

Stage 1 Archaeological Assessment

**North Yonge Street Corridor Public Transit and
Associated Road Improvements
Transit Class Environment Assessment,
Regional Municipality of York, Ontario**

Submitted to:

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1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by the York Consortium, Richmond Hill, on behalf of the Regional Municipality of York, to conduct a Stage 1 archaeological assessment as part of the North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class Environment Assessment (Figure 1).

Archaeological assessment activities during planning, design, construction, and operation/maintenance of the North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA must conform to the legislation and policies, provincial and federal as applicable, governing cultural heritage preservation and archaeological assessment/excavation in Ontario. All activities and must be undertaken in accordance with the technical guidelines and requirements for archaeological assessment set out by the Ministry of Culture (*2006 Final Draft: Standards and Guidelines for Consultant Archaeologists*).

As part of the approved Terms of Reference, an initial North Yonge Street Corridor EA study area was proposed within York Region based on a preliminary identification of transportation problems and opportunities. For the purposes of providing an overview of existing conditions, the boundaries of the initial North Yonge Street Corridor study area are defined as Highway 404 to the east, 19th Avenue to the south, Bathurst Street to the west, and Green Lane to the north (Figure 1).

2.0 STAGE 1 BACKGROUND RESEARCH

The Stage 1 archaeological assessment of the study area 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 Methodology

The approved ToR indicates the use of known available secondary sources of information, which have been collected and reviewed as part of determining existing archaeological conditions. These sources of information are described as follows:

- ***Ontario Archaeological Sites Database (OASD)***—housed at the Ministry of Culture (MCL), this database is the repository for information on archaeological sites registered in the Province of Ontario;
- ***Ministry of Transportation (MTO) Files***—the archaeological office at MTO has been contacted with a request to provide the study team with any relevant

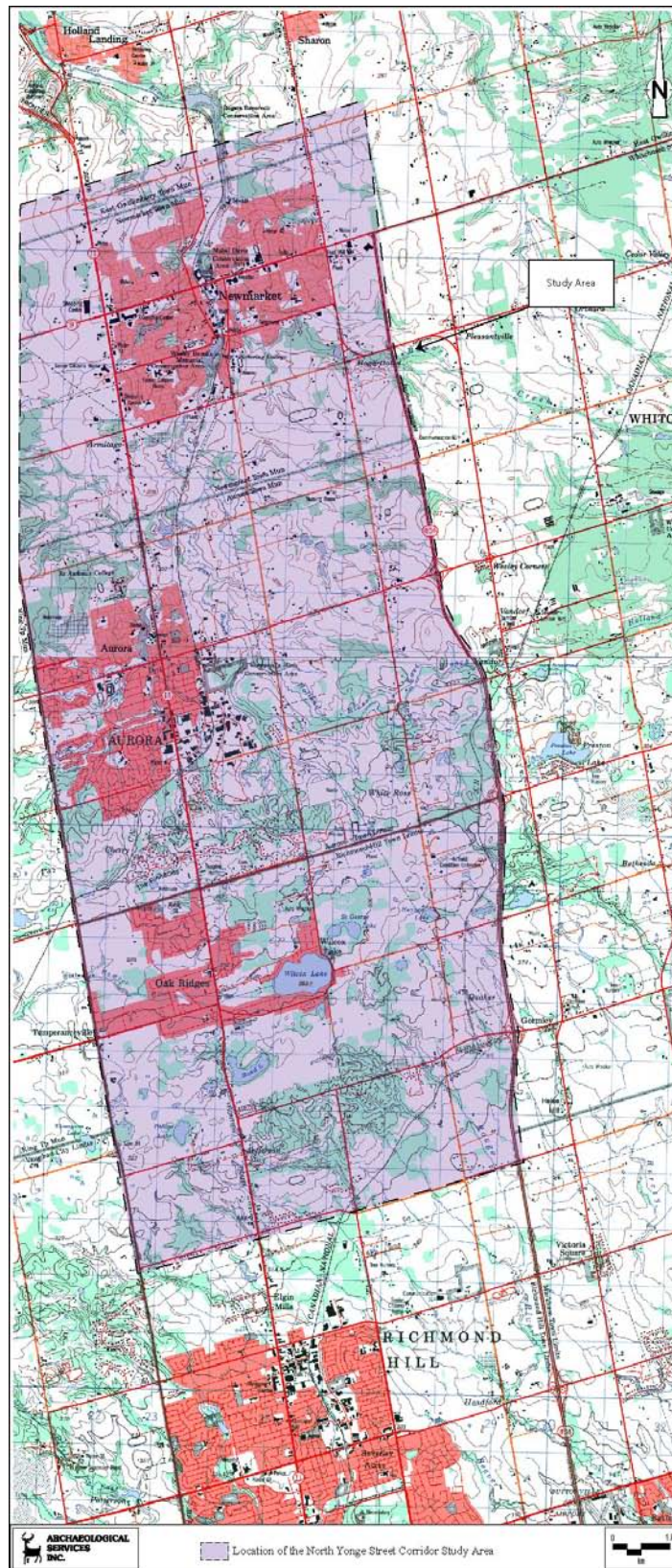


Figure 1: Location of the study area. (NTS Map 31 D / 03 and 30 M / 14)

archaeological site data that would not be contained in the OASD (to date, no such data has been identified):

- **Literature Review and the Files of ASI**—a review of archaeological documentation of particular relevance to the study area is ongoing and results will be incorporated into the study as appropriate
- **Historical Documents and Mapping**—a summary history of the study area has been compiled and a review of relevant historical mapping has been carried out;
- **Physiographic Documentation and Mapping**—a review of the physiography of the study area, based on relevant documents and mapping, has been carried out, and used to develop an archaeological site potential model.

For the purposes of describing existing conditions with respect to archaeological resources, there are two objectives: to identify archaeological sites within the project study area and to identify areas that have potential for the presence of archaeological sites. Accordingly, two inter-related data-gathering processes are undertaken. The first of these involves gathering data on known archaeological sites identified during previous archaeological research. As archaeological sites are identified, their locations are plotted on project mapping and the relevant site data is compiled for reference. The second data-gathering process is the collection of information that can be used to model archaeological site potential within the study area. One of the indicators of potential is the presence of known archaeological sites. Other indicators include, most notably, physiographic factors (such as proximity to water) and mapped historical features. As data relating to archaeological site potential is gathered, mapping is generated to show areas that have potential for the presence of archaeological resources.

2.2 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the project study area, three sources of information were consulted: the site record forms for registered archaeological sites, housed at the Ontario Ministry of Culture (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 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 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The study area is located in the Borden blocks *AlGu*, *BaGu*, and *BaGv*.

Previous archaeological work in the study area includes several large-scale surveys conducted in the late 1980s and onward. This area has received extensive pre-development survey as attested by the site inventory (Appendix A). As well, a series of master plans for archaeological resources for the Towns of Richmond Hill, East Gwillimbury and Vaughan have been conducted (ASI 1987, 1988; Mayer, Pihl, Poulton and Associates 1986).

The data collected from the MCL (Requested site information in August 2006) covers 151 registered archaeological sites within the limits of this archaeological assessment, including sites dating to all

periods of the Ontario archaeological record and including a wide variety of site types such as isolated artifacts, large and small Aboriginal habitation sites (camps, hamlet and cabin sites, and villages), and Euro-Canadian farmsteads, homesteads, blacksmith shops, and brickworks (Appendix A). Of special significance for preliminary route evaluations (routes retained for further evaluation) are a total of 32 sites, highlighted in Appendix A. Such sites will be considered the most sensitive archaeological resources for this report. It should be noted that large Aboriginal habitation sites, especially village sites, present the distinct possibility that burials are present both in close proximity to and within the habitation area, area of artifact concentration, or archaeological site limits. As well, large secondary interment pits known as ossuaries and containing the remains of numerous individuals are known to have been associated with Aboriginal villages in the Region, although they are distinct sites located at some distance from village sites. Based on current practice, it cannot be assumed that impacts to Aboriginal archaeological sites can be mitigated by archaeological excavation (Stage 3 testing and Stage 4 salvage excavation). The decision to excavate, protect, or avoid Aboriginal archaeological sites within the Region should be made in consultation with First Nations.

Of the 32 sites identified as significant for their location relative to routes retained for further evaluation, seven sites have either been intensively surveyed, and/or salvage excavated, or recommended for further investigation:

The **Murphy-Goulding Site (AlGu-3)**, located west of Yonge Street and south of Gamble Road on Lot 55, Concession I is categorized as an Iroquoian village dating to ca. A.D. 1400-1450. In the spring of 1987, the site was visited as part of the Archaeological Master Plan for Richmond Hill. At the time, the site was subject to development. It was recommended that prior to any development, the site be ploughed and subject to intensive controlled surface collection. In 1994, ASI was contracted to salvage excavate the portion of the site located within the southern half of Lot 55.

The **Orion Site (AlGu-45)** is situated approximately 400 metres northwest of the Murphy-Goulding site. Orion was excavated in 1987 by ASI and it appears that Orion may constitute the northernmost section of the Murphy-Goulding site. Further excavation was carried out in 1997.

The **Bernard Site (AlGu-46)** was located during a Stage 2 survey (ASI 1987) and it was recommended that the site undergo systematic controlled surface collection in order to determine the precise nature and surface extent of the site. It was further recommended that the area should then be stripped of topsoil by Gradall in order to examine the nature of subsurface archaeological features and to delimit the subsurface extent of the site area.

The **Redden-Routledge House (AlGu-186)** is located on the west side of Yonge Street at the north edge of Oak Ridges. Redden-Routledge House was completely excavated in 1997 including manual excavation of a very extensive and artifact-rich midden and 19th century privy pit (LMA 1997).

The **Redden-Routledge Blacksmith Shop (AlGu-187)** was tested in 1996 and excavated in 1997. Excavation focused on the west side of the shop. The main structure of the shop is off property within the road allowance and was not excavated (LMA 1997).

The **Hicksite Meeting House (BaGu-18)** is located on the southwest side of Newmarket on the west side of Yonge Street. This site consists of part of the foundation of the meeting house, a concrete block, and wooden beams. Mitigative excavation is recommended prior to any soil disturbance (ASI 1988). An associated cemetery is adjacent to Meeting House on west side of Yonge Street.

The **Sparrow Site (BaGu-25)** is located on a small knoll on part of Lot 101, concession I, E.Y.S. After the initial survey in 1989, it was recommended that the site be subject to further investigation prior to its disturbance in any manner (ASI 1989). It is further recommended that this area be subject to test pits and then be stripped of topsoil by Gradall in order to examine the nature of subsurface archaeological features and to delimit the subsurface extent of the site area.

The presence of known archaeological sites and the findings of extensive pre-development survey gives direct confirmation of archaeological site potential. The locations of archaeological sites in the project area are therefore a primary consideration in the assignment of archaeological site potential.

In November 2005, ASI was contracted to conduct a Stage 1 Archaeological Assessment for the Yonge Street 600mm Watermain From Gladman Avenue to Mulock Drive and From St. John's Sideroad to Wellington Street (ASI 2005). The field review determined that both the northern and southern concrete pressure pipe watermain sections would be installed within the existing disturbed ROW. With the exception of the land in the vicinity of the Quaker cemetery on the west side of Yonge Street, no additional archaeological assessment was required along either of the Yonge Street study area sections. Additional archaeological investigations were recommended to confirm the presence or absence of unmarked graves within the right-of-way, adjacent to the Quaker cemetery. The remainder of the project was considered free of further archaeological concern (Appendix B).

In July 2007, ASI was contracted to conduct a Stage 2 archaeological assessment of the Quaker Cemetery, as a follow-up to the Yonge Street Watermain Environmental Assessment (ASI 2007). The historic cemetery is located on the west side of Yonge Street and south of Eagle Street, on Lot 92, Concession I, in the City of Newmarket. The Stage 2 assessment was conducted in order to identify any unmarked grave shafts outside of the cemetery fence line that could be impacted by the proposed watermain construction. When the assessment was complete, the proposed Yonge Street Watermain study corridor fronting the Quaker Cemetery was considered free of further archaeological concern (Appendix C).

ASI was also recently contracted to conduct a Stage 1 Archaeological Assessment for the Class EA Study (Schedule C) - Roadworks along Davis Drive (Y.R. 31) from West of Yonge Street to Highway 404, in the Town of Newmarket (ASI 2006). A Stage 2 archaeological assessment was recommended for the areas exhibiting archaeological site potential. The report has been submitted for Ministry of Culture review and the results of that review are pending (Appendix D).

2.3 Physiographic Factors and Archaeological Site Potential

2.3.1 Physiography of the Study Area

Physiographic factors, especially proximity to water, are key indicators of archaeological site potential, particularly for the location of Aboriginal archaeological sites that pre-date European contact (Aboriginal sites). It is generally accepted that the last glaciation forms the limit of archaeological detection in Ontario, and the landscape of southern Ontario as we know it today was in large measure determined by the movement and melting of the last ice sheets in this area, over 10,000 years ago.

The study area is located within three different physiographic regions of southern Ontario: the Oak Ridges Moraine, the Schomberg Clay Plains, and the South Slope (Chapman and Putnam 1984).

The Oak Ridges Moraine physiographic region of Southern Ontario (Chapman and Putnam 1984:166–168) forms the height of land extending from the Niagara Escarpment in the west to the Trent River in the east, dividing the drainage of Lake Ontario from the drainages of Georgian Bay and the Trent River. This ridge-like region covers approximately 1,300 square kilometres and has an average altitude of approximately 300 metres above sea level (approximately 225 metres above the level of Lake Ontario). The width of the region is highly variable and in a few places, such as south of Lake Scugog, it narrows to a width of only one or two kilometres. The surface of the region consists, for the most part, of sand and gravel hills (predominantly sand) with relatively flat basin-like areas between.

It must be noted that the Oak Ridges Moraine physiographic region of Southern Ontario as defined by Chapman and Putnam does not correspond exactly to the Oak Ridges Moraine Area as designated by the Province of Ontario for the purposes of land use, conservation, and planning, pursuant to the Oak Ridges Moraine Conservation Act. Rather, the strict physiographic region as construed by Chapman and Putnam is a subset of the larger designated area and forms the core of that area. In this report, for the purposes of physiographic characterization and determination of archaeological site potential, the label will be reserved for the more narrowly-defined physiographic region, c.f. Chapman and Putnam.

While the moraine itself is virtually devoid of streams, water draining through the permeable material of the uplands emerges along the north and south slopes of the region, forming numerous streams. Accordingly, the Oak Ridges Moraine is the source for many of the watercourses that drain the plains and slopes on either side of it. The moraine lands are not totally devoid of surface water and numerous kettle lakes are found throughout.

The Schomberg Clay Plains physiographic region (Chapman and Putnam 1984: 176-177) is situated along the north slope of the Oak Ridges moraine and contains deep deposits of stratified clay and silt. In the Newmarket area, the topography is generally rolling with the presence of a drumlinized till plain. The local Schomberg silty clay loam is fertile and well drained, and the lands were thoroughly cleared during the first half of the 19th century for farming (Chapman and Putnam 1984:177).

The South Slope physiographic region of Southern Ontario (Chapman and Putnam 1984: 172–174) is the slope descending southwards from the heights of the Oak Ridges Moraine to the lowland Iroquois Plain (the former bed of glacial Lake Iroquois in the Lake Ontario basin). From the highlands of the moraine, at altitudes between approximately 250 and 300 metres above sea level, the South Slope land descends approximately 90 to 120 metres across approximately 9.5 to 11 kilometres. The region is a sloping till plain featuring numerous streams and intermittent drainage gullies running down slope (southward) toward Lake Ontario. Many of the streams have cut steep-sided valleys in the till.

As has been mentioned, numerous watercourses drain the lands under review in this report, rising at the interface between the Oak Ridges Moraine and the South Slope, and ultimately emptying into Lake Ontario. Among these, the largest include the Holland River, along with its minor tributaries and seasonal creeks, the Rouge River, as well as Wilcox Lake, Bond Lake and St. George Lake.

2.3.2 Physiographic Factors and Archaeological site potential

Water is arguably the single most important resource necessary for any extended human occupation or settlement and proximity to water can be regarded as the primary indicator of archaeological site potential. Accordingly, distance from water is one of the most commonly used variables for predictive modelling of archaeological site location.

The MCL's *Standards and Guidelines for Consultant Archaeologists* (Final Draft 2006, Unit 1C) stipulates that undisturbed land within 300 metres of a primary water source (lakeshore, river, large creek, etc.), undisturbed land within 200 metres of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 metres of an ancient water source (as indicated by remnant beaches, shorecliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological site potential.

In addition, the Standards and Guidelines have listed elevated topography such as drumlins as indicators of archaeological site potential. As has been noted, numerous drumlins are found within the study area under review.

2.4 Historical Factors and Archaeological Site Potential

2.4.1 Historical Review

The 1878 *Illustrated Historical Atlas of the County of York Ontario*. was reviewed to determine the potential for the presence of historical archaeological remains within the study area. The study area encompasses parts of four townships in the former York County: King, Whitchurch, Vaughan, and Markham (Figure 2). By 1877, the townships were well settled with nearly all farmsteads situated along the roads. Because the study area is situated at the meeting corners of these four townships, and includes the towns of Newmarket and Aurora, historic roads run through the entire study area.

As well, the historic Northern Railway also runs through the northern portion of the study area, passing through the towns of Newmarket and Aurora. The railway had a tremendous impact on the settlement patterns and economics in York Region, determining which towns grew or disappeared and which businesses flourished or floundered (Andreae 1997). The railway was eventually bought out by the Grand Trunk Railway, and today is currently under Canadian National Railway control.

Although it should be noted that not every feature of potential interest today would have been illustrated on the nineteenth century mapping, there are some features, such as numerous churches, mills, school houses and one cemetery that illustrate potential for historic sites in the study area. 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 water model outlined above, since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

A historic plaque, situated on the west side of Yonge Street just south of the intersection with Eagle Street, commemorates a Quaker settlement in the vicinity in the first decade of the nineteenth century. An extant Meeting House, built in 1812, and cemetery are situated at that location. This historical site is registered with the Ontario Ministry of Culture.



Figure 2: Study area superimposed on the 1878 map of York County from the *Illustrated Atlas of the County of York* (Mills & Co.).

2.4.2 Historical Factors and Archaeological site potential

As noted earlier in this section, potential for the presence of archaeological sites prior to the 1780s is primarily based on physiographic factors, most notably proximity to water sources. The availability of historic maps provides a valuable resource for refining the archaeological site potential model for the late eighteenth century and later. These maps often allow for the determination of relatively precise locations for core settlement areas such as towns and crossroads communities, i.e., areas throughout which there is generally potential for the presence of public, commercial, industrial, religious, and other institutional remains in addition to the remains of domestic and agricultural activity.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is the potential for recovering historic cultural material within the study area. Furthermore, it should be noted that not every feature of potential interest today would have been illustrated on the nineteenth century mapping.

2.4.3 Cemeteries and Burials

While cemeteries and burials are often associated with areas of archaeological site potential, predictive modelling for the Aboriginal period and for rural areas as late as the nineteenth century cannot reliably account for all possible burial locations, due to the complex cultural and ideological considerations that may be involved in the selection of burial sites. As well, the formerly mapped limits or present-day, existing limits of cemeteries dating to the nineteenth century or earlier may not reflect the actual limits of the interment area.

2.5 Summary of Stage 1 Background Research

Based on the presence of Bond Lake and the Holland River within approximately 150 metres of Yonge Street, and the fact that Yonge Street was part of the historic settlement network, the study area has the potential for the presence of Aboriginal and historic archaeological sites depending on the intensity of more recent development and landscape alterations. The archaeological site potential of the proposed North Yonge Street Public Transportation Improvements study area is also attested to by the presence of 151 registered archaeological sites within a one kilometre radius of the study area.

3.0 SHORT-LISTED ROUTE ALTERNATIVES

As one of the fastest growing municipalities in Canada, York Region must ensure that its ever-increasing population and robust economy can enjoy the timely and efficient movement of people and goods. To meet this demand, the region's 2002 transportation master plan called for the development of a transportation system consisting of both a rapid transit network (viva rapid transit) and an enhanced road network.

The Environmental Assessment for the North Yonge Street Corridor Public Transit and Associated Road Improvements will help define transit infrastructure and associated road improvements along the North Yonge Street corridor. Road capacity improvements along Yonge Street from Mulock Drive to Green Lane, are also being investigated in detail as part of this study.

The short-listed routes were broken down into 3 sections:

- Richmond Hill
 - RH2
- Aurora
 - A2
 - A3
 - A4
- Newmarket/East Gwillimbury
 - NE2
 - NE3
 - NE5
 - NE6
 - NE7
 - NE8

Each of the ten alternatives were evaluated for archaeological potential and translated to reflect the current evaluation scheme (set out by York Consortium). Appendix E contains the methodology for ranking of potential and the evaluation of each alternative.

The route alternative for Richmond Hill (RH2) has medium to high potential for adverse effects to known significant archaeological sites and areas of archaeological potential.

The three route alternatives for Aurora (A2, A3, & A4) all have medium potential for adverse effects to known significant archaeological sites and areas of archaeological potential.

Finally, the route alternative NE3 in Newmarket/East Gwillimbury has medium to high potential for adverse effects to known significant archaeological sites and areas of archaeological potential. The remaining five route alternatives for Newmarket/East Gwillimbury have medium potential for adverse effects to known significant archaeological sites and areas of archaeological potential.

Based on the evaluation, there is potential for the identification of archaeological sites throughout the entire project impact area.

4.0 FIELD REVIEW OF PREFERRED ALIGNMENT OPTION

A field review of the preferred alignment was carried out by Mr. Peter Carruthers (P163), ASI, on September 25, 2006, in order to confirm the assessment of archaeological site potential and to determine the degree to which development and landscape alteration may have affected that potential. Weather conditions during the field assessment were sunny and clear. Field observations have been compiled onto maps of the study area (Figures 3-1 to 3-33) with accompanying photographs.

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 centerline of the traveled lanes. The disturbed ROW includes the traveled lanes and shoulders, and it 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.

In light of the relative size of the study area, the field review was limited to areas immediately surrounding routes retained for further evaluations.

West and east of Yonge Street, from Gamble Road/ 19th Avenue to Stouffville Road, the study area is characterized as disturbed due to residential and commercial development (Figures 3-1 to 3-3: Plates 1-2, 6; areas marked in yellow). Given this, there are still some areas that have remained relatively undisturbed and exhibit archaeological site potential. The 19th century school house and farm house (Figure 3-1: Plates 3 & 4; areas marked in green) just north of Gamble Road are areas of potential. At the Yonge Street/Jefferson Forest intersection, a tributary of the Holland River is visible and the area is minimally disturbed. This area is therefore also identified as having potential for archaeological sites (Figure 3-2: Plate 5; areas marked in green). The area where Jefferson Sideroad meets Yonge Street is also identified as having potential, due to minimal disturbance and the fact that the area is characterized as a rolling moraine terrain with drainage systems and kettle lakes (Figure 3-3: Plate 8; areas marked in green). At this intersection, there is also an historic Anglican Church (St. John's) dating to the 1840's along with associated buildings and a cemetery (Figure 3-3: Plate 9; areas marked in green). The cemetery is set well back from the existing ROW and does not appear to be of concern in relation to the proposed project. If construction activities are proposed in close proximity to the cemetery, a Stage 3 archaeological investigation will be necessary in order to determine the presence or absence of unmarked graves beyond the cemetery limits.

The stretch of Yonge Street from Silver Maple Road to Estate Garden Mews/Old Colony Road has the potential for archaeological sites due to the minimal disturbance of certain areas as well as the presence of Bond Lake and several other kettle lakes (Figures 3-4 to 3-5: Plates 10-11; areas marked in green). Should the proposed project encroach upon these undisturbed lands beyond the disturbed ROW, a Stage 2 assessment should be conducted.

North of Estate Garden Mews/Old Colony Road to Regatta Avenue, the ROW has been largely disturbed by residential development and landscaping, and previous road construction and utility installation (Plate 12). Due to the extent of previous disturbances throughout these portions of the study area, archaeological site potential is negated, and no further archaeological assessment is required (Figures 3-5 to 3-7, areas marked in yellow).

From Regatta Avenue to south of Gilbert Drive, the area has remained relatively undisturbed and exhibits archaeological site potential. Should the proposed project encroach upon these undisturbed lands, a Stage 2 assessment should be conducted (Figures 3-7 to 3-10: Plates 13-15; areas marked in green).

The Aurora Cemetery, next to the Beacon Hall Golf Course, is an active cemetery, set well back from the existing ROW. If construction activities are proposed within the limits of the cemetery, beyond the fenceline, (Figure 3-10: Plate 16), a Stage 3 archaeological investigation will be necessary in order to determine the presence and extent of burial features in the proposed disturbance area.

From Gilbert Drive to Orchard Heights Boulevard/Batson Drive (Figures 3-11 to 3-15), the ROW and lands adjacent to the ROW have been largely disturbed by pervious road construction (Plates 17-18) and commercial and residential development (Plates 19, 23-24). While the stretch of Yonge Street running through the Town of Aurora is highly disturbed, there are some areas that exhibit archaeological site potential. Specific areas include the historic downtown core, including the Northeast Old Aurora Heritage Conservation District (Figures 3-13 to 3-14; Plates 20-22; areas marked in green).

The west side of Yonge Street from just north of Orchard Heights Boulevard/Batson Drive to St. John's Sideroad has remained relatively undisturbed and exhibits archaeological site potential (Plate 25). Should the proposed project encroach upon these undisturbed lands, a Stage 2 assessment should be conducted (Figures 3-15 to 3-16; areas marked in green). The east side of Yonge Street has been previously disturbed by road construction and commercial development (Plate 26). Due to the extent of previous disturbances throughout this portion of the study area, archaeological site potential is negated, and no further archaeological assessment is required (Figures 3-15 to 3-16; areas marked in yellow).

Between the Yonge Street/St. John's Sideroad and Yonge Street/Joe Persechini Drive intersections, a tributary of the Holland River is visible and the area beyond the ROW has been minimally disturbed. This area is therefore identified as having potential for archaeological sites (Figures 3-17 to 3-18; Plate 27; areas marked in green). Should the proposed project encroach upon these undisturbed lands, a Stage 2 assessment should be conducted

From Joe Persechini Drive to Mulock Drive, the ROW and lands adjacent to the ROW have been largely disturbed by pervious road construction and commercial development. Due to the extent of previous disturbances throughout these portions of the study area, archaeological site potential is negated, and no further archaeological assessment is required (Figures 3-18 to 3-19; Plate 29; areas marked in yellow).

The section of Yonge Street between Mulock Drive and Gladman Avenue and between St. John's Sideroad to Wellington Street, was subject to a previous archaeological assessment as part of the Yonge Street Watermain EA (ASI 2005). The proposed watermain is to be installed within the existing disturbed ROW. Further work in the vicinity of the Quaker cemetery along the west side of Yonge Street was recommended. No additional archaeological assessment is required along the Yonge Street Watermain study area sections, and they can be considered clear of further archaeological concern (Appendix B). The Ministry of Culture concurs with this recommendation.

Between Mulock Drive and Davis Drive, three areas of archaeological site potential are identified. In the first area, just north of Mulock Drive, a tributary of the Holland River crosses Yonge Street and passes through open fields. This area has remained relatively undisturbed and has archaeological site potential. The second location that contains archaeological potential is the land surrounding the Quaker Meeting House and Cemetery (Plates 31-32).

The Meeting House and Cemetery has a historical designation and was subject to a partial Stage 2 archaeological assessment as part of the Yonge Street Watermain EA (ASI 2007). The proposed Yonge Street watermain runs between the sidewalk and the curb fronting the cemetery. In order to identify any unmarked grave shafts within the watermain ROW, an exploratory trench was excavated by Gradall under the supervision of a licensed archaeologist (Figure 3-20: area marked in pink). Despite careful scrutiny, no significant archaeological material or unmarked grave features were encountered and the area was considered free of further archaeological concern (Appendix C). The Ministry of Culture concurs with this recommendation.

At the third area, just north of Eagle Street, a tributary of the Holland River crosses Yonge Street. This area is also relatively undisturbed and has archaeological site potential (Figures 3-20 to 3-21: area marked in green). Should the proposed project encroach upon these undisturbed lands, a Stage 2 assessment should be conducted.

The remainder of the Yonge Street ROW and lands adjacent to the ROW have been heavily disturbed by typical road construction and previous commercial development (Figures 3-22 to 3-24: Plates 34-35, 37-38; areas marked in yellow). Due to the extent of previous disturbances throughout this portion of the study area, archaeological site potential is negated, and no further archaeological assessment is required.

A Stage 1 archaeological assessment along Davis Drive, from west of Yonge Street to Highway 404, was recently completed (ASI 2006). The section from west of Yonge Street to Longford Drive has been heavily disturbed by typical road construction and previous commercial development (Figure 3-28: Plates 43-44). Due to the extent of previous disturbances throughout this portion of the study area, archaeological site potential is negated, and no further archaeological assessment is required.

Between Longford Drive and Roxborough Road/Patterson Street a number of areas have remained relatively undisturbed and exhibit archaeological site potential (Figures 3-29 to 3-31; areas marked in green). These include land adjacent to the East Holland River and its tributaries (Plates 45-46, 49, 51), areas surrounding 19th century homesteads (Plates 46-47), and minimally disturbed lawns (Plate 50). Should the proposed project encroach upon these undisturbed lands, a Stage 2 assessment should be conducted.

The remainder of the Davis Drive ROW and lands adjacent to the ROW have been heavily disturbed by typical road construction and previous commercial development (Figures 3-28 to 3-33: Plates 48, 52-53; areas marked in yellow). Due to the extent of previous disturbances throughout this portion of the study area, archaeological site potential is negated, and no further archaeological assessment is required.

The Stage 1 archaeological assessment along Davis Drive (ASI 2006) has been submitted to the Ministry of Culture for review and the results of that review are pending (Appendix D).

The Green Lane ROW has been previously disturbed and does not have potential. However, outside of the ROW are agricultural lands with the presence of historic farmsteads. With the exception of the western section, near the Yonge Street intersection (Figure 24: Plate 39), and the eastern section, near the GO station (Plate 42), any areas outside the existing Green Lane ROW are considered to have archaeological potential (Figures 3-25 to 3-27: Plate 40; areas marked in green). Should the proposed project encroach upon these undisturbed lands, a Stage 2 assessment should be conducted.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Stage 1 archaeological assessment for the North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class Environment Assessment, Regional Municipality of York, Ontario, determined that 151 archaeological sites are registered within the study area, 32 of these sites being identified as significant for their location relative to the proposed alignments. Additionally, a review of the general physiography and local nineteenth century land use of the study area suggested that it encompasses areas that exhibit both Aboriginal and Euro-Canadian archaeological site potential.

The short-listed route alternatives were evaluated for archaeological potential and determined that there is potential for the identification of archaeological sites within the entire project impact area.

The field review determined that although parts of the study area have been previously disturbed by typical road construction, and residential and commercial development, portions of the study area have remained undisturbed and are considered to have archaeological potential.

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

1. A Stage 2 archaeological assessment should be conducted on lands determined to have archaeological potential (Figures 3-1 to 3-33: areas marked in green), if the proposed project is to impact these lands. This work will be done in accordance with the Ministry of Culture's draft *Standards and Guidelines for Consultant Archaeologists* (MCL 2006), in order to identify any archaeological remains that may be present;
2. If construction activities are proposed along the existing ROW, immediately adjacent to the Quaker Cemetery or the Aurora Cemetery, a Stage 3 archaeological assessment will be required, in accordance with the Ministry of Culture's draft *Standards and Guidelines for Consultant Archaeologists* (MCL 2006), to confirm the presence or absence of unmarked graves beyond the cemetery limits. This work should involve the removal of the topsoil with a Gradall followed by the shovel shining of the exposed surfaces and subsequent inspection for grave shafts;
3. If construction activities are proposed immediately adjacent to the Quaker Cemetery or the St. John's Anglican Cemetery, a Stage 3 archaeological assessment will be required, in accordance with the Ministry of Culture's draft *Standards and Guidelines for Consultant Archaeologists* (MCL 2006), to confirm the presence or absence of unmarked graves beyond the cemetery limits. This work should involve the removal of the topsoil with a Gradall followed by the shovel shining of the exposed surfaces and subsequent inspection for grave shafts;
4. The remainder of the study area does not retain archaeological site potential due to previous road, residential, and commercial disturbances (Figures 3-1 to 3-33: areas marked in yellow). Additional archaeological assessment is not required, and that portion of the study area can be cleared of further archaeological concern.

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

The following Ministry of Culture conditions also apply:

- Should deeply buried archaeological remains be found during construction activities, the Manager, Heritage Operations Unit, Ministry of Culture should be immediately notified; and
- In the event that human remains are encountered during construction, the proponent should immediately contact both the Ontario Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Government Services, Consumer Protection Branch at (416) 326-8404 or toll-free at 1-800-889-9768.

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 York and Durham Region, the Ontario Ministry of Culture, and any other legitimate interest groups.

5.0 REFERENCES CITED

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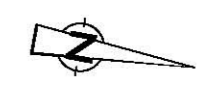


Plate 1: View to north along Yonge Street showing wide cross-section. ROW has been previously disturbed by commercial and residential development.



Plate 2: View to the north northwest from higher ground above Yonge/Gamble intersection showing partial lot on southwest corner with some original grade. ROW has been previously disturbed.

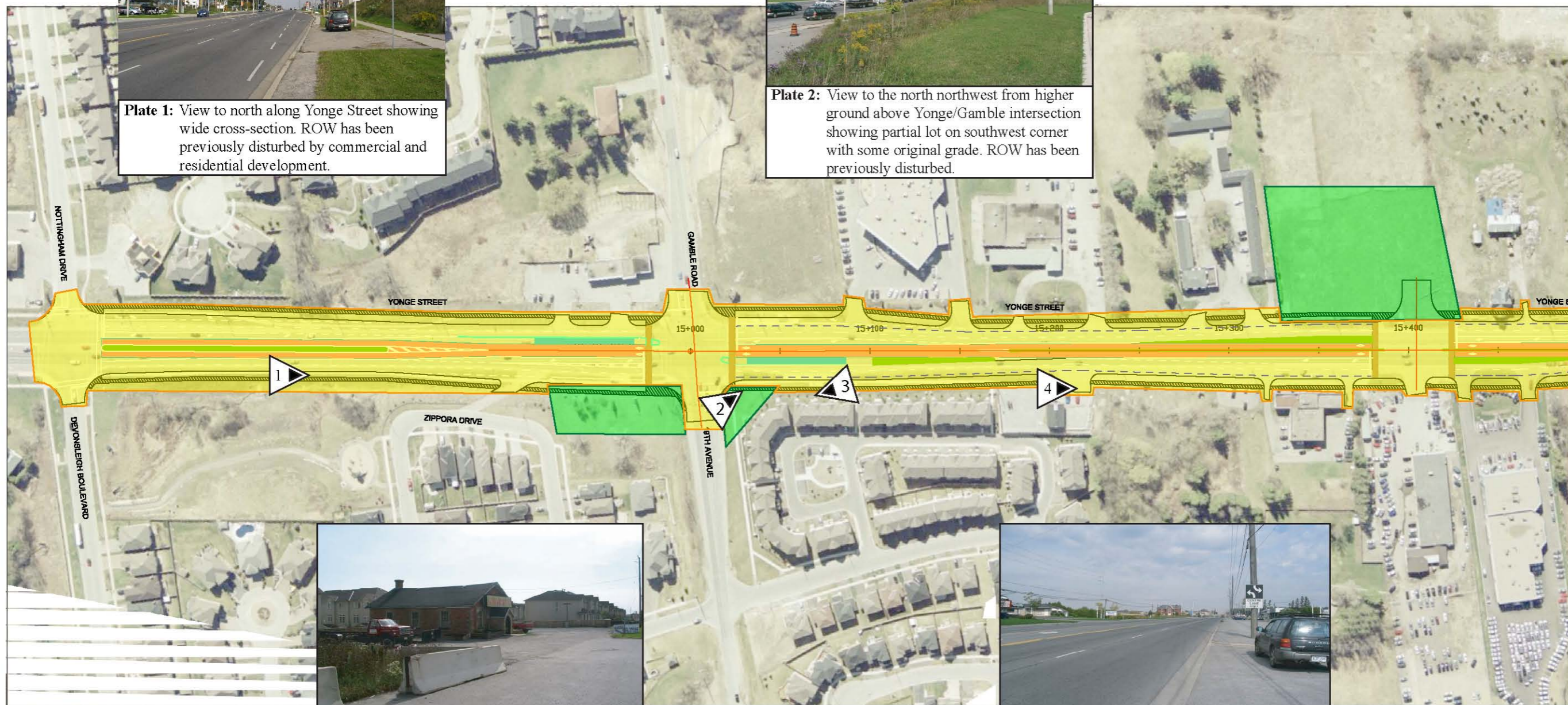


Plate 3: View to south southeast from north of Gamble Road showing mid-19th century schoolhouse in original location, now a print and sign shop.



Plate 4: View to north along Yonge Street. Graded field immediately to the right of car. Note in distance a 19th C. farmhouse with undisturbed grade around it.

Figure 3-1: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 5: View to the north northwest across intersection of Yonge Street and Jefferson Forest Drive. Tributary of east Humber is crossing from the left to right of the picture.



Plate 6: View to south along Yonge Street from entrance to Summit Golf Club. ROW has been previously disturbed. Potential may exist beyond fence line.

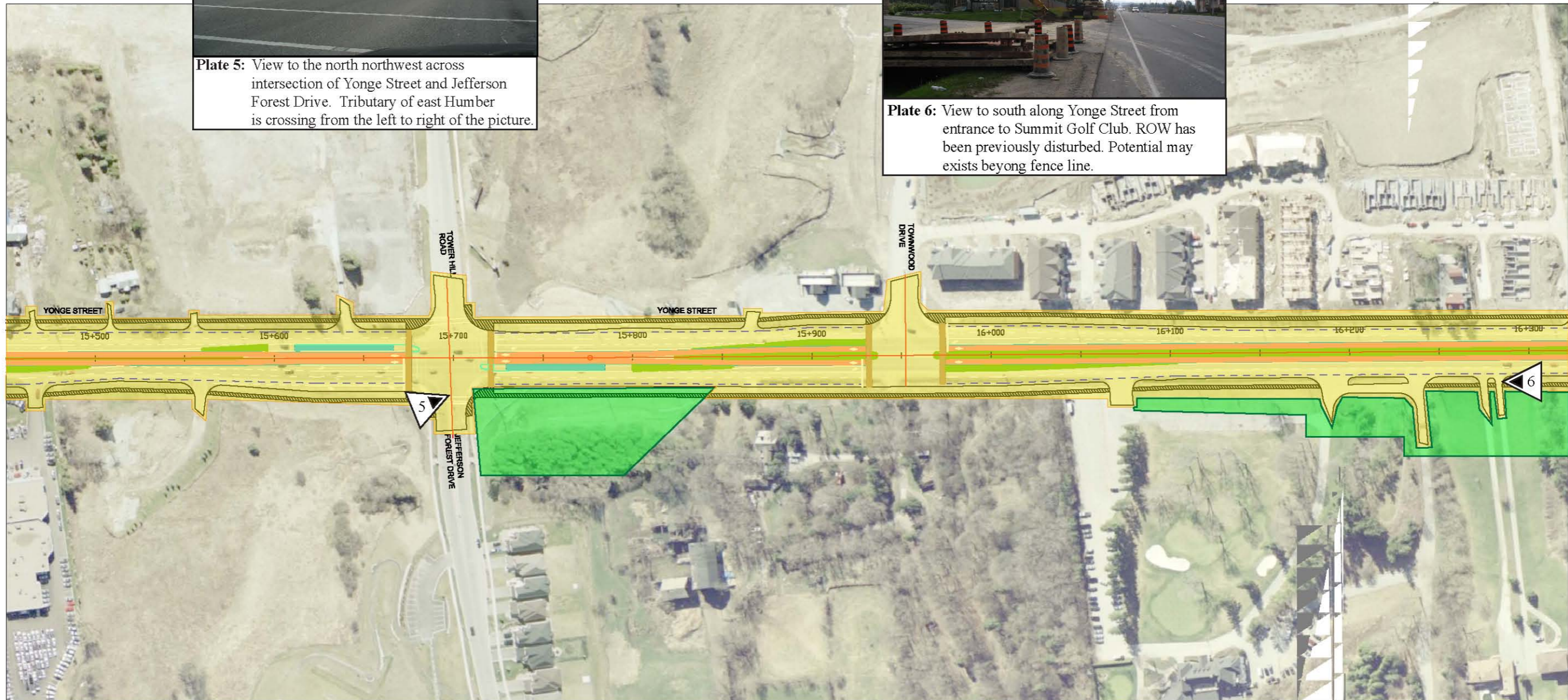
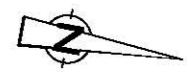


Figure 3-2: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 7: View to the east looking at text of Federal Government plaque commemorating Yonge Street on the grounds of a golf club.



Plate 8: View to the north along Yonge Street showing potential on both sides. Note dip in road marking tributary/ravine crossing road. Yonge Street rises to high ground in distance.



Plate 9: View to the northeast from shoulder of Yonge Street showing Saint John's Anglican Church, a historic 1840s building and associated cemetery.



Figure 3-3: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 10: View to north along Yonge Street as road descends into depression of Bond Lake. Potential exists beyond ditch.



Plate 11: View of house beside Bond Lake. Behind the house and to the west are massive stone foundations of a possible historical industrial building below street grade.

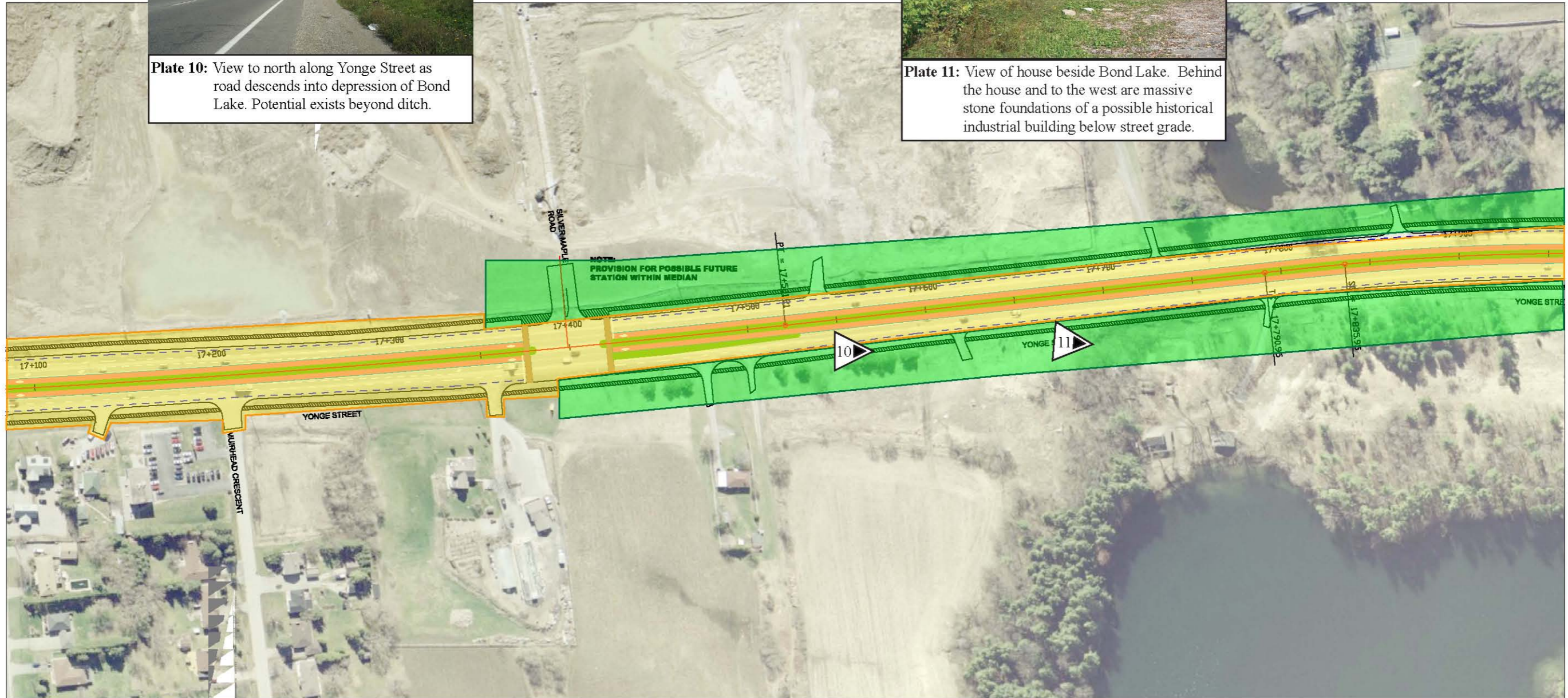


Figure 3-4: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment

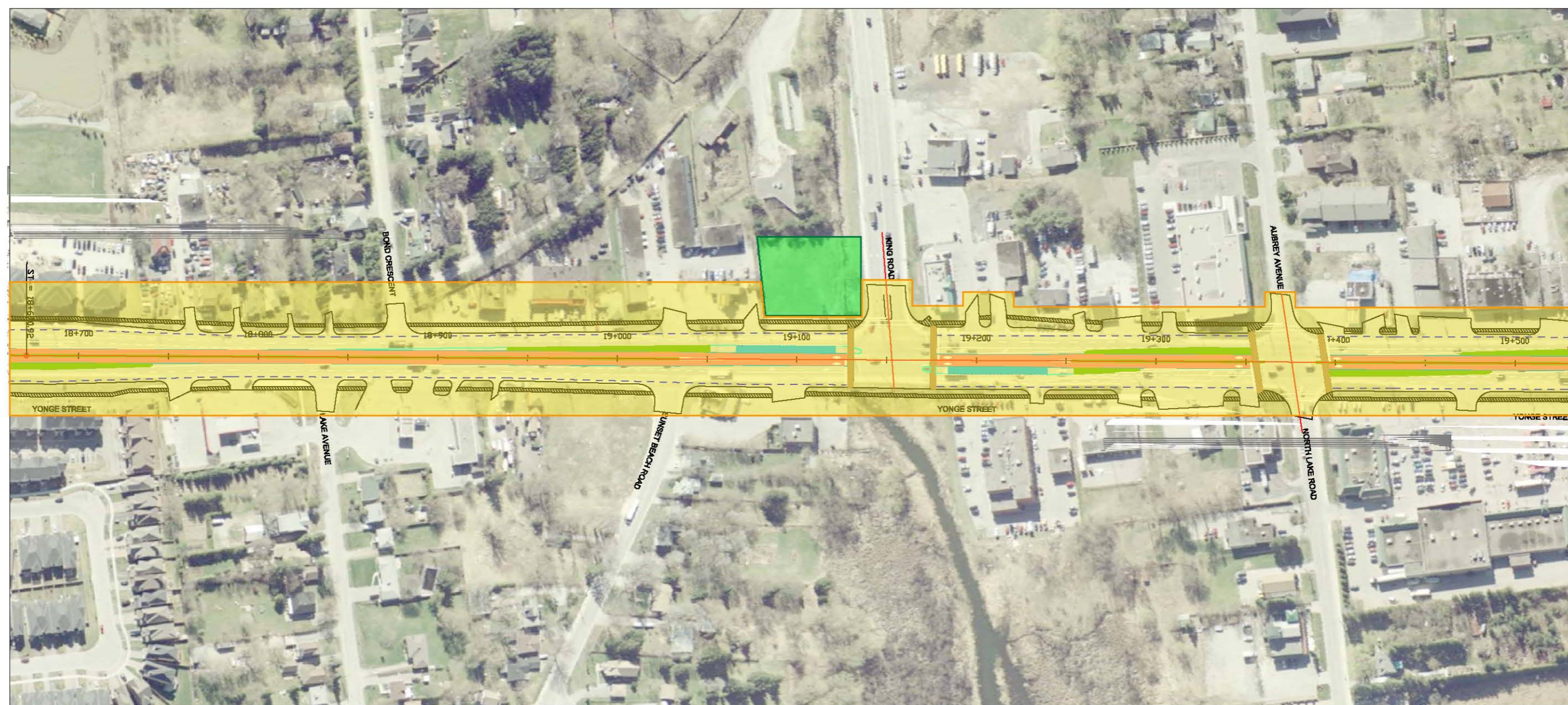


Figure 3-6: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment

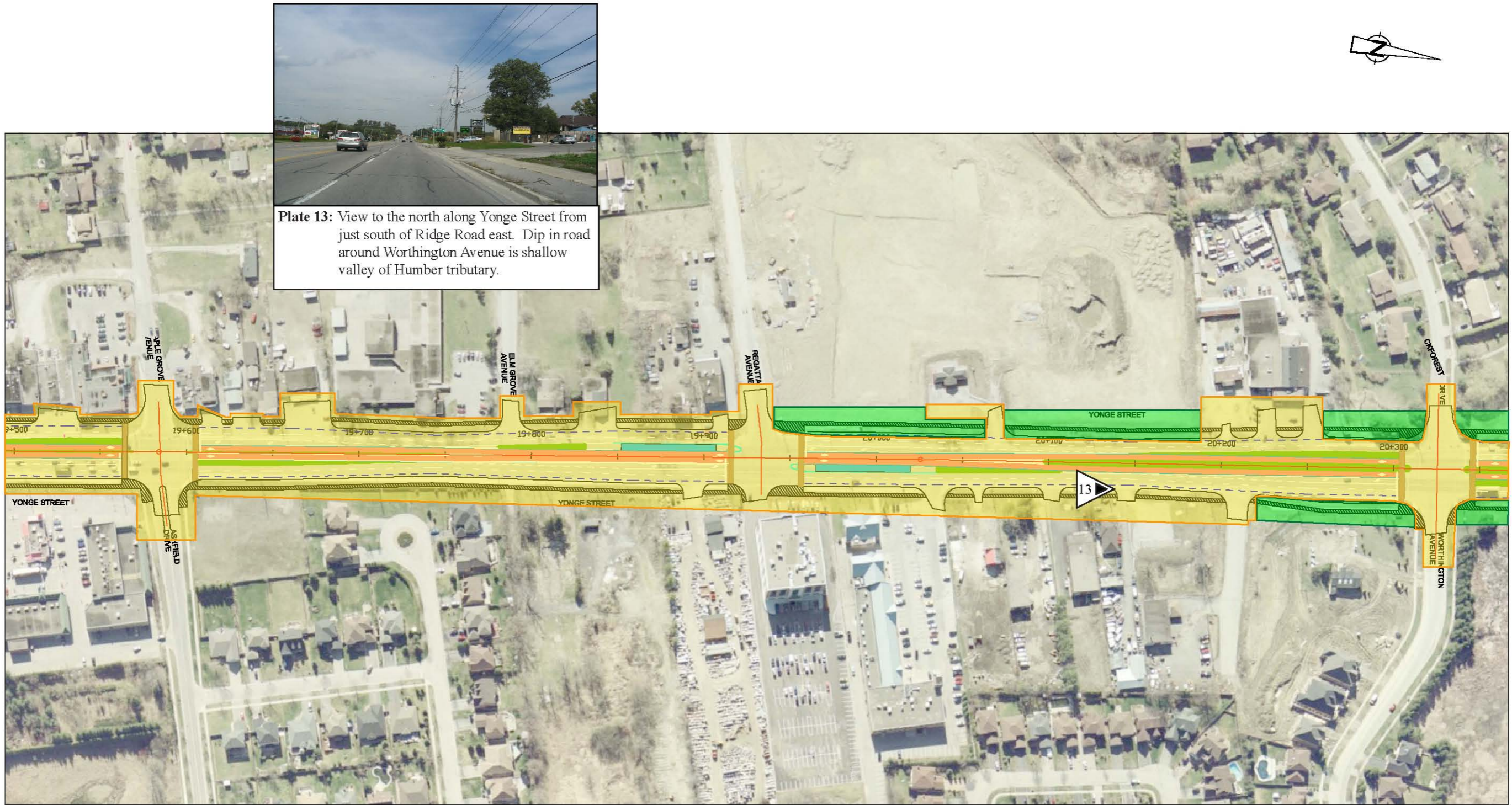


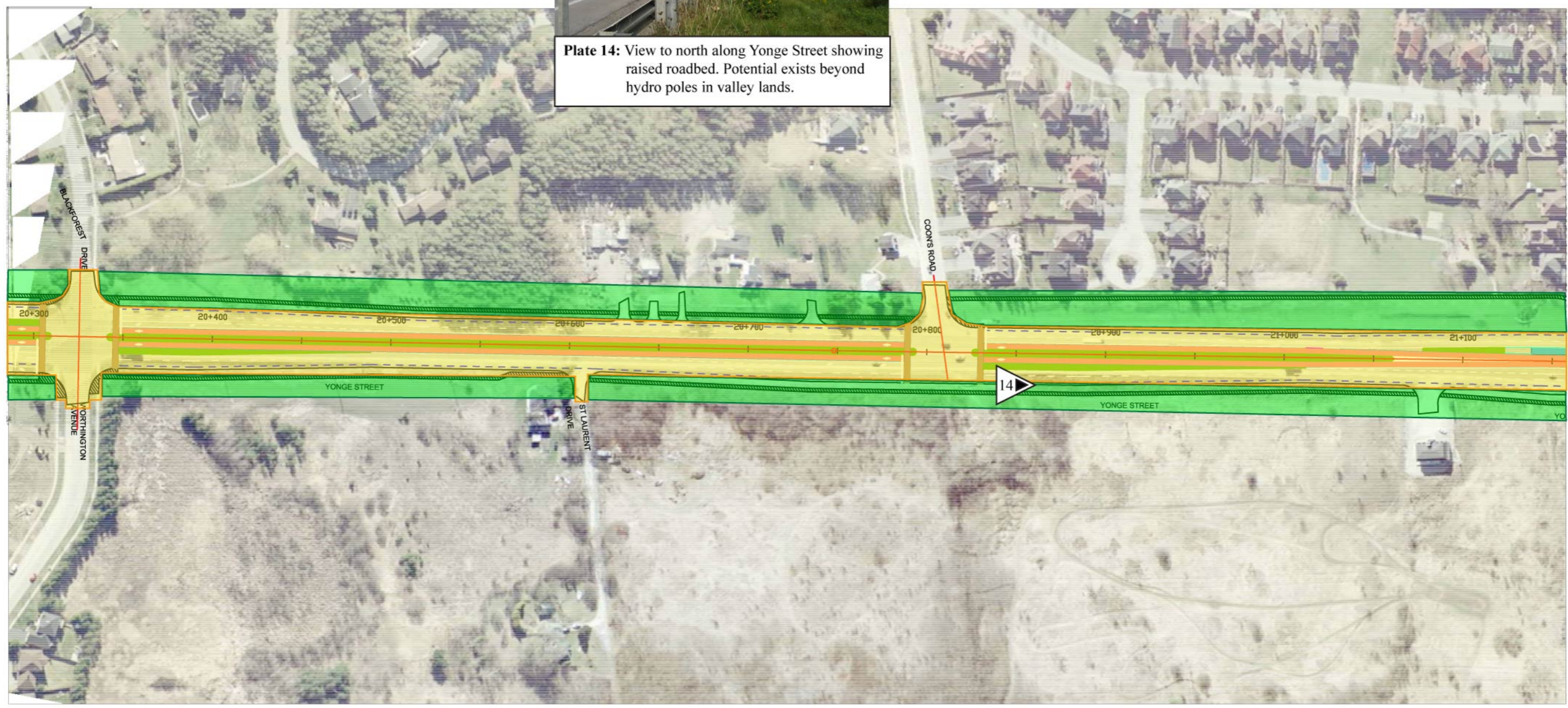
Plate 13: View to the north along Yonge Street from just south of Ridge Road east. Dip in road around Worthington Avenue is shallow valley of Humber tributary.



Figure 3-7: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 14: View to north along Yonge Street showing raised roadbed. Potential exists beyond hydro poles in valley lands.



Archaeological Potential

No Potential: disturbed

Photo Location & Direction

0 125m

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Figure 3-8: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 15: View to the north along Yonge Street from high ground north of Bloomington Side Road looking down over rolling moraine terrain into Aurora.

Figure 3-9: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment

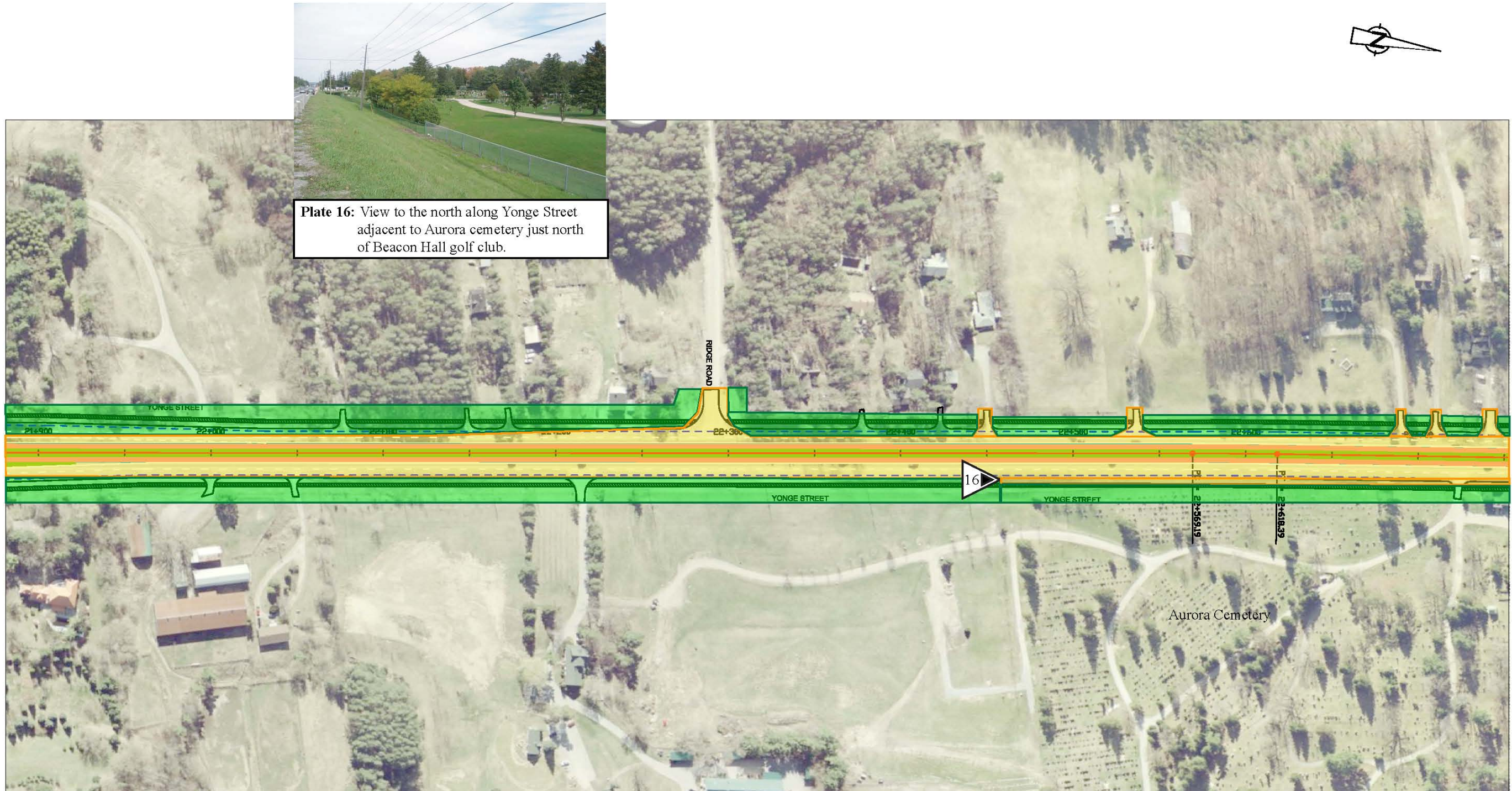


Plate 16: View to the north along Yonge Street adjacent to Aurora cemetery just north of Beacon Hall golf club.

Figure 3-10: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 17: View to northwest across Yonge Street. Note slope to west and roadbed has been cut and filled. Area has no potential.



Plate 18: View to the east-northeast along Industrial Parkway. Note road cut on right. Land drops down the left into graded Highland Recreational Park.

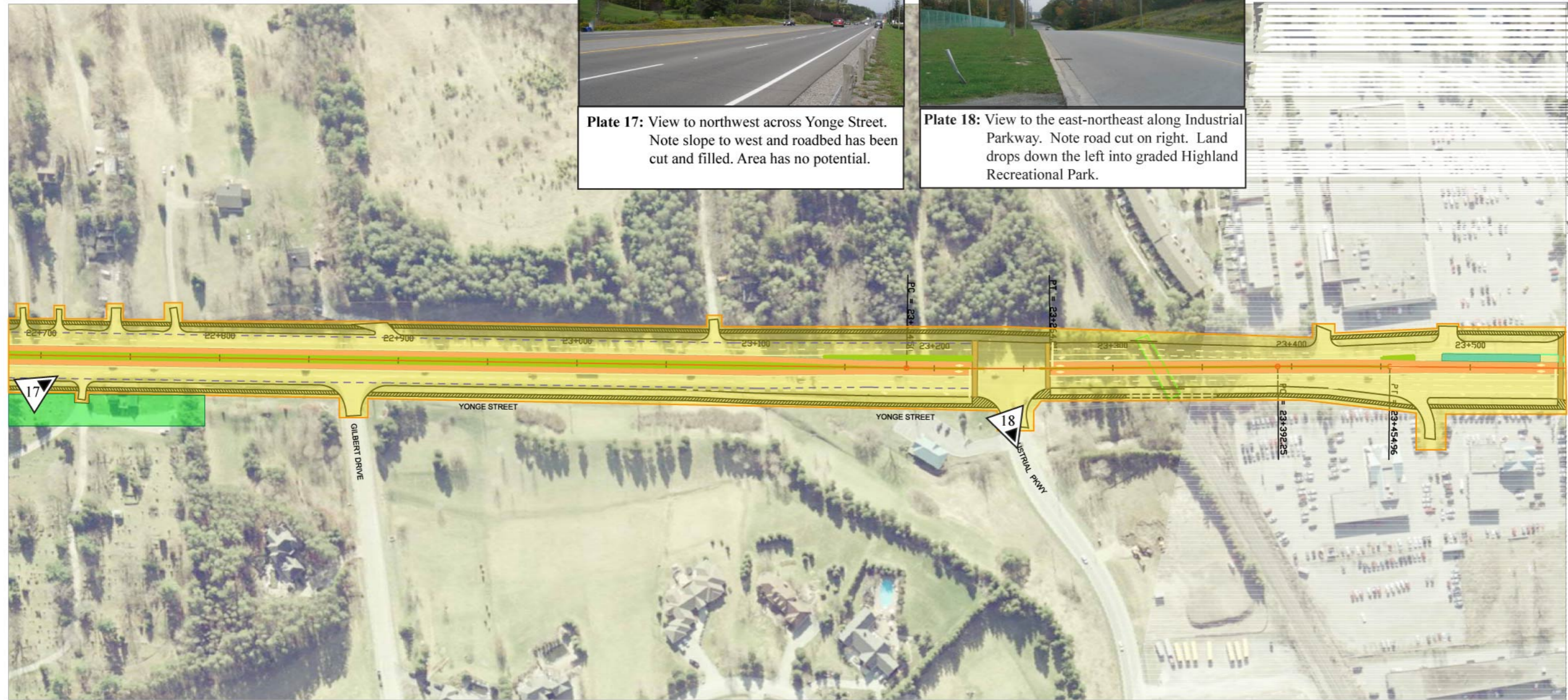


Figure 3-11: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 19: View to north along Yonge Street toward Henderson Drive/Allaura Boulevard. Area has been previously disturbed by commercial development.

Figure 3-12: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 20: View to the north along Yonge Street from Cousins Drive approaching Kennedy Street. Note older buildings on both sides of Yonge Street - historic downtown core and tributary crossing.

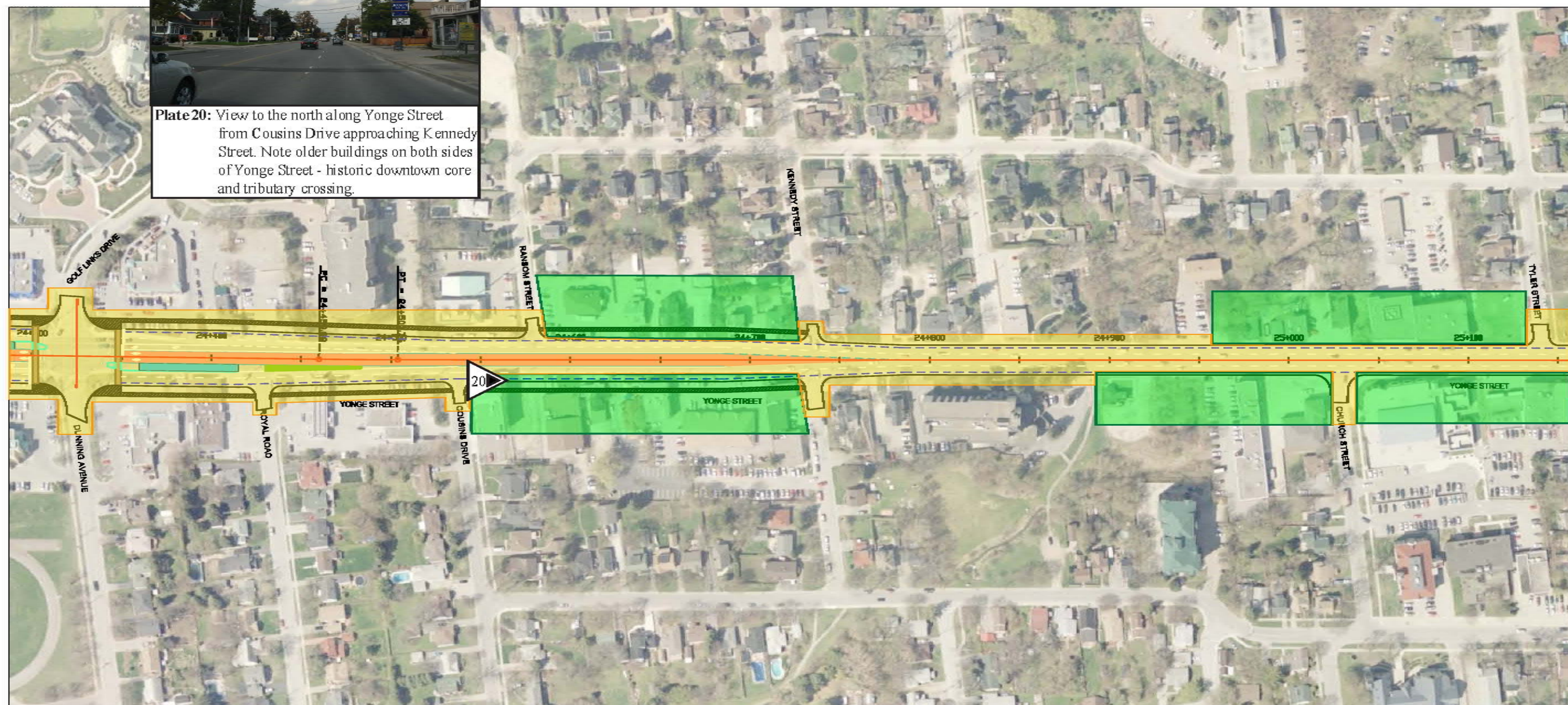


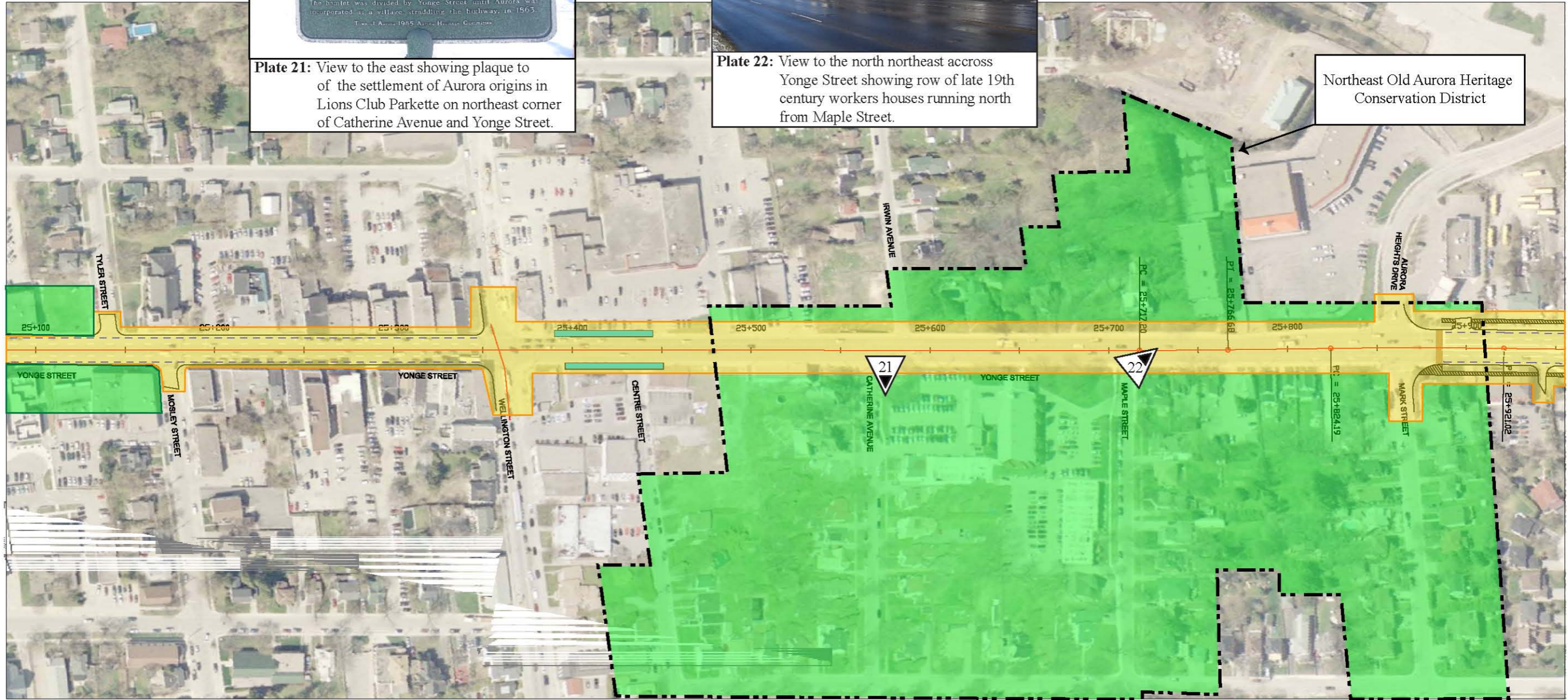
Figure 3-13: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 21: View to the east showing plaque to of the settlement of Aurora origins in Lions Club Parkette on northeast corner of Catherine Avenue and Yonge Street.



Plate 22: View to the north northeast across Yonge Street showing row of late 19th century workers houses running north from Maple Street.



Northeast Old Aurora Heritage Conservation District

Figure 3-14: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 23: View to north-northwest along Yonge Street showing commercial and residential disturbances.

Plate 24: View to west across Yonge Street showing Howard Johnson. Area to right has been graded - no potential.



Figure 3-15: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 25: View to west-southwest across Yonge Street showing grounds of St. Andrew's School. Land adjacent to tributary is level and has potential



Plate 26: View to north along Yonge Street toward entrance to St. Andrew's. East side of road has been previously disturbed.

Figure 3-16: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 27: View to north along Yonge Street across St. John's Sideroad. NE corner has been developed, potential exists on west side Yonge Street and beyond NE corner.



Plate 28: View to the west-southwest along St. Johns Sideroad towards Yonge Street at top of second ridge in distance. Cut and filled roadbed beyond.



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DATE: JUNE 3, 2008

FILE: 06EA-197_North Yonge

Figure 3-17: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Figure 3-18: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 29: View to north along Yonge Street showing development along both sides of road.



Plate 30: View to north along Yonge Street from north of Mulock Drive. East side of road has been previously disturbed, potential exists on west in wooded area.

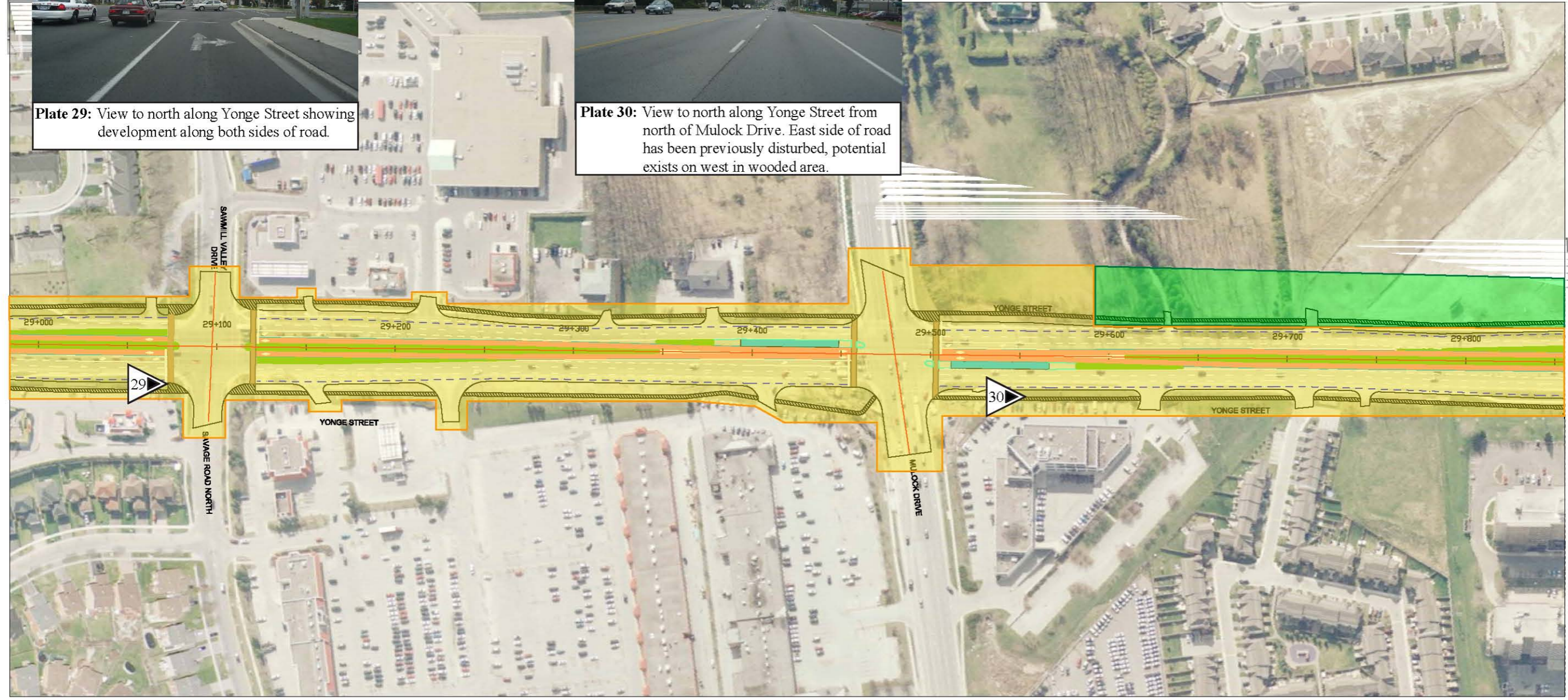


Figure 3-19: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment

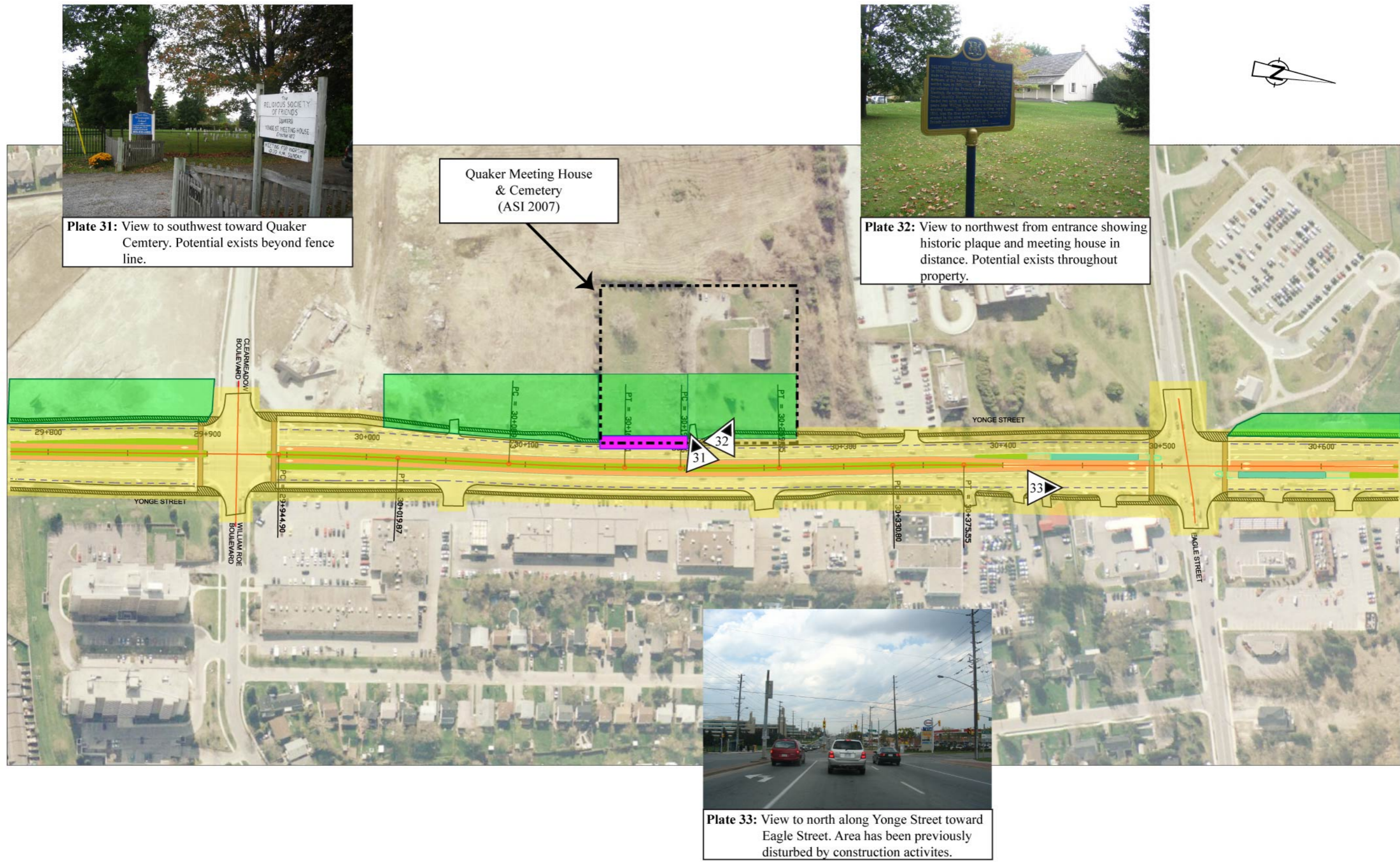


Plate 31: View to southwest toward Quaker Cemetery. Potential exists beyond fence line.

Quaker Meeting House & Cemetery (ASI 2007)

Plate 32: View to northwest from entrance showing historic plaque and meeting house in distance. Potential exists throughout property.

Plate 33: View to north along Yonge Street toward Eagle Street. Area has been previously disturbed by construction activities.



Figure 3-20: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment

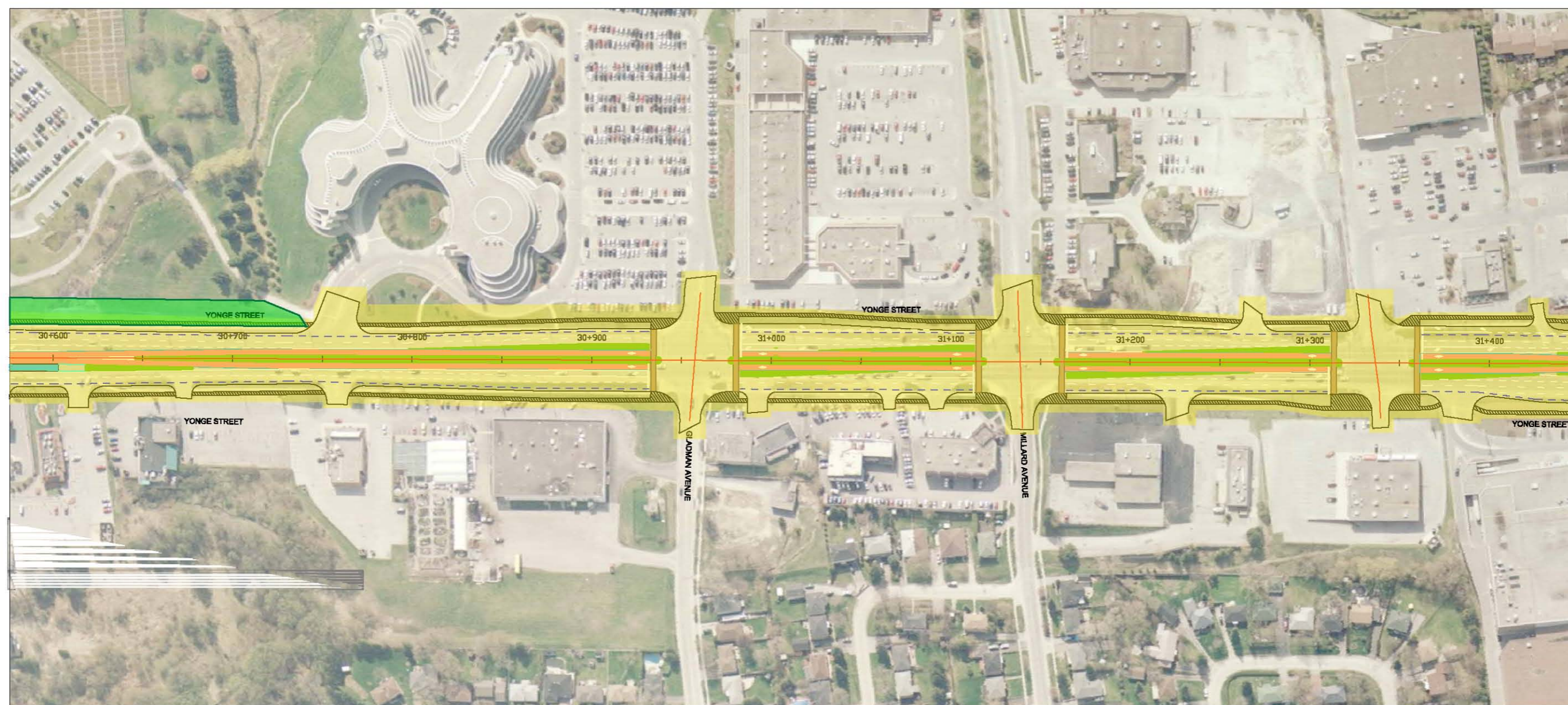


Figure 3-21: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 34: View to north along Yonge Street toward Davis Drive. Area has been previously disturbed by commercial development.



Plate 35: View to west-southwest along Davis Drive toward Eagle Street. Area has been previously disturbed by commercial development.



Plate 36: View to east-northeast along Davis Drive toward Main Street. Area has been previously disturbed by commercial development.

Figure 3-22: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment

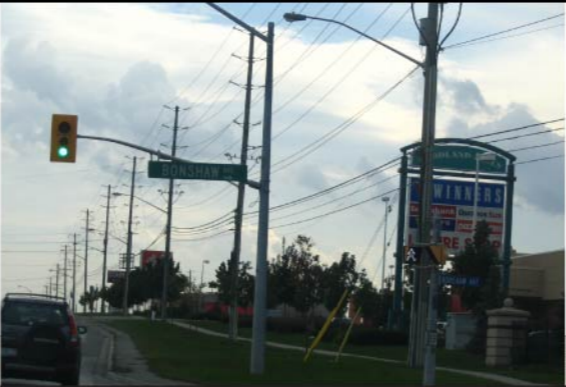
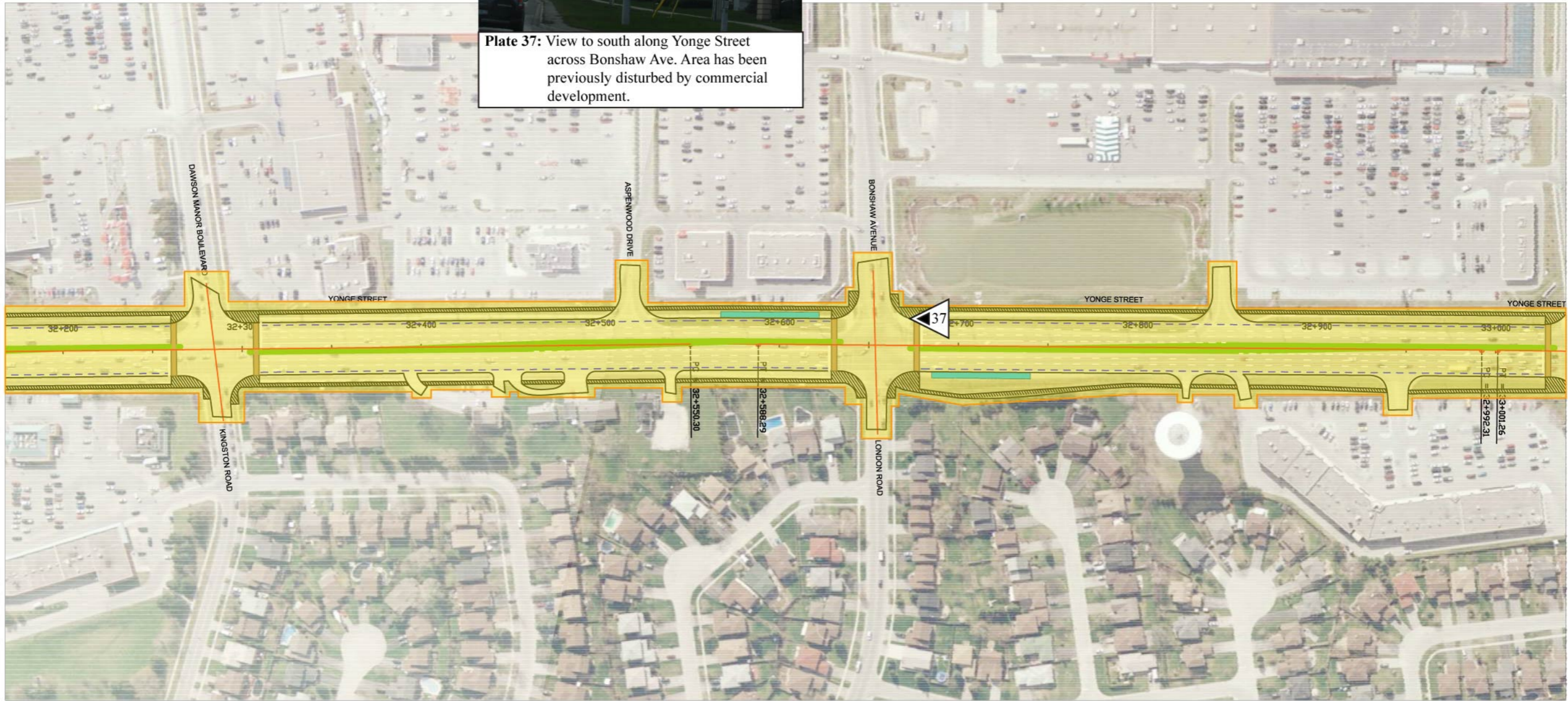


Plate 37: View to south along Yonge Street across Bonshaw Ave. Area has been previously disturbed by commercial development.



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Archaeological Potential

No Potential: disturbed

Photo Location & Direction

Figure 3-23: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment

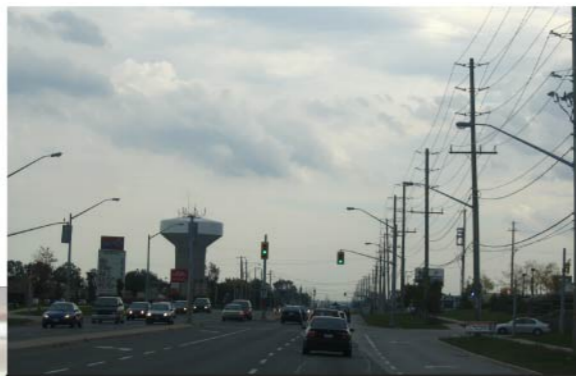


Plate 38: View to south along Yonge Street from Green Lane. Area has been previously disturbed by road construction and commercial development.



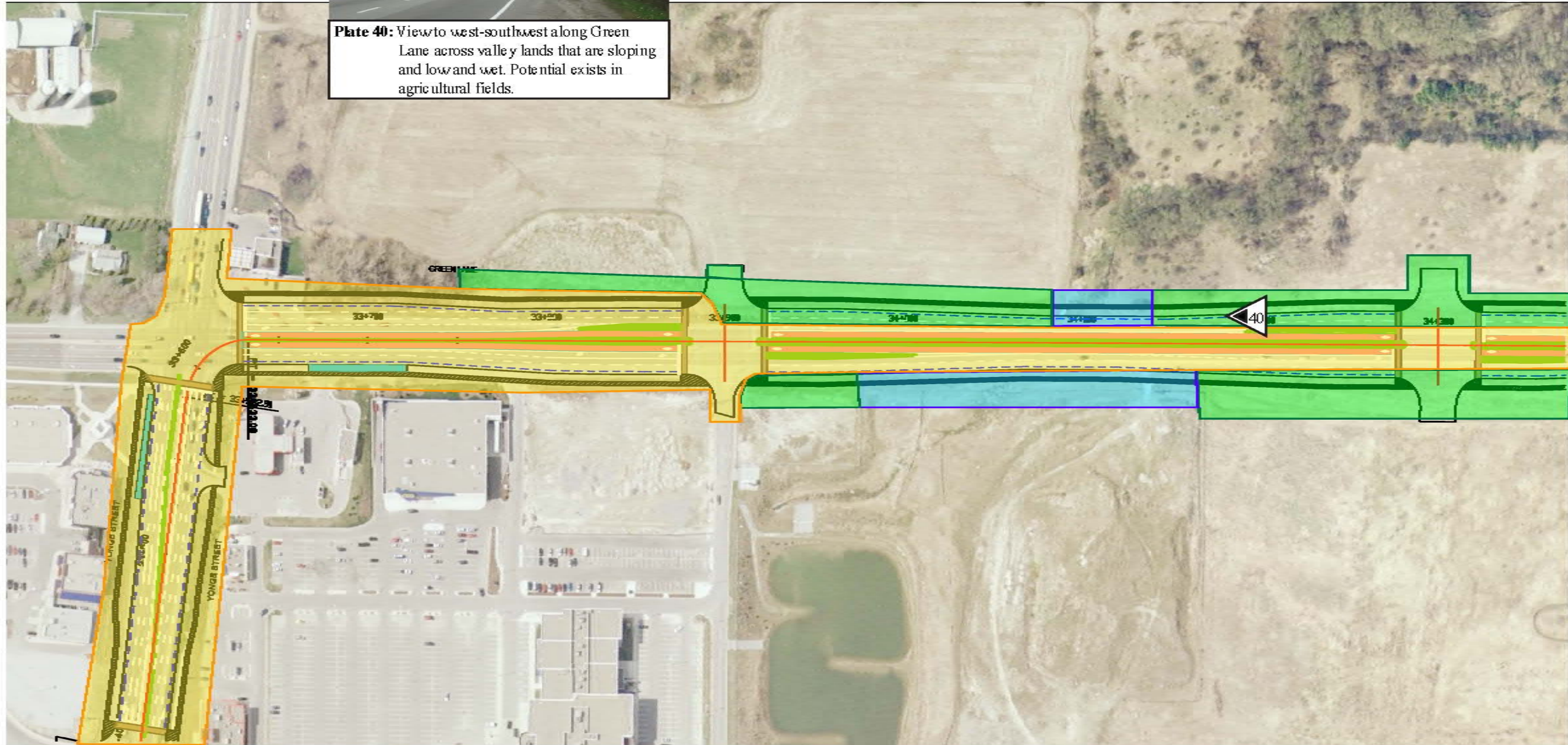
Plate 39: View to west-southwest along Green Lane. Area has been previously disturbed by road construction and commercial development.



Figure 3-24: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 40: View to west-southwest along Green Lane across valley lands that are sloping and low and wet. Potential exists in agricultural fields.



Archaeological Potential



No Potential: disturbed

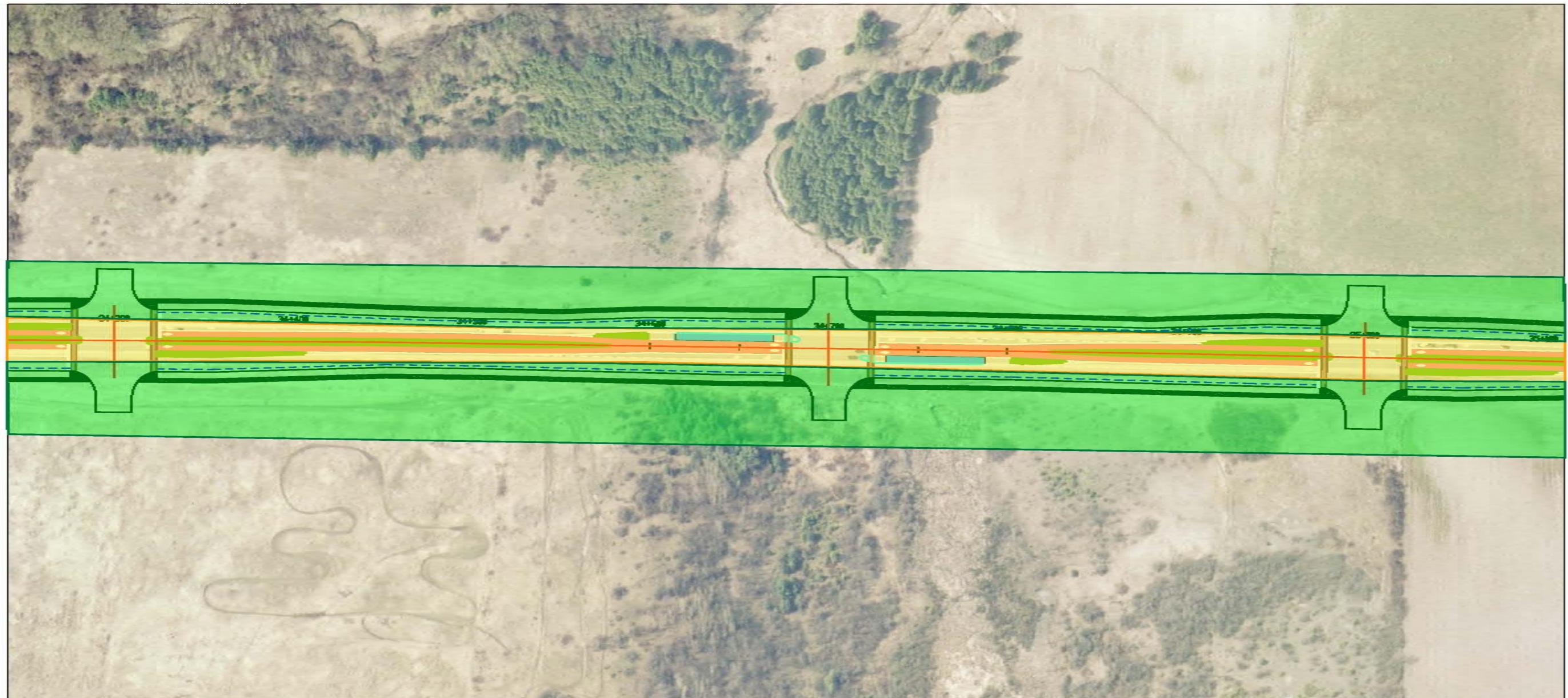


No Potential: slope or low and wet



Photo Location & Direction

Figure 3-25: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



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Inc.



Archaeological Potential



No Potential: disturbed



Photo Location &
Direction

Sheet 26 of 33

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Figure 3-26: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 41: View to north along 2nd Concession Road toward Green Lane. ROW has been previously disturbed by road construction.



Plate 42: View to west-southwest along Green Lane toward 2nd Concession. Potential exists in agricultural field on north, land to south has been disturbed by GO Station.

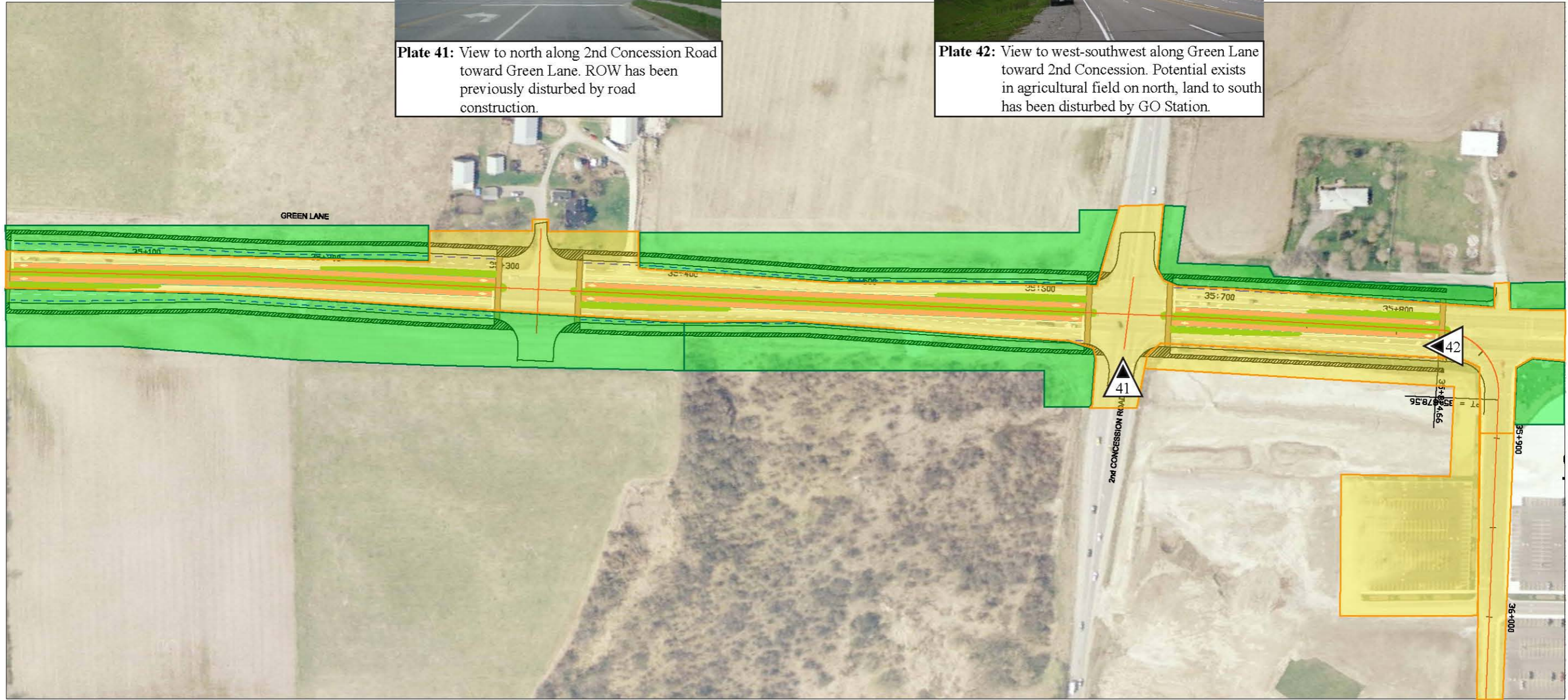


Figure 3-27: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 43: Looking east along north side of Davis Drive from Yonge Street at commercial development along both sides of ROW.



Plate 44: Looking east along south side of Davis Drive from Parkside Drive at open green space next to a tributary of the East Holland River (near tress).

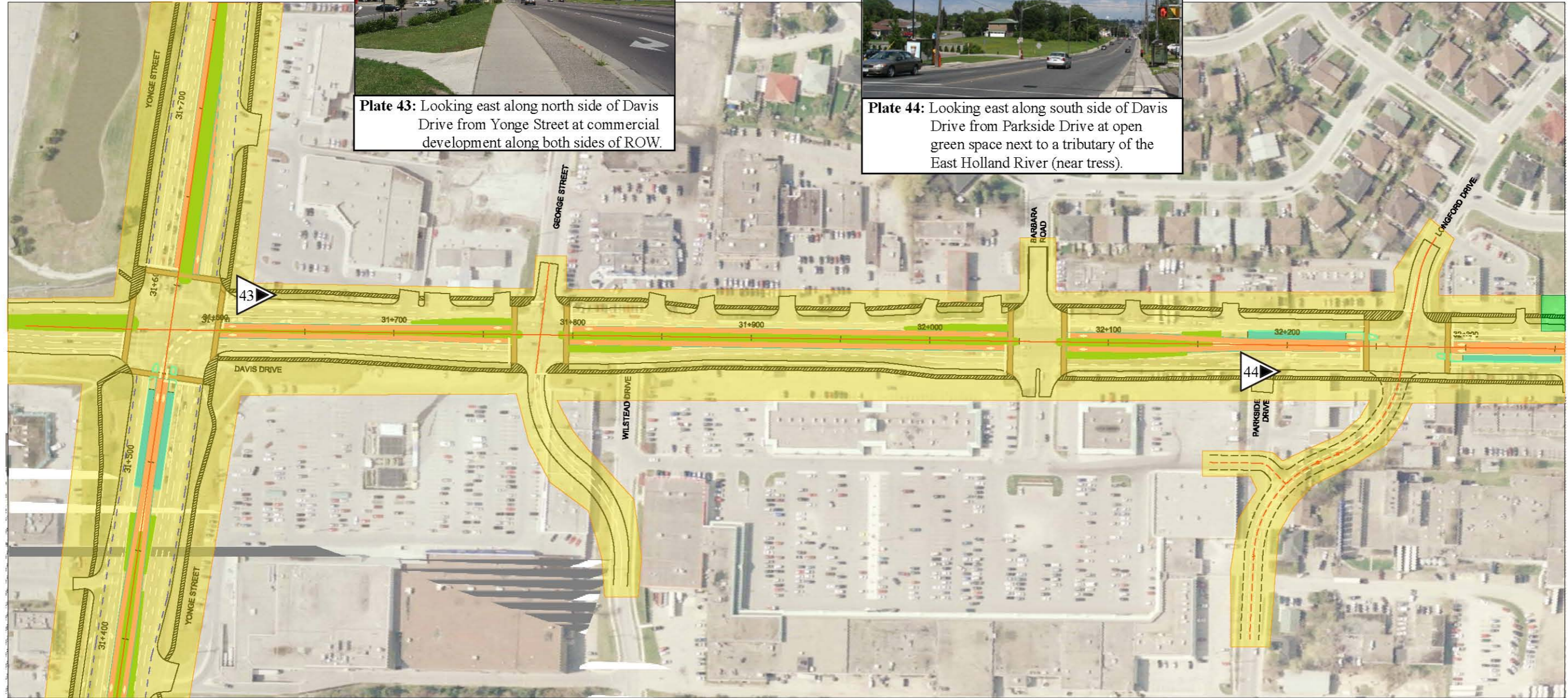


Figure 3-28: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 45: Looking east along Davis Drive from Niagara Street at the minimally disturbed green space next to a tributary of the East Holland River.



Plate 46: Looking northeast across Davis Drive toward minimally disturbed lawns of 19th century homes, west of a tributary of the East Holland River.



Plate 47: Looking northeast from Davis Drive across minimally disturbed abandoned lot and at minimally disturbed lawns of 19th century homestead.

Figure 3-29: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 48: Looking east along Davis Drive from Main Street at commercial development on both sides of ROW.

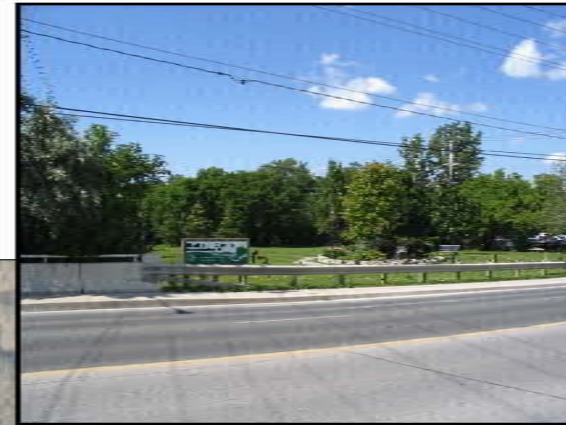


Plate 49: Looking north across Davis Drive at the Mable Davis Conservation Area, adjacent to the East Holland River.

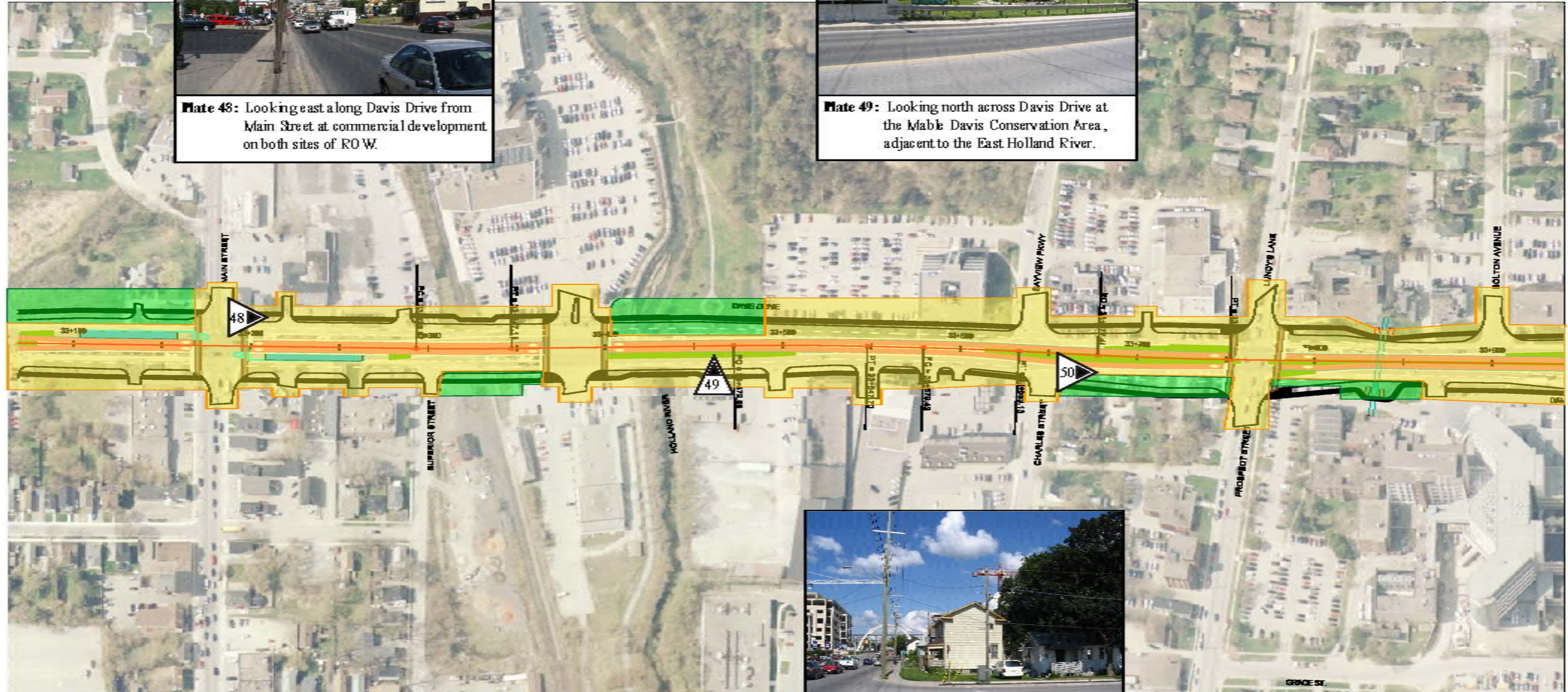
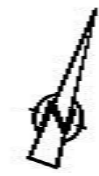


Plate 50: Looking east along Davis Drive at minimally disturbed lawns.

Figure 3-30: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 51: Looking southeast from Davis Drive at minimally disturbed banks of a tributary of the East Holland River.

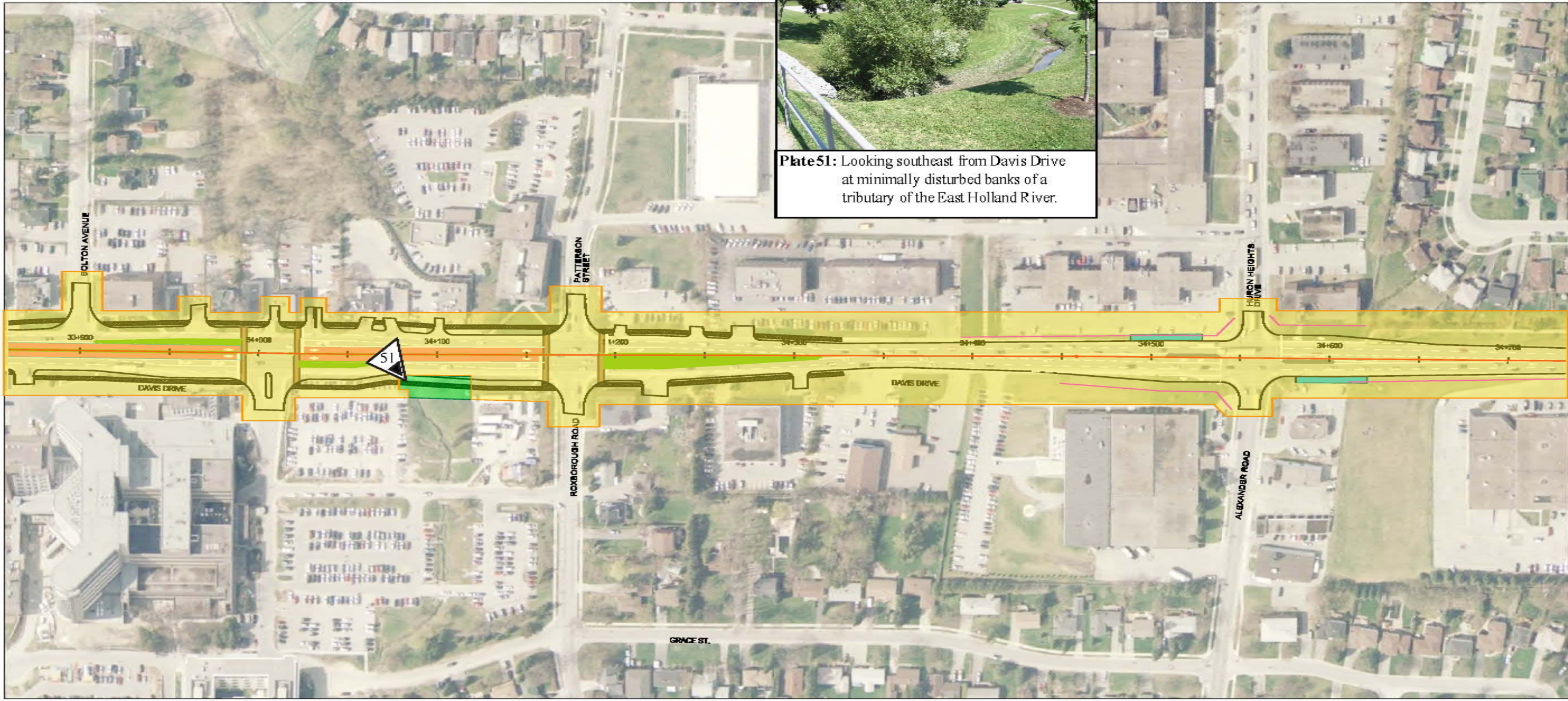



Figure 3-31: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Archaeological Services Inc. 

 Archaeological Potential

 No Potential: disturbed

 Photo Location & Direction

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Figure 3-32: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment



Plate 52: Looking west along the north side of Davis Dr. from Leslie St. at the residential development.



Plate 53: Looking east along the south side of Davis Dr. from east of Leslie St. at the commercial development on both sides of the ROW.

Figure 3-33: North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA - Results of the Stage 1 Archaeological Assessment

APPENDIX A

Registered Archaeological Sites within the Study Area
(sites located near the proposed routes are highlighted)

*Stage 1 Archaeological Assessment
North Yonge Street Corridor Public Transit and Associated Road Improvements
Transit Class Environment Assessment, Regional Municipality of York, Ontario*

Borden #	Name	Cultural Affiliation	Site Type	Researcher
AlGu-3	Murphy-Goulding	Woodland, Late	Campsite	ASI 1989
AlGu-17	Wilcox Lake	Iroquoian, Middle	Village	ASI 2000
AlGu-44	Rodes	Undetermined	Isolated Findspot	ASI 1987
AlGu-45	Orion	Iroquoian	Hamlet/Cabin	ASI 1988
AlGu-46	Bernard	Euro-Canadian	Homestead	ASI 1987
AlGu-61	Haunted House	Euro-Canadian	Homestead	ASI 1987
AlGu-63	Scorpio 1	Pre-Contact	Isolated Findspot	ASI 1987
AlGu-64	Scorpio 2	Undetermined	Isolated Findspot	ASI 1987
AlGu-65	White Pine	Historic, Undetermined	Homestead	ASI 1987
AlGu-69	Mortson	Undetermined	Isolated Findspot	ASI 1987
AlGu-70	Casseiopia	Pre-Contact	Isolated Findspot	ASI 1987
AlGu-74	Rocking Horse	Historic, Undetermined	Homestead	ASI 1987
AlGu-76	Andromeda	Undetermined	Isolated Findspot	ASI 1987
AlGu-79	Ruben Heise	Undetermined	Village	ASI 1988
AlGu-85	Cygnus	Undetermined	Undetermined	ASI 1987
AlGu-86	Gibson	Euro-Canadian	Homestead	ASI 1988
AlGu-87	Diamond	Woodland, Early	Isolated Findspot	ASI 1988
AlGu-89	Baker	Euro-Canadian	Homestead	ASI 1987
AlGu-96	Glen Lonely	Undetermined	Campsite	ROM 1987
AlGu-97	Lake St. George	Archaic, Late	Hunting/Processing	ROM 1987
AlGu-98	Snively	Undetermined	Undetermined	ROM 1987
AlGu-99	Esox	Woodland, Middle	Campsite	ROM 1987
AlGu-100	Abbey	Undetermined	Undetermined	ASI 1988
AlGu-101	Neighbor	Euro-Canadian	Homestead	ASI 1998
AlGu-103	Aquilla	Pre-Contact	Isolated Findspot	ASI 1989
AlGu-104	Lupus	Archaic, Middle	Isolated Findspot	ASI 1989
AlGu-105	Argo	Pre-Contact	Isolated Findspot	ASI 1989
AlGu-106	Sunset Beach	Undetermined	Undetermined	ASI 1989
AlGu-107	Log Cabin	Historic, Undetermined	Farmstead	ASI 1989
AlGu-108	Carins	Pre-Contact	Isolated Findspot	ASI 1989
AlGu-109	Fornax	Pre-Contact	Isolated Findspot	ASI 1989
AlGu-110	Lost Brant	Iroquoian	Hamlet, Campsite	ASI 1989
AlGu-111	Haynes Site	Pre-Contact	Isolated Findspot	ASI 1989
AlGu-112	Bond	Euro-Canadian	Isolated Findspot	ASI 1989

*Stage 1 Archaeological Assessment
North Yonge Street Corridor Public Transit and Associated Road Improvements
Transit Class Environment Assessment, Regional Municipality of York, Ontario*

Borden #	Name	Cultural Affiliation	Site Type	Researcher
AIGu-122	Unnamed	Euro-Canadian	Homestead	ASI 1991
AIGu-123	Patrician	Pre-Contact	Isolated Findspot	ASI 1992
AIGu-125	Lloyd	Euro-Canadian	Homestead	ASI 1992
AIGu-133	East Humber River	Pre-Contact	Isolated Findspot	ASI 1995
AIGu-134	Harman	Euro-Canadian	Homestead	LMA 1996
AIGu-135	Fleury	Euro-Canadian	Homestead	ASI 1995
AIGu-136	Bloomington Road	Archaic, Late	Isolated Findspot	ASI 1995
AIGu-137	Humber Flats	Pre-Contact	Scatter, Lithic	ASI 1995
AIGu-138	Flower	Pre-Contact	Scatter, Lithic	ASI 1995
AIGu-140	Fibola	Woodland, Middle	Isolated Findspot	ASI 1995
AIGu-151	Royal Chapin	Euro-Canadian	Homestead	ASI 1995
AIGu-152	Unnamed	Pre-Contact	Isolated Findspot	ASI 1996
AIGu-161	Drynoch 1	Pre-Contact	Isolated Findspot	LMA 1996
AIGu-162	Drynoch 2	Pre-Contact	Isolated Findspot	LMA 1996
AIGu-163	Drynoch 3	Pre-Contact	Isolated Findspot	LMA 1996
AIGu-164	Drynoch 4	Pre-Contact	Isolated Findspot	LMA 1996
AIGu-176	Oscroft	Pre-Contact	Isolated Findspot	LMA 1999
AIGu-186	Redden-Routledge House	Euro-Canadian	House	ASI 1996
AIGu-187	Redden-Routledge Blacksmith Shop	Euro-Canadian	Blacksmith Shop	ASI 1996
AIGu-188	Second Routledge Blacksmith Shop	Euro-Canadian	Blacksmith Shop	LMA 1996
AIGu-189	Nick of Time	Archaic, Late	Scatter, Lithic	ASI 1997
AIGu-190	Ridgewood	Pre-Contact	Scatter, Lithic	ASI 1997
AIGu-191	Unnamed	Woodland, Middle	Isolated Findspot	ASI 1997
AIGu-193	Unnamed	Pre-Contact	Isolated Findspot	ASI 1997
AIGu-194	Unnamed	Pre-Contact	Isolated Findspot	ASI 1997
AIGu-195	Unnamed	Pre-Contact	Isolated Findspot	ASI 1997
AIGu-198	Unnamed	Archaic, Late	Campsite; Scatter, Lithic	LMA 1998
AIGu-199	Unnamed	Pre-Contact	Isolated Findspot	LMA 1998
AIGu-200	Unnamed	Woodland, Early	Isolated Findspot	LMA 1998
AIGu-201	Unnamed	Pre-Contact	Isolated Findspot	LMA 1998
AIGu-202	Unnamed	Euro-Canadian	Homestead	LMA 1998
AIGu-203	Unnamed	Pre-Contact	Isolated Findspot	ASI 1998
AIGu-204	Unnamed	Pre-Contact	Isolated Findspot	ASI 1998
AIGu-205	Unnamed	Pre-Contact	Isolated Findspot	ASI 1998
AIGu-206	A.B. Smith	Euro-Canadian	Scatter	OHF 1998
AIGu-207	McLeod	Euro-Canadian	Scatter, Euro-Canadian	OHF 1998
AIGu-209	Elmway	Woodland, Early	Isolated Findspot	ASI 1998
AIGu-219	Unnamed	Pre-Contact	Isolated Findspot	ASI 1998
AIGu-224	Unnamed	Euro-Canadian	Homestead	Therault 2000
AIGu-225	Unnamed	Pre-Contact	Isolated Findspot	ASI 2000
AIGu-226	Unnamed	Pre-Contact	Isolated Findspot	ASI 2000
AIGu-227	Unnamed	Pre-Contact	Isolated Findspot	ASI 2000

Stage 1 Archaeological Assessment
 North Yonge Street Corridor Public Transit and Associated Road Improvements
 Transit Class Environment Assessment, Regional Municipality of York, Ontario

Borden #	Name	Cultural Affiliation	Site Type	Researcher
AlGu-227	Unnamed	Pre-Contact	Isolated Findspot	ASI 2000
AlGu-228	Unnamed	Pre-Contact	Scatter, Flake	ASI 2000
AlGu-231	Cluster 1	Pre-Contact	Scatter	ROM 1998
AlGu-232	Cluster 2	Pre-Contact	Scatter	ROM 1998
AlGu-233	Cluster 3	Pre-Contact	Scatter	ROM 1998
AlGu-234	Cluster 4	Woodland, Middle	Scatter	ROM 1998
AlGu-235	Isol, #23	Pre-Contact	Scatter	ROM 1998
AlGu-284	Capell	Euro-Canadian	Homestead	ASI 2003
AlGu-285	Wilkie	Euro-Canadian	Homestead, Euro-Canadian	ASI 2003
AlGu-287	Unnamed	Woodland, Late	Isolated Findspot	ASI 2003
AlGu-288	Unnamed	Pre-Contact	Isolated Findspot	ASI 2003
AlGu-292	Unnamed	Archaic, Early	Isolated Findspot	ASI 2003
AlGu-293	Bouchette	Euro-Canadian	Dump	ASI 2003
AlGu-294	Bond	Euro-Canadian	Homestead	ASI 2003
AlGu-295	Thompson	Euro-Canadian	Homestead	ASI 2003
AlGu-296	Fiel	Euro-Canadian	Homestead	ASI 2003
AlGu-343	Unnamed	Euro-Canadian	Scatter	ASI 2004
BaGu-7	Stephens	Historic Undetermined, Mississauga	Campsite	Trent Univ 1979
BaGu-13	Kay	Undetermined	Isolated Findspot	L.V. Butcher 1979
BaGu-18	Hicksite Meeting House	Euro-Canadian	Structure	ASI 1998
BaGu-19	Newmarket 1	Euro-Canadian	Isolated Findspot	MIA 1988
BaGu-20	Druid	Woodland, Early	Isolated Findspot	ASI 1989
BaGu-21	Walnut Farm	Archaic, Late	Isolated Findspot	ASI 1989
BaGu-22	Solstice	Archaic, Middle	Isolated Findspot	ASI 1989
BaGu-23	Martin	Pre-Contact	Isolated Findspot	ASI 1989
BaGu-25	Sparrow	Archaic	Campsite	ASI 1989
BaGu-27	Falcon	Undetermined	Isolated Findspot	ASI 1989
BaGu-29	Pheasant	Pre-Contact	Isolated Findspot	ASI 1989
BaGu-34	Cottontail	Woodland, Early	Isolated Findspot	ASI 1990
BaGu-35	Argus	Archaic, Late	Isolated Findspot	ASI 1990
BaGu-36	Durarith	Archaic, Early	Isolated Findspot	ASI 1990
BaGu-37	Tempest	Archaic, Late; Woodla	Isolated Findspot	ASI 1990
BaGu-38	Allegro	Pre-Contact	Isolated Findspot	ASI 1990
BaGu-39	Adagio	Archaic	Isolated Findspot	ASI 1990
BaGu-40	Garbutt	Euro-Canadian	Homestead	ASI 1990
BaGu-41	Augustus Rogers	Euro-Canadian	Homestead	ASI 1990
BaGu-42	Kelly	Pre-Contact	Campsite	ASI 1989
BaGu-49	Thophilus Wakefield	Euro-Canadian	Homestead	ASI 1989
BaGu-53	Eves	Euro-Canadian	Homestead	ASI 1989
BaGu-56	Howard	Euro-Canadian	Farmstead	ASI 1989

*Stage 1 Archaeological Assessment
North Yonge Street Corridor Public Transit and Associated Road Improvements
Transit Class Environment Assessment, Regional Municipality of York, Ontario*

Borden #	Name	Cultural Affiliation	Site Type	Researcher
BaGu-56	Howard	Euro-Canadian	Farmstead	ASI 1989
BaGu-59	Andrew Clubine	Euro-Canadian	Homestead	ASI 1992
BaGu-60	Mary Burkett	Euro-Canadian	Homestead	ASI 1992
BaGu-61	George Bodfish	Euro-Canadian	Homestead	ASI 1992
BaGu-62	Cook	Euro-Canadian	Homestead	ASI 1993
BaGu-63	Zenos Rogers	Euro-Canadian	Homestead	ASI 1993
BaGu-64	Phillips	Euro-Canadian	Homestead	ASI 1993
BaGu-65	Huntly	Euro-Canadian	Brickworks	ASI 1993
BaGu-66	Unnamed	Pre-Contact	Isolated Findspot	ASI 1993
BaGu-67	Unnamed	Pre-Contact	Isolated Findspot	ASI 1993
BaGu-68	Unnamed	Pre-Contact	Isolated Findspot	LMA 1994
BaGu-69	Stanjon	Pre-Contact	Isolated Findspot	ASI 1993
BaGu-70	Trent	Euro-Canadian	Building, Cottage	ASI 1994
BaGu-73	Unnamed	Archaic	Isolated Findspot	LMA 1998
BaGu-74	Unnamed	Pre-Contact	Isolated Findspot	LMA 1998
BaGu-75	Unnamed	Euro-Canadian	Homestead	LMA 1998
BaGu-76	Unnamed	Euro-Canadian	Homestead	LMA 1998
BaGu-78	Masongsong	Euro-Canadian	Canadian	LMA 1998
BaGu-79	Ballymore	Woodland	Isolated Findspot	LMA 1999
BaGu-80	Newmarket 1	Archaic, Late	Isolated Findspot	LMA 1999
BaGu-81	SW Newmarket 2	Archaic, Late	Isolated Findspot	LMA 1999
BaGu-82	SW Newmarket 3	Pre-Contact	Isolated Findspot	LMA 1999
BaGu-85	Location 1	Euro-Canadian	Homestead, Midden	Mayer 2001
BaGu-86	Location 5	Euro-Canadian	Homestead, Midden	Mayer 2001
BaGu-87	Location 8	Euro-Canadian	Homestead, Midden	Mayer 2001
BaGu-88	Unnamed	Euro-Canadian	Cabin	Slocki 2001
BaGu-89	Unnamed	Euro-Canadian	Cabin	Slocki 2001
BaGu-90	Thomas Coates 1	Euro-Canadian	Homestead, Midden	Mayer 2001
BaGu-91	Thomas Coates 2	Euro-Canadian	Homestead, Midden	Mayer 2001
BaGu-92	Thomas Coates 3	Euro-Canadian	Homestead, Midden	Mayer 2001
BaGu-96	Unnamed	Euro-Canadian	Homestead	Mayer 2001
BaGu-107	Green Lane	Woodland, Late	Village	ASI 2005
BaGu-108	Unnamed	Pre-Contact	Isolated Findspot	ASI 2004
BaGv-37	Bently	Euro-Canadian	Homestead	ASI 1993
BaGv-38	Upper Canada	Archaic, Middle	Isolated Findspot	ASI 1993
BaGv-39	Toth	Woodland	Campsite	ASI 1993, 2005
BaGv-40	Family Compact	Pre-Contact	Undetermined	ASI 1993

APPENDIX B

**Stage 1 Archaeological Assessment
Yonge Street 600 mm Watermain
From Gladman Avenue to Mulock Drive and
From St. John's Sideroad to Wellington Street,
Regional Municipality of York, Ontario**

Stage 1 Archaeological Assessment

**Yonge Street 600 mm Watermain
From Gladman Avenue to Mulock Drive and
From St. John's Sideroad to Wellington Street,
Regional Municipality of York, Ontario**

Submitted to

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November 2005 (Revised May 2007)

**ARCHAEOLOGICAL SERVICES INC.
ENVIRONMENTAL ASSESSMENTS**

PROJECT PERSONNEL

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Stage 1 Archaeological Assessment

Yonge Street 600 mm Watermain From Gladman Avenue to Mulock Drive and From St. John's Sideroad to Wellington Street, Regional Municipality of York, Ontario

1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by Trow Associates Inc., Brampton, on behalf of the Regional Municipality of York, to conduct a Stage 1 archaeological assessment of the proposed 600 mm watermain along Yonge Street from Gladman Avenue to Mulock Drive and from St. John's Sideroad to Wellington Street, in the Regional Municipality of York, Ontario (Figure 1). The new watermain along Yonge Street will consist of:

- A northern section, which is a proposed 1,500 metres of 600 mm diameter watermain on Yonge Street from Gladman Avenue to Mulock Drive including a connection at Clearmeadow Boulevard; and,
- A southern section, which is a proposed 2,500 metres of 600mm diameter concrete pressure pipe watermain from St. John's Sideroad to Wellington Street. The watermain alignment of the north end of this section is to the west side of Yonge Street starting at St. John's Sideroad and ending at Orchard Heights Boulevard. The watermain alignment at the southernmost end of this section goes through the Machell and Fleury Parks, under an existing easement, and continues on Machell Avenue to Wellington Street West.

The assessment was conducted under the project direction of Mr. Robert Pihl, ASI, under an archaeological licence (P057) issued to Mr. Pihl. The field review was conducted by Mr. Peter Carruthers (P160) in accordance with the Ontario Heritage Act (2005).

Permission to access the study area and to carry out the activities necessary for the completion of the Stage 1 assessment was originally granted to ASI by Trow Associates Inc. on July 19, 2005.

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

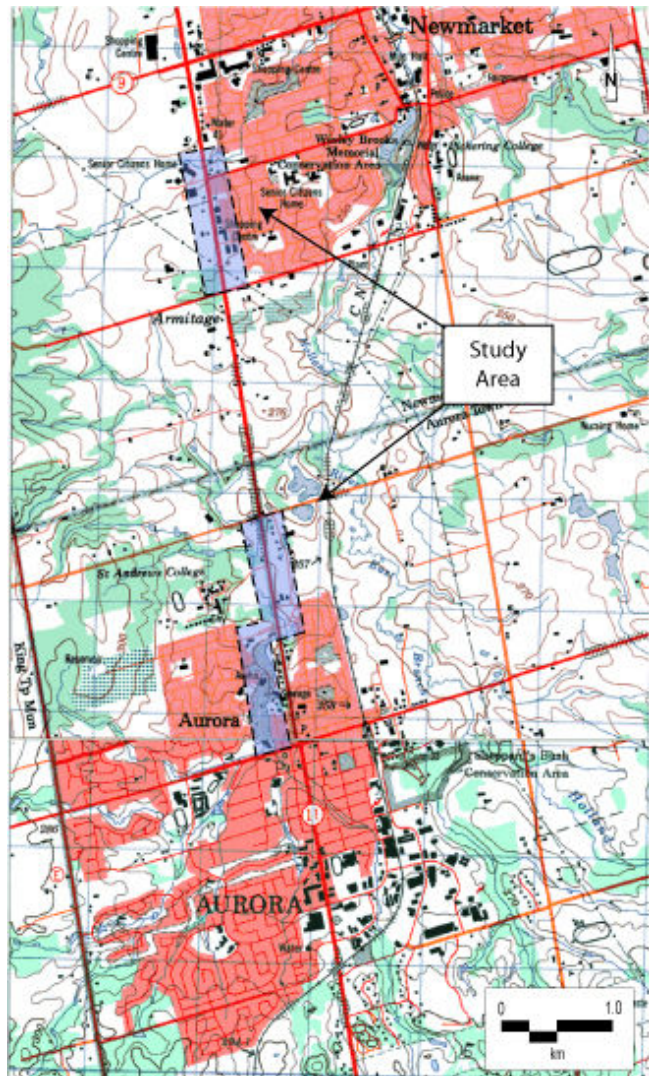


Figure 1: Location of the study corridor [NTS sheet 31D/03, Newmarket and 30 M/14, Markham]

2.0 BACKGROUND RESEARCH

The Stage 1 archaeological assessment of the study area was conducted in accordance with the Ontario Ministry of Culture's archaeological assessment technical guidelines (2006). A Stage 1 archaeological assessment involves research to describe the known and potential archaeological resources within the vicinity of the study area. 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 area and to assess its archaeological potential.

2.1 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: the site record forms for registered sites housed at the Ontario Ministry of Culture; 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 Ontario Ministry of Culture. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden Block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The study area under review is located in the Borden Block *BaGu*.

According to the OASD, there are no previously registered sites within the study area. However, a total of 20 sites have been registered within approximately two kilometres of it (Table 1).

Table 1: Registered Archaeological Sites within 2 kilometres of the Study Area

Borden #	Site name	Site Affiliation	Site Type	Researcher
BaGu-18	Hicksite Meeting House	Historic Euro-Canadian	Homestead	ASI*, 1988
BaGu-34	Cottontail	Early Woodland	Isolated Findspot	ASI, 1990
BaGu-36	Durarith	Early Archaic	Isolated Findspot	ASI, 1990
BaGu-37	Tempest	Early Woodland	Isolated Findspot	ASI, 1990
BaGu-38	Allegro	Undetermine Pre-contact	Isolated Findspot	ASI, 1990
BaGu-39	Adagio	Archaic	Isolated Findspot	ASI, 1990
BaGu-40	Garbutt	Historic Euro-Canadian	Homestead	ASI, 1990
BaGu-41	Augustus Rogers	Historic Euro-Canadian	Homestead	ASI, 1990
BaGu-59	Andrew Clubine	Historic Euro-Canadian	Homestead	ASI, 1993
BaGu-60	Mary Burkett	Historic Euro-Canadian	Homestead	ASI, 1993
BaGu-61	George Bodfish	Historic Euro-Canadian	Homestead	ASI, 1993
BaGu-62	Cook	Historic Euro-Canadian	Homestead	ASI, 1994
BaGu-65	Huntly	Historic Euro-Canadian	Homestead	ASI, 1994
BaGu-69	Stanjon	Undetermined Pre-contact	Isolated Findspot	ASI, 1998
BaGu-78	Masongsong	Historic Euro-Canadian	Homestead	LMA**, 1998
BaGu-80	SW Newmarket 1	Late Archaic	Isolated Findspot	LMA, 1999
BaGu-81	SW Newmarket 2	Late Archaic	Isolated Findspot	LMA, 1999

BaGu-82	SW Newmarket 3	Undetermined Pre-contact	Isolated Findspot	LMA, 1999
BaGv-38	Upper Canada	Middle Archaic	Isolated Findspot	LMA, 1999
BaGv-39		Woodland	Unknown	ASI, 1993

*ASI- Archaeological Services Inc.

**LMA – London Museum of Archaeology

2.2 Physiography and Assessment of Pre-contact Archaeological Potential

The study area is located in the bevelled till plains of the Peel Plain physiographic region (Chapman and Putnam 1984: 174–176). This region is a fairly level clay plain spread across the central portions of the Regional Municipalities of York, Peel, and Halton. The surface of the Peel Plain is characterized by level to gently rolling topography, with a consistent, gradual slope toward Lake Ontario. The Plain is made up of deep deposits of dense, limestone and shale imbued till, often covered by a shallow layer of clay sediment.

Potable water is arguably 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. More specifically, the East Branch of the Holland River flows to the west and south of the study corridor. Aboriginal peoples would have been attracted to the rivers and creeks, especially during the spring, by the abundance of fish, as well as by other important aquatic resources.

The Ministry of Culture primer on archaeology, land use planning and development in Ontario (1997) stipulates that undisturbed land within 300 metres of a primary water source (lakeshore, river, large creek, etc.), and undisturbed land within 200 metres of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 metres of an ancient water source (as indicated by remnant beaches, shore cliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological potential.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is potential for the recovery of pre-contact archaeological remains within the study area.

2.3 Assessment of Historic Archaeological Potential: Summary Review of Historical Maps

The 1878 *Illustrated Historical Atlas of the County of York, Ontario* was reviewed to determine the potential for the presence of historical archaeological remains within the study area during the nineteenth century (Figure 2).

The study area is located on Lots 81-85 and 90 to 94, Concession 1, in the former Township of Whitchurch, and Lots 81-85 and 90 to 94, Concession 1, in the former Township of King South. A number of historic features are illustrated within or adjacent to the study area. Table 2 presents a summary of property owners and historic features found within or adjacent to the Yonge Street study area.

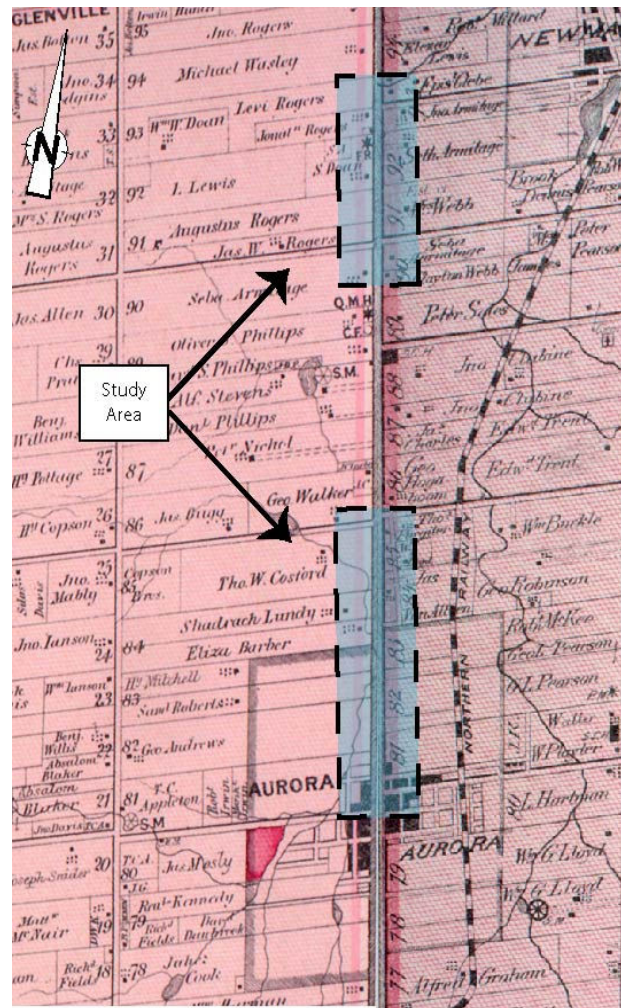


Figure 2: The study area overlaid on the historic map of Townships of Whitchurch and King South as found in the 1878 *Illustrated Historical Atlas of the County of York*.

The railway had tremendous impact on the settlement patterns and economics in York Region determining which towns grew or disappeared and which businesses flourished or floundered. The Northern Railway of Canada ran east of the study area. The railway was eventually bought out by the Grand Trunk Railway, and today is currently under Canadian National Railway control.

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 water model outlined above, since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads through the course of the nineteenth century. These transportation routes frequently influenced the location of farmsteads. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

Table 2: Property Owner(s) and Historic Feature(s) Illustrated Within or Adjacent to the Study Area

Township	Lot	Concession	Owner	Illustrated Feature(s)
King South	81	1		
	82	1		
	83	1		
	84	1	Eliza Barber Shadrach Lundy	Homestead, orchard Homestead, orchard
	85	1	Thomas W. Costord	Homestead, orchard
	90	1	Seba Armitage	
	91	1	Jason W. Rogers Augustus Rogers	
	92	1	S. Doan	Homestead, orchard Church F.R.
	93	1	Jonathan Rogers Levi Rogers	Homestead, orchard
	94	1	Michael Wasley	Homestead, orchard
Whitchurch	81			
	82			
	83			
	84		Jason Van Allen	Homestead, orchard
	85		Thomas Pargiler W. Ligard	Homestead, orchard 2 Homesteads
	90	1	Seba Armitage Clayton Webb	Homestead Homestead, orchard
	91	1	Mrs. Webb	Homestead, orchard
	92	1	Seth Armitage	Homestead, orchard
	93	1	Jonathan Armitage	Homestead, orchard
	94	1	Epis Clebe Elexar Lewis	2 Homesteads Homestead

An historic plaque situated on the west side of Yonge Street just south of the intersection with Eagle Street commemorates a Quaker settlement in the vicinity in the first decade of the nineteenth century. An extant Meeting House, built in 1812, and cemetery are situated at that location.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is the potential for recovering historic cultural material within the study area. Furthermore, it should be noted that not every feature of potential interest today would have been illustrated on the nineteenth century mapping.

3.0 FIELD REVIEW

A field review of the study area was originally conducted by Mr. Peter Carruthers, ASI on August 10, 2005. Weather conditions at the time were overcast and cool. A subsequent field review was conducted on April 24, 2007. Weather conditions for the second visit were sunny and cool. Field observations and photographs have been compiled on a map of the study area (Figures 3-1 & 3-2, Plates 1–25).

3.1 Northern Section (Figure 3-1)

The northern section comprises 1,500 metres of 600 mm diameter concrete pressure pipe watermain to be located on the west side of Yonge Street from Gladman Avenue to Mulock Drive (Figure 3-1, Plates 1–9). It will be installed within existing right-of-way along Yonge Street. Both the east and west margins of Yonge Street are comprised of typically disturbed urban rights-of-way consisting of paved curbs with sidewalks and numerous overhead and buried utilities in the landscaped margins.

The properties adjacent to the eastern side of the Yonge Street right-of-way are, for the most part, commercial enterprises of varying size, situated in strip malls as well as in larger complexes (Plates 1 and 6).

Properties adjacent to the west side of the Yonge Street right-of-way are more varied and less developed. A large landscaped government office complex is situated on the southwest corner at the intersection of Yonge Street and Eagle Street (Plate 2). South of the government complex is a historic Quaker meeting house and cemetery (Plates 3 and 4). The grounds of both include numerous mature maples and are enclosed by stone pillared fences.

At the intersection of Yonge Street and Mulock Drive, the northwest corner is the relatively undisturbed Mulock Farms property. However, the adjacent Yonge Street right-of-way is disturbed. At the stream crossing just north of the intersection of Yonge Street and Mulock Drive, much fill has been added, and the stream vicinity is quite disturbed.

There is no potential for archaeological sites within the northern section of the Yonge Street right-of-way since it has been entirely disturbed. No further archaeological assessment is recommended as long as the watermain construction is confined to the existing right-of-way.

3.2 Southern Section (Figure 3-2)

The southern section is a proposed 2,500 metres of 600 mm diameter concrete pressure pipe watermain from St. John's Sideroad to Wellington Street (Figure 3-2, Plates 9–25). The watermain alignment of the north end of this section is to the west side of Yonge Street starting at St. John's Sideroad and ending at Orchard Heights Boulevard. The watermain alignment at the southernmost end of this section goes through Machell and Fleury Parks, under an existing easement, and continues on Machell Avenue to Wellington Street West.

Both the east and west margins of Yonge Street are comprised of typically disturbed urban rights-of-way consisting of paved curbs with sidewalks and numerous overhead and buried utilities in the landscaped margins (Plates 9–12, 16).

The portion of the watermain alignment through Machell Park (Plates 20–22) parallels an existing sanitary sewer and has been entirely disturbed by previous construction activities. The remainder of the southern section within the existing Machell Avenue right-of-way (Plates 23–25) has also been entirely disturbed.

There is no potential for archaeological sites within the southern section of the Yonge Street right-of-way since it has been entirely disturbed. No further archaeological assessment is recommended as long as the watermain construction is confined to the existing right-of-way.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Stage 1 archaeological resource assessment for the proposed 600 mm watermain along Yonge Street from Gladman Avenue to Mulock Drive and From St. John's Sideroad to Wellington Street determined that 20 archaeological sites have been registered within two kilometres of the study area. Additionally, a review of the general physiography and local nineteenth century land use of the study area suggested that it exhibits archaeological site potential.

A field review conducted by ASI on August 10, 2005 and subsequently on April 24, 2007 determined that both the northern and southern concrete pressure pipe watermain sections has been entirely disturbed.

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

1. Prior to any land-disturbing activities in the vicinity of the Quaker cemetery along the west side of Yonge Street (Figure 3-1), additional investigation is recommended to confirm the presence or absence of unmarked graves within the right-of-way. This would initially involve archival research of cemetery records to investigate grave locations, followed, if necessary, by monitoring of the right-of-way for grave shafts by a licensed archaeologist, either during construction, or in advance of construction. The latter involves the removal of the topsoil with a Gradall followed by the shovel shining of the exposed surfaces and inspection for grave shafts.
2. With the exception of above recommendation, no additional archaeological assessment is required along both of the of Yonge Street study area sections, and they can be considered clear of further archaeological concern;

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

The following conditions also apply:

3. Should deeply buried archaeological remains be found during construction activities, the Heritage Operations Unit of the Ministry of Culture should be immediately notified.
4. In the event that human remains are encountered during construction, the proponent should immediately contact both the Ontario Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Government Services, Consumer Protection Branch at (416) 326-8404 or toll-free at 1-800-889-9768.

The documentation 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.

5.0 REFERENCES 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.

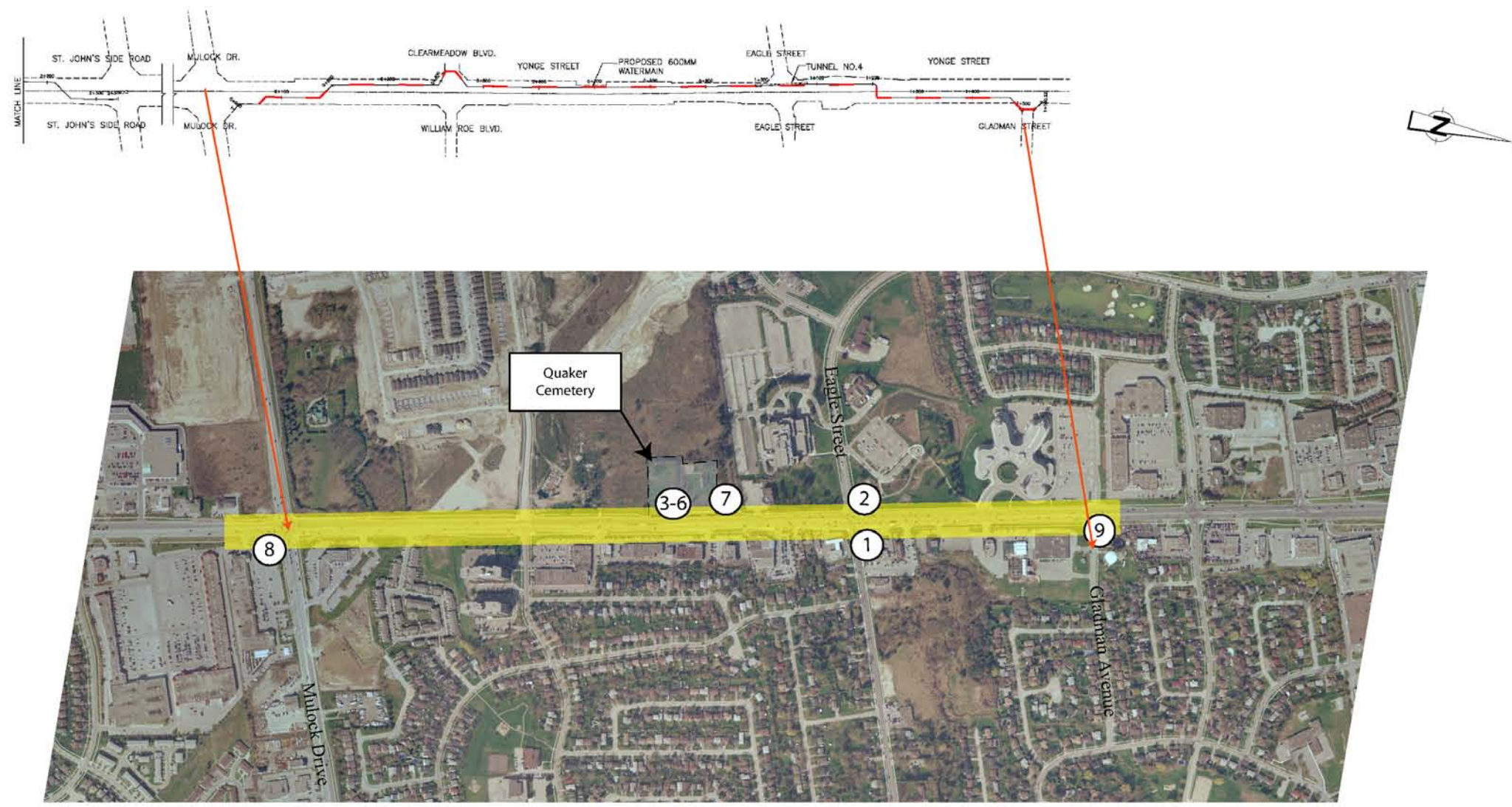
Illustrated historical atlas of the County of York County, Ontario

- 1878 Miles & Co., Belleville

Ministry of Culture

- 1997 *Conserving A Future For Our Past: Archaeology, Land Use Planning & Development in Ontario*. Toronto: Cultural Programs Branch, Archaeology & Heritage Planning Unit.
- 2006 *Standards and Guidelines for Consultant Archaeologists* (final draft, September 2006).
Cultural Programs Branch, Ontario Ministry of Culture, Toronto.

5.0 OVERSIZED GRAPHICS & PHOTOGRAPHY



LEGEND



Plate number and location



Disturbed
No Archaeological Potential



Proposed 600mm
Watermain



Water source



DATE:

DRAWN BY:
FILE:

Figure 3-1: Yonge Street 600 mm Watermain from Wellington Street to St. John's Sideroad

Northern Watermain Alignment



Plate 1: View to south, east side of Yonge Street at the intersection with Eagle Drive. Note intensive commercial development.



Plate 2: View to south, west side of Yonge Street at the intersection with Eagle Drive. Government office complex in treed area at right.

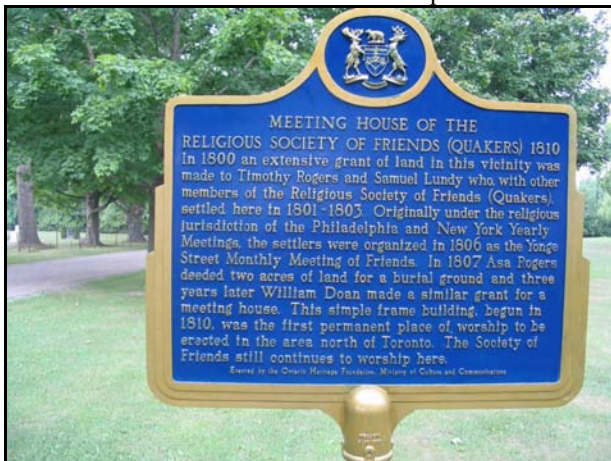


Plate 3: Historic plaque on the west side of Yonge Street south of Eagle Street intersection. Plaque commemorates Quaker settlement in the area.



Plate 4: View to northwest. Quaker meeting house (1812) situated on the west side of Yonge Street, south of Eagle Street intersection.



Plate 5: View to south, Quaker cemetery fronting on the west side of Yonge Street south of meeting house.



Plate 6: View to southeast across Yonge Street, commercial development north of William Roe Blvd.



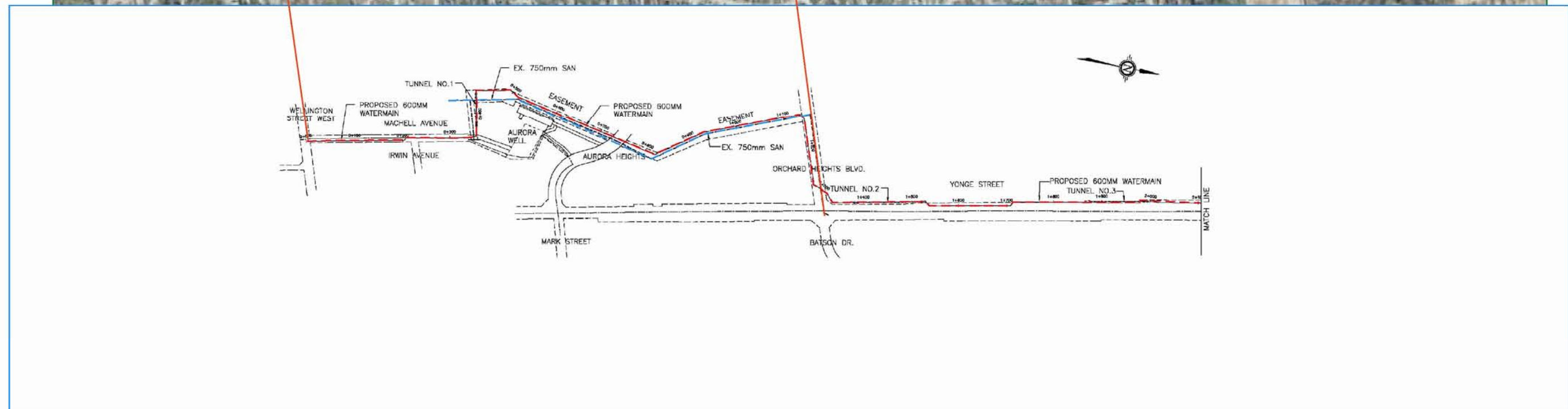
Plate 7: View to north along Yonge Street, from north of meeting house towards Eagle Street.



Plate 8: View to north along Yonge Street at Mulock Drive intersection. Note mature trees on Mulock Farms property. Stream crosses just north of intersection.



Plate 9: View to south along Yonge Street, from Gladman Avenue



LEGEND



Plate number and location



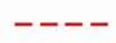
No Archaeological Potential: Disturbed



Water source



Existing Watermain



Proposed 600mm Watermain

0 100m



SCALE

DATE:

DRAWN BY:
FILE:

Figure 3-2: Yonge Street 600 mm Watermain from Wellington Street to St. John's Sideroad

Southern Watermain Alignment



Plate 10: View to north along Yonge Street at Wellington Street. Note commercial development on both sides of Yonge Street.



Plate 11: View to northwest from northeast corner of Catherine Avenue. Note late 19th century house on west side of Yonge Street, opposite a church.



Plate 12: View to northwest from northeast corner of Yonge Street and Maple Street looking at mid-late 19th century farm house on land below grade.



Plate 13: View to north from southwest corner of Aurora Heights Drive showing commercial and residential development.



Plate 14: View to northwest from southwest corner of Craddock Park. A tributary of the East Holland River crosses here.



Plate 15: View to north across Craddock Park. Note tributary of the East Holland River in background.



Plate 16: View to northwest across Yonge Street to north entrance to St. Andrew's College. A tributary of the East Holland River is shown in the distance.



Plate 17: View from southwest corner of Yonge Street and St. John's Sideroad showing higher ground to the north.



Plate 18: View to south along Yonge Street looking across Orchard Heights Boulevard intersection.



Plate 19: View to west along Orchard Heights Boulevard along route towards point of turning (south) into Machell Park.



Plate 20: View to southeast along trails into Machell Park. Note undisturbed land through park.



Plate 21: View to northeast along tributary through park. Note undisturbed land through park.



Plate 22: View to northwest along tributary through park.



Plate 23: View to northeast across parking lot to Aurora Heights. Area is disturbed.



Plate 24: View to east-northeast from Fleury Park across creek into Aurora Pumphouse works yard along proposed watermain. Note undisturbed land around creek.



Plate 25: View to north from Wellington Street looking uphill along Machell Street.

APPENDIX C

**Stage 2 Archaeological Assessment
Yonge Street Watermain – Quaker Cemetery
City of Newmarket, Regional Municipality of York, Ontario**

Stage 2 Archaeological Assessment
Yonge Street Watermain – Quaker Cemetery
City of Newmarket, Regional Municipality of York, Ontario

Submitted to:

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July 2007

**ARCHAEOLOGICAL SERVICES INC.
ENVIRONMENTAL ASSESSMENTS**

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Stage 2 Archaeological Assessment

Yonge Street Watermain – Quaker Cemetery, City of Newmarket, Regional Municipality of York, Ontario

1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by Trow Associates Inc., Brampton, to conduct a Stage 2 archaeological assessment of the Quaker Cemetery as part of the Yonge Street Watermain Environmental Assessment, Regional Municipality of York, Ontario (Figure 1). The historic cemetery is located on the west side of Yonge Street and south of Eagle Street, on Lot 92, Concession 1, City of Newmarket (former Township of King, County of York). The Stage 2 assessment was conducted in order to identify any unmarked grave shafts outside of the cemetery fence line that could be impacted by the proposed watermain construction.

The assessment was conducted under the project direction of Robert Pihl, ASI, under an archaeological license (P057) issued to Mr. Pihl. All fieldwork was directed by Peter Carruthers (P160), in accordance with the Ontario Heritage Act (2005).

Permission to access the study corridor and to carry out all activities necessary for the completion of the cemetery investigation was granted to ASI on May 31, 2007, by Trow Associates Inc.

This report summarizes the Stage 1 background research and field review for this project which was conducted by ASI in 2005 and 2007 (ASI 2007) and presents the results of the Stage 2 assessment of the Quaker Cemetery.

2.0 SUMMARY OF THE STAGE 1 ARCHAEOLOGICAL ASSESSMENT

The Stage 1 archaeological assessment of the proposed Yonge Street 600 mm watermain was conducted in August 2005 and April 2007. The study corridor consisted of two separate sections: a northern section which is a proposed 1,500 metre of watermain from Gladman Avenue to Mulock Drive, including a connection at Clearmeadow Boulevard, and a southern section, which is a proposed 2,500 meter of watermain from St. John's Sideroad to Wellington Street West. The Quaker Cemetery is located within the northern section of the study corridor.

The background research was completed in order to identify any archaeological sites previously registered within the study corridor and to assess the corridor's archaeological potential through a review of physiography and land-use history. While no archaeological sites had been registered within the study corridor, a review of the Ontario Archaeological Sites Database indicated a total of 20 sites were located within approximately two kilometres of it. Due to the proximity of the East Branch of the Holland River which flows west and south of the study corridor, it was concluded that there was potential for the recovery of Aboriginal and Historic archaeological sites, depending on the degree of previous land disturbance.

As discussed in the Stage 1 report (ASI 2007), the Yonge Street study corridor has had a long history of use as a transportation corridor, and mid-nineteenth century mapping depicts a number of historical features on both sides of the road (ASI 2007: Figure 2, Table 2). The west side of Yonge Street was

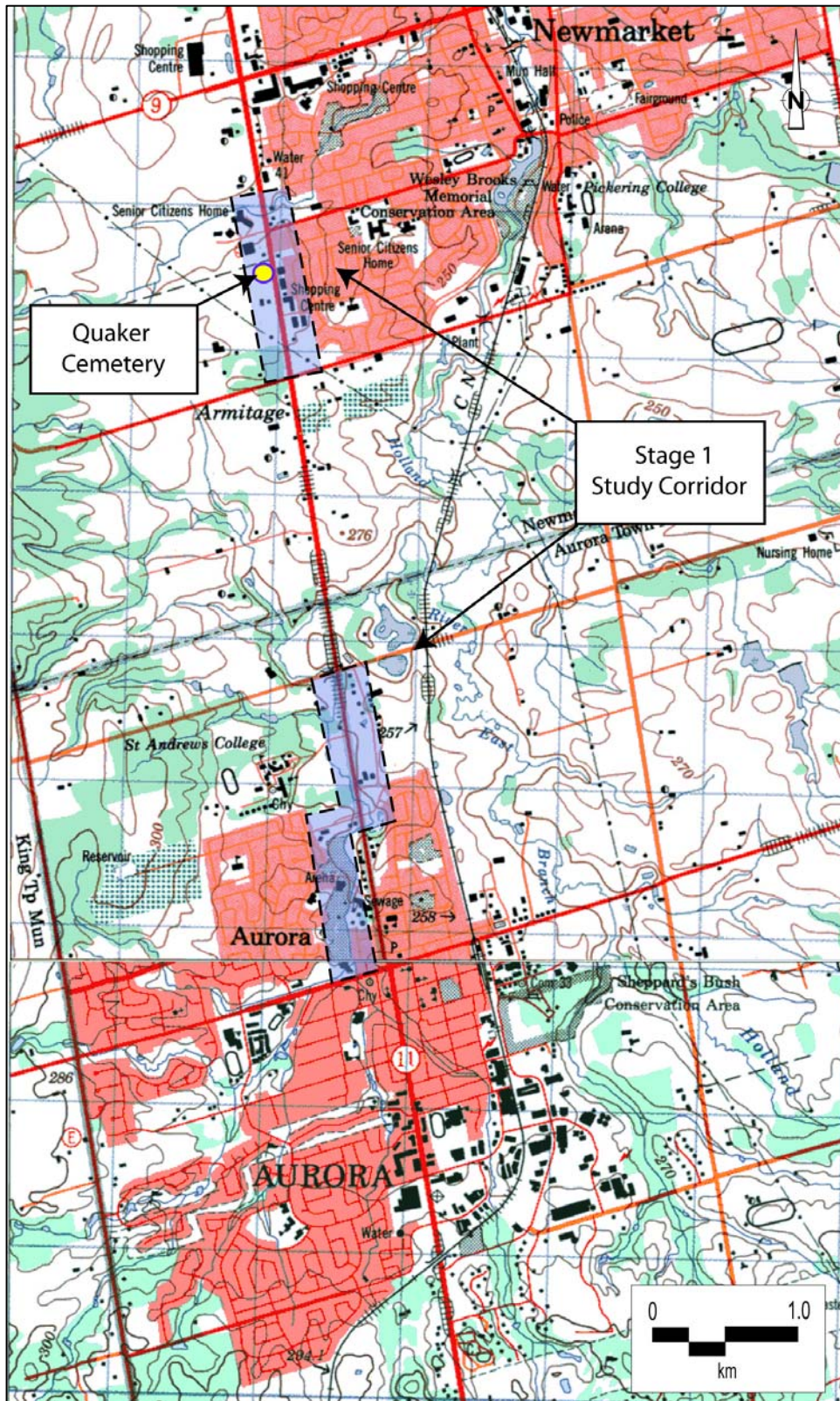


Figure 1: Location of the Quaker Cemetery within the Yonge Street Watermain study corridor highlighted on a segment of the 1:50,000 NTS maps of Newmarket (31 D/03) and Markham (30 M/14).

located within the former Township of King, while the east side was located within the former Township of Whitchurch. Illustrated historic features in the 1878 *Illustrated Historical Atlas of the County of York* include numerous homesteads and one “church” located on Lot 92, Concession 1, marked with the acronym F.R., and which corresponds with the approximate location of the Quaker cemetery (Figure 2). It was therefore concluded that there was potential for the recovery of historic period cultural material throughout the study corridor.

The field review determined that while the two proposed watermain sections had been entirely disturbed by previous land disturbing activities and thus free of further archaeological concern, a cemetery belonging to the Religious Society of Friends (Quakers) on the west side of Yonge Street, south of Eagle Street, required additional investigation to confirm the presence or absence of unmarked graves within the proposed watermain right-of-way (ASI 2007: Recommendation 1). This would initially involve background research concerning the cemetery and grave locations, followed, if necessary, by monitoring of the right-of-way for grave shafts by a licensed archaeologist, either during construction, or in advance of construction. The latter would involve the removal of the topsoil and fill with a Gradall followed by shovel shining of the exposed surfaces and the inspection for grave shafts.

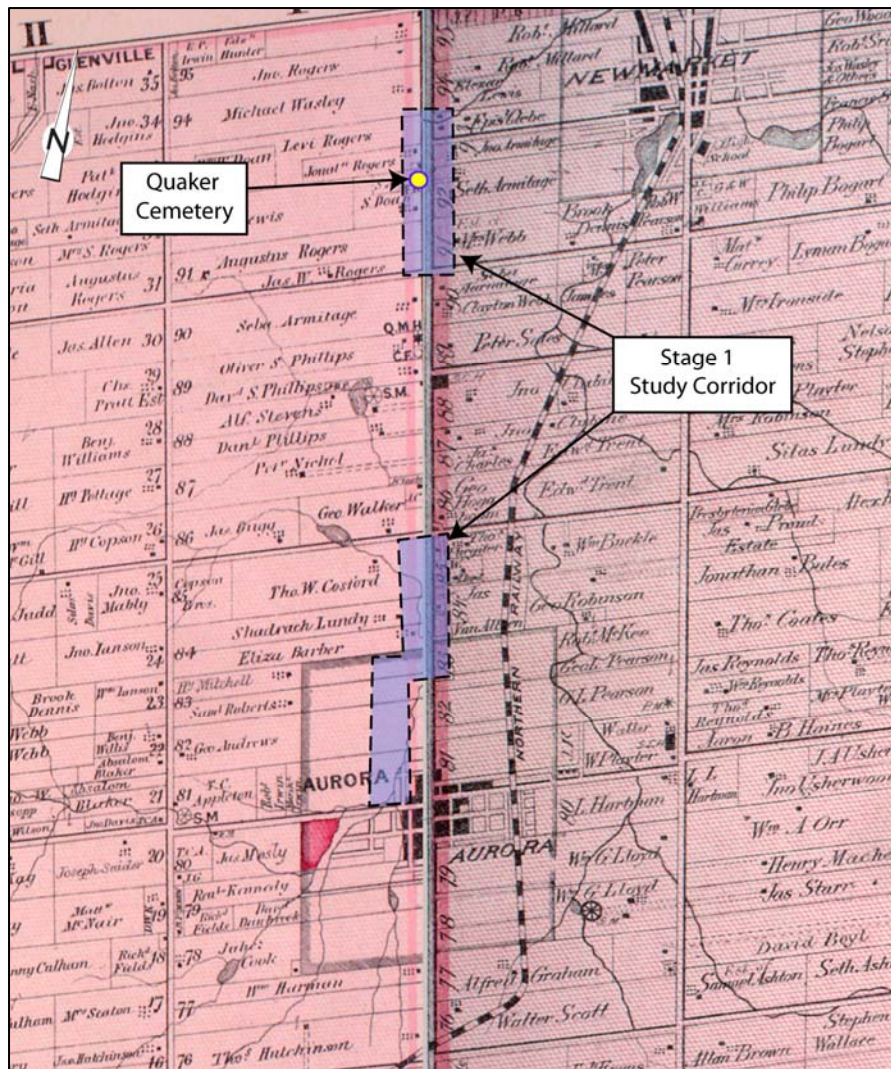


Figure 2: Approximate location of the Quaker Cemetery and the Stage 1 Study Corridor overlaid on a map of the Townships of King and Whitchurch in the 1878 *Illustrated Historical Atlas of the County*

The Stage 1 report also concluded that the balance of the study area (both sections) did not require additional assessment. A recommendation was made to the Ministry of Culture for clearance (ASI 2007: Recommendation 2).

3.0 BACKGROUND RESEARCH

In 1988, ASI was retained by the Local Architectural Conservation Advisory Committee (LACAC) of the Town of Newmarket to conduct an archaeological resource assessment of the remains of the inactive Hicksite Burial Ground and Meeting House situated on Part of Lots 89 and 90, Concession I in the Town of Newmarket (ASI 1988). This particular meeting house corresponds to the “church” with the acronym Q.M.H. illustrated immediately south of the northern portion of the study corridor in Figure 2 above. Most of the following background information on the Quaker religion was compiled by the project historian for that project.

3.1 The Religious Society of Friends (Quakers)

Approximately 300 years ago in England, a new religious movement protesting the formalism and rigidity of contemporary religion was established under the guidance of George Fox. This new movement emphasised the necessity of an inner religious expression of faith, and followers believed that God had placed in everyone an “Inner Light” which Fox identified with the living spirit of God in Christ. This group was known by many names over the years, including “Seeker”, “Children of Light”, and later “Friends”, from Christ’s words, “I have called you friends.” The name “Quakers” was initially used by their opponents in derision to the emotional trembling which sometimes characterised their Meetings.

The Quakers immigrated to the New World in search of greater religious freedom, and migration to Canada from New England began as early as the 1760s. This early migration had economic roots associated with the Seven Years’ War. The migration to Canada occurred in greater numbers following the War of Independence, and continued on a large scale until about 1820. The Quakers remained apart from the War of Independence, neither supporting nor resisting either side and offering no aid to the British. The fact that they could not support a movement that opposed laws and government and which usurped power and authority however, led to a de facto declaration of loyalty to the King. In addition, a wish to escape from a society which permitted slavery, hard economic times, as well as a desire to extend their ministries, led to the lure of a new start. Many Friends settled in Nova Scotia, and Quakers from New Jersey and Pennsylvania immigrated to the Niagara peninsula.

3.2 Yonge Street Monthly Meeting of Friends

In 1800-01, an extensive grant of land in the vicinity of the study area was made to Timothy Rogers, a Connecticut Quaker who, following what he believed to be a Divine calling, wanted to establish a Meeting halfway between the Bay of Quinte, which was associated with the New York Yearly Meeting, and Pelham, which was associated with Philadelphia Yearly Meeting. He was joined by Samuel Lundy and Isaac Philips who, with other members of the Religious Society of Friends, settled here in 1801-03.

The first Meeting was held in Roger’s home in 1802 under the religious jurisdiction of the Philadelphia and New York Yearly Meetings. By 1806, the settlers were organized as the Yonge Street Monthly Meeting of Friends. In 1807, Asa Rogers deeded two acres of land for a burial ground, and three years later, William Doan made a similar grant for a Meeting House on part of Lot 92, Concession I. This simple frame building, the first permanent place of worship to be erected in the area north of Toronto, still

stands today (Plate 1) and continues to be a place of worship for the Society of Friends. The Meeting House is designated under Part IV of the *Ontario Heritage Act* and a commemorative plaque is located on the property (Plate 2).

The Quakers in Canada suffered a number of religious separations. The “Hicksite” Friends, who stood for the traditional freedom of Quakerism, including the freedom from the autocracy of church discipline and external religious authority, broke away from the more Orthodox Quakers in the 1820s. At the Yonge Street Meeting, the Hicksites were barred from using the Meeting House, and at the Canada Half-Yearly Meeting in 1829, the Orthodox Friends refused to recognize the Hicksite clerk. The clerk left with other Hicksite followers to meet in a private home, taking the Minute book with him. While the Minute book remained in Hicksite hands, the Orthodox Friends retained the Yonge Street Meeting House as they were stronger in numbers.

3.3 Yonge Street Meeting Burying Ground

According to Newlands (1983), Canadian and American Friends characteristically established burial grounds adjacent to their Meeting Houses and continued to do so even after public cemeteries became common. In the early 19th century, the Friends did not mark their graves or keep written plans of their burying ground. Occasionally, a simple wooden cross or a fieldstone was used to mark the graves. Until the 1830s, Friends were buried chronologically based on the date of death rather than in family groups. It was not until the introduction of inscribed stones that families were buried together.

As part of the 1988 assessment of the remains of the Hicksite Burying Ground, ASI examined the Yonge Street Burying Ground in order to gather any evidence of an internment pattern which might have aided in the reconstruction of the Hicksite cemetery (ASI 1988). The field assessment determined that the graves were laid in a rough grid pattern. An analysis of the names and dates by decade revealed that, in general, the earlier dates appear on the eastern side of the cemetery, the side which borders Yonge Street, and extend westward, while several decades are represented in the intermediate rows. A certain degree of familial grouping was also detected as family members who had died a decade or so apart were frequently buried together.

The large gap in the centre of the most easterly rows might indicate the location of the earliest, probably unmarked burials. Alternatively, these graves may have been designated by wooden markers, which would have disintegrated, or plain fieldstones, which may not have survived decades of caretakers.

The majority of the burial markers in the western half of the cemetery date to the late 19th and 20th centuries, although there are few stones which date to the early 19th century. While there appears to be some chronological ordering of the stones, graves dating to all decades can be found throughout, suggesting the deliberate location of graves in a particular part of the cemetery rather than an attempt to follow a system of burial based on the date of death.

As noted above, the earliest burials, which were often unmarked, are located on the eastern side of the cemetery along Yonge Street. While the cemetery property is currently delineated by a wrought iron fence with stone pillars (Plate 3), there is the possibility that unmarked graves could be located beyond the established property line. It was therefore deemed prudent to proceed with the monitoring of the proposed watermain right-of-way by a licensed archaeologist in advance of construction.

4.0 FIELD ASSESSMENT

The Quaker Cemetery is located on the west side of Yonge Street, south of Eagle Street, between approximately STA 10+655 to STA 10+710 (Figure 3). The proposed Yonge Street watermain runs between the sidewalk and the curb fronting the cemetery. Because of the concern that unmarked graves could be present beyond the current cemetery boundary, a Stage 2 archaeological assessment was initiated in order to investigate the possible presence of such grave features.

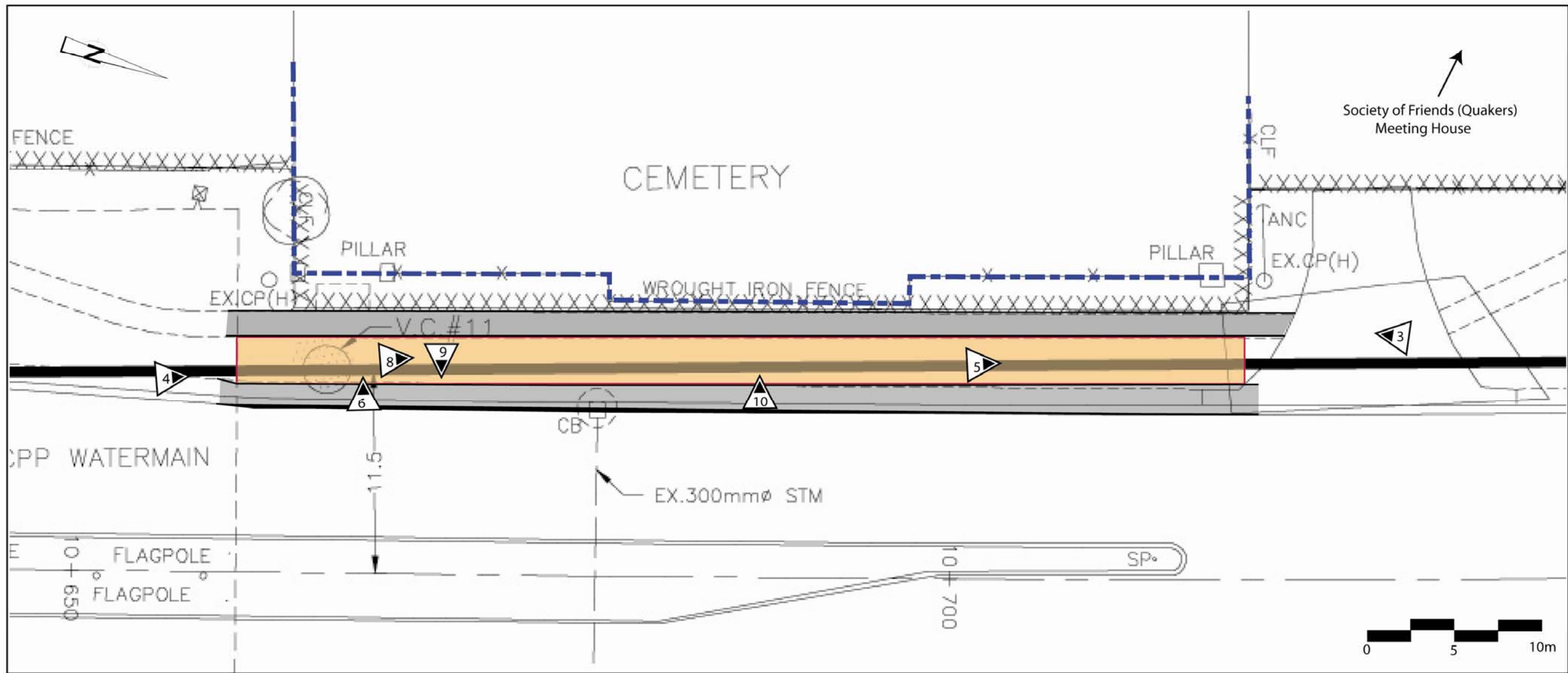
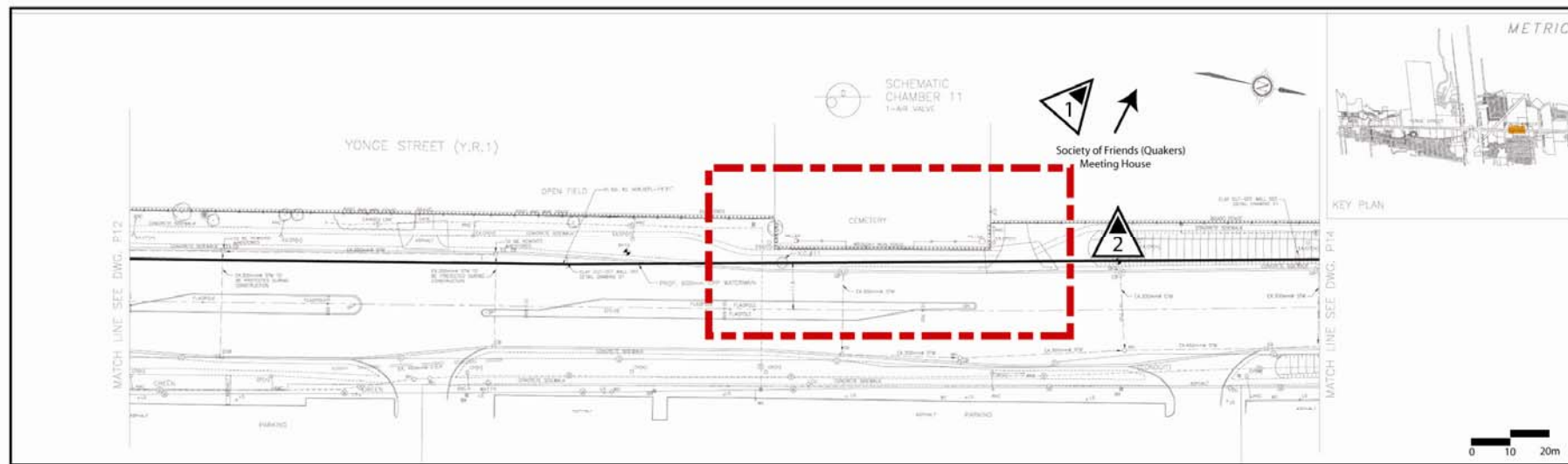
On July 3rd and 4th, 2007, Peter Carruthers, ASI, initiated fieldwork along the east side of the cemetery beyond the wrought iron fence, and a Gradall was used to strip topsoil from the proposed watermain ROW in order to expose the subsoil in the area. Weather on the first day was warm and sunny, while the second day proved to be warm and overcast with intermittent periods of light rain. All field activities, observations and photographs have been compiled onto a map of the study area (Figure 3).

Topsoil removal by Gradall extended from approximately STA 10+655 to approximately STA 10+710, for a distance of about 55 meter. A two metre wide trench, which corresponds to the width of the Gradall bucket, was excavated between the sidewalk and the curb on the west side of Yonge Street (Plate 4). The trench extended from the southern end of the cemetery northerly to the existing gravel driveway which leads to the Meeting House immediately north of the cemetery. Because of the narrow working area and the lack of space to hold backdirt, the trench had to be excavated in sections. Each segment, which measured between two and three metres, was excavated to below subsoil under the close monitoring of the archaeologist. The exposed subsoil and trench profiles were shovel-shined and/or trowelled in order to investigate the presence or absence of unmarked grave shafts and other archaeologically significant features. Each segment was backfilled to its original grade before moving on to the next one (Plate 5). The northern limit of each segment was flagged so that the Gradall operator could easily determine where to excavate the next segment, thus ensuring that the entire watermain ROW was thoroughly examined. A total of 24 passes were excavated.

The topsoil and approximately 25 centimetre of subsoil was removed from the trench, for a total depth of 125 to 140 centimetre. The soil fills throughout the entire trench were disturbed. As seen in Plate 6, the well defined layers, which were consistent throughout most of the west wall of the trench, consisted of 10-15 centimetre of sod plus light gray-brown silty sand, 35-55 centimetre of light to medium gray-brown gravelly sand fill with old road asphalt inclusions – some which still held bright yellow paint, a 10-20 centimetre layer of sticky medium brown clay with a rusty brown bottom leached layer, 25-40 centimetre of medium brown sand and rounded pebbles, and 10-15 centimetre of silty clay overtop of a subsoil of medium brown clay.

Several finished or polished wood fragments were found in the sticky clay layer, which also exuded a very oily smell. The wood fragments were oriented in different planes and while they were of different dimensions, some looked like pieces of stakes (Plate 7). This oily clay layer extended for approximately one meter east into the trench (Plate 8) and became less pronounced towards the northern end of the trench. The eastern profile of the trench exhibits the same stratigraphy minus the oily clay layer (Plate 9). A heavy plastic bag with sand in it was recovered from the layer underneath the oily clay (Plate 10). Other remains recovered from the disturbed layers included a rusty scythe (Plate 11) and an inscribed copper plate (Plate 12). A relatively large piece of unworked wet wood was also recovered from a pocket of bluish grey clay within the medium-brown clay subsoil (Plate 13).

Despite very careful examination, no grave features or other significant archaeological remains were encountered within the trench excavated in front of the Quaker Cemetery.



Base mapping provided by:
Trow Associates Inc. and York Region - Transportation and Works
Yonge Street Watermain (STA. 10+500 to STA 10+800)
DWG.No.P13
Cont.No.T-07-17
Sheet No. 17

LEGEND:

--- Cemetery fence line (wrought iron fence)

█ Sidewalk/Curb

█ Gradall trench

█ Proposed watermain



Direction of photographic plates

Drawn by: AV
Date: July 2007
ASI File: 07EA-143



Figure 3: Quaker Cemetery - Results of the Field Assessment

5.0 SUMMARY AND CONCLUSIONS

ASI was contracted by Trow Associates Inc. to conduct a Stage 2 archaeological assessment of the Quaker Cemetery as part of the Yonge Street Watermain Environmental Assessment, Regional Municipality of York, Ontario.

The Stage 1 assessment (ASI 2007) of the Yonge Street Watermain study corridor determined that the area has potential for the identification of archaeological sites, although this potential has been entirely affected by ROW construction and other forms of development. It did determine however, that a cemetery belonging to the Religious Society of Friends (Quakers) on the west side of Yonge Street, south of Eagle Street, required additional investigation to confirm the presence or absence of unmarked graves within the proposed watermain right-of-way (ASI 2007: Recommendation 1).

Research conducted at the cemetery in 1988 (ASI 1988) revealed that the earliest graves, many of which would potentially be unmarked, were located along the eastern edge of the cemetery fronting on Yonge Street. In order to identify any unmarked grave shafts within the watermain ROW, an exploratory trench was excavated by Gradall under the supervision of a licensed archaeologist between approximately STA 10+655 to approximately STA 10+710. Despite careful scrutiny, no significant archaeological material or unmarked grave features were encountered.

In light of these results, it is therefore recommended that:

1. The proposed Yonge Street Watermain study corridor fronting the Quaker Cemetery (STA 10+655 to STA 10+710) may be considered free of further archaeological concern

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

The following Ministry of Culture conditions also apply:

- Should deeply buried archaeological remains be found during construction activities, the Heritage Operations Unit of the Ministry of Culture should be immediately notified.
- In the event that human remains are encountered during construction, the proponent should immediately contact both the Ontario Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Government Services, Consumer Protection Branch at (416) 326-8404 or toll-free at 1-800-889-9768.

The documentation 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

5.0 REFERENCES CITED

Archaeological Services Inc.

- 1988 An Archaeological Reconstruction of the Hicksite Burial Ground and Meeting House, Town of Newmarket, Ontario, York. Report on file at the Ministry of Culture, Toronto.
- 2007 Stage 1 Archaeological Assessment Yonge Street 600 mm Watermain From Gladman Avenue to Mulock Drive and From St. John's Sideroad to Wellington Street, Regional Municipality of York, Ontario. Report on file at the Ministry of Culture, Toronto.

Dorland, A.G.

- 1968 *The Quakers in Canada – A History*. Ryerson, Toronto.

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- 1878 Miles & Co., Belleville

Ministry of Culture

- 2006 *Standards and Guidelines for Consultant Archaeologists* (final draft, September 2006). Cultural Programs Branch, Ontario Ministry of Culture, Toronto.

Newlands, D.L.

- 1983 The Hicksite Friends' Burying Ground, Yonge Street. *The York Pioneer*. 78(20):20-31.

6.0 PHOTOGRAPHIC PLATES



Plate 1: The Religious Society of Friends (Quakers) Meeting House. The Quaker Cemetery is located to the south.

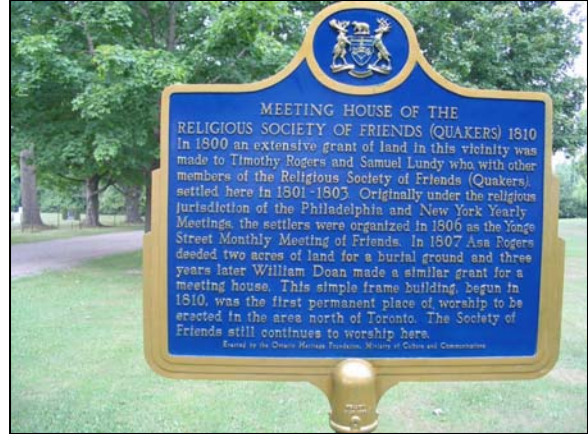


Plate 2: Commemorative plaque on the property of the Meeting House. The cemetery is visible in the left background.



Plate 3: Looking south at the Quaker Cemetery fronting Yonge Street south of the Meeting House.



Plate 4: Looking north at the Gradall excavation between the sidewalk and the curb.



Plate 5: Looking north at the Gradall operator backfilling a trench segment to its original grade.

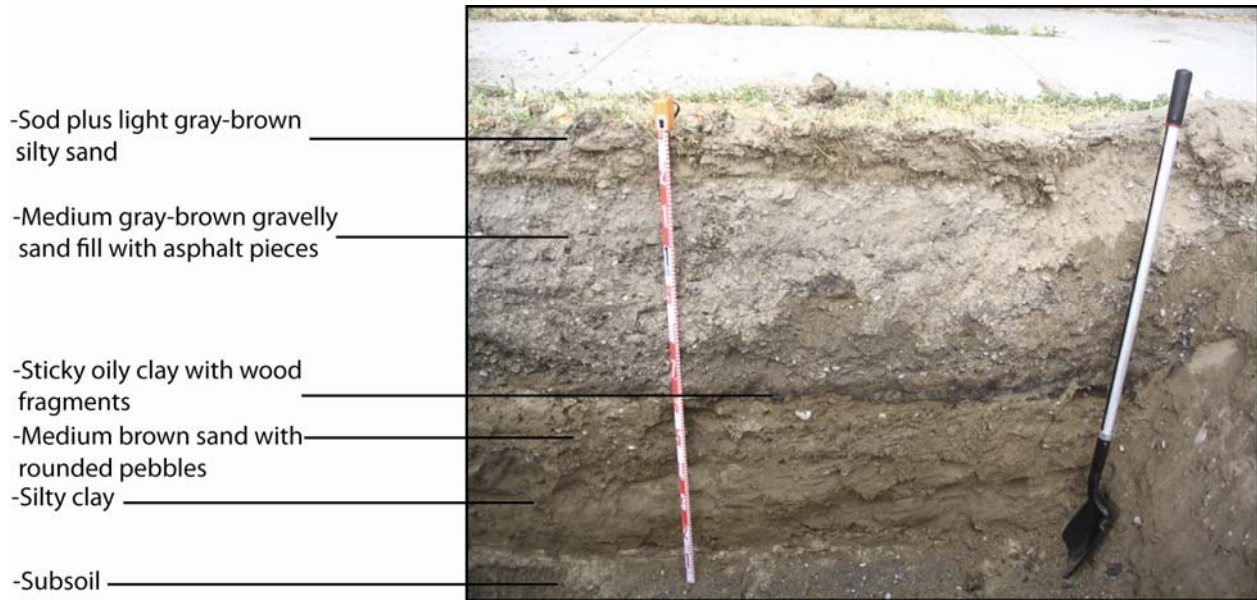


Plate 6: Typical view of the west wall profile.



Plate 7: Example of a wood fragment recovered from the oily clay layer.



Plate 8: View of a north wall profile. Note how the oily clay layer extends eastwards and ends.



Plate 9: Typical view of the east wall profile.



Plate 10: View of the heavy plastic bag located within the west wall profile.



Plate 11: Rusty scythe recovered within the disturbed fill.



Plate 12: Copper plate with the words "Magnetic Detector" and "Northern Electric" recovered within the disturbed fill.



Plate 13: Piece of unworked wet wood recovered from within the subsoil.

APPENDIX D

**Stage 1 Archaeological Assessment
Class EA Study (Schedule C)—Roadworks
Davis Drive (Y.R. 31) from West of Yonge Street (Y.R. 1)
to Highway 404, Town of Newmarket,
Regional Municipality of York, Ontario**

Stage 1 Archaeological Assessment

**Class EA Study (Schedule C)—Roadworks
Davis Drive (Y.R. 31) from West of Yonge Street (Y.R. 1)
to Highway 404,
Town of Newmarket, Regional Municipality of York,
Ontario**

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ASI File 06EA-027
Archaeological Licence P057
MCL PIF P057-256-2006

August 2006

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Research Archaeologist

Stage 1 Archaeological Assessment

Class EA Study (Schedule C)—Roadworks Davis Drive (Y.R. 31) from West of Yonge Street (Y.R. 1) to Highway 404, Town of Newmarket, Regional Municipality of York, Ontario

1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by Gartner Lee Limited of Markham, on behalf of York Region, to conduct a Stage 1 archaeological assessment as part of the Class Environmental Assessment (EA) of improvements to Davis Drive in the Town of Newmarket, Ontario (Figure 1). The EA study area extends along Davis Drive from 300 metres west of Yonge Street to 300 metres east of Harry Walker Parkway (at Highway 404). Proposed roadworks include the creation of turn lanes, intersection re-alignments, other operational improvements, potential streetscape improvements, and potential boulevard widening.

The Stage 1 archaeological assessment was conducted under the project direction of Mr. Robert Pihl, ASI, under an archaeological licence (P057) issued to Mr. Pihl pursuant to the *Ontario Heritage Act*. A field review of the study area was conducted by Mr. Peter Carruthers, ASI (P163).

Permission to access the study area and to carry out the activities necessary for the completion of the Stage 1 archaeological assessment was granted to ASI by Gartner Lee Limited, on April 17, 2006.

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

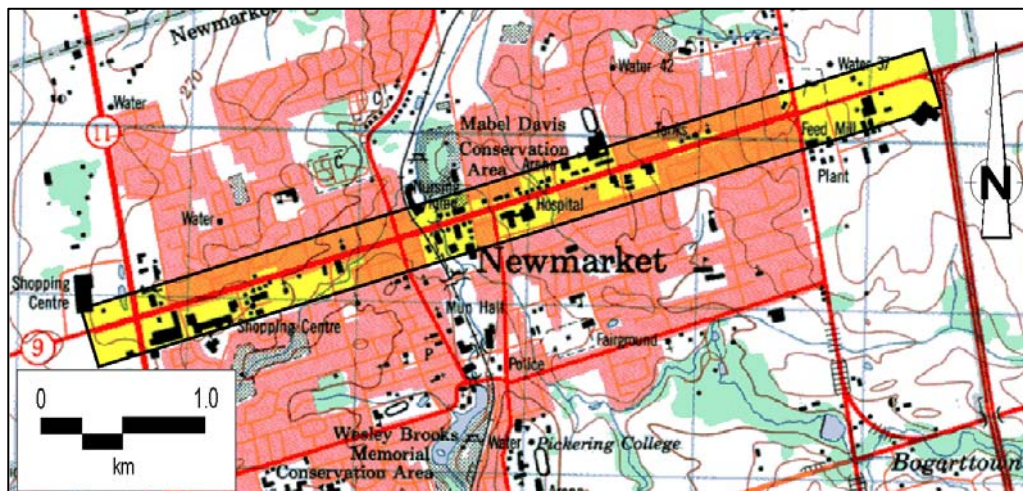


Figure 1: The Davis Drive study area highlighted on a detail from 1:50,000 NTS sheet 31 D/03 (Newmarket).

2.0 STAGE 1 BACKGROUND RESEARCH

The Stage 1 archaeological assessment of the EA study area was conducted in accordance with the Ontario Ministry of Culture’s archaeological assessment technical guidelines. A Stage 1 archaeological assessment involves research to describe the known and potential archaeological resources within a study area. Such an assessment incorporates a review of previous archaeological research, physiography, and land use history for the property. Background research was completed to identify any archaeological sites in the study area, and to assess its archaeological potential.

2.1 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: registered archaeological site records kept by the Ontario Ministry of Culture; 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 Ontario Ministry of Culture. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden Block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The study area under review is located in Borden Block *BaGu*.

According to the OASD, there are no previously registered archaeological sites within the study area, although nineteen registered sites are located within approximately two kilometres of its limits (see Table 1). Most of these registered sites are either historic Euro-Canadian homesteads or isolated pre-contact findspots identified during archaeological assessments.

Table 1: Registered Archaeological Sites Within ~2 km of the Study Area

Borden #	Name	Cultural Affiliation	Site Type	Researcher
BaGu-19	Newmarket 1	Historic Euro-Canadian	Isolated Findspot	Museum of Indian Archaeology, 1988
BaGu-38	Allegro	Undetermined Pre-contact	Isolated Findspot	Archaeological Services Inc. (ASI), 1990
BaGu-40	Garbutt	Historic Euro-Canadian	Homestead	ASI, 1990
BaGu-41	Augustus Rogers	Historic Euro-Canadian	Homestead	ASI, 1990
BaGu-42	Kelly	Undetermined Pre-contact	Lithic Scatter	ASI, 1989
BaGu-49	Thophilus Wakefield	Historic Euro-Canadian	Homestead	ASI, 1990
BaGu-53	Eves	Historic Euro-Canadian	Homestead	ASI, 1990
BaGu-56	Howard	Historic Euro-Canadian	Homestead	ASI, 1990
BaGu-62	Cook	Historic Euro-Canadian	Homestead	ASI, 1994
BaGu-63	Zenos Rogers	Historic Euro-Canadian	Homestead	ASI, 1994

Borden #	Name	Cultural Affiliation	Site Type	Researcher
BaGu-64	Philips	Historic Euro-Canadian	Homestead	ASI, 1994
BaGu-65	Huntly	Historic Euro-Canadian	Homestead, brickworks	ASI, 1994
BaGu-66		Undetermined Pre-contact	Isolated Findspot	ASI, 1993
BaGu-67		Undetermined Pre-contact	Isolated Findspot	ASI, 1993
BaGu-78	Masongsong	Historic Euro-Canadian	Homestead	London Museum of Archaeology, 1998
BaGu-108		Undetermined Pre-contact	Isolated Findspot	ASI, 2004
BaGv-38	Upper Canada	Middle Archaic	Isolated Findspot	ASI, 1994
BaGv-39		Woodland	Unknown	ASI, 1993
BaGv-40	Family Compact	Undetermined Pre-contact	Unknown	ASI, 1994

2.2 Physiography

The Davis Drive study area begins in the west in the vicinity of the interface between the Newmarket area of the Schomberg Clay Plains to the east and what is likely an isolated fragment of the Peterborough Drumlin Field to the west. Westerly from Yonge Street, the landscape features rolling till plains studded with drumlins. The majority of the study area—from Yonge Street easterly—is situated within the Schomberg Clay Plains physiographic region (Chapman and Putnam 1984: 176-177). The Schomberg Clay Plains are a set of separated plains comprised of deep, stratified clay and silt deposits situated to the north of the Oak Ridges Moraine. In the Newmarket area, the clay lies on top of a drumlinized till plain. The East Branch of the Holland River has deeply dissected the plain in a north-south direction, between Main Street and Prospect Street / Lundys Lane. The predominant soil type in the study area is fertile, well-drained Schomberg silty clay loam. The topography of the study area, on either side of the East Branch Holland River valley is typically gently undulating.

The East Branch of the Holland River and two of its tributaries cross the study area flowing northward and ultimately draining into Lake Simcoe. The western tributary crosses Davis Drive between Niagara Street / Vincent Street and Main Street, the East Branch Holland River crosses Davis Drive between Superior Street and Charles Street / Bayview Parkway, and the eastern tributary crosses Davis Drive between Bolton Avenue and Roxborough Road / Patterson Street.

Water is arguably the single most important resource necessary for any extended human occupation or settlement and proximity to water can be regarded as the primary indicator of archaeological site potential. Accordingly, distance from water is one of the most commonly used variables for predictive modelling of archaeological site location.

The Ministry of Culture primer on archaeology, land use planning and development in Ontario (MCL 1997) stipulates that undisturbed land within 300 metres of a primary water source (lakeshore, river, large creek, etc.), and undisturbed land within 200 metres of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 metres of an ancient water source (as indicated by remnant beaches, shorecliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological potential.

Based on the presence of the East Branch of the Holland River and two of its tributaries within the study area limits, the subject lands can be characterized as having potential for the presence of archaeological sites.

2.3 Historical Land Use Summary

The 1878 *Illustrated Historical Atlas of York County* was reviewed to determine the potential for the presence of historical archaeological remains within the study area (Figure 2). West of Yonge Street, Davis Drive follows the alignment of the town line between the former Township of King, to the south, and the former Township of East Gwillimbury, to the north. East of Yonge Street, Davis Drive follows the alignment of the town line road between the former Township of Whitchurch, to the south, and the former Township of East Gwillimbury to the north. The town line road passed through the former Village of Newmarket and was also referred to as Huron Street (see Figure 3).

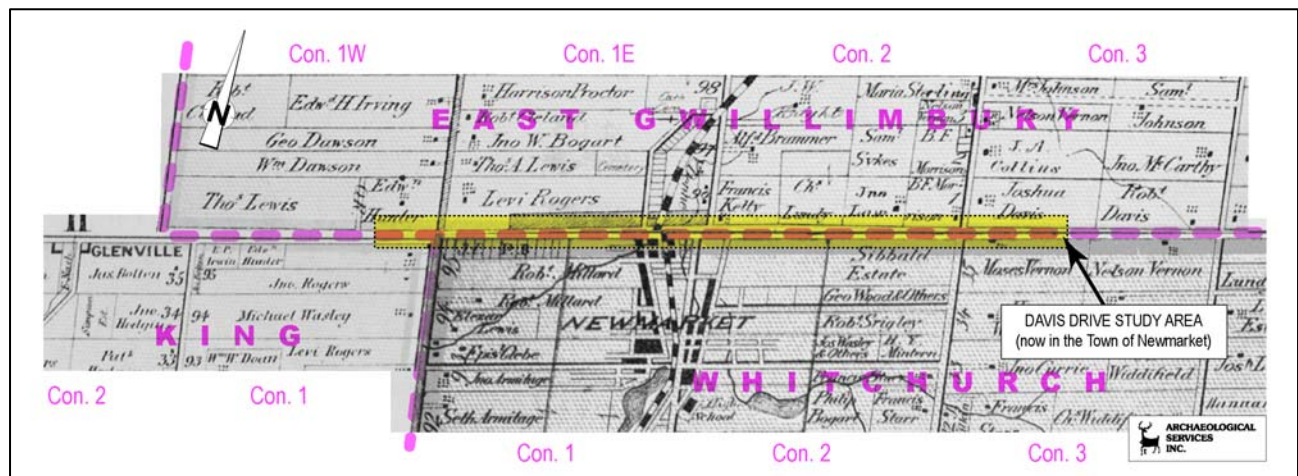


Figure 2: The Davis Drive study area highlighted on a composite of portions of the maps of the Township of Whitchurch, the Township of East Gwillimbury, and the south part of King Township from the 1878 *Illustrated Historical Atlas of York County*.

The study area comprises part of the former Lot 95, Concession 1, Township of King (west of Yonge Street and south of the town line [now Davis Drive]); part of the former Lot 95 in Concession 1 and parts of the former Lot 34 in Concessions 2 and 3, Township of Whitchurch (east of Yonge Street and south of the town line [now Davis Drive]); part of the former Lot 96, Concession 1 West of Yonge Street, Township of East Gwillimbury (west of Yonge Street and north of the town line [Davis Drive]); part of the former Lot 96 in Concession 1 East of Yonge Street, Township of East Gwillimbury; and parts of the former Lot 1, Concessions 2 and 3, Township of East Gwillimbury.

The 1878 atlas map of the Village of Newmarket (Figure 3) shows that the village, on Lots 95 and 96 west of Yonge Street and on Lot 34, Concession 2, Whitchurch, had been subdivided into town lots.

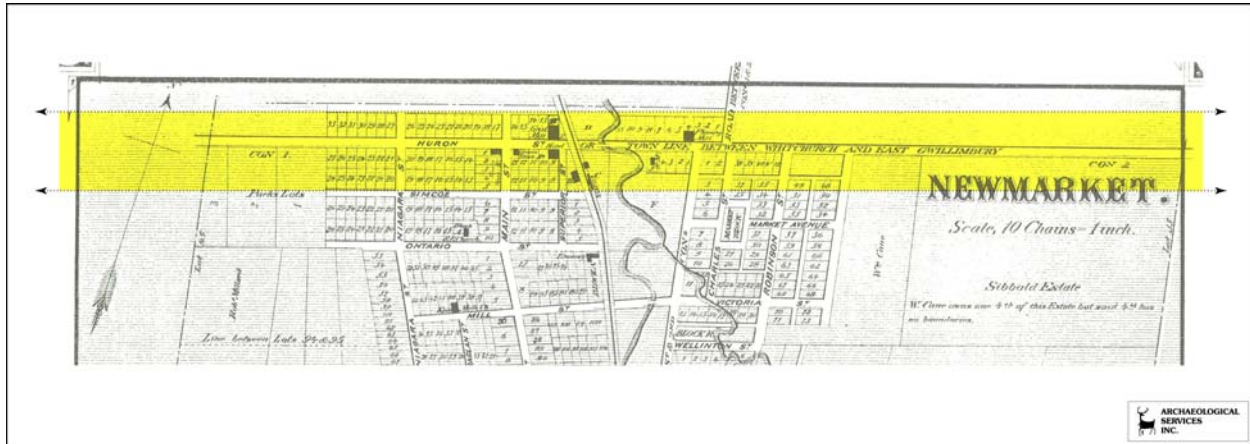


Figure 3: The central portion of the Davis Drive study area highlighted on a detail from the Newmarket village map in the 1878 *Illustrated Historical Atlas of York County*.

Additionally, Lot 95 and Lot 34 in Whitchurch adjacent to the core of the village had been subdivided into larger park lots.

The Village of Newmarket was incorporated in 1857, although the settlement grew up much earlier around mills established in the first quarter of the nineteenth century (Mika 1972: XVI). The 1878 map of the village does not depict the dwellings on town lots, but does show several mills and manufacturing establishments. Grain store houses are illustrated on the south side of Huron Street / town line (now Davis Drive) on either side of the Main Street intersection (Main Street having retained its name to the present time). A grist mill is depicted on the north side of Huron Street / town line (now Davis Drive) northwest of the Superior Street intersection (Superior Street also having retained its name to the present), and a hotel is shown in the southwest quadrant of the same intersection. The Northern Railroad is shown crossing Huron Street / town line east of Superior Street and this trackway is still actively used by CN Rail. The 1878 Newmarket map shows a station platform and two un-labelled structures alongside the tracks south of Huron Street / town line (now Davis Drive) and north of Simcoe Street (which has retained its name to the present). A sawmill is illustrated on the east side of the Holland River south of Huron Street / town line (now Davis Drive) and a planing mill is shown on the north side of the street to

the northwest of where Huron Street / town line (now Davis Drive) crossed the allowance for a road between the first and second concessions of Whitchurch (west of Charles Street and likely in line with Concession Street which is situated south of the study area, south of Queen Street).

In addition to these features within the Village of Newmarket, the 1878 township maps in the atlas depict several dwellings in close proximity to or adjacent to the town line right-of-way (now Davis Drive) both east and west of the incorporated community.

It should be noted that not all features of interest for archaeological assessment would have been depicted on nineteenth century atlas maps. With respect to archaeological potential, 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 water model outlined in Section 2.2 of this report, since access to potable water was a significant environmental constraint. Euro-Canadian settlement was also constrained and facilitated by the development of the network of concession roads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads. Accordingly, undisturbed lands within 100 metres of early settlement roads such as Davis Drive and the concession roads within the study area (for example, Yonge Street and Leslie Street) are considered to have potential for the presence of historic archaeological sites.

2.4 Summary of Archaeological Potential (Based on Background Research)

Based on the presence of the East Branch of the Holland River and two of its tributaries within the study area limits, the fact that Davis Drive, Yonge Street, and Leslie Street were historic nineteenth-century settlement roadways, and the intensity of historic settlement and development adjacent to and within the former Village of Newmarket, it can be concluded that the Davis Drive EA study area has potential for the presence of pre-contact and historic archaeological sites, depending on the intensity of more recent development and landscape alterations.

3.0 FIELD REVIEW

A field review of the study area was carried out by Mr. Peter Carruthers, ASI, on July 18, 2006, in order to confirm the assessment of archaeological potential and to determine the degree to which development and landscape alteration may have affected that potential. The weather on that day was hot, sunny and clear. All field observations have been compiled onto a map (Figure 4). Accompanying photographs can be found in Section 6.0 below.

As discussed above, Davis Drive is a historic road dividing East Gwillimbury Township from Whitchurch Township. The original cluster of settlements in this part of Newmarket was concentrated around the East Holland River and its tributaries. Although this area is historically significant, any archaeological remains have likely been disturbed by residential, commercial, and institutional development. The field review confirmed that most of the Davis Drive right-of-way (ROW) has previously been disturbed due to different levels of development.

For example, there has been extensive commercial development west and east of Yonge Street, on both sides of the ROW (Plate 1). This commercial development and associated disturbances extends easterly up to the East Holland tributary located east of Longford Drive. There has also been extensive commercial development east of Leslie Street, at the eastern limits of the study corridor (Plate 2), between the Mabel Davis Conservation Area easterly toward the East Holland tributary (Plate 3), as well as between Main Street and the East Holland River, in the heart of historic Newmarket (Plate 4).

Other forms of development that have disturbed any potential archaeological site potential include residential development between Alexander Road / Huron Heights Drive and Leslie Street (Plate 5), as well as institutional development in the form of health centres, schools and churches, at different points

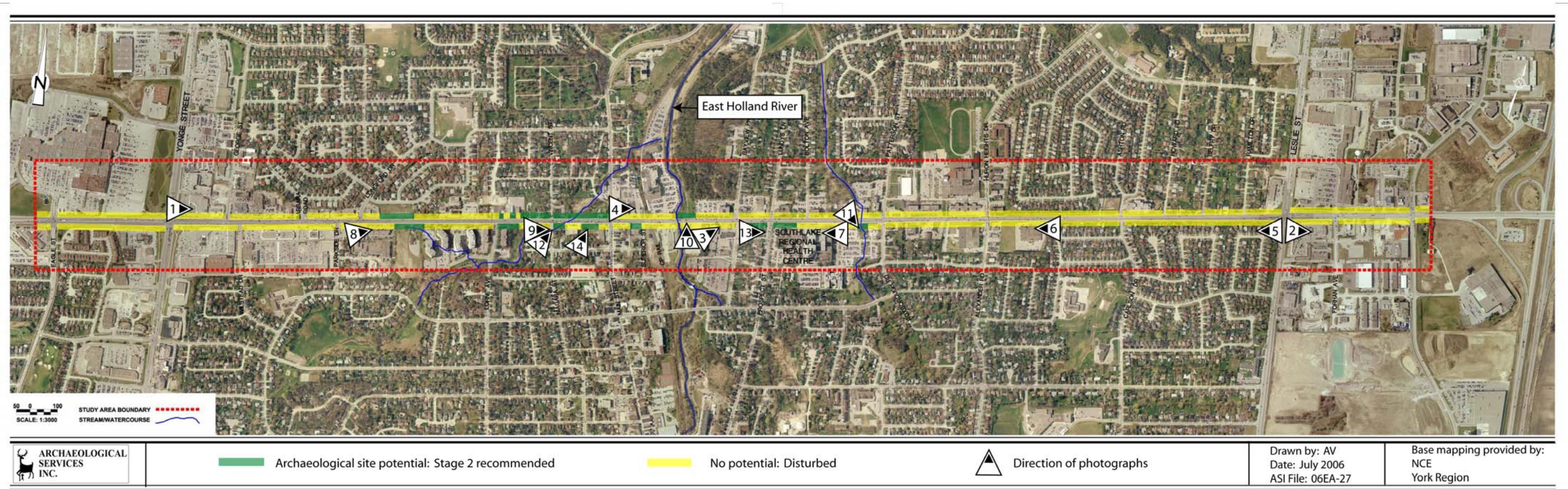


Figure 4: Davis Drive Class EA Study from West of Yonge Street to Highway 404- Results of the Stage 1 Archaeological Assessment

along the ROW (Plates 6 and 7). Due to the extent of previous disturbances, these areas do not exhibit archaeological site potential.

Along the mostly disturbed ROW, there are areas of minimal disturbance which exhibit archaeological site potential. These include the majority of the banks of the East Holland River and its tributaries (Plates 8 to 11). Furthermore, the Mabel Davis Conservation Area is located immediately east of the main channel of the East Holland River, on the north side of the ROW. Due to the minimal level of disturbances and the proximity to water, these areas exhibit archaeological site potential and should be subjected to a Stage 2 archaeological assessment in the form of a test pit survey at five metre intervals.

There is also minimal disturbance along some of the dwellings within and in the vicinity of the historic section of Newmarket (Plates 12 and 13). A vacant lot on the south side of Davis Drive between Niagara Street and Main Street also exhibits archaeological site potential (Plate 14). These areas should be subjected to a Stage 2 archaeological assessment in order to determine the extent of disturbance.

4.0 SUMMARY AND CONCLUSIONS

A Stage 1 archaeological assessment of Davis Drive in the Town of Newmarket, Ontario, from 300 metres west of Yonge Street to 300 metres east of Harry Walker Parkway (at Highway 404), has determined that while no registered archaeological sites are present within the study area limits, nineteen sites have been registered within a two kilometre radius of the limits of the study area. Additionally, a review of the general physiography and local nineteenth century land use within the study area suggested that it exhibits archaeological site potential.

Potential for the presence of pre-contact and historic archaeological sites is based on the presence of the East Branch of the Holland River and two of its tributaries within the study area limits, the fact that Davis Drive, Yonge Street, and Leslie Street were historic nineteenth century settlement roadways, and the intensity of historic settlement and development adjacent to and within the former Village of Newmarket.

A field review of the study area determined that with the exception of a few minimally disturbed areas, residential, commercial and institutional development has extensively impacted the heritage landscape and archaeological site potential of the Davis Drive study corridor. Areas of minimal disturbance that still exhibit archaeological site potential include the banks of the East Holland River and its tributaries, the Mabel Davis Conservation Area, as well as some of the yards of 19th century homes within, or in the vicinity of, historic Newmarket.

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

1. A Stage 2 archaeological assessment should be conducted of the areas exhibiting archaeological site potential (Figure 3: green areas), in accordance with the Ministry of Culture's Stage 1-3 Archaeological Assessment Technical Guidelines (1993). This work is required in order to identify any archaeological remains that may be present in advance of any construction;

2. No additional archaeological assessment is required within the remainder of the study corridor, and those areas which do not exhibit archaeological site potential may be considered clear of further archaeological concern;

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

3. Should deeply buried archaeological remains be found during construction activities, the Heritage Operations Unit of the Ontario Ministry of Culture should be notified immediately.
4. In the event that human remains are encountered during construction, the proponent should immediately contact both the Ontario Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Government Services, (416) 326-8392.

The documentation 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.

5.0 REFERENCES CITED

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

1984 *The Physiography of Southern Ontario*. Second Edition. Toronto: University of Toronto Press.

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1993 *Archaeological Assessment Technical Guidelines (Stages 1-3 & Reporting Format)*. Toronto: Cultural Programs Branch, Archaeology & Heritage Planning Unit

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1877 *Illustrated Historical Atlas of York County, Ontario*. Originally published by Miles & Co., Toronto, as the *Illustrated Historical Atlas of the County of York and the Township of West Gwillimbury & Town of Bradford in the County of Simcoe, Ontario*. Offset reprint edition published by Mika Silk Screening Limited, Belleville, Ontario.

6.0 PHOTOGRAPHS



Plate 1: Looking east along the north side of Davis Dr. from east of Yonge St. at the commercial development on both sides of the ROW.



Plate 2: Looking east along the south side of Davis Dr. from east of Leslie St. at the commercial development on both sides of the ROW.



Plate 3: Looking east along the south side of Davis Drive from the east side of the East Holland River at the commercial development on both sides of the ROW.



Plate 4: Looking south along the north side of Davis Dr. from Main St. at the commercial development on both sides of the ROW.



Plate 5: Looking west along the north side of Davis Dr. from Leslie St. at the residential development.



Plate 6: Looking west along the north side of Davis Dr. at institutional development (church).



Plate 7: Looking west along the south side of Davis Dr. at the Southlake Regional Health Centre west of Roxborough Rd.



Plate 8: Looking east along the south side of Davis Dr. from Parkside Dr. at the open green space next to a tributary of the East Holland River (in the trees).



Plate 9: Looking east along the south side of Davis Dr. from Niagara Street at the minimally disturbed green space next to a tributary of the East Holland River.



Plate 10: Looking north from the south side of Davis Dr. at the Mabel Davis Conservation Area on the west side of the main channel of the East Holland River.



Plate 11: Looking southeast from the south side of Davis Dr. at the minimally disturbed banks of a tributary of the East Holland River.



Plate 12: Looking northeast from the south side of Davis Dr. toward the minimally disturbed lawns of 19th century houses west of a tributary of the East Holland River.



Plate 13: Looking east along the south side of Davis Dr. from Prospect St. at the minimally disturbed lawns.



Plate 14: Looking northeast from the south side of Davis Dr. across a minimally disturbed abandoned lot and at minimally disturbed lawns of 19th century houses on the north side of Davis Dr.

APPENDIX E

Methodology for Ranking of Archaeological Sites and Archaeological Site Potential

1. The **number of archaeological sites** is calculated for each route retained for further evaluation. The following legend details the symbols used to depict the number of archaeological sites within a 100 m buffer of the route retained for further evaluation:

Worst	○	> 10 Sites
	◐	6 – 9 Sites
	◑	2 – 5 Sites
	◒	1 Site
Best	●	No Sites

2. The **significance of archaeological resources** displaced or disrupted is first ranked using the following categories:

- a) **Registered Archaeological Sites:** archaeological sites were ranked as follows:

- i: sites with human remains (or potential for burials) or on National Inventory; score as 100
- ii: large Aboriginal habitation sites (villages); score as 75
- iii: small Aboriginal habitation sites (e.g. campsites) or Euro-Canadian homestead sites; score as 50
- iv: Aboriginal findspots; score as 25
- v: no registered archaeological sites, score as 0

- b) **Archaeological Site Potential** is also considered in evaluating of the significance of archaeological resources displaced or disturbed. Site potential is evaluated as follows:

- 1: routes where 75% or more of its area have archaeological potential, score as 100
- 2: routes where 50 - 74% of its area have archaeological potential; score as 75
- 3: routes where 25 - 49% of its area have archaeological potential, score as 50
- 4: routes where 1 - 24% of its area have archaeological potential; score as 25
- 5: routes that have 0% archaeological potential, score as 0

The scores are calculated and then averaged for each route alternative.

Averaged scores of 75 - 100 are considered to have **High Impact**

Averaged scores of 50 – 74 are considered to have **Medium-High Impact**

Averaged scores of 25 - 49 are considered to have **Medium Impact**

Averaged scores of 1 - 24 are considered to have **Low Impact**

Averaged scores of 0 are considered to have **No Impact**

The averages are then translated to reflect the current evaluation scheme:

Worst	○	High Impact
	◐	Medium-High Impact
	◑	Medium Impact
	◒	Low Impact
Best	●	No Impact

Evaluation of Short-Listed Route Alternatives: Richmond Hill

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Rank
RH2 Yonge Street	Yonge Street from 19th Ave./Gamble Rd to Bloomington Road	AlGu-3	Murphy-Goulding	Woodland, Late	Campsite	50
		AlGu-45	Orion	Iroquoian	Hamlet/Cabin	50
		AlGu-46	Bernard	Euro-Canadian	Homestead	50
		AlGu-107	Log Cabin	Historic, Undetermined	Farmstead	50
		AlGu-108	Carins	Aboriginal	Isolated Findspot	25
		AlGu-109	Fornax	Aboriginal	Isolated Findspot	25
		AlGu-151	Royal Chapin	Euro-Canadian	Homestead	50
		AlGu-70	Casseiopia	Aboriginal	Isolated Findspot	25
		AlGu-74	Rocking Horse	Historic, Undetermined	Homestead	50
		AlGu-186	Redden-Routledge House	Euro-Canadian	House	50
		AlGu-187	Redden-Routledge Blacksmith Shop	Euro-Canadian	Blacksmith Shop	50
		AlGu-188	Second Routledge Blacksmith Shop	Euro-Canadian	Blacksmith Shop	50
Site Average						44
Archaeological Potential						75
Average						59

Number of Sites 12
Factor Score 59 **Medium-High Impact**

Evaluation of Short-Listed Route Alternatives: Aurora

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Rank
A2 Yonge Street	Yonge Street from Bloomington Road to Aurora/New Market Municipal Boundary	BaGu-59	Andrew Clubine	Euro-Canadian	Homestead	50
		BaGu-60	Mary Burkett	Euro-Canadian	Homestead	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
Site Average						50
Archaeological Site Potential						25

Average 38

Number of Sites 3
 Factor Score 38 **Medium Impact**

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Rank
A3 Yonge Street/ Industrial Parkway/ St. John's Sideroad	Yonge Street from Bloomington Road to Industrial Parkway	No Sites				0
	Industrial Parkway to St. John's Sideroad	No Sites				0
Site Average						0
Archaeological Site Potential						50

Average 25

Number of Sites 0
 Factor Score 25 **Medium Impact**

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Rank
A4 Yonge Street/ Industrial Parkway/ GO Bradford ROW	Yonge Street from Bloomington Road to Industrial Parkway	No Sites				0
	Industrial Parkway to St. John's Sideroad	No Sites				0
Site Average						0
Archaeological Site Potential						50

Average 25

Number of Sites 0
 Factor Score 25 **Medium Impact**

Evaluation of Short-Listed Route Alternatives: Newmarket/East Gwillimbury

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Rank
N2 Yonge Street/ Green Lane	Yonge Street from Aurora/Newmarket Municipal Boundary to Green Lane	BaGu-59	Andrew Clubine	Euro-Canadian	Homestead	50
		BaGu-60	Mary Burkett	Euro-Canadian	Homestead	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
		BaGu-64	Phillips	Euro-Canadian	Homestead	50
		BaGu-65	Huntly	Euro-Canadian	Homestead, Small Brickworks	50
Site Average						50
Archaeological Site Potential						25
Average						38

Number of Sites 5
 Factor Score 38 **Medium Impact**

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Rank
N3 GO Bradford ROW	Entire GO ROW for Bradford Line within municipal boundary of Newmarket for the study area	BaGu-59	Andrew Clubine	Euro-Canadian	Homestead	50
		BaGu-60	Mary Burkett	Euro-Canadian	Homestead	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
		BaGu-42	Kelly	Aboriginal	Campsite	50
		BaGu-49	Thophilus Wakefield	Euro-Canadian	Homestead	50
Site Average						50
Archaeological Site Potential						50
Average						50

Number of Sites 5
 Factor Score 50 **Medium-High Impact**

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Rank
N5 Yonge Street/ Eagle Street West/ Newmarket GO Bus Terminal	Yonge Street from Municipal Boundary to Eagle Street West	BaGu-59	Andrew Clubine	Euro-Canadian	Homestead	50
		BaGu-60	Mary Burkett	Euro-Canadian	Homestead	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
		BaGu-18	Hicksite Meeting House	Euro-Canadian	Structure	50
		BaGu-81	SW Newmarket 2	Archaic, Late	Isolated Findspot	25
		BaGu-82	SW Newmarket 3	Aboriginal	Isolated Findspot	25
		BaGu-41	Augustus Rogers	Euro-Canadian	Homestead	50
		BaGu-78	Masongsong	Euro-Canadian	Scatter, Euro-Canadian	50
	Eagle Street West to Newmarket GO Bus Terminal	BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
Site Average						44
Archaeological Site Potential						25

Average 35

Number of Sites 9
Factor Score 35

Medium Impact

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Score
N6 Yonge Street/ Davis Drive/ Main Street/ Green Lane	Yonge Street from Municipal Boundary to Davis Drive	BaGu-59	Andrew Clubine	Euro-Canadian	Homestead	50
		BaGu-60	Mary Burkett	Euro-Canadian	Homestead	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
		BaGu-81	SW Newmarket 2	Archaic, Late	Isolated Findspot	25
		BaGu-82	SW Newmarket 3	Aboriginal	Isolated Findspot	25
		BaGu-41	Augustus Rogers	Euro-Canadian	Homestead	50
		BaGu-78	Masongsong	Euro-Canadian	Scatter, Euro-Canadian	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
	Davis Drive to Main Street	No Sites				0
	Main Street to Green Lane	BaGu-42	Kelly	Aboriginal	Campsite	50
		BaGu-49	Thophilus Wakefield	Euro-Canadian	Homestead	50

Site Average	41
Archaeological Site Potential	50
Average	45

Number of Sites 10
Factor Score 45 **Medium Impact**

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Score
N7 Yonge Street/ Davis Drive to Leslie Street	Yonge Street from Municipal Boundary to Davis Drive	BaGu-59	Andrew Clubine	Euro-Canadian	Homestead	50
		BaGu-60	Mary Burkett	Euro-Canadian	Homestead	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
		BaGu-81	SW Newmarket 2	Archaic, Late	Isolated Findspot	25
		BaGu-82	SW Newmarket 3	Aboriginal	Isolated Findspot	25
		BaGu-41	Augustus Rogers	Euro-Canadian	Homestead	50
		BaGu-78	Masongsong	Euro-Canadian	Scatter, Euro-Canadian	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
	Davis Drive to Leslie Street	No Sites				
Site Average						39
Archaeological Site Potential						25
Average						32

Number of Sites 8
Factor Score 32 **Medium Impact**

Route	Segment	Borden #	Name	Cultural Affiliation	Site Type	Score
N8 Yonge Street/ Davis Drive/ Bayview Parkway/ Green Lane to Leslie Street	Yonge Street from Municipal Boundary to Davis Drive	BaGu-59	Andrew Clubine	Euro-Canadian	Homestead	50
		BaGu-60	Mary Burkett	Euro-Canadian	Homestead	50
		BaGu-61	George Bodfish	Euro-Canadian	Homestead	50
		BaGu-81	SW Newmarket 2	Archaic, Late	Isolated Findspot	25
		BaGu-82	SW Newmarket 3	Aboriginal	Isolated Findspot	25
		BaGu-41	Augustus Rogers	Euro-Canadian	Homestead	50
		BaGu-78	Masongsong	Euro-Canadian	Scatter, Euro-Canadian	50
	BaGu-61	George Bodfish	Euro-Canadian	Homestead	50	
	Davis Drive from Yonge to Bayview Parkway	No Sites				0
	Bayview Parkway from Davis Drive to Green Lane	BaGu-42	Kelly	Aboriginal	Campsite	50
BaGu-49		Thophilus Wakefield	Euro-Canadian	Homestead	50	
Site Average						41
Archaeological Site Potential						50
Average						45

Number of Sites 10
Factor Score 45 **Medium Impact**