

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:

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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, and May 10, 2022, in accordance with the *Ontario Heritage Act* and the S & G. Approximately 76 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. Fifteen 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 eight 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 precontact Indigenous sites and two non-diagnostic precontact 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.



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Table of Contents

Executive Summary	1
Project Personnel	2
1.0 Project Context	6
1.1 Development Context	7
1.1.1 Treaties and Traditional Territories	8
1.2 Historical Context	10
1.3 Archaeological Context	10
1.3.1 Current Land Use and Field Conditions	11
1.3.2 Geography	11
1.3.3 Previously Registered Archaeological Sites	12
1.3.4 Previous Archaeological Assessments	30
2.0 Field Methods	38
2.1 Areas of No/Low Archaeological Potential	40
2.2 Test Pit Survey	40
2.3 Areas with Remaining Archaeological Potential	41
2.4 Stage 2 Assessment Results Summary	41
3.0 Record of Finds	42
3.1 Unregistered Findspots	43
3.1.1 Secondary Deposit P2	43
3.1.2 Secondary Deposit P5	44
3.2 Registered Sites	45
3.2.1 Site P1 (AiHc-557)	45
3.2.2 Site P3 (AiHc-558)	47
3.3 Inventory of Documentary and Material Record	48



4.0	Analysis and Conclusions	49
5.0	Recommendations	51
6.0	Legislation Compliance Advice	53
7.0	Bibliography and Sources	54
8.0	Images	60
9.0	Maps	67
	Appendix A: Utility Locates	73
	Appendix B: Lithic Artifact Catalogue	75

List of Tables

Table 1: Registered Sites within One Kilometre of the Study Area	13
Table 2: Stage 2 Survey Results Summary	41
Table 3: Inventory of Documentary and Material Record	49

List of 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.	60
Image 2: Previously disturbed gas main corridor; no potential.	60
Image 3: Previous disturbance caused by utility installation and recent tree removal; no potential.	60
Image 4: Previous disturbance caused by utility installation; no potential.	60
Image 5: Area beyond gas main subject to test pit survey at five metre intervals.	61
Image 6: Test pit survey at five metre intervals in progress.	61
Image 7: Test pit survey at five metre intervals in progress.	61
Image 8: Test pit survey at five metre intervals in progress.	61
Image 9: Test pit survey at five metre intervals in progress.	62
Image 10: Test pit survey at five metre intervals in progress.	62
Image 11: Test pit survey at five metre intervals in progress.	62
Image 12: Test pit profile demonstrating intact A-horizon overlying B-horizon.	62
Image 13: Test pit profile demonstrating intact A-horizon overlying B-horizon.	63
Image 14: Test pit profile demonstrating intact A-horizon overlying B-horizon below laid soils.	63



Image 15: Test pit profile demonstrating intact A-horizon overlying B-horizon below laid soils.	63
Image 16: North wall of Test Unit 1 at Site P3 demonstrating intact A-horizon overlying B-horizon below laid soils (see <i>Supplementary Documentation: Detailed Site Location Information</i> Figure 3 for location).	63
Image 17: Judgmental test pit survey at 10 metre intervals in progress.	64
Image 18: Area subject to judgmental test pit survey at 10 metre intervals.	64
Image 19: Judgmental test pit survey at 10 metre intervals in progress.	64
Image 20: Area subject to judgmental test pit survey at 10 metre intervals.	64
Image 21: Judgmental test pit survey at 10 metre intervals in progress.	65
Image 22: Area subject to judgmental test pit survey at 10 metre intervals.	65
Image 23: Judgmental test pit survey at 10 metre intervals in progress.	65
Image 24: Test pit profile demonstrating an absence of A-horizon overlying B-horizon.	65
Image 25: Test pit profile demonstrating an absence of A-horizon under fill soils.	66
Image 26: Test pit profile demonstrating an absence of A-horizon under fill soils.	66

List of Figures

Figure 1: Location of the Study Area	68
Figure 2: Stage 2 Assessment Results - Sheet Key	69
Figure 3: Stage 2 Assessment Results – Sheet 1	70
Figure 4: Stage 2 Assessment Results - Sheet 2	71
Figure 5: Stage 2 Assessment Results - Sheet 3	72



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 (MTC, 2011).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (Environmental Assessment Act, RSO, 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 precontact 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. A portion of the western Fischer-Hallman Road right-of-way, north of Plains Road, was disturbed during December 2021 by utility installation and tree removal prior to Stage 2 assessment (Images 3-4). 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, 2021, under the field direction of Chris Langlois (P1177), from December 13-17, 2021, under the field direction of Jesse Hume (R1254), and on May 10, 2022, under the field direction of Hannah Curtis (R1296).

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	Precontact Indigenous	Campsite	ASI 1982	N/A
AiHc-48	Glencairn 1	Precontact Indigenous	Findspot	Mayer, Pihl, Poulton & Assoc. Inc. 1986	N/A
AiHc-49	Glencairn 2	Precontact 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	Precontact Indigenous	Findspot	Mayer, Pihl, Poulton & Assoc. Inc. 1986	N/A
AiHc-85	Huron Business Park 1	Precontact Indigenous	Findspot	ASI 1989	N/A
AiHc-86	Huron Business Park 2	Precontact Indigenous	Findspot	ASI 1989	N/A
AiHc-87	Huron Business Park 3	Precontact Indigenous	Findspot	ASI 1989	N/A
AiHc-88	Huron Business Park 4	Precontact 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	Precontact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-105	N/A	Precontact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-106	N/A	Precontact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-107	N/A	Precontact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-108	N/A	Precontact Indigenous	Campsite	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-109	N/A	Precontact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-110	N/A	Precontact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-111	N/A	Precontact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	No
AiHc-112	N/A	Precontact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-113	N/A	Precontact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-114	N/A	Precontact 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	Precontact Indigenous	Undetermined	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-117	N/A	Precontact 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	Precontact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-120	N/A	Precontact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-121	N/A	Precontact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-122	N/A	Precontact Indigenous	Findspot	Mayer, Poulton & Assoc. Inc. 1990	N/A
AiHc-163	Lujan	Precontact Indigenous	Findspot	ASI 1990, 1991	N/A
AiHc-164	Keyoke	Precontact 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	Precontact Indigenous	Undetermined	ARA 2001	N/A
AiHc-257	Cornfield	Precontact 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	Precontact 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	Precontact Indigenous	Camp	Stantec 2006	N/A

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher	CHVI
AiHc-364	Becker Estates	Precontact Indigenous	Camp; lithic scatter	Stantec 2006	N/A
AiHc-368	N/A	Precontact Indigenous	Scatter	ASI 2007	N/A
AiHc-369	N/A	Precontact Indigenous	Findspot	ASI 2007	N/A
AiHc-370	N/A	Precontact Indigenous	Scatter	ASI 2007	N/A
AiHc-389	N/A	Late Woodland	Campsite	ARA 2006	N/A
AiHc-413	N/A	Precontact 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	Precontact 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	Precontact 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	Precontact 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	Precontact Indigenous, Euro-Canadian	Log cabin; midden	ARA 2010; Golder 2013	N/A
AiHc-426	Location 25	Precontact 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	Precontact 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	Precontact Indigenous	Campsite	Golder 2015	N/A
AiHc-481	Location 1	Precontact 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	Precontact Indigenous	Findspot	Stantec 2019	N/A
AiHc-521	HSL-5	Early Archaic	Campsite	Stantec 2019	N/A
AiHd-94	Nutria	Precontact Indigenous	Findspot	ASI 1990, 1991	N/A
AiHd-95	Sacalait	Precontact Indigenous	Lithic scatter	ASI 1990, 1991	N/A
AiHd-96	Bruly	Precontact Indigenous	Findspot	ASI 1990, 1991	N/A
AiHd-107	N/A	Precontact Indigenous	Undetermined	ASI 1994	N/A
AiHd-150	N/A	Precontact 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 & G 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 & G 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 & G 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 & G 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, 2021, under the field direction of Chris Langlois (P1177), from December 13-17, 2021, under the field direction of Jesse



Hume (R1254), and on May 10, 2022, under the field direction of Hannah Curtis (R1296) 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 1-26), 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 76 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 (0.16 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 1-4).

2.2 Test Pit Survey

Approximately six percent of the Study Area (0.78 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, 5-11).

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 12-13).

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 14-16).



Approximately nine percent of the Study Area (1.16 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 17-23).

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 24-26).

2.3 Areas with Remaining Archaeological Potential

Approximately eight percent of the Study Area (1.08 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 (76 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	0.16 hectares (one percent)	Fischer-Hallman roadbed, gravel and paved shoulder, ditch, utilities	1-4
Test pit survey; five metre intervals	0.78 hectares (six percent)	Manicured and scrubby right-of-way boulevards	1, 5-16
Judgmental test pit survey; 10 metre intervals	1.16 hectares (nine percent)	Manicured and scrubby right-of-way boulevards	17-26
Not assessed due to seasonal conditions; Requires Stage 2 assessment	1.08 hectares (eight percent)	Manicured and scrubby right-of-way boulevards	N/A

3.0 Record of Finds

As a result of this assessment, two non-diagnostic precontact Indigenous sites and two non-diagnostic precontact 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: Precontact 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: Precontact 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 precontact 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, and May 10, 2022, in accordance with the *Ontario Heritage Act* and the S & G. Approximately 76 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 (0.16 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 1-4). Fifteen percent of the Study Area (1.94 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, 5-26). The remaining eight percent of the Study Area (1.08 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 precontact Indigenous sites and two non-diagnostic precontact 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. Precontact 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. Precontact 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 precontact 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-millimetre 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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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: Previous disturbance caused by utility installation; no potential.



Image 5: Area beyond gas main subject to test pit survey at five metre intervals.



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 survey at five metre intervals in progress.



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.



Image 15: Test pit profile demonstrating intact A-horizon overlying B-horizon below laid soils.



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



Image 16: North wall of Test Unit 1 at Site P3 demonstrating intact A-horizon overlying B-horizon below laid soils (see *Supplementary Documentation: Detailed Site Location Information* Figure 3 for location).



Image 17: Judgmental test pit survey at 10 metre intervals in progress.



Image 19: Judgmental test pit survey at 10 metre intervals in progress.



Image 18: Area subject to judgmental test pit survey at 10 metre intervals.



Image 20: Area subject to judgmental test pit survey at 10 metre intervals.



Image 21: Judgmental test pit survey at 10 metre intervals in progress.



Image 23: Judgmental test pit survey at 10 metre intervals in progress.



Image 22: Area subject to judgmental test pit survey at 10 metre intervals.



Image 24: Test pit profile demonstrating an absence of A-horizon overlying B-horizon.



Image 25: Test pit profile demonstrating an absence of A-horizon under fill soils.



Image 26: Test pit profile demonstrating an absence of A-horizon under fill soils.

9.0 Maps



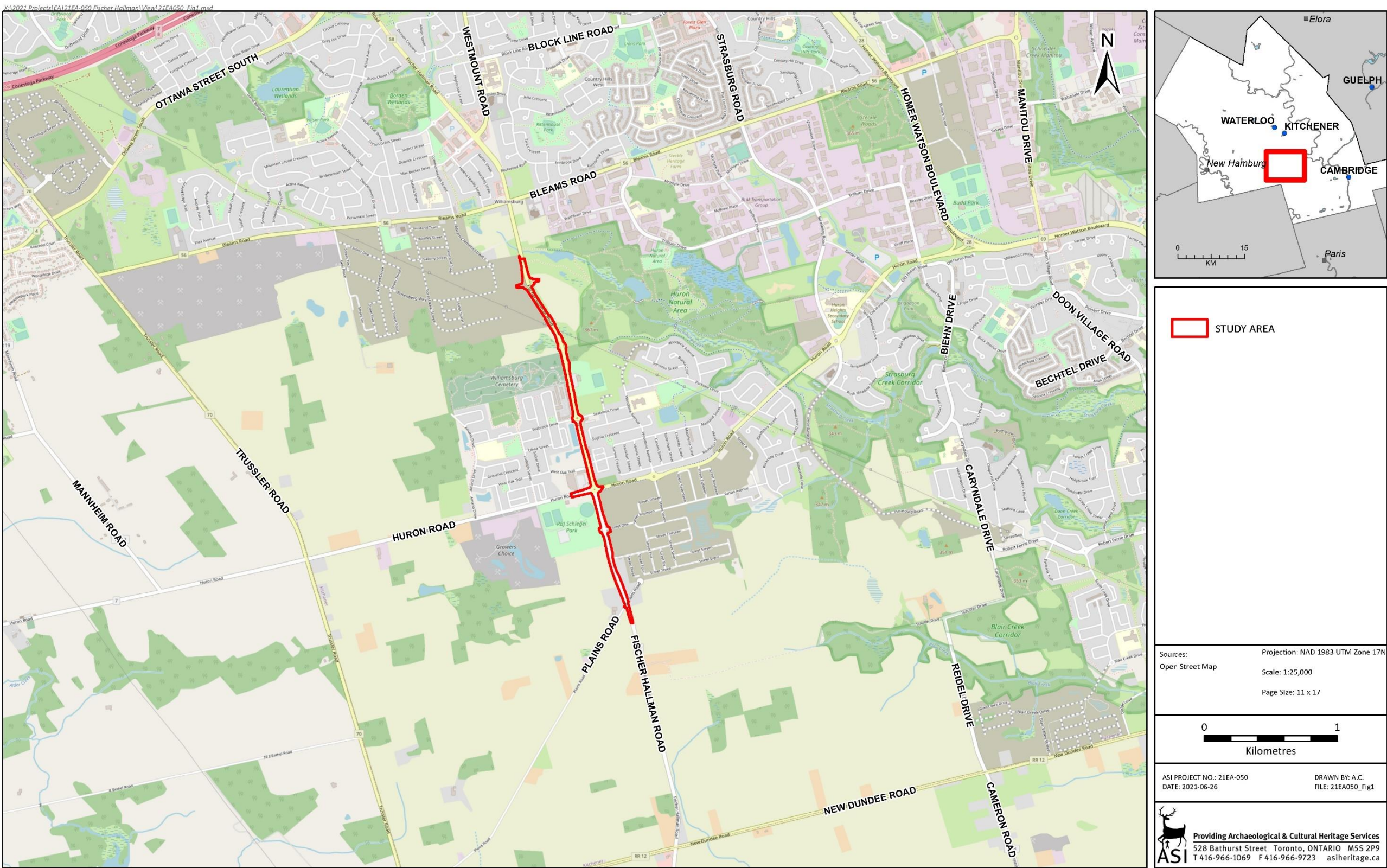


Figure 1: Location of the Study Area



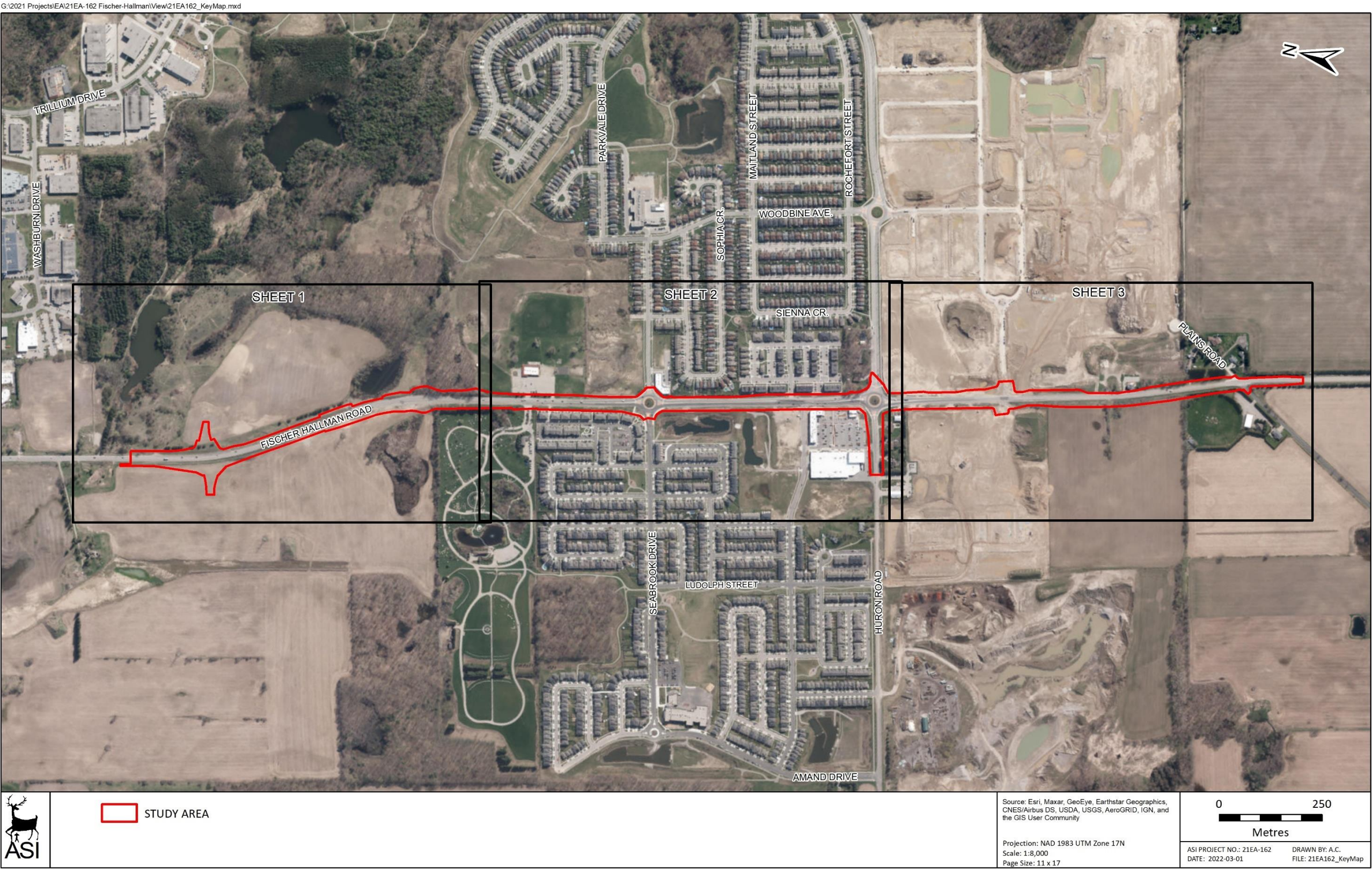


Figure 2: Stage 2 Assessment Results - Sheet Key



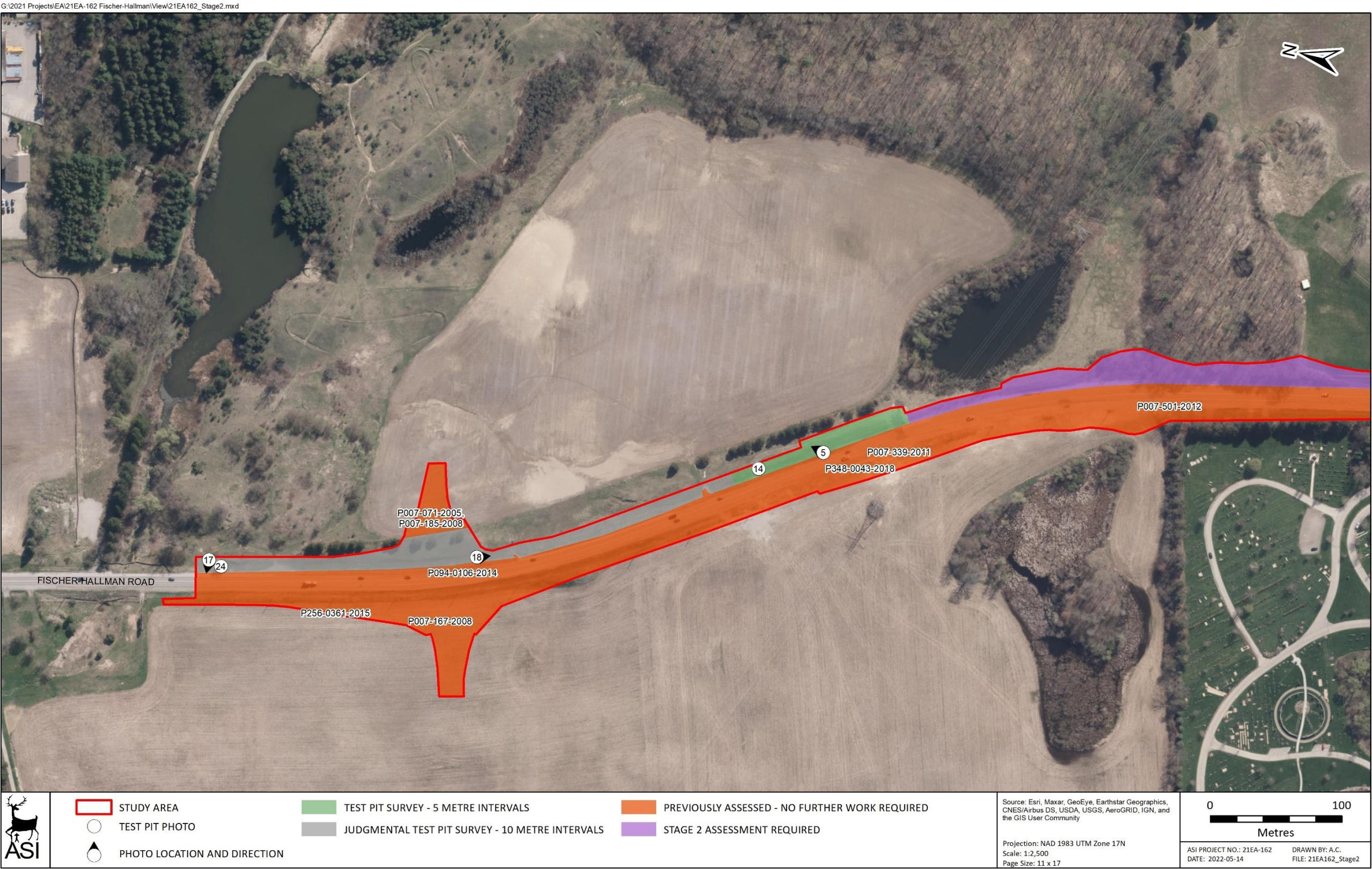


Figure 3: Stage 2 Assessment Results – Sheet 1



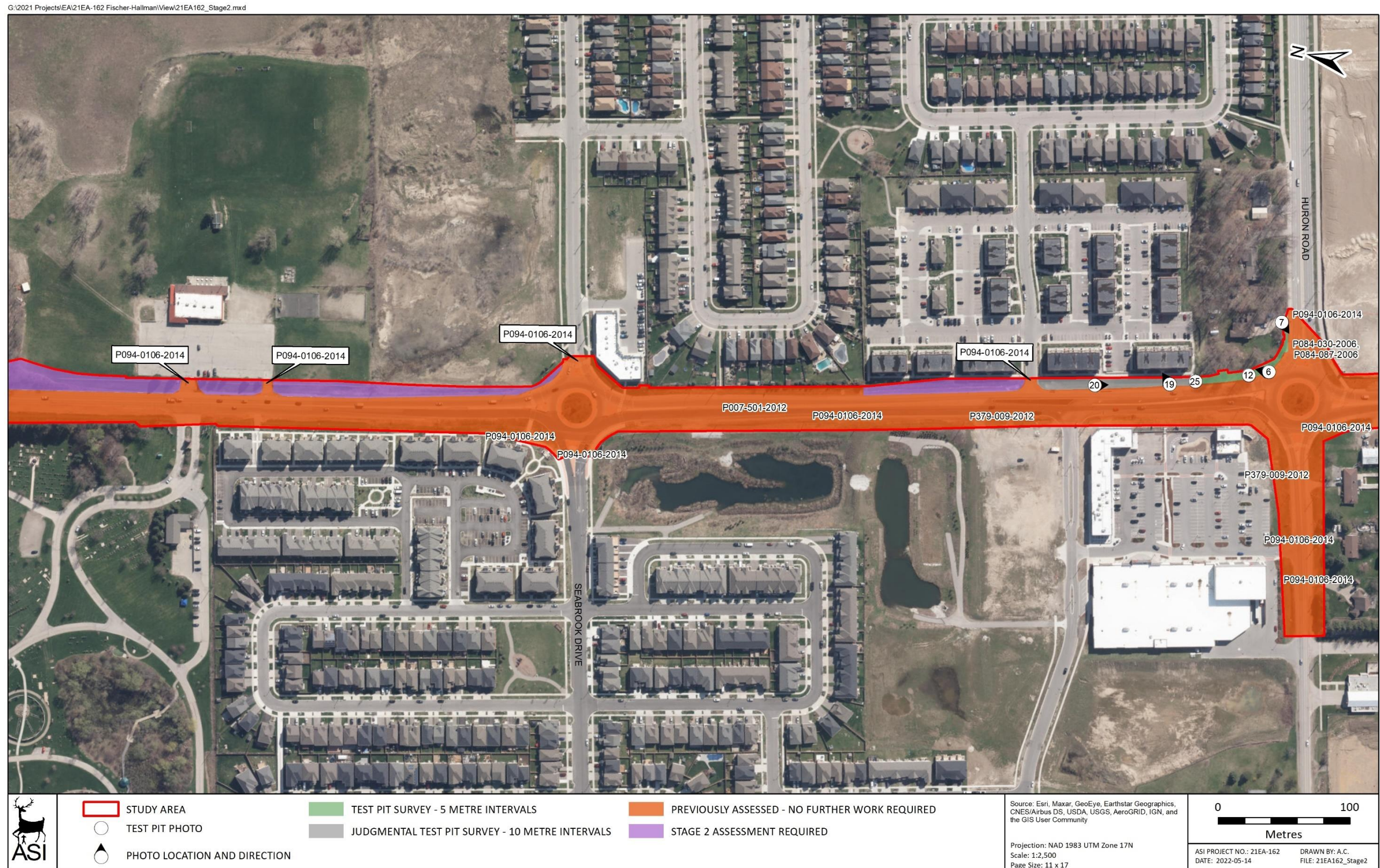


Figure 4: Stage 2 Assessment Results - Sheet 2



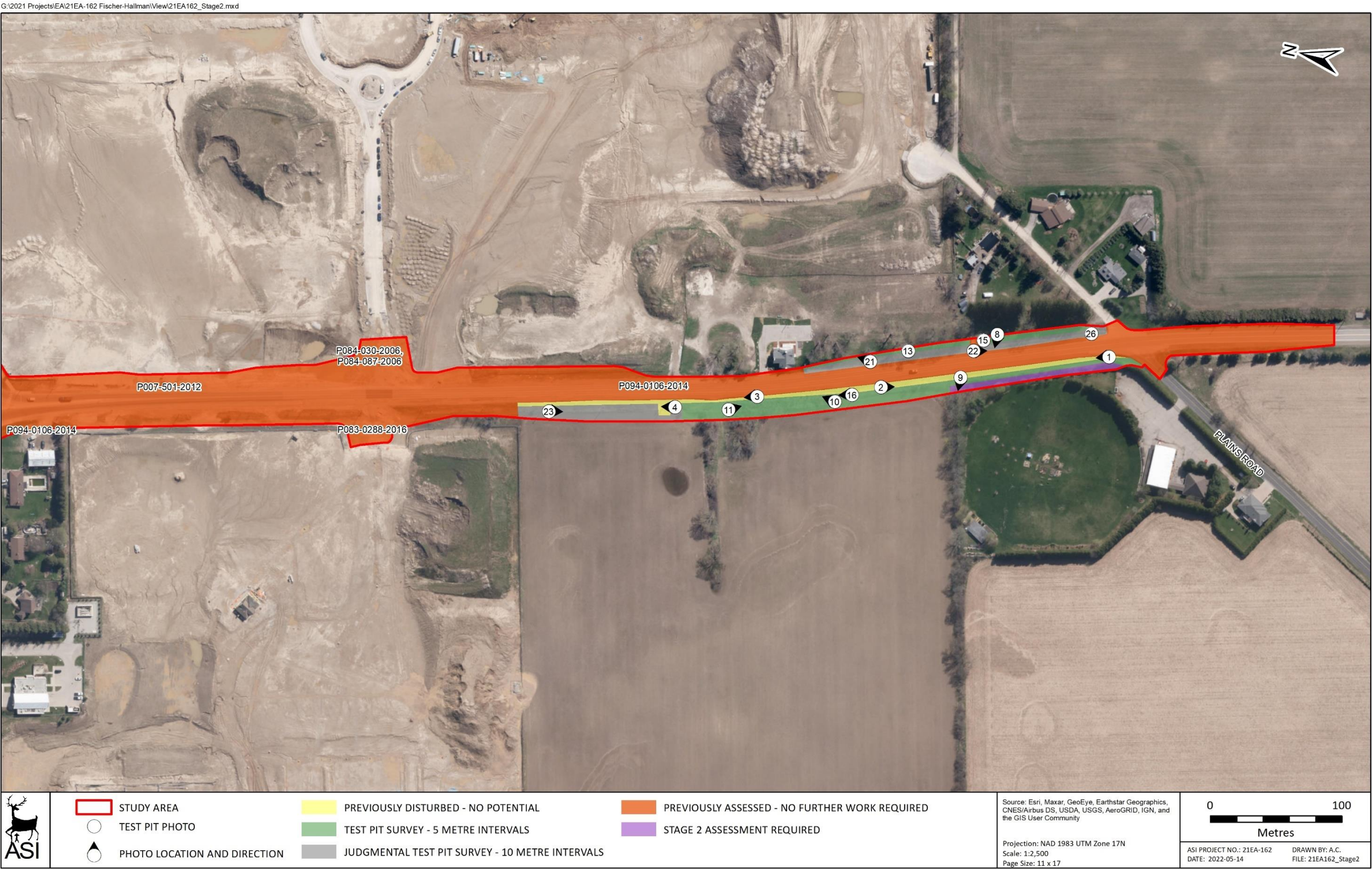
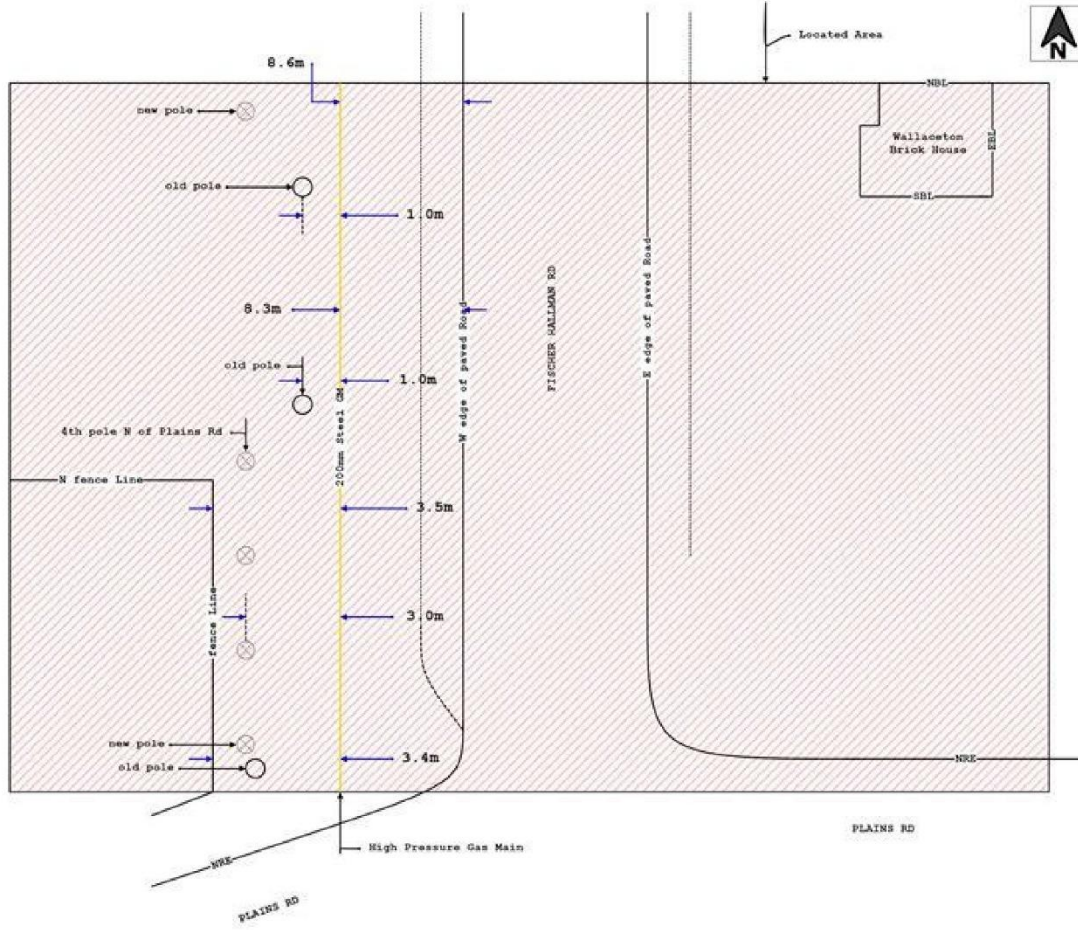


Figure 5: Stage 2 Assessment Results - Sheet 3



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 Direction — N</td> <td>Water Chamber — (WC)</td> <td>Catch Basin — (CB)</td> <td>Pole — ⊗</td> <td>North N</td> </tr> <tr> <td>Storm Svc. — STS —</td> <td>Water Main — WM —</td> <td>Lot Line — LL —</td> <td>Water Chamber — (WC)</td> <td>Water Valve — (V)</td> <td>Sidewalk — (SW)</td> <td>North N</td> <td>South S</td> </tr> <tr> <td>Road Edge — RE —</td> <td>Water Service — WS —</td> <td>Face of Curb — FC —</td> <td>Water Valve — (V)</td> <td>Vault — (V)</td> <td>Work Area — (WA)</td> <td>East E</td> <td>West W</td> </tr> <tr> <td>Measurement — → ←</td> <td>Sewer Main — SM —</td> <td>Driveway — DW —</td> <td>Vault — (V)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Sewer Svc. — SS —</td> <td>Fence Line — FL —</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 Direction — N	Water Chamber — (WC)	Catch Basin — (CB)	Pole — ⊗	North N	Storm Svc. — STS —	Water Main — WM —	Lot Line — LL —	Water Chamber — (WC)	Water Valve — (V)	Sidewalk — (SW)	North N	South S	Road Edge — RE —	Water Service — WS —	Face of Curb — FC —	Water Valve — (V)	Vault — (V)	Work Area — (WA)	East E	West W	Measurement — → ←	Sewer Main — SM —	Driveway — DW —	Vault — (V)						Sewer Svc. — SS —	Fence Line — FL —					
LEGEND :		Gas Main — GM —	Bldg Line — BL —	Railway — + + + +	North Direction — N	Hydrant — (H)	Pole — ⊗																																											
Storm Main — STM —	Gas Service — GS —	Property Line — PL —	North Direction — N	Water Chamber — (WC)	Catch Basin — (CB)	Pole — ⊗	North N																																											
Storm Svc. — STS —	Water Main — WM —	Lot Line — LL —	Water Chamber — (WC)	Water Valve — (V)	Sidewalk — (SW)	North N	South S																																											
Road Edge — RE —	Water Service — WS —	Face of Curb — FC —	Water Valve — (V)	Vault — (V)	Work Area — (WA)	East E	West W																																											
Measurement — → ←	Sewer Main — SM —	Driveway — DW —	Vault — (V)																																															
	Sewer Svc. — SS —	Fence Line — FL —																																																
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		