

Stage 1 Archaeological Assessment

**Highway 7 and Vaughan North-South Link Transitway
City of Vaughan, Town of Richmond Hill
and Town of Markham,
Regional Municipality of York, Ontario**

Submitted to:

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Stage 1 Archaeological Assessment

Highway 7 and Vaughan North-South Link Transitway, City of Vaughan, Town of Richmond Hill, and Town of Markham Regional Municipality of York, Ontario

1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by Delcan Corporation of the York Consortium 2002, on behalf of the Regional Municipality of York, to conduct a Stage 1 Archaeological Assessment as part of the Environmental Assessment of the York Region Transit Plan's (YRTP) proposed Highway 7 Transit Corridor from Highway 50 to York/Durham Line, in the City of Vaughan, the Town of Richmond Hill, and the Town of Markham, Regional Municipality of York, Ontario, a distance of approximately 39 kilometres (Figure 1). Highway 7 is situated approximately two kilometres north of, and parallel to, the boundary between the City of Toronto and the Regional Municipality of York. The Stage 1 study corridor identified in Figure 1 includes all proposed corridor alternatives under consideration during the Environmental Assessment.

The study corridor comprises the rights-of-way and areas to be impacted by construction activities beyond the outer limits of the existing right-of-way of the Highway 7 Transit Corridor between Highway 50 and York/Durham Line (Figure 1).

The Stage 1 archaeological assessment was conducted under the project direction of Mr. Martin Cooper in 2003 and Mr. Robert Pihl in 2004 under archaeological licence (P057) issued to Mr. Pihl, ASI, pursuant to the Ontario Heritage Act (R.S.O. 1990), and in partial fulfilment of conditions imposed in compliance with the *Environmental Assessment Act* (R.S.O. 1997).

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

2.0 BACKGROUND RESEARCH

Background research was completed to identify any archaeological sites previously registered within the study corridor prior to field examination, and to assess its archaeological potential based on its physiographic setting, proximity to registered archaeological sites, and a summary review of nineteenth century maps.

2.1 Previous Archaeological Research

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the 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 Borden block are numbered sequentially as they are found. The study corridor under review is located in Borden blocks *AlGt*, *AlGu*, *AkGu* and *AkGv*.



Figure 1: Highway 7 Transit Corridor from Highway 50 to York/Durham Line – Stage 1 Archaeological Assessment

For the purpose of determining archaeological potential, and identifying archaeological sites that may be impacted by the proposed transitway undertaking, the area examined included all proposed of Highway 7 Transit Corridor alignments between Highway 50 and York/Durham Line as shown in Figure 1 (the study corridor), surrounded by a 250-metre buffer. Seventy-two archaeological sites have been registered within the area examined. The majority of these sites, which are summarized in Table 1, were documented during the course of predevelopment archaeological assessments on lands within and immediately adjacent to the study area.

Table 1: Registered Archaeological Sites within 250m of the Highway 7 Transitway Corridor

Borden Number	Site Name	Cultural/Temporal Affiliation	Site Type	Researcher(s)
AkGu-16	Reaman	Late Woodland	Campsite	A.J. Clark 1924; Archaeological Services Inc. 1990; W. B. Stewart 1994 and T. Arnold. 1994.
AkGu-33	Unnamed	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1988.
AkGu-35	Unnamed	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1988.
AkGu-36	Bathurst	Undetermined Precontact	Campsite	Mayer Pihl Poulton & Assoc. Inc.1987
AkGu-37	Beartrap	Late Woodland	Undetermined	Mayer, Poulton & Assoc. Inc. 1989.
AkGu-38	Lewis Page	Euro-Canadian	Cabin	R.G. Mayer 1987-68
AkGu-39	Thomas Page	Woodland	Campsite	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGu-48	Deer Hoof	Undetermined Precontact	Kill site	G. Warrick 1993,
AkGu-49	Caleb	Undetermined Precontact	Findspot	G. Warrick 1992
AkGu-50	Wild Canary I	Undetermined Precontact	Findspot	G.Warrick 1993; W.B. Stewart and T. Arnold 1994
AkGu-51	Wild Canary II	Undetermined Precontact	Findspot	G. Warrick 1993; W.B. Stewart and T. Arnold 1994
AkGu-52	Wild Canary III	Undetermined Precontact	Findspot	G. Warrick 1993; W.B. Stewart and T. Arnold 1994
AkGu-53	Unnamed	Middle Archaic	Findspot	G.Warrick 1993.
AkGu-54	Unnamed	Undetermined Precontact	Findspot	G.Warrick 1993.
AkGu-55	Hawk	Late Iroquoian, Middle	Findspot	G. Warrick 1993; W.B. Stewart and T. Arnold 1994
AkGu-56	Two Pines	Late Woodland	Homestead	G.Warrick 1993; T. Arnold 1994 and 1995.
AkGu-58	Clarke	Euro-Canadian	Homestead	L. Parker 1994
AkGu-60	Murray Knoll	Euro-Canadian	Homestead	W.B. Stewart 1995.
AkGu-67	Reaman	Euro-Canadian	Homestead	Archaeological Services Inc. 2000.
AkGu-68	Jerrett	Euro-Canadian	Homestead	Archaeological Services Inc. 2001
AkGv-104	Burkholder	Euro-Canadian and Undetermined Precontact	Homestead	G. Warrick 1990
AkGv-105	Unnamed	Undetermined Precontact	Findspot	G. Warrick 1990
AkGv-106	Goose	Undetermined Precontact	Undetermined	G. Warrick 1990
AkGv-107	Bingo	Undetermined Precontact	Undetermined	G. Warrick 1990
AkGv-108	Unnamed	Early Archaic	Undetermined	G. Warrick 1991
AkGv-40	Farr 1	Late Archaic	Campsite	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-41	Farr 2	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-42	Farr 3	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-43	Farr 4	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-44	Farr 5	Late Woodland	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-45	Nancy Farr	Euro-Canadian and Late Woodland	Homestead and Campsite	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-46	Farr 6	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987

Borden Number	Site Name	Cultural/Temporal Affiliation	Site Type	Researcher(s)
AkGv-48	Rainbow Creek	Paleo-Indian	Campsite	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-49	McNaughton 2	Undetermined Precontact	Campsite	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-50	McNaughton 3	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-51	McNaughton 4	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-52	McNaughton 5	Late Archaic	Campsite	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-53	McNaughton 6	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-54	McNaughton 7	Undetermined Precontact	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AkGv-55	Glen Meyer	Late Woodland	Findspot	Mayer Pihl Poulton & Assoc. Inc. 1987
AlGt-19	Burkholder	Woodland	Campsite	V. Konrad 1950
AlGt-21	Subdivision	Woodland	Campsite	V. Konrad 1972
AlGt-211	CNR Uxbridge 2	Euro-Canadian	Homestead	W.B. Stewart 1995.
AlGt-214	Unnamed	Undetermined Precontact	Findspot	Archaeological Services Inc. 1995
AlGt-215	Unnamed	Undetermined Precontact	Findspot	Archaeological Services Inc. 1995.
AlGt-217	Joseph Marr	Euro-Canadian	Homestead	ASI, 1995
AlGt-218	Sommerville	Euro-Canadian	Homestead	Archaeological Services Inc. 1995
AlGt-22	Milne	Undetermined Precontact	Campsite	A. J. Clark 1879, 1920
AlGt-264	Unnamed	Undetermined Precontact	Findspot	Archaeological Services Inc. 2000.
AlGt-265	Unnamed	Undetermined Precontact	Findspot	Archaeological Services Inc. 2000.
AlGt-266	Unnamed	Undetermined Precontact	Findspot	Archaeological Services Inc. 2000.
AlGt-267	Unnamed	Euro-Canadian	Homestead	Archaeological Services Inc. 2000.
AlGt-27	J.E. Armstrong	Archaic	Campsite	J. E. Armstrong 1950
AlGt-29	Ansell	Undetermined Precontact	Campsite	V. Konrad, no date.
AlGt-53	Troyer	Undetermined Precontact	Findspot	William A. Ross 1973
AlGt-54	Beker	Undetermined Precontact	Findspot	William A. Ross 1973
AlGt-59	Brown House	Undetermined Precontact	Findspot	W.A. Ross 1973
AlGu-116	POW	Undetermined Precontact	Undetermined	G. Warrick 1991
AlGu-117	Unnamed	Late Woodland, Early Archaic	Undetermined	G. Warrick 1991
AlGu-118	Unnamed	Archaic	Findspot	G. Warrick 1991
AlGu-119	Unnamed	Early Woodland	Findspot	G. Warrick 1991
AlGu-120	Over	Euro Canadian and Late Woodland	Industrial complex and Village	G. Warrick 1991
AlGu-129	German Mills Creek	Late Woodland	Campsite	W.B. Stewart 1994.
lGu-131	Pristline	Late Archaic	Undetermined	G. Warrick 1993
lGu-160	Unnamed	Undetermined Precontact	Lithic scatter	Archaeological Services Inc. 1996.
AlGu-220	Unnamed	Late Archaic	Findspot	Archaeological Services Inc. 1999.
AlGu-221	Unnamed	Undetermined Precontact	Findspot	Archaeological Services Inc. 1999
AlGu-222	Unnamed	Undetermined Precontact	Findspot	Archaeological Services Inc. 1999
AlGu-24	Nicholson	Woodland	Village	A.J.Clark 1930;V.Konrad 1972;Mayer Phil Poulton & Assoc. Inc. 1986
AlGu-27	Captain	Late Archaic, Late Woodland	Findspot	R. Pearce 1986
AlGu-80	Pegasus	Undetermined Precontact	Undetermined	Archaeological Services Inc. 1987
AlGu-95	Langstaff Jail Farm	Euro-Canadian	Homestead	Archaeological Services Inc. 1988

Based on the presence of these registered archaeological sites in close proximity to or within the study corridor, the subject lands have potential for the identification of precontact and historic archaeological remains, where they have not been disturbed by more recent land uses.

2.2 Physiography and Assessment of Pre-contact Archaeological Potential

The various alignments forming the study corridor are located almost entirely within the Peel Plain physiographic region of southern Ontario (Chapman and Putnam 1984: 174-176), although its easternmost portion of the Highway 7 Corridor Transitway, approximately between Highway 48 (Markham Road) and the York/Durham Line falls within the South Slope physiographic region (Chapman and Putnam 1984: 172-174).

The Peel Plain, an approximately 775 square kilometre region covering the central portions of York, Peel, and Halton, is a fairly level till plain overlain, for the most part, by a veneer of lacustrine clay. Several major rivers flow southward across the plain through deeply cut valleys, and although drainage in inter-stream areas is imperfect, there are no large un-drained areas in the region. Small areas of sand plain occur within the Humber and Rouge watersheds, while a certain degree of additional topographic relief is provided by a series of drumlins lying between Concord and Unionville.

The South Slope covers approximately 2,450 square kilometres of land between the Niagara Escarpment and the Trent River, and comprises the majority of the slope descending from the heights of the Oak Ridges Moraine to the Iroquois Plain on the shore of Lake Ontario. Within the study corridor, the till plain of the South Slope and the clay of the Peel Plain region merge smoothly into a broad, rolling tract of land cut by the tributaries of the Rouge River, Petticoat Creek and Duffins Creek watersheds.

YRTP Natural Heritage Features mapping and the 1:50,000 scale NTS map sheets depict a total of 58 locations where watercourses traverse the study corridor. West of Keele Street, these watercourses represent the middle portions of the Humber watershed. Proceeding from west to east, the major channels include Albion Creek, Rowntree Creek, the west and east branches of the Humber River, Emery Creek, and Black Creek Creek. Between roughly Keele Street and Leslie Street, the study corridor passes through the Don River drainage system, comprised of the West Don, the East Don, German Mills Creek and their tributaries. From approximately Highway 404 to the Eleventh Line, the study corridor is located within the Rouge River watershed, consisting of the main channels of the Rouge and Little Rouge as well as major creeks such as Beaver, Berczy, and Bruce. The remaining, extreme eastern, portion of the study corridor crosses the Petticoat Creek system.

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in southern Ontario after the Pleistocene era, 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 modeling of archaeological site location.

The Ministry of Culture Primer on Archaeology, Land Use Planning and Development in Ontario (1997: 12-13) 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, are considered to have archaeological potential.

Therefore, based on the fact that the study corridor cuts across all of the major drainage systems flowing through the southern portion of York Region, intersecting creeks in 58 locations, it has the potential for the identification of pre-contact and historic archaeological sites.

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 in order to characterize the potential for the presence of 19th century archaeological sites within the study corridor (Figure 2).

The study corridor is located within the former Townships of York, Vaughan and Markham, in the former County of York, Ontario. The majority of the alignments within the Highway 7 Transit Corridor study corridor do not follow original 19th century road allowances established during the original survey of York County.

Figure 2, derived from the 1878 *Illustrated Historical Atlas of York County* demonstrates the intensity of historic land use within the study corridor, depicting a total of 102 identified land use features within or in close proximity to the various alignments (Table 2). These include 85 farmsteads, three saw mills, one grist mill, a factory, two post offices, two hotels, three churches, one cemetery, and one temperance hall.

It should be noted that the accuracy with which features were plotted on the atlas maps is limited, and that the accuracy with which the study corridor can be overlaid on these nineteenth century bases is also limited. Moreover, not every feature of interest would have been within the scope of the atlas maps at the time of their production. Nonetheless, the atlas is considered a primary source for the identification of historic archaeological site potential. Based on the intensity of land use in the vicinity of the study corridor, the subject lands have potential for the identification of historic archaeological sites.

Table 2: 19th Century Features Within the Study Area According to the 1878 Illustrated Historical Atlas

Lot	Conc	Owner	Feature
<i>Vaughan Township</i>			
5 (W ½)	9	George Weatherspoon	Farmstead
5 (E ½)	9	William Farr	Farmstead
4 (W½)	8	John Williams	Farmstead
5 (E ½)	8	John Jeffrey	3 Farmsteads
5 (W½)	7	John Brown	Community of Brownsville (identified structures include a Factory and a Saw Mill)
4 (W½)	6	Elisha Farr	Farmstead
4 (E½)	6	James Stephenson	Farmstead
4 (N½)	5	Aaron Whitmore	Farmstead
4 (C½)	5	Lafayette Whitmore	Farmstead
4 (S½)	5	Ephraim Whitmore	Farmstead
3	5	Joseph Brown	Farmstead
2	5	Richard Brown	Farmstead
1	5	James Dalziel	Farmstead, Saw Mill
4 (W½)	4	John Faulkner	Farmstead
3 (N½)	4	Joseph Burkholder	Farmstead, Church
3 (SW¼)	4	John Burkholder	2 Farmsteads
2 (W½)	4	Michael Brown	Farmstead
1	4	Joseph Brown	Farmstead
8 (NE¼)	3	Isaac White	2 Farmsteads
6 (E½)	3	Thomas Teesdale	Community of Concorde (identified structures include a School House, Post Office and a Farmstead)
4	3	Michael Fisher	Farmstead
3	3	Michael Fisher	2 Farmsteads
1 (W½)	3	Z. Jackson Estate	Farmstead
9 (E½)	2	T. Page	Farmstead
8	2	David Smellie	Farmstead
6	2	C. Cooper	Farmstead

Lot	Conc	Owner	Feature
5 (E ¹ / ₄)	2	G. Charlton	Farmstead
34 (SE ¹ / ₄)	1	G. Lemon	Saw Mill, School House, Farmstead
33 (N ¹ / ₂)	1	Mrs. Wright	3 Farmsteads
York Township			
25 (E ¹ / ₂)	5	John Kaiser	2 Farmsteads
24 (E ¹ / ₂)	5	Samuel Strong	Farmstead
25 (W ¹ / ₂)	4	Jacob Strong	2 Farmsteads
25 (E ¹ / ₂)	4	Jacob Strong	Farmstead
24	4	Jesse Strong	Farmstead
Markham Township			
35	1	Munshaw Estate	2 Farmsteads
34 (N ¹ / ₂)	1	David James	2 Farmsteads
34 (S ¹ / ₂)	1	Henry Miller	2 Farmsteads
33 (NW Severance)	1	Unidentified	Farmstead
33 (SW Severance)	1	Mortimer Estate	2 Farmsteads
8 (W ¹ / ₂)	2	William Gohn	Farmstead
8 (E ¹ / ₂)	2	Christopher Gohn	Farmstead
8 (NW ² / ₃)	3	Samuel Holditch	Farmstead
8 (SW ² / ₃)	3	Thomas Cross	Farmstead
8 (E ¹ / ₃)	3	Jonathan Slater	Farmstead
8 (SE Severance)	3	J.K.	Farmstead
7 (E ¹ / ₃)	3	Robert Scott	Farmstead
8 (NE ¹ / ₄)	4	Jonathan Lunau	Farmstead, Church, Cemetery, Temperance Hall
8 (SE ¹ / ₄)	4	Syrus Lunau	Farmstead
7 (W ¹ / ₂)	4	William Fierheller	Farmstead
7 (NE ¹ / ₄)	4	John Smith	Farmstead
7 (SE ¹ / ₄)	4	Edward Dixon	Farmstead
8 (W ¹ / ₂)	5	Henry Lunau	Farmstead
8 (E ¹ / ₂)	5	John T. Carr	Farmstead
7 (E ¹ / ₂)	5	Joseph Fierheller	Farmstead
6 (W ¹ / ₂)	5	Sinclair Hagerman	Farmstead
6 (E ¹ / ₂)	5	Nicholas Hagerman	Community of Hagerman's Corners (identified structures include a Church, Post Office and Farmstead)
5 (E ¹ / ₂)	5	William Miliken	Community of Hagerman's Corners (identified structures include a School House and Farmstead)
8 (E ¹ / ₄)	6	Peter Milne	Farmstead
7 (NW ¹ / ₄)	6	Robert Armstrong	Farmstead
7 (SW ¹ / ₄)	6	Joram Eckhardt	Farmstead
6 (W ¹ / ₄)	6	James Fairless	Community of Hagerman's Corners (identified structures include an Hotel and Farmstead)
8 (N ¹ / ₂)	7	Chancy Crosby	Farmstead
8 (S ¹ / ₂)	7	W.D. Crosby	Farmstead
8 (W ¹ / ₃)	8	John Reesor	Farmstead
8 (NE ¹ / ₃)	8	Daniel Brake	Farmstead, Grist Mill (Mill owned by G.W. Reesor)
9 (W ¹ / ₂)	9	A. Burkholder	Farmstead
8 (W ¹ / ₄)	9	J. McCreight	Farmstead
8 (NE ¹ / ₄)	9	Johnson Estate	Farmstead
8 (SE ¹ / ₄)	9	R. Reesor	Farmstead
11	10	Colonel William Bulton	Farmstead (The "St. Clair Farm")
10 (E ¹ / ₄)	10	Albert Clarry	Hotel, Farmstead
8 (W ¹ / ₃)	10	William Harding	Farmstead
8 (W ² / ₃)	10	James Tran	Farmstead

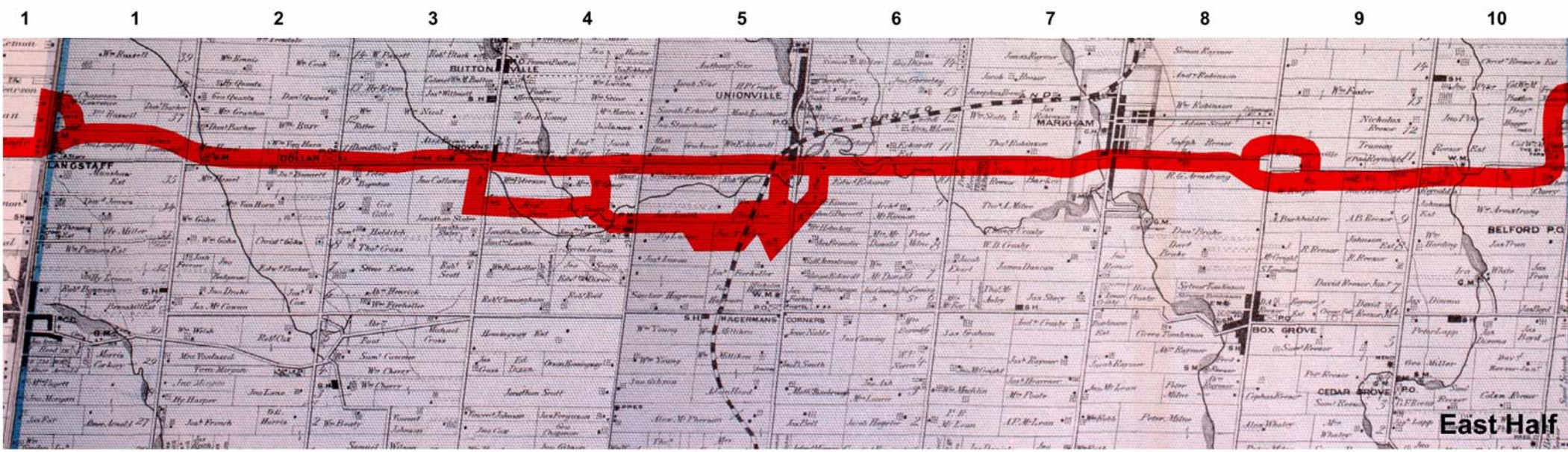
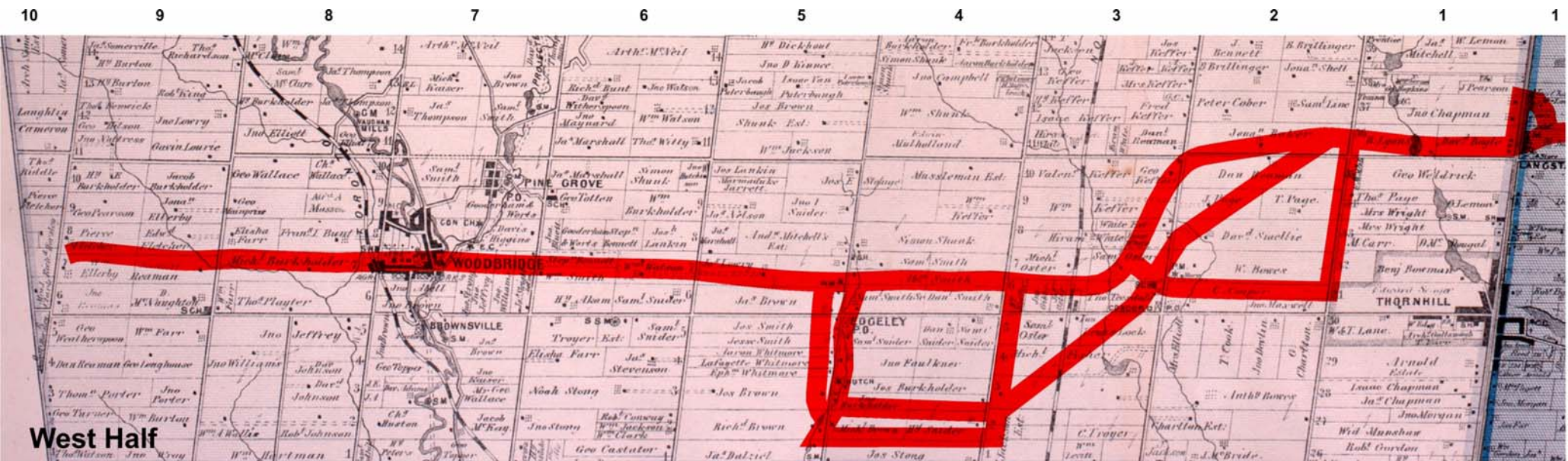


Figure 2: Highway 7 Transit Corridor overlain by 1877 Historical Atlas of York County.

█ Study Corridor

3.0 FIELD REVIEW

A field review of the study corridor was conducted by Mr. Robert Pihl, ASI, on September 30 and October 18, 2004. The weather on both days was cool and partly cloudy, but viewing conditions were considered satisfactory.

The field review proceeded from west to east, and focused on a series of preferred alignments which are currently under investigation in Delcan's report entitled *Highway 7 and Vaughan North-South Transitway Environmental Assessment* which is currently in preparation (Delcan 2005). These include the Vaughan North-South Link and Jane-Steeles-Keele Alignment, the Vaughan North-South Link and Hydro ROW Alignment, the Centre-Bathurst Street Alignment, the High Tech Road Alignment, and the Markham Centre Alignment. They are briefly discussed below.

For numerous sections along the study corridor, however, Delcan is recommending Mixed Traffic Operation zones which work within the existing right-of-way and incorporate traffic configurations currently in use. This recommended designation is proposed for the following locations along the study corridor:

- On Highway 7 from Kipling Avenue to Islington Avenue;
- On Jane Street from the existing Beechwood Cemetery entrance to 75 m south of the CN Halton Structure;
- On proposed new east-west collector road from Jane Street to proposed Street C within the Hydro corridor north of Steeles Avenue;
- On proposed Street C, extension of North West Gate;
- On Keele Street same as Quick Start route;
- On Highway 7 from Bowes Road/Baldwin Avenue to Centre Street;
- On Bathurst Street from Worth Boulevard/Flamingo Road to Bathurst Street Connection Ramp;
- On entire Bathurst Street Connection Ramp;
- Westbound on Highway 7 from Hunter's Point Drive to Bathurst Street Connection Ramp
- Westbound on Highway 7 from planned Richmond Hill Centre Intermodal Station via Yonge Street Connection Ramp to just east of Yonge Street;
- Westbound on Highway 7 from Red Maple Road to planned Richmond Hill Centre Intermodal Station via Yonge Street Connection Ramp;
- On Highway 7 from Bayview Connection Road to Chamlers Road;
- On Highway 7 from Highway 404 N-EW Ramp to S-EW Ramp;
- On Highway 7 from Galsworthy Drive/Grandview Boulevard to Wootten Way, including the Elmwood Cemetery;
- On proposed Burr Oak Avenue to the Markham-Stoffville Hospital Terminal;
- On Highway 7 from Reesor Road to York-Durham Line (Regional Road 30), including the Locust Hill Cemetery.

Due to local traffic constraints within these sections, no new construction is anticipated nor planned (Delcan 2005: Section 9.0).

Although the field review covered the entire study corridor, attention focused on several areas where various alignment options are being considered. The first involves the Vaughan North-South Link which includes both the Jane-Steeles-Keele and Hydro Right-of-Way corridor options (Figures 3-1 to 3-3). The Jane Street ROW passes beside the Beechwood Cemetery (Plate 1), but this section is situated in a Mixed Traffic Operation area that will not be effected by the proposed improvements (see Figure 4-1).

The Hydro ROW Alignment extends from Jane Street in the west to just east of Bathurst Street and parallels the existing hydro ROW, cutting across flat, featureless terrain that has generally been severely disturbed in the past (Plates 2-9). The ROW does, however, cross numerous small tributaries and passes through more wooded sections, particularly at the eastern end (Plate 10), where archaeological site potential is likely present.

The Centre-Bathurst Alignment Option 2 proposes a connection between Bathurst Street and Highway 7 via a new ROW which first parallels the south side of 407 ETR and then crosses over it (Figure 3-4). Most of the proposed ROW is situated within valley lands associated with a small creek (Plates 11-13).

The High Tech Road Alignment is situated in the Town of Richmond Hill (Figure 3-5). It would connect 407 ETR directly with High Tech Road and then provide ready access to commercial developments along Yonge Street (Plates 14-17). Most of the proposed ROW in this alignment is situated in highly disturbed lands with little or no archaeological site potential.

Finally, the Markham Centre Alignment features several possible options (Figure 3-6). Option 1 proposes an extension of Town Centre Boulevard southeast to connect with Warden Avenue (Plate 20). Option 2 involves a new east-west ROW connecting Town Centre Boulevard with Woodbine Avenue (Plates 18-19, 22-24) with a crossing at the Rouge River near Yorktech Drive (Plate 19). It should be noted that any Rouge River crossing should be considered archaeologically significant, whether it is here or any other proposed alignment (e.g. one possibly contemplated along Warden Avenue). Finally, Option 3 proposes an east-west ROW connecting Unionville Main Street (and/or Kennedy Road via Unionville Gate) to Warden Avenue to the west. This ROW would link with the new GO Transit Station which has recently been built to the south (Plate 21).

Four cemeteries were encountered along the proposed Highway 7 transitway corridor. As noted above, three are situated within Mixed Traffic Option zones and *will not be effected* by the proposed options; these are the Beechwood and Elmwood Cemeteries (Figure 4-1; Plates 25-28) and Locust Hill Cemetery (Figure 4-2; Plates 31-32). Only the Brown's Corners Cemetery which is associated with the Brown's Corners United Church (Figure 4-2; Plates 29 and 30) could be impacted by proposed sidewalk construction along the north side of Highway 7. Although an alignment shift to the south should avoid the cemetery, further archaeological assessment are still anticipated in this vicinity.

5.0 SUMMARY AND CONCLUSIONS

Stage 1 Archaeological Assessment of the proposed Highway 7 Corridor Transitway between Highway 50 and York/Durham Line, City of Vaughan, the Town of Richmond Hill, and the Town of Markham, Regional Municipality of York has determined that 105 archaeological sites have been registered within the study corridor.

Based on the presence of these sites within the study corridor, as well as on the presence of numerous watercourses forming parts of the Humber, Don, Rouge and Petticoat Creek drainage systems, and the intensity of historic land use within the study corridor, the subject lands have potential for the identification of historic and precontact archaeological sites in areas where archaeological potential has not been negated by intensive, recent construction disturbance.

The field review examined the various alignment options that are being proposed for the Highway 7 Transit Corridor. Disturbances due to urban development have greatly affected archaeological site potential throughout the study corridor. Never-the-less, there are areas where these disturbances are

minimal or absent, particularly in the vicinity of one of the numerous creek or river crossings, where archaeological site potential still exists. Furthermore, at least one 19th century feature -- the Locust Hill United Cemetery -- will require additional assessment if proposed road improvements to Highway 7 impact its boundaries.

It is therefore recommended that:

1. Prior to any land-disturbing activities within the study corridor, Stage 2 archaeological field survey should be conducted in accordance with Ministry of Culture Stage 1-3 Archaeological Assessment Technical Guidelines, in order to identify any archaeological remains that may be present within undisturbed lands.
2. Prior to any land-disturbing activities adjacent to the Brown's Corner United Church and Cemetery along the north side of Highway 7 (Figure 4a), investigations will be required to confirm the presence or absence of unmarked graves involving either the monitoring of the area by a licensed archaeologist during construction or the removal of the topsoil with a Gradall followed by the shovel shining of the exposed surfaces and inspection for grave shafts.

The above recommendations are subject to Ministry 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 MCL approval has been received.

3. In the event that deeply buried archaeological remains are encountered during construction activities, the office of the Regulatory and Operations Group, Ministry of Culture should be notified immediately.
4. In the event that human remains are encountered during construction, both the Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit, Ministry of Consumer and Commercial Relations should be notified immediately.

The documentation related to the archaeological assessment of the study area shall 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 can be made to the satisfaction of the Regional Municipality of York, the Ministry of Culture, and any other legitimate interest groups.

6.0 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.

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1878 Toronto: Page & Smith. Reprinted 1972 by Maracle Press, Oshawa.

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1997 *Conserving a Future for a Past: Archaeology, Land Use Planning and Development in Ontario. An Educational Primer and Comprehensive Guide for Non Specialists*. Toronto.

6.0 MAP SHEETS: Highway 7 and Vaughan North-South Link Transitway Corridor Environmental Assessment

Figures 3-1 to 3-3: Vaughan North-South Link and Hydro ROW Alignment

Figure 3-4: Centre – Bathurst Street Alignment

Figure 3-5: High Tech Alignment

Figure 3-6: Markham Centre Alignment

Figure 4-1: Beechwood Cemetery and Brown’s Corners United Church and Cemetery

Figure 4-2: Elmwood Cemetery and Locust Hill United Church and Cemetery

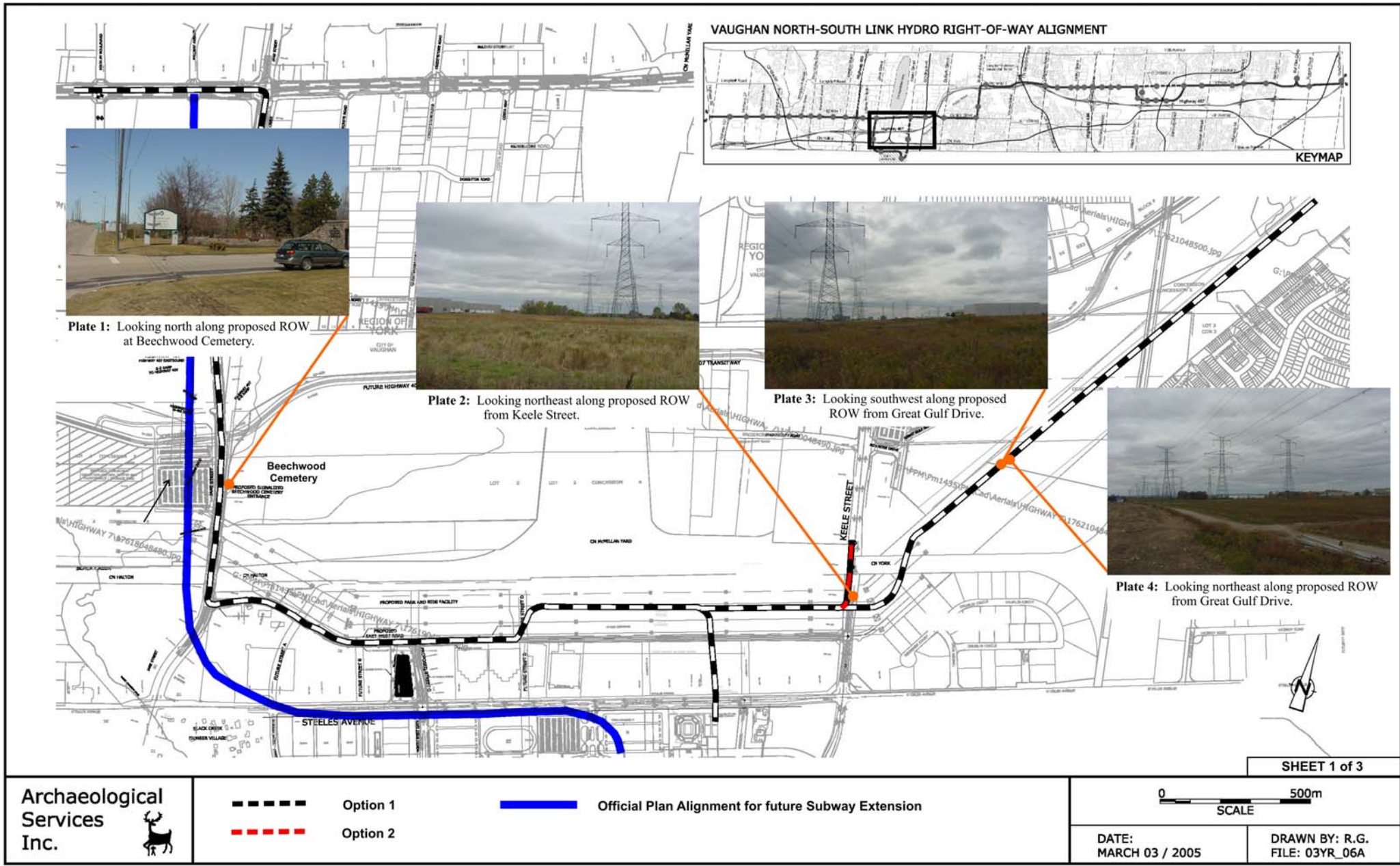


Figure 3-1: Highway 7 and Vaughan North-South Link Transitway Environmental Assessment – Jane-Keele-Steeles and Hydro ROW Alignments.

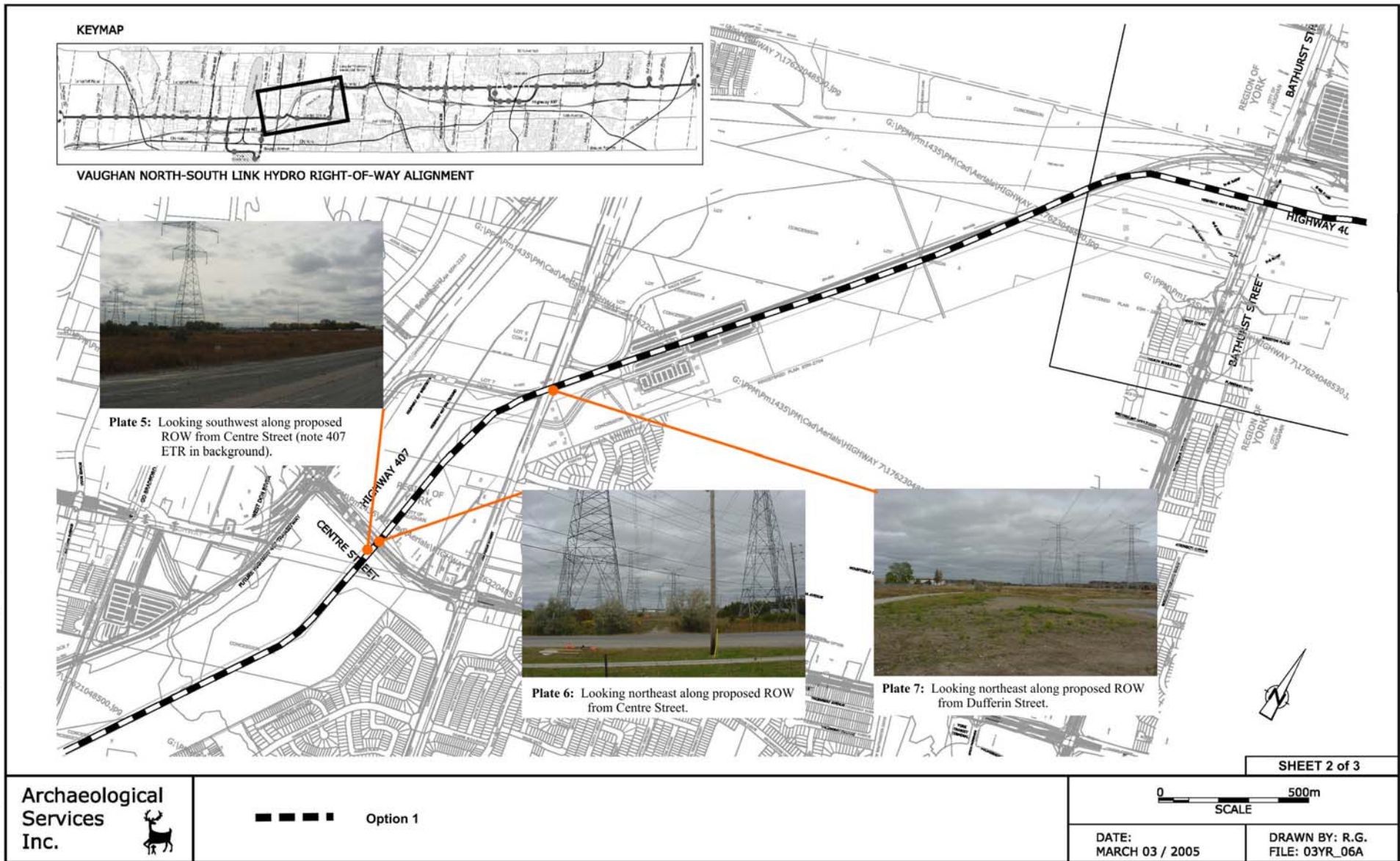
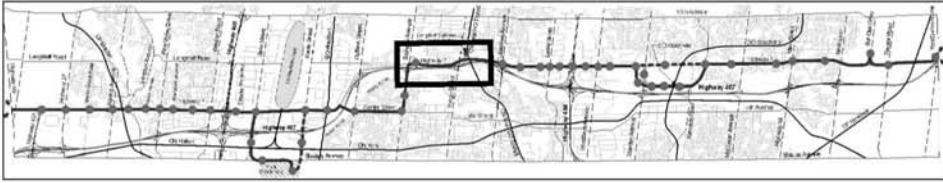


Figure 3-2: Highway 7 and Vaughan North-South Link Transitway Environmental Assessment – Jane-Keele-Steeles and Hydro ROW Alignments.

KEYMAP



VAUGHAN NORTH-SOUTH LINK HYDRO RIGHT-OF-WAY ALIGNMENT

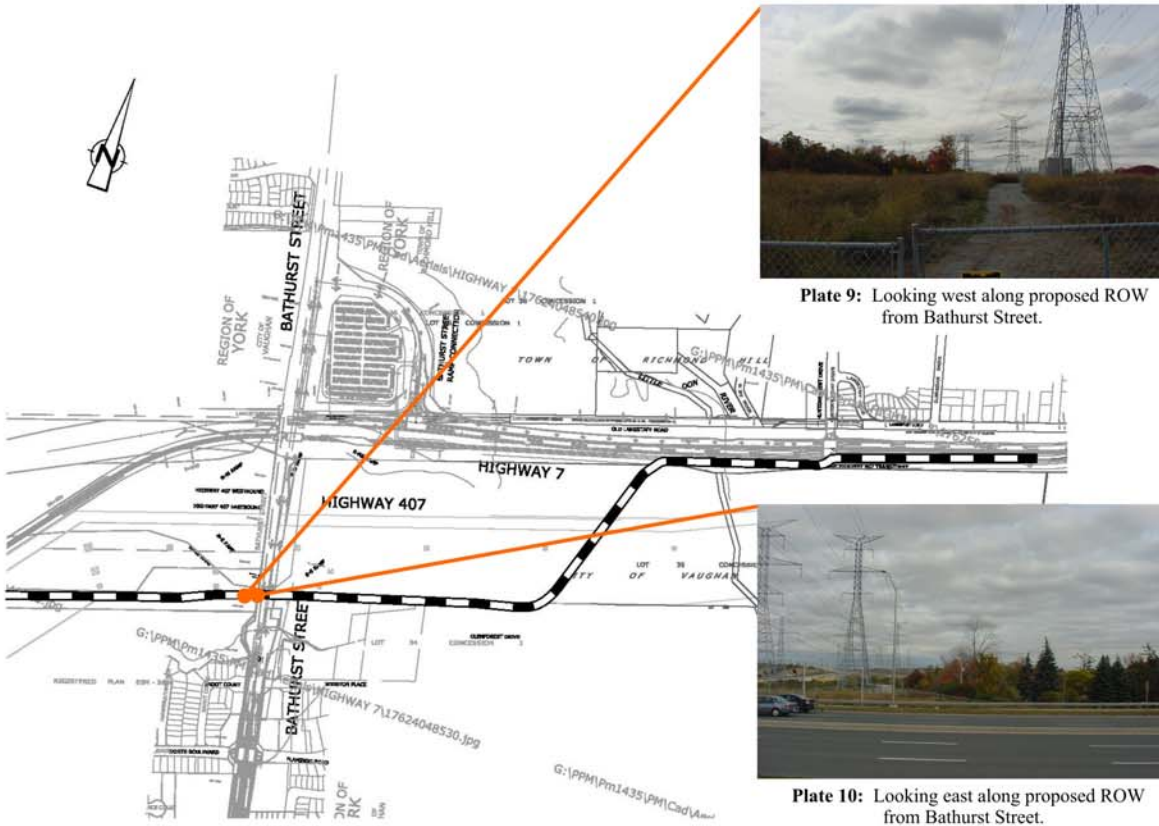


Plate 9: Looking west along proposed ROW from Bathurst Street.



Plate 10: Looking east along proposed ROW from Bathurst Street.

SHEET 3 of 3

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Option 1

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DATE:
MARCH 03 / 2005

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Figure 3-3: Highway 7 and Vaughan North-South Link Transitway Environmental Assessment – Jane-Keele-Steeles and Hydro ROW Alignments.

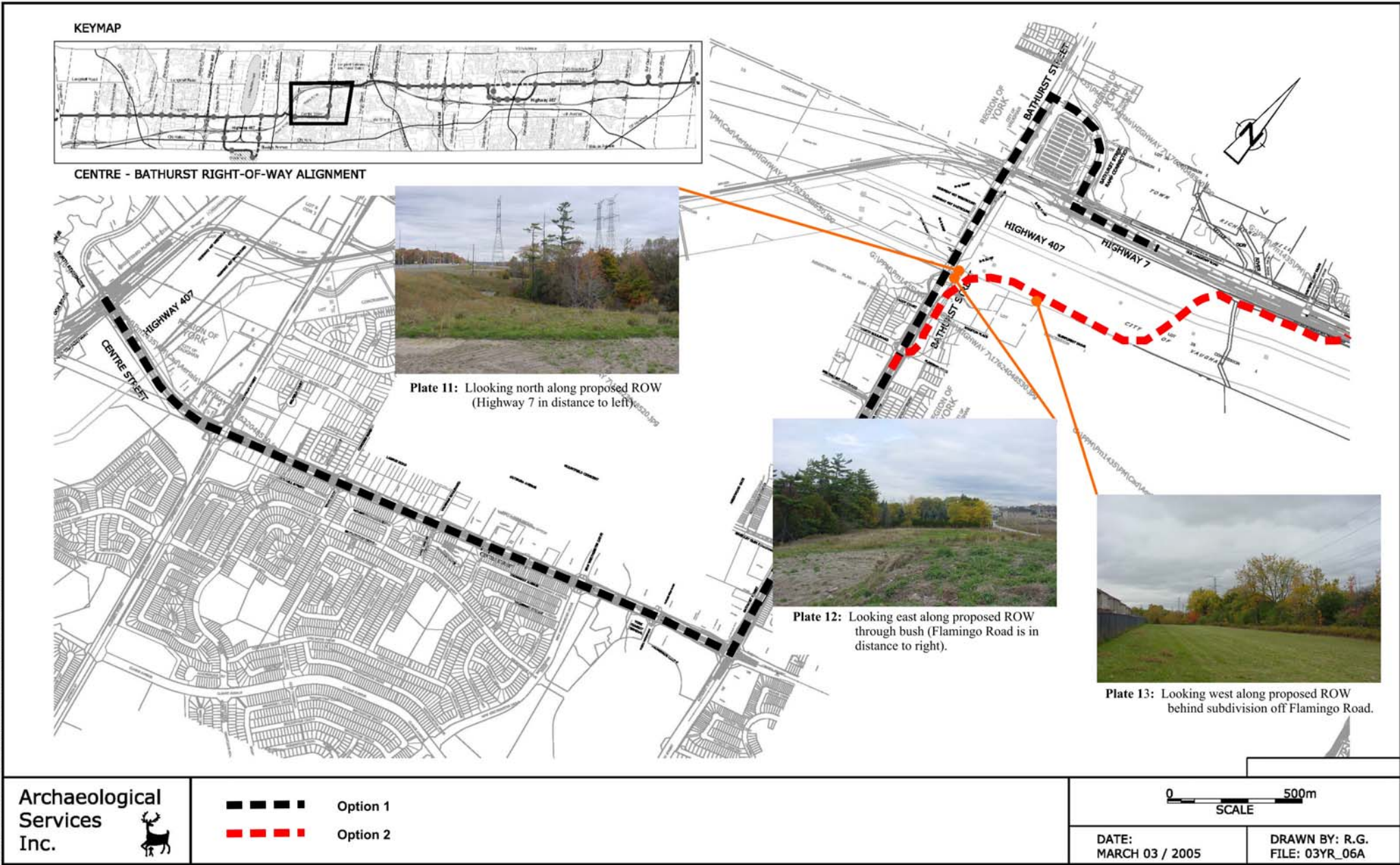


Figure 3-4: Highway 7 and Vaughan North-South Link Transitway Environmental Assessment – Centre - Bathurst Street Alignment.

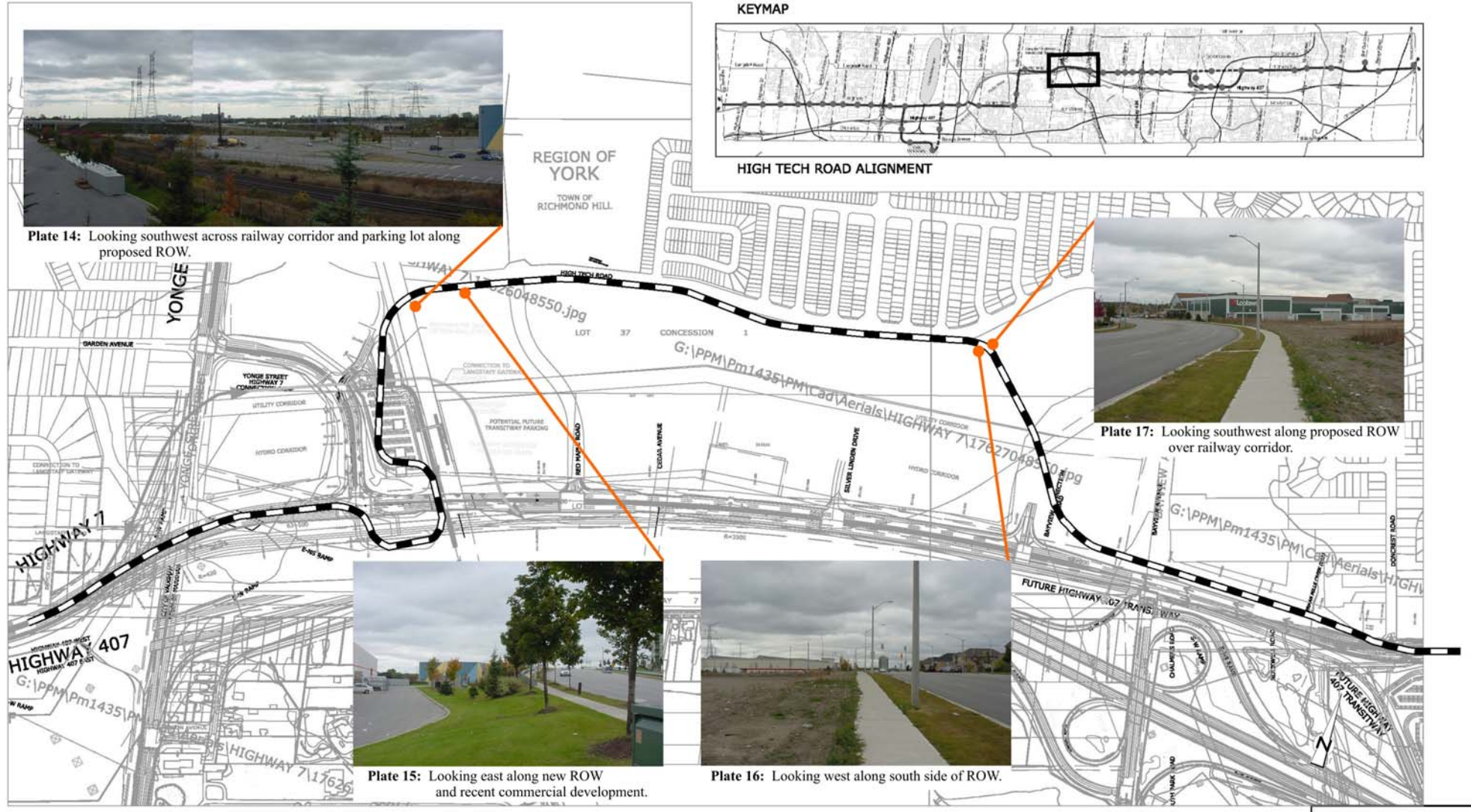


Plate 14: Looking southwest across railway corridor and parking lot along proposed ROW.

Plate 17: Looking southwest along proposed ROW over railway corridor.

Plate 15: Looking east along new ROW and recent commercial development.

Plate 16: Looking west along south side of ROW.

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Figure 3-5: Highway 7 and Vaughan North-South Link Transitway Environmental Assessment – High Tech Road Alignment.

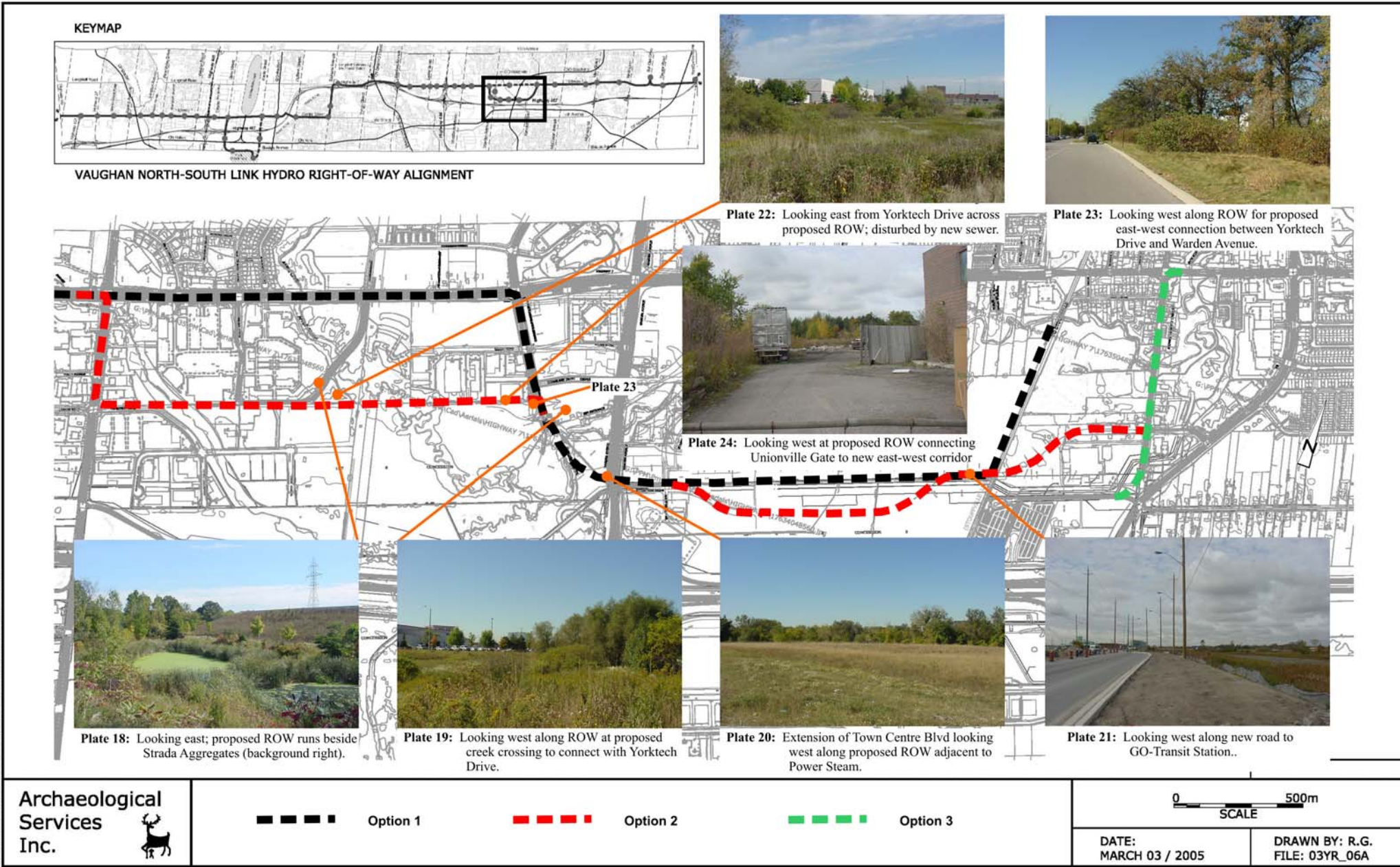
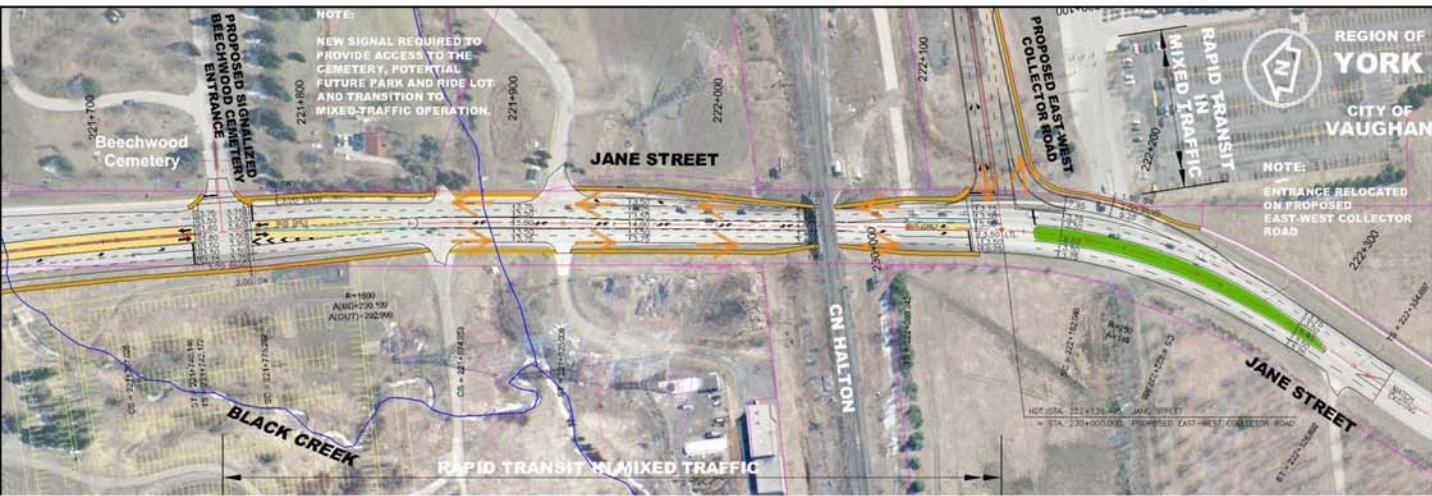


Figure 3-6: Highway 7 and Vaughan North-South Link Transitway Environmental Assessment – Markham Centre Alignments.



A. Beechwood Cemetery



B. Brown's Corners United Church and Cemetery



Plate 25: Looking south along east side of Jane Street (Beechwood Cemetery is to the left).



Plate 26: Looking north along Jane Street at entrance to Beechwood Cemetery.



Plate 27: Looking east along Highway 7 at cemetery at Brown's Corners United Church.

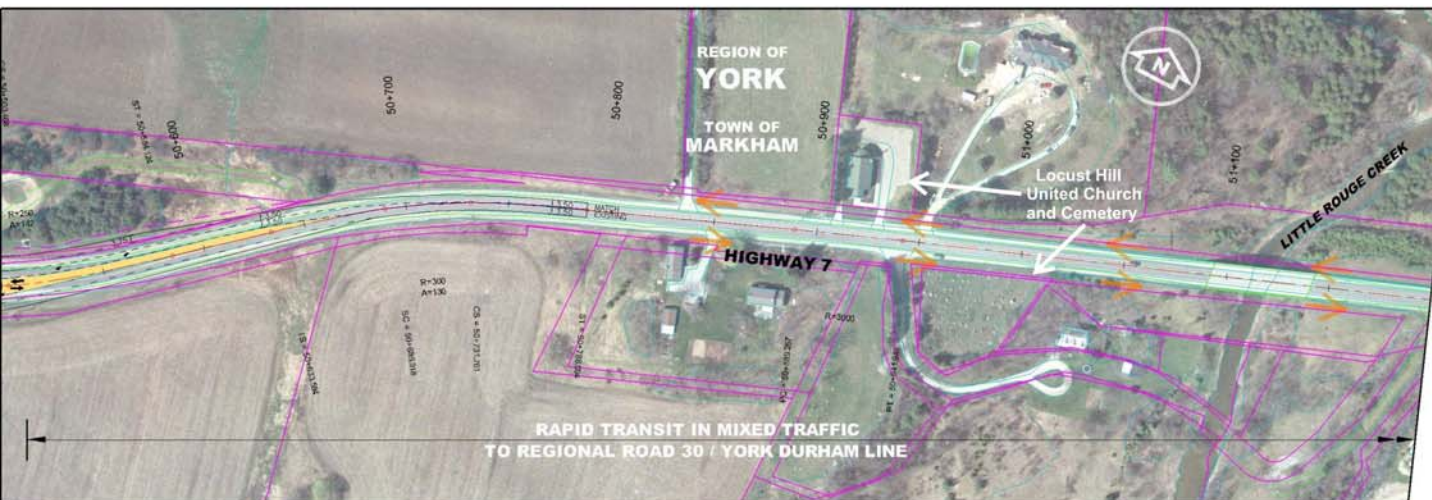


Plate 28: Looking west along Highway 7 at Brown's Corners United Church (note grave stone in front of building).

Figure 4-1: Highway 7 and Vaughan North-South Link Transitway – Preferred Alignments with Cemeteries



C. Elmwood Cemetery



D. Locust Hill United Church and Cemetery



Plate 29: Looking west along north side of Highway 7 beside Elmwood Cemetery.



Plate 30: Looking west along south side of Highway 7 beside Elmwood Cemetery.



Plate 31: Looking west along Highway 7 during approach to Locust Hill.



Plate 32: Looking east at Locust Hill Cemetery (LC United Church is on north side of Highway 7).

Figure 4-2: Highway 7 and Vaughan North-South Link Transitway – Preferred Alignments with Cemeteries