

**Stage 2 Archaeological Assessment,  
Northland Estates Subdivision  
Development (26T-12-2000-02), Port  
Colborne**

Part of Lot 31, Concession 2, Geographic Township of  
Humberstone, Historical County of Welland, now the City  
of Port Colborne, Regional Municipality of Niagara,  
Ontario

**Submitted to:**

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**Submitted by:**



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PIF Number: P017-0990-2022  
CP Number: 2022-04

**ORIGINAL REPORT**

June 14, 2022

## Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Matt Kernahan of Upper Canada Planning & Engineering Ltd. ('the Proponent') to conduct a Stage 2 archaeological assessment on Part of Lot 31, Concession 2, Geographic Township of Humberstone, Historical County of Welland, now the City of Port Colborne, Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of a proposed residential development ('Study Area'; Figure 3).

The assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (1990b). According to Section 2.6.2 of the PPS, "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." To meet the condition, a Stage 2 assessment of the Study Area was conducted during the application phase of the proposed residential development, under archaeological consulting license P017 issued to Mr. Garth Grimes by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'); (Government of Ontario 2011).

At the time of the assessment, the Study Area comprised well drained tableland and poorly drained forested lands fronting onto West Side Road. The parcel that made up the Study Area formed an irregular shape area, which measured 16.0 hectares ('ha'). The Study Area was bound by residential properties to the north, agricultural lands to the west and West Side Road to the east, with a retail centre bounding the southeastern portion of the property.

A Stage 1 Background Study of the Study Area was conducted by Archaeological Assessments Ltd. ('AA') on June 14, 2011 (PIF# P013-656-2012). According to this investigation, the Study Area was determined to demonstrate potential for the recovery of pre-contact Aboriginal, post-contact Aboriginal, and Euro-Canadian material culture (AAL 2012). A Stage 2 test pit assessment was recommended for the well drained tableland areas in the northern, central, and eastern sections of the Study Area, which accounted for approximately 60% of the property.

The Stage 2 assessment of the Study Area was conducted on May 18th, 2022 and involved a test pit survey at 5m intervals of well drained tableland areas and, despite AA's recommendations, was expanded to include the poorly drained forested land area. This investigation resulted in the identification and documentation of no archaeological resources; therefore, **no further archaeological assessment of the Study Area is recommended.**

*The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.*

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## Project Personnel

|                     |   |
|---------------------|---|
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## Project Acknowledgements

Generous contributions by Mr. Matt Kernahan of Upper Canada Planning & Engineering Ltd. for making this report possible.

## 1.0 Project Context

### 1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Matt Kernahan of Upper Canada Planning & Engineering Ltd. ('the Proponent') to conduct a Stage 2 archaeological assessment on Part of Lot 31, Concession 2, Geographic Township of Humberstone, Historical County of Welland, now the City of Port Colborne, Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of a proposed residential development ('Study Area'; Figure 3).

The assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (1990b). According to Section 2.6.2 of the PPS, "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." To meet the condition, a Stage 2 assessment of the Study Area was conducted during the application phase of the proposed a proposed residential development, under archaeological consulting license P017 issued to Mr. Garth Grimes by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'); (Government of Ontario 2011).

The purpose of a Stage 2 Property Assessment was to provide an overview of any archaeological resources within the Study Area, and to determine whether any of the resources might be archaeological sites with cultural heritage value or interest ('CHVI'), and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the Standards and Guidelines (Government of Ontario 2011), the objectives of the following Stage 2 assessment are as follows:

- To document all archaeological resources within the Study Area;
- to determine whether the Study Area contains archaeological resources requiring further assessment; and
- to recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

The licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities, including the recovery of artifacts.

## 1.2 Historical Context

### 1.2.1 Post-Contact Aboriginal Resources

Prior to the arrival of European settlers, the Niagara Region was occupied by the Neutral, or Attawandaron tribe. The earliest recorded visit was undertaken by Étienne Brûlé, an interpreter and guide for Samuel de Champlain. In June 1610, Brûlé requested permission to live among the Algonquin people and to learn their language and customs. In return, Champlain agreed to take on a young Huron named Savignon and to teach him the language and customs of the French. The purpose of this endeavour was to establish good relations with Aboriginal communities in advance of future military and colonial enterprises in the area. In 1615, Brûlé joined twelve Huron warriors on a mission to cross enemy territory and seek out the Andaste people, allies of the Huron, to ask for their assistance in an expedition being planned by Champlain. The mission was a success, but took much longer than anticipated. Brûlé returned with the Andaste two days too late to help Champlain and the Hurons, who had already been defeated by the Iroquois (Heidenreich 1990).

Throughout the middle of the 17<sup>th</sup> century, the Iroquois of the Five Nations sought to expand upon their territory and to monopolize the local fur trade as well as trade between the European markets and the tribes of the western Great Lakes. A series of bloody conflicts followed known as the Beaver Wars, or the French and Iroquois Wars, were contested between the Iroquois and the French with their Huron and other Algonquian speaking allies of the Great Lakes region. Many communities were destroyed including the Huron, Neutral, Erie, Susquehannock, and Shawnee leaving the Iroquois as the dominant group in the region. By 1653 after repeated attacks, the Niagara peninsula and most of Southern Ontario had been vacated. By 1667, all members of the Five Nations had signed a peace treaty with the French and allowed their missionaries to visit their villages (Heidenreich, 1990).

Ten years later, hostilities between the French and the Iroquois resumed after the latter formed an alliance with the British through an agreement known as the Covenant Chain (Heidenreich 1990). In 1696, an aging Louis de Buade, Comte de Frontenac et de Palluau, the Governor General of New France, rallied the Algonquin forces and drove the Iroquois out of the territories north of Lake Erie, as well as those west of present-day Cleveland, Ohio. A second treaty was concluded between the French and the Iroquois in 1701, after which the Iroquois remained mostly neutral (Jamieson 1992; Noble 1978).

Throughout the late 17<sup>th</sup> and early 18<sup>th</sup> centuries, various Iroquoian-speaking communities had been migrating into southern Ontario from New York State. In 1722, the Five Nations adopted the Tuscarora in New York becoming the Six Nations (Pendergast 1995:107). This period also marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes (Konrad 1981; Schmalz 1991). The oral traditions of the Mississaugas, as told by Chief Robert Paudash suggest that the Mississaugas defeated the Mohawk nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated and, at the end of the 17<sup>th</sup> century, the Mississaugas settled permanently in Southern Ontario (Praxis Research Associates n.d.). Around this same time, members of the Three Fires Confederacy (Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southeastern Ontario (Feest and Feest 1978:778-779).

The Study Area first entered the Euro-Canadian historical record on December 7<sup>th</sup> 1792 as part of Treaty No. 3, which included land acquired in the 'Between the Lakes Purchase' dating to May 22, 1784. According to the terms of the treaty, the Mississaugas ceded to the Crown approximately 3,000,000 acres of land between Lake Huron, Lake Erie and Lake Erie in return for trade goods valued at £1180. The limits of the Treaty 3 lands are documented as comprising...

*Lincoln County excepting Niagara Township; Saltfleet, Binbrook, Barton, Glanford and Ancaster Townships, in Wentworth County; Brantford, Onondaga, Tusc[a]r[o]ra, Oakland and Burford Townships in Brant County; East and West Oxford, North and South Norwich, and Dereham Townships in Oxford County; North Dorchester Township in Middlesex County; South Dorchester, Malahide and Bayham Township in Elgin County; all Norfolk and Haldimand Counties;*

*Pelham, Wainfleet, Thorold, Cumberland and Humberstone Townships in Welland County.*

Morris 1943:17-18

One of the stated objectives of the Between the Lakes Purchase was “to procure for that part of the Six Nation Indians coming into Canada a permanent abode” (Morris 1943: 17). Shortly after the transaction had been finalised in May of 1784, Sir Frederick Haldimand, the Governor of Québec, made preparations to grant a portion of land to those Six Nations who remained loyal to the Crown during the American War of Independence. More specifically, Haldimand arranged for the purchase of approximately 550,000 acres of land adjacent to the Treaty 3 limits from the Mississaugas. This tract of land, referred to as either the Haldimand Tract or the 1795 Crown Grant to the Six Nations, was provided for in the Haldimand Proclamation of October 25th, 1784 and was intended to extend a distance of six miles on each side of the Grand River from mouth to source (Weaver 1978). By the end of 1784, representatives from each constituent nation of the Six Nations, as well as other allies, relocated to the Haldimand Tract with Joseph Brant (Weaver 1978; Tanner 1987).

Throughout southern Ontario, the size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture began to shift with the establishment of European settlers. By 1834 it was accepted by the Crown that losses of portions of the Haldimand Tract to Euro-Canadian settlers were too numerous for all lands to be returned. Lands in the Lower Grand River area were surrendered by the Six Nations to the British Government in 1832, at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (Page & Co. 1879; Weaver 1978; Tanner 1987). Following the population decline and the surrender of most of their lands along the Credit River, the Mississaugas were given 6000 acres of land on the Six Nations Reserve, establishing the Mississaugas of New Credit First Nation, now the Mississaugas of the Credit First Nation (“MCFN”), in 1847 (Smith 2002).

Despite the encroachment of European settlers on previously established Aboriginal territories, “written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought” (Ferris 2009: 114). As Ferris observes, despite the arrival of a competing culture, First Nations communities throughout Southern Ontario have left behind archaeologically significant resources that demonstrate continuity with their pre-contact predecessors, even if they have not been recorded extensively in historical Euro-Canadian documentation.

### **1.2.2 Euro-Canadian Resources**

The current Study Area occupies part of Lot 31, Concession 2, Geographic Township of Humberstone, Historical County of Welland, Niagara Regional Municipality, Ontario.

In 1763, the Treaty of Paris brought an end to the Seven Years War, contested between the British, the French, and their respective allies. Under the Royal Proclamation of 1763, the large stretch of land from Labrador in the east, moving southeast through the Saint Lawrence River Valley to the Great Lakes and on to the confluence of the Ohio and Mississippi Rivers became the British Province of Québec (Niagara Historical Society and Museum 2008).

On July 24, 1788, when Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg, and Lunenburg (Archives of Ontario 2012-2015). Further change came in December 1791 when the province was rearranged into Upper Canada and Lower Canada under the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada; he initiated several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne 1895).



On July 1792, Simcoe divided Upper Canada into 19 counties, including Niagara, stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed the 'Western', 'Home', 'Midland' and 'Eastern' Districts. As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships (Archives of Ontario 2012-2015).

As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. Under this new territorial arrangement, the Study Area became part of Lincoln County within the Niagara District (Archives of Ontario 2012-2015).

In 1845, after years of increasing settlement that began after the War of 1812, the southern portion of Lincoln County was severed to form Welland County (the two counties would be amalgamated once again in 1970 to form the Regional Municipality of Niagara).

Humberstone Township was settled in 1785. In 1817 it featured 75 inhabited houses, a grist mill, and a saw mill. By 1850 the number of inhabited houses had increased to 279, and the population to 2,377 inhabitants. At this time, the township also contained a grist mill, three saw mills, a foundry, two churches, and eight public schools. The township continued to grow throughout the 19th century. By 1875, the population had increased to 3,200 (Page & Co. 1876).

The *Illustrated Historical Atlas of the Counties of Lincoln and Welland* ('*Historical Atlas*'), demonstrates the extent to which Humberstone Township had been settled by 1876 (Page & Co 1876; Figure 2). Landowners are listed for every lot within the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures and orchards are prevalent throughout the township, almost all of which front early roads and especially the Niagara River and Lake Erie.

According to the *Historical Atlas* map of Humberstone Township, Lot 31, Concession 2 was divided into three parcels; one parcel is the entire west half, and the east half is divided into two parcels. The Study Area is situated within the northern half of the eastern section owned by a Mr. William Bearman. A sole residential structure is illustrated north of the Study Area; the community of Humberstone is shown 1.5km south-east of the Study Area.

Although significant and detailed landowner information is available on the current *Historical Atlas* map of Humberstone Township (Page & Co 1876: Figure 2), it should be recognized that historical county atlases were funded by subscriptions fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).



## 1.3 Archaeological Context

### 1.3.1 Property Description and Physical Setting

The Study Area measures 16.0 hectares (ha) and is of an irregular shape. At the time of the assessment, the entirety of the Study Area comprised well drained tableland and poorly drained forested land. The study area itself is confined by residential properties to the north, agricultural lands to the west and West Side Road to the east, with a retail centre bounding the southeastern portion of the property. The limits of the Study Area were surveyed and marked by the Proponent prior to the assessment.

The majority of the region surrounding the Study Area has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the mid-19th century. Much of the region today continues to be used for agricultural purposes.

The Study Area is situated within the Haldimand Clay Plain. According to Chapman and Putnam

*...although it was all submerged in Lake Warren, the till is not all buried by stratified clay; it comes to the surface generally in low morainic ridges in the north. In fact, there is in that area a confused intermixture of stratified clay and till. The northern part has more relief than the southern part where the typically level lake plains occur.*

Chapman and Putnam 1984:156

Haldimand clay is slowly permeable, imperfectly drained with medium to high water-holding capacities. Surface runoff is usually rapid, but water retention of the clayey soils can cause it to be droughty during dry periods (Kingston and Presant 1989). The soil is suitable for corn and soy beans in rotation with cereal grains as well as alfalfa and clover (Huffman and Dumanski 1986).

The closest source of potable water is a small watercourse located 400 metres to the south. The Wainfleet Marsh runs approximately 500 metres (m) to the north of the Study Area.

### 1.3.2 Pre-Contact Aboriginal Land Use

This portion of southwestern Ontario has been demonstrated to have been occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Humberstone Township based on Ellis and Ferris (1990).

**Table 1: Cultural Chronology for Humberstone Township**

| Time Period     | Cultural Period                    | Comments   |
|-----------------|------------------------------------|--|
| 9500 – 7000 BC  | Paleo-Indian                       | first human occupation<br>hunters of caribou and other extinct Pleistocene game<br>nomadic, small band society |
| 7500 - 1000 BC  | Archaic                            | ceremonial burials<br>increasing trade network<br>hunter gatherers   |
| 1000 - 400 BC   | Early Woodland                     | large and small camps<br>spring congregation/fall dispersal<br>introduction of pottery                         |
| 400 BC – AD 800 | Middle Woodland                    | kinship based political system<br>incipient horticulture<br>long distance trade network                        |
| AD 800 - 1300   | Early Iroquoian<br>(Late Woodland) | limited agriculture<br>developing hamlets and villages   |

| Time Period    | Cultural Period                     | Comments   |
|----------------|-------------------------------------|--|
| AD 1300 - 1400 | Middle Iroquoian<br>(Late Woodland) | shift to agriculture complete<br>increasing political complexity<br>large palisaded villages |
| AD 1400 - 1650 | Late Iroquoian                      | regional warfare and<br>political/tribal alliances<br>destruction of Huron and Neutral       |

### 1.3.3. Previously Identified Archaeological Work

To compile an inventory of archaeological resources, the registered archaeological site records kept by the MHSTCI were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario n.d.) is maintained by the MHSTCI. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13km east to west and approximately 18.5km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The Study Area under review is situated within Borden Block AfGt.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the Freedom of Information and Protection of Privacy Act (Government of Ontario 1990c). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MHSTCI will provide information concerning site location to the party or an agent of the party holding title to a property, or a licensed archaeologist with relevant cultural resource management interests.

An examination of the ASDB has shown that there are 22 archaeological sites registered within a 1km radius of the Study Area (Table 2). Of these, 12 are pre-contact aboriginal sites, three of which date to the archaic period. Two sites have no time-period associated with them. No additional detailed information is available for the remaining 8 sites.

**Table 2: Registered Archaeological Sites within 1km of the Study Area**

| Borden Number | Site Name              | Time Period     | Affinity   | Site Type                |
|---------------|------------------------|-----------------|------------|--------------------------|
| AfGt-90       | McIntyre-Evans         | Archaic, Middle | Aboriginal | Othercamp/campsite       |
| AfGt-89       | Meadow Heights I       | Archaic, Late   | Aboriginal | Othercamp/campsite       |
| AfGt-79       | -                      | Pre-Contact     | Aboriginal | Othercamp/campsite       |
| AfGt-78       | -                      | Pre-Contact     | Aboriginal | Othercamp/campsite       |
| AfGt-77       | -                      | Pre-Contact     | Aboriginal | Othercamp/campsite       |
| AfGt-76       | -                      | Pre-Contact     | Aboriginal | Othercamp/campsite       |
| AfGt-75       | -                      | Pre-Contact     | Aboriginal | Othercamp/campsite       |
| AfGt-74       | -                      | Pre-Contact     | Aboriginal | Othercamp/campsite       |
| AfGt-73       | -                      | Other           |            | Other tool manufacturing |
| AfGt-72       | Salsbury/Loyalist Park | Archaic         | Aboriginal |                          |
| AfGt-233      | Barrick Road Site      | Paleo-Indian    |            | camp / campsite          |
| AfGt-201      | Port Colborne P1 site  | Pre-Contact     | Aboriginal | camp / campsite          |
| AfGt-143      |                        | Other           |            | Other findspot_          |
| AfGt-142      |                        |                 |            |                          |
| AfGt-141      |                        |                 |            |                          |

| Borden Number | Site Name       | Time Period | Affinity   | Site Type                |
|---------------|-----------------|-------------|------------|--------------------------|
| AfGt-140      |                 |             |            |                          |
| AfGt-139      |                 |             |            |                          |
| AfGt-138      |                 |             |            |                          |
| AfGt-137      |                 |             |            |                          |
| AfGt-136      |                 |             |            |                          |
| AfGt-135      |                 |             |            |                          |
| AfGt-1        | Colborne Quarry | Archaic     | Aboriginal | Other tool manufacturing |

To The best of Detritus' knowledge, no other assessments have been conducted within 50m of the Study Area. It should be noted, however, that previous archaeological assessments (Stage 1 and 2) may have been conducted within 50m of the Study Area, however, if no archaeological resources were registered with the MHSTCI, no notification on any such previous assessment is provided to consultant archaeologists.

#### 1.3.4. Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MHSTCI to determine areas of archaeological potential within the Study Area.

According to Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario 2011) these variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, when considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site locations and types to varying degrees. As per Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario 2011), water sources may be categorized in the following manner:

- Primary water sources, lakes, rivers, streams, creeks;
- secondary water sources, intermittent streams and creeks, springs, marshes and swamps;
- past water sources, glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- accessible or inaccessible shorelines, high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As was discussed above, the closest potable water source is a small watercourse located 400 metres ('m') to the south. The Wainfleet Marsh is located approximately 500 m to the north of the Study Area.

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Haldimand Clay Plain physiographic region. As was discussed earlier, the soils within this region are suitable for pre-contact and post-contact Aboriginal agriculture. Considering also the length of occupation of Humberstone Township prior to the arrival of European settlers, as evidenced by 12 pre-contact Aboriginal sites registered within 1km of the Study Area, the potential for pre-contact Aboriginal material culture within the Study Area is deemed to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and

properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990b) or property that local histories or informants have identified with possible historical events.

Considering also the 22 registered sites and 12 pre-contact aboriginal sites documented within 1km of the Study Area, the pre-contact aboriginal archaeological potential for the Study Area is judged to be moderate to high.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as outlined in Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario 2011). As per Section 2.1.8, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011), it is recommended that these areas be subject to a Stage 2 property inspection, conducted according to Section 1.2 of the *Standards and Guidelines* (Government of Ontario 2011), to confirm and document any disturbed areas.

## 2. Field Methods

The Stage 2 assessment of the Study Area was conducted on May 18th, 2022, under archaeological consulting license PO17 issued to Mr. Garth Grimes by the MHSTCI. The limits of the Study Area were surveyed and marked by the Proponent before the assessment.

At the time of primary assessment, the weather was partly cloudy with a high of 14° Celsius; the soil was dry and screened easily. Assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. Photos 1- 26 demonstrate the land conditions at the time of the survey throughout the Study Area. Figure 3 illustrates the Stage 2 assessment methods, as well as photograph locations and directions all in relation to the proposed development of the Study Area.

The Study Area comprised entirely of well drained tableland and poorly drained forested land which was inaccessible for ploughing. The well drained tableland and poorly drained forested land were subject to a test pit survey at 5m intervals in accordance with Section 2.1.2 of the Standards and Guidelines (Government of Ontario 2011; Photos 15, 20, 27-29) Test pits were excavated until test pits showed evidence of recent ground disturbance as per Standard 4 of this section. All test pits were at least 30 centimetres (cm) in diameter and were excavated 5cm into sterile subsoil. The soils were then examined for stratigraphy, cultural features, or evidence of fill. A layer of Sandy loam with orange sand sub-soil was observed in the drained tableland and poorly drained forested land. All soil from the test pits was screened through six-millimetre (mm) hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. No further archaeological methods were employed since no artifacts were identified during the test pit survey.

### 3. Record of Findings

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 2 below.

**Table 1: Inventory of Document Record**

| <b>Document Type</b>            | <b>Current Location</b> | <b>Additional Comments</b>       |
|---------------------------------|-------------------------|----------------------------------|
| 1 Page of Field Notes           | Detritus' office        | Stored digitally in project file |
| 1 Map provided by the Proponent | Detritus' office        | Stored digitally in project file |
| 1 Field Map                     | Detritus' office        | Stored digitally in project file |
| 27 Digital Photographs          | Detritus' office        | Stored digitally in project file |

No archaeological resources were identified within the Study Area and so no material culture was collected. As a result, no storage arrangements were required.

## 4. Analysis and Conclusions

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Matt Kernahan of Upper Canada Planning & Engineering Ltd. ('the Proponent') to conduct a Stage 2 archaeological assessment on Part of Lot 31, Concession 2, Geographic Township of Humberstone, Historical County of Welland, now the City of Port Colborne, Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of a proposed residential development ('Study Area'; Figure 3).

The subsequent Stage 2 assessment conducted on May 18th, 2022 involved a test pit survey at 5m intervals of the well-drained tableland and poorly drained forested land areas. This investigation resulted in the identification and documentation of no archaeological resources.



## 5. Recommendations

The Stage 2 assessment of the Study Area resulted in the identification of no archaeological resources; therefore, **no additional archaeological assessment of the Study Area is recommended.**

## 6. Advice on Compliance with Legislation

This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. 0.18. The report is reviewed to ensure that it complies with the *Standards and Guidelines for Consultant Archaeologists* (2011a) that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection, and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Government and Consumer Services.

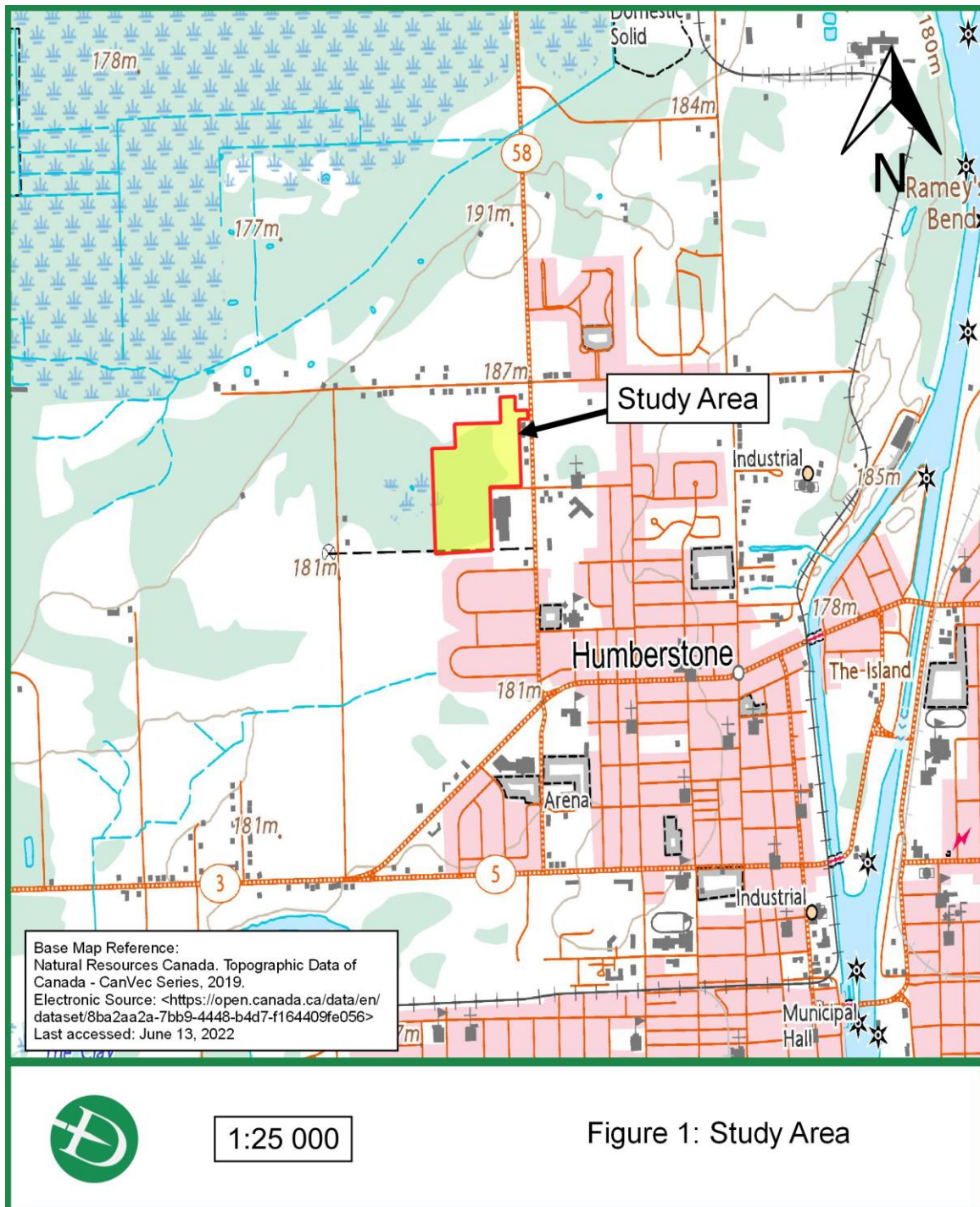
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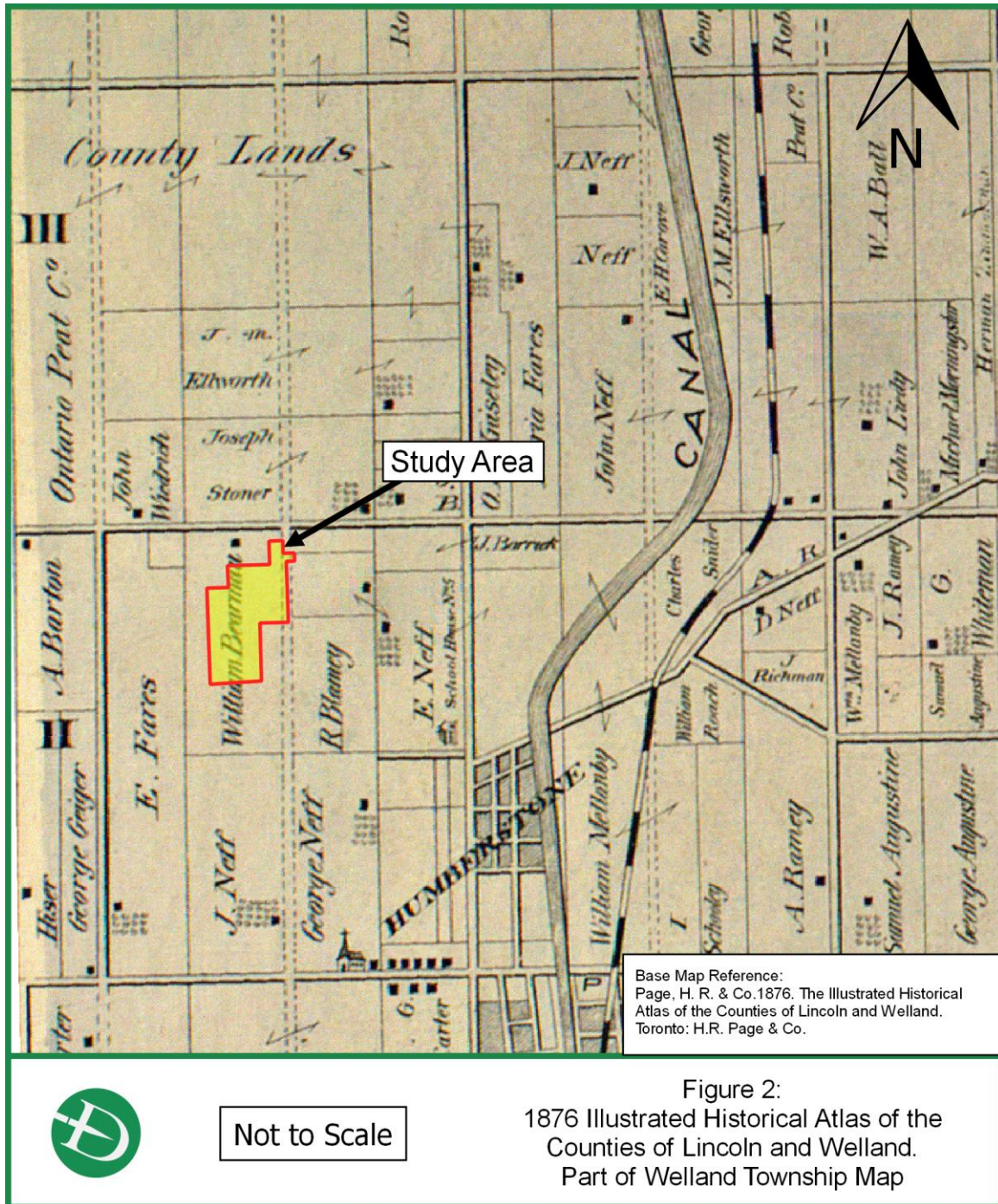
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## 8. Images

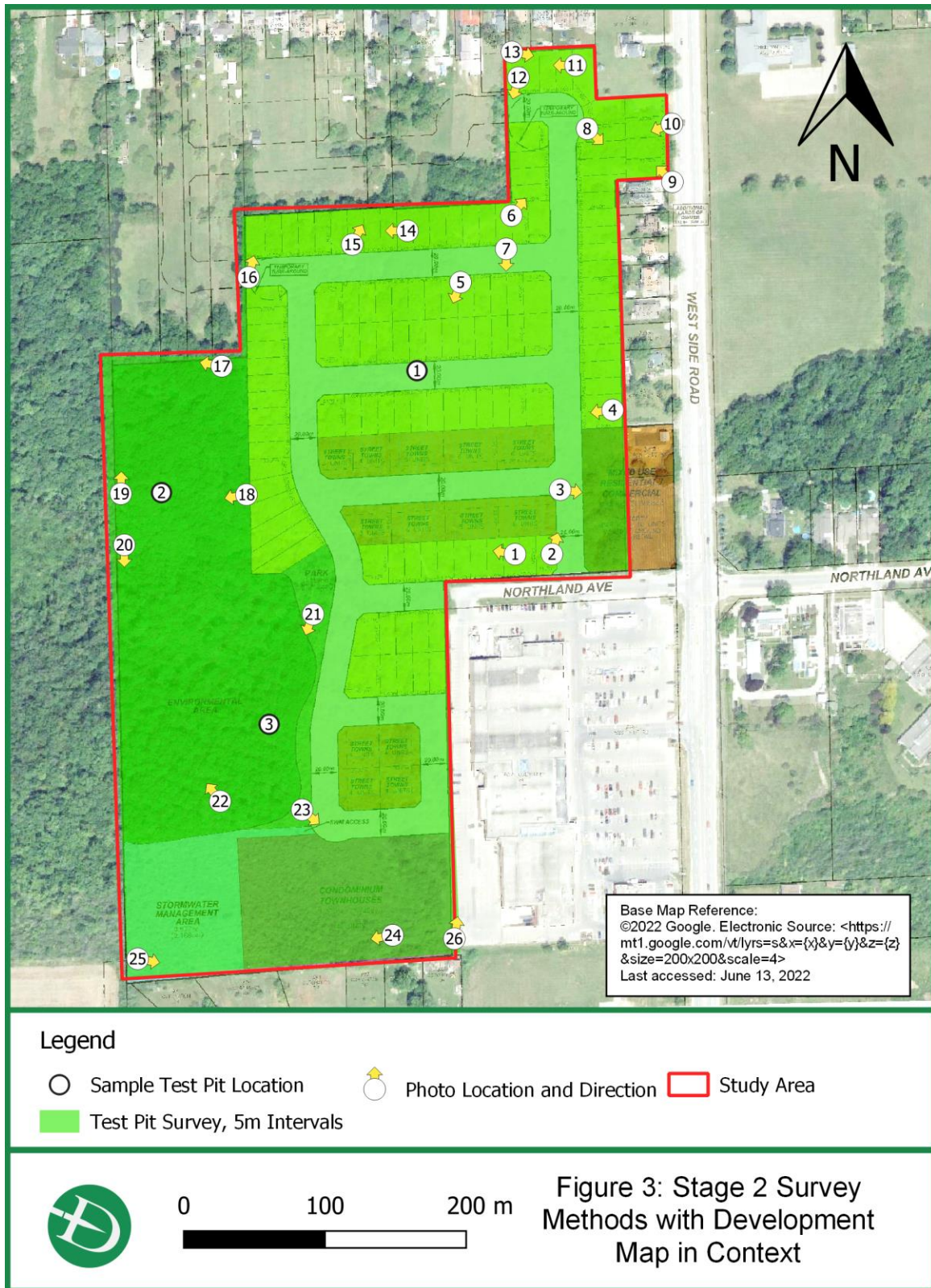
### 8.1 Maps







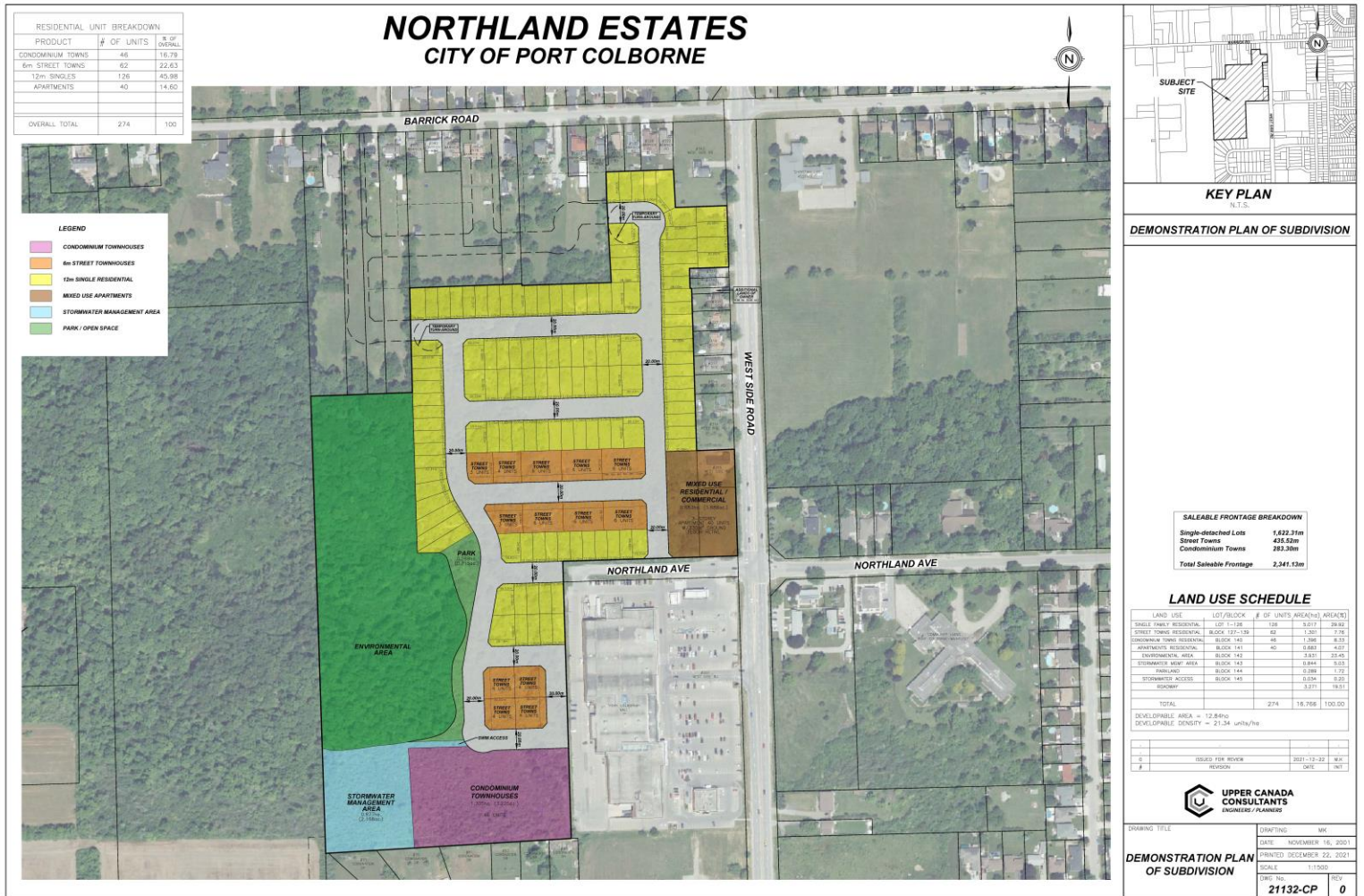






# Stage 2, Northland Estates Subdivision Development (26T-12-2000-02), Port Colborne

Figure 4: Development Map





## 8.2 Photos

**Photo 1: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing west**



**Photo 2: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing north**



**Photo 3: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing east**



**Photo 4: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing west**



**Photo 5: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing south**



**Photo 6: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing north-west**





**Photo 7: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing south**



**Photo 8: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing south-east**



**Photo 9: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing north-west**



**Photo 10: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing west**



**Photo 11: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Boundary, facing west**



**Photo 12: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Boundary, facing south**





**Photo 73: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing east**



**Photo 14: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing west**



**Photo 15: Well Drained Table Land and Path, Test Pit Survey Conducted at 5m Intervals, facing north-east**



**Photo 16: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing north**



**Photo 17: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing west**



**Photo 18: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals, facing west**





**Photo 19: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing north**



**Photo 20: Well Drained Table Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing south**



**Photo 21: Poorly Drained Forested Land, Test Pit Survey Conducted at 5m Intervals, facing south-west**



**Photo 22: Poorly Drained Forested Land, Test Pit Survey Conducted at 5m Intervals, facing north-west**



**Photo 23: Poorly Drained Forested Land, Test Pit Survey Conducted at 5m Intervals, facing south-east**



**Photo 24: Poorly Drained Forested Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing west**





**Photo 25: Poorly Drained Forested Land, Test Pit Survey Conducted at 5m Intervals, facing east**



**Photo 26: Poorly Drained Forested Land, Test Pit Survey Conducted at 5m Intervals; Property Extent, facing north**



**Photo 27: Sample Test Pit 1**



**Photo 28: Sample Test Pit 2**



**Photo 29: Sample Test Pit 3**

