

TECHNICAL MEMORANDUM

DATE May 24, 2018

Project No. 1668667-3000-M01

TO Kevin Brown
The Municipal Infrastructure Group Ltd.

CC Anthony O'Brien (Golder), Bradley Drouin (Golder), Le Anh Huynh (Golder)

FROM Kendra Patton, Golder Associates Ltd.

EMAIL Kendra_Patton@golder.com

STOUFFVILLE WATER SYSTEM UPGRADES CLASS ENVIRONMENTAL ASSESSMENT – ARCHAEOLOGICAL SCREENING

Golder Associates Ltd. (Golder) was retained by The Municipal Infrastructure Group Ltd. to provide an archaeological screening memorandum for the Stouffville Water System Upgrades Class Environmental Assessment. The study area is located in the Regional Municipality of York and is approximately bordered on the north side by Vandorf Sideroad, on the east side by York-Durham Line, on the south side by 19th Avenue and on the west side by McCowan Road, in the Town of Whitchurch-Stouffville (Figure 1).

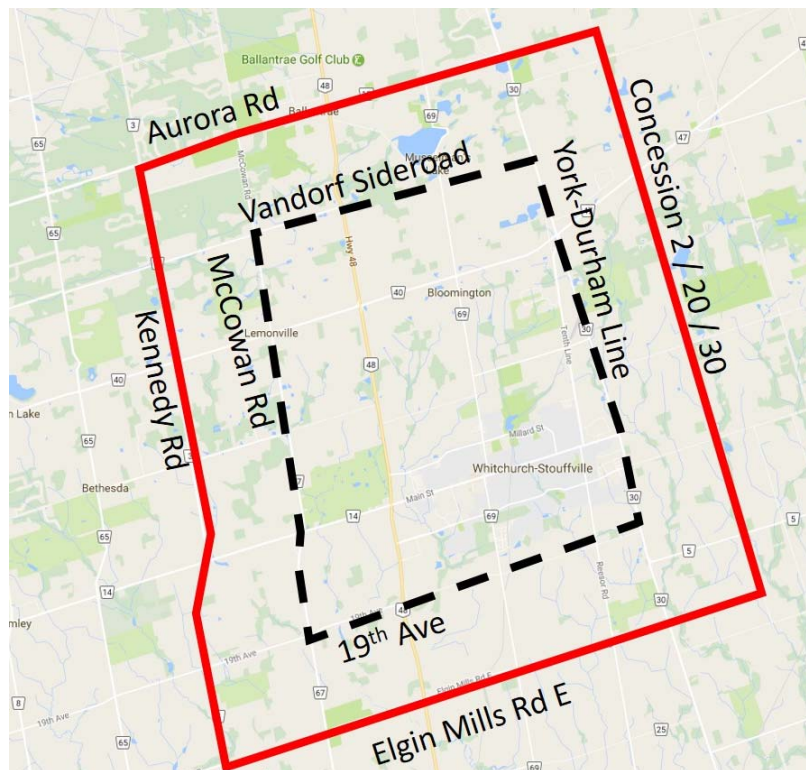


Figure 1: Stouffville Water System Upgrades Class EA Study Area (Dashed Black Line)

This purpose of this archaeological screening memorandum is to provide a high-level summary of archaeological potential within the study area, and to provide recommendations for fulfilling archaeological requirements under a Class EA. This memorandum does not replace a Stage 1 archaeological assessment report and will not be provided to the Ministry of Tourism, Culture and Sport (MTCS) for regulatory review.

Brief Environmental Summary

The study area is situated east of Aurora and Richmond Hill; the largest community within the study area is Stouffville, in the southeast corner of the study area. The north part of the study areas is situated within the Lake Simcoe watershed, while the south part of the study area is situated within the Lake Ontario watershed; the study area is crossed by numerous creek tributaries associated with these watersheds.

The majority of the study area is located in the South Slope physiographic region, with a small part of the study area north of Bloomington Road located in the Oak Ridges Moraine physiographic region. Various soil complexes can be found within the study area, including predominately Wobourn Loam, Milliken Loam and Smithfield Clay Loam; these soils exhibit variable drainage characteristics, but generally would have been conducive to pre-contact Aboriginal agricultural practices.

Distance to potable water sources and access to reasonably well-drained soils are considered to be key determinants of archaeological potential.

Brief Historical Summary

The study area is located mostly within the Geographic Township of Whitchurch. Whitchurch Township was established in 1792 as part of one of the original 19 counties of the province – the County of York – by John Graves Simcoe, the first Lieutenant Governor of Upper Canada. Whitchurch Township was initially surveyed from 1800 to 1802 by John Stegman and this survey also established the network of concession roads (north-south) and sideroads (east-west) that still exist to this day. Settlers arrived in the late 18th to early 19th century and included homesteaders, squatters given legal rights, Quaker and Mennonite families and Hessian (German) soldiers granted land by the British for services rendered during the American War of Independence.

The south part of the study area, south of Stouffville Road, is located within the Geographic Township of Markham. The township of Markham, named after William Markham the Archbishop of York, England, was first surveyed in 1793-1794 as part of the larger survey of the County of York and contained 67,578 acres (27,348 ha). The origins of European settlers in Markham Township was similar to those in Whitchurch Township.

The 1878 Maps of Whitchurch and Markham Townships illustrates the study area was heavily settled by this time, with homesteads throughout the area along concession roads (Figure 2, Figure 3). Numerous sawmills, inns, stores, and school houses are noted on the 1860 map within the study area.

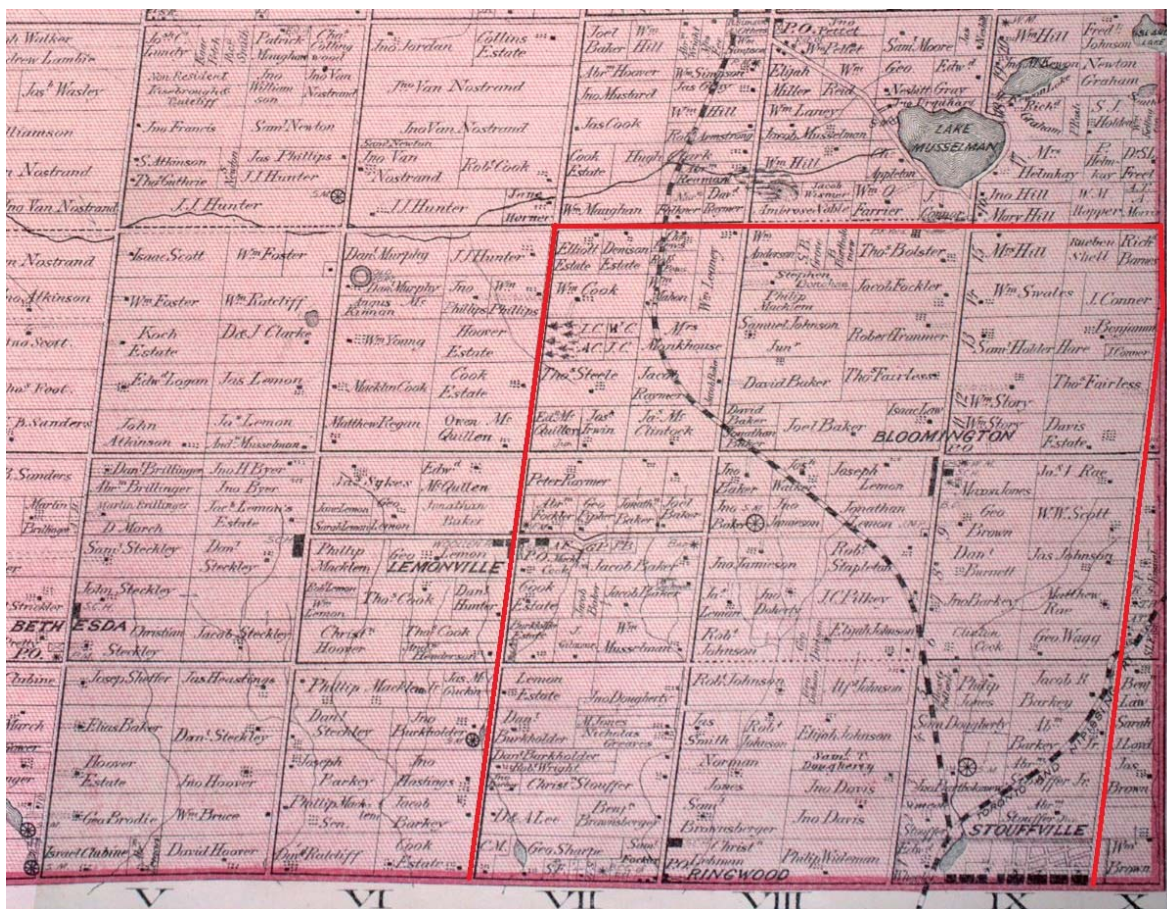


Figure 2: Stouffville Water Supply Class EA Study Area – Segment of the 1878 Map of the Township of Whitchurch



Figure 3: Stouffville Water Supply Class EA Study Area – Segment of the 1878 Map of the Township of Markham

Review of the Ontario Archaeological Sites Database

The presence of previously identified archaeological sites is an indicator of archaeological potential in an area. The Ontario Archaeological Sites Database (OASD), maintained by the MTCS was queried to identify sites within the study area, and sites within one kilometre of the study area (June 21, 2017). There are currently 38 archaeological sites located within the study area: 11 pre-contact Aboriginal sites, 23 historical Euro-Canadian sites, and four sites of unknown cultural affiliation.

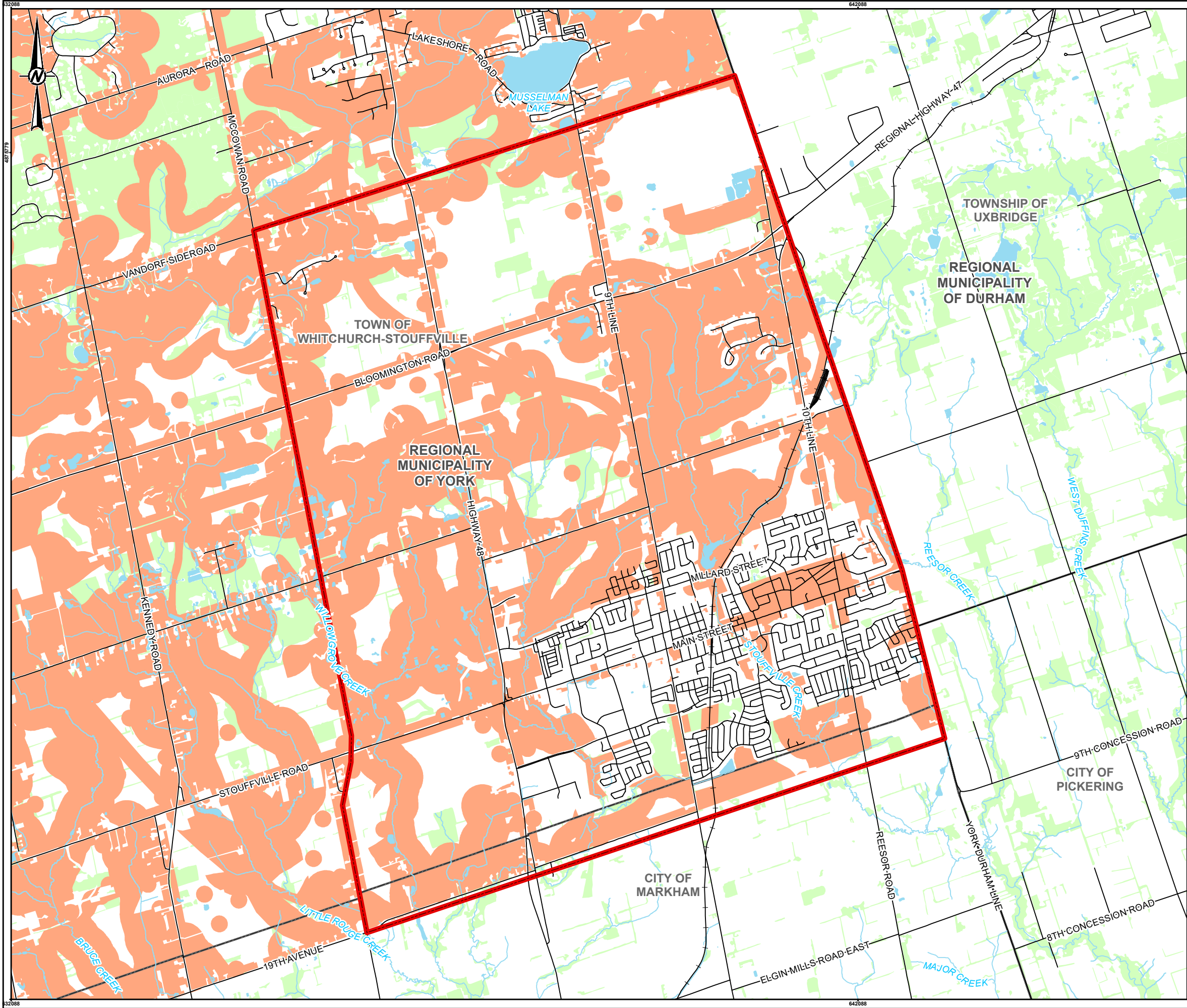
Various factors would have contributed to the appeal of this area during pre-contact Aboriginal and historical times, including access to multiple water sources, soils conducive to pre-contact Aboriginal and historic Euro-Canadian agricultural practices, and areas of early Euro-Canadian settlement along the 19th century road grid.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the Freedom of Information Act. The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MTCS will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

Any required Stage 1 (or subsequent) archaeological assessments related to the Stouffville Water Systems Upgrades Class EA should include a detailed review of previously completed archaeological assessments adjacent to the areas of impact.

Review of the York Region's Archaeological Potential Model

A review of the York Region's Archaeological Potential Model (updated 2015) indicates much of the study area has been identified as exhibiting archaeological potential for the identification of pre-contact Aboriginal and historical Euro-Canadian archaeological resources (Figure 4). This potential model uses key features such as distance to potable water, soil drainage characteristics, slope attributes and area of early European settlement (residential, commercial, industrial and transportation development) as indicators of archaeological potential. It is important to note that once a conceptual or preliminary design for the Stouffville Water Supply Upgrades is in place, subsequent Stage 1 archaeological assessment may determine an increased area of archaeological potential, based on a review of property-specific history.



LEGEND

- YORK REGION'S ARCHAEOLOGICAL POTENTIAL MODEL
- ROAD
- RAILWAY
- WATERCOURSE
- APPROXIMATE STUDY AREA
- WATERBODY
- MUNICIPAL BOUNDARY
- WOODED AREA



REFERENCE(S)
BASE DATA - MNR LIO, OBTAINED 2016
ARCHAEOLOGY POTENTIAL - YORK REGION, OBTAINED 2016
PRODUCED BY GOLDER ASSOCIATES LTD UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEEN'S PRINTER 2016
PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

DRAFT

CLIENT
YORK REGION / THE MUNICIPAL INFRASTRUCTURE GROUP (TMIG)

PROJECT
ARCHAEOLOGICAL SCREENING TECHNICAL MEMORANDUM

TITLE
YORK REGION'S ARCHAEOLOGICAL POTENTIAL MODEL

CONSULTANT	YYYY-MM-DD	2017-06-22
DESIGNED	JMC	
PREPARED	JMC	
REVIEWED	JL	
APPROVED	JL	



Conclusions and Recommendations

The archaeological screening memorandum has identified that there is continuous occupation of the study area from the pre-contact Aboriginal through to the historical Euro-Canadian period. A review of York Region's Archaeological Potential Mapping indicates that the study area exhibits archaeological potential for the identification of sites. Once a conceptual or preliminary design for the Stouffville Water Supply Upgrades is in place, a Stage 1 archaeological assessment is recommended to expand on the current background research, confirm the archaeological potential as illustrated on York Region's Archaeological Potential Mapping, and provide further recommendations as needed.

Golder Associates Ltd.



Kendra Patton, M.A.
Archaeologist



Bradley Drouin, M.A.
Associate, Senior Archaeologist

JLL/CP/LH/KP/BD/ca

[https://golderassociates.sharepoint.com/sites/13234g/archaeological assessment/report/draft screening memo/sr. arch review_22may2018/1668667-3000-tmig archaeological screening m01 24may2018.docx](https://golderassociates.sharepoint.com/sites/13234g/archaeological%20assessment/report/draft%20screening%20memo/sr_arch_review_22may2018/1668667-3000-tmig%20archaeological%20screening%20m01%2024may2018.docx)