



Hamilton Rapid Transit Preliminary Design and Feasibility Study

A-LINE

STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Version:2.0



Hamilton Rapid Transit Preliminary Design and Feasibility Study

A-LINE

STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Version:2.0

February 2012

**Stage 1 Archaeological Assessment
Background Study and Property Inspection**

**Hamilton Rapid Transit A-Line
City of Hamilton, Ontario**

Prepared for:

SNC-Lavalin Inc.
195 The West Mall,
Toronto, Ontario
Tel: (416) 679-6700
Fax: (416) 231-5356
lan.upjohn@snclavalin.ca
www.snclavalin.com

Archaeological Licence P057 (Robert Pihl) and P094 (Lisa Merritt)
MTCS PIF P057-654-2010 and P094-109-2011
ASI File 10EA-045

March 26, 2012



Archaeological Services Inc.

528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iASI.to

Stage 1 Archaeological Assessment Background Study and Property Inspection

**Hamilton Rapid Transit A-Line
City of Hamilton, Ontario**

EXECUTIVE SUMMARY

Archaeological Services Inc. (ASI) was contracted by SNC-Lavalin Inc. (SLI), Toronto, on behalf of the City of Hamilton, to conduct a Stage 1 Archaeological Assessment background study and property inspection for the proposed Hamilton Rapid Transit A-Line. The proposed A-Line would extend from the waterfront along James Street to Hamilton International Airport. The alignment from King Street southerly to Fennell Avenue has not yet been determined.

The Stage 1 Archaeological Assessment determined that 84 archaeological sites have been registered within a 1 km radius of the study corridor; 15 of which are located within 300m. A review of the geography and local eighteenth and nineteenth century land use of the study corridor also suggests that it has potential for the identification of both Aboriginal and Euro-Canadian archaeological sites.

Based on the results of the property inspection, it was determined that while the majority of the James Street/Upper James Street and Airport Road rights-of-way (ROW) have been subject to extensive and deep land alterations, several small areas within the ROW have remained relatively undisturbed and exhibit archaeological site potential.

In light of these results, ASI makes the following recommendations:

1. Archaeological potential exists within the study corridor. These lands will require a Stage 2 Property Survey, which can be conducted by test pit survey.
 - Test pit survey involves the hand excavation of small test pits at 5 m intervals and can be conducted only in areas where ploughing is not an option.
2. Following the Stage 2 assessment, a Stage 3 site specific assessment (cemetery investigation) is recommended for the ROW in front of all three cemetery properties to confirm the presence or absence of unmarked graves. The most cost-effective method of determining whether or not burials exist adjacent to the existing cemetery or in the vicinity of any grave markers is by the controlled removal of topsoil by Gradall (or smaller machine if required) under the supervision of a licensed archaeologist. The exposed subsoil will then be shovel-shined and thoroughly examined for the presence of burial shafts. This work will be done in accordance with the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* and the *Ontario Cemeteries Act*;



3. Stage 2 Property Survey is recommended in the vicinity of the Iroquois Beach Ridge and Cameron Street to examine for any deeply buried soil horizons. This can be accomplished through the use of backhoes or equivalent heavy excavating machinery to verify the presence of and to assess deeply buried archaeological resources.
4. Due to extensive and deep land alterations that have severely damaged the integrity of any potential archaeological resources, the majority of the study corridor does not require further archaeological assessment; and,
5. Should the proposed work extend beyond the current study corridor then further Stage 1 assessment must be conducted to determine the archaeological potential of the surrounding lands.



**ARCHAEOLOGICAL SERVICES INC.
ENVIRONMENTAL ASSESSMENT DIVISION**

PROJECT PERSONNEL

<i>Senior Project Manager:</i>	Lisa Merritt, MSc [MTCS license P094] <i>Senior Archaeologist, Assistant Manager, Environmental Assessment Division</i>
<i>Project Director (licensee):</i>	Lisa Merritt Robert Pihl, MA, CAHP [MTCS license P057] <i>Partner and Senior Archaeologist Manager, Environmental Assessment Division</i>
<i>Project Manager/Archaeologist:</i>	Sarah Jagelewski, Hon. BA [MTCS license R405] <i>Staff Archaeologist</i> Caitlin Lacy, Hon. BA [MTCS license R303] <i>Staff Archaeologist</i>
<i>Project Coordinator:</i>	Sarah Jagelewski
<i>Field Director:</i>	Peter Carruthers, MA, CAHP [MTCS license P163] Senior Associate
<i>Report Writer and Graphics:</i>	Sarah Jagelewski Caitlin Lacy Heidy Schopf, MES <i>Research Archaeologist</i>
<i>Graphics</i>	Jonas Fernandez, MSc [MTCS license R281] <i>GIS Technician</i> Blake Williams, MLitt <i>GIS Technician</i>
<i>Report Reviewer:</i>	Lisa Merritt



TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
PROJECT PERSONNEL	iii
1.0 PROJECT CONTEXT	1
1.1 Development Context	1
1.2 Archaeological Context	2
1.2.1 Previous Archaeological Research	2
1.2.2 Geography	5
1.3 Historical Context	7
1.3.1 Contact Period	7
1.3.2 Township Survey and Settlement	9
1.3.3 Transportation Network	10
1.3.4 Historic Map Review	12
2.0 FIELD METHODS	14
3.0 ANALYSIS AND CONCLUSIONS	15
3.1 Analysis of Archaeological Potential	15
3.2 Analysis of Property Inspection Results	15
3.3 Conclusions	17
4.0 RECOMMENDATIONS	18
5.0 ADVICE ON COMPLIANCE WITH LEGISLATION	19
6.0 WORKS CITED	20
7.0 MAPS	22
8.0 IMAGES	55
8.1 Hamilton RT A-Line – With Downtown Option 1 (BRT)	55
8.2 Hamilton RT A-Line – Downtown Option 2 (LRT)	62

LIST OF TABLES

Table 1: List of previously registered within 1 km of the study corridor	2
Table 2: Summary of Property Owners and Historic Features along the study corridor	13

LIST OF FIGURES

Figure 1: The location of the study corridor	23
Figure 2: Surficial geology in the study corridor	24
Figure 3: Soil drainage in the study corridor	25
Figure 4: 1815 Map of the Niagara District in Upper Canada	26
Figure 5: The 1850 Map by Baron de Rottenberg	26
Figure 6: The study corridor overlaid on the map of Barton and Glanford Townships.	27
Figure 7: Hamilton RT A-Line Key Plan	28
Figure 8: Hamilton RT A-Line (Sheet 1) – Results of Stage 1 Archaeological Assessment	29
Figure 9: Hamilton RT A-Line (Sheet 2) – Results of Stage 1 Archaeological Assessment	30
Figure 10: Hamilton RT A-Line (Sheet 3) – Results of Stage 1 Archaeological Assessment	31
Figure 11: Hamilton RT A-Line (Sheet 4) – Results of Stage 1 Archaeological Assessment	32
Figure 12: Hamilton RT A-Line (Sheet 5) – Results of Stage 1 Archaeological Assessment	33
Figure 13: Hamilton RT A-Line (Sheet 6) – Results of Stage 1 Archaeological Assessment	34
Figure 14: Hamilton RT A-Line (Sheet 7) – Results of Stage 1 Archaeological Assessment	35
Figure 15: Hamilton RT A-Line (Sheet 8) – Results of Stage 1 Archaeological Assessment	36
Figure 16: Hamilton RT A-Line (Sheet 9) – Results of Stage 1 Archaeological Assessment	37
Figure 17: Hamilton RT A-Line (Sheet 10) – Results of Stage 1 Archaeological Assessment	38
Figure 18: Hamilton RT A-Line (Sheet 11) – Results of Stage 1 Archaeological Assessment	39



Figure 19: Hamilton RT A-Line (Sheet 12) – Results of Stage 1 Archaeological Assessment.....	40
Figure 20: Hamilton RT A-Line (Sheet 13) – Results of Stage 1 Archaeological Assessment	41
Figure 21: Hamilton RT A-Line (Sheet 14) – Results of Stage 1 Archaeological Assessment.....	42
Figure 22: Hamilton RT A-Line (Sheet 15) – Results of Stage 1 Archaeological Assessment.....	43
Figure 23: Hamilton RT A-Line (Sheet 16) – Results of Stage 1 Archaeological Assessment	44
Figure 24: Hamilton RT A-Line (Sheet 17) – Results of Stage 1 Archaeological Assessment.....	45
Figure 25: Hamilton RT A-Line (Sheet 18) – Results of Stage 1 Archaeological Assessment	46
Figure 26: Hamilton RT A-Line (Sheet 19) – Results of Stage 1 Archaeological Assessment	47
Figure 27: Hamilton RT A-Line (Sheet 20) – Results of Stage 1 Archaeological Assessment.....	48
Figure 28: Hamilton RT A-Line (Sheet 21) – Results of Stage 1 Archaeological Assessment.....	49
Figure 29: Hamilton RT A-Line Option 2 (LRT) – Key Plan	50
Figure 30: Hamilton RT A-Line (Option 2 Sheet 1) –Results of Stage 1 Archaeological Assessment	51
Figure 31: Hamilton RT A-Line (Option 2 Sheet 2) –Results of Stage 1 Archaeological Assessment	52
Figure 32: Hamilton RT A-Line (Option 2 Sheet 3) –Results of Stage 1 Archaeological Assessment	53
Figure 33: Hamilton RT A-Line (Option 2 Sheet 4) –Results of Stage 1 Archaeological Assessment	54

LIST OF PLATES

Plate 1: View south-southwest from Barton Street toward the escarpment.	55
Plate 2: View south-southwest from Cannon Street along RT corridor.....	55
Plate 3: East-southeast view along King Street and north edge of Gore Park. No Potential.	55
Plate 4: North-northeast view across King at the west end of Gore Park. All disturbed and no potential.	55
Plate 5: North-northeast view under the T.H. & B. overpass. No potential - all disturbed.....	55
Plate 6: North-northeast view down John St. Disturbed on both sides of road – no potential.	55
Plate 7: West-northwest view along Charlton Ave. No potential.....	56
Plate 8: North-northeast view down James St S. Disturbed on both sides – no potential.	56
Plate 9: Northeast view down Mountain Road. Disturbed on both sides – no potential.	56
Plate 10: West-southwest view of exit from access to Mountain Rd and James St. All disturbed and no potential.....	56
Plate 11: West view along exit towards James Street and West 5 th St. All disturbed and no potential.	56
Plate 12: South-southwest view along study corridor. All disturbed and no potential.	56
Plate 13: West view along Fennell. Mainly disturbed except as indicated.	57
Plate 14: South-southwest view along Upper James St. All disturbed – no potential.	57
Plate 15: View south-southwest along Upper James St. Note commercial development along corridor.	57
Plate 16: View north-northeast from Aldridge St. along disturbed ROW.	57
Plate 17: View south across Upper James St. Area has been heavily developed.	57
Plate 18: View south-southwest across Blossom Lane along disturbed ROW.....	57
Plate 19: View southwest toward Barton Stone United Church. Archaeological potential exists beyond sidewalk around church.	58
Plate 20: View southeast across open space with archaeological potential.....	58
Plate 21: View north-northeast toward Rymal Road. Area has been heavily disturbed by commercial development.	58
Plate 22: View east-southeast toward historic homestead. Surrounding property has archaeological potential.	58
Plate 23: View south-southwest along disturbed ROW where hydro corridor crosses Upper James St.	58
Plate 24: View south-southwest across low/wet ground toward 20 Road W. Note raised roadbed.	58
Plate 25: View southeast toward Stoneholm Farm. Potential exists beyond disturbed ROW lands.	59
Plate 26: View north-northeast along disturbed ROW. Note utility box on left.....	59
Plate 27: View southeast across Upper James St toward historic homestead.....	59
Plate 28: View south-southeast along disturbed ROW. Note ditching on right.	59
Plate 29: View north-northeast along raised roadbed.	59
Plate 30: View south-southwest along disturbed ROW.....	59
Plate 31: View north-northeast across low/wet area adjacent to Willow Valley Golf Course.....	60
Plate 32: View southeast across cemetery at St. Paul's Anglican Church.....	60



Plate 33: North-northeast view along Homestead Dr. towards Upper James St. Disturbed ROW - no potential. Potential in lawns beyond ROW.....	60
Plate 34: North-northeast view along Homestead Dr. Potential in lawns beyond disturbed ROW.....	60
Plate 35: South-southwest view along Homestead Dr. Disturbed ROW and utilities. Potential in lawns beyond disturbed ROW.	60
Plate 36: South-southeast view across Homestead Dr. Historic house – potential in lawn. Modern development in background – disturbed.....	60
Plate 37: South view down Hoemstead Dr. ROW, new development, and utilities. Disturbed and no potential.	61
Plate 38: View east-southeast along disturbed ROW. Adjacent property has been previously graded.	61
Plate 39: View southeast along disturbed ROW. Archaeological potential is present adjacent to ROW.....	61
Plate 40: View east-southeast across entrance road and along disturbed ROW.....	61
Plate 41: View east-southeast along south side of Airport Rd. Archaeological potential is present adjacent to ROW.	61
Plate 42: East-southeast view along King St. All disturbed and no potential.....	62
Plate 43: South-southwest view along Wellington. All disturbed and no potential.	62
Plate 44: East-southeast view along King St on the south side of Wellington Park. Lawn has potential.	62
Plate 45: Northeast view of St. Patrick’s Catholic Church. Potential in lawn surrounding church.	62
Plate 46: East-southeast view along the south side of parkette. Lawn has potential.....	62
Plate 47: East-southeast view along Stinson. Disturbed on both sides of street. No potential.....	62
Plate 48: West-southwest view along Claremont access. Disturbed on both sides – no potential.	63
Plate 49: West-southwest view along Claremont access. Raised and disturbed on both sides. No potential. ..	63



1.0 PROJECT CONTEXT

Archaeological Services Inc. (ASI) was contracted by SNC-Lavalin Inc. (SLI), Toronto, on behalf of the City of Hamilton, to conduct a Stage 1 Archaeological Assessment (background research and property inspection) for the proposed Hamilton Rapid Transit A-Line (Figure 1). The proposed A-Line, using Bus Rapid Transit (BRT) technology would extend from the waterfront along James Street, up James Mountain Road to West 5th Street, east on Fennell Avenue, south on Upper James Street and Homestead Drive, and west on Airport Road to the Hamilton International Airport. A second route using Light Rail Transit (RT) technology is included in the study corridor. This route extends east along King Street and then south and southwest along Wellington Street and Victoria Street and the Claremount Access to West 5th Street.

This assessment was conducted under the project management of both Caitlin Lacy and Sarah Jagelewski and the project direction of Rob Pihl and Lisa Merritt, all of ASI.

The objectives of this report are:

- To provide information about the geography, history, previous archaeological fieldwork and current land condition of the study corridor;
- To evaluate in detail the archaeological potential of the study corridor, which can be used, if necessary, to support recommendations for a Stage 2 Archaeological Assessment for all or parts of the study corridor; and
- To recommend appropriate strategies for a Stage 2 Archaeological Assessment, if necessary.

This report describes the Stage 1 assessment that was conducted for this project and is organized as follows: Section 1.0 describes the project context and summarizes the background study that was conducted to provide the archaeological and historical context for the project study corridor; Section 2.0 describes the field methods used during the assessment and summarizes the results of the property inspection; Section 3.0 provides an analysis of the assessment results and evaluates the archaeological potential of the study corridor; Section 4.0 provides recommendations for the next assessment steps; and the remaining sections contain other report information that is required by the Ministry of Tourism, Culture and Sport and Sport's (MTCS) 2011 Standards and Guidelines (*S&G*) (e.g., advice on compliance with legislation, works cited, mapping and photo-documentation).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (1980) and regulations made under the Act, and are therefore subject to all associated legislation.

All activities carried out during this assessment were completed in accordance with the terms of the *Ontario Heritage Act* (2005) and the *S&G* (MTCS 2011).

Permission to access the study corridor and to carry out all activities necessary for the completion of the assessment was granted by SLI on September 8, 2010.



1.2 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Hamilton RT study corridor, 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 in the study corridor: the site record forms for registered sites housed at the MTCS; published and unpublished documentary sources; and the files of ASI.

The Stage 1 property inspection of the study corridor was conducted by Peter Carruthers (P163) of ASI on December 2, 2010 and November 30, 2011. The study area is a linear corridor that follows public rights-of-way (ROW) through an intensely developed section of the City of Hamilton. It passes through residential and commercial developments until the final leg of the corridor which passes through a rural area.

1.2.1 Previous Archaeological Research

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MTCS. 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 km east to west, and approximately 18.5 km 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 corridor under review is located in Borden blocks AgGx and AhGx.

According to the OASD (email communication, Robert von Bitter, MTCS Data Coordinator, August 9, 2010), 84 archaeological sites have been registered within 1 km radius of the study corridor, 15 of which are located within 300 m¹ of it. Details of the registered sites are summarized in Table 1.

Table 1: List of previously registered within 1 km of the study corridor

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AgGx-113	Whaley 2	Aboriginal	Isolated Find	M. Ambrose 1986
AgGx-114	Jerome 4	Aboriginal	Undetermined	M. Ambrose 1986
				MHCI 1997
AgGx-346		Aboriginal	Isolated Find	Woodley 2003
AhGx-101		Aboriginal	Isolated Find	ASI 1987
AhGx-102		Aboriginal	Lithic Scatter	ASI 1987
AhGx-103		Aboriginal	Lithic Scatter	ASI 1987
AhGx-104		Aboriginal	Isolated Find	ASI 1987
AhGx-105		Aboriginal	Campsite	ASI 1987
				Woodley 2000
AhGX-106		Aboriginal	Lithic Scatter	ASI 1987
AhGX-107		Aboriginal	Isolated Find	ASI 1987
AhGX-108		Aboriginal	Campsite	ASI 1987
		Euro-Canadian	Homestead	

¹ Areas within 300 m of previously registered archaeological sites are considered to have archaeological potential (MTCS 2011)



Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AhGx-224	Whitehern	Euro-Canadian Aboriginal	Homestead Undetermined	ASI 1994
AhGx-225	Daniel Young	Euro-Canadian	Homestead	ASI 1987
AhGx-226	Thistle Hill	Aboriginal	Campsite	Ramsden 1987
AhGx-227		Aboriginal	Isolated Find	MPP 1987
AhGx-228		Aboriginal	Isolated Find	MPP 1987
AhGx-229		Aboriginal	Isolated Find	MPP 1987
AhGx-232	Oakdale 1	Aboriginal	Isolated Find	ASI 1988
AhGx-233	Oakdale 2	Aboriginal	Isolated Find	ASI 1988
AhGx-234	Oakdale 3	Aboriginal	Campsite	ASI 1988
AhGx-235	Oakdale 4	Aboriginal	Lithic Scatter	ASI 1988
AhGx-254	Abby Hill 1	Aboriginal	Campsite	MPP 1988
AhGx-255	Abby Hill 2	Aboriginal	Campsite	MPP 1988
AhGx-266	Twenty Rd East	Euro-Canadian	Homestead	R. Michael 1988
AhGx-270	Jacob Smith	Euro-Canadian	Undetermined	ASI 1990
AhGx-274	Serena	Aboriginal	Campsite	ASI 1993
AhGx-275	Spruce	Aboriginal	Isolated Find	ASI 1991
AhGx-276	Pine	Aboriginal	Isolated Find	ASI 1991
AhGx-277	Poplar	Aboriginal	Isolated Find	ASI 1991
AhGx-32	Olmstead	Aboriginal	Burial	ASI 1994
AhGx-401	Jacqueline	Aboriginal	Campsite	M. Henry 1997
AhGx-402	Hydro	Aboriginal	Campsite	M. Henry 1997
AhGx-46	Comley 6	Aboriginal	Campsite	C. Dodd 1985
AhGx-47	Comley 7	Aboriginal	Campsite	C. Dodd 1985
AhGx-570		Aboriginal	Undetermined	Woodley 2005
AhGx-571	Wright-Maricle	Euro-Canadian	Homestead	ASI 2005
AhGx-572	Aeropark 1	Aboriginal	Isolated Find	ASI 2005
AhGx-573		Aboriginal	Isolated Find	ASI 2005
AhGx-574	Aeropark 2	Aboriginal	Isolated Find	ASI 2005
				Snarey 2006
AhGx-575	Aeropark 3	Aboriginal	Isolated Find	ASI 2005
AhGx-576	Aeropark 4	Aboriginal	Isolated Find	ASI 2005
AhGx-577		Aboriginal	Isolated Find	ASI 2005
AhGx-610		Aboriginal	Isolated Find	ASI 2005
AhGx-83	UG Kirkwall 31	Aboriginal	Campsite	MPP 1986, 1988
AhGx-87	UG Kirkwall 32	Aboriginal	Lithic Scatter	MPP 1986
AhGx-88	UG Kirkwall 37	Aboriginal	Campsite	MPP 1986, 1989
AgGx-128	Jerome 5	Aboriginal	Undetermined	M. Ambrose 1986 MHCI 1997
AgGx-162	Babyzac	Aboriginal	Undetermined	MTO 1990
AgGx-164	White Church	Aboriginal	Campsite	Hagerty 1996 Woodley 2001
AgGx-165	Jerome	Aboriginal	Village	G. Warrick 1985
AgGx-166	Jerome B	Aboriginal	Campsite	MTO 1989 Woodley 2001
AgGx-167	Jerome C	Aboriginal	Campsite	MTO 1989 Woodley 2001
AgGx-172		Aboriginal	Undetermined	MPA 1990
AgGx-173		Aboriginal	Undetermined	MPA 1990
AgGx-174		Aboriginal	Undetermined	MPA 1990
AgGx-175		Aboriginal	Undetermined	MPA 1990



Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AgGx-184	Jerome Historic	Euro-Canadian	Homestead	MTO 1987
AgGx-257	Lancaster	Aboriginal	Campsite	G. Warrick 1994
AgGx-285	Strathearne	Aboriginal	Isolated Find	ASI 2001
AgGx-286	Southern Pine	Aboriginal	Lithic Scatter	ASI 2001
AgGx-287	Marion	Aboriginal	Lithic Scatter	ASI 2001
AgGx-288	Ferris	Aboriginal	Isolated Find	ASI 2001
AgGx-289	Miles	Aboriginal	Lithic Scatter	ASI 2001
AgGx-290	Nebo	Aboriginal	Isolated Find	ASI 2001
AgGx-291	Tyneside	Aboriginal	Isolated Find	ASI 2001
AgGx-293	Longview	Aboriginal	Lithic Scatter	ASI 2001
AgGx-294	Mount Hope	Aboriginal	Campsite	ASI 2001
AgGx-295	Kirk	Aboriginal	Lithic Scatter	ASI 2001
AgGx-296	Woodbrook	Aboriginal	Lithic Scatter	ASI 2001
AgGx-297	Glanford	Aboriginal	Isolated Find	ASI 2001
AgGx-298	Southampton	Aboriginal	Campsite	ASI 2001
AgGx-299	Trimble	Aboriginal	Lithic Scatter	ASI 2001
AgGx-300	Niapenco	Aboriginal	Isolated Find	ASI 2001
AgGX-334		Aboriginal	Isolated Find	Woodley 2003
AgGX-335		Aboriginal	Isolated Find	Woodley 2003
AgGX-337		Aboriginal	Lithic Scatter	Woodley 2003
AgGX-338		Aboriginal	Isolated Find	Woodley 2003
AgGX-339		Aboriginal	Isolated Find	Woodley 2003
AgGX-340		Aboriginal	Isolated Find	Woodley 2003
AgGX-341		Aboriginal	Isolated Find	Woodley 2003
AgGX-342		Aboriginal	Isolated Find	Woodley 2003
AgGX-343		Aboriginal	Isolated Find	Woodley 2003
AgGX-344		Aboriginal	Isolated Find	Woodley 2003
AgGX-345		Aboriginal	Isolated Find	Woodley 2003

Note: Sites in bold are located within 50 m of the study corridor.

ASI has previously conducted a number of archaeological assessments adjacent to the study corridor. A Stage 1-2 Archaeological Assessment was conducted for a proposed subdivision development on part of Lot 5, Concession 3, in the former Township of Glanbrook (ASI 1991). The project area was comprised of approximately 23 ha. Three archaeological sites and an isolated findspot were encountered during the course of the assessment. The Spruce site, AhGx-275, consisted of an isolated projectile point midsection located in the northcentral portion of the property. The Pine site, AhGx-276, was located approximately 100 m west of the Spruce site and consisted of a biface fragment and two chert flakes distributed over an area of 10 m². The Poplar site, AhGx-277, was located in the northwest corner of the property and consisted of an isolated projectile point. Finally, the isolated findspot consisted of a single Onondaga chert flake. Despite careful scrutiny in the vicinity of these four finds, no further material was encountered. No further concerns exist for this property.

A Stage 1-2 Archaeological Assessment was also conducted for the proposed Aeropark subdivision located at 2460-2470 Upper James Street, Part Lot 5, Concession 3, in the former Township of Glanford (ASI 2005). The survey resulted in the documentation of the historic Euro-Canadian Wright-Maricle site (AhGx-571), eight pre-contact Aboriginal findspots (P1, AhGx-573, AhGx-577, AhGx-610, P8, P9, P10 and P11) and four pre-contact Aboriginal sites (Aeropark 1:AhGx-572; Aeropark 2:AhGx-574; Aeropark 3:AhGx-575; Aeropark 4:AhGx-576).



The Wright-Maricle site, AhGx-571, was uncovered while test pitting near the southeastern corner of the property. The site covers an area of approximately 40 m by 40 m. There are several settlement features visible on the surface of the site, including a gravel laneway to the south and patio stones to the southeast. Forty artifacts were recovered from the test pits, including ceramic tablewares, pipe fragments, and machine cut nails. Archival research suggested that three families are associated with this site, including the first one to settle the lot *circa* 1843. The site represents a potentially significant archaeological resource that has potential to provide insight into the historic Euro-Canadian occupation of the subject property ca. 1830-1900. A Stage 3-4 investigation was recommended to identify precisely its character and extent, if it is not possible to protect this site from disturbance (ASI 2005).

The Aeropark 1 through 4 sites, (AhGx-572, AhGx-574, AhGx-575 and AhGx-576) each represents a potentially significant archaeological resource that has potential to provide insight into the pre-contact Aboriginal occupation of the subject property. If it is impossible to protect these sites from disturbance, they should be subjected to Stage 3 archaeological assessment in order to further clarify their extent, archaeological integrity, artifact density and significance (ASI 2005).

Findspots P1, AhGx-573, AhGx-577, AhGx-610, P8, P9, P10, and P11, represent isolated and ephemeral artifacts which do not warrant further investigation and should be considered free of any further archaeological concern (ASI 2005).

The **Whitehern** site is a historic site/museum operated the City of Hamilton and is approximately 0.78 acres in size located at the corner of MacNab Street South and Jackson Street West. Whitehern was the residence of three generations of the McQuesten family between 1852 and 1968 and opened as a historic site in 1971 under the direction of the Board of Parks Management. Calvin McQueston was an early Hamilton industrialist and quickly became a member of the business and professional elite; the McQuestons were very involved in the community and very well known. The archaeological excavation by ASI in 1993 was undertaken as a component of a major restoration project to stabilize the foundation of the main building and the stable (ASI 1994).

The **Thistle Hill** site (AhGx-226) was first discovered in 1987 and is a late archaic site approximately 20 by 18 m in size. The site consisted of two 4m in diameter oval structures with internal pits and hearths a total of 20, 433 artifacts were recovered. The site was fully excavated and no further work was recommended (Woodley 1990).

AgGx-172 and **AgGx-173** are both small, 10m by 10m, pre contact sites of undetermined cultural affiliation. The artifacts recovered from AgGx-172 consist of a biface, 3 scrapers, 3 utilized flakes and 61 pieces of debitage. While 63 pieces of debitage, a biface, 2 utilized flakes, and 1 pipe fragments were recovered from AgGx-173. No further work was recommended at either site.

AgGX-338 represents an isolated scraper located in a cultivated field during pedestrian survey. This site was researched in 2003 by Phil Woodley during the Stage 2-3 Archaeological Assessment for the proposed South Hampton Estates property. The scraper was recovered near the Marol site and is made on a primary Onondaga flake and features continuous edge retouch. No additional artifacts were recovered and no further work was recommended (Woodley 2003).

1.2.2 Geography

The study corridor is situated within three separate physiographic regions of southern Ontario. From north to south they include the Iroquois Plain, Niagara Escarpment, and Haldimand Clay Plain. The Iroquois



Plain is a lowland region bordering Lake Ontario (Chapman and Putnam, 1984:190-196). This region is characteristically flat and is formed by lacustrine deposits laid down by the inundation of Lake Iroquois, a body of water that existed during the late Pleistocene. This region extends from the Trent River, around the western part of Lake Ontario, to the Niagara River, spanning a distance of 190 miles (Chapman and Putnam, 1984:190). The old shorelines of Lake Iroquois include cliffs, bars, beaches and boulder pavements. The old sandbars in this region are good aquifers that supply water to farms and villages. The gravel bars are quarried for road and building material, while the clays of the old lake bed have been used for the manufacture of bricks (Chapman and Putnam, 1984:196). This narrow strip is the most densely inhabited area because of its proximity to Lake Ontario and its climatic influences, as well as its favourable soil conditions.

The Niagara Escarpment physiographic region extends from the Niagara River to the northern tip of the Bruce Peninsula, continuing through the Manitoulin Islands (Chapman and Putnam 1984: 114-122). Vertical cliffs along the brow mostly outline the edge of the dolostone of the Lockport and Amabel Formations, which the slopes below are carved in red shale. Flanked by landscapes of glacial origin, the rock-hewn topography stands in striking contrast, and its steep-sided valleys are strongly suggestive of non-glacial regions. From Queenston, on the Niagara River, westward to Ancaster, the Escarpment is a simple topographic break separating the two levels of the Niagara Peninsula. In general, the base is followed by the 100 m contour while the top of the cliff reaches almost 200 m.

The Haldimand Clay Plain, which is among the largest of the 53 defined physiographic regions in southern Ontario, comprises approximately 3,500 km² (MacDonald 1980:3). Generally, this region is flat and poorly drained (Chapman and Putnam 1984:156), although it includes several distinctive landforms including dunes, cobble, clay, and sand beaches, limestone pavements, and back-shore wetland basins. The clay plain can be described as falling into a series of parallel belts. The current study corridor corresponds with the highest ground adjoining the Niagara Escarpment. Recessional moraines were built by the ice lobe that occupied the basin of Lake Ontario. It contains a shallow till derived in large measure from the red and grey beds below the Niagara Escarpment, and the moraines have a much subdued relief due to having been built under water (Chapman and Putnam 1984:157).

Soils south of the Escarpment fall into two separate classifications: Gray-Brown Podzolic Soils and Humic Gleysol Soils. Gray-Brown Podzolic soils have a dark grayish-brown surface Ah horizon with an organic matter content that ranges from 6 to 12 %. The underlying Ae horizon is light brown in color, slightly acid in reaction, and often becomes lighter in color and more acidic with depth. The B horizon is dark brown in color and contains accumulations of clay and sesquioxides. The calcareous C horizon most commonly occurs at a depth of 24 inches (Presant and Wicklund 1965:23). Humic Gleysol soils occur in poorly drained locations. Their Ah horizons have a high organic matter content, and are usually 15 to 25 cm thick. This horizon is underlain by gray or grayish-brown "gley" horizons which are commonly spotted by orange or yellow mottles (Presant and Wicklund 1965:24).

The soil series south of the Escarpment include well-drained Brantford silt loam, imperfectly drained Binbrook silt loam and Beverly silt loam, poorly drained Toledo silt loam and Toledo silty clay loam, and variable Alberton silt loam (Presant and Wicklund 1965:25-27).

Soils information north of the Escarpment was not available. The available information for surficial geology and soil drainage in the study corridor is mapped and presented in Figures 2 and 3.

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south central Ontario after the



Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

The *S&G* (MTCS 2011) stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential. Hamilton Harbour, Twenty Mile Creek, and the Three Mile Creek, and Welland River watersheds all bisect the study corridor. The Lake Iroquois shoreline also bisects the study corridor around Charlton Avenue.

Section 1.3.1 of the *S&G* also lists other geographic characteristics that can indicate archaeological potential include: elevated topography (eskers, drumlins, large knolls, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, and distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (i.e., migratory routes, spawning areas, and prairie) and scarce raw materials (quartz, copper, ochre, or outcrops of chert) are also considered characteristics that indicate archaeological potential. As indicated above, pockets of well-drained soil are present along the corridor, south of the Escarpment. Also, the Niagara Escarpment, a distinctive land formation, is an area rich in resources and has long been exploited by Aboriginal peoples.

1.3 Historical Context

This section provides a brief summary of historic research for the study corridor. A review of available primary and secondary source material was undertaken to produce a contextual overview of the study corridor, including a general description of Euro-Canadian settlement and land use.² The study corridor is located in parts of the former Townships of Barton and Glanford.

1.3.1 Contact Period

The first record of a European visit to southern Ontario was made in 1615 by Samuel de Champlain, who reported that a group of Iroquoian-speaking people situated between the New York Iroquois and the Huron were at peace and remained “la nation neutre”. In 1626, the Recollet missionary Joseph de la Roche Daillon recorded his visit to the villages of the Attiwandaron, whose name in the Huron language meant “those who speak a slightly different tongue” (the Neutral apparently referred to the Huron by the same term). Like the Huron, Petun and New York Iroquois, the Neutral people were settled village horticulturalists. The Neutral territory included discrete settlement clusters in the lower Grand River, Fairchild-Big Creek, Upper Twenty Mile Creek, Spencer-Bronte Creek drainages, Milton, Grimsby, Eastern Niagara Escarpment and Onondaga Escarpment areas. Since the 1970s, much archaeological

² Section 1.3 was informed by the ‘The Archaeological Study for the Growth Related Integrated Strategy City of Hamilton’ which was prepared by ASI in 2004 for the City of Hamilton.



research has focussed on refining regional chronologies, and describing settlement-subsistence patterns, in addition to excavating individual sites.

Between 1647 and 1651, the villages of the Neutral were destroyed by the New York Iroquois, who subsequently settled along strategic trade routes on the north shore of Lake Ontario for a brief period during the late 17th-century.

One French explorer who is known to have entered the Burlington Bay area during this period was Rene-Robert Cavalier de La Salle, who left Montreal with a flotilla of nine canoes and eventually reached the head of Lake Ontario in September of 1669. After landing, de La Salle's group travelled to the Seneca village of Tinaouataoua, the exact location of which is open to speculation. The historical sketch prepared for the *Illustrated Historical Atlas of the County of Wentworth* (1875) implied that the map produced by Rene de Brehant de Galinee, who accompanied De La Salle, illustrated the Seneca village in the location of Lake Medad in Halton. In fact, archaeologists have yet to determine the precise location of Tinaouataoua. For many years the best candidate for the location of the Seneca village was believed to be the Christianson site (AiHa-2) on Spencer Creek, northwest of Burlington Bay. When a test excavation was conducted at the site in 1968, however, it was revealed to be a Neutral site dated to circa A.D. 1600-1630, thus the location of this Seneca site remains unknown.

During the late 17th and early 18th centuries, the former Neutral territory came to be occupied by the Mississauga, an Algonquian-speaking southeastern Ojibwa people whose subsistence economy was based on garden farming, as well as hunting, fishing and gathering wild plants. The Mississauga and other Ojibwa groups began expanding southward from their homelands in the upper Great Lakes in the late seventeenth century, coming into occasional conflict with the New York Iroquois who had established themselves in southern Ontario (although alliances between the two groups were occasionally established as well). Around 1707, an Ojibwa group had arrived in the Niagara region which had apparently been vacated by the New York Iroquois. The colonial government recognized the Mississauga as the "owners" of the north shore of Lake Ontario and entered into negotiations for additional tracts of land as the need arose to facilitate European settlement. In 1784, under the terms of the "Between the Lakes Purchase," which was signed by Sir Frederick Haldimand, the Crown acquired over one million acres of land stretching westward from near the head of Lake Ontario along the north shore of Lake Erie to Catfish Creek.

Title to a portion of the lands acquired through the 1784 purchase was granted to the Six Nations in restitution for aboriginal lands that British had surrendered to the American government under the terms of the Treaty of Paris in 1783. These lands consisted of a tract six miles deep on either side of the Grand River, from its mouth to its source. Joseph Brant, the Mohawk hereditary chief who led the migration to the Grand River valley in the winter of 1784-spring 1785, claimed the title was an estate in fee simple, giving the Iroquois political sovereignty, including the right to sell the land at their discretion (Johnston 1964:xliv). Thus, after the Mohawk, Cayuga and other groups had organized themselves into villages along the Grand River, from Lake Erie to the present site of Brantford, Brant proceeded to lease or sell to non-aboriginal people close to half the total area set forth in the Haldimand Grant.

The sale of these lands was initially contested by the Crown, leading to the Simcoe Patent of 1793, which stipulated that all land transactions had to be approved by the Crown. Brant and the chiefs rejected this statement and continued to lease or sell land to Whites, and the Indian administration was ill-equipped to prevent these actions. An 1834 assessment of this state of affairs led the Crown to conclude that it was too late to contest Brant's actions and too costly to remove the White settlers and so their leases were legally confirmed.



Euro-Canadian settlement continued to expand in the area through the 1830s and 1840, and by 1847, the Six Nation lands were consolidated as a reserve of approximately 45,000 acres together with some other small scattered holdings retained from the original tract.

1.3.2 Township Survey and Settlement

Wentworth County was once part of the Gore District that covered an area of over a half a million acres in western Ontario. When the district was broken up into counties in 1850, Wentworth and Halton were united as a single municipality. This continued until 1854 when they were separated. Prior to the formation of the Regional Municipality of Hamilton-Wentworth in 1974, Wentworth County was composed of the seven townships: Ancaster, Barton, Beverly, Binbrook, Flamborough East and Flamborough West, Glanford and Saltfleet. The City of Hamilton was the county seat. Although the study corridor falls within the present-day limits of the City of Hamilton, historically it was associated with the Townships of Barton and Glanford.

The earliest settlers in Wentworth County were United Empire Loyalists who, in the early 1790s, built saw and grist mills on area creeks. These water powered industries attracted more settlers and more industries – and settlements grew around them. By the 1870s the study corridor landscape was dominated by a regimen of 100 to 200 acre farm lots separated by road allowances, as was evident in the 1875 *Illustrated Historical Atlas of the County of Wentworth*.

The land within Barton Township was acquired by the British from the Mississaugas in 1784. The first township survey was undertaken in 1791, and the first legal settlers occupied their land holdings the same year. The township is said to have been named after Barton upon Humber in Lincolnshire, England. Barton was initially settled by disbanded soldiers, mainly Butler's Rangers, and other Loyalists following the end of the American Revolutionary War. By the 1840s, the township was noted for its good farms and soil (Smith 1846:8; Burkholder 1956; Armstrong 1985:141; Rayburn 1997:24).

The land within Glanford Township was acquired by the British from the Mississaugas in 1784. The first township survey was undertaken in 1794, and the first legal settlers occupied their land holdings in the same year. The township lots are recorded as being comprised of 188 acres due to the flawed survey of Davenport Phelps, a non-government surveyor. The Glanford survey was to have concession parallel to Barton with a depth of sixty-six chains and each concession divided into lots with a frontage of 1,881 feet with a road allowance of one chain (66 feet) allotted between each group of five lots. In addition to the fact that the lot and concession dimensions matched no other township, the survey was carried out carelessly and as a result the roads in Glanford do not line up with the surrounding municipalities. Glanford ended up with each lot containing 188 acres instead of 100 or 200 acres as in other areas. The township is said to have been named after a town called Glanford Brigg in Lincolnshire, England. Glanford was initially settled by disbanded soldiers, mainly Butler's Rangers, and other Loyalists following the end of the American Revolutionary War. In 1805, Boulton noted that Glanford contained good soil, and only required time to render it a valuable township. By the 1840s, the township was noted for its good farms and "a mixed population" (Boulton 1805:79; Smith 1846:63; Armstrong 1985:143; Rayburn 1997:134).

A number of crossroad communities are located along the study corridor, including Ryckman Corners, North Glanford, and Mount Hope. Ryckman's Corners, a post office village, was situated on part Lots 14 and 15 in Concessions 7 and 8, Barton Township, and part Lots 5 and 6 Concession 1, Glanford. It was



named after Samuel Ryckman who settled there in the 1790s. It once contained a wagon shop, small hotel, store and post office, and tollgate. The population numbered 150 in 1873 (Crossby 1873:282; Glanford 1985:56-58).

North Glanford, another post office village, was situated on Highway 6 on part Lots 5 and 6 in Concession 2, Glanford Township. These lots were first granted to Samuel Ryckman in 1798 and Francis Hartwell in 1818. It contained a post office, blacksmith shop, a hotel known as the “Old Homestead” or “Rose Hill Tavern,” brickyard and school. A sawmill and inn owned by Jacob Terryberry stood on the next lot, Lot 6 Concession 3 (Glanford 1985:50-54).

Mount Hope was situated on part Lots 5 and 6 in Concessions 4 and 5, Glanford Township. Lands in the area were originally granted to settlers around 1802. It was first named “Swazie’s Corners” after Swazie’s Hotel, and later “Hines Corners” after Henry Hines who purchased the hotel. Another early name is said to have been “Briggs Corners” after a settler named Alma Briggs. The post office was opened as “Glanford” in 1847, but the name “Mount Hope” was suggested by an early settler, John Renton, during the 1850s after the church on the hill. The village contained blacksmiths, hotels, butchers, wagon makers, a shoe maker, carriage makers, grocer, hardware store, druggist, furniture factory and an undertaker. The village also contained an Orange Hall (Glanford 1985:27-50; Rayburn 1997:232).

1.3.3 Transportation Network

Early trails (pre-1790)

The earliest maps showing the western end of Lake Ontario date to the mid 17th century. Referred to as ‘Le Fond du Lac’ on several maps, the area includes the western extremity of the lake including the Burlington isthmus, Burlington/Hamilton Bay, Cootes Paradise, the sites of Hamilton, Ancaster and Dundas, the paths out of the low lands and into the upland above the escarpment.

The Nicholas Sanson D’Abbeville map of 1656 entitled “Le Canada, ou Nouvelle France, etc.” indicates a settlement labelled ‘nontateheronons’ at the fond du Lac in what was ‘Neutral’ territory. Francesco Guiseppi Bressani’s 1657 map has a label ‘gens neutra’ located between a stream entering the Fond du Lac and what is surely the Grand River but no villages or trails are shown there.

Gallinee prepared a map in 1670 to illustrate the trip that he took with Dollier on September 24th 1669. During this trip Gallinee and Dollier met with LaSalle and his party in order to meet Joliet in the small Iroquoian village of Tinawatawa or Tinawawa, which was located off the trail between the head of the lake and the Grand River. Two maps were published by Raffeix in 1688 which indicated the location of Quinaouataoua at the head of the lake, south of a trail which went to the Grand. Jean-Baptiste-Louis Franquelin released a manuscript map in 1688 which showed an unnamed settlement around the Dundas area. Henri Chatelain published a map in 1719 entitled “Carte Particuliere Du Fleuve Saint Louis...etc.” which calls the river flowing into Lac Ontario ‘Rive de Ganaraske’ and he also indicates a portage between the end of the lake and the Grand River. Some version of the trail and Quinaouatoua continue to show up on maps through the 18th century. An example is Mitchell’s ‘Map of the British Colonies...’ last published in 1782.

However, with the end of the American Revolution, the Grand River grant to the Six Nations and the Loyalist influx, land use began to intensify. Lieutenant Governor Simcoe and the Queen’s Rangers cut a road from Niagara along the top of the Escarpment to the Head of the lake. They then cut a road from the



western end of Cootes Paradise to the forks of the Thames at what became London. This latter route came to be called the Governor's Road, the Dundas Highway or Highway No. 5.

The present town of Dundas grew from the landing place at the village of Cootes Paradise located at the mouth of what later was called Ancaster Creek. Simcoe's 1793 map showing the route from Lake St. Clair to Burlington Bay portrays trails running out of the Dundas valley to the northern hunting grounds on the Grand and to the Mohawk village to the south and west also on the Grand River. Other trails extended to Niagara below the Escarpment, eastward to what became the site of Toronto as well as westward along the Dundas valley along several routes which still exist also to the Grand River.

Although these trails have for the most part been incorporated into the modern transportation system, the routes do persist and can be mapped. The best examples of original trail segments lie below Ancaster near the Ancaster Mill and near the old site of the Cold Spring Mill. Several original homesteads and ruins remain as do disconnected lengths of trail in the form of driveways.

Early Trails and Roads (1790s-1850s)

As a condition of the patent, all settlers were required to clear a 33 foot wide roadway across the 1/4 mile frontage of their lot. Settlers across the road did likewise, thus creating a 66 foot wide concession road along the main survey lines. Sideroads were opened later by statute labour. The varied timing of lot settlement (a number of lots that were granted to former army officers and government officials were not settled by the patentees but were held for sale at a later date) resulted in road gaps for many years. An 1815 "Map of the Niagara District in Upper Canada, by Lieutenant W.A. Nesfield, drawn partly from Survey and from documents obtained from the Qr Mr GenIs Department" (Figure 2) indicates the general extent of development in and around the study corridor and shows a clearly demarcated system of trails and roads, although lot and concession roads are not evident. On top of the escarpment the 1815 map shows a number of trails converging on top of the escarpment at the Davis mill site on the Big Creek. Two lead west, one to Ancaster and another to the Grand River and native settlements and two strike southeast and east: the former to Pelham and Thorold townships, and the latter "A road cut by Governor Simcoe", parallels the Escarpment in an effort to avoid swampy lands below. The trail to the Grand River follows the present day route alignment of Highway 6 through Glanford. The track, formerly called the Caledonia Stage Road and the Hamilton to Port Dover Road, was lined with at least 15 taverns from Hamilton to Caledonia on the Grand and it was planked to Mount Hope as early as 1837. Simcoe's Road along the escarpment was the earliest incarnation of present day Ridge Road in Saltfleet.

By 1850, the "Map of the Principal Communications in Canada West Compiled from the most authentic sources, actual Surveys, District maps etc., etc. by Major Baron de Rottenberg Ast Quarter Mr Genl" (Figure 3), shows a well developed system of roads. In Glanford and Binbrook Townships, there lay an appreciable area of "wilderness" although Highway 6, Twenty Road, Dickinson Road, English Church Road, Airport Road, White Church Road, Glanaster Road and Trinity Church Road have all been cut by this time.

Roads (1850s to 1920s)

The 1875 *Illustrated Historical Atlas of the County of Wentworth* shows virtually all of the roads in the study corridor (most of which are line roads and concession roads) although throughout the latter half of the nineteenth century, many of roads outside the urban area of Hamilton consisted of dirt, gravel or broken stone surfaces. Few were macadamized. The turnpikes and toll roads were becoming increasingly



unpopular and during the 1890s there was a consolidated provincial effort to improve all roads throughout the province. The “Good Roads” movement, together with a new county road system introduced, in 1901, to Wentworth County saw many of the old turnpikes brought under public control. With this move, accompanying improvements were made in road construction. Yet, the use of rural roads by the motoring urban public caused friction. Unable to pay for concrete or asphalt surfaces, the rural areas felt aggrieved by unrealistic demands by urban areas for costly rural road improvements. In 1918, the Hamilton and Wentworth Suburban Roads Commission were set up to ameliorate the situation. The Commission, established by the Provincial Legislature, provided a system whereby the City of Hamilton, the County of Wentworth and the Province of Ontario jointly contributed to the costs of road improvements.

The Department of Militia and Defence’s 1909 topographic survey map shows a well developed grid of line and concession roads within the study corridor. Major routes like Highway 6 (the dividing line between Flamborough East and West, also known as the Guelph and Hamilton Stone Road), Sydenham Road, Highway 6 in Glanford (the Hamilton and Port Dover Road), are paved rights of way. Rural roads remained unpaved.

Roads (1920s-1970s)

During this period, road construction and improvement were consolidated in a number of ways. Many major roads were routinely asphalted and improved.

Railways (The Canadian National Mainline)

The Great Western Railway track was completed in 1853 between Hamilton and Niagara Falls and crossed numerous creeks. The company was acquired by the Grand Trunk Railway in 1882. The Grand Trunk became part of the Canadian National in 1923. The Great Western Railway bisects the north end of the study corridor near Burlington Bay.

Railways (Hamilton and Lake Erie Railroad)

Work began on the Hamilton and Lake Erie Railroad in 1872. From Hamilton, the line crossed Highway 53 and Glanford to Caledonia with an official stop at Rymal Station and a mail drop at Nebo Road P.O. located at the White Church Road crossing. The Glanford Station was located on Station Road (now Miles Road). The opening of the rail line meant that farmers could transport cattle to market along with farm produce. The Hamilton and Lake Erie Railroad is located east of the study corridor.

1.3.4 Historic Map Review

The 1875 *Illustrated Historical Atlas of the County of Wentworth* was reviewed to determine the potential for the presence of historical archaeological remains within the study corridor during the nineteenth century (Figure 4).

The current road rights-of-way within the study corridor follow original historic thoroughfares that connected the Hamilton settlement with surrounding communities. Historically, the study corridor was located between Lots 14 and 15, Concession 1 to 8, in the former Township of Barton, and between Lots 5 and 6, Concession 1 to 4 and Lot 4, Concession 4, in the former Township of Glanford. Table 2



provides a summary property owners and associated features depicted on historic mapping. It should be noted, however, that not all features of interest appear on the historic map. Features were not mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the maps.

Table 2: Summary of Property Owners and Historic Features Along the Study Corridor

Con.	Lot	Property Owner(s)/Resident(s)	Historic Feature(s)
Barton Township			
IV	14	S.B. Freeman	Homestead
		James Jardine	Homestead
		Brown & Duff	
		T. Lawry	Homestead
IV	15	Merritt	
		William Milas	
		T. Lawry	Homestead
		Chapman	
V	14	Browns	
		Thomas Lawry	Homestead
V	15	R. McElroy	Homestead
		W. Muirhead	
		R. McElroy	
		J. Hess	
VI	14	D. Gallagher	Homestead
		James Dingle	
		H.H. Hines	
		William Marshall	Lime Kiln
VI	15		Blacksmith Shop, homestead
		J. Hess	Homestead
		Mrs. Tillman	2 homesteads
		Thomas Lawry	Homestead
		D. Gallagher	Church, homestead, Lime Kiln
		Mrs. Marshall	Lime Kiln, stone quarry
VII	14	J. Doran	Homestead
		G. Dickerson	Homestead
		Mrs. Marshall	School House
		Macklem	Homestead
VII	15	A Peacock	Homestead
		Peter Filman	
VIII	14	J. Hess	
		H. Ryckman	Homestead
		S. Bond	Church
		J. Wells	Homestead
VIII	15	William Wells	Homestead
		J. Carr	Homestead
		S. Hess	Homestead
		S. Bond	Mill
		Henry Mckee	Homestead
Glanford Township			
I	5	W.B. Gage	Homestead
I	6	Silas Smith	
		W. Allison	3 homesteads, blacksmith shop
		S. Heard	2 homesteads



Con.	Lot	Property Owner(s)/Resident(s)	Historic Feature(s)
II	5	S. T. Pearson	Homestead
		Samuel King	Homestead, blacksmith shop
		J. Hartnell	Inn
		A. French	Homestead
		D. Bradt	Homestead
II	6		North Glanford Post Office
		J. Dickenson	Homestead
		G. Coon	School House, homestead
		Henry Chase	
III	5	Thomas Choate	
		James Maricle	Homestead
III	6	Jacob Terryberry	Inn, homestead
		Ira Rymal	Homestead
IV	4	J. Dallon	Homestead
		Jacob Terryberry	Inn, homestead, mill
IV	5	L. Fraser	
		J. Fraser	
IV	6	William M. Calder	Church, cemetery, homestead

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be captured by the basic proximity to the water model outlined in Section 2.2, since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 m of an early settlement road, such as James Street/Upper James Street and Airport Road, are also considered to have potential for the presence of Euro-Canadian archaeological sites.

Section 1.3.1 of the *S&G* stipulates that that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries, are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential. A number of properties located along the study corridor have been designated under the *Ontario Heritage Act* or are listed on a municipal register. Details concerning these properties can be found in the Cultural Heritage Assessment Report prepared for this project (ASI 2011).

2.0 FIELD METHODS

A property inspection was conducted by Peter Carruthers (P163) of ASI on December 2, 2010 and November 30, 2011 in order to gain first-hand knowledge of the geography, topography, and current conditions of the Hamilton RT A-Line study area as per Section 1.2 of the *S&G*. A property inspection is a visual inspection only and does not include excavation or collection of archaeological resources.

Where applicable, Section 1.2, Standards 1-5 of the *S&G* were met as follows during the course of the property inspection:



- The Hamilton RT A-Line study area was inspected systematically during optimal weather conditions which permitted good visibility of land features;
- Weather conditions were 7°C, partly cloudy, and no snow;
- Coverage was sufficient to identify previously identified features of archaeological potential and additional features not visible on mapping; and,
- Additional features were documented, as well as any features that will affect assessment strategies.

The property inspection found that parts of the study area retained archaeological potential. Field observations are compiled onto a map of the study area in Section 7.0 (Figures 8-28 and 30-34) and associated photography is presented in Section 8.0 (Plates 1-49).

3.0 ANALYSIS AND CONCLUSIONS

The archaeological and historical context was analyzed to help determine the archaeological potential of the study corridor; these data are summarized in Section 3.1 of this report. An evaluation of the property inspection results are then presented for the study corridor in Section 3.2.

3.1 Analysis of Archaeological Potential

The *S&G* lists characteristics that indicate where archaeological resources are most likely to be found, and archaeological potential is confirmed when one or more features of archaeological potential are present. Per Section 1.3.1 of the *S&G*, the study corridor meets the following criteria used for determining archaeological potential:

- Water source: primary secondary, or past water source (e.g., shoreline of Glacial Lake Iroquois);
- Distinctive land formation (e.g., Niagara Escarpment);
- Well drained soil;
- Early historical transportation routes (e.g., Fennell Avenue).
- Areas of early Euro-Canadian settlement (e.g., farmsteads)
- Elevated topography (e.g., plateaux)
- Property identified with possible archaeological sites, historical events, activities, occupations (e.g., Hamilton Psychiatric Hospital)
- Previously known archaeological sites (e.g., Chedoke Estate)

These criteria characterize the study corridor as having potential for the identification of Aboriginal and Euro-Canadian archaeological resources.

3.2 Analysis of Property Inspection Results

As mentioned in Section 1.0 of this report, the project involves the proposed Hamilton Rapid Transit A-Line. The proposed A-Line BRT would extend from the waterfront along James Street, up James Mountain Road to West 5th Street, east on Fennell Avenue, south on Upper James Street and Homestead Drive, and west on Airport Road to the Hamilton International Airport (Figures 8-28). A second LRT



option for the downtown route is included in the study corridor. This route extends east along King Street and then south and southwest along the Claremount Access to West 5th Street (Figures 30-33).

Typically, rights-of-way (ROW) can be divided into two areas: the disturbed ROW, and ROW lands beyond the disturbed ROW. The typically disturbed ROW extends outwards from either side of the centreline of the traveled lanes, and it includes the travelled lanes and shoulders and extends to the toe of the fill slope, the top of the cut slope, or the outside edge of the drainage ditch, whichever is furthest from the centreline. Subsurface disturbance within these lands may be considered extreme and pervasive, thereby negating any archaeological potential for such lands.

ROW construction disturbance may be found to extend beyond the typical disturbed ROW area, and this generally includes additional grading, cutting and filling, additional drainage ditching, watercourse alteration or channelization, servicing, removals, intensive landscaping, and heavy construction traffic. Areas beyond the typically disturbed ROW generally require archaeological assessment in order to determine archaeological potential relative to the type or scale of disturbances that may have occurred in these zones.

James Street North/Upper James Street is a north-south arterial road. The property inspection proceeded from north to south starting at Guise Street West and focused on the existing ROW and the immediately adjacent lands.

Downtown Hamilton Option 1

The streetscape of downtown Hamilton is a mix of historic and modern buildings and can be characterized as a typical city-centre thoroughfare with two lanes of traffic in each direction, including curb-side parking and sidewalks. The study corridor includes two options for the RT A-Line route through the downtown core. Option 1 (BRT) follows James Street up James Mountain Road (Figures 10-13: route marked in green). The James Street North ROW has been heavily disturbed by typical road construction, exhibiting grading, utility installation, and landscaping, and by residential and commercial developments (Plates 1-8). Due to the extent of previous disturbance, the majority of the James Street ROW does not exhibit archaeological potential, and no further archaeological assessment is required within the disturbed ROW (Figures 8-11: areas marked in yellow). The area from the waterfront to Main Street was originally reviewed in January 2009. The current property inspection confirmed that the six properties identified in the ASI 2009 report still retain archaeological potential (Figures 8 and 9: areas marked in red). Should the proposed work impact these lands then Stage 2 assessment is required.

Downtown Hamilton Option 2

The study corridor includes a second option (for the LRT route) in the downtown core, which begins at the intersection of James Street North and King Street East (Figures 10-13, 29-33: route marked in pink). The character of this portion of the study corridor is similar to that described above, with a mix of historic and modern buildings. The majority of the Option 2 route has been heavily disturbed by previous construction activity including road construction, utility installation and commercial and residential building (Plates 42, 43; Figures 30, 31: areas marked in yellow). Two areas of potential are located outside the ROW limits but adjacent to the study corridor and one area of potential exists within the ROW



limits (Plates 44-46; Figures 30, 31: areas marked in red). Should the proposed work impact these lands, then Stage 2 assessment is required.

Escarpment

Both downtown options include routes that ascend the Hamilton escarpment. Both mountain access routes do not retain archaeological potential due to extensive disturbance caused by previous construction activity (Plates 9-11, 48, 49; Figures 12, 13, 32, 33: areas marked in yellow). These areas do not require further archaeological assessment.

Hamilton Mountain

The streetscape along Upper James Street, from Fennell Avenue to Christopher Drive, is quite different, with two lanes of traffic in each direction, including designated turning lanes and sidewalks (Figures 14-25). The Upper James Street ROW has also been heavily altered by previous road construction, exhibiting utility installation, and landscaping, and by residential and commercial developments; modern commercial and residential buildings far outnumber historic structures along this portion of the corridor. Due to the extent of previous disturbance, the majority of the Upper James Street ROW does not exhibit archaeological site potential (Plates 12, 14-18, 21, 23, 24, 26, 28-30; Figures 14-25: areas marked in yellow). Archaeological potential exists in portions of this section of the study corridor (Plates 13, 19, 20, 22, 25, 27; Figures 14, 18, 20-25: areas marked in red).). Should the proposed work impact these lands, then Stage 2 assessment is required.

The final leg of the study corridor along Upper James Street, from Christopher Drive to Airport Road, and along Airport Road to Hamilton International Airport, exhibits a rural character (Figures 26-28). While the ROW lands have been heavily disturbed by past road construction (Plates 33-38, 40; Figures 26-28: areas marked in yellow), much of the adjacent lands have remained undisturbed and contain archaeological potential (Plates 33-36, 39, 40; Figures 26-28: areas marked in red).

Cemeteries

Three cemeteries are located adjacent to the study corridor; Barton Stone United Church and Cemetery (Plate 19; Figure 18), Ohev Zedek Cemetery (Figure 17), and St. Paul's Anglican Church and Cemetery (Plate 32; Figure 25). If land disturbances are proposed in the vicinity of the cemeteries in the disturbed ROW, a Stage 3 site specific assessment (cemetery investigation) will be necessary in order to determine the presence and extent of burial features in the proposed disturbance area.

3.3 Conclusions

The Stage 1 Archaeological Assessment was completed to assist in evaluating potential constraints along the Hamilton Rapid Transit A-Line. The background research determined that 84 archaeological sites have been registered within a 1 km radius of the study corridor; 15 of which are located within 300 m. A review of the geography and local nineteenth century land use of the study corridor suggested that it has potential for the identification of Aboriginal and Euro-Canadian archaeological sites. Based on the results of the property inspection, it was determined that while the majority of the James Street/Upper James Street and Airport Road ROW have been subject to extensive and deep land alterations, several small



areas within the disturbed ROW have remained relatively undisturbed and exhibit archaeological site potential.

4.0 RECOMMENDATIONS

In light of these results, ASI makes the following recommendations:

1. Archaeological potential exists within the study corridor (Figures 8, 9, 14, 18-22, 24-28, 30, 31: areas marked in red). These lands will require a Stage 2 Property Survey, which can be conducted by test pit survey.
 - Test pit survey involves the hand excavation of small test pits at 5 m intervals and can be conducted only in areas where ploughing is not an option.
2. Following the Stage 2 assessment, a Stage 3 site specific assessment (cemetery investigation) is recommended for the ROW in front of all three cemetery properties to confirm the presence or absence of unmarked graves. The most cost-effective method of determining whether or not burials exist adjacent to the existing cemetery or in the vicinity of any grave markers is by the controlled removal of topsoil by Gradall (or smaller machine if required) under the supervision of a licensed archaeologist. The exposed subsoil will then be shovel-shined and thoroughly examined for the presence of burial shafts. This work will be done in accordance with the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* and the *Ontario Cemeteries Act*;
3. Stage 2 Property Survey is recommended in the vicinity of the Iroquois Beach Ridge and Cameron Street to examine for any deeply buried soil horizons. This can be accomplished through the use of backhoes or equivalent heavy excavating machinery to verify the presence of and to assess deeply buried archaeological resources.
4. Due to extensive and deep land alterations that have severely damaged the integrity of any potential archaeological resources, the majority of the study corridor does not require further archaeological assessment(Figures 8-28 and 30-34: areas marked in yellow); and,
5. Should the proposed work extend beyond the current study corridor, then further Stage 1 assessment must be conducted to determine the archaeological potential of the surrounding lands.

Notwithstanding the results and recommendations presented in this study, Archaeological Services Inc. 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 Cultural Programs Unit of the Ministry of Tourism, Culture and Sport should be immediately notified.



5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

ASI advises compliance with the following legislation:

- This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development;
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the *Ontario Heritage Act*; and
- The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.



6.0 WORKS CITED

Archaeological Services Inc.

- 1990 An Archaeological Resource Assessment of Proposed South Hill Subdivision, Part of Lot 4, Concession 1, Formerly in the Township of Glandford Now in the City of Hamilton (PIF 90-021). Report on file with the Ministry of Tourism, Culture and Sport.
- 1991 An Archaeological Assessment of Subdivision Lot 3, Concession 5 Glanbrook Township, Regional Municipality of Hamilton-Wentworth, Ontario (PIF 91-15). Report on file with the Ministry of Tourism, Culture and Sport.
- 1993 An Archaeological Assessment of Allison Estates 23T-91014, City of Hamilton, Regional Municipality of Hamilton-Wentworth, Ontario (PIF 93-016). Report on file with the Ministry of Tourism, Culture and Sport.
- 1994 An Archaeological Resource Assessment of Whitehern (AhGx-224) 41 Jackson Street West, City of Hamilton, Ontario (PIF 93-016). Report on file with the Ministry of Tourism, Culture and Sport.
- 2002 Stage 1&2 Archaeological Assessment of the Proposed Southampton Estates, Mount Hope, Township of Glanbrook, City of Hamilton, Ontario (PIF 2001-025-024). Report on file with the Ministry of Tourism, Culture and Sport.
- 2004 The Archaeological Study for the Growth Related Integrated Strategy City of Hamilton (MTCS PIF P050-037). Report on file with the City of Hamilton.
- 2005 Stage 1&2 Archaeological Assessment of the Proposed Aeropark Subdivision, Part of Lot 5, Concession 3, Geographic Township of Glandford, Wentworth County, Now in the City of Hamilton (PIF #117-097). Report on file with the Ministry of Tourism, Culture and Sport.
- 2009 Stage 1 Archaeological Assessment Rapid Transit Initiative, City of Hamilton, Ontario (MTCS PIF P264-077-2009). Report on file with the Ministry of Tourism, Culture and Sport.
- 2011 Cultural Heritage Assessment Report: Built Heritage Resources and Cultural Heritage Landscapes Hamilton Rapid Transit A-Line, City of Hamilton, Ontario.

Armstrong, Frederick H.

- 1985 *Handbook of Upper Canadian Chronology*. Toronto: Dundurn Press.

Boulton, D'Arcy

- 1805 *Sketch of His Majesty's Province of Upper Canada*. Toronto: Baxter Publishing Company (Reprinted 1961).

Burkholder, Mabel.

- 1956 *Barton on the Mountain*. Hamilton: (no publisher cited).

Chapman, L. J. and F. Putnam



- 1984 *The Physiography of Southern Ontario*. Ontario Geological Survey, Special Volume 2. Ontario Ministry of Natural Resources, Toronto.
- Crossby, P.A.
1873 *Lovell's Gazetteer of British North America*. Montreal: John Lovell.
- Glanford Historical Society
1985 *Glanford: Recollections and Reflections*. Chapter OAS, London.
- Johnston, Charles M.
1964 *The Valley of the Six Nations*. The Champlain Society for the Government of Ontario, University of Toronto Press.
- Macdonald, I.D.
1980 Life Science Features of the Haldimand Clay Plain Physiographic Region. Ontario Ministry of Natural Resources, Parks and Recreation Section, Central Region, Richmond Hill, Ontario.
- Ministry of Culture
2005 *Ontario Heritage Act*.
- Ministry of Tourism, Culture and Sport
2010 *Standards and Guidelines for Consultant Archaeologists*. Cultural Programs Branch, Ontario Ministry of Culture, Toronto.
http://www.culture.gov.on.ca/english/heritage/archaeology/SG_2010.pdf
- Page, H. R.
1875 *Illustrated Historical Atlas of the County of Wentworth*.
- Rayburn, Alan.
1997 *Place Names of Ontario*. Toronto: University of Toronto Press.
- Smith, William H.
1846 *Smith's Canadian Gazetteer*. Toronto:
- Woodley, Philip.
1990 *The Thistle Hill Site and Late Archaic Adaptations*. Dundas: Copetown Press
- 2003 *Stage 2-3 Archaeological Assessment of the Proposed South Hampton Estates, Town of Mount Hope, Regional Municipality of Hamilton-Wentworth*. New Directions Archaeology Ltd. Ancaster, Ontario.



7.0 MAPS



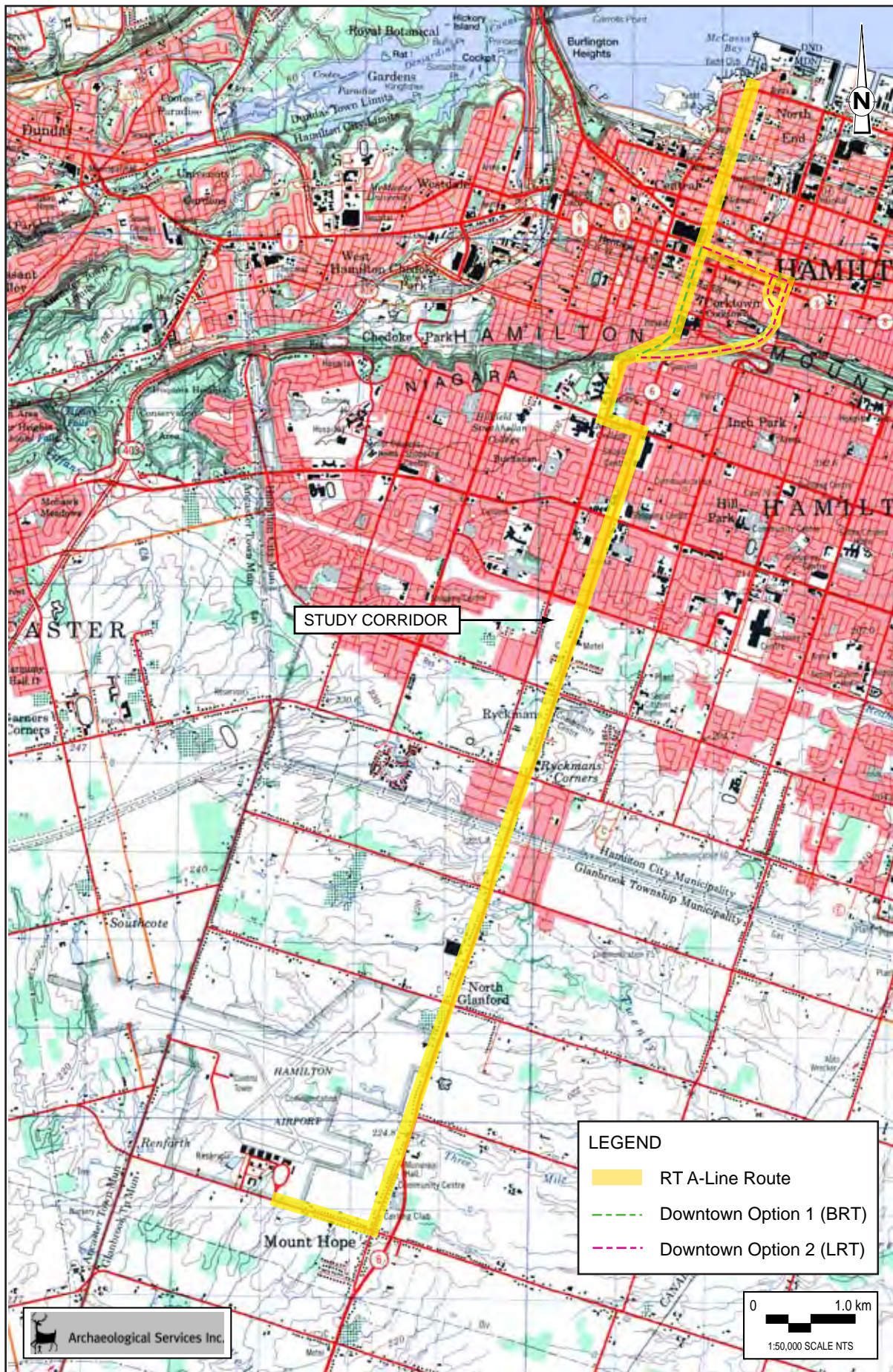


Figure 1: Location of the Study Corridor

Base Map: NTS Sheets 30 M/05 and 30 M/04

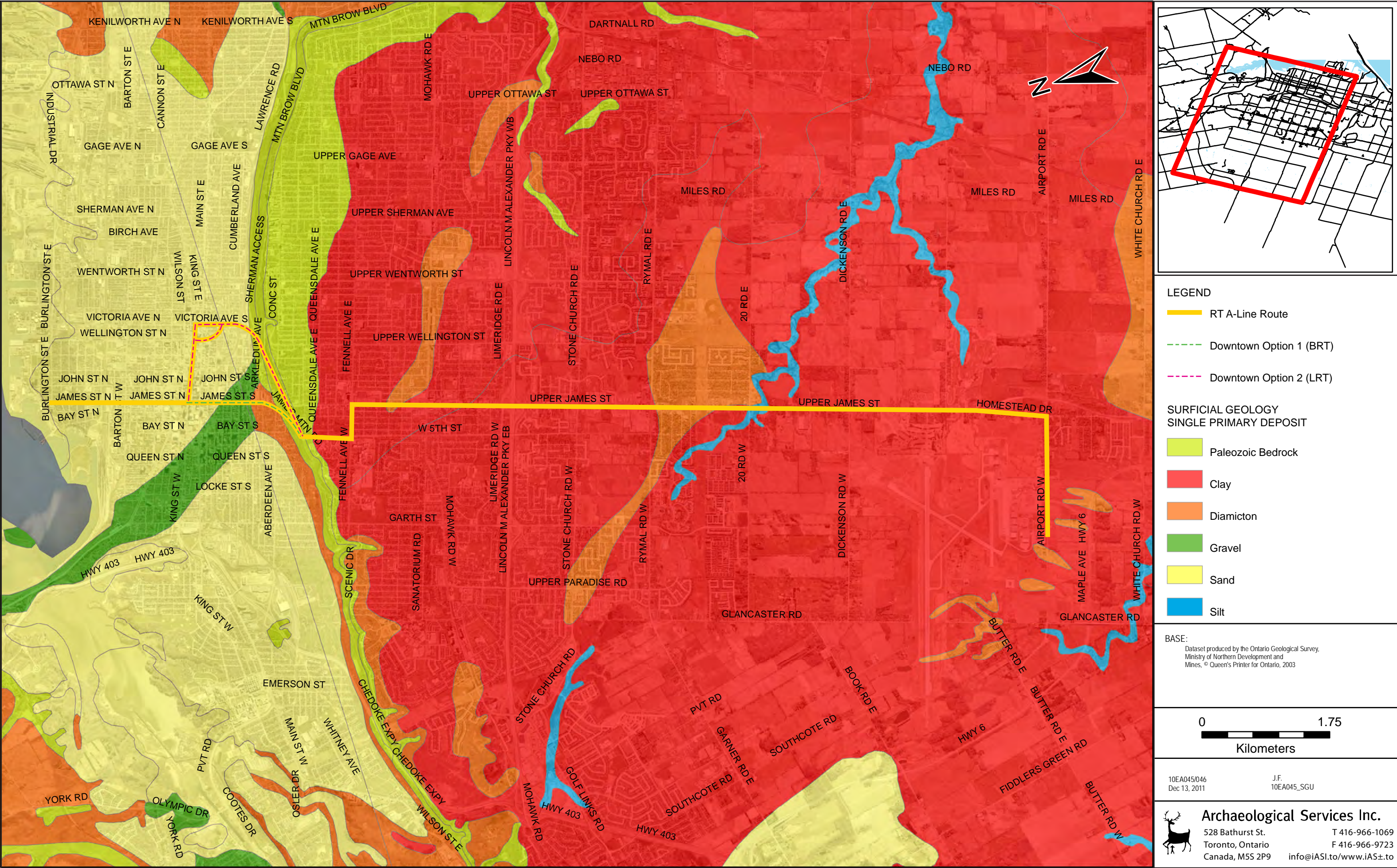


Figure 2: Surifacial Geology in the Study Corridor

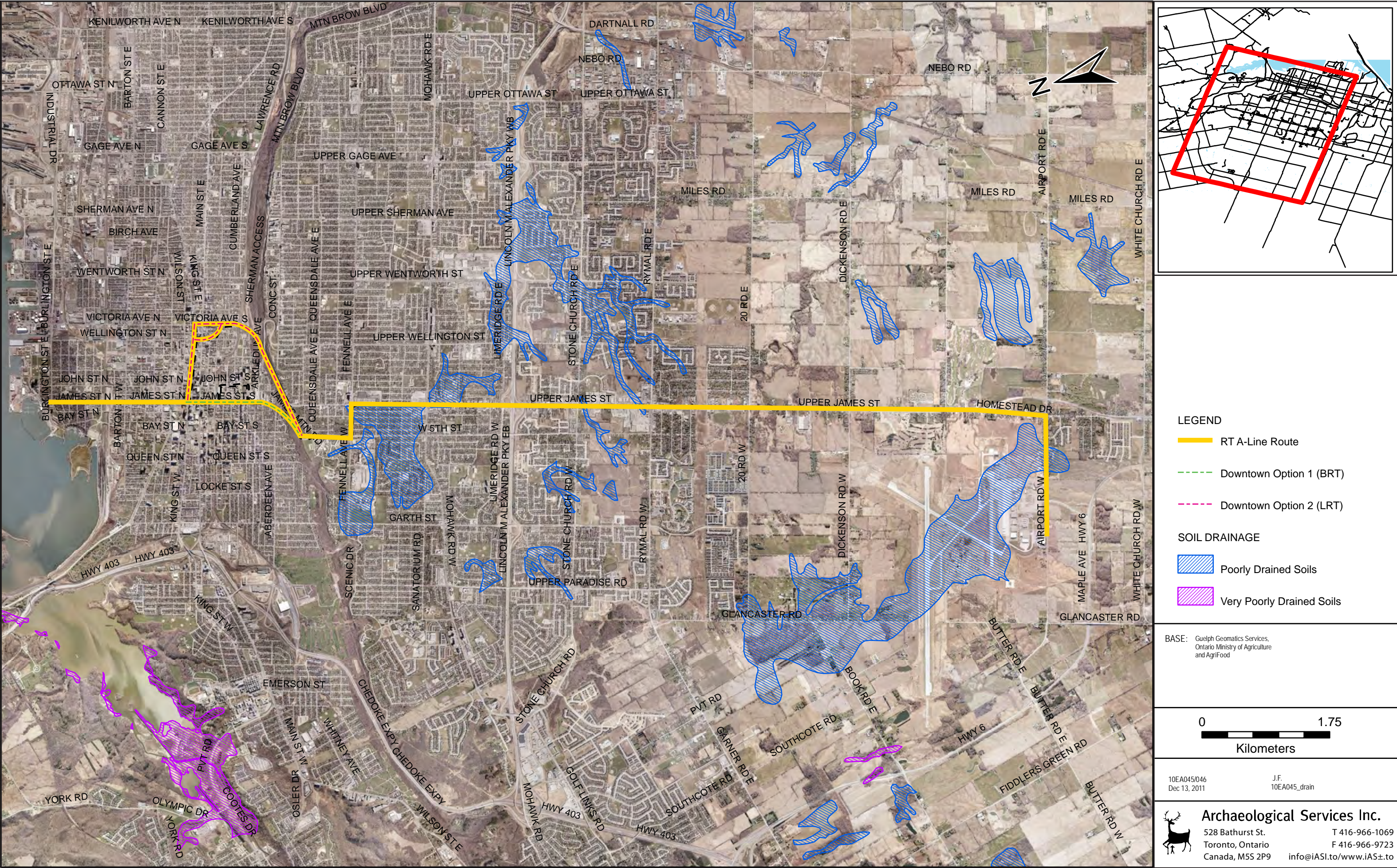


Figure 3: Soil Drainage in the Study Corridor

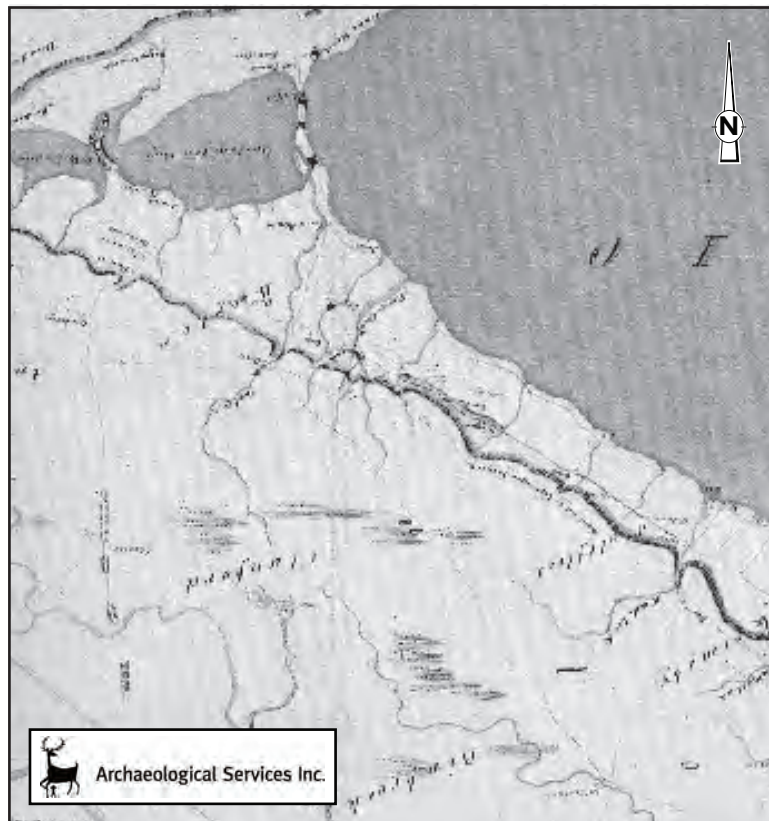


Figure 4: 1815 Map of the Niagara District in Upper Canada
by Lieutenant W.A. Nesfield



Figure 5: 1850 Map by Baron de Rottenberg

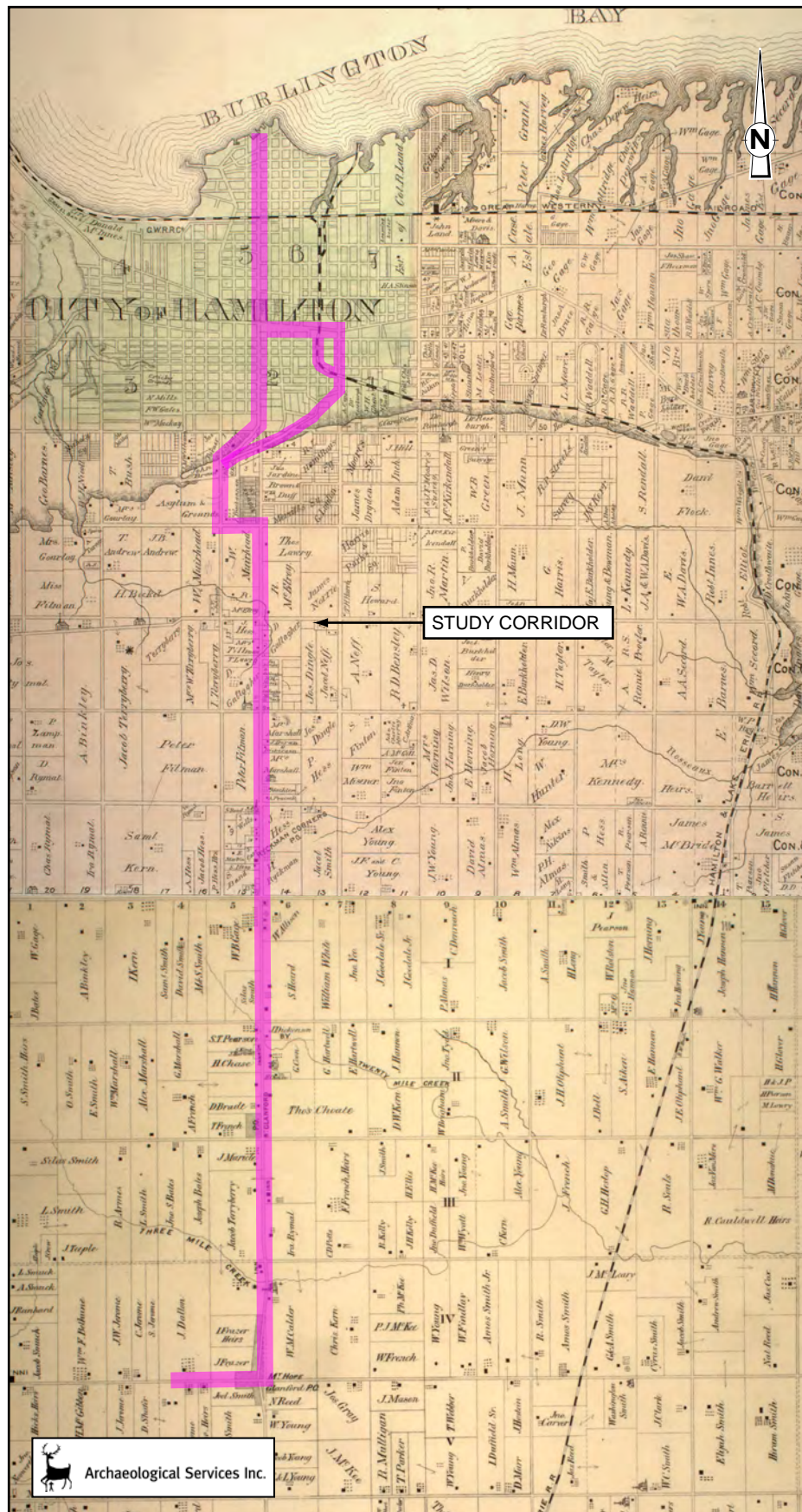


Figure 6: The study corridor overlaid on the 1875 map of Barton and Glanford Townships

Base Map: 1875 Illustrated Historical Atlas of the County of Wentworth

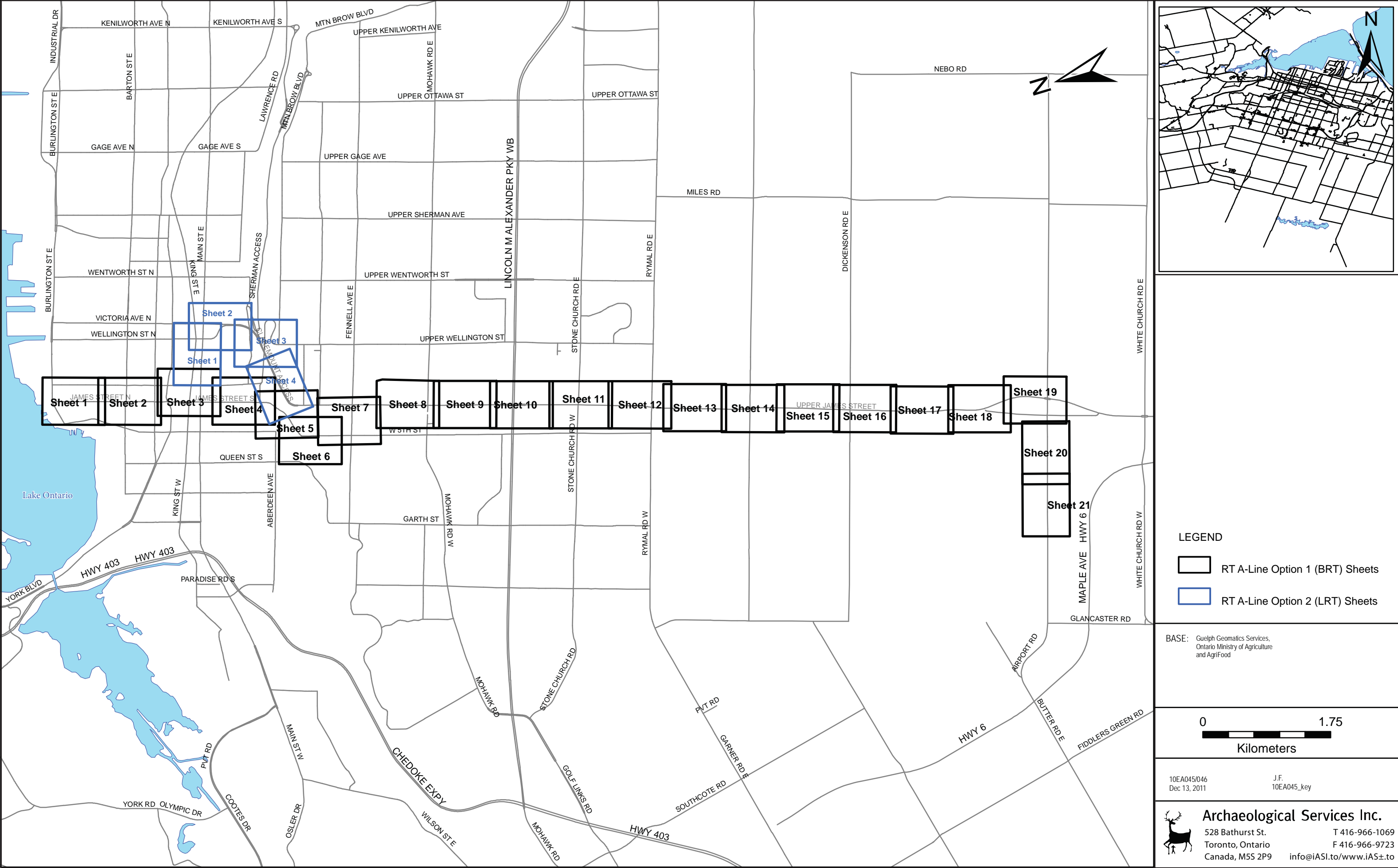
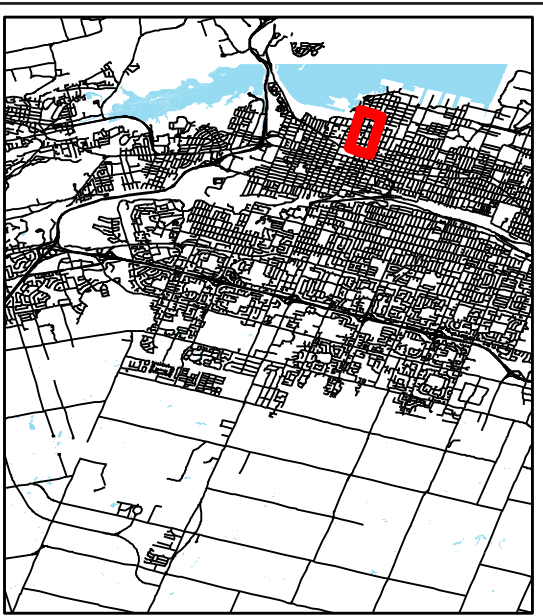


Figure 7: Hamilton RT A-Line Key Plan



Figure 8: Hamilton LRT A Line (Sheet 1) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

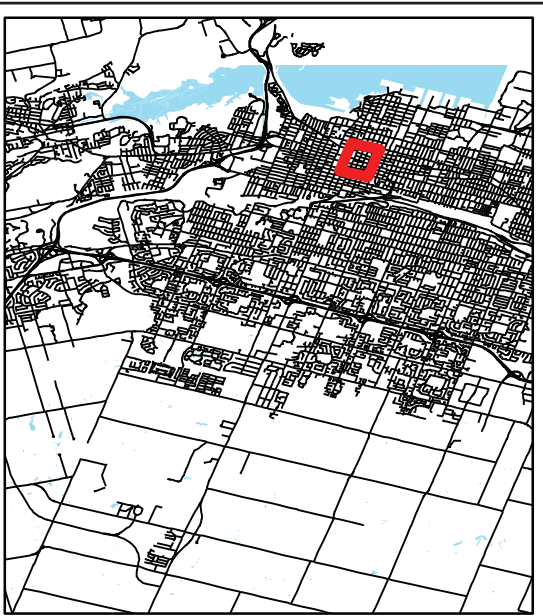
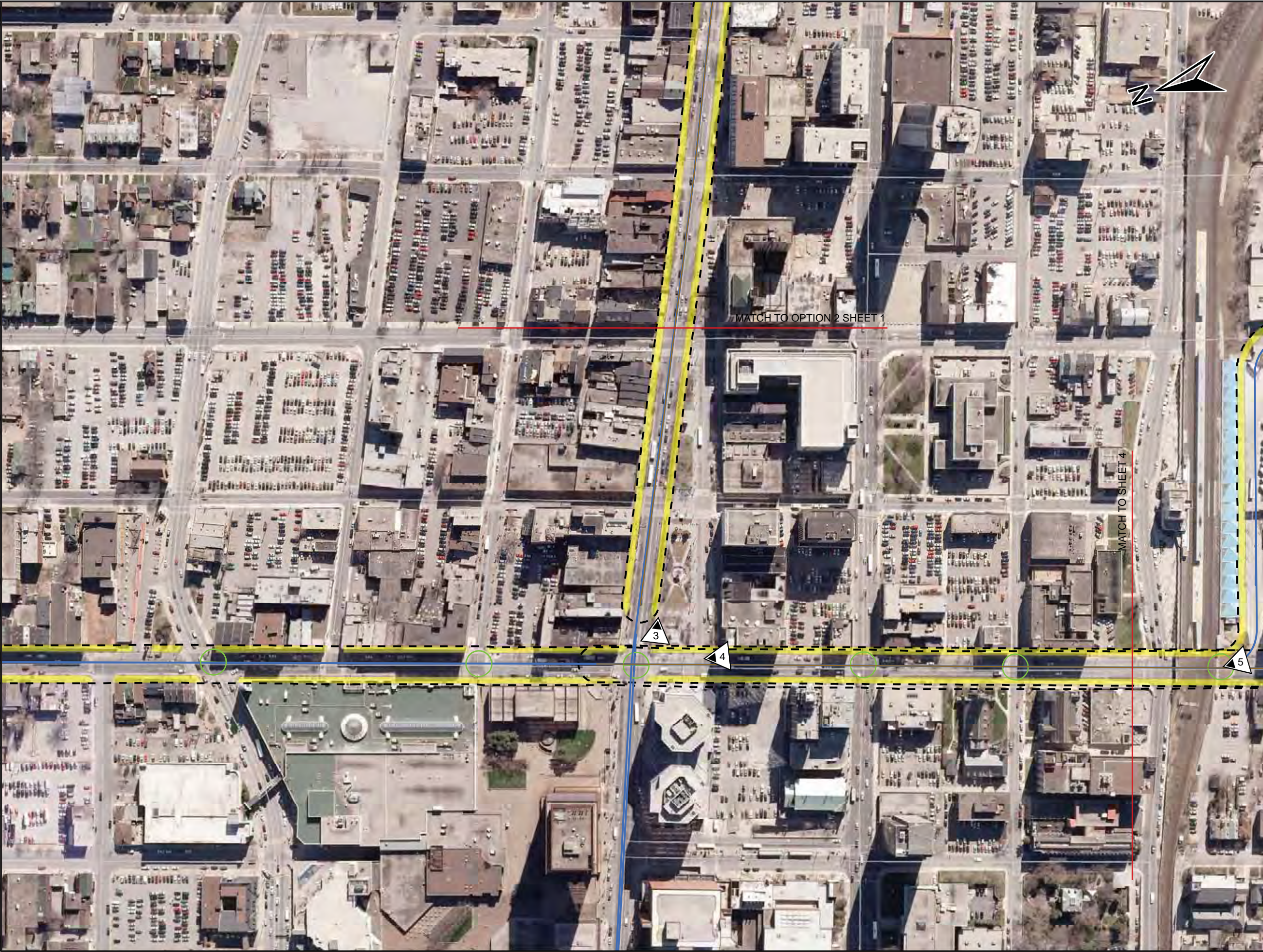
10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet2

Archaeological Services Inc.
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iASi.to

Figure 9: Hamilton LRT A Line (Sheet 2) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Alignment
 - Signal
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

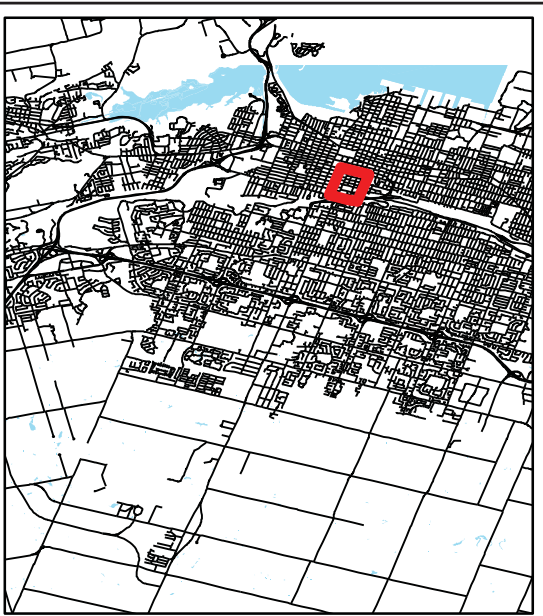
10EA045/046
Dec 12, 2011

J.F.
10EA045_sheet3

Archaeological Services Inc.
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iASItto

Figure 10: Hamilton LRT A Line (Sheet 3) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Alignment
 - Signal
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

10EA045/046
Dec 12, 2011

J.F.
10EA045_sheet4


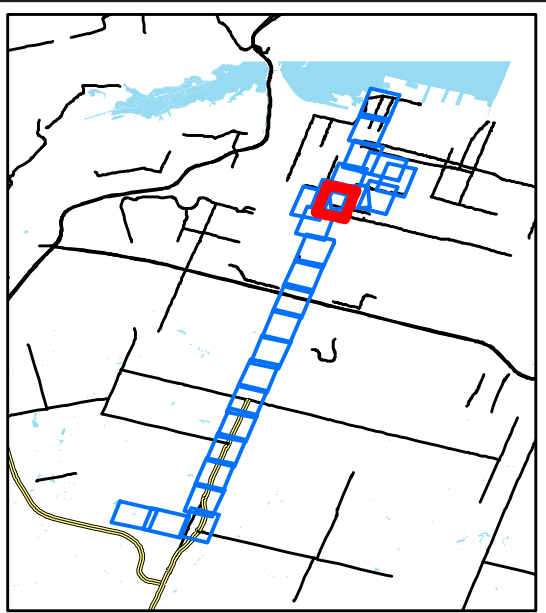
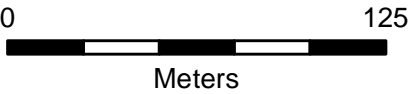
 **Archaeological Services Inc.**
528 Bathurst St. T 416-966-1069
Toronto, Ontario F 416-966-9723
Canada, M5S 2P9 info@iASI.to/www.iASi.to

Figure 11: Hamilton LRT A Line (Sheet 4) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Alignment
 - Signal
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010



10EA045/046
November 29 2011

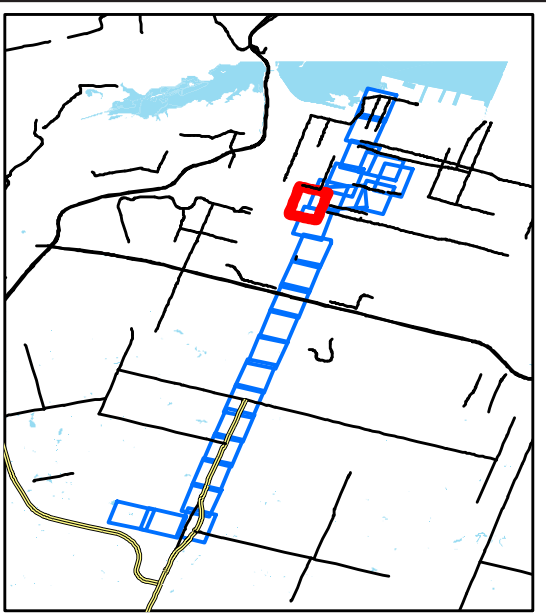
Drawn by: JF & BW
10EA045_Aline_S5



Archaeological Services Inc.
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iAS±.to

Figure 12: Hamilton LRT A Line (Sheet 5) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Alignment
 - Signal
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 125
Meters

10EA045/046
November 29 2011

Drawn by: JF & BW
10EA045_Aline_S6

Archaeological Services Inc.
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASi.to/www.iASi.to

Figure 13: Hamilton LRT A Line (Sheet 6) - Results of Stage 1 Archaeological Assessment

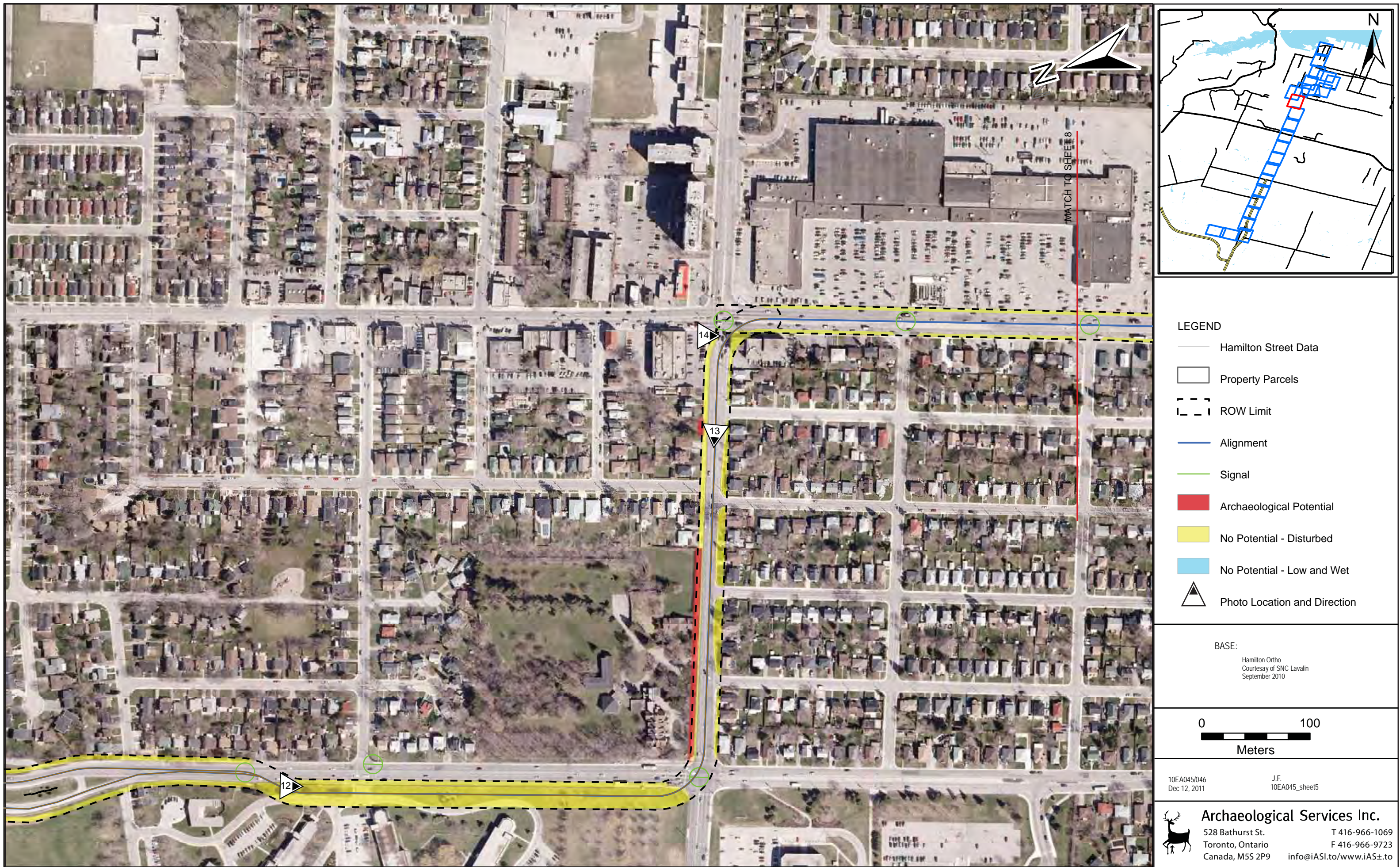
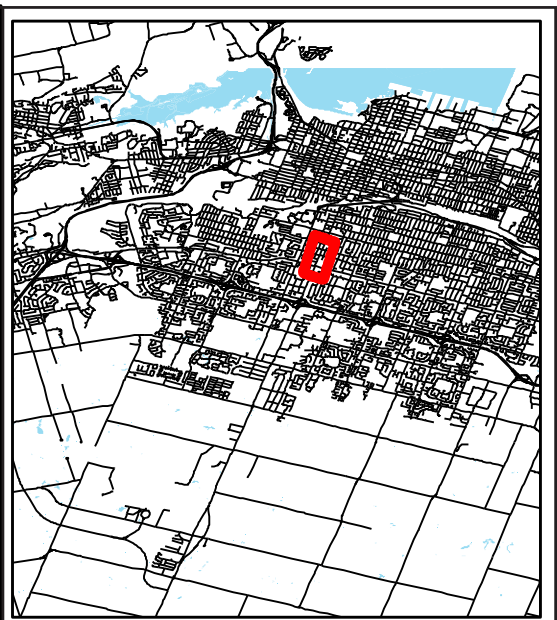
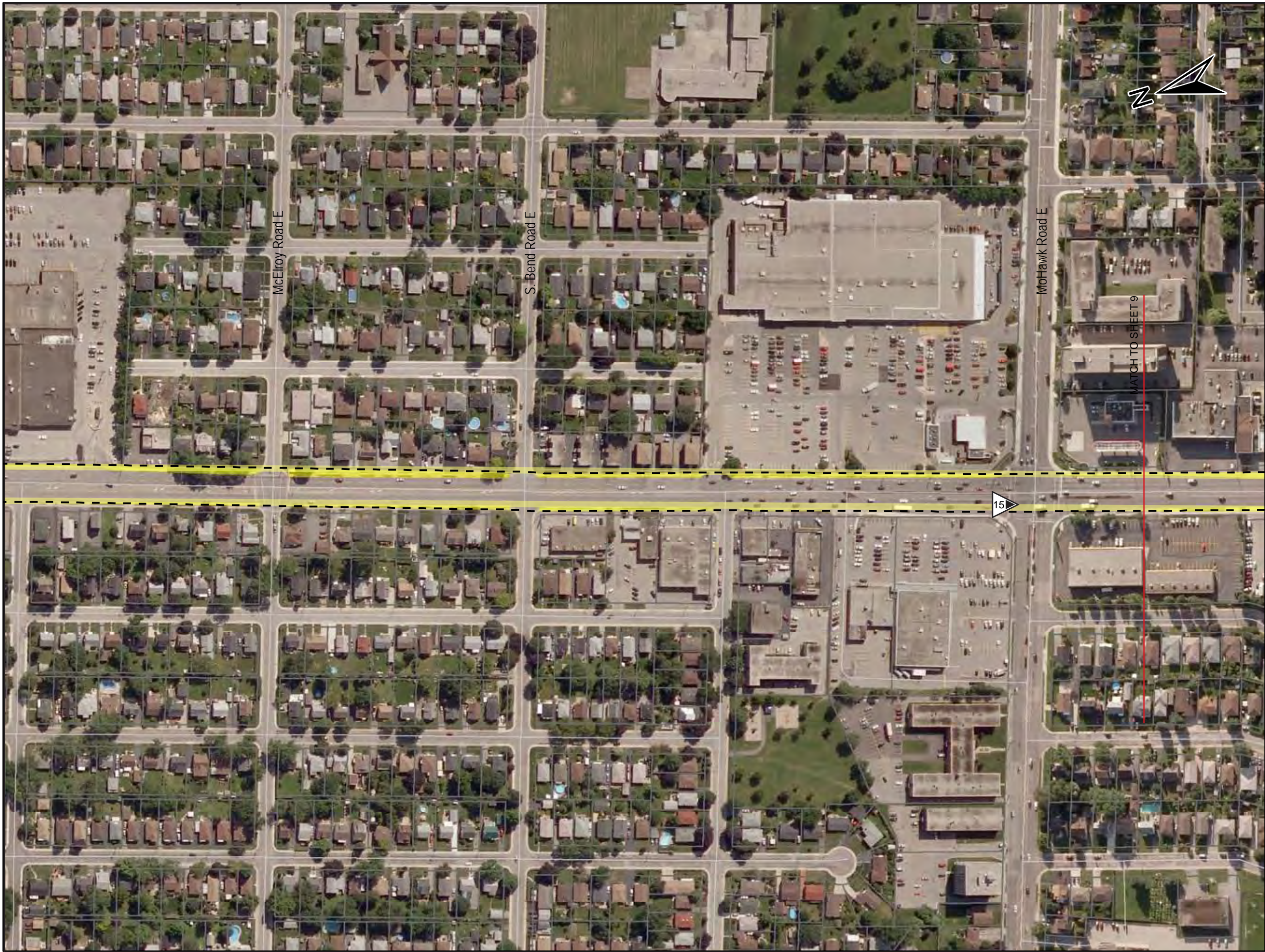


Figure 14: Hamilton LRT A Line (Sheet 7) - Results of Stage 1 Archaeological Assessment



LEGEND

- Hamilton Street Data
- Property Parcels
- ROW Limit
- Archaeological Potential
- No Potential - Disturbed
- No Potential - Low and Wet
- Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

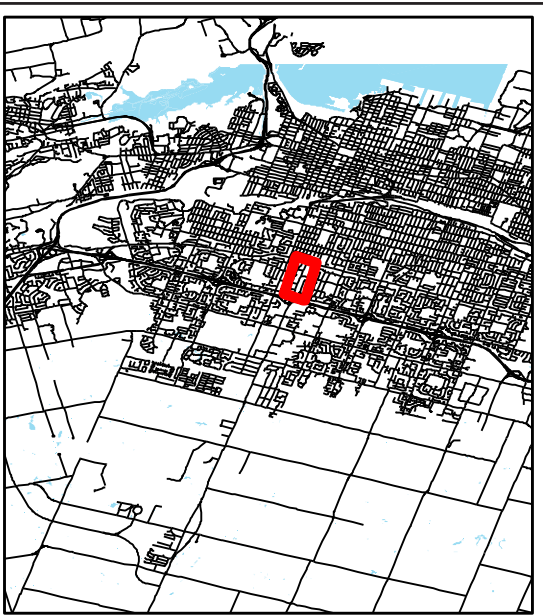
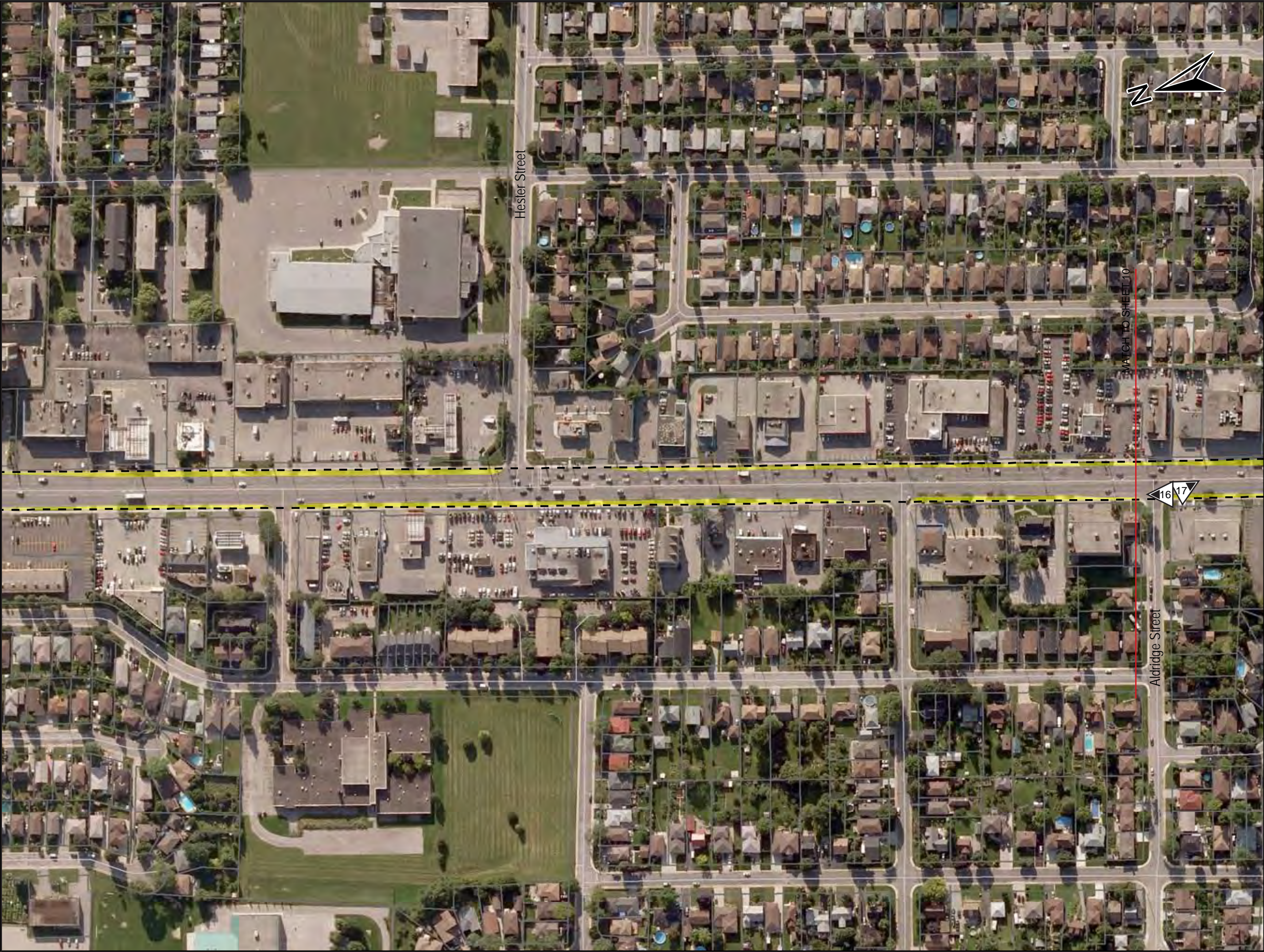
0 100
Meters

10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet7

Archaeological Services Inc.
528 Bathurst St. T 416-966-1069
Toronto, Ontario F 416-966-9723
Canada, M5S 2P9 info@iASI.to/www.iAS±.to

Figure 15: Hamilton LRT A Line (Sheet 8) - Results of Stage 1 Archaeological Assessment



LEGEND

- Hamilton Street Data
- Property Parcels
- ROW Limit
- Archaeological Potential
- No Potential - Disturbed
- No Potential - Low and Wet
- Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

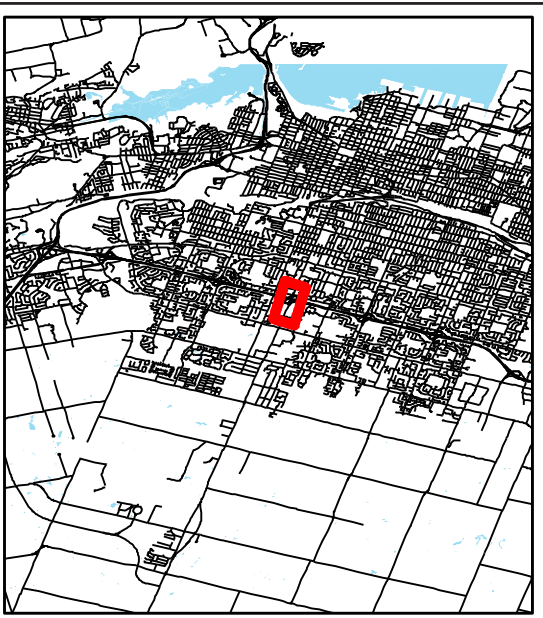
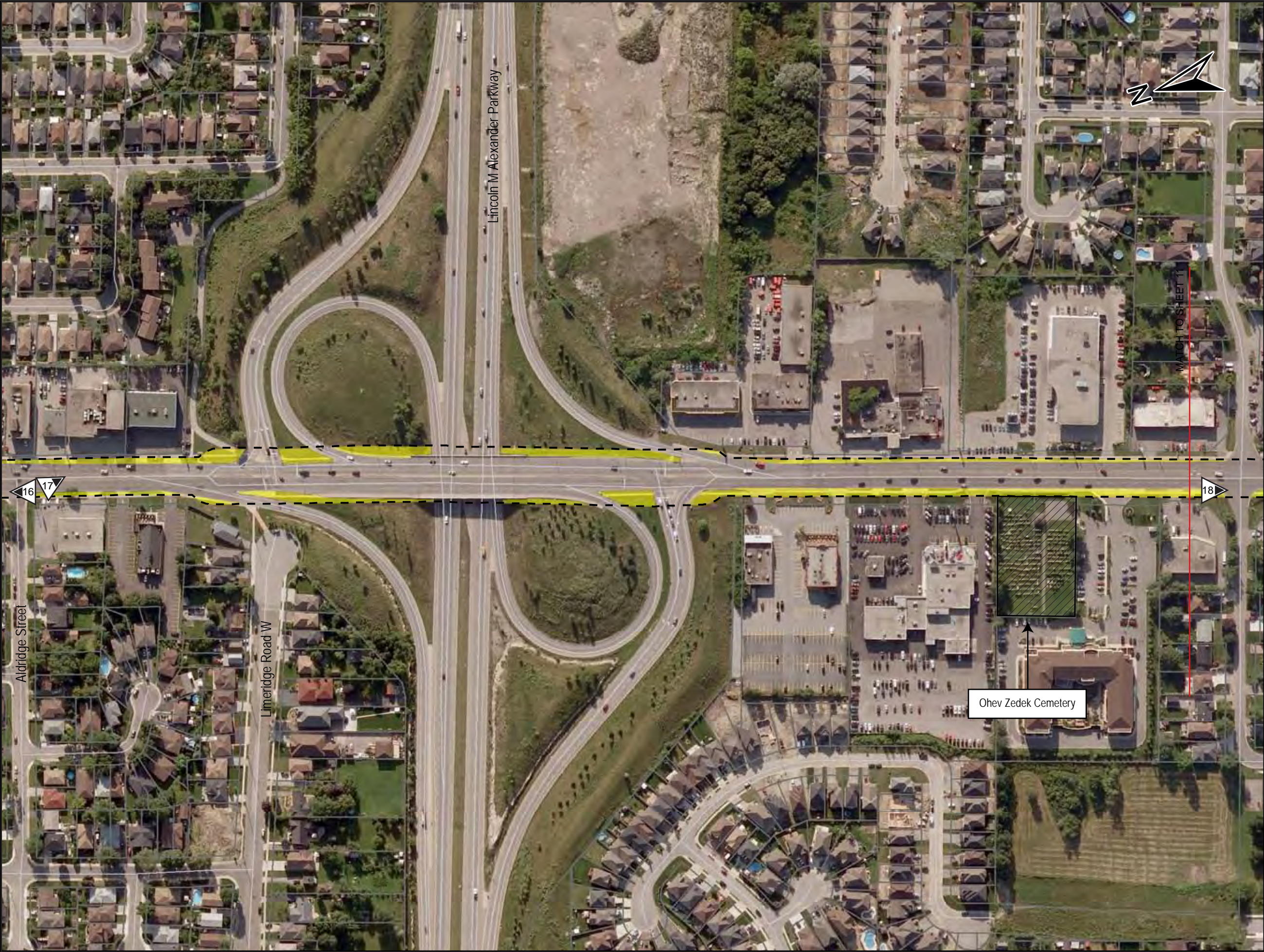
0 100
Meters

10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet8

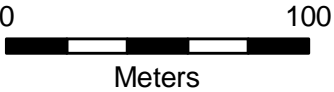
Archaeological Services Inc.
528 Bathurst St. T 416-966-1069
Toronto, Ontario F 416-966-9723
Canada, M5S 2P9 info@iASI.to/www.iAS±.to

Figure 16: Hamilton LRT A Line (Sheet 9) - Results of Stage 1 Archaeological Assessment




- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010



10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet9

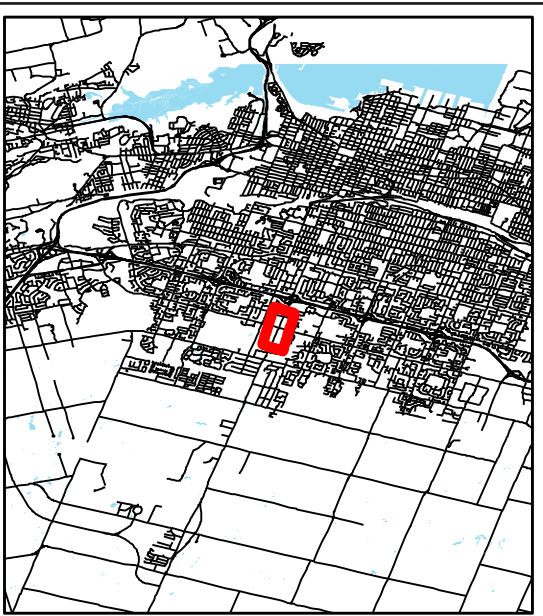


Archaeological Services Inc.

528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iAS±.to

Figure 17: Hamilton LRT A Line (Sheet 10) - Results of Stage 1 Archaeological Assessment



LEGEND

- Hamilton Street Data
- Property Parcels
- ROW Limit
- Archaeological Potential
- No Potential - Disturbed
- No Potential - Low and Wet
- Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

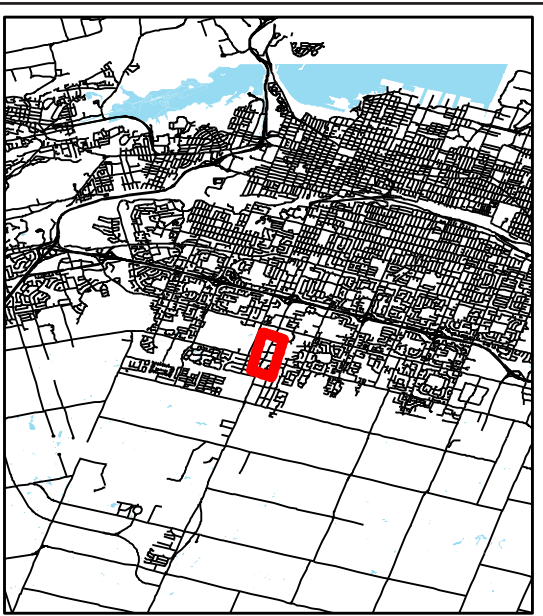
10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet10

Archaeological Services Inc.
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iAS±.to

Figure 18: Hamilton LRT A Line (Sheet 11) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet11


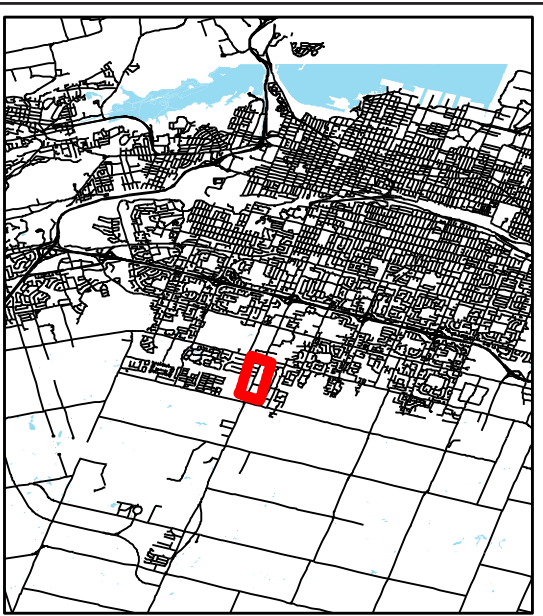
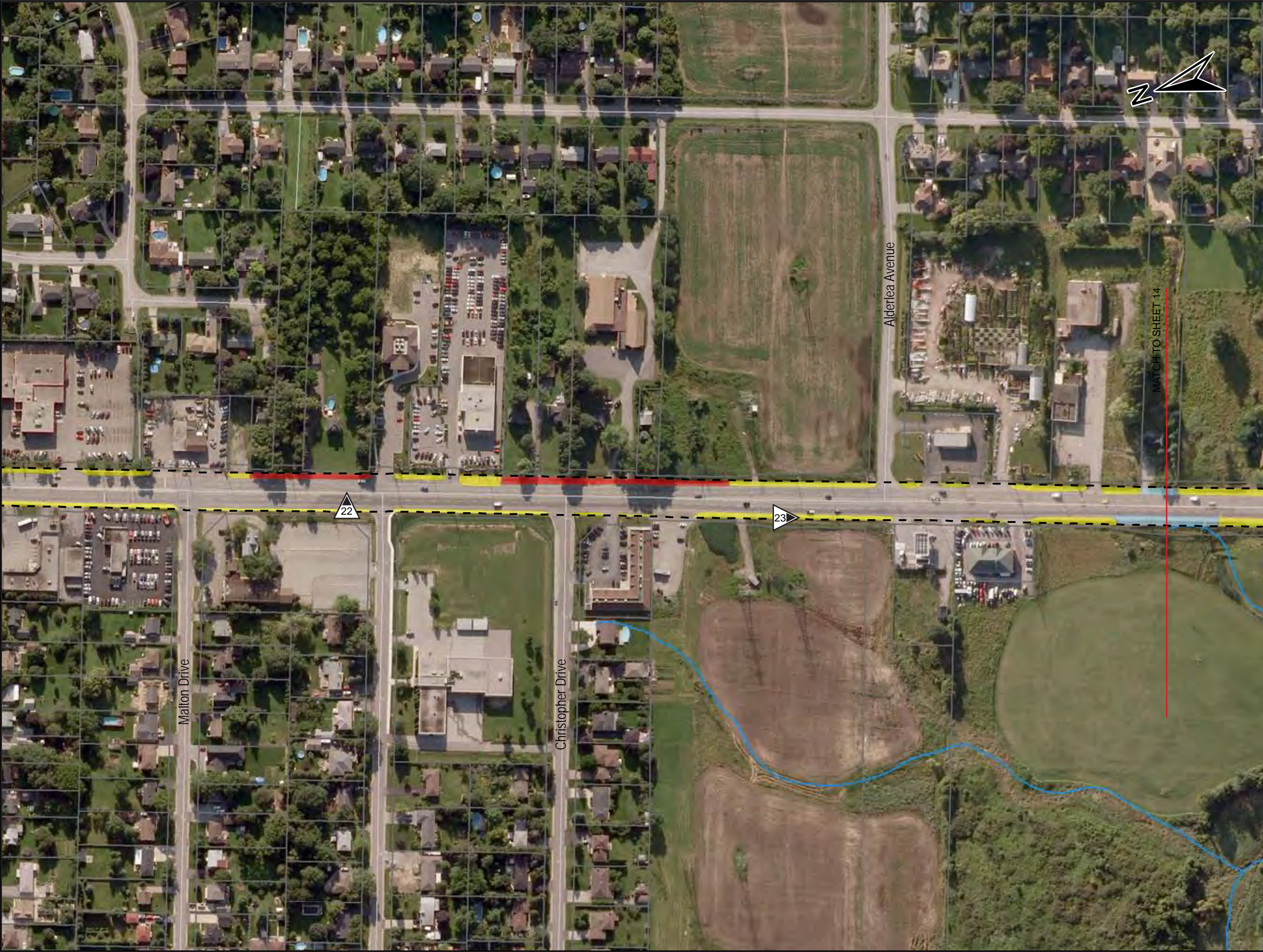
 **Archaeological Services Inc.**
528 Bathurst St. T 416-966-1069
Toronto, Ontario F 416-966-9723
Canada, M5S 2P9 info@iASI.to/www.iAS±.to

Figure 19: Hamilton LRT A Line (Sheet 12) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet12


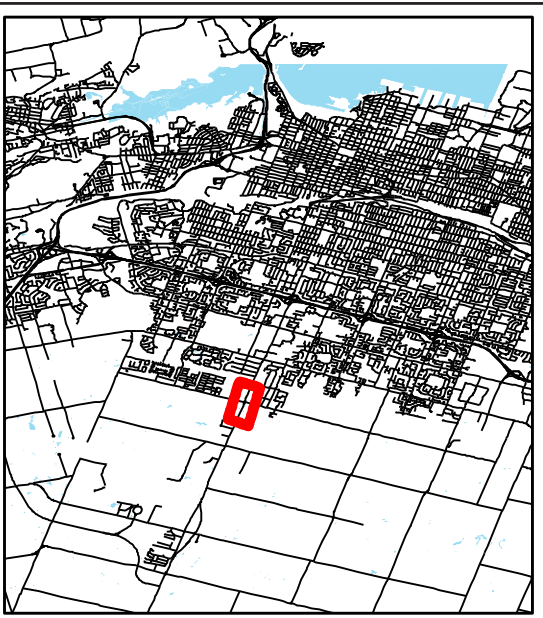
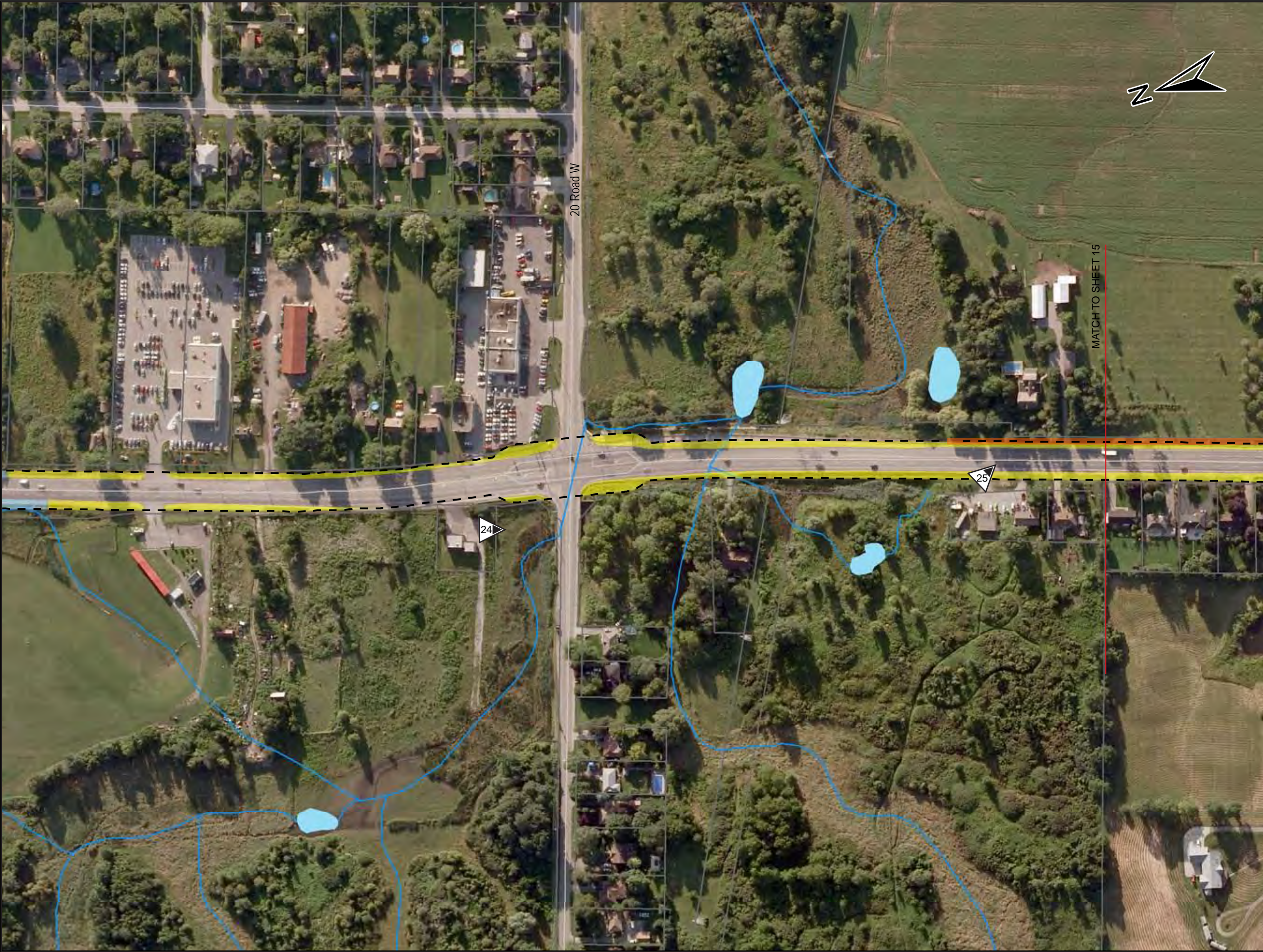
 **Archaeological Services Inc.**
528 Bathurst St. T 416-966-1069
Toronto, Ontario F 416-966-9723
Canada, M5S 2P9 info@iASi.to/www.iASi.to

Figure 20: Hamilton LRT A Line (Sheet 13) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet13


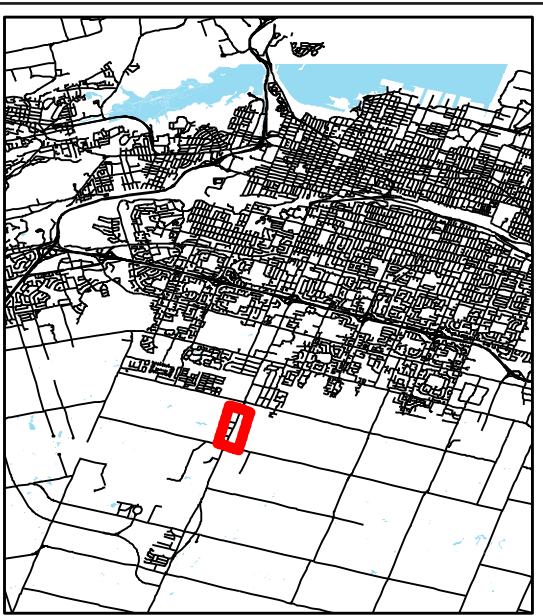
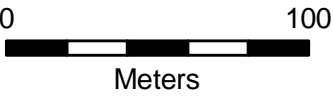
 **Archaeological Services Inc.**
528 Bathurst St. T 416-966-1069
Toronto, Ontario F 416-966-9723
Canada, M5S 2P9 info@iASI.to/www.iAS±.to

Figure 21: Hamilton LRT A Line (Sheet 14) - Results of Stage 1 Archaeological Assessment




- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010



10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet14

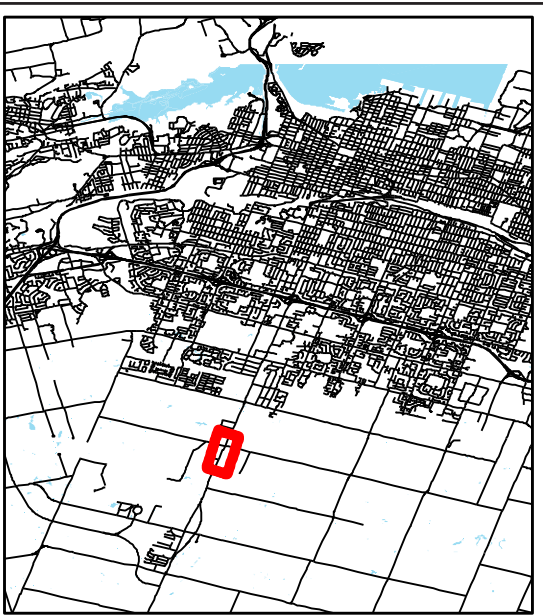


Archaeological Services Inc.

528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iAS±.to

Figure 22: Hamilton LRT A Line (Sheet 15) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet15



Archaeological Services Inc.

528 Bathurst St. T 416-966-1069
Toronto, Ontario F 416-966-9723
Canada, M5S 2P9 info@iASI.to/www.iAS±.to

Figure 23: Hamilton LRT A Line (Sheet 16) - Results of Stage 1 Archaeological Assessment



LEGEND

- Hamilton Street Data
- Property Parcels
- ROW Limit
- Archaeological Potential
- No Potential - Disturbed
- No Potential - Low and Wet
- Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

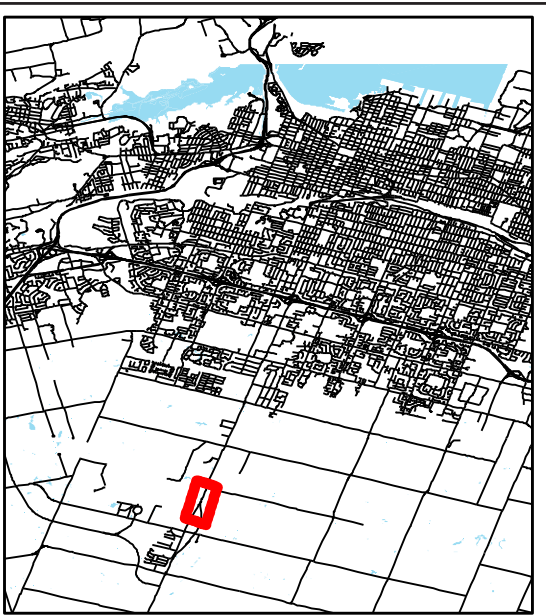
10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet16

Archaeological Services Inc.
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iASi.to

Figure 24: Hamilton LRT A Line (Sheet 17) - Results of Stage 1 Archaeological Assessment



LEGEND

- Hamilton Street Data
- Property Parcels
- ROW Limit
- Archaeological Potential
- No Potential - Disturbed
- No Potential - Low and Wet
- Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

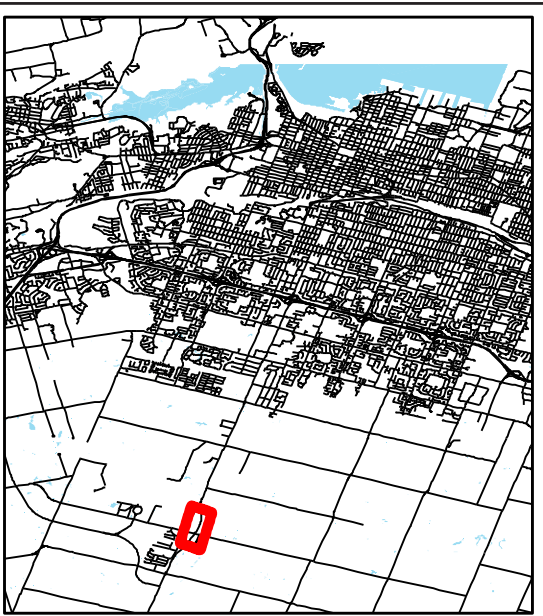
10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet17

Archaeological Services Inc.
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iASi.to

Figure 25: Hamilton LRT A Line (Sheet 18) - Results of Stage 1 Archaeological Assessment



- LEGEND
- Hamilton Street Data
 - Property Parcels
- Stage 1 Assessment Results
- ROW Limit
 - Potential
 - No Potential: Disturbed
 - No Potential: Low and Wet
 - Photo Location & Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

10EA045/046
Feb 2, 2011

J.F.
10EA045_sheet18



Archaeological Services Inc.

528 Bathurst St. T 416-966-1069
Toronto, Ontario F 416-966-9723
Canada, M5S 2P9 info@iASI.to/www.iAS±.to

Figure 26: Hamilton LRT A Line (Sheet 19) - Results of Stage 1 Archaeological Assessment

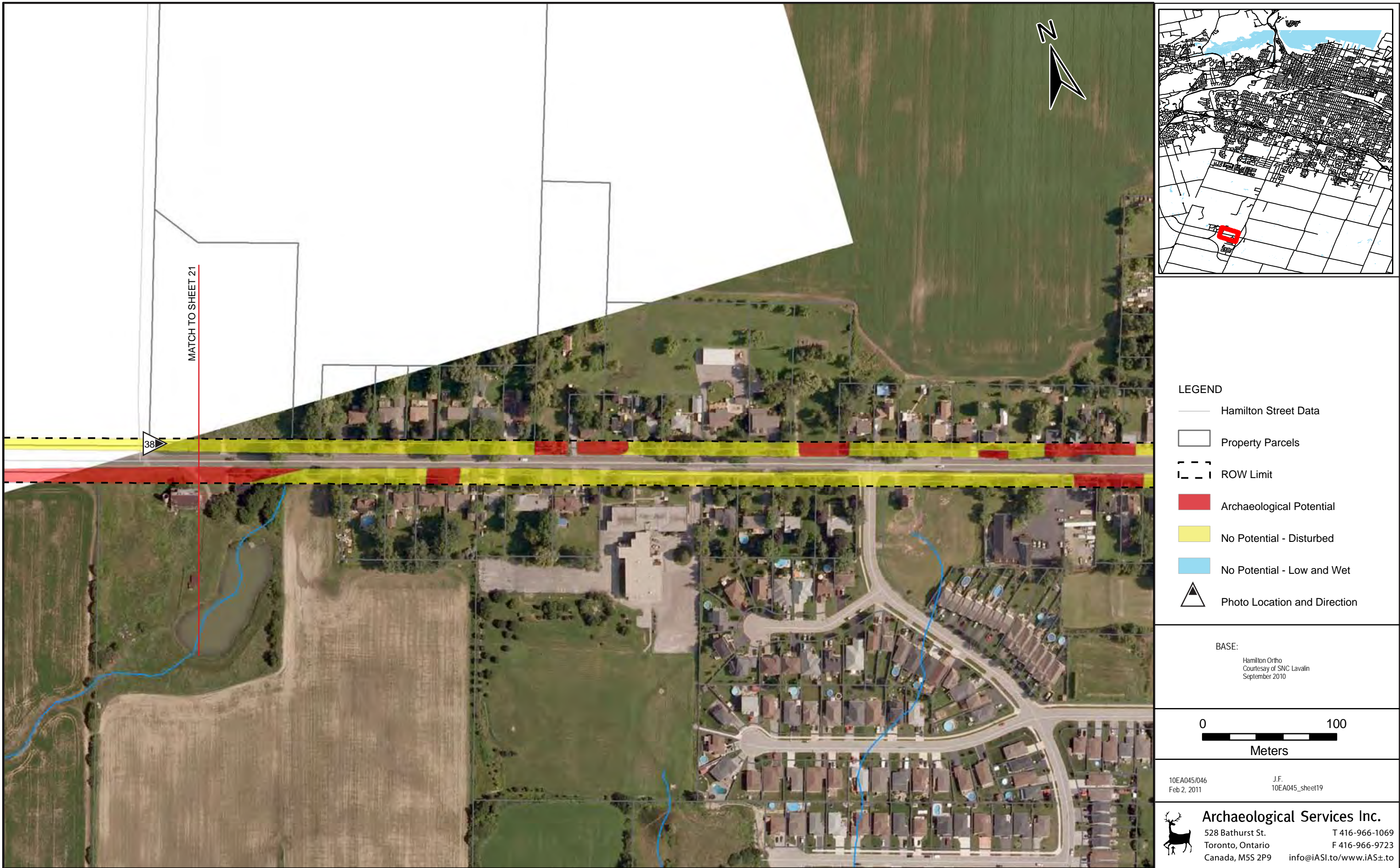


Figure 27: Hamilton LRT A Line (Sheet 20) - Results of Stage 1 Archaeological Assessment

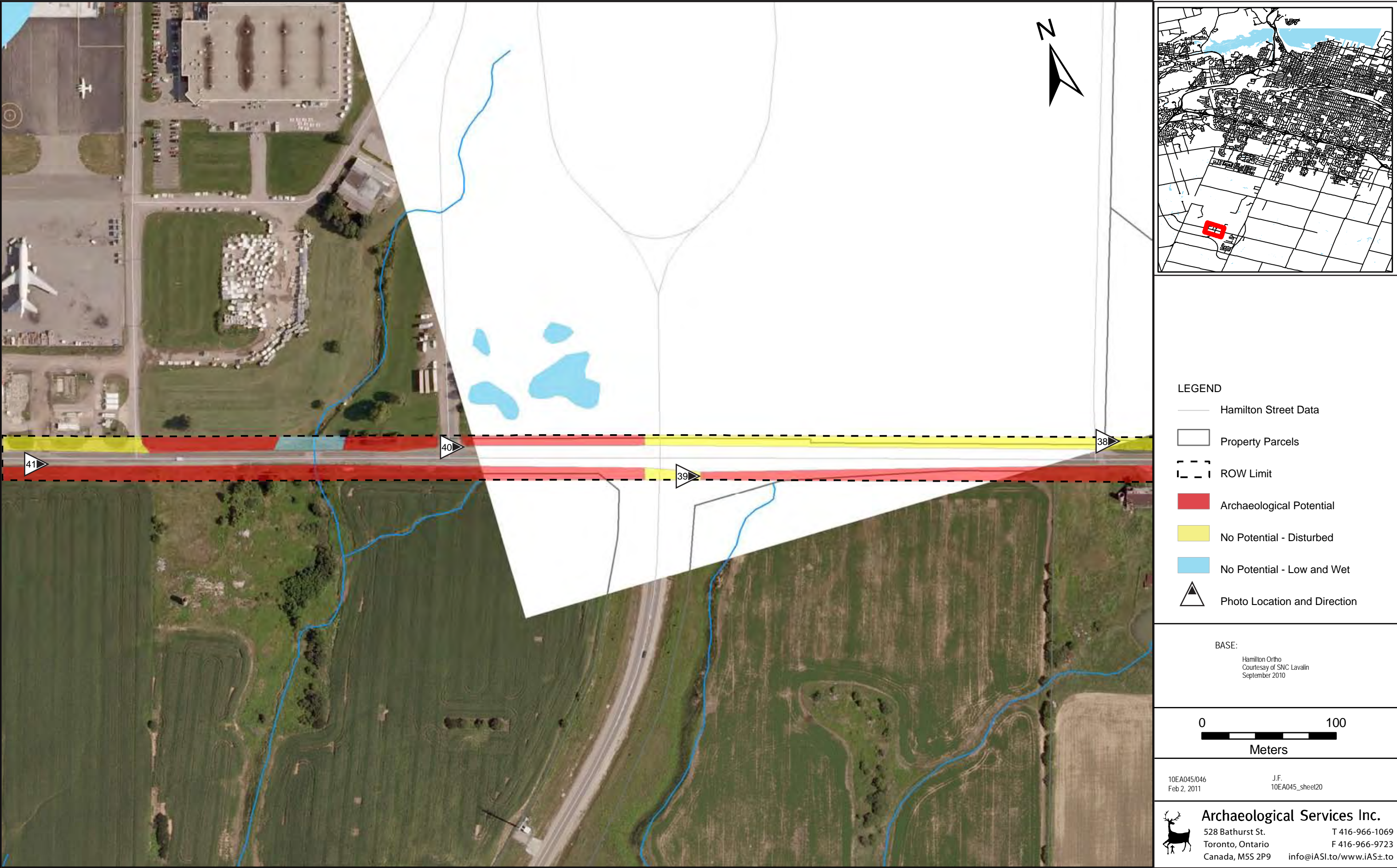


Figure 28: Hamilton LRT A Line (Sheet 21) - Results of Stage 1 Archaeological Assessment

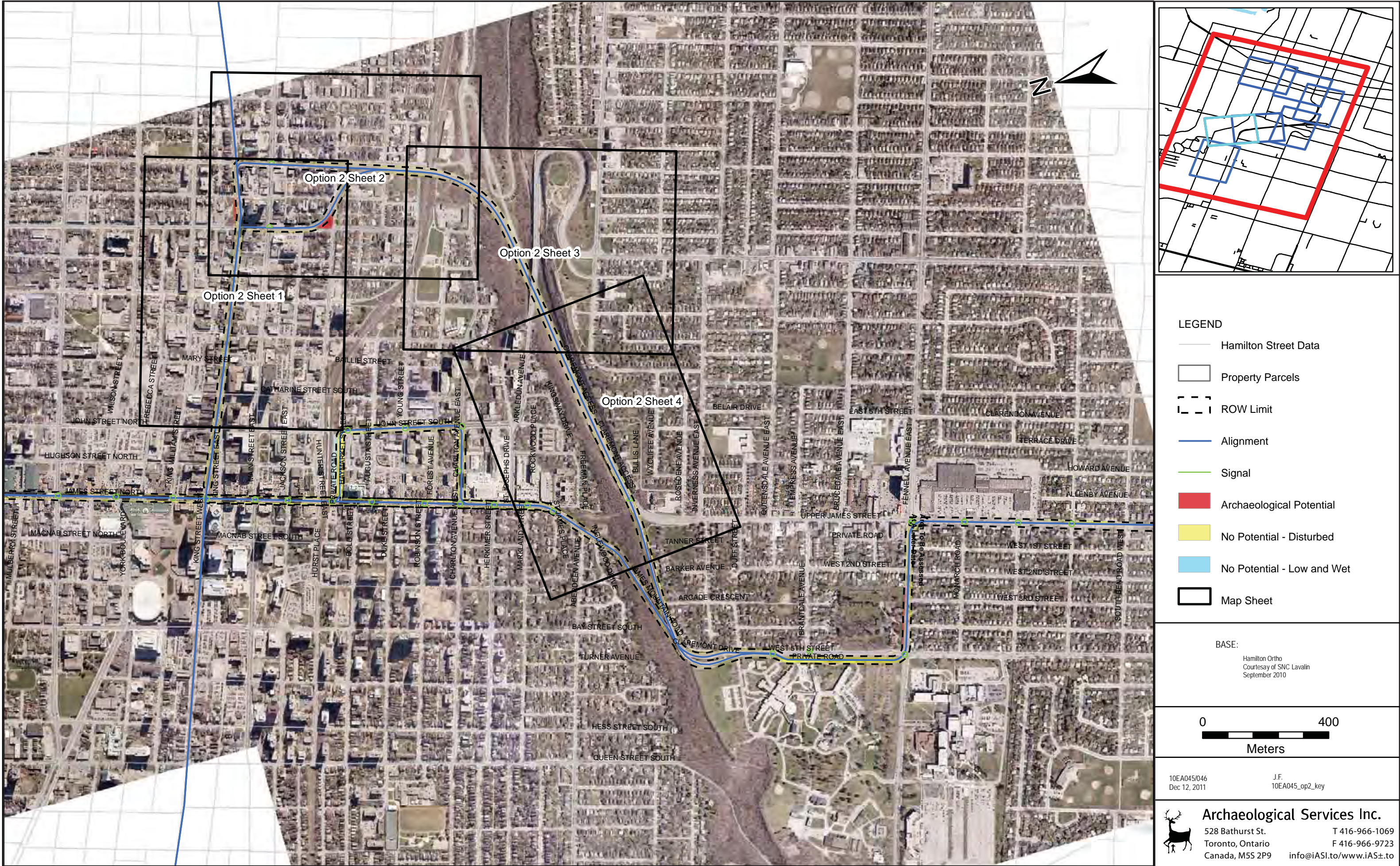


Figure 29: Hamilton LRT A Line Option 2 - Key Plan

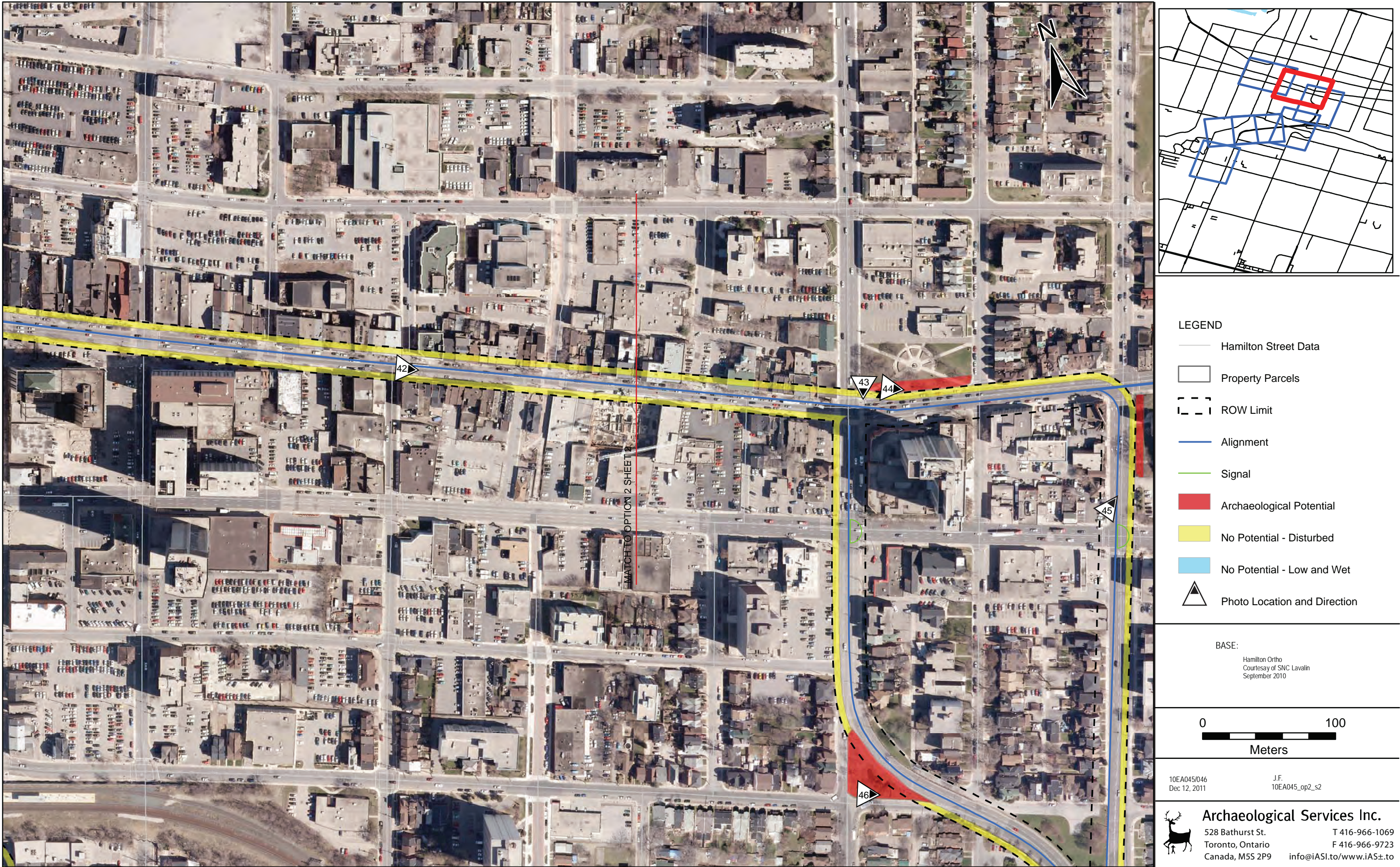
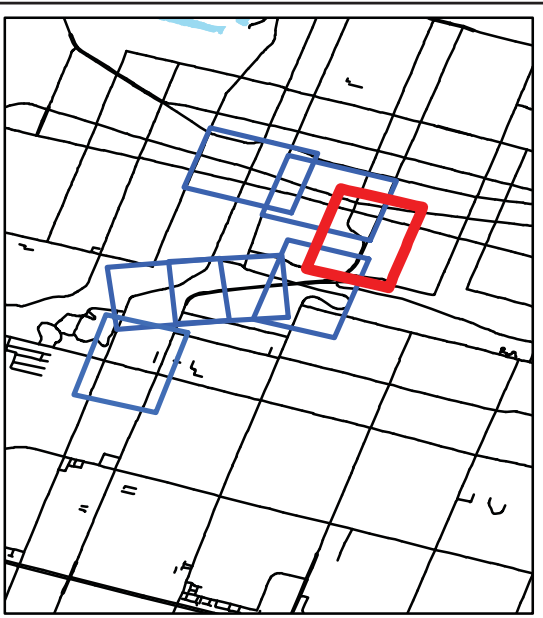


Figure 30: Hamilton LRT A Line (Option 2 Sheet 1) - Results of Stage 1 Archaeological Assessment




- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Alignment
 - Signal
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010

0 100
Meters

10EA045/046
Dec 12, 2011

J.F.
10EA045_op2_s3



Archaeological Services Inc.

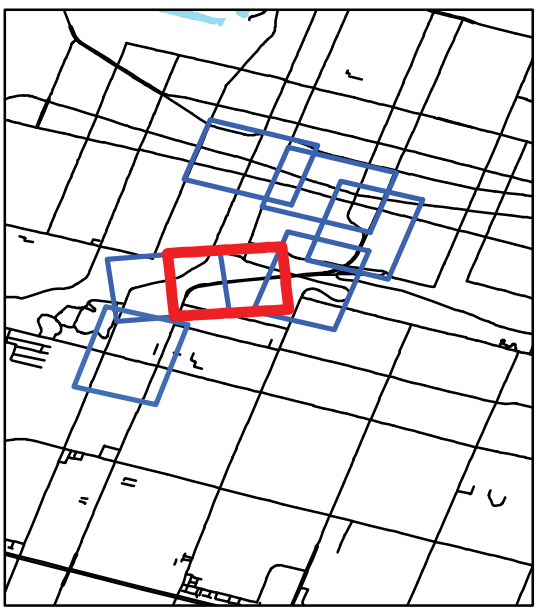
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iASi.to

Figure 31: Hamilton LRT A Line (Option 2 Sheet 2) - Results of Stage 1 Archaeological Assessment

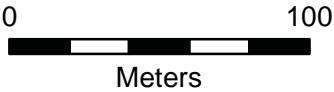


Figure 32: Hamilton LRT A Line (Option 2 Sheet 3) - Results of Stage 1 Archaeological Assessment




- LEGEND
- Hamilton Street Data
 - Property Parcels
 - ROW Limit
 - Alignment
 - Signal
 - Archaeological Potential
 - No Potential - Disturbed
 - No Potential - Low and Wet
 - Photo Location and Direction

BASE:
Hamilton Ortho
Courtesy of SNC Lavalin
September 2010



10EA045/046
Dec 12, 2011

J.F.
10EA045_op2_s5

 **Archaeological Services Inc.**
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iAS±.to

Figure 33: Hamilton LRT A Line (Option 2 Sheet 4) - Results of Stage 1 Archaeological Assessment

8.0 IMAGES

8.1 Hamilton RT A-Line – With Downtown Option 1 (BRT)



Plate 1: View south-southwest from Barton Street toward the escarpment.



Plate 2: View south-southwest from Cannon Street along RT corridor.



Plate 3: East-southeast view along King Street and north edge of Gore Park. No Potential.



Plate 4: North-northeast view across King at the west end of Gore Park. All disturbed and no potential.



Plate 5: North-northeast view under the T.H. & B. overpass. No potential - all disturbed.



Plate 6: North-northeast view down John St. Disturbed on both sides of road – no potential.





Plate 7: West-northwest view along Charlton Ave. No potential.



Plate 8: North-northeast view down James St S. Disturbed on both sides – no potential.



Plate 9: Northeast view down Mountain Road. Disturbed on both sides – no potential.



Plate 10: West-southwest view of exit from access to Mountain Rd and James St. All disturbed and no potential.



Plate 11: West view along exit towards James Street and West 5th St. All disturbed and no potential.



Plate 12: South-southwest view along study corridor. All disturbed and no potential.





Plate 13: West view along Fennell. Mainly disturbed except as indicated.



Plate 14: South-southwest view along Upper James St. All disturbed – no potential.



Plate 15: View south-southwest along Upper James St. Note commercial development along corridor.



Plate 16: View north-northeast from Aldridge St. along disturbed ROW.



Plate 17: View south across Upper James St. Area has been heavily developed.

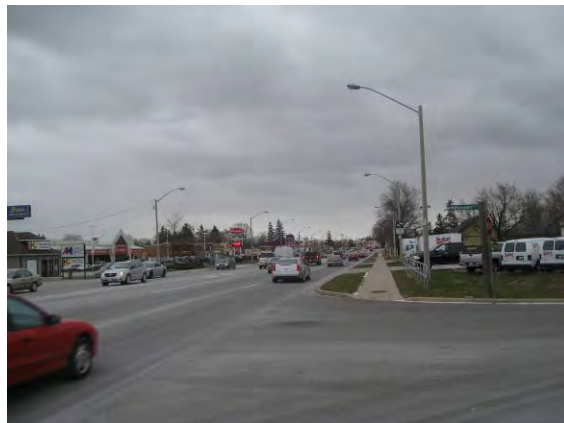


Plate 18: View south-southwest across Blossom Lane along disturbed ROW.





Plate 19: View southwest toward Barton Stone United Church. Archaeological potential exists beyond sidewalk around church.



Plate 20: View southeast across open space with archaeological potential.



Plate 21: View north-northeast toward Rymal Road. Area has been heavily disturbed by commercial development.



Plate 22: View east-southeast toward historic homestead. Surrounding property has archaeological potential.



Plate 23: View south-southwest along disturbed ROW where hydro corridor crosses Upper James St.



Plate 24: View south-southwest across low/wet ground toward 20 Road W. Note raised roadbed.





Plate 25: View southeast toward Stoneholm Farm. Potential exists beyond disturbed ROW lands.



Plate 26: View north-northeast along disturbed ROW. Note utility box on left.



Plate 27: View southeast across Upper James St toward historic homestead.



Plate 28: View south-southeast along disturbed ROW. Note ditching on right.



Plate 29: View north-northeast along raised roadbed.



Plate 30: View south-southwest along disturbed ROW.





Plate 31: View north-northeast across low/wet area adjacent to Willow Valley Golf Course.



Plate 32: View southeast across cemetery at St. Paul's Anglican Church.



Plate 33: North-northeast view along Homestead Dr. towards Upper James St. Disturbed ROW - no potential. Potential in lawns beyond ROW.



Plate 34: North-northeast view along Homestead Dr. Potential in lawns beyond disturbed ROW.



Plate 35: South-southwest view along Homestead Dr. Disturbed ROW and utilities. Potential in lawns beyond disturbed ROW.



Plate 36: South-southeast view across Homestead Dr. Historic house – potential in lawn. Modern development in background – disturbed.





Plate 37: South view down Hoemstead Dr. ROW, new development, and utilities. Disturbed and no potential.



Plate 38: View east-southeast along disturbed ROW. Adjacent property has been previously graded.



Plate 39: View southeast along disturbed ROW. Archaeological potential is present adjacent to ROW.



Plate 40: View east-southeast across entrance road and along disturbed ROW.



Plate 41: View east-southeast along south side of Airport Rd. Archaeological potential is present adjacent to ROW.



8.2 Hamilton RT A-Line – Downtown Option 2 (LRT)



Plate 42: East-southeast view along King St. All disturbed and no potential.



Plate 43: South-southwest view along Wellington. All disturbed and no potential.



Plate 44: East-southeast view along King St on the south side of Wellington Park. Lawn has potential.



Plate 45: Northeast view of St. Patrick's Catholic Church. Potential in lawn surrounding church.



Plate 46: East-southeast view along the south side of parkette. Lawn has potential.



Plate 47: East-southeast view along Stinson. Disturbed on both sides of street. No potential.





Plate 48: West-southwest view along Claremont access. Disturbed on both sides – no potential.



Plate 49: West-southwest view along Claremont access. Raised and disturbed on both sides. No potential.

