

Stage 1 Archaeological Assessment of the Port Colborne Lands Parcel 3, Part of Lot 22, Concession 2, Geographic Township of Humberstone, County of Welland, City of Port Colborne, Regional Municipality of Niagara

Original Report

Prepared for:

Elite MD Developments

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Executive Summary

Archaeological Services Inc. was contracted by Elite MD Developments to undertake a Stage 1 Archaeological Assessment of the Port Colborne Lands Parcel 3, part of Lot 22, Concession 2, in the Geographic Township of Humberstone, County of Welland, now in the City of Port Colborne, Regional Municipality of Niagara. The project area is approximately 12.4 hectares. Permission to access the project area and to carry out all activities necessary for the completion of the assessment was granted by the proponent on August 11, 2021.

The Stage 1 background research entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the project area, along with nineteenth- and twentieth-century settlement trends. This research has led to the conclusion that there is potential for the presence of both Indigenous and Euro-Canadian archaeological resources within the project area.

The Stage 1 assessment has determined that the entire project area retains archaeological potential and will require a Stage 2 Archaeological Assessment in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*.



Project Personnel

- **Senior Project Manager:** Jennifer Ley, Honours Bachelor of Arts (R376), Lead Archaeologist, Manager, Planning Assessment Division
- **Project Manager:** Jamie Houston-Dickson, Master of Arts (P398), Associate Archaeologist, Project Manager, Planning Assessment Division
- **Project Director:** Robb Bhardwaj, Master of Arts (P449) Associate Archaeologist, Project Manager, Planning Assessment Division
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1.0 Project Context

Archaeological Services Inc. was contracted by Elite MD Developments to undertake a Stage 1 Archaeological Assessment of the Port Colborne Lands Parcel 3, part of Lot 22, Concession 2, in the Geographic Township of Humberstone, County of Welland, now in the City of Port Colborne, Regional Municipality of Niagara (Figure 1). The project area is approximately 12.4 hectares.

1.1 Development Context

This assessment was conducted under the senior project management of Jennifer Ley (R376), the project management of Jamie Houston-Dickson (P398), and the project direction of Robb Bhardwaj (P449); the work was completed under Ministry of Heritage, Sport, Tourism and Culture Industries (hereafter the Ministry) Project Information Form P449-0552-2021. All activities carried out during this assessment were completed as part of a Secondary Plan submission, as required by the City of Port Colborne and the *Planning Act* (Ministry of Municipal Affairs and Housing, 1990). All work was completed in accordance with the *Ontario Heritage Act* (Ministry of Culture [now the Ministry], 1990) and the *Standards and Guidelines for Consultant Archaeologists* (hereafter the Standards) (Ministry of Tourism and Culture, 2011).

The overall Port Colborne Lands development area encompasses a large assembly of lands comprised of multiple property parcels (a mix of former residential and commercial lands and actively cultivated and fallow agricultural fields) situated between Highway 3 to the north, Elizabeth Street to the west, Lorraine Road to the east, and Killaly Street East to the south (part of Lots 21 through 24, Concession 2), with an additional property located south of Killaly Street East (part of Lot 22, Concession 1) (Figure 2); not all properties within this general area are included in the Port Colborne Lands development area. The various properties within the overall Port Colborne Lands development area have been grouped into three distinct project areas (“Parcels”), each of which will be subject to separate archaeological assessments.

Parcel 3, the focus of the current assessment, is the smallest of the three project areas (12.4 hectares) and is located in the southeast part of the overall



development north of Killaly Street East in Lot 22, Concession 2. Permission to access the Parcel 3 project area and to carry out all activities necessary for the completion of the assessment was granted by the proponent on August 11, 2021.

Parcel 1, the largest of the three project areas, consists of a 62.1-hectare block of land on the west side of Snider Road within Lots 23 and 24, Concession 2, and an additional 12.6-hectare block of land on the east side of Snider Road in the southwest portion of Lot 22, Concession 2, for a total of 74.7 hectares. Parcel 2 is comprised of three non-contiguous properties on portions of Lot 21, Concession 2, Lots 23 and 24, Concession 2, and Lot 22, Concession 1, for a total of 34.4 hectares. The current Parcel 3 project area is bordered along the west limit by the 12.6-hectare Parcel 1 block east of Snider Road, while the east limit is partially bordered by one of the three properties (“Property B”) comprising Parcel 2 (Figure 2). The Stage 1 and 2 Archaeological Assessments of Parcel 1 and Parcel 2 are being conducted under Ministry Project Information Forms P449-0542-2021 and P449-0556-2021, respectively.

1.2 Historical Context

The purpose of this section is to describe the past and present land use and settlement history of the project area, and any other relevant historical information gathered through the Stage 1 background research.

Historically, the project area was located in the south of Lot 22, Concession 2, in the Geographic Township of Humberstone, County of Welland. Currently, the Parcel 3 project area is a single, large property parcel with the assigned street address of 806 Killaly Street East. It consists of a cultivated field and the remains of a demolished school building and associated paved parking area that formerly fronted Killaly Street East (Figure 3).

1.2.1 Pre-Contact Settlement

Table 1 provides a general summary of the pre-contact Indigenous settlement history of southern Ontario.



Table 1: Pre-contact Indigenous Temporal Culture Periods in Southern Ontario

Period	Description
Paleo 13,000 Before Present – 9,000 Before Present	<ul style="list-style-type: none"> • First human occupation of Ontario • Astronomers/ Artists/ Hunters/ Gatherers/ Foragers • Language Unknown • Small occupations • Non-stratified populations
Archaic 9,000 Before Present – 3,000 Before Present	<ul style="list-style-type: none"> • Astronomers/ Artists/ Hunters/ Gatherers/ Foragers • Small occupations • Non-stratified populations • Mortuary ceremonialism • Extensive trade networks for raw materials and finished objects
Early Woodland 3,000 Before Present – 2,400 Before Present	<ul style="list-style-type: none"> • Astronomers/ Artists/ Hunters/ Gatherers/ Foragers • General trend in spring/summer congregation and fall/winter dispersal • Small and large occupations • First evidence of community identity • Mortuary ceremonialism • Extensive trade networks for raw materials and finished objects



Period	Description
Middle Woodland 2,400 Before Present – 1,300 Before Present, Transitional Woodland 1,300 Before Present – 1,000 Before Present	<ul style="list-style-type: none"> • Astronomers/ Artists/ Hunters/ Gatherers/ Foragers • A general trend in spring/summer congregation and fall/winter dispersal into large and small settlements • Kin-based political system • Increasingly elaborate mortuary ceremonialism • Incipient agriculture in some regions • Longer term settlement occupation and reuse
Late Woodland (Early) Anno Domini 900 – Anno Domini 1300	<ul style="list-style-type: none"> • Foraging with locally defined dependence on agriculture • Villages, specific and special purpose sites • Socio-political system strongly kinship based
Late Woodland (Middle) Anno Domini 1300 – Anno Domini 1400	<ul style="list-style-type: none"> • Major shift to agricultural dependency • Villages, specific and special purpose sites • Development of socio-political complexity
Late Woodland (Late) Anno Domini 1400 – Anno Domini 1650	<ul style="list-style-type: none"> • Complex agricultural society • Villages, specific and special purpose sites • Politically allied regional populations

1.2.2 Post-Contact Settlement

Between the Lakes Purchase (Treaty 3)

The project area is within Treaty 3, the “Between the Lakes Purchase.” Following the 1764 Niagara Peace Treaty and the follow-up treaties with Pontiac, the English colonial government considered the Mississaugas to be their allies since they had accepted the Covenant Chain. The English administrators followed the terms of the Royal Proclamation and insured that no settlements were made in the hunting grounds that had been reserved for their use (Johnston, 1964; Lytwyn, 2005). In 1784, under the terms of the Between the Lakes Purchase,



signed by Sir Frederick Haldimand and the Mississaugas, the Crown acquired over one million acres of land in-part spanning westward from near modern day Niagara-on-the-Lake along the south shore of Lake Ontario to modern day Burlington (Aboriginal Affairs and Northern Development Canada, 2016).

Geographic Township of Humberstone

The land within Humberstone Township was acquired by the British from the Mississaugas (Ojibwa) in 1784. The first township survey was undertaken in 1789, and the first legal settlers occupied their land holdings the same year. The township was named after a town in Lincolnshire, England. Humberstone was initially settled by disbanded soldiers, mainly Butler's Rangers, following the end of the American Revolutionary War. In 1805, Boulton noted that, due to its remote location from Niagara, Humberstone was "but little cultivated." The township began to flourish more following the construction of the first Welland Canal during the early 1830s. By the 1840s, the township was said to contain good land but that the farms were not well cultivated. The population was comprised mainly of a large community of Pennsylvania Dutch settlers, with some Canadians and Americans (Armstrong, 1985:144; Boulton, 1805:82; Ott, 1967; Rayburn, 1997:163; Smith, 1846:84).

Early Development of Port Colborne

The City of Port Colborne is located at the Lake Erie end of the Welland Ship Canal. First named Gravelly Bay, and later renamed in honour of the Lieutenant-Governor of Upper Canada, Sir John Colborne, the village was established in 1832 when the Welland Canal was extended in a direct line to Lake Erie from the Chippawa Creek, or Welland River, and a lock was constructed near the settlement. The settlement was laid out on parts of Lots 26, 27, and 28, Concession 1, and registered plans of subdivision for the village date from 1847 to 1863.

Port Colborne became a port of entry during the nineteenth century and was served by the Buffalo, Brantford and Goderich Railway (later renamed the Buffalo and Lake Huron Railway before eventually being absorbed by the Grand Trunk Railway) and the Welland Railway. In 1873, the population of the village was



about 1,500 and there were several stores and hotels, as well as a brewery (Crossby, 1873:256). By 1876, there was one public and one separate school, four churches and burial grounds, a town hall, one grist mill, one sawmill, three planning mills, a sash and door factory, one bank, two telegraph offices, and a grain elevator, and a protective pier with a lighthouse extended into Lake Erie on the west side of the canal. Port Colborne became a town in 1918 and later incorporated as a city in 1966 (Wainfleet Historical Society, 1992:281-289; City of Port Colborne, 1970; Page, 1876:11; Rayburn, 1997:276; Scott, 1997:182; Winearls, 1991:783-784).

1.2.3 Review of Map Sources

A review of nineteenth- and early twentieth-century mapping was completed to determine if these sources depict any nineteenth-century Euro-Canadian settlement features that may represent potential historical archaeological sites within or adjacent to the project area. Historical map sources are used to reconstruct/predict the location of former features within the modern landscape by cross-referencing points between the various sources and then georeferencing them in order to provide the most accurate determination of the location of any property from historical mapping sources. The results can be imprecise (or even contradictory) because sources of error, such as the vagaries of map production, differences in scale or resolution, and distortions caused by the reproduction of the sources, introduce error into the process. The impacts of this error are dependent on the size of the feature in question, the constancy of reference points on mapping, the distances between them, and the consistency with which both are depicted on historical mapping.

In addition, not all settlement features were depicted systematically in the compilation of these historical map sources, given that they were financed by subscription, and subscribers were given preference with regards to the level of detail provided. Thus, not every feature of interest from the perspective of archaeological resource management would have been within the scope of these sources.

Figures 4 and 5 show the project area overlaid on the 1862 *Tremaine Map of the Counties of Lincoln and Welland* (Tremaine & Tremaine, 1862) and the 1876



Illustrated Historical Atlas of the Counties of Lincoln and Welland (Page, 1876). The *Tremaine* map indicates that the project area was in the southeast of a parcel owned by J. Stone, fronting the concession road of present-day Killaly Street East to the south; by 1876, this parcel had changed hands to Henry Stone. On both maps, a watercourse is illustrated transecting the project area, entering in the north and exiting in the south.

Early topographic mapping was also reviewed for the presence of potential historical features. Land features such as waterways, wetlands, woodlots, and elevation are clearly illustrated on this series of mapping, along with roads and structure locations. Figure 6 illustrates the project area located on the 1907 Welland topographic map (Department of Militia and Defence, 1907). The project area is depicted just below the 584-foot (178 metre) elevation contour. There is a cluster of trees in the centre-east of the project area, but otherwise no houses, watercourses, or settlement features are depicted. The south limit fronts the concession road of present-day Killaly Street East, now on the telegraph line. The watercourse shown flowing south through the centre of the project area on the nineteenth-century mapping is now depicted on the 1907 map as cutting southwest from Highway 3 to Snider Road well north of the project area before resuming its southward course on the west side of Snider Road, fully bypassing Parcel 3. It is inferred that this relocation of the watercourse represents the channelization associated with the first iteration of the Wignell Drain.

1.2.4 Review of Aerial Imagery

In order to further understand the previous land use on the project area, historical and modern aerial imagery was reviewed. Figure 7 depicts the project area on aerial photographs from 1934, 2000, and 2010 (Ministry of Natural Resources, 1934; Google Earth Pro, 2021). The image from 1934 depicts the project area as comprised of five equally sized cultivated fields, with the southernmost field fronting Killaly Street East. There are no structures within the limits of the project area, but a house and a barn are visible immediately adjacent to the southwest corner. In 2000, the project area consists of two agricultural fields and a school with surrounding paved areas in the south, fronting Killaly Street East. The 2010 image indicates that the school building was demolished early in the twenty-first century, but the footprints of the buildings and the paved



areas that had surrounded the school remain. Current imagery shows no significant changes to the property since 2010 (Figure 3).

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the project area, its environment characteristics (including drainage, soils, surficial geology, and topography), and current land use and field conditions.

1.3.1 Registered Archaeological Sites

In order that an inventory of archaeological resources could be compiled for the project area, three sources of information were consulted: the site record forms for registered sites housed at the Ministry, published and unpublished documentary sources, and the files of Archaeological Services Inc.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database, which is maintained by the Ministry. This database contains archaeological sites registered within the Borden system. The Borden system was first proposed by Doctor Charles E. Borden and is based on a block of latitude and longitude. Each Borden block measures approximately 13 kilometres east to west by 18.5 kilometres north to south and is referenced by a four-letter designator. Sites within a block are numbered sequentially as they are found. The project area is located in the centre-east of the AfGt Borden block.

Fourteen archaeological sites have been registered with an approximate one-kilometre radius of the project area (Ministry of Heritage, Sport, Tourism and Culture Industries, 2021). A detailed summary of the sites is available in Appendix A; all fourteen sites are Indigenous lithic sites.

Two of the previously registered sites are in the north portion of the project area: the Snider 1 (AfGt-35) site, a large Indigenous lithic scatter dating to the Middle Archaic period, is situated entirely within Parcel 3, and the Snider 3 (AfGt-37) site, a non-diagnostic Indigenous lithic scatter, overlaps the north limit of Parcel 3, with the northern portion of the site situated outside the project area. See Section 1.3.2 below for further discussion of these sites.



Six other sites are located within approximately 300 metres of the project area. The Snider 2 (AfGt-36), Ott 1 (AfGt-54), and Ott 4 (AfGt-57) sites are within approximately 150 metres of Parcel 3 and the Ott 2 (AfGt-55), Ott 3 (AfGt-56), and Augustine 1 (AfGt-41) sites are between approximately 150 metres and 300 metres from Parcel 3. All other registered sites are more than 300 metres from the project area.

1.3.2 Previous Assessments

Two archaeological assessments are known to have been completed on the project area.

In 1984, James W. Pengelly conducted an archaeological survey of a small portion of the Wignell Drain Basin as part of the Archaeological Conservation Program, an initiative to identify and record archaeological sites in the Regional Municipality of Niagara (Pengelly, 1984; Pengelly and Pengelly, 1986). The work was conducted under Ontario Ministry of Citizenship and Culture (now the Ministry) licence #84-90.

The survey was carried out from 1984 to 1985 over approximately one square kilometre of the 18-square-kilometre Wignell Drain Basin area and resulted in the identification of 30 sites dating from the Middle Archaic to the Contact periods (Pengelly and Pengelly, 1986:3-5). One cluster of sites, which Pengelly (1984) refers to as the Snider-Ott sites, are on or immediately adjacent to the Parcel 3 project area under review¹; all of these sites were encountered during pedestrian survey of the agricultural fields.

The Snider-Ott complex consists of the Snider 1 (AfGt-35), Snider 2 (AfGt-36), Snider 3 (AfGt-37), Ott 1 (AfGt-54), Ott 2 (AfGt-55), Ott 3 (AfGt-56), Ott 4 (AfGt-

¹ The locations of the sites discussed in this report are based on field mapping supplied in Pengelly's 1984 report (Pengelly, 1984: Figures 4 and 6), which shows the sites relative to known topographic features, current roadways, and property boundaries. These locations may deviate from location coordinates listed in the Ontario Archaeological Sites Database, which were recalculated from their original North American Datum 27 coordinates during the mass data migration to the new Ontario Past Portal system in 2015.



57), and Ott 5 (AfGt-59) sites, which were documented east of Snider Road in Lot 22 and Lot 21, Concession 2 (Pengelly, 1984: Figure 6). The Snider 1 (AfGt-35) site and the south half of the Snider 3 (AfGt-37) site are in the north end of the project area, whilst the Ott 1 (AfGt-54) and Ott 4 (AfGt-57) sites are within 100 metres of the north limit of the project area. The Ott 1 (AfGt-54), Ott 2 (AfGt-55), Ott 3 (AfGt-56), and Snider 2 (AfGt-36) sites are all more than 100 metres from the project area. Only the four Snider-Ott sites on or within 100 metres of the project area are summarized in this section.

The Snider 1 (AfGt-35) and Snider 3 (AfGt-37) sites are located on the project area in the vicinity of the watercourse indicated on the nineteenth-century historical mapping (Figures 4 and 5), before the Wignell Drain diverted drainage to the west side of Snider Road. The Snider 1 (AfGt-35) site, located between approximately 250 and 300 metres east of Snider Road and 400 metres and 450 metres north of Killaly Street East (approximately 50 metres west of Property B of Parcel 2), consisted of a large Indigenous lithic scatter approximately 0.5 hectare in size, from which a sample of eight bifaces, five scrapers, two blade fragments, one preform, and a diagnostic Otter Creek projectile point indicative of a Middle Archaic occupation were recovered (Pengelly, 1984:11-13). The Snider 3 (AfGt-37) site was encountered to the north of the Snider 1 (AfGt-35) site and is between 250 metres and 300 metres east of Snider Road and 575 metres to 600 metres north of Killaly Street East; the site itself overlaps the project area limits, with the north portion of the site extending outside the north limit of Parcel 3. The overall Snider 3 (AfGt-37) site artifact scatter measured approximately 60 metres by 40 metres and was comprised of four distinct loci of activity, and an overall sample of five scrapers, six bifaces, several utilized flakes, a preform blade, and a non-diagnostic projectile point were recovered (Pengelly, 1984:11, 13).

The Ott 1 (AfGt-54) and Ott 4 (AfGt-57) sites are also in the vicinity of the former watercourse that once flowed south through the project area. The Ott 4 (AfGt-57) site, located immediately north of the Snider 3 (AfGt-37) site and approximately 50 metres north of the project area limit, was a large, dense, non-diagnostic Indigenous lithic scatter measuring approximately 80 metres by 50 metres, from which a sample of two bifaces and one scraper were recovered (Pengelly, 1984:11, 16). The Ott 1 (AfGt-35) site, located approximately 100 metres north of



the northeast corner of the project area, consisted of a non-diagnostic Indigenous lithic scatter measuring approximately 85 metres east-west by 60 metres north-south, from which six scrapers, five bifaces, and one potential drill base fragment were collected (Pengelly, 1984:11, 15); the eastern portion of the Ott 1 (AfGt-35) site overlaps Property B of Parcel 2.

In 2009, Archaeological Services Inc. conducted a Stage 1 Archaeological Assessment for a proposed new South Niagara East-West Arterial Road Corridor (Archaeological Services Inc., 2009). The purpose of the overall study was to confirm the need and preferred route for a new or improved east to west arterial road in the southern tier of the Regional Municipality of Niagara. The study area, located east of the Welland Canal, spanned over 200 square kilometres across four townships (Humberstone, Bertie, Crowland, and Willoughby), with the southern limit in Port Colborne terminating at Killaly Street East; the Port Colborne Lands Parcel 3 project area currently under review falls within the southwest corner of the 2009 study area. The Stage 1 assessment, which consisted of a map-based review and did not include a field review, determined that 94% of the overall assessment area, including the majority of the current Parcel 3 project area, had potential for the recovery of archaeological sites (Archaeological Services Inc., 2009: Figure 4F). The final assessment report recommended an archaeological field review of the preferred route chosen for the east to west arterial road be undertaken to confirm the extent of archaeological potential along the chosen route.

No other archaeological assessments are known to have been completed on or within 100 metres of the project area.

1.3.3 Physiography

The project area is in the Haldimand Clay Plain physiographic region. The Haldimand Clay Plain is among the largest of the 53 defined physiographic regions in southern Ontario, comprising approximately 3,500 square kilometres (Chapman and Putnam, 1984:156-159; MacDonald, 1980:3). Generally, this region is flat and poorly drained, although it includes several distinctive landforms, including dunes, limestone pavements, back-shore wetland basins, and cobble, clay, and sand beaches.



A number of environmental sub-regions have been described in this part of the Niagara peninsula, including the Niagara Slough Clay Plain, the Fort Erie Clay Plain, the Calcareous Rock Plain (Onondaga Escarpment), the Buried Moraines, the Lake Erie Coast, and the Niagara River Valley (MacDonald, 1980). The distribution and nature of these sub-regions, and the specific environmental features they contain, have influenced land use in the region throughout history and pre-history. The Parcel 3 project area is located on a clay plain.

The surficial geology of the project area consists of massive to well-laminated fine-textured glaciolacustrine deposits of silt and clay with minor sand and gravel (Ontario Geological Survey, 2000). The northeast limit borders the edge of an area of Paleozoic bedrock overlapping part of the adjacent section of the Parcel 2 lands (Property B).

The project area is within the Lake Erie North Shore watershed (Niagara Peninsula Conservation Authority, 2022). The Wignell Drain flows west and north of the project area and then continues south to empty at the north shore of Lake Erie (Ministry of Natural Resources and Forestry, 2020).

1.3.4 Existing Conditions

The Parcel 3 project area is a single, 12.4-hectare rectangular property parcel (806 Killaly Street East) consisting primarily of an agricultural field with a smaller unploughed section at the south end fronting the road where a former school once occupied the property. The school was demolished sometime prior to 2010 but the building footprints and associated paved areas remain visible on modern imagery (Figures 3 and 7). There are agricultural lands to the west and north, agricultural and wooded lands to the east, and Killaly Street East aligns the south boundary.

1.3.5 Review of Archaeological Potential

The Standards, Section 1.3.1 stipulates that undisturbed lands within 300 metres of primary water sources (lakes, rivers, streams, creeks), secondary water sources (intermittent streams and creeks, springs, marshes, and swamps), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel



beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, and cobble beaches), and accessible and inaccessible shorelines (bluffs, swamps or marsh fields by the edge of a lake, sandbars stretching into marsh) are considered, at a generic level, to exhibit potential for Indigenous archaeological sites.

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south-central Ontario after the Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most common variables used for predictive modelling of site location. Historical mapping indicates that a watercourse flowed south through the centre of the project area in the nineteenth century (Figures 4 and 5). This watercourse appears to have been redirected by the early twentieth century to create the Wignell Drain, which approaches the project area from the north but then cuts west upon reaching the northwest corner, fully bypassing the project area (Figures 1, 2, 6, and 7).

Other geographic characteristics that can indicate pre-contact archaeological potential include elevated topography (eskers, drumlins, large knolls, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, and distinctive land formations that might have been special or spiritual places for Indigenous populations, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use by Indigenous peoples, such as burials, structures, offerings, and rock paintings or carvings. Resource areas, including food or medicinal plants (migratory routes, spawning areas, prairie) and scarce raw materials (quartz, copper, ochre, or outcrops of chert and bedrock), are also considered characteristics that indicate pre-contact archaeological potential.

For the post-contact period, Section 1.3.1 of the Standards stipulates those areas of early Euro-Canadian settlement, including places of early military or pioneer settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries, are considered to have archaeological potential. There may be commemorative markers of their



history, such as local, provincial, or federal monuments or heritage parks. Also considered to have archaeological potential are early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a federal, provincial, or municipal historical landmark or site, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations.

The majority of early nineteenth-century farmsteads, which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth-century maps, are likely to be captured by the basic proximity to water model, since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, the Standards considers undisturbed lands within 100 metres of early settlement roads or railroads to have potential for the presence of Euro-Canadian archaeological sites.

In addition to the above criteria for Indigenous and historical archaeological potential, the Standards also defines potential buffers of 300 metres around registered Indigenous and historical archaeological sites. While no historical sites have been registered in the general vicinity, currently there are two Indigenous sites registered on the project area and another six Indigenous sites registered within 300 metres of the project area.

In addition to the presence of water and registered Indigenous sites, the project area also fronts a historical road. Therefore, the project area meets the criteria for both Indigenous and Euro-Canadian archaeological potential.

2.0 Field Methods

The optional field review was not required as part of this assessment, as per the Standards, Section 1.2. In order to provide images to support the analysis, conclusions, and recommendations of this report, current orthographic imagery (Figure 3) and images available through Google Earth Street View (Images 1



through 4) were reviewed (Google Earth Pro, 2021). The Google Earth Street View images were taken in April 2021 and are presented in Section 7.0 of this report. Photo locations and assessment conclusions have been compiled on project mapping (Figure 8).

2.1 Findings

The project area consists of an agricultural field and the remains of a demolished school in the south end fronting Killaly Street East (Images 1 through 4). Upon review of the available background sources, including historical and modern mapping and aerial imagery, it is concluded that the entire project area is considered to have archaeological potential and will require a Stage 2 Archaeological Assessment (Figure 8).

3.0 Analysis and Conclusions

Archaeological Services Inc. was contracted by Elite MD Developments to complete a Stage 1 Archaeological Assessment of the Port Colborne Lands Parcel 3, part of Lot 22, Concession 2, Geographic Township of Humberstone, Welland County, now in the City of Port Colborne, Regional Municipality of Niagara. The Parcel 3 project area is approximately 12.4 hectares and is the smallest of three distinct project areas comprising the Port Colborne Lands development. Parcels 1 and 2 are comprised of lands located to the west, east, and south of Parcel 3 and will be assessed separately.

The Stage 1 background research entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the project area, along with nineteenth- and twentieth-century settlement trends. This research has led to the conclusion that there is potential for both Indigenous and Euro-Canadian archaeological resources on the project area.

The Stage 1 background review has determined that the entire project area retains archaeological potential and will require a Stage 2 Archaeological Assessment.



4.0 Recommendations

In light of these results, the following recommendation is made:

1. Prior to any land-disturbing activities within the project area, a Stage 2 Archaeological Assessment must be conducted in accordance with the Ministry of Heritage, Sport, Tourism, and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*.
 - a) The Stage 2 Archaeological Assessment of all agricultural or open lands within the project area must be carried out by means of a pedestrian survey. The lands must be ploughed in advance of survey and allowed to weather for at least one substantial rainfall. Ploughing must be deep enough to provide total topsoil exposure, but not deeper than previous ploughing. The pedestrian survey must be completed at five-metre transect intervals, as outlined in Section 2.1.1 of the *Standards and Guidelines for Consultant Archaeologists*.
 - b) The Stage 2 Archaeological Assessment of all remaining portions of the project area where ploughing is not possible or viable must be carried out by means of a test pit survey. All test pits must be excavated at least five centimetres into sterile subsoil, with all soils being screened through six-millimetre wire mesh to facilitate artifact recovery. All test pits must be at least 30 centimetres in diameter and backfilled upon completion. Test pits must be excavated at five-metre transect intervals, as outlined in Section 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists*.

NOTWITHSTANDING the results and recommendations presented in this study, Archaeological Services Inc. notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Heritage, Sport, Tourism and Culture Industries must be immediately notified.



The above recommendations are subject to Ministry approval, and it is an offence to alter any archaeological site without Ministry of Heritage, Sport, Tourism and Culture Industries concurrence. No grading or other activities that may result in the destruction or disturbance of any archaeological sites are permitted until notice of Ministry of Heritage, Sport, Tourism, and Culture Industries approval has been received.

5.0 Advice on Compliance with Legislation

Archaeological Services Inc. advises compliance with the following legislation:

- This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 2005, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation, and protection 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 regards 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 field work 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 Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.
- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.

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7.0 Images



Image 1: View of the southwest corner of the project area, looking northeast (April 2021).



Image 2: View of the paved driveway and parking areas of the former school in the south of the project area, looking north (April 2021).



Image 3: View of paved areas in the south of the project area, looking northwest (April 2021).

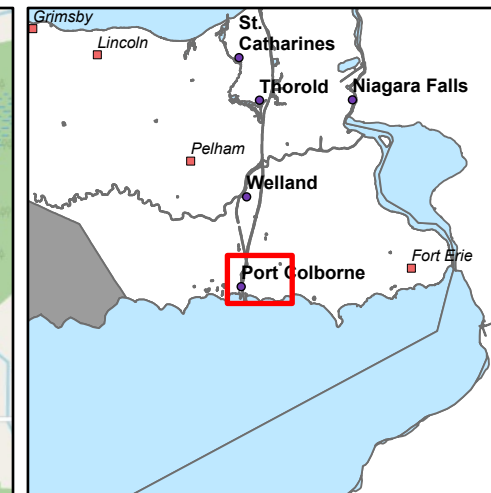
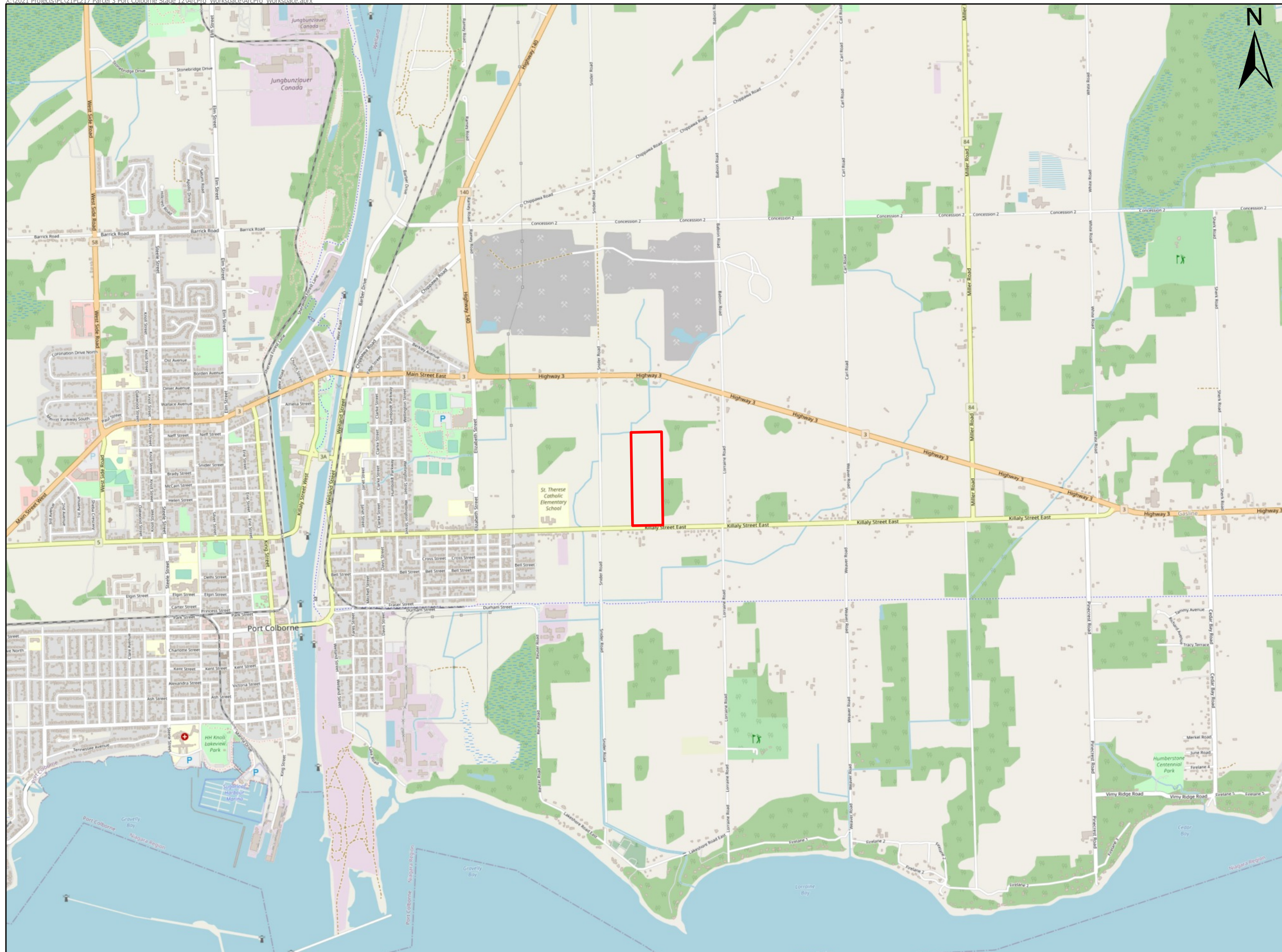


Image 4: View of the southeast corner of the project area, looking north (April 2021).

8.0 Maps

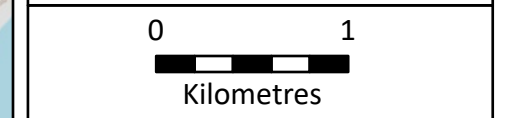
See following pages for detailed assessment mapping and figures





PROJECT AREA

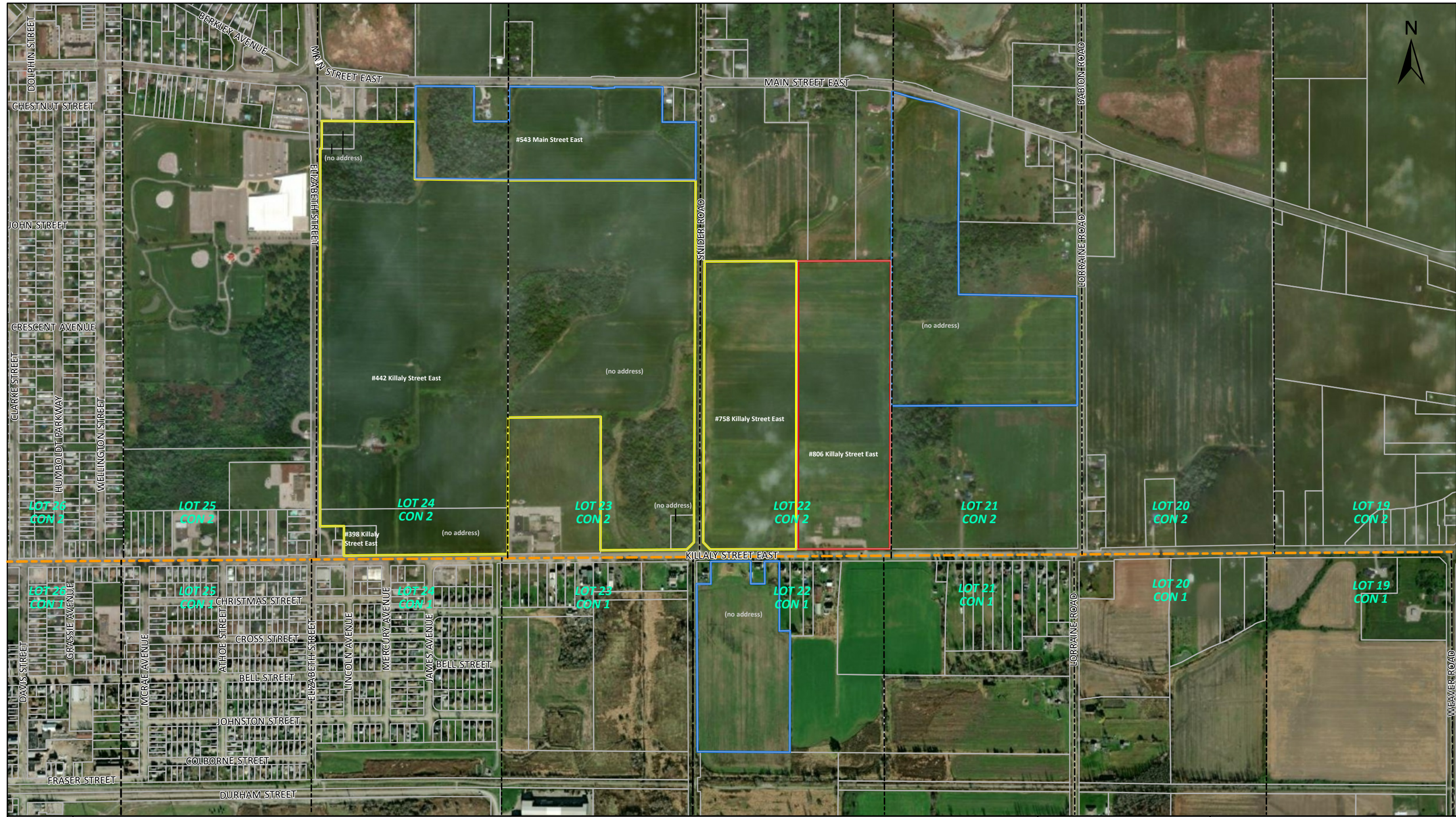
Sources: © OpenStreetMap (and contributors, CC-BY-SA) Projection: NAD 1983 UTM Zone 17N Scale: 1:25,000



ASI Project No: 21PL-217 Date: 8/23/2021 9:33 AM Drawn By: pbikoulis File: Figure1

ASI Providing Archaeological & Cultural Heritage Services
 528 Bathurst Street Toronto, ONTARIO M5S 2P9
 T 416-966-1069 F 416-966-9723 asiheritage.ca

Figure 1: Location of the Project Area




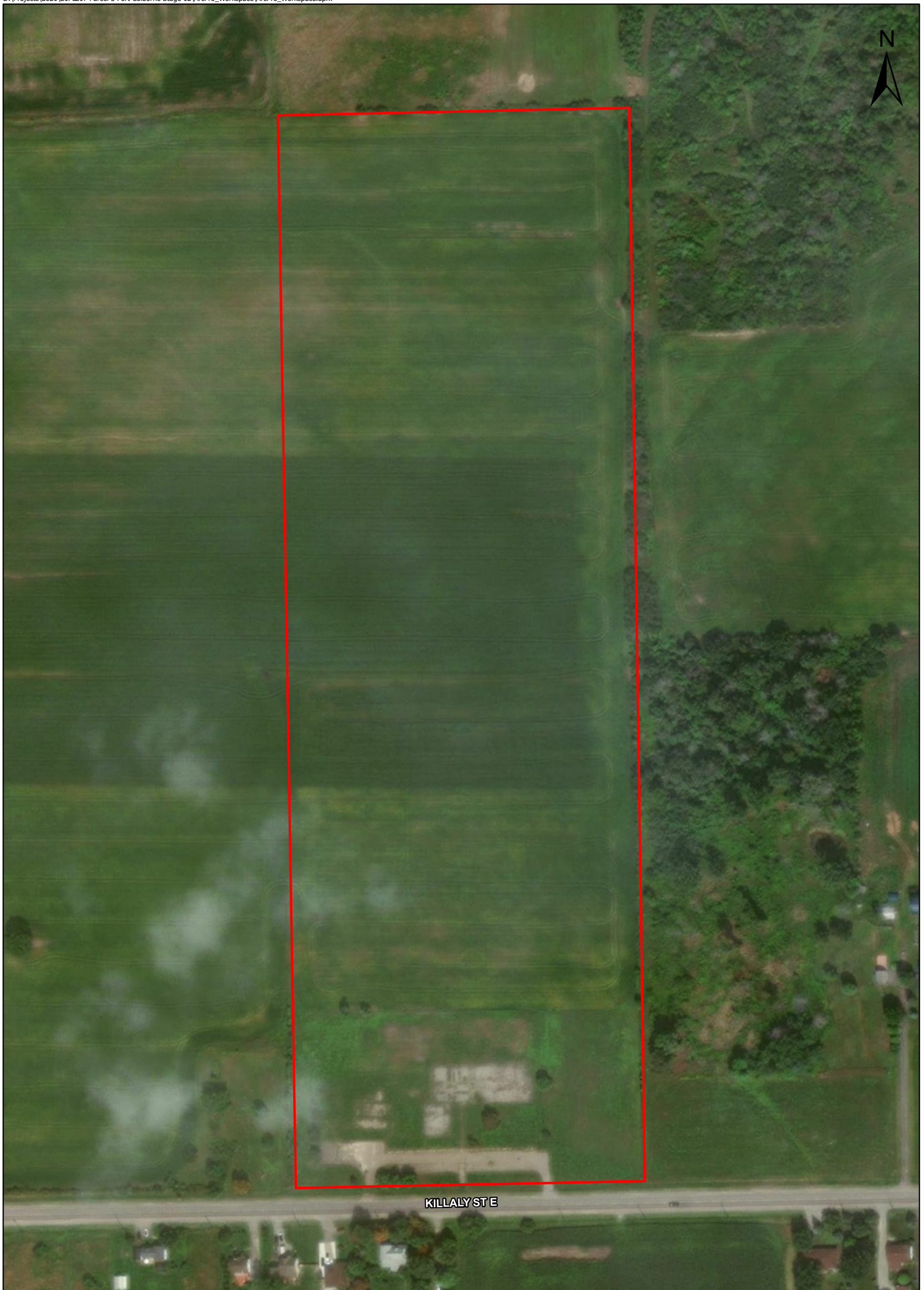
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	 PARCEL 2 LANDS	 CONCESSION BOUNDARY	
	 PARCEL 3 LANDS	 PROPERTY PARCEL LIMIT	ASI Project No.: 21PL-215 Date: 2/9/2022 2:31 PM
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Figure 2: Port Colborne Lands Development - Parcels 1-3



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Figure 3: Existing Conditions of the Project Area



Figure 4: Project Area Located on the 1862 Tremain Map of the Counties of Lincoln and Welland

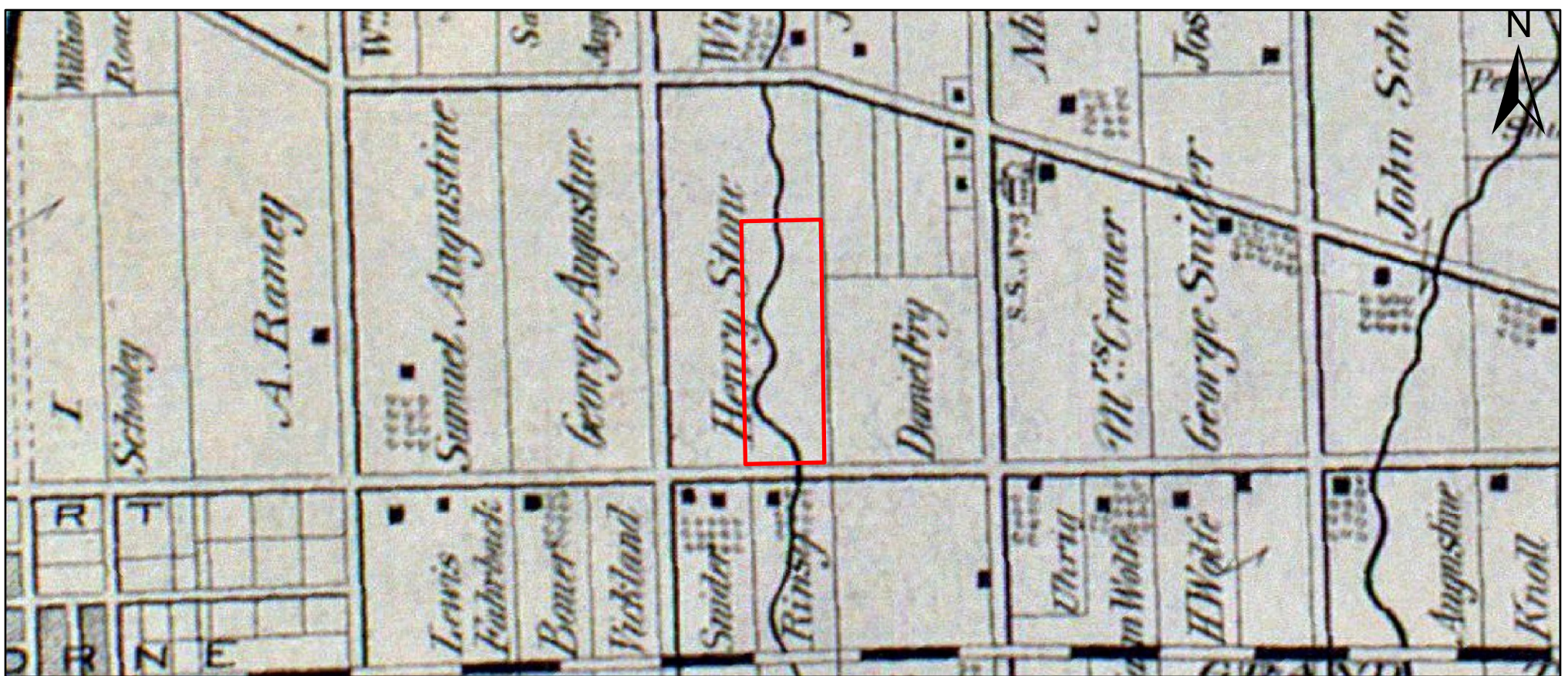


Figure 5: Project Area Located on the 1876 Illustrated Historical Atlas of the Counties of Lincoln and Welland

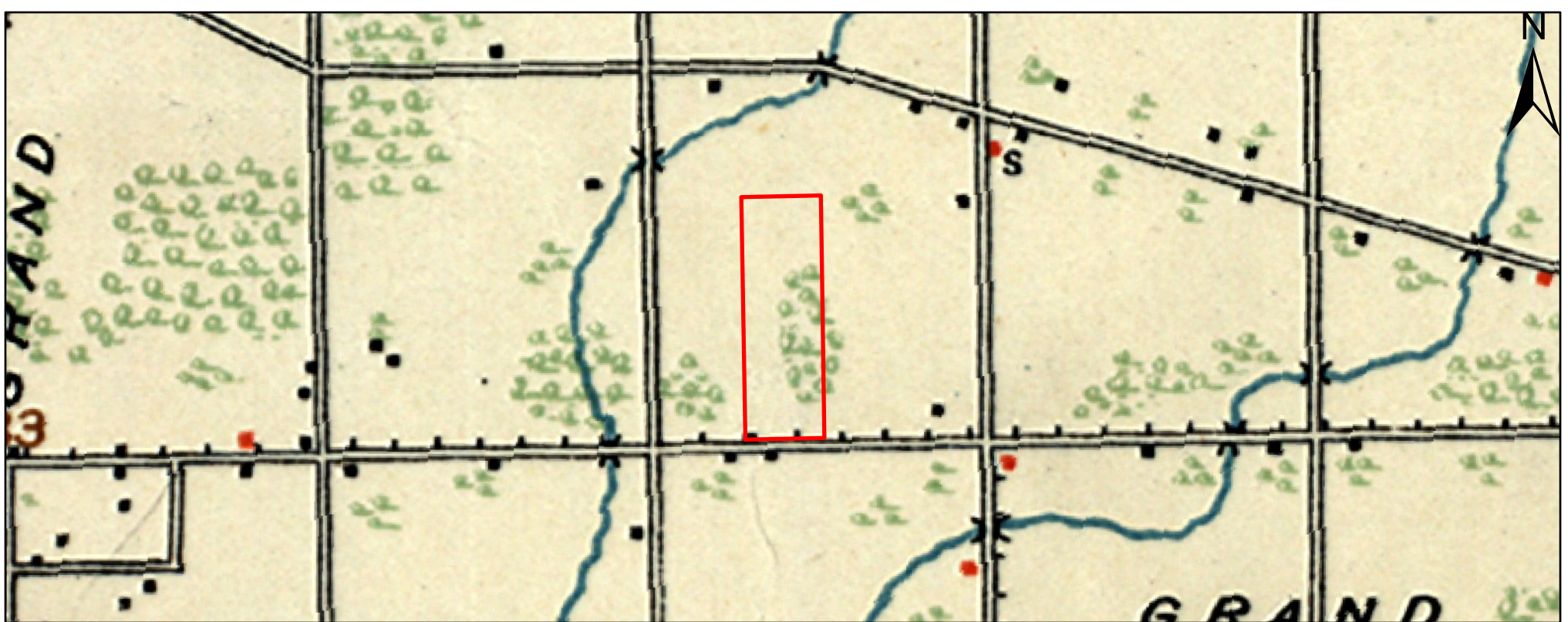
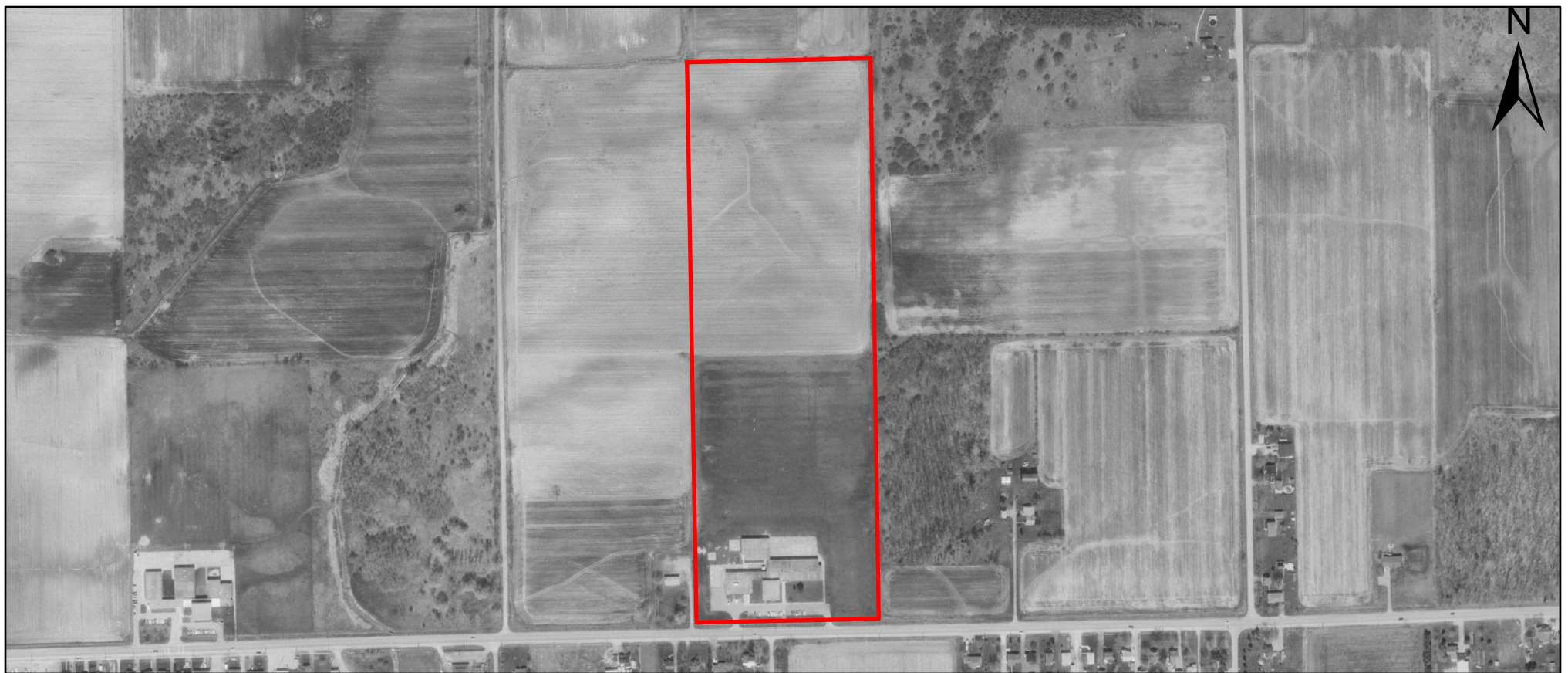


Figure 6: Project Area Located on the 1907 Welland Topographic Map

	 PROJECT AREA	Sources: Tremain Map of the Counties of Lincoln and Welland (Tremain & Tremain, 1862); Illustrated Historical Atlas of the Counties of Lincoln and Welland (Page, 1876); Welland Sheet (Department of Militia and Defence, 1907)	0 500  Metres
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1934



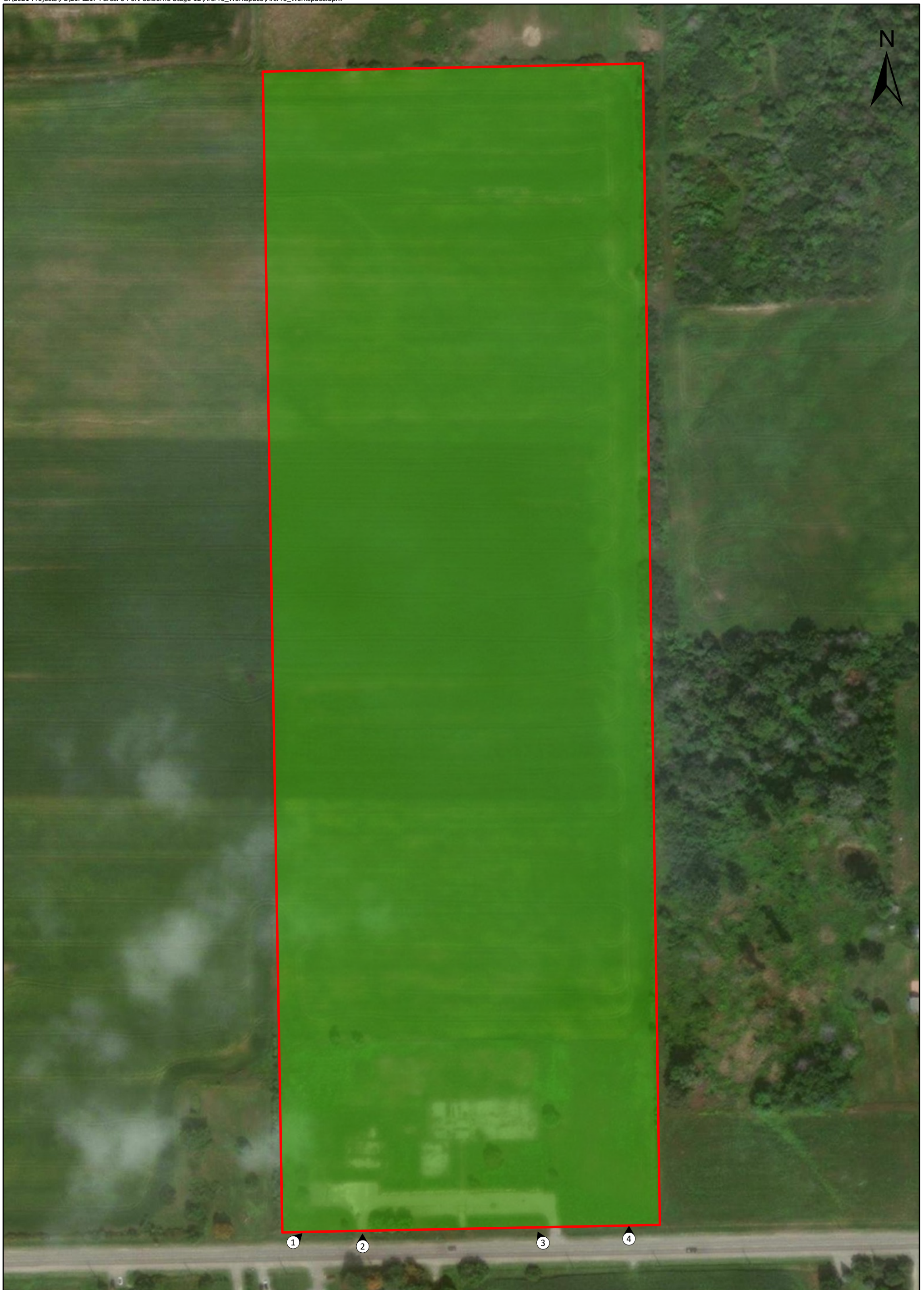
2000



2010

 ASI	 PROJECT AREA	Niagara Region, No restrictions, Niagara Region, Ministry of Natural Resources	
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Figure 7: Project Area Located on 1934, 2000, and 2010 Aerial Imagery





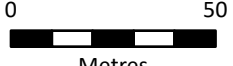

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	 STAGE 2 ARCHAEOLOGICAL ASSESSMENT REQUIRED		ASI Project No.: 21PL-217	Drawn By: pbikoulis
	 PHOTO LOCATION AND DIRECTION	Projection: NAD 1983 UTM Zone 17N Scale: 1:1,848 Page Size: 11 x 17	Date: 3/7/2022 10:10 AM	File: 21PL217_fig8

Figure 8: Stage 1 Archaeological Assessment Results

9.0 Appendix A: Registered Sites within One Kilometre of the Project Area

Fourteen archaeological sites have been registered with an approximate one-kilometre radius of the project area (Ministry of Heritage, Sport, Tourism and Culture Industries, 2021).

Borden	Site Name	Temporal/Cultural Affiliation	Site Type	Researcher
AfGt-35	Snider 1	N/A	N/A	Pengelly 1984
AfGt-36	Snider 2	N/A	N/A	Pengelly 1984
AfGt-37	Snider 3	Middle Archaic	Campsite	Pengelly 1984
AfGt-41	Augustine 1	Pre-contact Indigenous	Findspot	Pengelly 1984
AfGt-42	Augustine 2	Pre-contact Indigenous	Findspot	Pengelly 1984
AfGt-43	Augustine 3	Pre-contact Indigenous	Findspot	Pengelly 1984
AfGt-54	Ott 1	N/A	N/A	Pengelly 1984
AfGt-55	Ott 2	N/A	N/A	Pengelly 1984

Borden	Site Name	Temporal/Cultural Affiliation	Site Type	Researcher
AfGt-56	Ott 3	N/A	N/A	Pengelly 1984
AfGt-57	Ott 4	N/A	N/A	Pengelly 1984
AfGt-58	Port Colborne Quarry	Late Archaic, Early Woodland, Late Woodland	Workshop	Pengelly 1984
AfGt-59	Ott 5	Early Archaic, Late Archaic, Late Woodland	Quarry	Pengelly 1984; Warrick 1985
AfGt-307	Location 25	Pre-contact	Scatter	Archeoworks 2018; Golder Associates Ltd. 2019
AfGt-316	N/A	Pre-contact	Scatter	Archeoworks 2019
