

## Stage 2 Archaeological Assessment Report

631 Lorraine Road  
Part of Lot 20, Concession 1  
Port Colborne  
Regional Municipality of Niagara  
Historic Township of Humberstone  
Historic County of Welland

May 24, 2024  
Prepared for: The Proponent  
Prepared by: Irvin Heritage Inc.  
Archaeological Licensee: Thomas Irvin, P379  
PIF#: P379-0667-2024  
Related PIF#(s): P379-0647-2024  
Version: Original

## EXECUTIVE SUMMARY

Irvin Heritage Inc. was contracted by the proponent to conduct a Stage 2 Archaeological Assessment in support of a Severance Application of 3.00 Ha of land from an overall 33.49 Ha property.

A previously authored Stage 1 Archaeological Assessment by Irvin Heritage Inc., indicated that the Study Area retained archaeological potential. As such, a Stage 2 Archaeological Assessment consisting of a 5 m Transect Test Pit Survey was conducted over the lands for the proposed Severance Application. It became clear that the Study Area has been impacted by the creation of the golf course with examples of topsoil grading and removal and deep topsoil disturbance. Given the archaeological potential of the Study Area within the general landscape, a 5 m Judgmental Test Pit Survey was then conducted. This confirmed deep disturbance and low archaeological potential for the Study Area subject to a Stage 2 Archaeological Assessment Survey. Archaeological potential remains for the balance of the property and appropriate survey recommendations have been made for these lands.

Given the results and conclusions of the completed Stage 2 Archaeological Assessment, the following recommendations are made:

- It is the professional opinion of the archaeological licensee, Thomas Irvin (P379) that the Study Area lands which have been subject to assessment and reported on herein are free of further archaeological concern.
- A Stage 2 Archaeological Assessment is recommend for the lands not subject to a Stage 2 Archaeological Assessment Survey as they retain archaeological potential. A Stage 2 Archaeological Assessment Survey should consist of the following:
  - Lands which are not viable to plough must be subject to a Test Pit Survey with the following conditions:
    - ▶ All test pits are to be excavated by hand at 5 m intervals along 5 m transects
    - ▶ Test pits must be excavated to within 1 m of all extant and/or ruined structures when present
    - ▶ All test pits must be 30 cm in diameter and be excavated into the first 5 cm of subsoil
    - ▶ All test pits must be examined for evidence of fill, stratigraphy or cultural features
    - ▶ All excavated soils must be screened through 6 mm wire mesh to facilitate artifact recovery

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- ▶ All artifacts recovered must be retained via their associated test pit
  - ▶ All test pits are to be backfilled unless instructed otherwise by the landowner
- 
- Notwithstanding the above recommendations, the provided Advice On Compliance With Legislation shall take precedent over any recommendations of this report should deeply buried archaeological resources or human remains be found during any future earthworks within the Study Area.

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**Project Personnel**

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GIS Mapping: Sajeev Bhagowtee, AA

Internal Review: Thomas Irvin, MA (P379)

**Archaeological Resources Reported On Herein (Bordenized & Non-Bordenized)**

| Resource Name | Borden | Affinity | Type | CHVI | Notes |
|---------------|--------|----------|------|------|-------|
| -             | -      | -        | -    | -    | -     |

## 1. ASSESSMENT CONTEXT

### 1.1. Development Context

Irvin Heritage Inc. was retained by the proponent to conduct a Stage 2 Archaeological Assessment of their property (the Study Area) located within 631 Lorraine Road, Part of Lot 20, Concession 1, Port Colborne, Regional Municipality of Niagara, Historic Township of Humberstone in the Historic County of Welland (Map 1).

The requirement for an Archaeological Assessment was triggered by the Approval Authority in response to a Development Application under the Planning Act for a Severance Application. Additionally, a previously authored Stage 1 Archaeological Assessment indicated that the property retained archaeological potential (IHI 2023). The assessment reported on herein was undertaken after direction by the Approval Authority and before formal application submission.

The Stage 2 Archaeological Assessment reported on was undertaken for the and subject to the proposed severance totalling 3.00 Ha Study Area. Permission, without limitation, was provided by the proponent to survey, assess, and document the archaeological potential and resources, if present, of the Study Area.

### 1.2. Environmental Setting

The Study Area of the proposed new lots is rectangular in shape, approximately 2.88 Ha in size, is active golf course lands (Map 2 & 3).

The Study Area is situated within the Great Lakes - St. Lawrence Rive Primary Watershed (2OMNRF 2023). The Study Area is approximately 180 m north of Lake Erie.

The Study Area is situated within the Haldimand Clay Plain (23) physiographic region of Southern Ontario (Chapman & Putnam 1984).

## 2. INDIGENOUS PEOPLES CONTEXT

### 2.1. Mississaugas of the Credit First Nation Traditional History

The following indigenous history was written and provided by the Mississaugas of the Credit First Nation:

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*Prior to European contact, the ancestors of the Mississaugas of the New Credit First Nation occupied the lands north of Lake Superior and the area around Georgian Bay. The Mississaugas lived lightly on the lands they occupied and purposefully moved about the landscape harvesting resources as they became available.*

### *Mississauga Territory*

*The ancestors of the Mississaugas of the Credit migrated into Southern Ontario by means of military conquest. After the Iroquois had expelled the Huron from Southern Ontario in 1649-50, they continued their attacks northward into the territories occupied by the Mississaugas and their allies. By the end of the 17th century, the Mississaugas and their allies had succeeded in driving the Iroquois back into their homelands south of Lake Ontario. At the conclusion of the conflict, many Mississaugas settled at the eastern end of Lake Ontario; other Mississaugas settled at the western end of the lake with their primary location at the mouth of the Credit River. The Mississaugas of the Credit occupied, controlled and exercised stewardship over approximately 3.9 million acres of lands, waters, and resources in Southern Ontario. Their territory extended from the Rouge River Valley westward across to the headwaters of the Thames River, down to Long Point on Lake Erie and then followed the shoreline of Lake Erie, the Niagara River, and Lake Ontario until arriving back at the Rouge River Valley. From the time of the conquest of New France in 1760, the British Crown recognized the inherent rights of First Nations and their ownership of the lands they occupied. The Royal Proclamation of 1763 confirmed First Nations' sovereignty over their lands and prevented anyone, other than the Crown, from purchasing that land. The Crown, needing First Nations' land for military purposes or for settlement, would first have to purchase it from its Indigenous occupants.*

## 2.2. Indigenous Peoples Land Use Context

A search was conducted within the Sites Module of the provincial PastPort System for all pre-contact registered archaeological sites within a 5 km radius of the Study Area. The Sites Module is the online registry of all known and registered archaeological sites and is maintained by the Archaeology Program Unit of the Ontario Ministry of Citizenship and Multiculturalism (MCM). This determined that a total of 68 such sites have been registered as of the date of this report.

This baseline review was conducted to better place the specific Study Area within the known archaeological landscape of the surrounding area, in specific relation to land use patterns by



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Indigenous peoples. A 5 km radius was chosen, by the licensee, to better sample the broader known archaeological landscape in which the Study Area is situated by reviewing sites registered as 'Pre-Contact' or 'Indigenous'. It should be noted that low numbers, or an absence of registered archaeological sites, is directly tied to the degree of archaeological survey conducted within the area. Further, the absence or productivity of sites may not accurately reflect the land use patterns of Indigenous peoples within the landscape.

Within the data reviewed for this assessment, it is clear that there is a sustained and continual presence of Indigenous peoples across the landscape from the Paleo period well into the Post-Contact period. The numerous site types indicate a landscape that was used for resource procurement, transit, and habitation.

While it is known that Southern-Ontario, as a whole, has been inhabited by Indigenous peoples from the Paleo-Indian period, the specific past land use of the Study Areas location suggests a focused and sustained occupation by various Indigenous peoples for thousands of years.

TABLE 1: REGISTERED INDIGENOUS SITES WITHIN 5 KM RADIUS OF STUDY AREA

| Site Periods & Types     | # of Registered Sites |
|--------------------------|-----------------------|
| Pre-Contact              | 43                    |
| Aboriginal               | 37                    |
| scatter                  | 17                    |
| Othercamp/campsite       | 7                     |
| camp / campsite          | 7                     |
| (blank)                  | 3                     |
| quarry                   | 1                     |
| camp / campsite, scatter | 1                     |
| processing, scatter      | 1                     |
| (blank)                  | 6                     |
| scatter                  | 3                     |
| processing, scatter      | 3                     |
| Archaic, Late            | 4                     |
| Aboriginal               | 4                     |
| Unknown                  | 2                     |

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| Site Periods & Types  | # of Registered Sites |
|---|-----------------------|
| Othercamp/campsite  | 1                     |
| Othercamp/campsite, workshop                                    | 1                     |
| Archaic   | 4                     |
| Aboriginal  | 4                     |
| Unknown   | 2                     |
| Othertoolmanufacturing  | 1                     |
| (blank)   | 1                     |
| Archaic, Middle   | 3                     |
| Aboriginal  | 3                     |
| Othercamp/campsite  | 1                     |
| Othercamp/campsite, workshop                                    | 1                     |
| (blank)   | 1                     |
| Post-Contact, Pre-Contact                                       | 2                     |
| Aboriginal, Euro-Canadian                                       | 2                     |
| Unknown   | 1                     |
| OtherRefuse, scatter  | 1                     |
| Other   | 2                     |
| (blank)   | 2                     |
| Othertoolmanufacturing  | 1                     |
| Otherfindspot_  | 1                     |
| Archaic, Early, Archaic, Late, Woodland, Late, Woodland, Middle | 1                     |
| Aboriginal  | 1                     |
| Othercamp/campsite  | 1                     |
| Paleo-Indian, Late, Woodland, Early, Woodland, Late             | 1                     |
| Aboriginal  | 1                     |
| (blank)   | 1                     |
| Woodland  | 1                     |
| Aboriginal  | 1                     |
| Unknown   | 1                     |

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| Site Periods & Types   | # of Registered Sites |
|--|-----------------------|
| Archaic, Early, Archaic, Late, Woodland, Late                    | 1                     |
| Aboriginal   | 1                     |
| quarry   | 1                     |
| Archaic, Late, Woodland, Early, Woodland, Late, Woodland, Middle | 1                     |
| Aboriginal   | 1                     |
| workshop   | 1                     |
| Woodland, Early  | 1                     |
| Aboriginal   | 1                     |
| (blank)  | 1                     |
| Archaic, Middle, Post-Contact                                    | 1                     |
| Aboriginal   | 1                     |
| homestead, processing, scatter                                   | 1                     |
| Archaic, Late, Woodland, Late                                    | 1                     |
| Aboriginal   | 1                     |
| camp / campsite, seasonal  | 1                     |
| Paleo-Indian   | 1                     |
| (blank)  | 1                     |
| camp / campsite  | 1                     |
| Archaic, Woodland  | 1                     |
| Aboriginal   | 1                     |
| Unknown  | 1                     |

*It should be noted that this list contains site types and designations created in the 20th century and may not accurately reflect the true nature or purpose of the identified sites.*

### 3. HISTORICAL CONTEXT

#### 3.1. Treaty History

The following Treaty No. 3 information is provided by the Mississaugas of the Credit First Nation:

## Stage 2 Archaeological Assessment

The arrival of Loyalists during and after the American Revolutionary War placed pressure on the British Crown to find lands on which to settle the newcomers. Among the Loyalists were approximately 2000 members of the Six Nations who had lost their homes fighting on behalf of the Crown. Seeking to reward his First Nation allies for their loyalty during the war, Governor Haldimand offered homes to the Six Nations refugees in the remaining British colonies. One group of the Six Nations Loyalists settled at the eastern end of Lake Ontario, while another group, under the leadership of Mohawk Chief Joseph Brant, selected the Grand River Valley as an area for settlement. Recognizing that under the terms of the Royal Proclamation of 1763 the land needed to be purchased from its owners before the resettlement of the Grand River Valley could begin, Col. John Butler was sent to negotiate with the Mississaugas at the western end of Lake Ontario. On May 22, 1784, for the sum of £1180 worth of trade goods, the Mississaugas of the Credit ceded to the Crown approximately 3 000 000 acres of land located between Lakes Huron, Ontario, and Erie. Of those lands, some 550 000 acres were granted to the Six Nations in the Haldimand Proclamation of October 25, 1784, with the remainder to be utilized for the settlement of other Loyalists. The land grant to the Six Nations was to extend six miles on both sides of the Grand River from its mouth to its source. When it was later discovered that the upper limits of the Between the Lakes Treaty were in error due to faulty geographical assumptions, actual boundaries were defined and a confirming document signed by the Mississaugas and the Crown in 1792. Major population centres found within the boundaries of the Between the Lakes Treaty include Hamilton, Cambridge, Waterloo, Guelph, Brantford, and St. Catharines. The present location of the Mississaugas of the New Credit First Nation Reserve is located on Between the Lakes Treaty lands. (MCFN 2023)

The Study Area is located within the boundaries of the Between the Lakes Treaty No. 3. This treaty was signed on December 7, 1792 by Chiefs and Principle Women of the Mississauga Nation and John Graves Simcoe on behalf of the British Crown. The treaty includes over 3 million acres between Lake Ontario and Lake Erie. It extends along the northeastern shore of Lake Erie to outside of Port Bruce where it shares its western border with the McKee Purchase, London Township Purchase, and Huron Tract Purchase. It extends north to approximately Arthur and then southeast to Indian Point, Burlington. On the east its bordered by the Ajetance Purchase, the Head of the Lake Purchase, and the Brant Tract. The Between the Lakes Treaty is split into two sections with the Haldimand Tract running directly down the middle of the treaty lands just shy of 10km on either side the Grand River (MIA 2023).

### 3.2. County History

The Regional Municipality of Niagara was formed in 1970 when the counties within the Niagara Peninsula, Lincoln and Welland, were amalgamated. Lincoln County ran along the south shore of Lake Ontario between Fifty Point and the Niagara River. The County of Welland accounted for the remainder of the lands within the Niagara Peninsula to the south of Lincoln County (Gayler & Jackson 2020).

The areas of Lincoln and Welland were first settled by United Empire Loyalists around the year 1784, though previous settlers were scattered sparsely through the lands. The area did not see administrative infrastructure until the creation of the district system in 1788 which placed it within the Nassau District (Page 1876). In 1792, it became part of the Home District and Lincoln was formerly defined as a county, however, the townships included within its jurisdiction would fluctuate over the coming decades (Armstrong 1985)(MOGACS 2022). At this time, the administrative centre for all of Upper Canada was placed at Newark, otherwise known as Niagara or Niagara on the Lake as it was later named. Parliament was held at Newark for 4 years before moving to York, now Toronto, which was strategically safer being further from the border (Page 1876). Welland County was set apart from Lincoln County in 1842 (Page 1876).

Pennsylvanian Dutch Mennonite settlers arrived in 1799 from the United States of America founding villages in Louth and Clinton Townships. These settlers along with immigrants from Western Europe cleared the land and shaped it into the fruitful agricultural landscape that drove its economy (Jones 1946) (Page 1877). Milling towns emerged around river ways and well travelled trails (Gayler & Jackson 2020). The Underground Railroad had an effect on the settlement of Lincoln and Welland Counties with many Black refugees of American Slavery moving into the area to build new lives (Henry 2020). In the early to mid 19th century Upper Canada saw an influx of Irish immigration due to the need for labour constructing the Welland and subsequent canals. Toward the end of the 1840s and early 1850s the Great Famine in Ireland caused the rate of Irish immigrants in Upper Canada to increase dramatically. This only exasperated the already high tensions surrounding the Irish in Lincoln and Welland Counties (McGowan 2005). The 1850s brought the constructions of rail lines and with them a boost to Lincoln and Welland's agricultural industries. With more access to trade, farms were able to diversify their produce, small communities grew to flourish along rail lines, and tourism along the lakeshores and towards Niagara Falls increased (Gayler & Jackson 2020).

Modernly, the heart of Niagara Region's economy has changed very little since its pioneer beginnings. Agriculture remains the driving force of the economy with fruit and vineyards being the main focus. Tourism has flourished both because of these industries feeding the wine, spirits, and hospitality industries but also the natural formations of the region bring sightseers to its wooded trails, Great Lakes, and Niagara Falls (Gayler & Jackson 2020).

### 3.3. Township History

Humberstone Township was located at the south centre of Welland County at the southern terminus of the Welland Canal along Lake Erie. In 1970, when the counties of Lincoln and Welland were restructured into the Regional Municipality of Niagara, the majority of Humberstone Township became the City of Port Colborne (Gayler & Jackson 2020). The Township of Humberstone was first settled in 1785 by United Empire Loyalists. Settlers found the township were faced with thousands of acres of marshland but found success in cultivating this for cranberries, huckleberries, and even peat. The remainder of the township is loamy soil good for farming (H.R. Page 1876). By 1817 the 32000 acre township contained a grist and saw mills and 75 inhabited houses (H.R. Page 1876). The township grew quickly reaching a population of 3200 by 1850 largely due to the Welland Canal which runs through the western portion of the township. The Welland canal, which connects Lake Ontario to Lake Erie, became a settlement hub with the communities of Petersburg and Port Colborne growing on its banks (H.R. Page 1876). In 1866, being an important trade center, the defensive battalion at Port Colborne fell to the Fenian Raids and was captured alongside Fort Erie to the east (Mika & Mika 1983). Port Colborne would grow to become an important trade hub not only benefitted from its terminus position on the Welland Canal but also became the terminus for the Welland Railway and station on the Buffalo, Goderich line of the Grand Trunk Railway making it a crucial trade port (H.R. Page 1876).

The Loop Line of the Great Western Railway reaches through the northern part of Humberstone Township and the Canadian Southern Railway connects the northeast part of the township which only serves to bolster the trade prosperity for the settlers of Humberstone during the mid 19th century (H.R. Page 1876). Port Colborne developed quickly but this now pinnacle City settled later than the wider township (Mika & Mika 1983) The City of Port Colborne as its known today, began with a very small settlement at Gravelly Bay on the shore of Lake Erie (Mika & Mika 1983). In 1835, William H. Merritt, president of the canal company, laid out the heart of the community further north from the shore to facilitate trade on the Welland Canal and it grew quickly around the canal economy (Mika & Mika 1983). Port Colborne was incorporated as a

Village in 1870 with a population of 1030 residents into the 1880s tourism by wealthy Americans led to the building of distinct picturesque cottage mansions on the lakefront (Mika & Milk 1983)(Gayler & Jackson 2020). Port Colborne became a Town in 1918 with a population of over 5000 (Mika & Mika 1983). Into the 20th century, flour trade and refinery remained a massive part of Port Colborne's economy along with nickel and steel production, cement, and manufacturing. In 1964, Port Colborne was annexed from Humberstone Township and in 1970 Humberstone Township was absorbed into the City of Port Colborne within the Regional Municipality of Niagara (Mika & Mika 1983)(Gayler & Jackson 2020). Modernly, Port Colborne has a thriving tourism industry but still centres most of its economy around the canal, construction, manufacturing, and health care with over 60% of its population commuting to work outside of Port Colborne (Statistics Canada 2023).

### 3.4. Study Area History

A review of historical resources resulted in the following data relevant to the Study Area:

#### **Map 4: 1860 Tremaine's Map of the County of Lincoln and Welland (Tremaine 1860)**

The Study Area is situated within part of Lot 20, Concession 1. The land containing the Study Area is listed as under the ownership of Jonathan Knesey. There are no structures noted within or adjacent to the Study Area.

#### **Map 5: 1876 Page's Historical Map of the Township of Humberstone (Page 1876)**

The Study Area is situated within part of Lot 20, Concession 1. The land containing the Study Area is listed as under the ownership of two people, Eliha Knisley & J.B. There is a structure noted within the Study Area.

The following should be noted in regard to the review of historic maps:

- Study Area placement within historic maps is only approximate
- Many historic maps were subscriber based, meaning only individuals who paid a fee would have their property details mapped

## 4. ARCHAEOLOGICAL CONTEXT

The Study Area is situated within an overall historic landscape that would have been appropriate for both resource procurement and habitation by both Indigenous and Euro-Canadian peoples.

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### 4.1. Registered Archaeological Sites

A search of the Ontario Sites Database conducted on April 18, 2024, using a Study Area centroid of 17T E 646031 N 4748756 indicated that there are 3 registered archaeological sites within a 1 km radius of the Study Area. None of the registered archaeological sites are within the Study Area nor are any within a 50 m buffer which would suggest encroachment of archaeological resources into the Study Area.

TABLE 2: SITES WITHIN 1 KM

| Borden # | Site Name            | Time Period | Affinity   | Site Type       |
|----------|----------------------|-------------|------------|-----------------|
| AfGt-330 | <i>None Provided</i> | Pre-Contact | Aboriginal | scatter         |
| AfGt-329 | <i>None Provided</i> | Pre-Contact | Aboriginal | camp / campsite |
| AfGt-311 | <i>None Provided</i> | Pre-Contact | Aboriginal | camp / campsite |

### 4.2. Related and/or Adjacent Archaeological Assessments

A review of Archaeological Assessment reports currently accepted into the provincial register of archaeological reports that have been completed within, directly adjacent too, or detail site excavations within a 50 m buffer of the Study Area resulted in the following accepted reports.

Report Status: Report Accepted into the Provincial Register of Archaeological Reports

PIF/CIF#: P379-0647-2023

Consultant Firm: Irvin Heritage Inc.

Report Title: Stage 1 Archaeological Assessment Report 631 Lorraine Road Part of Lot 20, Concession 1 , Port Colborne Regional Municipality of Niagara, Historic Township of Humberstone, Historic County of Welland

Executive Summary: *Irvin Heritage Inc. was contracted by the proponent to conduct a Stage 1 Archaeological Assessment in support of a Severance Application for a Study Area which is approximately 33.50 Ha in size.*

*The Stage 1 Archaeological Assessment indicated that the Study Area retains archaeological potential. As such, a Stage 2 Archaeological Assessment consisting of a 5 m Test Pit Survey is recommended.*

*Given the results and conclusions of the completed Stage 1 Archaeological Assessment the Study Area retains archaeological potential and is recommended for a Stage 2 Archaeological Assessment confirming to the following:*



## Stage 2 Archaeological Assessment

*Lands which are not viable to plough must be subject to a test pit survey with the following conditions:*

*All test pits are to be excavated by hand at 5 m intervals along 5 m transects*

*Test pits must be excavated to within 1 m of all extant and/or ruined structures when present*

*All test pits must be 30 cm in diameter and be excavated into the first 5 cm of subsoil*

*All test pits must be examined for evidence of fill, stratigraphy or cultural features*

*All excavated soils must be screened through 6 mm wire mesh to facilitate artifact recovery*

*All artifacts recovered must be retained via their associated test pit*

*All test pits are to be backfilled unless instructed otherwise by the landowner*

*Notwithstanding the above recommendations, the provided Advice On Compliance With Legislation shall take precedent over any recommendations of this report should deeply buried archaeological resources or human remains be found during any future earthworks within the Study Area.*

### 4.3. Cemeteries & Burials

As per a cursory search conducted on April 18, 2024, there are no known or registered cemeteries or burials within or directly adjacent to the Study Area.

### 4.4. Archaeological Management Plan

The Study Area is situated within limits of the Region of Niagara Archaeological Management Plan.

### 4.5. Heritage Conservation District

The Study Area is not situated within an existing or proposed Heritage Conservation District (OHT 2023).

### 4.6. Historic Plaques

There are no historic plaques within a 100 m radius of the Study Area (Ontario Heritage Trust 2023).

### 4.7. Study Area Archaeological Potential

The Study Area retains the following criteria of indicating archaeological potential:

- Present or past water sources within 300 m of the Study Area,

## Stage 2 Archaeological Assessment

- Proximity to early historic transportation routes
- The Study Area is situated within an area suitable for resource procurement, transit and habitation by both pre-historic and post-contact Indigenous Peoples.

### 5. STAGE 1 ANALYSIS & CONCLUSIONS

It is clear that the Study Area retains archaeological potential owing to the environmental setting of the Study Area in relation historic settlement, and proximity to a watercourse.

As such, the Study Area retains archaeological potential and should be subject to a Stage 2 Archaeological Assessment (Map 6).

### 6. STAGE 1 RECOMMENDATIONS

Given the results and conclusions of the completed Stage 1 Archaeological Assessment the Study Area retains archaeological potential and is recommended for a Stage 2 Archaeological Assessment confirming to the following:

- Lands which are not viable to plough must be subject to a test pit survey with the following conditions:
  - ▶ All test pits are to be excavated by hand at 5 m intervals along 5 m transects
  - ▶ Test pits must be excavated to within 1 m of all extant and/or ruined structures when present
  - ▶ All test pits must be 30 cm in diameter and be excavated into the first 5 cm of subsoil
  - ▶ All test pits must be examined for evidence of fill, stratigraphy or cultural features
  - ▶ All excavated soils must be screened through 6 mm wire mesh to facilitate artifact recovery
  - ▶ All artifacts recovered must be retained via their associated test pit
  - ▶ All test pits are to be backfilled unless instructed otherwise by the landowner
- Notwithstanding the above recommendations, the provided Advice On Compliance With Legislation shall take precedent over any recommendations of this report should deeply buried archaeological resources or human remains be found during any future earthworks within the Study Area.

## 7. STAGE 2 ARCHAEOLOGICAL ASSESSMENT SURVEY

### 7.1. Archaeological Survey Methodology

Prior to the initiation of fieldwork, the Field Director reviewed the existing Stage 1 Archaeological Assessments analysis and recommendations; all field staff were then briefed on the archaeological potential of the Study Area. Fieldwork was conducted in April 2024. The weather conditions encountered during the completed archaeological survey are presented below. At all times the assessment was conducted under appropriate weather and lighting conditions. The limits of the Study Area were defined in the field by the use of a geo-referenced Study Area overly on a GPS system accurate to 1 m.

TABLE 3: DATES & DIRECTORS OF ASSESSMENT

| Date        | Weather                 | Field Director(s) | Assistant Field Directors |
|-------------|-------------------------|-------------------|---------------------------|
| Apr-22-2024 | 15°C, light cloud cover | Irvin (P379)      | -                         |
| Apr-23-2024 | 16°C, light cloud cover | Irvin (P379)      | -                         |

The assessment began with a visual review of the Study Area conditions.

The Study Area was found to be highly landscaped and grassed with various examples of clear visual disturbance from golf course landscaping. A Stage 2 Archaeological Assessment consisting of a 5 m Transect Test Pit Survey was initially conducted over the lands for the proposed Severance Application. However, it became clear that the Study Area has been impacted by the creation of the golf course with examples of topsoil grading and removal and deep topsoil disturbance. Given the archaeological potential of the Study Area within the general landscape, a 5 m Judgmental Test Pit Survey was then conducted. This confirmed deep disturbance and low archaeological potential for the Study Area subject to a Stage 2 Archaeological Assessment. Given this, the survey transects were moved to a 5 m Judgment Test Pit Survey (Images 1-5). The entirety of the Study Area resulted in the confirmation of low archaeological potential as the Test Pits produced disturbed soils with a very shallow topsoil horizon, indicating previous soil disturbance (Images 6-8).

The archaeological methodology employed during the Stage 2 Test Pit survey consisted of:

- All test pits were excavated by shovel at 5 m intervals on 5 m transects (unless noted above)
- Test pits were excavated to within 1 m of all structures, both extant and in ruin, when present
- All test pits were 30 cm in diameter and were excavated into the first 5 cm of subsoil
- All test pits must be examined for evidence of fill, stratigraphy, or cultural features

## Stage 2 Archaeological Assessment

- All excavated soils which were of an undisturbed context were screened through 6 mm wire mesh
- All test pits were backfilled

The completed Test Pit Survey of lands not viable to plough resulted in the discovery of no archaeological resources.

### 8. STAGE 2 RECORD OF FINDS

The completed archaeological assessment resulted in the creation of various documentary records. No archaeological resources were identified in the completed Stage 2 Archaeological Assessment Survey.

TABLE 4: INVENTORY OF STAGE 2 HOLDINGS

| Record Type or Item         | Details       | # of Boxes |
|-----------------------------|---------------|------------|
| Field Notes: P379-0667-2024 | Digital Files | -          |
| Photos: P379-0667-2024      | Digital Files | -          |

### 9. STAGE 2 ANALYSIS & CONCLUSIONS

The Study Area subject to Stage 2 Archaeological Assessment Survey, measuring approximately 3.00 Ha in size was subject to a complete archaeological assessment. No archaeological resources were identified in the completed Stage 2 Archaeological Assessment Survey.

TABLE 5: SUMMARY OF STAGE 2 ASSESSMENT METHODOLOGIES & FINDINGS

| Assessment Method  | Findings     | Ha           | % of Study Area |
|--|--------------|--------------|-----------------|
| Archaeologically Assessed: 5m Judgmental Test Pit Survey Conducted | No Resources | 3.00         | 9.0%            |
| Archaeological Potential: 5 m Test Pit Survey Recommended          | -            | 30.50        | 91.0%           |
| <b>Total</b>   |              | <b>33.50</b> | <b>100%</b>     |

## 10. STAGE 2 ARCHAEOLOGICAL ASSESSMENT RECOMMENDATIONS

Given the results and conclusions of the completed Stage 2 Archaeological Assessment, the following recommendations are made:

- It is the professional opinion of the archaeological licensee, Thomas Irvin (P379) that the Study Area lands which have been subject to assessment and reported on herein are free of further archaeological concern.
- A Stage 2 Archaeological Assessment is recommend for the lands not subject to a Stage 2 Archaeological Assessment Survey as they retain archaeological potential. A Stage 2 Archaeological Assessment Survey should consist of the following:
  - Lands which are not viable to plough must be subject to a Test Pit Survey with the following conditions:
    - ▶ All test pits are to be excavated by hand at 5 m intervals along 5 m transects
    - ▶ Test pits must be excavated to within 1 m of all extant and/or ruined structures when present
    - ▶ All test pits must be 30 cm in diameter and be excavated into the first 5 cm of subsoil
    - ▶ All test pits must be examined for evidence of fill, stratigraphy or cultural features
    - ▶ All excavated soils must be screened through 6 mm wire mesh to facilitate artifact recovery
    - ▶ All artifacts recovered must be retained via their associated test pit
    - ▶ All test pits are to be backfilled unless instructed otherwise by the landowner
- Notwithstanding the above recommendations, the provided Advice On Compliance With Legislation shall take precedent over any recommendations of this report should deeply buried archaeological resources or human remains be found during any future earthworks within the Study Area.



11. IMAGES



Image 1: Study Area subject to a 5 m Judgmental Test Pit Survey. Note extensive grading and disturbance.



Image 2: Field Archaeologists conducting the initial 5 m Transect Test Pit Survey.



Image 3: Study Area subject to a 5 m Judgmental Test Pit Survey. Note extensive grading and disturbance.



Image 4: Study Area subject to a 5 m Judgmental Test Pit Survey. Note extensive grading and disturbance.



Stage 2 Archaeological Assessment



Image 5: Study Area subject to a 5 m Judgmental Test Pit Survey. Note extensive grading and disturbance.



Image 6: Example of disturbed Test Pit conditions. Note lack of topsoil.



Image 5: Example of disturbed Test Pit conditions. Note lack of topsoil.



Image 6: Example of disturbed Test Pit conditions. Note highly mixed soil conditions.

## 12. ADVICE ON COMPLIANCE WITH LEGISLATION

The Standards and Guidelines for Consultant Archaeologists requires that the following standard statements be provided within all archaeological reports for the benefit of the proponent and approval authority in the land use planning and development process (MTC 2011:126):

This report is submitted to the Minister of Tourism, Culture and Sport 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 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 MTCS, 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.

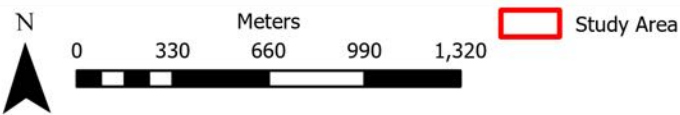
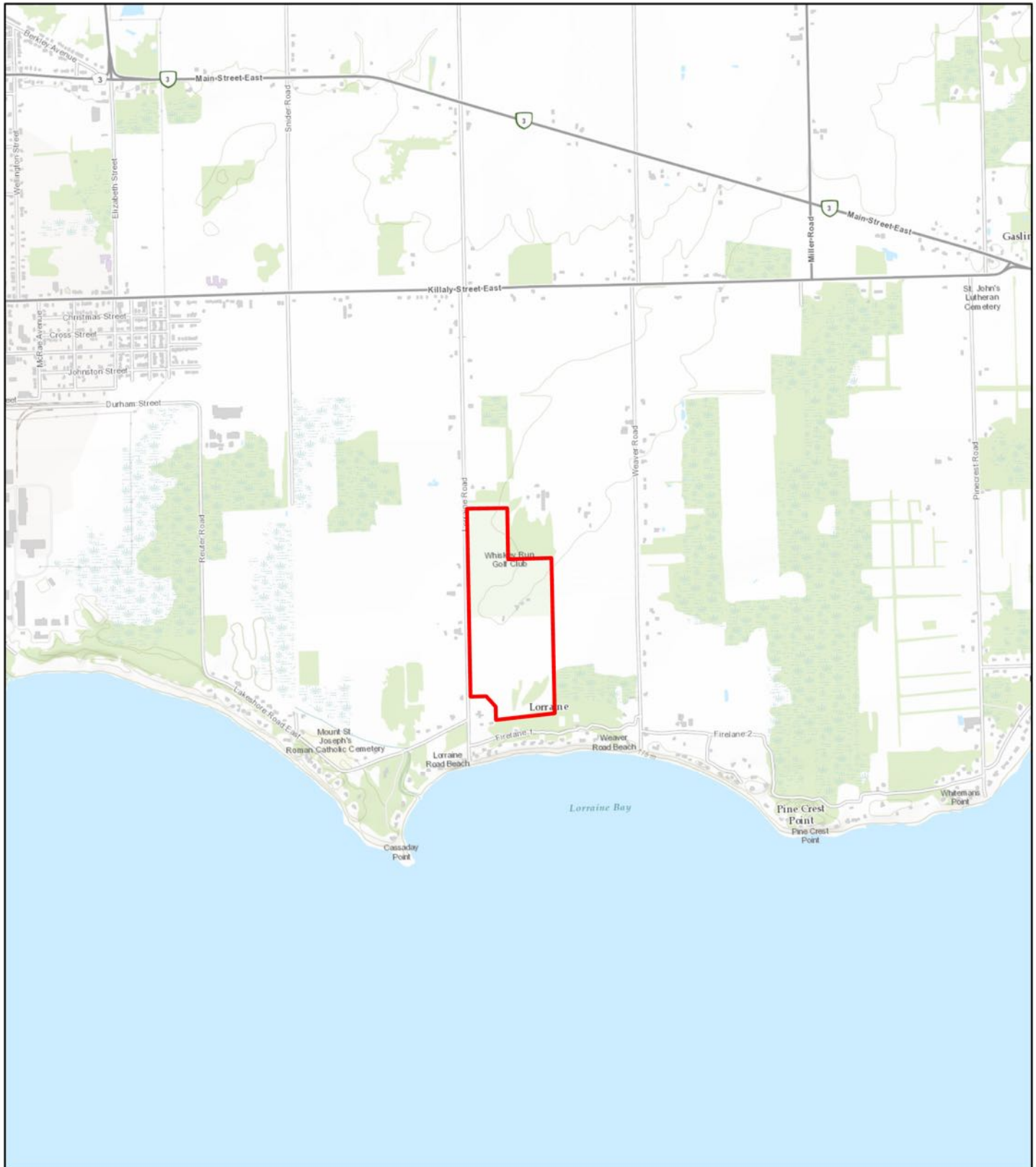
Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a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

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the Ontario Heritage Act and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Service.

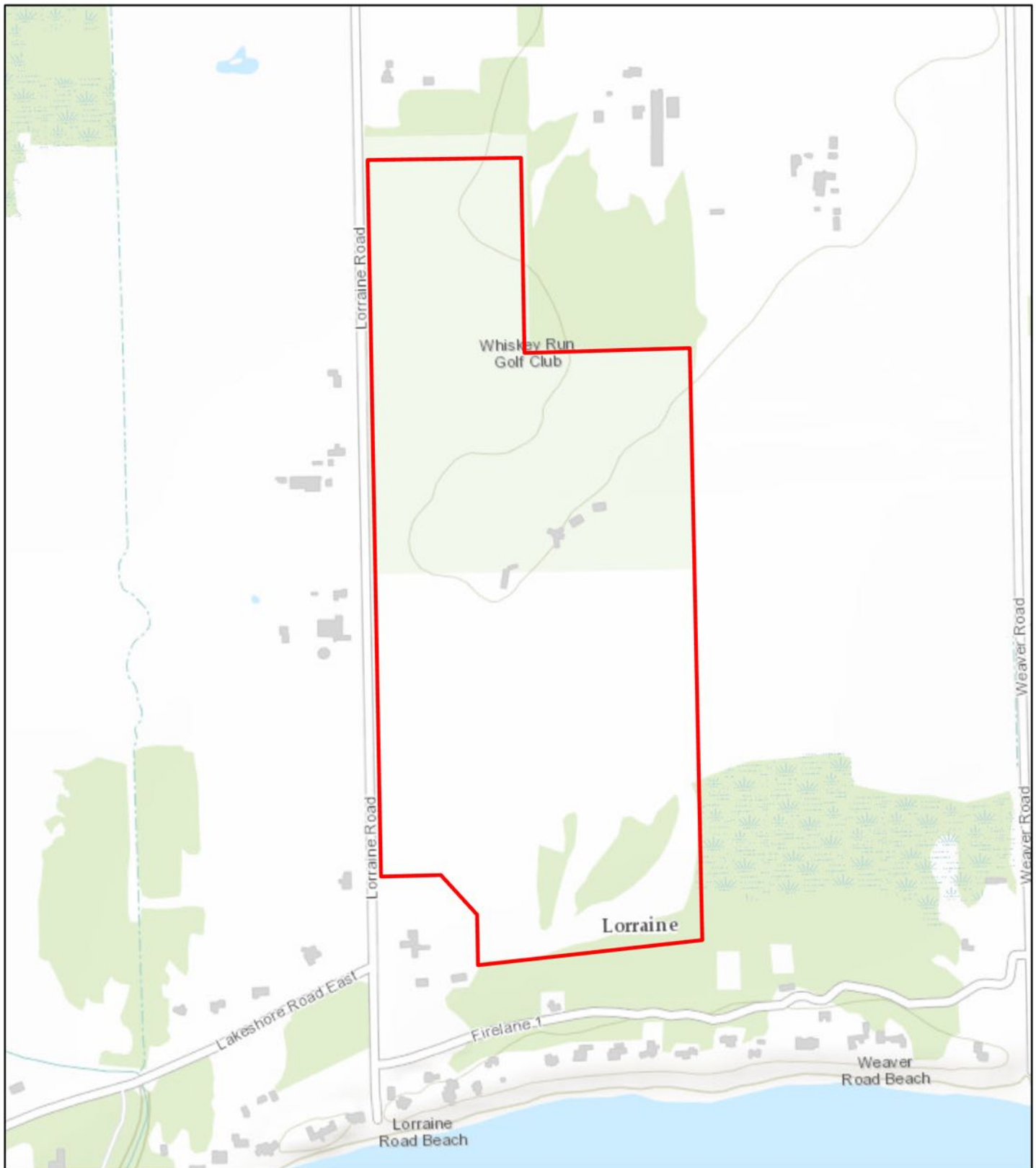


13. MAPS



Source: City of Welland, Niagara Region, Regional Municipality of Niagara, Province of Ontario, Ontario MNR, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, AAFC, NRCan

Map 1: Study Area Location

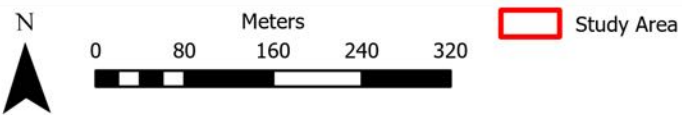
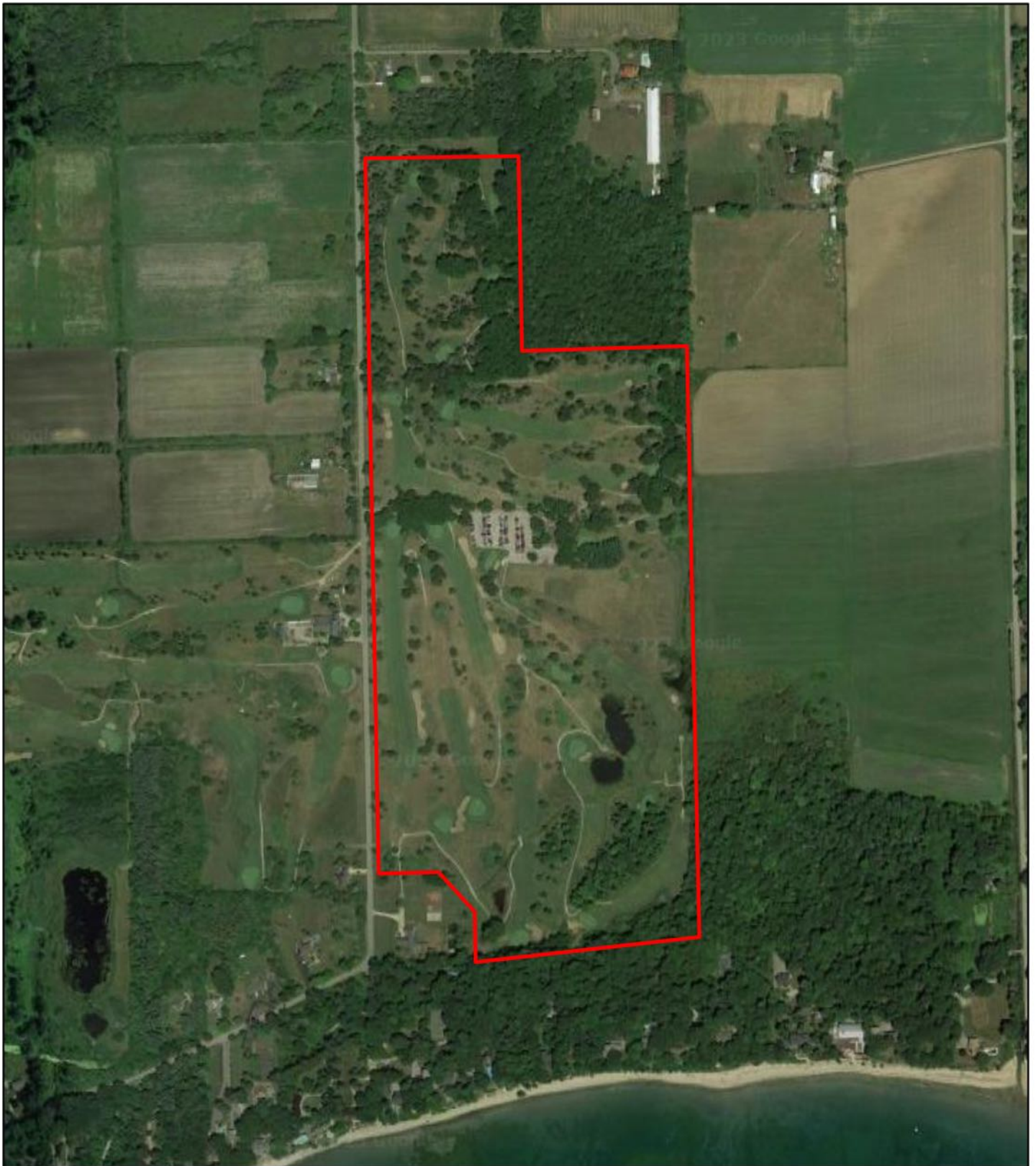


N  
Meters  
0 80 160 240 320  
Study Area

Source: City of Welland, Niagara Region, Regional Municipality of Niagara, Province of Ontario, Ontario MNR, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA, AAFC, NRCan

Map 2: Study Area Topographic Detail

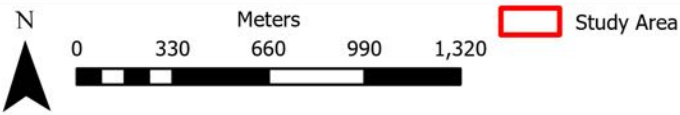
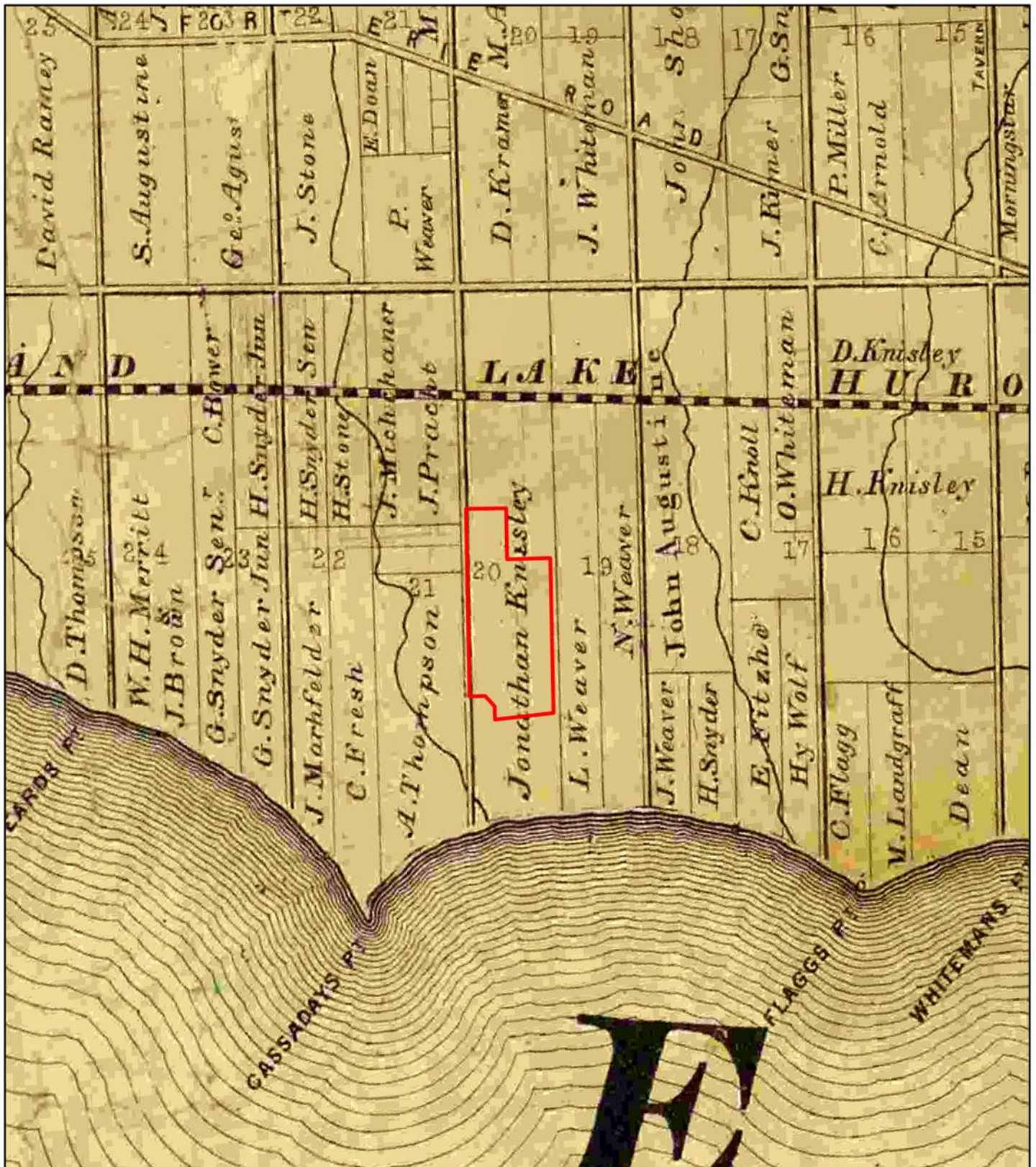




Source: © OpenStreetMap (and) contributors, CC-BY-SA

Map 3: Study Area Environmental Detail

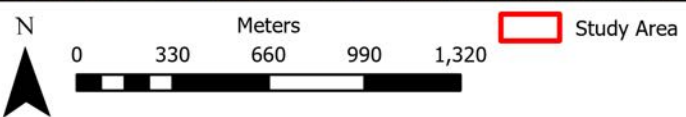
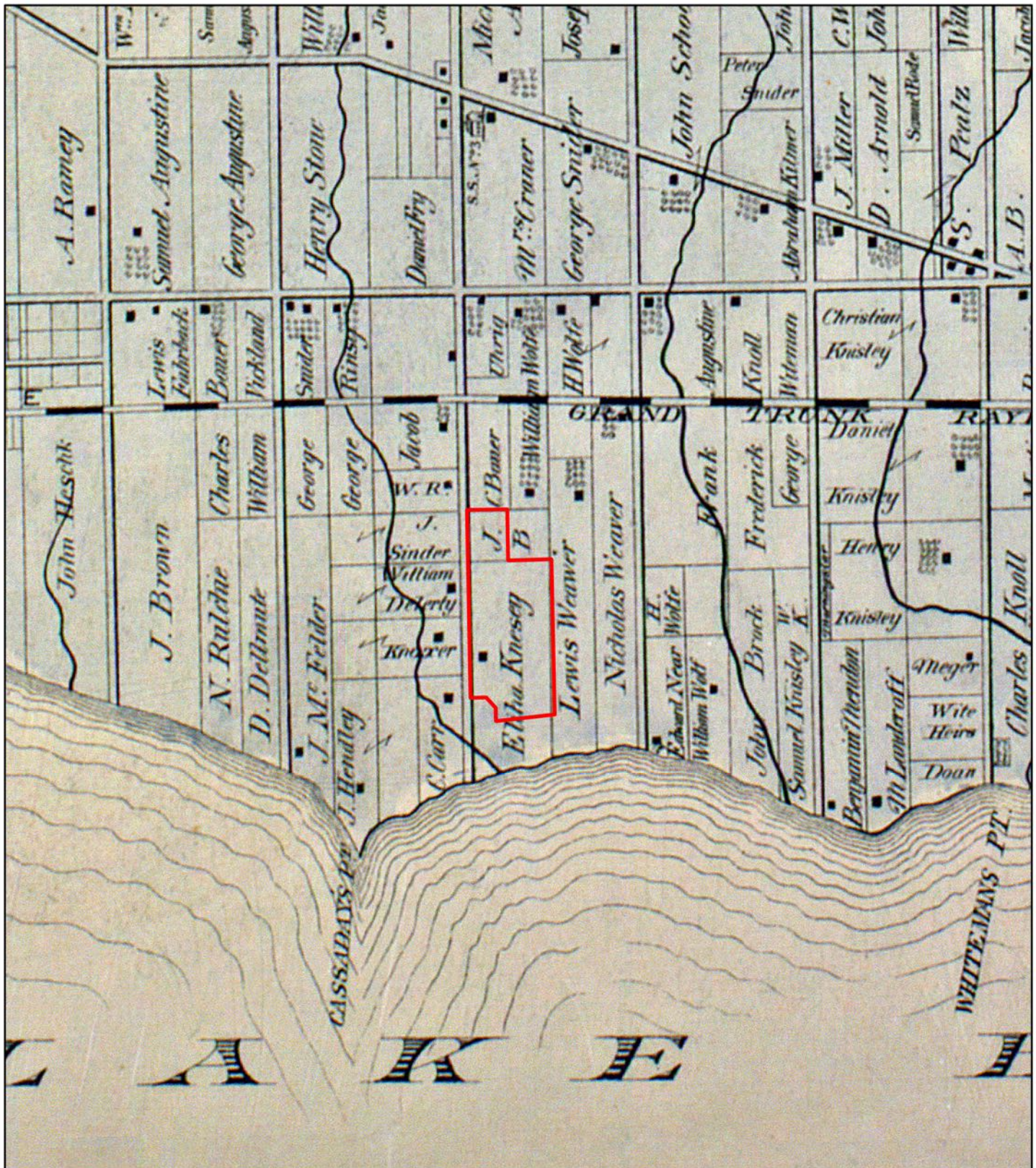




Source: Tremaine 1860

Map 4: Study Area atop 1860 Map

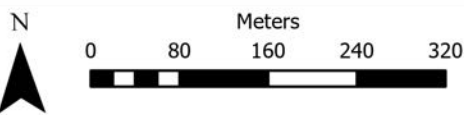
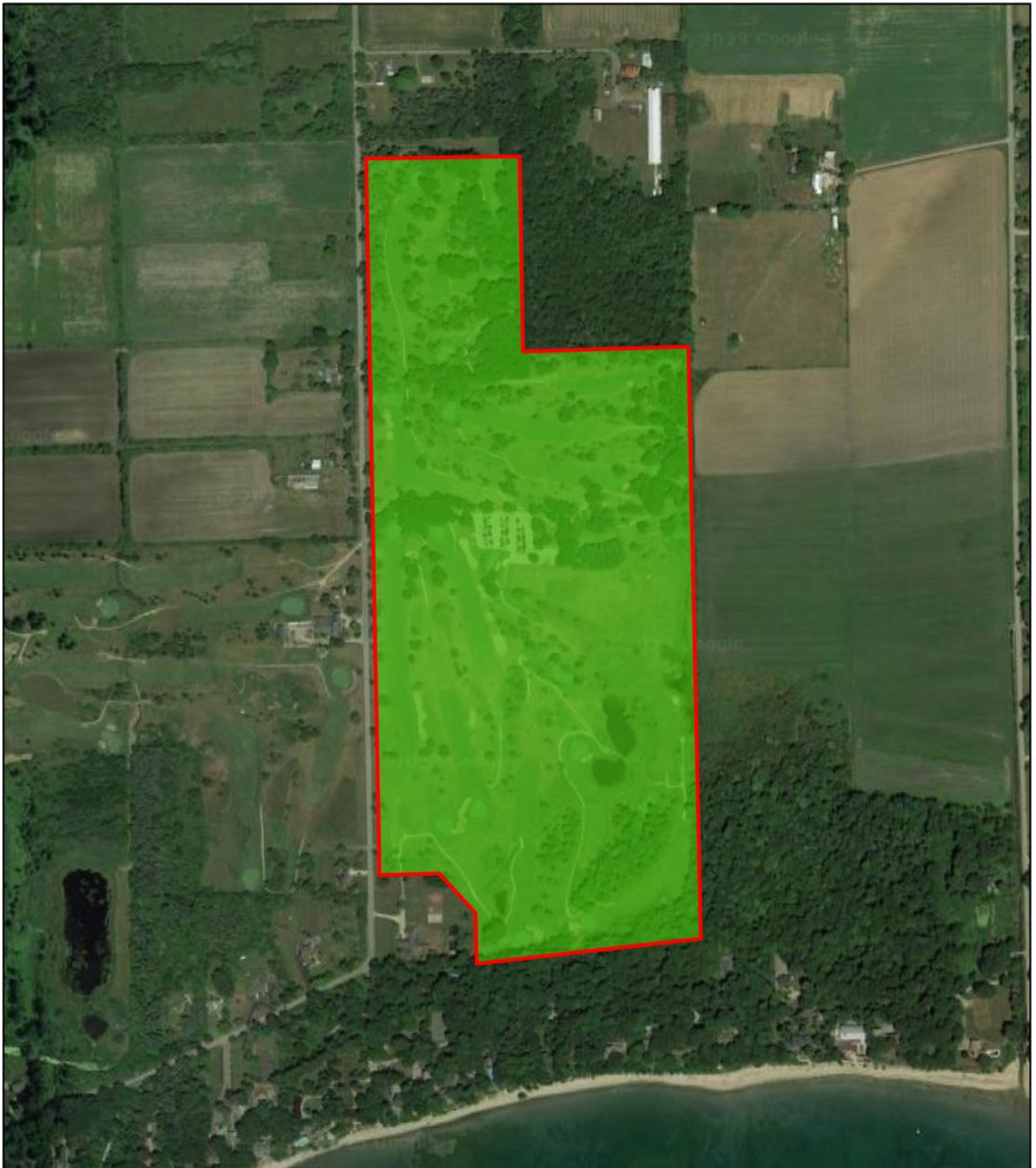






Source: Page 1876

Map 5: Study Area atop 1876 Map



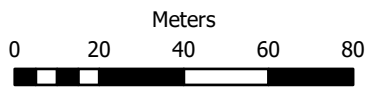






-  Study Area
-  Archaeological Potential:  
Stage 2 Archaeological Survey  
Recommended

Source: © OpenStreetMap (and) contributors, CC-BY-SA

Map 6: Stage 1 Results & Recommendations



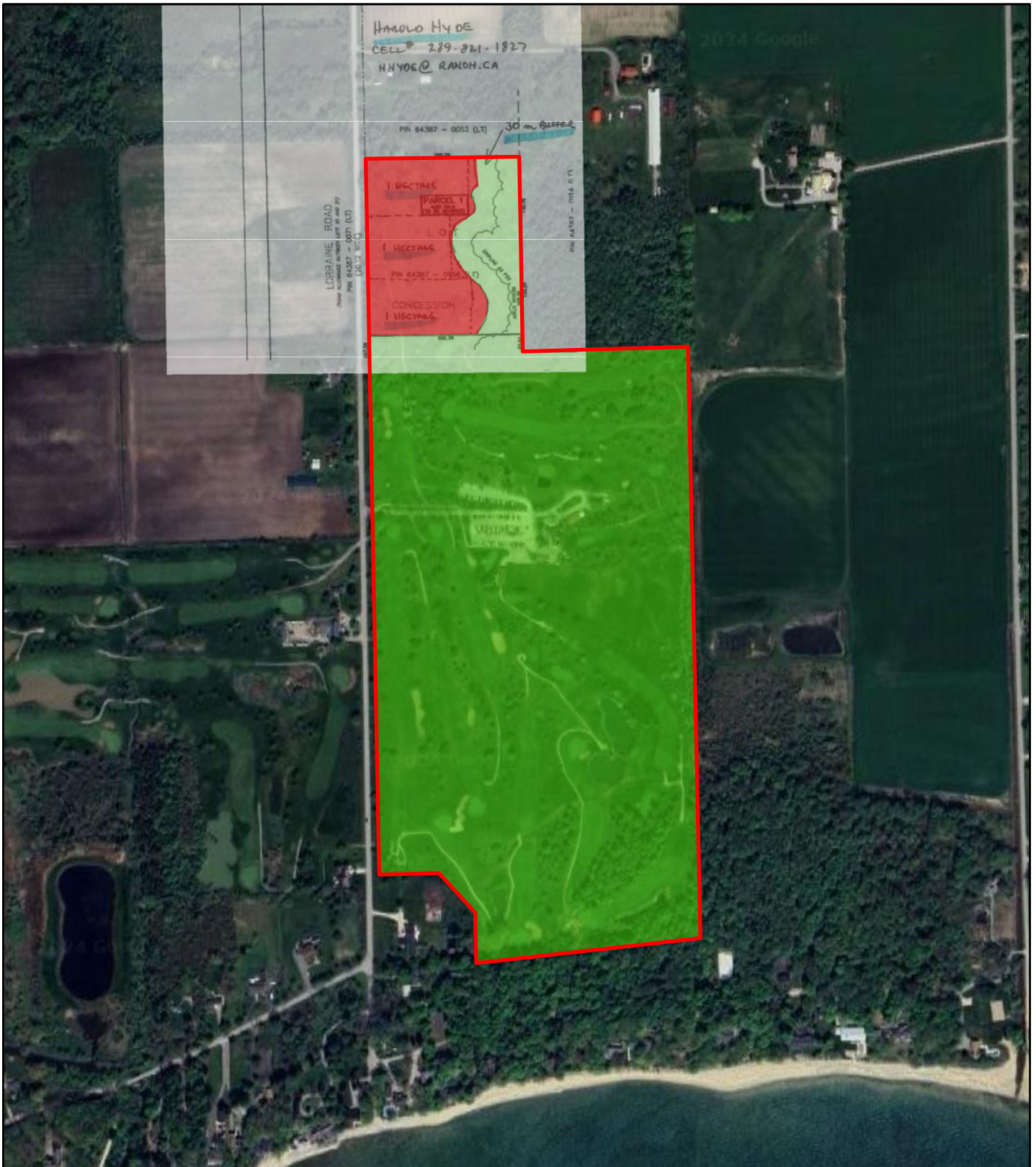


-  Study Area
-  5m Judgmental Test Pit  
Survey Conducted: Deep  
Disturbance - No  
Archaeological
-  Archaeological Potential:  
Stage 2 Archaeological Survey  
Recommended
-  Photo # & Direction

Source: © OpenStreetMap (and) contributors, CC-BY-SA, Maxar, Microsoft

Map 7: Stage 2 Results of Assessment





N

Meters

0 80 160 240 320

Study Area

5m Judgmental Test Pit Survey Conducted: Deep Disturbance - No Archaeological

Archaeological Potential: Stage 2 Archaeological Survey Recommended

Source: © OpenStreetMap (and) contributors, CC-BY-SA, Maxar

Map 8: Stage 2 Results of Assessment atop Severance Plan





Study Area  
 5m Judgmental Test Pit  
 Survey Conducted: Deep Disturbance - No Archaeological  
 Archaeological Potential: Stage 2 Archaeological Survey Recommended

Photo # & Direction

Source: © OpenStreetMap (and) contributors, CC-BY-SA, Maxar, Microsoft

Map 9: Stage 2 Results of Assessment atop Severance Plan Detail

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