



Geotechnical
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Studies

Phase I - Environmental Site Assessment

Proposed Residential Development
RSSR Lands, McNeely Avenue
Carleton Place, Ontario

Prepared For

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Report: PE4834-1

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EXECUTIVE SUMMARY

Assessment

A Phase I - Environmental Site Assessment was carried out for a vacant parcel of land referred to as the RSSR Lands located on the south side of the future McNeely Avenue extension and future Riddell Street extension in the Town of Carleton Place, Ontario. The purpose of this environmental assessment was to research the past and current use of the site and adjacent properties and identify any environmental concerns with the potential to impact the subject property.

Based on a review of historical sources, the subject property has always been vacant/agricultural land. No potential environmental concerns were identified with regard to the subject property. Similarly, the adjacent properties have historically been treed or used for agricultural purposes. Farmsteads have been historically situated further east of the subject property. No potential concerns to the subject property were identified during the historical research.

Following the historical research, a site visit was conducted to assess the potential for environmental concerns regarding the subject and surrounding properties. The subject and neighbouring properties to the south, east and west are currently vacant land. The neighbouring property to the north is currently undergoing residential development. No concerns were identified based on visual observations of the subject site or surrounding properties

Conclusion

Based on the results of the assessment, **it is our opinion that a Phase II - Environmental Site Assessment is not required for the subject property.**

1.0 INTRODUCTION

At the request of Novatech Engineering Consultants Ltd. Paterson Group (Paterson) conducted a Phase I - Environmental Site Assessment (ESA) of a vacant parcel of land located southwest of the McNeely Avenue and Riddell Street intersection, in the Town of Carleton Place, Ontario.

This report has been prepared specifically and solely for the above noted project which is described herein. It contains all our findings and results of the environmental conditions at this site.

2.0 SITE INFORMATION

Legal Description: Northeast half of Lot 15, Concession 10, Town of Carleton Place, Township of Beckwith, Ontario.

Location: The site is situated on the south side of the future McNeely Avenue extension and future Riddell Street extension in the town of Carleton Place, Ontario. Refer to Figure 1 - Key Plan for the site location.

Latitude and Longitude: 45° 07' 42.1" N, 76° 07' 01.6" W

Site Description:

Configuration: Rectangular.

Zoning: Residential

Area: 11.7 ha (approximate)

Current Use: The subject property is currently vacant land.

Services: The subject site is currently not serviced.

3.0 SCOPE OF WORK

The scope of work for this Phase I - Environmental Site Assessment was as follows:

- Investigate the existing conditions present at the subject site by carrying out a field study and historical review in general accordance with CSA Z768-01.
- Present the results of our findings in a comprehensive report.
- Provide a preliminary environmental site evaluation based on our findings.
- Provide preliminary remediation recommendations and further investigative work if contamination is encountered or suspected.

4.0 METHOD OF INVESTIGATION

4.1 Historical Research

The methodology for the Phase I - Environmental Site Assessment program was carried out in two segments. The first consisted of a historical review which included a brief research of the past use of the site. This portion of the program was carried out by Paterson personnel from the Environmental Division. The following is a list of the key information sources reviewed by our firm.

Federal Records

- Maps and photographs (Geological Survey of Canada surficial and subsurface mapping).
- Air photos at the Energy Mines and Resources Air Photo Library.
- National Archives.
- PCB Waste Storage Site Inventory.

Provincial Records

- MECP document titled "Waste Disposal Site Inventory in Ontario".
- MECP Brownfields Environmental Site Registry.
- MECP Freedom of Information.
- Office of Technical Standards and Safety Authority, Fuels Safety Branch.

Municipal Records

- The Corporation of the County of Lanark.

Local Information Sources

- Personal Interviews.
- Previous Engineering Reports.

4.2 Field Assessment

The second segment of the Phase I-ESA consisted of a site visit which included a walk-through inspection and detailed visual assessment of the environmental conditions of the subject property. The site visit was carried out on December 13, 2019 by personnel from our Environmental Division.

As part of the field assessment, the site was inspected for signs of the following:

- Evidence of previous or existing fuel storage tanks.
- On-site use or storage of hazardous materials.
- On-site handling or disposal of liquid or solid waste materials.
- Aboveground piping systems, including pumps, valves, and joints.
- Truck or rail loading or unloading areas.
- Electrical conduits abandoned pipelines or pumping stations.
- Remnants of old buildings.
- Signs of surficial contamination (i.e. staining, distressed vegetation).
- Unnaturally discoloured, ponded, or flowing waters.
- Surficial drainage, wetlands, natural waterways, or watercourses through the property (i.e. ditches, creeks, ponds, poor drainage).
- Any evidence of potable water supply wells or groundwater monitoring wells (such as leak detection monitoring wells for underground storage tank systems or abandoned systems).
- Any abnormal odours associated with the site, whether from on-site or off-site sources.
- The presence of any recent soil disturbances such as soil removal, filling, tilling, grading, etc.
- Asbestos containing materials (ACMs).
- Urea formaldehyde foam insulation (UFFI).
- Products containing Polychlorinated Biphenyls (PCBs).
- Ozone depleting substances (ODS).
- Lead-containing materials.
- Current use of neighbouring properties.

5.0 FINDINGS OF THE ENVIRONMENTAL ASSESSMENT

5.1 Historical Review

Air Photo Research

Historical air photos from the City of Ottawa website were reviewed between 2002 and 2017. Based on the review, the following observations have been made:

- | | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2002 | The subject property is predominantly vacant agricultural land with some minor treed areas. The neighbouring properties to the north, south and west are vacant in this photo. A farmstead can be seen on the neighbouring property to the east. |
| 2005 | No significant changes are apparent to the subject property or adjacent lands since the previous photo. |
| 2011 | No significant changes are apparent to the subject property. Retail development has increased north of the subject property. The McNeely Avenue extension to the north can be seen in this photo. |
| 2014 | No significant changes are apparent to the subject property or surrounding lands with one (1) exception. A portion of the future Riddell Street extension can be seen to the north of the subject property. |
| 2017 | No significant changes are apparent to the subject property and surrounding area with one (1) exception. The land to the north is in the early stages of residential development. |

Laser copies of selected aerial photographs reviewed are included in the Appendix.

National Archives

Fire insurance plans and city directories are not available for the area of the subject site.

Personal Interviews

Roger Stewart from RSSR Properties Inc. was available to respond to questions regarding the subject site. Mr. Stewart stated that he was unaware of any environmental concerns with regard to the subject property. Mr. Stewart noted that the two (2) fill piles along the northern edge of the subject site were placed at this location during the construction of adjacent roadways.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on January 14, 2020 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. Based on the TSSA response, no records were identified for the subject property or the immediately adjacent lands.

Natural Resources Canada (NRCAN)

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on the information from NRCAN, bedrock in the area of the site consists of dolomite interbedded with shale of the Oxford formation with the northern portion of the site consisting of the Rockcliffe formation. Based on the maps, the surficial geology or overburden consists of organic deposits 0 to 5 meters below existing grade.

PCB Inventory

A search of national PCB waste storage sites was conducted as part of our assessment. There were no PCB waste storage sites within a 150 m of the subject site.

Ontario Ministry of Environment and Climate Change (MECP)

The Ontario Ministry of Environment and Climate Change document entitled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. Based on this document, there are no active or closed waste disposal sites or above-mentioned industrial sites within the vicinity of the subject property.

Previous Engineering Reports

Paterson conducted a Phase I – Environmental Site Assessment in July of 2018 for the neighbouring property to the northeast (across future McNeely Avenue extension). No potential environmental concerns were identified and a Phase II – ESA was not recommended at that time.

Geotechnical Investigation

Paterson conducted a geotechnical investigation on the subject property in October of 2012. At that time, five (5) test pits were placed on the subject property. The locations of these test pits can be seen on the attached site plan. Based on a review of our file, no unusual visual or olfactory observations were noted regarding the soil or groundwater encountered in these test pits.

Current Geotechnical Investigation

A geotechnical Investigation was conducted by Paterson concurrently with this Phase I – ESA. A total of eight (8) test pits were excavated with a steel track excavator on January 9, 2020 on the subject site. Generally, the soil conditions encountered in the test pits consisted of a layer of topsoil overlaying native silty clay overlaying glacial till. Bedrock was encountered below the glacial till layer in all test pits. No unusual visual or olfactory observations were noted regarding the soil or groundwater encountered at the time of the geotechnical investigation.

5.2 Assessment

Buildings and Structures

There are no buildings or structures on the subject site.

Site

The site is predominantly grass or tree covered and the regional topography slopes slightly downwards towards the east. Water drainage on the subject site occurs primarily by infiltration and sheet-flow to a ditch located along the northern property line. No ponded water, surficial staining or indications of potential sub-surface contamination were observed during the exterior assessment of the subject property. However, it should be noted that a significant layer of snow covered the subject site at the time of our visit. As a result, a detailed surficial inspection could not be completed.

Potential Environmental Concerns

Fuels and Chemical Storage

No liquid fuel tanks, or chemical storage was observed on the subject site.

Polychlorinated Biphenyls (PCBs)

No sources of PCBs were observed on the subject site.

Potable Wells

Potable groundwater wells were not observed on the subject property. The proposed future development of the subject site will include a municipal groundwater supply.

Ozone Depleting Substances (ODSs)

No sources of ODSs were observed on the subject site.

Wastewater Discharges

No wastewater is currently being generated on the subject site

Fill Material

Two (2) fill piles were observed on the northern portion of the subject property at the time of our site inspection. No unusual visual or olfactory observations were identified regarding the fill piles on-site. It is suspected that this material was placed on-site during construction of the adjacent roadways. The presence of this fill material on-site does not represent a potential environmental concern to the subject property.

5.3 Adjacent Properties

Land use adjacent to the subject site was as follows:

- North – Road allowance for McNeely Avenue extension, followed by residential development under construction
- South – Vacant land.
- East – Vacant land, followed by a farmstead.
- West – Vacant Land followed by retail development.

The current uses of the adjacent properties were not considered to pose a concern to the subject land. Current land use adjacent to the subject site is illustrated on drawing PE4834-1–Site Plan in the Appendix.

6.0 ASSESSMENT AND CONCLUSION

6.1 Assessment

A Phase I - Environmental Site Assessment was carried out for a vacant parcel of land referred to as the RSSR Lands located on the south side of the future McNeely Avenue extension and future Riddell Street extension in the Town of Carleton Place, Ontario. The purpose of this environmental assessment was to research the past and current use of the site and adjacent properties and identify any environmental concerns with the potential to impact the subject property.

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Following the historical research, a site visit was conducted to assess the potential for environmental concerns regarding the subject and surrounding properties. The subject and neighbouring properties to the south, east and west are currently vacant land. The neighbouring property to the north is currently undergoing residential development. No concerns were identified based on visual observations of the subject site or surrounding properties

6.2 Conclusion

Based on the results of the assessment, **it is our opinion that a Phase II - Environmental Site Assessment is not required for the subject property.**

7.0 STATEMENT OF LIMITATIONS

This Phase I-Environmental Site Assessment report has been prepared in general accordance with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review along with a field inspection program and testing program. The findings of the Phase I are based on a review of readily available geological, historical, and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

This report was prepared for the sole use of Novatech Engineering Consultants Ltd. Permission and notification from Novatech Engineering Consultants Ltd. and Paterson Group Inc. will be required to release this report to any other party.

Paterson Group Inc.



Samuel Berube, B.Eng.



Eric Leveque, B.A.

Report Distribution:

- Novatech Engineering Consultants Ltd.
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APPENDIX

AERIAL PHOTOGRAPHS

FIGURE 1 – KEY PLAN

DRAWING: PE4834-1 – SITE PLAN



AERIAL PHOTOGRAPH
2002



AERIAL PHOTOGRAPH
2005



AERIAL PHOTOGRAPH
2011



AERIAL PHOTOGRAPH
2014



AERIAL PHOTOGRAPH
2017

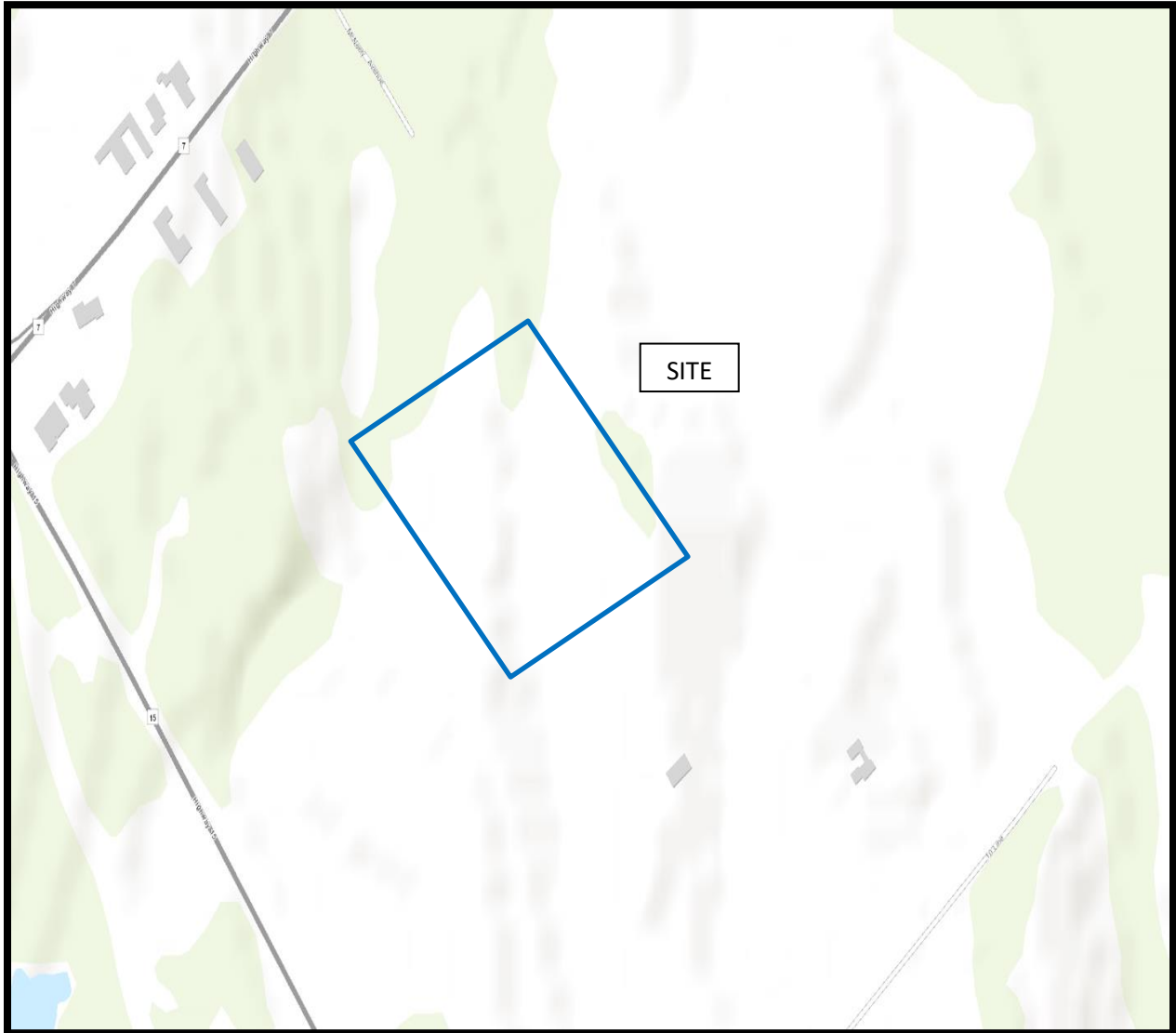
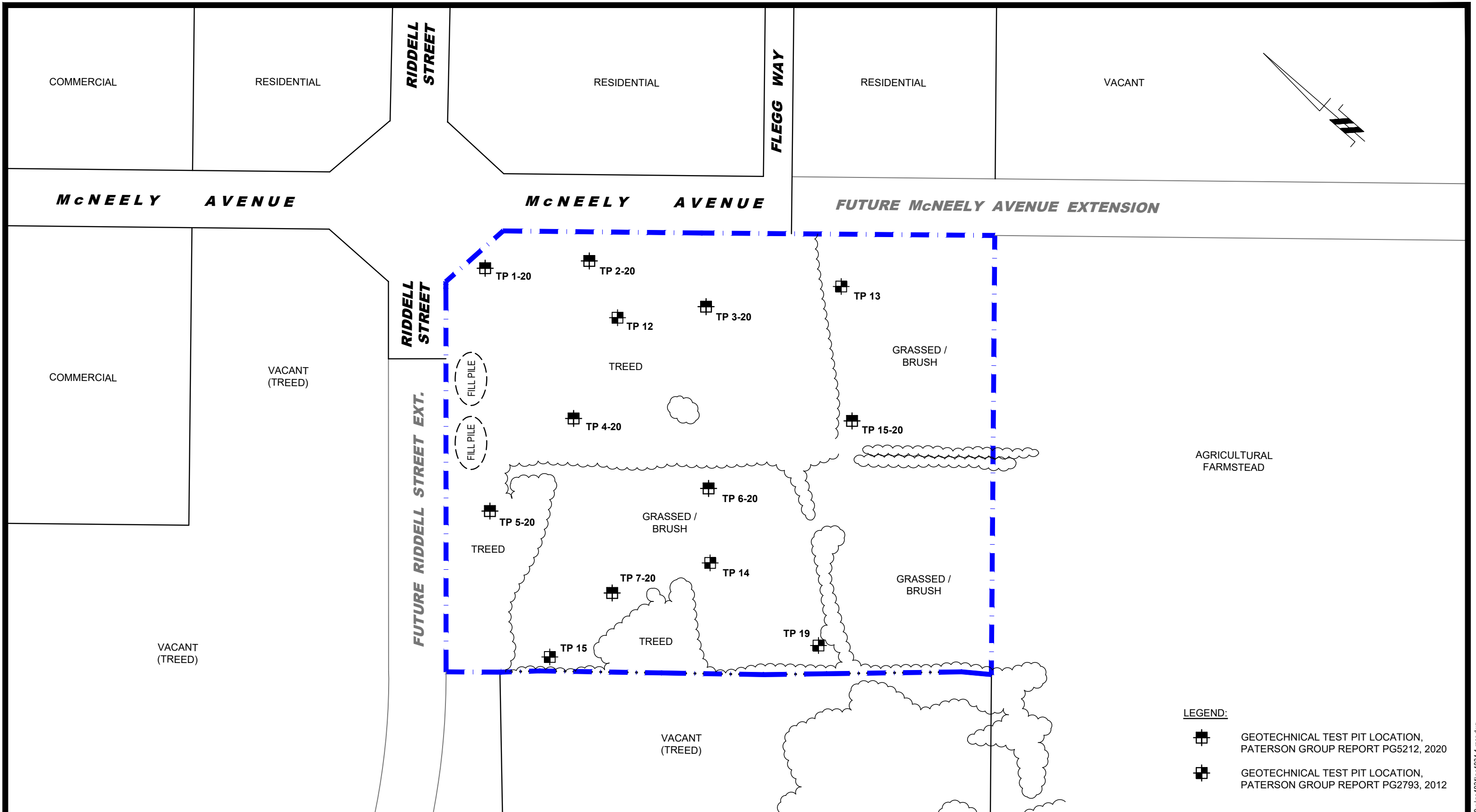


FIGURE 1
KEY PLAN

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NO.	REVISIONS	DATE	INITIAL
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NOVATECH ENGINEERING CONSULTANTS LTD.
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
RSSR LANDS - McNEELY AVENUE
 CARLETON PLACE, ONTARIO
 Title: **SITE PLAN**

Scale: 1:2500
 Drawn by: MPG
 Checked by: E.JL
 Approved by: E.JL

Date: 01/2020
 Report No.: PE4834-1
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