

APPENDIX C - STAGE 1 ARCHAEOLOGICAL ASSESSMENT REPORT

Stage 1 Archaeological Assessment Dorchester Road/Oldfield Road Intersection Improvements (Lots 187, 188, 196, and 197, Geographical Stamford Township, County of Welland) City of Niagara Falls, Regional Municipality of Niagara

Original Report

Prepared for:

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Executive Summary

Archaeological Services Inc. was contracted by Associated Engineering on behalf of the City of Niagara Falls to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Dorchester Road/Oldfield Road Intersection Improvements Municipal Class Environmental Assessment in the City of Niagara Falls. Stage 1 scope involves proposed intersection improvements for the Dorchester Road and Oldfield Road intersection.

The Stage 1 background study determined one archaeological site is within one kilometre of the Study Area. The site is not within 50 metres of the Study Area. The property inspection determined parts of the Study Area require Stage 2 archaeological assessment.

The following recommendations are made:

- 1 Parts of the Study Area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit survey at five metre intervals. Stage 2 is required prior to any proposed construction activities on these lands;
- 2 The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, low and wet conditions, or being previously assessed. These lands do not require further archaeological assessment; and,
- 3 Should the proposed work extend beyond the current Study Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.



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1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by Associated Engineering on behalf of the City of Niagara Falls to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Dorchester Road/Oldfield Road Intersection Improvements Municipal Class Environmental Assessment in the City of Niagara Falls.

Stage 1 scope involves proposed intersection improvements for the Dorchester Road and Oldfield Road intersection (Figure 1).

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (Ontario Heritage Act, R.S.O. c. O.18, 1990, as amended in 2019) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI, 2011).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (Environmental Assessment Act, R.S.O., 1990 as amended 2020) and regulations made under the Act, and are therefore subject to all associated legislation.

The *New Niagara Official Plan Niagara Region Archaeological Management Plan: Phase 5 Report* (ASI & Letourneau Heritage Consulting Inc., 2022) was also consulted.

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment and property inspection was granted by Associated Engineering on December 14, 2021.

1.1.1 Treaties and Traditional Territories

The Study Area is within Treaty 381, the Niagara Purchase, signed in 1781 between the Crown and the Chippewa and Mississaugas for the tract of land



which had not been agreed upon in the 1764 Niagara Peace Treaty on the west side of “the Straits” that lead from Lake Erie to Lake Ontario at Niagara Falls (Crown-Indigenous Relations and Northern Affairs, 2016).

1.2 Historical Context

1.2.1 Indigenous Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years before present (B.P.) (Ferris, 2013). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 B.P., the environment had progressively warmed (Edwards & Fritz, 1988) and populations now occupied less extensive territories (Ellis & Deller, 1990).

Between approximately 10,000-5,500 B.P., the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 B.P.; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is indicative of increased social organization, investment of labour into social infrastructure, and the establishment of socially prescribed territories (Brown, 1995, p. 13; Ellis et al., 1990, 2009).

Between 3,000-2,500 B.P., populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 B.P. and exchange and interaction networks broaden at this time (Spence et al., 1990, pp. 136, 138) and by approximately 2,000 B.P., evidence exists for small community camps, focusing on the seasonal harvesting of resources (Spence et al., 1990, pp. 155, 164). By 1,500 B.P. there is macro botanical evidence for maize in southern Ontario, and it is



thought that maize only supplemented people's diet. There is earlier phytolithic evidence for maize in central New York State by 2,300 B.P. - it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch & Williamson, 2013, pp. 13–15). As is evident in detailed Anishinaabek ethnographies, winter was a period during which some families would depart from the larger group as it was easier to sustain smaller populations (Rogers, 1962). It is generally understood that these populations were Algonquian-speakers during these millennia of settlement and land use.

From the beginning of the Late Woodland period at approximately 1,000 B.P., lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (C.E.), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson, 1990, p. 317). By 1300-1450 C.E., this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al., 1990, p. 343). By the mid-sixteenth century these small villages had coalesced into larger communities (Birch et al., 2021). Through this process, the socio-political organization of the First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed.

By 1600 C.E., the Huron-Wendat communities within Simcoe County had formed the Confederation of Nations encountered by the first European explorers and missionaries. Samuel de Champlain in 1615 reported that a group of Iroquoian-speaking people situated between the Haudenosaunee and the Huron-Wendat were at peace and remained "la nation neutre". Like the Huron-Wendat, Petun, and Haudenosaunee, the Neutral or Attawandaron people were settled village agriculturalists. In the 1640s, the Attawandaron and the Huron-Wendat (and their Algonquian allies such as the Nippissing and Odawa) were decimated by epidemics and ultimately dispersed by the Haudenosaunee. Shortly afterwards, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. By the 1690s however, the Anishinaabeg were the only communities with a permanent presence in southern Ontario. From the beginning of the eighteenth century to



the assertion of British sovereignty in 1763, there was no interruption to Anishinaabeg control and use of southern Ontario.

1.2.2 Post-Contact Settlement

Historically, the Study Area is located in the Geographical Stamford Township, County of Welland in Lots 187, 188, 196 and 197.

The S & G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries are considered to have archaeological potential. 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 historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those that are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Indigenous pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006).

Stamford Township

The area long known as Stamford Township was, during the 1780s, initially referred to as “Township No. 2,” and also as the “Mountain Township.” In the late



1780s and early 1790s, it was also known as “Mount Dorchester.” The name “Stamford” officially came into common use after Simcoe renamed the townships in the Niagara Region in 1792. This name was selected in honour of a very old town by the same name located in Lincolnshire in England (Gardiner 1899:277).

Stamford comprised part of Lincoln County in the Home District from 1792 until 1800. At that time, the Home District (York) was separated and raised to independent status, and the remainder of the older administrative unit on the south side of Lake Ontario was renamed as the Niagara District. Following the abolition of the Districts in 1849, the Niagara District was succeeded for judicial purposes by the United Counties of Lincoln, Welland and Haldimand. Haldimand was separated from this union in 1850-1851, and the provisional County of Welland was fully separated from the union in 1856. Both Lincoln and Welland counties were abolished in 1969-1970, and replaced by the Regional Municipality of Niagara (Proclamation 24 July 1788; Proclamation 16 July 1792; 32 Geo. III c. 8; 38 Geo. III c. 5; 12 Vic. c. 78; Armstrong 1985:138-140, 147, 186).

The first township survey was undertaken shortly after the Treaty of 1784, and the first permanent settlers took up their land holdings around that same time (Armstrong 1985:147). Stamford was initially settled by disbanded soldiers, mainly Butler’s Rangers, following the end of the American Revolutionary War. Stamford was the location of the Battle of Lundy’s Lane in 1814. By 1846, the population stood at 2,636, which was a mixture of “Canadians, English, Irish, Scotch and Americans” (Smith 1846:176). During the late eighteenth and the nineteenth centuries a number of notable settlements were established within Stamford Township. Many of these, including Chippawa, which was first settled in the early 1790s and had a post office by 1801, still exist as communities or neighbourhoods within the City of Niagara Falls. Other early settlements in Stamford Townships include Clifton (1832), Elgin (1840s) and Drummondville (1831). Stamford Township was amalgamated into the Regional Municipality of Niagara in 1970 (Armstrong, 1985, p. 147; Boulton, 1805, p. 89; Crossby, 1873, p. 86; Mika & Mika, 1983; Rayburn, 1997, pp. 68, 328; Scott, 1997, pp. 48–49; D. B. Smith, 1975, p. 176; Winearls, 1991, p. 640).



1.2.3 Map Review

The 1815 *Map of the Niagara District of Upper Canada* (Nesfield, 1815), 1862 *Tremaine's County Map of Welland County* (Tremaine & Tremaine, 1862), the 1876 *Illustrated Historical Atlas of Lincoln and Welland Counties* (Page, 1876), the 1906 and 1925 topographic map Niagara Sheets (Department of Militia and Defence, 1906; Department of National Defence, 1925), and the 1996 National Topographic System Niagara Sheet (Department of Natural Resources, 1996) were examined to determine the presence of historic features within the Study Area during the nineteenth and twentieth centuries (Figures 2-7).

The 1815 map (Figure 2) shows the Study Area east of a watercourse, and south of a main historical road which would have connected early settler homes such as the Bull family to the north. Note: this map was originally created with north at the bottom of the page.

The 1862 map (Figure 3) and 1876 map (Figure 4) depict a north-south oriented road allowance within the middle of the Study Area, along part of what is now Dorchester Road.

The 1906 map (Figure 5) shows a north-south oriented road in the approximate location of Dorchester Road and continuing south of the Study Area. A west-east oriented road is in the approximate location of the present Oldfield Road. A power transmission line owned by the Toronto and Niagara Power Company intersects Dorchester Road to the north of Oldfield Road.

The 1925 map (Figure 6) depicts a canal, identified as the Chippawa Power Canal, constructed approximately 350 metres west of the Study Area's western boundary. The alignment of the intersection in the Study Area remains the same as in 1906.

The 1996 map (Figure 7) shows Dorchester Road diverting diagonally to the southwest, south of Oldfield Road. Residential subdivision development is shown west and east of the northern branch of Dorchester Road. A structure is north of the southern branch of Dorchester Road. A power transmission line is within the



hydro corridor. Greenspace is shown between the power transmission line and Oldfield Road, and south of Oldfield Road.

1.2.4 Aerial and Orthoimagery Review

Historical aerial imagery from 1934, 1965 and 2000 (Janzen, 2018b, 2018c, 2018a) were examined.

The 1934 aerial photography shows Dorchester Road as a north-south oriented road which extends south of its modern limits, with a diagonal offshoot to the west (Figure 8). Oldfield Road intersects eastwards. Within the northern portion of the Study Area, is a woodlot, and a hydro corridor directly to its south. The hydro corridor follows a similar alignment to the power transmission line in the 1906, 1925, and 1996 topographic maps.

The 1965 aerial photography shows that Oldfield Road again is being maintained, and both Oldfield Road and Dorchester Road appear to have been widened (Figure 9). The laneway and house are not extant in this aerial. A house is visible to the north of a woodlot east of Dorchester Road. The diagonal section of Dorchester Road has a ditch on its north side which drains into the Welland Power Canal.

The 2000 aerial photography shows earth moving activities south of Dorchester Road related to the rail storage and parking yard (Figure 10).

A review of available Google satellite imagery since 1995 shows:

- Widening of Oldfield Road in 2016 (Image 11)
- Residential development north of Oldfield Road in 2018 (Image 12)

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological



research: the site record forms for registered sites available online from the MHSTCI through “Ontario’s Past Portal”; published and unpublished documentary sources; and the files of ASI.

1.3.1 Geography

In addition to the known archaeological sites, the state of the natural environment is a helpful indicator of archaeological potential. Accordingly, a description of the physiography and soils are briefly discussed for the Study Area.

The S & G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), 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, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 B.P. (Karrow & Warner, 1990, p. Figure 2.16), 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 commonly used variables for predictive modeling of site location.

Other geographic characteristics that can indicate archaeological potential include elevated topography (eskers, drumlins, large knolls, and plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal



plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential (S & G, Section 1.3.1).

The Study Area is situated within the clay plains of the Haldimand clay plain physiographic region of southern Ontario. The Haldimand Clay Plain physiographic region (Chapman and Putnam 1984:156-159) is among the largest of the 53 defined physiographic regions in southern Ontario, comprising approximately 3,500 square km (MacDonald 1980:3). Generally, this region is flat and poorly drained, although it includes several distinctive landforms including dunes, cobble, clay, and sand beaches, limestone pavements, and back-shore wetland basins. Within this part of the Niagara peninsula, a number of environmental sub-regions have been described, 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.

Figure 11 depicts surficial geology for the Study Area. The surficial mapping demonstrates that the Study Area is underlain by fine-textured glaciolacustrine deposits of silt and clay, minor sand and gravel, massive to well laminated.

Soils within the southern portion of the Study Area (Figure 12) consists of Lincoln mainly lacustrine heavy clay with poor drainage. The northern portion of the Study Area is not mapped due to residential, industrial and recreational land area developments (Ontario Geological Survey, 2010).

A wetland, designated a Niagara Falls Slough Forest Wetland Complex (Figure 13) with provincial significance, is within the Study Area south of Oldfield Road. The Study Area is within three kilometres of the Niagara River and Niagara Falls. The river flows for 51 kilometres, from Lake Erie north into Lake Ontario over Niagara Falls. The Study Area is north of the Welland River, which drains the Niagara Peninsula from west to east to outlet into the Niagara River at Chippewa. Historically these waterways have been heavily modified for canals to serve as transportation routes as well as hydroelectric power generation. The Study Area is adjacent to the Hydro Electric Power Canal which diverts water from the



Welland River at Montrose to the Sir Adam Beck No. 2 Generating Station on the Niagara River near Queenston.

1.3.2 Previously Registered Archaeological Sites

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MHSTCI. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres 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 located in Borden block AgGs.

According to the Ontario Archaeological Sites Database, one previously registered archaeological site is located within one kilometre of the Study (MHTSCI 2022). The site is not within 50 metres of the Study Area. A summary of the site is provided below in Table 1.

Table 1: Registered Sites within One Kilometre of the Study Area

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AgGs-298	Not Applicable	Archaic, Early	Campsite	Austin 2006, Detritus Consulting 2016

1.3.3 Previous Archaeological Assessments

According to the background research, two previous reports detail fieldwork within 50 metres of the Study Area:



(ASI, 2021) Stage 1-2 Archaeological Assessment Fern Park Trail Part of Lot 188 (Former Township of Stamford, County of Welland) City of Niagara Falls Regional Municipality of Niagara, Ontario [P383-0253-2021]

This project area overlaps the current Study Area within the hydro corridor northeast of the Dorchester Road and Oldfield Road intersection. Disturbed soil profiles were encountered during test pit survey, and intervals were reduced to 10 metres and 20 metres in the areas of disturbance. It was recommended that the project area require no further archaeological assessment.

(Amec Foster Wheeler Environment & Infrastructure, 2016) Stage 1 & 2 Archaeological Assessment Thundering Waters Secondary Plan, Lot 214 and Part Lots 195, 196, 197, 212, 213, 215 and 216, Township of Stamford, County of Welland, Now Located in the City of Niagara Falls, Ontario [P141-0239-2015].

This project area overlaps the current Study Area south of Oldfield Road. Part of the project area included protected wetland environment that was not to be developed. Although it was included in the project area, it was not assessed or included in the recommendations. Part of the overlapping project area was assessed as having its archaeological potential removed due to roads, construction, and being capped by concrete. These parts were recommended to not require further archaeological assessment.

2.0 Property Inspection

2.1 Field Methods

A Stage 1 property inspection must adhere to the S & G, Section 1.2, Standards 1-6, which are discussed below. The entire property and its periphery must be inspected. The inspection may be either systematic or random. Coverage must be sufficient to identify the presence or absence of any features of archaeological potential. The inspection must be conducted when weather conditions permit good visibility of land features. Natural landforms and watercourses are to be



confirmed if previously identified. Additional features such as elevated topography, relic water channels, glacial shorelines, well-drained soils within heavy soils and slightly elevated areas within low and wet areas should be identified and documented, if present. Features affecting assessment strategies should be identified and documented such as woodlots, bogs or other permanently wet areas, areas of steeper grade than indicated on topographic mapping, areas of overgrown vegetation, areas of heavy soil, and recent land disturbance such as grading, fill deposits and vegetation clearing. The inspection should also identify and document structures and built features that will affect assessment strategies, such as heritage structures or landscapes, cairns, monuments or plaques, and cemeteries.

The Stage 1 archaeological assessment property inspection was conducted under the field direction of Doug Todd (R055) of ASI, on April 6, 2022, in order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the Study Area. It was a systematic visual inspection from publicly accessible lands/public right-of-ways only and did not include excavation or collection of archaeological resources. Fieldwork was conducted when weather conditions were deemed clear with good visibility (overcast and 16 degrees Celsius), per S & G Section 1.2., Standard 2. Field photography is presented in Section 7.0 (Image 1Image 10), and field observations are overlaid onto the existing conditions of the Study Area in Section 8.0 (Figure 15).

2.2 Current Land Use and Field Conditions

The Study Area is located at the intersection of Dorchester Road and Oldfield Road. Dorchester Road is a north-south oriented road which diverts southwest diagonally upon its intersection with Oldfield Road. Oldfield Road is a west-east oriented road which extends east from the intersection. A hydro corridor, rail storage and parking yard, and the Niagara Falls Slough Forest Wetland Complex within a woodlot are within the Study Area (see Figure 13). Dorchester Road is bound by townhouses to the west and apartment buildings to the east, developed in the late-twentieth century. A moving and storage facility is to the northwest. Oldfield Road is bound to the north by twenty-first century townhouses.



Oldfield Road is a two-way two-lane roadway with curbs and a sidewalk along its north side. North of the Dorchester Road and Oldfield Road intersection, Dorchester Road is a two-way two-lane roadway with curbs and a sidewalk along its west side. South of the Dorchester Road and Oldfield Road intersection, Dorchester Road is a two-way two-lane roadway with ditched right-of-ways and a metal guard rail along its northwest side. At the Dorchester Road and Oldfield Road intersection, both roads have ditched right-of-ways.

3.0 Analysis and Conclusions

The historical and archaeological contexts have been analyzed to help determine the archaeological potential of the Study Area. Results of the analysis of the Study Area property inspection and background research are presented in Section 3.1.

3.1 Analysis of Archaeological Potential

The S & G, Section 1.3.1, lists criteria that are indicative of archaeological potential. The Study Area meets the following criteria indicative of archaeological potential:

- Previously identified archaeological sites (AgGs-298);
- Water sources: primary, secondary, or past water source (Welland River, Warren Creek); and
- Early historic transportation routes (Dorchester Road)

According to the S & G, Section 1.4 Standard 1e, no areas within a property containing locations listed or designated by a municipality can be recommended for exemption from further assessment unless the area can be documented as disturbed. The Municipal Heritage Register was consulted and no property within the Study Area is Listed or Designated under the *Ontario Heritage Act*.

The *New Niagara Official Plan Niagara Region Archaeological Management Plan: Phase 5 Report* (ASI & Letourneau Heritage Consulting Inc., 2022) was reviewed for background information and to help inform any indicators of archaeological potential not captured in other research. Generally speaking, archaeological management plans are high-level analyses of archaeological potential for non-



specialists but cannot not be considered a replacement for Stage 1 archaeological assessments. ASI's review of the above archaeological management plan indicates parts of the Study Area possess archaeological potential, and a portion of the Study Area south of Oldfield Road is indicated to be wetlands (Figure 14).

These criteria are indicative of potential for the identification of archaeological resources, depending on soil conditions and the degree to which soils have been subject to deep disturbance.

The property inspection determined that parts of the Study Area exhibit archaeological potential. These areas will require Stage 2 archaeological assessment prior to any construction activities. According to the S & G Section 2.1.2, test pit survey is required on terrain where ploughing is not viable, such as wooded areas, properties where existing landscaping or infrastructure would be damaged, overgrown farmland with heavy brush or rocky pasture, and narrow linear corridors up to 10 metres wide (Image 2-Image 3, Image 9Image 10; Figure 15: areas highlighted in green).

Parts of the Study Area have been previously assessed and does not require further archaeological assessment (Figure 15: areas highlighted in red).

A part of the Study Area is located within the permanently low lying wet areas of the Niagara Falls Slough Forest Wetland Complex and has poorly drained soils, and according to the S & G Section 2.1 does not retain potential (Figure 15: areas highlighted in blue). These areas do not require further survey.

The remainder of the Study Area has been subjected to deep soil disturbance events due to twenty-first century residential development north of Oldfield Road, twentieth century residential development west and east of Dorchester Road, construction of right-of-ways, and the twenty-first century rail storage and parking yard. According to the S & G Section 1.3.2 these areas do not retain archaeological potential (Image 1,Image 4-Image 8; Figure 15: areas highlighted in yellow) and do not require further survey.



3.2 Conclusions

The Stage 1 background study determined one archaeological site is within one kilometre of the Study Area. The site is not within 50 metres of the Study Area. The property inspection determined parts of the Study Area require Stage 2 archaeological assessment (Figure 15: areas highlighted in green).

4.0 Recommendations

The following recommendations are made:

- 1 Parts of the Study Area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit survey at five metre intervals (Figure 15: areas highlighted in green). Stage 2 is required prior to any proposed construction activities on these lands;
- 2 The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, low and wet conditions, or being previously assessed. These lands do not require further archaeological assessment; and,
- 3 Should the proposed work extend beyond the current Study Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

NOTWITHSTANDING the results and recommendations presented in this study, ASI 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 Archaeology Programs Unit of the Ministry of Heritage, Sport, Tourism and Culture Industries should 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 MHSTCI approval has been received.



5.0 Legislation Compliance Advice

ASI 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 sec. 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

7.1 Field Photography



Image 1: Area is disturbed, no potential



Image 2: Area requires Stage 2 survey



Image 3: Area requires Stage 2 survey



Image 4: Area is disturbed, no potential



Image 5: Area is disturbed, no potential



Image 6: Area is disturbed, no potential



Image 7: Area beyond disturbed right-of-way is low and wet, no potential



Image 8: Rail storage and parking yard is disturbed, no potential



Image 9: Area requires Stage 2 survey



Image 10: Area beyond disturbed right-of-way requires Stage 2 survey

7.2 Historical Imagery



Image 11 Oldfield Road widening in 2016 (Google Earth Pro, 2021)



Image 12 Development north of Oldfield Road in 2018 (Google Earth Pro, 2021)

8.0 Maps

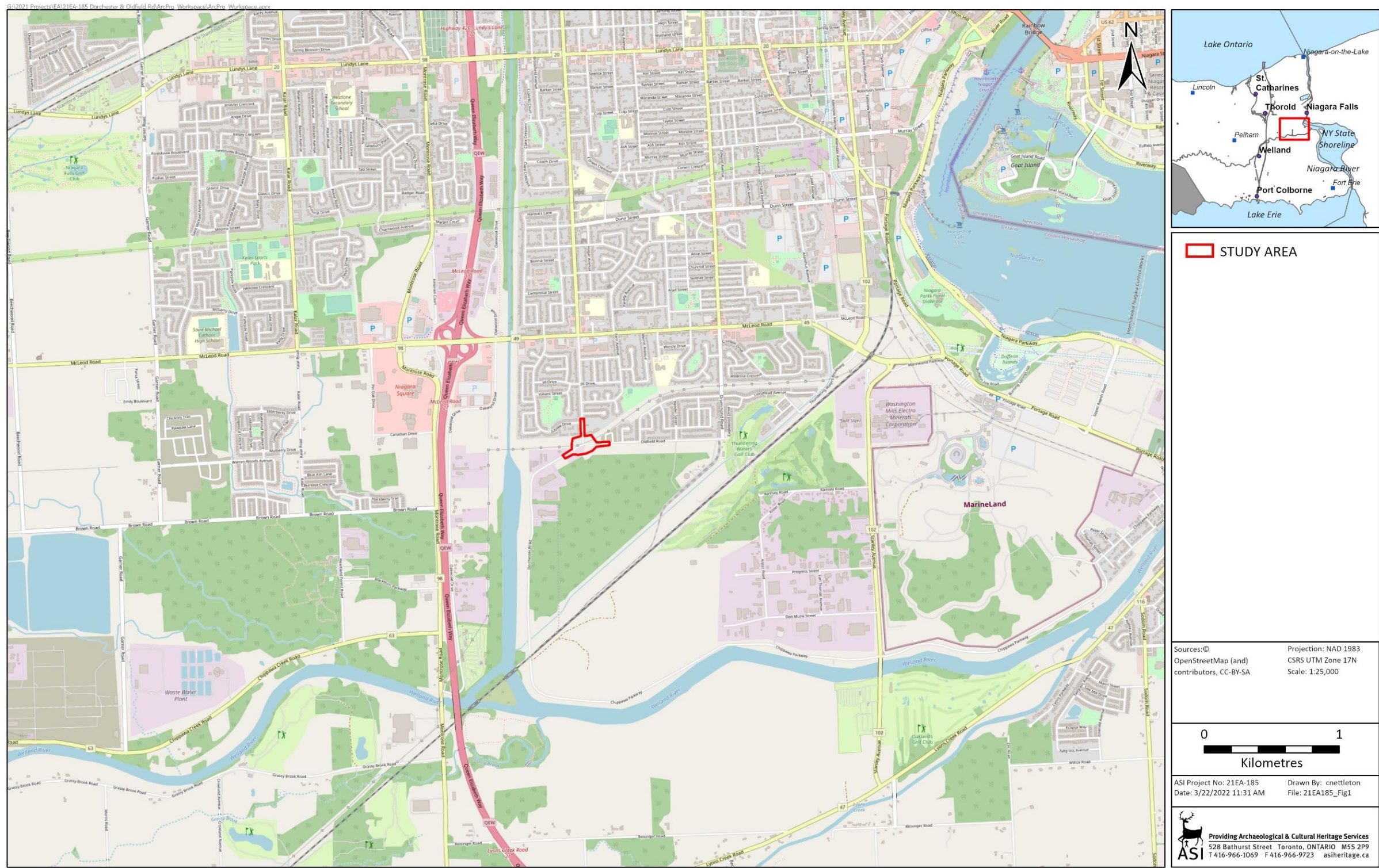


Figure 1: Dorchester Road/Oldfield Road Intersection Improvements Study Area



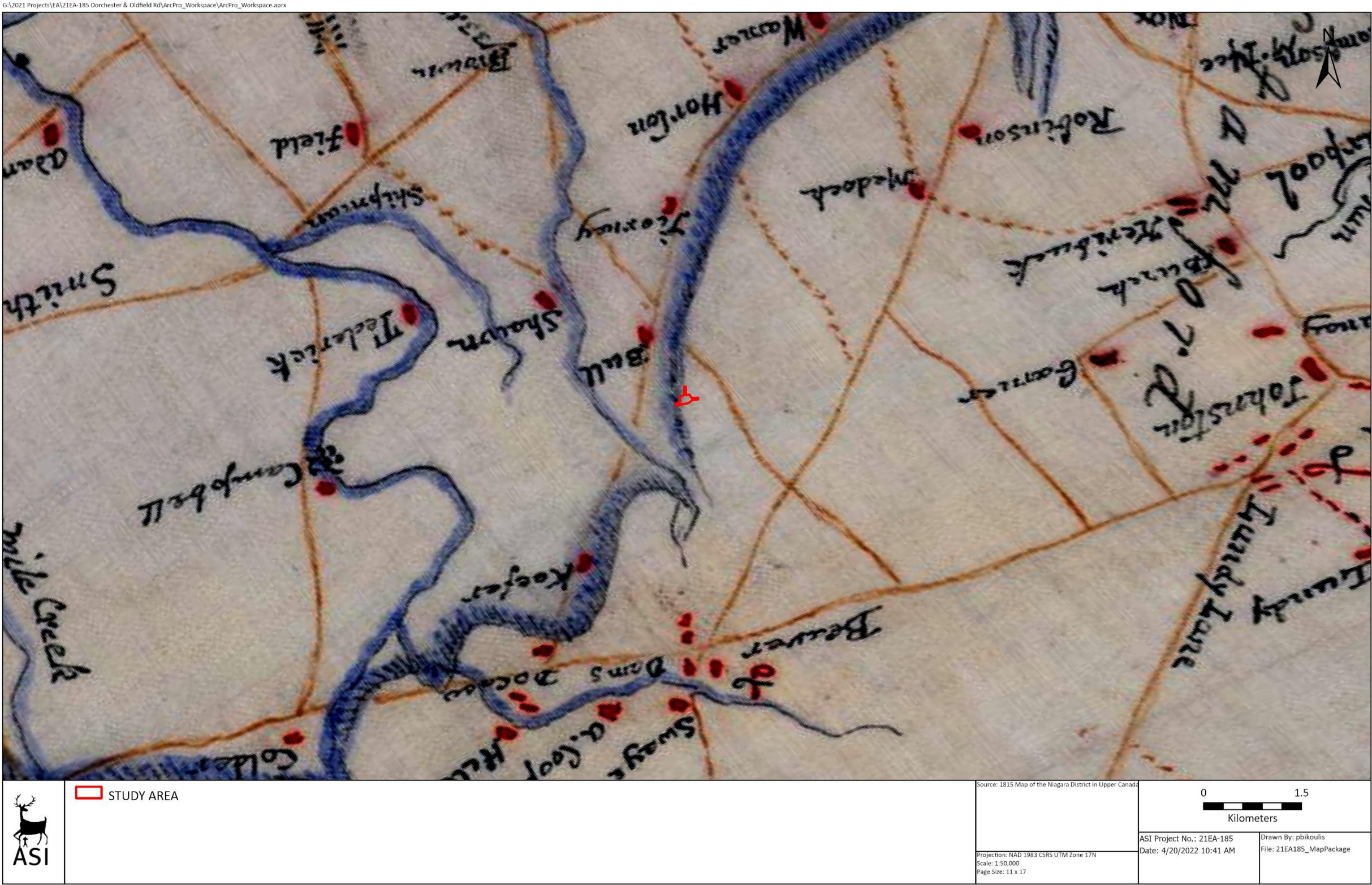


Figure 2: Study Area (Approximate Location) Overlaid on the 1815 Map of the Niagara District in Upper Canada



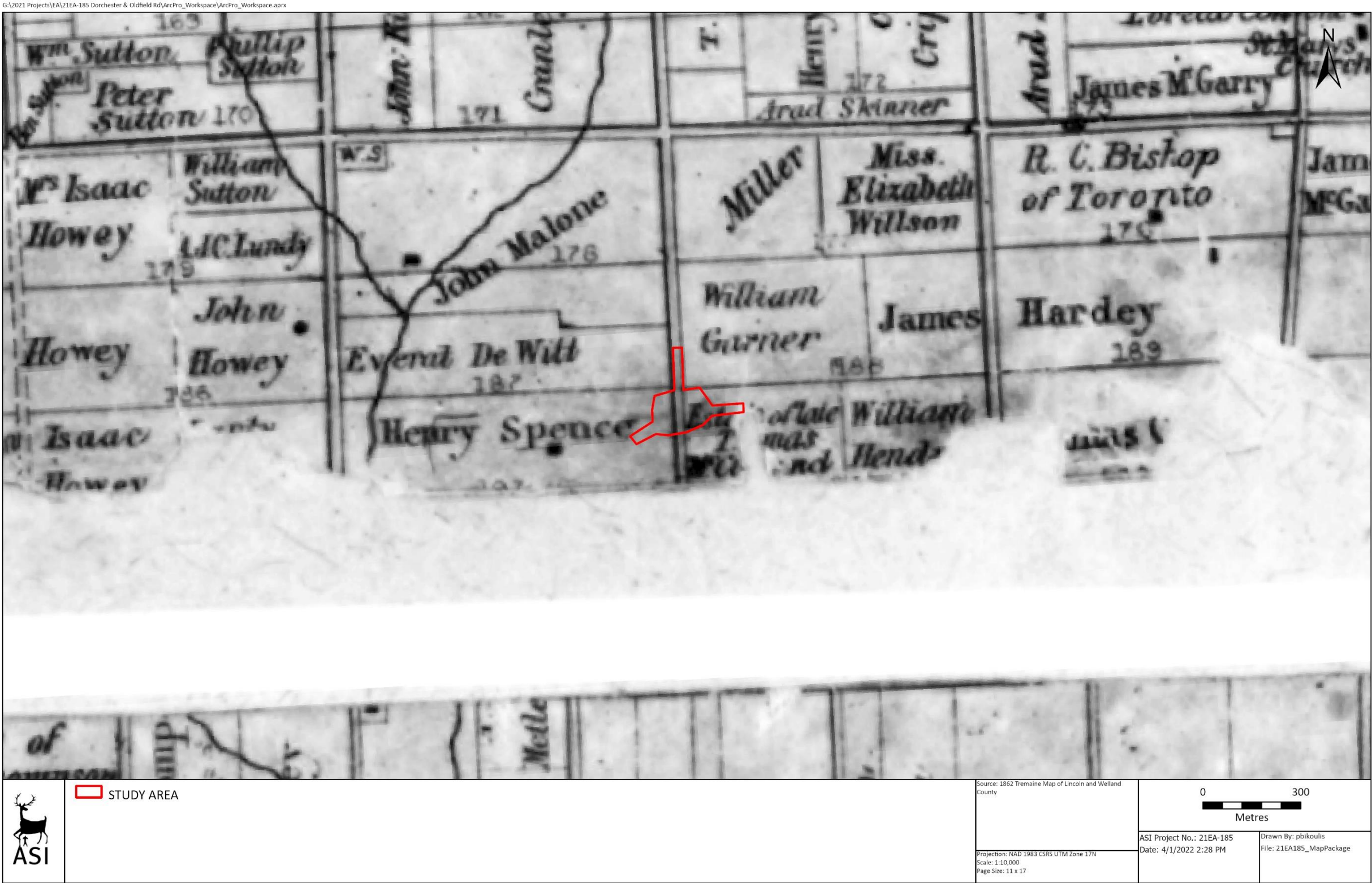


Figure 3: Study Area (Approximate Location) Overlaid on the 1862 Tremaine’s Map of Welland County



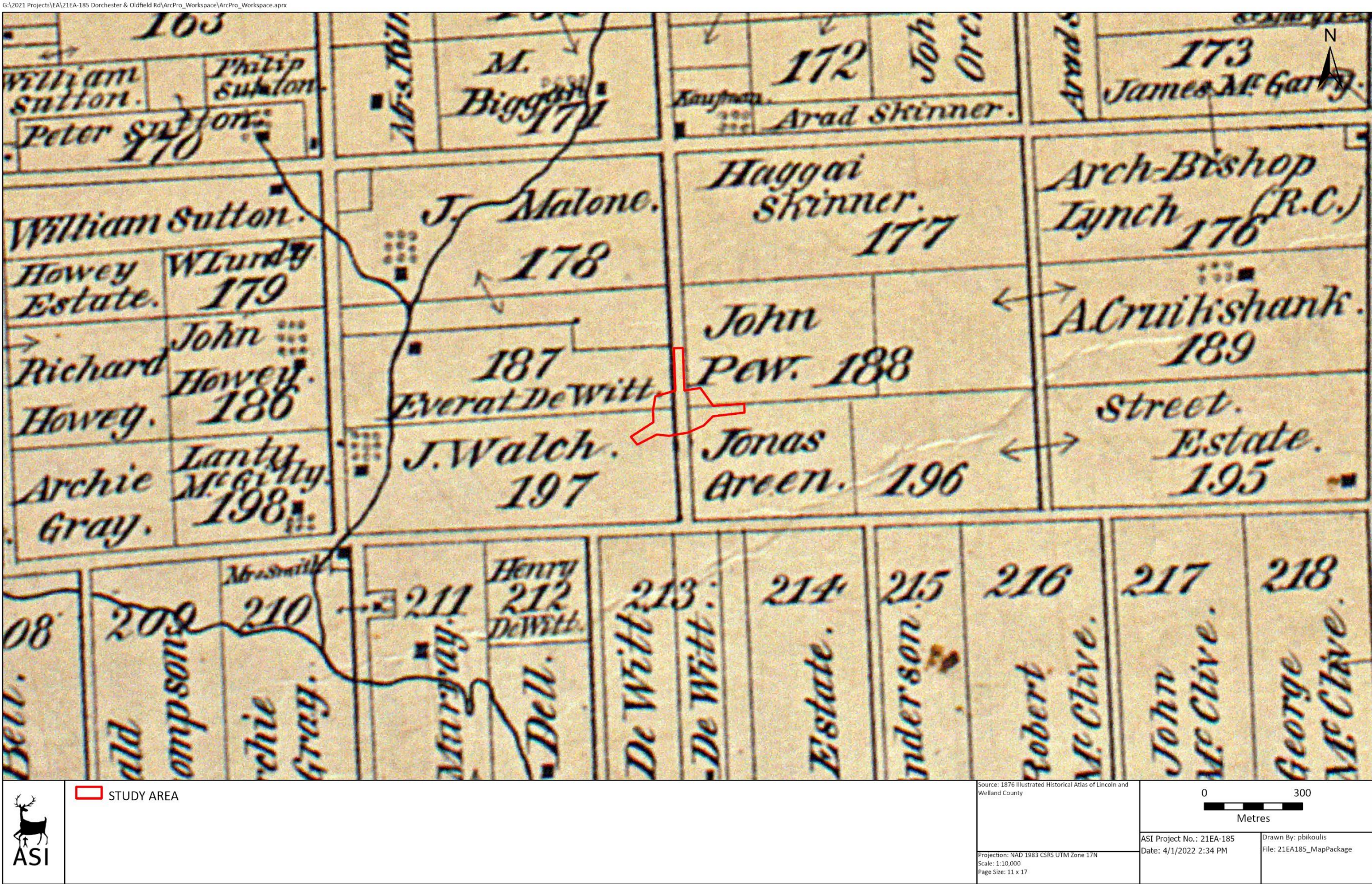


Figure 4: Study Area (Approximate Location) Overlaid on the 1876 Illustrated Historical Atlas of Lincon and Welland Counties



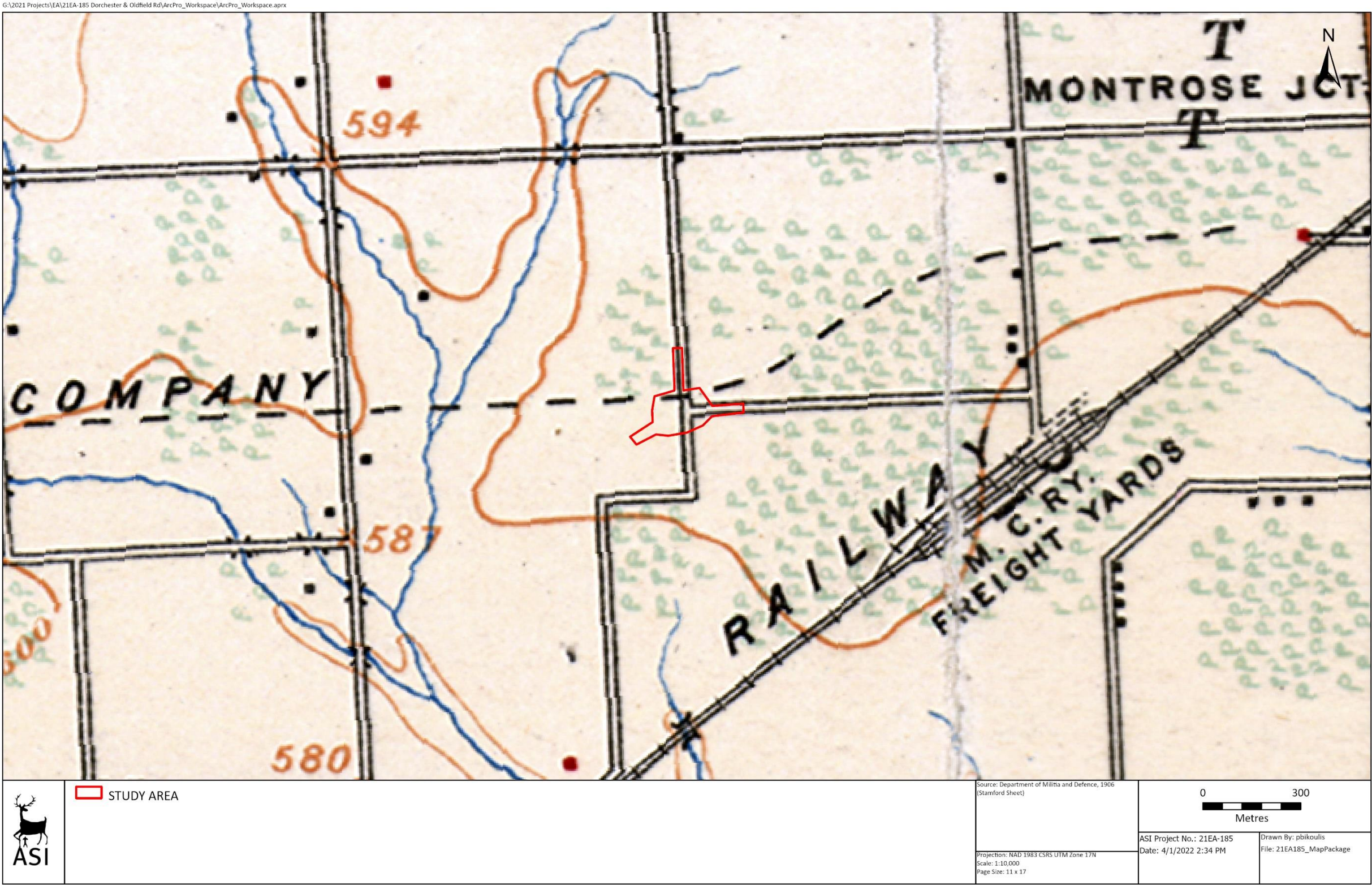


Figure 5: Study Area (Approximate Location) Overlaid on the 1906 Topographic Map Niagara Sheet



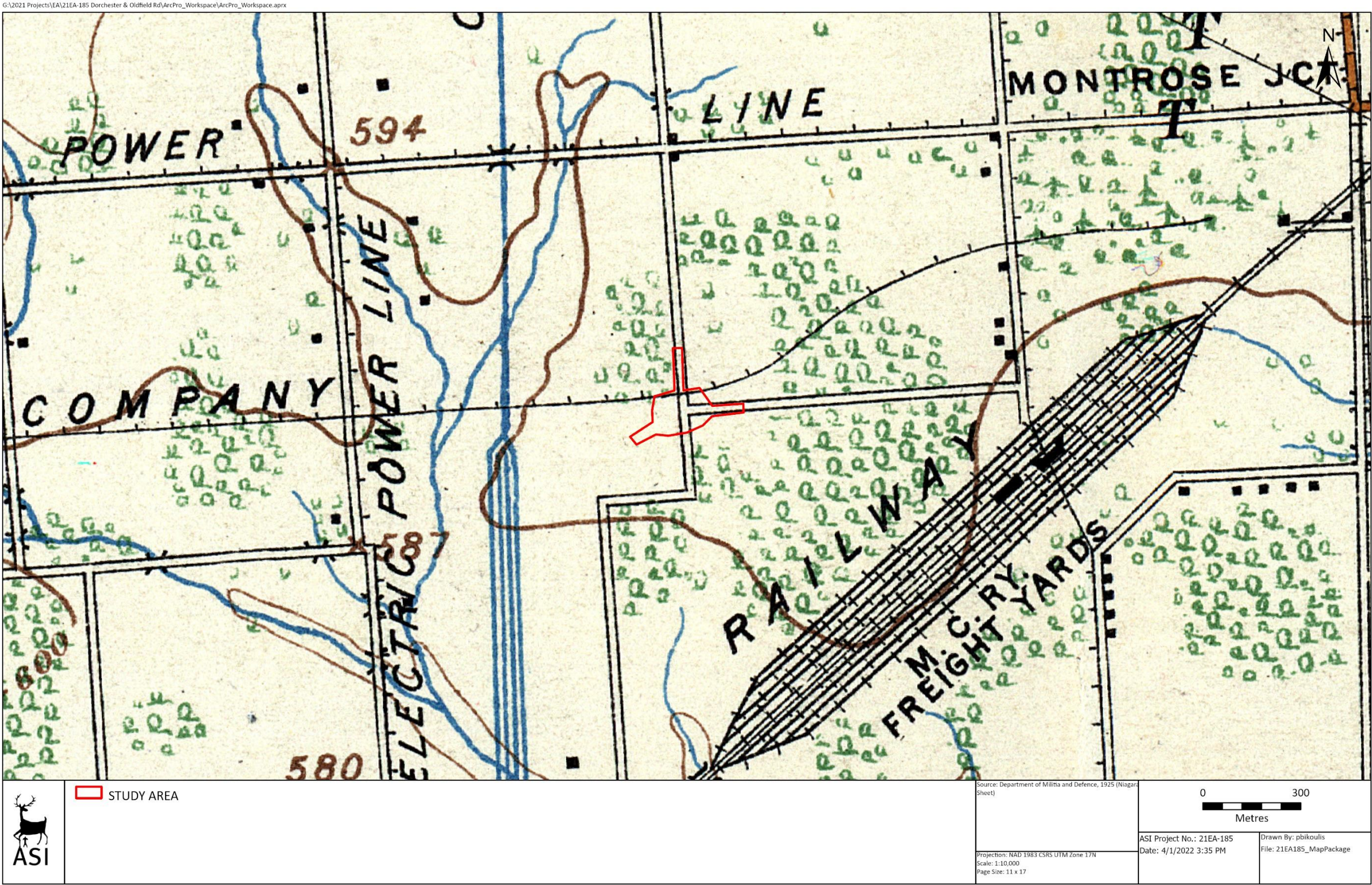


Figure 6: Study Area (Approximate Location) Overlaid on the 1925 Topographic Map Niagara Sheet



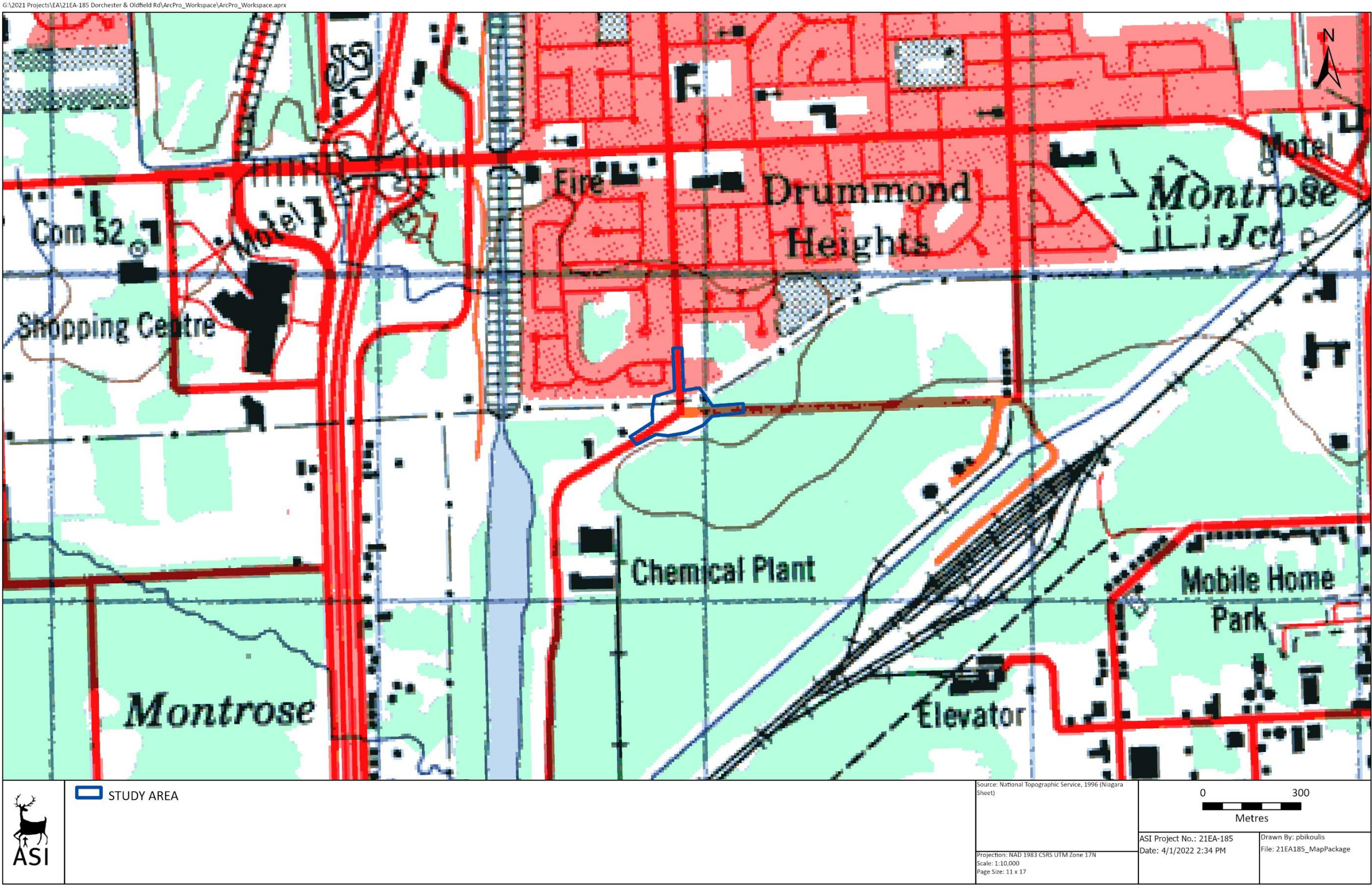


Figure 7: Study Area (Approximate Location) Overlaid on the 1996 National Topographic System Niagara Sheet





Figure 8: Study Area (Approximate Location) Overlaid on the 1934 Aerial Photography





Figure 9: Study Area (Approximate Location) Overlaid on the 1965 Aerial Photography



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Figure 10: Study Area (Approximate Location) Overlaid on the 2000 Aerial Photography



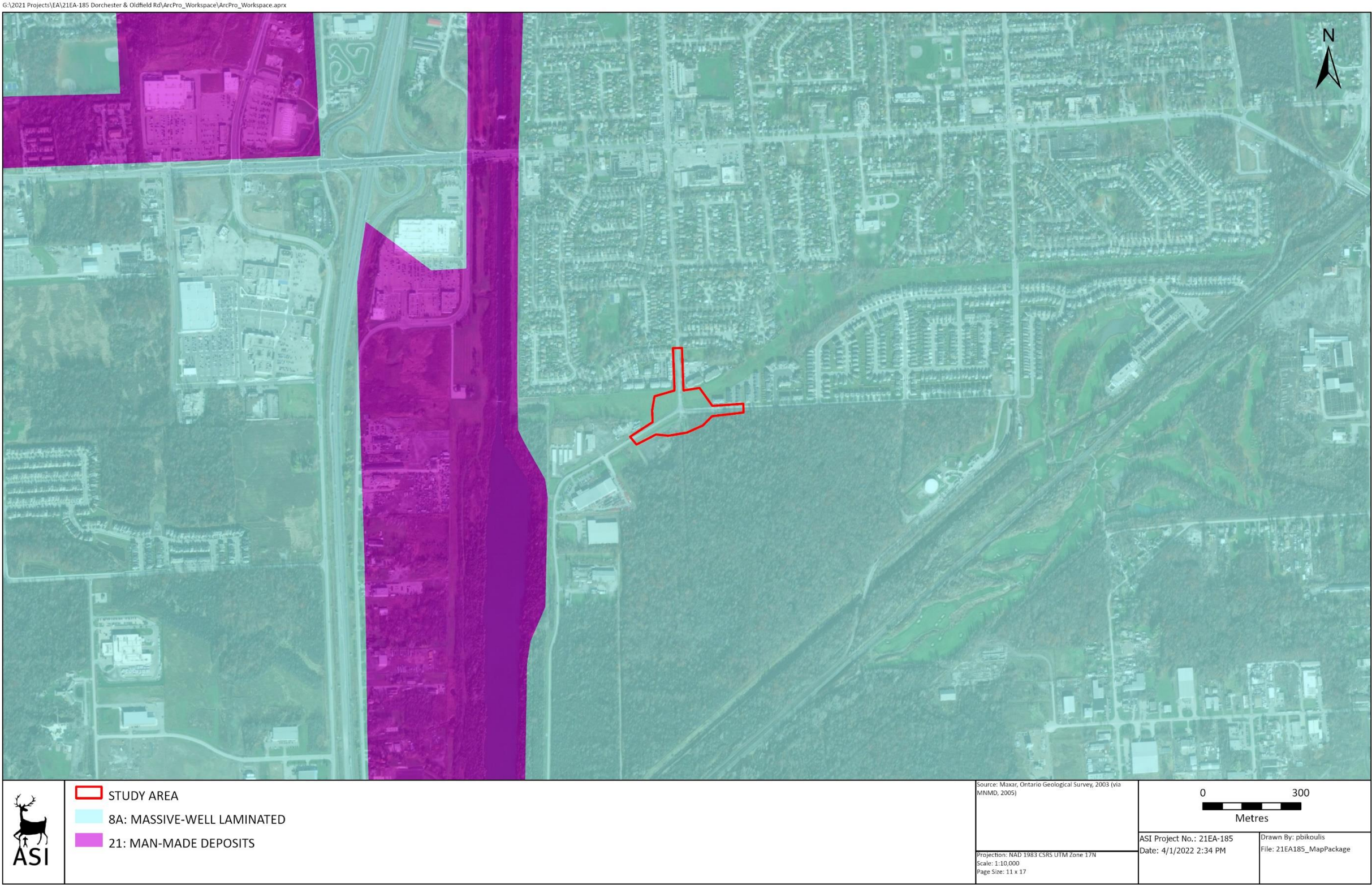


Figure 11: Study Area – Surficial Geology





Figure 12: Study Area – Soil Drainage



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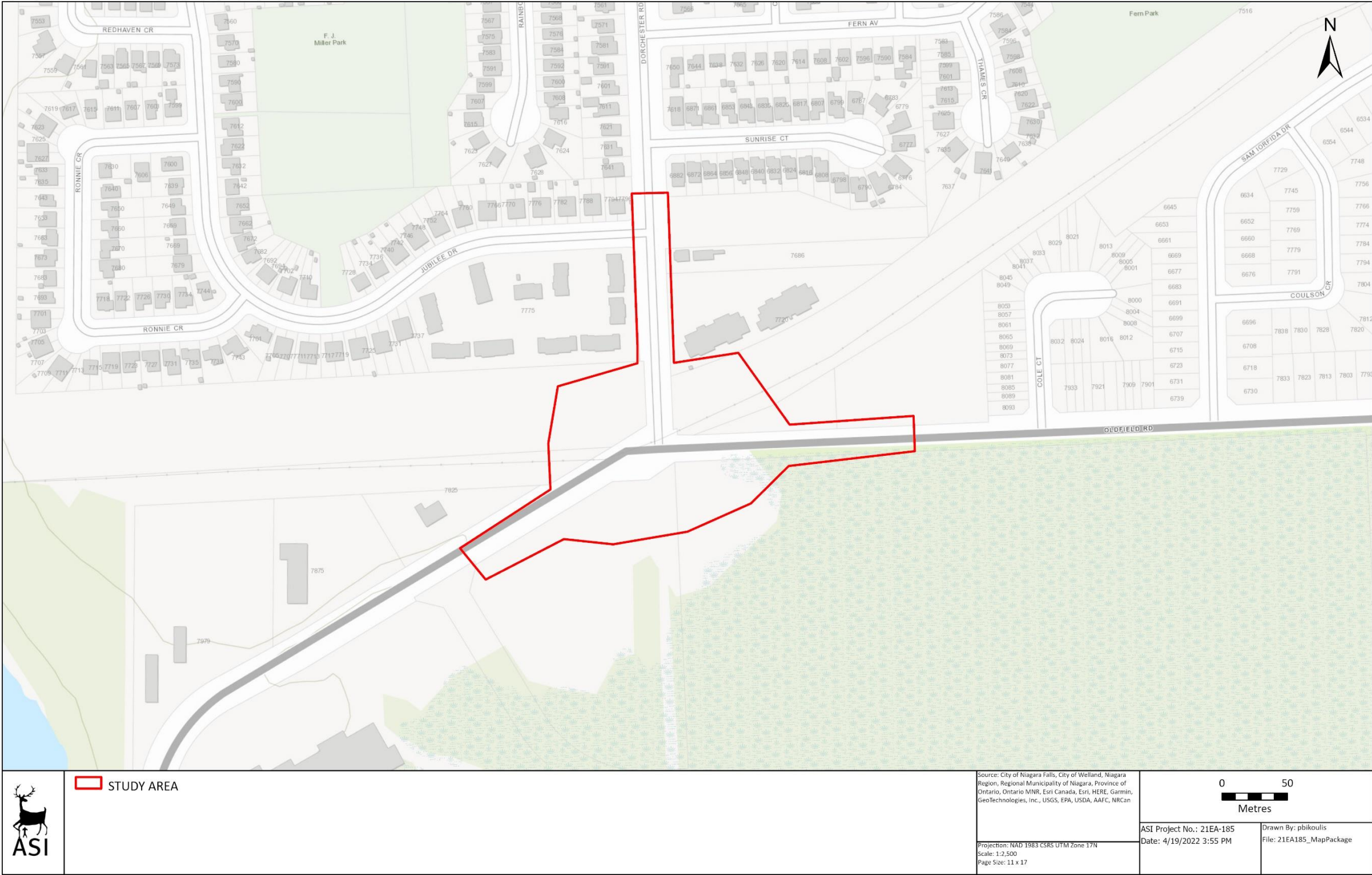


Figure 13: Study Area Topography



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Figure 14: Study Area – Archaeological Potential Layer from the New Niagara Official Plan Niagara Region Archaeological Management Plan Phase 5 Report





Figure 15: Dorchester Road/Oldfield Road Intersection Improvements – Results of Stage 1

