IRVIN HERITAGE INC.

Stage 1 & 2 Archaeological Assessment

401, 405, 409, 411, 415 and 417-417
Plan 20R-21168
Part of Lot 92 Registered Plan 99
Part of Lot 14, Plan 99
Part of Historic Lot 19, Concession 4 S.D.S.
City of Burlington
Regional Municipality of Halton
Historic Township of Nelson
Historic County of Halton

September 24, 2020
Prepared for: The Proponent
Prepared by: Irvin Heritage Inc.
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EXECUTIVE SUMMARY

Irvin Heritage Inc. was contracted by the proponent to conduct a Stage 1 Archaeological Assessment in support of a development application for a Study Area which is approximately 0.33 Ha in size.

The Stage 1 Archaeological Assessment indicated that the Study Area retained archaeological potential. As such, a Stage 2 Archaeological Assessment consisting of 5 m Test Pit Survey was recommended and completed. The Stage 2 identified no archaeological resources within the Study Area.

Given the analysis and conclusion of the completed Stage 2 assessment, the following recommendations are made:

- It is the professional opinion of the archaeological licensee, Thomas Irvin (P379) that the Study Area has been sufficiently assessed and is free of further archaeological concern.

- 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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Field Archaeologist(s):	Patrick Hubbard, BA
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1. ASSESSMENT CONTEXT

1.1. Development Context

Irvin Heritage Inc. was retained by the proponent to conduct a Stage 1 and 2 Archaeological Assessment of their property (the Study Area) located at the municipal addresses of 401, 405, 409, 411, 413 and 417 Martha Street, Burlington, Part of Lot 92, Registered Plan 99, City of Burlington, County of Halton, Historic Township of Nelson in the Historic County of Halton (Map 1).

The requirement for a Stage 1 Archaeological Assessment was triggered by the Approval Authority in response to a Development Application under the Planning Act for the construction of residential units. The assessment reported on herein was undertaken after direction by the Approval Authority and before formal application submission.

The archaeological assessment reported on was undertaken for the entirety of the legal 0.33 Ha property. 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 is irregular approximately 0.33 Ha in size, is predominantly residential houses, paved parking pads, and manicured lawns (Maps 2 and 3). The Study Area is bordered on the northwest by a walkway, Martha Street to the southwest, and to the northeast and southeast by residential buildings and their associated manicured lawns and parking pads. The northeast border is defined by Rambo Creek and its associated.

Rambo Creek runs directly through the northeastern portions of the Study Area. Lake Ontario is located approximately 270 m southeast of the Study Area.

The Study Area is situated within the Iroquois Plain (41) physiographic region of Southern Ontario.

The surficial geology of the Study Area is coarse-textured glaciolacustrine deposits (sand, gravel, minor silt and clay).

2. HISTORICAL CONTEXT

2.1. General History

The Study Area is located within the Brant Tract or Treaty 3 ¾. The Brant Tract is roughly 14 square kilometres and covers a portion of land in Burlington, between Derry Road at its northwest extent down to Lake Ontario. Its northeast border runs from approximately the intersection of Derry Rd and Walkers Line diagonally to about the midway point between Burloak Drive and Stevenson Road at the Lake Ontario Waterfront. The Southwest border of the Brant Tract starts around the midpoint between Center Rd and McNiven Rd and runs through approximately the intersection of Edgewater Crescent and North Shore Blvd E as it makes its way to Lake Ontario. Representatives of the Mississauga peoples and the Crown signed the Brant Tract Treaty 3 ¾ into effect in 1795 (MIA 2020).

Burlington was first settled in the late 1700s with its most notable and influential settler being Thayendanega or Iroquois Chief Joseph Brant. Brant was granted 1300 acres on Burlington Bay as recognition for his services during the American Revolutionary War (Gagan 2019) (Mika & Mika 1981).

Due to its accessible bay on Lake Ontario, Burlington's Port Nelson became an active hub for many industries such as lumber, wheat, and quarried rock. The 1854 railway expansions only served to fuel this rapidly growing port town, ship building was booming, and Burlington was a flour hub for the area. Eventually the lumber business slowed and the City ports of Hamilton and Toronto began to draw commerce ships away from the small ports of Burlington. However, this did not seem to stunt the economy of the local community, as it changed focus to agriculture becoming the "Garden City" of southern Ontario home to the Royal Botanical Gardens (Gagan 2019). Burlington also flourished in manufacturing (Mika & Mika 1981) (Reynolds 1993).

Following the Second World War and the installation of both the Burlington Skyway Bridge to Hamilton in 1958 and the Queen Elizabeth Way in 1939, Burlington began to transform from an agricultural hub to a bedroom community. In 1974 Burlington was officially incorporated as a city (Reynolds 1993).

2.2. Study Area History

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

Map 4: 1858 Historic Atlas of the County of Halton (Tremaine 1858)

The Study Area is situated within the land holdings of an entity titled "Torrance". The current Martha Street is shown on the map, and the Study Area appears to be directly across from the developed Village of Burlington. There are no structures noted within or adjacent to the Study Area.

Map 5: 1877 Illustrated Historic Atlas of the County of Halton, Ont. (Walker & Miles 1877)

The current Martha Street is shown on the map, and the Study Area appears to now be within the developed portions of the Village of Burlington. There are no structures noted within or adjacent to the Study Area.

Map 6: 1877 Village of Burlington, Illustrated Historic Atlas of the County of Halton, Ont. (Walker & Miles 1877)

Martha Street is now formally on the historic map. The Study Area roughly occupies lots designated as 7, 8, 9 and 10; although due to clarity it is unclear how these are further organized. There are no structures noted within or adjacent to 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

3. 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.

3.1. Registered Archaeological Sites

A search of the Ontario Sites Database conducted on September 15, 2020, using a Study Area centroid of 17T E 597791 N 4797916 indicated that there are 8 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.

3.2. Related and/or Adjacent Archaeological Assessments

No readily identifiable archaeological assessments have been conducted within or directly adjacent to the Study Area.

TABLE 1: SITES WITHIN 1 KM

Borden #	Site Name	Time Period	Affinity	Site Type
AiGw-77	Stanley Blair	Archaic, Paleo-Indian, Woodland	Aboriginal	Othercamp/campsite
AhGw-99	Brant Hotel Complex	Post-Contact, Woodland, Late	Aboriginal, Euro-Canadian	Unknown, hotel
AhGw-3	Burlington Mounds	Woodland	Aboriginal	ossuary
AhGw-270				
AhGw-25	St. Luke's Church			
AhGw-24	Bell 2	Archaic	Aboriginal	Unknown
AhGw-23	John Blair	Archaic	Aboriginal	Othercamp/campsite
AhGw-18	Rene Bridgeman	Archaic	Aboriginal	Unknown

3.3. Cemeteries & Burials

As per a cursory search conducted on September 15, 2020, there are no known or registered cemeteries or burials within or adjacent to the Study Area.

3.4. Archaeological Management Plan

The Study Area is not situated within an area subject to an Archaeological Management Plan.

3.5. Heritage Conservation District

The Study Area is not situated within an existing or proposed Heritage Conservation District.

3.6. Heritage Properties

The Study Area contains no registered or listed heritage properties.

3.7. Historic Plaques

There are no historic plaques within a 100 m radius of the Study Area (Ontario Heritage Trust 2020).

4. 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, proximity of registered archaeological sites, and proximity to a watercourse.

As such, the Study Area retains archaeological potential and should be subject to a Stage 2 Archaeological Assessment (Maps 7 and 8).

5. STAGE 1 RECOMMENDATIONS

Given the analysis and conclusion of the completed Stage 1 assessment, the following recommendations are made:

- 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 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

6. STAGE 2 FIELD METHODOLOGY

Prior to the initiation of fieldwork, the Field Director reviewed the existing Stage 1 archaeological analysis and recommendations; all field staff were then briefed on the archaeological potential of the Study Area. Fieldwork was conducted in September 2020 (see Table 2). The weather consisted of light cloud cover and at all times the assessment was conducted under appropriate weather conditions.

TABLE 2: DATES & DIRECTORS OF ASSESSMENT

Date	Weather	Field Director(s)	Assistant Field Director(s)
September 24 2020	24°C, light cloud cover	T. Irvin (P379)	-

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

The Study Area was found to consist of five extant and occupied homes, with associated rear lawns. It was clear that a structure has been removed with original grading and an open foundation still present (Image 1). Manicured lawns present within the Study Area were subject to a 5 m test pit survey (Image 20). Test pits were placed as close to the top of slope to Rambo Creek as this area was the least likely to have been impacted by 20th century development (Image 3).

The Test Pit Survey found examples of both disturbed and undisturbed soils, however, the disturbed soils were not concentrated in any specific area and as such did not alter the survey transects nor methodology (Image 4). The topsoil consisted of a mixture organic loam atop an orange sandy subsoil.

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

The archaeological survey of the property resulted in the discovery of no archaeological resources.

7. STAGE 2 RECORD OF FINDS

The completed archaeological assessment resulted in the creation of various documentary records (Table 3).

TABLE 3: INVENTORY OF STAGE 2 HOLDINGS

Record Type or Item	Details	# of Boxes
Field Notes: P379-0326-2020	Digital Files	-
Photos: P379-0326-2020	Digital Files	-

8. STAGE 2 ANALYSIS & CONCLUSIONS

The Study Area, measuring approximately .33 Ha in size was subject to a complete archaeological assessment. The Study Area was found to consist of a mixture of disturbed and

undisturbed soils and has been highly impacted by the 20th century development and occupation of the area.

No archaeological resources were noted during the survey.

TABLE 4: SUMMARY OF STAGE 2 ASSESSMENT METHODOLOGIES & FINDINGS

Assessment Method	Findings	Ha	% of Study Area
Archaeological Potential: 5m Test Pit Survey	No Resources	0.22	66.6%
Low Potential: Extant structures, driveways etc.	-	0.11	34.3%
Total		**0.33**	**100**

9. STAGE 2 RECOMMENDATIONS

Given the results and conclusions of the completed Stage 1 & 2 assessment, the following recommendations are made:

- It is the professional opinion of the archaeological licensee, Thomas Irvin (P379) that the Study Area has been sufficiently assessed and is free of further archaeological concern.

- 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

10. 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.

11. IMAGES



Image 1: Original grading and open foundation to the left.

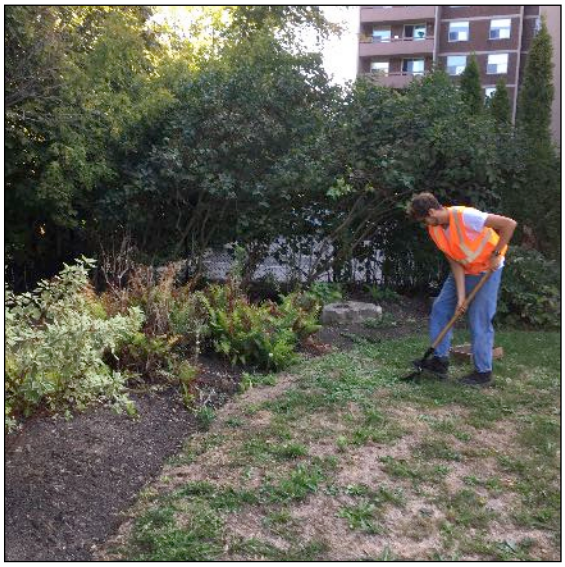


Image 2: Field Archaeologist conducting 5 m Test Pit Survey.

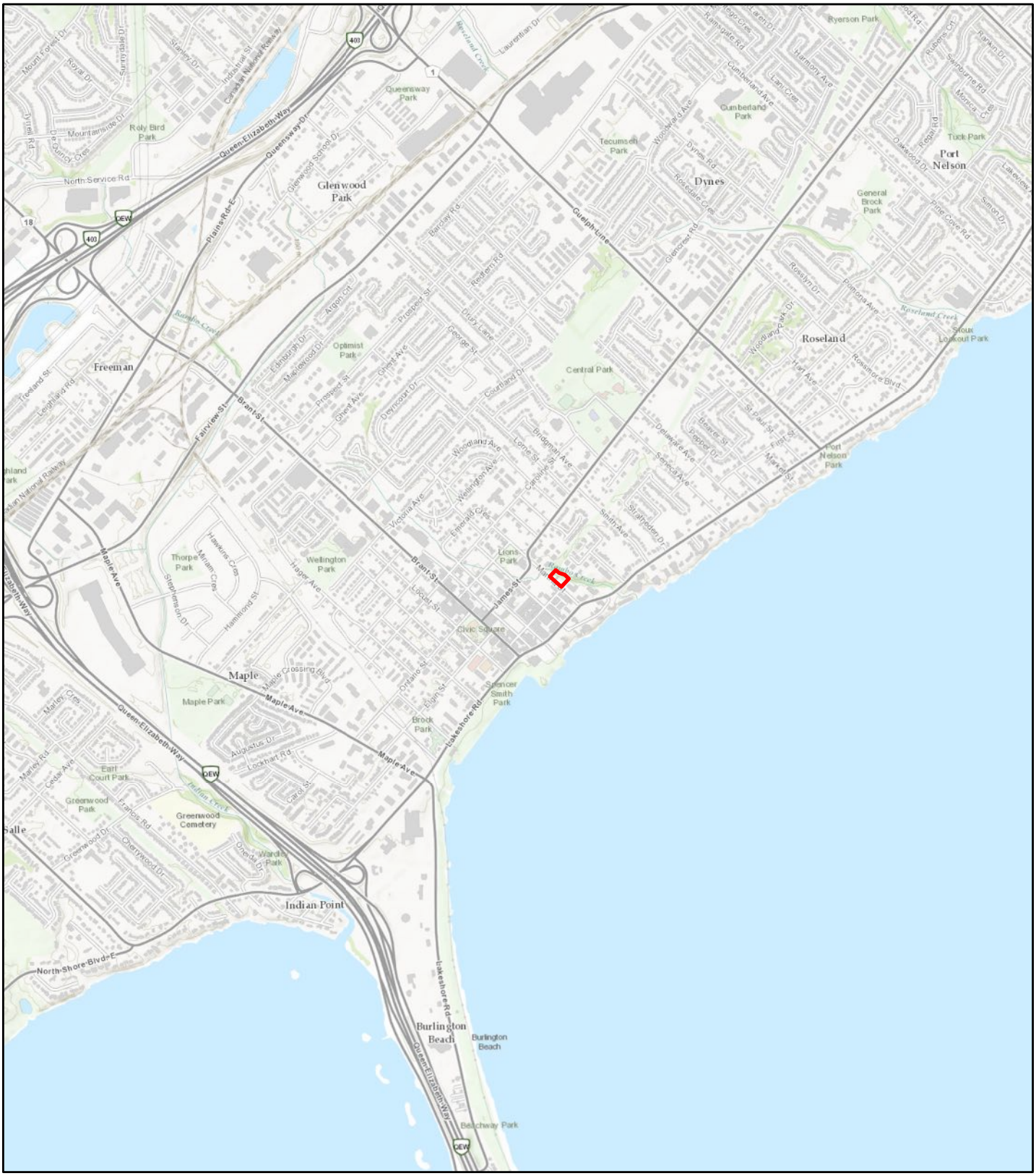


Image 3: Field Archaeologist conducting 5 m Test Pit Survey at top of slope of Rambo Creek.



Image 4: Example of disturbed soil conditions.

12. MAPS



Map 1: Study Area Location



Source: ESRI, ARCGIS PRO

Map 2: Study Area Topographic Detail



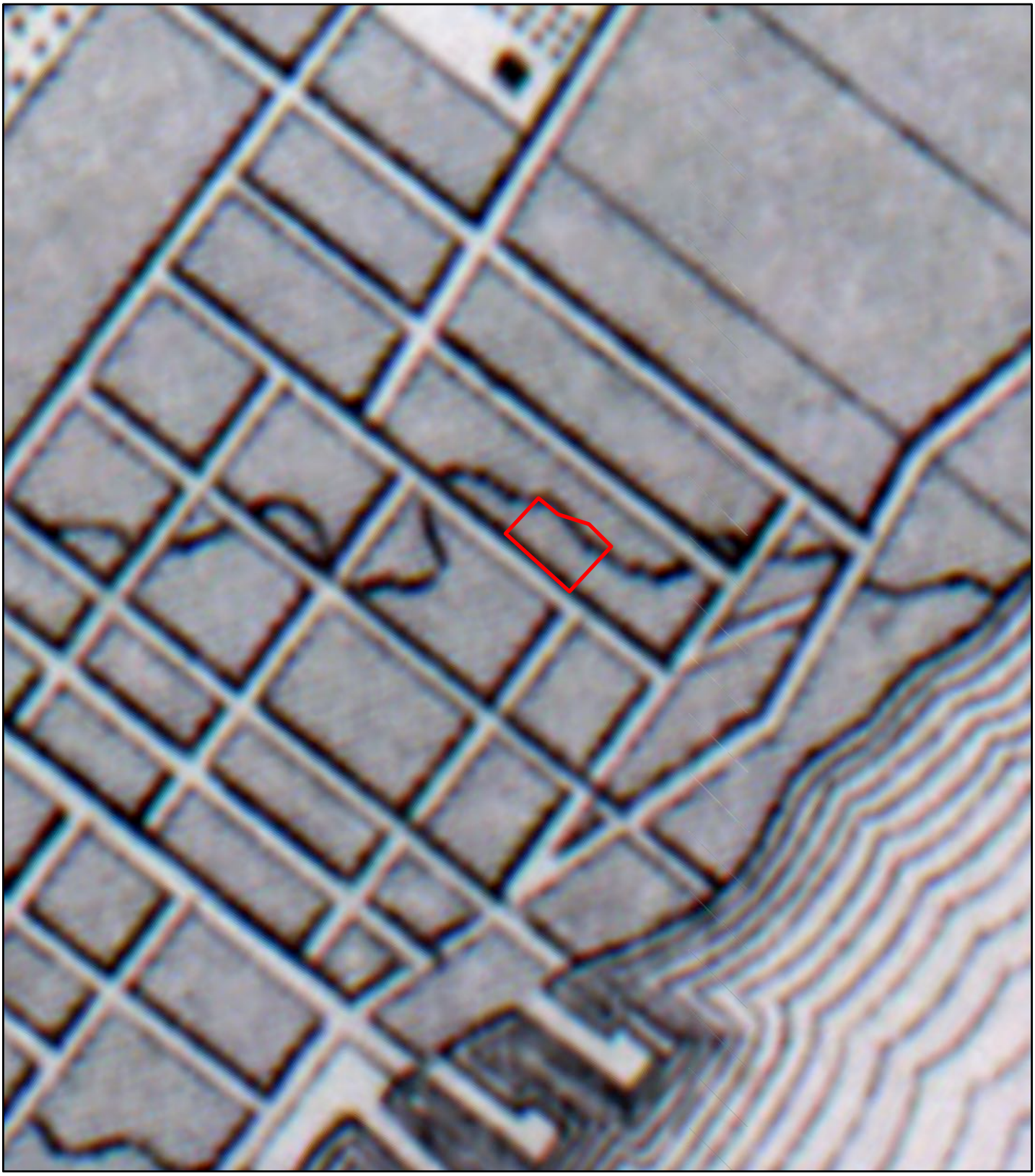
Source: ESRI, ARCGIS PRO

Map 3: Study Area Environmental Detail



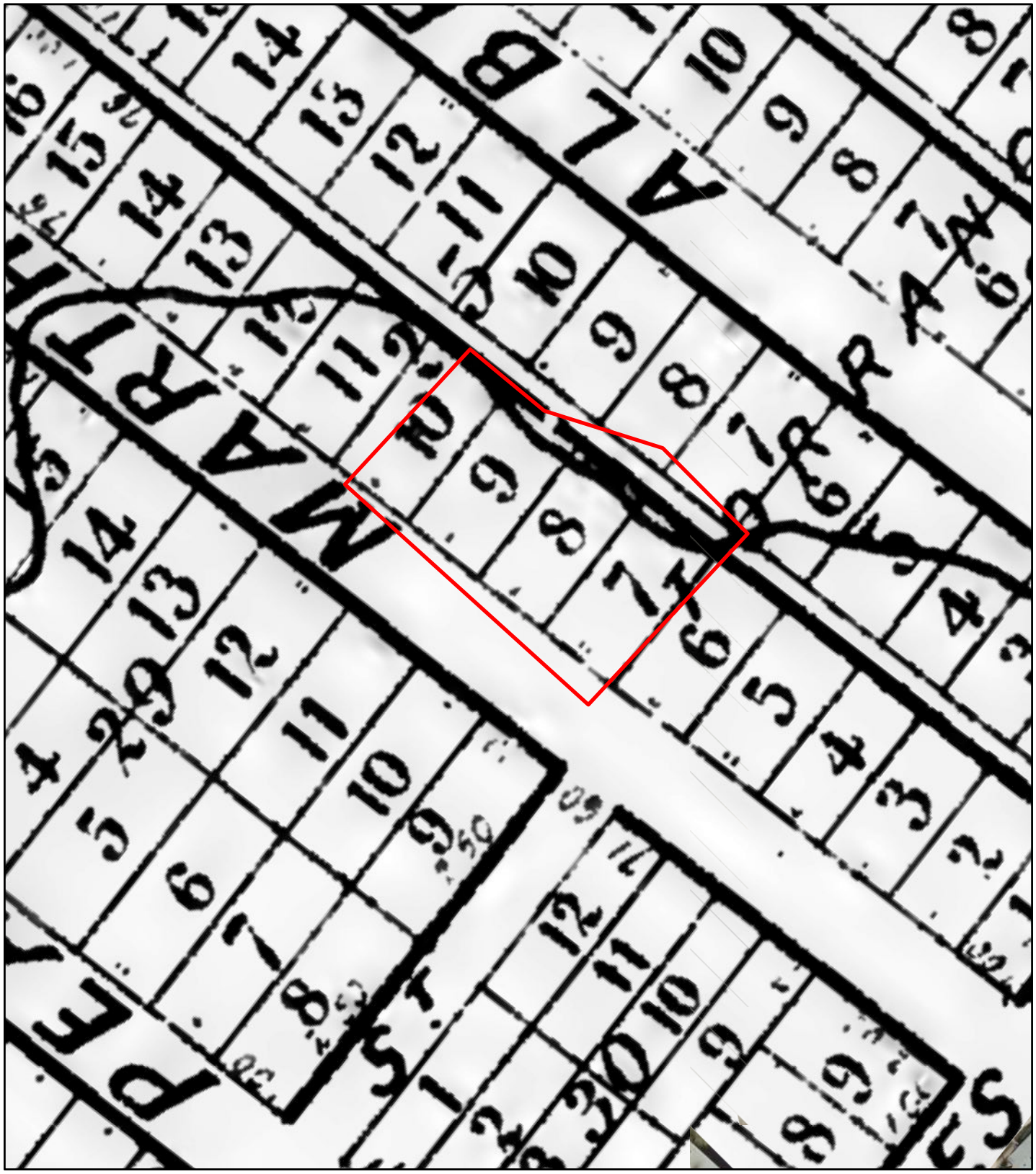
Source: Tremaine 1858

Map 4: Study Area atop 1858 Historic Atlas Map



Source: Walker & Miles 1877

Map 5: Study Area atop 1877 Historic Atlas Map



Source: Walker & Miles 1877

Map 6: Study Area atop 1877 Historic Village of Burlington Map



Source: ESRI, ARCGIS PRO

Map 7: Stage 1 Results & Recommendations



N

Meters

0 6.5 13 19.5 26

Source: ESRI, ARCGIS PRO

Study Area

5m Test Pit Survey Conducted

Low Potential: Extant or Former Structures

Low Potential: Rambo Creek & Associated Slope

Photo # & Direction

Map 8: Stage 2 Results of Assessment



Map 8: Stage 1 Results & Recommendations atop Site Plan

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