment was very different then, these sites are found associated more with relic water courses and especially older glacial beach ridges.

#### Archaic Time Periods (10,000 - 3,000 BP)

The Archaic is broken down into Early (10,000-8,000 BP), Middle (8,000-5,000 BP), and Late (5,000-3,000 BP) periods. Distinctions between periods are generally made on the basis of changes to projectile point forms and the appearance of other distinctive artifact types. Sites from especially the Early and Middle periods are rare, and it is believed that people during this period lived a broadly similar lifestyle to that seen earlier, albeit based on a changing environmental setting. However, by the Late Archaic there is some evidence for a population increase, more formalised subsistence patterns exploiting a wider range of food sources (i.e. fish and plants), some definition of territorial groups, a much wider and diverse range of artifact types, and the emergence of the use of cemeteries.

Woodland Time Periods (3,000 BP - 300 BP)

The Woodland is also divided into Early (3,000 BP - 2400 BP) Middle (2400 BP - 1200 BP), Late (1200 BP- 650 BP) and Terminal (650 BP - 300 BP) periods. Initially the Woodland is distinguished from earlier Archaic periods by little more than the appearance of clay pottery. However, rapid and successive changes mark this period, as communities appear to get larger and more territorial, develop more sophisticated settlement-subsistence patterns, and reflect long distance trade and exchange networks extending as far away as Mexico. By the Late Woodland Aboriginal communities had developed agricultural subsistence practices which in part lead to the creation of large villages, housing several hundred individuals who lived in communal houses surrounded by fortified palisades. Village sites of over a dozen acres are known from this period. Smaller sites reflecting specialised activities (such as fishing camps or agricultural hamlets) appear, and cemeteries can include burial pits holding dozens or even hundreds of individuals.

The end of the Woodland Period is marked by the arrival of European explorers, missionaries and traders, as evidenced by the appearance of European-manufactured trade goods found on Aboriginal sites. This is also a period marked by increased warfare and epidemics, arising from diseases brought over by the Europeans.

#### Historic Period

Archaeologists tend to refer to the last 300 years or so of Ontario's past as the Historic Period, distinguishing this time from the earlier Prehistoric period. The terms Prehistoric and Historic are, of course, a bit of a misnomer and are not meant to imply that the first 11,500 years or so of Ontario's archaeological record are not part of Ontario's history. Rather, these terms reflect the mindset of archaeologists, who make the distinction because when they study the first 11,500 years or so of Ontario's history is of Ontario's history, they rely exclusively on artifacts and archaeological deposits. To the archaeologist, then, the Historic Period is that brief part of Ontario's history when historical documents - written records - were made, and thus are available to help augment the study of artifacts and archaeological deposits in interpreting the past.

This Historic period can be separated into early (pre-1800) and late (post-1800) components. Early historic archaeological sites consist mostly of Native occupations, along with some European military forts, trader cabins, early pioneer sites, etc. After 1800, southern Ontario was dramatically changed as a result of massive, non-Aboriginal migration (the non-Aboriginal population in southern Ontario increased from about 10,000 in 1800 to over 150,000 by mid century). Given this huge influx of people into southern Ontario, it isn't too surprising that many of the archaeological sites found from this period represent the pioneer cabins and homesteads of primarily European settlers. And finally, the archaeological investigation of sites dating after about 1870 is mostly a study of the residential, commercial and industrial urban growth that occurred in and around the major city centres of southern Ontario.

#### An Overview of Ontario's Archaeological Record (Northern)

While many of the general trends in the archaeological record noted for southern Ontario have similar counterparts when discussing northern Ontario, they occurred at different times and to differing degrees. Also, northern Ontario is a vast region, extending from the northern Great Lakes north to the sub-arctic and west to the beginning of the plains. As such, it is difficult to describe the 9000 years of archaeology for an area as large as northern Ontario in a couple of pages. Nevertheless, there are some *broad over-generalizations* to be made. It must be remembered, however, that very different influences were felt by the peoples living on the shield depending where, in this vast extent of boreal forest, one is discussing. The influences, for example, felt by the peoples living north of the Ottawa and French Rivers were often quite different than those felt by the people living far to the west and bordering close to the plains.

The encroachment of people into northern Ontario is directly tied to the retreat of the continental glacier. Most scholars agree that people first moved into the area on a permanent basis sometime between 10,000 and 9,500 years ago. These incursions represented small bands of hunters and gatherers moving in from the south as the land became clear of ice. In the east, these people are believed to have originated from southern Ontario and the Bruce Peninsula, and then across to Manitoulin Island and the north shore of Lake Huron. In the west, they seem to have entered from the south and the west and have ties to groups in Wisconsin, Minnesota and the high plains.

Archaeologists refer to these early people as **Paleo-Indians**. They moved into a landscape quite different from that seen today. There initially may have been a tundra-like Arctic environment, followed a few centuries later by an open spruce forest. It is believed that one of the more important game species hunted by Paleo-Indians would have been caribou, but other game would undoubtedly have been harvested. Paleo-Indians are believed to have lived in small bands, probably extended families, staying together throughout most of the year and gathering with other groups at specific times of the year for hunting, to conduct religious ceremonies, and to renew community solidarity.

This type of lifestyle probably changed very little over the next 8,000 years or so in the north, although there is evidence of somewhat expanding populations and ever expanding use of the region as the glaciers continued to retreat, and the climate stabilised over time.

Archaeologists tend to classify periods of time by the visible changes in technology that are recognisable in the artifacts and excavated sites occupied at different times. Sometime around 7,000 years ago, there is a visible change in the artifacts that one finds on sites in northern Ontario from the artifacts found on preceding Paleo-Indian sites. Spear points change shape quite dramatically and there are, for the first time, discoveries of artifacts made from grinding and polishing stone, rather than chipping them into the desired shape and form. This period is referred to as the **Archaic**, and may represent the adaptation of people to an increasingly milder climate in the north, and changing varieties of animals and plants available for subsistence. This changed way of life lasted with only minor changes (at least as can be recognised archaeologically) for some 5000 years. Also, it should be remembered that these people - although living in small, scattered bands across the north - were not living in isolation. Evidence of trade with groups further afield is discovered at sites from this period, including the discovery of artifacts made from Lake Superior Copper sources on sites as far east as New York State, as far west as Alberta, and south to the Mississippi river system. The trade routes established during this time would last for thousands of years.

It is undoubtedly along these trade routes that an influence leading to the next major technological change in prehistory first was introduced to the north. This change was the introduction of ceramics (clay vessels) into artifact assemblages, and its first appearance in the region is usually pointed to by archaeologists as the start of the **Woodland** period. Ceramics first appear in the Mississippi and Ohio river systems, and then southern Ontario, some 500 years before they reach northern Ontario. After ceramics had been established across the north, subsequent changes in the method of manufacture, vessel form and decorative styles all help to allow archaeologists to subdivide the Woodland period into an Early, Middle and Late Woodland. And with this distinction, other changes through time are observed. For example, the building of burial mounds begins in selected areas, and there also appears to be a sudden increase in the use of wild rice as a staple food resource. This, in turn, may also have led to an increase in population, but we still can't say what magnitude of increase this consisted of, or how consistent this increase was across the north.

It is during the Late Woodland, in the 17th century AD that European explorers and others first arrive in northern Ontario. This brings written accounts and histories, and the rise of a fur trade and the subsequent European expansion in the north that would have a dramatic effect on Native ways of life.

APPENDIX B:

CHECKLIST FOR NON-SPECIALISTS WHEN DETERMINING THE ARCHAEOLOGICAL POTENTIAL OF A DEVELOPMENT PROPERTY

### ARCHAEOLOGICAL POTENTIAL CHECKLIST FOR NON-SPECIALISTS

	Potential Feature	Yes	No	Not Available	Comment
1	Known Archaeological Site (250 m)				If Yes, Potential Determined.
	*** PH	YSIOGF	RAPHI	C FEATURES ***	
2	Water - Any within 300 metres?				If Yes, what kind of water?
2a	Primary Water Source (300 m) (lakeshore, river, large creek, etc.)				If Yes, Potential Determined.
2b	Secondary Water Source (200 m) (stream, spring, marsh, swamp)				If Yes, Potential Determined.
2c	Ancient Water Source (300 m) (beach ridge, river bed)				If Yes, Potential Determined.
3	Elevated Topography (knolls, drumlins, eskers, plateaus, etc.)				If Yes, and Yes for any of 4-9, Potential Determined.
4	Pockets of Sandy Soil in a clay or rocky area				If Yes, and Yes for any of 3, 5-9, Potential Determined.
5	Unusual Land Formations (mounds, caverns, waterfalls, etc.)				If Yes, and Yes for any of 3-4, 6-9, Potential Determined.
	*** HIST	ORIC CI	ULTUł	RAL FEATURES ***	
6	Extractive Area (for food or scarce resources)				If Yes, and Yes for any of 3-5, 7-9, Potential Determined.
7	Non-Aboriginal Settlement (monuments, cemeteries, etc.)				If Yes, and Yes for any of 3-6, 8-9, Potential Determined.
8	Historic Transportation (road, rail, portage, etc.)				If Yes, and Yes for any of 3-7 or 9, Potential Determined.
9	Designated Property (Refer to LACAC or Clerk's office)				If Yes, and Yes for any of 3-8, Potential Determined.
	*** APPLICA	ATION S	PECI	FIC INFORMATION *	**
10	Local Knowledge				If Yes, Potential Determined
11	Recent Disturbance (confirmed extensive and intensive)				If Yes, No Potential
If Ye	es to any of 1, 2a-2c, or 10: es to two or more of 3-9: equalified Yes to 11, or no to 1-10:		Archa	eological Potential eological Potential Archaeological Pote	is Confirmed

Please refer to Section 3 of this Primer for full explanation of the categories listed. These criteria are not intended for use by professional archaeologists, who are expected to apply expertise and in-depth knowledge of regional archaeology to determine survey strategies.

Time Period	Cultural Label	Time	Cultural Label	Time Period	
LATE HISTORIC	Urban (commercial/industrial) Rural (farming) Pioneer (land surrenders & reserves)	100 years ago	Pioneer (land surrenders & reserves)	HISTORIC	
		250 years ago	Fur Trade		
EARLY HISTORIC	French & Algonquian & British Iroquoian	ago	Wanikan	LATI	
	Inter-Lakes Western Basin Late Wolf - Neutral, Huron,	500 years ago	Blackduck	EWOC	
LATE	St. Lawrence <u>Middle</u> Springwells		Selkirk	LATE WOODLAND	
LATE WOODLAND	- Middleport, Uren <u>Early</u> Younge	1,000	Eastern Algonkians	Ð	
)LAND	- Glen Meyer, Pickering	years ago	Laurel	EARLY/ MIDDLE WOODLANE	
	Transitional Riviere - Princess Point			LY/ DLE	
MIDDLE	Point Penninsula			0	
WOOD LAND	Couture Saugeen	2,000 years ago			
EARLY WOOD LAND	Meadowood	3,000	Shield Archaic	AR	
	Small Point Tradition	years ago		CH	
LATE ARCHAIC	Broad Point Tradition	4,000 years ago	Old Copper Culture	ARCHAIC	
	Narrow Point Tradition Laurentian	, cars ago			
MIDDLE ARCHAIC	Stemmed	7,000 years ago			
	Stellings				
	Bifurcate		Plano	PALEO-	
EARLY ARCHAIC	Corner-Notched	9,000 years ago		INDIAN	
Side Notched			ļ		
PALEO- INDIAN	Late	12,000 years ago			

## Appendix G

## **Archaeology Conditions and Comments**

This document provides templates for commenting on development applications under the <u>Planning Act</u>, construction projects subject to the <u>Environmental Assessment Act</u>, and any other Municipal initiatives that may affect archaeological sites or areas of archaeological potential, to ensure consistency. When necessary, templates may be altered to address the specific situation of a project or archaeological site. For example, when surface disturbance is evident but archaeological potential remains, such as soilhorizons capped by fill or asphalt, Stage 4 monitoring of mechanical soil excavation by a licensed archaeologist can take the place of a standard Stage 2-3 archaeology.

When a subject property contains a registered or reported archaeological site, the archaeology **must** be addressed under the <u>Ontario Heritage Act</u> prior to any soil disturbance activities permitted under other legislation, such as the <u>Building Code Act</u>. Alteration to an archaeological site by any individual or company other than a licensed archaeologist contravenes Section 48(d) of the <u>Ontario Heritage Act</u>, and offenders subject to fines and/or imprisonment.

## **Archaeological Potential**

Archaeological potential is determined using 10 criteria set by the Province and applied by the City that are closely associated with the Native and EuroCanadian occupation of Hamilton. Areas have archaeological potential when they meet one or more of the criteria outlined below, which means that there is potential on the property for the presence of Native and/or EuroCanadian archaeological sites.

The 10 criteria are broken down into three primary and seven secondary categories. If a given property meets one (or more) of the primary criteria, this identifies the property as having archaeological potential. If none of the primary criteria are met, but the property meets two (or more) of the secondary criteria, this also defines the property as having archaeological potential. If a property meets any combination of primary and secondary criteria, it likewise has archaeological potential.

Hierarchy	Category	#	Criterion	Minimum Requirements	Potential identified
Primary	Archaeology	A1	Within 250 m of known archaeological resources	One	Yes
Primary	Water	B2a	300 m to primary	One	Yes
Primary		B2b	200 m to secondary	One	Yes
Primary		B2c	300 m to prehistoric	One	Yes
Secondary	Physiography	B3	Topography	Two	Yes with one other
Secondary		B4	Sandy Soil	Two	Yes with one other
Secondary		B5	Distinct landforms	Two	Yes with one other
Secondary	Historic	C6	Resource area	Two	Yes with one other
Secondary		C7	Pioneer settlement	Two	Yes with one other
Secondary		C8	Transportation route	Two	Yes with one other
Secondary		C9	Designated property	Two	Yes with one other
Primary	Site specific	D10	Local knowledge	One	Yes
Control		D10	Total soil disturbance	One	None

If the property is identified as having archaeological potential, but the soil has been both intensively (displaced to a substantial depth) and extensively (across the entire property) disturbed in the past, it may not retain any further archaeological potential. Examples of this are when all of the topsoil or plough zone and the top of the subsoil have been mechanically removed, the property has been extensively built on, or landscaping activities have substantially relocated surface soils across the site. In such cases, there remains little archaeological potential, despite the criteria otherwise met, and an archaeological assessment is not needed. A standard caution should always be provided, warning of deeply buried archaeological remains and/or burials on the property, as required by the Province.

Soil disturbance only exempts a property from archaeological assessment if it is both intensive and extensive: agricultural activities are not an intensive disturbance. If soil disturbance is intensive but not extensive, those portions of the property not intensively disturbed require archaeological assessment. The use of aerial photography can aid in the evaluation of soil integrity, and whether an archaeological assessment is required. The historic capping of soil with fill is not necessarily an intensive disturbance: comments may be edited to require the examination of soil borehole data to determine whether buried soil horizons are present: if so, alternative approaches such as the monitoring the removal of fill and uncovering of the buried soil horizon may be used to address the archaeological potential of the property.

Planning Act	5
Formal Consultation Draft Plan of Subdivision	9 13
Draft Plan of Condominium	17 23
Rezoning or Zoning Amendment Preliminary Site Plan/Site Plan/Minor Site Plan	23 27
Committee of Adjustment	31
Consent to Sever	31
Zoning Variance	37
Subsequent Applications under the Planning Act	41
Transfer of Archaeological Sites to the City for Conserv Place	ation in 47
Archaeological Site Management Plan Requirements	51
Building Code Act	53
Niagara Escarpment Planning and Development Act	55
Internal Comments	59
Environmental Assessment Act 6	63

# Planning Act

The fundamental Provincial interest in the documentation and conservation of archaeology under planning is expressed in Section 2(d) of the <u>Planning Act</u> and Section 2.6.2 of the <u>Provincial Policy Statement</u>,

Section 2(d) of the Planning Act states that:

"The Minister, the council of a municipality, a local board, a planning board and the Municipal Board, in carrying out their responsibilities under this Act, shall have regard to, among other matters, matters of provincial interest such as the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest."

Section 2.6.2 of the Provincial Policy Statement stipulates that:

"Development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.

These policies apply to all properties with archaeological potential that are subject to applications under the <u>Planning Act</u>.

## Application Review

Larger development projects typically require multiple approvals under the <u>Planning Act</u>, and so should be reviewed for prior archaeological comments and conditions, and archaeological assessments carried out. When this is the case, comments for a current application should reflect the previous comments, summarize any archaeological work under way or completed, and state whether the Provincial and Municipal interests in archaeology have been met. Templates for these scenarios are in the **Subsequent Applications** section.

If there are no prior archaeological comments for a <u>Planning Act</u> application, the archaeological potential of the subject property is evaluated. The statement of archaeological potential for all applications should use the following format, identifying the criteria that establish the archaeological potential of the property:

"The subject property meets NN of the ten criteria used by the City of Hamilton and

Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- 2) Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act."

If the subject property has archaeological potential, the means and degree to which the Provincial and Municipal interests in archaeology can be applied are reliant on the nature of the application. The remainder of this *Planning Act* portion of Appendix F comprises templates that have been drafted for each type of application that the City of Hamilton administers under the *Planning Act*. These templates have been written to maintain consistency and compliance in comments on the following applications:

- o Official Plan Amendment
- o Formal Consultation
- Draft Plan of Subdivision
- o Draft Plan of Condominium
- o Zoning By-Law
- Site Plan (including Preliminary and Minor Site Plan)
- o Committee of Adjustment (consents and variances)
- Subsequent Application(s)

Reviewing and commenting on applications involves three steps:

- 1. Making a potential call for the property with the GIS mapping of archaeological potential criteria;
- 2. Statement of the relevant policies; and,
- 3. Providing comments (initialled and dated) that direct the proponent on actions they are to undertake to address the archaeological interests of the Province and Municipality.

The range of comments that can be made include conditions, acknowledgments, and cautions, and are applied as follows:

*Conditions* are placed on an application, when permitted under the *Planning Act*, that proposes development affecting an area of archaeological potential.

Acknowledgement notes are usually used for applications where the municipality is not permitted under legislation to place a condition that requires an archaeological assessment be conducted (Site Plans and Minor Variances), or that the scale or scope of the project are relatively minor and not sufficient to require a condition. The acknowledgement recommends that the proponent undertake the work in good faith, as best practice.

*Cautionary notes* are used when a site has been determined to have archaeological potential, but the site has been subject to sufficient soil disturbance that exempts the application from requiring an archaeological assessment. The City advises due diligence in these scenarios, providing detailed response protocol and contact information in the event that deeply buried archaeological materials and/or human remains are discovered during development activities.

# Formal Consultation:

Prior to submitting an application under the *Planning Act*, the proponent may **Formally Consult**. This is an opportunity for relevant City of Hamilton staff to review concept and scope submissions and advise the proponent of what future development applications and studies will need to be undertaken. For comments, the requirement and potential calls are made using two tables, informing the proponent that an archaeological assessment shall be required for development approvals, and the criteria that apply. If the Formal Consultation is for Site Plan on a property with archaeological potential, and no additional *Planning Act* approvals are required, and archaeology has not yet been addressed, an archaeological assessment can be made a pre-submission requirement for site plan, and should be stated. Planners making comments in support of archaeological assessments should attend formal consultation meetings.

# Potential call (✓ the archaeology box):

Community Planning	(^)	Natural Heritage	(√)
Concept Plan		Aggregate Resource Assessment	
Draft ROPA, OPA, and By-laws		Aggregate/Mineral Resource Analysis	
Land Use/Market Needs Assessment		Air Quality Study	
Planning Justification Report		Channel Design and Geofluvial Assessment	
Site Plan and Building Elevations		Cut and Fill Analysis	
Market Impact Study		Demarcation of top of bank, limit of wetland, limit of natural hazard, limit of Environmentally Significant Area (ESA), or limit of Conservation Authority regulated area	
Land Use Compatibility Study		Environmental Impact Statement (EIS)	
Noise Impact Study		Erosion Hazard Assessment	
		Fish Habitat Assessment	
<u>Archaeology</u>		Floodline Delineation Study/Hydraulic Analysis	
		General Vegetation Inventory	
Archaeological Assessment	✓	Karst Assessment/Karst Contingency Plan	
		Linkage Assessment	
Built Heritage		Meander Belt Assessment	
		Restoration Plan	
Cultural Heritage Impact Assessment		Shoreline Assessment Study/Coastal Engineers Study	
Cultural Heritage Assesment		Slope Stability Study and Report	
Cultural Heritage Landscapes		Species Habitat Assessment	
		Tree Management Plan/Study	
Cultural Heritage Impact Assessment		Tree Protection Plan	
Cultural Heritage Assesment		Contaminant Management Plan	
<u>Urban Design</u>		Environmental Site Assessment and/or Record of Site Condition (RSC)	
Urban Design Report		Erosion and Sediment Control Plan	
- Guidelines		Hydrogeological Study	
- Brief		Grading Plan	
Landscape Plan		Master Drainage Plan	
Sun/Shadow Study		Stormwater Management Report/Plan and/or update to an existing Stormwater Management Plan	
Vibration Study		Soils/Geotechnical Study	
Wind Study		Sub-watershed Plan and/or update to an existing Sub- watershed Plan	
Pedestrian Route and Sidewalk Analysis			

#### 'X' the applicable criteria:

Х	archaeological sites	distinctive or unusual landforms
	water	subsistence resources
	historic events/activities/occupations	EuroCanadian settlement
	elevated topography	historic transportation routes
	soil	Within a property designated under the OHA

Brief supplementary comments may be provided to explain the rationale for retaining an interest in the archaeology despite mitigating circumstances. For example, where there remains possibility of deeply buried remains under an otherwise disturbed surface (such as a parking lot or fill over a former lakeshore or watercourse).

"Despite extant surface conditions, the subject property retains archaeological potential for deeply buried remains (rationale for potential). This may be addressed through soil borehole data, to determine whether buried soil horizons are present or absent, or by the monitoring of mechanical excavations by an Ontario-licensed archaeologist."

# **Draft Plan of Subdivision:**

If the subject property has archaeological potential, the Province and City of Hamilton both stipulate that an archaeological assessment is a pre-submission requirement. The following potential call is added to the comments along with the text for the standard condition:

# Potential call text:

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- 2) Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

## Text for the standard comment and condition:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. Schedule 1 of <u>Ontario Planning Act</u> *Regulation* 544/06 requires that, to be considered complete, applications under subsection 51(17) for draft Plans of Subdivision require documentation on:

23. Whether the subject land contains any areas of archaeological potential.

24. If the plan would permit development on land that contains known archaeological resources or areas of archaeological potential,

(a) an archaeological assessment prepared by a person who holds a licence that is e
 (b) a conservation plan for any archaeological resources identified in the

Heritage staff notes that the standard subdivision agreement clause 3.4 a) ii) respecting archaeological assessment and grading authorization applies. All archaeological reports shall be submitted to the City of Hamilton for approval concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392).

If this application is approved without the above documentation, Heritage staff require that the following condition be attached as follows:

"That the proponent shall carry out an archaeological assessment of the entire property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and conservation requirements. All archaeological reports shall be submitted to the City of Hamilton for approval concurrent with their submission to the Ministry of Tourism, Culture and Sport.

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(*Note:* Standard subdivision agreement clause 3.4 a) states: "The Proponent agrees that no preliminary grading shall occur on the Land until such time as the Proponent has: ii) carried out and completed an archaeological assessment of the Land and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found, where an archaeological assessment is a condition of final release of the Draft Plan for registration. No demolition or soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Citizenship, Culture and Recreation confirming that all archaeological resource concerns have met licensing and resource conservation requirements.)."

#### Archaeological site preservation as condition of Draft Plan approval

As outlined in the Appendix E, the preferred alternative for mitigation of archaeological sites is conservation *in situ* (rather than excavation). While this can be achieved as a condition through any application under the *Planning Act*, it is usually implemented under Draft Plan of Subdivision, in co-ordination with the Ministry of Tourism, Culture and Sport. Management of any archaeological site

- That Block(s) NN ("named" archaeological site and Borden #) and NN ("named" archaeological site and Borden #) be conveyed to the City;
- That the owner provide the sum of \$NN,NNN to be placed in a City fund for the perpetual care and maintenance of Blocks NN and NN (approximately \$15,000 Hectare).
- 3) That the owner prepare at their expense an archaeological site management plan for Blocks NN and NN prepared by a licensed archaeologist from the City of Hamilton's roster and approved by the City, detailing but not limited to:

i) The intended long-term use of the Blocks NN and NN;

ii) Any means of long-term physical definition and protection of the

#### sites;

- iii) Surface treatment (e.g. ground-cover);
- iv) Neighbourhood and Councilor engagement; and,
- v) First Nations engagement, and the nature of this involvement.
- 4) That, prior to registration of the final plan of subdivision, the Owner agree to the inclusion in the Subdivision Agreement of the following warning clause: "Purchasers are advised that despite the fact the City has ownership of the archeological sites, maintenance of those sites will be at a minimum, and the sites will remain in a natural state, which may become of concern, occasionally interfering with some activities of the abutting land owners."

The Ministry of Tourism, Culture and Sport will have additional requirements with respect to protection of the site during construction, including minimum buffers (typically 10-20 metres) beyond the site boundary as confirmed by Stage 3 site-specific assessment, the installation of protective fencing (e.g. snow fencing) during construction, and documentation undertaking to avoid disturbance from the proponent).

The Ministry will also require long—term protection of the archaeological site through a zoning change, easement or designation. To date, the City of Hamilton has used site-specific zoning amendments to the City's zoning By-Law 05-200, as detailed in the zoning section of this appendix.

# **Draft Plan of Condominium:**

Typically this requirement has been addressed through draft plans of subdivision and/or rezoning as these applications typically precede as plans of condominium. However, in the event that only a plan of Condominium is required prior to the submission of a site plan, the following is applied:

# Potential call text:

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
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ii) Any means of long-term physical definition and protection of the

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- iv) Neighbourhood and Councilor engagement; and,
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- 4) That, prior to registration of the final plan of subdivision, the Owner agree to the inclusion in the Subdivision Agreement of the following warning clause: "Purchasers are advised that despite the fact the City has ownership of the archeological sites, maintenance of those sites will be at a minimum, and the sites will remain in a natural state, which may become of concern, occasionally interfering with some activities of the abutting land owners."

The Ministry of Tourism, Culture and Sport will have additional requirements with respect to protection of the site during construction, including minimum buffers (typically 10-20 metres) beyond the site boundary as confirmed by Stage 3 site-specific assessment, the installation of protective fencing (e.g. snow fencing) during construction, and documentation undertaking to avoid disturbance from the proponent).

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- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

# Text for the standard condition:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this application is approved, Heritage staff require that the following condition be attached as follows:

"That the proponent shall carry out an archaeological assessment of the entire property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and conservation requirements. All archaeological reports shall be submitted to the City of Hamilton for approval concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)"

# **Zoning Change or Amendment:**

When an application is made for a zoning amendment and the subject property has archaeological potential, a condition may be included as a recommendation in the staff report requiring the proponent to submit an archaeological assessment prior to the draft zoning By-law being enacted by Council. If expedient approval of the zoning By-law is required, hold zoning for archaeology may be placed on some or all of the subject property. If a portion of the subject property is to remain unassessed with the intent of being permanently vacant and unmaintained lands, or encompasses a significant archaeological site that is to be conserved in situ, a prohibitive site specific By-law or prohibitive archaeology zoning can be applied.

The following potential call is added to the comments along with the standard text for holding of the staff report hold, 'H' hold zoning, prohibitive site specific zoning, or prohibitive archaeology zoning:

## Potential call text:

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

## Standard text for the staff report hold or alternative 'H' hold zoning:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. Heritage Staff require that the following condition be included in the staff report:

"That the draft By-law, attached as Appendix "X" to Report PED<sup>1</sup>1XXX, which has been prepared in a form satisfactory to the City Solicitor, not be enacted by City Council, until an archaeological assessment has been completed to the satisfaction of the Director of Planning and the Ministry of Tourism, Culture and Sport."

An alternative for consideration is that an 'H' holding zoning be applied to all or parts of the subject lands, prohibiting the development of the subject properties until such time that the proponent conducts an archaeological assessment of the subject properties and mitigates, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. If 'H' holding zoning is applied, the proponent shall be advised that no demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject properties prior to the removal of the holding provisions on the archaeology and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and resource conservation requirements. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392).

# Prohibitive Zoning for Archaeology

As specified in Section 35(1) 3.3 of the *Planning Act*, municipalities may pass zoning bylaws to prohibit the use of or construction on any lands that are the site of a significant archaeological resource. To date, the City of Hamilton has used site-specific zoning where appropriate.

# Standard text for prohibitive site-specific zoning:

The intent of the draft By-law is to conserve the following archaeological sites on the subject property *in situ*:

(selective sites identified by Borden numbers and Blocks within the subject property).

Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. Heritage Staff require that the following site-specific zoning be applied to the subject lands within the subject property as "P5" with Special Exception -<u>NN</u>, whereby Special Exception <u>NN</u> is as follows:

N. That Schedule "C" of By-law No. 05-200 is amended by adding an additional special exception as follows:

"NN. Within the lands zoned Conservation/Hazard (P5, NN) Zone, identified on Map NNNN of Schedule "X" and described as (the subject property), the following special provisions shall apply:

a) No person shall erect, or use any land, building, or structure, in whole or in part, within a Conservation/Hazard Land (P5) Zone for any purpose other than that listed in Section (b) below;

b) Permitted Use - Archaeological Conservation which, for the purpose of this By-law, shall mean the preservation of an archaeological resource or resources in place."

# Proposed text for prohibitive archaeology zoning:

As part of the implementation of the City of Hamilton Archaeology Management Plan, the following category of Open Space and Park zoning is proposed.

The intent of the draft By-law is to conserve archaeological sites *in situ*, and zone identified areas as Archaeological Conservation (P6) Zone:

# 7.6 ARCHAEOLOGICAL CONSERVATION (P6) ZONE

No person shall erect, or use any building or structure in whole or in part, or use any land in whole or in part for any purpose, within an Archaeological Conservation (P6) Zone.

# 7.6.1 PERMITTED USES

Permitted Use - Archaeological Conservation which, for the purpose of this By-law, shall mean the preservation of an archaeological resource or resources in place."

**Archaeological Conservation** Shall mean the preservation of an archaeological resource or resources in place.

# Site Plan, Preliminary Site Plan, and Minor Site Plan Applications:

As site plans are often preceded by other applications under the <u>Planning Act</u>, archaeology has most likely been addressed prior to submission of a site plan. In this case, re-stating previous comments is sufficient, along with any referral to any Municipal and Provincial sign-off for archaeology.

When archaeology has not been previously addressed and the subject property has archaeological potential, the relevant potential criteria are stated, and the standard comment is an acknowledgement note: current interpretation of the <u>Planning Act</u> does not allow placement of an archaeology condition on approval on the application. If the subject property is of significant archaeological interest, where it can be clearly demonstrated that a sizable area has high archaeological archaeological potential and-or significant First Nations interests may be affected, with management consent a condition can be placed on the approval. Alternatively, an archaeological assessment may be made a pre-submission requirement for the site-plan application – this can be raised during the Formal Consultation, where appropriate.

## Potential call text:

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

#### Text for the standard acknowledgement note:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this site plan is approved, heritage staff requires that an acknowledgement be added to the Site Plan as follows:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this site plan is approved, heritage staff requires that an acknowledgement be added to the Site Plan as follows:

"Acknowledgement: The subject property has been determined to be an area of archaeological potential. It is reasonable to expect that archaeological resources may be encountered during any demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances and the proponent is advised to conduct an archaeological assessment prior to such impacts in order to address these concerns and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. Mitigation, by an Ontario-licensed archaeologist, may include the monitoring of any mechanical excavation arising from this project. If archaeological resources are identified on-site, further Stage 3 Site-specific Assessment and Stage 4 Mitigation of Development Impacts may be required as determined by the Ontario Ministry of Tourism, Culture and Sport. All archaeological reports shall be submitted to the City of Hamilton for approval concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

# Text for the standard caution regarding deeply buried archaeological materials and/or human remains:

Cautionary notes are to be used when a subject property has archaeological potential, but the site has been subject to intensive and extensive modern soil disturbances. Because there may be deeply buried archaeological materials and/or human remains, the following comment is used:

Notwithstanding current surface conditions, these criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this site plan is approved, heritage staff requires that a written caution be added to the Site Plan as per the following:

"Caution: Notwithstanding current surface conditions, the property has been determined to be an area of archaeological potential. Although an archaeological assessment is not required by the City of Hamilton, the proponent is cautioned that during development activities, should deeply buried archaeological materials be found on the property the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

#### Text for the standard condition:

A condition may only be placed on a site plan approval in extenuating circumstances, when the property has not already been subject to archaeological assessment and is of significant archaeological potential or size.

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this site plan application is approved, Heritage Staff require that the following condition be attached as follows:

"**Condition:** The proponent shall carry out an archaeological assessment of the entire property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and conservation requirements. All archaeological reports shall be submitted to the City of Hamilton for approval concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological remains be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

# **Committee of Adjustment Decisions:**

# Consent to Sever:

In general, consents comprise small-scale subdivision or assembly of property, and may be related to new construction, transferring lands to adjoining parcels (boundary adjustments), creating rights-of-way, or land dedications to a government body or organization. The archaeological potential is assessed, with comments made according to the implications of the consents approval on the subject properties with respect to soil disturbance, at present or in future. Consent may be the only <u>Planning Act</u> approval required, and so placement of a condition on the approval is often warranted. It is important to track whether the recommendations made in the comments were applied by the Committee of Adjustment, and respond accordingly as recommendations for conditions of approval may be converted to acknowledgement notes by the Committee without staff consultation. For this reason, when comments recommending an archaeological condition are made, staff should be present at the Committee of Adjustment hearing if questions are raised on the matter.

# Potential call text:

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

Placing a condition of approval on a consent application is the most common practice. As mentioned previously, many consent applications seek to convey one or more portions of a subject property in preparation for future construction. If substantial soil disturbance is likely and the subject property has archaeological potential, a condition can be applied to the subject property, the portion to be conveyed, or the portion to be retained, depending on the scope of impact, and the following is used:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this severance is granted, Heritage Staff require that the Committee of Adjustment attach the following condition to the application:

"That the proponent shall carry out an archaeological assessment of the entire/(portion of) the property (to be retained/conveyed) and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning confirming that all archaeological resource concerns have met conservation requirements. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

## Text for the standard acknowledgement note:

Placing an acknowledgement note on a consent application is appropriate where minimal soil disturbance and or change in land use is implied by the approval decision. The City of Hamilton advises the proponent that best practice is to conduct an archaeological assessment.

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this severance is granted, the City does not require an archaeological assessment, but the proponent must be advised in writing by the Committee of Adjustment as follows:

"The subject property has been determined to be an area of archaeological potential. It is reasonable to expect that archaeological resources may be encountered during any demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances and the proponent is advised to conduct an archaeological assessment prior to such impacts in order to address these concerns and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. Mitigation, by an Ontario-licensed archaeologist, may include the monitoring of any mechanical excavation arising from this project. If archaeological resources are identified on-site, further Stage 3 Site-specific Assessment and Stage 4 Mitigation of Development Impacts may be required as determined by the Ontario Ministry of Tourism, Culture and Sport (MTCS). All archaeological reports shall be submitted to the City of Hamilton for review concurrent with their submission to MTCS.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

## Text for the standard caution:

Cautionary notes are to be used when a subject property has archaeological potential, but the site has been subject to intensive and extensive modern soil disturbances. Because there may be deeply buried archaeological materials and/or human remains, the following comment is used:

Notwithstanding current surface conditions, these criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this severance is granted, the City does not require an archaeological assessment, but the proponent must be advised in writing by the Committee of Adjustment as follows:

"Notwithstanding current surface conditions, the property has been determined to be an area of archaeological potential. Although an archaeological assessment is not required by the City of Hamilton, the proponent is cautioned that during development activities, should deeply buried archaeological materials be found on the property the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392). "

## Advisory Note:

When the scope of a consent application is relatively minor, but the subject property has significant archaeological potential, contains confirmed archaeological resources, and-or future <u>Planning Act</u> or <u>Building Code Act</u> applications may have substantial impacts, and advisory comment puts the proponent on notice that an archaeological assessment will be required for any subsequent applications.

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application, which would normally require an archaeological assessment. This application is centred around an adjustment of property boundaries and will not result in significant soil disturbance. If this severance is granted the City does not require an archaeological assessment, but retains the authority to require one for any future applications on the subject property under the Planning Act, and Heritage Staff require that the Committee of Adjustment attach the following note to the application:

"Prior to any further approvals under the Planning Act or any construction requiring a building permit issued by the City of Hamilton, the property owner shall carry out an archaeological assessment of the entire development property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and conservation requirements. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

The subject lands are considered to be of archeological potential, and should deeply buried archaeological remains be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (519.675.7742). In the event that human remains are encountered during construction, the applicant/landowner should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Government Services (416.326.8392)."

#### Scoped assessment text

Where the extent of soil disturbance arising from the consent application is small in relation to the property size, and archaeological assessment of the entire property may be prohibitive to the property owner, at the discretion of the planner the scope of archaeological assessment required may be limited to the footprint of the proposed impact area, with the following condition.

"That the proponent shall carry out an archaeological assessment of that portion of the property subject to soil disturbance arising from this application, including new structures, foundation, driveways, any associated landscape alterations or soil disturbance through staging, stockpiling and temporary access, in addition to any areas impacted by the installation of services, such as water and wastewater, electricity, pipelines, easements and ground-source heat pumps. The proponent shall mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning confirming that all archaeological resource concerns have met conservation requirements. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport."

# Zoning Variance:

A variance allows minor changes to the provisions of a zoning by-law to permit existing conditions or accommodate future construction. The Municipality may not impose archaeology conditions on minor variances, and is limited to providing advice to the proponent, excepting when an identified archaeological site will be impacted.

## Potential call text:

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

#### Text for the standard acknowledgement note:

When a subject property has archaeolgoical potential, the City can only recommend that an archaeological assessment be conducted for the subject property, and advise the proponent of best practice as follows:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this variance is granted, the City does not require an archaeological assessment, but the proponent must be advised in writing by the Committee of Adjustment as follows:

"The subject property has been determined to be an area of archaeological potential. It is reasonable to expect that archaeological resources may be encountered during any demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances and the proponent is advised to conduct an archaeological assessment prior to such impacts in order to address these concerns and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. Mitigation, by an Ontario-licensed archaeologist, may include the monitoring of any mechanical excavation arising from this project. If archaeological resources are identified on-site, further Stage 3 Site-specific Assessment and Stage 4 Mitigation of Development Impacts may be required as determined by the Ontario Ministry of Tourism, Culture and Sport. All archaeological reports shall be submitted to the City of Hamilton for approval concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

# Text for the standard caution:

Cautionary notes are to be used when a subject property has archaeological potential, but the site has been subject to intensive and extensive modern soil disturbances. Because there may be deeply buried archaeological materials and/or human remains, the following comment is used:

Notwithstanding current surface conditions, these criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application. If this variance is granted, the City does not require an archaeological assessment, but the proponent must be advised in writing by the Committee of Adjustment as follows:

"Notwithstanding current surface conditions, the property has been determined to be an area of archaeological potential. Although an archaeological assessment is not required by the City of Hamilton, the proponent is cautioned that during development activities, should deeply buried archaeological materials be found on the property the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

## Text for Recommendation of Denial:

Occasionally, when significant archaeological potential or the presence of a confirmed site is a concern, Staff may recommend refusal or tabling of the variance in order to allow for an assessment to be conducted. Unlike severance applications, The City of Hamilton cannot require an archaeological assessment to be conducted on site, and must therefore apply alternative measures. The following statement is an example of what can be applied to such occurrences:

These criteria define the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* apply to the subject application.

The subject property, property address, encompasses an identified archaeological site, and Staff opinion is that archaeological resources will be disturbed by persons other than a licensed archaeologist.

This activity would be in direct contravention of the **Ontario Heritage Act**, and hence subject to potential penalties under Part VII of the **Act**.

Staff recommends denial of the application, or that the proponent table the application until such a time as archaeological concerns have been addressed and signed-off by the City of Hamilton and the Ministry of Tourism, Culture and Sport.

#### Advisory Note:

When the scope of a variance application is relatively minor, but the subject property has significant archaeological potential, contains confirmed archaeological resources, and-or future *Planning Act* or *Building Code Act* applications may have substantial impacts, an advisory comment puts the proponent on notice that an archaeological assessment will be required for any subsequent applications.

If this variance is granted, an advisory note should be attached to the approval as follows:

"That prior to any further approvals under the *Planning Act* or any construction requiring a building permit issued by the City of Hamilton, the property owner shall carry out an archaeological assessment of the entire development property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and conservation requirements. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

The subject lands are considered to be of archaeological potential, and should deeply buried archaeological remains be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (519.675.7742). In the event that human remains are encountered during construction, the applicant/landowner should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Government Services (416.326.8392)."

## Subsequent Applications under the Planning Act:

When commenting on development applications which have received previous archaeological comments through prior <u>Planning Act</u> approvals, the potential call and original comment is repeated verbatim, followed by an amended comment reflecting the status of the archaeology carried out to date.

#### Re-Statement of the Potential Call

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

#### Acknowledgment of Previous Comments

The following comment is used when the proponent has submitted additional applications under the <u>Planning Act</u>, but has not completed the archaeological work required by Staff for a previous application. Accordingly, the potential call is re-stated, the application number of the previous application is listed, and the prior comments are quoted and followed by an updated comment:

On month day, year, as part of Draft Plan of Subdivision APP#; Draft Plan of Condominium APP#; Official Plan Amendment APP#; Zoning Amendment APP#; Site Plan Application APP#; Severance Application APP#; and Minor Variance Application APP#, Heritage Staff made the following comments regarding the above noted applications:

"Restatement of previous application comments verbatim"

(continued on next page)

The criteria referenced in the previous comments determined that the lands were of archaeological potential. Therefore, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* still apply to the subject application. Staff required that the proponent submit an archaeological assessment report to address the archaeological potential on site, but the proponent has yet to submit any work to the City of Hamilton or the Ministry for review. Accordingly, Staff maintains its previous comments, and requires the following:

"That the proponent shall carry out an archaeological assessment of the entire property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and conservation requirements. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

The following comment is applied when the proponent has submitted additional development applications under the <u>Planning Act</u>, and has initiated the archaeological work required by Staff in previous applications. The potential call is re-stated, the application number of the previous application is listed, and the prior comments are quoted and followed by an updated comment on the status of the work:

On month day, year, as part of Draft Plan of Subdivision APP#; Draft Plan of Condominium APP#; Official Plan Amendment APP#; Zoning Amendment APP#; Site Plan Application APP#; Severance Application APP#; and Minor Variance Application APP#, Heritage Staff made the following comments regarding the above noted application:

"Restatement of previous comments of subject property verbatim"

The criteria referenced in the previous comments determined that the lands were of archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* still apply to the subject application. A (Stage 1-2-3-4) archaeological (project/report) has been (initiated/submitted to the Ministry of Tourism, Culture and Sport), but the Provincial interest has yet to be signed off by the Ministry.

The following comment is applied when the proponent has submitted additional development applications under the <u>Planning Act</u>, completed the initial stages of archaeological work required by Staff in previous applications, further work is recommended in the report to address outstanding archaeological interests, and the Ministry and/or the City of Hamilton concur with the recommendation. The potential call is re-stated, the application number of the previous application is listed, and the prior comments are quoted and followed by an updated comment on additional work required:

On month day, year, as part of Draft Plan of Subdivision APP#; Draft Plan of Condominium APP#; Official Plan Amendment APP#; Zoning Amendment APP#; Site Plan Application APP#; Severance Application APP#; and Minor Variance Application APP#, Heritage Staff made the following comments regarding the above noted application:

"Restatement of previous comments of subject property verbatim"

The criteria referenced in the previous comments determined that the lands were of archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* still apply to the subject application. A (Stage 1-2-3-4) archaeological report (PIF#) has been submitted to the Ministry of Tourism, Culture and Sport and City of Hamilton, but the Provincial interest has yet to be signed off by the Ministry. The consultant recommended that further archaeological work be conducted to address the archaeological potential of / materials and/or remains identified on the subject property. On review, City of Hamilton staff and the Ministry concur with this recommendation, and require that the applicant conduct a Stage 2-3-4 archaeological assessment prior to providing archaeological sign-off for the subject property.

## Acknowledgement of Work Completion and Ministry Sign-off without Staff Sign-off

The following comment is applied when the proponent has submitted additional development applications under the <u>Planning Act</u>, completed the archaeological work required by Staff in previous applications, and the Ministry has received and signed-off the Provincial interest in archaeology, recommending that the condition be removed from the application. On review and determination by Municipal Staff that the work is unsatisfactory, Staff can require that the proponent conduct additional work to address any further archaeological potential or resources overlooked by both the consultant and Ministry. Accordingly, the potential call is re-stated, the application number of the previous application is listed, and the prior comments are quoted, followed by the

amended comments of the work completed, date of Ministry Sign-off, and further work that will be required by City of Hamilton prior to removal of the Municipal sign-off.

On month day, year, as part of Draft Plan of Subdivision APP#; Draft Plan of Condominium APP#; Official Plan Amendment APP#; Zoning Amendment APP#; Site Plan Application APP#; Severance Application APP#; and Minor Variance Application APP#, municipal heritage planning staff made the following comments regarding the above noted application:

#### "Restatement of previous comments of subject property verbatim"

The criteria referenced in the previous comments determined that the lands were of archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* still apply to the subject application. A (Stage 1-2-3-4) archaeological report (PIF#) has been submitted to the Ministry of Tourism, Culture and Sport, and the Provincial interest was signed off in a letter dated Month Day, Year by the Ministry. The consultant recommended that no further archaeological work is required on site, and that the study area be considered free of further archaeological concerns. However, municipal heritage planning staff do not concur with the consultant's recommendation(s), and requires that the proponent complete a further Stage 2-3-4 archaeological assessment in order to address the Municipal interest in archaeology for the subject property.

#### Acknowledgement of Work Completion and Staff Sign-off without Ministry Signoff

This comment is to be used rarely, only when necessary to expedite a planning approval in extenuating circumstances and a timely review of the work by the Province is not forthcoming: it is recommended only for Stage 1-2 archaeological assessments when no resources have been identified. Within this context, the following comment is applied when the proponent has submitted additional development applications under the <u>Planning Act</u>, completed the archaeological work required by Staff in previous applications, the City of Hamilton has received the archaeological assessment and has determined that the lands be cleared of any archaeological potential, removing the condition from the application, but Ministry Sign-off has not been received. The potential call is re-stated, the application number of the previous application are listed, and the prior comments are quoted and followed by Municipal sign-off for the subject property:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* still apply to the subject application. A Stage (1-2-3-4) archaeological report (PIF#) has been submitted to the City of Hamilton and Ministry of Tourism, Culture and Sport. The report has yet to be received by the Ministry for compliance with licensing requirements, but has been reviewed by a municipal heritage planner. As the approval authority, municipal heritage planning staff do not/concur with the recommendations made in the report/recommend peer a review of the recommendations made, and the municipal interest in archaeology has not/been met.

#### Acknowledgement of Work Completion and Ministry Sign-off with Staff Sign-off

The below comment is applied when the proponent has submitted additional development applications under the <u>Planning Act</u>, and the proponent has completed all archaeological work required by Staff in previous applications. In this case, both the City of Hamilton and the Ministry of Cultural has signed off on the archaeological potential of the site, no longer requiring any further work. Accordingly, the potential call is re-stated, the application number of the previous application is listed, followed by amended comments on the work completed and the dates of Ministry sign-off.

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 (d) of the <u>Planning Act</u> and Section 2.6.2 of the *Provincial Policy Statement* still apply to the subject application. A Stage (1-2-3-4) archaeological report (PIF#) was submitted to the Ministry of Tourism, Culture and Sport, and the Province accepted the report for compliance with licensing requirement in a letter dated Month Day, Year. Municipal Staff concur with the recommendations made in the report, and no longer has an interest in the subject property with respect to archaeology.

# Transfer of Archaeological Sites to the City for Conservation in Place

The Provincial interest in archaeology can be addressed through mitigation of sites by their long-term or permanent conservation in place. The Ministry has specific requirements for this approach, and while details may vary somewhat between different site and project types, the strategy of site conservation typically identifies two main components:

- Measures taken to protect sites before and during construction; and
- Measures taken to protect sites after construction.

Conditions that the Ministry requires for the conservation of site in place:

1) a 10 to 20 metre buffer zone to be established around each archaeological site, and incorporated into Block "ZZ";

2) The incorporation of each archaeological site within a defined and dedicated Block within a registered plan;

3) The protection of each Block through restrictive covenants incorporating Ministry-specified text;

4) Provision of a notice of intent to transfer of title each Blocks to a third party public body, and acknowledgement by that third party of these intentions;

5) The protection of each Block through prohibitive zoning incorporating Ministry-specified text;

6) The installation of temporary fencing to protect each site during construction activities; and,

7) Documentation from the proponent undertaking to avoid any disturbance of each Block and the archaeological site thereon, prior to receiving sign-off of the Provincial interest.

Typically, the usual circumstance in which a proponent would undertake to transfer property containing an archaeological site to the City or other public body, such as a Conservation authority, would be as part of a large-scale land development project like a

Draft Plan of Subdivision. Below are examples of the various conditions that the City of Hamilton would place on such a Draft Plan (and related Zoning amendment) when such a land transfer is taking place: the prorated transfer fee was determined in 2009, and is subject to revision. Such a land transfer or dedication to conserve archaeological sites can also take place under different <u>Planning Act</u> provisions, the <u>Environmental Assessment Act</u>, and other legislation.

Zoning of each Block for archaeology refers to Zoning By-law 05-200, as of 2012:

That Schedule "C" of By-law No. 05-200 is amended by adding an additional special exception as follows:

"23. Within the lands zoned Conservation/Hazard (P5, 23) Zone, identified on Map # of Schedule "A" and described as Street Address, the following special provisions shall apply:

a) No person shall erect, or use any land, building, or structure, in whole or in part, within a Conservation/Hazard Land (P5) Zone for any purpose other than that listed in Section (b) below;

b) Permitted Use - Archaeological Conservation which, for the purpose of this By-law, shall mean the preservation of an archaeological resource or resources in place."

The following are conditions for Draft Plan Approvals, prior to grading or other soil disturbance activities:

NN. That, prior to registration of the final plan of subdivision, Block "ZZ" (site name Archaeological site Borden #) (add as required) be conveyed to the City.

**NN**. That, prior to registration of the draft plan of subdivision, the Owner provide the sum of \$10,000 per hectare to be placed in a City fund for the perpetual care and maintenance of Block "ZZ", to the satisfaction of the Director of Planning.

**NN**. That, prior to registration of the final plan of subdivision, the Owner prepare, at their expense, an archaeological site management plan for Block "ZZ"", prepared by a licensed archaeologist from the City of Hamilton's roster of consulting archaeologists, to the satisfaction of the Director of Planning detailing, but not limited to:

i) The intended long-term use of the Block "ZZ";

ii) Any means of long-term physical definition and protection of the site;

iii) Surface treatment (e.g. ground-cover);

iv) Neighbourhood and Councillor engagement; and,

v) First Nations engagement, and the nature of this involvement.

**NN**. That, prior to registration of the final plan of subdivision, the Owner agrees to the inclusion in the Subdivision Agreement of the following warning clause: "Purchasers are advised that despite the fact the City has ownership of the archeological site, maintenance of the site will be at a minimum, and the site will remain in a natural state, which may become of concern, occasionally interfering with some activities of the abutting land owners."

## Archaeological Site Management Plan Requirements

An Archaeological Site Management Plan is required to ensure the long-term protection of any significant archaeological site that is being administered by the City of Hamilton. The intent of a Site Management Plan is to ensure that the monitoring, maintenance and protection of a significant archaeological site is integrated within the Property Management plan, and not overlooked. A Site Management Plan may be part of a stand-alone Stage 4 (Mitigation of Development Impacts) report, a supplementary addendum to a Stage 4 report, or incorporated within into a multi-stage report. All Archaeological Site Management Plans must be based on Stage 3: Site Specific Assessment fieldwork and reporting, to accurately evaluate site significance, nature and physical extent.

#### **Property Transfers**

An Archaeological Site Management Plan must be provided when a third-party is transferring lands encompassing an archaeological site to the City of Hamilton, where the purpose of this transfer is long-term conservation of the archaeological site in place. Typically, this is when a development proponent is transferring an archaeological site to the City as a means of mitigating through preservation in place instead of excavation.

#### Parks and Museums

The City owns properties, such as a museums and parks, that encompass and identified archaeological site. A Site Management Plan may be required owing to the cultural sensitivity of the site, ongoing or future work on the property that may affect the site, or external agreements on management of the property. In this context, a Site Management Plan is used to identify the nature and extent of archaeological resources present on a property, what activities on the property will warrant further archaeological investigations, and what routine activities on the property may be carried out that will not impact the archaeological site. The plan may also identify specific methods of conservation in place, such as capping, that will require detailed methodology, mapping and monitoring.

#### **Deferred Mitigation through Excavation**

The City owns properties that are slated for future construction or other impacts and contain an identified archaeological site, but the future impacts are not scheduled for the near future (one to two years): the intent is to excavate the archaeological site, but not immediately. Here the role of an Archaeological Site Management Plan is to protect the

site from disturbance prior to excavation, and ensure that the site is excavated prior to the planned construction or other impacts.

#### Archaeological Site Management Plan Scope

- The intent and span of the Archaeological Site Management Plan is stated;
- The significance, nature and physical extent of the archaeological site is identified and mapped;
- Known culturally sensitive areas within the archaeological site will be identified;
- The physical state of the site will be stabilized to prevent damage incurred by erosion, and protected from harm arising out of informal use or formal use, such as pathways or agriculture;
- Maintenance activities on the property will be scoped to prevent damage to the archaeological site;
- Relevant Nations will be engaged to aid in its management when the archaeological site represents a Native occupation;
- The neighbouring community may be invited to participate in the monitoring and protection of the archaeological site.

## **Building Code Act**

Unlike the *Planning Act*, applications under the *Building Code Act* are not normally subject to review for compliance with the *Ontario Heritage Act*. However, where a building permit application is sought for property on which an archaeological site has already been identified, Section 48(d) of the *Ontario Heritage Act* applies. This section stipulates that the alteration of an identified archaeological site by anyone other than a licensed archaeologist is illegal.

The applicant may not be aware that the subject property contains an identified archaeological site, and should be so advised. Staff may not knowingly recommend approval of a building permit application that will result in un-licensed disturbance of an archaeological site.

The subject property (address) encompasses an identified archaeological site and municipal heritage planning staff advise that the proposed activities will result in the disturbance of archaeological resources by persons other than a licensed archaeologist.

Such activity would be in direct contravention of the **Ontario Heritage Act**, and hence subject to potential penalties under Part VII of the **Act**.

Staff recommends denial of the application, or that the proponent table the application until such a time as archaeological concerns have been addressed and signed-off by the City of Hamilton and the Ministry of Tourism, Culture and Sport.

If the location and extent of the archaeological site can be confirmed by a licensed archaeologist, and it is determined that the archaeological site will either be untouched by permitting the construction or mitigated prior to construction, then the building permit can be approved, as per the scoped approval of the building permit below.

"That the proponent carry out an archaeological assessment of that portion of the property subject to soil disturbance arising from this application, including new structures, foundation, driveways, any associated landscape alterations or soil disturbance through staging, stockpiling and temporary access, in addition to any areas impacted by the installation of services, such as water and wastewater, electricity, pipelines, easements and ground-source heat pumps. The proponent shall mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Tourism, Culture and Sport confirming that all archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport."

## Niagara Escarpment Planning and Development Act

## Niagara Escarpment Commission applications:

The Niagara Escarpment Commission (NEC) provides some circulation for comment to the City of Hamilton. Until the new OP for the amalgamated City of Hamilton (2001) is implemented and the previous OPs are superseded, these will be used to address these specific areas. For the former Town of Dundas, the standard condition shall be applied without reference to the legacy OPs, until the new OP for Hamilton is implemented and this section is reviewed. The NEC preamble is to be used for all comments.

For the former Town of Dundas, the standard condition shall be applied without reference to the legacy OPs, until the new OP for Hamilton is implemented and this section is reviewed. Accordingly, when commenting on NEC application, the potential call must first be stated, followed by the standard NEC preamble, former City/Township/Region preamble, and concluded with the appropriate comment.

#### Potential call text:

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

#### Standard NEC Preamble:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2.12(1) of the Niagara Escarpment Plan states that "care should be taken to discover unknown and to preserve known archaeological sites and areas where such sites might reasonably exist.

#### Urban Area NEC Preamble:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Part 1.7 of the *Niagara Escarpment Plan* (Urban Area) states that development proposals should be compatible with and provide for the protection or restoration of historic features or areas, archaeological sites and structures of architectural significance in accordance with Part 2.12. The objective of this policy is to inventory, interpret, evaluate, maintain and conserve the cultural heritage features of the *Niagara Escarpment Plan* Area. Existing heritage features, areas and properties are to be retained and reused.

#### Former Regional, City, Town and and Township:

#### Region of Hamilton-Wentworth Preamble:

Section 9.1 of the Official Plan for the Regional Municipality of Hamilton-Wentworth states that the Region will "Consider protection and preservation of Regionally significant historical and culture resources, including recognized archaeological sites, in the review of proposals for development and re-development. Where possible, these attributes will be incorporated into the overall design in a manner which minimizes impacts and encourages maintenance and protection."

#### Ancaster Preamble:

Section 2.5.1 of the former Town of Ancaster Official Plan identifies the goal of conserving the heritage of the Town, with one of the objectives (2.5.2.i) "to identify sites of architectural, historic or archaeological value."

The subject property falls within the former Town of Ancaster Escarpment Protection Area. Section 5.3.8.i states that within the *Niagara Escarpment Plan* Area "Care shall be taken to preserve known archaeological sites (especially native burial sites) or areas where such sites may reasonably be expected to exist."

Flamborough Preamble:

Section E.2.1 of the former Town of Flamborough Official Plan states that "Council shall encourage the conservation and restoration of heritage features in the Town, which may include archaeological sites, buildings, structures and streetscapes of historical and

#### Glanbrook Preamble:

Section A.10.1 of the former Town of Glanbrook Official Plan states that Council shall "...encourage the preservation, conservation and rehabilitation of buildings, structures and/or lands of architectural, historical and/or archaeological value..."

#### Hamilton Preamble:

Section 6.1 of the former City of Hamilton Official Plan states that "*it is the intent of Council to encourage the preservation, maintenance, reconstruction, restoration, and management of property that is considered to have historic, architectural, archaeological or aesthetic value.*"

#### Stoney Creek Preamble:

Section 5.1.1 of the former City of Stoney Creek Official Plan identifies the goal of preserving resources of historic and architectural merit, where one of the policies (5.2.1) reads "Council shall consider historic and cultural resources, including recognized archaeological sites in the review of any proposal for development and redevelopment."

#### Text for the standard condition

If this application is approved, the NEC must attach a condition to the approval as follows:

"That the proponent shall carry out an archaeological assessment of those areas subject to this application, including new structures, associated driveway and any associated landscape alterations or soil disturbance, in addition to any areas impacted by the installation of services, such as water, electricity, septic beds or ground-source heat pumps. The proponent shall mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances should take place on the subject property prior to the approval of the Director of Planning, the Niagara Escarpment Commission, and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and resource conservation requirements. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

#### Text for the standard advice:

If this application is approved, the City does not require an archaeological assessment, but the NEC must advise the proponent in writing that:

"The subject property has been determined to be an area of archaeological potential. It is reasonable to expect that archaeological resources may be encountered during any demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbance, in addition to any areas impacted by the installation of services, such as water, electricity and ground-source heat pumps, and the proponent is advised to conduct an archaeological assessment prior to such impacts in order to address these concerns and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. Mitigation, by an Ontario-licensed archaeologist, may include the monitoring of any mechanical excavation arising from this project. If archaeological resources are identified on-site, further Stage 3 Site-specific Assessment and Stage 4 Mitigation of Development Impacts may be required as determined by the Ontario Ministry of Tourism, Culture and Sport. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

#### Text for the standard caution

Cautionary notes are to be used when a subject property has archaeological potential, but the site has been subject to intensive and extensive modern soil disturbances. Because there may be deeply buried archaeological materials and/or human remains, the following comment is used:

Notwithstanding current surface conditions, these criteria/this criterion define/s the property as having archaeological potential. The City does not require an archaeological assessment to be undertaken for the subject property. However, the NEC is requested to provide the following written caution to the proponent as part of any approval of this application:

(continued on next page)

## **Internal Comments**

The City of Hamilton may circulate for comment on a variety of matters including the sale of surplus properties, school properties, rights-of-way closures and Council Initiatives, among others. Heritage Staff is given the opportunity to comment on these proposals or projects, and make recommendations as to whether archaeological assessments should be conducted.

#### Potential call text:

 The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

 Within 250 metres of known archaeological sites;
 Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
 Local knowledge associates areas with historic events/activities/occupations;
 In an area of elevated topography;
 In an area of sandy soil in areas of clay or stone;
 In the vicinity of distinctive or unusual landforms;
 Near source areas for subsistence resources;
 In areas of pioneer EuroCanadian settlement;
 Along historic transportation routes; and
 Within a property designated under the Ontario Heritage Act.

## Rights-of-Way Closures and Surplus Properties:

#### Text for the standard acknowledgement note:

These criteria/this criterion define/s the property as having archaeological potential. Municipal heritage planning staff requires that Real Estate/Public Works/City staff inform any prospective buyers of the subject property in writing of the following:

#### (continued on next page)

"The subject property has been determined to be an area of archaeological potential. It is reasonable to expect that archaeological resources may be encountered during any demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances and any proponent is advised to conduct an archaeological assessment prior to such impacts in order to address these concerns and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. Mitigation, by an Ontario-licensed archaeologist, may include the monitoring of any mechanical excavation arising from this project. If archaeological resources are identified on-site, further Stage 3 Site-specific Assessment and Stage 4 Mitigation may be required as determined by the Ontario Ministry of Tourism, Culture and Sport. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

## Offers for City to Purchase:

#### Text for the standard acknowledgement note:

These criteria/this criterion define/s the property as having archaeological potential. If Real Estate staff determines that the property is appropriate for acquisition, any Department/Division of the City responsible for the property be should be advised of the following:

"The subject property has been determined to be an area of archaeological potential. It is reasonable to expect that archaeological resources may be encountered during any demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances, and an archaeological assessment should be conducted prior to such impacts in order to address these concerns and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. Mitigation, by an Ontario-licensed archaeologist, may include the monitoring of any mechanical excavation arising from this project. If archaeological resources are identified onsite, further Stage 3 Site-specific Assessment and Stage 4 Mitigation of Development Impacts may be required as determined by the Ontario Ministry of Tourism, Culture and Sport. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

(The Seller) should also be advised of the property's archaeological potential so that, in the event that the City does not purchase the property, any other prospective owners can also be advised as above.

## **Council Initiatives:**

#### Text for the standard alternatives comment:

"In response to future applications for site plan, variances, severances, re-zoning, or plans of condominium and subdivision, Heritage Planning Staff shall inform the proponent of the archaeological potential of the site, and the means by which the City's interest in the archaeology of the subject property is to be addressed through either:

 A standard condition that the proponent shall carry out an archaeological assessment of the entire property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances shall take place on the subject property prior to the approval of the Director of Planning and the Ministry of Tourism, Culture and Sport confirming that all archaeological resource concerns have met licensing and conservation requirements. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport. Should deeply buried archaeological remains be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143); or,

#### (continued on next page)

2) An acknowledgement that it is reasonable to expect that archaeological resources may be encountered during any demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbance. The proponent is advised to conduct an archaeological assessment prior to such impacts in order to address these concerns and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. Mitigation, by an Ontario-licensed archaeologist, may include the monitoring of any mechanical excavation arising from this project. If archaeological resources are identified on-site, further Stage 3 Site-specific Assessment and Stage 4 Mitigation of Development Impacts may be required as determined by the Ontario Ministry of Tourism, Culture and Sport. All archaeological reports shall be submitted to the City of Hamilton concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

## **Environmental Assessment Act**

The *Environmental Assessment Act*, Municipal Class EA and other class EAs identify archaeology as an element of the environment to be addressed under their regulatory framework. These normally have a separate review process, whereby the archaeological potential of the lands they may impact is evaluated, and addressed through the project phasing.

## Environmental Assessment Act Circulation:

When *Environmental Assessment Act* projects are circulated, their archaeological potential is evaluated, and where appropriate a generic summary of archaeological potential made.

#### Potential call text

The subject property meets NN of the ten criteria used by the City of Hamilton and Ministry of Tourism, Culture and Sport for determining archaeological potential:

- 1) Within 250 metres of known archaeological sites;
- Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody;
- 3) Local knowledge associates areas with historic events/activities/occupations;
- 4) In an area of elevated topography;
- 5) In an area of sandy soil in areas of clay or stone;
- 6) In the vicinity of distinctive or unusual landforms;
- 7) Near source areas for subsistence resources;
- 8) In areas of pioneer EuroCanadian settlement;
- 9) Along historic transportation routes; and
- 10) Within a property designated under the Ontario Heritage Act.

#### Text for the standard acknowledgement note:

These criteria/this criterion define/s the property as having archaeological potential. Accordingly, Section 2 of the Environmental Assessment Act states that "the purpose of this Act is the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment". Section 1.(1) of the Act defines the "environment" as including (c) the social, economic and cultural conditions that influence the life of humans or a community", (d) "any building, structure, machine or other device or thing made by humans", and (f) "any part or combination of the foregoing and the interrelationships between any two or more of them".

The subject property has been determined to be an area of archaeological potential. It is reasonable to expect that archaeological resources may be encountered during any demolition, grading, construction activities, landscaping, staging, stockpiling or other soil disturbances and an archaeological assessment shall be conducted prior to such impacts in order to address these concerns and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. Mitigation, by an Ontario-licensed archaeological resources are identified on-site, further Stage 3 Site-specific Assessment and Stage 4 Mitigation of Development Impacts may be required as determined by the Ontario Ministry of Tourism, Culture and Sport. All archaeological reports shall be submitted to the City of Hamilton for approval concurrent with their submission to the Ministry of Tourism, Culture and Sport.

Should deeply buried archaeological materials be found on the property during any of the above development activities the Ontario Ministry of Tourism, Culture and Sport (MTCS) should be notified immediately (416.314.7143). In the event that human remains are encountered during construction, the proponent should immediately contact both MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Business and Consumer Services (416.326.8392)."

### Appendix H

## **First Nations Consultation and Engagement Protocol**

#### Purpose:

This protocol serves as a guide to assist the City of Hamilton where municipal actions may affect the interests of First Nations. This measure arises from the requirements to :

- Consult with First Nations on <u>Environmental Assessment Act</u> matters as directed by the Ministry of the Environment;
- Engage with First Nations with respect to land use matters as addressed in the <u>Planning Act</u> as directed by the Ministry of Municipal Affairs and Housing; and,
- Engage with First Nations regarding consulting archaeology as directed by the Ministry of Tourism and Culture.

This document is provided to maintain consistency in systematic consultations and engagement with First Nations across the entire City of Hamilton, in the City's varied roles as landowner, proponent, approval authority, and trustee.

#### **Principles:**

As professional planners and engineers, City of Hamilton staff responsible for land use planning must fulfill their professional codes of practice and ethics, and meet the City's mission, vision, values and goals. The Ontario Professional Planners Institute (OPPI) requires, among other criteria, that members must consider the long-term and crossjurisdictional implications of their work, value the cultural environment and its diversity, balance the needs of geographic communities and communities of interest, and articulate the needs of individuals and groups whose interests have not been represented. Professional engineers in Ontario must act with fidelity to public needs, and a devotion to high ideals of personal honour and professional integrity (from the Professional Engineers of Ontario and the Ontario Society of Professional Engineers).

Further, Municipal employees or consultants contracted to conduct work on behalf of the City of Hamilton are expected to do so with the highest level of integrity and ethics. The City of Hamilton's mission statement includes commitments to: demonstrate leadership through initiatives that exceed expectations; innovate through broad-thinking and long-term strategies; uphold only the highest ethics; and, to communicate clearly and effectively.

In short, there are significant corporate and professional commitments to maintain a high level of ethics through the practice of municipal planning City-wide. In doing so the City recognizes its broader interests and obligations than simply those addressing minimum requirements for land-use management overall across its jurisdiction.

**Why?** First Nations and Natives hold a broad and strong interest in all land-use matters, as they may retain some rights, such as access for traditional hunting and fishing, to some or all portions of the City of Hamilton. The <u>Planning Act</u> specifies that plans of subdivision and applications within one kilometer of a First Nation require circulation to that Nation for comment. The <u>Environmental Assessment Act</u> specifically requires "consultation" with First Nations. Additional special concerns, regardless of scale, include Native archaeological sites and burials or cemeteries.

The Supreme Court of Canada has made it clear – Crown actions must respect the rights of First Nations. In respecting those rights, the Crown must act honourably. To act honourably means to "consult". The Crown and First Nations must determine together how the Crown action and First Nations rights can be respected.

The Federal and Provincial governments are the Crown, with whom First Nations hold treaties and rights. Municipalities are provincial government creations. The Province is looking to Municipalities to help fulfill its legal consultation obligations. Some First Nations groups view municipalities as the Crown. Others do not and will require signed statements that discussions held with Municipalities do not constitute "consultation." This protocol offers guidance on discussions between Municipalities and First Nations in the absence of implementation details from the Federal and Provincial levels.

"Consultation" must be meaningful: that is, a genuine attempt to discern any First Nation interest that may be affected by a Crown action and to accommodate that interest if practicable. The extent of "consultation" will vary depending on the Crown action and the First Nation interest involved.

Who? The First Nations to be included in circulation of planning documents are:

- Six Nations (the Iroquois Confederacy), represented by:
  - Six Nations of the Grand River Territory First Nation (elected council); and,
  - Haudenosaunee (traditional Longhouse council).
     (both to be included in consultations unless directed otherwise by both);

- Mississaugas, represented by the Mississaugas of the New Credit First Nation; and,
- Huron-Wendat, represented by the Wendake First Nation.

From the City of Hamilton, participants include staff and management dealing with larger land-use reviews and projects as outlined below. For the sake of corporate continuity, while contracted consultants can be involved in consultations with First Nations, emphasis should be placed on the continuity of corporate contacts.

**When?** First Nations should be involved early as possible in the planning process, in order to provide an opportunity for their interests to be accommodated by design changes in proposed plans. First Nations do not have a large complement of staff to review and participate in such matters. As a result, involving First Nations as early as possible in the process will ensure their timely engagement to reduce the potential for impacts on municipal and legislative schedules.

The City may engage in parallel discussions with First Nations when other levels of government such as the Province are concurrently "consulting" with First Nations, as occurred with Hamilton's Official Plan. Engagement of First Nations governments should be initiated prior to stakeholder consultations.

What? "Consultation" provides First Nations governments with opportunities to engage in the City's planning process. The Supreme Court of Canada has stated that circulation alone is not adequate: genuine efforts towards accommodation must have been made. While First Nation feedback will largely define the nature of the engagement or "consultation", based on dialogue to date, First Nations are largely interested in largerscale plans and undertakings, such as:

- The Official Plan;
- Secondary Plans;
- Neighbourhood Plans;
- Special projects like the Red Hill Valley Parkway, the Growth Related Integrated Development Strategy, Stony Creek Urban Boundary Expansion (SCUBE), and Airport Employment Growth District; and,
- Other projects involving larger tracts of land, whether through the <u>Planning Act</u> or <u>Environmental Assessment Act</u>, such as:
  - o Watershed plans;
  - o Parklands dedication;
  - Conservation lands;

- Larger properties subject to plans of subdivision or condominium, zoning or site plan; and,
- The management of existing parks or other larger, relatively undisturbed properties.

**Where?** The First Nations with vested interests in the City of Hamilton's land-use planning are not physically located within the City of Hamilton. An effort should be made to hold some consultation and/or Public Information Centres (PICs) on one or more of the First Nations lands or areas of jurisdiction where warranted by substantial alterations to policy or significant land-use projects that impact large areas of land.

- Official Plan: First Nations shall be engaged with respect to proposed changes to the Official Plan where these will affect larger geographic areas, or substantial portions of the Official Plan (such as five-year reviews).
- Secondary and Neighbourhood Plans: First Nations shall be engaged on proposed Secondary and Neighbourhood plans with respect to the areas subject to the plans, and land-use within those areas.
- Environmental Assessment and Other or Special Projects: First Nations shall be engaged on proposed special projects with respect to their scope, areas subject to the plans, and land-use within those areas. For Environmental <u>Assessment Act</u> projects initiated by the City, First Nations shall be informed of the alternatives during "consultation", to provide weighting for these options, and input on identifying and accommodating the preferred alternative design.
- **Municipal** *Planning Act* **projects:** For larger-scale, property-specific development projects initiated by the City of Hamilton, First Nations should be consulted through the site selection and design process, in order to allow a practicable accommodation of interests.
- Draft Plans of Subdivision and Condominium: First Nations shall be circulated with subdivision applications by proponents on submission to the City of Hamilton. If First Nations have an interest in a draft plan, the City of Hamilton may facilitate engagement between the First Nations and proponent.
- **City as Landowner:** First Nations shall be circulated information on activities that may affect their interests on lands owned or managed by the City of Hamilton and its agencies. The City of Hamilton has extensive land holdings, and co-operates with various agencies to manage other lands. Work related to

landscape maintenance or alteration, and development on such properties, may affect First Nations interests, warranting their engagement.

• **City as Trustee:** First Nations shall be circulated information on City activities, initiatives or directives that may affect First Nations interests. As a creature of the Crown, and a government, the City of Hamilton has an inherent responsibility for the broad interests of its citizens. First Nation representation may be appropriate where such interests are being examined, and may warrant their engagement.

**How?** A circulation of notice for the proposed project with a cover letter is to be mailed to the relevant First Nations. The circulation should be followed-up by emails and/or phone calls to determine whether there are any First Nations interests in the project. If requested by one or more of the First Nations, meetings between representatives of the City and the respective First Nations can be held to provide details on the project, and address any accommodations requested by the First Nations. Larger projects may warrant Public Information Centres (PICs), as First Nations governance is reached through community consensus.

#### Process:

Throughout this process, please document your circulations, contacts and meetings on any project-related engagement or "consultation" with First Nations. Being able to summarize these activities will demonstrate the efforts taken by the City to recognize and confer with First Nations about municipal activities that may affect First Nations interests.

The following is general sequence of procedures to follow when managing municipal actions that may affect First Nations interests.

- 1) Identify whether project warrants First Nation "Consultation" or engagement;
- Determine nature or scope of interaction based on scale and substance of project:
  - a. Circulation;
  - b. Meetings;
  - c. PIC; and,
  - d. Formal "consultation" and accommodation.
- 3) Circulate information on project to contacts;
- 4) Follow-up phone-calls and email correspondence;
- 5) Reassess nature or scope of interaction based on feedback with First Nations;

- a. Conduct subsequent meetings if requested
- b. Hold PICs as determined to be appropriate;
- 6) Negotiate accommodations or other agreements; and,
- 7) Report to First Nations and the City on agreements reached.

#### **Contact Information:**

 Six Nations of the Grand River Territory First Nation Elected Chief and Council Chief William K. Montour through Paul General, Six Nations Lands and Resources: 519-445-0330, 519-445-0242 fax, pgeneral@sixnations.ca Six Nations Eco-Centre, 2676 Fourth Line Road, Box 5000, Ohsweken, Ontario

Six Nations Eco-Centre, 2676 Fourth Line Road, Box 5000, Ohsweken, Ontario N0A 1M0

- Haudenosaunee (Six Nations Traditional Council) Confederacy Secretary Leroy Hill 905-765-1749, 905-765-9193 fax, 1749resource@gmail.com Haudenosaunee Resource Centre, 2634 6th Line, R.R. # 2, Ohsweken, Ontario NOA 1M0
- Mississaugas of the New Credit First Nation Elected Chief and Council Chief Bryan LaForme 905-768-1133, 905-768-1225 fax, bryanlaforme@newcreditfirstnation.com RR 6, 2789 Mississauga Road, Hagersville, Ontario NOA 1H0

#### Huron-Wendat First Nation at Wendake

Grand Chief Konrad Sioui (418) 843-3767, (418) 842-1108 fax, <u>administration@cnhw.qc.ca</u> 255 Place Chef Michel Laveau, Wendake, Quebec G0A 4V0

These are the main contacts for planning file consultations. Further contacts are available for other specialties such as archaeology and burials. For further information, please contact Cultural Heritage Planning Staff:

Phone: 905-546-2424 x1214 Facsimile: 905-643-7250 In person or mail: 6<sup>th</sup> Floor, 71 Main Street West, Hamilton ON L8P 4Y5

