

**STAGE 1 ARCHAEOLOGICAL ASSESSMENT FOR THE CLASS ENVIRONMENTAL ASSESSMENT STUDY FOR IMPROVEMENTS TO LANGSTAFF ROAD FROM WESTON ROAD TO HIGHWAY 7 ON LOTS 10 AND 11 CONCESSION 2 WEST OF YONGE STREET (WYS), LOTS 9 TO 18 CONCESSION 3 WYS, LOTS 6 TO 15 CONCESSION 4 WYS, AND ON LOTS 10 AND 11 CONCESSIONS 5 AND 6 WYS IN THE GEOGRAPHIC TOWNSHIP OF VAUGHAN, FORMER YORK COUNTY, IN THE CITY OF VAUGHAN, REGIONAL MUNICIPALITY OF YORK**

**Revised Report**

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## EXECUTIVE SUMMARY

This report discusses the rationale, methods and results of the Stage 1 archaeological assessment for the Class Environmental Assessment (Class EA) Study for Improvements to Langstaff Road from Weston Road to Highway 7 in the City of Vaughan, Regional Municipality of York. The proposed improvements will help manage traffic congestion and assist the needs of pedestrians, cyclists, public transit users, goods movement, and motorists. The study area is located on Lots 10 and 11 Concession 2 West of Yonge Street (WYS), Lots 9 to 18 Concession 3 WYS, Lots 6 to 15 Concession 4 WYS, and on Lots 10 and 11 Concessions 5 and 6 WYS in the Geographic Township of Vaughan, Former York County. New Directions Archaeology Ltd. (NDA) was contracted by WSP Canada Group Limited on behalf of York Region to conduct this Stage 1 archaeological assessment, which has been triggered by the *Environmental Assessment Act*. The study area measures approximately 998 ha.

The purpose of this Stage 1 archaeological assessment is to provide information about the study area's geography, history, previous archaeological fieldwork, and current land condition in order to determine the archaeological potential of the study area. Detailed documentary research was conducted and provides a record of the study area's archaeological and land use history, as well as its present condition. This research is presented in the historical and archaeological context sections of this report. A property inspection was also completed to gain first-hand knowledge of the study area's geography, topography, and current condition, and to evaluate and map archaeological potential. NDA completed the property inspection from publicly accessible lands, and did not enter any private properties since permission to enter had not been granted.

The background research resulted in the identification of multiple features of archaeological potential within the study area. Most prominent is proximity to the previously identified archaeological sites located within 1 km of the study area, including four Late Woodland villages. Of the seven sites that have been documented within 50 m of the study area, two are located within the study area and may still contain CHVI: the McNeil site (AkGv-16) and the Downey ossuary (AkGv-17). Other features of potential include the presence of the Don River, Black Creek, and their tributaries, and the presence of historic roadways (Langstaff Road, Weston Road, Jane Street, Keele Street, Rutherford Road and Dufferin Street), dwellings, orchards, laneways, and the historic Canadian Northern Railway. Furthermore, one pioneer cemetery is located within the study area and is called the Langstaff Cemetery (aka the St. Stephen's Anglican Cemetery). The presence of the above features indicates there is high archaeological potential for encountering archaeological sites associated with the occupation of the study area by both Indigenous peoples and early settlers.

However, the potential for a study area to contain archaeological resources is tempered with a consideration of previous archaeological work already completed within the study area, as well as the presence and extent of past disturbances and other areas of low archaeological potential. Approximately 5.9% of the study area has been previously assessed and does not require further assessment. Approximately 59.2% of the study has been subject to deep and extensive land alterations that have removed archaeological potential within the study area. Approximately 0.2% of the study area was assessed a low and/or permanently wet including the Don River, Black Creek, and a pond. Areas assessed as low and wet do not require further assessment. Approximately 0.1%

of the study area is comprised by the Langstaff Cemetery, and should be avoided by the proposed undertaking.

Finally, approximately 34.7% of the study area is located within previously unassessed lands that hold archaeological potential and will require further assessment. Areas of archaeological potential include greenspace along rivers, parklands, woodlots, and agricultural fields. Additionally, a property inspection of the rail yard could not be completed due to a lack of permission to enter. While the construction of the rail yard has likely caused some disturbance to the study area, the degree of disturbance could not be determined through this Stage 1 assessment. As a result, this area will require a Stage 2 assessment to confirm disturbance.

Finally, as noted, four confirmed Late Woodland villages and one unconfirmed village have been documented within 1 km of the study area. When an application of the York Region and City of Vaughan Ossuary Potential Model is applied, we find that large portions of the study area are located within an area of heightened potential to encounter ossuaries. Burial avoidance strategies will be required throughout these areas. This is true even for lands that have been previously subject to archaeological assessment, as ossuaries are often found at a depth not reached by standard archaeological survey methods. Additionally, the Downey ossuary (AkGv-17) has been previously identified within the study area; while the exact location of the Downey ossuary is unknown, the burial has not been previously excavated and may still be intact within the study area.

On the basis of the above information, the following recommendations are made:

1. Additional archaeological assessment is not required for those areas visually determined to be disturbed including Langstaff Road, Weston Road, Jane Street, Keele Street, Dufferin Street, Highway 7 and Highway 400, and the numerous side streets within the study area, as well as housing, commercial, and industrial developments. Additionally, all areas assessed as low and permanently wet do not require further assessment.
2. Additional archaeological assessment is not required for those areas previously subject to archaeological assessment, where it has been determined that archaeological potential no longer exists.
3. The McNeil site (AkGv-16) is located within the study area and has not been documented in any detail beyond initial identification in the early twentieth century. Based on the location of the McNeil site, it appears that at least part of the site has been impacted by the construction of Highway 400. It is therefore recommended should development be proposed within the vicinity of the McNeil site, that Stage 2 field survey be completed within areas of archaeological potential prior to impact, to attempt to identify whether any of the site remains intact.
4. The Downey ossuary (AkGv-17) is located within the study area. While the exact site location is unknown, the ossuary has not yet been excavated. It is unknown whether any portion of the ossuary remains intact following the development of the general

- area. As a result, it is recommended that if development is proposed within the vicinity of the site, that burial avoidance strategies be completed (see Recommendation # 7).
5. One historic cemetery (Langstaff Cemetery) is located within the study area and should be avoided by the proposed undertaking. Currently, the limits of the cemetery are not known. Additional cemetery research as per Section 3.1 of the 2011 *Standards and Guidelines for Consultant Archaeologists* must be carried out in advance of any further assessment within 50 m of the current legal boundary to clarify the historic limits. If future impacts are proposed within 10 m of the inferred limit, a Stage 3 cemetery investigation program is required. The cemetery investigation program must involve mechanical topsoil removal within the proposed area of impact for a minimum of 10 m beyond the inferred limits to confirm there are no adjacent burials. If impacts are needed to the east, south or west of the cemetery, mechanical excavation should begin at the 10 m distance and work towards the inferred limit. In the north, mechanical excavation should begin within the disturbed roadway platform/ditch and progress southwards. However, if proposed development impacts are more than 10 m from the edge of the cemetery, the development impacts are considered to pose no threat to the cemetery. Regardless, it is recommended that a temporary barrier be erected around nearby cemeteries and that “no go” instructions be issued for all onsite crews as a precautionary measure. The Bereavement Authority of Ontario must be contacted prior to any intrusive assessment in the vicinity of the cemetery to determine whether an Investigation Authorization is required.
  6. The remainder of the study area contains archaeological potential and will require a Stage 2 archaeological assessment prior to any ground disturbing activities:
    - a. All areas identified as holding archaeological potential and that are comprised of wooded greenspace along rivers, woodlots, and public parklands, cannot be ploughed. As a result, the portion of the study area with archaeological potential must be subject to a test pit survey as per Section 2.1.2 of the 2011 *Standards and Guidelines for Consultant Archaeologists*. The area between Langstaff Cemetery and the disturbed roadway platform should also be subject to test pit survey prior to mechanical excavation.
    - b. All agricultural fields must be subject to a pedestrian survey as per Section 2.1.1 of the 2011 *Standards and Guidelines for Consultant Archaeologists*.
    - c. The portion of the study area not subject to the property inspection (rail yard) and areas where it appears some degree of disturbance has occurred must be subject to a combination survey comprised of a mixture of test pit survey and visual assessment, as per Section 2.1.8 of the 2011 *Standards and Guidelines for Consultant Archaeologists*.
  7. Finally, according to York Region’s Official Plan ROPA 6, where there is the potential for lands to contain an ossuary, it is recommended that burial avoidance strategies be implemented to attempt to mitigate any negative impacts to unknown ossuary locations. This includes the unconfirmed location of the Downey ossuary (AkGv-17). Based on

the ossuary potential model, several large portions of the study area have the potential to contain an ossuary. Within this area, regardless of Stage 2 archaeological assessment results, and regardless of previous disturbance, the following recommendations are made:

- a. Predevelopment topsoil removal (grading) within development lands located within 1000 m of a documented village site *and* within 300 m of any current or former water sources should be subject to archaeological *monitoring*.
- b. All site supervisors and heavy equipment operators working on site should be briefed in advance concerning the role and responsibilities of the archaeological monitor. Should they encounter potential human remains while the monitor's attention is elsewhere on site, they must cease work in the area, retain all potentially associated soils in place and notify the monitor and their own supervisors immediately.
- c. In the event that human remains are encountered during construction, the *proponent* must immediately contact the Police and Registrar at the Ministry of Government and Consumer Services. Should any *ossuary* feature be discovered during the course of the *monitoring* work, *preservation* through *avoidance* and project redesign/revision is the preferred alternative. The details of this form of *mitigation* must be negotiated with the appropriate First Nation(s) and the Cemeteries Registrar.

## TABLE OF CONTENTS

|   |             |
|---|-------------|
| <b>EXECUTIVE SUMMARY</b>  | <b>I</b>    |
| <b>TABLE OF CONTENTS</b>  | <b>V</b>    |
| <b>LIST OF TABLES</b>   | <b>VI</b>   |
| <b>LIST OF IMAGES</b>   | <b>VI</b>   |
| <b>LIST OF MAPS</b>   | <b>VIII</b> |
| <b>LIST OF APPENDICES</b>   | <b>IX</b>   |
| <b>PERSONNEL</b>  | <b>X</b>    |
| <br>  |             |
| <b>1.0 PROJECT CONTEXT</b>  | <b>1</b>    |
| 1.1 Development Context   | 1           |
| 1.2 Historical Context  | 1           |
| 1.2.1 Settlement History  | 2           |
| 1.2.1.1 Pre-Contact   | 2           |
| 1.2.1.2 Post-Contact  | 2           |
| 1.2.2 Past and Present Land Use   | 4           |
| 1.2.2.1 Review of Nineteenth Century Maps                               | 4           |
| 1.2.2.2 Review of Twentieth and Twenty-First Century Aerial Photographs | 5           |
| 1.2.2.3 Built Heritage Resources  | 6           |
| 1.2.2.4 Cemeteries and Plaques  | 6           |
| 1.3 Archaeological Context  | 7           |
| 1.3.1 Condition of the Study Area                                       | 7           |
| 1.3.2 Previous Archaeological Work                                      | 8           |
| 1.3.3 Registered or Known Archaeological Sites                          | 11          |
| 1.3.4 Regional Official Plans and Archaeological Management Plans       | 14          |
| <b>2.0 STAGE 1 BACKGROUND STUDY</b>                                     | <b>17</b>   |
| 2.1 Background Study Methods  | 17          |
| 2.2 Property Inspection Field Methods                                   | 17          |
| 2.3 Analysis and Conclusions  | 18          |
| <b>3.0 RECOMMENDATIONS</b>  | <b>21</b>   |
| <b>4.0 ADVICE ON COMPLIANCE WITH LEGISLATION</b>                        | <b>24</b>   |
| <b>5.0 IMAGES</b>   | <b>25</b>   |
| <b>6.0 MAPS</b>   | <b>37</b>   |
| <b>7.0 BIBLIOGRAPHY AND SOURCES</b>                                     | <b>64</b>   |
| <b>APPENDICES</b>   | <b>68</b>   |

## LIST OF TABLES

|   |    |
|---|----|
| Table 1: Pre-Contact Settlement History   | 2  |
| Table 2: Post-Contact Settlement History  | 3  |
| Table 3: Summary of Historic Ownership of the Study Area and Nearby Historic Features | 4  |
| Table 4: List of Reports Documenting Field Work within 50m of the Study Area          | 8  |
| Table 5: Registered or Known Archaeological Sites within 1 km                         | 11 |

## LIST OF IMAGES

|   |    |
|---|----|
| Image 1: Weston Road at Langstaff Road facing south   | 25 |
| Image 2: Langstaff Road at Weston Road facing north   | 25 |
| Image 3: Langstaff Road at Weston Road facing west  | 25 |
| Image 4: Langstaff Road at Weston Road facing east  | 25 |
| Image 5: Fifth Street facing east   | 25 |
| Image 6: Silmar Drive facing south, note commercial development on right                    | 25 |
| Image 7: Langstaff Road at Simlar Drive facing east   | 25 |
| Image 8: Treecar Drive at Langstaff Road facing north, note commercial developments         | 25 |
| Image 9: SWM pond facing south  | 26 |
| Image 10: Sunview Drive facing west   | 26 |
| Image 11: Highway 400 and Rutherford Road Overpass facing southwest                         | 26 |
| Image 12: Hawkview Boulevard facing south, note berm to Highway 400                         | 26 |
| Image 13: Grassy area along Highway 400 ramp near Canadas Wonderland Drive facing northwest | 26 |
| Image 14: Highway 400 and Bass Pro Mills overpass facing southwest                          | 26 |
| Image 15: Vaughan Mills mall and parking lot facing northeast                               | 26 |
| Image 16: SWM pond and Bass Pro Mills Drive access ramp to Highway 400 facing southeast     | 26 |
| Image 17: Highway 400 and off-ramp to Bass Pro Mills Drive facing northwest                 | 27 |
| Image 18: Car dealership on east side of Highway 400 facing north                           | 27 |
| Image 19: Parking lot along 4 Valley Drive facing southwest                                 | 27 |
| Image 20: Langstaff Road at Highway 400 facing east   | 27 |
| Image 21: Langstaff Road at Highway 400 facing southeast                                    | 27 |
| Image 22: Langstaff Road at Highway 400 facing southeast                                    | 27 |
| Image 23: Langstaff Road at Highway 400 facing northwest                                    | 27 |
| Image 24: Industrial and business development south of Langstaff Road facing south          | 27 |
| Image 25: Langstaff Road at Edgeley Boulevard facing west                                   | 28 |
| Image 26: Edgeley Boulevard facing north, note Vaughan business area                        | 28 |
| Image 27: Langstaff Road at Edgeley Boulevard facing east                                   | 28 |
| Image 28: Edgeley Boulevard facing south  | 28 |
| Image 29: Langstaff Road east of Millway Avenue facing west                                 | 28 |

|   |    |
|---|----|
| Image 30: Langstaff Road facing east  | 28 |
| Image 31: Langstaff Road at Jane Street facing west   | 28 |
| Image 32: Jane Street facing north, note commercial development   | 28 |
| Image 33: Langstaff Road at Jane Street facing east TI  | 29 |
| Image 34: Jane Street and parking lot facing south  | 29 |
| Image 35: Business/industrial development on north side of Langstaff Road facing north                  | 29 |
| Image 36: Intersection between Creditstone Road and Modena Trail facing north                           | 29 |
| Image 37: Greenspace along Don River facing south north   | 29 |
| Image 38: Empty lot on east site of Creditstone Road at Locke Street facing northeast                   | 29 |
| Image 39: Creditstone Road facing south, note commercial complex Map                                    | 29 |
| Image 40: Internal commercial road overlooking train yard facing east                                   | 29 |
| Image 41: Langstaff Road at Creditstone Road facing west  | 30 |
| Image 42: Langstaff Road termination at CN Rail Yard facing east  | 30 |
| Image 43: CN Rail yard facing east  | 30 |
| Image 44: CN rail yard facing east  | 30 |
| Image 45: Creditstone Road facing south   | 30 |
| Image 46: Creditstone Road facing south   | 30 |
| Image 47: Creditstone Road facing north   | 30 |
| Image 48: Creditstone Road facing north   | 30 |
| Image 49: Greenspace along Don River west of Keele Street and South of Rutherford Road facing southwest | 31 |
| Image 50: Sherwood Park Drive facing northwest  | 31 |
| Image 51: Very large parking lot for CN facing southeast  | 31 |
| Image 52: Rotational Drive facing northwest   | 31 |
| Image 53: Train tracks and internal road facing west  | 31 |
| Image 54: Train tracks and internal road facing southwest   | 31 |
| Image 55: Langstaff Road termination facing west, note business/industrial zone                         | 31 |
| Image 56: Keele Street facing south   | 31 |
| Image 57: Keele Street facing north   | 32 |
| Image 58: Langstaff east of Keele facing east   | 32 |
| Image 59: Greenspace west of the Don River facing west  | 32 |
| Image 60: Greenspace and the Don River facing south   | 32 |
| Image 61: Langstaff Road east of the Don River facing east  | 32 |
| Image 62: Road near CN rail yard facing west  | 32 |
| Image 63: Train tracks and internal road facing south   | 32 |
| Image 64: Rail yard and industrial complex facing southeast   | 32 |
| Image 65: Creditstone Road facing north   | 33 |
| Image 66: Industrial complex facing northeast   | 33 |
| Image 67: Greenspace along Langstaff Road near the Don River facing west                                | 33 |
| Image 68: Langstaff Cemetery (Old St. Stephen's Anglican Cemetery) facing south                         | 33 |
| Image 69: Langstaff east of Keele facing west, note road ditch  | 33 |
| Image 70: Langstaff Road east of Keele facing west  | 33 |



|  |    |
|--|----|
| Image 71: Langstaff Road east of Keele Street facing east, note road ditch and adjacent parkland | 33 |
| Image 72: Langstaff Road west of Connie Crescent facing west                                     | 33 |
| Image 73: Langstaff Road east of Connie Crescent facing east                                     | 34 |
| Image 74: Langstaff Road facing west, note road ditch  | 34 |
| Image 75: Langstaff Road facing west, note road ditch and greenspace on left                     | 34 |
| Image 76: Langstaff Road facing east, note commercial development on left                        | 34 |
| Image 77: Langstaff Road facing east, note greenspace on right                                   | 34 |
| Image 78: Staffern Drive facing south, note commercial and business developments                 | 34 |
| Image 79: Langstaff Road facing west   | 34 |
| Image 80: Langstaff Road at Dufferin Street facing west, note road ditch                         | 34 |
| Image 81: Dufferin Street facing north, note greenspace  | 35 |
| Image 82: Langstaff Road at Dufferin Street facing east  | 35 |
| Image 83: Langstaff Road at Dufferin Street facing west  | 35 |
| Image 84: Dufferin Street facing south   | 35 |
| Image 85: Langstaff Road at Dufferin Street facing east, note housing development on left        | 35 |
| Image 86: Timberview Drive facing northeast  | 35 |
| Image 87: Langstaff Road facing northwest  | 36 |
| Image 88: Langstaff Road facing northwest  | 36 |
| Image 89: Langstaff Road facing south towards Highway 7  | 36 |
| Image 90: Langstaff Road facing northwest  | 36 |
| Image 91: Langstaff Road southeast towards Highway 7, note ditch                                 | 36 |

## LIST OF MAPS

|   |    |
|---|----|
| Map 1: Location of the Study Area on Topographic Map  | 37 |
| Map 2: Location of the Study Area on 1860 Tremaine Map of York County                         | 38 |
| Map 3: Location of the Study Area on 1878 Miles & Co. Atlas of York County – Markham Township | 39 |
| Map 4: Location of the Study Area on 1954 Aerial Imagery – West Half                          | 40 |
| Map 5: Location of the Study Area on 1954 Aerial Imagery – East Half                          | 41 |
| Map 6: Location of the Study Area on 1965 Aerial Imagery – View of Rail Yard                  | 42 |
| Map 7: Location of the Study Area on Vaughan Archaeological Potential Model                   | 43 |
| Map 8: Features of Potential within the Study Area  | 44 |
| Map 9: Previous Archaeological Assessments  | 45 |
| Map 10: Assessment Results - Overview   | 46 |
| Map 11: Assessment Results -Tile 1  | 47 |
| Map 12: Assessment Results -Tile 2  | 48 |
| Map 13: Assessment Results -Tile 3  | 49 |
| Map 14: Assessment Results -Tile 4  | 50 |
| Map 15: Assessment Results -Tile 5  | 51 |

---

|   |    |
|---|----|
| Map 16: Assessment Results -Tile 6          | 52 |
| Map 17: Assessment Results -Tile 7          | 53 |
| Map 18: Assessment Results -Tile 8          | 54 |
| Map 19: Assessment Results -Tile 9          | 55 |
| Map 20: Assessment Results -Tile 10         | 56 |
| Map 21: Assessment Results -Tile 11         | 57 |
| Map 22: Assessment Results -Tile 12         | 58 |
| Map 23: Assessment Results -Tile 13         | 59 |
| Map 24: Assessment Results -Tile 14         | 60 |
| Map 25: Assessment Results -Tile 15         | 61 |
| Map 26: Assessment Results -Tile 16         | 62 |
| Map 27: Recommendations -Langstaff Cemetery | 63 |

## **LIST OF APPENDICES**

|   |    |
|---|----|
| APPENDIX I: Unaltered Development Plans | 69 |
| APPENDIX II: Document Inventory         | 70 |

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## **1.0 PROJECT CONTEXT**

### **1.1 Development Context**

This report discusses the rationale, methods and results of the Stage 1 archaeological assessment for the Class Environmental Assessment (Class EA) Study for Improvements to Langstaff Road from Weston Road to Highway 7 in the City of Vaughan, Regional Municipality of York (Map 1). The proposed improvements will help manage traffic congestion and assist the needs of pedestrians, cyclists, public transit users, goods movement, and motorists (APPENDIX I). The study area is located on Lots 10 and 11 Concession 2 West of Yonge Street (WYS), Lots 9 to 18 Concession 3 WYS, Lots 6 to 15 Concession 4 WYS, and on Lots 10 and 11 Concessions 5 and 6 WYS in the Geographic Township of Vaughan, Former York County. New Directions Archaeology Ltd. (NDA) was contracted by WSP Canada Group Limited on behalf of York Region to conduct this Stage 1 archaeological assessment, which has been triggered by the *Environmental Assessment Act*. The study area measures approximately 998 ha.

The purpose of this Stage 1 archaeological assessment is to provide information about the study area's geography, history, previous archaeological fieldwork, and current land condition in order to determine the archaeological potential of the study area. Detailed documentary research was conducted and provides a record of the study area's archaeological and land use history, as well as its present condition. This research is presented in the historical and archaeological context sections of this report (Sections 1.2 and 1.3). A property inspection was also completed to gain first-hand knowledge of the study area's geography, topography, and current condition, and to evaluate and map archaeological potential (Section 2.2). NDA completed the property inspection from publicly accessible lands and did not enter any private properties since permission to enter had not been granted.

Assessment activities were conducted in accordance with the provisions of the *Ontario Heritage Act* (R.S.O. 1990, c.o. 18) in compliance with the 2011 *Standards and Guidelines for Consultant Archaeologists (S&Gs)* under an archaeological consulting license (#P089) issued to Dean Knight of NDA. The field notes, photos and related documents will be curated at the office of NDA (APPENDIX II). Site locational information can be viewed in the Supplementary Documentation submitted with this report.

### **1.2 Historical Context**

After a century of archaeological work in southern Ontario, scholarly understanding of the historic usage of lands in York Region has become very well-developed. With occupation beginning in the Palaeo-Indian period approximately 11,000 years ago, the greater vicinity of the study area comprises a complex chronology of Pre-Contact and Euro-Canadian histories. Section 1.2.1 provides an overview of the region's settlement history, and Section 1.2.2 summarizes the past and present land use of the study area.

## 1.2.1 Settlement History

### 1.2.1.1 Pre-Contact

The Pre-Contact history of the region is both lengthy and rich, and a variety of Indigenous groups inhabited the landscape. Archaeologists generally divide this complex history into three main periods: Palaeo-Indian, Archaic and Woodland. Each of these periods comprises a range of discrete sub-periods characterized by specific material culture, settlement patterns and lifeways. The principal archaeological horizons/cultures of the region are summarized in Table 1.

**Table 1: Pre-Contact Settlement History**  
(Wright 1972; Ellis and Ferris 1990; Warrick 2000; Munson and Jamieson 2013)

| Sub-Period                       | Timeframe     | Characteristics   |
|----------------------------------|---------------|---|
| Early Palaeo-Indian              | 9000–8400 BC  | Gainey, Barnes and Crowfield traditions; Small bands; Mobile hunters and gatherers; Utilization of seasonal resources and large territories; Fluted projectiles   |
| Late Palaeo-Indian               | 8400–7500 BC  | Holcombe, Hi-Lo and Lanceolate biface traditions; Continuing mobility; Campsite/Way-Station sites; Smaller territories are utilized; Non-fluted projectiles   |
| Early Archaic                    | 7500–6000 BC  | Side-notched, Corner-notched (Nettling, Thebes) and Bifurcate Base traditions; Growing diversity of stone tool types; Heavy woodworking tools appear (e.g., ground stone axes and chisels)  |
| Middle Archaic                   | 6000–2500 BC  | Stemmed (Kirk, Stanly/Neville), Brewerton side- and corner-notched traditions; Reliance on local resources; Populations increasing; More ritual activities; Fully ground and polished tools; Net-sinkers common; Earliest copper tools          |
| Late Archaic                     | 2500–900 BC   | Narrow Point (Lamoka), Broad Point (Genesee) and Small Point (Crawford Knoll) traditions; Less mobility; Use of fish-weirs; True cemeteries appear; Stone pipes emerge; Long-distance trade (marine shells and galena)                          |
| Early Woodland                   | 900–400 BC    | Meadowood tradition; Crude cord-roughened ceramics emerge; Meadowood cache blades and side-notched points; Bands of up to 35 people   |
| Middle Woodland                  | 400 BC–AD 600 | Saugeen tradition; Stamped ceramics appear; Saugeen projectile points; Cobble spall scrapers; Seasonal settlements and resource utilization; Post holes, hearths, middens, cemeteries and rectangular structures identified                     |
| Middle/Late Woodland Transition  | AD 600–900    | Princess Point tradition; Cord roughening, impressed lines and punctate designs on pottery; Adoption of maize horticulture at the western end of Lake Ontario; Oval houses and 'incipient' longhouses; First palisades; Villages with 75 people |
| Late Woodland (Early Iroquoian)  | AD 900–1300   | Glen Meyer tradition; Settled village-life based on agriculture; Small villages (0.4 ha) with 75–200 people and 4–5 longhouses; Semi-permanent settlements  |
| Late Woodland (Middle Iroquoian) | AD 1300–1400  | Uren and Middleport traditions; Classic longhouses emerge; Larger villages (1.2 ha) with up to 600 people; More permanent settlements (30 years)  |
| Late Woodland (Late Iroquoian)   | AD 1400–1600  | Pre-Contact Huron tradition; Larger villages (1.7 ha); Examples up to 5 ha with 2,500 people; Extensive croplands; Also hamlets, cabins, camps and ossuaries; Potential tribal units; Fur trade begins ca. 1580; European trade goods appear    |

### 1.2.1.2 Post-Contact

The arrival of European explorers and traders at the beginning of the 17<sup>th</sup> century triggered widespread shifts in Indigenous lifeways and set the stage for the ensuing Euro-Canadian settlement process. Documentation for this period is abundant, ranging from the first sketches of Upper Canada and the written accounts of early explorers to detailed township maps and lengthy histories. The Post-Contact period can be effectively discussed in terms of major historical events, and the principal characteristics associated with these events are summarized in Table 2.

**Table 2: Post-Contact Settlement History**

(Smith 1846; Miles & Co. 1878; Mulvany 1885; Robinson 1885; Coyne 1895; Lajeunesse 1960; Cumming 1972; Mika 1972; Champion 1979; Smith 1987; Ellis and Ferris 1990; Surtees 1994; Hughes 2009; NRC 2010; AO 2011)

| Historical Event                                  | Timeframe  | Characteristics  |
|---|--|--|
| Early Contact                                     | Early 17 <sup>th</sup> century                           | Brûlé explores the area in 1610; Champlain visits in 1613 and 1615/1616; Iroquoian-speakers (Huron, Petun and Neutral) and Algonkian-speakers (Anishnabeg) encountered; European goods begin to replace traditional tools  |
| Five Nations Invasion                             | Mid-17 <sup>th</sup> century                             | Haudenosaunee (Five Nations) invade ca. 1650; Neutral, Huron and Petun Nations are defeated/removed; vast Iroquoian hunting territory established in the second half of the 17 <sup>th</sup> century; Explorers continue to document the area  |
| Anishnabeg Influx                                 | Late 17 <sup>th</sup> and early 18 <sup>th</sup> century | Ojibway, Odawa and Potawatomi expand into Haudenosaunee lands in the late 17 <sup>th</sup> century; Nanfan Treaty between Haudenosaunee and British in 1701; Anishnabeg occupy the area and trade directly with the French and English   |
| Fur Trade Development                             | Early and mid-18 <sup>th</sup> century                   | Growth and spread of the fur trade; Peace between the French and English with the Treaty of Utrecht in 1713; Ethnogenesis of the Métis; Hostilities between French and British lead to the Seven Years' War in 1754; French surrender in 1760  |
| British Control                                   | Mid-18 <sup>th</sup> century                             | <i>Royal Proclamation</i> of 1763 recognizes the title of the First Nations to the land; Numerous treaties arranged by the Crown; First acquisition is the Seneca surrender of the west side of the Niagara River in August 1764   |
| Loyalist Influx                                   | Late 18 <sup>th</sup> century                            | United Empire Loyalist influx after the American Revolutionary War (1775–1783); British develop interior communication routes and acquire additional lands; 'Between the Lakes Purchase' in 1784 orchestrated by Haldimand to obtain lands for Six Nations; <i>Constitutional Act</i> of 1791 creates Upper and Lower Canada   |
| <b>York County Development</b>                    | Late 18 <sup>th</sup> and early 19 <sup>th</sup> century | York County was originally created in 1792 and one of its early defining characteristics was Yonge Street, which was first surveyed in 1794 by Augustus Jones. The route was intended to open up the inland areas to settlement as well as facilitate travel to the northwest. Despite these favourable conditions, the rate of settlement was slow in York County, with growth hindered mainly due to the fact that many lands were granted to "favourites of successive administrations" to garner political support. These people typically avoided their settlement duties and caused the land to be locked up in private hands and closed to settlement, waiting for the land to increase in value rather than settle. By 1842, the population of York County reached 58,853, and there were 65 grist mills and 209 saw mills in operation within its diverse townships. Following the abolition of the district system in 1849, the boundaries of York County were largely redefined to consist of the City of Toronto and the Townships of Etobicoke, York, Scarborough, Vaughan, Markham, King, Whitchurch, East Gwillimbury, North Gwillimbury and Georgina.  |
| <b>Vaughan Township Formation and Development</b> | 19 <sup>th</sup> century                                 | Vaughan Township is bounded to the east by Markham, to the north by King, to the west by the Gore of Toronto, and to the south by York. Originally part of the West Riding of York County, the first survey of the Township was started in 1795 by Tredell, but was not completed until 1851 following additional contributions. Lands were first granted in 1799 to along Yonge Street. Early land patents were given as rewards to soldiers who fought against the American Colonies; however, many early settlers to Vaughan came from the United States including United Empire Loyalists, Pennsylvania Germans, Mennonites, and Quakers. British immigrants arriving after 1814 were not agriculturalists, but were tended to have skills in trades like millers, blacksmiths, and merchants. By 1842, 60,496 acres were taken up, 19,766 of which were under cultivation. At the time, six grist mills and 25 saw mills were operating within the Township. The population was noted as 4,300 individuals. By 1878, there were 16 churches and 19 churches within the township, and 1345 individuals were recorded as voters in 1878 including owners (756), tenants (517), farmers sons (68), occupants (1), and income tax (3). Principle villages included Woodbridge, Teston, Langstaff, Patterson, and Maple. |

## 1.2.2 Past and Present Land Use

The study area is located on Lots 10 and 11 Concession 2 West of Yonge Street (WYS), Lots 9 to 18 Concession 3 WYS, Lots 6 to 15 Concession 4 WYS, and on Lots 10 and 11 Concessions 5 and 6 WYS in the Geographic Township of Vaughan, York County. To reconstruct the historic land use of the study area, NDA conducted a review of nineteenth century maps and twentieth century aerial photographs focused on the study area to provide insight in to the past and present land use and settlement history of the study area. Furthermore, a review of the *City of Vaughan Heritage Inventory* (Vaughan 2012) was completed to document the known structures of historical importance located within the study area.

### 1.2.2.1 Review of Nineteenth Century Maps

The nineteenth century maps reviewed include G.C Tremaine's *Map of the County of York, Canada West* (1860) (Map 2) and Miles & Co.'s *Illustrated Historical Atlas of the County of York, Ont.* (1878) (Map 3). The ownership and settlement features of the lots and concessions within the study area are documented in Table 3.

**Table 3: Summary of Historic Ownership of the Study Area and Nearby Historic Features  
(Tremaine 1860; Miles & Co. 1878)**

| Con | Lot               | 1860 Tremaine Map            |                        | 1878 Mile & Co. Atlas |   |               |               |                                    |
|-----|-------------------|------------------------------|------------------------|-----------------------|---|---------------|---------------|------------------------------------|
|     |                   | Occupant                     | Features               | Occupant              | Features                                      |               |               |                                    |
| 2   | 10                | Daniel Raeman                | -                      | Dan Reaman            | 1 structure and associated orchard            |               |               |                                    |
|     | 11                | Johnathan Baker              | -                      | Johnathan Baker       | -   |               |               |                                    |
| 3   | 10                | Valentine Keffer             | 1 structure, rail line | Valentine Keffer      | 1 structure and associated orchard, rail line |               |               |                                    |
|     |                   |                              |                        | George Keffer         | 2 structures                                  |               |               |                                    |
|     | 11                | Henry Reed<br>White<br>White | Rail line              | Hiram White           | 1 structure and associated orchard, rail line |               |               |                                    |
|     |                   |                              |                        |                       |   | Isaac White   | Daniel Reaman | 1 structure and associated orchard |
|     |                   |                              |                        |                       |   | Mrs. Matheson |               |                                    |
| 4   | 6                 | Samuel Smith                 | -                      | Samuel Smith Sr.      | -   |               |               |                                    |
|     |                   | David Smith                  | -                      | Daniel Smith          | 1 structure and associated orchard            |               |               |                                    |
|     | 7                 | Jacob Smith                  | -                      | Abrm. Smith           | -   |               |               |                                    |
|     |                   |                              |                        | Samuel Smith          | -   |               |               |                                    |
|     | 8                 | Simon Shunk                  | -                      | Simon Shunk           | -   |               |               |                                    |
|     | 9                 | Simon Shunk                  | -                      | Simon Shunk           | -   |               |               |                                    |
|     |                   | Alex Amour                   | -                      | William Keffer        | 1 structure and laneway                       |               |               |                                    |
|     | 10                | Peter Musselmann             | -                      | Jos Stonge            | -   |               |               |                                    |
|     |                   |                              |                        | Mussleman Estates     | -   |               |               |                                    |
|     | 11                | David Mulholland             | -                      | Edwin Mulholland      | 1 structure and associated orchard            |               |               |                                    |
|     | 12                | Simon Shunk                  | -                      | William Shunk         | 1 structure and associated orchard            |               |               |                                    |
|     | 13                | John Campbell                | -                      | Jno. Campbell         | 1 structure                                   |               |               |                                    |
|     |                   |                              |                        | Illegible             | -   |               |               |                                    |
|     |                   |                              |                        | Illegible             | 1 structure                                   |               |               |                                    |
| 14  | Widdow Burkholder | 1 structure                  | Simon Shunk            | -                     |   |               |               |                                    |
|     |                   |                              | Aaron Burkholder       | 1 structure           |   |               |               |                                    |
|     |                   |                              | Aaron Burkholder       | -                     |   |               |               |                                    |

| Con | Lot | 1860 Tremaine Map        |                | 1878 Mile & Co. Atlas |                                    |             |
|-----|-----|--------------------------|----------------|-----------------------|------------------------------------|-------------|
|     |     | Occupant                 | Features       | Occupant              | Features                           |             |
|     |     |                          |                | Frank Burkholder      | 1 structure                        |             |
|     | 15  | Estate of Late John Line | 1 structure    | William Line          | 2 structures                       |             |
| 5   | 9   | W. Dalzell               | 1              | Jas. Nelson           | 1 structure and associated orchard |             |
|     |     | Simon Shunk              | -              | Jos Lankin            | -                                  |             |
|     | 10  | John Strong              | 2 structures   | Jos Stonge            | 1 structure and associated orchard |             |
|     |     | William Jackson Senior   | -              | William Jackson       | 1 structure and associated orchard |             |
|     | 11  | William Jackson Junior   | -              |                       |                                    |             |
|     |     | Jacob Shunk              | -              | Shunk Estates         | -                                  |             |
|     | 12  |                          |                | Jos. Brown            | -                                  |             |
|     |     | Isaac Paterbough         | -              | Jacob Puterbaugh      | -                                  |             |
|     | 13  |                          |                | Isaac Van Paterbough  | 1 structure                        |             |
|     |     | Peter Dickhout           | -              | Jno. D. Kinnee        | -                                  |             |
|     | 14  |                          | Henry Dickhout | -                     | Wm Dickhout                        | 1 structure |
|     |     | 15                       | Hector McLean  | -                     | Jacob Smith                        | -           |
|     | 16  |                          | Jacob Smith    | -                     | William Constable                  | -           |
|     |     | Jacob Lahmer             | -              | Jacob Lahmer          | -                                  |             |
| 17  |     | Jacob Lahmer             | -              | Jn. Smider            | -                                  |             |
|     |     | Jacob Snider             | -              |                       |                                    |             |
| 18  |     | Peter Frank              | -              | Peter Frank           | -                                  |             |
|     |     | Jacob Snider             | -              | Jacob Snider          | -                                  |             |
| 6   | 10  | Simon Shunk              | -              | Jno. Hutchinson       | 1 structure                        |             |
|     | 11  | T. Whilly                | -              | Thomas Whitty         | 1 structure and associated orchard |             |

The nineteenth century map review has established that several historic features were located within the study area including dwellings and orchards. Historically surveyed roads are also noted on the maps within the study area including Langstaff Road, Weston Road, Jane Street, Keele Street, Dufferin Street, and Rutherford Road. Additionally, the Canadian Northern Railway bisects the study area and is illustrated on both the 1860 and 1878 maps. The railway was established in 1853 as part of the Ontario, Simcoe, and Huron Railroad located between Toronto and Aurora, and was eventually extended to Collingwood in 1855. The study area is located between Concord Station and Rutherford Station. The Don River is also depicted as traversing the study area. Based on the presence of these historic features within and immediately adjacent to the study area, there is a distinct possibility that historic materials are present within the project lands.

#### 1.2.2.2 Review of Twentieth and Twenty-First Century Aerial Photographs

A review of a 1954 aerial photograph demonstrates that the study area was primarily utilized for agricultural purposes, with limited areas of woodlot (Map 4 to Map 5). The Don River bisects the study area, as does the Canadian Northern Railway. A rail yard had been constructed by 1965, while the remainder of the study area remained almost exclusively in agricultural use (Map 6). Currently, the study area is dominated by residential, commercial, and industrial developments, with limited greenspace located along the Don River and a woodlot found at the intersection between Dufferin Street and Langstaff Road.



### 1.2.2.3 Built Heritage Resources

The *Ontario Heritage Act (OHA)* gives municipal heritage advisory committees the responsibility of researching and recommending to municipal council properties of cultural value or interest. The properties are recorded and monitored through a heritage register as *designated* (under the OHA) or *listed* (non-designated properties with cultural heritage interest or value that may become candidates for designation). Additionally, Part V of the OHA provides for the designation of heritage conservation districts, aimed at identifying and maintaining the character of a collection of buildings, streets, and open spaces that together are of historical or architectural significance to a community.

The City of Vaughan's *Built Heritage Inventory* (Vaughan 2012) includes all individually designated properties (Part IV), all properties within an HCD (Part V), all properties in the *Listing of Building of Architectural and Historical Value*, and all properties of interest to Vaughan's Cultural Services Division. A review of this document revealed that one heritage structure is located within the study area and that four additional structures are located within the vicinity of the study area. The Isaac Baker Homestead is located at 1350 Langstaff Road within the study area. It is designed in the Foursquare architectural style, was constructed in 1929, and is designated under Part IV of the *Ontario Heritage Act*. The Zion Evangelical Lutheran Church is located to the east of the study area at 8795 Keele Street. The church was built in 1860 in the Gothic Revival style to replace the original log structure that once served the community. The church is listed with the City of Vaughan. Finally, the remaining two structures include the Vellore Schoolhouse (b. 1868) and the Vaughan Township Hall (B. 1845). Both structures are located at 9541 West Road, and both are designated under Part IV of the *Ontario Heritage Act*. The presence of designated and listed structures within and adjacent to the study area increases the potential for historic Euro-Canadian archaeological sites to be present within the study area.

### 1.2.2.4 Cemeteries and Plaques

The Langstaff Cemetery, also known as Old St. Stephen's Anglican Cemetery and the Langstaff German Episcopal Congregation Cemetery, is located on the south side of Langstaff Road east of Keele Street within the study area. The German Episcopal congregation was established in 1833 on lands owned by the Kieffer Family, with the cemetery being established in 1838. The Township of Vaughan created a cairn from the headstones in the 1960s, and the property continues to be managed by the City of Vaughan.

One historic plaque is located within the vicinity of the study area at 8795 Keele Street. It is entitled "Zion Evangelical Lutheran Church" and reads:

"In December, 1806, a group of German settlers from Berlin, Pennsylvania, led by Jacob and Michael Keffer, arrived in Vaughan Township, where they formed one of Upper Canada's earliest Lutheran congregations. Their first services were conducted by the Keffers, who served as lay readers, and by pastors from the nearby German settlement in Markham Township. While the parish records date from 1807, it was not until 1819 that the congregation commenced its first log church under the direction of the first regular pastor, the Rev. Johan D. Petersen. It was replaced by the present building in 1860. The

following year this was the site of the founding of the Canada Synod of the Lutheran Church.”

### **1.3 Archaeological Context**

The archaeological context of any given study area must be informed by the general condition of the study area (Section 1.3.1), summaries of any previous archaeological work conducted within 50 m of the study area (Section 1.3.2), whether there are any registered or known archaeological sites located within 1 km of the study area (Section 1.3.3), and a review of Regional Official Plans and Archaeological Management Plans within the subject lands (Section 1.3.4). The Stage 1 property inspection was carried out on August 21 and October 19, 2017 and the specific weather and lighting conditions are summarized in Section 2.2.

#### **1.3.1 Condition of the Study Area**

The study area is located within the Great Lakes-St. Lawrence forest region of southern Ontario, which is dominated by hardwood forests including maple, oak, yellow birch, and white and red pine. In terms of physiography, the study area is located within the Peel Plain physiographic region. The Peel Plain is a clay tract that covers an area of approximately 300 square miles over the central areas of the Regional Municipalities of York, Peel, and Halton (Chapman and Putnam 1984: 174-175). Several large rivers and streams have cut deep valleys across the plain, leaving much of the area fairly well drained. The plain is largely shale and limestone, covered in heavy, usually red clay (Chapman and Putnam 1984: 174-175). Bands of sand have been observed in the Peel Plain near streams (Chapman and Putnam 1984: 174-175).

More specifically, the study area measures approximately 998 ha and includes lands that are roughly bounded from 1 km west of Weston Road, 300 m north and south of Langstaff Road, and 700 m east of Dufferin Street to the juncture of Langstaff Road and Highway 7. The study area also includes 200 m on either side of Highway 400 from 500 m south of Langstaff Road to 1 km north of Rutherford Road, as well as the CN Rail yard between Highway 7 and Rutherford Road. The Don River and its tributaries, as well as Black Creek and its tributaries, meander across the study area. The study area environs are almost exclusively comprised of residential, commercial, and industrial developments. The CN rail yard makes up a large portion of the study area, and the Toronto to Allandale GO Line (former Northern Railway) crosses the study area. Limited areas of greenspace are located within the study area along the Don River and Black Creek. The general topography is flat to undulating (Map 1), with steeply sloping lands noted in the Don River Valley.

The soils within the study area include Chinguacousy clay loam, Jeddo clay, Malton Clay, Peel clay, and Bottom Land (Hoffman and Richards 1955). Chinguacousy clay loam is a grey-brown podzolic comprised of dark yellowish brown, shaly calcareous clay till with imperfect drainage. Jeddo clay loam is a dark grey gleisolic comprised of a dark yellowish brown, shaly calcareous clay till with poor drainage. Malton clay is a dark grey gleisolic comprised of a stonefree lacustrine clay over gritty clay till with poor drainage. Peel clay is a grey-brown podzolic comprised of a stonefree lacustrine clay over gritty clay till with imperfect drainage. Finally, Bottom Land is an alluvial soil comprised of irregularly stratified alluvial deposits with variable drainage.

### 1.3.2 Previous Archaeological Work

The Ontario Archaeological Sites Database was consulted to determine whether any archaeological assessments had been previously conducted within the limits of, or immediately adjacent to the study area. Fifteen reports may document work within 50 metres of the study area (Table 4). Five reports were unavailable on PastPort, and while requests were made to the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) and licence holders, the reports could not be obtained for review at the time of writing. Descriptions of the available reports are provided below, and the locations of previous assessments can be viewed on Map 9.

**Table 4: List of Reports Documenting Field Work within 50m of the Study Area**

| PIF/CIF  | Title   | Reference                           | Availability                         |
|--|---|-------------------------------------|--------------------------------------|
| ND   | An Archaeological Assessment of Draft Plan of Subdivision Part Lot 15, Concession IV, City of Vaughan.  | ASI 1993a                           | Not Available on PastPort, Requested |
| 1993-016   | Stage Three Assessment of the Ravensway Site, AIGv-101, Draft Plan of Subdivision, Part of Lot 15, Concession 4, City of Vaughan, Ontario   | ASI 1993b                           | Available                            |
| 1997-017   | Stage 1/2 A. R. A. of Langstaff Woods (Block 10) OPA 400, Part of Lots 11-15, Con. 2, City of Vaughan, RM of York, Ontario AND REVISED REPORT Stage 1 and 2 A.R.A. of Block 10, OPA 400, Part of Lots 11-15, Conc. 2, City of Vaughan, R. M. of York, Ontario | ASI 1997                            | Available                            |
| 1998-020   | Stage 1 and 2 Archaeological Assessment of Highway 400, from Langstaff Road to Teston Road, Regional Municipality of York   | NDA 1998                            | Available                            |
| 1999-007-106                                     | Stage 1 Class Environmental Assessment of Dufferin Street (Y.R. 53) Widening from Langstaff Road (Y.R. 72) to Major Makenzie Drive (Y.R. 25), City of Vaughan, Municipality of York   | ASI 2000                            | Available                            |
| 1999-007-158 and 2000-016-074                    | Stage 1-2 Archaeological Assessment of the Proposed Vaughan Mills Shopping Centre (19T-98V10), Part of Lots 144 and 15, Concession 5, City of Vaughan, Regional Municipality of York, Ontario, Revised  | ASI 2001                            | Available                            |
| 1999-031-044                                     | The 1999 Stage 1-2 Archaeological Assessment of the Proposed Progressive Moulded Products Limited Factory Development, 9000 Keele Street, Site Development Application File #DA.00.087, City of Vaughan, Ontario  | D.R. Poulton & Associates Inc. 2000 | Available                            |
| 2000-116-052                                     | Stage 1 A.A. of ORC Land at Hwy. 7 & Langstaff Rd., Part Lot 10, Con. 2, Geog. Twp. of Vaughan, City of Vaughan, RM of York, Ontario  | ASI ND                              | Not Available on PastPort, Requested |
| P014-022   | Report on the Stage 1 and Stage 2 Archaeological Assessment of the Tilzen Holdings Ltd. Lands, part of Lot 12, Concession 3, City of Vaughan, York Region   | Pearce 2004                         | Available                            |
| P047-028   | Stage 2 Archaeological Assessment Langstaff Road Watermain, City of Vaughan, R. M. of York, Ontario   | ASI ND                              | Not Available on PastPort, Requested |
| P047-047   | Stage 2 Archaeological Assessment Langstaff Road Watermain, City of Vaughan, R. M. of York, Ontario   | ASI ND                              | Not Available on PastPort, Requested |
| P047-083   | Stage 1&2 Archaeological Assessment, Glen Keele Developments Three Limited Located at Keel Street and Highway 7, Part of lot 6, Concession 4, City of Vaughan, Regional Municipality of York, Ontario   | ASI 2004                            | Available                            |
| P047-150   | Stage 1 and 2 Archaeological Assessment of 8888 Keele Street, Lot 13, Concession 4, Former Township of Vaughan, Regional Municipality of York   | ASI 2005                            | Available                            |
| P303-078-2010, P303-078-2010-STG3, P303-037-2009 | REVISED: Archaeological Assessment of TRCA Property, OHT Property and York Region ROW in York and Peel Regions (Stages 1-2), Archaeological Assessment of Western Vaughan Transportation Improvements: Individual Environmental Assessment...                 | TRCA ND                             | Not Available on PastPort, Requested |

| PIF/CIF        | Title   | Reference | Availability |
|----------------|---|-----------|--------------|
| P303-0261-2013 | Archaeological Assessment (Stage 1-2) in the City of Vaughan, GO Transit BarrAMICie Passing Track, Lots 9 and 10 Concession III, Historic Vaughan township, York County | TRCA 2014 | Available    |

*Stage Three Assessment of the Ravensway Site, AIGv-101, Draft Plan of Subdivision, Part of Lot 15, Concession 4, City of Vaughan, Ontario (ASI 1993b) [93-016]*

In 1993, ASI completed a Stage 3 assessment of the Ravensway site (AIGv-101), a small lithic scatter which is located within the current study area. The site had been encountered during a pedestrian survey during which six lithic artifacts were recovered including on Late Archaic projectile point fragment and five pieces of debitage (ASI 1993a). A controlled surface pickup (CSP) was completed across the extent of the site, and resulted in the recovery of one additional piece of debitage. Four 1 m units were then excavated across the scatter yielding an additional nine pieces of debitage. ASI determined the site had no cultural heritage value or interest (CHVI) and did not recommend further assessment.

*Stage 1/2 A. R. A. of Langstaff Woods (Block 10) OPA 400, Part of Lots 11-15, Con. 2, City of Vaughan, RM of York, Ontario AND REVISED REPORT Stage 1 and 2 A.R.A. of Block 10, OPA 400, Part of Lots 11-15, Conc. 2, City of Vaughan, R. M. of York, Ontario (ASI 1997) [1997-017]*

The above report documents the Stage 1-2 assessment of part of Block 10 located between Rutherford Road, sugar Bush Road, Dufferin Street, and Bathurst Street in the City of Vaughan, part of which overlaps with the current study area. The study area was subject to visual and pedestrian surveys and resulted in the identification of four archaeological sites and one findspot. One site, AkGu-62, was encountered within 50 m of the study area. The site was identified via pedestrian survey and was comprised of two flakes and one broken projectile point that had similar characteristics to the Nettling projectile point type of the Early Archaic period. However, point type could not be confirmed due to the fragmentary nature of the recovered tool. ASI determined AkGu-62 did not have CHVI, and did not require further assessment.

*Stage 1 and 2 Archaeological Assessment of Highway 400, from Langstaff Road to Teston Road, Regional Municipality of York (NDA 1998) [1998-020]*

The above report documents the Stage 1-2 archaeological assessment of approximately 10 km of Highway 400 from Langstaff Road to Teston Road in the City of Vaughan, a portion of which falls within the current study area. Most of the existing ROW was determined to be disturbed from the construction of the highway, highway ramps, and associated ditching. The remainder of the study area was subject to test pit or pedestrian surveys. No archaeological resources were encountered, and no further assessment of the study area was recommended.

*Stage 1 Class Environmental Assessment of Dufferin Street (Y.R. 53) Widening From Langstaff Road (Y.R. 72) to Major Mackenzie Drive (Y.R. 25), City of Vaughan, Municipality of York (ASI 2000) [1999-006-106]*

The above report documents that Stage 1 assessment for the Class Environmental Assessment of Dufferin Street Widening from Langstaff Road to Majority Mackenzie Drive in the City of Vaughan, a small portion of which overlaps with the current study area. The study area was subject to a background study and concluded that portions of the study area contained archaeological

potential. Those areas noted as undisturbed were recommended for the further archaeological assessment.

*Stage 1-2 Archaeological Assessment of the Proposed Vaughan Mills Shopping Centre (19T-98V10), Part of Lots 144 and 15, Concession 5, City of Vaughan, Regional Municipality of York, Ontario, Revised (ASI 2001) [1999-007-158 and 2000-016-074]*

The above report documents the Stage 1-2 archaeological assessment for the proposed construction of Vaughan Mills Shopping Centre, part of which overlaps with the current study area. The property was subject to visual, test pit, and pedestrian surveys and resulted in the discovery of three archaeological sites, none of which were located within 50 m of the study area. All three sites were historic (AkGv-161, AkGv-162, AkGv-163), only one of which was recommended for further assessment (AkGv-161).

*The 1999 Stage 1-2 Archaeological Assessment of the Proposed Progressive Moulded Products Limited Factory Development, 9000 Keele Street, Site Development Application File #DA.00.087, City of Vaughan, Ontario (DR. Poulton & Associates Inc. [1999-031-044]*

The above report documents the Stage 1-2 archaeological assessment of the property located at 9000 Keele Street, and which is found within the current study area. The assessment consisted of background research and field survey. Survey methods included visual, pedestrian, and test pit surveys. Only one historic site (late nineteenth to mid-twentieth centuries) was identified during the survey, and was not recommended for further assessment.

*Report on the Stage 1 and Stage 2 Archaeological Assessment of the Tilzen Holdings Ltd. Lands, part of Lot 12, Concession 3, City of Vaughan, York Region (Pearce 2004) [P014-022]*

The above report documents the Stage 1-2 archaeological assessment of a parcel of land located at 8775 Keele Street in Vaughan, which is within 50 m of the study area. The purpose of this assessment was twofold: first, to attempt to identify the locations of reported but unconfirmed pioneer graves on the property, and second, to complete a pedestrian survey in agricultural fields on the property in advance of development. No evidence of the burials was identified, and no archaeological sites were encountered. It was also noted that property had been subject to disturbance in preparation for the construction of a large industrial building on the property immediately adjacent to the south and east sides of the nearby Zion Cemetery.

*Stage 1&2 Archaeological Assessment, Glen Keele Developments Three Limited Located at Keele Street and Highway 7, Part of lot 6, Concession 4, City of Vaughan, Regional Municipality of York, Ontario (ASI 2004) [P047-083]*

The above report documents the Stage 1-2 archaeological assessment for the proposed Glen Keele Developments Three Limited property at Keele Street and Highway 7, which is located within the study area. The report indicates that upon arrival on the property, that the study area had been subject to previous disturbance including road ditching, extensive gravel fill dumping, the construction of a culvert, and other disturbances associated with the dumping of materials on the property. Test pits were excavated within selective areas to confirm the disturbance on the property. No undisturbed areas were encountered, and no further assessment of the property was recommended.

*Stage 1 and 2 Archaeological Assessment of 8888 Keele Street, Lot 13, Concession 4, Former Township of Vaughan, Regional Municipality of York (ASI 2005) [P047-150]*

The above report documents the Stage 1-2 assessment of 8888 Keele Street, which is located within the current study area. The assessment was comprised of both pedestrian and test pit surveys. No archaeological resources were encountered, and no further assessment of the property was recommended.

*Archaeological Assessment (Stage 1-2) in the City of Vaughan, GO Transit Barrie Passing Track, Lots 9 and 10 Concession III, Historic Vaughan township, York County (TRCA 2014) [P303-0261-2013]*

The above report documents the Stage 1-2 archaeological assessment completed in advance of the proposed double track expansion of the GO Transit Barrie Line between Keele Street and Rivermede Road in the City of Vaughan. A test pit survey was completed and did not result in the recovery of any archaeological resources. No further assessment of the study area was recommended.

### 1.3.3 Registered or Known Archaeological Sites

The Ontario Archaeological Sites Database was consulted to determine whether any registered or known archaeological resources are located within 1 km of the study area. Forty-four registered sites have been documented within 1 km of the study area (Table 5). Of these previously identified sites, four are located within the study area and three are within 50 m of the study area limits. These nearby resources are described below. Site locations can be viewed in the Supplementary Documentation submitted with this report (SD Map 1).

**Table 5: Registered or Known Archaeological Sites within 1 km**

| Borden No.      | Site Name             | Cultural Affiliation | Site Type         | Researcher                                 | Development Status     | Distance from Study Area |
|-----------------|-----------------------|----------------------|-------------------|--|------------------------|--------------------------|
| AkGu-15         | Baker                 | Late Woodland        | Village           | ASI 2000                                   | Unknown                | > 300 m                  |
| AkGu-16         | Reaman                | Woodland             | Village           | ASI 1990;<br>Stewart 1994;<br>Dickson 2015 | Further CHVI           | > 300 m                  |
| AkGu-30         | Keelang 1             | Unknown              | Unknown           | MIA 184                                    | Unknown                | > 300 m                  |
| AkGu-31         | Keelang 2             | Unknown              | Unknown           | MIA 184                                    | Unknown                | > 300 m                  |
| AkGu-38         | Lewis Page            | Euro-Canadian        | Cabin             | MPP 1987                                   | Unknown                | > 300 m                  |
| <b>AkGu-49*</b> | <b>Caleb</b>          | <b>Pre-Contact</b>   | <b>Findspot</b>   | <b>MTO 1992</b>                            | <b>No Further CHVI</b> | <b>&lt; 50 m</b>         |
| AkGu-60         | Murray Knoll          | Euro-Canadian        | Homestead         | Stewart 1995                               | Unknown                | > 300 m                  |
| <b>AkGu-62*</b> | -                     | <b>Early Archaic</b> | <b>Scatter</b>    | <b>Williamson 1997</b>                     | <b>No Further CHVI</b> | <b>&lt; 50 m</b>         |
| AkGu-63         | -                     | Pre-Contact          | Findspot          | ASI1997                                    | No Further CHVI        | > 300 m                  |
| AkGu-67         | Reaman Homestead      | Euro-Canadian        | Homestead         | Williamson 2000                            | No Further CHVI        | 50–300 m                 |
| AkGv-14         | Keffer                | Late Woodland        | Village           | Clark 1929                                 | Further CHVI           | > 300 m                  |
| AkGv-15         | Keffer Ossuary        | Late Woodland        | Ossuary           | Boyle 1888; 1907                           | Unknown                | > 300 m                  |
| <b>AkGv-16*</b> | <b>McNeil</b>         | <b>Not Listed</b>    | <b>Not Listed</b> | <b>Orr 1911</b>                            | <b>Unknown</b>         | <b>Within</b>            |
| <b>AkGv-17*</b> | <b>Downey Ossuary</b> | <b>Late Woodland</b> | <b>Ossuary</b>    | <b>Clark 1925</b>                          | <b>Unknown</b>         | <b>Within</b>            |
| AkGv-95         | Wonderland            | Late Archaic         | Findspot          | Williamson 1990                            | Unknown                | > 300 m                  |
| AkGv-98         | Bestway               | Archaic              | Camp              | Williamson 1990                            | Further CHVI           | 50–300 m                 |
| AkGv-150        | Mclean                | Post-Contact         | Homestead         | Williamson 1997                            | No Further CHVI        | > 300 m                  |
| AkGv-151        | Westford 1            | Archaic, Middle      | Camp              | Williamson 1996                            |                        | > 300 m                  |
| AkGv-152        | Westford 2            | Archaic              | Camp              | Williamson 1996                            | No Further CHVI        | > 300 m                  |

| Borden No.       | Site Name             | Cultural Affiliation                                  | Site Type                   | Researcher                       | Development Status              | Distance from Study Area |
|------------------|-----------------------|---|-----------------------------|----------------------------------|---------------------------------|--------------------------|
| AkGv-154         | Lehman 1              | Post-Contact  | Homestead                   | Williamson 1996                  | No Further CHVI                 | > 300 m                  |
| AkGv-155         | Lehman 2              | Euro-Canadian   | Homestead                   | Williamson 1996                  | No Further CHVI                 | > 300 m                  |
| AkGv-161         | Hector Mclean         | Euro-Canadian   | Homestead                   | Williamson 1999                  | Further CHVI                    | > 300 m                  |
| AkGv-162         | Vaughan Mills         | Euro-Canadian   | Homestead                   | Williamson 1999                  | No Further CHVI                 | > 300 m                  |
| AkGv-163         | Dickout               | Euro-Canadian   | Farmstead<br>Homestead      | Williamson 1999                  | Further CHVI                    | 50–300 m                 |
| AkGv-181         | -                     | Pre-Contact   | Camp                        | Cooper 2000                      | No Further CHVI                 | > 300 m                  |
| AlGu-22          | Keelang 3             | Pre-Contact   | Findspot                    | MIA 1984                         | Unknown                         | > 300 m                  |
| AlGu-23          | -                     | Pre-Contact   | Camp                        | Konrad 1971                      | Unknown –<br>Possibly Destroyed | > 300 m                  |
| AlGu-181         | -                     | Pre-Contact   | Findspot                    | Unknown                          | No Further CHVI                 | > 300 m                  |
| AlGv-18          | Jarrett-Lahmer        | Woodland, Late  | Village,<br>Burial          | Unknown                          | Unknown; Dunlop<br>2016         | 50–300 m                 |
| <b>AlGv-49*</b>  | <b>Circle Ridge 1</b> | <b>Pre-Contact</b>                                    | <b>Camp</b>                 | <b>MPP 1987</b>                  | <b>Unknown</b>                  | <b>&lt; 50 m</b>         |
| AlGv-50          | Circle Ridge 2        | Pre-Contact   | Camp                        | MPP 1987                         | Unknown                         | > 300 m                  |
| AlGv-82          | Fieldgate             | Archaic, Early<br>Post-Contact                        | Findspot;<br>Homestead      | Williamson 1988                  | Unknown                         | > 300 m                  |
| <b>AlGv-101*</b> | <b>Ravensway</b>      | <b>Archaic, Late</b>                                  | <b>Camp</b>                 | Williamson 1993                  | <b>No Further CHVI</b>          | <b>Within</b>            |
| <b>AlGv-102*</b> | <b>Salaberry</b>      | <b>Archaic, Late</b>                                  | <b>Findspot</b>             | Williamson 1993                  | <b>No Further CHVI</b>          | <b>Within</b>            |
| AlGv-146         | Snider                | Archaic, Early<br>Post-Contact<br>Woodland,<br>Middle | Cabin<br>Cabin<br>Homestead | Poulton 1995                     | No Further CHVI                 | > 300 m                  |
| AlGv-147         | Rutherford            | Archaic, Early  | Findspot                    | Poulton 1995                     | Unknown                         | > 300 m                  |
| AlGv-160         | Vellore 1             | Woodland,<br>Middle                                   | Scatter                     | Williamson 1996                  | No Further CHVI                 | > 300 m                  |
| AlGv-162         | Vellore 2             | Archaic, Early  | Scatter                     | Williamson 1996                  | No Further CHVI                 | > 300 m                  |
| AlGv-163         | Vellore Farm          | Post-Contact  | Scatter                     | Williamson 1998                  | No Further CHVI                 | > 300 m                  |
| AlGv-165         | Menaughton            | Post-Contact  | Homestead                   | Williamson 1996                  | No Further CHVI                 | > 300 m                  |
| AlGv-170         | Keffer Saw Mill       | Post-Contact  | Mill                        | Poulton 1999,<br>Williamson 2000 | Further CHVI                    | > 300 m                  |
| AlGv-196         | Hudwin                | Pre-Contact<br>Post-Contact                           | Findspot<br>Homestead       | Cooper 2001                      | Further CHVI                    | 50–300 m                 |
| AlGv-198         | Constable             | Post-Contact  | Farmstead                   | Cooper 2001                      | Unknown                         | > 300 m                  |
| AlGv-230         | -                     | Archaic, Middle                                       | Findspot                    | Slocki 2006                      | No Further CHVI                 | > 300 m                  |

\* Denotes Site is either within study area or within 50 m of the study area limits

### ***Caleb site (AkGu-49)***

The Caleb site (AkGu-49) is a Pre-Contact findspot consisting of two lithic flakes and is located within 50 m of the current study area. Identified by MTO, no report documenting this work could be identified during the PastPort search. While no report could be reviewed, the site record form indicates the site was identified by MTO in 1992 during a pedestrian survey. The site was not found to hold CHVI and was not recommended for further assessment. Highway 7 is now found at the site's location.

### ***AkGu-62***

AkGu-62 is an Early Archaic scatter identify by Williamson in 1997 (ASI 1997) [1997-017] and is located within 50 m of the current study area. The report and site record form indicate the site was identified during a Stage 2 pedestrian survey during which a possible Nettling projectile point and two lithic flakes were encountered. An intensified pedestrian survey was completed and did not yield any additional artifacts. The site was not found to hold further CHVI and was not

recommended for further assessment. A housing development has since been constructed at the location of the site.

### ***McNeil Site (AkGv-16)***

No reports documenting the identification of the McNeil site could be obtained. Based on the site record form (which was filled out by Victor Konrad), the McNeil site was identified in 1911 by David Orr, who worked at the Royal Ontario Museum. The site was documented as being located within the centre of Lot 13 Concession 5, measuring 3-6 acres, and currently being located under Highway 400, north of Highway 7 and south of the Sherwood Side Road. There is no mention of the site type, or if any artifacts were collected. The site record indicates information on Orr's survey can be found in the 1911 volume of the *Annual Archaeological Report of Ontario*. However, a review of the identified pages (pp54-64) demonstrates a series of photos and descriptions of artifacts collected by Orr from a variety of sites. No mention of the McNeil site was found, and no mention of Lot 13 Concession 5W was identified either. No further mention of the site could be provided by the MHSTCI. However, given the estimated site size, it certainly seems possible that the site could represent a village site.

### ***Downey Ossuary (AkGv-17)***

The Downey Ossuary (AkGv-17) is an Iroquoian (AD 1400 and 1550) mass burial that had been documented within the vicinity of the study area. The ossuary was identified by AJ Clark in 1925 based on information from an informant. While the precise location of the ossuary is unknown, D.R. Poulton and Associates (2000) completed research to determine the location of the ossuary. Poulton reviewed previous recordings of the site and completed a comparative mapping analysis to better pinpoint the location of the site. According to Poulton's research, Clark identified the Downey ossuary in 1925 and indicated it was located on 'Lot (blank) Con. 4 Vaughan Tp. Downey Farm (1925)'. In his field notes, Clark wrote that the bone pit was close to the south line fence and was north of the rear of the property owned by Alf. Hollingshead. The ossuary was noted as being close to the Keffer site, an Iroquoian village located on Lots 12 and 13 Concession 3, northeast of the current study area. While Clark's map is detailed, the size of the ossuary is exaggerated and makes its exact location difficult to pinpoint.

The next documentation of the Downey ossuary was completed by Victor Konrad in his 1971-1973 study on archeological sites in the Metropolitan Toronto Planning Area. Konrad registered the Downey ossuary based on Clark's notes, placing the site in the CNR Freight Terminal on Lot 12. Konrad wrote that he assumed the ossuary was destroyed by the construction of the CN Freight Classification Yard in the 1950s. Additional research into the Downey ossuary location was completed during the creation of the Vaughan Archaeological Master Plan by Mayer, Pihl, Poulton and Associates. Poulton compared topographic maps with the data compiled by Clark and Konrad, which together indicated that the site was situated just west of Keele Street in Concession 4. Poulton suggested that while the precise location of the ossuary is unknown, though two possibilities were posited: the first and most likely location is in the southwest corner of Lot 14, immediately north of a service road to the Canadian Nation Railway Yard; the second is in the southeast corner of the north half of Lot 13, immediately north of the Concord Collision Centre (in 1989).



In 1999, Poulton (2000) completed an additional comparative analysis of nineteenth century maps, topographic maps, aerial photographs, and the maps created by Clark and Konrad. During this assessment, Poulton determined the Downey ossuary would have been located in the northeastern quadrant of Lot 13, Concession 4, in the field immediately north of the lane to Roy Keffer's farmstead. This location roughly corresponds to the second possible ossuary location noted in the City of Vaughan's Archaeological Master Plan (see above). Poulton further noted that the ossuary is most likely located no more than 70 m west of the Keele Street right-of-way (ROW) (as existed in 2000), and is most likely located near the Concord Collision Centre (8850 Keele Street). Poulton notes that it is unknown whether the Downey ossuary survived development of the surrounding properties, but that it is possible that some portions of the ossuary remain intact.

#### ***Circle Ridge 1 (AIGv-49)***

No reports documenting the identification of this site could be found on PastPort. Based on the site record form, Circle Ridge 1 consisted of three flakes and one celt recovered from an area measuring 50 m by 25 m. The celt was found approximately 55 m south of the flake scatter. The site is currently located in a field found between a housing development and a road. There is no mention of whether the site requires further assessment.

#### ***Ravensway (AIGv-101)***

While the report documenting the identification of this site could not be obtained for review (ASI 1993a), the Stage 3 assessment report was available (ASI 1993b, LIC-93-016). The report indicated that the Ravensway site (AIGv-101) was encountered during a pedestrian survey (ASI 1993a) and resulted in the recovery of six lithic artifacts including a Late Archaic projectile point fragment and five pieces of debitage. As part of the Stage 3 assessment, a controlled surface pickup (CSP) was completed across the extent of the site, and resulted in the recovery of one additional piece of debitage. Four 1 m units were then excavated across the scatter yielding an additional nine pieces of debitage. Following the Stage 3 assessment, ASI determined the site had no cultural heritage value or interest (CHVI) and did not recommend further assessment. A housing development is now found at the site's location.

#### ***Salaberry (AIGv-102)***

While the report documenting the identification of this site could not be obtained for review (ASI 1993a), the site record form indicates the site was found during a pedestrian survey. Three lithic artifacts were recovered from an area spanning 10 m by 5 m. Two of the artifacts were flakes, while the third was a Brewerton Corner-Notched projectile point. ASI determined the site did not have CHVI, and no further assessment of the site was recommended. A housing development is now found at the site's location.

### ***1.3.4 Regional Official Plans and Archaeological Management Plans***

The *York Region Official Plan 2010* (YROP 2010) sets out directions and policies that guide economic, environmental and community planning decisions for the Region. In 2014, York Region adopted Regional Official Plan Amendment No. 6 (ROPA 6) which established specific policies to ensure the responsible management of archaeological resources, as required by Provincial policy and legislation. The amendment provides: a trigger for the required archaeological assessment in the development review process; suggests appropriate methods to protect significant archaeological resources; sets out the procedures to follow in implementing the province's archaeological assessment

process, including in the case of unexpected discovery of a burial site; and commits the Region to investigating a secure reinternment site and interpretation site.

As part of the official planning process, York Region developed an archaeological management plan to provide further support to ROPA 6 policies and is included within the amendment. Titled *Planning for the Conservation of Archaeological Resources in York Region*, the document provides information about the archaeological history of the region, the Ontario archaeological assessment process, and sets out the process for integrating the archaeological assessment and development review processes (York Region 2014). The document also includes an Archaeological Potential Model for York Region which highlights the lands within the Region that contain archaeological potential. Potential for lands to contain archaeological resources is based on the proximity of those lands to features such as water, well drained soils, known archeological sites, and early Euro-Canadian settlements. The potential model also takes into consideration deep and extensive land alterations that have removed archaeological potential from the Region. A review of this potential model indicates most the study area contains archaeological potential (Map 7).

The archaeological management plan further sets out guidelines for the identification and treatment of ossuaries. Ossuaries are features containing the remains of multiple individuals who were once interred within ancestral Wendat villages, and were later disinterred and re-deposited into one or two mass graves. Ossuaries can be difficult to identify using standard Stage 2 survey techniques due to their depth; they are often encountered at a depth of over 1 m, though can be found at the ground's surface as well. As a result, ossuaries are often discovered by chance during construction activities. To assist in the discovery of ossuaries prior to negative impacts, York Region has developed an Ossuary Potential Model. The model indicates that lands located within 1000 m of a village *and* that are within 300 m of water are prime locations for ossuaries, and should be subject to special monitoring measures. Based on this information, the archaeological management plan recommends that all jurisdictions develop and adopt burial avoidance strategies since the potential disturbance to ossuaries remains a subject of considerable concern. According to the plan, such strategies should include (York Region 2014:43):

- “Predevelopment topsoil removal (grading) within development lands located within 1000 m of a documented village site *and* within 300 m of any current or former water sources should be subject to archaeological *monitoring*”
- All site supervisors and heavy equipment operators working on site should be briefed in advance concerning the role and responsibilities of the archaeological monitor. Should they encounter potential human remains while the monitor’s attention is elsewhere on site, they must cease work in the area, retain all potentially associated soils in place and notify the monitor and their own supervisors immediately
- In the event that human remains are encountered during construction, the *proponent* must immediately contact the Police and Registrar at the Ministry of Government and Consumer Services. Should any *ossuary* feature be discovered during the course of the *monitoring* work, *preservation* through *avoidance* and project redesign/revision is the preferred alternative. The details of this form of *mitigation* must be negotiated with the appropriate First Nation(s) and the Cemeteries Registrar.”

The City of Vaughan supports the strategies set out in ROPA, citing them within their Official Plan (Vaughan 2010a) and within Vaughan’s *Archaeological and First Nations Policy Study* (Vaughan

2010b). Based on the presence of multiple Iroquoian villages located within 1 km of the study area, the above strategies are of relevance to this project. The City of Vaughan's policy study also includes an Archaeological Potential Model for the City which highlights the lands within the Vaughan that contain archaeological potential. Potential for lands to contain archaeological resources is based on the proximity of those lands to features such as water, well drained soils, known archeological sites, and early Euro-Canadian settlements. The potential model also takes into consideration deep and extensive land alterations that have removed archaeological potential from the Region. A review of this potential model indicates most the study area contains archaeological potential (Map 7).

## 2.0 STAGE 1 BACKGROUND STUDY

### 2.1 Background Study Methods

The Stage 1 background study was completed as per Section 1.1 of the 2011 *Standards and Guidelines for Consultant Archaeologists*. The background study involved an examination of the archaeology, history, geography and current land condition of the vicinity of the study area and is detailed in the Historical and Archaeological Context sections above. The research includes information from the following sources:

- Historic settlement maps
- Aerial photographs
- Built heritage registers
- Commemorative plaques or monuments
- The most up-to-date listing of sites from the archaeological sites database within 1 km of the study area
- Reports of previous field work within 50 m of the study area
- Topographic maps at 1:10,000 (recent and/or historical) or the most detailed scale available
- Official Plans and Archaeological Management Plans

The highest quality and most detailed mapping available was utilized. The background study has demonstrated the past and present land use and settlement history of the study area, and has provided information sufficient to evaluate the presence of archaeological potential within the study area (Map 8 and SD Map 1).

### 2.2 Property Inspection Field Methods

In order to gain first-hand knowledge of the geography, topography and current condition of the study area, a property inspection was conducted on August 21, 2017 by Philip Woodley (P018) and on October 19, 2017 by Meaghan Nichols and Sarah Clarke (R445). The study area was subject to random spot checking in accordance with the requirements set out in Section 1.2 of the 2011 *S&Gs*. However, given the lack of permission to enter private properties, access was restricted to public lands, and all photographs were taken from roadways. Fieldwork was carried out under weather and lighting conditions that met the requirements set out in Section 1.2 Standard 2 of the 2011 *S&Gs*. Environmental conditions were ideal during the inspection, with sunny to partly cloudy skies, temperatures ranging between 20°C and 30°C, and excellent lighting.

Where possible, the study area was documented with photographs (Image 1 to Image 91). The property inspection confirmed that all features of archaeological potential (e.g., historically-surveyed roadways, watercourses, etc.) were present where they were previously identified, and did not result in the identification of any additional features of archaeological potential not visible on mapping (e.g., relic water channels, patches of well-drained soils, etc.). One exception was Black Creek and its tributaries, portions of which were noted as being underground. No culturally-significant structures or built features that would affect assessment strategies were identified.

Map 10 to Map 26 present the results of the Stage 1 archaeological assessment and the locations and directions of photographs (Image 1 to Image 91). Approximately 5.9% of the study area has

been previously assessed and was not subject to the property inspection. Additionally, permission to access to the rail yard was not received at the time of assessment, and so no entry onto the property was completed.

The property inspection involved random spot-checking across the study area. Significant portions of the study area were visually determined to be disturbed and do not require further assessment. Disturbances were related to the construction of major roadways and highways and their rights-of-way (ROWs) including Weston Road (Image 1), Langstaff Road (Image 2, Image 7, Image 21, Image 30, Image 41, Image 55, Image 69, Image 76, Image 79, and Image 88), Highway 400 (Image 11, Image 14, and Image 17), Jane Street (Image 32 and Image 34), Keele Street (Image 56 and Image 57), Dufferin Street (Image 81 and Image 84), and Highway 7 (Image 89 and Image 91). Numerous cross streets are present within the study area as well and were noted as disturbed (Image 5, Image 6, Image 8, Image 28, Image 36, Image 41, Image 78, and Image 86). Road ditching, and traffic, sewage, and buried utility infrastructure were all noted within the ROWs of these roads (Image 1 to Image 91). However, parts of the Langstaff Road ROW in the east end of the study area appear less disturbed, and may still contain archaeological potential. Beyond these transportation routes, substantial portions of the study area have been impacted by the construction of residential (Image 5 and Image 86), commercial (Image 6, Image 8, and Image 15, and Image 78), and industrial or business developments (Image 24, Image 26, Image 35, and Image 55) on the north and south sides of Langstaff Road. Additionally, a large business and/or industrial area is located along both the east and west sides of the CN rail yard, which is located centrally within the study area. While no property inspection could be completed within the rail yard due to a lack of permission to enter, the business/industrial area appears to have removed archaeological potential within the study area (Image 36, Image 39, Image 40, Image 45 to Image 47, Image 51, Image 53 to Image 55, Image 57, Image 62, Image 64, and Image 66) Based on the property inspection, these areas no longer contain archaeological potential.

Small portions of the study area were assessed as low or permanently wet and do not contain archeological potential. These include the Don River (Image 60) and a storm water management pond.

The remainder of the study area contains archaeological potential and includes greenspace along the Don River (Image 59 to Image 67), parklands and grasslands (Image 71, Image 75, Image 77, and Image 81), and woodlots (Image 82). Also of note is that the Langstaff Cemetery (aka St. Stephen's Anglican Cemetery) was observed within the study area on the south side of Langstaff Road east of Keele Street (Image 68). The construction of the rail line and rail yard have also likely caused disturbances to the study area; however, since no property inspection could be completed at this location, it will require further assessment to confirm disturbance, and aerial imagery suggests some areas may still contain archaeological potential.

### **2.3 Analysis and Conclusions**

In addition to relevant historical sources and the results of past archaeological assessments, the archaeological potential of a study area can be assessed using its soils, hydrology and landforms as considerations. Section 1.3.1 of the 2011 *S&Gs* recognizes the following features or characteristics as indicators of archaeological potential: previously identified sites, water sources (past and present), elevated topography, pockets of well-drained sandy soil, distinctive land

formations, resource areas, areas of Euro-Canadian settlement, early transportation routes, listed or designated properties, historic landmarks or sites, and areas that local histories or informants have identified with possible sites, events, activities or occupations. Also taken into consideration is the presence and extent of deep land alterations that have severely damaged the integrity of any archaeological resources.

The Stage 1 archaeological assessment has resulted in the identification of multiple features of archaeological potential within the study area, most prominent of which is the presence of the Don River and Black Creek (Map 8 and SD Map 1). Forty-five (45) registered archaeological sites have been documented within 1 km of the study area. Of these previous finds, seven sites are located within 50 m of the study area. Five of the sites do not contain further CHVI, and do not require further assessment. The remaining two sites, the McNeil site (AkGv-16) and the Downey ossuary (AkGv-17) may still contain CHVI. While the OASD does not contain information on the McNeil site function or affiliation, the MHSTCI was able to provide the original site record form which indicated only that the site spanned 3-6 acres in size. Based on this size, and the fact that many of the first sites registered with the province were villages or ossuaries, the McNeil site has been tentatively listed as an unconfirmed village site. The exact location of the Downey ossuary remains unknown. Originally identified by Clark in 1925, Konrad registered the ossuary as being location on Lot 12 Concession 4 within the CN rail yard. Further exploration of the Downey ossuary location was completed by Poulton in 1999 (D.R. Poulton and Associates 2000). Through a comparative map analysis, Poulton indicated that the site was located further to the north on Lot 13, within the current study area west of Keele Street. It is unknown whether the Downey ossuary has been impacted by developments to the area, but Poulton indicated that it was possible that portions of the ossuary remain intact.

Four previously identified Late Woodland village sites are located within 1 km of the study area: AkGu-15, AkGu-16, AkGv-14, and AlGv-18. Additionally, as noted above, the McNeil site (AkGv-16) has been tentatively identified as a village site. York Region's Ossuary Potential Model stipulates that lands within 1 km of a village *and within* 300 m of water have a heightened potential to contain an associated ossuary. NDA applied this potential model to the study area and has determined that portions of the study area meet these requirements, and will require burial avoidance strategies should those lands be proposed for development (Map 10 to Map 18). Burial avoidance strategies should also be completed within the vicinity of the Downey ossuary.

Numerous heritage features have also been noted within the study area on nineteenth century maps including historic roadways (Langstaff Road, Weston Road, Jane Street, Keele Street, and Dufferin Street), dwellings, orchards, laneways, and the historic Canadian Northern Railway. Additionally, the presence of built heritage resources within a study area can increase the potential to recover historic Euro-Canadian archaeological material. Two Designated Part IV buildings and two listed buildings area located within or immediately adjacent to the study area. Furthermore, one pioneer cemetery is located within the study area and is called the Langstaff Cemetery (aka the St. Stephen's Anglican Cemetery). The presence of the above features indicates there is high archaeological potential for encountering archaeological sites associated with the occupation of the study area by both Indigenous peoples and early settlers.

However, the potential for a study area to contain archaeological resources is tempered with a consideration of previous archaeological work already completed within the study area, as well as

the presence and extent of past disturbances and other areas of low archaeological potential. Approximately 5.9% of the study area has been previously assessed and does not require further assessment. Approximately 59.2% of the study has been subject to deep and extensive land alterations that have removed archaeological potential within the study area. Disturbances are related to the construction of Langstaff Road, Weston Road, Jane Street, Keele Street, Dufferin Street, Highway 7, and Highway 400, as well as the cross roads and residential side streets. In addition to the roadways themselves, the ROWs also appear to be disturbed as a result of ditching and buried infrastructure.

The study area also contains housing, commercial, and industrial developments, the construction of which has removed archaeological potential within the study area. These developments dominate the study area.

Approximately 0.2% of the study area was found to be low and/or permanently wet including the Don River, Black Creek, and a pond. Areas assessed as low and wet do not require further assessment.

Approximately 0.1% of the study area is comprised by the Langstaff Cemetery, and should be avoided by the proposed undertaking.

Approximately 34.7% of the study area is located within previously unassessed lands that hold archaeological potential and will require further assessment. Areas of archaeological potential include greenspace along rivers, parklands, woodlots, and agricultural fields. Additionally, a property inspection of the rail yard could not be completed due to a lack of permission to enter. While the construction of the rail yard has likely caused some disturbance to the study area, the degree of disturbance could not be determined through this Stage 1 assessment. As a result, this area will require further assessment to confirm disturbance

Finally, as noted, four confirmed Late Woodland villages and one unconfirmed village have been documented within 1 km of the study area. When an application of the York Region and City of Vaughan Ossuary Potential Model is applied, we find that large portions of the study area are located within an area of heightened potential to encounter ossuaries. Burial avoidance strategies will be required throughout these areas. This is true even for lands that have been previously subject to archaeological assessment, as ossuaries are often found at a depth not reached by standard archaeological survey methods. Further, the Downey ossuary (AkGv-17) is located within the study area. While its exact location remains unknown, and it is unknown whether the ossuary remains intact, its presence requires planning consideration. Since the Downey ossuary has not been excavated to date, burial avoidance strategies will be required within the general area noted as containing the ossuary.

### 3.0 RECOMMENDATIONS

On the basis of the above information, the following recommendations are made (Map 10 to Map 27):

1. Additional archaeological assessment is not required for those areas visually determined to be disturbed including Langstaff Road, Weston Road, Jane Street, Keele Street, Dufferin Street, Highway 7 and Highway 400, and the numerous side streets within the study area, as well as housing, commercial, and industrial developments. Additionally, all areas assessed as low and permanently wet do not require further assessment.
2. Additional archaeological assessment is not required for those areas previously subject to archaeological assessment, where it has been determined that archaeological potential no longer exists.
3. The McNeil site (AkGv-16) is located within the study area and has not been documented in any detail beyond initial identification in the early twentieth century. Based on the location of the McNeil site, it appears that at least part of the site has been impacted by the construction of Highway 400. It is therefore recommended should development be proposed within the vicinity of the McNeil site, that Stage 2 field survey be completed within areas of archaeological potential prior to impact, to attempt to identify whether any of the site remains intact.
4. The Downey ossuary (AkGv-17) is located within the study area. While the exact site location is unknown, the ossuary has not yet been excavated. It is unknown whether any portion of the ossuary remains intact following the development of the general area. As a result, it is recommended that if development is proposed within the vicinity of the site, that burial avoidance strategies be completed (see Recommendation # 7).
5. One historic cemetery (Langstaff Cemetery) is located within the study area and should be avoided by the proposed undertaking. Currently, the limits of the cemetery are not known. Additional cemetery research as per Section 3.1 of the 2011 S&Gs must be carried out in advance of any further assessment within 50 m of the current legal boundary to clarify the historic limits. If future impacts are proposed within 10 m of the inferred limit, a Stage 3 cemetery investigation program is required. The cemetery investigation program must involve mechanical topsoil removal within the proposed area of impact for a minimum of 10 m beyond the inferred limits to confirm there are no adjacent burials (Map 27). If impacts are needed to the east, south or west of the cemetery, mechanical excavation should begin at the 10 m distance and work towards the inferred limit. In the north, mechanical excavation should begin within the disturbed roadway platform/ditch and progress southwards. However, if proposed development impacts are more than 10 m from the edge of the cemetery, the development impacts are considered to pose no threat to the cemetery. Regardless, it is recommended that a temporary barrier be erected around nearby cemeteries and that “no go” instructions be issued for all onsite crews as a precautionary measure. The Bereavement Authority of



- Ontario must be contacted prior to any intrusive assessment in the vicinity of the cemetery to determine whether an Investigation Authorization is required.
6. The remainder of the study area contains archaeological potential and will require a Stage 2 archaeological assessment prior to any ground disturbing activities:
    - a. All areas identified as holding archaeological potential and that are comprised of wooded greenspace along rivers, woodlots, and public parklands, cannot be ploughed. As a result, the portion of the study area with archaeological potential must be subject to a test pit survey as per Section 2.1.2 of the 2011 *S&Gs*. The area between Langstaff Cemetery and the disturbed roadway platform should also be subject to test pit survey prior to mechanical excavation.
    - b. All agricultural fields must be subject to a pedestrian survey as per Section 2.1.1 of the 2011 *S&Gs*.
    - c. The portion of the study area not subject to the property inspection (rail yard) and areas where it appears some degree of disturbance has occurred must be subject to a combination survey comprised of a mixture of test pit survey and visual assessment, as per Section 2.1.8 of the 2011 *S&Gs*.
  7. Finally, according to York Region's Official Plan ROPA 6, where there is the potential for lands to contain an ossuary, it is recommended that burial avoidance strategies be implemented to attempt to mitigate any negative impacts to unknown ossuary locations. This includes the unconfirmed location of the Downey ossuary (AkGv-17). Based on the ossuary potential model, several large portions of the study area have the potential to contain an ossuary. Within this area, regardless of Stage 2 archaeological assessment results, and regardless of previous disturbance, the following recommendations are made:
    - a. Predevelopment topsoil removal (grading) within development lands located within 1000 m of a documented village site *and* within 300 m of any current or former water sources should be subject to archaeological *monitoring*.
    - b. All site supervisors and heavy equipment operators working on site should be briefed in advance concerning the role and responsibilities of the archaeological monitor. Should they encounter potential human remains while the monitor's attention is elsewhere on site, they must cease work in the area, retain all potentially associated soils in place and notify the monitor and their own supervisors immediately.
    - c. In the event that human remains are encountered during construction, the *proponent* must immediately contact the Police and Registrar at the Ministry of Government and Consumer Services. Should any *ossuary* feature be discovered during the course of the *monitoring* work, *preservation* through *avoidance* and project redesign/revision is the preferred alternative. The details of this form of

*mitigation* must be negotiated with the appropriate First Nation(s) and the Cemeteries Registrar.

## 4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

Section 7.5.9 of the 2011 *S&Gs* requires that the following information be provided for the benefit of the proponent and approval authority in the land use planning and development process:

1. This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries 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 MHSTCI, a letter will be issued by the ministry stating that there are no further concerns with regard to alteration to archaeological sites by the proposed development.
2. 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 times 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*.
3. 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*.
4. 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 at the Ministry of Government and Consumer Services.
5. 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.

## 5.0 IMAGES



**Image 1: Weston Road at Langstaff Road facing south**



**Image 2: Langstaff Road at Weston Road facing north**



**Image 3: Langstaff Road at Weston Road facing west**



**Image 4: Langstaff Road at Weston Road facing east**



**Image 5: Fifth Street facing east**



**Image 6: Silmar Drive facing south, note commercial development on right**



**Image 7: Langstaff Road at Simlar Drive facing east**



**Image 8: Treocar Drive at Langstaff Road facing north, note commercial developments**



**Image 9: SWM pond facing south**



**Image 10: Sunview Drive facing west**



**Image 11: Highway 400 and Rutherford Road Overpass facing southwest**



**Image 12: Hawkview Boulevard facing south, note berm to Highway 400**



**Image 13: Grassy area along Highway 400 ramp near Canadas Wonderland Drive facing northwest**



**Image 14: Highway 400 and Bass Pro Mills overpass facing southwest**



**Image 15: Vaughan Mills mall and parking lot facing northeast**



**Image 16: SWM pond and Bass Pro Mills Drive access ramp to Highway 400 facing southeast**



**Image 17: Highway 400 and off-ramp to Bass Pro Mills Drive facing northwest**



**Image 18: Car dealership on east side of Highway 400 facing north**



**Image 19: Parking lot along 4 Valley Drive facing southwest**



**Image 20: Langstaff Road at Highway 400 facing east**



**Image 21: Langstaff Road at Highway 400 facing southeast**



**Image 22: Langstaff Road at Highway 400 facing southeast**



**Image 23: Langstaff Road at Highway 400 facing northwest**



**Image 24: Industrial and business development south of Langstaff Road facing south**



**Image 25: Langstaff Road at Edgeley Boulevard facing west**



**Image 26: Edgeley Boulevard facing north, note Vaughan business area**



**Image 27: Langstaff Road at Edgeley Boulevard facing east**



**Image 28: Edgeley Boulevard facing south**



**Image 29: Langstaff Road east of Millway Avenue facing west**



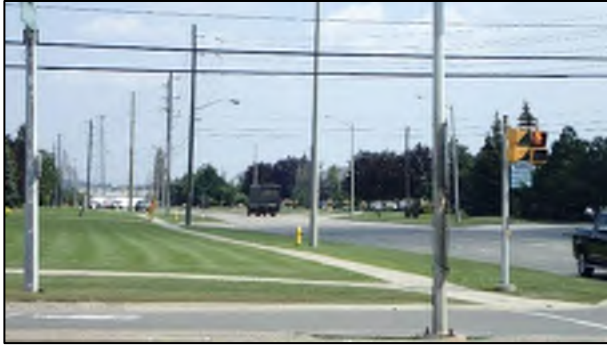
**Image 30: Langstaff Road facing east**



**Image 31: Langstaff Road at Jane Street facing west**



**Image 32: Jane Street facing north, note commercial development**



**Image 33: Langstaff Road at Jane Street facing east TI**



**Image 34: Jane Street and parking lot facing south**



**Image 35: Business/industrial development on north side of Langstaff Road facing north**



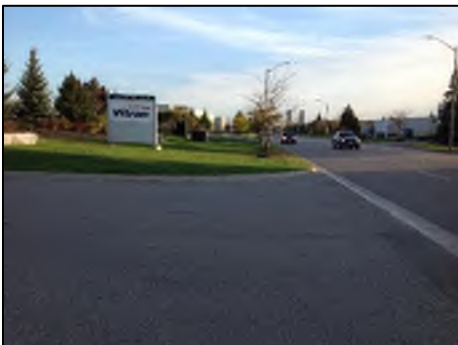
**Image 36: Intersection between Creditstone Road and Modena Trail facing north**



**Image 37: Greenspace along Don River facing south north**



**Image 38: Empty lot on east site of Creditstone Road at Locke Street facing northeast**



**Image 39: Creditstone Road facing south, note commercial complex Map**



**Image 40: Internal commercial road overlooking train yard facing east**





**Image 41: Langstaff Road at Creditstone Road facing west**



**Image 42: Langstaff Road termination at CN Rail Yard facing east**



**Image 43: CN Rail yard facing east**



**Image 44: CN rail yard facing east**



**Image 45: Creditstone Road facing south**



**Image 46: Creditstone Road facing south**



**Image 47: Creditstone Road facing north**



**Image 48: Creditstone Road facing north**



**Image 49: Greenspace along Don River west of Keele Street and South of Rutherford Road facing southwest**



**Image 50: Sherwood Park Drive facing northwest**



**Image 51: Very large parking lot for CN facing southeast**



**Image 52: Rotational Drive facing northwest**



**Image 53: Train tracks and internal road facing west**



**Image 54: Train tracks and internal road facing southwest**



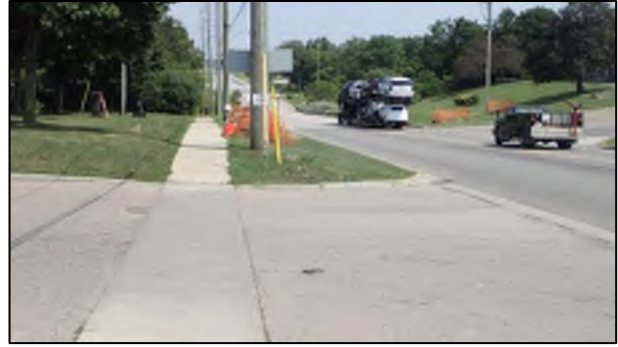
**Image 55: Langstaff Road termination facing west, note business/industrial zone**



**Image 56: Keele Street facing south**



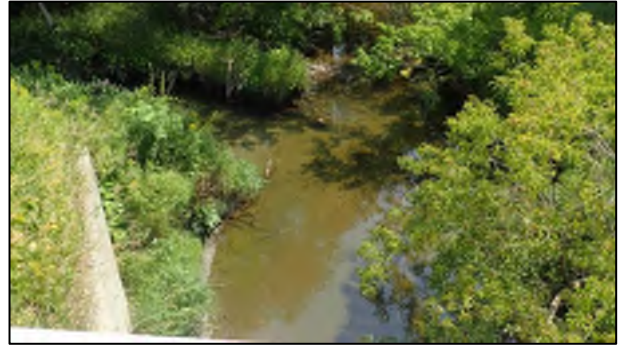
**Image 57: Keele Street facing north**



**Image 58: Langstaff east of Keele facing east**



**Image 59: Greenspace west of the Don River facing west**



**Image 60: Greenspace and the Don River facing south**



**Image 61: Langstaff Road east of the Don River facing east**



**Image 62: Road near CN rail yard facing west**



**Image 63: Train tracks and internal road facing south**



**Image 64: Rail yard and industrial complex facing southeast**



**Image 65: Creditstone Road facing north**



**Image 66: Industrial complex facing northeast**



**Image 67: Greenspace along Langstaff Road near the Don River facing west**



**Image 68: Langstaff Cemetery (Old St. Stephen's Anglican Cemetery) facing south**



**Image 69: Langstaff east of Keele facing west, note road ditch**



**Image 70: Langstaff Road east of Keele facing west**



**Image 71: Langstaff Road east of Keele Street facing east, note road ditch and adjacent parkland**



**Image 72: Langstaff Road west of Connie Crescent facing west**



**Image 73: Langstaff Road east of Connie Crescent facing east**



**Image 74: Langstaff Road facing west, note road ditch**



**Image 75: Langstaff Road facing west, note road ditch and greenspace on left**



**Image 76: Langstaff Road facing east, note commercial development on left**



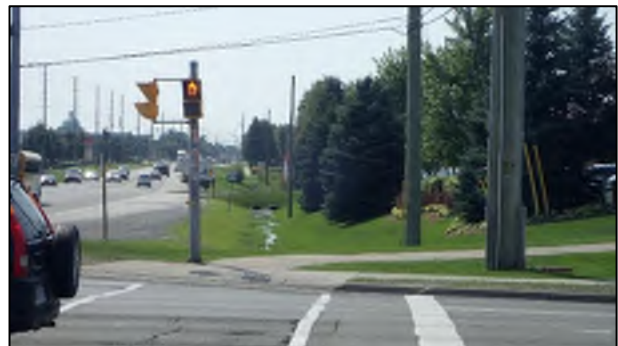
**Image 77: Langstaff Road facing east, note greenspace on right**



**Image 78: Staffern Drive facing south, note commercial and business developments**



**Image 79: Langstaff Road facing west**



**Image 80: Langstaff Road at Dufferin Street facing west, note road ditch**



**Image 81: Dufferin Street facing north, note greenspace**



**Image 82: Langstaff Road at Dufferin Street facing east**



**Image 83: Langstaff Road at Dufferin Street facing west**



**Image 84: Dufferin Street facing south**



**Image 85: Langstaff Road at Dufferin Street facing east, note housing development on left**



**Image 86: Timberview Drive facing northeast**



**Image 87: Langstaff Road facing northwest**



**Image 88: Langstaff Road facing northwest**



**Image 89: Langstaff Road facing south towards Highway 7**

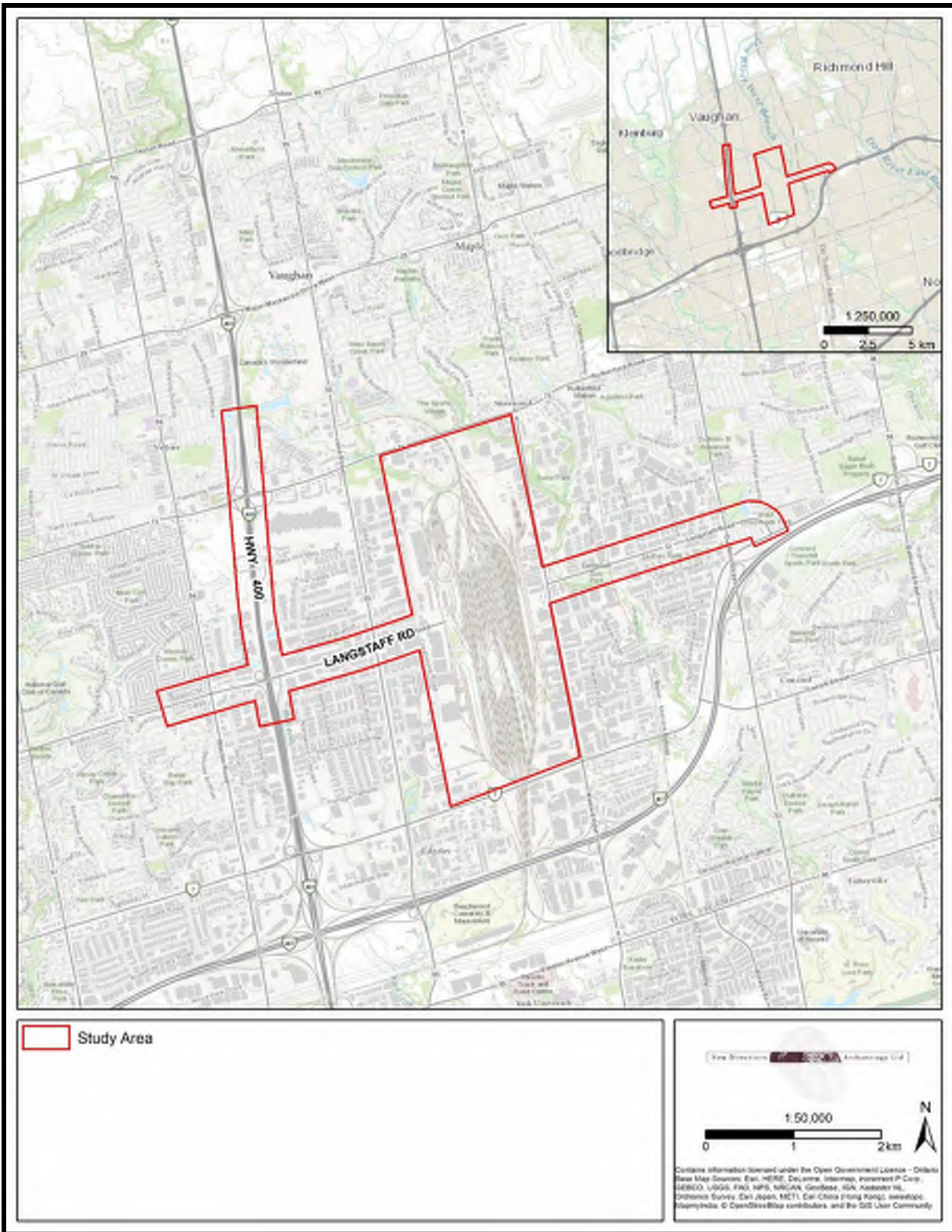


**Image 90: Langstaff Road facing northwest**



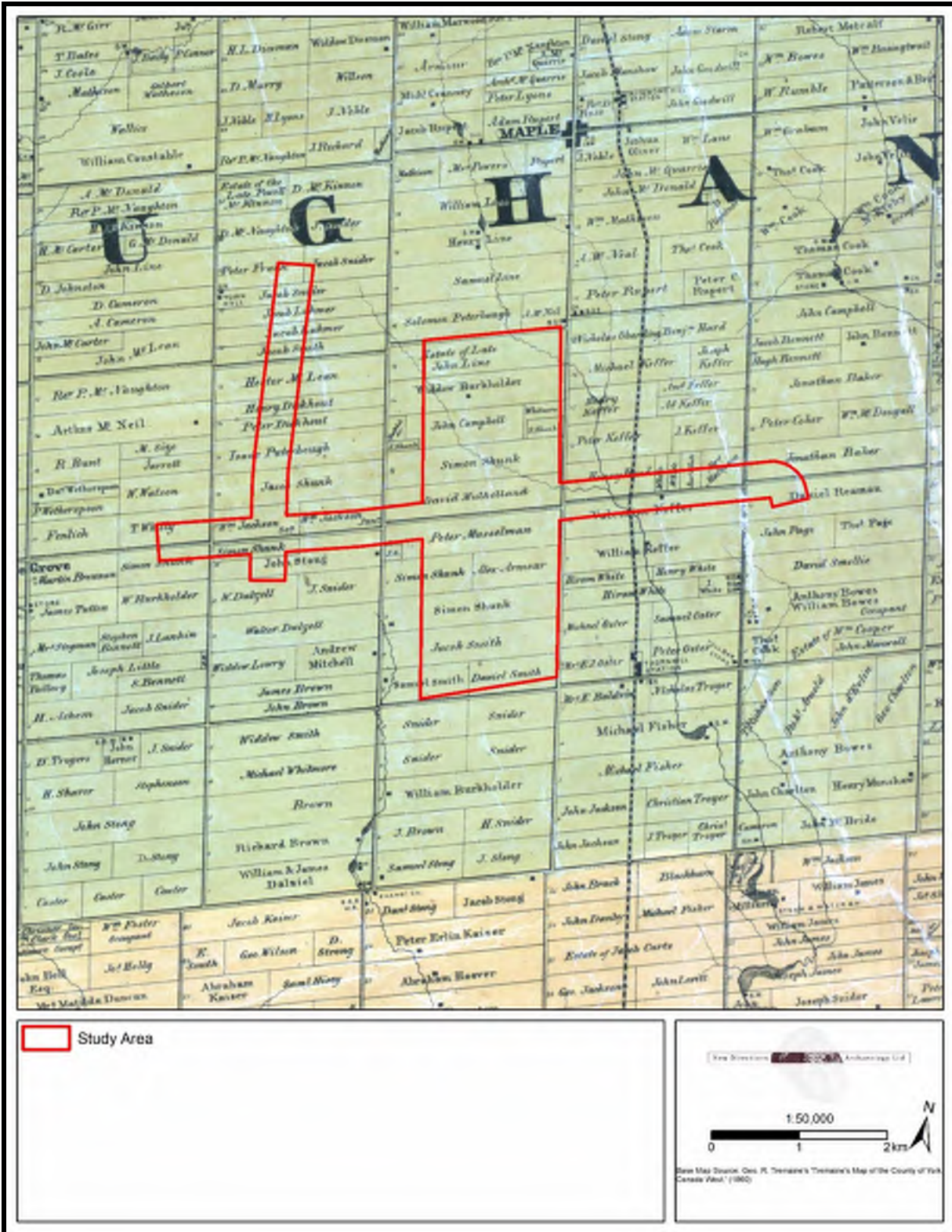
**Image 91: Langstaff Road southeast towards Highway 7, note ditch**

## 6.0 MAPS

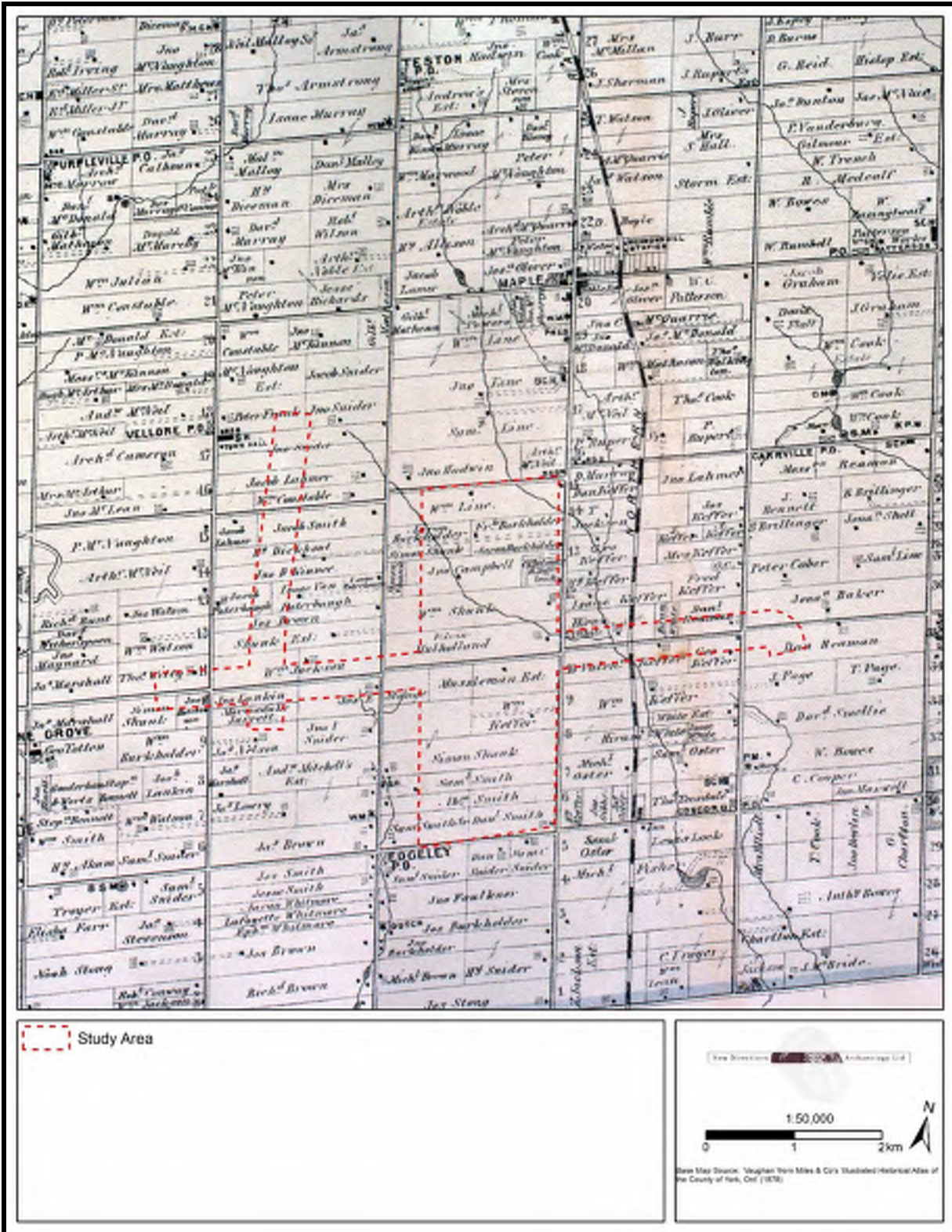


**Map 1: Location of the Study Area on Topographic Map**





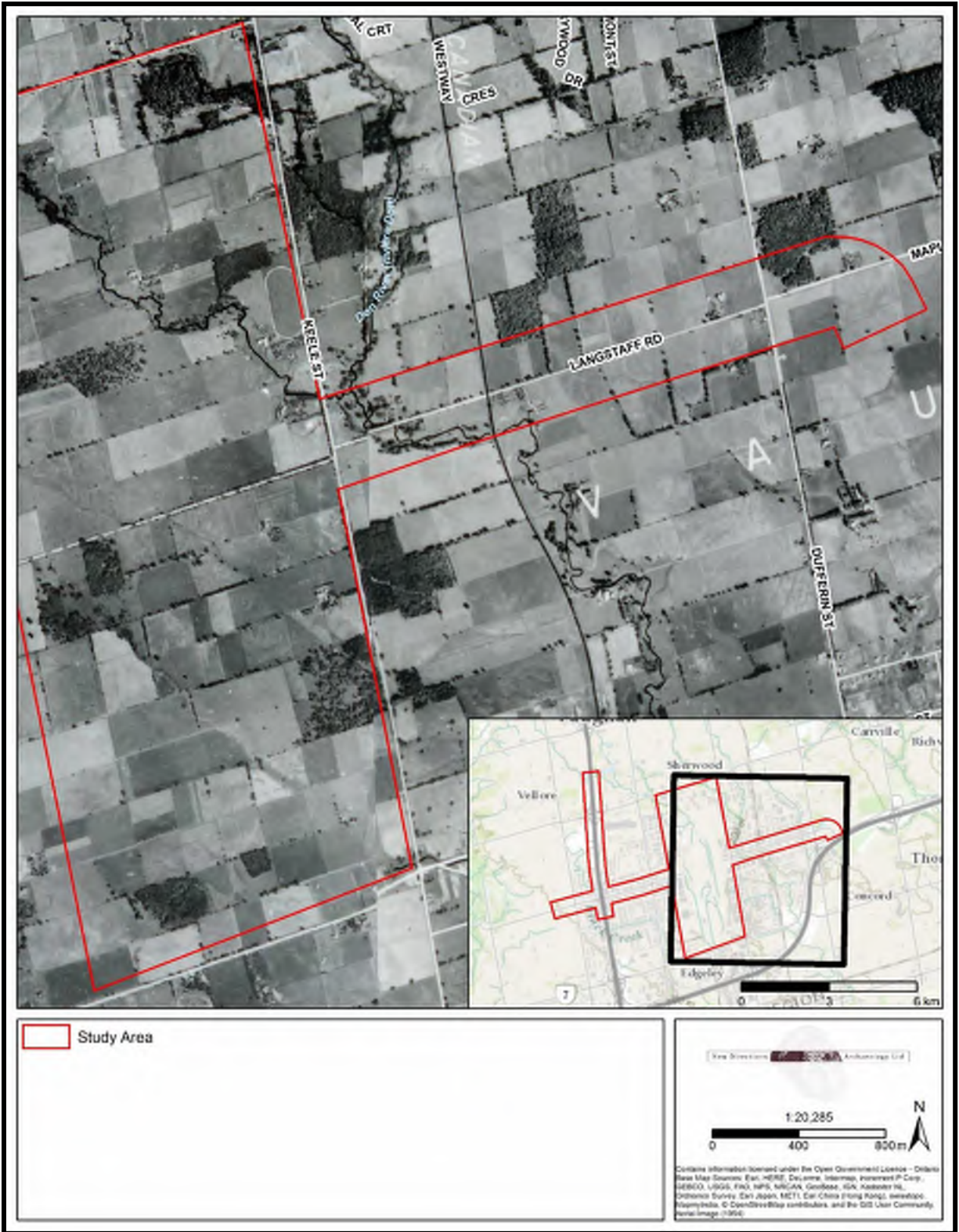
Map 2: Location of the Study Area on 1860 Tremain Map of York County



Map 3: Location of the Study Area on 1878 Miles & Co. Atlas of York County – Markham Township



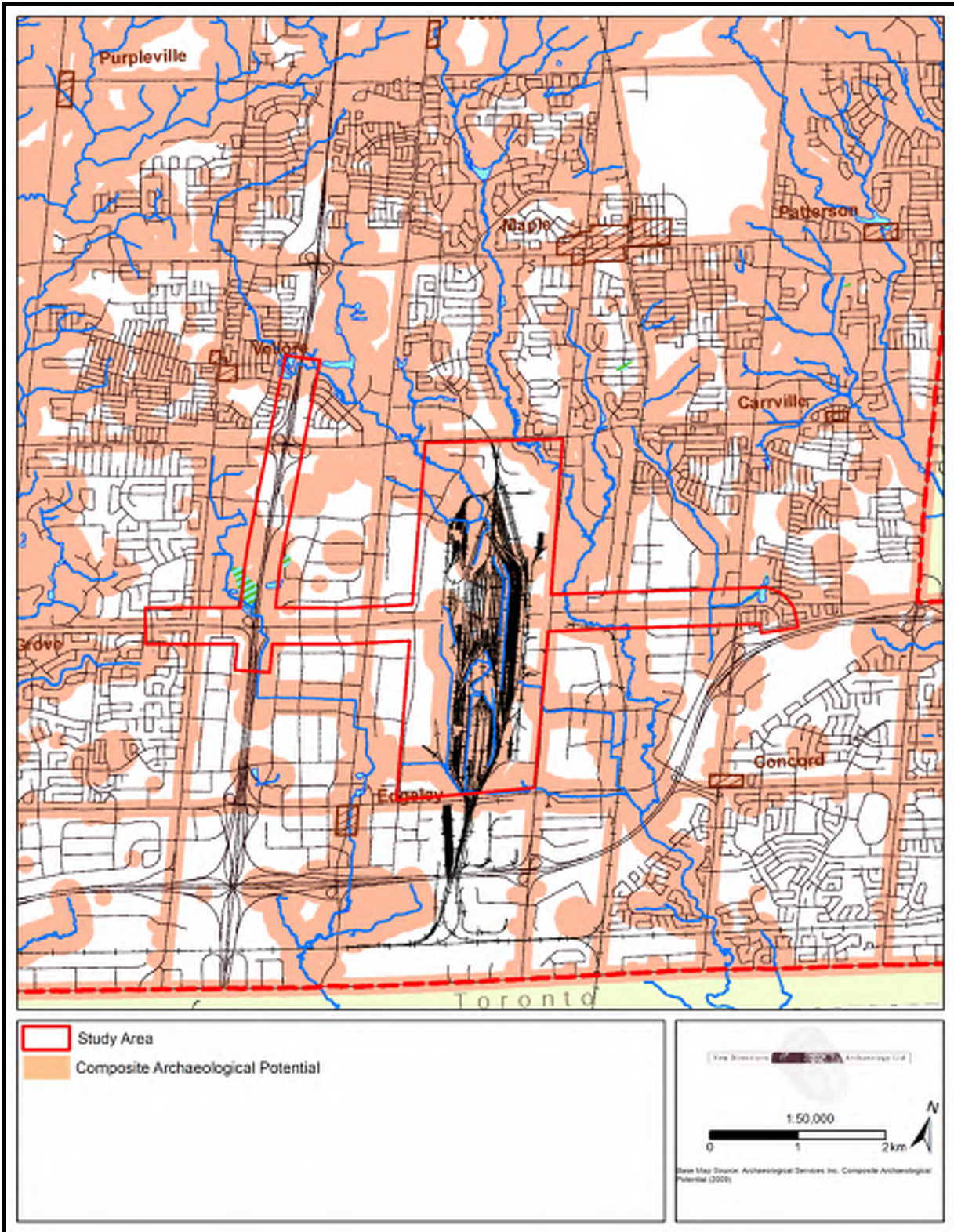
Map 4: Location of the Study Area on 1954 Aerial Imagery – West Half



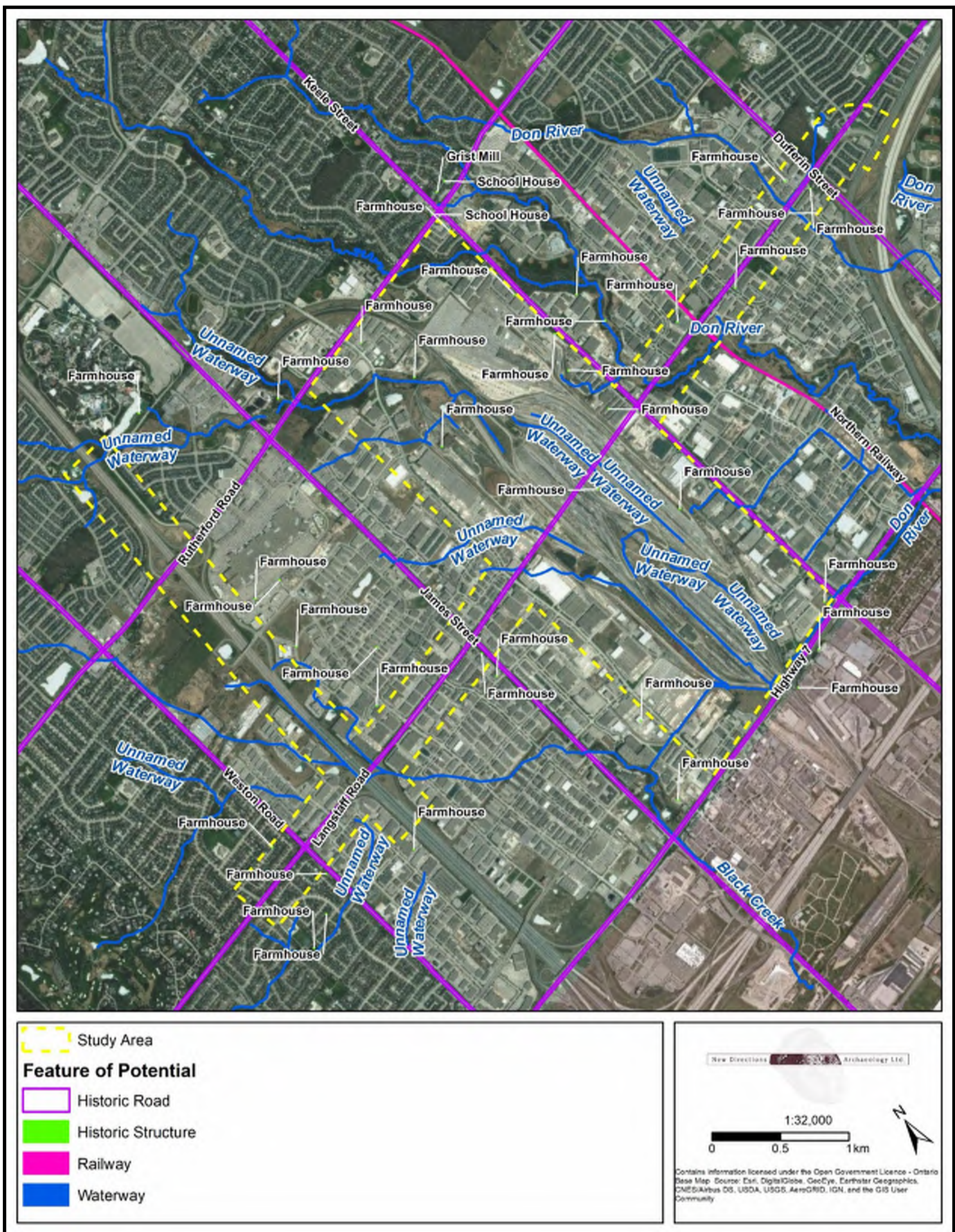
Map 5: Location of the Study Area on 1954 Aerial Imagery – East Half



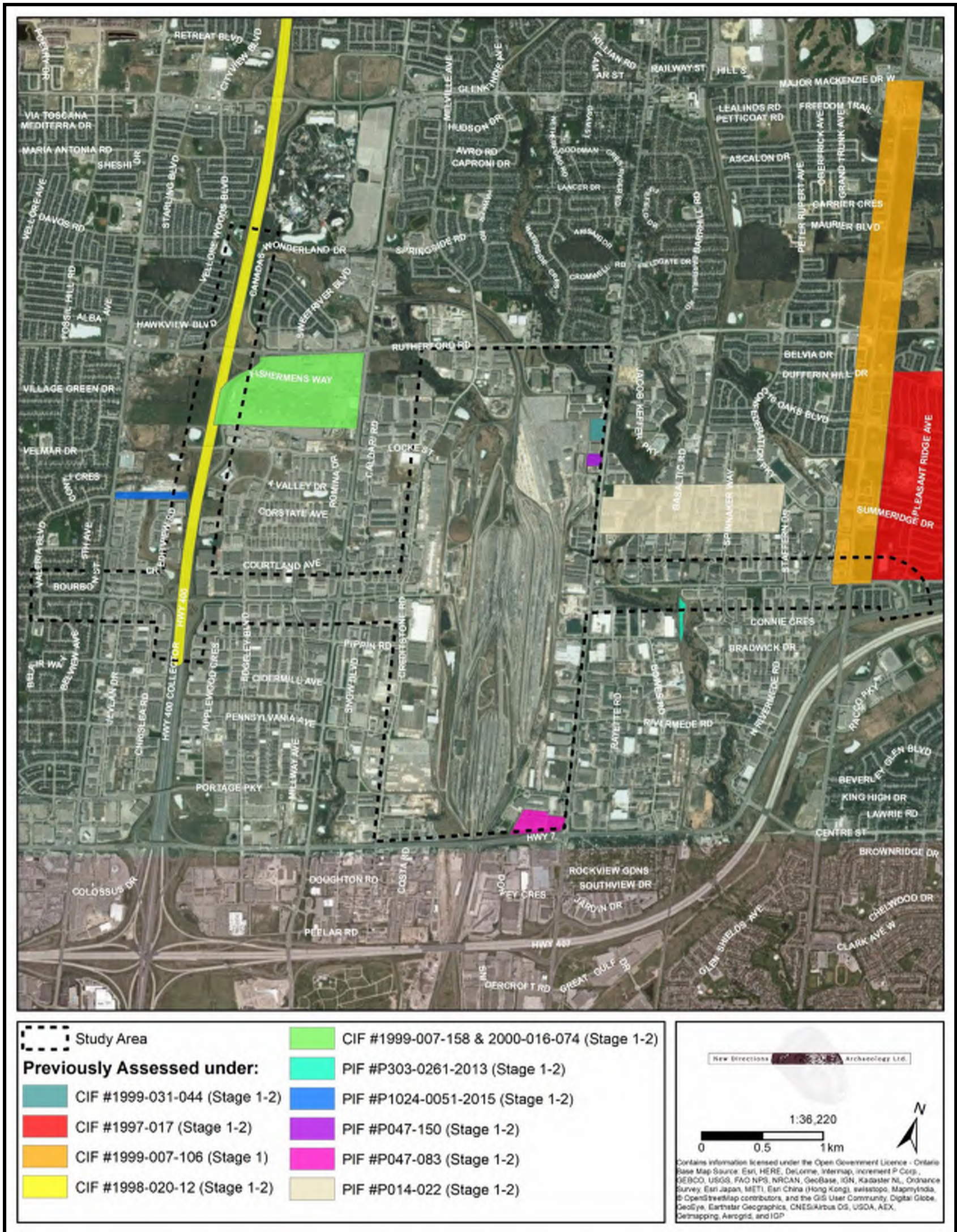
**Map 6: Location of the Study Area on 1965 Aerial Imagery – View of Rail Yard**



**Map 7: Location of the Study Area on Vaughan Archaeological Potential Model**

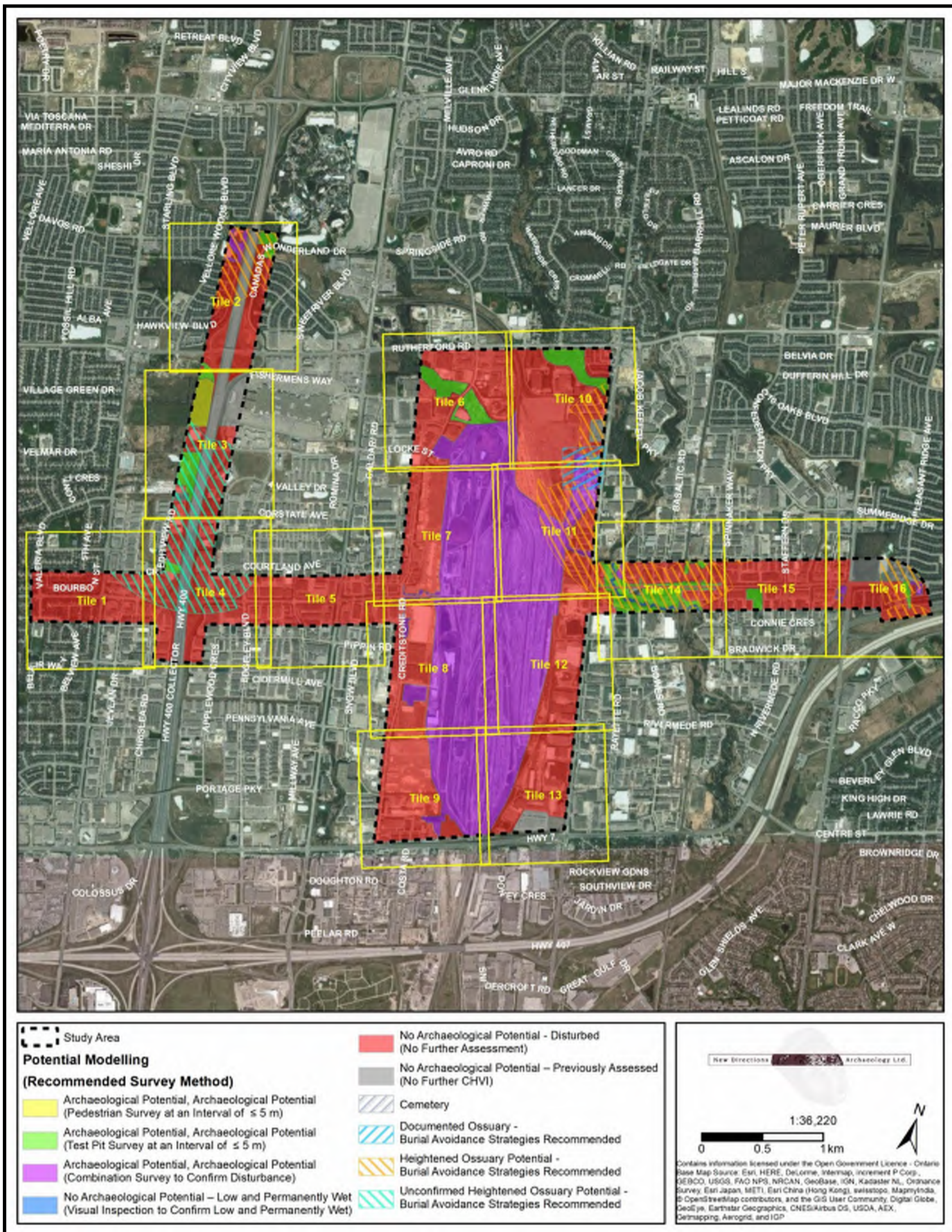


Map 8: Features of Potential within the Study Area

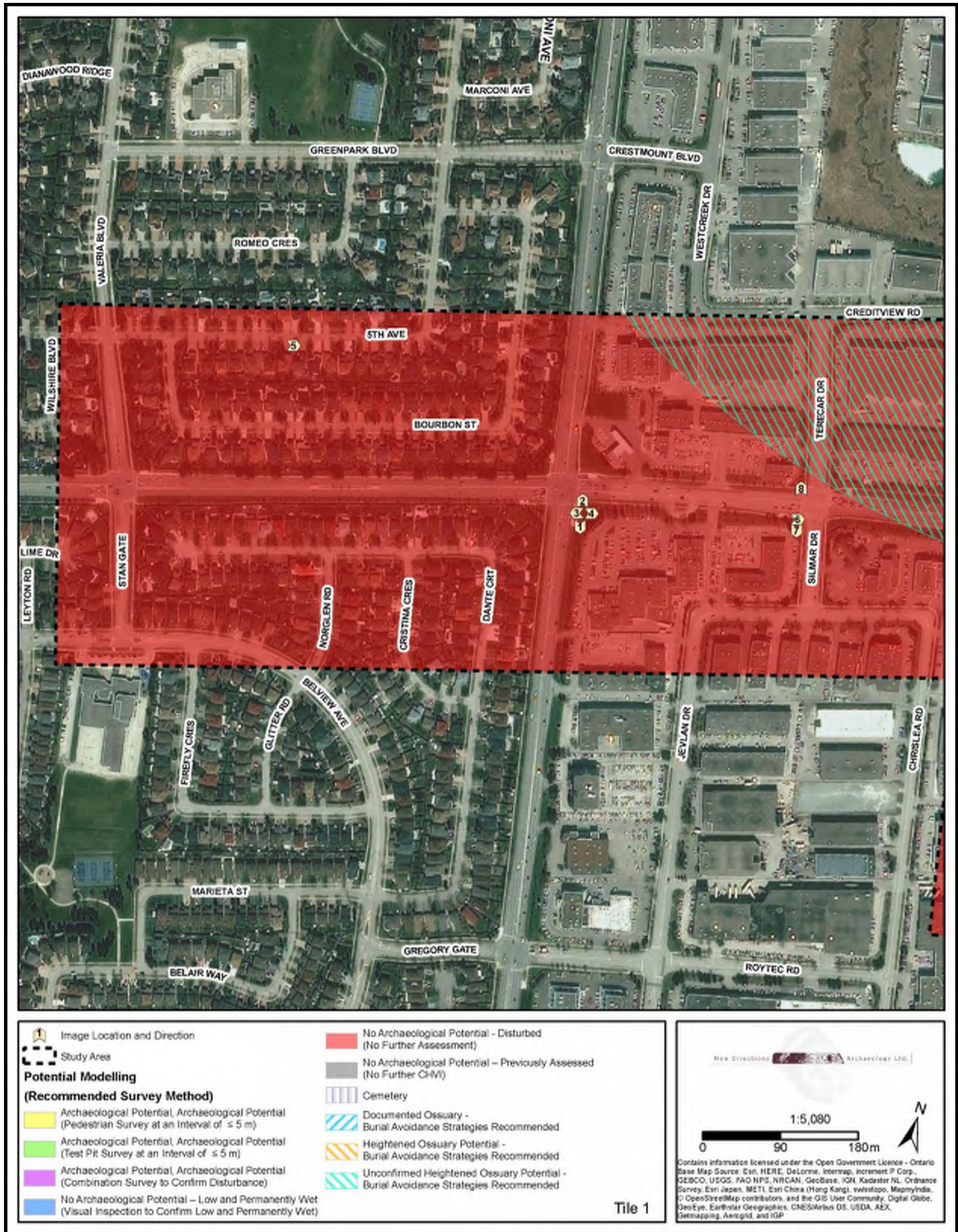


Map 9: Previous Archaeological Assessments

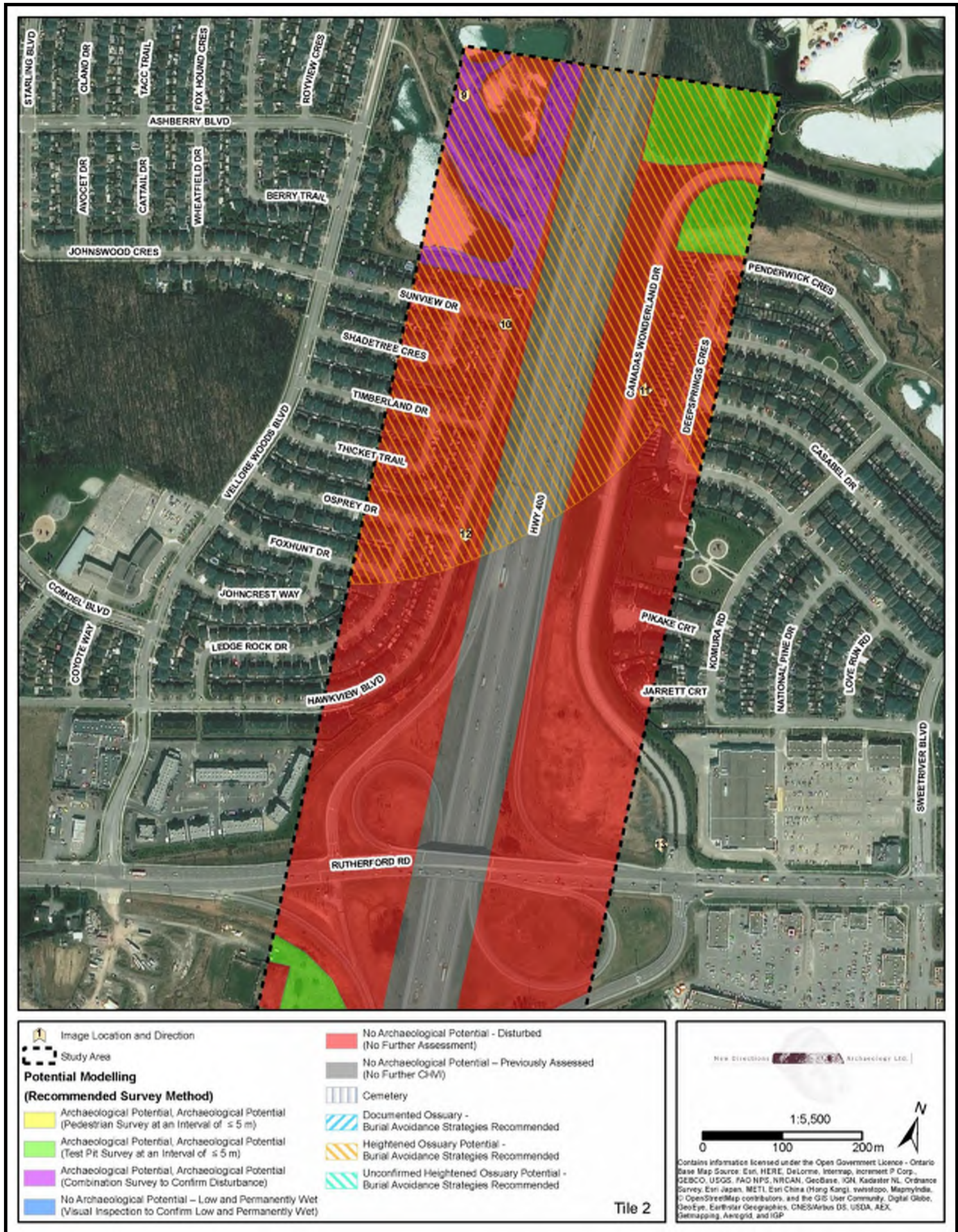




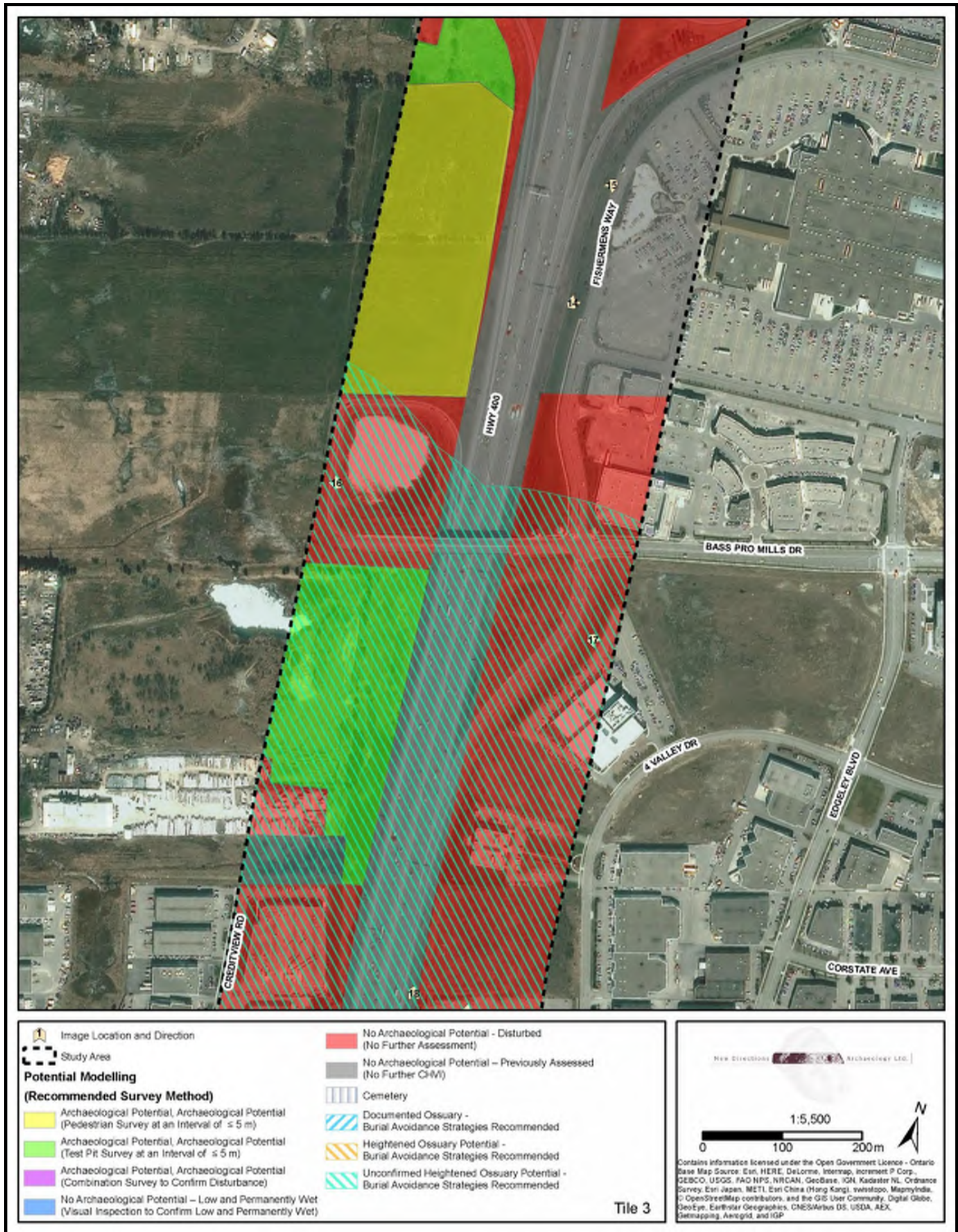
Map 10: Assessment Results - Overview



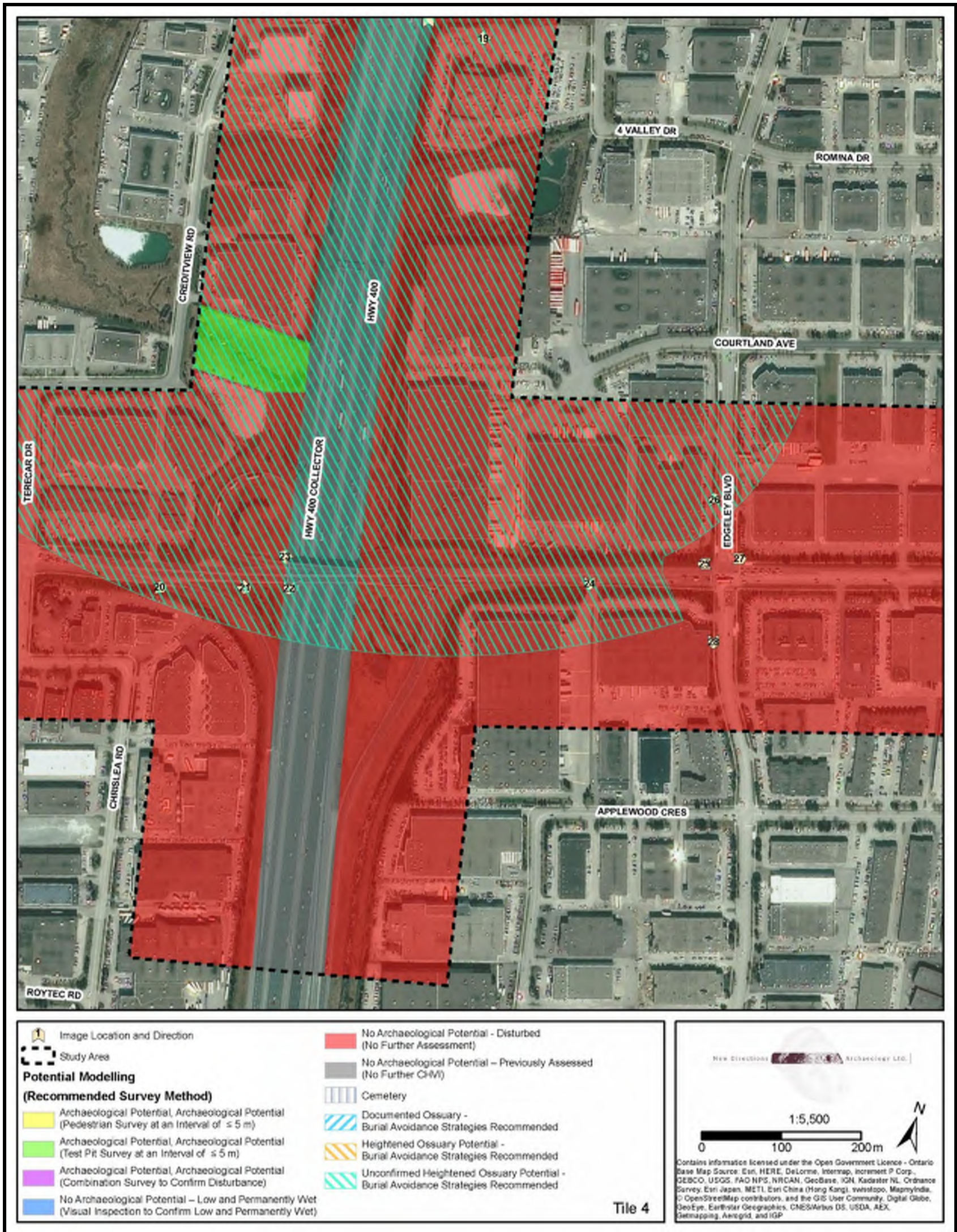
Map 11: Assessment Results -Tile 1



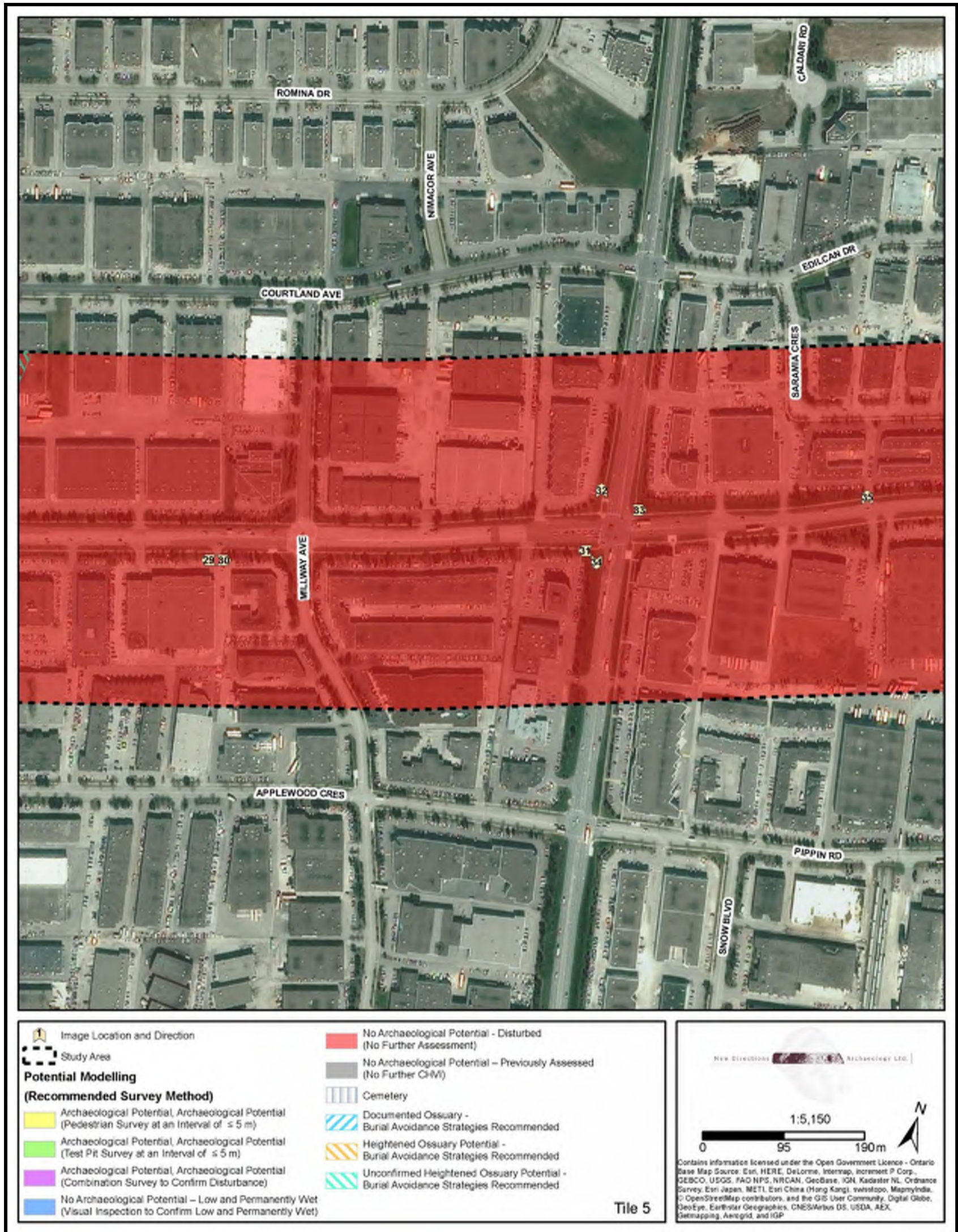
Map 12: Assessment Results -Tile 2



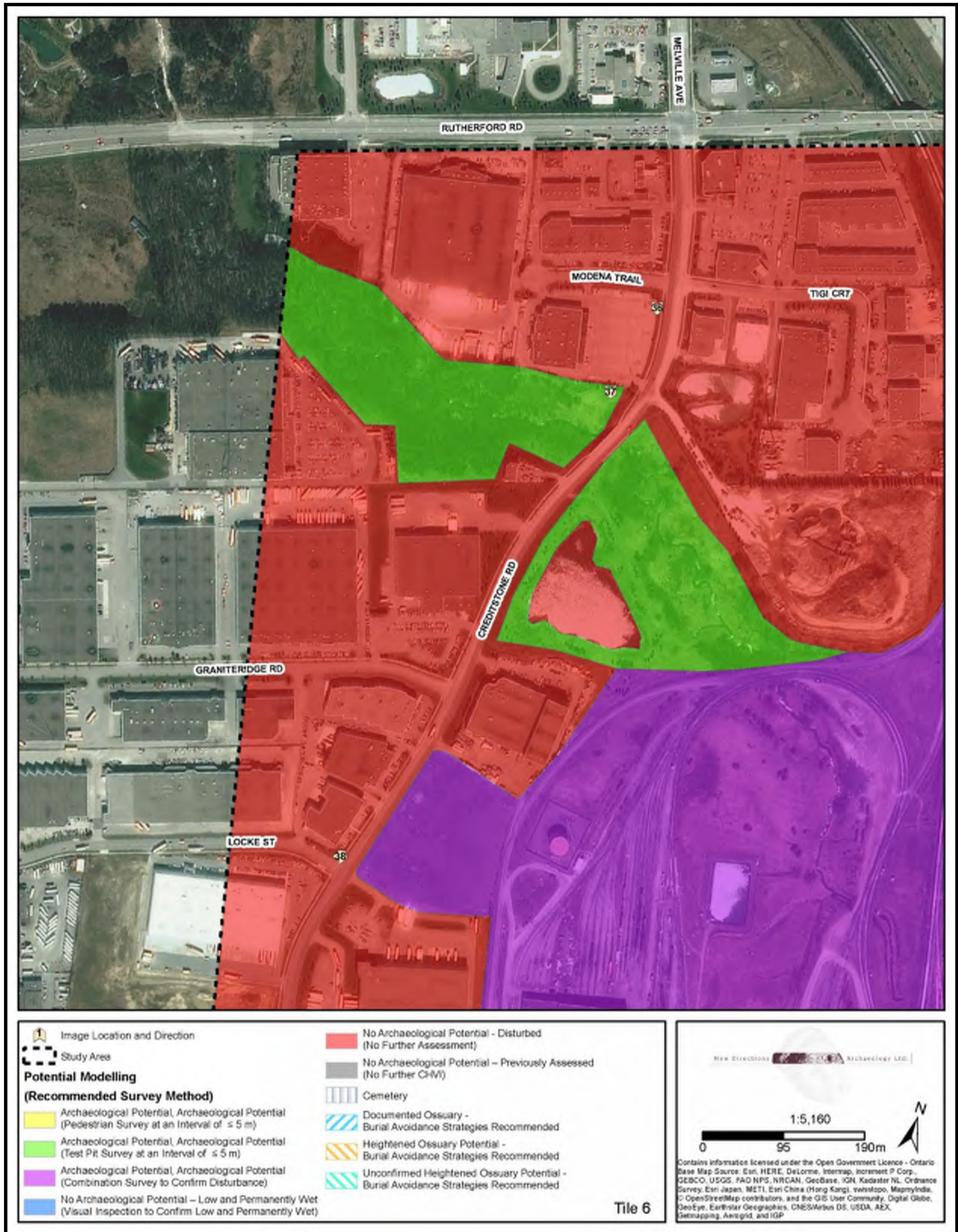
Map 13: Assessment Results -Tile 3



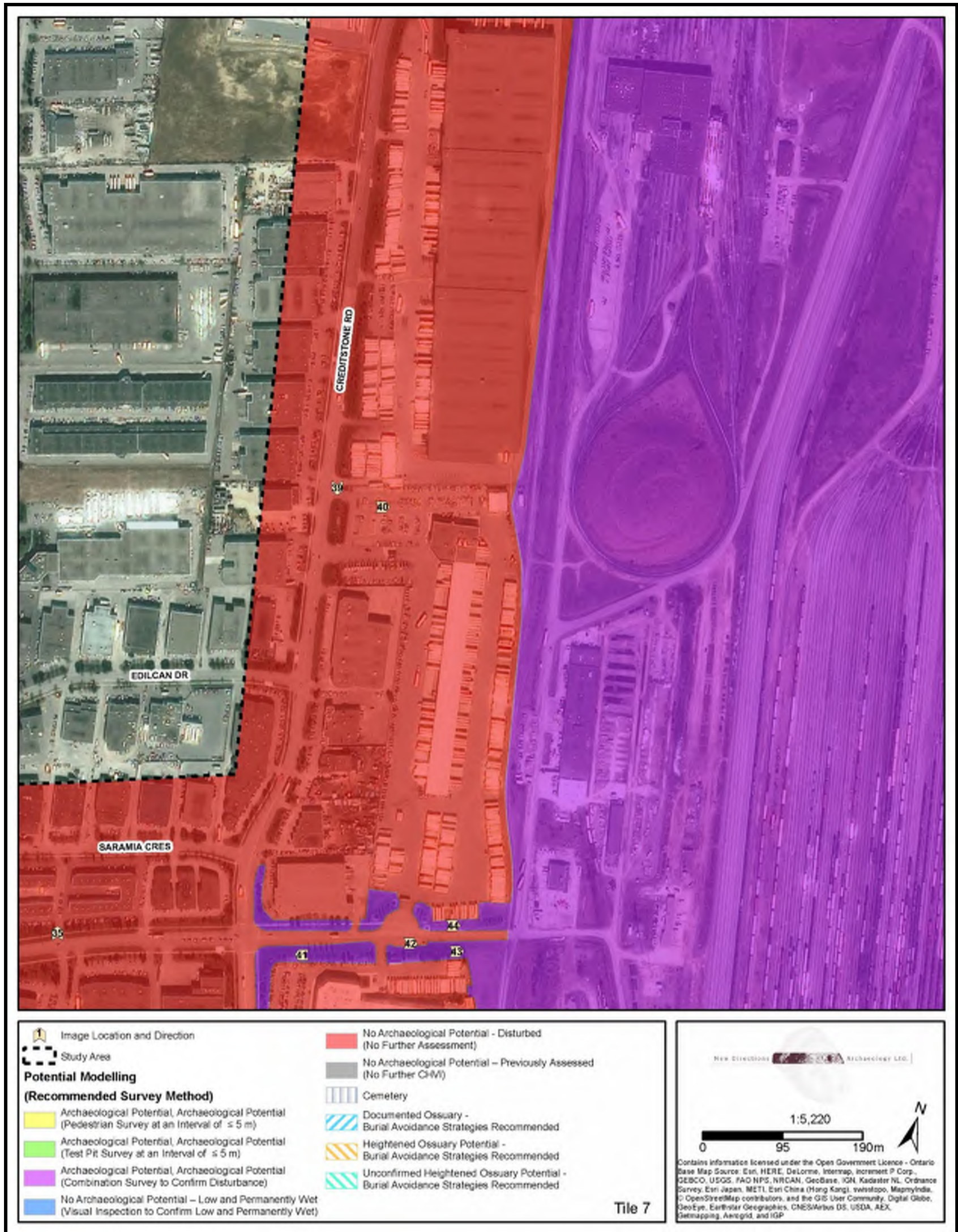
Map 14: Assessment Results -Tile 4



Map 15: Assessment Results -Tile 5

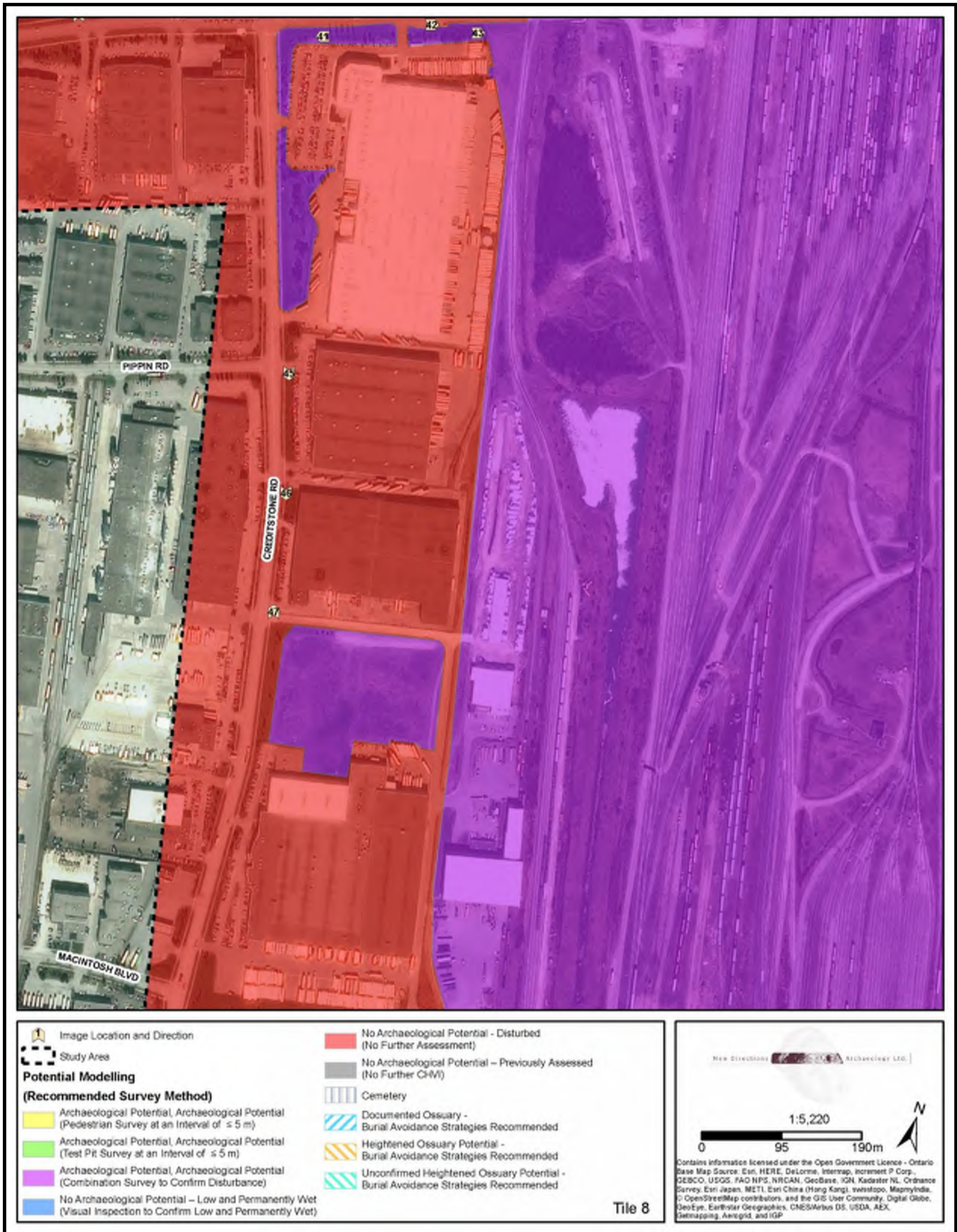


Map 16: Assessment Results -Tile 6

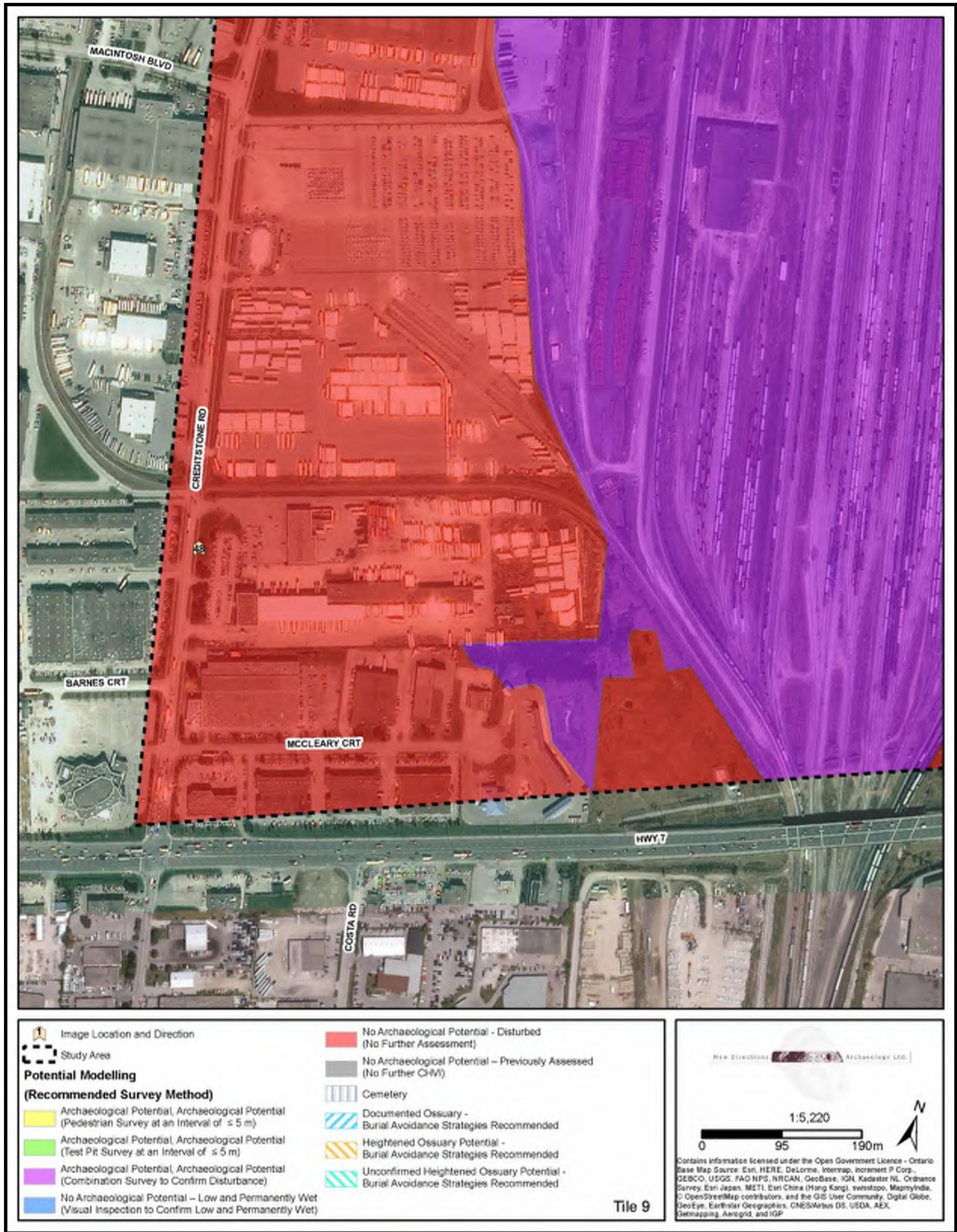


Map 17: Assessment Results -Tile 7

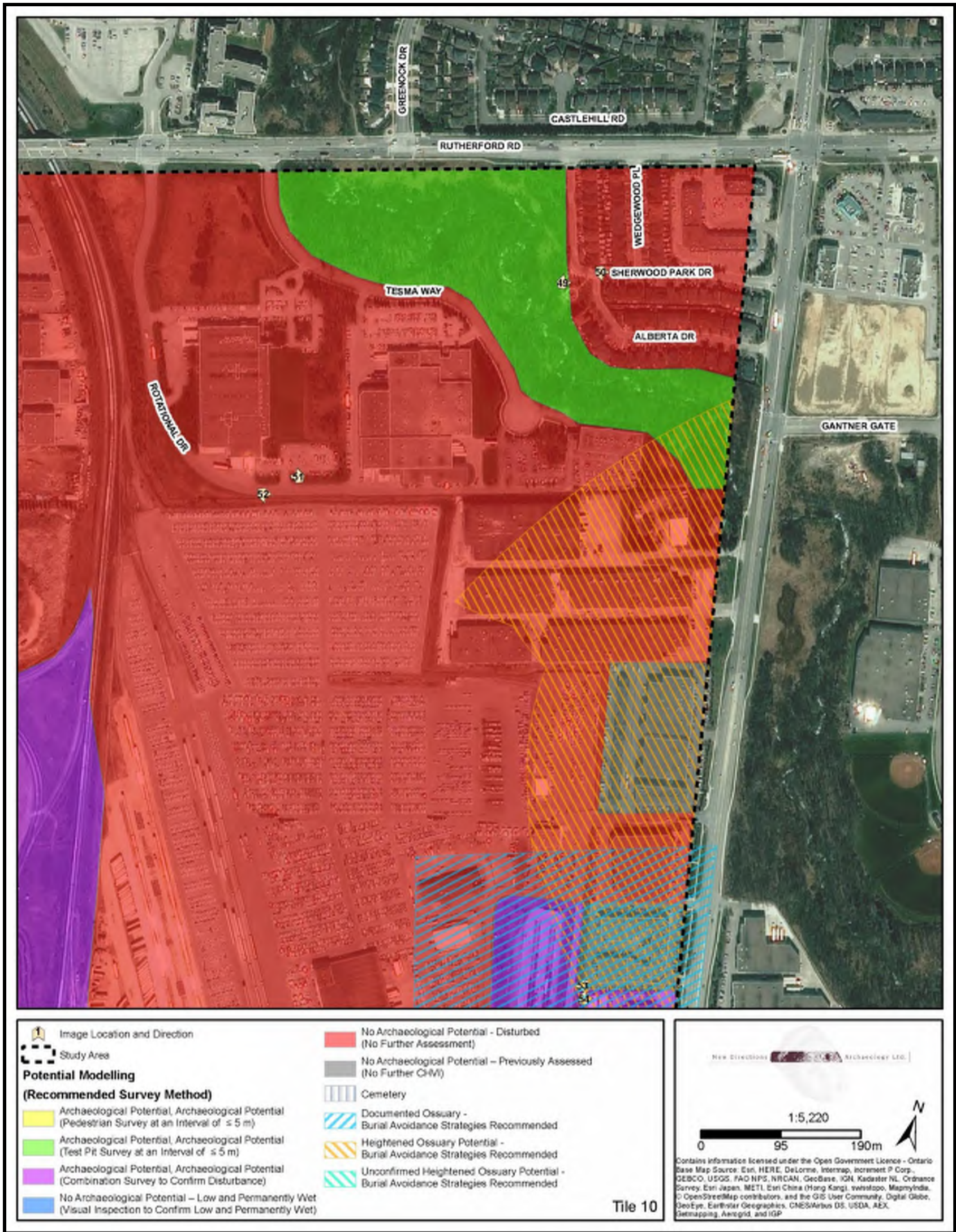




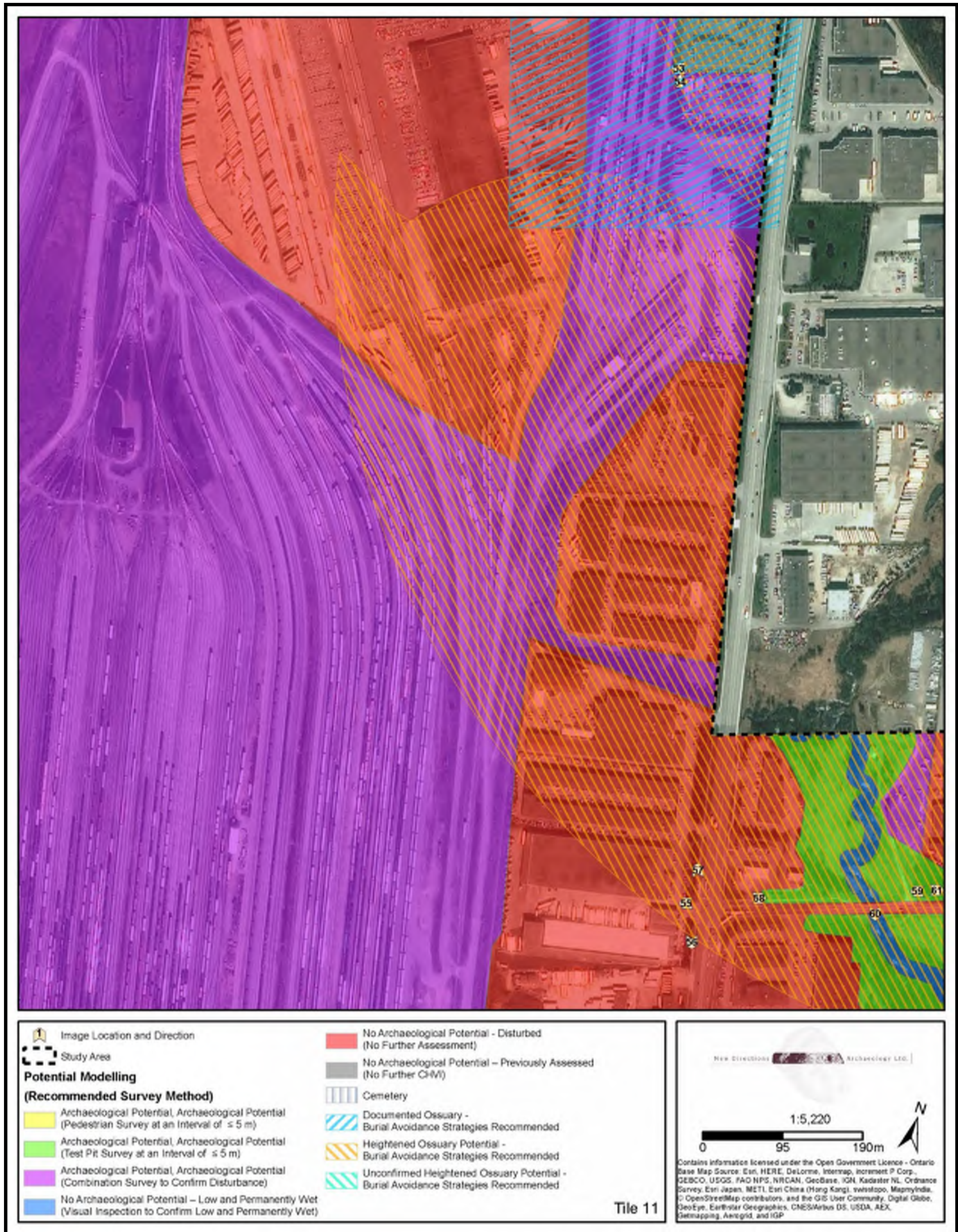
Map 18: Assessment Results -Tile 8



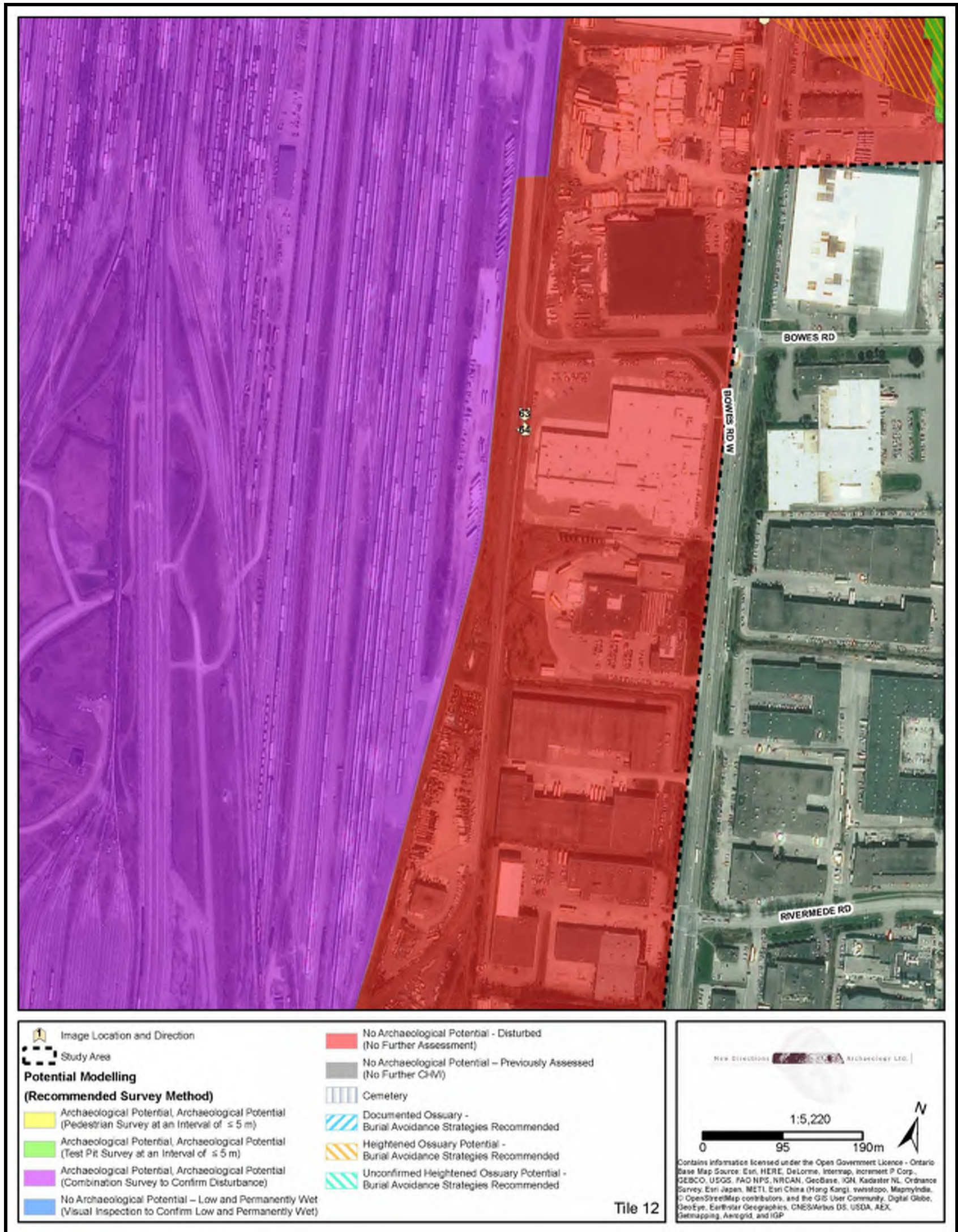
Map 19: Assessment Results -Tile 9



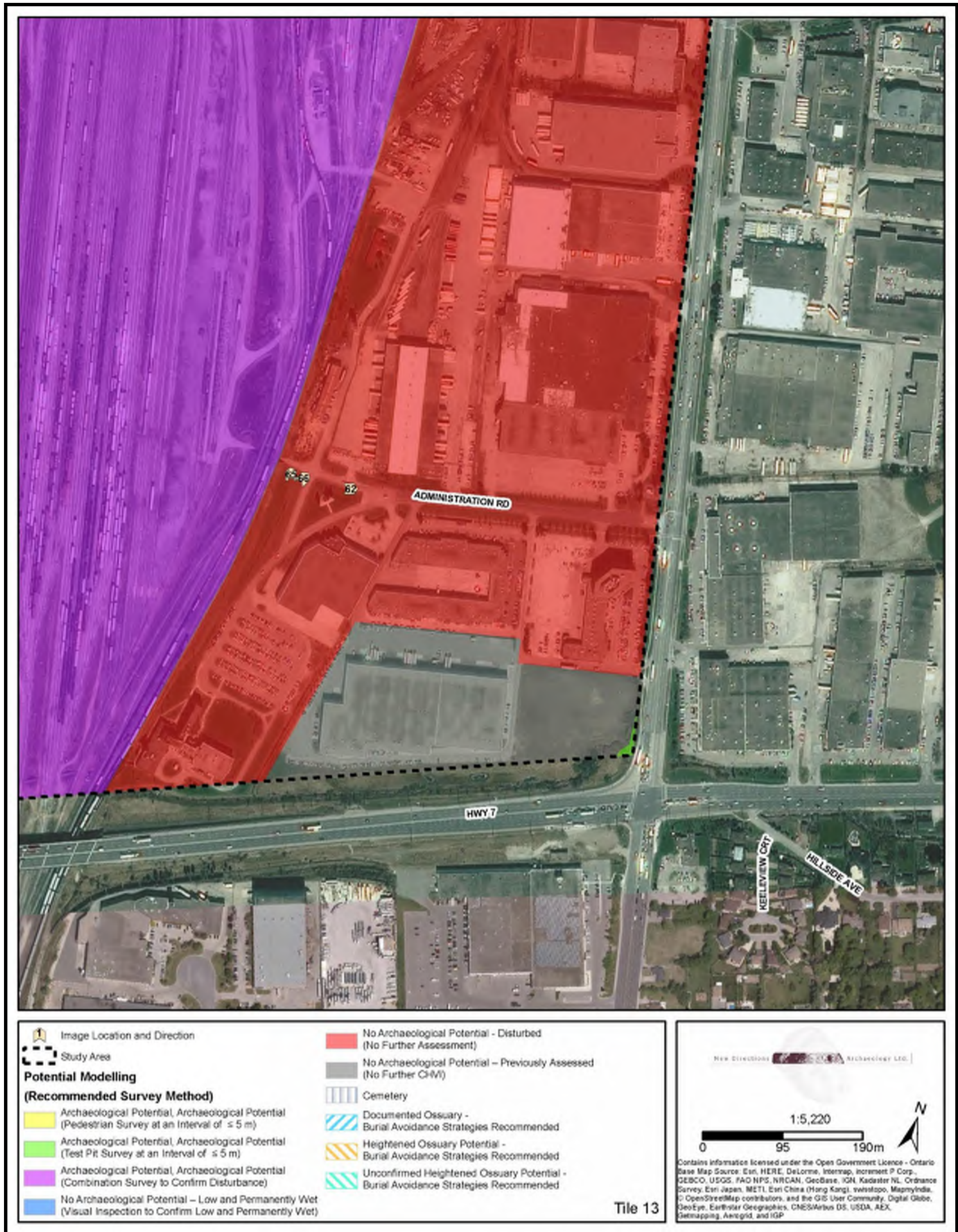
Map 20: Assessment Results -Tile 10



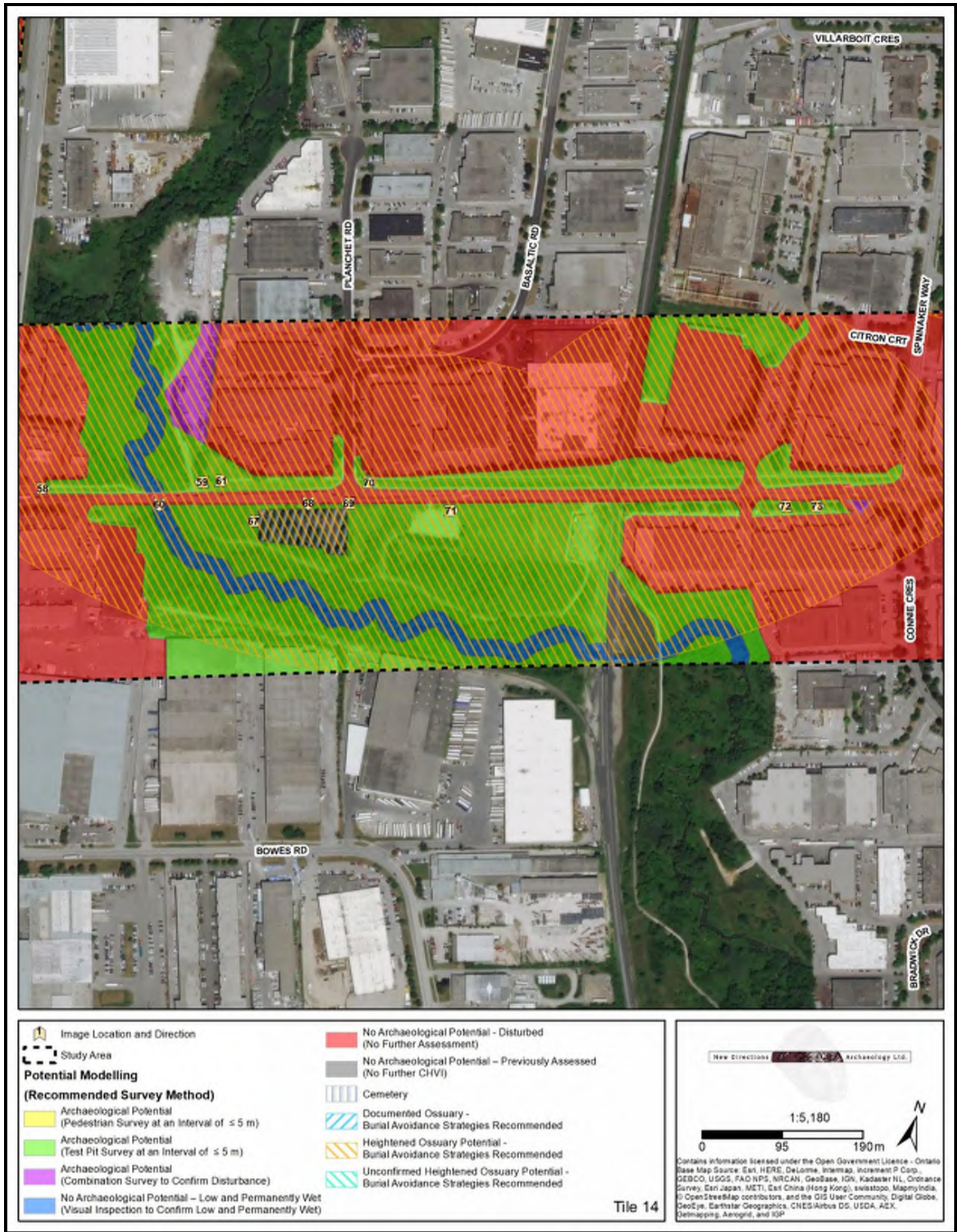
Map 21: Assessment Results -Tile 11



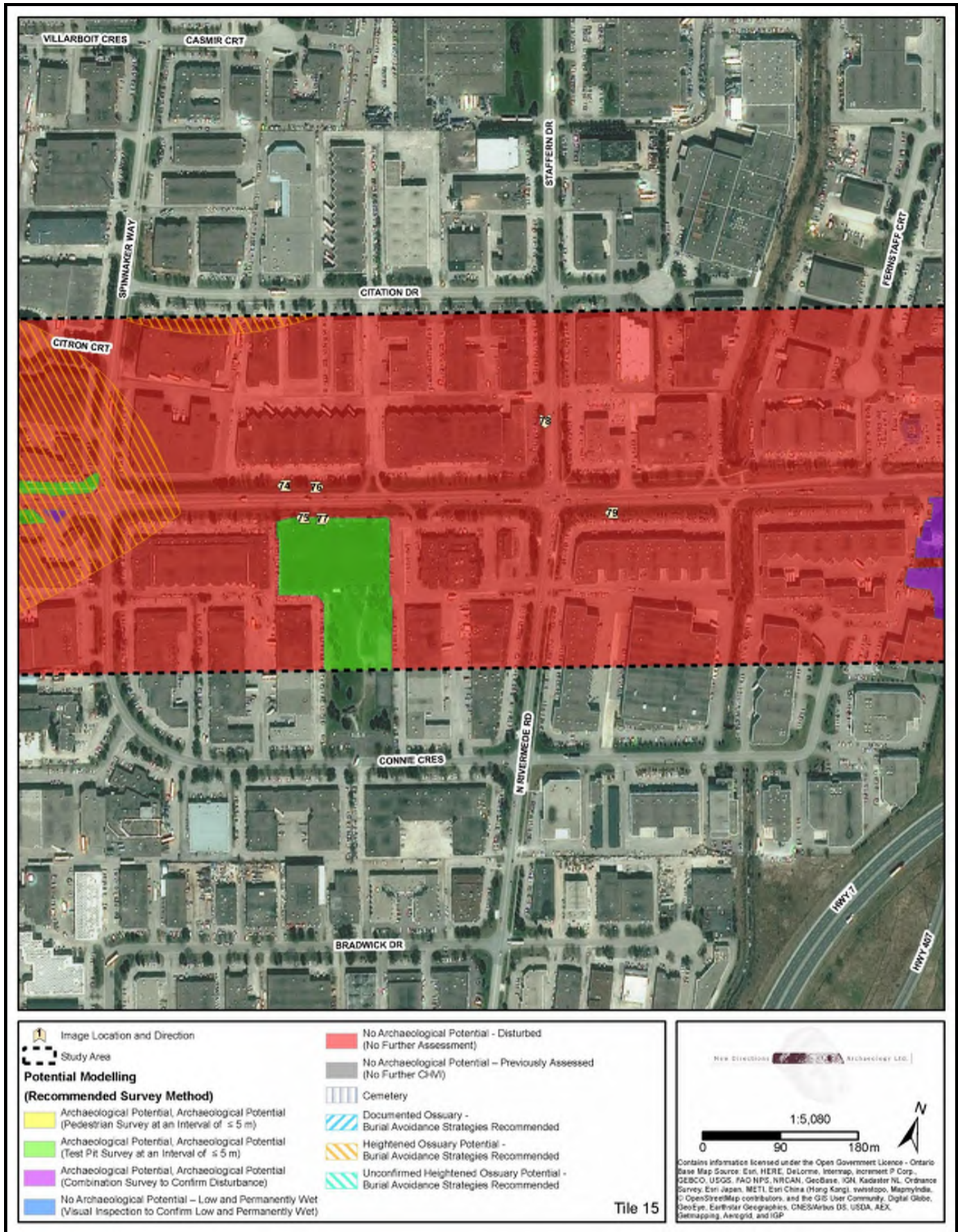
Map 22: Assessment Results -Tile 12



Map 23: Assessment Results -Tile 13

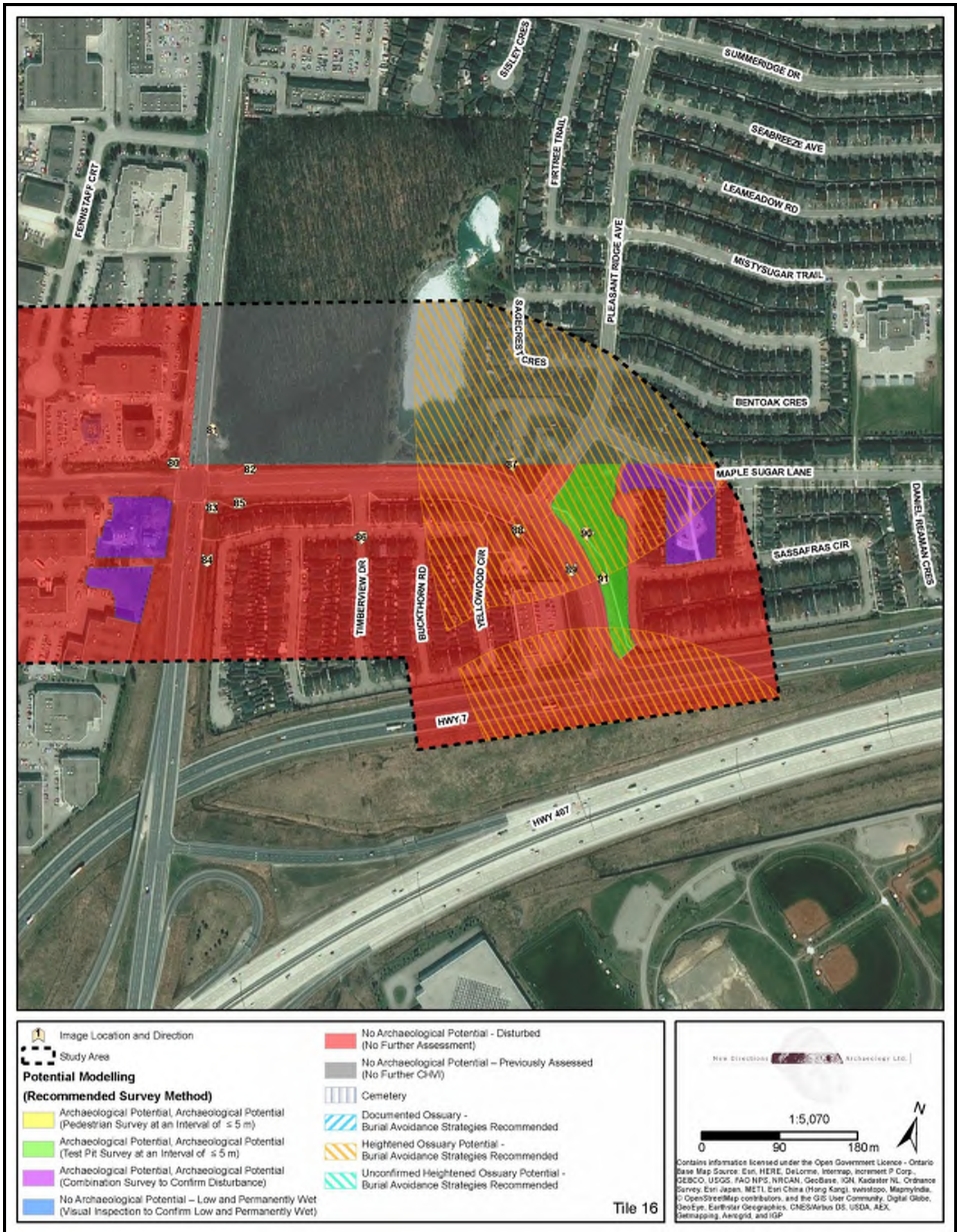


Map 24: Assessment Results -Tile 14

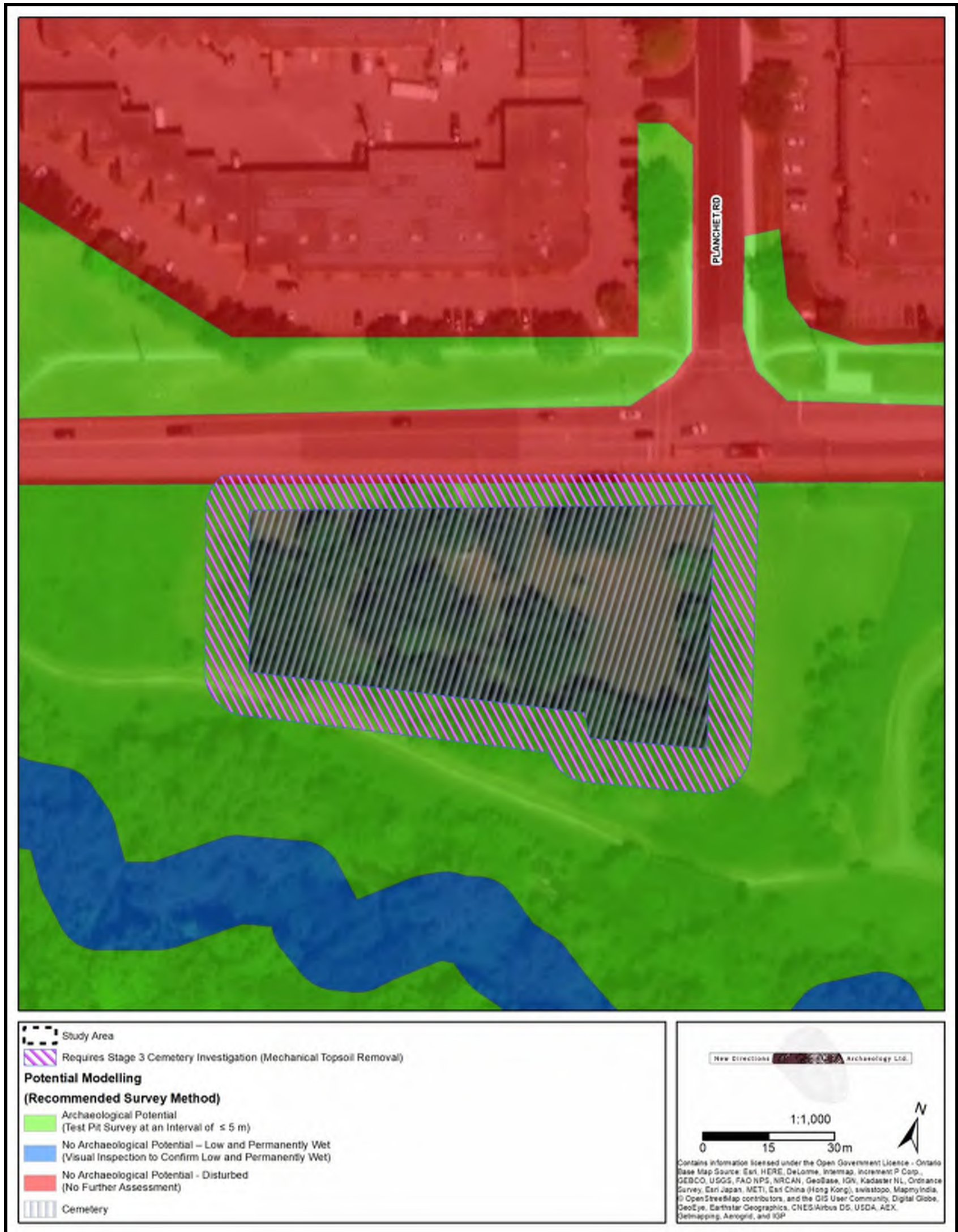


Map 25: Assessment Results -Tile 15





Map 26: Assessment Results -Tile 16



Map 27: Recommendations -Langstaff Cemetery

## 7.0 BIBLIOGRAPHY AND SOURCES

Adam, G. M & C. P. Mulvaney

1885 *History of Toronto and County of York*. Accessed online at:  
<http://www.ourroots.ca/quickSearchResults.aspx?qryID=653d5452-1da3-4096-8bc9-d840a718c4b7>

Archaeological Services Inc. (ASI)

- 1993a *An Archaeological Assessment of Draft Plan of Subdivision Part Lot 15, Concession IV, City of Vaughan*. [ND].
- 1993b *Stage Three Assessment of the Ravensway Site, AlGv-101, Draft Plan of Subdivision, Part of Lot 15, Concession 4, City of Vaughan, Ontario*. [1993-016].
- 1997 *Stage 1/2 A. R. A. of Langstaff Woods (Block 10) OPA 400, Part of Lots 11-15, Con. 2, City of Vaughan, RM of York, Ontario AND REVISED REPORT Stage 1 and 2 A.R.A. of Block 10, OPA 400, Part of Lots 11-15, Conc. 2, City of Vaughan, R. M. of York, Ontario*. [1997-017].
- 1998 *Stage 1 and 2 Archaeological Assessment of Highway 400, from Langstaff Road to Teston Road, Regional Municipality of York*. [1998-020].
- 2000 *Stage 1 Class Environmental Assessment of Dufferin Street (Y.R. 53) Widening From Langstaff Road (Y.R. 72) to Major Makenzie Drive (Y.R. 25), City of Vaughan, Municipality of York*. [1999-007-106].
- 2001 *Stage 1-2 Archaeological Assessment of the Proposed Vaughan Mills Shopping Centre (19T-98V10), Part of Lots 144 and 15, Concession 5, City of Vaughan, Regional Municipality of York, Ontario, Revised*. [1999-007-158 and 2000-016-074].
- 2004 *Stage 1&2 Archaeological Assessment, Glen Keele Developments Three Limited Located at Keel Street and Highway 7, Part of lot 6, Concession 4, City of Vaughan, Regional Municipality of York, Ontario*. [P047-083].
- 2005 *Stage 1 and 2 Archaeological Assessment of 8888 Keele Street, Lot 13, Concession 4, Former Township of Vaughan, Regional Municipality of York*. [P047-150].
- ND *Stage 2 Archaeological Assessment Langstaff Road Watermain, City of Vaughan, R. M. of York, Ontario*. [P047-028].
- ND *Stage 2 Archaeological Assessment Langstaff Road Watermain, City of Vaughan, R. M. of York, Ontario*. [P047-047].
- ND *Stage 1 A.A. of ORC Land at Hwy. 7 & Langstaff Rd., Part Lot 10, Con. 2, Geog. Twp. of Vaughan, City of Vaughan, RM of York, Ontario*. [2000-116-052].

Archives of Ontario (AO)

2011 *The Changing Shape of Ontario: Early Districts and Counties 1788–1899*. Available online at: <http://www.archives.gov.on.ca/en/maps/ontario-districts.aspx>.

Chapman, L.J. and D.F. Putnam

1984 *The Physiography of Southern Ontario, 3rd Edition*. Toronto: Ontario Geological Survey, Special Volume 2.

Coyne, J. H.

1895 *The Country of the Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot*. St. Thomas: Times Print.

Cumming, R. (ed.)

1972 *Historical Atlas of the County of Wellington, Ontario*. Reprint of 1906 Edition. Toronto: Historical Atlas Publishing Co.

D.R. Poulton and Associates

2000 *The 1999 Stage 1-2 Archaeological Assessment of the Proposed Progressive Moulded Products Limited Factory Development, 9000 Keele Street, Site Development Application File #DA.00.087, City of Vaughan, Ontario*. [1999-031-044].

Ellis, C.J. and N. Ferris (eds.)

1990 *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, OAS Number 5. London: Ontario Archaeological Society Inc.

Hayes, D.

2008 *Historical Atlas of Toronto*. Toronto: Douglas & McIntyre.

Hoffman, D.W. and Richards, N.R.

1955 *Soil Survey of York County. Report No. 19 of the Ontario Soil Survey*. Guelph: Experimental Farms Service, Canada Department of Agriculture and the Ontario Agricultural College.

Lajeunesse, E.J.

1960 *The Windsor Border Region: Canada's Southernmost Frontier*. Toronto: The Champlain Society.

Mika, N.H. (ed.)

1972 *Illustrated Historical Atlas of the County of York and the Township of West Gwillimbury & Town of Bradford in the County of Simcoe, Ontario*. Offset Edition, originally published by Miles & Co. (1878). Belleville: Mika Silk Screening Limited.

Miles & Co.

1878 *Illustrated Historical Atlas of the County of York, Ont.* Toronto.

Ministry of Natural Resources and Forestry (MNRF)

2016 Ontario's Forest Regions. Available online at: <http://www.ontario.ca/environment-and-energy/forest-regions>.

Mulvany, C.P., G.M. Adam and C.B. Robinson

1885 *History of Toronto and the County of York, Ontario, Volume 1*. Toronto: C. Blackett Robinson.

Munson, M.K. and S.M. Jamieson (eds.)

2013 *Before Ontario: The Archaeology of a Province*. Kingston: McGill-Queen's University Press.

Natural Resources Canada (NRC)

2010 *Historical Indian Treaties*. Atlas of Canada, 6<sup>th</sup> Edition. Accessed online at: <http://geogratis.gc.ca/api/en/nrcan-rncan/ess-sst/cb216b8f-8893-11e0-8ed0-6cf049291510.html>.

New Directions Archaeology Ltd. (NDA)

1998 *Stage 1 and 2 Archaeological Assessment of Highway 400, from Langstaff Road to Teston Road, Regional Municipality of York*. [PIF-98-12-LIC-1998-020, PIF-98-12-LIC-1998-020-STG3].

Ontario Archaeological Museum (OAC)

ND *Annual Archaeology Report of Ontario*. Volumes 1 to 8. Accessed online at: <https://archive.org/details/annualarchaeolo06ontgoog>

Pearce, R.

2004 *Report on the Stage 1 and Stage 2 Archaeological Assessment of the Tilzen Holdings Ltd. Lands, part of Lot 12, Concession 3, City of Vaughan, York Region*. [P014-022].

Reaman, G.E.

1971 *A History of Vaughan Township*. Vaughan Township Historical Society, 1971. Accessed online at: [http://www.ourroots.ca/quickLink.aspx?field=SUBJECT&key=Vaughan%20\(Ont.%20:%20Township\)--History&qryID=dd3a10af-3ebe-40dc-b8fc-fb019c84d751](http://www.ourroots.ca/quickLink.aspx?field=SUBJECT&key=Vaughan%20(Ont.%20:%20Township)--History&qryID=dd3a10af-3ebe-40dc-b8fc-fb019c84d751)

Smith, D.B.

1987 *Sacred Feathers: The Reverend Peter Jones (Kahkewaquonaby) and the Mississauga Indians*. Toronto: University of Toronto Press.

Smith, W.H.

1846 *Smith's Canadian Gazetteer: Comprising Statistical and General Information Respecting all Parts of the Upper Province, or Canada West*. Toronto: H. & W. Rowsell.

Surtees, R.J.

1994 Land Cessions, 1763–1830. In *Aboriginal Ontario: Historical Perspectives on the First Nations*, edited by E.S. Rogers and D.B. Smith, pp. 92–121. Toronto: Dundurn Press.

Toronto and Region Conservation Authority (TRCA)

ND *REVISED: Archaeological Assessment of TRCA Property, OHT Property and York Region ROW in York and Peel Regions (Stages 1-2), Archaeological Assessment of Western Vaughan Transportation Improvements: Individual Environmental Assessment...* [P303-078-2010, P303-078-2010-STG3, P303-037-2009].

2014 *Archaeological Assessment (Stage 1-2) in the City of Vaughan, GO Transit Barrie Passing Track, Lots 9 and 10 Concession III, Historic Vaughan township, York County.* [P303-0261-2013].

Tremaine, George C.

1860 *Map of the County of York, Canada West.* Toronto.

University of Toronto

2009 *Digital Aerial Photographs, Southern Ontario 1954 – West Index.* Available online at: [http://maps.library.utoronto.ca/data/on/AP\\_1954/indexwest.html](http://maps.library.utoronto.ca/data/on/AP_1954/indexwest.html).

Vaughan, City of

2010a *Vaughan Official Plan 2010.* Available online at: [https://www.vaughan.ca/projects/policy\\_planning\\_projects/Pages/Vaughan-Official-Plan--Volume-1-and-2.aspx](https://www.vaughan.ca/projects/policy_planning_projects/Pages/Vaughan-Official-Plan--Volume-1-and-2.aspx)

2010b *City of Vaughan Official Plan Archaeological and First Nations Study.* Available online at: <file:///C:/Users/ARA-NDA%20Floater/Downloads/A77499-3%20Exhibit%20B%20-%20City%20of%20Vaughan%20Official%20Plan%20Archaeological%20and%20First%20Nations%20Policy%20Study%20-%20A5C6D4.pdf>

2012 *Built Heritage Inventory.* Available online at: [https://www.vaughan.ca/services/business/heritage\\_preservation/built\\_heritage\\_inventory/Pages/default.aspx](https://www.vaughan.ca/services/business/heritage_preservation/built_heritage_inventory/Pages/default.aspx)

Warrick, G.

2000 *The Precontact Iroquoian Occupation of Southern Ontario.* *Journal of World Prehistory* 14(4):415–456.

Welsh, B.

2006 *Stage 1 & 2 Archaeological Assessment of the Honda Canada Campus Site, Part of Lots 19 and 20, Conc. 3, Former Twp. of Markham, County of York Town of Richmond Hill, RM of York [P047-186-2006].*

Wright, J.V.

1972 *Ontario Prehistory: An Eleven-Thousand-Year Archaeological Outline.* Archaeological Survey of Canada, National Museum of Man. Ottawa: National Museums of Canada.

York Region

2010 *York Region Official Plan 2010.* Available online at: [http://www.york.ca/wps/wcm/connect/yorkpublic/0dc3cfc2-2e0f-49d2-b523-dc7c14b08273/15001\\_yropConsolidation2016AccessibleMay42016.pdf?MOD=AJPERES](http://www.york.ca/wps/wcm/connect/yorkpublic/0dc3cfc2-2e0f-49d2-b523-dc7c14b08273/15001_yropConsolidation2016AccessibleMay42016.pdf?MOD=AJPERES)

2014 *Regional Official Plan Amendment No. 6 (ROPA 6).* Available online at: <http://www.york.ca/wps/wcm/connect/yorkpublic/fb42d42d-8c66-45cc-be39-57d14e6e339f/feb+6+amendment.pdf?MOD=AJPERES>

## **APPENDICES**

**APPENDIX I: Unaltered Development Plans**





**APPENDIX II: Document Inventory**

| <b>Assessment</b>                       | <b>Field Documents</b> | <b>Total</b> | <b>Nature</b>         | <b>Location</b>  |
|---|------------------------|--------------|-----------------------|--|
| Stage 1 A.A. of Langstaff Road Class EA | Photographs            | 206          | Digital               | On server at 900 Guelph Street, Unit 219, Kitchener; Folder P089-0102-2018             |
|   | Field Notes            | 10           | Digital and hard copy | On server and on file at 900 Guelph Street, Unit 219, Kitchener; Folder P089-0102-2018 |
|   | Field Maps             | 16           | Digital and hard copy | On server and on file at 900 Guelph Street, Unit 219, Kitchener; Folder P089-0102-2018 |

**STAGE 1 ARCHAEOLOGICAL ASSESSMENT FOR THE CLASS ENVIRONMENTAL ASSESSMENT STUDY FOR IMPROVEMENTS TO LANGSTAFF ROAD FROM WESTON ROAD TO HIGHWAY 7 ON LOTS 10 AND 11 CONCESSION 2 WEST OF YONGE STREET (WYS), LOTS 9 TO 18 CONCESSION 3 WYS, LOTS 6 TO 15 CONCESSION 4 WYS, AND ON LOTS 10 AND 11 CONCESSIONS 5 AND 6 WYS IN THE GEOGRAPHIC TOWNSHIP OF VAUGHAN, FORMER YORK COUNTY, IN THE CITY OF VAUGHAN, REGIONAL MUNICIPALITY OF YORK**

**Supplementary Documentation**

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Project #P089-0102-2018

December 6, 2018

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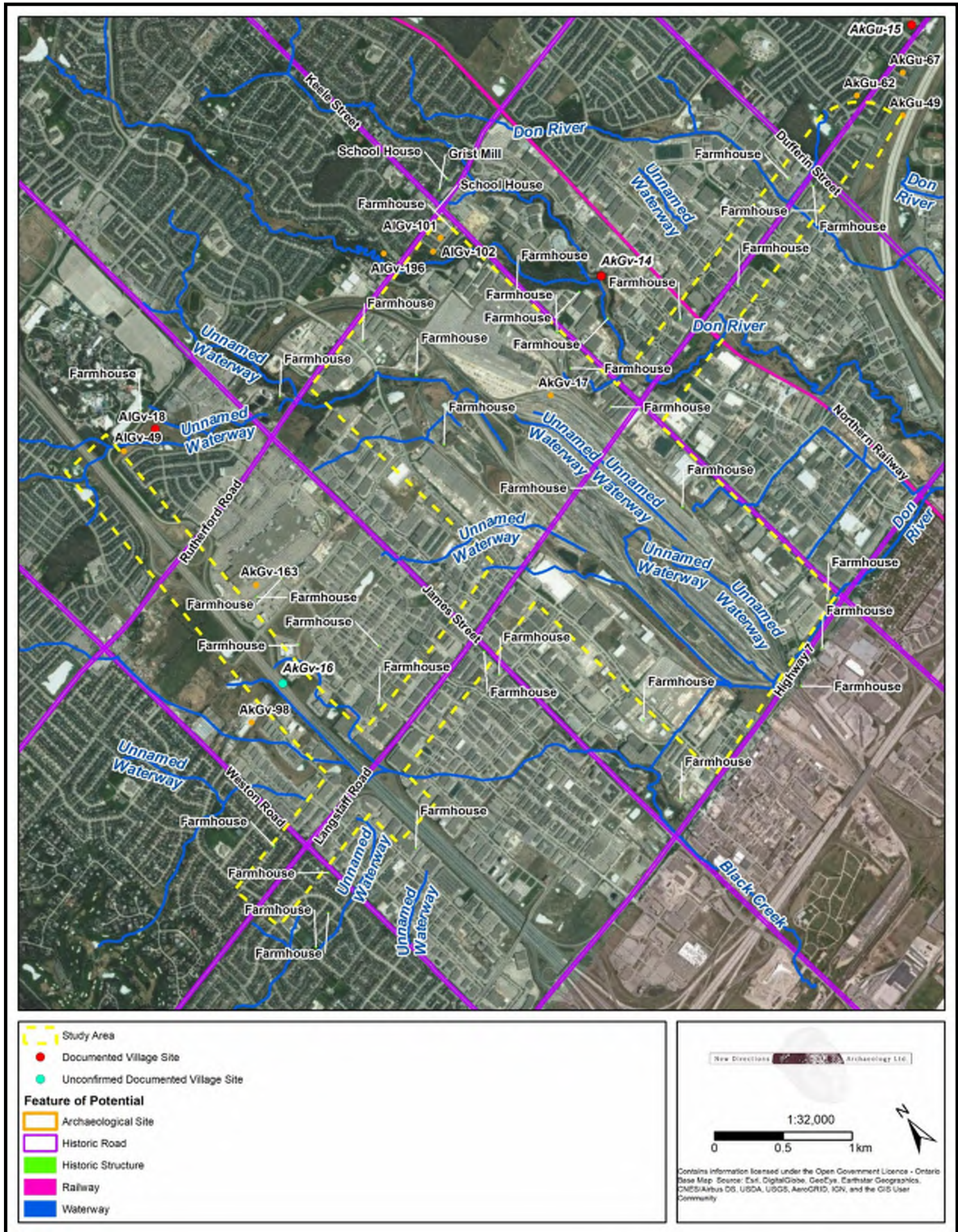
**TABLE OF CONTENTS**

1.0 Supplementary Maps 1

**LIST OF MAPS**

Map 1: Features of Potential within the Study Area - Overview 1

1.0 Supplementary Maps



Map 1: Features of Potential within the Study Area - Overview

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Apr 28, 2020

Dean Knight (P089)  
New Directions Archaeology Ltd.  
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**RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "STAGE 1 ARCHAEOLOGICAL ASSESSMENT FOR THE CLASS ENVIRONMENTAL ASSESSMENT STUDY FOR IMPROVEMENTS TO LANGSTAFF ROAD FROM WESTON ROAD TO HIGHWAY 7 ON LOTS 10 AND 11 CONCESSION 2 WEST OF YONGE STREET (WYS), LOTS 9 TO 18 CONCESSION 3 WYS, LOTS 6 TO 15 CONCESSION 4 WYS, AND ON LOTS 10 AND 11 CONCESSIONS 5 AND 6 WYS IN THE GEOGRAPHIC TOWNSHIP OF VAUGHAN, FORMER YORK COUNTY, IN THE CITY OF VAUGHAN, REGIONAL MUNICIPALITY OF YORK", Dated Mar 6, 2020, Filed with MTCS Toronto Office on Mar 13, 2020, MTCS Project Information Form Number P089-0102-2018, MTCS File Number 0006253**

Dear Dr. Knight:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.<sup>1</sup> This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report documents the Stage 1 archaeological assessment of the study area as depicted in Map 10-27 of the above titled report and recommends the following:

1. Additional archaeological assessment is not required for those areas visually determined to be disturbed including Langstaff Road, Weston Road, Jane Street, Keele Street, Dufferin Street, Highway 7 and Highway 400, and the numerous side streets within the study area, as well as housing, commercial, and industrial developments. Additionally, all areas assessed as low and permanently wet do not require further assessment.
2. Additional archaeological assessment is not required for those areas previously subject to archaeological

assessment, where it has been determined that archaeological potential no longer exists.

3. The McNeil site (AkGv-16) is located within the study area and has not been documented in any detail beyond initial identification in the early twentieth century. Based on the location of the McNeil site, it appears that at least part of the site has been impacted by the construction of Highway 400. It is therefore recommended should development be proposed within the vicinity of the McNeil site, that Stage 2 field survey be completed within areas of archaeological potential prior to impact, to attempt to identify whether any of the site remains intact.

4. The Downey ossuary (AkGv-17) is located within the study area. While the exact site location is unknown, the ossuary has not yet been excavated. It is unknown whether any portion of the ossuary remains intact following the development of the general area. As a result, it is recommended that if development is proposed within the vicinity of the site, that burial avoidance strategies be completed (see Recommendation # 7).

5. One historic cemetery (Langstaff Cemetery) is located within the study area and should be avoided by the proposed undertaking. Currently, the limits of the cemetery are not known. Additional cemetery research as per Section 3.1 of the 2011 S&Gs must be carried out in advance of any further assessment within 50 m of the current legal boundary to clarify the historic limits. If future impacts are proposed within 10 m of the inferred limit, a Stage 3 cemetery investigation program is required. The cemetery investigation program must involve mechanical topsoil removal within the proposed area of impact for a minimum of 10 m beyond the inferred limits to confirm there are no adjacent burials (Map 27). If impacts are needed to the east, south or west of the cemetery, mechanical excavation should begin at the 10 m distance and work towards the inferred limit. In the north, mechanical excavation should begin within the disturbed roadway platform/ditch and progress southwards. However, if proposed development impacts are more than 10 m from the edge of the cemetery, the development impacts are considered to pose no threat to the cemetery. Regardless, it is recommended that a temporary barrier be erected around nearby cemeteries and that "no go" instructions be issued for all onsite crews as a precautionary measure. The Bereavement Authority of Ontario must be contacted prior to any intrusive assessment in the vicinity of the cemetery to determine whether an Investigation Authorization is required.

6. The remainder of the study area contains archaeological potential and will require a Stage 2 archaeological assessment prior to any ground disturbing activities:

a. All areas identified as holding archaeological potential and that are comprised of wooded greenspace along rivers, woodlots, and public parklands, cannot be ploughed. As a result, the portion of the study area with archaeological potential must be subject to a test pit survey as per Section 2.1.2 of the 2011 S&Gs. The area between Langstaff Cemetery and the disturbed roadway platform should also be subject to test pit survey prior to mechanical excavation.

b. All agricultural fields must be subject to a pedestrian survey as per Section 2.1.1 of the 2011 S&Gs.

c. The portion of the study area not subject to the property inspection (rail yard) and areas where it appears some degree of disturbance has occurred must be subject to a combination survey comprised of a mixture of test pit survey and visual assessment, as per Section 2.1.8 of the 2011 S&Gs.

7. Finally, according to York Region's Official Plan ROPA 6, where there is the potential for lands to contain an ossuary, it is recommended that burial avoidance strategies be implemented to attempt to mitigate any negative impacts to unknown ossuary locations. This includes the unconfirmed location of the Downey ossuary (AkGv-17). Based on the ossuary potential model, several large portions of the study area have the potential to contain an ossuary. Within this area, regardless of Stage 2 archaeological assessment results, and regardless of previous disturbance, the following recommendations are made:

a. Predevelopment topsoil removal (grading) within development lands located within 1000 m of a documented village site and within 300 m of any current or former water sources should be subject to

archaeological monitoring.

b. All site supervisors and heavy equipment operators working on site should be briefed in advance concerning the role and responsibilities of the archaeological monitor. Should they encounter potential human remains while the monitor's attention is elsewhere on site, they must cease work in the area, retain all potentially associated soils in place and notify the monitor and their own supervisors immediately.

c. In the event that human remains are encountered during construction, the proponent must immediately contact the Police and Registrar at the Ministry of Government and Consumer Services. Should any ossuary feature be discovered during the course of the monitoring work, preservation through avoidance and project redesign/revision is the preferred alternative. The details of this form of mitigation must be negotiated with the appropriate First Nation(s) and the Cemeteries Registrar.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Shari Prowse  
Archaeology Review Officer

cc. Archaeology Licensing Officer  
Katherine Jim, WSP Canada Group Inc  
Sue Eves, York Region Community Planning and Development Services

<sup>1</sup> *In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.*