

Supplementary Documentation for Original Report

Stage 1 Archaeological Assessment:

Fischer Hallman Road Improvements, from Bleams Road to Plains
Road, City of Kitchener, Regional Municipality of Waterloo
Project # SWW181149.3000

Archaeological Consulting License # P348 (Slim)
P.I.F. # P348-0049-2018 (Stage 1)
{Associated with PIF P094-120-2012 (Stage 1) and P392-0106-2014 (Stage 1)}

Prepared for:

Regional Municipality of Waterloo

Design & Construction, 150 Frederick Street, 6th Floor, Kitchener, Ontario N2G 4J3

21-Mar-19

SUPPLEMENTARY DOCUMENTATION for Stage 1 Archaeological Assessment

Fischer-Hallman Road Improvements, from Bleams Road to Plains Road, City of Kitchener, Regional Municipality of Waterloo

Project # SWW181149.3000

Prepared for:

Regional Municipality of Waterloo
Design & Construction, 150 Frederick Street
6th Floor, Kitchener, Ontario N2G 4J3
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Prepared by:

Wood Environment & Infrastructure Solutions,
a Division of Wood Canada Limited
900 Maple Grove Road, Unit 10
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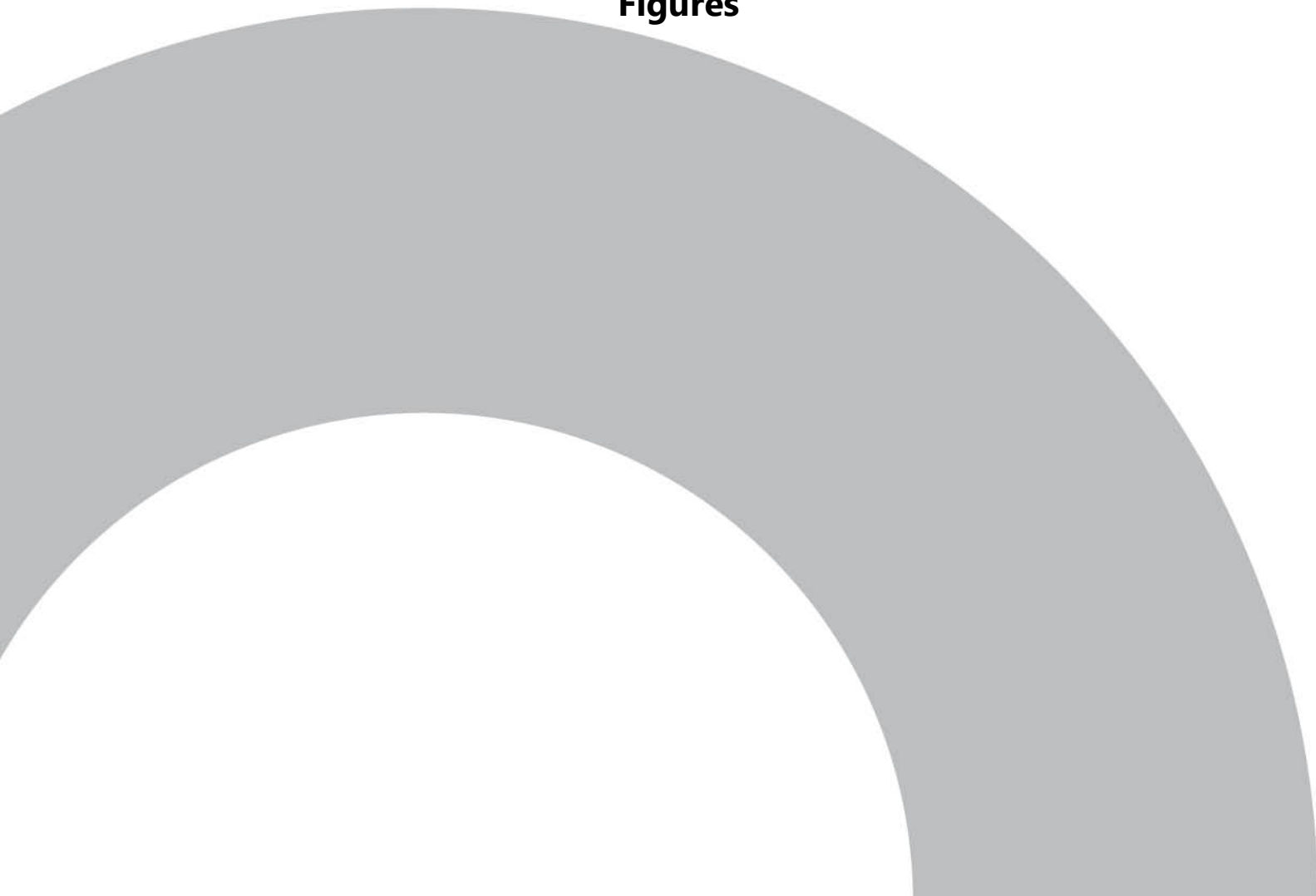
Figure 8A-C Stage 1 Results



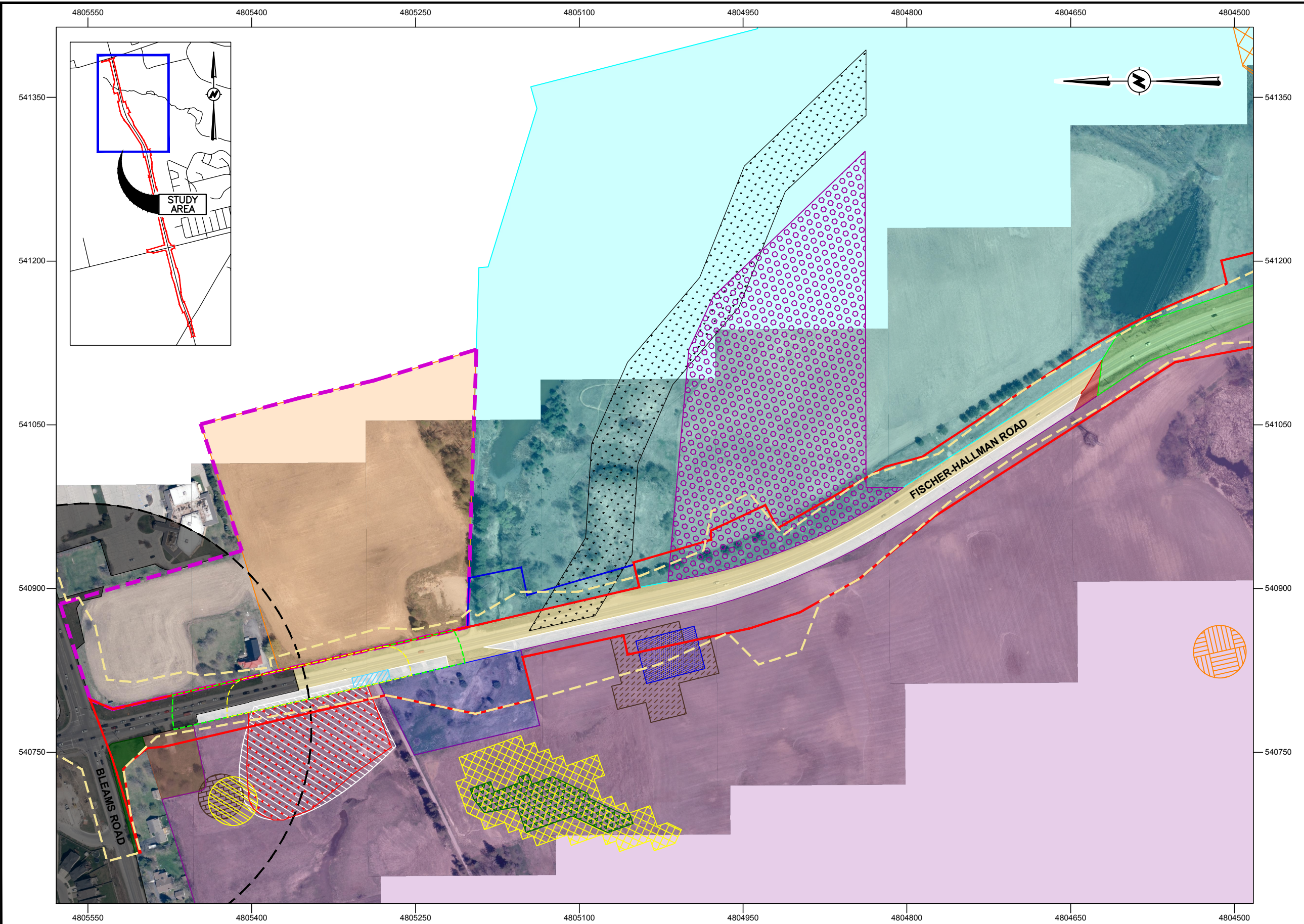
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Section 1

Figures



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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
AERIAL PHOTOGRAPH OF STUDY AREA SHOWING
PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

LEGEND:

- ARCHAEOLOGICAL ASSESSMENT (CIF 89-021, 89-049, 89-064; MAYER, POULTON AND ASSOCIATES, 1989; REPORT NOT AVAILABLE - STUDY AREA OBTAINED FROM ARA 2017.8)
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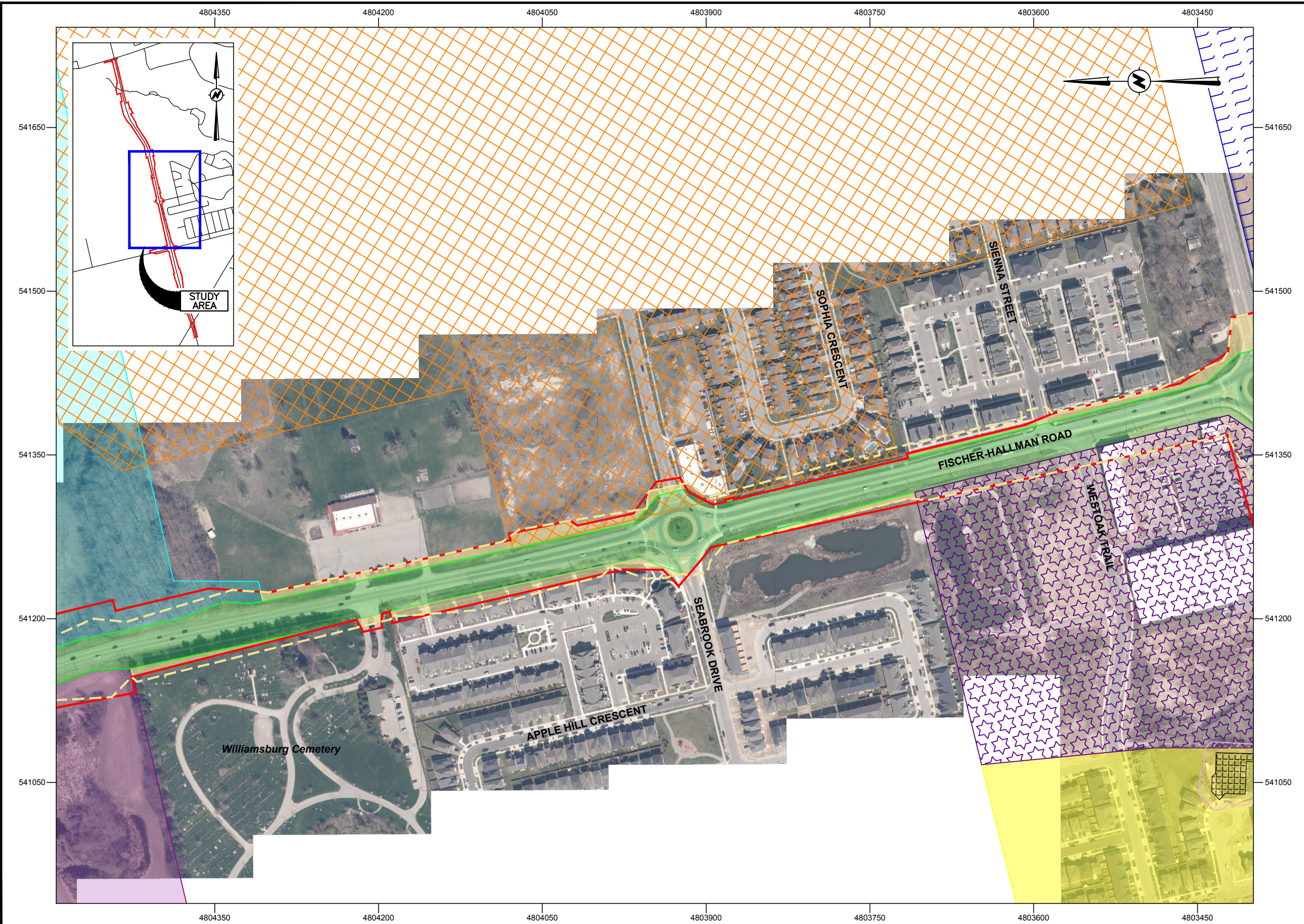
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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
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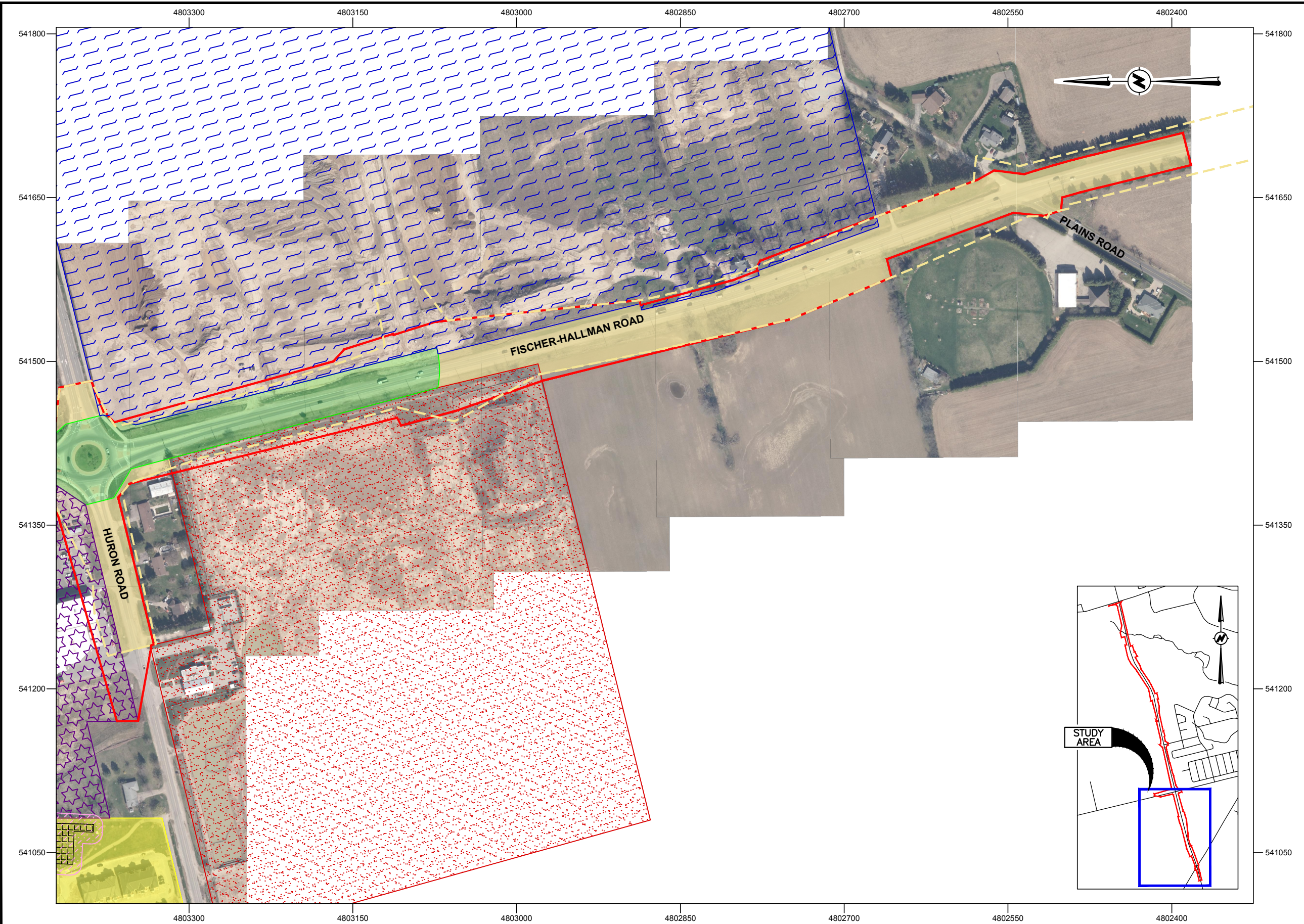
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Region of Waterloo
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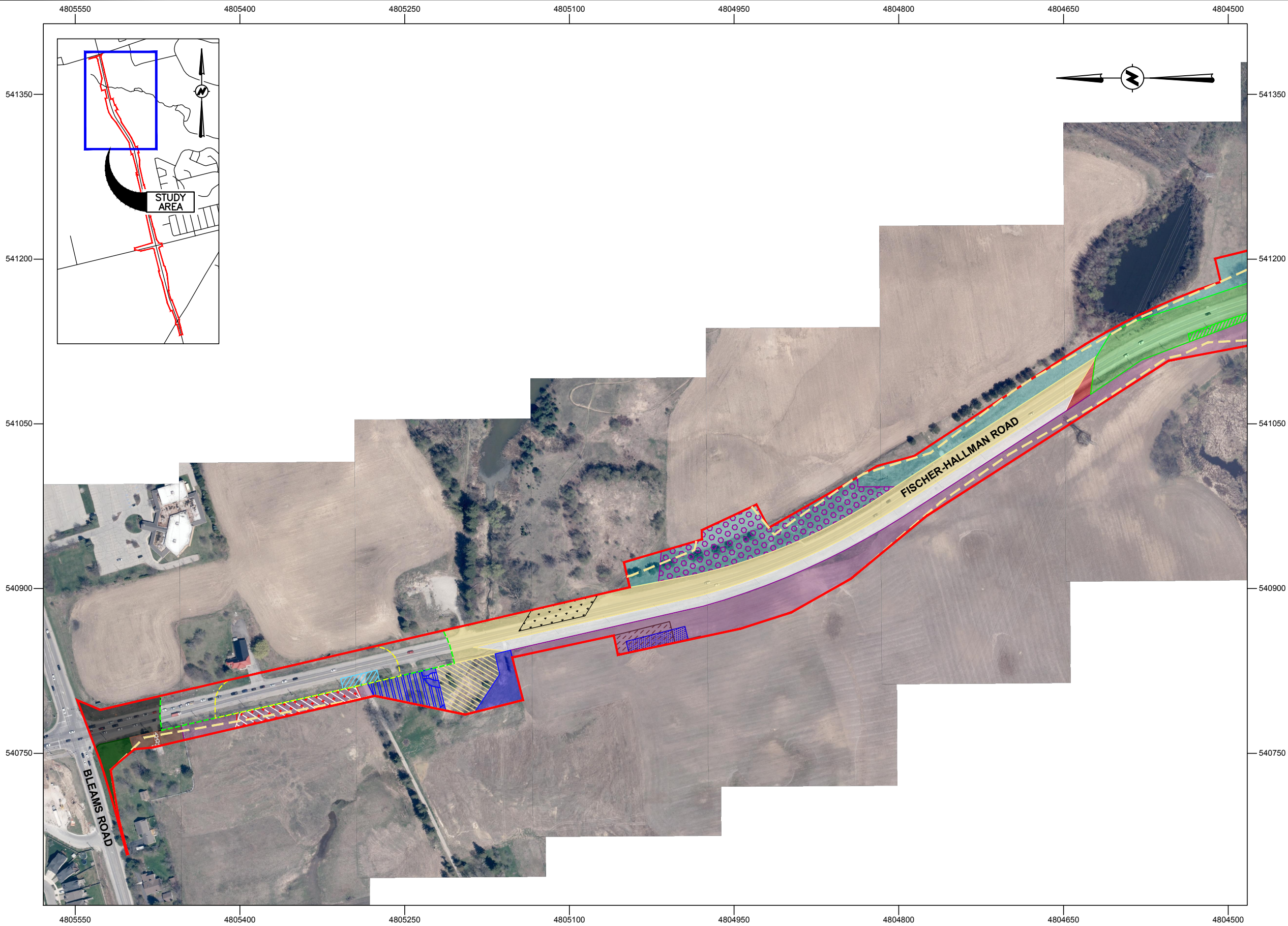
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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:

STAGE 1 RESULTS

- LEGEND:
- STUDY AREA (CURRENT INVESTIGATION)
 - NO FURTHER WORK RECOMMENDED
 - ARCHAEOLOGICAL ASSESSMENT (CIF 89-021, 89-049, 89-064; MAYER, POULTON AND ASSOCIATES, 1989; REPORT NOT AVAILABLE - STUDY AREA OBTAINED FROM ARA 2017.8)
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 - STAGE 2 ARCHAEOLOGICAL ASSESSMENT (PIF P348-0043-2018; Wood 2019)
 - NO ARCHAEOLOGICAL POTENTIAL - DISTURBED, STEEPLY SLOPED OR LOW LYING AND WET
 - STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P007-339-2011; ARA 2011)
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 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P007-501-2012; ARA 2013)
 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT, SHOVEL TESTED: FOUND TO BE DISTURBED (PIF P007-501-2012; ARA 2013)
 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P001-695-2012; STANTEC 2013)
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 - DISTURBED - TOPSOIL REMOVED (CURRENT INVESTIGATION)
 - LOW LYING AND WET (CURRENT INVESTIGATION)
 - ARCHAEOLOGICAL POTENTIAL - FURTHER WORK REQUIRED
 - STAGE 1 ARCHAEOLOGICAL ASSESSMENT; STAGE 2 AA REQUIRED (TO BE TEST PITTED AT 5m INTERVALS) (PIF P392-0106-2014; ASI 2016)
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 - STAGE 2 ARCHAEOLOGICAL ASSESSMENT REQUIRED (TO BE TEST PITTED AT 5m INTERVALS - CURRENT INVESTIGATION)
 - STAGE 2 ARCHAEOLOGICAL ASSESSMENT REQUIRED (TO BE PEDESTRIAN SURVEYED AT 5m INTERVALS - CURRENT INVESTIGATION)

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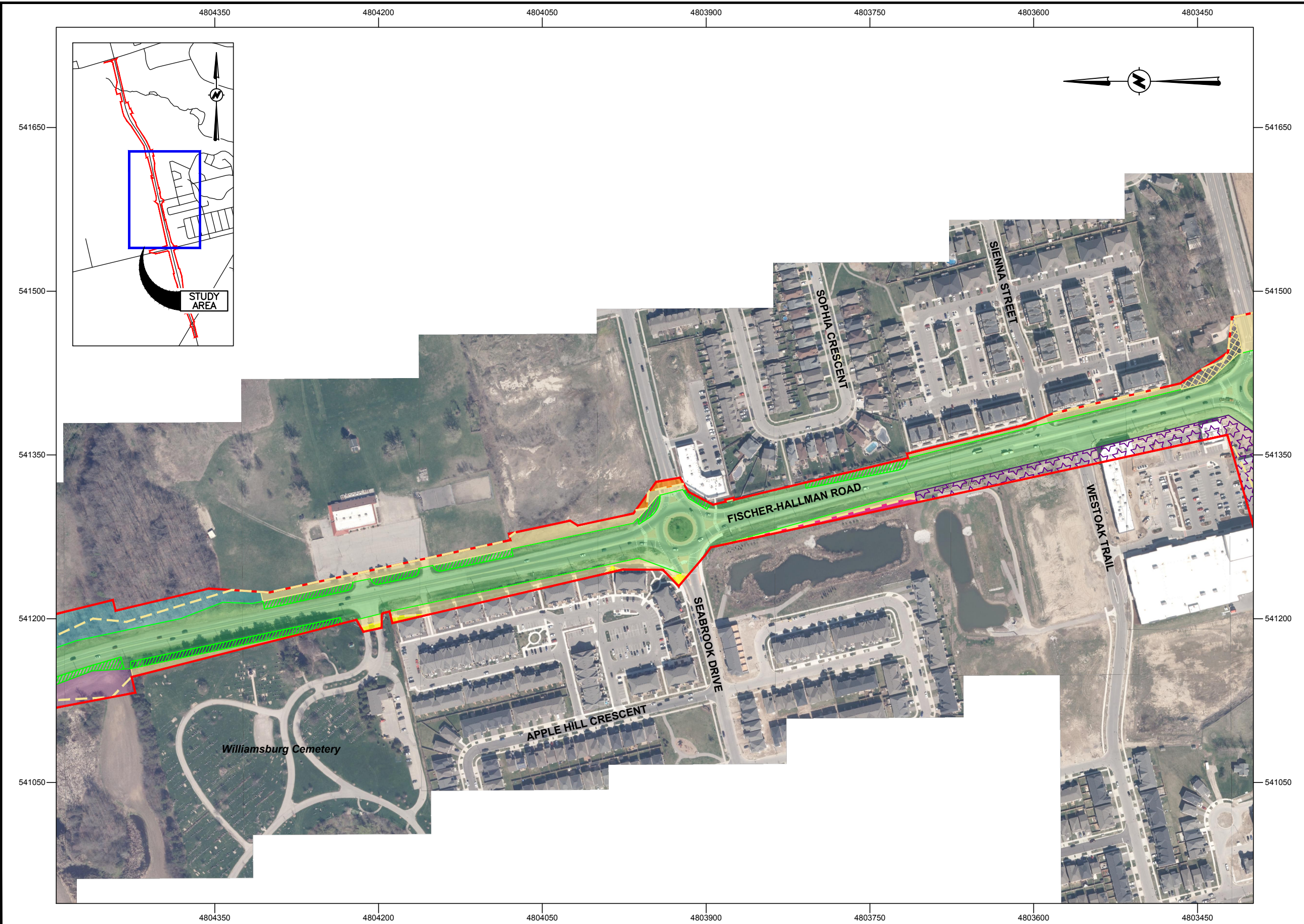




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STAGE 1 RESULTS

LEGEND:

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NO FURTHER WORK RECOMMENDED

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STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P001-695-2012; STANTEC 2013)

STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0382-2015; STANTEC 2016a)

STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0358-2015; STANTEC 2016c)

STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0361-2015; STANTEC 2016e)

STAGE 4 ARCHAEOLOGICAL ASSESSMENT (PIF P344-0076-2016; BLUESTONE 2017b)

STAGE 4 ARCHAEOLOGICAL ASSESSMENT (PIF P344-0108-2016; BLUESTONE 2018)

STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P083-0288-2016; STANTEC 2017)

STAGE 2 ARCHAEOLOGICAL ASSESSMENT (PIF P348-0039-2018; Wood 2018)

STAGE 2 ARCHAEOLOGICAL ASSESSMENT (PIF P348-0043-2018; Wood 2019)

NO ARCHAEOLOGICAL POTENTIAL - DISTURBED, STEEPLY SLOPED OR LOW LYING AND WET

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P007-339-2011; ARA 2011)

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P094-120-2012; ASI 2012)

STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P007-501-2012; ARA 2013)

STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT, SHOVEL TESTED: FOUND TO BE DISTURBED (PIF P007-501-2012; ARA 2013)

STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P001-695-2012; STANTEC 2013)

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P392-0106-2014; ASI 2016)

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, STEEPLY SLOPED (PIF P392-0106-2014; ASI 2016)

STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P256-0382-2015; STANTEC 2016a)

DISTURBED - TOPSOIL REMOVED (CURRENT INVESTIGATION)

LOW LYING AND WET (CURRENT INVESTIGATION)

ARCHAEOLOGICAL POTENTIAL - FURTHER WORK REQUIRED

STAGE 1 ARCHAEOLOGICAL ASSESSMENT; STAGE 2 AA REQUIRED (TO BE TEST PITTED AT 5m INTERVALS) (PIF P392-0106-2014; ASI 2016)

ESTIMATED AREA RECOMMENDED FOR STAGE 3 AA (SUBJECT TO CHANGE DEPENDING ON FINDINGS) (PIF P348-0043-2018; Wood 2019)

20m PROTECTIVE BUFFER (PIF P348-0043-2018; Wood 2019)

50m MONITORING BUFFER (PIF P348-0043-2018; Wood 2019)

STAGE 2 ARCHAEOLOGICAL ASSESSMENT REQUIRED (TO BE TEST PITTED AT 5m INTERVALS - CURRENT INVESTIGATION)

STAGE 2 ARCHAEOLOGICAL ASSESSMENT REQUIRED (TO BE PEDESTRIAN SURVEYED AT 5m INTERVALS - CURRENT INVESTIGATION)

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REFERENCES:
2018 AERIAL PHOTOGRAPHS BY THE REGION OF WATERLOO; CANMAP STREETFILES V2008.4.

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SJL

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NAD83

REV No:
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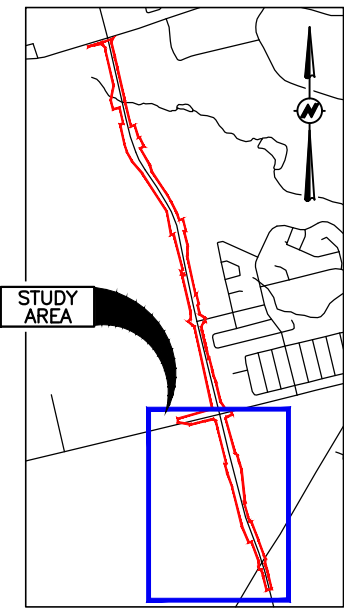
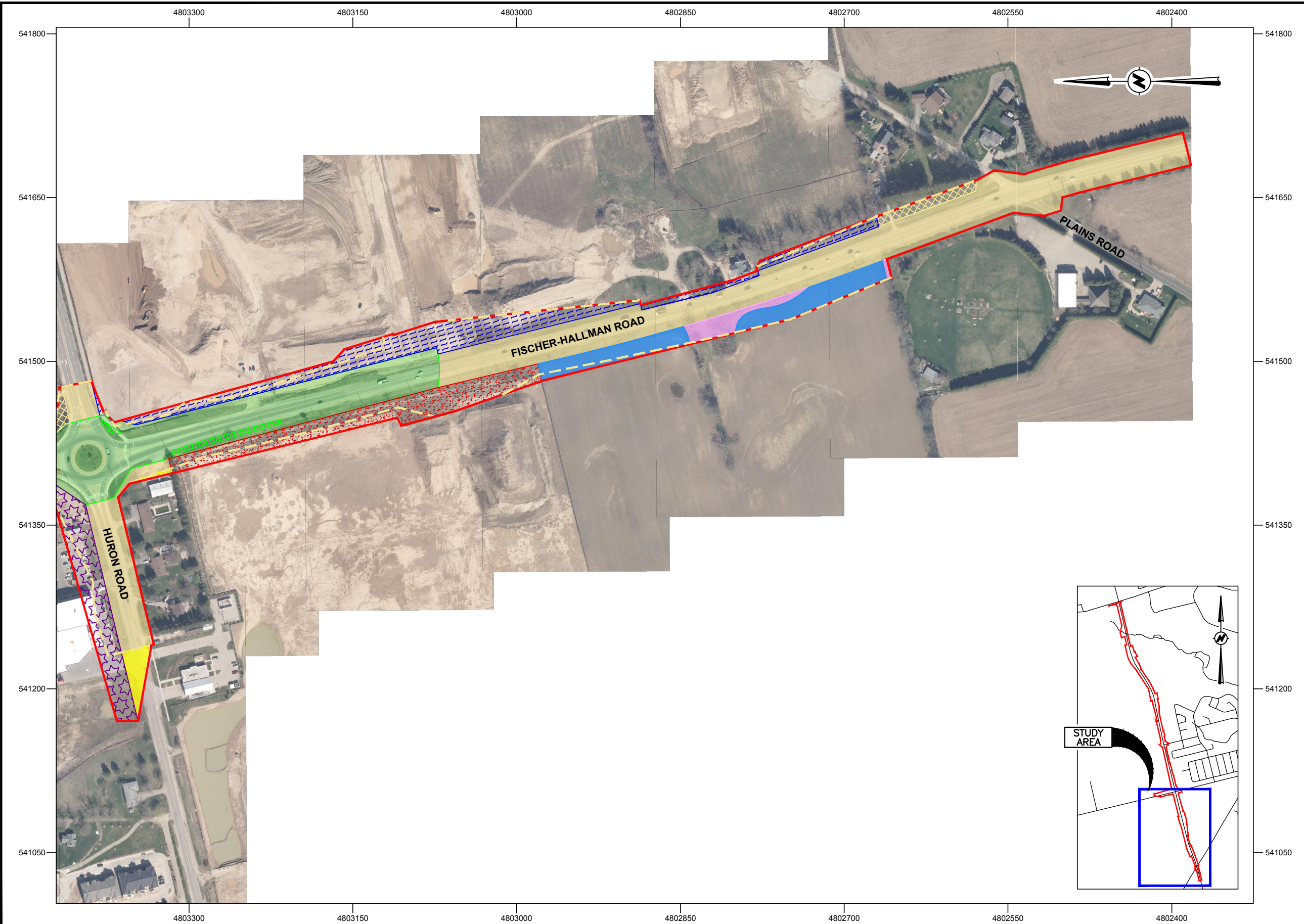
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UTM Zone 17

DATE:
MAR. 20, 2019

PROJECT No:
SWW181149.3000

FIGURE No:
8B

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SJL	BS	MAR. 20, 2019
DATUM:	PROJECTION:	PROJECT No:
NAD83	UTM Zone 17	SWW181149.3000
REV No:		FIGURE No:
1		8C

PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:

STAGE 1 RESULTS

- LEGEND:
- STUDY AREA (CURRENT INVESTIGATION)
 - NO FURTHER WORK RECOMMENDED
 - ARCHAEOLOGICAL ASSESSMENT (CIF 89-021, 89-049, 89-064; MAYER, POULTON AND ASSOCIATES, 1989; REPORT NOT AVAILABLE - STUDY AREA OBTAINED FROM ARA 2017.8)
 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (CIF 2001-082-001; ARA 2001)
 - ARCHAEOLOGICAL ASSESSMENT (PIF P007-071-2005, P007-185-2008; ARA 2008; REPORT NOT AVAILABLE - STUDY AREA OBTAINED FROM ARA 2017.8)
 - STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT (PIF P084-030-2006 & P084-087-2006; ARCHAEOLOGIX 2007)
 - STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT (PIF P007-164-2008, P007-165-2008; REPORT NOT AVAILABLE - STUDY AREA OBTAINED FROM ARA 2017.8)
 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P007-167-2008; ARA 2010)
 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P379-009-2012; STANTEC 2012)
 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P001-695-2012; STANTEC 2013)
 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0382-2015; STANTEC 2016a)
 - STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0358-2015; STANTEC 2016c)
 - STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0361-2015; STANTEC 2016a)
 - STAGE 4 ARCHAEOLOGICAL ASSESSMENT (PIF P344-0076-2016; BLUESTONE 2017b)
 - STAGE 4 ARCHAEOLOGICAL ASSESSMENT (PIF P344-0108-2016; BLUESTONE 2018)
 - STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P083-0288-2016; STANTEC 2017)
 - STAGE 2 ARCHAEOLOGICAL ASSESSMENT (PIF P348-0039-2018; Wood 2018)
 - STAGE 2 ARCHAEOLOGICAL ASSESSMENT (PIF P348-0043-2018; Wood 2019)
 - NO ARCHAEOLOGICAL POTENTIAL - DISTURBED, STEEPLY SLOPED OR LOW LYING AND WET
 - STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P007-339-2011; ARA 2011)
 - STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DISTURBED (PIF P094-120-2012; ASI 2012)
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Original Report: Stage 1 Archaeological Assessment:

Fisher-Hallman Road Improvements, from Bleams Road to
140 m south of Plains Road, City of Kitchener, Regional
Municipality of Waterloo, Ontario
Project #SWW1181149.3000

Archaeological Consulting License # P348 (Slim)

P.I.F. # P348-0049-2019(Stage 1)

{Associated with P094-120-2012 (Stage 1) and P392-0106-2014 (Stage 1)}

Prepared for:

Regional Municipality of Waterloo

Design & Construction, 150 Frederick Street, 6th Floor, Kitchener, Ontario N2G 4J3

21-Mar-19

Stage 1 Archaeological Assessment

Fisher-Hallman Road Improvements, from Bleams Road to 140 m south of Plains Road, City of Kitchener, Regional Municipality of Waterloo, Ontario

Project # SWW181149.3000

Prepared for:

Regional Municipality of Waterloo

Design & Construction, 150 Frederick Street, 6th Floor, Kitchener, Ontario N2G 4J3

And

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21-Mar-19

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Executive Summary

Wood Environment & Infrastructure Solutions ("Wood") was retained Region of Waterloo to conduct a Stage 1 archaeological assessment in support of future road improvements to Fischer-Hallman Road from Bleams Road to 140 m south of Plains Road in Kitchener, Ontario. This archaeological assessment was triggered under the Environmental Assessment Act and was conducted prior to development. The study area was historically described as Part of the Hiestand Tract, Part of the Bechtel Tract, Part of Lots 151 to 160, German Company Tract Small Lots, and Part of Lot 8, Beasley's New Survey, Township of Waterloo, County of Waterloo (Appendix A: Figures 1, 2 and 3) and is approximately 17.6 hectares in size.

A Stage 1 archaeological assessment covering the present study area was completed by Archaeological Services Inc. ("ASI") in 2016 (Appendix A: Figure 6). ASI's (2016) study was completed as part of a Class Environmental Assessment (EA) associated with the Fischer-Hallman Road Improvements and encompassed the area alongside Fischer-Hallman Road from Bleams Road to the south of Plains Road in Kitchener, Ontario. The original Stage 1 archaeological assessment (ASI 2016) recommending further work was triggered under the Region of Waterloo's municipal Environmental Assessment ("EA") process prior to the proposed widening of Fischer-Hallman Road. The Class EA Study for road improvements to Fischer-Hallman Road from Bleams Road to south of Plains Road was approved by Regional Council on March 2nd, 2016. The Environmental Study Report was placed on the 30-day public record on March 22nd, 2016. A Part 'II' Order request from a property developer west of the project limits was received by the Minister of Environment and Climate Change on April 21st, 2016. Upon the Ministry of Environment and Climate Change having reviewed the information requested and was found to be satisfactory, the Class EA Study for road improvements to Fischer-Hallman Road was subsequently approved by the Minister of Environment and Climate Change on April 10, 2017. The purpose of this Stage 1 archaeological investigation is to update information on any additional studies that have been completed within the study area since the completion of ASI's report and to summarize all pertinent recommendations.

The Stage 1 archaeological assessment was carried out in accordance with the Ontario Ministry of Tourism, Culture and Sport's ("MTCS") *Standards and Guidelines for Consultant Archaeologists* (2011), under an Ontario Professional Licence to Conduct Archaeological Fieldwork (P348) held by Barbara Slim, Senior Archaeologist at Wood. The project information was acknowledged by the MTCS on 11 February 2019 with the approval of PIF number P348-0049-2019.

The Stage 1 background study has indicated that undisturbed portions of the subject property have archaeological potential and warrant Stage 2 property assessment for 5 principal reasons: 1) the close proximity of a natural water source that transects the study area; 2) the known presence of 81 archaeological sites located within 1km of the study area providing direct evidence that this general area had been exploited by Aboriginal/historic Euro-Canadian peoples; 3) the presence of an archaeological site located within the current study area, site AiHc-414; 4) the location of the study area within 100 metres of historical transportation routes, including Fischer-Hallman Roads; 5) known Euro-Canadian historical buildings located within the study area including a farmstead on Lot 151 German Company Lots Small Tract.

Based on a review of recent land use, archaeological and historical data, it has been determined that various portions of the study area have had archaeological potential removed by development and accompanying disturbances as shown on Figures 8A to 8C in the accompanying supplementary documents.

As shown on Figure 8, there are several areas that have not undergone previous assessment but have been identified as being disturbed during current Stage 1 research (Supplementary Documents: Figures 8B and 8C). These previously disturbed areas exhibit low archaeological potential and require no further fieldwork.

Further Stage 2 fieldwork is recommended for areas that retain archaeological potential as follows: a) woodlot located on the northeast corner of Huron Road and Fischer-Hallman Road; b) landscaped area located on the northeast corner of Plains Road and Fischer-Hallman Road; c) woodlots and agricultural fields located alongside the western edge of Fischer-Hallman Road (north of Plains Road). A Stage 2 archaeological assessment in the form of a test pit survey should be conducted on the landscaped areas and woodlots (totaling 0.29 hectares in size) as shown in Supplementary Documents: Figures 8B and 8C. A Stage 2 archaeological assessment in the form of a pedestrian survey should be conducted on the agricultural fields (totaling 0.47 hectares in size) as shown in Supplementary Documents: Figure 8C.

In addition, Stage 3 excavations have been recommended for the portion of Site AiHc-414 that is located within the study area, as shown in Supplementary Documents: Figure 8A. This site was encountered within a 23-m by 3-m area during the Stage 2 assessment (Wood 2019). These artifacts are associated with a registered Middleport village site, AiHc-414. Archaeological site AiHc-414 was mitigated to the west of the existing study area by Bluestone in 2017. Based on the results from this assessment, Wood (2019) recommended that a Stage 3 site-specific assessment be completed at the remaining component of AiHc-

414. The required 20-m protective buffer and 50-m monitoring buffer was also identified (Supplementary Documentation: Figure 5A).

In light of these results, the following recommendations are made, subject to the advice on compliance with legislation contained in Section 5.0:

- 1) A Stage 2 archaeological assessment in the form of a pedestrian survey should be conducted on the agricultural fields (0.47 hectares in size) as shown in Supplementary Documents: Figure 8C. The fields must be ploughed by means of mouldboard ploughing or disk harrowing techniques. At least 80% of the ground surface must be visible in order to conduct a pedestrian survey. The fields should be allowed to weather through one heavy, or several light rainfalls to improve surface visibility. Areas of archaeological potential are surveyed at regular five-meter interval transects.

If archaeological resources are encountered, the 5 m transect should be decreased to 1 m intervals over a minimum of 20 m radius around the archaeological find until the full extent of the scatter has been identified or if it is determined that it is an isolated find. All formal artifact types and diagnostic categories are to be collected and enough artifacts should be left *in-situ* to relocate the site in the event that it is necessary to conduct further assessment. The exact location of archaeological resources should be documented using one or more of a combination of: the Global Positioning System, topographic survey or other precision measurements. These resources are then inventoried.

- 2) A Stage 2 archaeological assessment in the form of a test pit survey should be conducted on the landscaped areas and woodlots (0.29 hectares in size) as shown in Supplementary Documents: Figures 8B and 8C. The test pits should be excavated by hand at regular five-metre intervals in a grid-pattern and to a depth of 5 cm into the subsoil. The stratigraphy of soils excavated during test pitting should be examined in order to detect cultural soil horizons. In addition, excavated soils are to be screened through ¼ inch (6 mm) mesh in order to facilitate the recovery of archaeologically significant artifacts.

The pattern and intensity of test pit placement may be altered due to changes in archaeological potential in different parts of a study area and/or the presence of disturbed soils. Any areas of 'disturbance' should be evaluated and photo-documented.

If archaeological resources are found their exact distribution should be documented and any diagnostic artifacts recovered and inventoried. Upon discovery of cultural materials, the survey grid should be continued to determine whether there are enough archaeological resources to meet the criteria for making a recommendation to carry out a Stage 3 assessment. In the event that insufficient archaeological resources are recovered, eight additional test-pits are to be dug in a 2 to 2.5 metre radius around the positive test-pit, followed by the excavation of a 1 x 1 m unit at the positive test pit. Cultural artifacts encountered are to be collected and bagged according to provenience.

- 3) As described on the Stage 2 Archaeological Assessment completed by Wood (2019; PIF P348-0043-2018), Despite previous disturbance to some topsoils, portions of archaeological Site AiHc-414 exhibit cultural heritage value or interest and warrant Stage 3 site-specific assessment. The site represents a Late Woodland period village site where it is certain that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 mitigation.

Stage 3 fieldwork will involve establishing a permanent grid on the site followed by the hand excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by the hand excavation of additional test units, amounting to 40 percent of the grid unit total, focusing on areas of interest within the site (such as distinct areas of higher concentrations of artifacts) as per Section 3.2.2 and Table 3.2.1 of the *Standards and Guidelines for Consultant Archaeologists*. If any features are encountered they will be addressed as per Section 3.2.2 Standard 6 where their plan shapes will be recorded, before they are covered with geotextile fabric followed by a small amount of dirt placed by hand.

Figures 5A and 8A show the estimated extent of the Stage 3 study area recommended for further work, as well as the required 20-m protective buffer and 50-m monitoring buffer.

- a. Monitoring of construction activities has been recommended for all areas within the 50-m monitoring buffer zone, as shown on Appendix A: Figures 11 and 12. A licensed archaeologist will be retained by the Region of Waterloo and must have full access to the areas being excavated to monitor for cultural features or deposits containing archaeological materials. A monitoring schedule must be arranged prior to construction.
- b. If archaeological resources are identified, all construction activities must cease in that area and the archaeologist(s) must have safe access to the

construction area in which the resources are found in order to examine and document these resources fully.

- c. The construction contractor and site foreman shall be made aware of the need for archaeological monitoring and will inform the project archaeologist of the projected schedule, providing them with at least 48 hours' notice prior to the actual construction excavation. The project archaeologist shall be made aware of any safety concerns associated with the construction work in order to meet health and safety requirements.
 - d. Should archaeological material be discovered outside of the monitored area, or when the project archaeologist is not present, the archaeologist must be contacted to determine the significance of the material.
- 4) The Williamsburg Cemetery is documented to be adjacent to the existing ROW property boundary. The cemetery lands should be avoided by the Fischer-Hallman Road Improvements detail design.
- 5) The remainder of the study area does not require further archaeological assessment.

The above recommendations are subject to Ministry of Tourism, Culture and Sport approval, and it is an offence to alter any of the study area without Ministry of Tourism, Culture, and Sport concurrence.

No grading or other activities that may result in the destruction or disturbance to the study area is permitted until notice of Ministry of Tourism, Culture, and Sport approval has been received.

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Figure 4A-C	Development Plan
Figure 6	1861 Tremaine's Map of the County of Waterloo showing Location of Study Area
Figure 7	1881 Historical Atlas of Waterloo Township, County of Waterloo showing Location of Study Area

APPENDIX B: ASSESSOR QUALIFICATIONS

APPENDIX C: LIMITATIONS

SUPPLEMENTARY DOCUMENTATION

SECTION 1: FIGURES

Figure 5A-C	Aerial Photograph of Study Area showing Previous Archaeological Investigations
Figure 8A-C	Stage 1 Results

Project Personnel

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Project Manager:	Barbara Slim, M.A.
Report Preparation:	Barbara Slim, M.A. Kristy O'Neal (P066) Chelsea Dickinson (R1194)
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1.0 Project Context

1.1 Development Context

Wood Environment & Infrastructure Solutions ("Wood") was retained Region of Waterloo to conduct a Stage 1 archaeological assessment in support of future road improvements to Fischer-Hallman Road from Bleams Road to 140 m south of Plains Road in Kitchener, Ontario. This archaeological assessment was triggered under the Environmental Assessment Act and was conducted prior to development. The study area was historically described as Part of the Hiestand Tract, Part of the Bechtel Tract, Part of Lots 151 to 160, German Company Tract Small Lots, and Part of Lot 8, Beasley's New Survey, Township of Waterloo, County of Waterloo (Appendix A: Figures 1, 2 and 3) and is approximately 17.6 hectares (38.7 acres) in size.

A Stage 1 archaeological assessment covering the present study area was completed by Archaeological Services Inc. ("ASI") in 2016 (Appendix A: Figure 6). ASI's (2016) study was completed as part of a Class Environmental Assessment (EA) associated with the Fischer-Hallman Road Improvements and encompassed the area alongside Fischer-Hallman Road from Bleams Road to south of Plains Road in Kitchener, Ontario. The original Stage 1 archaeological assessment (ASI 2016) recommending further work was triggered under the Region of Waterloo's municipal Environmental Assessment ("EA") process prior to the proposed widening of Fischer-Hallman Road. The Class EA Study for road improvements to Fischer-Hallman Road from Bleams Road to south of Plains Road was approved by Regional Council on March 2nd, 2016. The Environmental Study Report was placed on the 30-day public record on March 22nd, 2016. A Part 'II' Order request from a property developer west of the project limits was received by the Minister of Environment and Climate Change on April 21st, 2016. Upon the Ministry of Environment and Climate Change having reviewed the information requested and was found to be satisfactory, the Class EA Study for road improvements to Fischer-Hallman Road was subsequently approved by the Minister of Environment and Climate Change on April 10, 2017. The purpose of this Stage 1 archaeological investigation is to update information on any additional studies that have been completed within the study area since the completion of ASI's report and to summarize all pertinent recommendations.

The Stage 1 archaeological assessment was carried out in accordance with the Ontario Ministry of Tourism, Culture and Sport's ("MTCS") Standards and Guidelines for Consultant Archaeologists (2011), under an Ontario Professional Licence to Conduct Archaeological Fieldwork (P348) held by Barbara Slim, Senior Archaeologist at Wood. The project information was acknowledged by the MTCS on 11 February 2019 with the approval of PIF

number P348-0049-2019. This report presents the results of the Stage 1 background study and makes pertinent recommendations.

1.2 Scope of Work

This Stage 1 archaeological assessment was carried out in accordance with the Terms of Reference provided in Wood's work agreement dated January 16, 2019.

A Stage 1 archaeological assessment is a systematic qualitative process executed in order to assess the archaeological potential of a property based on its historical use and its potential for early Euro-Canadian (early settler) and pre-contact Aboriginal occupation. The objectives of a Stage 1 background study are: 1) to provide information about the property's geography, history, previous archaeological fieldwork and current land condition; 2) to evaluate in detail the property's archaeological potential which will support recommendations for Stage 2 property assessment for all or parts of the property if warranted; and, 3) to recommend appropriate strategies for Stage 2 property assessment if warranted.

The Stage 1 background study was conducted in accordance with the *Standards and Guidelines for Consultant Archaeologists, 2011*, set out by the MTCS, and with the Ontario Heritage Act, R.S.O. 1990, c.0.18.

The scope of work for the Stage 1 background study consisted of the following tasks:

- Contacting the MTCS to determine if recorded archaeological sites exist in the vicinity (one-kilometre ["km"] radius) of the property, through a search of the Ontario Archaeological Sites Database maintained by that Ministry;
- Contacting the MTCS to determine if there are any known reports of previous archaeological field work within a radius of 50 metres ("m") around the study area;
- A desktop review of the study area's physical setting to determine its potential for both historic and pre-contact human occupation, including its topography, hydrology, soils, vegetation, and proximity to important resources and historic transportation routes;
- A review of the potential for historic occupation as documented in historical atlases and other archival sources;
- Mapping and other relevant graphics; and,
- Preparing a report of findings with recommendations regarding the need for further archaeological work if deemed necessary.

2.0 Stage 1 Background Study

As part of the Stage 1 archaeological assessment, Wood contacted MTCS to determine if archaeological sites have been registered within 1 km of the property (Section 2.1.1), and if previous archaeological assessments have been carried out within a 50-m radius (Section 2.1.2). Secondly, the principal determinants of archaeological potential—proximity to water, topography, drainage, soils, vegetation, and proximity to important resources and historically significant transportation routes—were examined in order to evaluate the property's overall archaeological potential (Sections 2.1, 2.1.3, 2.2, and 2.2.1). Thirdly, the specific potential for historic archaeological resources was assessed through an examination of available historical maps and other archival sources (Section 2.2).

2.1 Archaeological Context

2.1.1 Registered Archaeological Sites

Wood conducted the requisite Stage 1 background research. First, the MTCS was asked to search the Ontario Archaeological Sites Database in order to ascertain if previously registered archaeological sites have been identified in close proximity to the study area.

In Ontario, information concerning archaeology sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MTCS. This database contains archaeological registered sites within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on longitude and latitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referred to by a four-letter designation and sites located within the block are numbered sequentially as they are found. The subject property is located within the *AiHc* and *AiHd* Borden Blocks. On the basis of a search of the OASD (inquiries made to Mr. Rob von Bitter, Database Co-ordinator of MTCS), 81 registered archaeological sites are located within a 1-km radius.

Table 1 provides a summary of these sites:

Table 1: Registered Archaeological Sites within a 1-km Radius				
Borden	Site Name	Cultural	Site Type	Researcher
AiHd-96	Bruly	Aboriginal (Archaic, Early)	Findspot	Ronald Williamson (1990)
AiHd-95	Sacalait	Aboriginal (Pre-Contact)	Scatter	Ronald Williamson (1990)
AiHd-94	Nutria	Aboriginal (Pre-Contact)	Findspot	Ronald Williamson (1990)
AiHd-93	Tarbox	Aboriginal (Pre-Contact)	Findspot	Ronald Williamson (1990)

Table 1: Registered Archaeological Sites within a 1-km Radius				
Borden	Site Name	Cultural	Site Type	Researcher
AiHd-156	-	Aboriginal (Woodland, Middle)	Village	Paul Racher (2008)
AiHd-150	-	Aboriginal (Pre-Contact)	Findspot	Shaun Austin (2007)
AiHd-107	-	Aboriginal (Pre-Contact)	Unknown	Ronald Williamson (1994)
AiHc-92	Bleams Road - Corduroy Road	Euro-Canadian	Road	Scarlett Janusas (1989)
AiHc-88	Huron Business Park 4	Aboriginal (Pre-Contact)	Unknown	Ronald Williamson (1989)
AiHc-87	Huron Business Park 3	Aboriginal (Pre-Contact)	Findspot	Ronald Williamson (1989)
AiHc-86	Huron Business Park 2	Aboriginal (Archaic, Early)	Findspot	Ronald Williamson (1989)
AiHc-85	Huron Business Park 1	-	-	Ronald Williamson (1989)
AiHc-57	Off Corridor	-	-	Robert G. Mayer (1986)
AiHc-56	Williamsburg 2	Euro-Canadian	-	Robert G. Mayer (1986) & Scarlett Janusas (1986)
AiHc-55	Williamsburg 1	Euro-Canadian	House	Robert G. Mayer (1986) & Scarlett Janusas (1986)
AiHc-49	Glencairn 2	-	-	Robert G. Mayer (1986)
AiHc-482		Euro-Canadian	Unknown; Residential	Luke William Fischer (2017)
AiHc-481	Location 1	Aboriginal (Archaic, Late)	Camp/Campsite	Arthur Figura (2016)
AiHc-48	Glencairn 1	-	-	Robert G. Mayer (1986)
AiHc-479	-	Aboriginal (Pre-Contact)	Camp/Campsite	Irena Jurakic (2011)

Table 1: Registered Archaeological Sites within a 1-km Radius				
Borden	Site Name	Cultural	Site Type	Researcher
AiHc-472	findspot 2	Aboriginal (Woodland, Early)	-	Robert von Bitter (2014) & Paul Racher (2014)
AiHc-471	Findspot 1	-	-	Paul Racher (2014)
AiHc-460	-	Post-Contact & Aboriginal (Archaic, Late; Woodland, Middle)	Farmstead; Unknown; Camp/Campsite;	Tara Jenkins (2013)
AiHc-456	Location 2	-	-	Robert von Bitter (2013) & John David Sweeney (2013)
AiHc-455	AiHc-455-P2	Aboriginal (Archaic, Middle)	-	Bruce Welsh (1987)
AiHc-454	Ferguson Site	Euro-Canadian	Homestead	Bruce Welsh (1987) & Barry Gaulton (1979) & Jessica Lytle (2016)
AiHc-430	-	Euro-Canadian	Farmstead	Robert von Bitter (2008)
AiHc-429	Find Spot 29	Aboriginal (Archaic, Late)	Camp/Campsite	Paul Racher (2008) & Sarah Roe (2013) & Tara Jenkins (2013) & Derek Lincoln (2016)
AiHc-428	Location 28	Euro-Canadian & Iroquoian (Woodland, Late)	Unknown; Village	Paul Racher (2008) & Parker S. Dickson (2015)
AiHc-427	-	Euro-Canadian & Iroquoian (Woodland, Late)	Village	Paul Racher (2008) & Parker S. Dickson (2015) & Derek Lincoln (2016)

Table 1: Registered Archaeological Sites within a 1-km Radius				
Borden	Site Name	Cultural	Site Type	Researcher
AiHc-426	Location 25	Aboriginal (Archaic, Late; Archaic, Middle)	Camp/Campsite; Camp/Campsite	Paul Racher (2008) & Sarah Roe (2008) & Parker S. Dickson (2015) & Derek Lincoln (2016)
AiHc-425	AiHc-425	Aboriginal (Post-Contact; Pre-Contact)	Cabin; Midden	Paul Racher (2008) & Michael Teal (2013)
AiHc-424	Location 21	Euro-Canadian & Iroquoian (Woodland, Late)	Unknown; Village	Paul Racher (2008) & Parker S. Dickson (2015)
AiHc-423	-	Aboriginal (Archaic, Late)	Camp/Campsite	Paul Racher (2008) & Tara Jenkins (2013) & Derek Lincoln (2016)
AiHc-422	-	Euro-Canadian & Aboriginal (Pre-Contact)	-	Paul Racher (2008) & Tara Jenkins (2013)
AiHc-421	-	Aboriginal (Archaic, Middle)	Camp/Campsite	Robert von Bitter (2008) & Paul Racher (2008) & Derek Lincoln (2016) & Tara Jenkins (2013 &
AiHc-420	Location 12- 15 (AfHi-420)	Aboriginal (Archaic, Middle)	Camp/Campsite	Paul Racher (2008) & Derek Lincoln (2016)
AiHc-419	-	-	-	Paul Racher (2008)
AiHc-418	-	Euro- Canadian	Midden	Paul Racher (2008)
AiHc-417	Location 7	Aboriginal (Archaic)	Scatter	Paul Racher (2008) & Parker S. Dickson (2015)

Table 1: Registered Archaeological Sites within a 1-km Radius				
Borden	Site Name	Cultural	Site Type	Researcher
AiHc-416	Location 4	Iroquoian (Woodland, Late)	Village	Paul Racher (2008) & Robert von Bitter (2015) & Parker S. Dickson (2015) & Derek Lincoln (2016)
AiHc-415	Location 2	Aboriginal (Pre-Contact)	Scatter	Paul Racher (2008) & Parker S. Dickson (2015) & Derek Lincoln (2016)
AiHc-414	Location 1	Euro-Canadian & Iroquoian (Woodland, Late)	Unknown; Village	Parker S. Dickson (2015) & Derek Lincoln (2016) & N.A. (2008)
AiHc-413	-	-	-	Racher, Paul (2009)
AiHc-389	-	Aboriginal (Woodland, Late)	Other: Camp/Campsite	Racher, Paul (2006)
AiHc-370	-	Aboriginal (Pre-Contact)	Scatter	Shaun Austin (2007)
AiHc-369	-	Aboriginal (Pre-Contact)	Findspot	Shaun Austin (2007)
AiHc-368	-	Aboriginal (Pre-Contact)	Scatter	Shaun Austin (2007)
AiHc-364	Becker Estates	Aboriginal (Pre-Contact)	Other: Camp/Campsite; Scatter	Adam Hossack (2006)
AiHc-363	Becker Estates	Other	Other: Camp/Campsite	Adam Hossack (2006)
AiHc-362	Hewitt Farm Dump Site	Euro-Canadian	Dump	Shaun Austin (2007)
AiHc-361	AiHc-361	Aboriginal (Archaic, Late; Post-Contact)	Scatter	Shaun Austin (2007) & Barry Gaulton (2013)
AiHc-360	AiHc-360	Aboriginal (Pre-Contact)	Findspot	Shaun Austin (2007) & Barry Gaulton (2013)

Table 1: Registered Archaeological Sites within a 1-km Radius				
Borden	Site Name	Cultural	Site Type	Researcher
AiHc-359	-	Aboriginal (Pre-Contact)	Findspot	Shaun Austin (2007)
AiHc-358	Borsh	Euro-Canadian	Homestead	Jim Wilson (2013) & Alexis Dunlop (2013) & Barry Gaulton (2013)
AiHc-257	Cornfield	Aboriginal (Pre-Contact)	-	Paul Racher (2001)
AiHc-256	Fischer- Hallman	Aboriginal (Pre-Contact)	-	Isobel Ball (2001)
AiHc-255	Strasburg Creek Site	Aboriginal (Woodland, Late)	Village	Paul Racher (1983) & Isobel Ball (2001) & Paul Racher (2011)
AiHc-23	-	Other	Other: Camp/Campsite	Robert Pihl (1982)
AiHc-2	Moyer	Neutral, Iroquoian (Woodland, Late)	Village	- (1961)
AiHc-164	Keyoke	Aboriginal (Pre-Contact)	Scatter	Ronald Williamson (1990)
AiHc-163	Lujan	Aboriginal (Pre-Contact)	Findspot	Ronald Williamson (1990)
AiHc-122	-	Aboriginal (Pre-Contact)	Findspot	Robert G. Mayer (1990)
AiHc-121	-	Aboriginal (Pre-Contact)	Findspot	Robert G. Mayer (1990)
AiHc-120	-	Aboriginal (Pre-Contact)	Findspot	Robert G. Mayer (1990)
AiHc-119	-	Aboriginal (Pre-Contact)	Findspot	Robert G. Mayer (1990)
AiHc-118	-	Euro-Canadian	Homestead	Robert G. Mayer (1990)
AiHc-117	-	Aboriginal (Pre-Contact)	Unknown	Robert G. Mayer (1990)
AiHc-116	-	Aboriginal (Pre-Contact)	Unknown	Robert G. Mayer (1990)
AiHc-115	-	Aboriginal (Woodland, Late)	Unknown	Robert G. Mayer (1990)

Table 1: Registered Archaeological Sites within a 1-km Radius				
Borden	Site Name	Cultural	Site Type	Researcher
AiHc-114	-	Aboriginal (Pre-Contact)	Findspot	Robert G. Mayer (1990)
AiHc-113	-	Aboriginal (Pre-Contact)	Unknown	Robert G. Mayer (1990)
AiHc-112	-	Aboriginal (Pre-Contact)	Findspot	Robert G. Mayer (1990)
AiHc-111	-	Aboriginal (Pre-Contact)	Findspot	Robert G. Mayer (1990)
AiHc-110	-	Aboriginal (Pre-Contact)	Findspot	Robert G. Mayer (1990)
AiHc-109	-	Aboriginal (Pre-Contact)	Unknown	Robert G. Mayer (1990)
AiHc-108	-	Aboriginal (Pre-Contact; Woodland, Early)	Other: Camp/Campsite; Other: Camp/Campsite	Robert G. Mayer (1990)
AiHc-107	-	Aboriginal (Pre-Contact)	Unknown	Robert G. Mayer (1990)
AiHc-106	-	Aboriginal (Pre-Contact)	Unknown	Robert G. Mayer (1990)
AiHc-105	-	Aboriginal (Pre-Contact)	Unknown	Robert G. Mayer (1990)
AiHc-104	-	Aboriginal (Pre-Contact)	Unknown	Robert G. Mayer (1990)

2.1.2 History of Archaeological Investigations

A request for relevant reports within 50 m of the study area was also placed with MTCS on 15 February 2019 and 01 March 2019. Enquiries to the MTCS and Region of Waterloo indicated that the following archaeological assessments have been conducted within 50 m of the subject lands:

Table 2: Related Archaeological Assessment Reports			
Year	Title	Author	PIF
2012	Stage 1 Archaeological Assessment: Background Study and Property Inspection: Fischer-Hallman Road, Class Environmental Assessment Study, German Company Tract (Lot 37), Hiestands Tract, Bechtels Tract, Former Township of Waterloo, Waterloo County, City of Kitchener, Ontario.	ASI	PIF P094-120-2012
2016	Stage 1 Archaeological Assessment: Fischer-Hallman Road Improvements from Bleams Road to Plains Road (Former Township of Waterloo, County of Waterloo) Regional Municipality of Waterloo, Ontario	ASI	P392-0106-2014

Table 2: Related Archaeological Assessment Reports			
Year	Title	Author	PIF
2013	Stage 1 and 2 Archaeological Assessment: New Kitchener Zone 4 Trunk Watermain Class Environmental Assessment, City of Kitchener, Regional Municipality of Waterloo, Multiple Lots and Concessions, Geographic Township of Waterloo, Former Waterloo County, Ontario	ARA	P007-501-2012
West Boulevard: Fischer-Hallman Road from Bleams Road to Seabrook Drive			
2018	Stage 2 Archaeological Assessment: Parts 3 And 4 On Reference Plan 58r-19075, 1375 Bleams Road, Kitchener, Ontario	Wood	P348-0039-2018
2016	Stage 1 and 2 Archaeological Assessment: Williamsburg South Subdivision, 1255 Fischer-Hallman Road. Part of the Histan Tract, Geographic Township of Waterloo, Now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario.	Stantec	PIF P256-0382-2015
2010	Stage 1 and 2 Archaeological Assessment: Williamsburg South Property, 1291 Fischer-Hallman Road, Part of Lot 2, RCP 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario.	ARA	PIF P007-167-2008
2016	Stage 3 Archaeological Assessment: Location 2 (AiHc-415), Williamsburg South Subdivision, 1291 Fischer-Hallman Road.	Stantec	P256-0356-2015
2017	Stage 4 Archaeological Mitigation of Williamsburg South Location 2 (AiHc-415) at 1291 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario.	Bluestone Research Inc.	P344-0077-2016
2016	Stage 3 Archaeological Assessment: Location 1 (AiHc-414), Williamsburg South Subdivision, 1291 Fisher-Hallman Road.	Stantec	P256-0358-2015
2017	Preliminary Report: Stage 4 Archaeological Mitigation of Williamsburg South Location 1 (AiHc-414) at 1291 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario.	Bluestone Research Inc.	P344-0076-2016
2016	Stage 3 Archaeological Assessment: Locations 21 (AiHc-424), 27 (AiHc-427) and 28 (AiHc-428), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of Historical Tract, Geographic Township of Waterloo, former Waterloo County, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo.	Stantec	P256-0360-2015; P256-0362-2015 and P256-0364-2015

Table 2: Related Archaeological Assessment Reports			
Year	Title	Author	PIF
2017	Preliminary Report: Stage 4 Archaeological Mitigation of Williamsburg South Location 27 (AiHc-427) at 1291 Fischer-Hallman Road, Part of the Histland Tract, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario.	Bluestone Research Inc.	P344-0080-2016
2016	Stage 3 Archaeological Assessment: Location 25 (AiHc-426), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Histland Tract, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario.	Stantec	P256-0361-2015
2017	Stage 4 Archaeological Mitigation of Williamsburg South Location 25 (AiHc-426) at 1291 Fischer Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	Bluestone Research Inc.	P344-0108-2016
2016	Stage 3 Archaeological Assessment: Location 7 (AiHc-417), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Histand Tract, Geographic Township of Waterloo, former Waterloo County, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario.	Stantec	P256-0359-2015
2019	Stage 2 Archaeological Assessment: Western Boulevard of Fischer-Hallman Road, between Bleams Road and north of Seabrook Drive, Plan of Survey, Part of Lots 2 and 3, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo	Wood	P348-0043-2018
2013	Stage 1 to 2 Archaeological Assessment: Mazmanian Property, Plan 1469, Lot South of Bleams Road, Hiestand Tract, Geographic Township of Waterloo, now City of Kitchener, Regional Municipality of Waterloo, Ontario.	Stantec	P001-695-2012
2011	Stage 1 Archaeological Assessment: Kitchener Zone 4 Trunk Watermain From Ottawa Street South to Strasburg Road, City of Kitchener, Regional Municipality of Waterloo, Ontario.	ARA	PIF P007-339-2011
East Boulevard: Fischer-Hallman Road from Bleams Road to Seabrook Drive			
2017	Stage 1 and 2 Archaeological Assessments: 1250, 1270, 1314 Fischer-Hallman Road, Zone Change and Site Plan Applications, City of Kitchener, Regional Municipality of Waterloo, Part of Bechtel's Tract, Geographic Township of Waterloo, Former Waterloo County, Ontario.	ARA	PIF P007-0784-2016

Table 2: Related Archaeological Assessment Reports			
Year	Title	Author	PIF
2014	Stage 1 and 2 Archaeological Assessment: Proposed Development at 1314 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Registrar's Compiled Plan 147, 4, Bechtel Tract, Geographic Township of Waterloo, Former Waterloo County, Ontario.	ARA	P007-0644-2014
1989	Archaeological Resource Assessment Survey, Draft Plans of Subdivision 30T-84004, 30T-89020, & 30T-90024, City of Kitchener, R.M. of Waterloo.	Mayer	CIF 89-021, 89-049, & 89-064
2018	Stage 1 & 2 Archaeological Assessment Parts 3, 4, 5 and 6 of Registered Plan 58R-19758 1340 Fischer-Hallman Road, Kitchener, Ontario.	Wood	P348-0041-2018
2008	Stage 1-3 Archaeological Assessment, Middle Strasburg Trunk Sanitary Sewer, Fischer-Hallman Road to Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	ARA	P007-164-2008 and P007-165-2008
2009	Stage 1, 2 and 3 Archaeological Assessment, Activa Fischer-Hallman Property, Lot 110, Broken Tract Concession, Kitchener, Ontario	ARA	P007-071-2005 and P007-185-2005
2001	Stage 1 & 2 Archaeological Assessment: Huron West Community, Regional Municipality of Waterloo, 30T-01201.	ARA	P2001-082-001
West Boulevard: Fischer-Hallman Road East Boulevard from Seabrook Drive to Plains Road			
2012	Stage 1-2 Archaeological Assessment, Pumpkin Patch Lands, Fischer-Hallman and Huron Road, Part of Lot 153, German Company Tract, Small Lots, Geo. Twp. Of Waterloo, Now Part 4, Plan 58R-8992 (PIN 22728-0021), City of Kitchener, R.M. Waterloo, Waterloo County, Ontario	Stantec	P379-009-2012
2012	Stage 2 Archaeological Assessment of the Doehn-Foster Property, Part of Lot 153, German Company Tract Small Lot, Geographic Township of Waterloo, County of Waterloo, Now in the City of Kitchener, Regional Municipality of Waterloo	ASI	P047-367-2012
2013	Stage 3 Archaeological Assessment of the Ferguson Site (AiHc-454), 1683 Huron Road, Part of Lot 153, German Company Tract Small Lot, Geographic Township of Waterloo, County of Waterloo, Now in the City of Kitchener, Regional Municipality of Waterloo	ASI	P375-002-2012

Table 2: Related Archaeological Assessment Reports			
Year	Title	Author	PIF
2016	Stage 4 Archaeological Monitoring of the Avoidance and Protection of the Ferguson Site (AiHc-454) during the Installation of New Services at 1683 Huron Road, City of Kitchener, Regional Municipality of Waterloo	ASI	P1066-0003-2016
2017	Stage 1 and 2 Archaeological Assessment; South Kitchener District Park, Part of Lot 152, German Company Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo, Ontario	Stantec	P083-0264-2015 and P083-0288-2016
East Boulevard: Fischer-Hallman Road East Boulevard from Seabrook Drive to Plains Road			
2007	Archaeological Assessment (Stages 1, 2 & 3) Becker Estates, Part of Lots 159 & 160, German Company Tract, Small Lots, Geographic Township of Waterloo, now City of Kitchener, Regional Municipality of Waterloo, Ontario	Archaeologix Inc.	CIF P084-030-2006 & P084-087-2006

- Stage 1 Archaeological Assessment: Background Study and Property Inspection: Fischer-Hallman Road, Class Environmental Assessment Study, German Company Tract (Lot 37), Hiestands Tract, Bechtels Tract, Former Township of Waterloo, Waterloo County, City of Kitchener, Ontario. Prepared for Regional Municipality of Waterloo, dated 24 April 2012, Ref. No. 11EA-278 (PIF P094-120-2012; ASI 2012a).**

A Stage 1 Archaeological Assessment was completed by ASI in 2012 associated with the widening of Fischer-Hallman Road from Ottawa Street to Bleams Road as well as intersection improvements at Activa Boulevard, Westmount Road, and Bleams Road (Supplementary Documentation: Figure 5A). A review of the geography and history of the study area indicated that the study area had high potential for the identification of archaeological resources (ASI 2016: 11). The background research also determined that portions of the property had been previously assessed and did not require further archaeological assessment (ASI 2016: 12). A property inspection confirmed that some areas within the study area had been previously disturbed during road construction and grading and no longer retained archaeological potential.

- Stage 1 Archaeological Assessment: Fischer-Hallman Road Improvements from Bleams Road to Plains Road (Former Township of Waterloo, County of Waterloo) Regional Municipality of Waterloo, Ontario. Prepared for**

Regional Municipality of Waterloo, dated 18 February 2016, Ref. No. 14EA-067 (PIF P392-0106-2014; ASI 2016a).

A Stage 1 archaeological assessment covering the present study area was completed by Archaeological Services Inc. ("ASI") in 2016 (Supplementary Documentation: Figure 5A-C). ASI's (2016) study was completed as part of a Class Environmental Assessment (EA) associated with the Fischer-Hallman Road Improvements and encompassed the area alongside Fischer-Hallman Road from Bleams Road to Plain Road in Kitchener, Ontario. The original Stage 1 archaeological assessment (ASI 2016) recommending further work was triggered under the Region of Waterloo's municipal EA process prior to the proposed widening of Fischer-Hallman Road. Stage 1 AA results indicated that various areas had already undergone archaeological assessment, other areas did not retain archaeological potential due to either disturbance, low-lying and wet or sloping conditions and that some areas did retain archaeological potential. Pedestrian survey and test-pit survey at 5-m intervals was recommended for areas that retained archaeological potential. Finally, it was noted that the William Cemetery is document adjacent to the existing ROW property boundary and that it should be avoided by the Fischer-Hallman Road improvements detail design.

- ***Stage 1 and 2 Archaeological Assessment: New Kitchener Zone 4 Trunk Watermain Class Environmental Assessment, City of Kitchener, Regional Municipality of Waterloo, Multiple Lots and Concessions, Geographic Township of Waterloo, Former Waterloo County, Ontario. Prepared for GENIVAR Inc. Prepared by Archaeological Research Associates Ltd., Dated 17 June 2013 (PIF P007-501-2012; ARA 2013).***

A Stage 1 and 2 archaeological assessment was conducted by ARA in 2012 alongside Fischer-Hallman Road ROW and the west and eastern boulevards. The Stage 1 investigation concluded that portions of the study area retained archaeological potential. Thus, a Stage 2 was carried out in form of a test-pit survey (ARA 2013: 36-37). No archaeological finds were encountered (ARA 2013: 38).

West Boulevard: Fischer-Hallman Road from Bleams Road to Seabrook Drive

- ***Stage 2 Archaeological Assessment: Parts 3 And 4 On Reference Plan 58r-19075, 1375 Bleams Road, Kitchener, Ontario. Prepared for the Regional Municipality of Waterloo, dated 18 May 2018, Ref. No. SWW171081.4000 (PIF P348-0039-2018; Wood 2018a).***

A Stage 2 test-pit survey was completed by Wood in 2018 for the property at 1375 Bleams Road, located to the southwest of Fischer-Hallman Road and Bleams Road, Kitchener, Ontario (Supplemental Documentation: Figure 5A). This Stage 2 test-pit survey followed the recommendations presented in ASI's (2012; PIF P392-0106-2014) Stage 1 AA report. No archaeological finds were encountered during this investigation.

- ***Stage 1 and 2 Archaeological Assessment: Williamsburg South Subdivision, 1255 Fischer-Hallman Road. Part of the Hstrand Tract, Geographic Township of Waterloo, Now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for Big Spring Farms Limited c/o RBJ Schlegel Holdings Inc. Prepared by Stantec, Dated 16 March 2016, Ref. No. 160940352 (PIF P256-0382-2015; Stantec 2016a).***

A Stage 1 and 2 archaeological assessment was completed by Stantec in 2016 at 1255 Fischer-Hallman Road (Supplemental Documentation: Figure 5A). This property is located to the southwest of Bleams Road and Fischer-Hallman Road. The background study completed by Stantec identified archaeological potential in the majority of the property. A Stage 2 test-pit survey was completed. No archaeological resources were identified (Stantec 2016: 4.1).

- ***Stage 1 and 2 Archaeological Assessment: Williamsburg South Property, 1291 Fischer-Hallman Road, Part of Lot 2, RCP 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for RBJ Schlegel Holdings Inc., prepared by ARA, Dated: July 2010, Ref. No. P007-167 (PIF P007-167-2008; ARA 2010).***

A Stage 1 & 2 assessment was completed by ARA in 2010 at 1291 Fischer-Hallman Road to the southwest of Bleams Road and Fischer-Hallman Road and adjacent to the west of the current study area (Supplemental Documentation: Figure 5A-B). The ARA study area was found to contain archaeological potential and Stage 2 survey was completed by means of pedestrian survey (ARA 2010: 7). The following archaeological sites were discovered:

- 1) Site AiHc-414 consists of a 145-m by 190-m scatter of 220 lithics, three project point tips, two biface fragments, one end scraper, one utilized flake and one core fragment, interpreted as an Early to Middle Iroquoian hamlet or small village (ARA 2010: 11). This site was recommended for Stage 3 assessment.

- 2) Site AiHc-415 is reportedly continuous with AiHc-414 and consists of 20 lithic flakes, one adze, one blank and one scraper in a 40-m diameter scatter (ARA 2010: 11). This site was recommended for Stage 3 assessment.
- 3) Site AiHc-416 is also associated with Site AiHc-414. Five flaked lithic and one Pre-Contact ceramic body sherd fragment were recovered in a 40-m diameter area (ARA 2010: 12). This site was recommended for Stage 3 assessment.
- 4) AiHc-417 is a Pre-Contact findspot consisting of two flaked lithic flakes, one gorget fragment, one slate flake, one end scraper and one utilized flake in a 20-m by 15-m area (ARA 2010: 13). This site was recommended for Stage 3 assessment.
- 5) Site AiHc-418 is a 20th-century midden which was not recommended for further work (ARA 2010: 13–14).
- 6) Site AiHc-419 is a possible campsite or chipping station containing six flaked lithics in an 18-m by 11-m area. This site was recommended for Stage 3 assessment (ARA 2010: 15).
- 7) Site AiHc-410 is a possible campsite or chipping station that contained seven flaked lithics, one thumbnail end scraper and two utilized primary flakes in a 20-m by 15-m area. This site was recommended for Stage 3 assessment (ARA 2010: 15).
- 8) Site AiHc-421 is a possible campsite or chipping station that contained 15 flaked lithics, one project point stem and one utilized primary flake in a 30-m by 15-m area. This site was recommended for Stage 3 assessment (ARA 2010: 16).
- 9) Site AiHc-422 is a possible chipping station with four flaked lithics and one burnt scraper in a 10-m diameter area. This site was recommended for Stage 3 assessment (ARA 2010: 16).
- 10) Site AiHc-423 is a possible chipping station with eight flaked lithics and one utilized primary flake in a 15-m diameter area. This site was recommended for Stage 3 assessment (ARA 2010: 17).
- 11) Site AiHc-424 is identified as an Early to Middle Iroquoian hamlet or small village in a 50-m by 30-m area. Forty-five flaked lithics, two projectile points, two Pre-Contact ceramic body sherds, one scraper and three utilized flakes

were recovered (ARA 2010: 18). This site was recommended for Stage 3 assessment.

- 12) Site AiHc-425 consists of an Euro-Canadian farmstead and associated midden that contained 400+ historical artifacts, of which 90 were collected, in an 80-m diameter area. This site was recommended for Stage 3 assessment (ARA 2010: 18).
 - 13) Site AiHc-426 is a possible chipping station with 24 flaked lithics, one projectile point base, two projectile point stems and one utilized primary flake in a 25-m diameter area. This site was recommended for Stage 3 assessment (ARA 2010: 20).
 - 14) Site AiHc-427 is identified as an Early to Middle Iroquoian hamlet or small village, which a Late Archaic component, in a 70-m by 40-m area. Recovered artifacts include: 50+ flaked lithics, one projectile point, one Pre-Contact ceramic sherd with punctates, two plain Pre-Contact ceramic sherds, one slate tool, one scraper and three utilized flakes. This site was recommended for Stage 3 assessment (ARA 2010: 21).
 - 15) Site AiHc-428 is a possible campsite or chipping station containing 15 flaked lithics, one scraper and one utilized flake in a 15-m diameter area. This site was recommended for Stage 3 assessment (ARA 2010: 21).
 - 16) Site AiHc-429 is a possible campsite or chipping station containing 50+ flaked lithics, one quartzite flake, one utilized flake and one core fragment in a 60-m by 20-m area. This site was recommended for Stage 3 assessment (ARA 2010: 21).
- **Stage 3 Archaeological Assessment: Location 2 (AiHc-415), Williamsburg South Subdivision, 1291 Fischer-Hallman Road. Prepared for Vaughn Bender Big Spring Farms Limited c/o RBJ Schlegel Holdings Inc. Prepared by Stantec, Dated 21 March 2016 (PIF P256-0356-2015; Stantec 2016b)**

Stage 3 site-specific study was completed at archaeological site AiHc-415, located approximately 40 m to the west of the study area (Supplemental Documentation: Figure 5A). This study resulted in the delineation of a small pre-contact Aboriginal campsite or activity area for stone tool maintenance. Based on the findings from this assessment, with one 1x1 m unit yielding a high artifact count, a Stage 4 mitigation was recommended.

- ***Stage 4 Archaeological Mitigation of Williamsburg South Location 2 (AiHc-415) at 1291 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for Big Spring Farms Ltd. c/o RBJ Schlegel Holdings Inc. Prepared by Bluestone Research Inc., Dated March 2017 (PIF P344-0077-2016; Bluestone Research Inc. 2017a).***

Stage 4 mitigation was completed at archaeological site AiHc-415, approximately 40 m west of the current study area (Supplemental Documentation: Figure 5A). The mitigation entailed block excavation around all high yielding Stage 3 units, resulting in the excavation of 8 1x1 m units, followed by the mechanical removal of topsoil layers, as this site was considered a possible extension of archaeological site AiHc-414. Settlement patterns were not encountered within this site; however, 40 pieces of chipping detritus, 1 utilized flake and 1 fragmentary faunal remain were recovered. This site was interpreted as a Late Woodland village associated with AiHc-414. With the completion of the Stage 4 mitigation, the cultural heritage value or interest of AiHc-415 within the Stage 4 study area was removed.

- ***Stage 3 Archaeological Assessment: Location 1 (AiHc-414), Williamsburg South Subdivision, 1291 Fisher-Hallman Road. Prepared for Big Spring Farms Limited c/o RBJ Schlegel Holdings Inc., prepared by Stantec, Dated 11 March 2016, Ref. No. 160940352, PIF P256-0358-2015 (Stantec 2016c).***

A Stage 3 assessment was completed by Stantec in 2015 to the west of Fischer-Hallman Road (Supplemental Documentation: Figure 5A). A controlled surface pickup was completed, and 245 1-m units were excavated, resulting in the recovery of 2,710 artifacts. Stantec (2016a: i) reported that the AiHc-414 assemblage contains 2,185 lithic artifacts, 452 Pre-Contact ceramics, 31 organic remains and 42 intrusive Euro-Canadian artifacts. AiHc-414 was interpreted as a Late Woodland village or hamlet, dating to ca. A.D. 1300–1650 (late Middle to Late Iroquoian). Evidence of possible structures was also recorded. Stage 4 assessment was recommended.

- ***Preliminary Report: Stage 4 Archaeological Mitigation of Williamsburg South Location 1 (AiHc-414) at 1291 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for Big Spring Farms Ltd. c/o RBJ Schlegel, prepared by Bluestone Research Inc., Dated May 2017 (PIF P344-0076-2016 (Bluestone Research 2017b).***

The Stage 4 mitigation of Site AiHc-414 was completed by Bluestone Research Inc. in 2016 (Bluestone Research 2017a). It consisted of the block excavation of 915 1-

m units and subsequent mechanical soil removal. Overall, 35,000 Pre-Contact artifacts were recovered, including lithics, groundstone tools, pottery, faunal remains, carbonized botanical remains, jewellery and personal items. Four structures were identified: a complete longhouse that was overlain by a later longhouse; a smaller, almost round, house; and a partial longhouse that continued under Fisher-Hallman Road. Also documented were 149 subsurface settlement features, including: eight sweat lodges, four hearths, 112 refuse pits and 25 post moulds. Bluestone Research Inc. identified AiHc-414 as a late Middle Iroquoian (Middleport Substage) village.

Bluestone (2017a: 1.3) indicated that no further assessment of AiHc-414 was required within the development under their review; however, the following recommendation was made: *“Longhouse 5 extends outside the proposed development to the northeast under Fischer-Hallman Road. A Stage 3 assessment to determine the limits of the site is required prior to any further land disturbance. The Stage 3 assessment should consist of archaeological monitoring for any work being conducted through Fischer-Hallman road to determine if site exists and appropriate Stage 4 mitigation strategies be recommended”* (see Figure 5A for the monitoring areas).

- ***Stage 3 Archaeological Assessment: Locations 21 (AiHc-424), 27 (AiHc-427) and 28 (AiHc-428), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of Historical Tract, Geographic Township of Waterloo, former Waterloo County, now Part of Lot 2, Registrar’s Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo. Prepared for Big Spring Farms Ltd. c/o RBJ Schlegel, prepared by Stantec, Dated 14 April 2016, Ref. No. 160940352, PIF P256-0360-2015; P256-0362-2015 and P256-0364-2015 (Stantec 2016d).***

A Stage 3 assessment was completed on three archaeological sites located approximately 100 m west of the current study area confirmed that each represents a Middle to Late Iroquoian hamlet or small village. Thus, they were all merged under one Borden number AiHc-427, which was recommended for Stage 4 mitigation of development impacts (Supplemental Documentation: Figure 5A).

- ***Preliminary Report: Stage 4 Archaeological Mitigation of Williamsburg South Location 27 (AiHc-427) at 1291 Fischer-Hallman Road, Part of the Histland Tract, now Part of Lot 2, Registrar’s Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for Big Spring Farms***

Ltd. c/o RBJ Schlegel, prepared by Bluestone Research Inc., Dated August 2017, PIF P344-0080-2016 (Bluestone Research Inc. 2017c).

The Stage 4 mitigation of Site AiHc-427 was completed by Bluestone Research in 2017, resulting in the recovery of 21,6000 Pre-Contact artifacts including: lithics, groundstone tools, pottery, carbonized botanical remains, faunal remains, jewelry and personal items (Bluestone Research Inc. 2017b: 1.2). The settlement patterns uncovered included 1,726 posts, four longhouses, a large midden, 10 sweat lodges, four hearths, one midden and 116 refuse pits. (Bluestone Research Inc., 2017b: 4.1).

- ***Stage 3 Archaeological Assessment: Location 25 (AiHc-426), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Histland Tract, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for Big Spring Farms Ltd. c/o RBJ Schlegel, prepared by Stantec, Dated 12 April 2016, Ref. No 160940352, PIF P256-0361-2015 (Stantec 2016e).***

A Stage 3 assessment was completed on Site AiHc-426, located approximately 40 m west of the current study area (Supplemental Documentation: Figure 5A). Stage 3 investigations included a controlled surface pickup and the excavation of 171 one-metre units, resulting in the recovery of 524 pieces of chipping detritus, 27 expedient tools, five bifaces, four projectile points, one scraper and one perforator, as well as 18 intrusive Euro-Canadian artifacts (Stantec 2016c: i). Additionally, excavations exposed five potential subsurface features and 25 post moulds. Stantec (2016c: i) interpreted this site as a Middle to Late Archaic period (ca. 3,700–2,000 B.C.) campsite retaining cultural heritage value or interest and requiring Stage 4 mitigation of development impacts.

- ***Stage 3 Archaeological Assessment: Location 7 (AIHc-417), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Histand Tract, Geographic Township of Waterloo, former Waterloo County, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for Big Spring Farms Ltd. c/o RBJ Schlegel, prepared by Stantec, Dated 23 March 2016, Ref. No. 160940352, PIF P256-0359-2015 (Stantec 2016f).***

Stage 3 site-specific study was completed at archaeological site AiHc-417, located approximately 245 m to the west of the study area (Supplemental Documentation: Figure 5A). This study resulted in the recovery of 79 Aboriginal lithics interpreted

as a small camp or activity area dating to the Middle Archaic period (Stantec 2016f: i). None of the units excavated resulted in a yield of more than 10 artifacts. Due to the paucity of artifacts recovered, Stantec (2016f:i) concluded that the cultural heritage value or interest at archaeological site AiHc-417 had been sufficiently documented and a Stage 4 mitigation of development impacts was not recommended.

- ***Stage 4 Archaeological Mitigation of Williamsburg South Location 25 (AiHc-426) at 1291 Fischer Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario, prepared by Bluestone Research Inc., dated 2018, PIF P344-0108-2016.***

This report was not available for review from MTCS; however, based on a summary provided within Pastport, it is known that the excavation of Site AiHc-426 was completed in 2017 (Bluestone 2018). The site is identified as a Middle to Late Archaic period encampment.

- ***Stage 2 Archaeological Assessment: Western Boulevard of Fischer-Hallman Road, between Bleams Road and north of Seabrook Drive, Plan of Survey, Part of Lots 2 and 3, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, prepared for the Regional Municipality of Waterloo, prepared by Wood, dated 22 Jan 2019, Ref. No. SWW181387, PIF P348-0043-2018.***

Stage 2 test-pit survey was completed along the western boulevard of Fischer-Hallman Road for any lands identified by ASI's (2016) Stage 1 AA as retaining archaeological potential which had not already undergone assessment. Areas of archaeological potential identified during the Stage 1 assessment were systematically test pitted at 5-m intervals. Seventy-five artifacts were encountered within a 23-m by 3-m area during the Stage 2 assessment. These artifacts are associated with a registered Middleport village site, AiHc-414. Archaeological site AiHc-414 was mitigated to the west of the existing study area by Bluestone in 2017.

Some of the artifacts recovered during the Stage 2 assessment were found in disturbed contexts, but within 20-m of Site AiHc-414. It appears that the overburden within the current study area has been thoroughly disturbed during road, ditch, and driveway construction. However, intact soils were observed below the disturbance on a portion of the site, and there is still a possibility of finding undisturbed cultural features in the subsoil in a 20-m buffer around Site AiHc-414. Based on the results from this assessment, Wood (2019) recommended that a

Stage 3 site-specific assessment be completed at the remaining component of AiHc-414. The required 20-m protective buffer and 50-m monitoring buffer was also identified (Supplementary Documentation: Figure 5A).

- ***Stage 1 to 2 Archaeological Assessment: Mazmanian Property, Plan 1469, Lot South of Bleams Road, Hiestand Tract, Geographic Township of Waterloo, now City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for Schlegel Urban Developments Inc. prepared by Stantec, dated 2013 (PIF P001-695-2012; Stantec 2013).***

A Stage 1 & 2 archaeological assessment was completed by Stantec at the Mazmanian property, adjacent to the west of the current study area. A Pre-Contact scatter, and an Historical find dating to the late 19th/early 20th century, were identified during this assessment. These two components were not recommended for further work as they did not meet the criteria for Stage 3 archaeological investigation as per Section 2.2. Standard 1 of the 2011 S&G.

- ***Stage 1 Archaeological Assessment: Kitchener Zone 4 Trunk Watermain From Ottawa Street South to Strasburg Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. Prepared for GENIVAR. Prepared by Archaeological Research Associates Ltd., Dated 04 November 2011 (PIF P007-339-2011; ARA 2011).***

ARA conducted a Stage 1 archaeological assessment on a 5.5 km corridor to the south and southwest of the current study area. The Stage 1 background research and property inspection determined that some portions of the study area retained archaeological potential based on proximity to historic transportation routes, secondary water sources, and wetland areas (ARA 2011: 59). Portions of the study area had been previously assessed between 1987 and 2011 and required no further assessment (ARA 2011: 32). Stage 2 assessment by pedestrian survey and by test pit survey was recommended for lands still exhibiting archaeological potential that had not been previously subject to assessment (ARA 2011: 32-33).

East Boulevard: Fischer-Hallman Road from Bleams Road to Seabrook Drive

- ***Stage 1 and 2 Archaeological Assessment: Proposed Development at 1314 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Registrar's Compiled Plan 147, 4, Bechtel Tract, Geographic Township of Waterloo, Former Waterloo County, Ontario. Prepared for Eastforest Homes***

Ltd., prepared by Archaeological Research Associates, Dated 26 June 2014, Ref. No. P007-0644 (PIF P007-0644-2014; ARA 2014).

A Stage 1 & 2 archaeological assessment was completed by ARA (2014) at 1314 Fischer-Hallman Road, southeast of Bleams Road and Fischer-Hallman Road and approximately 200 m south of the current study area. The Stage 1 investigation concluded that portions of that study area retained archaeological potential. Thus Stage 2 assessment was recommended in form of a pedestrian survey, and test-pit survey where appropriate (ARA 2014: 38). The Stage 2 investigation resulted in the identification of two archaeological sites: AiHc-471 (1 x 1 m scatter of three non-diagnostic Pre-Contact lithics), and AiHc-472 (an isolated Early Woodland Meadowood projectile point). Both archaeological sites were found to have no further cultural heritage value or interest.

- ***Stage 1 and 2 Archaeological Assessments: 1250, 1270, 1314 Fischer-Hallman Road, Zone Change and Site Plan Applications, City of Kitchener, Regional Municipality of Waterloo, Part of Bechtel's Tract, Geographic Township of Waterloo, Former Waterloo County, Ontario. Prepared for ONE Properties, prepared by Archaeological Research Associates ("ARA"), dated 06 February 2017, Ref. No. 2016-0256 (PIF P007-0784-2016; ARA 2017).***

A Stage 1 & 2 archaeological assessment was completed by ARA (2017) at 1250, 1270, 1314 Fischer-Hallman Road, southeast of Bleams Road and Fischer-Hallman Road and east of the current study area, past Fischer-Hallman Road. The Stage 1 investigation concluded that portions of that study area retained archaeological potential. Thus, a Stage 2 was carried out in form of a pedestrian survey, and test-pit survey where appropriate (ARA 2017: 15-16). No archaeological finds were encountered (ARA 2017: 18).

- ***Archaeological Resource Assessment Survey, Draft Plans of Subdivision 30T-84004, 30T-89020 & 30T-90024, City of Kitchener, R.M. of Waterloo, prepared for The Proctor and Redfern Group. Prepared by Mayer, Poulton and Associates (MPA), dated November 1990, CIF #89-021, 89-049 and 89-064.***

MPA completed a pedestrian survey and test-pit survey of 114 ha of land located east of Fischer-Hallman Road and north of Huron Road. MPA's study area includes existing portions of the current study area. A total of 18 Aboriginal findspots/sites and one nineteenth century Euro-Canadian domestic midden were identified. Five findspots (identified as sites B [AiHc-108], C [AiHc-107], E [AiHc-115], F [AiHc-116],

and G [AiHc-117]) were recommended for further work, and it was recommended that three others (Sites L [AiHc-112], M [AiHc-113], and P [AiHc-106]) be subjected to an intensive surface collection to assess cultural heritage value or interest. Based on a review of MTCS's site database, none of these sites are located within the current study area.

- ***Stage 1 & 2 Archaeological Assessment Parts 3, 4, 5 and 6 of Registered Plan 58R-19758 1340 Fischer-Hallman Road, Kitchener, Ontario. Prepared for Regional Municipality of Waterloo, dated 11 July 2018, Ref. No. SWW181274 (P348-0041-2018; Wood 2018b).***

A Stage 1 and 2 archaeological assessment was conducted by Wood on a parcel of land alongside the east boulevard of Fischer-Hallman Road. On the basis of the Stage 1 and 2 assessment by Wood, a portion of the study area had been previously disturbed. Additional portions were deemed to be steeply sloping or permanently wet and did not require Stage 2 assessment (Wood 2018:24). The areas identified as having archaeological potential were subject to Stage 2 test pit survey at 5 m intervals. No archaeological materials were encountered during the Stage 2 assessment and no further fieldwork was recommended (Wood 2018: 25).

- ***Stage 1–3 Archaeological Assessment, Middle Strasburg Trunk Sanitary Sewer, Fischer-Hallman Road to Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario, prepared by Archaeological Research Associates Ltd., dated 2008, PIF P007-164-2008 and P007-165-2008.***

This report was not available for review from MTCS; however, ARA (2017) provided a summary of findings in one of their reports. According to ARA (2017: 8), ARA completed an assessment for an irregularly shaped 2.3-km corridor associated with the Middle Strasburg Trunk Sanitary Sewer development from Fischer-Hallman Road to Huron Road, located to the east of the study area (past Fischer-Hallman Road). Ten findspots were identified during this assessment and three were recommended for further work. Of these, a small Pre-Contact lithic scatter and an historical farmstead were found to have further cultural heritage value or interest and were recommended for avoidance and protection. Based on a review of MTCS's site database, none of these locations are within the current study area.

- ***Stage 1, 2 and 3 Archaeological Assessment, Activa Fischer-Hallman Property, Lot 110, Broken Tract Concession, Kitchener, Ontario, prepared by ARA, 2009, PIF P007-071-2005 and P007-185-2005.***

This report was not available for review from MTCS; however, ARA (2017) provided a summary of findings in one of their reports. According to ARA (2017: 8), ARA completed a Stage 1 & 2 archaeological assessment in 2005 and 2008 on a property located to the east of the study area (past Fischer-Hallman Road). Six findspots were identified during this assessment, of which, only one (AiHc-413) was recommended for further work. Stage 3 assessment was completed under the same report and resulted in a recommendation for Stage 4 mitigation by means of excavation. This site would be located approximately 300 m southeast of the current study area.

West Boulevard: Fischer-Hallman Road from Seabrook Drive to Plains Road

- ***Stage 1-2 Archaeological Assessment: Pumpkin Patch Lands, Fischer-Hallman and Huron Road, Part of Lot 153, German Company Tract, Small Lots, Geo. Twp. Of Waterloo, Now Part 4, Plan 58R-8992 (PIN 22728-0021), City of Kitchener, R.M. Waterloo, Waterloo County, prepared for Bromberg Homes, prepared by Stantec, 22 November 2012, PIF P379-009-2012. (Stantec 2012)***

A Stage 1 and 2 archeological assessment was completed by Stantec in 2012. This study a 9.01-hectare parcel of land on the northwest corner of the intersection of Fischer-Hallman Road and Huron Road. One precontact Aboriginal findspot was recovered during the course of the Stage 2 investigation, identified as Location 1. The site did not meet criteria for a Stage 3 site-specific assessment, and no further fieldwork was recommended for the study area.

- ***Stage 1 & 2 Archaeological Assessment: Huron West Community, Regional Municipality of Waterloo, 30T-01201, prepared for Activa Holdings Ltd., prepared by ARA, June 2001, CIF 2001-082-001.***

A Stage 1 and 2 archeological assessment was completed by ARA in 2001. This study encompasses the east boulevard of Fischer-Hallman Road (north of Huron Road). Three archaeological sites were identified during the course of the Stage 2 investigation: AiHc-255, AiHc-256 and AiHc-257. Stage 3 site-specific assessment were recommended for the above-mentioned archaeological sites. None of these archaeological sites were located within the current study area.

- ***Stage 2 Archaeological Assessment of the Doehn-Foster Property, Part of Lot 153, German Company Tract Small Lot, Geographic Township of Waterloo, County of Waterloo, now in the City of Kitchener, Regional Municipality of***

Waterloo, prepared for Mattamy Homes, prepared by ASI, 21 September 2012, Ref. No 12TS-023, PIF P047-367-2012 (ASI, 2012b)

A Stage 2 pedestrian survey and test-pit survey was advanced at a property located approximately 70 m to the west of the study area (Supplementary Documentation: Figures 5B and 5C). The study resulted in the identification of a precontact lithic site (AiHc-455), two pre-contact lithic findspots (P1 and P3) and one historical Euro-Canadian Site, the Ferguson Site (AiHc-454). The Ferguson Site was recommended for a Stage 3 site-specific assessment; the remainder finds reportedly did not meet the 2011 MTCS *Standards and Guidelines for Consultant Archaeologists* criteria for requirement Stage 3 assessment.

- ***Stage 3 Archaeological Assessment of the Ferguson Site (AiHc-454), 1683 Huron Road, Part of Lot 153, German Company Tract Small Lot, Geographic Township of Waterloo, County of Waterloo, Now in the City of Kitchener, Regional Municipality of Waterloo, prepared for 2040796 Ontario Ltd., prepared by ASI, 06 Ma5rch 2013, Ref. No 12TE-033, PIF P375-002-2012***

A Stage 3 site-specific assessment was completed at the Ferguson Site (AiHc-454), associated with the homestead of a nineteenth-century farmhouse, by ASI (2013). The Stage 3 investigation, consisting of 38 one-metre units identified the limits of the archaeological site. Stage 4 avoidance and protection measures were recommended as the existing heritage farmhouse and existing dedicated building lot were to be preserved (ASI 2013).

- ***Stage 4 Archaeological Monitoring of the Avoidance and Protection of the Ferguson Site (AiHc-454) during the Installation of New Services at 1683 Huron Road, City of Kitchener, Regional Municipality of Waterloo, prepared for Mattamy (Kitchener) Ltd., prepared by ASI, 02 May 2016, Ref. No 16TE-001, PIF P1066-0003-2016 (ASI 2016b)***

Stage 4 archaeological monitoring was completed by ASI in 2016 to allow the construction of a subdivision adjacent to this lot and the installation of new water and sanitary services. Upon completion of this work, ASI (2016) recommended that the service trench be considered clear of any further archaeological concern.

- ***Stage 1 and 2 Archaeological Assessment; South Kitchener District Park, Part of Lot 152, German Company Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo,***

**Ontario, prepared for City of Kitchener, prepared by Stantec Consulting Ltd.,
21 June 2017, Ref. No. 161413191, PIF P083-0264-2015 and P083-0288-2016**

A Stage 1 and 2 archaeological assessment was completed to the southwest of Huron Road and Fischer-Hallman Road. This investigation encompassed a portion of the current study area located along the western boulevard of Fischer-Hallman Road. One archaeological site (AiHc-481) was identified at this property, to the west of the current study area; however, this archaeological site reportedly did not meet the 2011 MTCS *Standards and Guidelines for Consultant Archaeologists* criteria for requirement Stage 3 assessment. As such, no further work was recommended at this location.

East Boulevard: Fischer-Hallman Road from Seabrook Drive to Plains Road

- ***Archaeological Assessment (Stages 1, 2 & 3) Becker Estates, Part of Lots 159 & 160, German Company Tract, Small Lots, Geographic Township of Waterloo, now City of Kitchener, Regional Municipality of Waterloo, Ontario, prepared for G.S.P. Group, prepared by Archaeologix Inc., Ref. No. 2006-054, CIF P084-030-2006 and P084-087-2006.***

A Stage 1 to 3 archaeological investigation was completed by Archaeologix in 2006 for a property located to the southeast of Fischer-Hallman Road and Huron Road. This investigation encompassed a portion of the current study area located along the eastern boulevard of Fischer-Hallman Road. The Stage 2 pedestrian survey that was completed resulted in the identification of five pre-contact Aboriginal sites, two of which were recommended for further work and bordenized as AiHc-363 an AiHc-364 (Archaeologix 2007). A subsequent Stage 3 site-specific investigation was completed for both sites. No further work was recommended.

2.1.3 Environmental Context

The study area (Appendix A: Figures 1–3) is situated in the Waterloo Hills physiographic region of Ontario (Chapman and Putnam 1984: 113). This region is composed of sandy hills consisting of either ridges of sandy till or kame moraines with outwash sands occupying the intervening hollows, the latter being the soils located within the study area (Chapman and Putnam 1984: 136). The original forests would have consisted of sugar maple, beech, wild cherry and red oak (Chapman and Putnam 1984: 136). The topography is undulating.

It is crucial to consider the proximity of water sources in any evaluation of archaeological potential because the availability of water is arguably the single most important

determinant of human land use, past and present. The *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011) lists proximity to water as one of the prime indicators of potential for the presence of archaeological sites. Distance from potable water has been one of the most commonly used variables for predictive modeling of site location. Water, both potable and non-potable, also facilitated the transportation of people and goods and served to focus animal and vegetable resources. According to the 2011 *Standards and Guidelines for Consultant Archaeologists*, lands within 300 m of an extant or formerly mapped river or creek have potential for the presence of early Aboriginal and Euro-Canadian archaeological sites. The nearest body of water is a creek that transects Fischer-Hallman Road approximately 385 m to the south of Bleams Road. This creek connects to Sunfish Pond, which is 130 m to the east of the study area.

2.2 Historical Context

2.2.1 A Cultural History for Southern and Eastern Ontario

The majority of interpretations of pre-contact Aboriginal adaptations in Ontario derive from the analysis and interpretation of stone tools. Stone tools are made from specific types of rocks that fracture in ways that can be controlled, so that they are easily shaped into useful forms. These rocks include chert, chalcedony, quartzite, petrified wood, and volcanic glass, known as obsidian. Most stone tools found in southern Ontario are formed from types of chert that outcrop in local limestone formations, such as: Onondaga and Haldimand cherts, found near the north shore of Lake Erie; Kettle Point chert, which outcrops near Lake Huron; and Collingwood chert, which outcrops along the Niagara Escarpment near Georgian Bay.

Stone tools used as spear tips and arrowheads are the most commonly studied tool type. These are referred to as projectile points. As projectile point technology changed over time, styles and shapes of points changed also. Studying these changing point types has resulted in the development of a chronological framework for pre-contact times prior to 3,000 years ago, when First Nations groups began to make clay pottery. Later periods are defined both by point types and pottery characteristics. Radiocarbon dating of archaeological sites can only be done when organic materials are collected from those sites, so the dating of most sites is done by comparing the artifacts from dated sites to those from undated sites. The following is an overview of the pre-contact history of southern Ontario as understood by archaeologists.

The cultural history of southern Ontario began approximately 11,000 years ago when the glaciers had melted, and the land was re-exposed. The land was quickly settled by bands of hunters and gatherers who are thought to have been large game hunters. These people

used large spear points that are distinctively shaped with long central grooves, called "flutes". Archaeologists have defined a number of point types that date to this time, including Gainey, Barnes, Crowfield, and Hi-Lo types. This period is referred to as the Paleo-Indian Period and it is thought to have lasted until approximately 9,000 years ago.

After 9,500 years ago, there was a long period when the climate was variable, and the bare lands left by the glaciers were becoming re-forested, resulting in patchier, more diverse ecozones. During this time, which lasted until 3,000 years ago, people were adapting to diverse environmental settings. There appears to have been more reliance on local stone for making tools and more variable tool manufacturing technologies. The adoption of a spear-throwing board, known as an atlatl, was an important innovation, resulting in the ability to throw smaller darts with more force. Projectile points from this period, called the Archaic Period, are commonly side or corner-notched and are smaller than those of the preceding period. The Archaic adaptation is generally thought to have centred on localized resources, often forest resources, and groups of people are thought to have been less mobile, an adaptation that continued to develop until the arrival of Europeans.

In southern Ontario, the Archaic Period is divided into the Early, Middle and Late Archaic. Early point types include serrated Nettling and Bifurcate Base points. Middle types include Brewerton Corner Notched and Otter Creek, and Late types include Lamoka, Genesee, Crawford Knoll, and Innes. Most of these are named after sites where they were first identified.

The Archaic Period is followed by the Woodland Period. The major technological change in the Early Woodland Period is the introduction of pottery. During this time, people are thought to have developed more community organization and the manufacture of clay pottery is thought to indicate less residential mobility. Burial sites dating to this time often display evidence of ceremonial activities. Projectile points made at this time include much smaller types, probably used as arrow tips. Point types include Meadowood and Kramer and early ceramics were crudely-made vessels with conoidal (pointed) bases. The Early Woodland Period transitioned into the Middle Woodland Period approximately 2,400 years ago.

During the Middle Woodland Period in southern Ontario community and kin identity became more deeply entrenched, and more sedentary communities developed. Point types made at this time include Saugeen, Vanport, and Snyders. Ceramic vessels were conoidal in shape but were decorated with stamped designs in the soft clay. The Middle Woodland Period transitioned into the Late Woodland Period A.D. 500–900 with the earliest direct evidence for agriculture.

The Late Woodland Period saw the development of recognizable Iroquoian and Algonkian cultures in southern Ontario, characterized by the intensification of agriculture and the increased utilization of corn. Greater sedentism led to increasing settlement populations and greater complexity of settlement organization. Sites dating to this time are often found on terraces overlooking the floodplains of large rivers. Iroquoian villages tended to be small, palisaded compounds with longhouses occupied by families. As the Late Woodland Period progressed, more intercommunity communication and integration became necessary to maintain the sedentary agricultural way of life. Later Iroquoian villages were larger and more heavily palisaded, and longhouses were larger also.

When European explorers and missionaries arrived in southern Ontario in the early seventeenth century, they described the local Iroquoian social organization as being under the direction of elected chiefs. Tribal confederacies and allegiances resulted in intertribal warfare, which was only made worse by the European presence. Three Ontario Iroquoian confederacies, the Huron, Petun, and Neutral, were driven from their traditional territories before the middle of the seventeenth century.

Table 3: Simplified Cultural Chronology of Southern and Eastern Ontario	
Period	Complexes/Cultures, Some Diagnostic Artifacts
Early Paleo-Indian (9000–8500 B.C.)	Small nomadic hunter-gatherer bands. Early Paleo-Indian (EPI) rarely found in Eastern Ontario. Gainey, Barnes, Crowfield fluted points.
Late Paleo-Indian (8500–7500 B.C.)	Small nomadic hunter-gatherer bands. Hi-Lo, Holcombe points, Lanceolate Bifaces.
Early Archaic (7500–6000/4500 B.C.)	Small nomadic hunter-gatherer bands. Nettling, Stanley/Neville points.
Middle Archaic (6000/4500–2500 B.C.)	Transition to territorial settlements. Seasonal round of subsistence introduced. Thebes (6000–5000 B.C.), Otter Creek points (4500–3000 B.C.). Brewerton Complex (3000–2500 B.C.) . Brewerton points. Laurentian Complex (6000 B.C.–2500 B.C.) (Eastern Ontario)
Late Archaic (2500–1000 B.C.)	More numerous territorial hunter-gatherer bands, increasing use of exotic materials and artistic items for grave offerings, regional trade networks. Narrowpoint Complex (2500–1850 B.C.) . Lamoka points. Broadpoint Complex (1850–1650 B.C.) . Adder Orchard, Genesee points. Smallpoint Complex (1650–1000 B.C.) . Crawford Knoll, Innes points. Terminal Archaic (1100–1000 B.C.) Glacial Kame Complex . Hind points.

Table 3: Simplified Cultural Chronology of Southern and Eastern Ontario	
Period	Complexes/Cultures, Some Diagnostic Artifacts
Early Woodland (1000–400 B.C.)	Pottery introduced. Meadowood Notched points, Meadowood Cache Blades, Kramer, Adena points. Meadowood Complex (1000–400 B.C.). Middlesex Complex (650–400 B.C.). Introduction of true cemeteries.
Middle Woodland (400 B.C.–A.D. 500/900)	Saugeen, Snyders, Vanport, Port Maitland points. Point Peninsula Complex (Southcentral and Eastern Ontario) Saugeen Complex (southeast of Lake Huron and the Bruce Peninsula, London area, and possibly as far east as the Grand River) Couture Complex (Lake St. Clair and the western end of Lake Erie). Burial ceremonialism.
Transitional Woodland (A.D. 500–900)	Agriculture introduced. Levanna, Jacks Reef points. Princess Point Complex (Eastern end of Lake Erie and the western end of Lake Ontario). Rivière au Vase Phase of the Youngs / Western Basin Tradition (Lake St. Clair and western end of Lake Erie) Sandbanks Complex (Kingston area).
Late Woodland (A.D. 900–1650)	Tribal differentiation. Transition to settled village life. Dewaele, Glen Meyer Tanged, Triangular Nanticoke, Notched Nanticoke, Triangular Daniels/Madison points. Ontario Iroquoian and St. Lawrence Iroquoian Traditions (Southcentral and Eastern Ontario, respectively). Youngs, Springwells, Wolf Phases of the Youngs / Western Basin Tradition (Lake St. Clair and the western end of Lake Erie).
Early Post-Contact (A.D. 1650–1763)	Iroquoian, Algonkian migrations and resettlement. French exploration and colonization
Late Post-Contact (A.D. 1763–1867)	Iroquoian, Algonkian migrations and resettlement. British and other European immigration increases.

Archaeologists tend to describe a period of transition from Late Woodland to Historic times as “proto-historic”. The dating of this period is variable and may be different from site to site within a region as it describes a time when local First Nations were acquiring European trade goods indirectly through other Aboriginal middlemen rather than directly from European traders. This period was generally very short and is often difficult to differentiate archaeologically from later historic times, when trade goods were widely available, but it usually is identified by evidence of an intact traditional cultural adaptation with occasional European items used in traditional ways.

Archaeologically, the years since the arrival of Europeans are referred to as the Historic Period. In southern Ontario, significant Historic sites are those that have an affiliation with an important historic event, figure, or family, but can also be anything dating to the original European settlement of a region. Often, these sites date to before A.D. 1830.

2.2.2 Review of Historical Records

During pre-contact and early contact times, the vicinity of the study area would have contained a mixture of deciduous trees, coniferous trees and open areas. In the early 19th century, Euro-Canadian settlers arrived and began to clear the forests for agricultural purposes. In the 19th and early 20th centuries, the study area and surrounding land were primarily used for agricultural purposes.

Historically, the northern edge of the study area would have been located to the south of the former crossroads hamlet of Williamsburg (Bleams Road and former County Road 50) in the former Waterloo Township. It should be noted that County Road 50 was later named Westmount Road East and renamed again as Fischer-Hallman Road.

Waterloo Township was once one of the largest townships in southwestern Ontario. The township was named to commemorate the British victory over Napoleon at Waterloo (Mika & Mika 1983). It was also one of the earliest settled townships. The area corresponding to Waterloo Township, consisting of 94,012 acres of land, was originally purchased from Joseph Brant by Richard Beasley, John Baptiste Rousseaux and James Wilson in 1796 (Hayes 1997: 3). Waterloo Township is bordered to the north by the Township of Woolwich, to the east by the Townships of Guelph and Puslinch, to the south by the Township of Dumfries, and to the west by the Township of Wilmot (H. Parsells & Co. 1881). By 1800, more than 14,000 acres of land were sold to German Mennonites from Pennsylvania and surveyed by August Jones in 1805. In order to not interfere with previously established settlers, the new lots were laid out in an irregular manner (Moyer 1971). Several roads were constructed throughout this area during the first quarter of the 19th century, including Bleams Road which was constructed by Philip Bleam in the 1820s to link the Township of Wilmot and the Township of Waterloo to his business at German Mills near the Grand River (Bloomfield 1995a: 74). Waterloo Township was created in 1849, and by 1851 had a population of 8,871 (H. Parsells & Co. 1881; Hayes 1997: 16).

The study area is located to the south of the historic limits of the hamlet of Williamsburg. Williamsburg was founded in 1846 by Anton Wilhelm and Philip Fischer. They were possibly aided by William Moyer who owned much of the property in the area (MHBC 2012: 3). Williamsburg was a farming community with a blacksmith, shoemaker, turner, two carpenters, two coopers, two tailors, a millwright and a sawyer. In 1861, Williamsburg had a population of 349, most of whom were immigrants from German-speaking regions of Europe (MHBC 2012: 4).

Historical records and mapping were examined for evidence of early Euro-Canadian use of the study area. The study area was historically located within portions of four tracts

within Waterloo Township: the Hiestand Tract, the Bechtel Tract, the German Company Tract Small Lots, and Beasley's New Survey. The 1861 *Tremaine's Map of the County of Waterloo* (Tremaine 1861; Appendix A: Figure 6) and the 1881 *Illustrated Historical Atlas of Waterloo County* (H. Parsells & Co. 1881; Appendix A: Figure 8) were examined. Landowners and features of historical interest are listed in Table 3.

Table 4. Historical Features by Tract, as Shown in Historical Atlas Mapping				
Tract	Lot	Landowner 1861 Tremaine (Figure 6)	Landowner 1881 Parsells (Figure 7)	Notes
Hiestand Tract	n/a	Abraham D. Clemens	A.S. Clemens	Schoolhouse 50 m to west of study area on 1881 map, Farmstead 100 m west of study area on 1861 & 1881 maps
Bechtel Tract	North Portion	W.K.	None listed	Within historic Williamsburg limits on 1881 map
	South Portion	Ernst A.P. Hagedorn	C.K. Hagedorn	Farmstead just east of study area on 1861 & 1881 maps
German Company Tract Small Lots	Lot 151	John Wallace	None listed	Farmstead shown within study area on 1861 map
	Lot 152	Richard Sheard	None listed	Farmstead 200 m to west of study area on 1861 map
	Lot 153	Archibald Ferguson	None listed	n/a
	Lot 154	F. Amand	None listed	n/a
	Lot 155	Joseph Hemhofer	None listed	n/a
	Lot 156	Leonard Hemhofer	None listed	n/a
	Lot 157	Wendell Bushart	None listed	n/a
	Lot 158	Thomas Scott	None listed	n/a
	Lot 159	John Wallace	None listed	n/a

Table 4. Historical Features by Tract, as Shown in Historical Atlas Mapping				
Tract	Lot	Landowner 1861 Tremaine (Figure 6)	Landowner 1881 Parsells (Figure 7)	Notes
	Lot 160	John Linton	None listed	n/a
Beasley's New Survey	Lot 8	George Proudfoot	None listed	Schoolhouse 250 m to west on 1881 map, Plains Road present on both maps

On both the 1861 and 1881 historical atlas maps, the study area is shown fronting an historical roadway Fischer-Hallman Road (formerly County Road 50/Westmount Road East), and is transected by Huron Road, with Plains Road adjacent to the southern boundary of the study area.

On Lot 151, German Company Tract Small Lots there is a farmstead shown within the study area on the 1881 historic atlas map. Several other farmsteads and two schoolhouses are in close proximity to the study area. In addition, on the 1881 map, a portion of the study area is located within the historic limits of the community of Williamsburg.

The historical data supports a conclusion of overall archaeological potential and the need for Stage 2 assessment since the study area was clearly in use historically and is located along a historic transportation route (Fischer-Hallman Road). Furthermore, it is located to just to the south of the limits of the historic community of Williamsburg.

In summary, a review of the historical context supports a conclusion of overall archaeological potential and the need for a Stage 2 assessment since the study area is located adjacent to historical roadways as illustrated in the [year] historical maps. Moreover, a farmstead is depicted within the study area on the 1861 historical map (Appendix A: Figure 6). Numerous structures, including farmhouses and schools, are depicted in the vicinity of the current study area (Appendix A: Figures 6 & 7). As per the MTCS's *Standards and Guidelines for Consultant Archaeologists*, any areas within 100 m of early historic transportation routes and 300 m of early Euro-Canadian settlement warrant the need for a Stage 2 property assessment.

2.2.3 Historic Plaques

Based on a review of the Ontario Historical Plaques website (<http://www.ontario>

plaques.com/Menu_Map.html) there are no historic plaques located in the vicinity of the study area.

2.3 Summary of Archaeological Potential

The Stage 1 background study has indicated that undisturbed portions of the subject property have archaeological potential and warrant Stage 2 property assessment for 5 principal reasons: 1) the close proximity of a natural water source that transects the study area; 2) the known presence of 81 archaeological sites located within 1km of the study area providing direct evidence that this general area had been exploited by Aboriginal/historic Euro-Canadian peoples; 3) the presence of an archaeological site located within the current study area, site AiHc-414; 4) the location of the study area within 100 metres of historical transportation routes, including Fischer-Hallman Roads; 5) known Euro-Canadian historical buildings located within the study area including a farmstead on Lot 151 German Company Lots Small Tract.

3.0 Stage 1 Analysis and Conclusions

The Stage 1 background study has indicated that undisturbed portions of the subject property have archaeological potential and warrant Stage 2 property assessment for 5 principal reasons: 1) the close proximity of a natural water source that transects the study area; 2) the known presence of 81 archaeological sites located within 1km of the study area providing direct evidence that this general area had been exploited by Aboriginal/historic Euro-Canadian peoples; 3) the presence of an archaeological site located within the current study area, site AiHc-414; 4) the location of the study area within 100 metres of historical transportation routes, including Fischer-Hallman Roads; 5) known Euro-Canadian historical buildings located within the study area including a farmstead on Lot 151 German Company Lots Small Tract.

On the basis of a review of recent land use history and previous archaeological reports, Wood has identified that most of the study area has undergone archaeological assessment and no further fieldwork has been recommended for these areas.

As shown on Figure 8, there are several areas that have not undergone previous assessment but have been identified as being disturbed during current Stage 1 research (Appendix A: Figures 8B and 8C). These previously disturbed areas exhibit low archaeological potential and require no further fieldwork.

Further Stage 2 fieldwork is recommended for areas that retain archaeological potential as follows: a) woodlot located on the northeast corner of Huron Road and Fischer-Hallman Road; b) landscaped area located on the northeast corner of Plains Road and Fischer-Hallman Road; c) woodlots and agricultural fields located alongside the western edge of Fischer-Hallman Road (north of Plains Road). A Stage 2 archaeological assessment in the form of a test pit survey should be conducted on the landscaped areas and woodlots (totaling 0.29 hectares in size) as shown in Supplementary Documents: Figures 8B and 8C. A Stage 2 archaeological assessment in the form of a pedestrian survey should be conducted on the agricultural fields (totaling 0.47 hectares in size) as shown in Supplementary Documents: Figure 8C.

In addition, Stage 3 excavations have been recommended for the portion of Site AiHc-414 that is located within the study area, as shown in Supplementary Documents: Figure 8A. This site was encountered within a 23-m by 3-m area during the Stage 2 assessment (Wood 2019). These artifacts are associated with a registered Middleport village site, AiHc-414. Archaeological site AiHc-414 was mitigated to the west of the existing study area by Bluestone in 2017. Based on the results from this assessment, Wood (2019) recommended that a Stage 3 site-specific assessment be completed at the remaining component of AiHc-

414. The required 20-m protective buffer and 50-m monitoring buffer was also identified (Supplementary Documentation: Figure 5A).

4.0 Recommendations

In light of these results, the following recommendations are made, subject to the advice on compliance with legislation contained in Section 5.0:

- 1) A Stage 2 archaeological assessment in the form of a pedestrian survey should be conducted on the agricultural fields (0.47 hectares in size) as shown in Supplementary Documents: Figure 8C. The fields must be ploughed by means of mouldboard ploughing or disk harrowing techniques. At least 80% of the ground surface must be visible in order to conduct a pedestrian survey. The fields should be allowed to weather through one heavy, or several light rainfalls to improve surface visibility. Areas of archaeological potential are surveyed at regular five-meter interval transects.

If archaeological resources are encountered, the 5 m transect should be decreased to 1 m intervals over a minimum of 20 m radius around the archaeological find until the full extent of the scatter has been identified or if it is determined that it is an isolated find. All formal artifact types and diagnostic categories are to be collected and enough artifacts should be left *in-situ* to relocate the site in the event that it is necessary to conduct further assessment. The exact location of archaeological resources should be documented using one or more of a combination of: the Global Positioning System, topographic survey or other precision measurements. These resources are then inventoried.

- 2) A Stage 2 archaeological assessment in the form of a test pit survey should be conducted on the landscaped areas and woodlots (0.29 hectares in size) as shown in Supplementary Documents: Figures 8B and 8C. The test pits should be excavated by hand at regular five-metre intervals in a grid-pattern and to a depth of 5 cm into the subsoil. The stratigraphy of soils excavated during test pitting should be examined in order to detect cultural soil horizons. In addition, excavated soils are to be screened through ¼ inch (6 mm) mesh in order to facilitate the recovery of archaeologically significant artifacts.

The pattern and intensity of test pit placement may be altered due to changes in archaeological potential in different parts of a study area and/or the presence of disturbed soils. Any areas of 'disturbance' should be evaluated and photo-documented.

If archaeological resources are found their exact distribution should be documented and any diagnostic artifacts recovered and inventoried. Upon

discovery of cultural materials, the survey grid should be continued to determine whether there are enough archaeological resources to meet the criteria for making a recommendation to carry out a Stage 3 assessment. In the event that insufficient archaeological resources are recovered, eight additional test-pits are to be dug in a 2 to 2.5 metre radius around the positive test-pit, followed by the excavation of a 1 x 1 m unit at the positive test pit. Cultural artifacts encountered are to be collected and bagged according to provenience.

- 3) As described on the Stage 2 Archaeological Assessment completed by Wood (2019; PIF P348-0043-2018), Despite previous disturbance to some topsoils, portions of archaeological Site AiHc-414 exhibit cultural heritage value or interest and warrant Stage 3 site-specific assessment. The site represents a Late Woodland period village site where it is certain that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 mitigation.

Stage 3 fieldwork will involve establishing a permanent grid on the site followed by the hand excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by the hand excavation of additional test units, amounting to 40 percent of the grid unit total, focusing on areas of interest within the site (such as distinct areas of higher concentrations of artifacts) as per Section 3.2.2 and Table 3.2.1 of the *Standards and Guidelines for Consultant Archaeologists*. If any features are encountered they will be addressed as per Section 3.2.2 Standard 6 where their plan shapes will be recorded, before they are covered with geotextile fabric followed by a small amount of dirt placed by hand.

Figures 5A and 8A show the estimated extent of the Stage 3 study area recommended for further work, as well as the required 20-m protective buffer and 50-m monitoring buffer.

- a. Monitoring of construction activities has been recommended for all areas within the 50-m monitoring buffer zone, as shown on Appendix A: Figures 11 and 12. A licensed archaeologist will be retained by the Region of Waterloo and must have full access to the areas being excavated to monitor for cultural features or deposits containing archaeological materials. A monitoring schedule must be arranged prior to construction.
- b. If archaeological resources are identified, all construction activities must cease in that area and the archaeologist(s) must have safe access to the construction area in which the resources are found in order to examine and document these resources fully.

- c. The construction contractor and site foreman shall be made aware of the need for archaeological monitoring and will inform the project archaeologist of the projected schedule, providing them with at least 48 hours' notice prior to the actual construction excavation. The project archaeologist shall be made aware of any safety concerns associated with the construction work in order to meet health and safety requirements.
 - d. Should archaeological material be discovered outside of the monitored area, or when the project archaeologist is not present, the archaeologist must be contacted to determine the significance of the material.
- 4) The Williamsburg Cemetery is documented to be adjacent to the existing ROW property boundary. The cemetery lands should be avoided by the Fischer-Hallman Road Improvements detail design.
- 5) The remainder of the study area does not require further archaeological assessment.

The above recommendations are subject to Ministry of Tourism, Culture and Sport approval, and it is an offence to alter any of the study area without Ministry of Tourism, Culture, and Sport concurrence.

No grading or other activities that may result in the destruction or disturbance to the study area is permitted until notice of Ministry of Tourism, Culture, and Sport approval has been received.

5.0 Advice with Compliance with Legislation

- a) This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part IV 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 Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- b) 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 a time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- c) 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*.
- d) The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.
- e) Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

6.0 Assessor Qualifications

This report was prepared and reviewed by the undersigned, employees of Wood. Wood is one of North America's leading engineering firms, with more than 50 years of experience in the earth and environmental consulting industry. The qualifications of the assessors involved in the preparation of this report are provided in Appendix B.

7.0 Closure

This report was prepared for the exclusive use of Region of Waterloo and is intended to provide a Stage 1 archaeological assessment of the study area. The property is located at Fischer-Hallman Road from Bleams Road to 140 m south of Plains Road, in Kitchener, Ontario. The property is legally described as Part of the Hiestand Tract, Part of the Bechtel Tract, Part of Lots 151 to 160, German Company Tract Small Lots, and Part of Lot 8, Beasley's New Survey, Township of Waterloo, County of Waterloo, Ontario.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from Wood will be required. With respect to third parties, Wood has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the Stage 1 background study conducted by Wood. It is based solely a review of historical information and data obtained by Wood as described in this report. Except as otherwise maybe specified, Wood disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to Wood after the time during which Wood conducted the archaeological assessment.

In evaluating the property, Wood has relied in good faith on information provided by other individuals noted in this report. Wood has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. Wood accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Wood makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

This report is also subject to the further Standard Limitations contained in Appendix C.

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Respectfully Submitted,

**Wood Environment & Infrastructure Solutions,
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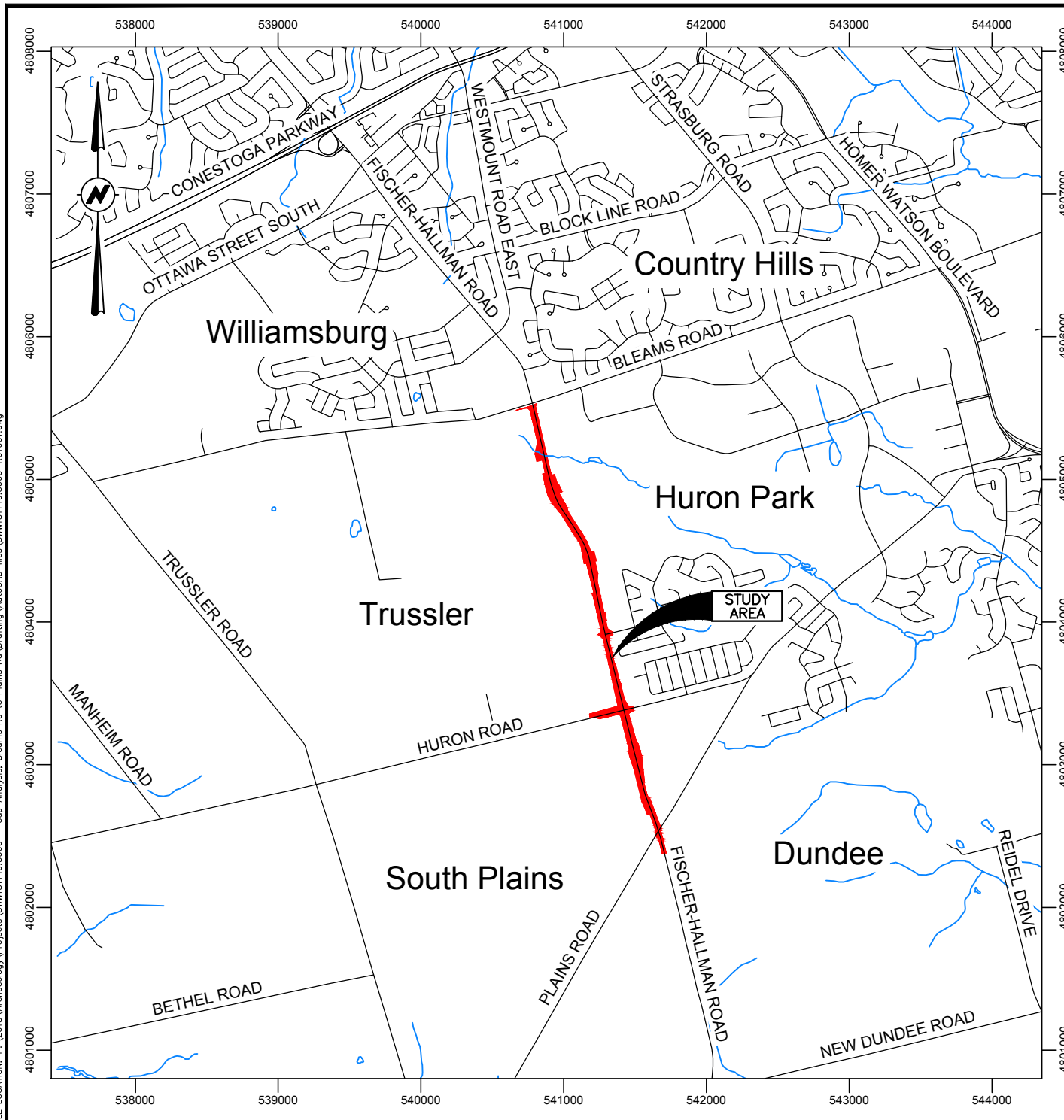
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- 2016e *Stage 3 Archaeological Assessment: Location 25 (AiHc-426), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Histland Tract, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario.* Prepared for Big Spring Farms Ltd. c/o RBJ Schlegel, Dated 12 April 2016, Ref. No 160940352 (PIF P256-0361-2015).
- 2016f *Stage 3 Archaeological Assessment: Location 7 (AiHc-417), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Histland Tract, Geographic Township of Waterloo, former Waterloo County, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario.* Prepared for Big Spring Farms Ltd. c/o RBJ Schlegel, Dated 23 March 2016, Ref. No. 160940352 (PIF P256-0359-2015).
- 2017 Stage 1 and 2 Archaeological Assessment; South Kitchener District Park, Part of Lot 152, German Company Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo, Ontario, prepared for City of Kitchener, 21 June 2017, Ref. No. 161413191, PIF P083-0264-2015 and P083-0288-2016
- Wood
- 2018a Stage 2 Archaeological Assessment: Parts 3 And 4 On Reference Plan 58r-19075, 1375 Bleams Road, Kitchener, Ontario. Prepared for the Regional Municipality of Waterloo. Prepared for the Region of Waterloo, dated 18 May 2018, Ref. No. SWW1711081.4000 (PIF P348-0039-2018)
- 2018b *Stage 1 & 2 Archaeological Assessment Parts 3, 4, 5 and 6 of Registered Plan 58R-19758 1340 Fischer-Hallman Road, Kitchener, Ontario.* Prepared for Regional Municipality of Waterloo, dated 11 July 2018, Ref. No. SWW181274 (P348-0041-2018)
- 2019 Stage 2 Archaeological Assessment: Western Boulevard of Fischer-Hallman Road, between Bleams Road and north of Seabrook Drive, Plan of Survey, Part of Lots 2 and 3, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, prepared for the Regional Municipality of Waterloo, dated 22 Jan 2019, Ref. No. SWW181387 (PIF P348-0043-2018).

Appendix A

Figures

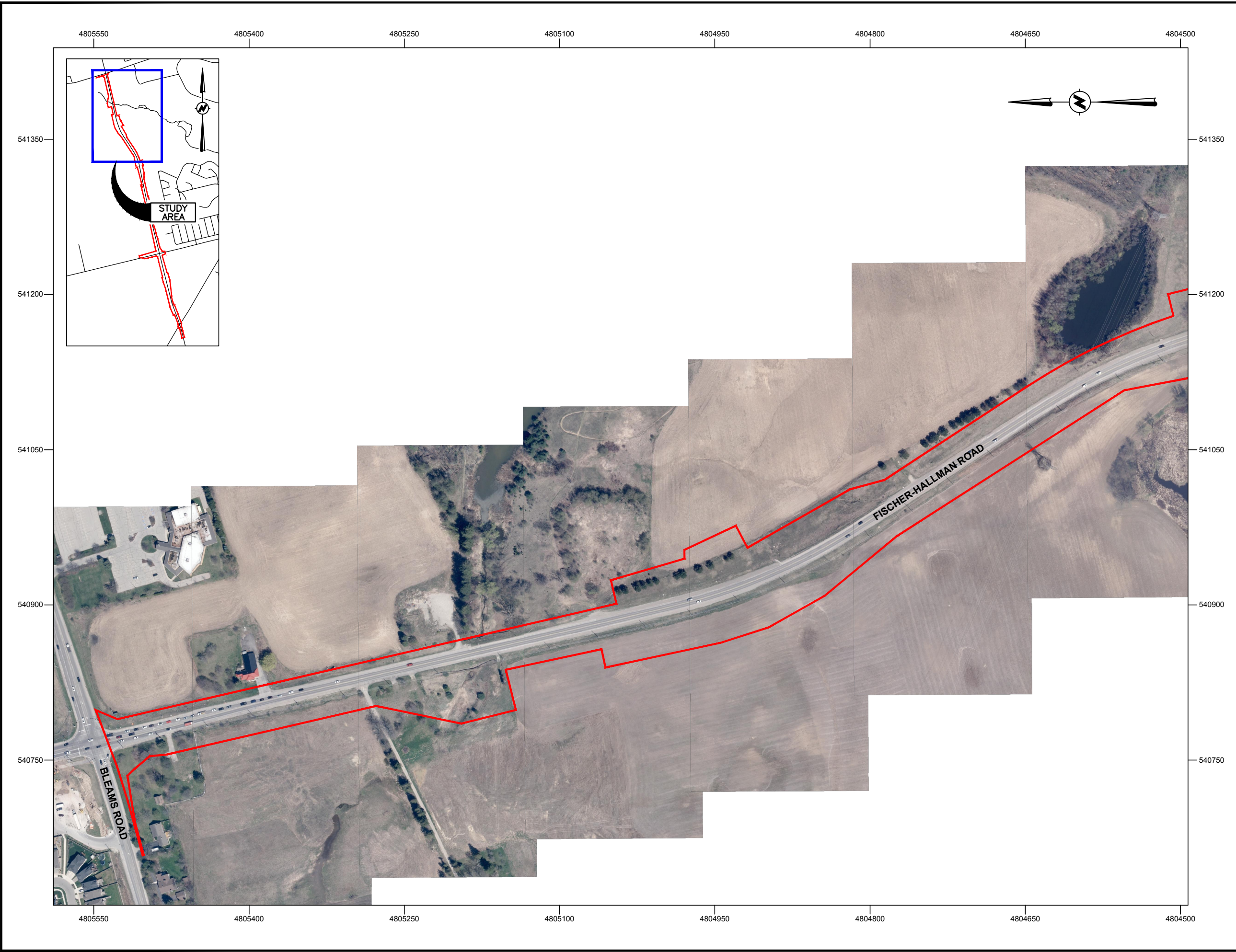


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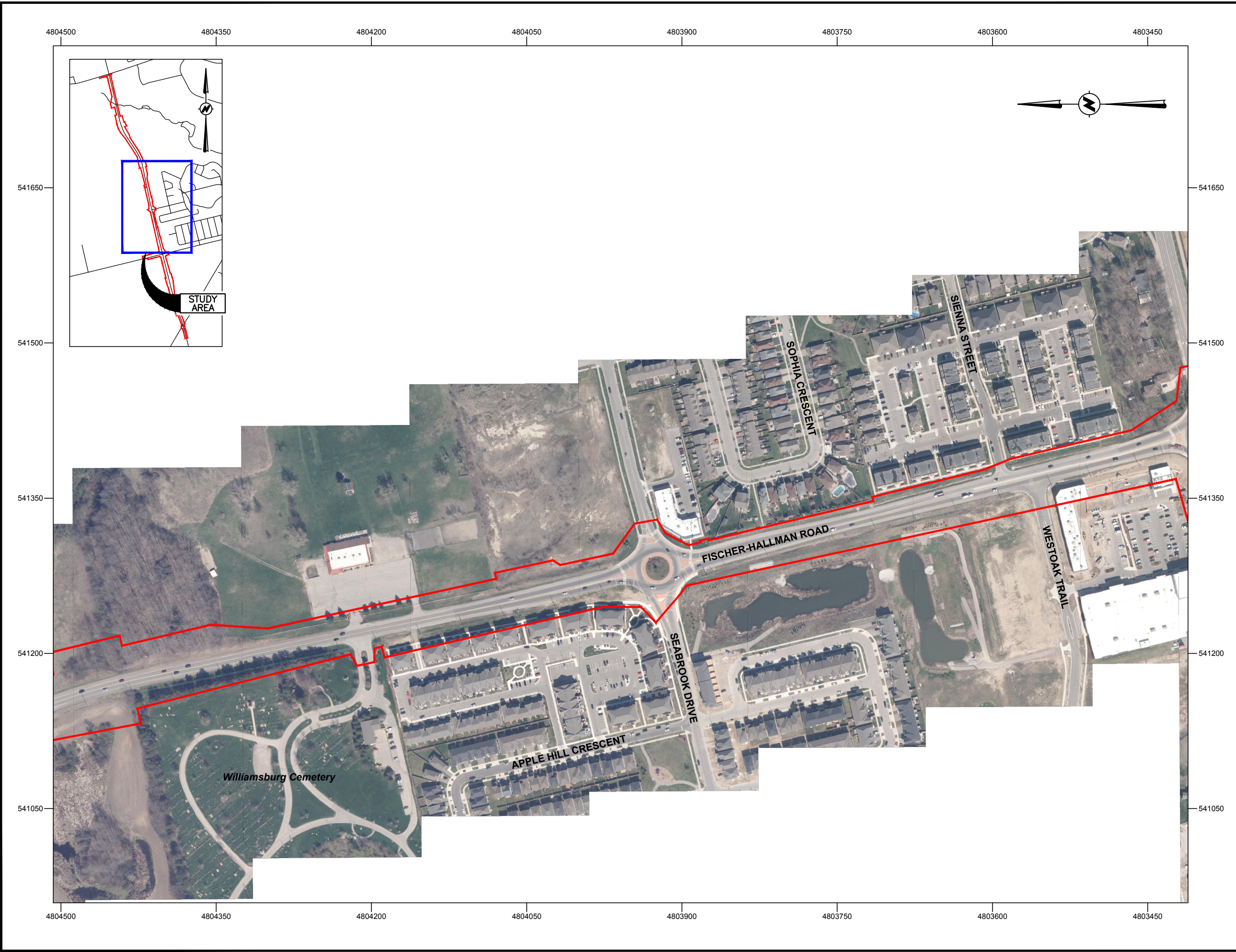
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LEGEND: STUDY AREA		
NOTES: THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. SWW181149.3000. ALL LOCATIONS ARE APPROXIMATE. ORIGINAL PAPER SIZE: 8½ x 11. REFERENCES: CANMAP STREETFILES V2008.4.		
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Wood Environment & Infrastructure Solutions 900 MAPLE GROVE ROAD, UNIT 10 CAMBRIDGE, ONTARIO, N3H 4R7 519-650-7100 wood.		
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TITLE: AERIAL PHOTOGRAPHS SHOWING LOCATION OF STUDY AREA		
LEGEND: ■ STUDY AREA		
NOTES: THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. SWW181149.3000. ALL LOCATIONS ARE APPROXIMATE. ORIGINAL PAPER SIZE: 11 x 17. REFERENCES: 2018 AERIAL PHOTOGRAPHS BY THE REGION OF WATERLOO; CANMAP STREETFILES V2008.4.		
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Wood Environment & Infrastructure Solutions 900 MAPLE GROVE ROAD, UNIT 10 CAMBRIDGE, ONTARIO, N3H 4R7 519-650-7100 		
DWN BY: SJL	CHK'D BY: BS	DATE: MAR. 20, 2019
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: SWW181149.3000
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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
AERIAL PHOTOGRAPHS SHOWING
LOCATION OF STUDY AREA

LEGEND:
■ STUDY AREA

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
REPORT No. SWW181149.3000.
ALL LOCATIONS ARE APPROXIMATE.
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2018 AERIAL PHOTOGRAPHS BY THE REGION OF WATERLOO;
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Region of Waterloo
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KITCHENER, ONTARIO, N2G 4J3

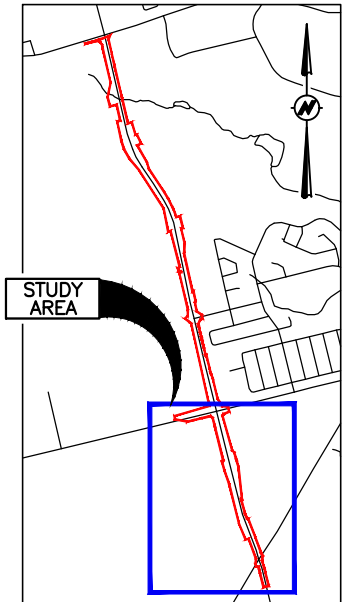
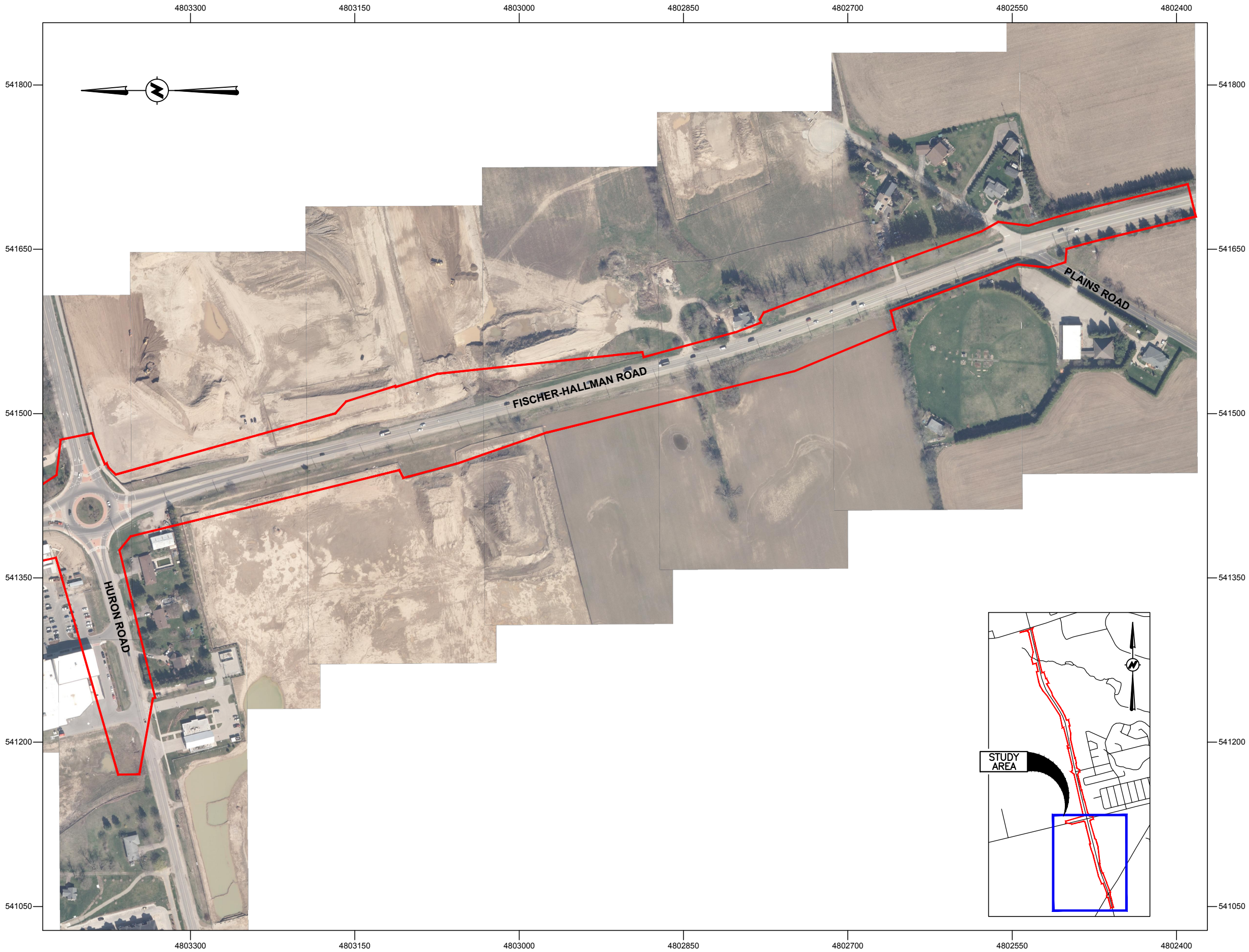

Region of Waterloo

Wood
Environment & Infrastructure Solutions
900 MAPLE GROVE ROAD, UNIT 10
CAMBRIDGE, ONTARIO, N3H 4R7
519-650-7100



DWN BY: SJL	CHK'D BY: BS	DATE: MAR. 20, 2019
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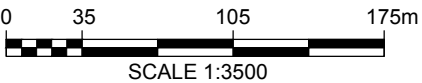


PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
AERIAL PHOTOGRAPHS SHOWING
LOCATION OF STUDY AREA

LEGEND:
 STUDY AREA

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
REPORT No. SWW181149.3000.
ALL LOCATIONS ARE APPROXIMATE.
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Region of Waterloo
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KITCHENER, ONTARIO, N2G 4J3

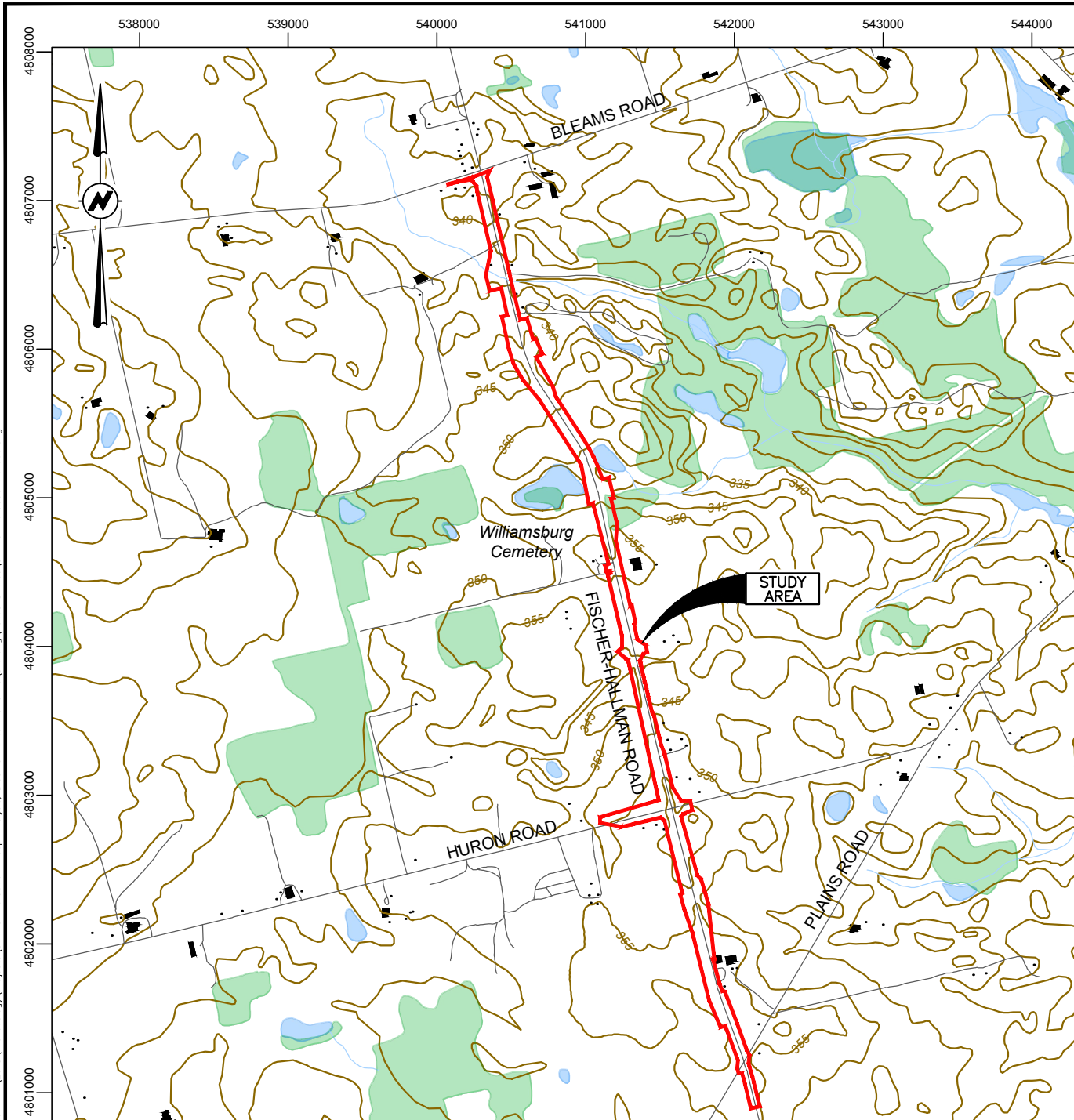


Wood
Environment & Infrastructure Solutions
900 MAPLE GROVE ROAD, UNIT 10
CAMBRIDGE, ONTARIO, N3H 4R7
519-650-7100

wood.

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SJL	BS	MAR. 20, 2019
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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
TOPOGRAPHIC MAP SHOWING
LOCATION OF STUDY AREA

LEGEND:
 STUDY AREA

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
REPORT No. SWW181149.3000.
ALL LOCATIONS ARE APPROXIMATE.

ORIGINAL PAPER SIZE: 8½ x 11.

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Region of Waterloo
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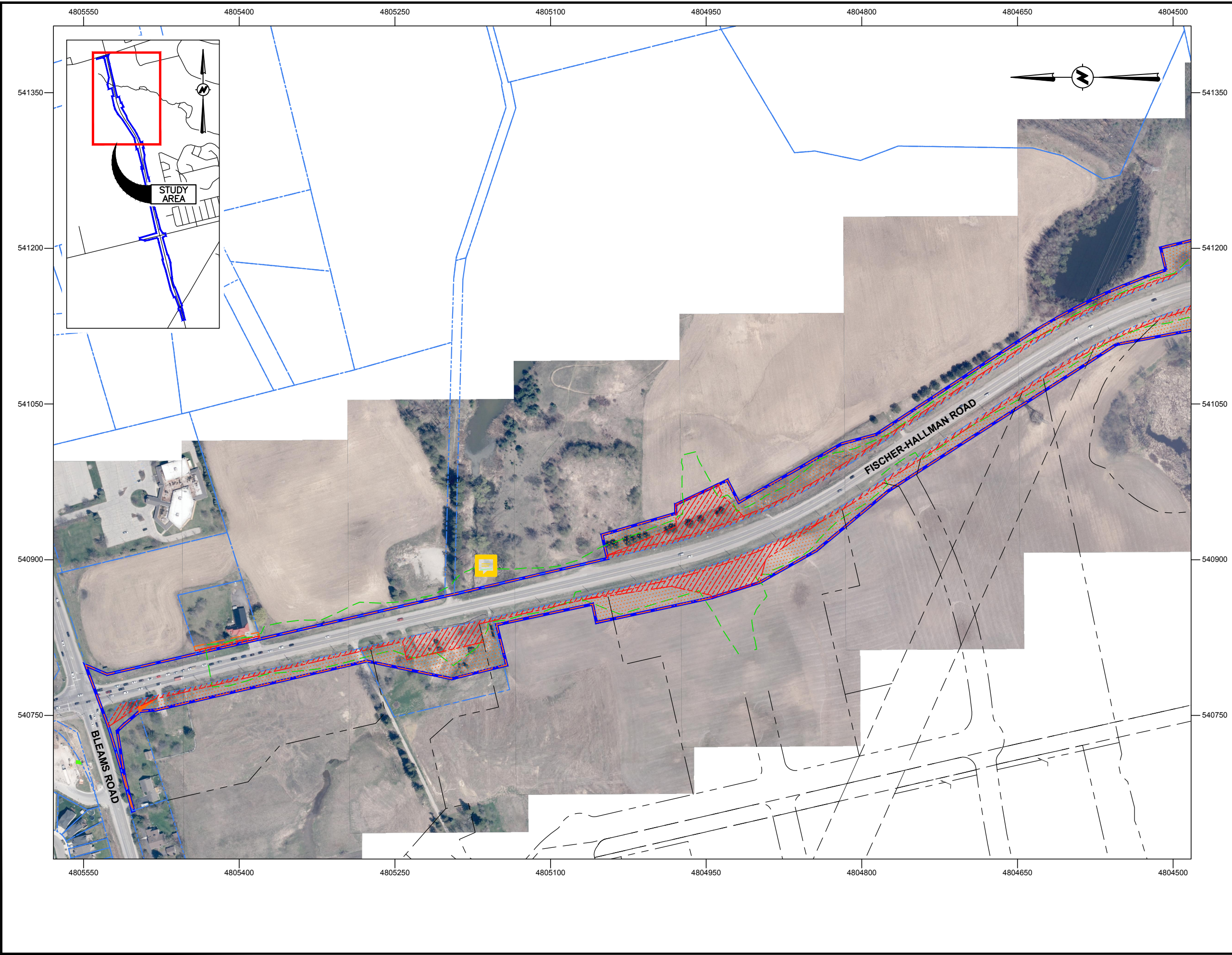


Wood
Environment & Infrastructure Solutions
900 MAPLE GROVE ROAD, UNIT 10
CAMBRIDGE, ONTARIO, N3H 4R7
519-650-7100

wood.

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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
OVERALL DEVELOPMENT PLAN

LEGEND:

- STUDY AREA
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
(SHOWN ONLY WHERE DIFFERENT FROM EXISTING)
- PROPOSED GRADING EASEMENT LIMIT
- PROPOSED GRADING LIMIT
- PROPOSED FEE SIMPLE ACQUISITION
(AREA-PART A)
- PROPOSED PERMANENT EASEMENT
(AREA-PART B)
- PROPOSED TEMPORARY GRADING EASEMENT
(AREA-PART C)

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
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ALL LOCATIONS ARE APPROXIMATE.
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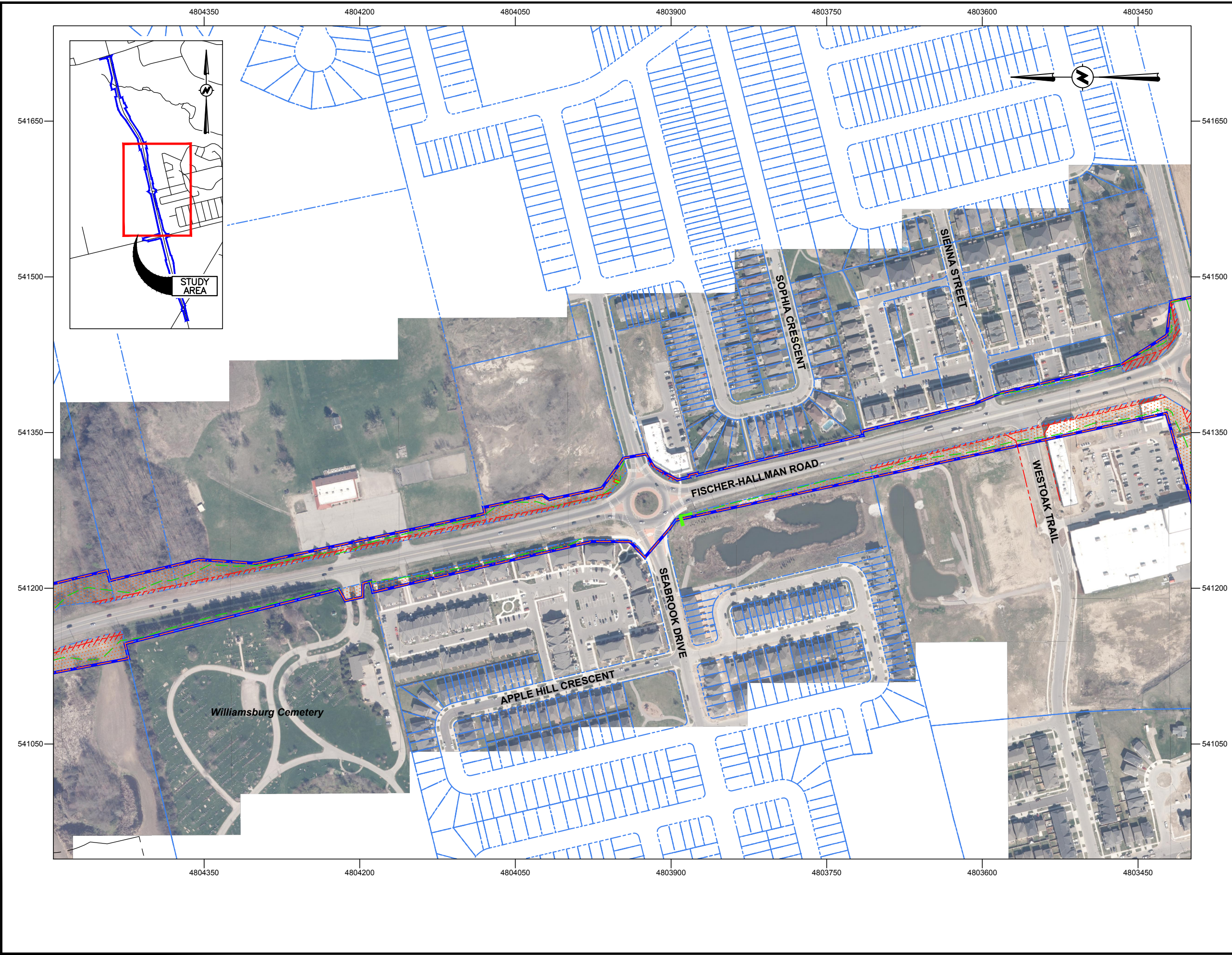
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Region of Waterloo
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KITCHENER, ONTARIO, N2G 4J3

Wood
Environment & Infrastructure Solutions
900 MAPLE GROVE ROAD, UNIT 10
CAMBRIDGE, ONTARIO, N3H 4R7
519-650-7100

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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
OVERALL DEVELOPMENT PLAN

LEGEND:

- STUDY AREA
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
(SHOWN ONLY WHERE DIFFERENT FROM EXISTING)
- PROPOSED GRADING EASEMENT LIMIT
- PROPOSED GRADING LIMIT
- PROPOSED FEE SIMPLE ACQUISITION
(AREA-PART A)
- PROPOSED PERMANENT EASEMENT
(AREA-PART B)
- PROPOSED TEMPORARY GRADING EASEMENT
(AREA-PART C)

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
REPORT No. SWW181149.3000.
ALL LOCATIONS ARE APPROXIMATE.
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Region of Waterloo
150 FREDERICK STREET
KITCHENER, ONTARIO, N2G 4J3

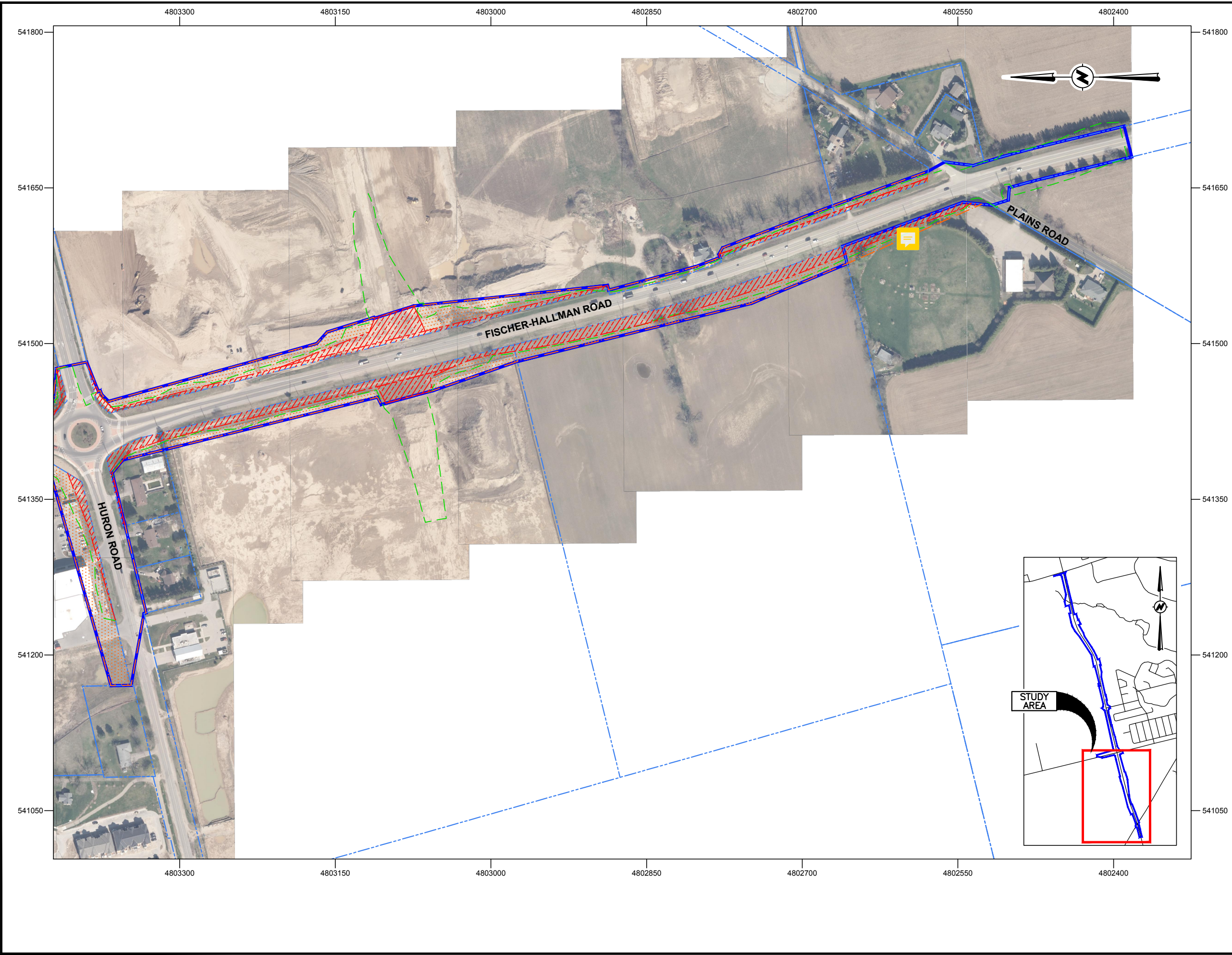
Region of Waterloo

Wood
Environment & Infrastructure Solutions
900 MAPLE GROVE ROAD, UNIT 10
CAMBRIDGE, ONTARIO, N3H 4R7
519-650-7100

wood.

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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
OVERALL DEVELOPMENT PLAN

LEGEND:

- STUDY AREA
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE (SHOWN ONLY WHERE DIFFERENT FROM EXISTING)
- PROPOSED GRADING EASEMENT LIMIT
- PROPOSED GRADING LIMIT
- PROPOSED FEE SIMPLE ACQUISITION (AREA-PART A)
- PROPOSED PERMANENT EASEMENT (AREA-PART B)
- PROPOSED TEMPORARY GRADING EASEMENT (AREA-PART C)

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. SWW181149.3000.
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KITCHENER, ONTARIO, N2G 4J3

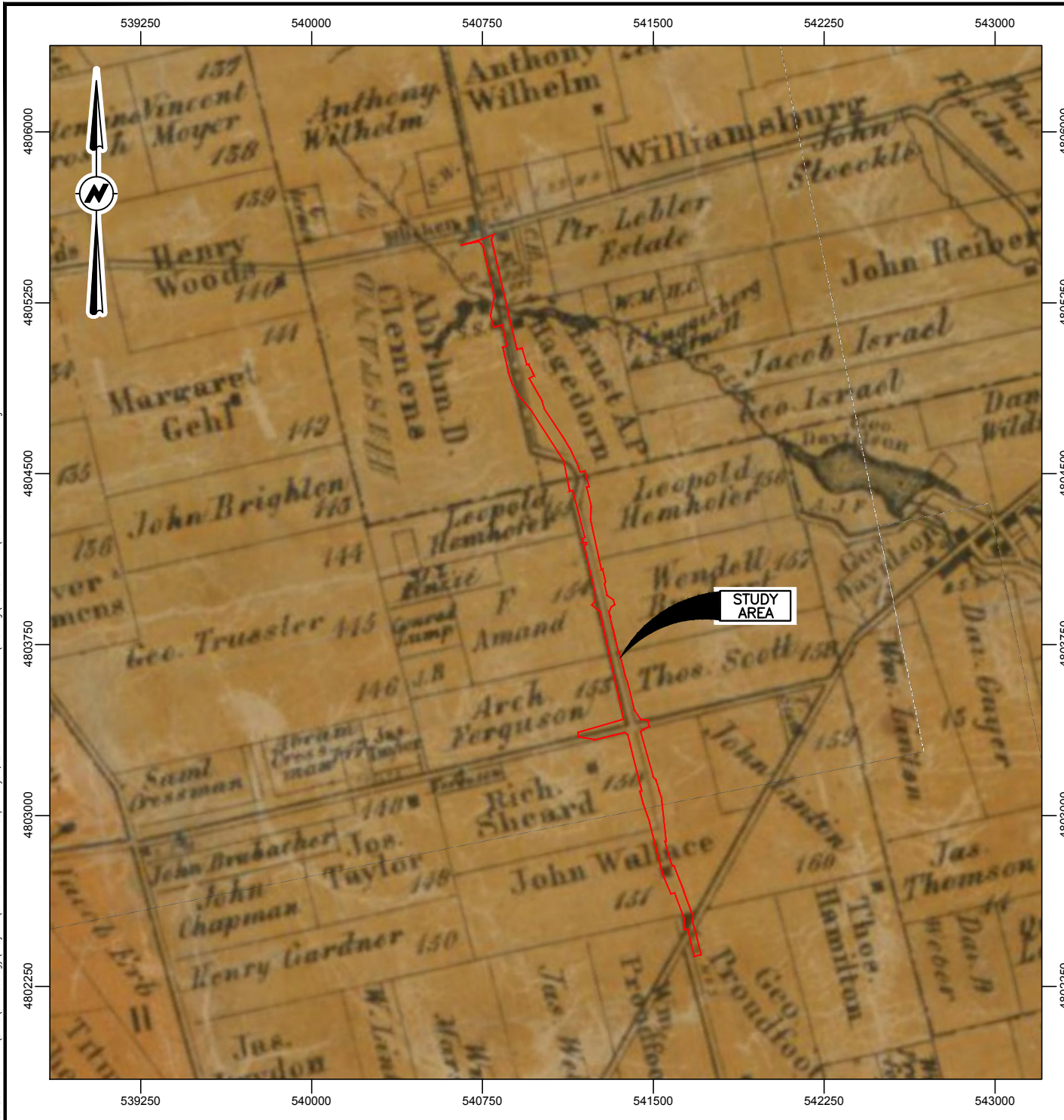
Region of Waterloo

Wood
Environment & Infrastructure Solutions
900 MAPLE GROVE ROAD, UNIT 10
CAMBRIDGE, ONTARIO, N3H 4R7
519-650-7100

wood.

DWN BY:	CHK'D BY:	DATE:
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TITLE: 1861 TREMAINE'S MAP OF WATERLOO TOWNSHIP, COUNTY OF WATERLOO SHOWING LOCATION OF STUDY AREA		
LEGEND: STUDY AREA		
NOTES: THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. SWW181149.3000. ALL LOCATIONS ARE APPROXIMATE. ORIGINAL PAPER SIZE: 8½ x 11. REFERENCES: G. TREMAINE, 1861; CANMAP STREETFILES V2008.4.		
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Region of Waterloo 150 FREDERICK STREET KITCHENER, ONTARIO, N2G 4J3  Region of Waterloo		
Wood Environment & Infrastructure Solutions 900 MAPLE GROVE ROAD, UNIT 10 CAMBRIDGE, ONTARIO, N3H 4R7 519-650-7100 		
DWN BY: SJL	CHK'D BY: BS	DATE: MAR. 20, 2019
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: SWW181149.3000
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PROJECT: STAGE 1 ARCHAEOLOGICAL ASSESSMENT FISCHER-HALLMAN ROAD FROM BLEAMS ROAD TO PLAINS ROAD KITCHENER, ONTARIO		
TITLE: 1881 HISTORICAL ATLAS OF WATERLOO TOWNSHIP, COUNTY OF WATERLOO SHOWING LOCATION OF STUDY AREA		
LEGEND: STUDY AREA		
NOTES: THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. SWW181149.3000. ALL LOCATIONS ARE APPROXIMATE. ORIGINAL PAPER SIZE: 8½ x 11. REFERENCES: H. PARSELL & Co., 1881; CANMAP STREETFILES V2008.4.		
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Wood Environment & Infrastructure Solutions 900 MAPLE GROVE ROAD, UNIT 10 CAMBRIDGE, ONTARIO, N3H 4R7 519-650-7100 		
DWN BY: SJL	CHK'D BY: BS	DATE: MAR. 20, 2019
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: SWW181149.3000
REV No: 1		FIGURE No: 7

Appendix B

Assessor Qualifications



Assessor Qualifications

Dr. Shaun Austin, Ph.D. – Associate Archaeologist

Dr. Austin is the Senior Archaeology Advisor of Wood's cultural heritage resources group and is based in the Wood's Hamilton Office. He has been working in Canadian archaeology and heritage since 1976 and as an archaeological and heritage consultant in Ontario since 1987. He is a dedicated cultural heritage consultant with repeated success guiding projects through to completion to the satisfaction of the development proponent, the cultural heritage community and all other stakeholder groups. His areas of interest and expertise include pre-contact Aboriginal lithics and ceramics. Dr. Austin holds a Professional Archaeology License (P141) issued by the Ontario Ministry of Tourism, Culture and Sport, is MTO RAQs certified in Archaeology/Heritage and is a member of the Ontario Association of Professional Archaeologists.

Barbara Slim, M.A. – Senior Archaeologist

Ms. Slim is a Senior Archaeologist with more than 13 years of experience in the archaeological field and has participated in and directed numerous Stage 1 to 4 archaeological assessments in Ontario. As a founding member of the Wood's archaeology team, Ms. Slim has performed every aspect of project execution, from client relations, project design and First Nation's engagement to MTCS clearance. The majority of the above-mentioned projects have included First Nations involvement. In addition to her archaeological experience, Ms. Slim has several years of experience in conducting environmental investigations and occupational hygiene assessments. Furthermore, she currently serves as Health & Safety Coordinator for her office. Her diverse background with multidisciplinary projects has highlighted her abilities as an effective team member and innovator. Ms. Slim holds a Professional Archaeology License (P348) issued by the Ontario MTCS, is a member of the Ontario Association of Professional Archaeologists and Ontario Archaeological Association.

Kristy O'Neal, M.A. – Senior Archaeologist

Ms. O'Neal is a Senior Archaeologist at Wood with over 20 years of archaeology consulting experience in Ontario. Ms. O'Neal has supervised a wide variety of Stage 1 through 4 archaeological assessments throughout Ontario, with a focus on both pre-contact and Euro-Canadian settlements. Pre-Contact projects have involved First Nations consultation. Ms. O'Neal has a strong background in cultural material analysis and has extensive experience with large complex stratified Aboriginal sites situated within often compromised urban context. She holds a Master's Degree in Bioarchaeology and a Bachelor of Arts Degree in Anthropology from the University of Western Ontario, where she received a Gold Medal Award. Ms. O'Neal's areas of interest and expertise include the archaeological prehistory and history of southwestern Ontario, with focus on the Middle Woodland period and changes in Aboriginal weapon technology. Ms. O'Neal holds a **Professional Archaeology Licence (P066)** issued by the Ontario Ministry of Tourism, Culture and Sport, and is a member of the Ontario Archaeology Society.

Chelsea Dickinson, B.A. – Field Archaeologist

Ms. Dickinson is a Field Archaeologist with 4 years of experience in the consulting archaeology. She has participated in Stage 1 to 4 archaeological assessments in Ontario, including survey in Northern Ontario. In addition, Ms. Dickinson is proficient in surveys using ArcGIS mapping

systems, and has extensive experience working on both Aboriginal and Euro-Canadian sites. Furthermore, she currently serves as Health & Safety Coordinator for her office. Her diverse background with multidisciplinary projects has highlighted her abilities as an effective team member and innovator. Ms. Dickinson holds an **Applied Research Archaeology Licence (R1194)** issued by the MTCS and is a member of the Ontario Archaeological Society.

Appendix C

Limitations

Limitations

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:
 - (a) The Standard Terms and Conditions which form a part of our Professional Services Contract;
 - (b) The Scope of Services;
 - (c) Time and Budgetary limitations as described in our Contract; and,
 - (d) The Limitations stated herein.
2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.
3. The conclusions presented in this report were based, in part, on visual observations of the Study Area. Our conclusions cannot and are not extended to include those portions of the Study Area which were not reasonably available, in Wood Environment & Infrastructure's opinion, for direct observation.
4. The potential for archaeological resources, and any actual archaeological resources encountered, at the Study Area were assessed, within the limitations set out above, having due regard for applicable heritage regulations as of the date of the inspection.
5. Services including a background study and fieldwork were performed. Wood Environment & Infrastructure's work, including archival studies and fieldwork, were completed in a professional manner and in accordance with the Ministry of Tourism, Culture and Sport's guidelines. It is possible that unforeseen and undiscovered archaeological resources may be present at the Study Area.
6. The utilization of Wood Environment & Infrastructure's services during the implementation of any further archaeological work recommended will allow Wood Environment & Infrastructure to observe compliance with the conclusions and recommendations contained in the report. Wood Environment & Infrastructure's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.
7. This report is for the sole use of the parties to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or in part, or any reliance thereon, or decisions made based on any information of conclusions in the report, is the sole responsibility of such third party. Wood Environment & Infrastructure accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.
8. This report is not to be given over to any third-party other than a governmental entity, for any purpose whatsoever without the written permission of Wood Environment & Infrastructure, which shall not be unreasonably withheld.

Stage 2 Archaeological Assessment Fischer-Hallman Road Improvements Part of Lots 151-160, German Company Tract; Lots 8-9, Beasley's New Survey; Hiestand's Tract; and Bechtel's Tract (Former Township of Waterloo, County of Waterloo) City of Kitchener, Regional Municipality of Waterloo

Original Report

Prepared for:

Associated Engineering

508 Riverbend Drive, Suite 302
Kitchener, ON N2K 3S2

Archaeological Licence: P1066 (Lytle)

PIF P1066-0263-2021

Archaeological Services Inc. File: 21EA-162

8 March 2022



Executive Summary

Archaeological Services Inc. (ASI) was contracted by Associated Engineering, on behalf of the Region of Waterloo, to conduct a Stage 2 Archaeological Assessment as part of the proposed Fischer-Hallman Road Improvements in the City of Kitchener. Stage 1 assessments for the Fisher-Hallman Road Improvements previously conducted by ASI (2016) and Wood Environment & Infrastructure Solutions (2019) determined that portions of the Study Area retained archaeological potential and Stage 2 survey was recommended.

The Stage 2 property survey was conducted from December 7-10, and 13-17, 2021, in accordance with the *Ontario Heritage Act* and the S & G. Approximately 78 percent of the Study Area was previously assessed and not subject to Stage 2 survey. One percent of the Study Area had been previously subject to deep and extensive ground disturbance associated with utilities and recent tree removal, and was not subject to Stage 2 survey. Eleven percent of the Study Area comprising the Fischer-Hallman Road right-of-way boulevards was subject to test pit survey at five metre intervals and judgmental 10 metre intervals to confirm previous disturbance. The remaining 10 percent of the Study Area could not be subject to test pit survey due to deteriorating field conditions resulting from cold temperatures, and requires Stage 2 assessment prior to any proposed impacts. As a result of this assessment, two non-diagnostic Pre-contact Indigenous sites and two non-diagnostic Pre-contact Indigenous secondary deposits were identified. As Secondary Deposits P2 and P5 do not represent primary archaeological deposits, they do not have continued cultural heritage value or interest, and therefore do not require further assessment.

Site P1 (AiHc-557) is represented by three flake fragments manufactured from Onondaga chert recovered from the topsoil of one positive test pit and one test unit. Due to the isolated and non-diagnostic nature of Site P1, it does not require further assessment. Site P3 (AiHc-558) is represented by thirteen flake fragments, one secondary knapping flake, and one secondary retouch flake manufactured from Onondaga chert recovered from the topsoil of seven positive test pits and two test units. The site meets the artifact density requirements for Stage 3 assessment and requires further excavation.



Project Personnel

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- **Division Coordinator:** Katrina Thach, Hon. BA (R1225), Associate Archaeologist, Project Coordinator, Environmental Assessment Division
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- **Project Manager:** Sarah Jagelewski, Hon. BA (R405), Lead Archaeologist, Manager, Environmental Assessment Division
- **Field Director:** Jesse Hume, BA (R1254), Archaeologist, Field Director, Mitigation Division; Chris Langlois, MA (P1177), Field Director, Mitigation Division
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- **Artifact Analysis:** Debbie Steiss, MA (P049), Senior Associate
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1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by Associated Engineering, on behalf of the Region of Waterloo, to conduct a Stage 2 Archaeological Assessment as part of the proposed Fischer-Hallman Road Improvements in the City of Kitchener (Figure 1). Proposed improvements include the urbanization and widening of Fischer-Hallman Road to four lanes, the installation of multi-use trails, utilities, and roundabouts, and enhanced landscaping and streetscaping.

ASI previously completed a Stage 1 Archaeological Assessment in 2016 as part of the Municipal Class Environmental Assessment for the Fischer-Hallman Road Improvements projects (ASI, 2016). The improvements involve the widening of Fischer-Hallman Road from two lanes to four lanes, between Bleams Road and Plains Road in the City of Kitchener. The Stage 1 project area included the existing Fischer-Hallman Road right-of-way from 50 metres south of Bleams Road to 250 metres south of Plains Road, including an eight-metre buffer beyond the existing right-of-way property boundary. The report states that a large part of the study area was considered to be disturbed due to right-of-way construction and grading of adjacent lands, and the remainder of the project area was considered to possess archaeological potential requiring Stage 2 survey by means of either test pit or pedestrian survey.

The Class Environmental Assessment for the proposed road widening of Fischer-Hallman Road from Bleams Road to Plains Road was approved by Regional Council on March 2, 2016, and approved by the Minister of Environment and Climate Change on April 10, 2017 (Wood Environment & Infrastructure Solutions, 2019a). In 2019 Wood Environment & Infrastructure Solutions (Wood) completed a Stage 1 archaeological assessment to review and summarize the work completed within the project area to update the results of ASI's 2016 report. The Region of Waterloo and Associated Engineering contracted ASI to conduct an additional Stage 2 assessment as part of the proposed Fischer-Hallman Road Improvements.

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (*Ontario Heritage Act*, R.S.O. c. O.18, 1990, as amended in 2019) and the 2011 *Standards and Guidelines for Consultant*



Archaeologists (S & G), administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI), formerly the Ministry of Tourism and Culture (MHSTCI, 2011).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (Environmental Assessment Act, R.S.O., 1990 as amended 2020) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (Municipal Class Environmental Assessment, 2000, as amended 2015).

This Stage 2 assessment has been commissioned to satisfy the recommendations of the previous Stage 1 assessment that was undertaken as part of the Fischer-Hallman Road Improvements Municipal Class Environmental Assessment in the City of Kitchener (ASI, 2016), in addition to Wood's (2019a) more recent Stage 1 assessment for the project.

ASI has been actively engaging with Indigenous communities who have expressed an interest in the archaeological work within the Study Area for this project on behalf of the Regional Municipality of Waterloo. Representatives from the Haudenosaunee Development Institute, Mississaugas of the Credit First Nation, and Six Nations of the Credit River Elected Council were present on site and participated during the Stage 2 property survey. A detailed account of all First Nations engagement, including concerns expressed and accommodations made, can be found in the *Supplementary Documentation: Indigenous Engagement* document associated with this report.

Authorization to access and carry out all activities necessary for the completion of this Stage 2 assessment was granted by the Regional Municipality of Waterloo on August 31, 2021.



1.1.1 Treaties and Traditional Territories

The Study Area is located in Treaty 4, The Crown to the Six Nations or the Haldimand Tract. Treaty 4 is also known as the Simcoe Patent and was issued in 1793.

During the American Revolution, Mississauga warriors supported the English military. Rebel forces destroyed the villages of the Six Nations Iroquois in New York, and many people were forced to move to the Niagara area. Frustration was expressed when the Six Nations Iroquois leaders learned that the English planned to make a peace treaty with the Americans and establish a boundary line that would give away their homelands. The English government offered to protect Six Nations Iroquois peoples and give them land within their boundaries. On August 8, 1783, Lord North instructed Governor Haldimand to set apart land for the Six Nations Iroquois and ensure that they carried on their hunting and fur trading with the British. On May 22, 1784, a tract of land along the Grand River was purchased by the British government from the Mississaugas who lived in the vicinity (Johnston, 1964; Lytwyn, 2005). The land set apart is called the Haldimand Tract.

Joseph Brant led Haudenosaunee loyalists (1600 people) to the Haldimand tract in 1784 and in the fall of 1784, Sir Frederick Haldimand formally awarded the tract to the Mohawks “and others of the Six Nations [Iroquois].” They were authorized to “Settle upon the Banks of the River” and were allotted “for that Purpose six miles [10 kilometres] deep from each Side of [it] beginning at Lake Erie, & extending in the Proportion to [its] Head.” The precise boundaries of the grant were unclear as there was no survey; for example, the northern boundary of the original deed from the Mississaugas to the Crown stated that the line extended “from the creek that falls from a small lake into...the bay known by the name of Waghquata [Burlington Bay]...until it strikes the river La Tranche [Thames].” The 1790 survey by Augustus Jones intentionally failed to include the headwaters of the Grand, an action made all the more difficult to address given the unclear description of the extent in the original deeds (Johnston 1964; Lytwyn 2005).

Brant regarded the territory as his own to manage on behalf of the Confederacy and interpreted the proclamation as tantamount to full national recognition of



the Mohawks and fellow tribesmen. This interpretation was strongly denied by the British (Johnston 1964; Lytwyn 2005). Appointed as Lieutenant Governor of the new colony of Upper Canada in 1791, Simcoe refused to permit the Six Nations Iroquois to sell/lease any part of their reserve because they were arranged independently of the Crown. Brant, on the other hand, argued for the Six Nations Iroquois' need for an immediate assured income from land sales as they could no longer hope to survive by hunting exclusively. Simcoe thought that if such practices were permitted, it could lead to other Europeans attempting to seize control by any means of the better part of the Six Nations Iroquois' reserve and it was therefore unresolved as to whether Six Nations Iroquois people could dispose of their lands directly to whomever they chose (Johnston 1964; Lytwyn 2005).

In the first few years, Brant took the initiative and invited European friends and acquaintances to the tract and provided them with rough land titles. Over the next 25 years (1784-1810), a considerable number of Europeans and Americans obtained similar leases authorizing them (in Brant's opinion) to occupy and improve lots overlooking the river (Johnston 1964; Lytwyn 2005).

The subsequent Peter Russel administration (1797-1798), however, recognized the leases and the sales that Brant arranged with white settlers along the Grand River Valley. Trustees were appointed to act on the behalf of the Six Nations Iroquois with the authority to receive payment of purchases. On the other hand, some Six Nations Iroquois thought that the land sale practices violated the ancient principle that land was not a "commodity which could be conveyed." Two Mohawk sachems even tried to take up arms to depose Brant because they did not agree with his ways. Their efforts were for naught, and they returned to the Bay of Quinte where other Six Nation Iroquois peoples, led by Sachem John Deseronto, had settled after the American Revolution (Johnston 1964; Lytwyn 2005).

A formal investigation of the matter was launched in 1812 although leases were not set aside. Many of the leases were confirmed by the Crown in 1834-1835. Unauthorized sales and agreements remained rampant (Johnston 1964; Lytwyn 2005).



In 1841, Samuel P. Jarvis (Indian Superintendent) informed the Six Nations Iroquois that the only way to keep settlers off their land would be for them to surrender it to the Crown, to be administered for their sole benefit. With this plan, the Six Nations Iroquois would retain lands that they actually occupied and a reserve of approximately 8,094 hectares. The surrender of land was made by the Confederacy in January 1841 (Johnston 1964; Lytwyn 2005).

Today, this history and those surrenders are still contested and there are numerous specific land claims that have been filed by the Six Nations Iroquois with the federal government in regard to lands within the Haldimand Tract (Johnston 1964; Lytwyn 2005).

1.2 Historical Context

A comprehensive review of the Pre-contact Indigenous and Euro-Canadian occupations of the Waterloo region is presented in the previous Stage 1 reports (ASI, 2016, pp. 1–8; Wood Environment & Infrastructure Solutions, 2019a, pp. 28–35). To summarize, background research indicates that the general vicinity of the Study Area has been attractive to human settlement for thousands of years, primarily by Indigenous people and more recently by Euro-Canadian settlers. Historically, the Study Area corridor is within part of Lots 8-9, Beasley's New Survey; Lots 151-160, Germany Company Tract; Bechtel's Tract; and Hiestand's Tract.

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the MHSTCI through *Ontario's Past Portal*; published and unpublished documentary sources; and the files of ASI.



1.3.1 Current Land Use and Field Conditions

The Study Area includes the existing Fischer-Hallman Road right-of-way from 400 metres south of Bleams Road to 145 metres south of Plains Road in the City of Kitchener (Figure 1). The lands within the Study Area comprise the Fischer-Hallman roadbed, paved and gravel shoulders, and ditching adjacent to either manicured or scrubby boulevards containing hydro poles and subsurface utilities. The lands surrounding the Study Area are presently undergoing urbanization, with former agricultural lands being developed into low to medium density planned residential neighbourhoods and supporting commercial businesses.

The Stage 2 survey for the Fischer-Hallman Road Improvements project was conducted from December 7-10, 2022, under the field direction of Chris Langlois (P1177), and December 13-17, 2022, under the field direction of Jesse Hume (R1254).

1.3.2 Geography

A comprehensive summary of the geology and physiography of the Waterloo region is presented in the previous Stage 1 reports (ASI, 2016, pp. 8–10; Wood Environment & Infrastructure Solutions, 2019a, pp. 27–28). To summarize, the Study Area is situated within the Waterloo Hills physiographic region of southern Ontario (Chapman & Putnam, 1984). The rolling terrain of ridges and hills of the Waterloo Hill region was formed as till and kame moraines. Flowing southward through the moraines is the Grand River spillway comprised of level alluvial terraces (Chapman and Putnam 1984: 136). North of Waterloo, the spillway channel splits into two channels that rejoin south of Kitchener. The present course of the Grand River follows the eastern channel while Schneider Creek follows the western channel. The study area is situated to the west of the southern confluence.

The Study Area is within the Strasburg Creek and Cedar Creek subwatersheds of the Grand River watershed. The Grand River was an important transportation route and a critical resource extraction area for generations of Indigenous people. Historically, the Grand River has been utilized as a navigable waterway, as a power source (such power sites served as settlement nuclei), and above



Brantford as a course for driving logs (Chapman and Putnam 1984:98). It is also the focus of the Haldimand Tract; Joseph Brant was awarded six miles (10 kilometres) on either side of the river (Johnston 1964:35-38; Lytwyn 2005). The Grand River (and its tributaries the Nith, Conestogo, Speed and Eramosa Rivers) was designated as a Canadian Heritage River in 1994 for its cultural history and recreation (Canadian Heritage River Systems 2016).

1.3.3 Previously Registered Archaeological Sites

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MHSTCI. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The Study Area under review is located in Borden block *AiHc*.

According to the Ontario Archaeological Sites Database, 86 previously registered archaeological sites are located within one kilometre of the Study Area (Ministry of Heritage, Sport, Tourism and Culture Industries, 2021). A summary of the sites is provided below in Table 1. The location of Site *AiHc*-451 has been placed incorrectly within 50 metres of the current Study Area. Its actual location is approximately 10 kilometres northeast of the Study Area within Lot 17, Beasely's Broken Front Concession. Conversely, Site *AiHc*-426 was not included within the Ontario Archaeological Sites Database, but is located within 50 metres of the current Study Area (Archaeological Research Associates Ltd. 2010a; Stantec 2016c; Bluestone Research 2018; *Supplementary Documentation: Detailed Site Location Information* Figure 1). In total, three sites are located within 50 metres of the Study Area (Table 1: bolded sites), but no longer hold cultural heritage value and interest (CHVI) : *AiHc*-111, *AiHc*-426, and *AiHc*-430 (*Supplementary Documentation: Detailed Site Location Information* Figure 1).



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

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-2	Moyer	Neutral Nation	Village	Wagner 1973	N/A
AiHc-23	N/A	Pre-contact Indigenous	Campsite	ASI 1982	N/A
AiHc-48	Glencairn 1	Pre-contact Indigenous	Findspot	Mayer, Pihl, Poulton & Assoc. Inc. 1986	N/A
AiHc-49	Glencairn 2	Pre-contact Indigenous	Findspot	Mayer, Pihl, Poulton & Assoc. Inc. 1986	N/A
AiHc-55	Williamsburg 1	Euro-Canadian	House	Mayer, Pihl, Poulton & Assoc. Inc. 1986; Janusas 1989	N/A
AiHc-56	Williamsburg 2	Euro-Canadian	Undetermined	Mayer, Pihl, Poulton & Assoc.	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
				Inc. 1986; Janusas 1989	
AiHc-57	Off Corridor	Pre-contact Indigenous	Findspot	Mayer, Pihl, Poulton & Assoc. Inc. 1986	N/A
AiHc-85	Huron Business Park 1	Pre-contact Indigenous	Findspot	ASI 1989	N/A
AiHc-86	Huron Business Park 2	Pre-contact Indigenous	Findspot	ASI 1989	N/A
AiHc-87	Huron Business Park 3	Pre-contact Indigenous	Findspot	ASI 1989	N/A
AiHc-88	Huron Business Park 4	Pre-contact Indigenous	Undetermined	ASI 1989	N/A
AiHc-92	Bleams Road – Corduroy road	Euro-Canadian	Road	Janusas 1989	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-104	N/A	Pre-contact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-105	N/A	Pre-contact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-106	N/A	Pre-contact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-107	N/A	Pre-contact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-108	N/A	Pre-contact Indigenous	Campsite	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-109	N/A	Pre-contact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-110	N/A	Pre-contact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-111	N/A	Pre-contact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	No
AiHc-112	N/A	Pre-contact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-113	N/A	Pre-contact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-114	N/A	Pre-contact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-115	N/A	Late Woodland	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-116	N/A	Pre-contact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-117	N/A	Pre-contact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-118	N/A	Euro-Canadian	Homestead	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-119	N/A	Pre-contact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-120	N/A	Pre-contact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-121	N/A	Pre-contact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-122	N/A	Pre-contact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-163	Lujan	Pre-contact Indigenous	Findspot	ASI 1990, 1991	N/A
AiHc-164	Keyoke	Pre-contact Indigenous	Lithic scatter	ASI 1990	N/A
AiHc-223	Norris-Sternberg	Archaic	Hunting	Grimes 1998; ARA 1999	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-255	Strasburg Creek	Late Woodland	Village	ARA 2001, 2011	N/A
AiHc-256	Fischer-Hallman	Pre-contact Indigenous	Undetermined	ARA 2001	N/A
AiHc-257	Cornfield	Pre-contact Indigenous	Undetermined	ARA 2001	N/A
AiHc-358	Borsh	Euro-Canadian	Homestead	ASI 2007	N/A
AiHc-359	N/A	Indigenous (Pre-sixteenth century)	Findspot	ASI 2008	N/A
AiHc-360	N/A	Pre-contact Indigenous	Findspot	ASI 2007, 2013	N/A
AiHc-361	N/A	Late Archaic, Post-Contact	Lithic scatter	ASI 2007,2013	N/A
AiHc-362	Hewitt Farm Dump Site	Euro-Canadian	Dump	ASI 2007	N/A
AiHc-363	Becker Estates	Pre-contact Indigenous	Camp	Stantec 2006	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-364	Becker Estates	Pre-contact Indigenous	Camp; lithic scatter	Stantec 2006	N/A
AiHc-368	N/A	Pre-contact Indigenous	Scatter	ASI 2007	N/A
AiHc-369	N/A	Pre-contact Indigenous	Findspot	ASI 2007	N/A
AiHc-370	N/A	Pre-contact Indigenous	Scatter	ASI 2007	N/A
AiHc-389	N/A	Late Woodland	Campsite	ARA 2006	N/A
AiHc-413	N/A	Pre-contact Indigenous	Campsite	ARA 2009	N/A
AiHc-414	Location 1	Late Woodland, Euro-Canadian	Village	ARA 2010; Stantec 2016; Bluestone Research 2017; Wood 2019	N/A
AiHc-415	Location 2	Pre-contact Indigenous	Undetermined	ARA 2010, Stantec 2016, Bluestone Research 2017	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-416	Location 4	Late Woodland	Village	ARA 2010; Stantec 2016; Bluestone Research 2017; Wood 2019	N/A
AiHc-417	Location 7	Archaic	Scatter	ARA 2010, Stantec 2016	N/A
AiHc-418	N/A	Euro-Canadian	Midden	ARA 2010	N/A
AiHc-419	N/A	Pre-contact Indigenous	Undetermined	ARA 2010	N/A
AiHc-420	Location 12	Middle Archaic	Campsite	ARA 2010; Bluestone Research 2016	N/A
AiHc-421	N/A	Middle Archaic	Campsite	ARA 2010; Timmins Martelle Heritage Consultants Inc. 2013; Bluestone Research 2016	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-422	N/A	Pre-contact Indigenous, Euro-Canadian	Undetermined	ARA 2010; Timmins Martelle Heritage Consultants Inc. 2013	N/A
AiHc-423	N/A	Late Archaic	Campsite	ARA 2010; Timmins Martelle Heritage Consultants Inc. 2013; Bluestone Research 2016	N/A
AiHc-424	Location 21	Late Woodland, Euro-Canadian	Village/hamlet	ARA 2010; Stantec 2015	N/A
AiHc-425	AiHc-425	Pre-contact Indigenous, Euro-Canadian	Log cabin; midden	ARA 2010; Golder 2013	N/A
AiHc-426	Location 25	Pre-contact Indigenous	Campsite	ARA 2010; Stantec 2016; Bluestone Research 2018	No

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-427	N/A	Late Woodland, Euro-Canadian	Village/hamlet	ARA 2010, Stantec 20016, Bluestone Research 2017	N/A
AiHc-428	Location 28	Late Woodland	Village	ARA 2010 Stantec 2015	N/A
AiHc-429	Find Spot 29	Pre-contact Indigenous	Camp/Campsite	ARA 2008 Timmins Martelle Heritage Consultants Inc. 2013 Bluestone Research 2016	N/A
AiHc-430	N/A	Euro-Canadian	Farmstead	ARA 2008	No
AiHc-451	Location 12	Unknown	Undetermined	Golder 2012	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-454	Ferguson Site	Euro-Canadian	Homestead	ASI 1987, 2016	N/A
AihC-455	P2	Middle Archaic	Undetermined	ASI 1987	N/A
AiHc-456	Location 2	Unknown	Undetermined	Timmins Martelle Heritage Consultants Inc. 2013	N/A
AiHc-460	N/A	Late Archaic	Campsite	Timmins Martelle Heritage Consultants Inc. 2013	N/A
AiHc-471	Findspot 1	Unknown	Undetermined	ARA 2014	N/A
AiHc-472	Findspot 2	Early Woodland	Undetermined	ARA 2014	N/A
AiHc-479	N/A	Pre-contact Indigenous	Campsite	Golder 2015	N/A
AiHc-481	Location 1	Pre-contact Indigenous	Campsite	Stantec 2016	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-482	N/A	Euro-Canadian	Unknown	Wood 2017	N/A
AiHc-498	Findspot #2	Pre-contact Indigenous	Findspot	Stantec 2019	N/A
AiHc-521	HSL-5	Early Archaic	Campsite	Stantec 2019	N/A
AiHd-94	Nutria	Pre-contact Indigenous	Findspot	ASI 1990, 1991	N/A
AiHd-95	Sacalait	Pre-contact Indigenous	Lithic scatter	ASI 1990, 1991	N/A
AiHd-96	Bruly	Pre-contact Indigenous	Findspot	ASI 1990, 1991	N/A
AiHd-107	N/A	Pre-contact Indigenous	Undetermined	ASI 1994	N/A
AiHd-150	N/A	Pre-contact Indigenous	Findspot	ASI 2007	N/A
AiHd-156	N/A	Middle Woodland	Village	ARA 2008	N/A

Registered Precontact Village Sites within One Kilometre

The Moyer Site (AiHc-2)

The Moyer Site was first identified by William John Wintemberg in 1900, and first surveyed by George McDonald in 1951 (Wagner et al., 1973). McDonald's survey was used to organize an excavation of the site supported by Waterloo Lutheran University (now the University of Waterloo). Fieldwork took place across three seasons from 1970-1972 under the supervision of Norman Wagner, Dean Knight, and Lawrence Toombs. It was concluded that the Moyer Site represents a fifteenth century Neutral Nation village site containing 10 longhouses. The cultural heritage value of the site is currently unknown (MHSTCI, 2022); however, its location is under active agricultural cultivation. The Moyer Site is located approximately 900 metres from the current Study Area.

Strasburg Creek (AiHc-255)

The Strasburg Creek Site was first identified by Archaeological Research Associates Ltd. (2001: CIF 2001-082-001) during a survey for the Huron West Community in the City of Kitchener. The 1600 square metre scatter included lithic debitage, projectile points, Late Woodland ceramics, bone, and shell fragments, and was recommended for Stage 3 assessment. Archaeological Research Associates Inc. (2003: CIF 2001-082-001, 2001-128-001, and 2001-082-009) then conducted Stage 3 and 4 assessments which included block excavation and topsoil stripping within the impacted portion of the site and a five metre protective buffer. The remainder of the site, outside of the Huron West Community, was protected.

Later on, Archaeological Research Associates Ltd. (2008: P007-164-2008, P007-165-2008) conducted additional work at Site AiHc-255 as part of the Middle Strasburg Trunk Sanitary Sewer installation, which included Stage 1-3 assessments. Once the remainder of Site AiHc-255 was relocated during the Stage 1-2 assessment (identified as Findspot 1), Stage 3 controlled surface collection and test unit excavation resulted in the recovery of an additional 93 lithic artifacts from 53 test units. Mechanical trenching was used to confirm the site limits. As test unit yields were less than 10, no further work was recommended within



the area of impacts, however a 20 metre ‘no-go’ protective buffer and fencing was recommended for Site AiHc-255 during subdivision construction.

Additional Stage 3 assessment at Site AiHc-255 was conducted by Archaeological Research Associates Ltd. (2010b: P007-216-2009) as part of a proposed trail crossing within the Huron Natural Area. A controlled surface collection and excavation of 18 test unit to the north and east of the 2001 excavation site produced an additional 535 Indigenous artifacts, and the identification of post moulds associated with House 1 and House 2 discovered in 2001. Artifacts recovered included a Nanticoke-notched projectile point, non-diagnostic lithic tools, groundstone fragments, Middleport Oblique Indigenous ceramic fragments, and worked bone. It was recommended that the impacts to the site be carried out in such a way to minimize impacts, and Stage 4 assessment was recommended prior to those impacts.

Site AiHc-414 (Location/Findspot 1)

Site AiHc-414 is a Middleport Late Woodland village site with continued cultural heritage value. The current limits and buffers of Site AiHc-414 are located more than 100 metres from the current Study Area.

Since its identification by Archaeological Research Associates Ltd. (2010a: P007-167-2008) during a Stage 1-2 survey of the Williamsburg South Property located at 1291 Fischer-Hallman Road in the City of Kitchener, Site AiHc-414 has been subject to numerous Stage 2 (Wood Environment & Infrastructure Solutions, 2019c), Stage 3 (Stantec Consulting Ltd., 2016a: P256-0358-2015; Wood Environment & Infrastructure Solutions, 2020: P348-0062-2019), and Stage 4 (Bluestone Research Inc., 2017a: P344-0076-2016) assessments.

Bluestone Research Inc.’s Stage 4 excavation comprised block excavation followed by mechanical topsoil removal. A total of four structures were identified, including Longhouse 5 which extends outside of the proposed development into the Fischer-Hallman Road right-of-way. Bluestone recommended additional Stage 3 assessment and construction monitoring through Fischer-Hallman Road to determine the limits of the site. Site AiHc-414 has been determined to be



associated with nearby Sites AiHc-416 and AiHc-427 as part of a Late Woodland village.

Two additional Stage 4 assessments of Site AiHc-414 have been completed by Wood (P348-0104-2020 and P348-0103-2020) and are presently undergoing review by the MHSTCI.

[Site AiHc-416 \(Location/Findspot 4\)](#)

Site AiHc-416 was first identified by Archaeological Research Associates Ltd. (2010a: P007-167-2008) during a Stage 1-2 survey of the Williamsburg South Property located at 1291 Fischer-Hallman Road in the City of Kitchener. Five lithic flakes and one Indigenous ceramic fragment were recovered from a 40-metre scatter. It was determined that the site possibly represented a Glen Meyer or Middleport Late Woodland village or hamlet, likely associated with Findspot 1/AiHc-414, Findspot 2/AiHc-415, and Findspot 3, and was recommended for Stage 3 assessment.

Stantec Consulting Inc. (2016b: P256-0357-2015) conducted a Stage 3 controlled surface collection and excavated a total of 45 test units at Site AiHc-416. A total of two cultural features and 15 post moulds were identified, and a total of 210 Indigenous artifacts were recovered, including lithic flakes, lithic tools, faunal remains, and ceramic fragments. The conclusions drawn from the Stage 3 assessment indicated that the site represents a small Late Woodland village or hamlet dating to the Middle Iroquoian tradition (*circa* 1300-1400 A.D.). The site could not be avoided within the project impacts and was recommended for Stage 4 mitigative excavation.

Bluestone Research Inc. (2017b: P344-0078-2016) conducted a Stage 4 mitigative excavation of Site AiHc-416 including block excavation, feature excavation, and mechanical topsoil removal. According to a preliminary report, a total of 16 cultural features (including three sweat lodges, one midden and numerous refuse pits) and 36 post moulds were identified, and a total of 3,300 Indigenous artifacts were recovered, including lithic flakes, lithic tools, faunal remains, and ceramic fragments. It was concluded that Site AiHc-416 represents a part of a



Middleport Late Woodland village associated with Sites AiHc-414 and AiHc-427. Site AiHc-416 has been completely mitigated and no further work is required.

Site AiHc-427 (Location/Findspot 27; Combined with AiHd-424/Findspot 21 and AiHd-428/Findspot 28)

Sites AiHc-424, AiHc-427, and AiHc-428 were first identified by Archaeological Research Associates Ltd. (2010a: P007-167-2008) during a Stage 1-2 pedestrian survey at five metre intervals of the Williamsburg South Property located at 1291 Fischer-Hallman Road in the City of Kitchener.

Fifty-one lithic artifacts and two Indigenous ceramic fragments were recovered from a 50 by 30 metre scatter at Site AiHc-424/Findspot 21. It was determined that Site AiHc-424 possibly represented a Glen Meyer or Middleport Late Woodland village or hamlet, likely associated with Findspot 27, and was recommended for Stage 3 assessment.

More than 50 lithic artifacts and three Indigenous ceramic fragments were recovered from a 70 by 40 metre scatter at Site AiHc-427/Findspot 27. It was determined that Site AiHc-427 possibly represented a Glen Meyer or Middleport multi-component Late Archaic and Late Woodland village or hamlet, likely associated with Findspot 21, and was recommended for Stage 3 assessment.

Seventeen lithic artifacts were recovered from a 15-metre scatter at Site AiHc-428/Findspot 28. It was determined that Site AiHc-428 possibly represented an undetermined Pre-contact campsite or lithic manufacture site, likely associated with AiHc-429/Findspot 29, and was recommended for Stage 3 assessment.

Stantec (2016d: P256-0360-2015, P256-0362-2015, P256-0364-2015) conducted Stage 3 assessments on Sites AiHc-424, AiHc-427, and AiHc-428. During that time, the three sites were consolidated under one registered site: AiHc-427/Location 27. Stage 3 controlled surface collection and test unit excavation across an area measuring 180 by 150 metres resulted in the recovery of 936 Indigenous and 11 Euro-Canadian artifacts, and the identification of four cultural features and 28 post moulds. It was determined that the Euro-Canadian artifacts were coincident to the Indigenous component of the site. Overall, Site AiHc-427 was interpreted as a moderate sized Ontario Iroquoian occupation, possibly a



hamlet or small village, likely associated with two nearby sites: AiHc-414/Location 1 and AiHc-416/Location 4. Stage 4 mitigative excavation was recommended for Site AiHc-427.

Bluestone Research Inc. (2017a: P344-0080-2016) conducted a Stage 4 mitigative excavation of Site AiHc-427 by means of block excavation and mechanical topsoil removal. According to the preliminary excavation report 11,700 lithics, 7,900 ceramic fragments, and 2,000 faunal fragments were recovered, and 1,726 post moulds and 149 features were identified, including 10 sweat lodges, four hearths, one midden, and 116 refuse pits. Four longhouses were represented. Site AiHc-427 was fully mitigated and no further assessment was recommended.

Site AiHd-156

Site AiHd-156 was first identified by Archaeological Research Associates Ltd. (2011b: P007-157-2008) as Findspot 1; an Indigenous lithic scatter comprising nine lithics in an area measuring 21 by 23 metres, and recommended for Stage 3 assessment.

A Stage 3 assessment of Site AiHc-156 was conducted by Archaeological Research Associates Ltd. (2011b: P007-172-2008) which included a controlled surface collection and excavation of 39 test units. While test unit yields were considered low, a number of potential post moulds were identified, and the site was recommended for Stage 4 assessment.

Archaeological Research Associates Ltd. (2011c: P007-219-2010) returned to Site AiHd-156 and conducted a Stage 4 mitigative excavation on a portion of the site by means of block excavation, feature excavation, and mechanical topsoil removal. A total of 66 cultural features (including hearths, ash pits, refuse pits, and storage pits) and 2,671 Indigenous artifacts were recovered, including lithic flakes, lithic tools, groundstone tools, faunal remains, and ceramic fragments. Based on the diagnostic artifacts recovered, it was concluded that the major component of Site AiHd-156 represents a Middle to early Late Woodland village, with minor Paleo, Middle Archaic, and Late Archaic components. While the portion of the site subject to Stage 4 was completely mitigated, it was clear that the site extended south outside of the area of proposed impacts. This portion of



the site with continued heritage value was protected through incorporation strategies for the project and recommended for protection during construction by means of a protective buffer and fencing.

1.3.4 Previous Archaeological Assessments

According to the background research, 20 previous reports detail fieldwork within 50 metres of the Study Area.

Reports within the Study Area

(Mayer, Poulton and Associates Inc., 1990) Archaeological Resource Assessment Survey, Draft Plans of Subdivision 30T-84004, 30T-89020 & 30T-90024, City of Kitchener, R.M. of Waterloo. CIF #89-021, 89-049, 89-064.

This report was not available for ASI review. A summary included in Wood's P348-0049-2019 report (2019a) indicates that: Mayer, Poulton and Associates Inc. completed a pedestrian survey and test-pit survey of 114 hectares of land located east of Fischer-Hallman Road and north of Huron Road. The project area includes existing portions of the current Study Area. A total of 18 Indigenous findspots/sites and one nineteenth century Euro-Canadian domestic midden were identified. Five findspots (identified as sites B [AiHc-108], C [AiHc-107], E [AiHc-115], F [AiHc-116], and G [AiHc-117]) were recommended for further work, and it was recommended that three others (Sites L [AiHc-112], M [AiHc-113], and P [AiHc-106]) be subjected to an intensive surface collection to assess cultural heritage value or interest. Based on a review of Ontario Archaeological Sites Database, none of these sites are located within the current Study Area.

(Archaeological Research Associates Ltd., 2001) Stage 1 & 2 Archaeological Assessment, Huron West Community, Regional Municipality of Waterloo 30T-01201. CIF #2001-082-001.

A Stage 1 and 2 archaeological assessment was completed by Archaeological Research Associates Ltd. (ARA) in 2001. This study encompasses the lands located at the site of the proposed Huron West Community subdivision (north of Huron Road, on the east side of Fischer-Hallman Road) and overlaps with the current Study Area. Three archaeological sites were identified during the course of the



Stage 2 investigation: AiHc-255, AiHc-256 and AiHc-257. Stage 3 site-specific assessment were recommended for the above-mentioned archaeological sites. None of these archaeological sites were located within the current Study Area.

(Archaeologix Inc., 2007) Archaeological Assessment (Stages 1, 2 & 3) Becker Estates, Part of Lots 159 & 160, German Company Tract Small Lots, Geographic Township of Waterloo, now City of Kitchener, Regional Municipality of Waterloo, Ontario. P084-030-2006, P084-087-2006.

Archaeologix Inc. conducted a Stage 1-3 Archaeological Assessment for the Becker Estates property, which overlaps with the current Study Area at the southeast corner of Fischer-Hallman Road and Huron Road. Portions of the project area were determined to retain archaeological potential and Stage 2 property survey was carried out by means of pedestrian survey at 5 metre intervals. Five Pre-contact Indigenous sites were identified, two of which (AiHc-363 and AiHc-364) required further Stage 3 assessment. The Stage 3 determined that due to the paucity of artifacts, no further assessment was required.

(Archaeological Research Associates Ltd., 2010a) Stage 1-2 Archaeological Assessment, Williamsburg South Property, 1291 Fischer-Hallman Road, Part of Lot 2, RCP 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario. P007-167-2008.

ARA conducted a Stage 1-2 Archaeological Assessment at 1291 Fischer-Hallman Road, overlapping with the current Study Area. Stage 1 background research indicated high archaeological potential and Stage 2 pedestrian survey was conducted at five metre intervals. The Stage 2 survey encountered 29 findspots, of which the following 15 sites were recommended for Stage 3 assessment:

- 1) Site AiHc-414: Pre-contact lithic scatter, possible village or hamlet
- 2) Site AiHc-415: Pre-contact lithic scatter
- 3) Site AiHc-416: Pre-contact scatter, possible Late Woodland village/hamlet
- 4) Site AiHc-417: Archaic period lithic scatter



- 5) Sites AiHc-419, AiHc-420, AiHc-21, AiHc-422, AiHc-423, AiHc-426, AiHc-428, AiHc-429: Pre-contact lithic scatters, possible campsites or chipping stations
- 6) Site AiHc-424: Late Woodland, possibly Glen Meyer or Middleport, possible village or hamlet
- 7) Site AiHc-425: Historical Euro-Canadian mid-late nineteenth century farmstead
- 8) Site AiHc-427: Pre-contact multi-component Late Archaic and Late Woodland, possibly Glen Meyer or Middleport, possible village or hamlet

(Archaeological Research Associates Ltd., 2011a) Stage 1 Archaeological Assessment Kitchener Zone 4 Trunk Watermain From Ottawa Street South to Strasbourg Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. P007-339-2011.; and

(Archaeological Research Associates Ltd., 2013) Stage 1 and 2 Archaeological Assessments New Kitchener Zone 4 Trunk Watermain Class Environmental Assessment, City of Kitchener, Regional Municipality of Waterloo, Multiple Lots and Concessions, Geographic Township of Waterloo, Former Waterloo County, Ontario. P007-501-2012.

ARA conducted Stage 1 and Stage 1-2 Archaeological Assessments as part of the proposed Kitchener Zone 4 Trunk Watermain project, which overlaps with the current Study Area at Fischer-Hallman Road, north of Seabrook Drive. Background research and property inspection indicated that portions of the project area retained archaeological potential and were recommended for Stage 2 assessment. Areas of previous assessment or disturbance were determined to be clear of further archaeological concerns. Stage 2 property survey was carried out by means of test pit survey and did not result in the discovery of any archaeological materials. It was recommended that no further assessment was required for the project lands.



(ASI, 2016) Stage 1 Archaeological Assessment (Background Study and Property Inspection) Fischer-Hallman Road Improvements From Bleams Road to Plains Road Former Township of Waterloo, County of Waterloo, Regional Municipality of Waterloo, Ontario. P392-0106-2014.

ASI conducted a Stage 1 Archaeological Assessment of the Fischer-Hallman Road corridor from approximately 50 metres south of Bleams Road to 250 metre south of Plains Road, overlapping with the current Study Area. Portions of the project area were determined to not require further archaeological assessment due to previous disturbance by right-of-way construction and grading, and low and wet and steeply sloping conditions. The Williamsburg Cemetery was noted to be adjacent to the existing right-of-way and avoidance recommended. Stage 2 Archaeological Assessment was recommended for remaining lands retaining archaeological potential.

(Stantec Consulting Ltd., 2017) Stage 1 and Stage 2 Archaeological Assessment: South Kitchener District Park, Part of Lot 152, German Company Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo, Ontario. P083-0264-2015, P083-0288-2016.

Stantec conducted Stage 1 and Stage 2 Archaeological Assessments for the proposed South Kitchener District Park, located at the southwest corner of Huron Road and Fischer-Hallman Road. Background research and property inspection determined that portions of the project area were previously disturbed. Stage 2 property survey was carried out by pedestrian and test pit survey, resulting in the identification of one archaeological site (AiHc-481); a large and sparse Pre-contact lithic scatter. Site AiHc-481 is located greater than 50 metres from the current Study Area. The site was determined to not meet the S & Gs criteria for further assessment.

(Wood Environment & Infrastructure Solutions, 2018) Stage 1 & 2 Archaeological Assessment Parts 3, 4, 5 and 6 of Registered Plan 58R-19758, 1340 Fischer-Hallman Road, Kitchener, Ontario. P348-0041-2018.

Wood conducted a Stage 1-2 Archaeological Assessment at 1340 Fischer-Hallman Road, which overlaps with the northern limits of the current Study Area. Portions of the project area were determined to have been previously



disturbed, permanently wet, and steeply sloping. The remaining lands were subject to Stage 2 test pit survey, at five metre intervals. No archaeological materials were identified, and the project area was determined to not require further assessment.

(Wood Environment & Infrastructure Solutions, 2019a) Original Report: Stage 1 Archaeological Assessment: Fischer-Hallman Road Improvements, from Bleams Road to 140 m south of Plains Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. Project #SWW1181149.3000. P348-0049-2019.

Wood conducted a Stage 1 Archaeological Assessment for future Fischer-Hallman Road improvements, and includes lands within the current Study Area. Background research indicated undisturbed portions of the project area that retain archaeological potential. Portions of the project area were determined to have been previously disturbed. Stage 2 assessment was recommended for several areas and Stage 3 assessment was recommended for the portion of Site AiHc-414 that was located within the project area. The Williamsburg Cemetery was documented to be adjacent to the existing Fischer-Hallman Road right-of-way property boundary and it was recommended that cemetery lands should be avoided.

(Wood Environment & Infrastructure Solutions, 2019b) Revised Report: Stage 2 Archaeological Assessment: Proposed Road Widening of Fischer-Hallman Road between Plains Road and North of Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario, Project #SCL191154. P348-0061-2019.

Wood conducted a Stage 2 Archaeological Assessment for lands on the east and west side of Fischer-Hallman Road from Huron Road to Plains Road, including portions of the current Study Area. A Stage 2 property survey was carried out by means of test pit and pedestrian surveys at five metre intervals. Two separate Indigenous lithic scatters were located during pedestrian survey: Location 1 and Location 2. Neither scatter met the density requirements for Stage 3 assessment, and were not recommended for further work. This portion of Wood's project area was partially reassessed as part of the current Stage 2 assessment and potentially related artifacts were encountered (*Supplementary Documentation: Detailed Site Location Information* Figure 4). The remainder of Wood's project area has



either been reassessed as part of the current Stage 2 assessment or recommended for additional Stage 2 assessment.

(Wood Environment & Infrastructure Solutions, 2019c) Stage 2 Archaeological Assessment: Western Boulevard of Fischer-Hallman Road, between Bleams Road and north of Seabrook Drive, Plan of Survey, Part of Lots 2 and 3, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, prepared for the Regional Municipality of Waterloo. PIF P348-0043-2018.

Wood conducted a Stage 2 Archaeological Assessment for lands along the western boulevard of Fischer-Hallman Road, including lands within the current Study Area. Stage 2 property survey was carried out by means of test pit survey at five metre intervals. One hundred and nine artifacts were encountered within a 23 metre by 3 metre area associated with Site AiHc-414: a Late Woodland village site. Many of the artifacts, including lithic, ceramic, and bone fragments, were found in disturbed contexts but within 20 metres of Site AiHc-414. The report indicated that the overburden was thoroughly disturbed during road, ditch and driveway construction. Intact soils were observed within a part of the area and there still exists a possibility of finding undisturbed cultural features in the subsoil in a 20 m buffer around Site AiHc-414. As such, portions of Site AiHc-414 were determined to exhibit cultural heritage value or interest and Stage 3 site-specific assessment was recommended. The required 20 metre protective buffer and 50 metre monitoring buffer were also identified. The current limits and buffers of Site AiHc-414 are located more than 100 metres from the current Study Area.

Additional Reports within 50 metres of the Study Area

(Archaeological Research Associates Ltd., 2008) Stage 1-3 Archaeological Assessment, Middle Strasburg Trunk Sanitary Sewer, Fischer-Hallman Road to Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. P007-164-2008, P007-165-2008.

This report was not available for ASI review. A summary included in Wood's P348-0049-2019 report (2019a) indicates that: This report was not available for review from Ministry of Tourism, Culture and Sport; however, ARA (2017) provided a summary of findings in one of their reports. According to ARA (2017, p. 8), ARA completed an assessment for an irregularly shaped 2.3-kilometre corridor



associated with the Middle Strasburg Trunk Sanitary Sewer development from Fischer-Hallman Road to Huron Road, located to the east of the Study Area (past Fischer-Hallman Road). Ten findspots were identified during this assessment and three were recommended for further work. Of these, a small Pre-contact lithic scatter and an historical farmstead were found to have further cultural heritage value or interest and were recommended for avoidance and protection. Based on a review of the Ontario Archaeological Sites Database, none of these locations are within the current Study Area.

(Archaeological Research Associates Ltd., 2009) Stage 1, 2 and 3 Archaeological Assessment, Ariba Fischer-Hallman Property, Lot 110, Broken Tract Concession, Kitchener, Ontario. P007-071-2005, P007-185-2005.

This report was not available for ASI review. A summary included in Wood's P348-0049-2019 report (2019a) indicates that: This report was not available for review from Ministry of Tourism, Culture and Sport; however, ARA (2017) provided a summary of findings in one of their reports. According to ARA (2017, p. 8), ARA completed a Stage 1 and 2 archaeological assessment in 2005 and 2008 on a property located to the east of the study area (past Fischer-Hallman Road). Six findspots were identified during this assessment, of which, only one (AiHc-413) was recommended for further work. Stage 3 assessment was completed under the same report and resulted in a recommendation for Stage 4 mitigation by means of excavation. This site would be located approximately 300 metres southeast of the current Study Area.

(Stantec Consulting Ltd., 2012) Stage 1-2 Archaeological Assessment Pumpkin Patch Lands, Fischer-Hallman and Huron Road, Part of Lot 153, German Company Tract Small Lots, Geo. Twp. Of Waterloo, now Part 4, Plan 58R-8992 (PIN 22728-0021), City of Kitchener, R.M. Waterloo, Waterloo County, Ontario. P379-009-2012.

Stantec conducted a Stage 1-2 Archaeological Assessment at the northwest corner of Fischer-Hallman and Huron Roads, adjacent to the current Study Area. Stage 2 property survey was carried out by means of pedestrian and test pit survey, resulting in the identification of one Pre-contact Indigenous findspot. Given the isolated and non-diagnostic nature of the find, the findspot was determined not to meet the S & Gs criteria for further assessment.



(Stantec Consulting Ltd., 2013) Stage 1 to 2 Archaeological Assessment Mazmanian Property, Plan 1469, Lot South of Bleams Road, Hiestand Tract, formerly Waterloo Township, now City of Kitchener, Regional Municipality of Waterloo, Ontario. P001-695-2012.

Stantec conducted a Stage 1 and 2 Archaeological Assessment at the Mazmanian Property, south of Bleams Rd and along the west side of Fischer-Hallman Road, just north of the current Study Area. Portions of the project area were determined to be previously disturbed, areas of steep slope, and a small pond. The remaining areas were subject to Stage 2 by means of pedestrian and test pit survey, at five metre intervals. A Pre-contact scatter and a late nineteenth to early twentieth century Euro-Canadian scatter were identified and determined not to meet the S & Gs criteria for further assessment.

(Archaeological Research Associates Ltd., 2014) Stage 1 and 2 Archaeological Assessments Proposed Development at 1314 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Registrar's Compiled Plan 147, Lot 4, Bechtel's Tract, Geographic Township of Waterloo, Former Waterloo County, Ontario. P007-0644-2014.; and

(Archaeological Research Associates Ltd., 2017) Stage 1 and 2 Archaeological Assessments 1250, 1270 and 1314 Fischer-Hallman Road Zone Change and Site Plan Applications, City of Kitchener, Regional Municipality of Waterloo, Part of Bechtel's Tract, Geographic Township of Waterloo, Former Waterloo County, Ontario. P007-0784-2016.

ARA conducted Stage 1 and Stage 2 Archaeological Assessments at 1250, 1270 and 1314 Fischer-Hallman Road, located north of the current Study Area. Portions of the project area were determined to retain archaeological potential. Stage 2 property survey was carried out by means of pedestrian and test pit survey, resulting in two Pre-contact findspots (AiHc-471 and AiHc-472). Neither findspot was determined to meet the S & Gs criteria for further assessment.



(Stantec Consulting Ltd., 2016c) Stage 3 Archaeological Assessment: Location 25 (AiHc-426), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Hiestand's Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo, Ontario. P256-0361-2015.

Stantec conducted a Stage 3 Archaeological Assessment of Site AiHc-426, located at 1291 Fischer-Hallman Road. The Stage 3 assessment consisted of a controlled surface collection and test unit excavation, resulting in the interpretation of the site as an Indigenous camp site dating to the Middle to Late Archaic Period. Possible evidence of former structures was also uncovered. Site AiHc-426 was determined to retain further cultural heritage value or interest and Stage 4 mitigation was recommended.

(Bluestone Research Inc., 2018) Stage 4 Archaeological Mitigation of Williamsburg South Location 25 (AiHc-426) at 1291 Fischer Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. P344-0108-2016.

Bluestone Research Inc. conducted a Stage 4 Archaeological Mitigation of Site AiHc-426, a small Pre-contact lithic scatter located within 50 metres of the current Study Area. The Stage 4 mitigation consisted of the block excavation of 268 one-metre square units. A total of 3,956 artifacts were recovered, including chipping detritus, utilized flakes, retouched flakes, bifaces, projectile points and point fragments, faunal elements, a scraper, and a ground stone fragment. Two cultural features were also identified. The report suggested that the site represents seasonal campsites dating to the Middle and Late Archaic Periods. Site AiHc-426 was recommended to not require further assessment.

2.0 Field Methods

The Stage 2 Study Area comprises the existing Fischer-Hallman Road right-of-way from 400 metres south of Bleams Road to 145 metres south of Plains Road in the City of Kitchener and covers an area of 12.4 hectares (Figures 1-5).

The Stage 2 survey for the Fischer-Hallman Road Improvements project was conducted from December 7-10, 2022, under the field direction of Chris Langlois (P1177), and from December 13-17, 2022, under the field direction of



Jesse Hume (R1254), in accordance with the *Ontario Heritage Act* and the S & G, Section 2. During the field assessments, weather and lighting conditions permitted good visibility and were in accordance with the S & G, Section 2.1, Standard 3. During the time of survey, conditions were seasonal with sunny to overcast skies with light snow, and temperatures of -6 to 14 degrees Celsius. Despite some light snow cover during some of the survey, the ground was not frozen, the area had already been inspected under conditions that allowed for full viewing of features of archaeological potential and conditions did not hinder the test pit survey. Photographs of all field conditions were taken (Images 1-24), and the location and direction of each photograph is mapped in Figures 3-5, and *Supplementary Documentation: Detailed Site Location Information Figure 3*.

As per Section 2.1 of the S & G, all lands were within areas where ploughing was not possible or viable, or within a narrow corridor of 10 metres or less, and therefore subject to test pit survey. According to Section 2.1.2, Standard 2 of the S & G, any undisturbed areas requiring test pit survey within 300 metres of any feature of archaeological potential must be subject to systematic assessment at five metre intervals. Test pits were placed at five metre intervals until disturbance was encountered, and then judgmentally increased to 10 metres intervals as per S & G Section 2.1.8. All test pits were excavated following the S & G Section 2.1.2 Standards 2-9. All test pits were excavated by hand to a minimum of 30 centimetres in diameter and into the first five centimetres of subsoil. Each test pit was examined for stratigraphy, cultural features, and evidence of fill. Test pit fill was screened through six-millimetre mesh to facilitate artifact recovery. Afterwards, all test pits were backfilled, and their locations were recorded on field maps. Any factors that precluded the excavation of test pits (e.g., excessive slope, drainage, exposed bedrock, previous disturbance) were noted, and the areas were mapped and photographed.

Fieldwork was conducted using a Samsung Galaxy S4 tablet running Esri Collector software equipped with a sub-metre Trimble Catalyst Global Navigation Satellite System in conjunction with project mapping provided by Associated Engineering to ensure the assessment remained within the Study Area limits.



2.1 Areas of No/Low Archaeological Potential

Approximately 78 percent of the Study Area (9.64 hectares) was previously assessed and not subject to Stage 2 assessment as per S & G Section 2.1, Standard 2.c (ARA 2008, 2010, 2011, 2013; Archaeologix 2007; ASI 2016; Stantec 2012, 2016, 2017; Wood 2019c).

Visual assessment determined that a small portion of the Study Area did not retain archaeological potential. Approximately one percent of the Study Area (0.11 hectares) had been previously subject to deep and extensive ground disturbance and was not subject to Stage 2 survey, as per S & G Section 2.1, Standard 2.b. The lands documented as being previously disturbed include a portion of the western Fischer-Hallman Road boulevard, north of Plains Road, containing a buried gas main and previously subject to utility installation and tree removal (Appendix A; Figure 5; Images 1-3).

2.2 Test Pit Survey

Approximately five percent of the Study Area (0.63 hectares) was found to contain natural topsoil (A-horizon) and was subject to test pit survey at five metre intervals following S & G Section 2.1.2, Standards 1-9. The areas subject to test pit survey at five metre intervals include manicured and scrubby portions of the Fischer-Hallman Road right-of-way (Figures 3-5; Images 1, 4-10).

Undisturbed stratigraphy in the Study Area is characterized by approximately 25-35 centimetres of very dark grayish brown to dark yellowish brown (10YR 3/2 to 10YR 4/4) sandy loam topsoil (A-horizon), overlying a dark yellowish brown to yellowish brown (10YR 4/6 to 10YR 5/4) silty clay subsoil (B-horizon) (Images 11-12).

In some instances, buried topsoil was encountered below laid soils. Soil profiles in these areas included 10-15 centimetres of grayish brown to dark grayish brown (10YR 4/2 to 10YR 5/2) laid sandy-loam topsoil containing gravel, atop 10-20 centimetres of redeposited subsoil containing gravel, followed by 20-30 centimetres of natural topsoil overlying subsoil (Images 13-15).



Approximately six percent of the Study Area (0.76 hectares) did not contain natural topsoil (A-horizon) and was subject to judgmental test pit survey at 10 metre intervals to confirm previous disturbance following S & G Section 2.1.8, Standards 1-2. The areas subject to judgmental test pit survey include manicured and scrubby portions of the Fischer-Hallman Road right-of-way (Figures 3-5; Images 16-21).

Disturbed stratigraphy in the Study Area is characterized by 10-15 centimetres of grayish brown to dark grayish brown (10YR 4/2 to 10YR 5/2) laid sandy-loam topsoil containing gravel, atop 10-20 centimetres of imported brown (10YR 5/3) sand construction fill containing gravel, overlying a dark yellowish-brown (10YR 4/6) to yellowish-brown (10YR 5/4) sand subsoil (Images 22-24).

2.3 Areas with Remaining Archaeological Potential

Approximately 10 percent of the Study Area (1.27 hectares) could not be subject to test pit survey due to deteriorating field conditions resulting from cold temperatures and due to lack of access to the Yog Fellowship Temple, and includes portions of the Fischer-Hallman Road right-of-way (Figures 3-5). These areas exhibit archaeological potential and require Stage 2 assessment prior to any proposed impacts.

2.4 Stage 2 Assessment Results Summary

A summary of the Stage 2 assessment results for the Fischer-Hallman Road Improvements can be found in Table 2 below.

Table 2: Stage 2 Survey Results Summary

Survey Method	Area	Description	Images
Not assessed due to previous assessment; no archaeological potential	9.64 hectares (78 percent)	ARA 2008, 2010, 2011, 2013; Archaeologix 2007; ASI 2016; Stantec	N/A



Survey Method	Area	Description	Images
		2012, 2016, 2017; Wood 2019c	
Visually assessed as being previously disturbed; no archaeological potential	0.11 hectares (one percent)	Fischer-Hallman roadbed, gravel and paved shoulder, and ditching	1-3
Test pit survey; five metre intervals	0.63 hectares (five percent)	Manicured and scrubby right-of-way boulevards	1, 4-15
Judgmental test pit survey; 10 metre intervals	0.76 hectares (six percent)	Manicured and scrubby right-of-way boulevards	16-24
Not assessed due to seasonal conditions; Requires Stage 2 assessment	1.27 hectares (10 percent)	Manicured and scrubby right-of-way boulevards	N/A

3.0 Record of Finds

As a result of this assessment, two non-diagnostic Pre-contact Indigenous sites and two non-diagnostic Pre-contact Indigenous secondary deposit findspots were identified: Site P1 (AiHc-557), Site P3 (AiHc-558), Secondary Deposit P2, and Secondary Deposit P5.

Secondary deposits are defined as having a context which has been altered or lost by means of natural transformation or human activity processes which have resulted in the destruction of the deposits original or primary context. Secondary deposits are often a result of construction activities, such as grading or other



land alterations, whereby artifact bearing soils are removed from their original context and used as fill soils elsewhere.

3.1 Unregistered Findspots

3.1.1 Secondary Deposit P2

General site location: Secondary Deposit P2 is located in Lot 151, German Company Tract in the Former Township of Waterloo, County of Waterloo, within Universal Transverse Mercator grid zone 17T using the North American Datum 1983. For detailed site location information including GPS coordinates and detailed mapping, see Figures 1 and 3 of the accompanying *Supplementary Documentation: Detailed Site Location Information* report.

Topography and geography: Gently rolling terrain within the Waterloo Hills physiographic region.

Soil type: Approximately 18 centimetres of grayish brown to dark grayish brown (10YR 4/2 to 10YR 5/2) laid sandy-loam topsoil containing gravel, atop 22 centimetres of loam fill containing gravel and one lithic artifact, followed by 20 centimetres of natural topsoil overlying subsoil.

Features of archaeological potential: Proximity to watercourse (Strasburg Creek and Cedar Creek), historic transportation routes (Fischer-Hallman Road), well-drained soils (Waterloo fine sandy loam), and previously registered archaeological sites (Table 1).

Site type: Secondary deposit of an Indigenous artifact.

Field conditions: Partially disturbed grassy boulevard within the Fischer-Hallman Road right-of-way.

Site size and density: One artifact in an area measuring one metre (north-south) by one metre (east-west).

Assessment method: One positive test pit (Test Pit 1) from test pit survey at five and 2.5 metre intervals following S & G Section 2.1.3, Standard 2, Option A.



A test unit was not excavated as the artifact was recovered from previously displaced fill soils.

Assemblage summary: One flake fragment manufactured from Onondaga chert (Cat. L1) recovered from fill (Appendix B).

Site interpretation: Secondary deposit of a non-diagnostic Indigenous lithic artifact.

Recommendations: As Secondary Deposit P2 does not represent a primary archaeological deposit, it does not have continued cultural heritage value or interest, and therefore does not require Bordenization, entry into the Ontario Archaeological Sites Database, or Stage 3 assessment. **No further work is recommended at Secondary Deposit P2.**

3.1.2 Secondary Deposit P5

General site location: Secondary Deposit P5 is located in Bechtel's Tract in the Former Township of Waterloo, County of Waterloo, within Universal Transverse Mercator grid zone 17T using the North American Datum 1983. For detailed site location information including GPS coordinates and detailed mapping, see Figures 1-2 of the accompanying *Supplementary Documentation: Detailed Site Location Information* report.

Topography and geography: Flat terrain within the Waterloo Hills physiographic region.

Soil type: Approximately 10 centimetres of grayish brown to dark grayish brown (10YR 4/2 to 10YR 5/2) laid sandy-loam topsoil containing gravel, atop 10-20 centimetres of imported brown (10YR 5/3) sand construction fill containing gravel, overlying a dark yellowish-brown (10YR 4/6) to yellowish-brown (10YR 5/4) sand subsoil.

Features of archaeological potential: Proximity to watercourse (Strasburg Creek and Cedar Creek), historic transportation routes (Fischer-Hallman Road), well-drained soils (Waterloo fine sandy loam), and previously registered archaeological sites (Table 1).



Site type: Secondary deposit of an Indigenous artifact.

Field conditions: Disturbed grassy boulevard within the Fischer-Hallman Road right-of-way.

Site size and density: One artifact in an area measuring one metre (north-south) by one metre (east-west).

Assessment method: One positive test pit (Test Pit 1) from test pit survey at five metre intervals following S & G Section 2.1.3, Standard 2, Option A. Test pit intensification and test unit excavation were not conducted as the artifact was recovered from previously displaced fill soils.

Assemblage summary: One secondary retouch flake manufactured from Onondaga chert (Cat. L1) recovered from fill (Appendix B).

Site interpretation: Secondary deposit of a non-diagnostic Indigenous lithic artifact.

Recommendations: As Secondary Deposit P5 does not represent a primary archaeological deposit, it does not have continued cultural heritage value or interest, and therefore does not require Bordenization, entry into the Ontario Archaeological Sites Database, or Stage 3 assessment. **No further work is recommended at Secondary Deposit P5.**

3.2 Registered Sites

3.2.1 Site P1 (AiHc-557)

General site location: Site P1 is located in Lot 151, German Company Tract in the Former Township of Waterloo, County of Waterloo, within Universal Transverse Mercator grid zone 17T using the North American Datum 1983. For detailed site location information including GPS coordinates and detailed mapping, see Figures 1 and 3 of the accompanying *Supplementary Documentation: Detailed Site Location Information* report.



Topography and geography: Flat terrain within the Waterloo Hills physiographic region.

Soil type: Soils within the site are represented by 25-35 centimetres of very dark grayish brown to dark yellowish brown (10YR 3/2 to 10YR 4/4) sandy loam topsoil (A-horizon), overlying a dark yellowish brown to yellowish brown (10YR 4/6 to 10YR 5/4) silty clay subsoil (B-horizon)

Features of archaeological potential: Proximity to watercourse (Strasburg Creek and Cedar Creek), historic transportation routes (Fischer-Hallman Road), well-drained soils (Waterloo fine sandy loam), and previously registered archaeological sites (Table 1).

Site type: Pre-contact Indigenous lithic site.

Field conditions: Scrubby boulevard and agricultural field edge within the Fischer-Hallman Road right-of-way.

Site size and density: Three artifacts in an area measuring one metre (north-south) by three metre (east-west).

Assessment method: One positive test pit (Test Pit 1) from test pit survey at five and 2.5 metre intervals in combination with the excavation of two one-metre-square test units (Test Units 1 and 2) following S & G Section 2.1.3, Standard 2, Option A.

Assemblage summary: Three flake fragments (Cat. L1-L2) manufactured from Onondaga chert recovered from topsoil (Appendix B).

Site interpretation: Non-diagnostic Pre-contact Indigenous lithic scatter.

Recommendations: Site P1 **does not meet** the artifact density requirements for Stage 3 assessment following S & G Section 2.2, Standard 1.a.ii(2), and therefore does not require further work.



3.2.2 Site P3 (AiHc-558)

General site location: Site P3 is located in Lot 151, German Company Tract in the Former Township of Waterloo, County of Waterloo, within Universal Transverse Mercator grid zone 17T using the North American Datum 1983. For detailed site location information including GPS coordinates and detailed mapping, see Figures 1 and 3 of the accompanying *Supplementary Documentation: Detailed Site Location Information* report.

Topography and geography: Flat terrain within the Waterloo Hills physiographic region.

Soil type: Soils within the site are generally represented by 25-35 centimetres of very dark grayish brown to dark yellowish brown (10YR 3/2 to 10YR 4/4) sandy loam topsoil (A-horizon), overlying a dark yellowish brown to yellowish brown (10YR 4/6 to 10YR 5/4) silty clay subsoil (B-horizon). Given the sites' location in relation to the right-of-way, some portions of the site exhibited overlying fill. These profiles demonstrated 20 centimetres of very dark grayish brown to dark yellowish brown (10YR 3/2 to 10YR 4/4) sandy loam, followed by 15 centimetres of very dark grayish brown to dark yellowish brown (10YR 3/2 to 10YR 4/4) sandy loam containing gravel, followed by 40-45 centimetres of very dark grayish brown to dark yellowish brown (10YR 3/2 to 10YR 4/4) sandy loam containing lithic artifacts overlying sterile subsoil (Image 15).

Features of archaeological potential: Proximity to watercourse (Strasburg Creek and Cedar Creek), historic transportation routes (Fischer-Hallman Road), well-drained soils (Waterloo fine sandy loam), and previously registered archaeological sites (Table 1).

Site type: Pre-contact Indigenous lithic site.

Field conditions: Scrubby boulevard and agricultural field edge within the Fischer-Hallman Road right-of-way. After the site was encountered, the Fischer-Hallman Road right-of-way was subject to vegetation clearing and subsurface utility installation (Image 3).



Site size and density: Fifteen artifacts in an area measuring 20 metres (north-south) by six metres (east-west).

Assessment method: Seven positive test pit (Test Pits 1-7) from test pit survey at five and 2.5 metre intervals in combination with the excavation of four one-metre-square test unit (Test Units 1-4; Image 15) following S & G Section 2.1.3, Standard 2, Option A.

Assemblage summary: Thirteen flake fragments, one secondary knapping flake, and one secondary retouch flake; all manufactured from Onondaga chert recovered from topsoil (Cat. L1-L9) (Appendix B).

Site interpretation: Non-diagnostic Pre-contact Indigenous lithic scatter.

Recommendations: Site P3 **meets** the artifact density requirements for Stage 3 assessment following S & G Section 2.2, Standard 1.a.ii(2), and therefore requires Stage 3 assessment. A Stage 3 assessment will also confirm any impacts to the site made during vegetation clearing and subsurface utility installation.

3.3 Inventory of Documentary and Material Record

The documentation related to this archaeological assessment will be curated by ASI until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the MHSTCI, and any other legitimate interest groups.

Table 3 provides an inventory and location of the documentary and material record for the project in accordance with the S & G, Sections 6.7 and 7.8.2.3.



Table 3: Inventory of Documentary and Material Record

Material	Location	Comments
Digital field notes, field maps, GPS logs, etc.	Archaeological Services Inc., 528 Bathurst Street, Toronto, Ontario, M5S 2P9	Stored in ASI project folder 21EA-162; GPS and digital information stored on ASI network servers
Digital field photography	Same as above	Files stored on ASI network servers
Digital research, analysis, and reporting materials	Same as above	Files stored on ASI network servers
Artifacts	Same as above	Findspots, sites, and secondary deposits sealed in individual plastic bags measuring 13 centimetres by 21 centimetres by provenience, and stored within one sealed plastic bag measuring centimetres by 30 centimetres.

4.0 Analysis and Conclusions

ASI was contracted by Associated Engineering, on behalf of the Region of Waterloo, to conduct a Stage 2 Archaeological Assessment as part of the proposed Fischer-Hallman Road Improvements in the City of Kitchener (Figure 1). Proposed improvements include the urbanization and widening of Fischer-Hallman Road to four lanes, the installation of multi-use trails, utilities, and roundabouts, and enhanced landscaping and streetscaping.



ASI previously completed a Stage 1 Archaeological Assessment in 2016 as part of the Municipal Class Environmental Assessment for the Fischer-Hallman Road Improvements projects (ASI, 2016). Similarly, in 2019 Wood Environment & Infrastructure Solutions completed a Stage 1 archaeological assessment to review and summarize the work completed within the project area to date. Both assessments determined that portions of the Study Area retained archaeological potential and Stage 2 survey was recommended.

The Stage 2 property survey was conducted from December 7-10, and 13-17, 2021, in accordance with the *Ontario Heritage Act* and the S & G. Approximately 78 percent of the Study Area (9.64 hectares) was previously assessed and not subject to Stage 2 assessment (ARA 2008, 2010, 2011, 2013; Archaeologix 2007; ASI 2016; Stantec 2012, 2016, 2017; Wood 2019c). One percent of the Study Area (0.11 hectares) is represented by a portion of the Fischer-Hallman Road boulevard, north of Plains Road, which has been previously subject to deep and extensive ground disturbance associated with a buried gas main (Appendix A), recent utility installation, and recent tree removal, and was not subject to Stage 2 survey (Figure 5; Images 1-3). Eleven percent of the Study Area (1.39 hectares) is represented by portions of the Fischer-Hallman Road right-of-way boulevards and was subject to test pit survey at five metre intervals and judgmental 10 metre intervals to confirm previous disturbance (Figures 3-5; Images 1, 4-24). The remaining 10 percent of the Study Area (1.27 hectares) could not be subject to test pit survey due to deteriorating field conditions resulting from cold temperatures, and includes portions of the Fischer-Hallman Road right-of-way (Figures 3-5). These areas exhibit archaeological potential and require Stage 2 assessment prior to any proposed impacts.

As a result of this assessment, two non-diagnostic Pre-contact Indigenous sites and two non-diagnostic Pre-contact Indigenous secondary deposits were identified: Site P1 (AiHc-557), Site P3 (AiHc-558), Secondary Deposit P2, and Secondary Deposit P5.

Secondary Deposits P2 and P5 are both represented by one test pit where a single piece of lithic debitage manufactured from Onondaga chert was recovered from fill soil (Appendix B). As Secondary Deposits P2 and P5 do not represent



primary archaeological deposits, they do not have continued cultural heritage value or interest, and therefore do not require further assessment.

Site P1 (AiHc-557) is represented by three flake fragments manufactured from Onondaga chert recovered from the topsoil of one positive test pit and one test unit (Appendix B). An additional test unit was excavated but did not produce additional artifacts. The site measures one metre (north-south) by three metre (east-west). Due to the isolated and non-diagnostic nature of Site P1, it does not meet the artifact density requirements for Stage 3 assessment following S & G Section 2.2, Standard 1.a.ii(2), and therefore does not require further assessment.

Site P3 (AiHc-558) is represented by thirteen flake fragments, one secondary knapping flake, and one secondary retouch flake manufactured from Onondaga chert recovered from the topsoil of seven positive test pits and two test units (Appendix B). Two additional test unit was excavated but did not produce additional artifacts. The site measures 20 metres (north-south) by six metres (east-west). Site P3 meets the artifact density requirements for Stage 3 assessment following S & G Section 2.2, Standard 1.a.ii(2), and therefore requires Stage 3 assessment.

5.0 Recommendations

In light of these results, the following recommendations are made:

1. Portions of the Study Area (Figures 3-5: areas highlighted in purple) retain archaeological potential and require Stage 2 test pit survey prior to any proposed impacts.
2. Secondary Deposits P2 and P5 do not represent primary archaeological deposits. As such, they do not have continued cultural heritage value or interest, and do not require further archaeological assessment.
3. Pre-contact Indigenous Site P1 (AiHc-557) is isolated and non-diagnostic in nature. It does not have sufficient cultural heritage value or interest for Stage 3 site-specific assessment as per S & G



Section 2.2, Standard 1.a.ii (2). No further archaeological assessment is recommended for Site P1.

4. Pre-contact Indigenous Site P3 (AiHc-558) was encountered during test pit survey and exhibits cultural heritage value or interest as per S & G Section 2.2, Standard 1.a.ii (2). Stage 3 site-specific assessment is recommended to clarify the nature and extent of the cultural deposits and to aid in the determination of Stage 4 mitigation strategies, if required.
 - a. Following S & G Table 3.1 for small Pre-contact sites with undetermined cultural heritage value or interest, the Stage 3 archaeological assessments should commence with the creation of a recording grid on a fixed datum, the position of which has been recorded using a GPS.
 - b. The site will be excavated by hand, placing one-metre-square test units in an established five metre grid across the site with additional units amounting to 20 percent of the site grid total. These will be placed strategically in areas of interest around units of high artifact counts or other significant areas of the site. The test units should be excavated five cm into the sterile subsoil and soil fills screened through six mm wire mesh to facilitate artifact recovery. The sterile subsoil should be trowelled, and all soil profiles examined for undisturbed cultural deposits.
5. Should the proposed work extend beyond the current Study Area, or should changes to the project design or temporary workspace requirements result in the inclusion of previously un-surveyed lands, these lands should be subject to a Stage 2 archaeological assessment.

NOTWITHSTANDING the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant



archaeologist, approval authority, and the Archaeology Programs Unit of the MHSTCI should be immediately notified.

The above recommendations are subject to Ministry approval, and it is an offence to alter any archaeological site without MHSTCI concurrence. No grading or other activities that may result in the destruction or disturbance of any archaeological sites are permitted until notice of MHSTCI approval has been received.

6.0 Legislation Compliance Advice

ASI advises compliance with the following legislation:

- This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 2005, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation, and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the Ministry stating that there are no further concerns with regards to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject



to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the *Ontario Heritage Act*.

- The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.
- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.

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Wagner, N. E., Toombs, L. E., & Riegert, E. R. (1973). *The Moyer Site: A Pre-Historic Village in Waterloo County.* Wilfred Laurier University Press.

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Wood Environment & Infrastructure Solutions. (2019b). *Revised Report: Stage 2 Archaeological Assessment: Proposed Road Widening of Fischer-Hallman Road between Plains Road and North of Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario, Project #SCL191154. P348-0061-2019.* Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Wood Environment & Infrastructure Solutions. (2019c). *Stage 2 Archaeological Assessment: Western Boulevard of Fischer-Hallman Road, between Bleams Road and north of Seabrook Drive, Plan of Survey, Part of Lots 2 and 3, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, prepared for the Regional Municipality of Waterloo. PIF P348-0043-2018.* Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Wood Environment & Infrastructure Solutions. (2020). *Stage 3 Archaeological Assessment: Site AiHc-414, Western Boulevard of Fischer-Hallman Road between Bleams Road and North of Seabrook Drive, Plan of Survey Part of Lots 2 & 3, Registrar's Compiled plan 1469, 1291 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario, Prepared for the Regional Municipality of Waterloo [PIF P348-0062-2019].*



8.0 Images



Image 1: Gas utility corridor marked by yellow flags in right-of-way has no potential due to previous disturbance (see Appendix A). Area between gas main and fence line subject to test pit survey at five metre intervals.



Image 3: Previous disturbance caused by utility installation and recent tree removal; no potential.



Image 2: Previously disturbed gas main corridor; no potential.



Image 4: Area beyond gas main subject to test pit survey at five metre intervals.



Image 5: Test pit survey at five metre intervals in progress.



Image 7: Test pit survey at five metre intervals in progress.



Image 6: Test pit survey at five metre intervals in progress.



Image 8: Test pit survey at five metre intervals in progress.



Image 9: Test pit survey at five metre intervals in progress.



Image 11: Test pit profile demonstrating intact A-horizon overlying B-horizon.



Image 10: Test pit survey at five metre intervals in progress.



Image 12: Test pit profile demonstrating intact A-horizon overlying B-horizon.



Image 13: Test pit profile demonstrating intact A-horizon overlying B-horizon below laid soils.



Image 15: North wall of Test Unit 1 at Site P4 demonstrating intact A-horizon overlying B-horizon below laid soils (see *Supplementary Documentation: Detailed Site Location Information* Figure 3 for location).



Image 14: Test pit profile demonstrating intact A-horizon overlying B-horizon below laid soils.



Image 16: Judgmental test pit survey at 10 metre intervals in progress.



Image 17: Area subject to judgmental test pit survey at 10 metre intervals.



Image 19: Area subject to judgmental test pit survey at 10 metre intervals.

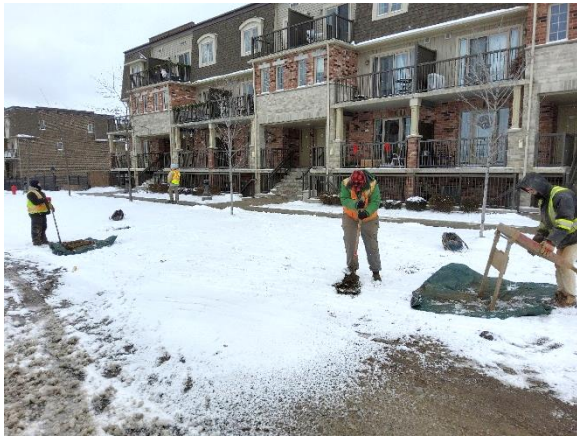


Image 18: Judgmental test pit survey at 10 metre intervals in progress.



Image 20: Judgmental test pit survey at 10 metre intervals in progress.



Image 21: Area subject to judgmental test pit survey at 10 metre intervals.



Image 23: Test pit profile demonstrating an absence of A-horizon under fill soils.



Image 22: Test pit profile demonstrating an absence of A-horizon overlying B-horizon.



Image 24: Test pit profile demonstrating an absence of A-horizon under fill soils.

9.0 Maps



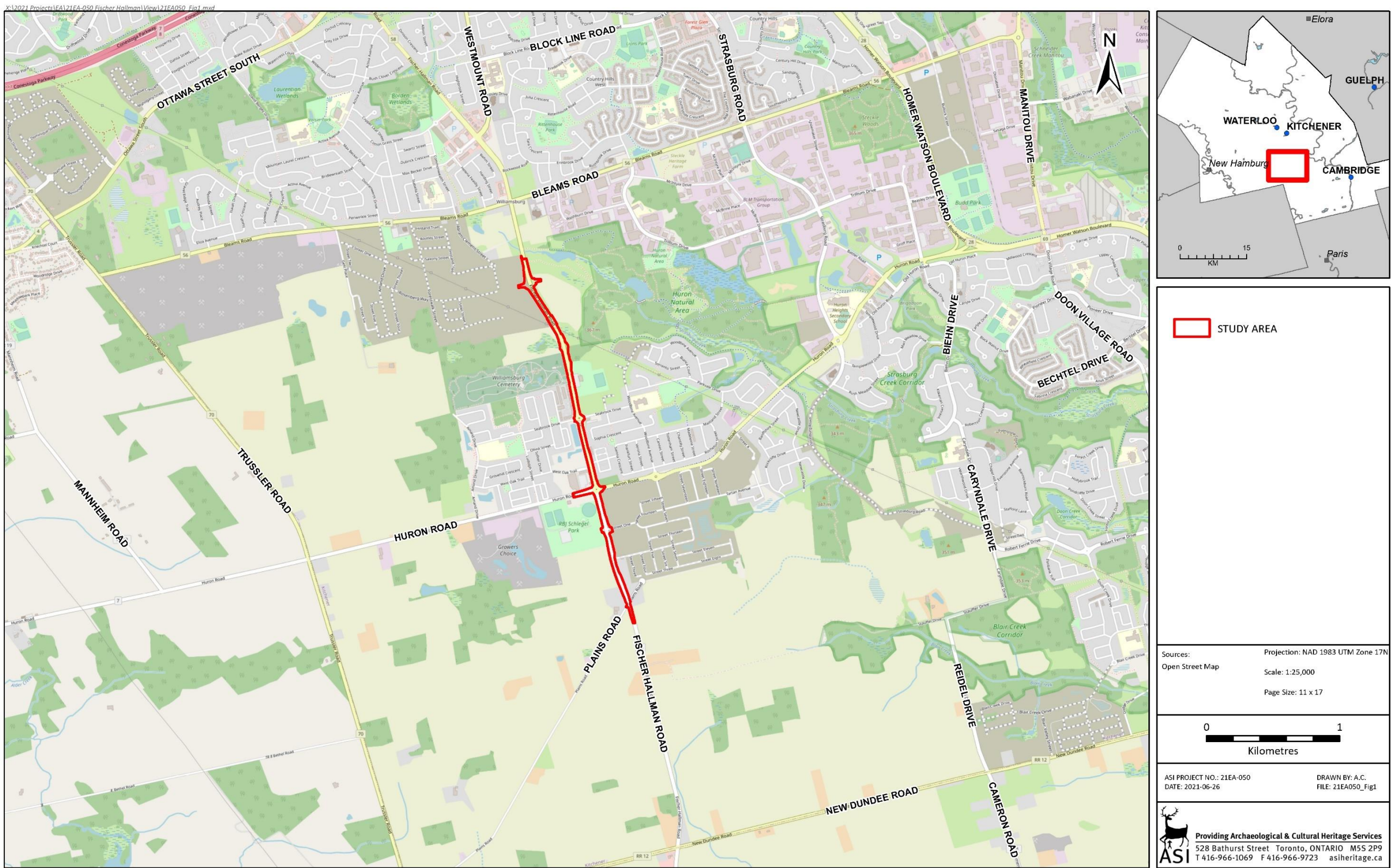


Figure 1: Location of the Study Area



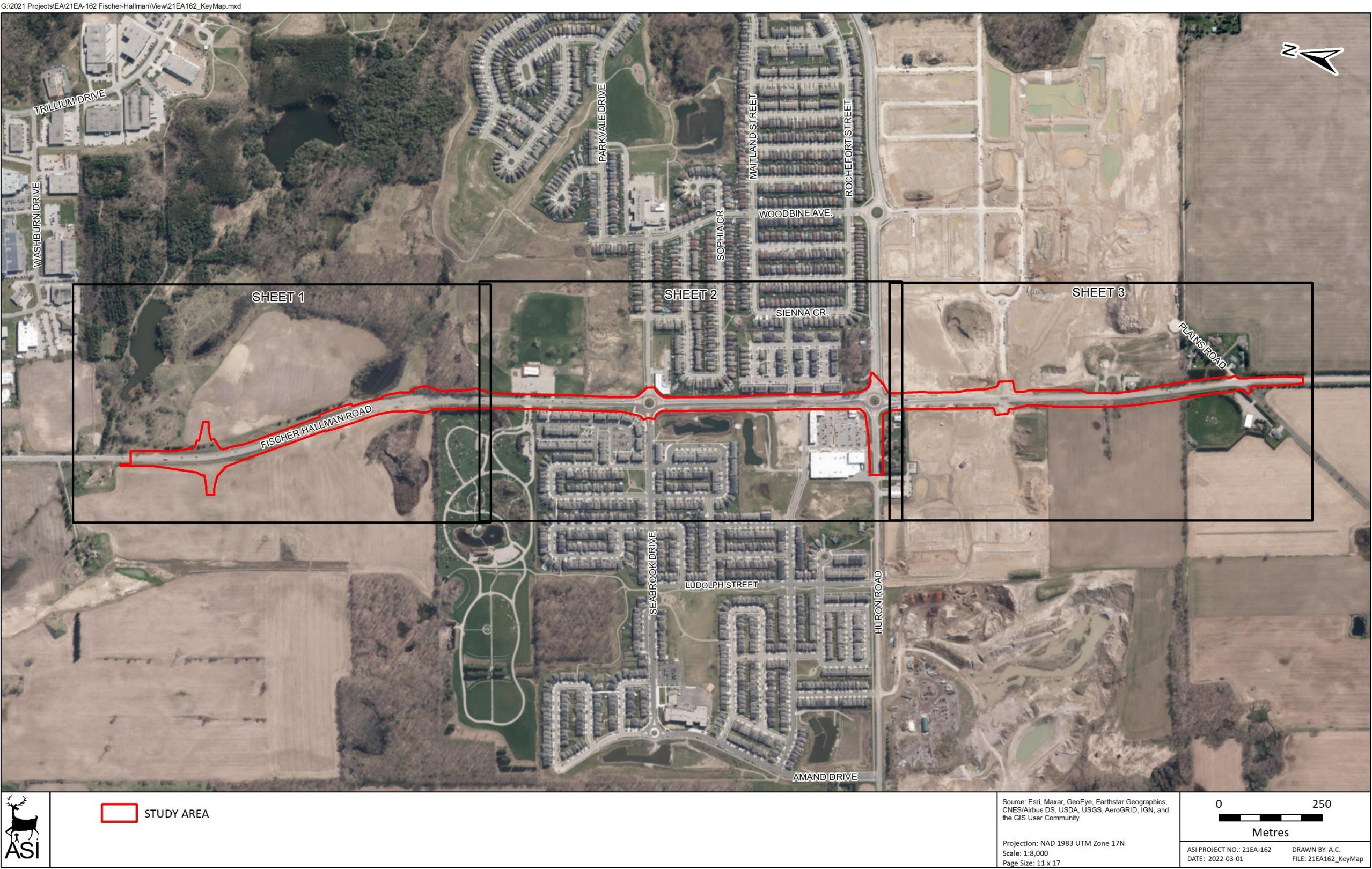


Figure 2: Stage 2 Assessment Results - Sheet Key



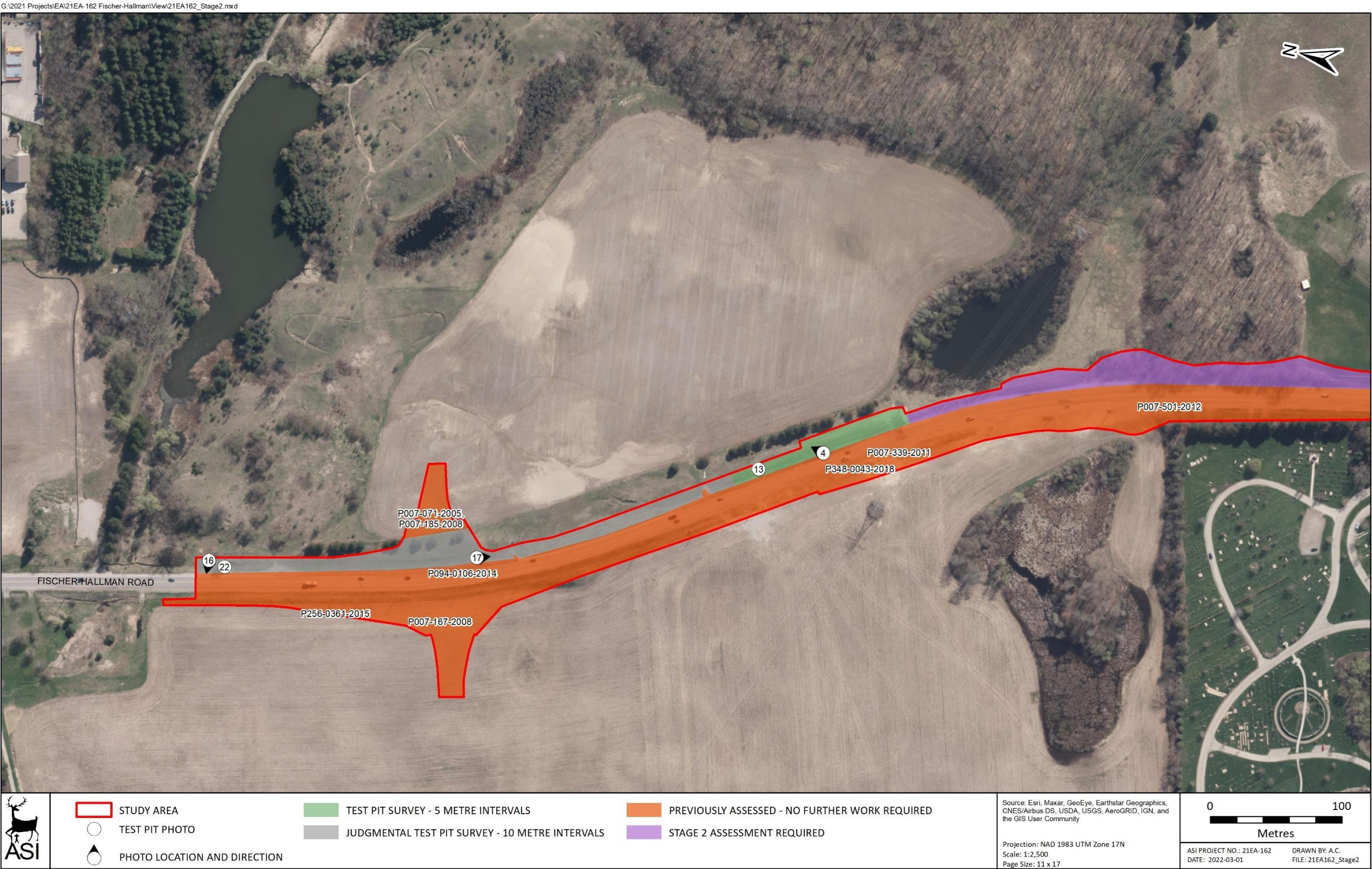


Figure 3: Stage 2 Assessment Results – Sheet 1



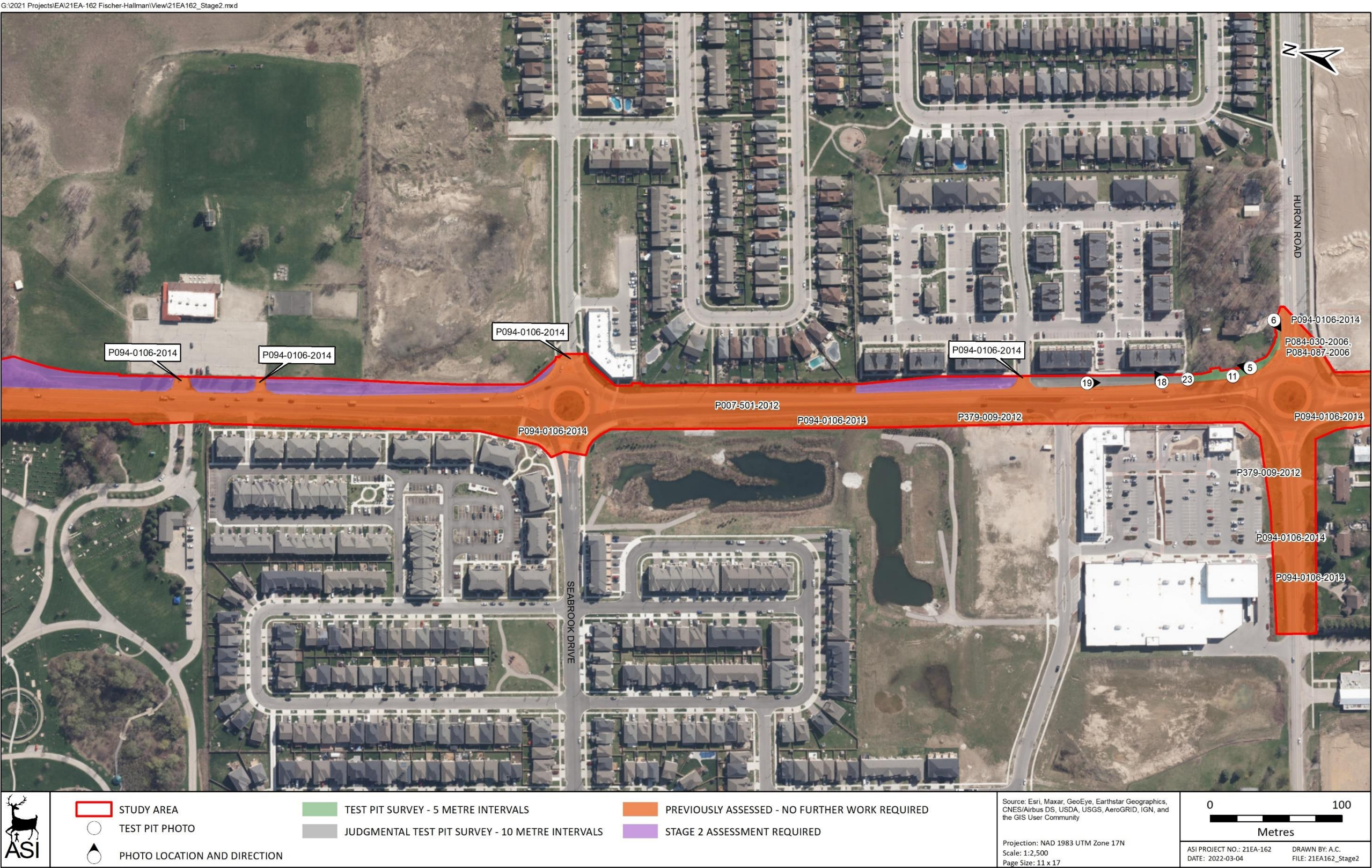


Figure 4: Stage 2 Assessment Results - Sheet 2



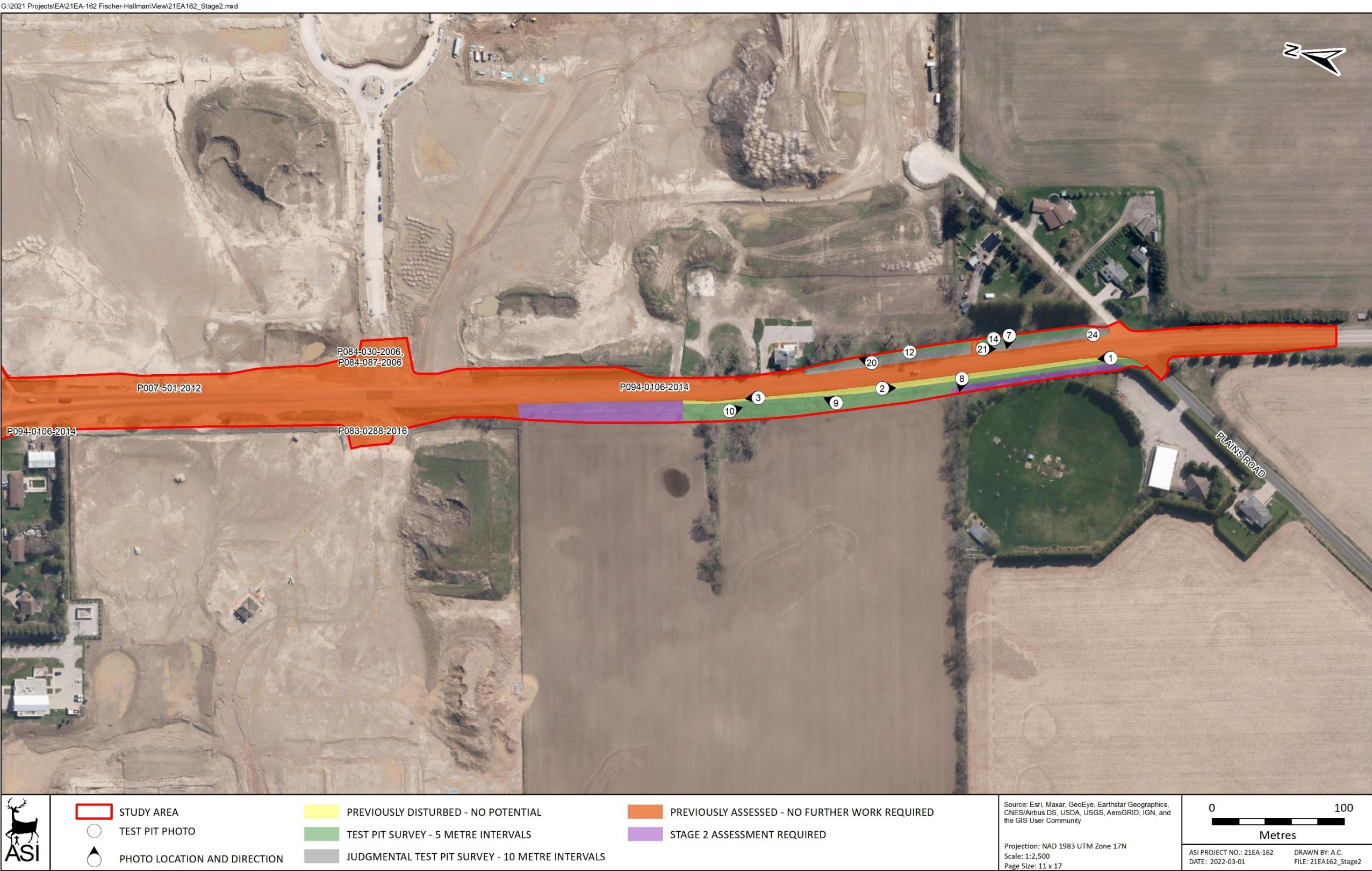
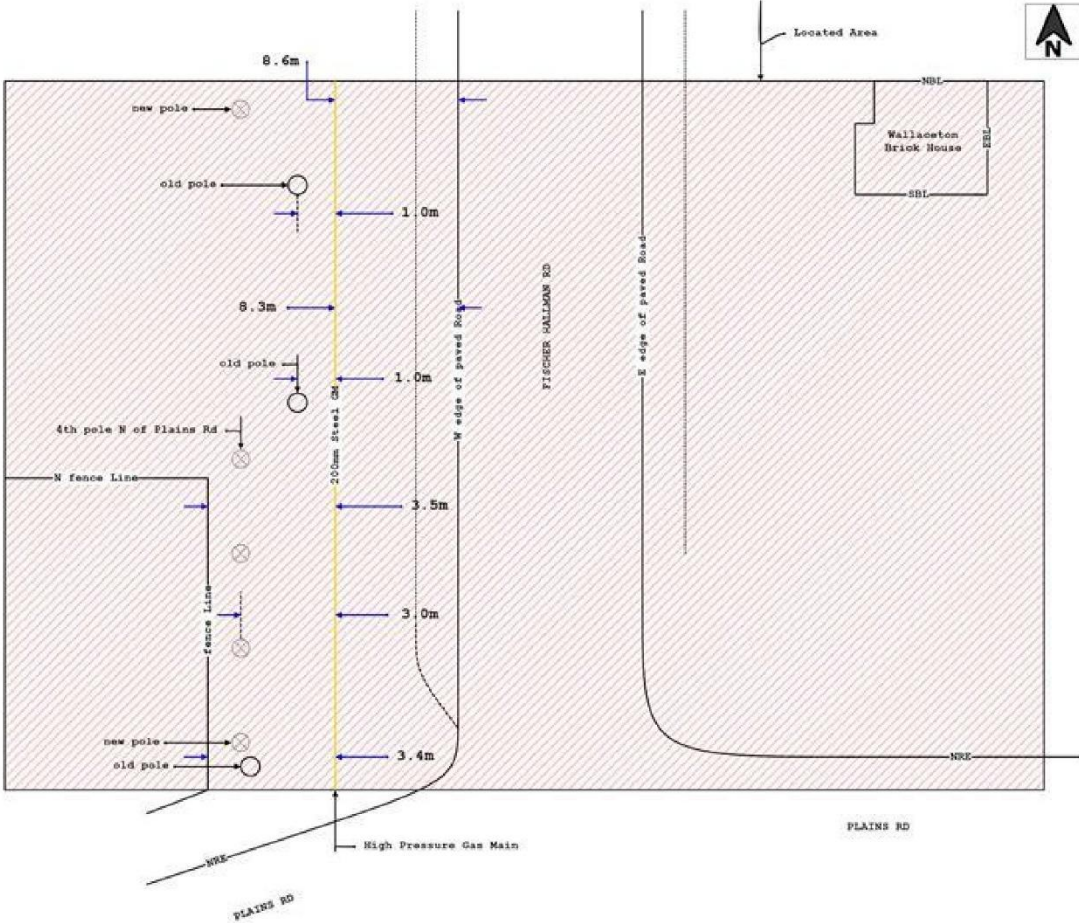


Figure 5: Stage 2 Assessment Results - Sheet 3



Appendix A: Utility Locates



 CANADIAN LOCATORS (ONTARIO) INC. Serving the UTILITIES INDUSTRY	Auxiliary Locate Sheet	ON 1 Call Ticket #: 2021417955																																																
LOCATED AREA : EXCAVATOR MUST NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE !																																																		
FROM : 10.0M N OF NRE PLAINS RD W SIDE FISCHER HALLMAN RD	TO : NBL WALLACETON BRICK HOUSR SHOWN ON SKETCH																																																	
FROM : 40.0M W OF WEST PAVED EDGE OF FISCHER HALLMAN RD	TO : 10.0M E OF EBL WALLACETON BRICK HOUSR SHOWN																																																	
Hand dig within 1 meter as measured horizontally from the field markings to avoid damaging the underground utilities. Depth of infrastructure varies and MUST be determined by hand digging or vacuum excavation. LOCATED AREA ALTERED AS PER :																																																		
																																																		
Sketch not drawn to scale																																																		
<table border="0" style="width: 100%; font-size: small;"> <tr> <td colspan="2">LEGEND :</td> <td>Gas Main — GM —</td> <td>Bldg Line — BL —</td> <td>Railway — + + + +</td> <td>North Direction — N</td> <td>Hydrant — (H)</td> <td>Pole — ⊗</td> </tr> <tr> <td>Storm Main — STM —</td> <td>Gas Service — GS —</td> <td>Property Line — PL —</td> <td>North N</td> <td>Water Chamber — (WC)</td> <td>Catch Basin — (CB)</td> <td>South S</td> <td>East E</td> </tr> <tr> <td>Storm Svc. — STS —</td> <td>Water Main — WM —</td> <td>Lot Line — LL —</td> <td>Face of Curb — FC —</td> <td>Water Valve — (V)</td> <td>Sidewalk — (SW)</td> <td>West W</td> <td></td> </tr> <tr> <td>Road Edge — RE —</td> <td>Water Service — WS —</td> <td>Driveway — DW —</td> <td>Fence Line — FL —</td> <td>Vault — (V)</td> <td>Work Area — (WA)</td> <td></td> <td></td> </tr> <tr> <td>Measurement — → ←</td> <td>Sewer Main — SM —</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Sewer Svc. — SS —</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>			LEGEND :		Gas Main — GM —	Bldg Line — BL —	Railway — + + + +	North Direction — N	Hydrant — (H)	Pole — ⊗	Storm Main — STM —	Gas Service — GS —	Property Line — PL —	North N	Water Chamber — (WC)	Catch Basin — (CB)	South S	East E	Storm Svc. — STS —	Water Main — WM —	Lot Line — LL —	Face of Curb — FC —	Water Valve — (V)	Sidewalk — (SW)	West W		Road Edge — RE —	Water Service — WS —	Driveway — DW —	Fence Line — FL —	Vault — (V)	Work Area — (WA)			Measurement — → ←	Sewer Main — SM —								Sewer Svc. — SS —						
LEGEND :		Gas Main — GM —	Bldg Line — BL —	Railway — + + + +	North Direction — N	Hydrant — (H)	Pole — ⊗																																											
Storm Main — STM —	Gas Service — GS —	Property Line — PL —	North N	Water Chamber — (WC)	Catch Basin — (CB)	South S	East E																																											
Storm Svc. — STS —	Water Main — WM —	Lot Line — LL —	Face of Curb — FC —	Water Valve — (V)	Sidewalk — (SW)	West W																																												
Road Edge — RE —	Water Service — WS —	Driveway — DW —	Fence Line — FL —	Vault — (V)	Work Area — (WA)																																													
Measurement — → ←	Sewer Main — SM —																																																	
	Sewer Svc. — SS —																																																	
A copy of this Auxiliary Locate Sheet(s) and the Primary Locate Sheet must be on site and in the hands of the machine operator during work operations. Should sketch and markings not coincide, a new locate MUST be obtained.																																																		



Appendix B: Lithic Artifact Catalogue



Lithic Catalogue: All Sites

Cat #	Context	Type	Stratum	Qty	Material	TA	Notes
21EA-162 - Secondary Deposit P2							
L1	Test Pit 1	Flake Fragment	Gravel fill	1	Onondaga Chert	0	retouched/notched margin
				1	0		
21EA-162 - Secondary Deposit P5							
L1	Test Pit 1	Secondary Retouch Flake	Sand fill	1	Onondaga Chert	0	
				1	0		
AiHc-557							
L1	Test Pit 1	Flake Fragment	Topsoil	1	Onondaga Chert	0	
L2	Test Unit 1	Flake Fragment	Topsoil	2	Onondaga Chert	0	
				3	0		
AiHc-558							
L1	Test Pit 1	Flake Fragment	Topsoil	1	Onondaga Chert	0	
L2	Test Pit 2	Secondary Retouch Flake	Topsoil	1	Onondaga Chert	0	
L3	Test Pit 3	Flake Fragment	Topsoil	1	Onondaga Chert	0	
L4	Test Unit 1	Flake Fragment	Topsoil	4	Onondaga Chert	1	
L5	Test Pit 4	Secondary Knapping Flake	Topsoil	1	Onondaga Chert	0	
L6	Test Pit 5	Flake Fragment	Topsoil	2	Onondaga Chert	1	
L7	Test Pit 6	Flake Fragment	Topsoil	2	Onondaga Chert	0	
L8	Test Pit 7	Flake Fragment	Topsoil	1	Onondaga Chert	0	
L9	Test Unit 4	Flake Fragment	Topsoil	2	Onondaga Chert	0	
				15	2		

Stage 2 Archaeological Assessment Fischer-Hallman Road Improvements Part of Lots 151-160, German Company Tract; Lots 8-9, Beasley's New Survey; Hiestand's Tract; and Bechtel's Tract (Former Township of Waterloo, County of Waterloo) City of Kitchener, Regional Municipality of Waterloo

Supplementary Documentation: Indigenous Engagement

Prepared for:

Associated Engineering

508 Riverbend Drive, Suite 302
Kitchener, ON N2K 3S2

Archaeological Licence: P1066 (Lytle)

PIF P1066-0263-2021

Archaeological Services Inc. File: 21EA-162

8 March 2022



1.0 Project Context

Indigenous community engagement was initiated by Archaeological Services Inc. (ASI) on behalf of the Regional Municipality of Waterloo prior to the start of the Stage 2 assessment for the Fischer-Hallman Road Improvements project in the City of Kitchener (ASI, 2022).

2.0 Record of Engagement

The Haudenosaunee Development Institute, Mississaugas of the Credit First Nation, and Six Nations of the Grand River Elected Council were contacted for community engagement on August 6, 2021. At this time, ASI provided a memo to each Nation which summarized previous assessment reports within the vicinity of the Study Area and outlined the testing methodologies proposed to confirm the presence or absence of previous disturbance within the Fischer-Hallman Road corridor (Appendix A). Feedback from each Nation was requested to ensure agreement between all parties. Communities were informed that ASI would be undertaking the assessment and would handle the logistical coordination of Stage 2 fieldwork scheduled to begin on December 7, 2021. The contacted parties are listed below:

Haudenosaunee Development Institute:

- Wayne Hill: Tworowarchaeology@gmail.com
- Todd Williams: Williams.todde@gmail.com

Mississaugas of the Credit First Nation:

- Megan DeVries: Megan.devries@mncfn.ca
- Fawn Sault: Fawn.sault@mncfn.ca
- Marlene Morton: Marlene.morton@mncfn.ca
- Adrian Blake: Adrian.blake@mncfn.ca



- Mariah Sault: Field.coordinator@mncfn.ca
- Adam LaForme: Adam.laforme@mncfn.ca

Six Nations of the Grand River Elected Council:

- Tanya Hill-Montour: Tanyahill-montour@sixnation.ca
- Dawn LaForme: Dlaforme@sixnations.ca

Positive responses were received from the Haudenosaunee Development Institute, Mississaugas of the Credit First Nation, and Six Nations of the Grand River Elected Council, and no concerns were expressed regarding the proposed fieldwork methodology.

The Stage 2 property survey for the Fischer-Hallman Road Improvements project was conducted from December 7-10, 2022, under the field direction of Chris Langlois (P1177), and from December 13-17, 2022, under the field direction of Jesse Hume (R1254), in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*, Section 2 (MHSTCI, 2011).

During the execution of the Stage 2 survey, Field Liaison Representatives from Haudenosaunee Development Institute (HDI), Mississaugas of the Credit First Nation (MCFN), and Six Nations of the Grand River Elected Council (SNGREC) were on-site monitoring and providing input on the assessment. Specific dates of fieldwork, field directors, and Field Liaison Representatives are listed below in Table 1.

Table 1: Indigenous Field Liaison Representatives on Site

Dates	Field Liaison Representatives
December 7, 2021	Sherann Martin (HDI), Chris Tobicoe (MCFN), Tim Nanticoke (SNGREC)



Dates	Field Liaison Representatives
December 8, 2021	Sherann Martin (HDI), Chris Tobicoe (MCFN), Tim Nanticoke (SNGREC)
December 9, 2021	Sherann Martin (HDI), Chris Tobicoe (MCFN), Tim Nanticoke (SNGREC)
December 10, 2021	Sherann Martin (HDI), Chris Tobicoe (MCFN), Tim Nanticoke (SNGREC)
December 13, 2021	Markus Doxtater (HDI), Tim Nanticoke (SNGREC)
December 14, 2021	Markus Doxtater (HDI), Tim Nanticoke (SNGREC)
December 15, 2021	Markus Doxtater (HDI), Tim Nanticoke (SNGREC)
December 16, 2021	Markus Doxtater (HDI), Tim Nanticoke (SNGREC)
December 17, 2021	Markus Doxtater (HDI), Tim Nanticoke (SNGREC)

During the execution of the Stage 2 survey, the following concerns were expressed:

December 7, 2021:

Sharann Martin (HDI) requested that all construction fill layers be screened for the recovery of artifacts. This request was accommodated.



December 9, 2021:

Sharann Martin (HDI) requested test pit intensification at 2.5 metre intervals around Secondary Deposit P2. Two intensification test pits were placed beside Secondary Deposit P2, however no intact topsoil or artifacts from fill were encountered.

Sharann Martin (HDI) expressed concerns regarding the placement of Test Unit 1 at Site P1 (AiHc-557) (*Supplementary Documentation: Detailed Site Location Information* Figure 3). Test Unit 1 was placed and excavated 80 centimetres west of Positive Test Pit 1 due to soil conditions. After the test unit was excavated, concerns were expressed that it was not placed immediately atop the positive test pit. A second test unit (Test Unit 2) was later excavated atop positive Test Pit 1 when soil conditions had improved.

Sharann Martin (HDI), Chris Tobicoe (MCFN), and Tim Nanticoke (SNGREC) expressed concerns when unknown project staking was encountered within the agricultural field adjacent to the portion of the Fisher-Hallman Road right-of-way containing Site P1 (AiHc-557) and Site P3 (AiHc-558). A comprehensive review of the Ontario Archaeological Sites Database, Ontario's PastPortal, archaeological reports on file with the Region of Waterloo, and the latest Stage 1 report for the Fischer-Hallman Road Improvements Project (Wood Environment & Infrastructure Solutions, 2019a) demonstrated this section of agricultural lands had not been subject to Stage 2 assessment and exhibited archaeological potential. Additional research conducted when drafting the final Stage 2 report found that the lands contained by the staked portion of the agricultural field were subject to Stage 2 by Wood Environment & Infrastructure Solutions (2019b: P348-0061-2019).

December 16, 2021:

Wayne Hill (HDI) contacted Sarah Jagelewski (ASI) after hours and expressed concerns raised by field liaison Markus Doxtater (HDI). After fieldwork had been completed for the day, Markus Doxtater was driving past the vicinity of Site P1 (AiHc-557) and Site P3 (AiHc-558) and noted construction crews working within the Fischer-Hallman Road right-of-way. A contractor had cleared the right-of-way



area of all vegetation and was installing a new cable-style utility within the portion of right-of-way containing Sites P1 and P3 (ASI, 2022: Image 3).

December 17, 2021:

Sarah Jagelewski (ASI) shared HDI's concerns and contacted the Region of Waterloo. The Region of Waterloo confirmed the contractors work was not part of the Fischer-Hallman Road Improvements project but rather servicing for a residential development. The Region of Waterloo then cancelled permits associated with the work, shut down the utility installation, and contacted Wayne Hill (HDI) to confirm that no construction work would be proceeding within that portion of the Fischer-Hallman road right-of-way. While a portion of the area affected by the utility contractors was subject to test pit survey, the remainder of the right-of-way lands to the north will require Stage 2 assessment in 2022 prior to any proposed construction impacts (ASI, 2022: Figure 5). No further concerns were expressed.

The results of this assessment and a copy of the final draft report were shared with the Haudenosaunee Development Institute, Mississaugas of the Credit First Nation, and Six Nations of the Grand River Elected Council to keep all parties updated and informed (ASI, 2022).

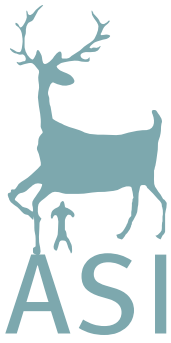


3.0 Bibliography and Sources

- ASI. (2022). Stage 2 Archaeological Assessment, Fischer-Hallman Road Improvements, Part of Lots 151-160, German Company Tract; Lots 8-9, Beasley's New Survey; Hiestand's Tract; and Bechtel's Tract (Former Township of Waterloo, County of Waterloo), City of Kitchener, Regional Municipality of Waterloo. P1066-0263-2021. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.
- MHSTCI, (Ministry of Heritage, Sport, Tourism and Culture Industries). (2011). Standards and Guidelines for Consultant Archaeologists. Cultural Programs Branch, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.
- Wood Environment & Infrastructure Solutions. (2019a). Original Report: Stage 1 Archaeological Assessment: Fischer-Hallman Road Improvements, from Bleams Road to 140 m south of Plains Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. Project #SWW1181149.3000. P348-0049-2019.
- Wood Environment & Infrastructure Solutions. (2019b). Revised Report: Stage 2 Archaeological Assessment: Proposed Road Widening of Fischer-Hallman Road between Plains Road and North of Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario, Project #SCL191154. P348-0061-2019. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Appendix A: Stage 2 Methodology Memo





Providing Archaeological &
Cultural Heritage Services

528 Bathurst Street Toronto, ONTARIO M5S 2P9
T416-966-1069 F416-966-9723 asiheritage.ca

June 25, 2021

TO: Peter Lejcar, Associated Engineering

Cc:

FROM: Sarah Jagelewski, Lisa Merritt

RE: Archaeological Strategy for Additional Work as part of the Fischer Hallman Road EA

ASI File:

The following memo provides a summary of archaeological assessments completed to date within and adjacent to the Fisher-Hallman Road right-of-way (ROW) between Bleams Road and Plains Road (Study Area) in the City of Kitchener and provides recommendations for areas where outstanding assessment is required.

As directed by Associated Engineering and the Region of Waterloo, ASI has conducted a detailed review of the archaeological assessments completed to date and has revaluated the results and recommendations from those reports, which is presented below. Please note that because the salvage excavations of the AiHc-414 site is on-going by another consultant, ASI has not commented on nor provided any recommendations surrounding this site.

Project Background

ASI completed a Stage 1 Archaeological Assessment in 2016 as part of the Municipal Class Environmental Assessment (EA) for the Fischer-Hallman Road Improvements projects (ASI, 2016). The improvements involve the widening of Fischer-Hallman Road from two lanes to four lanes, between Bleams Road and Plains Road in the City of Kitchener. The Stage 1 study area included the existing Fischer-Hallman Road ROW from 50 m south of Bleams Road to 250 m south of Plains Road, including an eight metre buffer beyond the existing ROW property boundary. The report states that a large part of the study area was considered to be disturbed due to ROW construction and grading of adjacent lands, and the remainder of the study area is considered to possess archaeological potential requiring Stage 2 survey by means of either test pit or pedestrian survey.

The Class EA for the proposed road widening of Fischer-Hallman Road from Bleams Road to Plains Road was approved by Regional Council on March 2, 2016, and approved by the Minister of Environment and Climate Change on April 10, 2017 (Wood Environment & Infrastructure Solutions, 2019a). In 2019 Wood Environment & Infrastructure Solutions (Wood) completed a Stage 1 archaeological assessments to review and summarize the work completed within the Study Area to date, the results mapping from this assessment are included in Appendix A.

Known archaeological sites and other assessments completed within and adjacent to the ROW are summarized in table format below.

Engagement

The Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries (MHSTCI) licenses archaeologists under the provisions of the Ontario Heritage Act. In carrying out their work, licensees have a statutory obligation to comply with the Standards and Guidelines for Consultant Archaeologists established by MHSTCI (MHSTCI, 2011a). These standards and guidelines include engaging with Indigenous communities when dealing with archaeological sites of Indigenous cultural affiliation .

Development proponents do not always bear the statutory obligation for engagement, the licensed archaeologist does. As with consultation, though, it is to the proponent's benefit to support the engagement process in the interest of developing and maintaining positive relations with interested Indigenous communities in the context of the broader and more complex relations that exist between the Crown, approval authorities, Indigenous communities, and the public. To facilitate the engagement process, the archaeological resource management industry works with Indigenous communities to develop best practices for engagement. Over the last decade, the approach that has gained the most widespread acceptance has been the training and inclusion of Indigenous practitioners, variously referred to as liaisons, monitors, or field liaison representatives (FLRs), to work alongside consultant archaeologists on the ground.

Trained liaisons are also increasingly deployed by Indigenous communities to participate in fieldwork undertaken by other professionals, such as environmental consultants, and requirements for such participation is being written into municipal official plans. With costs for these workers underwritten by development proponents, Indigenous communities gain both capacity funding, allowing them to participate in the engagement process, and first-hand knowledge of the archaeological fieldwork dealing with their cultural patrimony. Working with Indigenous liaisons, often from more than one Indigenous community with overlapping treaty lands or traditional territories, has become routine practice for archaeological heritage management firms such as ASI and for many of our clients.

ASI recommends that this memo be circulated to the following Indigenous communities for review and comment on the proposed strategy for future work within the Study Area:

- Haudenosaunee Confederacy Chiefs Council;
- Mississaugas of the Credit First Nation; and
- Six Nations of the Grand River

All future archaeological assessments completed within the Fisher-Hallman Road ROW between Bleams Road and Plains Road must follow the MHSTCI Engaging Aboriginal Communities in Archaeologist: A Draft Technical Bulletin for Consultant Archaeologists in Ontario. The communities outlined above should be contacted and included in all future assessments within the Study Area. Any Specific accommodation requests from representatives of the Indigenous communities will be negotiated and approved by the Region of Waterloo, including by not limited to participation of Indigenous community monitors in any required archaeological fieldwork and the review of any archaeological assessment reports.



Archaeological Context

The following provides a review of the archaeological sites located within 1 km, and a summary of previous archaeological fieldwork conducted within and in the vicinity of the Study Area.

Table 1: Previously Registered Archaeological Sites within 1 km of the Study Area

Borden #	Site Name	Temporal / Cultural Affiliation	Site Type	Researcher
AiHc-2	Moyer	Neutral Nation	Village	Wagner 1962
AiHc-23		Pre-Contact Indigenous	Campsite	Pihl 1982
AiHc-48	Glencairn 1	Pre-Contact Indigenous	Findspot	MPP 1986
AiHc-49	Glencairn 2	Pre-Contact Indigenous	Findspot	MPP 1986
AiHc-55	Williamsburg 1	Euro-Canadian	House	MPP 1986; RMW 1989
AiHc-56	Williamsburg 2	Euro-Canadian		MPP 1986; Janusas 1989
AiHc-57	Off Corridor	Pre-Contact Indigenous	Findspot	MPP 1986
AiHc-85	Huron Business Park 1	Pre-Contact Indigenous	Findspot	ASI 1989
AiHc-86	Huron Business Park 2	Pre-Contact Indigenous	Findspot	ASI 1989
AiHc-87	Huron Business Park 3	Pre-Contact Indigenous	Findspot	ASI 1989
AiHc-88	Huron Business Park 4	Pre-Contact Indigenous	Undetermined	ASI 1989
AiHc-92	Bleams Road – Corduroy road	Euro-Canadian	Road	Janusas 1989
AiHc-104		Pre-Contact Indigenous	Undetermined	MPA 1990
AiHc-105		Pre-Contact Indigenous	Undetermined	MPA-1990
AiHc-106		Pre-Contact Indigenous	Undetermined	MPA 1990
AiHc-107		Pre-Contact Indigenous	Undetermined	MPA 1990
AiHc-108		Pre-Contact Indigenous	Campsite	MPA 1990
AiHc-109		Pre-Contact Indigenous	Undetermined	MPA 1990
AiHc-110		Pre-Contact Indigenous	Findspot	MPA 1990
AiHc-111		Pre-Contact Indigenous	Findspot	MPA 1990
AiHc-112		Pre-Contact Indigenous	Findspot	MPA 1990
AiHc-113		Pre-Contact Indigenous	Undetermined	MPA 1990
AiHc-114		Pre-Contact Indigenous	Findspot	MPA 1990
AiHc-115		Late Woodland	Undetermined	MPA 1990
AiHc-116		Pre-Contact Indigenous	Undetermined	MPA 1990
AiHc-117		Pre-Contact Indigenous	Undetermined	MPA 1990
AiHc-118		Euro-Canadian	Homestead	MPA 1990
AiHc-119		Pre-Contact Indigenous	Findspot	MPA 1990
AiHc-120		Pre-Contact Indigenous	Findspot	MPA 1990
AiHc-121		Pre-Contact Indigenous	Findspot	MPA 1990
AiHc-122		Pre-Contact Indigenous	Findspot	MPA 1990
AiHc-163	Lujan	Pre-Contact Indigenous	Findspot	ASI 1990; 1991
AiHc-164	Keyoke	Pre-Contact Indigenous	Lithic scatter	ASI 1990
AiHc-255	Strasburg Creek	Late Woodland	Village	ARA 2001 & 2011



Borden #	Site Name	Temporal / Cultural Affiliation	Site Type	Researcher
AiHc-256	Fischer-Hallman	Pre-Contact Indigenous		ARA 2001
AiHc-257	Cornfield	Pre-Contact Indigenous		ARA 2001
AiHc-358	Borsh	Euro-Canadian	Homestead	ASI 2007
AiHc-359		Aboriginal (pre-16 th century)	Findspot	Austin and Pradzynski 2007
AiHc-360		Pre-Contact Indigenous	Findspot	ASI 2007 & 2013
AiHc-361		Late Archaic, Post-Contact	Lithic scatter	ASI 2007 & 2013
AiHc-362	Hewitt Farm Dump Site	Euro-Canadian	Dump	ASI 2007
AiHc-363	Becker Estates	Pre-Contact Indigenous	Camp	Stantec 2006
AiHc-364	Becker Estates	Pre-Contact Indigenous	Camp; lithic scatter	Stantec 2006
AiHc-368		Pre-Contact Indigenous	Scatter	ASI 2007
AiHc-369		Pre-Contact Indigenous	Findspot	ASI 2007
AiHc-370		Pre-Contact Indigenous	Scatter	ASI 2007
AiHc-389		Late Woodland	Campsite	ARA 2006
AiHc-413		Pre-Contact Indigenous		ARA 2009
AiHc-414	Location 1	Late Woodland, Euro-Canadian	Village	ARA 2009, Stantec 2015, LEC 2016
AiHc-415	Location 2	Pre-Contact Indigenous		ARA 2008, Stantec 2015, LEC 2016
AiHc-416	Location 4	Late Woodland	Village	ARA 2008, RVB 2015, Stantec 2015, LEC 2016
AiHc-417	Location 7	Archaic		ARA 2008, Stantec 2015
AiHc-418		Euro-Canadian	Midden	ARA 2008
AiHc-419		Pre-Contact Indigenous		ARA 2008
AiHc-420	Location 12	Middle Archaic	Campsite	ARA 2008, LEC 2016
AiHc-421		Middle Archaic	Campsite	RVB 2008, ARA 2008, TMHC 2013, LEC 2016, ARA 2008, TMHC 2013
AiHc-422		Pre-Contact Indigenous, Euro-Canadian		ARA 2008, TMHC 2013
AiHc-423		Late Archaic	Campsite	ARA 2008, TMHC 2013, LEC 2016
AiHc-424	Location 21	Late Woodland, Euro-Canadian	Village/hamlet	ARA 2008, Stantec 2015
AiHc-425	AiHc-425	Pre-Contact Indigenous, Euro-Canadian	Log cabin; midden	ARA 2008, Golder 2013



Borden #	Site Name	Temporal / Cultural Affiliation	Site Type	Researcher
AiHc-426	Location 25	Pre-Contact Indigenous	Campsite	ARA, 2008, Stantec 2015, LEC 2016
AiHc-427		Late Woodland & Euro-Canadian	Village/hamlet	ARA 2008, Stantec 2008, LEC 2016
AiHc-428	Location 28	Late Woodland	Village	ARA 2008 Stantec 2015
AiHc-429	Find Spot 29	Pre-Contact Indigenous	Camp/Campsite	ARA 2008 TMHC 2013 LEC 2016
AiHc-430		Euro-Canadian	Farmstead	ARA 2008
AiHc-454	Ferguson Site	Euro-Canadian	Homestead	ASI 1987 & 2016
AiHc-455	P2	Pre-Contact Indigenous		ASI 1987
AiHc-456	Location 2			RVB 2013, Sweeney 2013
AiHc-460		Late Archaic	Campsite	TMHC 2013
AiHc-471	Findspot 1			ARA 2014
AiHc-472	Findspot 2	Early Woodland		ARA 2014
AiHc-479		Pre-Contact Indigenous	Campsite	Golder 2015
AiHc-481	Location 1	Pre-Contact Indigenous	Campsite	Stantec 2016
AiHc-482		Euro-Canadian		Wood 2017
AiHd-93	Tarbox	Pre-Contact Indigenous	Findspot	ASI 1990; 1991
AiHd-94	Nutria	Pre-Contact Indigenous	Findspot	ASI 1990 - 1991
AiHd-95	Sacalait	Pre-Contact Indigenous	Lithic scatter	ASI 1990; 1991
AiHd-96	Bruly	Pre-Contact Indigenous	Findspot	ASI 1990; 1991
AiHd-107		Pre-Contact Indigenous	Undetermined	ASI 1994
AiHd-150		Pre-Contact Indigenous	Findspot	ASI 2007
AiHd-156		Middle Woodland	Village	ARA 2008



Table 2: Previously Completed Archaeological Assessments

Year	Title	Author	PIF	Results Summary
2001	Stage 1 & 2 Archaeological Assessment: Huron West Community, Regional Municipality of Waterloo, 30T-01201	ARA	CIF 2001-082-001	A Stage 1 and 2 archeological assessment was completed by ARA in 2001. This study encompasses the lands located at the site of the proposed Huron West Community subdivision (north of Huron Road). Three archaeological sites were identified during the course of the Stage 2 investigation: AiHc-255, AiHc-256 and AiHc-257. Stage 3 site-specific assessment were recommended for the above-mentioned archaeological sites. None of these archaeological sites were located within the current study area.
2008	Stage 1-3 Archaeological Assessment, Middle Strasburg Trunk Sanitary Sewer, Fischer-Hallman Road to Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	ARA	PIF P007-164-2008, P007-165-2008	This report was not available for our review. A summary included in Wood's P348-0049-2019 report (Wood 2019) indicates that: This report was not available for review from MTCS; however, ARA (2017) provided a summary of findings in one of their reports. According to ARA (2017: 8), ARA completed an assessment for an irregularly shaped 2.3-km corridor associated with the Middle Strasburg Trunk Sanitary Sewer development from Fischer-Hallman Road to Huron Road, located to the east of the study area (past Fischer-Hallman Road). Ten findspots were identified during this assessment and three were recommended for further work. Of these, a small Pre-Contact lithic scatter and an historical farmstead were found to have further cultural heritage value or interest and were recommended for avoidance and protection. Based on a review of MTCS's site database, none of these locations are within the current study area.
2009	Stage 1, 2 and 3 Archaeological Assessment, Activa Fischer-Hallman Property, Lot 110, Broken Tract Concession, Kitchener, Ontario	ARA	PIF P007-071-2005, P007-185-2005	This report was not available for our review. A summary included in Wood's P348-0049-2019 report (Wood 2019) indicates that: This report was not available for review from MTCS; however, ARA (2017) provided a summary of findings in one of their reports. According to ARA (2017: 8), ARA completed a Stage 1 & 2 archaeological assessment in 2005 and 2008 on a property located to the east of the study area (past Fischer-Hallman Road). Six findspots were identified during this assessment, of which, only one (AiHc-413) was recommended for further work. Stage 3 assessment was completed under the same report and resulted in a recommendation for Stage 4 mitigation by means of excavation. This site would be located approximately 300 m southeast of the current study area.



2010	Stage 1-2 Archaeological Assessment Williamsburg South Property, 1291 Fischer-Hallman Road, Part of Lot 2, RCP 1469, City of Kitchener, Regional Municipality of Waterloo	ARA	PIF P007- 167-2008	ARA conducted a Stage 1-2 Archaeological Assessment at 1291 Fischer-Hallman Road, overlapping with the current study area. Stage 1 background research indicated high archaeological potential and Stage 2 pedestrian survey was conducted at five metre intervals. The Stage 2 survey encountered 29 findspots, of which the following 15 sites were recommended for further work: 1) Site AiHc-414: pre-contact lithic scatter, possible village or hamlet, recommended for Stage 3 assessment; 2) Site AiHc-415: pre-contact lithic scatter, recommended for Stage 3 assessment; 3) Site AiHc-416: pre-contact scatter, possible Late Woodland village/hamlet, recommended for Stage 3 assessment; 4) Site AiHc-417: Archaic period lithic scatter, recommended for Stage 3 assessment; 5) Site AiHc-419: pre-contact lithic scatter, possible campsite or chipping station, recommended for Stage 3 assessment; 6) Site AiHc-420: pre-contact lithic scatter, possible campsite or chipping station, recommended for Stage 3 assessment; 7) Site AiHc-421: pre-contact lithic scatter, possible campsite or chipping station, recommended for Stage 3 assessment; 8) Site AiHc-422: pre-contact lithic scatter, possible chipping station, recommended for Stage 3 assessment; 9) Site AiHc-423: pre-contact lithic scatter, possible chipping station, recommended for Stage 3 assessment; 10) Site AiHc-424: Late Woodland, possibly Glen Meyer or Middleport, possible village or hamlet, recommended for Stage 3 assessment; 11) Site AiHc-425: historical Euro-Canadian mid-late 19th Century farmstead, recommended for Stage 3 assessment; 12) Site AiHc-426: pre-contact lithic scatter, possible campsite or chipping station, recommended for Stage 3 assessment; 13) Site AiHc-427: pre-contact multi-component Late Archaic and Late Woodland, possibly Glen Meyer or Middleport, possible village or hamlet, recommended for Stage 3 assessment; 14) Site AiHc-428: pre-contact lithic scatter, possible campsite or chipping station, recommended for Stage 3 assessment; and
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				15) Site AiHc-429: pre-contact lithic scatter, possible campsite or chipping station, recommended for Stage 3 assessment.
2011	Stage 1 Archaeological Assessment Kitchener Zone 4 Trunk Watermain From Ottawa Street South to Strasbourg Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	ARA	PIF P007-339-2011	ARA conducted a Stage 1 Archaeological Assessment as part of the proposed Kitchener Zone 4 Trunk Watermain project. Background research and property inspection indicated that portions of the study area retained archaeological potential and were recommended for Stage 2 assessment. Areas of previous assessment or disturbance were determined to be clear of further archaeological concerns.
2013	Stage 1 and 2 Archaeological Assessments New Kitchener Zone 4 Trunk Watermain Class Environmental Assessment, City of Kitchener, Regional Municipality of Waterloo, Multiple Lots and Concessions, Geographic Township of Waterloo, Former Waterloo County, Ontario	ARA	PIF P007-501-2012	ARA conducted Stage 1 and Stage 2 Archaeological Assessments for the proposed New Kitchener Zone 4 Trunk Watermain lands. A large portion of the study area was previously assessed under P007-339-2011 (ARA 2011). Stage 2 property survey was carried out by means of test pit survey and did not result in the discovery of any archaeological materials. It was recommended that no further assessment was required for the project lands.
2014	Stage 1 and 2 Archaeological Assessments Proposed Development at 1314 Fischer-Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Registrar's Compiled Plan 147, Lot 4, Bechtel's Tract, Geographic Township of Waterloo, Former Waterloo County, Ontario	ARA	PIF P007-0644-2014	ARA conducted Stage 1 and 2 Archaeological Assessments at 1314 Fischer-Hallman Road. Portions of the study area were determined to retain archaeological potential. Stage 2 property survey was carried out by means of pedestrian and test pit survey, resulting in two pre-contact findspots (AiHc-471 and AiHc-472). Neither findspot was determined to meet the S&Gs criteria for further assessment.
2017	Stage 1 and 2 Archaeological Assessments 1250, 1270 and 1314 Fischer-Hallman Road Zone Change and Site Plan Applications, City of Kitchener, Regional Municipality of Waterloo, Part of Bechtel's Tract, Geographic Township of Waterloo, Former Waterloo County, Ontario	ARA	PIF P007-0784-2016	ARA conducted Stage 1 and Stage 2 Archaeological Assessments at 1250, 1270 and 1314 Fischer-Hallman Road. Portions of the study area were previously assessed under P007-0644-2014. Part of the study area was determined to be disturbed and the remaining lands were subject to Stage 2 pedestrian and test pit survey. No archaeological materials were recovered and it was recommended that no further assessment was required for the project lands.
2007	Archaeological Assessment (Stages 1, 2 & 3) Becker Estates, Part of Lots 159 &	Archaeologix Inc.	PIF P084-030-2006,	Archaeologix Inc. conducted a Stage 1-3 Archaeological Assessment for the Becker Estates property. Portions of the study area were determined to retain



	160, German Company Tract Small Lots, Geographic Township of Waterloo, now City of Kitchener, Regional Municipality of Waterloo, Ontario		P084-087-2006	archaeological potential and Stage 2 property survey was carried out by means of pedestrian survey at 5 metre intervals. Five pre-contact Indigenous sites were identified, two of which (AiHc-363 and AiHc-364) required further Stage 3 assessment. The Stage 3 determined that due to the paucity of artifacts, no further assessment was recommended.
2012	Stage 1 Archaeological Assessment Fischer-Hallman Road Class Environmental Assessment Study, German Company Tract (Lot 37), Hiestands Tract, Bechtels Tract, Former Township of Waterloo, Waterloo County, City of Kitchener, Ontario	ASI	PIF P094-120-2012	ASI conducted a Stage 1 Archaeological Assessment for the proposed widening of Fischer-Hallman Road from Ottawa Street to Bleams Road, as well as intersection improvements at Activa Boulevard, Westmount Road/Max Becker Drive and Bleams Road. Background research and property inspection determined portions of the study area did not require further assessment due to previous assessment, extensive and deep land alterations, and low and wet conditions. Stage 2 assessment was recommended for several parcels of lands determined to retain archaeological potential.
2012	Stage 2 Archaeological Assessment of the Doehn-Foster Property, Part of Lot 153, German Company Tract Small Lot, Geographic Township of Waterloo, County of Waterloo, now in the City of Kitchener, Regional Municipality of Waterloo	ASI	PIF P047-367-2012	ASI conducted a Stage 2 Archaeological Assessment of the Doehn-Foster property, west of the current study area. Pedestrian and test pit survey was conducted at five metre intervals, resulting in the identification of one pre-contact lithic site (AiHc-455), two pre-contact lithic findspots (P1 and P3), and one historical Euro-Canadian site, the Ferguson Site (AiHc-454). The Ferguson Site (AiHc-454) was recommended for Stage 3 site-specific assessment; the pre-contact site (AiHc-455) and findspots (P1 and P3) did not meet the S&Gs criteria for further assessment.
2013	Stage 3 Archaeological Assessment of the Ferguson Site (AiHc-454), 1683 Huron Road, Part of Lot 153, German Company Tract Small Lot, Geographic Township of Waterloo, County of Waterloo, now the City of Kitchener, Regional Municipality of Waterloo	ASI	PIF P375-002-2012	ASI conducted a Stage 3 Archaeological Assessment of the Ferguson Site (AiHc-454), associated with the homelot of a nineteenth-century farmhouse. The Stage 3 consisted of the excavation of 38 one-metre square test units and defined the limits of the site. A comprehensive Stage 4 avoidance and protection strategy was recommended.
2016	Stage 4 Archaeological Monitoring of the Avoidance and Protection of the Ferguson Site (AiHc-454) During the Installation of New Services at 1683 Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	ASI	PIF P1066-0003-2016	ASI conducted Stage 4 archaeological monitoring of the Ferguson Site (AiHc-454) during the installation of the new services trench at 1683 Huron Road. No alterations were made to the site during the monitoring and the service trench was recommended to be considered clear of any further archaeological concern.



2016	Stage 1 Archaeological Assessment Fischer-Hallman Road Improvements From Bleams Road to Plains Road (Former Township of Waterloo, County of Waterloo), Regional Municipality of Waterloo, Ontario	ASI	PIF P392- 0106-2014	ASI conducted a Stage 1 Archaeological Assessment of the Fischer-Hallman Road corridor from approximately 50 m south of Bleams Road to 250 m south of Plains Road. Portions of the study area were determined to not require further archaeological assessment due to previous disturbance by ROW construction and grading, and low and wet and steeply sloping conditions. The Williamsburg Cemetery was noted to be adjacent to the existing ROW and avoidance recommended. Stage 2 Archaeological Assessment was recommended for remaining lands retaining archaeological potential.
2017	Preliminary Report: Stage 4 Archaeological Mitigation of Williamsburg South Location 1 (AiHc- 414) at 1291 Fischer Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	Bluestone Research Inc.	PIF P344- 0076-2016	Bluestone Research Inc. conducted a Stage 4 Archaeological Mitigation of Site AiHc-414, a Late Woodland village site. The Stage 4 mitigation consisted of the block excavation of 915 one-metre square units, and subsequent mechanical topsoil removal. Approximately 35,000 pre-contact artifacts were recovered, including chipped stone tool, ground stone tools, pottery, faunal remains, carbonized botanical remains, jewelry, and personal items. Four longhouses were identified, including a complete longhouse with a partial overlying longhouse, a smaller almost round house, and a partial longhouse that continued under Fischer-Hallman Road. 149 cultural features were identified, including 8 sweat lodges, 4 hearths, and 112 refuse pits of varying sizes. AiHc-414 was determined to be associated with the adjacent AiHc-416 and AiHc-427, and part of a Late Woodland Village site. The report indicated that no further assessment is recommended for AiHc-414 within the proposed development. However, the report includes the following recommendation for Longhouse 5, which extends outside of the proposed development to the northeast under Fischer-Hallman Road: <i>A Stage 3 assessment to determine the limits of the site is required prior to any future land disturbance. The Stage 3 assessment should consist of archaeological monitoring for any work being conducted through Fischer-Hallman Road to determine if site exists and appropriate Stage 4 mitigation strategies be recommended.</i>
2017	Stage 4 Archaeological Mitigation of Williamsburg South Location 2 (AiHc- 415) at 1291 Fischer Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	Bluestone Research Inc.	PIF P344- 0077-2016	Bluestone Research Inc. conducted a Stage 4 Archaeological Mitigation of Site AiHc-415, a small pre-contact lithic scatter. The Stage 4 mitigation consisted of the block excavation of 8 one-metre square units, and subsequent mechanical topsoil removal, based on the consideration of the site being a possible extension of AiHc-414. A total of 42 pre-contact artifacts were recovered, including chipped detritus, a utilized flake and a fragmentary faunal remain. No



				settlement pattern, diagnostic material, or cultural features were identified for AiHc-415. The report concluded that AiHc-415 could represent an outlying activity area associated with the adjacent Late Woodland Village (AiHc-414, AiHc-416 and AiHc-427) or it could be its own discreet scatter. Site AiHc-415 was recommended to not require further assessment.
2017	Preliminary Report: Stage 4 Archaeological Mitigation of Williamsburg South Location 27 (AiHc-427) at 1291 Fischer Hallman Road, Part of the Histan Tract, now in Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, Ontario	Bluestone Research Inc.	PIF P344-0080-2016	Bluestone Research Inc. conducted a Stage 4 Archaeological Mitigation of Site AiHc-427, a Late Woodland site. The Stage 4 mitigation consisted of the block excavation of 890 one-metre square units, and subsequent mechanical topsoil removal. A total of 21,600 pre-contact artifacts were recovered, including chipped stone tools, ground stone tools, pottery, faunal remains, carbonized botanical remains, jewelry, and personal items. Four longhouses and 149 cultural features were identified, including 10 sweat lodges, 4 hearths, 1 midden, and 116 refuse pits of varying sizes. AiHc-427 was determined to be associated with the adjacent AiHc-414 and AiHc-416, and part of a Late Woodland Village site. Site AiHc-427 was recommended to not require further assessment.
2018	Stage 4 Archaeological Mitigation of Williamsburg South Location 25 (AiHc-426) at 1291 Fischer Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	Bluestone Research Inc.	PIF P344-0108-2016	Bluestone Research Inc. conducted a Stage 4 Archaeological Mitigation of Site AiHc-426, a small pre-contact lithic scatter. The Stage 4 mitigation consisted of the block excavation of 268 one-metre square units. A total of 3,956 artifacts were recovered, including chipping detritus, utilized flakes, retouched flakes, bifaces, projectile points and point fragments, faunal elements, a scraper, and a ground stone fragment. Two cultural features were also identified. The report suggested that the site represents seasonal campsites dating to the Middle and Late Archaic Periods. Site AiHc-426 was recommended to not require further assessment.
1990	Archaeological Resource Assessment Survey, Draft Plans of Subdivision 30T-84004, 30T-89020 & 30T-90024, City of Kitchener, R.M. of Waterloo	Mayer, Poulton and Associates	CIF #89-021, 89-049, 89-064	This report was not available for our review. A summary included in Wood's P348-0049-2019 report (Wood 2019) indicates that: MPA completed a pedestrian survey and test-pit survey of 114 ha of land located east of Fischer-Hallman Road and north of Huron Road. MPA's study area includes existing portions of the current study area. A total of 18 Aboriginal findspots/sites and one nineteenth century Euro-Canadian domestic midden were identified. Five findspots (identified as sites B [AiHc-108], C [AiHc-107], E [AiHc-115], F [AiHc-116], and G [AiHc-117]) were recommended for further work, and it was recommended that three others (Sites L [AiHc-112], M [AiHc-113], and P [AiHc-



				106]) be subjected to an intensive surface collection to assess cultural heritage value or interest. Based on a review of MTCS's site database, none of these sites are located within the current study area.
2012	Stage 1-2 Archaeological Assessment Pumpkin Patch Lands, Fischer-Hallman and Huron Road, Part of Lot 153, German Company Tract Small Lots, Geo. Twp. Of Waterloo, now Part 4, Plan 58R-8992 (PIN 22728-0021), City of Kitchener, R.M. Waterloo, Waterloo County, Ontario	Stantec	PIF P379-009-2012	Stantec conducted a Stage 1-2 Archaeological Assessment at the northwest corner of Fischer-Hallman and Huron Roads. Stage 2 property survey was carried out by means of pedestrian and test pit survey, resulting in the identification of one pre-contact Indigenous findspot. Given the isolated and non-diagnostic nature of the find, the findspot was determined not to meet the S&Gs criteria for further assessment.
2013	Stage 1 to 2 Archaeological Assessment Mazmanian Property, Plan 1469, Lot South of Bleams Road, Hiestand Tract, formerly Waterloo Township, now City of Kitchener, Regional Municipality of Waterloo, Ontario	Stantec	PIF P001-695-2012	Stantec conducted a Stage 1 and 2 Archaeological Assessment at the Mazmanian Property, south of Bleams Rd and along the west side of Fischer-Hallman Road. Portions of the study area were determined to be previously disturbed, areas of steep slope, and a small pond. The remaining areas were subject to Stage 2 by means of pedestrian and test pit survey, at 5 metre intervals. A pre-contact scatter and a late 19 th /early 20 th Century Euro-Canadian scatter were identified and determined not to meet the S&Gs criteria for further assessment.
2016	Stage 3 Archaeological Assessment: Location 1 (AiHc-414), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Hiestand Tract, Geographic Township of Waterloo, former Waterloo County, now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo	Stantec	PIF P256-0358-2015	Stantec conducted a Stage 3 Archaeological Assessment of Site AiHc-414, located at 1291 Fischer-Hallman Road. The Stage 3 assessment consisted of a CSP and test unit excavation and resulted in the general interpretation of the site as a Late Woodland village or hamlet, dating to the Middle to Late Ontario Iroquoian Tradition. Possible evidence of former structures was also uncovered. Site AiHc-414 was determined to retain further cultural heritage value or interest and Stage 4 mitigation was recommended.
2016	Stage 3 Archaeological Assessment: Location 2 (AiHc-415), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Hiestand Tract, Geographic Township of Waterloo, former Waterloo County,	Stantec	PIF P256-0356-2015	Stantec conducted a Stage 3 Archaeological Assessment of Site AiHc-415, located at 1291 Fischer-Hallman Road. The Stage 3 assessment resulted in the delineation of a small pre-contact Indigenous campsite or activity area for stone tool maintenance. Site AiHc-415 was determined to retain further cultural heritage value or interest and Stage 4 mitigation was recommended.



	now Part of Lot 2, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo			
2016	Stage 3 Archaeological Assessment: Location 7 (AiHc-417), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Hiland Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo, Ontario	Stantec	PIF P256-0359-2015	Stantec conducted a Stage 3 Archaeological Assessment of Site AiHc-417, located at 1291 Fischer-Hallman Road. The Stage 3 assessment resulted in the recovery of 79 Indigenous artifacts. Site AiHc-417 was interpreted as a small temporary campsite for lithic tool reworking and maintenance. Due to the paucity of artifacts recovered, it was determined that Site AiHc-417 did not meet the S&Gs criteria for further assessment.
2016	Stage 3 Archaeological Assessment: Locations 21 (AiHc-424), 27 (AiHc-427), and 28 (AiHc-428), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Hiland Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo, Ontario	Stantec	PIF P256-0360-2015, P256-0362-2015, P256-0364-2015	Stantec conducted a Stage 3 Archaeological Assessment of Sites AiHc-424, AiHc-427, and AiHc-428, located at 1291 Fischer-Hallman Road. During the Stage 3 assessment, the three sites were consolidated into one single site under AiHc-427. Site AiHc-427 was identified as a moderate-sized Middle to Late Ontario Iroquoian occupation, possibly a hamlet or small village. Site AiHc-427 was determined to retain further cultural heritage value or interest and Stage 4 mitigation was recommended.
2016	Stage 3 Archaeological Assessment: Location 25 (AiHc-426), Williamsburg South Subdivision, 1291 Fischer-Hallman Road, Part of the Hiland Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo, Ontario	Stantec	PIF P256-0361-2015	Stantec conducted a Stage 3 Archaeological Assessment of Site AiHc-426, located at 1291 Fischer-Hallman Road. The Stage 3 assessment consisted of a CSP and test unit excavation, resulting in the interpretation of the site as an Indigenous camp site dating to the Middle to Late Archaic Period. Possible evidence of former structures was also uncovered. Site AiHc-426 was determined to retain further cultural heritage value or interest and Stage 4 mitigation was recommended.
2016	Stage 1-2 Archaeological Assessment: Williamsburg South Subdivision, 1255 Fischer-Hallman Road, Part of the Hiland Tract, Geographic Township of Waterloo, former Waterloo County,	Stantec	PIF P256-0382-2015	Stantec conducted a Stage 1-2 Archaeological Assessment at 1255 Fischer-Hallman Road. Stage 2 property survey was carried out by means of test pit survey at 5 metre intervals. No archaeological resources were identified and it was determined that no further archaeological assessment of the study area is required.



	now City of Kitchener, Regional Municipality of Waterloo, Ontario			
2017	Stage 1 and Stage 2 Archaeological Assessment: South Kitchener District Park, Part of Lot 152, German Company Tract, Geographic Township of Waterloo, former Waterloo County, now City of Kitchener, Regional Municipality of Waterloo, Ontario	Stantec	PIF P083-0264-2015, P083-0288-2016	Stantec conducted Stage 1 and Stage 2 Archaeological Assessments for the proposed South Kitchener District Park, located at the southwest corner of Huron Road and Fischer-Hallman Road. Background research and property inspection determined that portions of the study area were previously disturbed. Stage 2 property survey was carried out by pedestrian and test pit survey, resulting in the identification of one archaeological site (AiHc-481), a large and sparse pre-contact lithic scatter. The site was determined to not meet the S&Gs criteria for further assessment.
2018	Stage 2 Archaeological Assessment Parts 3 and 4 on Reference Plan 58R-19075, 1375 Bleams Road, Kitchener, Ontario	Wood	PIF P348-0039-2018	Wood conducted a Stage 2 Archaeological Assessment at 1375 Bleams Road. Stage 2 property survey was carried out by means of test pit survey at 5 metre intervals. No cultural artifacts were encountered and the study area was determined to not require further assessment.
2018	Stage 1 & 2 Archaeological Assessment Parts 3, 4, 5 and 6 of Registered Plan 58R-19758, 1340 Fischer-Hallman Road, Kitchener, Ontario	Wood	PIF P348-0041-2018	Wood conducted a Stage 1 & 2 Archaeological Assessment at 1340 Fischer-Hallman Road. Portions of the study area were determined to have been previously disturbed, permanently wet, and steeply sloping. The remaining lands were subject to Stage 2 test pit survey, at 5 metre intervals. No archaeological materials were identified and the study area was determined to not require further assessment.
2019	Stage 1 Archaeological Assessment Fischer-Hallman Road Improvements, from Bleams Road to 140 m south of Plains Road, City of Kitchener, Regional Municipality of Waterloo, Ontario	Wood	PIF P348-0049-2019	Wood conducted a Stage 1 Archaeological Assessment for future Fischer-Hallman Road improvements, from Bleams Road to 140 m south of Plains Road. Background research indicated undisturbed portions of the study area that retain archaeological potential. Portions of the study area were determined to have been previously disturbed. Stage 2 assessment was recommended for several areas and Stage 3 assessment was recommended for the portion of Site AiHc-414 that is located within the study area. The Williamsburg Cemetery was documented to be adjacent to the existing ROW property boundary and it was recommended that cemetery lands should be avoided.
2019	Stage 2 Archaeological Assessment Western Boulevard of Fischer-Hallman Road, between Bleams Road and north of Seabrook Drive, Plan of Survey, Part	Wood	PIF P348-0043-2018	Wood conducted a Stage 2 Archaeological Assessment for lands along the western boulevard of Fischer-Hallman Road from Bleams Road to north of Seabrook Drive. Stage 2 property survey was carried out by means of test pit survey at 5 metre intervals. 75 artifacts were encountered within a 13m x 3m



	of Lots 2 and 3, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo			area, associated with Site AiHc-414, a Late Woodland village site. Many of the artifacts were found in disturbed contexts but within 20 m of Site AiHc-414. The report indicated that the overburden within the current study area was thoroughly disturbed during road, ditch and driveway construction. Intact soils were observed within a part of the area and there still exists a possibility of finding undisturbed cultural features in the subsoil in a 20 m buffer around Site AiHc-414. As such, portions of Site AiHc-414 were determined to exhibit cultural heritage value or interest and Stage 3 site-specific assessment was recommended. The required 20 m protective buffer and 50 m monitoring buffer were also identified.
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Current Work: AiHc-414

The AiHc-414 site, a Late Woodland village site, was subject to Stage 4 mitigative excavation by Bluestone Research Inc. in 2016 (Bluestone Research Inc., 2017). The project was undertaken in advance of draft Plan approval for a housing development at 1291 Fischer-Hallman Road, located immediately south of Bleams Road on the west side of Fischer-Hallman Road. The excavation consisted of block excavation followed by mechanical topsoil removal. A total of four structures were identified, including longhouse 5 which extends outside of the proposed development into the Fischer-Hallman Road ROW. Bluestone recommended additional Stage 3 assessment to determine the limits of the site.

In 2019 Wood Environment & Infrastructure Solutions completed a Stage 2 archaeological assessment for a 23 m by 3 m area (2019b). During the test pit survey the AiHc-414 site was encountered. The report found that despite previous disturbance on the surface, portions of the site are intact below and exhibit cultural heritage value or interest and warrant further investigation. Stage 3 site-specific assessment was recommended in this area, which corresponds to the area of Longhouse 5 recommended for further work by Bluestone.

The Stage 3 assessment by Wood is on going. As such, a report is not available for ASI to review and incorporate the results into this memo.

Recommendations: Further Work

Based on a review of above summarized archaeological assessments, completed within or adjacent to the Study Area, ASI makes the following recommendations:

1. Parts of the Study Area exhibit archaeological potential and require Stage 2 archaeological assessment by means of test pit survey (Figures 5-6: areas in green). Test pits are excavated at an interval of 5 m, are approximately 30 cm in diameter, and are excavated to subsoil in order to facilitate the identification of any subsurface cultural deposits. The soil fills of all test pits are screened through 6 mm mesh to facilitate the recovery of cultural material. All test pits will be back-filled immediately, and their location will be recorded on field maps;
2. Parts of the Study Area have been previously assessed as disturbed and recommendations made for no further work. However, due to the high archaeological potential of this area and the discovery of intact archaeological site deposits associated with AiHc-414 below fill, ASI recommends Stage 2 test pit survey to confirm the extent of existing disturbance. Test pits will be placed at intervals determined in the field according to professional judgement, and where physically viable (i.e where utility locates permit) to confirm that these areas have been completely and deeply disturbed; and
3. During any further archaeological assessments, meaningful engagement with Indigenous communities should be conducted, as outlined in Section 3.5 of the S & G (MHSTCI 2011a: 62-63) and Engaging Aboriginal Communities in Archaeologist Technical Bulletin (MHSTCI, 2011b: 3).

Notwithstanding the results and recommendations presented in this memorandum, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. If archaeological remains are



found during subsequent construction activities, the consultant archaeologist, Region of Waterloo, and the Archaeological Programs Unit of the MHSTCI should be immediately notified.



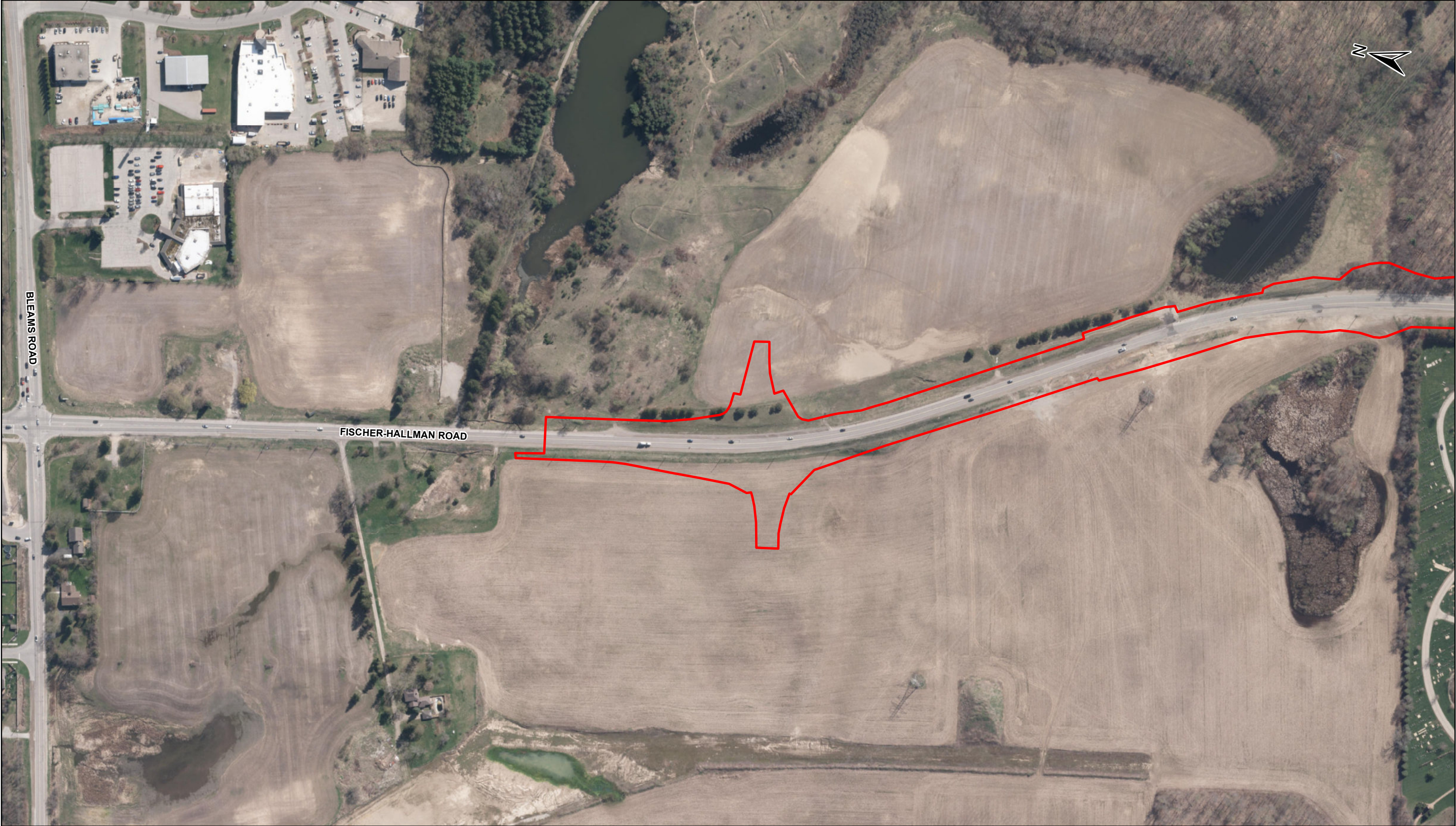
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- ASI, (Archaeological Services Inc.). (2016). Stage 1 Archaeological Assessment (Background Study and Property Inspection) Fischer-Hallman Road Improvements From Bleams Road to Plains Road Former Township of Waterloo, County of Waterloo, Regional Municipality of Waterloo, Ontario. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.
- Bluestone Research Inc. (2017). Preliminary Report: Stage 4 Archaeological Mitigation of Williamsburg South Location 1 (AiHc-414) at 1291 Fischer Hallman Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.
- MHSTCI, (Ministry of Heritage, Sport, Tourism and Culture Industries). (2011a). Standards and Guidelines for Consultant Archaeologists. Cultural Programs Branch, Ontario Ministry of Tourism and Culture.
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- Wood Environment & Infrastructure Solutions. (2019a). Original Report: Stage 1 Archaeological Assessment: Fischer-Hallman Road Improvements, from Bleams Road to 140 m south of Plains Road, City of Kitchener, Regional Municipality of Waterloo, Ontario. Project #SWW1181149.3000.
- Wood Environment & Infrastructure Solutions. (2019b). Stage 2 Archaeological Assessment: Western Boulevard of Fischer-Hallman Road, between Bleams Road and north of Seabrook Drive, Plan of Survey, Part of Lots 2 and 3, Registrar's Compiled Plan 1469, City of Kitchener, Regional Municipality of Waterloo, prepared for the Regional Municipality of Waterloo [PIF P348-0043-2018].



Mapping





	 STUDY AREA	Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community	0 150	
			Metres	
Projection: NAD 1983 UTM Zone 17N Scale: 1:3,000 Page Size: 11 x 17			ASI PROJECT NO.: 21EA-050 DATE: 2021-06-26	
			DRAWN BY: A.C. FILE: 21EA050_Fig1-3	

Figure 1: Fischer-Hallman Road Improvements Study Area



	 STUDY AREA	Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community	0  150 Metres

Figure 2: Fischer-Hallman Road Improvements Study Area



	 STUDY AREA	Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community	0  150 Metres	
			Projection: NAD 1983 UTM Zone 17N Scale: 1:3,000 Page Size: 11 x 17	ASI PROJECT NO.: 21EA-050 DATE: 2021-06-26 DRAWN BY: A.C. FILE: 21EA050_Fig1-3

Figure 3: Fischer-Hallman Road Improvements Study Area



	 STUDY AREA	 PREVIOUSLY ASSESSED NO FURTHER WORK REQUIRED: SEE APPENDIX A
		 JUDGMENTAL TEST PIT SURVEY REQUIRED
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Projection: NAD 1983 UTM Zone 17N Scale: 1:2,490 Page Size: 11 x 17		
0100 Metres ASI PROJECT NO.: 21EA-050 DATE: 2021-07-29 DRAWN BY: JF FILE: 21EA050_Results		

Figure 4: Areas Requiring Further Assessment [Sheet 1]

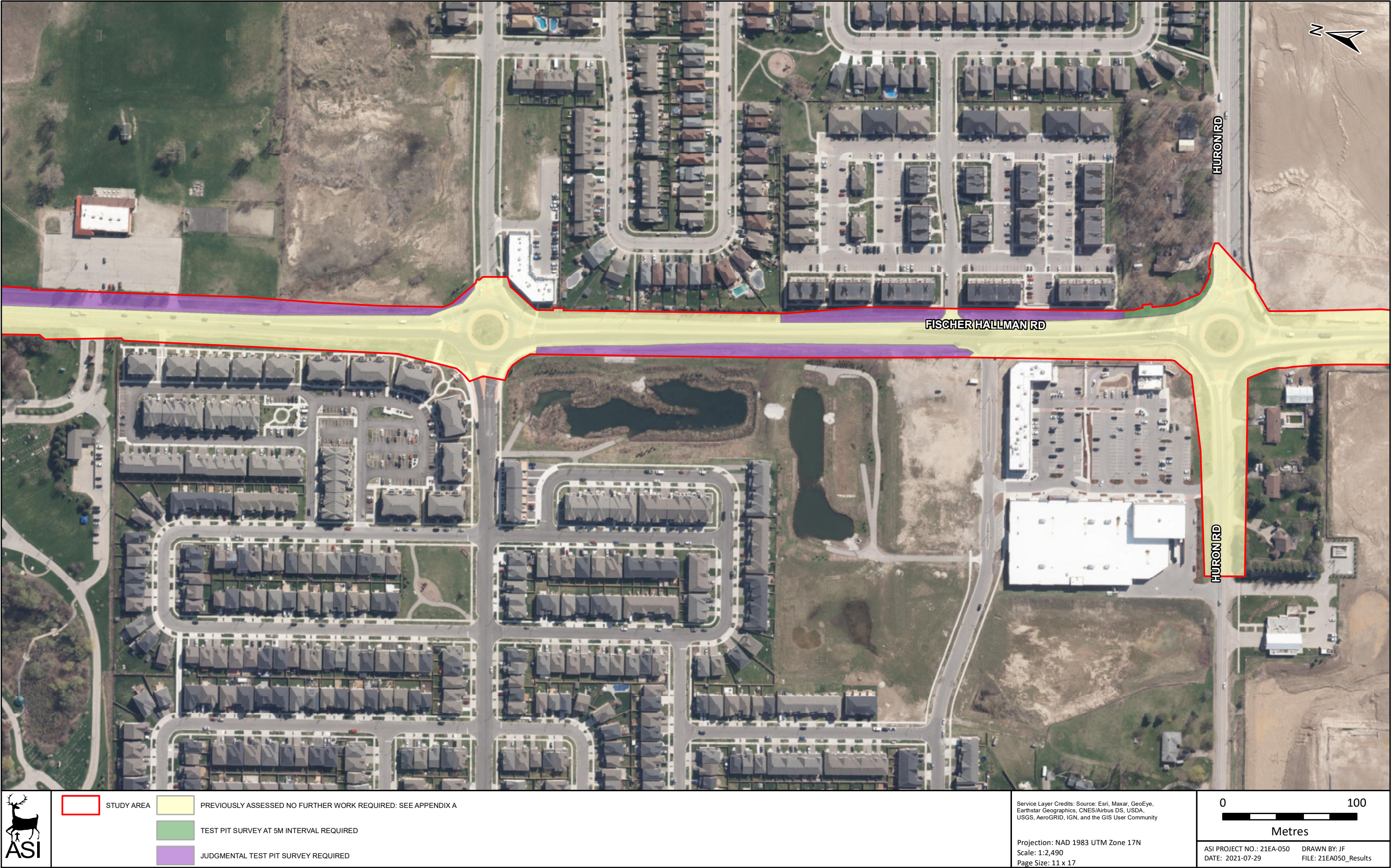
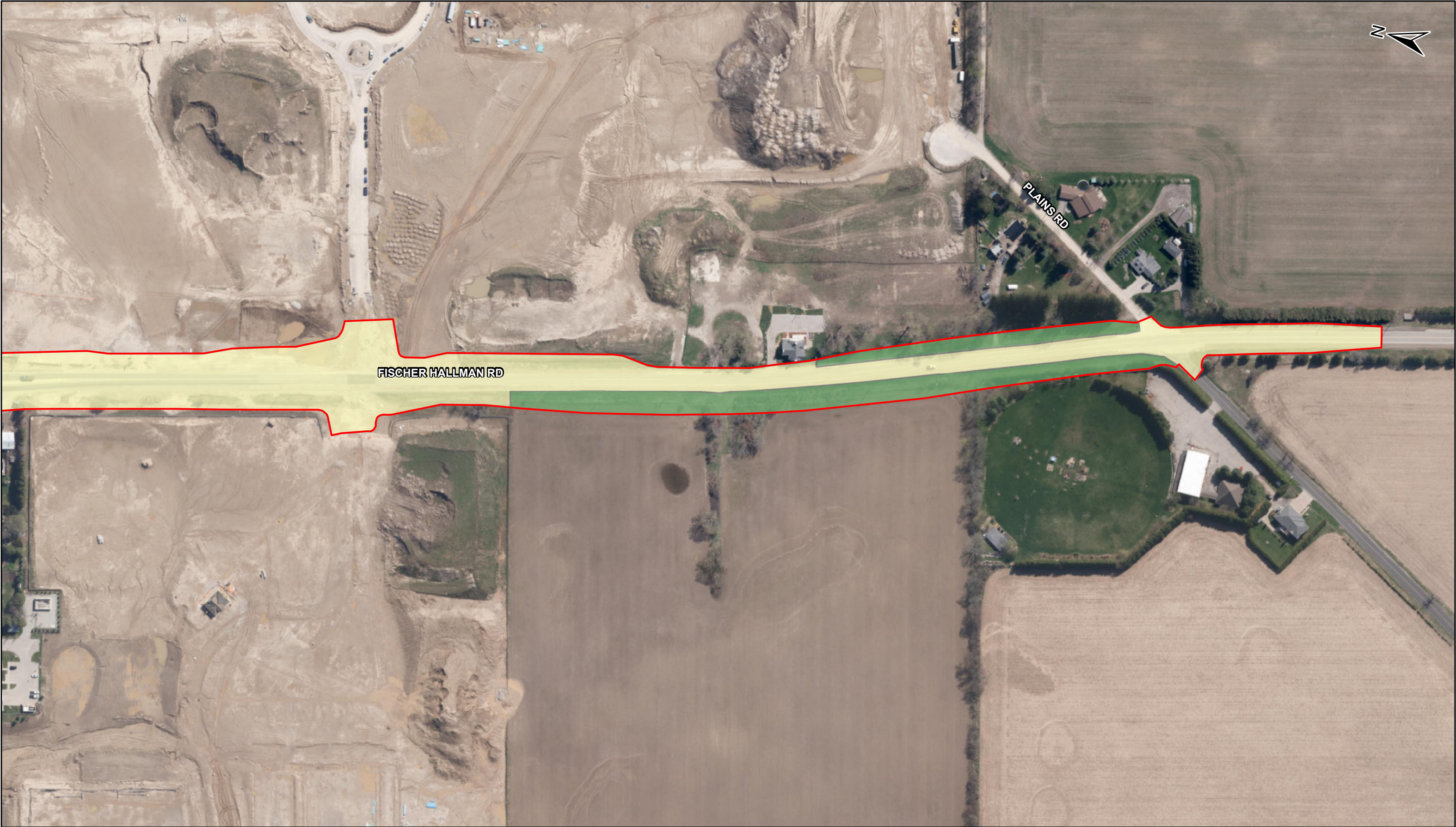


Figure 5: Areas Requiring Further Assessment [Sheet 2]



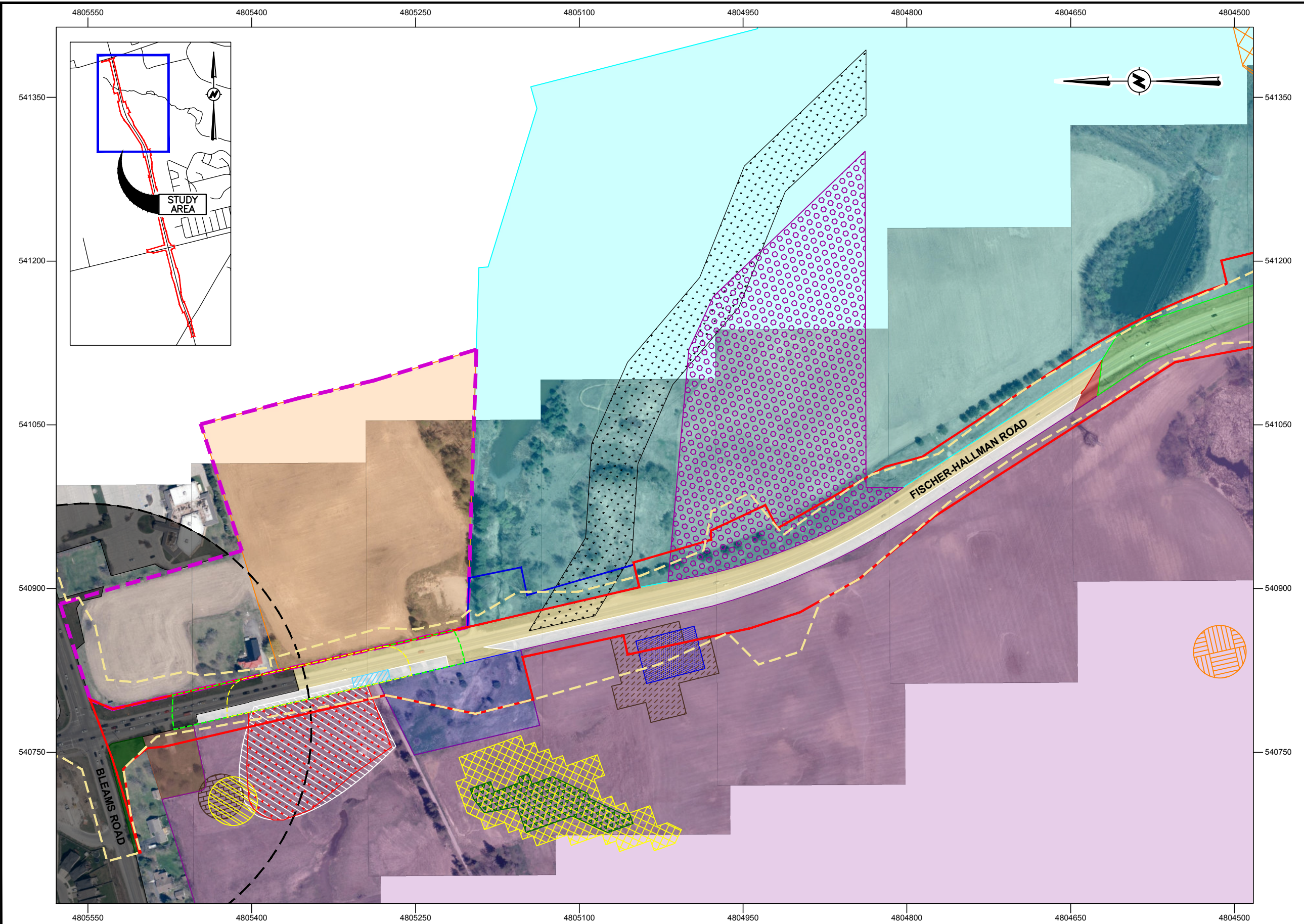
	 STUDY AREA	 PREVIOUSLY ASSESSED NO FURTHER WORK REQUIRED: SEE APPENDIX A
		 TEST PIT SURVEY AT 5M INTERVAL REQUIRED
	Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Projection: NAD 1983 UTM Zone 17N Scale: 1:2,490 Page Size: 11 x 17	
		0 100 Metres ASI PROJECT NO.: 21EA-050 DRAWN BY: JF DATE: 2021-07-29 FILE: 21EA050_Results

Figure 6: Areas Requiring Further Assessment [Sheet 3]

Appendix A



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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
FISCHER-HALLMAN ROAD
FROM BLEAMS ROAD TO PLAINS ROAD
KITCHENER, ONTARIO

TITLE:
AERIAL PHOTOGRAPH OF STUDY AREA SHOWING
PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

LEGEND:

- ARCHAEOLOGICAL ASSESSMENT (CIF 89-021, 89-049, 89-064; MAYER, POULTON AND ASSOCIATES, 1989; REPORT NOT AVAILABLE - STUDY AREA OBTAINED FROM ARA 2017.8)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (CIF 2001-082-001; ARA 2001)
- ARCHAEOLOGICAL ASSESSMENT (PIF P007-071-2005, P007-185-2005; ARA 2006; REPORT NOT AVAILABLE - STUDY AREA OBTAINED FROM ARA 2017.8)
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- STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT (PIF P007-164-2008, P007-165-2008; REPORT NOT AVAILABLE - STUDY AREA OBTAINED FROM ARA 2017.8)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P007-167-2008; ARA 2010)
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- STAGE 1 ARCHAEOLOGICAL ASSESSMENT (PIF P094-120-2012; ASI 2012)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P379-009-2012; STANTEC 2012)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P001-695-2012; STANTEC 2013)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P007-501-2012; ARA 2013)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P007-0644-2014; ARA 2014)
- STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P375-002-2012; ASI 2013)
- STAGE 1 ARCHAEOLOGICAL ASSESSMENT (PIF P392-0106-2014; ASI 2016)
- STAGE 1 ARCHAEOLOGICAL ASSESSMENT (PIF P1066-0003-2016; STANTEC 2016)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0382-2015; STANTEC 2016a)
- STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0356-2015; STANTEC 2016b)
- STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0358-2015; STANTEC 2016c)
- STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0360-2015, P256-0362-2015, P256-0364-2015; STANTEC 2016d)
- STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0361-2015; STANTEC 2016e)
- STAGE 3 ARCHAEOLOGICAL ASSESSMENT (PIF P256-0359-2015; STANTEC 2016f)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P007-0784-2016; ARA 2017)
- STAGE 4 ARCHAEOLOGICAL ASSESSMENT (PIF P344-0077-2016; BLUESTONE 2017a)
- STAGE 4 ARCHAEOLOGICAL ASSESSMENT (PIF P344-0076-2016; BLUESTONE 2017b)
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- STAGE 4 ARCHAEOLOGICAL ASSESSMENT (PIF P344-0108-2016; BLUESTONE 2018)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P083-0288-2016; STANTEC 2017)
- STAGE 2 ARCHAEOLOGICAL ASSESSMENT (PIF P348-0039-2018; Wood 2018)
- STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT (PIF P348-0041-2018; Wood 2018)
- STAGE 1 ARCHAEOLOGICAL ASSESSMENT (PIF P348-0043-2018; Wood 2019)
- ESTIMATED AREA RECOMMENDED FOR STAGE 3 AA (SUBJECT TO CHANGE DEPENDING ON FINDINGS) (PIF P348-0043-2018; Wood 2019)
- 20m PROTECTIVE BUFFER (PIF P348-0043-2018; Wood 2019)
- 50m MONITORING BUFFER (PIF P348-0043-2018; Wood 2019)
- STUDY AREA (CURRENT INVESTIGATION)

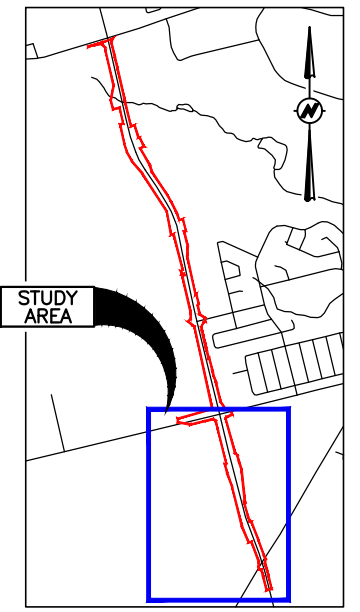
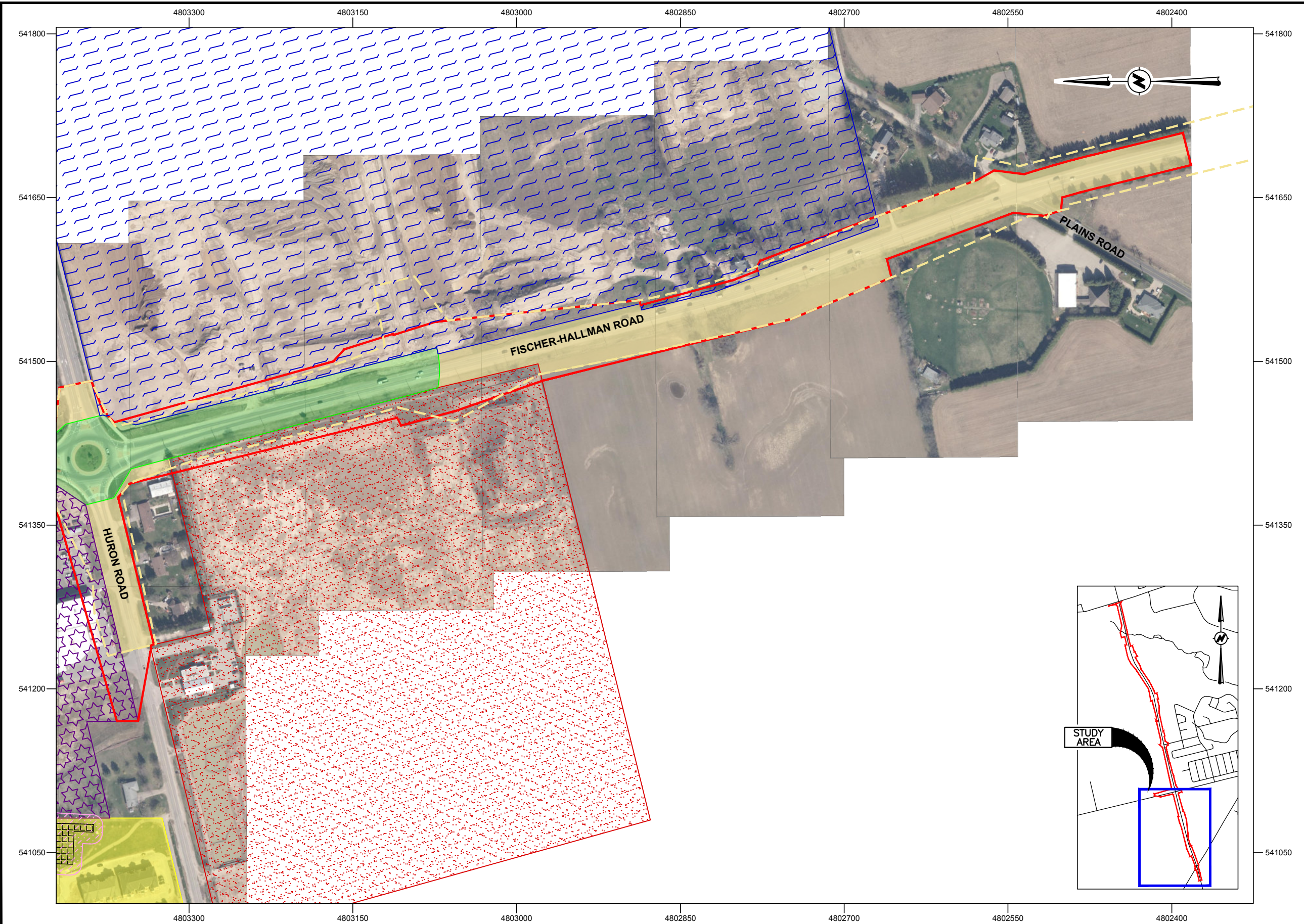
Region of Waterloo
150 FREDERICK STREET
KITCHENER, ONTARIO, N2G 4J3

Wood
Environment & Infrastructure Solutions
900 MAPLE GROVE ROAD, UNIT 10
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REFERENCES:
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Stage 2 Archaeological Assessment Fischer-Hallman Road Improvements Part of Lots 151-160, German Company Tract; Lots 8-9, Beasley's New Survey; Hiestand's Tract; and Bechtel's Tract (Former Township of Waterloo, County of Waterloo) City of Kitchener, Regional Municipality of Waterloo

Supplementary Documentation: Detailed Site Location Information

Prepared for:

Associated Engineering

508 Riverbend Drive, Suite 302
Kitchener, ON N2K 3S2

Archaeological Licence: P1066 (Lytle)

PIF P1066-0263-2021

Archaeological Services Inc. File: 21EA-162

8 March 2022



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1.0 Detailed Site Location

According to Section 7.6 of the *Standards and Guidelines for Consultant Archaeologists* (S & G) administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI), previously the Ministry of Tourism and Culture (MHSTCI, 2011), any information that pinpoints the location of an archaeological site (e.g., detailed assessment results mapping, tables of Global Positioning System (GPS) coordinates for site locations) must not be included in the project report and should only be provided in the *Supplementary Documentation* document. This allows the Ministry of Heritage, Sport, Tourism and Culture Industries to exclude it from the Ontario Public Register of Archaeological Reports, if necessary. Archaeological site location information is considered by Ministry of Heritage, Sport, Tourism and Culture Industries to be confidential and/or sensitive information that cannot be made public.

Site descriptions and other relevant information relating to all archaeological work conducted for the project are contained in our accompanying Stage 2 assessment report for the Fischer-Hallman Road Improvements (ASI, 2022).

1.1 Findspots and Registered Sites

1.1.1 Stage 2 Assessment Results

As a result of the Stage 2 assessment for the Fischer-Hallman Road Improvements project (ASI, 2022), two non-diagnostic Pre-contact Indigenous sites and two non-diagnostic Pre-contact Indigenous secondary deposit findspots were identified: Site P1 (AiHc-557), Site P3 (AiHc-558), Secondary Deposit P2, and Secondary Deposit P5 (Figures 1-3).

Of the finds encountered, Site P3 (AiHc-558) exhibits cultural heritage value or interest and meets the requirements for Stage 3 site-specific assessment as per S & G Section 2.2, Standard 1.a.ii(2) and therefore requires further work. Despite a comprehensive review of the Ontario Archaeological Sites Database, Ontario's PastPortal, archaeological reports on file with the Region of Waterloo, and the latest Stage 1 report for the Fischer-Hallman Road



Improvements Project (Wood Environment & Infrastructure Solutions, 2019a), ASI could not confirm that the area surrounding Site P3 (AiHc-558) had been previously subject to Stage 2 assessment. Unbeknownst to ASI at the time of Stage 2 survey, the area surrounding Site P3 was previously assessed by Wood Environment & Infrastructure Solutions (2019: P348-0061-2019) as seen in Figure 4. During their assessment, two separate Indigenous lithic scatters were located during pedestrian survey: Location 1 and Location 2. Neither scatter met the density requirements for Stage 3 assessment, and were not recommended for further work. It is likely that the artifacts encountered as part of Site P3 (AiHc-558) are related to those documented by Wood Environment & Infrastructure Solutions.

The location of all finds was recorded using a Samsung Galaxy S4 tablet running Esri Collector equipped with a sub-metre Trimble Catalyst GPS. All GPS points taken were referenced to the North American Datum 1983 and projected on the Universe Transverse Mercator grid in zone 17 north.

Environmental conditions were optimal at the time of recording the GPS coordinates, with an accuracy of less than one metre of error. One off-site datum was recorded for this project: Datum 1 is represented by a hydro pole within the Fischer-Hallman Road right-of-way (Figures 1-3).

Table 1: GPS Coordinates

Designation	Easting	Northing	Coordinate Description
Secondary Deposit P2	541619.69	4802595.63	Findspot centre, Test Pit 1
Secondary Deposit P5	540941.66	4804940.72	Findspot centre, Test Pit 1



Designation	Easting	Northing	Coordinate Description
Site P1 (AiHc-557)	541573.08	4802703.70	Site centre
Site P1 (AiHc-557)	541573.51	4802703.85	Eastern limits, Test Pit 1, Test Unit 2
Site P1 (AiHc-557)	541572.68	4802703.59	Western limits, Test Unit 1
Site P1 (AiHc-557)	541573.02	4802703.95	Northern limits
Site P1 (AiHc-557)	541573.12	4802703.50	Southern limits
Site P3 (AiHc-558)	541566.39	4802740.00	Site centre
Site P3 (AiHc-558)	541560.38	4802750.40	Northern limits, Test Pit 7
Site P3 (AiHc-558)	541568.16	4802740.17	Eastern limits
Site P3 (AiHc-558)	541569.50	4802730.50	Southern limits, Test Pit 2, Test Unit 1
Site P3 (AiHc-558)	541560.57	4802738.60	Western limits



Designation	Easting	Northing	Coordinate Description
Datum 1	541585.00	4802689.00	Hydro pole

2.0 Bibliography and Sources

ASI. (2022). Stage 2 Archaeological Assessment, Fischer-Hallman Road Improvements, Part of Lots 151-160, German Company Tract; Lots 8-9, Beasley's New Survey; Hiestand's Tract; and Bechtel's Tract (Former Township of Waterloo, County of Waterloo), City of Kitchener, Regional Municipality of Waterloo. P1066-0263-2021. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

MHSTCI, (Ministry of Heritage, Sport, Tourism and Culture Industries). (2011). Standards and Guidelines for Consultant Archaeologists. Cultural Programs Branch, Ontario Ministry of Tourism and Culture.

Wood Environment & Infrastructure Solutions. (2019). Revised Report: Stage 2 Archaeological Assessment: Proposed Road Widening of Fischer-Hallman Road between Plains Road and North of Huron Road, City of Kitchener, Regional Municipality of Waterloo, Ontario, Project #SCL191154. P348-0061-2019. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.



3.0 Maps

The following maps show the approximate location of sites within one kilometre of the Study Area available from the Ontario Archaeological Sites Database: AiHc-111, AiHc-426, and AiHc-430. These sites do not require further work.

The following maps also show the detailed location of Site P1 (AiHc-557), Site P3 (AiHc-558), and Secondary Deposit P2 in Lot 151, German Company Tract, and Secondary Deposit P5 in Bechtel's Tract (Former Township of Waterloo, County of Waterloo), City of Kitchener, Regional Municipality of Waterloo, Ontario (Figures 1-3). Findspot and site descriptions, and other relevant information relating to all archaeological work conducted for the project are contained in our accompanying Stage 2 assessment report submitted to the MHSTCI (ASI, 2022).



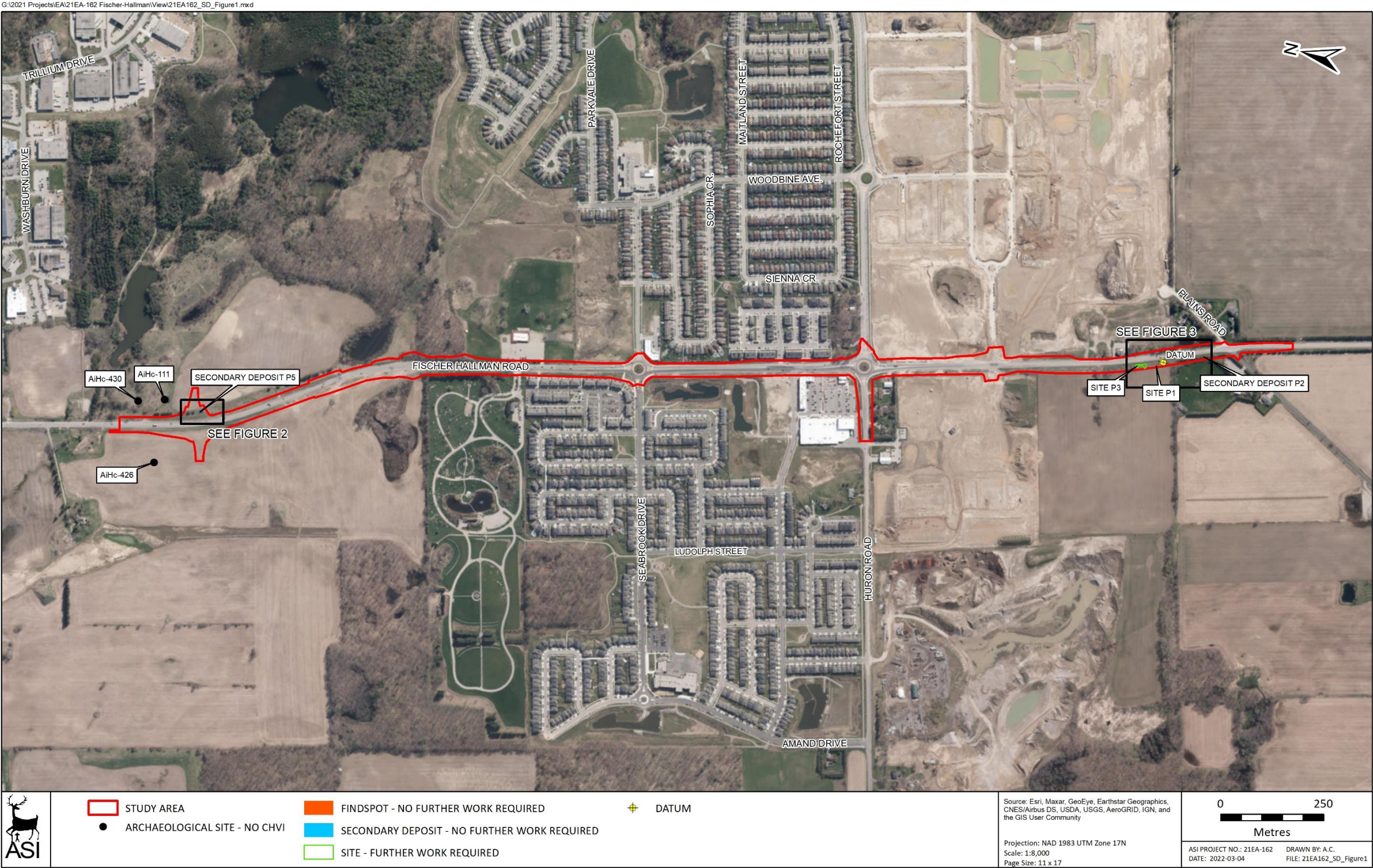


Figure 1: Detailed Location of Registered Sites within One Kilometre of the Study Area and Key of Stage 2 Assessment Results



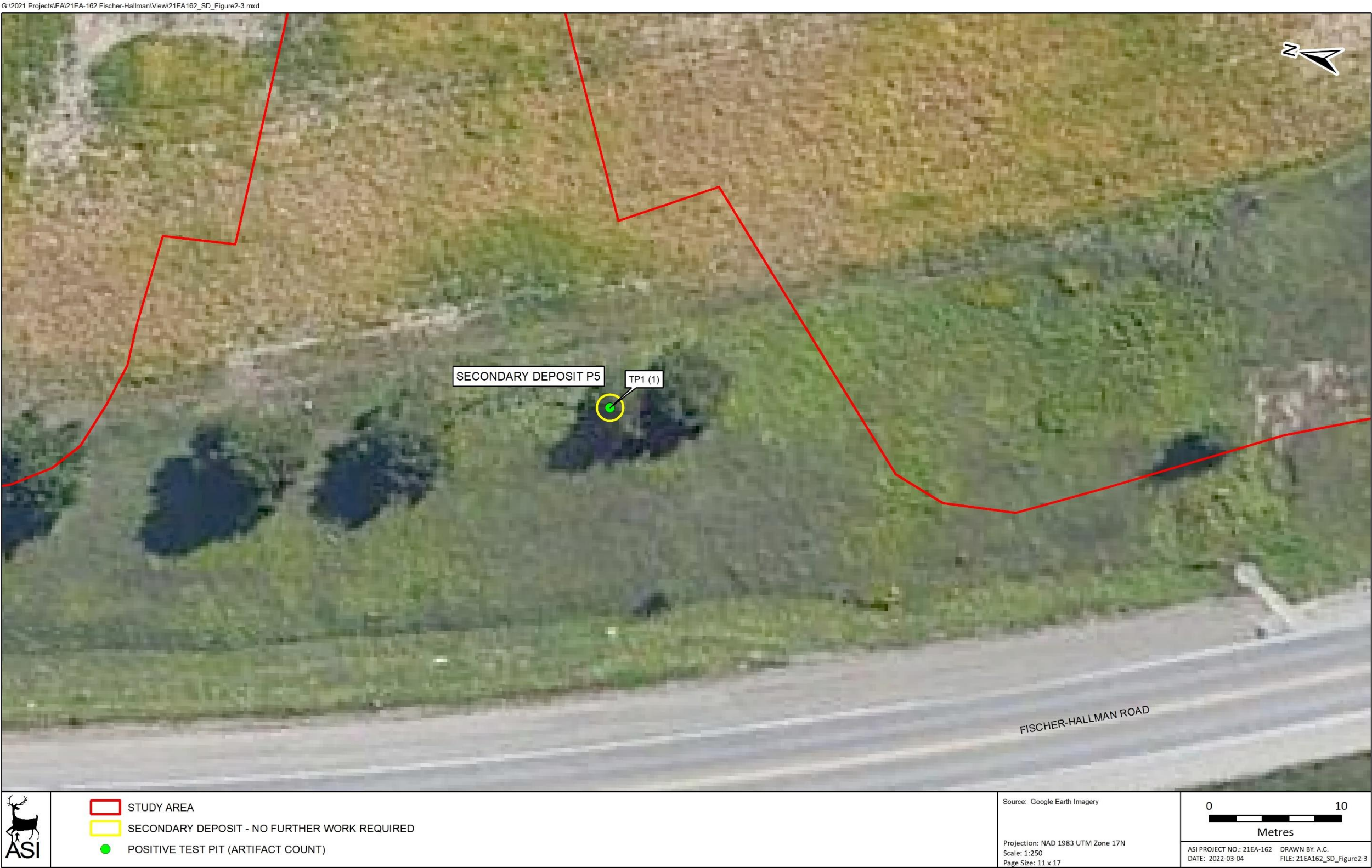


Figure 2: Detailed Site Location of Secondary Deposit P5



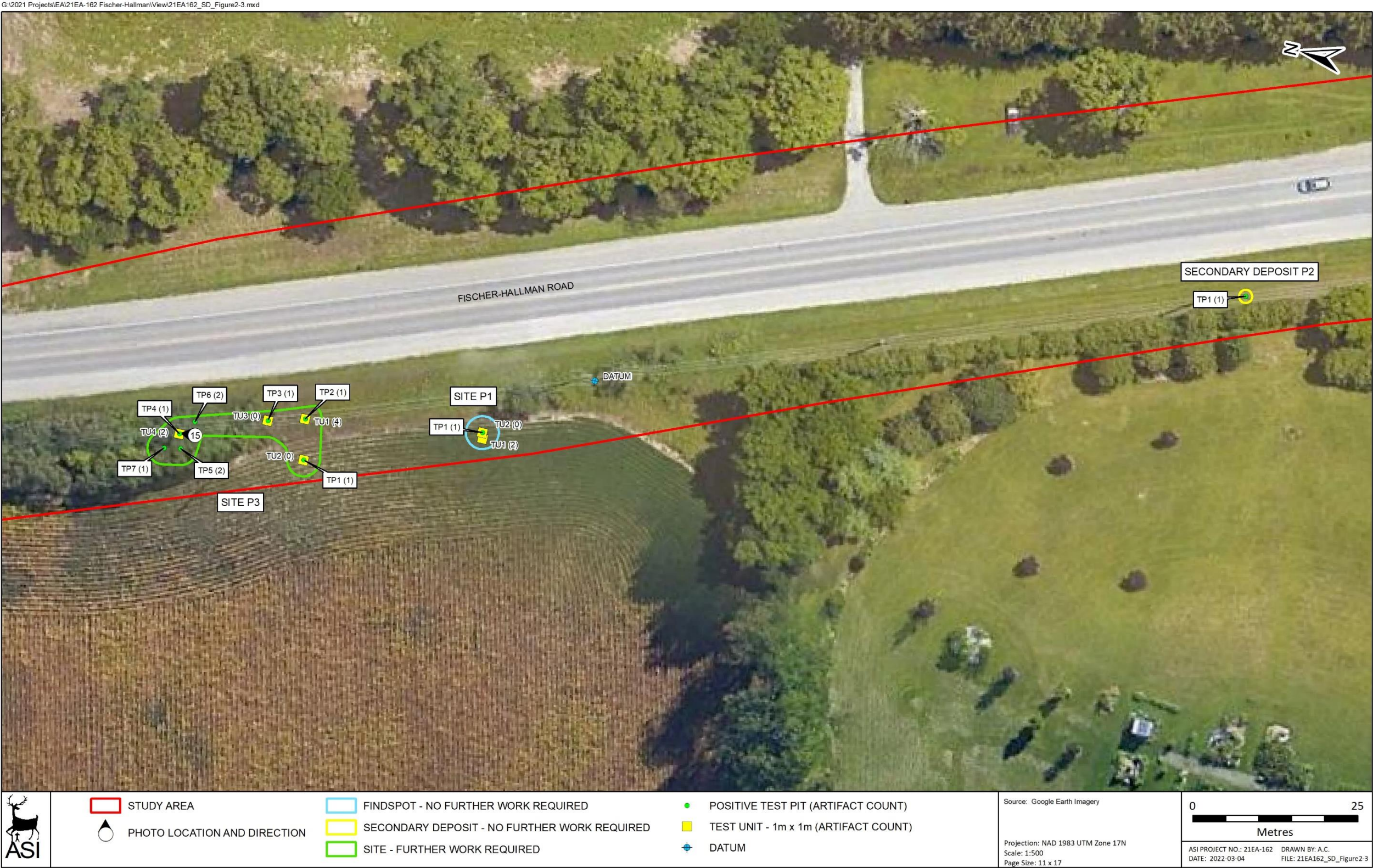


Figure 3: Detailed Site Location of Site P1 (AiHc-557), Site P3 (AiHc-558), and Secondary Deposit P2



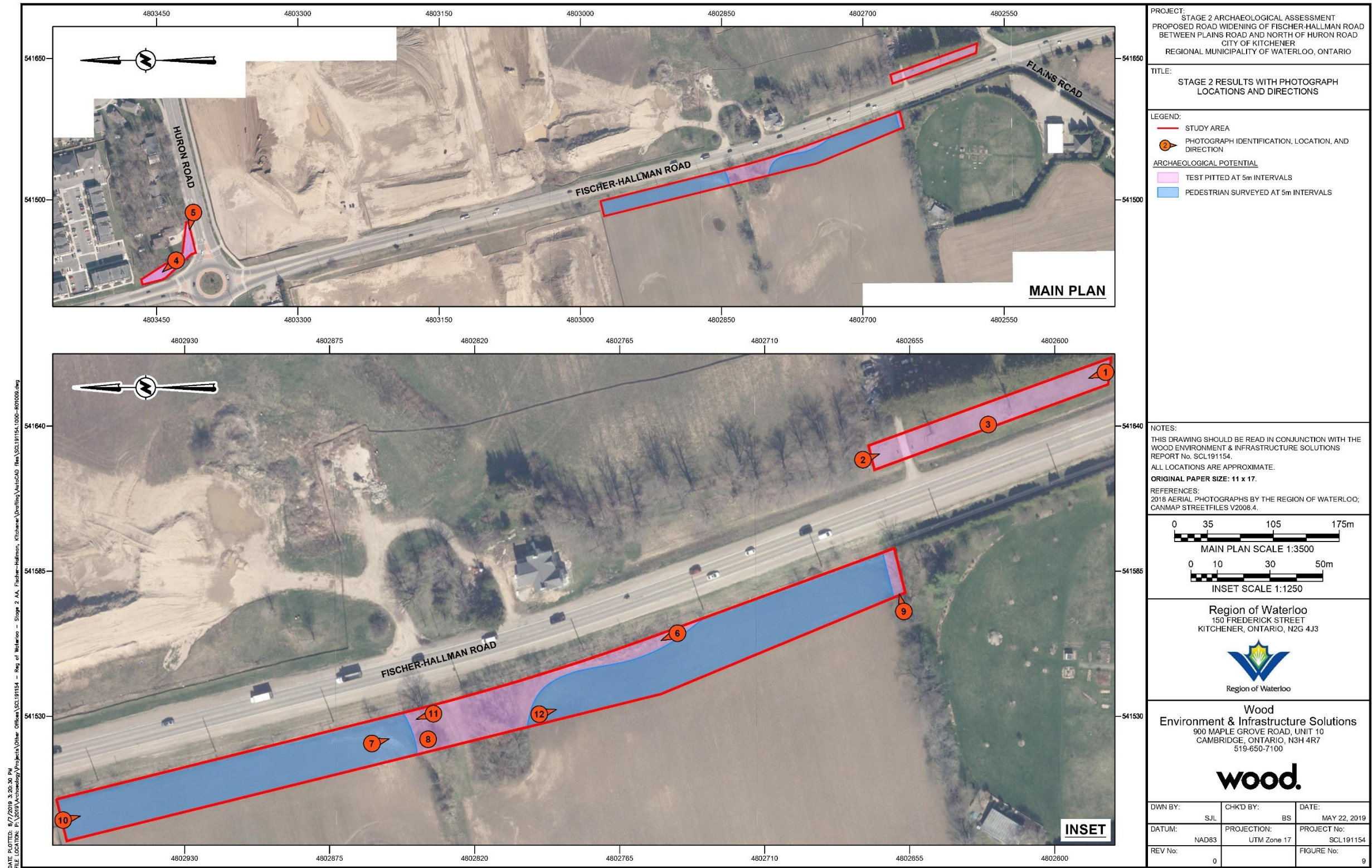


Figure 4: Previous Stage 2 Assessment Results by Wood Environment & Infrastructure Solutions (2019: Figure 9)

