## **APPENDIX B.6 Archaeology**

### **Stage 1 Archaeological Assessment**

### Rapid Transit Initiative, City of Hamilton, Ontario

### Submitted to

### **City of Hamilton**

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# ARCHAEOLOGICAL SERVICES INC. ENVIRONMENTAL ASSESSMENT DIVISION

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### **EXECUTIVE SUMMARY**

Archaeological Services Inc. (ASI) was contracted by the City of Hamilton to conduct a Stage 1 Archaeological Assessment for the Rapid Transit Initiative, City of Hamilton, Ontario. This assessment is being conducted to assist with the Transit Project Assessment Process, in anticipation of the implementation of Light Rail Transit. The project extends approximately 16 km from Eastgate Square/Centennial Parkway to University Plaza (B-Line), along the Main/King Street corridor, and along James Street (A-Line) from Main Street north to the Waterfront.

The Stage 1 assessment determined that 20 archaeological sites have been registered within 2 km of the study corridor, two of which are located within 100 m of it. Additionally, a review of the general physiography 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 ASI's background research and consultation with the City of Hamilton's Archaeology Management Plan (provided by Joseph Muller, City of Hamilton, Cultural Heritage Planner, February 4, 2009), the study corridor meets nine of the eleven criteria used for determining archaeological potential:

- Known archaeological sites within 250 m;
- Primary water source within 300 m, or secondary water source within 200 m;
- Pockets of sandy soil in a clay or rocky area;
- Distinctive land formations:
- Associated with food or scarce resource harvest areas;
- Indications of early Euro-Canadian settlement;
- Associated with historic transportation routes;
- Contains property designated under the Ontario Heritage Act; and
- Local knowledge/documentary evidence.

These criteria characterize the study corridor as having both Aboriginal and Euro-Canadian archaeological potential.

The field review of the study corridor determined that the Main, King, and James Street rights-of-way (ROW) have been previously disturbed by typical road construction and modern development. However, there are several areas adjacent to the disturbed ROW that remain undisturbed and contain archaeological potential.

In addition to lands that have remained undisturbed, within the urban context in general, and on land that has been intensively developed and redeveloped between the mid- to late nineteenth century and the present, such as is the case within the study corridor, any archaeological resources that may have survived are likely to take the form of subsurface structural features (e.g., foundations, privies, cisterns, etc.). These areas are noted in Tables 2 to 4 as "Vacant Lot".

Given the essentially continuous use of the majority of the individual properties that make up the study corridor, most archaeological resources of the nineteenth century occupations are likely to have been severely compromised and/or highly mixed, consisting of an accumulation of items that could not be conclusively associated with any particular occupation or activity among the myriad of uses that the corridor has witnessed. The continuous occupation of the individual properties for a variety of purposes likely involved repeated episodes of utility upgrades, renovation, structural alteration, landscaping, etc.



that would have resulted in further destruction or mixing of earlier deposits that may have formed on any surviving original ground surface or occupation level.

These considerations are applicable, in variable degrees along the study corridor, to these vacant lots, which function mostly as parking lots today.

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

- 1. The Main, King, and James Street ROWs do not retain archaeological site potential due to previous disturbances. Additional archaeological assessment is not required within the ROWs, and those portions of the study corridor can be cleared of further archaeological concern;
- 2. A Stage 2 archaeological assessment should be conducted on lands determined to have archaeological potential, if the proposed project is to impact these lands. This work will be done in accordance with the MCL's draft *Standards and Guidelines for Consultant Archaeologists* (MCL 2006), in order to identify any archaeological remains that may be present; and
- 3. If the proposed undertaking is to impact the areas noted as "Vacant Lots" to the point of below-grade excavations, these activities should be subject to further archaeological investigation (i.e. detailed archival research) in order to document any significant archaeological features that may be present.
- 4. If the proposed undertaking is to impact the pipeline at the intersection of Main Street and Ottawa Street by deep trenching, Stage 4 mitigation and/or excavation will be required.



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### **Stage 1 Archaeological Assessment**

### Rapid Transit Initiative, City of Hamilton, Ontario

### 1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by the City of Hamilton to conduct a Stage 1 Archaeological Assessment for the Rapid Transit Initiative, City of Hamilton, Ontario (Figure 1). This assessment is being conducted to assist with the Transit Project Assessment Process, in anticipation of the implementation of Light Rail Transit. The project extends approximately 16 km from Eastgate Square/ Centennial Parkway to University Plaza (B-Line), along the Main/King Street corridor, and along James Street (A-Line) from Main Street north to the Waterfront.

Authorization to carry out the activities necessary for the completion of the Stage 1 assessment was granted to ASI by the City of Hamilton on December 11, 2008.

This report presents the results of the Stage 1 background research and field review, and makes several recommendations.

### 2.0 BACKGROUND RESEARCH

The Stage 1 archaeological assessment of the study corridor was conducted in accordance with the *Ontario Heritage Act* (2005) and the Ontario Ministry of Culture's (MCL) draft *Standards and Guidelines for Consultant Archaeologists* (MCL 2006). A Stage 1 archaeological assessment involves research to describe the known and potential archaeological resources within the vicinity of a study corridor. Such an assessment incorporates a review of previous archaeological research, physiography, and land use history. Background research was completed to identify any archaeological sites in the study corridor and to assess their archaeological potential.

### 2.1 Definitions

For the purposes of this EA, the *Ontario Heritage Act* (OHA) and the *Provincial Policy Statement* (PPS) provide a number of useful definitions that will be applied throughout this report:

- Archaeological resource...[i]ncludes artifacts, archaeological sites, and marine archaeological sites. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with the OHA (MMAH 2005: 28);
- Area of archaeological potential...means areas with the likelihood to contain archaeological
  resources. Criteria for determining archaeological potential are established by the Province, but
  municipal approaches with the same objectives may also be used. Archaeological potential is
  confirmed through archaeological fieldwork undertaken in accordance with the OHA (MMAH
  2005: 28);



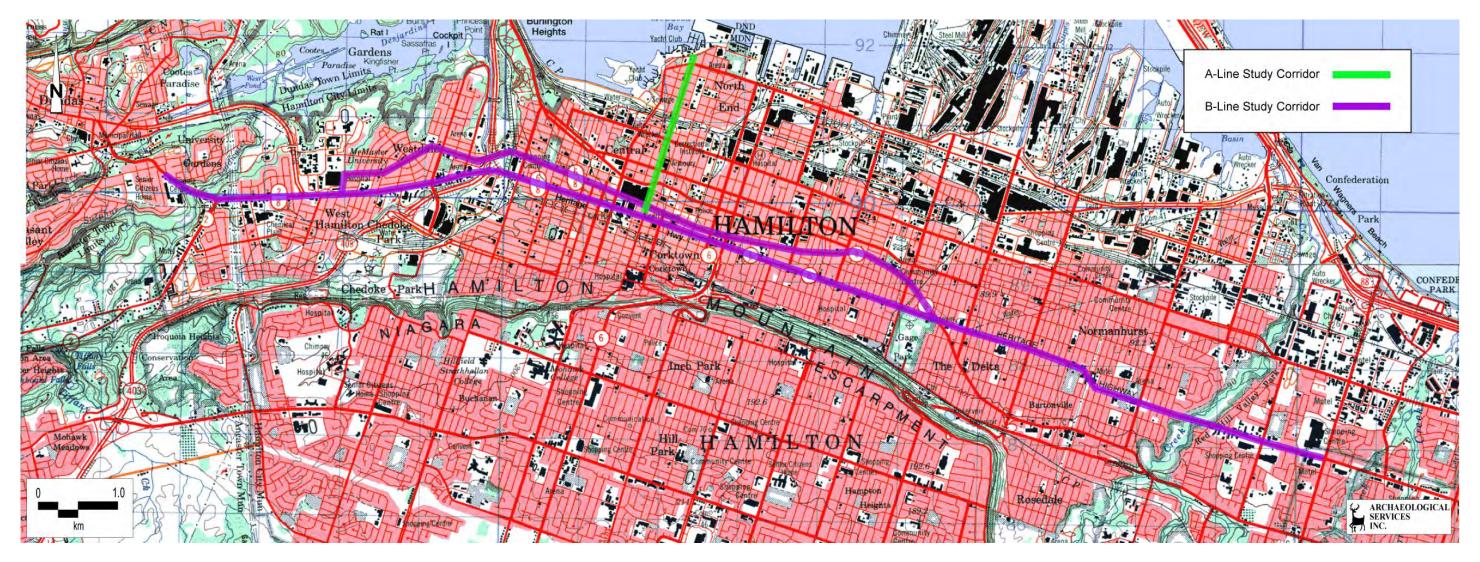


Figure 1: Location of the study corridor [NTS Sheets 30 M/04 (Hamilton-Grimsby) and 30 M/05 (Hamilton-Burlington)].



- Archaeological sites...means any property that contains an artifact or any physical evidence of past human use or activity that is of cultural heritage value or interest...(OHA, O.Reg. 170/04, s.1); and
- Significant...means...in regard to cultural heritage and archaeology, resources that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people. Criteria for determining significance...are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation (MMAH 2005: 36).

### 2.2 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the study corridor, three sources of information were consulted: the site record forms for registered sites housed at the MCL; published and unpublished documentary sources; and the files of ASI.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MCL. 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 AhGw and AhGx.

According to the OASD (email communication, Robert von Bitter, MCL Data Coordinator, January 5, 2009), twenty archaeological sites have been registered within 2 km of the study corridor (Table 1). Three of these sites are located within 100 m of the B-Line study corridor.

Table 1: List of registered sites within a 2 km radius of the study corridor

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AhGw-1	King's Forest Park	Aboriginal – Woodland	Campsite	W. Fox 1961
				ASI 2007
AhGw-2	Pergentile	Aboriginal – Woodland	Village	W. Fox 1962
AhGw-31	Spera	Aboriginal – Archaic	Campsite	W. Fox 1977
AhGw-66	Nash Farm East	Aboriginal – Archaic	Undetermined	R. Michael 1986
AhGw-67	Nash Farm West	Aboriginal – Archaic	Undetermined	R. Michael 1986
AhGw-98	Battlefield Creek	Aboriginal	Lithic Scatter	ASI 1992, 1993
AhGw-101	Stoney Creek	Aboriginal – Woodland	Lithic Scatter	L. Gibbs 1990
	Monument	Euro-Canadian	Undetermined	
AhGw-117	Thomas Kennady 1	Aboriginal	Campsite	MHCI 1996
AhGw-118	Thomas Kennady 2	Aboriginal	Campsite	MHCI 1996
AhGw-119	Thomas Kennady 3	Euro-Canadian	Undetermined	MHCI 1996
AhGw-120	Bertie Gage	Aboriginal	Campsite	MHCI 1996
AhGw-124	Creekbend	Aboriginal	Campsite	ASI 1996
AhGw-130	Spera 2	Aboriginal	Lithic Scatter	ASI 1998, 2001



Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AhGx-2	Campus	Aboriginal – Archaic	Undetermined	D. Stothers 1968
AhGx-28	Frederick Ashbaugh	Euro-Canadian	Kiln	R Michael 1983
	Redware Pot			
AhGx-224	Whitehern	Aboriginal	Undetermined	ASI 1994
		Euro-Canadian	Homestead	
AhGx-278	Ofield Road 1	Aboriginal – Woodland	Campsite	MPA 1991
AhGx-279	Ofield Road 2	Aboriginal	Isolated Find	MPA 1991
AhGx-280	Coldwater Creek	Aboriginal – Woodland	Campsite	MPA 1991
		Euro-Canadian	Undetermined	
AhGx-286	Whitney Avenue	Aboriginal	Campsite	MPA 1991
Unknown	Unknown	Unknown	Unknown	Historic Horizon n.d.
				Archaeoworks n.d.

\* sites in bold are within 100 m of the study corridor

The Frederick Ashbaugh Redware Pot site, AhGx-28, is located on the southeast corner of Newtown Avenue/Arkell Street, just north of Main Street. The site was discovered when a hole for a pool was dug and consisted of a large scatter of redware ceramics. The site provided new evidence for Ontario redware technology in the form of kiln furniture, different from any other thus far recovered. No structural evidence of a kiln or other buildings pre-dating the present structure were found, however, the 1816 tax assessment roll indicted the owner as a potter (Michael 1985).

The Coldwater Creek site, AhGx-280, is located just north of Main Street and west of West Park Avenue, within the hydro ROW. The site contained a diffuse scatter of late 19th to early 20th century artifacts, and approximately 125 chipped lithics, including one Nanticoke triangular projectile point. The site was encountered during an assessment of the hydro corridor (MPA 1991).

The City of Hamilton (personal communication, Joseph Muller, Cultural Heritage Planner, March 4, 2009) has confirmed the presence of an unregistered site located at 398 King Street West. Historic Horizon Inc. conducted the initial Stage 1 assessment of the property, and Archeoworks Inc. conducted the Stage 2-4 assessment. The site encompasses the western half of the property, and the northern half of the site has been mitigated through excavation. Further work is being conducted on the southern half of the site.

The presence of Aboriginal artifacts in almost every Euro-Canadian site that has been investigated in the City of Hamilton indicates that these urban areas, although developed in the 19th and early 20th century, often retain remnants of the former intense Aboriginal occupation of this region.

### 2.3 Physiography and Assessment of Aboriginal Archaeological Potential

The study corridor is situated within the Iroquois Plain physiographic region of southern Ontario (Chapman and Putnam 1984). The Iroquois Plain region is characteristically flat and was formed by lacustrine deposits laid down by the innundation 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 305 km (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).

A portion of the study corridor along King Street (between Queen Street and Dundurn Street) and Main Street (between Locke Street and Bay Street) transgresses a portion of the Iroquois Beach Ridge. This significant rise of land is a remnant glacial feature of Lake Iroquois. The ridge marks the location of the former Lake Iroquois shoreline and was formed approximately 12,000 years ago and constitutes a prominent physiographic feature within the City of Hamilton.

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.

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 MCL's draft Standards and Guidelines for Consultant Archaeologists (2006: Unit 1e 5–7, 10) stipulates that undisturbed land within 300 m of a primary water source (lakeshore, river, large creek, etc.), undisturbed land within 200 m of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 m of an ancient water source (as indicated by remnant beaches, shore cliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological potential. Coldwater Creek, Chedoke Creek, and Red Hill Creek all bisect the B-Line study corridor.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is potential for the recovery of Aboriginal remains within the study corridor.

### 2.4 Euro-Canadian Land Use History

Historically, the study corridors traverse across the Townships of Ancaster, Barton and Saltfleet. Each of the current road ROWs follows original historic thoroughfares that connected the Hamilton settlement with the communities to the west and east.

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.

The Township of Barton was first surveyed by Augustus Jones in 1791. The first settlers in the township were United Empire Loyalists and disbanded troops, mainly men who had served in Butler's Rangers during the American Revolutionary War. The earliest families to settle within the township included those of Land, Ryckman, Horning, Rymal, Terryberry and Markle (Smith 1846:8; Mika 1977:143).



One writer described the Head of the Lake and Burlington Bay in a geographical account of Upper Canada published in the early nineteenth century, but made no particular mention of Barton Township. Settlement was slow up until the time of the War of 1812, perhaps due to the early importance of the nearby town of Dundas. By 1815, it is said that the Township contained just 102 families. By 1823, however, the township contained three sawmills and a gristmill. By 1841, the township population had increased to 1,434, and it contained five saw mills and one grist mill. In 1846, the township was described as "well settled" and under cultivation (Boulton 1805:48-49; Smith 1846:8; Mika 1977:143).

The land within the Township of Ancaster was acquired by the British from the Mississaugas in 1784. The first township survey was undertaken in 1793, and the first legal settlers occupied their land holdings two years later. The township is said to have been named after a town in Lincolnshire, England. Ancaster 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 this township contained both excellent and indifferent soils. By the 1840s, the township was noted for its fine farms (Boulton 1805:79; Smith 1846:6; Armstrong 1985:141; Rayburn 1997:11).

The land within the Township of Saltfleet 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 in the same year. The township is said to have been named after a place in Lincolnshire, England. Saltfleet was initially settled by disbanded soldiers, mainly Butler's Rangers, and other Loyalists following the end of the American Revolutionary War. In 1805, Boulton described Saltfleet as "a township claiming no particular observation." By the 1840s, the township was noted for its excellent land and well-cultivated farms (Boulton 1805:87; Smith 1846:163; Armstrong 1985:147; Rayburn 1997:305).

The City of Hamilton was surveyed and established by 1820 through the combined efforts of George Hamilton, James Durand and Nathaniel Hughson. The first court house and jail, a log-and-frame building, was constructed in 1817, which was replaced with a stone building in 1827/28. The settlement became a port in 1827, at which point Hamilton became the commercial centre of the District of Gore, in addition to serving as its administrative centre (Gentilcore 1987: 101-3). Hamilton was incorporated as a City in 1846.

### 2.5 Assessment of Euro-Canadian Archaeological Potential

The 1875 *Illustrated Historical Atlas of the County of Wentworth, Ontario* was reviewed to determine the potential for the presence of historical archaeological remains within the study corridor during the nineteenth and early twentieth centuries (Figures 2).

As mentioned above, the study corridors traverse across the Townships of Ancaster, Barton and Saltfleet.

From west to east, the Main Street corridor travels through Lots 54 to 61, Concession I, in the Township of Ancaster; then into the Township of Barton (and the City of Hamilton) through Lot 21 in Concession III, and Lots 20 to 1 along the road allowance between Concession II and III. Finally, the



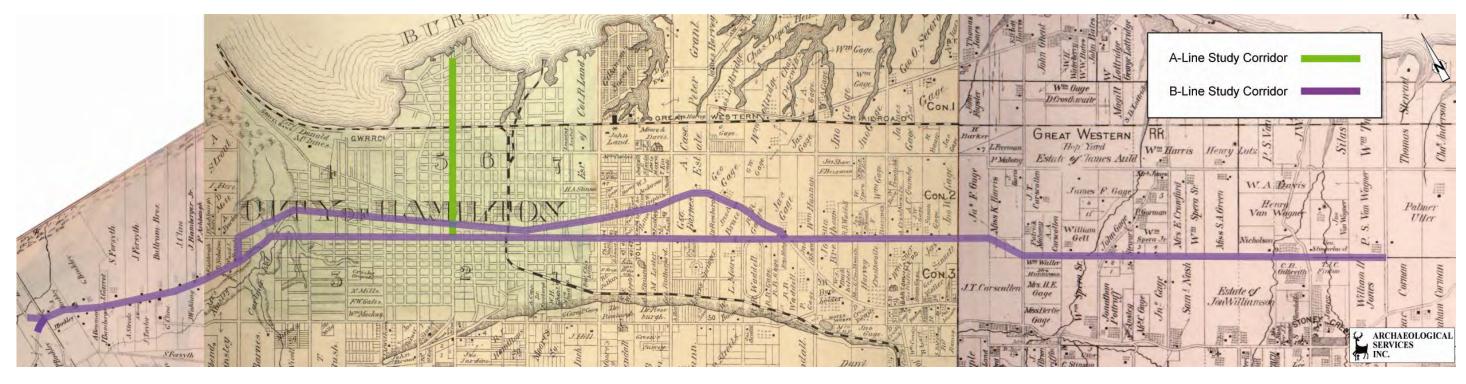


Figure 2: The study corridor superimposed on a map of the Townships of Ancaster, Barton and Saltfleet, in the 1875 Illustrated historical atlas of the county of Wentworth, Ontario



Main Street corridor continues into the Township of Saltfleet along the road allowance between Concessions II and III across Lots 32 to 23.

From west to east, the King Street corridor extends northerly along the road allowance between Lots 20 and 21 in Concession 3, Township of Barton, from Main Street, then easterly through Lots 20 to Lot 5 in Concession 2, at which point it intersects Main Street and continues southeasterly and out of the study corridor.

From south to north, the James Street study corridor begins at the intersection of James Street and Main Street in the City of Hamilton and travels along the road allowance between Lots 14 and 15 towards Burlington Bay, through Concessions 1 and 2.

The atlas depicts several property owners/residents within the study corridor. Details of property owners/residents and historic features within or adjacent to the study corridor are listed, where possible, in Appendix A. It should be noted, however, that not all features of interest were 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 atlas.

The Cultural Heritage Assessment Report for the Rapid Transit Initiative further documents the land use development patterns along the study corridor using historic mapping from 1875, 1876, 1893, 1898 and 1911 (ASI 2009).

For the Euro-Canadian period, the majority of early nineteenth century homesteads (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 2.3, 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 homesteads and businesses. Accordingly, undisturbed lands within 100 m of an early settlement road, Main, King, and James Streets, are also considered to have potential for the presence of Euro-Canadian archaeological sites.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is potential for the recovery of Euro-Canadian cultural material within the study corridor.

### 3.0 DETERMINATION OF ARCHAEOLOGICAL POTENTIAL

The MCL's draft *Standards and Guidelines for Consultant Archaeologists* cites eleven criteria that indicate where archaeological resources are most likely to be found (2006: Unit 1C 10). Archaeological potential is confirmed when one or more features of archaeological potential are present.

Based on ASI's background research and consultation with the City of Hamilton's Archaeology Management Plan (provided by Joseph Muller, City of Hamilton, Cultural Heritage Planner, February 4, 2009), the study corridor meets nine of the eleven criteria used for determining archaeological potential:



- Known archaeological sites within 250 m;
- Primary water source within 300 m, or secondary water source within 200 m;
- Pockets of sandy soil in a clay or rocky area;
- Distinctive land formations;
- Associated with food or scarce resource harvest areas;
- Indications of early Euro-Canadian settlement;
- Associated with historic transportation routes;
- Contains property designated under the Ontario Heritage Act; and
- Local knowledge/documentary evidence.

These criteria characterize the study corridor as having both Aboriginal and Euro-Canadian archaeological potential.

### 4.0 FIELD REVIEW

A field review of the study corridor was conducted by Peter Carruthers (P163), ASI, on January 14 and January 21, 2009, in order to confirm the assessment of archaeological site potential and to determine the degree to which development and landscape alterations may have affected that potential. Weather conditions during the January 14 field assessment were sunny and -14°C, and during the January 21 field assessment were overcast and -1°C. Field observations have been compiled onto maps of the study corridor (Appendix B).

ROWs 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 centerline of the traveled lanes. The disturbed ROW includes the traveled 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 centerline. Subsurface disturbance within these lands may be considered extreme and pervasive, negating any archaeological potential for such lands.

ROW construction disturbance may be found to extend beyond the typical disturbed ROW area. Such ROW disturbances generally include 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.

Within the study corridor, Main Street Starts at the border of Dundas, Ancaster and Hamilton at Wilson and Osler Streets as a two-way street and switches over to a one-way street (Eastbound) at Paradise Road up to the Delta where it once again switches over to a two-way street into Stoney Creek. King Street starts at McMaster Medical Centre as a two-way street and passes through Westdale and then at Paradise Road South, King Street switches over to a one-way street (Westbound) right through the city's core up to the Delta, where King and Main Streets intersect. Main Street switches over to a two-way street at the Queenston Road traffic circle; King Street continues from the Delta into Stoney Creek and ends at Highway 8. Finally, James Street is an arterial road running north-south. Within the study corridor, it extends north to the city's waterfront.



The field review of the study corridor proceeded from west to east, starting at University Plaza.

#### 4.1 **Main Street Corridor**

Along Main Street, the ROW has been heavily disturbed by typical road construction, exhibiting grading, utility installation, and landscaping, and by residential and commercial developments (Plates 2, 4-5, 9, 11-12, 14-15, 17, 19, 22-25, 30, 32, 34, 36). Due to the extent of previous disturbance, the Main Street ROW does not exhibit archaeological site potential, and no further archaeological assessment is required within the disturbed ROW (Figures 4-1 to 4-25: non-highlighted areas).

Beyond the Main Street disturbed ROW, a few areas have exhibited minimal disturbances. Areas with archaeological potential are summarized in Table 2.

Table 2: Areas Containing Archaeological Potential along Main Street				
Location	Plate Reference	Figure Reference	Rational	
White Chapel cemetery, along main frontage	1, 3	4-1	Within 300 m of a primary water source (Sulpher/Coldwater Creek) and 100 m of an early settlement road (Main Street)	
Northwest corner of Main Street and Main Street West	6	4-2	Within 300 m of a primary water source (Sulpher/Coldwater Creek) and 100 m of an early settlement road (Main Street)	
North and south of Osler Drive within the valley lands	6	4-2, 4-3	Within 300 m of a primary water source (Sulpher/Coldwater Creek) and 100 m of an early settlement road (Main Street)	
Across hydro corridor on both sides of Main Street	7, 8	4-2, 4-3	Within 100 m of an early settlement road (Main Street)	
North side of Main Street between West Park Avenue and Westbourne Road	N/A	4-3	Within 100 m of an early settlement road (Main Street)	
Southwest corner of Main Street and Riffle Range Road	N/A	4-3	Within 100 m of an early settlement road (Main Street)	
South side of Main Street, east of Leland Street (Canadian Martyrs Catholic Elementary School grounds)	10	4-5	Within 100 m of an early settlement road (Main Street)	
North side of Main Street, west of Dalewood Avenue	N/A	4-6	Within 100 m of an early settlement road (Main Street)	
North side of Main Street, west of Haddon	N/A	4-6	Within 100 m of an early settlement road (Main Street)	
South side of Main Street, between Cline Avenue South and Dow Avenue	N/A	4-6	Within 300 m of a primary water source (Chedoke Creek) and 100 m of an early settlement road (Main Street)	



N. 1	12	1.0	TW::1: 200 C :
Northwest corner of Main Street and Paradise Road south	13	4-8	Within 300 m of a primary water source (Chedoke Creek) and 100 m of an early settlement
			road (Main Street/Paradise Rd)
Southeast corner of Main Street	16	4-10	Within 100 m of an early
and Locke Street South within			settlement road (Main/Locke
RBC parking lot (Vacant Lot)			Strees)
North side of Main Street,	16	4-10	Within 100 m of an early
between Locke Street and Pearl			settlement road (Main Street)
Street (Vacant Lot)			(
Southeast corner of Main Street	18	4-11	Within 100 m of an early
and Caroline Street (Vacant Lot)			settlement road (Main Street)
South side of Main Street,	20	4-12	Within 100 m of an early
between Hughson Street and			settlement road (Main/Hughson/
John Street			John Streets)
North and south side of Main	N/A	4-12, 4-13	Within 100 m of an early
Street, between John Street and		, -	settlement road (Main Street)
Catherine Street (Vacant Lot)			,
Northwest corner of Main Street	21	4-13	Within 100 m of an early
and Ferguson Avenue			settlement road (Main Street/
			Ferguson Avenue)
			,
North side of Main Street,	N/A	4-14	Within 100 m of an early
between Victoria Avenue and			settlement road (Main Street/
East Avenue – St. Patrick's			Victoria/East Avenue)
Church			,
North side of Main Street,	N/A	4-15	Within 100 m of an early
between Tisdale Street and Grant			settlement road (Main Street)
Street (Vacant Lot)			` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `
Northwest corner of Main Street	N/A	4-16	Within 100 m of an early
and Burris Street (Vacant Lot)			settlement road (Main Street)
North side of Main Street,	26	4-17	Within 100 m of an early
between Carrick Avenue and			settlement road (Main Street)
Spadina Avenue			
North side of Main Street,	26	4-17	Within 100 m of an early
between Spadina Avenue and			settlement road (Main Street)
Melrose Avenue			
Southeast corner of Main Street	N/A	4-17	Within 100 m of an early
and Albert Street			settlement road (Main Street)
Southwest corner of Main Street	N/A	4-17	Within 100 m of an early
and Balsam Avenue (Vacant Lot)			settlement road (Main Street)
Southwest corner of Main Street	27	4-18	Within 100 m of an early
and Gage Avenue			settlement road (Main Street/
			Gage Avenue)
South side of Main Street,	28	4-18	Within 100 m of an early
between Gage Avenue and King			settlement road (Main/King
Street (See ASI 2008a, 2008b)			Streets/Gage Avenue)
Southeast corner of Main Street	N/A	4-19	Within 100 m of an early
and King Street			settlement road (Main/King
			Streets)



North side of Main Street, between Balmoral Avenue and Ottawa Street (Memorial High School)	29	4-19	Within 100 m of an early settlement road (Main Street/Balmoral Avenue)
Southeast corner of Main Street and Ottawa Street (Vacant Lot)	31	4-19	Within 100 m of an early settlement road (Main Street)
Northwest corner of Main Street and Edgemont (Vacant Lot)	N/A	4-19	Within 100 m of an early settlement road (Main Street)
South side of Main Street, between Graham Avenue and Wexford Avenue (Delta Collegiate)	33	4-20	Within 100 m of an early settlement road (Main Street)
South side of Main Street, west of Berry Avenue (Montgomery Park)	35	4-21, 4-22	Within 100 m of an early settlement road (Main Street)
Southeast corner of Queenston Road and Craigroyston Road	N/A	4-21, 4-22	Within 100 m of an early settlement road (Main Street)
Both sides of Queenston Road, between Isabel Avenue and Parkdale Avenue	37, 38	4-22	Within 100 m of an early settlement road (Queenston Road)
Both sides of Queenston Road, within the Red Hill Creek valley	39, 40	4-22	Within 300 m of a primary water source (Red Hill Creek) and 100 m of an early settlement road (Queenston Road)

The 48 areas listed in Table 2 total 76,457 m<sup>2</sup> in size and have remained relatively undisturbed, and they exhibit archaeological site potential. Should the proposed project encroach upon undisturbed land with archaeological potential beyond the disturbed ROW, a Stage 2 assessment should be conducted (Figures 4-1 to 4-25: areas marked in green).

The majority of land on the south side of Main Street, between Gage Avenue and King Street has been previously subject to a Stage 1 and 2 archaeological assessment (ASI 2008a, 2008b). If the proposed undertaking is to impact land within Gage Park, east of the Children's Museum, a Stage 2 assessment should be conducted. This portion of the park was outside the Phase 1 Redevelopment area and was not subject to a previous archaeological assessment.

In addition to the 48 areas listed in Table 2, one area of additional archaeological interest should be noted (personal communication, Peter Topalovic, City of Hamilton, February 27, 2009). A pipeline, dating to ca. 1858-1859, extends from the pump house at Woodward Avenue to the Main Street and Ottawa Street intersection (Plate 30, Figure 4-19). As an archaeological feature, it comprises an 18-inch diameter cast-iron water pipe at a depth of approximately 8 feet below the surface that passes through the ROW at Ottawa Street. The pipeline has also been captured as a cultural heritage landscape feature (ASI 2009). Should the proposed project impact the location of this archaeological resource by deep trenching, further archaeological investigations will be required.



### 4.2 King Street Corridor

The King Street ROW has been heavily disturbed by typical road construction, exhibiting grading, utility installation, and landscaping, and by residential and commercial developments (Plates 42-45, 53, 56, 67). Due to the extent of previous disturbance, the King Street ROW does not exhibit archaeological site potential, and no further archaeological assessment is required within the disturbed ROW (Figures 4-1 to 4-25: non-highlighted areas).

Beyond the King Street disturbed ROW, a few areas have exhibited minimal disturbances. Areas with archaeological potential are summarized in Table 3.

Table 3: Areas Containing Archaeological Potential along King Street

Table 3: Areas Containing Archaeological Potential along King Street				
Location	Plate Reference	Figure Reference	Rational	
West side of Paradise Road, between Main Street and King Street	41	4-8	Within 300 m of a primary water source (Chedoke Creek) and 100 m of an early settlement road (Main Street/Paradise Rd)	
Victoria Park	46	4-10	Within 100 m of an early settlement road (King/Locke Streets)	
North and south side of King Street, between Locke Street and Pearl Street (Vacant Lots)	N/A	4-10	Within 100 m of an early settlement road (King/Locke Streets)	
North side of King Street, between Pearl Street and Ray Street	47	4-10	Within 100 m of an early settlement road (King/Pearl/Ray Streets)	
South side of King, between Pearl Street and Ray Street	48	4-10	Within 100 m of an early settlement road (King Street)	
Northeast corner of King Street and Ray Street	N/A	4-10	Within 100 m of an early settlement road (King/Ray Streets)	
Scottish Rite Club	49	4-11	Early Euro-Canadian building and within 100 m of an early settlement road (King/Ray Streets)	
Northwest corner of King Street and Queen Street	N/A	4-11	Within 100 m of an early settlement road (King/Queen Streets)	
All Saints Anglican church	50	4-11	Early Euro-Canadian building and within 100 m of an early settlement road (King/Queen Streets).	
Southeast corner of King Street and Hess Street (Vacant Lot)	51	4-11	Within 100 m of an early settlement road (King/Hess Streets)	
North side of King Street, between Caroline Street and Bay Street (Vacant Lot)	52	4-11	Within 100 m of an early settlement road (King Street)	
South side of King Street, between	52	4-11	Within 100 m of an early	



Caroline Street and Bay Street (2 Vacant Lots)			settlement road (King Street)
Southeast corner of King Street and Bay Street (Vacant Lot)	N/A	4-11	Within 100 m of an early settlement road (King/Bay Streets)
Gore Park	54	4-12	Within 100 m of an early settlement road (King/Bay Streets)
Southwest corner of King Street and Catharine Street (Vacant Lot)	54	4-13	Within 100 m of an early settlement road (King/Catharine Streets)
South side of King Street, between Mary Street and Walnut Street (Vacant Lot)	55	4-13	Within 100 m of an early settlement road (King Street)
Southwest corner of King Street and Wellington Street (Vacant Lot)	N/A	4-13	Within 100 m of an early settlement road (King/ Wellington Streets)
North side of King Street between Wellington Street and West Ave	57	4-14	Within 100 m of an early settlement road (King/ Wellington Streets)
St. Patrick's Church	58	4-14	Within 100 m of an early settlement road (King Street/ Victoria/East Avenue)
Southeast corner of King Street and Emerald Street (Vacant Lot)	59	4-14	Within 100 m of an early settlement road (King/Emerald Streets)
North side of King Street, between Tisdale Street and Steven Street (Vacant Lot)	60	4-14	Within 100 m of an early settlement road (King Street)
Northeast corner of King Street and Wentworth Street (Vacant Lot)	61	4-15	Within 100 m of an early settlement road (King Street)
North side of King Street between Wentworth Street and Sanford Avenue	62	4-15	Within 100 m of an early settlement road (King/Wentworth Streets)
Southwest corner of King Street and Sanford Avenue (Vacant Lot)	63	4-15	Within 100 m of an early settlement road (King/ Wentworth Streets)
Southeast corner of King Street and Sanford Avenue (Vacant Lot)	63	4-15	Within 100 m of an early settlement road (King Street)
South side of King Street, between Fairleigh Avenue and Holton Avenue (Vacant Lot)	64	4-16	Within 100 m of an early settlement road (King Street)
Northeast corner of King Street and Sherman Avenue (Vacant Lot)	N/A	4-16	Within 100 m of an early settlement road (King Street)
Northeast corner of King Street and Garfield Avenue (Vacant Lot)	65	4-16, 4-17	Within 100 m of an early settlement road (King Street)



Northeast corner of King Street and Melrose Avenue, within the recreational complex	66	4-17	Within 100 m of an early settlement road (King Street)
Southwest corner of King Street and Dunsmure Road	68	4-18	Within 100 m of an early settlement road (King Street)
Southeast corner of King Street and Hilda Avenue	N/A	4-18	Within 100 m of an early settlement road (King Street)
Northwest corner of King Street and Belmont Avenue (Vacant Lot)	N/A	4-19	Within 100 m of an early settlement road (King Street)
Northeast corner of King Street and Belmont Avenue (Vacant Lot)	69	4-19	Within 100 m of an early settlement road (King Street)

The 35 areas listed in Table 3 total 33,533 m<sup>2</sup>in size and have remained relatively undisturbed, and they exhibit archaeological site potential. Should the proposed project encroach upon undisturbed land with archaeological potential beyond the disturbed ROW, a Stage 2 assessment should be conducted (Figures 4-1 to 4-25: areas marked in green).

### 4.3 James Street Corridor

The James Street ROW has been heavily disturbed by typical road construction, exhibiting grading, utility installation, and landscaping, and by residential and commercial developments (Plats 70-71, 75-77). Due to the extent of previous disturbance, the James Street ROW does not exhibit archaeological site potential, and no further archaeological assessment is required within the disturbed ROW (Figures 4-26 to 4-27: non-highlighted areas).

Beyond the James Street disturbed ROW, a few areas have exhibited minimal disturbances. Areas with archaeological potential are summarized in Table 4.

Table 4: Areas Containing Archaeological Potential along James Street

Location Plate Reference Figure Reference Rational				
Southwest corner of James	N/A	4-26	Within 300 m of a primary	
Street and Burlington Street			water source (Burlington Bay)	
_			and 100 m of an early settlement	
			road (James/ Burlington Streets)	
Northwest corner of James	N/A	4-26	Within 100 m of an early	
Street and Picton Street			settlement road (James/Picton	
			Streets)	
			,	
Southwest corner of James	74	4-26, 4-27	Within 100 m of an early	
Street and Ferrie Street		·	settlement road (James/Ferrie	
			Streets)	
Southwest corner of James	73	4-27	Within 100 m of an early	
Street and Strachan Street			settlement road (James/	
(Vacant Lot)			Strachan Streets)	
Southeast corner of James	N/A	4-27	Within 100 m of an early	
Street and Strachan Street			settlement road (James/	
(Vacant Lot)			Strachan Streets)	



Northeast corner of James	72	4-27	Within 100 m of an early
Street and Murray Street			settlement road (James/ Murray
(Vacant Lot)			Streets)

The six areas listed in Table 4 total 10,014 m<sup>2</sup> in size and have remained relatively undisturbed, and they exhibit archaeological site potential. Should the proposed project encroach upon undisturbed land with archaeological potential beyond the disturbed ROW, a Stage 2 assessment should be conducted (Figures 4-26 to 4-27: areas marked in green).

### 5.0 CONCLUSIONS AND RECOMMENDATIONS

The Stage 1 Archaeological Assessment is being conducted as part the City of Hamilton's Rapid Transit Initiative. The assessment determined that 20 archaeological sites have been registered within 2 km of the study corridor, two of which are located within 100 m of it. Additionally, a review of the general physiography 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.

The field review of the study corridor determined that the Main, King, and James Street ROWs have been previously disturbed by typical road construction and modern development. However, there are several areas adjacent to the disturbed ROW that remain undisturbed and contain archaeological potential.

In addition to lands that have remained undisturbed, within the urban context in general, and on land that has been intensively developed and redeveloped between the mid- to late nineteenth century and the present, such as is the case with the study corridor, any archaeological resources that may have survived are likely to take the form of subsurface structural features (e.g., foundations, privies, cisterns, etc.). These areas have been noted in Tables 2 to 4 as "Vacant Lots".

Given the essentially continuous use of the majority of the individual properties that make up the study corridor, most archaeological resources of the nineteenth century occupations are likely to have been severely compromised and/or highly mixed, consisting of an accumulation of items that could not be conclusively associated with any particular occupation or activity among the myriad of uses that the corridor has witnessed. The continuous occupation of the individual properties for a variety of purposes likely involved repeated episodes of utility upgrades, renovation, structural alteration, landscaping, etc. that would have resulted in further destruction or mixing of earlier deposits that may have formed on any surviving original ground surface or occupation level.

These considerations are applicable, in variable degrees along the study corridor, to these vacant lots, which function mostly as parking lots today.

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

1. The Main, King, and James Street ROWs do not retain archaeological site potential due to previous disturbances (Figure 4-1 to 4-27: non-highlighted areas). Additional archaeological assessment is not required within the ROWs, and those portions of the study corridor can be cleared of further archaeological concern;



- 2. A Stage 2 archaeological assessment should be conducted on lands determined to have archaeological potential (Figure 4-1 to 4-27: areas marked in green), if the proposed project is to impact these lands. This work will be done in accordance with the MCL's draft *Standards and Guidelines for Consultant Archaeologists* (MCL 2006), in order to identify any archaeological remains that may be present;
- 3. If the proposed undertaking is to impact the areas noted as "Vacant Lots" to the point of below-grade excavations, these activities should be subject to further archaeological investigation (i.e. detailed archival research) in order to document any significant archaeological features that may be present (Figure 4-1 to 4-27: areas marked in green);
- 4. If the proposed undertaking is to impact the archaeological feature (original pipeline ca. 1858-1859) at the intersection of Main Street and Ottawa Street by deep trenching (Figure 4-19: area marked in green), Stage 4 monitoring and/or excavation will be required.

The following Ministry of Culture conditions also apply:

- This report is filed with the Minister of Culture in compliance with sec. 65 (1) of the Ontario Heritage Act. The ministry reviews reports to ensure that the licensee has met the terms and conditions of the licence and archaeological resources have been identified and documented according to the standards and guidelines set by the ministry, ensuring the conservation, protection and preservation of the heritage of Ontario. It is recommended that development not proceed before receiving confirmation that the Ministry of Culture has entered the report into the provincial register of reports;
- Should previously unknown or unassessed deeply buried archaeological resources be uncovered during development, 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 archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the Ontario Heritage Act; and
- Any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Government Services.

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

### 6.0 REFERENCES CITED

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### 7.0 PHOTOGRAPHY

### 7.1 Main St Corridor



**Plate 1:** View to north-northeast along Main St. W in front of White Chapel cemetery. Potential exists beyond fence, within cemetery limits.



Plate 3: View to southwest from Whitney Ave. along
Main St. W past White Chapel cemetery.
Potential exists beyond fence, within cemetery.



**Plate 5:** View to north-northeast along Main St. W. Both sides have been disturbed by residential development.



**Plate 2:** View to north across Main St. W. Area has been previously disturbed by residential development.



**Plate 4:** View to north-northeast along Main St. W ROW. Area has been previously disturbed by commercial development.



**Plate 6:** View to west along Main St. into valley lands along Osler Dr. Potential exists around trees in distance and within valley.





**Plate 7:** View to northeast across Main St and along hydro corridor. Potential exists beyond sidewalk.



**Plate 9:** View to west along Main St. ROW. Area has been previously disturbed by commercial development.



Plate 11: View to east along Main St. across access to Highway 403. Area has been previously disturbed and has no potential.



**Plate 8**: View to east along Main St and along hydro corridor. Potential exists beyond sidewalk.



Plate 10: View to southeast along Main St. across
Leland St. ROW has been previously disturbed,
but potential exists beyond fence within school
grounds.



Plate 12: View to east along Main St. across Longwood Rd. ROW and lands beyond ROW have been significantly altered and have no potential.





Plate 13: View to southeast along Paradise Rd. ROW. Potential exists within school grounds.



Plate 14: View to east-northeast along Main St. Area has been previously disturbed and has no potential.



Plate 15: View to east-northeast along Main St. across Dundurn St. Area has been previously disturbed and has no potential.



Plate 16: View to east-northeast along Main St. toward Locke St. Potential exists in parking lot behind RBC and vacant lot on left in distance.



Plate 17: View to east-southeast along Main St. toward Queen St. Area has been previously disturbed and has no potential.



Plate 18: View to east-southeast approaching Caroline St. Area has been previously disturbed and has no potential.





Plate 19: View to east-southeast approaching McNab St. Both sides of Main St. have been previously disturbed.



Plate 21: View to east-southeast along Main St. across Walnut St. Potential exists in small lot on left beyond green building.



Plate 23: View to east-southeast approaching
Wellington St. Area has been disturbed by residential development.

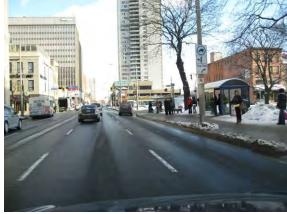


Plate 20: View to east-southeast along Main St. toward John St. Parkette on right contains archaeological potential.



Plate 22: View to east-southeast across Wellington St. Area has been disturbed by commercial development.



Plate 24: View to northeast at St. Gales United Church.
Landscape has been previously altered and has no potential.





Plate 25: View to east-southeast approaching Sherman Ave. Area has been disturbed by residential and commercial development.



Plate 27: View to west-southwest across Gage Ave.

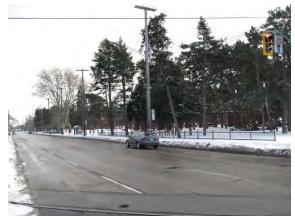
Potential exists in parking lot beside fish and chips restaurant.



Plate 29: View to west-northwest across Ottawa St. toward Memorial High School. Potential exists beyond disturbed ROW.



Plate 26: View to east-southeast across Springer Ave.
Potential exists on front lawns on left.

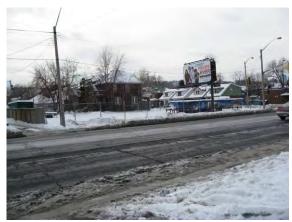


**Plate 28:** View to southeast toward Gage Park. Majority of land was previously assessed (ASI 2008b).



Plate 30: View to west across Main/Ottawa St. intersection. South side of Main St. has been previously disturbed by commercial and residential development.





**Plate 31:** View to southwest across Main St. at vacant lot with potential adjacent to Ottawa St.



**Plate 32:** View to west-northwest across Wexford Ave. at disturbed lands on north side of Main St.



**Plate 33:** View to southwest across Main St. Potential exists along front of Delta Collegiate.



Plate 34: View to west-northwest along Main St. ROW. Area has been previously disturbed by commercial development.



Plate 35: View to south-southwest across Main St. along Berry Ave. Potential exists within Montgomery Park



Plate 36: View to west-northwest through roundabout and along Main St. Area has been previously disturbed by residential and commercial development.





Plate 37: View to west-northwest along Queenston Rd. ROW. Potential exists beyond ROW in park.



Plate 39: View to west-northwest across Red Hill Valley. Areas of potential are present in far distance.



Plate 38: View to west across Main St. Potential exists along front lawn of church.



Plate 40: View to southwest across Queenston Rd. at Red Hill Valley. Areas of potential are present within trees in distance.

### 7.2 King St Corridor



**Plate 41:** View to north along Paradise Rd. Potential exists within school grounds.



Plate 42: View to south along Paradise Rd across King St. Landscape has been altered by previous construction.





Plate 43: View to east-southeast along King St. ROW.

Area has been previously altered by commercial development.



Plate 45: View to west-northwest across Dundurn St. Both sides have been disturbed by commercial development.



Plate 47: View to west from Ray St. into vacant property. Potential exists on lands that have not been graded.



Plate 44: View to east-southeast from Macklin St. Area has been previously altered by residential and commercial development.



Plate 46: View to northwest across Locke St into Victoria Park. Potential exists within park, beyond sidewalk.



Plate 48: View to southwest from Ray St. across King St. toward vacant lot with potential on south side of King St.





**Plate 49:** View to south at Scotish Rite Masonic Temple. Potential exists beyond fence.



Plate 51: View to southeast approaching Hess St. Parking lot in distance has potential.



Plate 53: View to west-southwest along King St. Area has been disturbed by commercial development.



Plate 50: View to southwest from Hess St. Land surrounding All Saints Anglican Church on left in far distance has potential.



Plate 52: View to west-southwest across Bay St. toward parking lot with potential.



Plate 54: View to west-southwest approaching Catherine St. Parking lot beside Royal Connaught has potential, as does Gore Park in distance.





Plate 55: View to south toward empty lot with potential.



**Plate 57:** View to west along King St. ROW. Potential exists in park on north side of King St.



Plate 59: View to west-southwest across Tisdale Ave.
Vacant lots in distance on left have potential.



Plate 56: View to west-northwest along King. St across Ferguson Ave. showing 19<sup>th</sup> century commercial core. Area has no archaeological potential.



**Plate 58:** View to southwest toward St. Patrick's church. Potential exists all around building.



**Plate 60:** View to west along King St. ROW. Vacant lot on right has potential.





Plate 61: View to west-southwest toward commercial development. Parking lot on corner of Wentworth St has potential.





Plate 63: View to west-southwest along King St. ROW. Used car lot on south side has potential.



Plate 64: View to west-southwest from Holton Ave. Vacant lot on south side has potential.



Plate 65: View to west-southwest from Fairholt Rd. Vacant lot in distance on north side has potential.



Plate 66: View to west-northwest along King St. Potential exists throughout recreation complex to north.



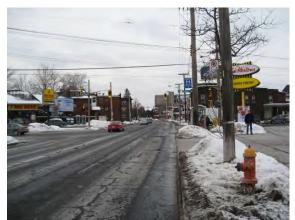


Plate 67: View to northwest from Fairview Ave.

Landscape has been altered by development.



Plate 68: View to west along King St. Triangular parkette on left in distance has potential.



**Plate 69:** View to southeast from Belmont Ave. across parking lot with archaeological potential.

### 7.3 James St Corridor



Plate 70: View to south-southwest along approaching Cannon St. Landscape has been altered by commercial development.



Plate 71: View to south-southwest approaching Barton St. Area is known as Barton Village and has no potential.





Plate 72: View to south-southeast at park in front of CNR station. Area has potential for archaeological resources.



**Plate 74:** View to south-southwest across Ferries t. Potential exists beyond sidewalk on right.



**Plate 76:** View to south across Burlington St. Area has been disturbed by commercial development.



Plate 73: View to south-southwest across Strachan St. Potential exists on either side of ROW, north of railway.



Plate 75: View to south-southwest along James St. Area has been previously disturbed by residential development.



Plate 77: View to southwest along James St. at apartment complex. Area has been previously disturbed and has no potential.



## **APPENDIX A: Summary of Historic Property Owners**



Table 5: Summary of Property Owners along the Main Street corridor

Township	Concession	Lot	Property Owners along the Owner	Illustrated Feature
Ancaster	I	54	P. Binkley	Inustracea reactive
Alleaster	1	34	H. Binkley	
		55	J. Binkley	Homestead
		33	A. Binkley	Homestead, orchard
		56	A. Bowman	3 Homesteads
		30		
		57	G. Binkley J. Bamberger	Schoolhouse, homestead, orchard Homestead, orchard
		37	J. Garret	Homestead, orchard
			S. Forsyth	Homestead, orchard
		58	A. Strode	Homestead Homestead
		38		Homestead, orchard
		50	J. Forsyth	Homestead, orcnard Homestead
		59	A. Morrison	
			J. Taylor	Homestead
		(0	Buttrum Brothers	Homestead, orchard
		60	G. Cline	Homestead, orchard
		(1	J. Cline	Homestead, orchard
		61	J. Wahling	Homestead
			J. Bamburger Jr.	Homestead, orchard
D /	111	2.1	F. Ashbaugh	Homestead, orchard
Barton	III	21	Mrs. Ainsley	TT
			F. Ashbaugh	Homestead
			D. Nicholson	TT 1
	***	20	W. Hancock	Homestead
	III	20	Cartmer Estates	
	III	10	Thomas Nottle	
			D. Lamont	
			A Harper	
	***	1.0	F. Beer	
	II	10	C. Magan	
			A. Harper	
			T. Lawry	
	***		J. Bull	m 11
	III	9	A. Skinner	Toll
			M. Lester	
	TT	0	George Rutherford	
	II	9	W. Mille	II 1
			W. Holton	Homestead
			J. Field	Homestead
			Thomas Beasley	Homestead
	111	0	D. Smith	Homestead
	III	8	J. Eastwood	
	17	0	J. Murton	TT 4 1
	II	8	George Barnes	Homestead
	III	7	L. Moore	Homestead, orchard
	II	7	Dr. John Roseburgh	
	117		John A. Bruce	
	III	6	R. R. Waddell	
			R. R. Gage	Homestead
	II	6	R. R. Gage	



	III	5	R. R. Waddell	Boys Homes, Homestead, orchard
	111		James Shaw	Boys fromes, fromestead, oremard
	II	5	James Gage	2 homesteads
			William Hannon	
	III	4	Joshua Brethour	Homestead
	II	4	Joshua Brethour	
			R. R. Waddell	
	III	3	Mrs. G. Crosthwaite	
			Harvey Crosthwaite	
	II	3	James Shaw	Homestead, orchard
			William Reynard	Homestead
			F. Beerman	Homestead, orchard
	III	2	William Syer	
	II	2	A. Crosthwaite	
			A.C. Quimby	Homestead, orchard
			John W. Gage	Homestead, orchard
	III	1	James Sinnett	Homestead, orchard
Ţ	II	1	Susan Gage	Homestead, orchard
			John W. Gage	Homestead
Saltfleet	III	34	J. T. Carscallen	
	II	34	J & F Gage	
	III	33	Miss. K. Harris	
			J & F Gage	
	II	33	Miss. K. Harris	
	III	32	William Waller	
	II	32	Patrick Mahony	
			A.A. Carscallen	
	III	31	W. Spera Sr.	
	II	31	William Gell	Homestead, orchard
	III	30	Charles Ortwine	Homestead
			M. Stewart	Homestead
	II	30	John Gage	
			M. Stewart	Homestead, orchard
	III	29	John Gage	
	II	29	Joseph Jones	Homestead
			Thomas Woodman	Homestead
	III	28	Samual Nash	
	II	28	Mrs. E. Cronford	
			William Spera Sr.	
	III	27	Estate of Jon	
			Williamson	
	II	27	Miss. S.A. Green	
	III	26	Estate of Jon	
			Williamson	
	II	26	Nicholson	Homestead
	III	25	C.B. Gilbreith	
	II	25	Mrs. McMillan	
	III	24	TJC Finton	
	II	24	George Stingerland	Homestead
	III	23	William H. Jones	
	II	23	P.S. Van Wagner	Homestead, orchard



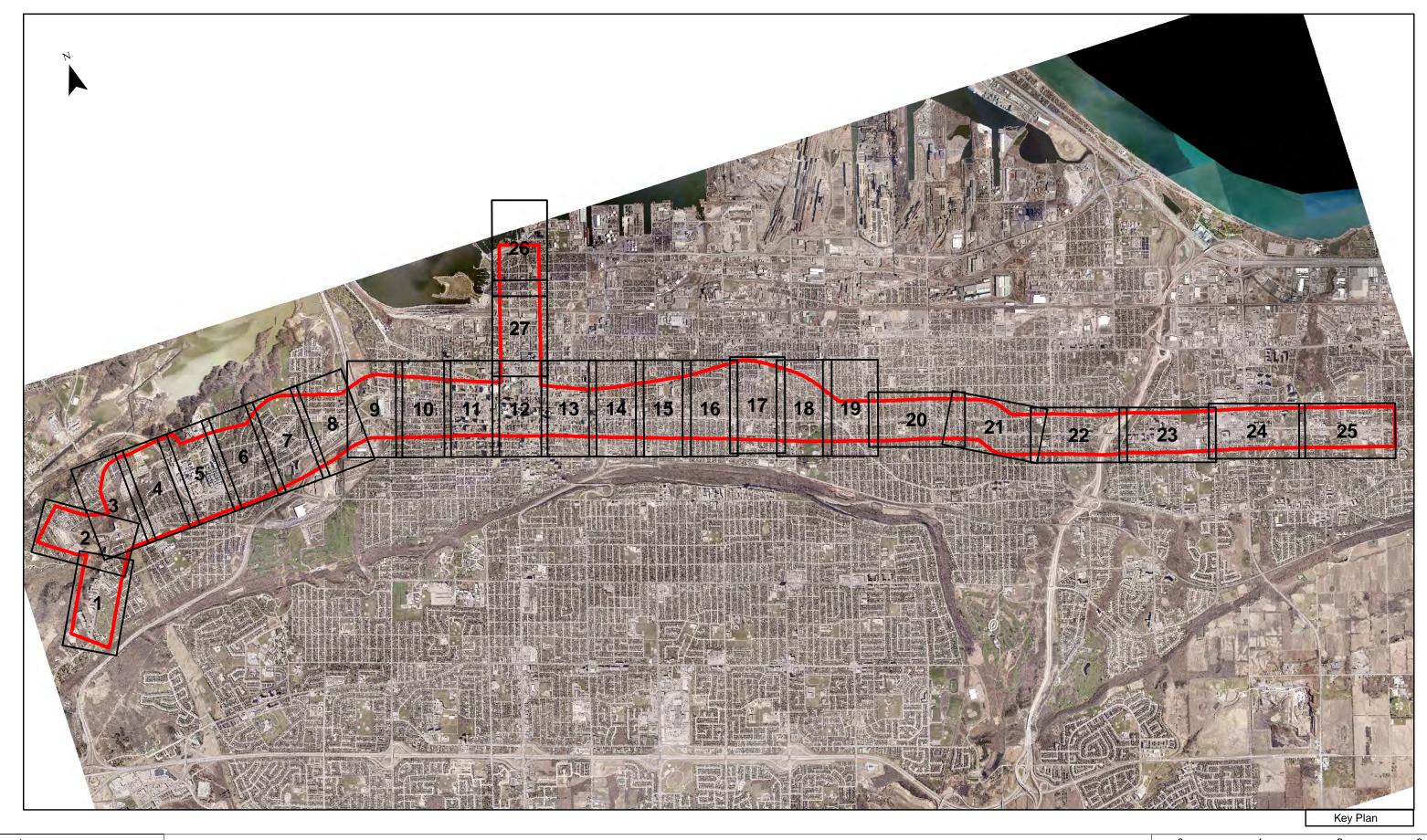
Table 6: Summary of Property Owners along the King Street corridor

Township	Concession	Lot	Owner	Illustrated Feature
Barton	III	21	W. Hancock	Homestead
	III	20	Cartmer Estate	
	II	10	M. Tarlot	
	II	9	William Anderson	
			R. Hopkin	Homestead
			W. Holton	
	II	8	A. Case Estate	Homestead, orchard
			George Barnes	
	II	7	George Gage	Homestead, orchard
			Dr. John Roseburgh	
			John Bruce	
	II	6	R.R. Gage	
			Jason Gage	Homestead
	II	5	Jason Gage	Homestead



## APPENDIX B: OVERSIZED GRAPHIC







0 1 2 3

Kilometers

DATE: FlLE: Feb. 9th 2009 08EA-368\_Key





Figure 4-1: Archaeological Potential in the B-Line Corridor

0	50	100	150	200		
Meters						
DATE: FILE:						
Feb. 6th	2009 (	08EA-368_A	rch_Potent_	Sheet1		

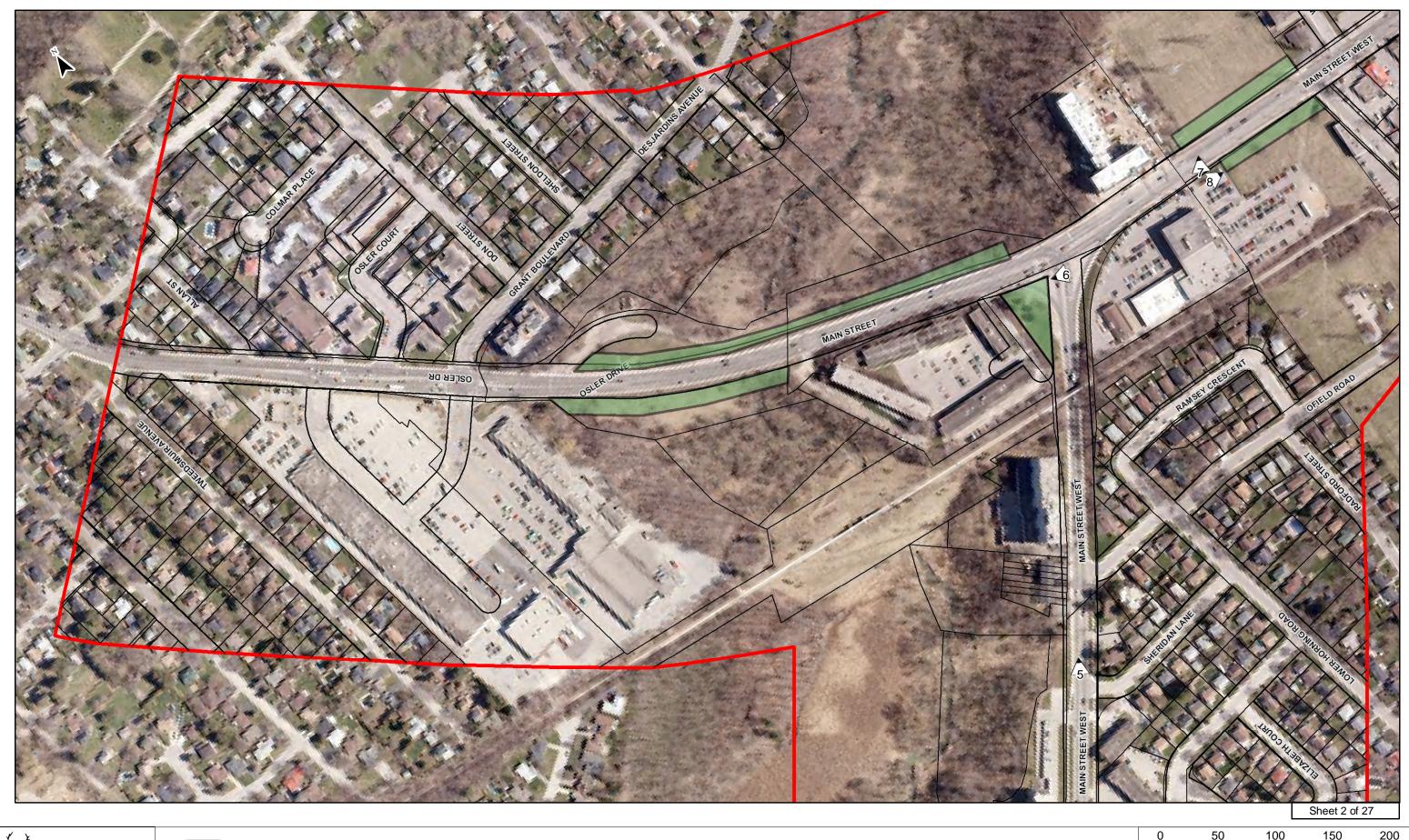




Figure 4-2: Archaeological Potential in the B-Line Corridor

0	50	100	150	200		
Meters						
DATE: FILE:						
Feb. 6th	2009 (	08EA-368_A	rch_Potent_	Sheet2		





Figure 4-3: Archaeological Potential in the B-Line Corridor

0	50	100	150	200		
Meters						
DATE: FILE:						
Feb. 6th 2009 08EA-368_Arch_Potent_Sheet3						





Figure 4-4: Archaeological Potential in the B-Line Corridor

0	50	100	150	200		
Meters						
DATE:	1 -	ILE:				
Feb. 6th 2009 08EA-368_Arch_Potent_Sheet4						





Figure 4-5: Archaeological Potential in the B-Line Corridor

0	50	100	150	200		
Meters						
DATE: FILE:						
Feb. 6th	2009	)8EA-368_A	rch_Potent_	Sheet5		

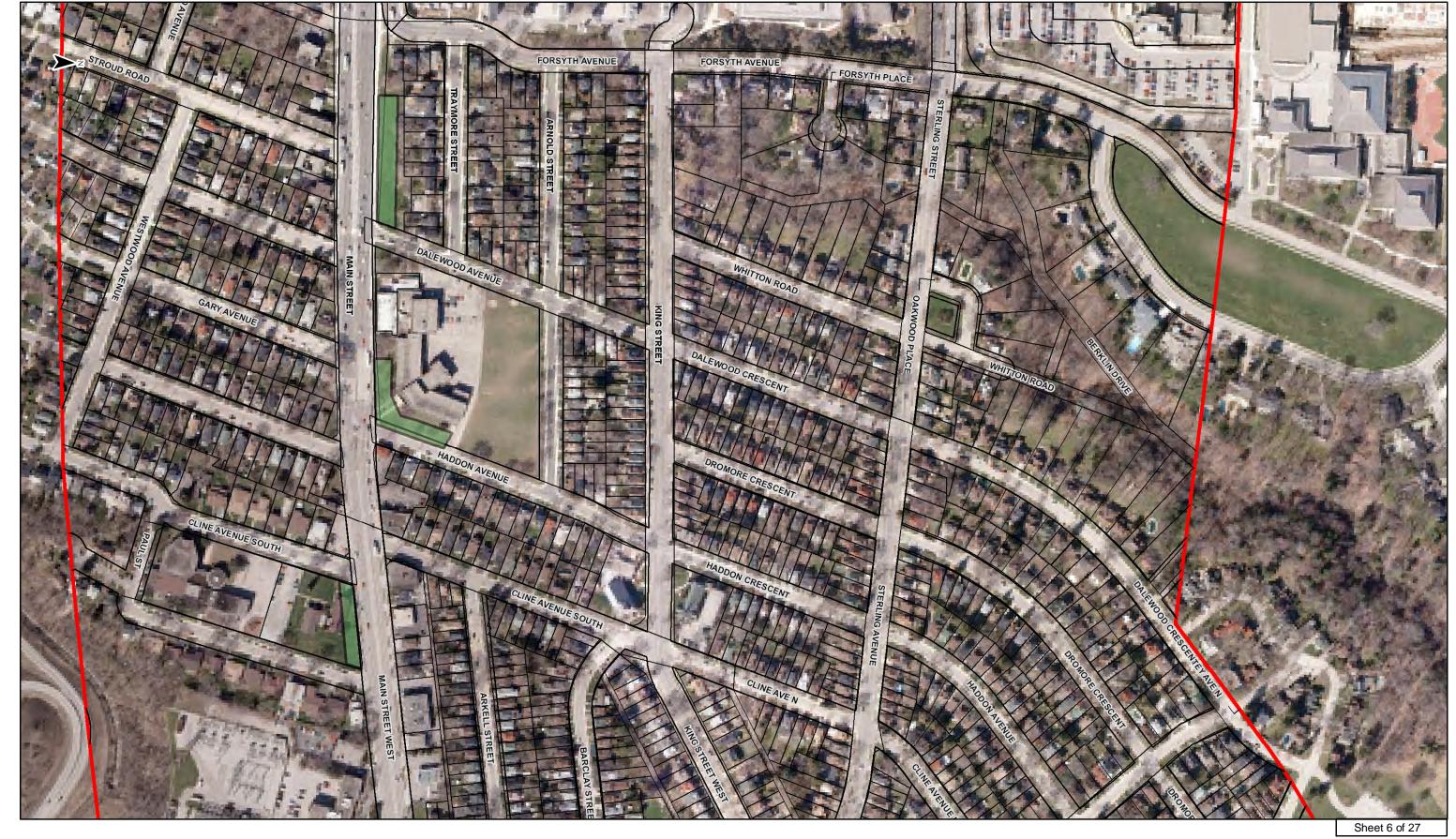




Figure 4-6: Archaeological Potential in the B-Line Corridor

0	50	100	150	200		
Meters						
DATE: FILE: Feb. 6th 2009 08EA-368_Arch_Potent_Sheet6						

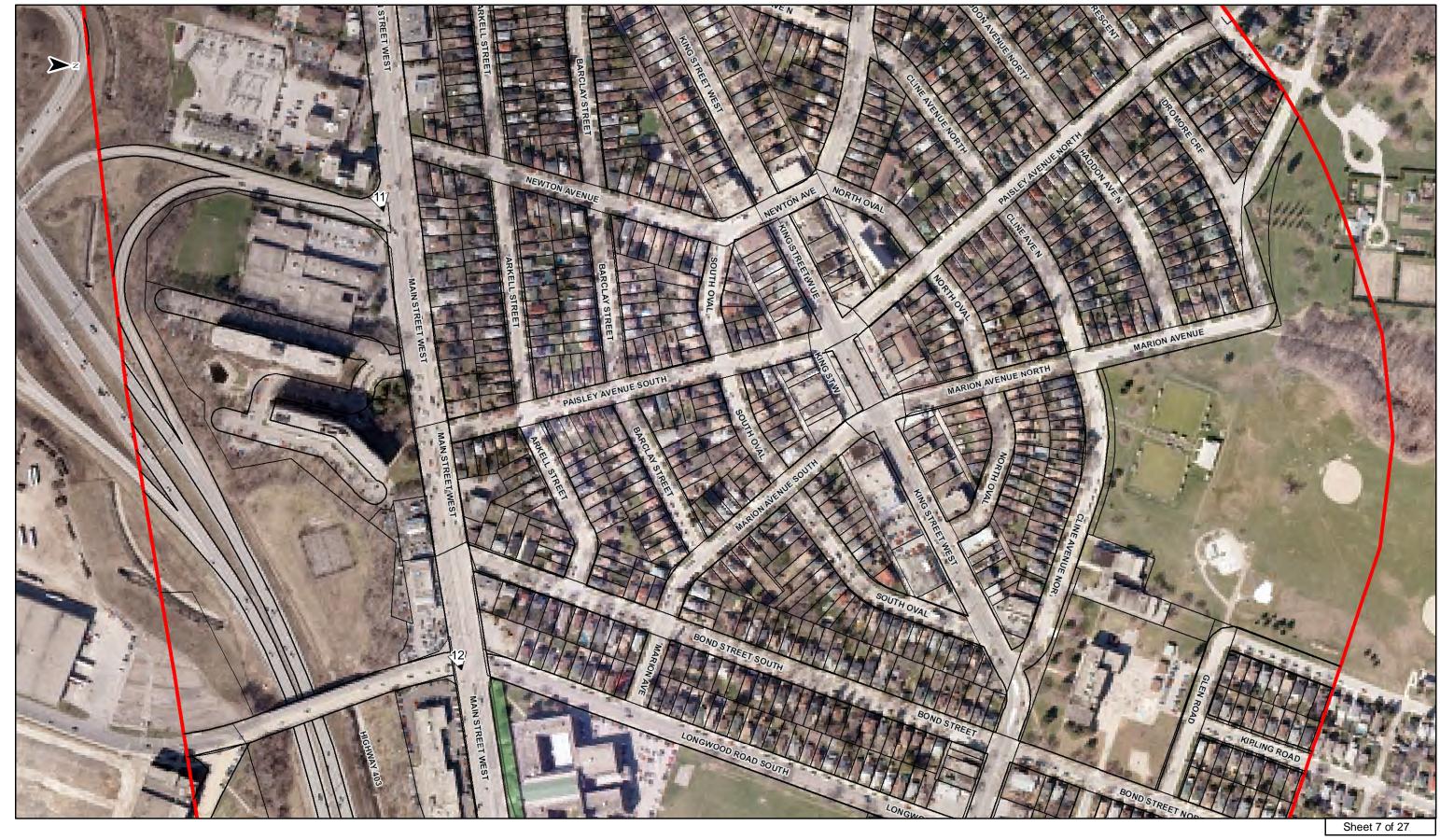




Figure 4-7: Archaeological Potential in the B-Line Corridor

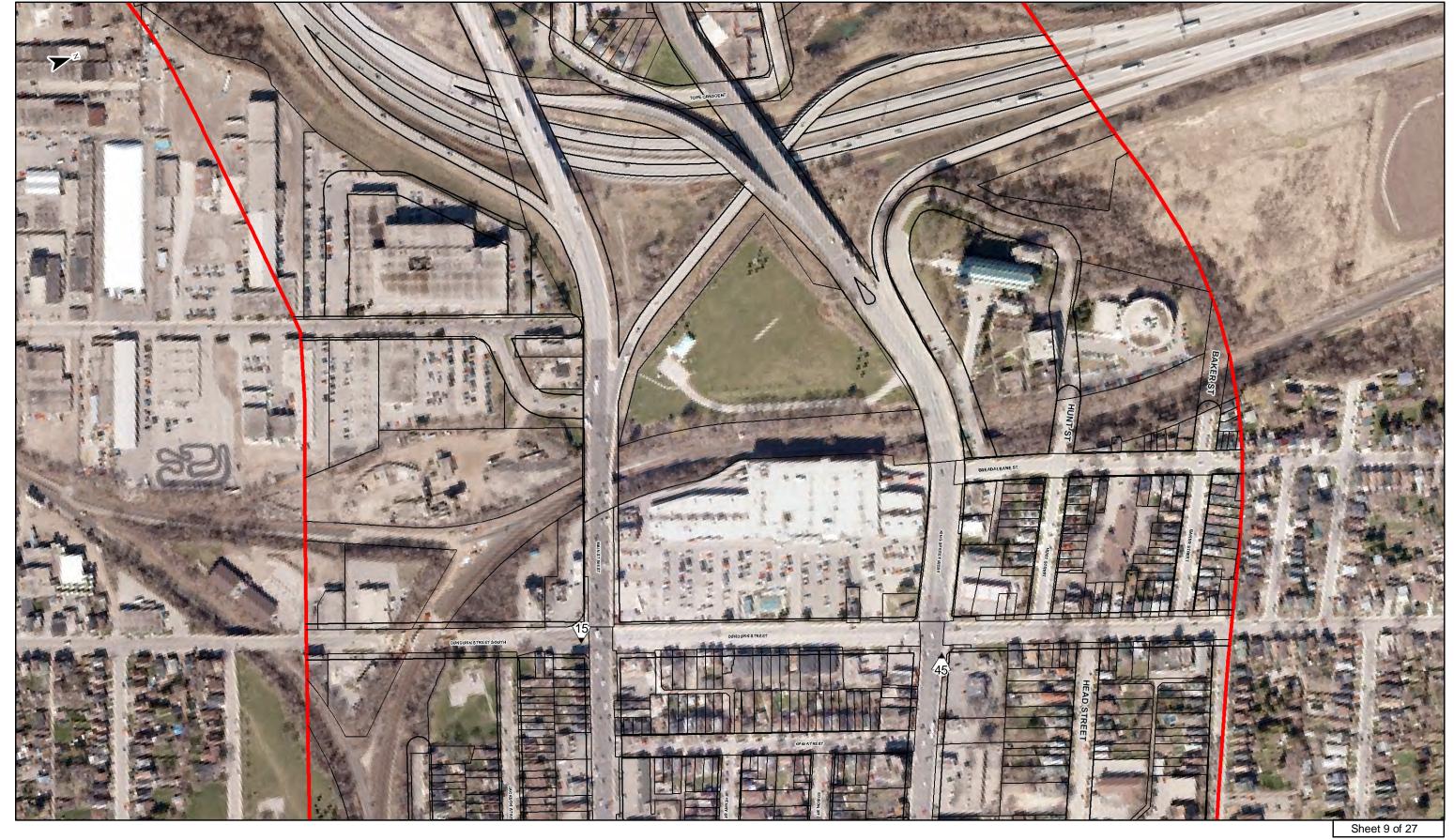
0	50	100	150	200			
Meters							
DATE:	F	ILE:					
Feb. 9th 2009 08EA-368_Arch_Potent_Sheet7							





Figure 4-8: Archaeological Potential in the B-Line Corridor

0	50	100	150	200		
Meters						
DATE: FILE:						
Feb. 9th 2009 08EA-368_Arch_Potent_Sheet8						





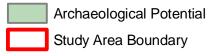


Figure 4-9: Archaeological Potential in the B-Line Corridor

0	50	100	150	200		
Meters						
DATE: FILE: Feb. 9th 2009 08EA-368_Arch_Potent_Sheet9						

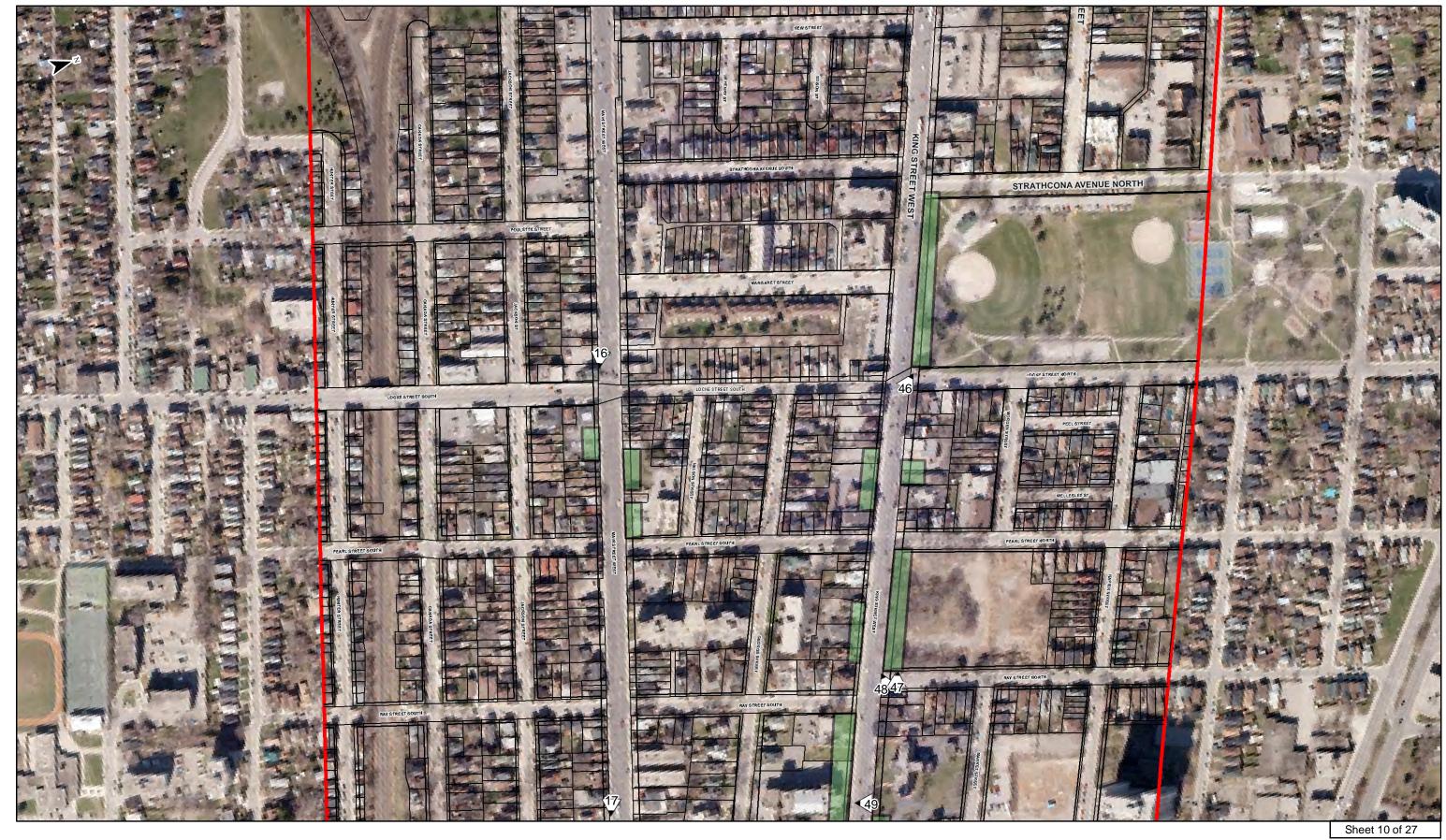




Figure 4-10: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	'	ILE:			
Feb. 9th 2009 08EA-368_Arch_Potent_Sheet10					

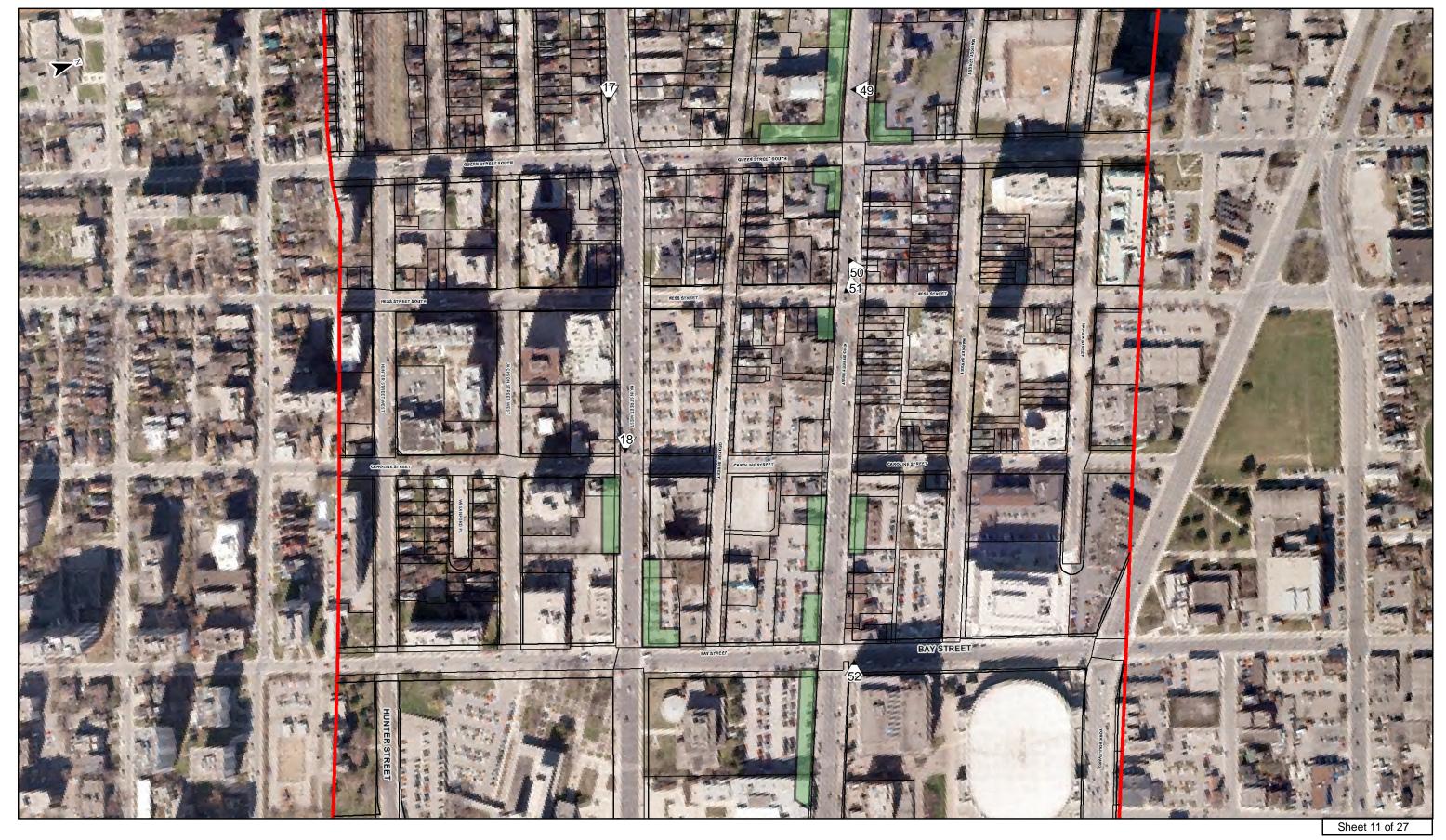
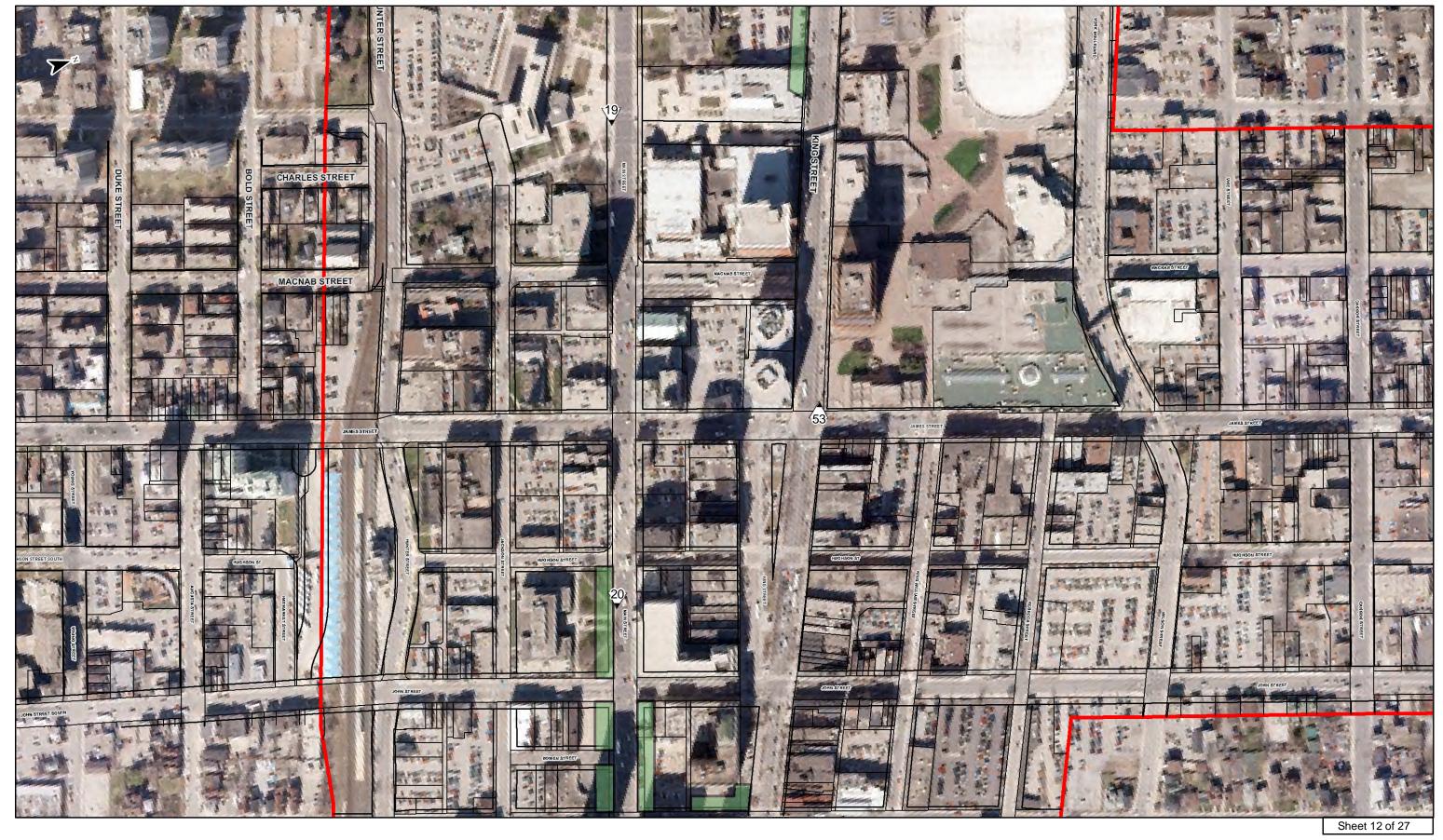




Figure 4-11: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
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	•		,		





0 50 100 150 200

Meters

DATE: FlLE: Feb. 9th 2009 08EA-368\_Arch\_Potent\_Sheet12

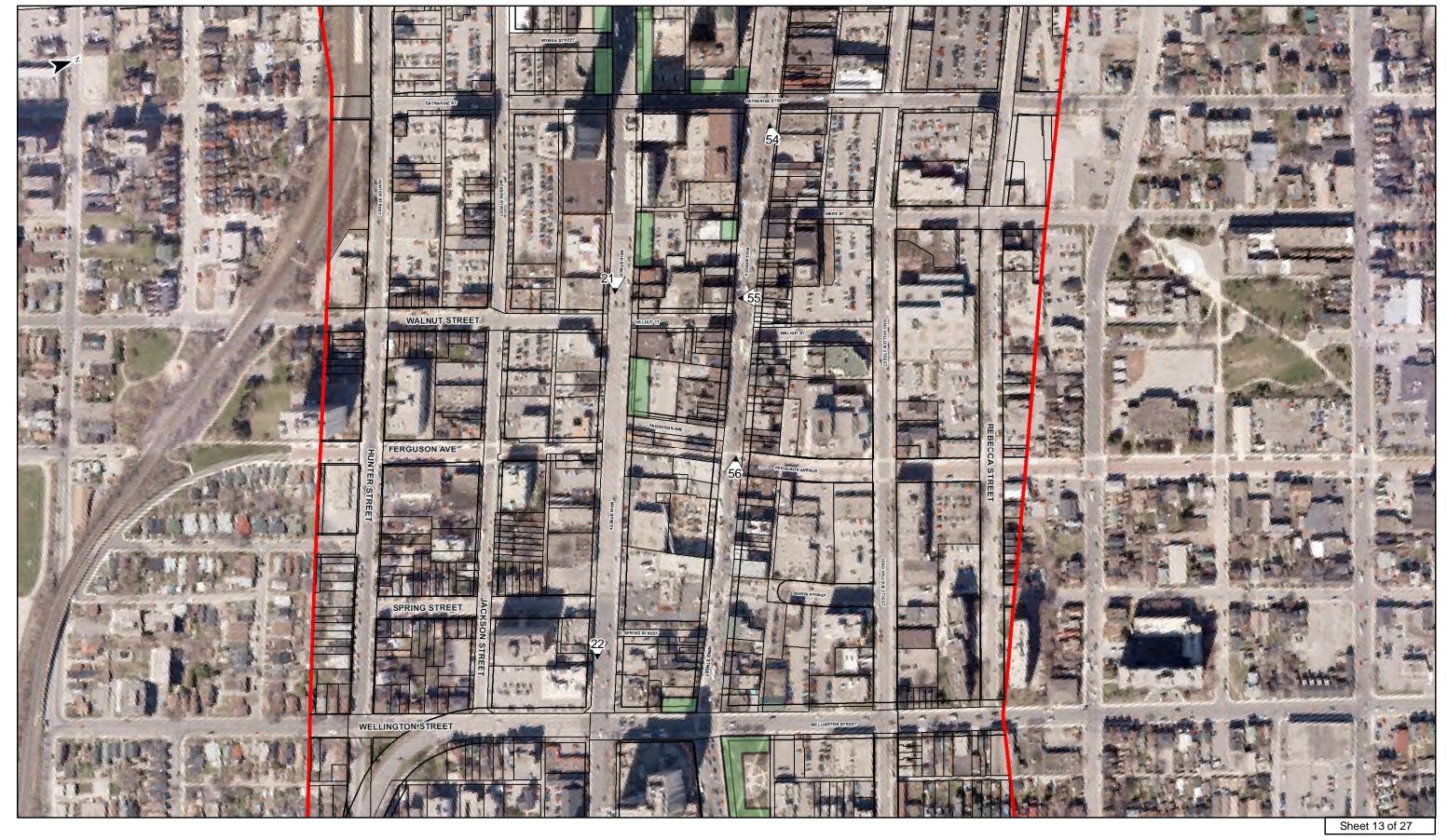




Figure 4-13: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	F	FILE:			
Feb. 9th 2	2009 (	)8EA-368_A	rch_Potent_	Sheet13	
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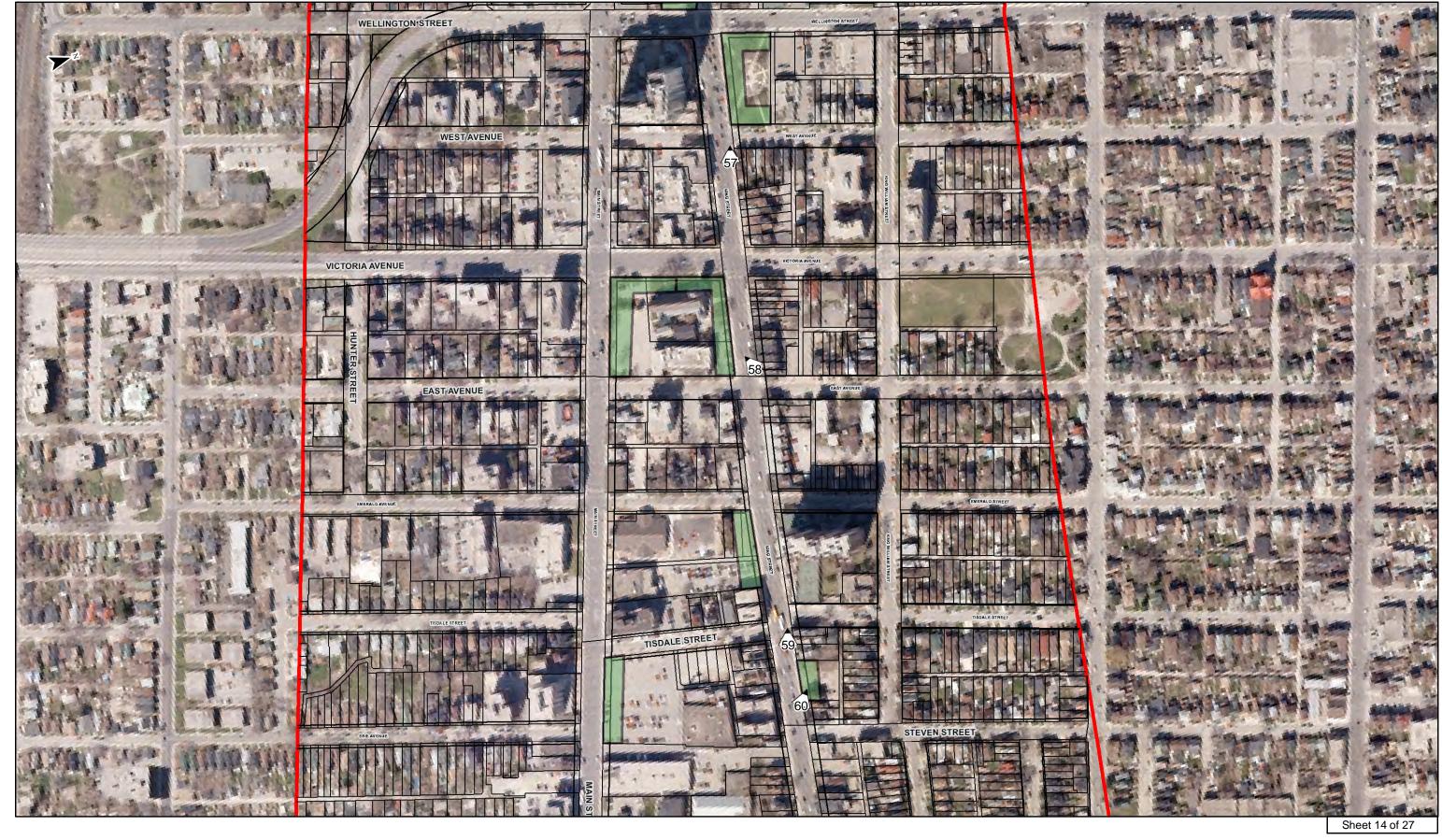




Figure 4-14: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	1 -	ILE:			
Feb. 9th	2009 0	8EA-368_A	rch_Potent_	Sheet14	





Figure 4-15: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	F	ILE:			
Feb. 9th	2009 0	8EA-368_A	rch_Potent_	Sheet15	

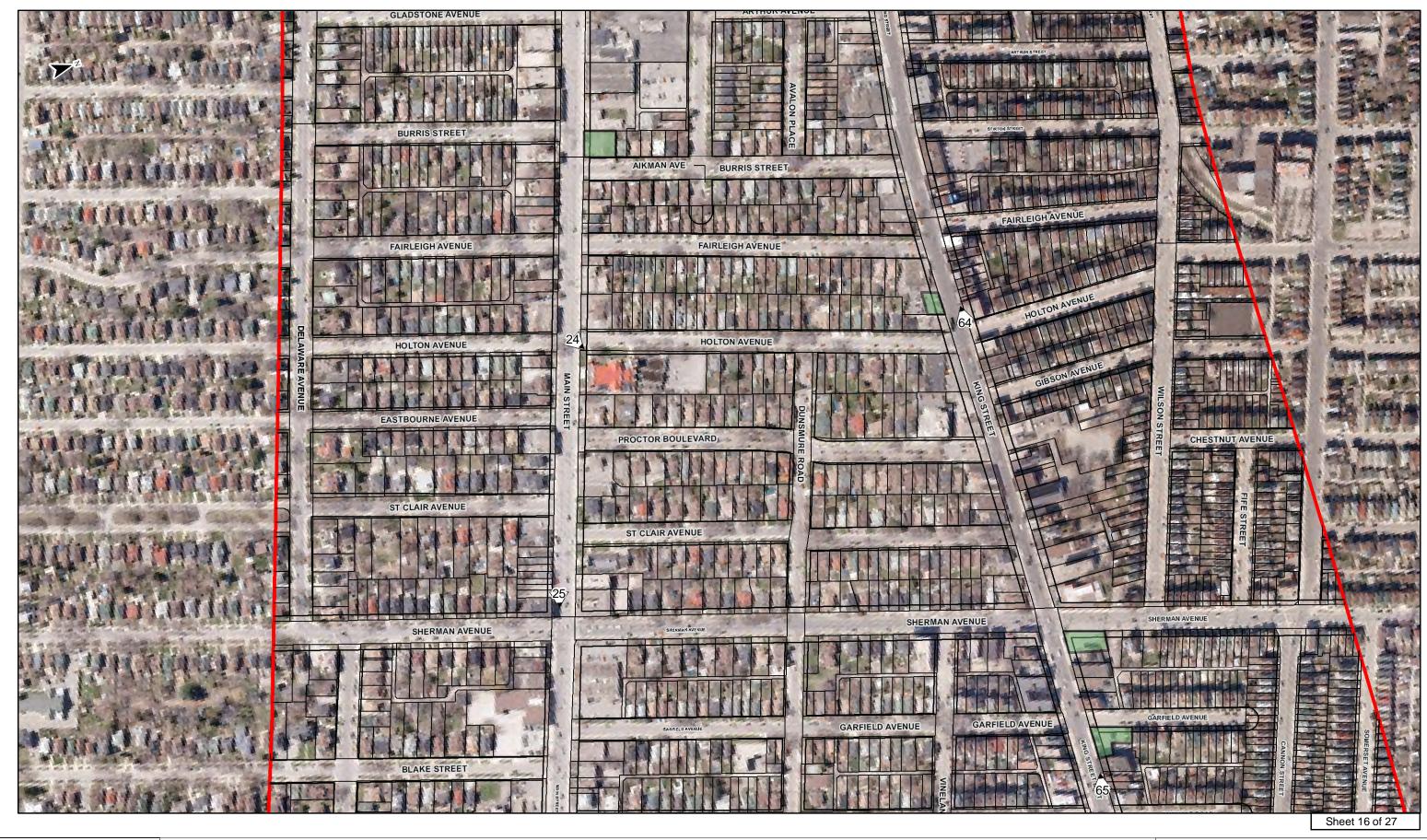




Figure 4-16: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	F	ILE:			
Feb. 9th	2009 0	08EA-368_A	rch_Potent_	Sheet16	
•					

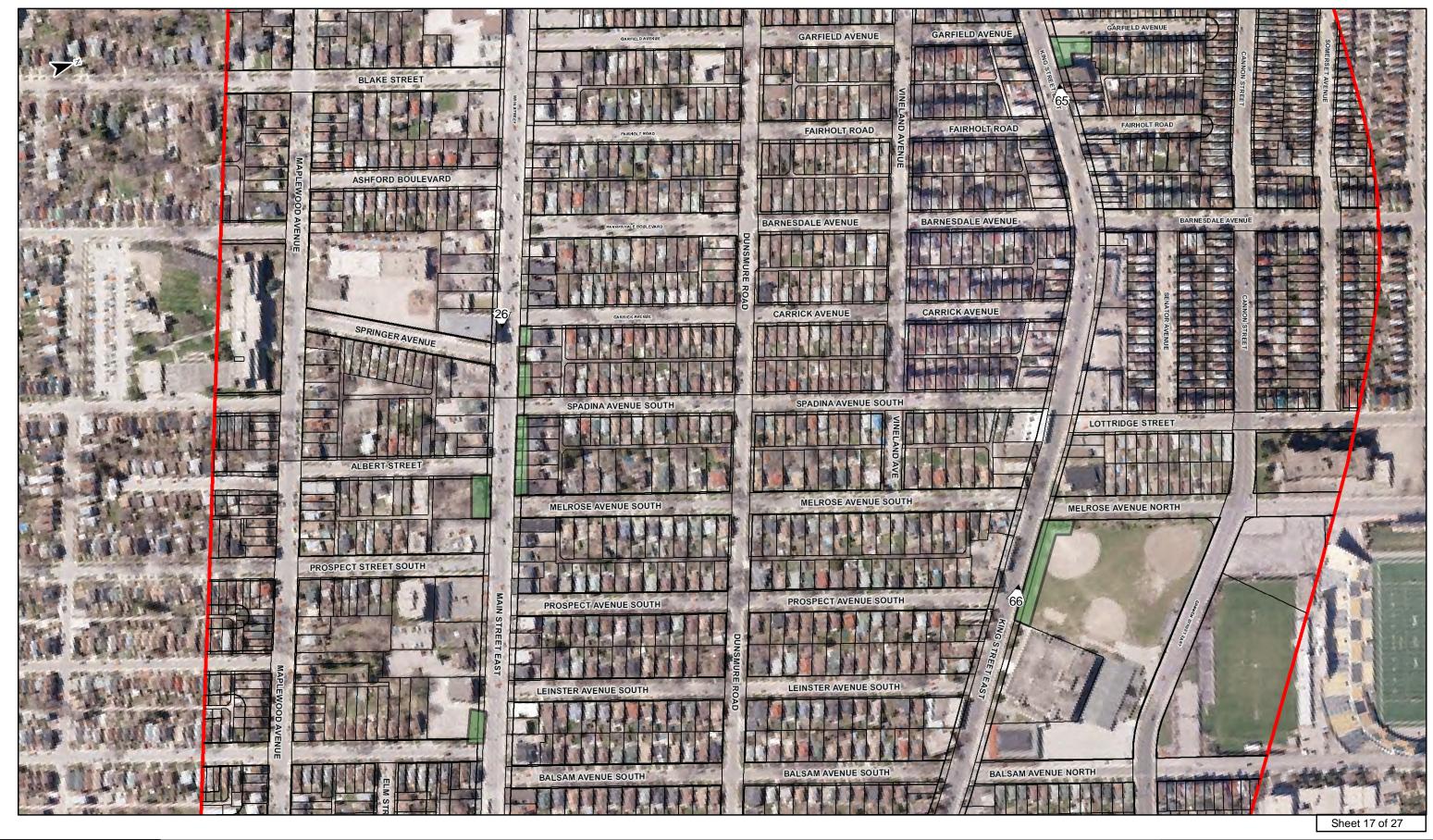




Figure 4-17: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	-	ILE:			
Feb. 9th	2009 0	8EA-368_A	rch_Potent_	Sheet17	





Figure 4-18: Archaeological Potential in the B-Line Corridor

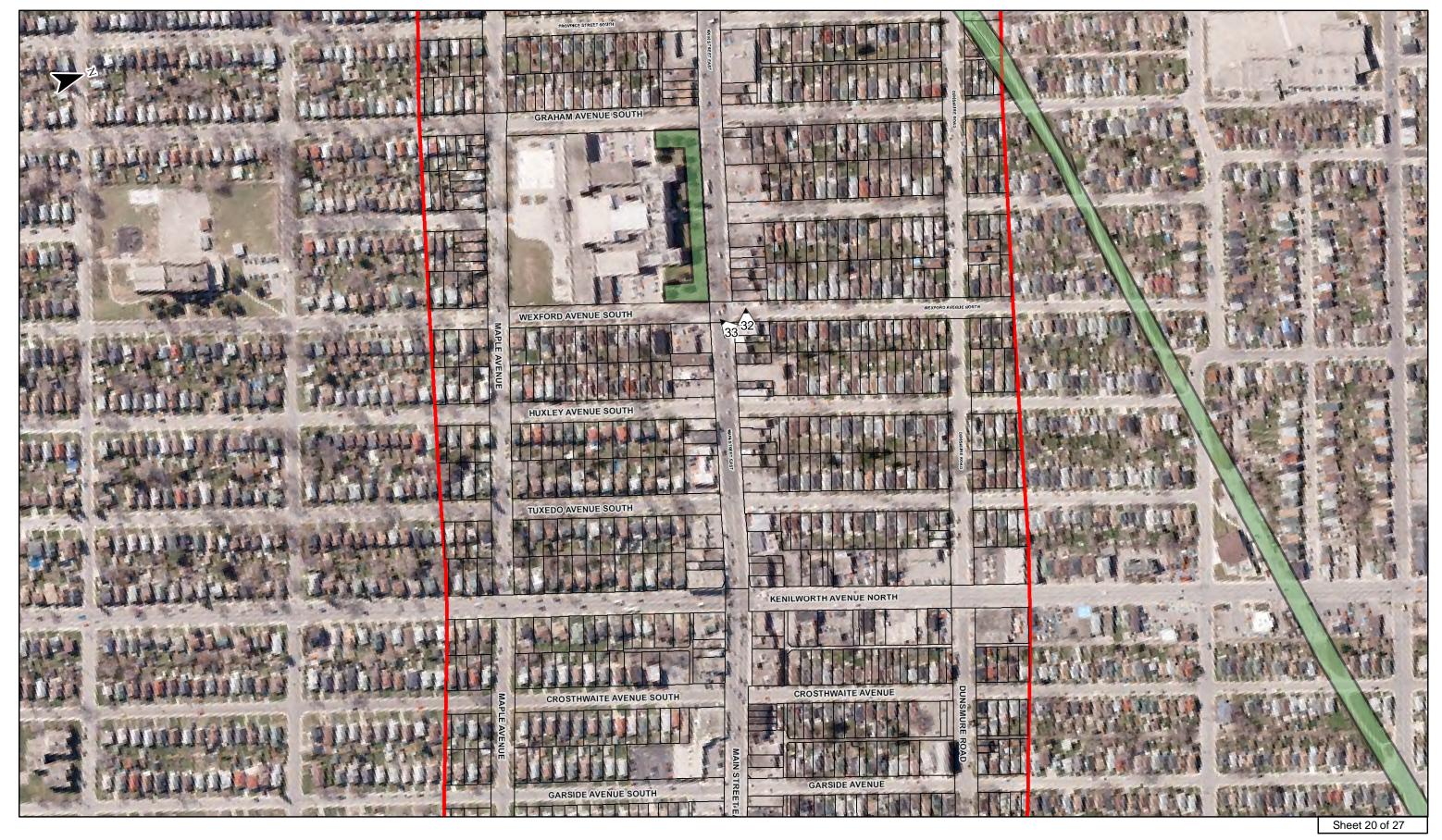
0	50	100	150	200	
Meters					
DATE:	F	FILE:			
Feb. 9th	2009 (	08EA-368_A	rch_Potent_	Sheet18	





Figure 4-19: Archaeological Potential in the B-Line Corridor

0 5	0	100	150	200	
Meters					
DATE: March 5th, 2009	FILE 08E	= =	h_Potent_S	heet19	





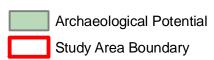


Figure 4-20: Archaeological Potential in the B-Line Corridor

0 50	10	0 15	50 20	0	
Meters					
DATE:	FILE:				
March 5th, 2009	08EA-369	Arch_Pot	ent_Sheet20	)	





Figure 4-21: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	1 -	FILE:			
Feb. 9th	2009 (	08EA-368_A	rch_Potent_	Sheet21	

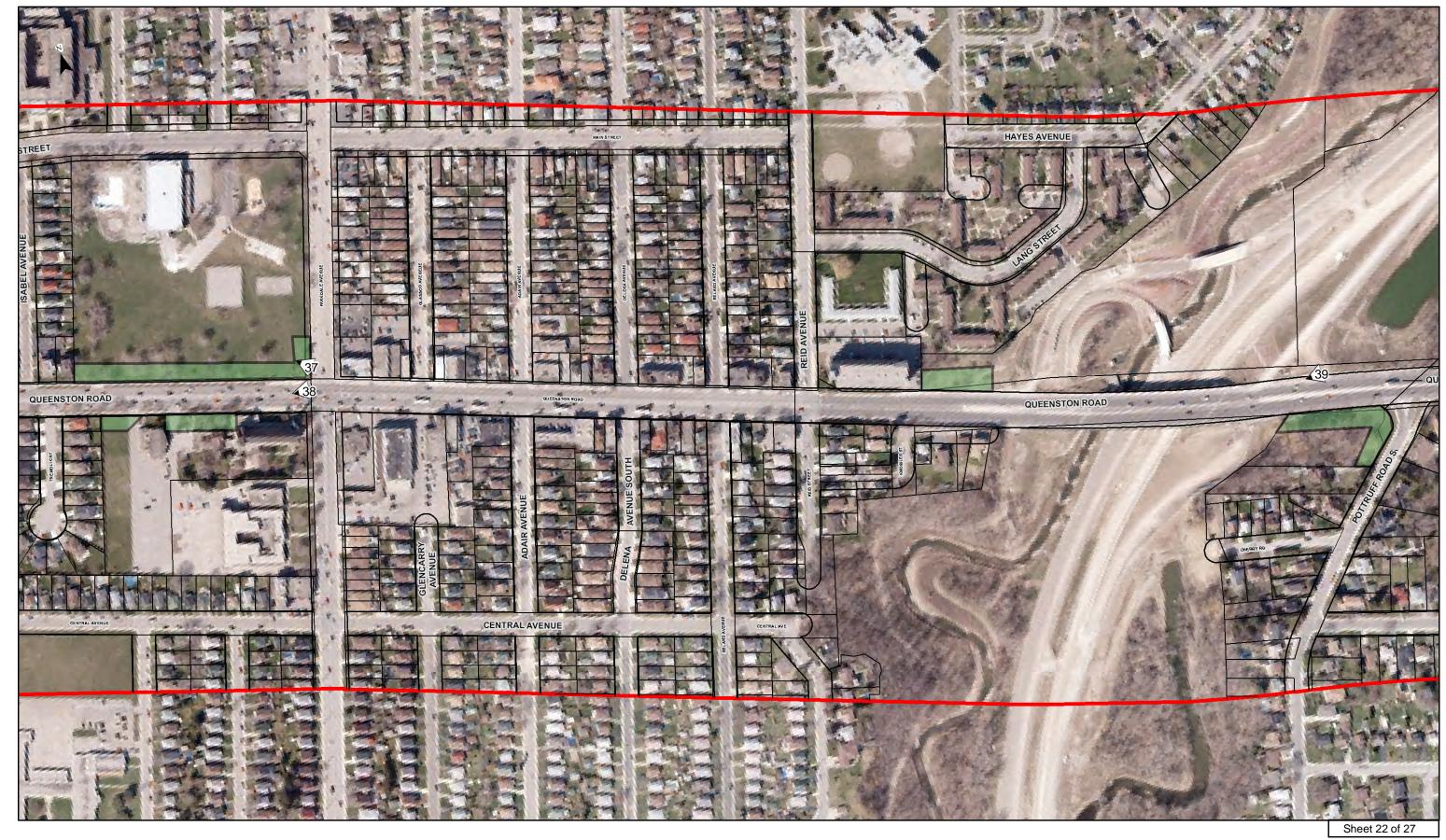




Figure 4-22: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	F	ILE:			
Feb. 9th 2009 08EA-368_Arch_Potent_Sheet22				Sheet22	

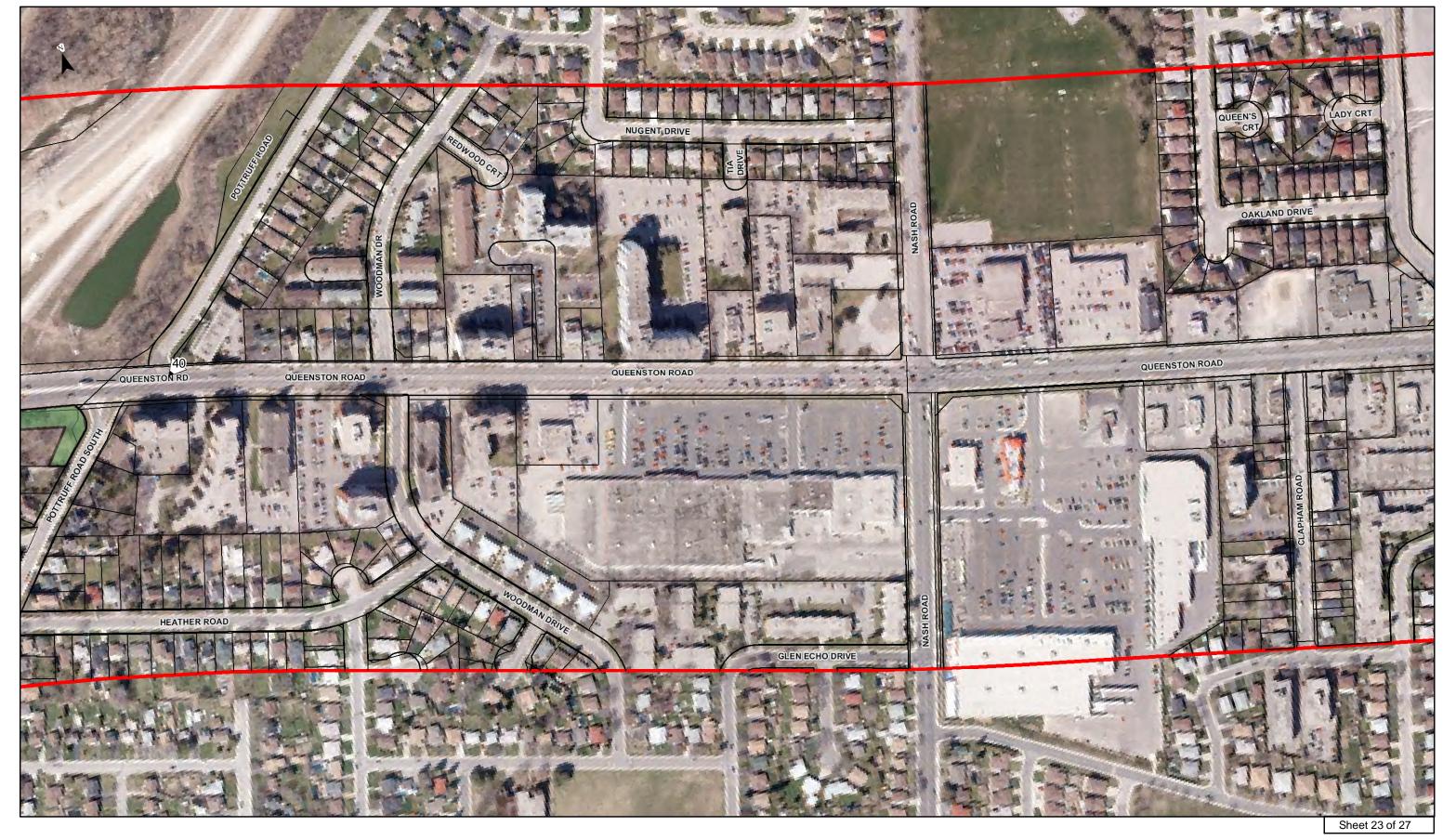




Figure 4-23: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	F	ILE:			
Feb. 9th 2	2009 0	8EA-368_Ar	ch_Potent_	Sheet23	

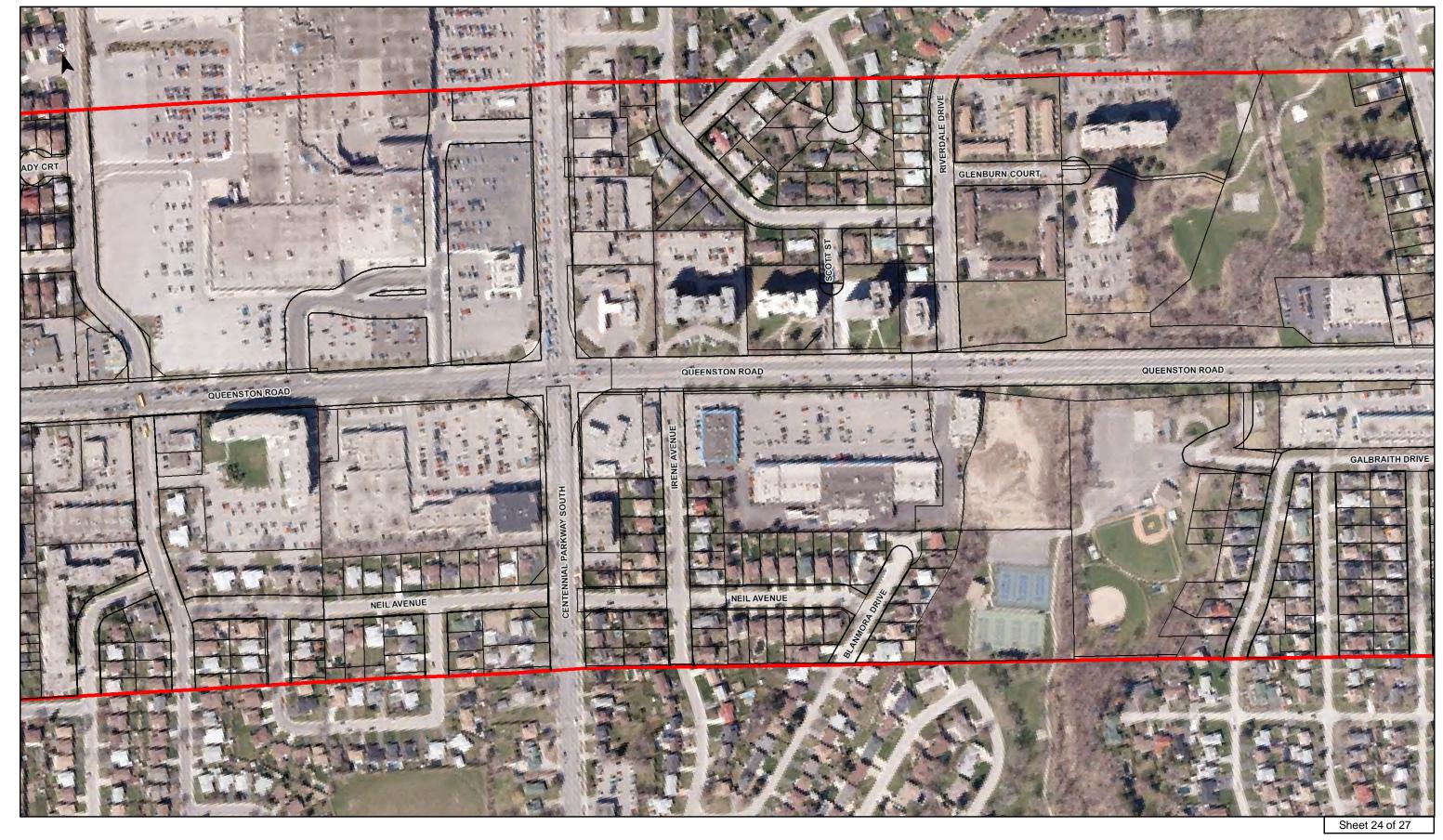




Figure 4-24: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:	ı	FILE:			
Feb. 9th	2009 (	08EA-368_A	rch_Potent_	Sheet24	

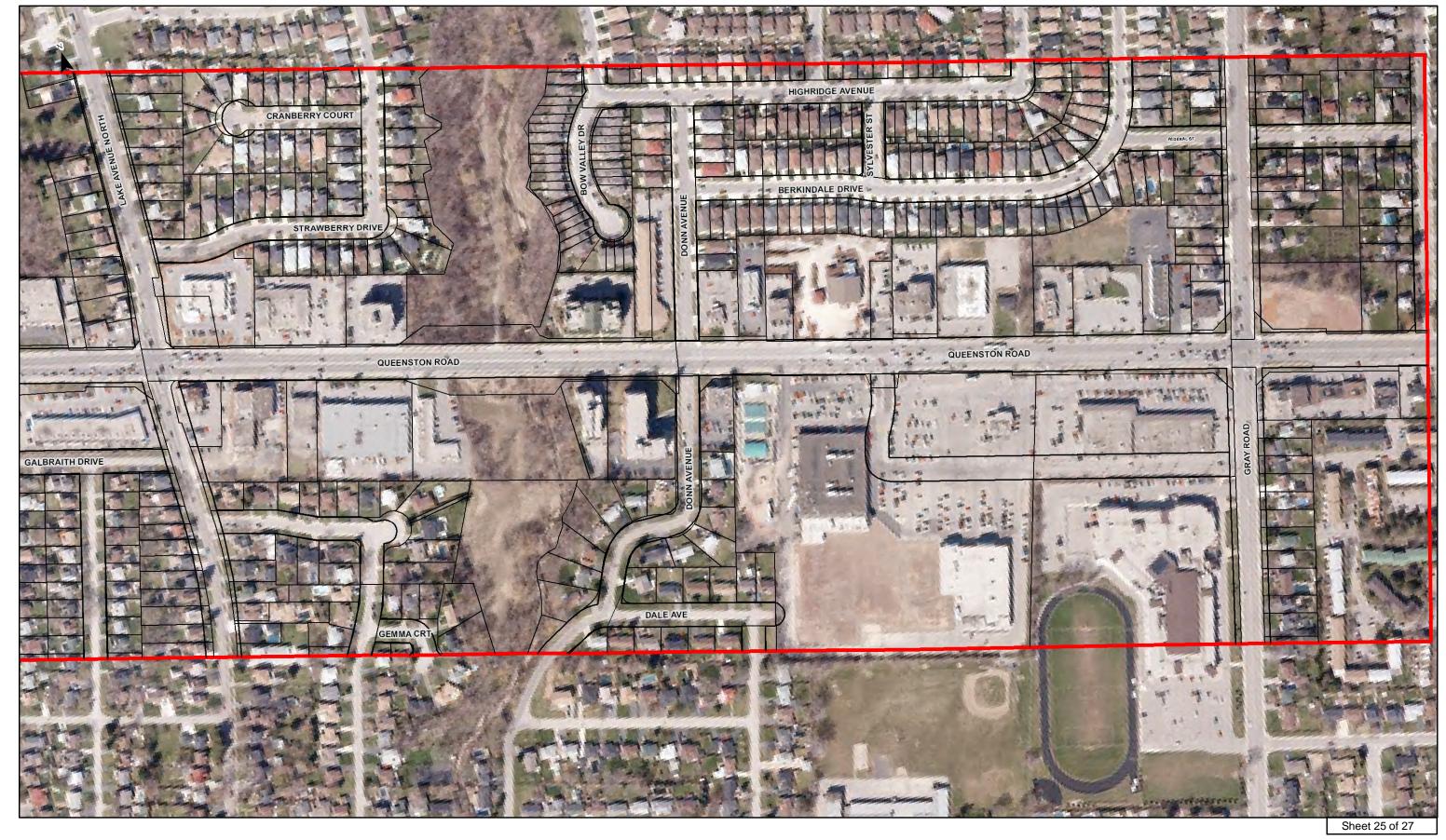




Figure 4-25: Archaeological Potential in the B-Line Corridor

0	50	100	150	200	
Meters					
DATE:		FILE:			
Feb. 9th	2009	08EA-368_A	rch_Potent_	Sheet25	





Figure 4-26: Archaeological Potential in the A-Line Corridor

0	50	100		150	200	
Meters						
DATE: Feb. 9th 2	1	ILE: BEA-368	Arch	Potent	Sheet26	





Figure 4-27: Archaeological Potential in the A-Line Corridor

0	50	100	150	200	
Meters					
DATE:	-	FILE:			
Feb. 9th	2009 (	08EA-368_A	rch_Potent_	Sheet27	

## **Appendix B.7 Geotechnical**

Appendix B.8 Design Criteria

Draft Environmental Project Report

Appendix B.9 Track Plan / Systems Operation Plan

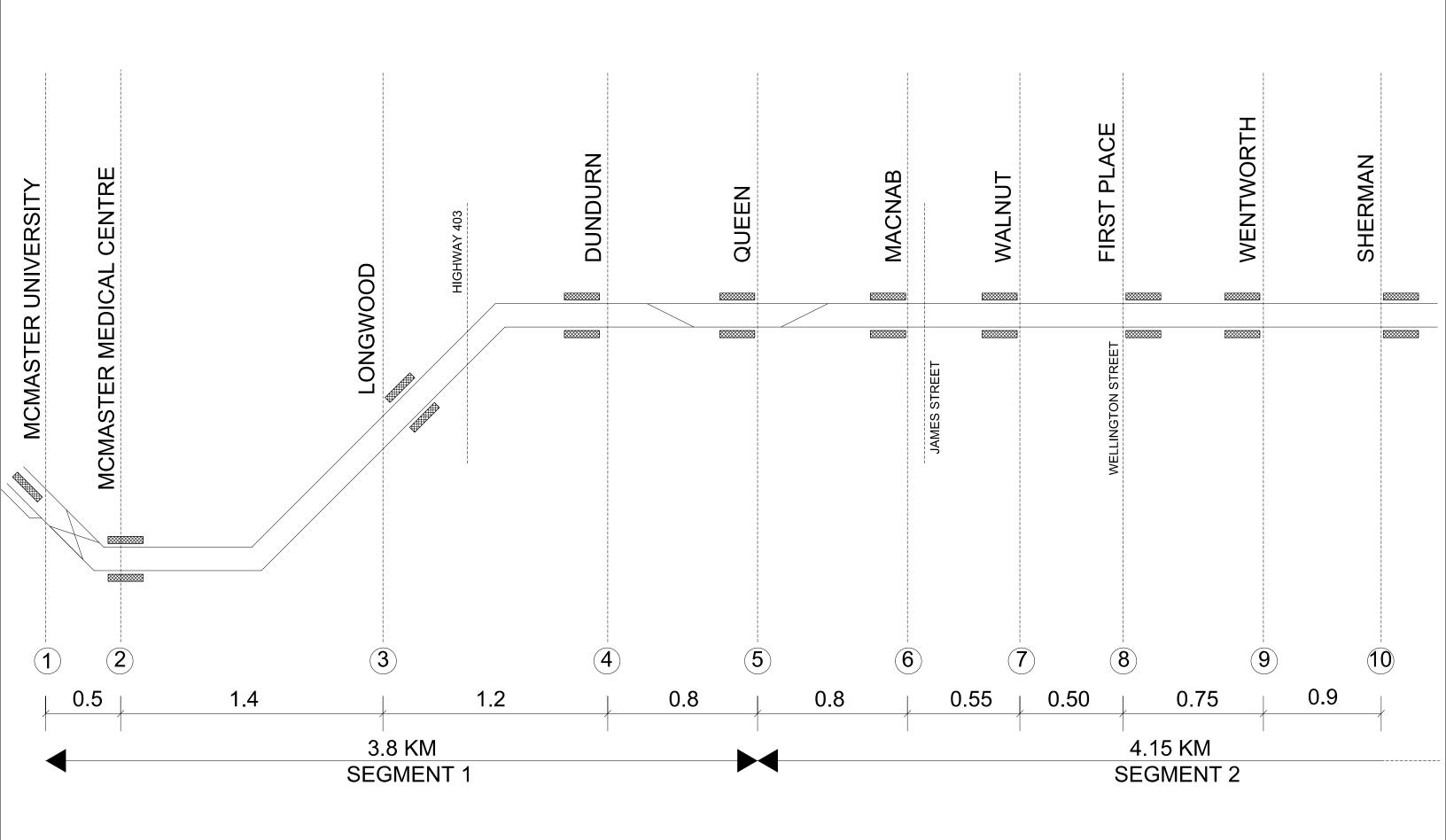


FIGURE 1 - PROPOSED TRACK PLAN (PART 1)

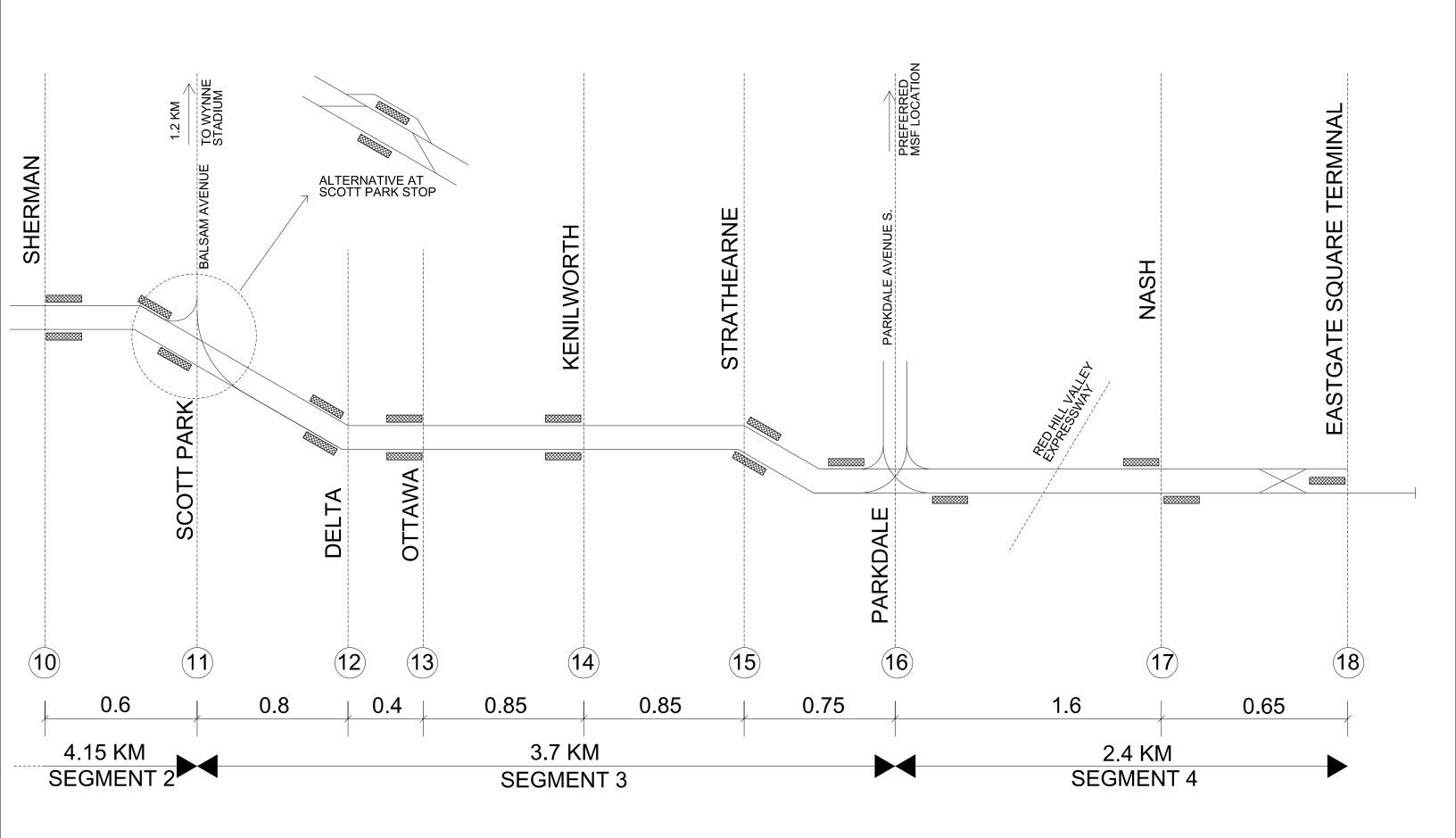


FIGURE 1 - PROPOSED TRACK PLAN (PART 2)