

ARCHEOWORKS INC.

**Stage 1 Archaeological Assessment for the
Nobleton Water and Wastewater
Municipal Class Environmental Assessment
Within Part of Lots 1-8, Concession 7;
Lots 1-10, Concessions 8-9; Lots 1-6, Concession 10;
Lots 1-4, Concession 11;
And Road Allowances In Between
In the Geographic Township of King (South)
Former County of York
Now in the Township of King and City of Vaughan
Regional Municipality of York
Ontario**

**Project #: 145-NO1749-16
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Revised Report

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EXECUTIVE SUMMARY

Archeoworks Inc. was retained by *Black & Veatch* to conduct a Stage 1 Archaeological Assessment (AA) in support of the Nobleton Water and Wastewater Municipal Class Environmental Assessment (Class EA) study area. Comprising this study area are three water system servicing components (Existing Well 2; Well Site F; Existing Well 5 and Potential Well Site H) and four wastewater servicing system components (Forcemain Route which follows an easement north from Janet Avenue Sewage Pumping Station (SPS) to King Road, then encompassing the right-of-way (ROW) of King Road west to the Nobleton Water Resource Recovery Facility (WRRF) access road, then following the access road south to the WRRF; the Nobleton WRRF; Janet Avenue SPS; and the Nobleton WRRF Outfall Route, extending approximately 500 metres westward from the Nobleton WRRF to manhole 113). The study area is located in part of Lots 1-8, Concession 7; Lots 1-10, Concessions 8-9; Lots 1-6, Concession 10; and Lots 1-4, Concession 11 – as well as the road allowances in between – in the Geographic Township of King (South), former County of York, now in the Township of King and City of Vaughan, Regional Municipality of York, Ontario.

Stage 1 AA background research established elevated potential for the recovery of archaeologically significant materials within the study area as a whole due to the presence of numerous previously identified archaeological sites, designated and non-designated heritage resources, primary and secondary water sources (East Humber River, Humber River and their tributaries) and documented pre-ca. 1900 Euro-Canadian settlement.

To determine if the archaeological potential classification is relevant within the seven identified water and wastewater system servicing locations, a detailed desktop review of ground conditions using recent aerial imagery was undertaken, followed by a visual property inspection. A large portion of these specific locations was determined to have been subjected to deep and extensive disturbances (i.e., existing roadways, buried utilities, previous grading and construction activities, etc.) that have removed archaeological potential. Several areas had also been subject to previous archaeological assessment and cleared of further archaeological concern and several watercourses were identified as features of no or low archaeological potential. The remaining balance of these areas were identified as retaining archaeological potential and require further archaeological assessment. The Wesleyan Old Methodist Cemetery (Cemetery on the Hill) is also noted to be adjacent to the Forcemain Route along King Road and requires further archaeological assessment and cemetery investigations.

Considering the findings detailed in the succeeding sections, the following recommendations are presented:

1. Lands that were subjected to previous archaeological assessments (A.M. Archaeological Associates, 2011; ASI, 2007b; Bluestone Research Inc., 2017; TRCA, 2007b) and deemed free of further archaeological concern are recommended to be exempt from further assessment.

2. All areas that were identified as having archaeological potential removed are exempt from requiring Stage 2 AA.
3. All areas that were identified as having no or low archaeological potential are exempt from requiring Stage 2 AA.
4. All areas identified as retaining archaeological potential must be subjected to a Stage 2 AA. These areas must be subjected to pedestrian or test pit survey at five-metre intervals in accordance with the standards set within *Sections 2.1.1 and 2.1.2* of the *2011 S&G*.
 - a. Where at the time of fieldwork the lands within a narrow (10 metres wide or less) linear survey corridor meet the standards as laid out within *Section 2.1.1* of the *2011 S&G* for pedestrian survey land preparation, pedestrian survey must be carried out (per *Section 2.1.2, Standard 1.f*).
5. As per the *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33*, no intrusive activity may occur within the limits of the Wesleyan Old Methodist Cemetery (Cemetery on the Hill), also designated under *Part IV* of the *Ontario Heritage Act* according to by-law 2009-109, without consent from the cemetery operator and the *Bereavement Authority of Ontario (BAO)*.
6. Lands within the 20-metre cemetery investigation area surrounding the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) that were identified as having no potential for unmarked burials are considered free of further cemetery investigations.
7. Should proposed construction impacts occur within the swaths of land adjacent to the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) identified as having potential for the recovery of unmarked burials, the following archaeological/cemetery investigations are required:
 - a. As there is the potential for the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) to extend into a wastewater system servicing location (Forcemain Route), a Cemetery Investigation Authorization (CIA) issued by the *Bereavement Authority of Ontario (BAO)* is required and needs to be obtained prior to conducting any soil-intrusive work (e.g., Stage 2/3/4 investigations; construction monitoring).
 - b. As there is the potential to encounter both deeply buried archaeological resources and for archaeological resources to be present near the surface, per *Section 2.1.7, Standard 2* of the *2011 S&G*, surface survey methods (Stage 2 test pit survey) must occur within the grassed areas adjacent to the cemetery prior to mechanical excavation.
 - c. Following the completion of the Stage 2 AA, regardless of the results, per *Section 2.2, Guideline 4* of the *2011 S&G*, and in accordance with the *Registrar's Directive: Authorization for Stages 2-4 Archaeological Fieldwork (Assessments and Investigations) on Cemetery Lands* (dated February 12, 2021), further cemetery investigations are required to determine the boundaries of a cemetery where records, maps and plans of the cemetery cannot confirm the existence and exact

locations of burials within that cemetery. The recommendations for further cemetery investigations are as follows:

- i. In accordance with *Section 2.1.7, Standard 3, Section 3.3.3, Standard 2, and Section 4.2.3* of the *2011 S&G*, a Stage 3 investigation consisting of mechanical topsoil removal (MTR) must be undertaken following the lands immediately adjacent to the current cemetery limits, where feasible, to confirm the presence or absence of deeply buried human remains. Mechanical excavation must employ a flat-edged bucket and should begin at the furthest extent from the cemetery that will be investigated and move inward towards the assumed cemetery limits. Unless human remains are encountered, mechanical stripping of topsoil is to reach sterile subsoil depths.
 - ii. Where mechanical topsoil removal is not feasible due to existing roadway infrastructure (i.e., buried utilities), these areas will require on-site monitoring by a licensed archaeologist during any construction or other soil disturbing activities per *Section 2.1.7, Standard 4* of the *2011 S&G*, to confirm the presence or absence of deeply buried human remains. Due to the sensitivity of potentially uncovering human remains, monitoring during construction must be carried out by a licensed archaeologist until no potential for human burials has been confirmed in a given area.
 - iii. Per *Section 2.1.7, Standard 4b* of the *2011 S&G*, in the event human remains and/or graves shafts are encountered during construction monitoring, all work must cease and the *BAO* be consulted regarding next steps.
8. Should construction activities associated with this project, including construction laydown areas, extend beyond the assessed limits, further archaeological investigation will be required prior to construction activities in order to minimize impacts to cultural heritage resources.

No construction activities shall take place within the study area, and specifically the water and wastewater system servicing locations, prior to the *Ministry of Heritage, Sport, Tourism and Culture Industries* (Archaeology Programs Unit) confirming in writing that all archaeological licensing and technical review requirements have been satisfied.

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1.0 PROJECT CONTEXT

1.1 Objectives

The objectives of a Stage 1 Archaeological Assessment (AA), as outlined by the 2011 *Standards and Guidelines for Consultant Archaeologists* ('2011 S&G') published by the *Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)* (2011), are as follows:

- To provide information about the property's geography, history, previous archaeological fieldwork and current land condition;
- To evaluate in detail, the property's archaeological potential, which will support recommendations for a Stage 2 survey for all or parts of the property; and
- To recommend appropriate strategies for a Stage 2 survey.

1.2 Development Context

Nobleton is a community in the Township of King, located in the Regional Municipality of York ("York Region"). Nobleton is serviced by standalone water and wastewater systems to meet the needs of the current population. The York Region Water and Wastewater Master Plan (Regional Municipality of York, 2016) indicated that the water and wastewater systems would have insufficient capacity to meet the requirements to support growth to the 2041 Master Plan horizon. Therefore, the Master Plan recommended undertaking a Schedule C Class Environmental Assessment (EA), to identify servicing solutions to accommodate growth.

The developed water and wastewater servicing components were evaluated on technical, natural environmental, socio-economic, financial and jurisdictional/regulatory criteria, based on the Municipal Engineers Association Class Environmental Assessment process requirements. To complete this evaluation, a Stage 1 AA is required to determine if any component will have significant impacts during construction and/or from ongoing operations on registered/known archaeological features within the project area.

To facilitate this study, *Archeoworks Inc.* was contracted by *Black & Veatch* to conduct a Stage 1 AA of the Nobleton Water and Wastewater Class EA project area, located in the community of Nobleton, in the Township of King. The project area is roughly bounded by 8th Concession Road, 15th Sideroad, 10th Concession Road, King Road, 11th Concession Road, and traveling approximately 350 metres north of King Vaughan Road. This entire parcel of land will herein be referred to as the "study area." The study area is located in part of Lots 1-8, Concession 7; Lots 1-10, Concessions 8-9; Lots 1-6, Concession 10; and Lots 1-4, Concession 11 – as well as the road allowances in between – in the Geographic Township of King (South), former County of York, now in the Township of King and City of Vaughan, Regional Municipality of York, Ontario (**see Appendix A – Map 1**).

To support the proposed upgrades within the study area, seven water and wastewater system servicing components are being examined (*also see Map 1*):

- Water System Servicing Locations:
 - 1) Existing Well 2, located at municipal address 22 Faris Avenue.
 - 2) Potential Well Site F, located in 12650 Highway 27.
 - 3) Existing Well 5 and Potential Well Site H, located at 12860 Highway 27.

- Wastewater System Servicing Locations:
 - 1) Forcemain Route, follows an easement (25 metres wide) north of the Janet Avenue Sewage Pumping Station (SPS) into 5885 King Road, from this point encompassing the existing road right-of-way (ROW) of King Road westward to the Nobleton Water Resource Recovery Facility (WRRF) access road (approximately 20 metres in width), which extends southward to the WRRF.
 - 2) Nobleton WRRF, located at 7277 King Road.
 - 3) Janet Avenue SPS, located at 66 Janet Avenue.
 - 4) Nobleton WRRF Outfall Route, extending approximately 500 metres westward from the Nobleton WRRF to manhole (MH) 113, and measuring 21 metres in width.

The Stage 1 AA documented herein will provide an overall review of archaeological potential for the Nobleton Water and Wastewater Class EA project area (“study area”), with specific review, analysis and recommendations for the proposed water and wastewater system servicing locations.

This study was triggered by the *Environment Assessment Act* in support of Schedule C of the Municipal Class EA regulatory process. It was conducted under the project direction of Ms. Cassandra Aldridge, under the archaeological consultant licence number P439, in accordance with the *Ontario Heritage Act* (1990; amended 2019) and *2011 S&G*. Permission to investigate the study area was granted by *Black & Veatch* on May 6th, 2020.

The Regional Municipality of York has an archaeological management plan (AMP), founded on the principles of archaeological potential modeling, and developed using a Geographic Information System (GIS). Per the Regional Municipality of York AMP, the majority of the study area has archaeological potential (Regional Municipality of York, 2020a; *see Map 2*).

1.3 Historical Context

To establish the historical context and archaeological potential of the study area, *Archeoworks Inc.* conducted a review of Indigenous and Euro-Canadian settlement history, and a review of available historic mapping.

The results of this background research are documented below and summarized in **Appendix B – Summary of Background Research**.

1.3.1 Pre-Contact Period

The pre-contact period of Southern Ontario includes numerous Indigenous groups that continually progressed and developed within the environment they inhabited (Ferris, 2013, p.13).

Table 1 includes a brief overview and summary of the pre-contact Indigenous history of Southern Ontario.

Table 1: Pre-Contact Period

Period	Date Range	Overview and Attributes
PALEO-INDIAN (Early)		
Early	ca. 11000 to 8500 BC	Small groups of nomadic hunter-gatherers who utilized seasonal and naturally available resources; sites are rare; hunted in small family groups who periodically gathered into larger groups/bands during favourable periods in the hunting cycle; campsites used during travel episodes and found in well-drained soils in elevated situations; sites found primarily along glacial strandlines due to current understanding of regional geological history; artifacts include fluted and lanceolate stone points, scrapers and dart heads.
Late	ca. 8500 to 7500 BC	- Gainey, Barnes, Crowfield Fluted Points (Early Paleo-Indian) - Holcombe, Hi-Lo, Lanceolates (Late Paleo-Indian) (Ellis and Deller, 1990, pp.37-64; Wright, 1994, p.25; Ellis, 2013, p.37).
ARCHAIC (Middle)		
Early	ca. 7800 to 6000 BC	Descendants of Paleo-Indian ancestors; lithic scatters are the most commonly encountered site type; trade networks appear; artifacts include reformed fluted and lanceolate stone points with notched bases to attach to a wooden shaft; ground-stone tools shaped by grinding and polishing; stone axes, adzes and bow and arrow; Shield Archaic in Northern Ontario introduced copper tools.
Middle	ca. 6000 to 2000 BC	- Side-notched, corner-notched, bifurcate projectile points (Early Archaic) - Stemmed, Otter Creek/Other Side-notched, Brewerton side and corner-notched projectile points (Middle Archaic)
Late	ca. 2500 to 500 BC	- Narrow Point, Broad Point, Small Point projectile points (Late Archaic) (Ellis et al., 1990, pp.65-124; Wright, 1994, pp.26-28; Ellis, 2013, pp.41-46; Dawson, 1983, pp.8-14).
WOODLAND (Late)		
Early	ca. 800 BC to AD 1	Evolved out of the Late Archaic Period; introduction of pottery (ceramic) where the earliest were coil-formed, under fired and likely utility usage; two primary cultural complexes: Meadowood (broad extent of occupation in Southern Ontario) and Middlesex (restricted to Eastern Ontario); poorly understood settlement-subsistence patterns; artifacts include cache blades, and side-notched points that were often recycled into other tool forms; primarily Onondaga chert; commonly associated with Saugeen and Point Peninsula complexes; oral traditions of the present-day Michi Saagiig (Mississauga Anishinaabeg), an Algonquian-speaking First Nation group, state that they, “are the descendants of the ancient peoples who lived in Ontario during the Archaic and Paleo-Indian periods” (Migizi and Kapyrka, 2015, p.1). - Meadowood side-notched projectile points (Spence et al., 1990, pp.125-142; Wright, 1994, pp.29-30; Ferris and Spence, 1995, pp.89-97; Williamson, 2013, pp.48-61; Dawson, 1983, pp.15-19).
Middle	ca. 200 BC to AD 700	Three primary cultural complexes: Point Peninsula (generally located throughout south-central and eastern Southern Ontario), Saugeen (generally located southwestern Southern Ontario), and Couture (generally located in southwestern-

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Period	Date Range	Overview and Attributes
		<p>most part of Ontario); introduction of large “house” structures and substantial middens; settlements have dense debris cover indicating increased degree of sedentism; incipient horticulture; burial mounds present; shared preference for stamped, scallop-edged or tooth-like decoration, but each cultural complex had distinct pottery forms; Laurel Culture (ca. 500 BC to AD 1000) established in boreal forests of Northern Ontario.</p> <ul style="list-style-type: none"> - Saugeen Point projectile points (Saugeen) - Vanport Point projectile points (Couture) - Snyder Point projectile points - Laurel stemmed and corner-notched projectile points <p>(Spence et al., 1990, pp.142-170; Wright, 1994, pp.28-33; Ferris and Spence, 1995, pp.97-102; Wright, 1999, pp.629-649; Williamson, 2013, pp.48-61; Wright, 1994, p.28; Hessel, 1993, pp.8-9; Dawson, 1983, pp.15-19; Gagné, 2015).</p>
Late (Transitional) Woodland	ca. AD 600 to 1000	<p>The north shore of Lake Ontario in Southern Ontario was occupied throughout the entire Late Woodland Period by the Mississauga Anishinaabeg (Michi Saagiig); their territory extended north where they would hunt and trap during the winter months, followed by a return to Lake Ontario in the spring and summer; “the traditional territories of the Michi Saagiig span from Gananoque in the east, all along the north shore of Lake Ontario, west to the north shore of Lake Erie at Long Point. The territory spreads as far north as the tributaries that flow into these lakes, from Bancroft and north of the Haliburton highlands” (Migizi and Kapyrka, 2015, p.1); the Mississauga were highly mobile and often traveled great distances to obtain resources; Mississauga oral traditions speak of people (the Iroquois) coming into their territory between AD 500-1000 who wished to establish villages and grow corn; treaties were made and the Mississauga allowed the Iroquois to stay in their traditional territories.</p> <p>Earliest Iroquoian development in Southern Ontario is Princess Point which exhibits few continuities from earlier developments with no apparent predecessors; hypothesized to have migrated into Ontario; the settlement data is limited, but oval houses are present; artifacts include ‘Princess Point Ware’ vessels that are cord roughened, with horizontal lines and exterior punctation; smoking pipes and ground stone tools are rare; introduction of maize/corn horticulture; continuity of Princess Point and Late Woodland Iroquoian groups.</p> <ul style="list-style-type: none"> - Triangular projectile points <p>(Fox, 1990, pp.171-188; Ferris and Spence, 1995, pp.102-106; Migizi and Kapyrka, 2015, pp.1-3; MCFN, 2017a).</p>
Early Late Woodland	ca. AD 900 to 1300	<p>Two primary Iroquoian cultures in Southern Ontario: Glen Meyer (located primarily in southwestern Ontario from Long Point on Lake Erie to southwestern shore of Lake Huron) and Pickering (encompassed north of Lake Ontario to Georgian Bay and Lake Nipissing); well-made and thin-walled clay vessels with stamping, incising and punctation; multi-family longhouses and some small, semi-permanent palisade villages; adoption of greater variety of harvest products; increase in corn-yielding sites; crudely made smoking pipes, and worked bone/antler present; evolution of ossuary burials.</p> <ul style="list-style-type: none"> - Triangular-shaped, basally concave projectile points with downward projecting corners or spurs <p>(Williamson, 1990, pp.291-320; Ferris and Spence, 1995, pp.106-109).</p>

Period	Date Range	Overview and Attributes
Middle Late Woodland	ca. AD 1300 to 1400	<p>Two primary Iroquoian cultures in Southern Ontario: Uren and Middleport; decorated clay vessels decrease; well-developed clay pipe complex that includes effigy pipes; increase in village sizes (0.5 to 1.7 hectares) and campsites (0.1 to 0.6 hectares) appear with some palisades; classic longhouse takes form; increasing reliance on maize and other cultigens such as beans and squash; intensive exploitation of locally available land and water resources; from Middleport emerged the Huron-Wendat, Petun, Neutral Natives and the Erie.</p> <ul style="list-style-type: none"> - Triangular and (side of corner or corner removed) notched projectile points - Middleport Triangular and Middleport Notched projectile points <p>(Dodd et al., 1990, pp.321-360; Ferris and Spence, 1995, pp.109-115).</p>
Late Woodland	ca. AD 1400 to 1600	<p>The Mississauga Anishinaabeg “were the negotiators, the messengers, the diplomats, and they successfully mediated peace throughout this area of Ontario for countless generations” (Migizi and Kapyrka, 2015, p.1); the Mississauga Anishinaabeg, along with the Odawa Nation, continued to meet with the Huron-Wendat, Neutral Nation and Petun Nation to ensure their friendly political and economic relations remained strong while the Iroquoian groups continued to establish villages in the Mississauga traditional territory.</p> <p>Two major Iroquoian groups: the Neutral Natives to the west, and the Huron-Wendat to the east of the Niagara Escarpment; Huron-Wendat “concentrations of sites occur in the areas of the Humber River valley, the Rouge and Duffin Creek valleys, the lower Trent valley, Lake Scugog, the upper Trent River and Simcoe County” (Ramsden, 1990, p.363); Toronto Carrying Place Trail connecting Lake Ontario to Lake Simcoe by way of the Humber and Rouge Rivers, overland to the Holland River and travelling through the Township of King; longhouses; villages enlarged to 100 longhouses clustered together as horticulture (maize, squash and beans) gained importance in subsistence patterns; villages chosen for proximity to water, arable soils, available fire wood and defensible position; diet supplemented with fish; ossuaries; tribe/band formation; relocation to north of Lake Simcoe.</p> <ul style="list-style-type: none"> - Huron-Wendat points are limited but change from predominantly side-notched to unnotched triangular <p>(Heidenreich, 1978, pp.368-388; Ramsden, 1990, pp.361-384; Ferris and Spence, 1995, pp.115-122; Warrick, 2000, p.446; Warrick, 2008, p.15; Migizi and Kapyrka, 2015, pp.1-3; TRCA, 2007a, p.9).</p>

1.3.2 Contact Period

The contact period of Southern Ontario is defined by European arrival, interaction and influence with the established Indigenous communities of Southern Ontario. **Table 2** includes an overview of some of the main developments that occurred during the contact period of Southern Ontario.

Table 2: Contact Period

Period	Date Range	Overview and Attributes
European Contact	ca. AD 1600s	<p>The Mississauga Anishinaabeg focused on hunting/fishing/gathering with little emphasis on agriculture; highly mobile within their traditional territory; temporary and moveable houses (wigwam); inter-marriage between Algonquian-speaking groups (such as the Nipissing, Algonquin, Odawa, Mississauga and Ojibway) and Iroquois groups likely occurred; Algonquian-</p>

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Period	Date Range	Overview and Attributes
		<p>speaking groups often wintered with Iroquois neighbours, resulting in a complex archaeological record; oral traditions of the Mississauga Anishinaabeg state that at the time of European Contact, the Mississauga Anishinaabeg retreated to their winter grounds in the north, thus avoiding disease and warfare.</p> <p>Multiple (Iroquoian-speaking) Huron-Wendat villages and campsites north of Lake Simcoe; French arrival into Ontario; trade relationship with Huron and French established; trade goods begin to replace traditional tools/items; Jesuit missionaries; epidemics (Heidenreich, 1978, pp.368-388; Trigger, 1994, pp.47-55; Warrick, 2008, pp.12, 245; Fox and Garrad, 2004, p.124; McMillian and Yellowhorn, 2004, pp.110-111).</p>
Five Nations of Iroquois (Haudenosaunee) Arrival	ca. AD 1650s	<p>The Five (later Six) Nations of Iroquois (or Haudenosaunee), originally located south of the Great Lakes, engaged in warfare with Huron-Wendat neighbours as their territory no longer yielded enough furs; the Five Nations, armed with Dutch firearms, attacked and destroyed numerous Huron-Wendat villages in 1649-50; the small groups that remained became widely dispersed throughout the Great Lakes region, ultimately resettling in Quebec, in southwestern Ontario and in America; to prevent the revival of Huron-Wendat settlements, the Five Nations of Iroquois attacked and destroyed the villages of the Huron-Wendat allies, the Petun Natives; in 1650, what remained of the Petun Natives migrated through Neutral Native territory; the Five Nations of Iroquois attacked Neutrals ca. 1650s and caused their dispersal; the Five Nations, particularly the Seneca, established settlements along the northern shoreline of Lake Ontario at strategic locations along canoe-and-portage routes and used territory for extensive fur trade; European fur trade and exploration continued (Robinson, 1965, pp.15-16; Ablor and Tooker, 1978, p.506; Schmalz, 1991, pp.12-34; Trigger, 1994, pp.53-59; Williamson, 2013, p.60; Migizi and Kapyrka, 2015, p.2).</p>
Anishinaabe Return	ca. AD 1650s to 1700s	<p>Algonquian-speaking groups within the Anishinaabe (Ojibway, Chippewa, Odawa, Mississauga and others) returned from the north to their traditional territory of Southern Ontario; by 1690s, the Five Nations settlements were abandoned; battles fought throughout Southern Ontario; by 1701, the Five Nations were driven out by the returning Anishinaabe; the Five Nations returned to their homelands south of the Great Lakes, and some remained in parts of Southern Ontario (Hathaway, 1930, p.433; Trigger, 1994, pp.57-59; Johnston, 2004, pp.9-10; Gibson, 2006, pp.35-41; Smith, 2013, pp.16-20; Williamson, 2013, p.60).</p>
Trade, Peace and Conflict	ca. AD 1700 to 1770s	<p>Great Peace negotiations of 1701 in Montreal established peace around the Great Lakes; collectively referred to Anishinaabe and Five Nations of Iroquois as the First Nations; European commerce and exploration resumed; the Anishinaabe continued to trade with both the English and the French; genesis of the Métis and their communities; France and Britain were the basis of the Seven Years' War; French defeat transferred the territory of New France to Britain; Treaty of Paris (1763); Royal Proclamation of 1763 established the government administration of the North American territories ceded by France to Britain and established the framework for the negotiation of treaties with First Nation inhabitants; Pontiac's War; fur trade continued until Euro-Canadian settlement (Schmalz, 1991, pp.35-62, 81; Surtees, 1994, pp.92-97; Johnston, 2004, pp.13-14; Jaenen, 2013; Hall, 2015).</p>

Period	Date Range	Overview and Attributes
Early British Administration and Euro-Canadian Settlement	ca. AD 1760s to 1790s	American Revolution (1775 to 1783) caused large numbers of United Empire Loyalists, military claimants, immigrants from the British Isles/European locations, and groups who faced persecution in the United States to arrive in Upper Canada; Treaty of Paris (1783) formally recognized the independence of the United States; Province of Quebec divided in 1791 into sparsely populated Upper Canada (now southern Ontario) and culturally French Lower Canada (now southern Quebec); Jay’s Treaty of 1795 establishes American/Canadian border along the Great Lakes; large parts of Upper Canada opened to settlement after land cession treaties were secured with various First Nations groups by the British Crown (Department of Indian Affairs, 1891; Government of Ontario, 2014; Jaenen, 2014; Hall, 2019; Surtees, 1994, p.110; Sutherland, 2014).
British Land Treaties	ca. AD 1780s to 1800s	In 1787, senior officials from the Indian Department met with representatives of certain Anishinaabe groups to acquire land along the northern shores of Lake Ontario extending northward to Lake Simcoe; sometimes referred to as the “Gunshot Treaty”; the documentation which formalized the 1787 transaction did not include a description of the area surrendered and these irregularities resulted in Lieutenant-Governor John Graves Simcoe invalidating the surrender; in 1805, William Claus, the Deputy Superintendent of Indian Affairs, entered into negotiations with the Mississauga to purchase a greater tract of land consisting of 100,000 hectares in and around the Town of York that included the Township of King, known as the Toronto Purchase, or Treaty 13; the Williams Treaty of 1923 (Department of Indian Affairs, 1891, p.xxxii; Surtees, 1986, p.19; Surtees, 1994, p.107; Government of Ontario, 2014; Government of Ontario, 2019; MCFN, 2017b).

1.3.3 Euro-Canadian Settlement Period (1800s to present)

1.3.3.1 Township of King (South)

The Township of King was first surveyed in 1800 by John Stegmann who employed Yonge Street as the baseline to survey the land (Miles & Co, 1878, p.xix). The survey of the township was completed in 1859 by Mr. Wheelock, P.L.S. with some minor alterations to the township boundaries when the County of Simcoe was being organized (Mulvany and Adams, 1885, p.134). The Township of King was named after John King, the British undersecretary of state at the time the township was created in 1794 (Township of King, 2016). Initial settlement was focused along Yonge Street since the Township of King was distant from any main navigable waterways, and it lacked internal transportation routes (Gillham, 1975, p.1). As roads became better maintained and additional roads were constructed, settlement within the Township of King steadily grew and pushed westward towards Kettleby and Lloydtown (Gillham, 1975, p.1). By 1846, 53,240 acres were owned where 13,818 acres were under cultivation, and the land was settled primarily by Irish, with a few English, Scotch, Canadians and Americans, numbering approximately 2,625 individuals (Smith, 1846, pp.90-91).

The Oak Ridges Moraine was (and continues to be) the predominate feature in the township, running through the centre of the township from east to west. It is characterized by rolling terrain, numerous swamps, lakes and ponds (Mulvany and Adams, 1885, p.137). The soil of the

Township of King is predominantly clay and clay loam and the land was ranked as second class agricultural land, characterized by low agricultural potential (Mulvany and Adams, 1885, p.137). Consequently, stock-raising was carried out to a greater extent in the Township of King than in any other township in the county (Mulvany and Adams, 1885, p.138).

1.3.3.2 Community of Nobleton

The area now known as Nobleton, situated within the study area, was first settled in 1812. For many years, the community was known as Hambly and was named after the four brothers who settled in the area beginning in the 1830s. Nobleton was eventually renamed in honour of Joseph Noble, who operated a store on Lot 5, Concession 9. As settlers moved into the vicinity, a small hamlet began to develop. A log schoolhouse was constructed in 1820, a post office was opened in 1851, and by 1890 the hamlet had two blacksmith shops, a butcher, two inns, and a general store. An Anglican church was erected in 1889 and a Methodist Church in 1896 (Gillham, 1975, pp.44-48; Mika and Mika, 1983, p.55).

1.3.4 Past Land Use

1.3.4.1 Pre-1900 Land Use

Several documents were reviewed to gain an understanding of the land use history and of the study area's potential for the recovery of historic pre-1900 remains, namely G. R. Tremaine's 1860 *Map of the County of York* and Miles & Co.'s 1878 *Illustrated Historical Atlas of the County of York* (*see Maps 3-4; Table 3*). The study area primarily encompassed farmland and multiple homesteads. The village of Nobleton and the East Humber River, Humber River and their tributaries were also depicted within the study area.

Table 3: Summary of Structures and Property Owners/Occupants documented in the 1860 *Tremaine's Map* and the 1878 *Illustrated Historical Atlas* within the Study Area

Lot	Part	Owner/Occupant		Structure(s) in the Study Area	
		1860	1878	1860	1878
CONCESSION 7					
1	Wpt	Widdow Wallis	Patterson Estate	-	-
2	W½	James McMuroy	James McMurchy	-	-
3	W½	John Page	John Page	-	-
4	Wpt	Thomas Page		-	-
5	Wpt			-	-
6	W½	Alexander McMurchy	Dugald McMurchy	-	-
7	W½	Neil & Thos. McMurchy		-	-
8	All	David Archibald		-	-
CONCESSION 8					
1	Wpt	Anthony Hollingshead	James Hollingshead	-	1 homestead
1	Ept	Wm. Renton	Pat. McCutcheon	-	-
2	N½	Alex. Armour	Arthur Noble	-	1 homestead
2	S½	Armour Estate	D. & A. Armour	-	1 homestead
3	W½	Isaac Snider		1 homestead	1 homestead
3	E½	Asa Edmondson; T. Ireland, occupant	George Ireland	1 homestead	1 homestead

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Lot	Part	Owner/Occupant		Structure(s) in the Study Area	
		1860	1878	1860	1878
4	All	Edway W. Snider	Charles Snider	1 homestead	1 homestead
5	SEpt	M.I. Murphy	M. McKame	-	1 homestead
5	Wpt	Martin Snider		1 homestead; village lots of Nobleton	1 homestead; 1 schoolhouse; village lots of Nobleton
6	NW¼	John Weller	J. & N. Weller	-	6 homesteads; Post Office; village lots of Nobleton
6	SW¼	Nelson Weller		1 homestead; store; village lots of Nobleton	
6	NE¼	Lorenzo Weller	W. Snider	-	1 homestead
6	SE¼	I. Weller	L. Weller	-	1 homestead
7	W½	Dannon McKinnon	G. Hill	-	1 homestead
7	E½	Isaac Snelser		1 homestead	
8	All	Joseph Parker	James Bowman	-	1 homestead
9	W½	William Pringle	John Pringle	-	1 homestead
9	E½	George Pringle		-	1 homestead
9	Ept	J.E.		-	1 homestead
10	W¼	Charles Fry		1 homestead	
10	W¼	Archibald Cameron	John Archibald	-	1 homestead
10	E½	John Archibald		-	1 homestead; Primitive Methodist Church
CONCESSION 9					
1	All	Gabriel Hawman	McTaggart & Bros.	-	-
2	All	Charles Hambly		1 homestead; Schoolhouse No.6	2 homesteads
3	All	George Hambly	Alex. McTaggart	-	2 homesteads
4	NW¼	Samuel McCutcheon	McCutcheon Estate	-	1 homestead
4	SW¼	Hugh McCutcheon		-	
4	NE¼	Wm. Hambly	James Hambly	-	1 homestead
4	SE¼	John Hambly		-	
5	Wpt	George Wirling	Wm. McFall	-	1 homestead
5	Npt	Late Thos. Noble Estate		Arthur Noble	-
5	Spt	Jos. Robinson		-	1 homestead
5	Ept	Unreadable	J.P.	Village lots of Nobleton	
6	W½	Samuel Sheardown	Pet. & Thos. Sheardown	W.M. Church	1 homestead; 1 Wesleyan Methodist Church
6	Ept	John Wilkie		1 homestead	-
6	Ept	James Adams		1 homestead	1 homestead; Village lots of Nobleton
6	Ept	Late J. Hawman Estate	Jacob Hawman	P.M. Church; village lots of Nobleton	-
6	Ept	-	W.H.	-	Primitive Methodist Church
7	W½	Angus Wilkie	Angus Wilkie Est.	-	1 homestead; 1 schoolhouse
7	Ept	John Wilkie	Arthur Armstrong	-	1 homestead
7	Ept	James Milligan	John Wilkie	-	-
7	Ept	Unlisted	-	Harness shop	-
8	W½	John O. Hambly		2 homesteads	1 homestead

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Lot	Part	Owner/Occupant		Structure(s) in the Study Area	
		1860	1878	1860	1878
8	Ept	William Basbey	John Beasley	Blacksmith shop	1 homestead
8	Ept	J. Adams	C.F.	-	-
9	W½	Wm. McFall	W. T. McCutcheon	1 homestead ("Glenarn's Cottage")	1 homestead
9	E½	Robert Kennedy		-	1 homestead
9	Ept	Unlisted	J.H.	1 homestead	-
10	W½	Estate of the Late Johnston	James Cherry	-	-
10	NEpt	Estate of the Late Owen Sullivan	Henry Allison	-	-
10	NEpt		John McKenzie		-
10	SE¼		Owen Sullivan		1 homestead
CONCESSION 10					
1	W½	Charles Hambly	Charles Hambly	-	-
1	E½		Edwin Hambly		1 homestead
2	W½	Robert Ramsey	William & George Jewitt	-	-
2	E½		John Robb		1 homestead
3	W½	Donald Black	Angus Black	-	1 homestead
3	E½	Wm. McKinley	Daniel Dennis	-	1 homestead
4	W½	Late James Burrell Estate	John Sheardown	-	1 homestead
4	E½	Daniel Drummond	William Beasley Est.	-	1 homestead
5	W½	John Huffman	George Chamberlain	-	1 homestead
5	NE¼	George Brooks	Thomas A. Hambly	-	1 homestead
5	SE¼	Dan. Drummond	William Beasley Est.	-	-
6	Wpt	William Breden		-	1 homestead
6	E½	John Brooks	Thomas Brooks	-	1 homestead
CONCESSION 11					
1	All	John Dalzell	Benjamin Snell	-	-
2	All	Estate of the Late H. Nunn	Mrs. Nunn, widow	-	-
3	N½	Adam Wilson	Lawrence Hayden	-	-
3	S½	George Johnson	George Johnson	-	-
4	All	Adam Wilson	Lawrence Hayden	-	1 homestead

"-" denotes details not applicable

Additionally, four homesteads (one identified as "West View"), one schoolhouse (No. 7), a Catholic Church (St. Mary's Roman Catholic Church and Cemetery), a Scotch Church (St. Andrews's Presbyterian Church and Cemetery) and one blacksmith shop are depicted falling within 300 metres of the study area in the 1860 *Tremaine's Map*. By 1878, 22 homesteads, a Roman Catholic Church (St. Mary's) and a Presbyterian Church (St. Andrews's) were depicted within 300 metres of the study area.

The study area also encompasses present-day King Road, 15th Sideroad, 8th Concession Road, Highway 27, 10th Concession Road and 11th Concession Road, which were originally laid out during the survey of the Township of King. In Ontario, the 2011 *S&G* considers areas of early Euro-Canadian settlements (e.g., pioneer homesteads, isolated cabins, farmstead complexes, early wharf or dock complexes, pioneer churches, and early cemeteries), early historic transportation

routes (e.g., trails, passes, roads, railways, portage routes), and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations, as features or characteristics that indicate archaeological potential (per *Section 1.3.1*). Therefore, based on the proximity of early Euro-Canadian settlements and early historic transportation routes, these features contribute to establishing the archaeological potential of the study area.

1.3.4.2 Post-1900 Land Use

To facilitate further evaluation of the established archaeological potential within the study area, a detailed review of topographic maps from 1914 and 1940 (*see Maps 5-6*) and aerial imagery from 1954 to 2019 was undertaken (*see Maps 7-11*).

The 1914 topographic map illustrated the study area primarily within land that had been cleared of overgrown vegetation and was likely agricultural lands as well as pockets of treed areas throughout. Numerous houses and several access driveways are depicted in the study area along the six main roadways. A concentration of structures are depicted along King Road and Highway 27 in the community of Nobleton, including a blacksmith shop, post office, telephone exchange and school, as well as a cemetery (Wesleyan Methodist Cemetery). The East Humber River and Humber River and several tributaries are depicted as flowing through the study area. The study area remained relatively unchanged to 1940.

By 1954, the study area primarily consisted of open agricultural fields and several wooded areas. Numerous houses were constructed within Nobleton and several farmsteads were also located within the study area. By 1954 the intersection of King Road and 10th Concession Road had been realigned and by 1970, King Road had been realigned at the intersection of Highway 27. Nobleton saw continued growth and subdivision development between 1970 and 1988.

In 2009 there was significant roadside construction along King Road, and construction activities at the Janet Avenue SPS, Nobleton Water Resource Recovery Facility (WRRF) and WRRF Outfall Route. By 2019, Well 5 had been installed and the study area saw continued residential subdivision development northeast and southwest of King Road and Highway 27. Additional roadside construction occurred along King Road at this time. Apart from this, the majority of the study area remained in open agricultural lands with blocks of forested areas flanking the East Humber River and Humber River.

1.3.5 Present Land Use

The present land use of the study area is categorized as Natural Heritage, Agricultural Area, Residential, Village Core, Commercial, Institutional, Business Area, Park-Existing and Rural Area in the Township of King's Official Plan (Township of King, 2005).

1.4 Archaeological Context

To establish the archaeological context and further establish the archaeological potential of the study area, *Archeoworks Inc.* conducted a comprehensive review of designated and listed heritage properties, commemorative markers and pioneer churches and early cemeteries in relation to the study area. Furthermore, an examination of registered archaeological sites and previous AAs in proximity to the study area limits, and a review of the physiography of the study area were performed.

The results of this background research are documented below and summarized in **Appendix B – Summary of Background Research**.

1.4.1 Designated and Listed (Non-Designated) Cultural Heritage Resources

Per *Section 1.3.1* of the *2011 S&G*, properties listed on a municipal register or designated under the *Ontario Heritage Act*, or that is a federal, provincial, or municipal historic landmark or site, are considered features or characteristics that indicate archaeological potential. Several designated and featured (non-designated) heritage resources are located in and within 300 metres of the study area (Township of King, 2013; Township of King Heritage Committee, 2008; **see Tables 4-5**). Therefore, this feature contributes to establishing the archaeological potential of the study area. Non-designated properties (or “featured” properties) are properties that have cultural heritage value or interest to the community but have not been formally designated.

Table 4: Designated and Featured Heritage Resources in the Study Area

Address	Description	Heritage Status
6012 King Road	Hambly House, ca. 1884	Designated (by-law 82-144)
19 Old King Road	Nobleton Community Hall	Designated (by-law 2007-60)
6400 King Road	Wesleyan Methodist Cemetery (Cemetery on the Hill), ca. 1849	Designated (by-law 2009-109)
6076 King Road	Methodist, now the Nobleton United Church, ca. 1896	Featured
13162 Highway 27	St. Alban’s Anglican Church, ca. 1889	Featured
5885 King Road	S.S. 19, Nobleton (Nobleton Public School), one room schoolhouse, ca. 1870	Featured
13735 Highway 27	Charles Fry retirement home, ca. 1888	Featured
12926 Highway 27	Colony Honey House, ca. 1936	Featured
5345 8 th Concession Road	Methodist church, ca. 1865	Featured
13305 10 th Concession Road	S.S. 7, Tenth, ca. 1846	Featured

It must be noted that the heritage resource at 5885 King Road (original SS. 19) has since been demolished and only the foundations of the Methodist church at 5345 8th Concession Road have been uncovered (registered archaeological site AIGv-286; **see Tables 6-7**).

Table 5: Designated and Featured Heritage Resources within 300 metres of the Study Area

Address	Description	Heritage Status
13340 10 th Concession Road	Chamberlain Burying Ground	Designated (by-law 2009-97)

Address	Description	Heritage Status
13900 10 th Concession Road	St. Andrew's Presbyterian Cemetery	Designated (by-law 2009-104)
13900 10 th Concession Road	St. Andrew's Presbyterian Church, ca. 1883	Featured
13610 10 th Concession Road	St. Mary's Roman Catholic Cemetery and Church	Featured

The heritage resource noted as St. Andrew's Presbyterian Church, located at 13900 10th Concession Road, was removed in 1960 (The Corporation of the Township of King, 2009c).

1.4.2 Heritage Conservation Districts

Per *Section 1.3.1* of the 2011 S&G, heritage resources listed on a municipal register or designated under the *Ontario Heritage Act* are considered features or characteristics that indicate archaeological potential. The study area is not located in or within 300 metres of a Heritage Conservation District (MHSTCI, 2020a). Therefore, this feature does not contribute to establishing the archaeological potential of the study area.

1.4.3 Commemorative Plaques or Monuments

Per *Section 1.3.1* of the 2011 S&G, commemorative markers of Indigenous and Euro-Canadian settlements and history, which may include local, provincial, or federal monuments, cairns or plaques, or heritage parks, are considered features or characteristics that indicate archaeological potential. The study area is not located in or within 300 metres of a commemorative plaque or monument (Ontario Historical Plaques, 2019; OHT, 2020). Therefore, this feature does not contribute to establishing the archaeological potential of the study area.

1.4.4 Pioneer/Historic Cemeteries

Per *Section 1.3.1* of the 2011 S&G, pioneer churches and early cemeteries are considered features or characteristics that indicate archaeological potential. Two cemeteries (the Nobleton Community Cemetery located at 13164 Highway 27 North, and the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) at 6400 and 6406 King Road) are located in the study area, and three cemeteries (Chamberlain Burying Ground at 13340 10th Concession Road, St. Andrew's Presbyterian Cemetery at 13900 10th Concession Road, and Saint Mary's Roman Catholic Church Cemetery at 13610 10th Concession Road) are located within 300 metres of the study area. All five cemeteries are considered early cemeteries and therefore, these features contribute to establishing the archaeological potential of the study area.

It should be noted that only the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) is located adjacent to a water or wastewater system servicing location. Further discussion of this cemetery and the requirements for archaeological and cemetery investigations within the scope of this project can be found in **Section 3.5**. The Nobleton Community Cemetery, located within the study area, and the other three cemeteries located outside the study area will not be impacted by the proposed upgrades to the seven water and wastewater system servicing components within the study area. As such, no further archaeological or cemetery investigation recommendations are required for these four cemeteries within the scope of this project.

1.4.4.1 Nobleton Community Cemetery

The Nobleton Community Cemetery initially consisted of one acre of land that was donated by Jacob Hawman and William Milligan for the establishment of a cemetery; the date of this donation is unknown. The earliest burial within the one-acre parcel occurred in 1833 and was a relative of Jacob Hawman. The Nobleton Community Cemetery was intended to be a free cemetery but over time fell into disuse and was neglected. By 1944, the Nobleton Women's Institute arranged a public meeting and Trustees were appointed to manage and clean up the cemetery. A Cemetery Board was established in 1954 and each member donated \$100 to have the burial grounds surveyed and new burial plots set aside. That same year, Thomas Dodson donated approximately half an acre to enlarge the existing cemetery grounds and additional acreage was purchased from the estate of Thomas Breedon to increase the area of the new portion of the cemetery grounds. In 1962, two additional acres were purchased "just west of the cemetery from Norman Hill" (Nobleton Tweedsmuir History – Book 5, 2015; OGS, 1998, p.1). This cemetery is located within the overall study area but not within close proximity to a water or wastewater system servicing location.

1.4.4.2 Wesleyan Old Methodist Cemetery (Cemetery on the Hill)

The Wesleyan Old Methodist Cemetery (Cemetery on the Hill) "was also known as the Water Tower Cemetery because of the water tower on the property (which has since been removed)" (OGS, 1992a, p.1). The land was provided by Samuel Sheardown in 1845 and the cemetery was established in about 1849 as a small family burial ground. According to the by-law for heritage site designation, the cemetery property is described with a frontage of 215.36 feet (~ 66 metres) and a depth of 139.67 feet (~ 43 metres) on the north side of King Road (The Corporation of the Township of King, 2009a); this corresponds with the currently recognized property limits of municipal addresses 6400 and 6406 King Road. It should be noted that the *BAO* and the by-law for heritage site designation have incorrectly provided 6260 King Road as the municipal address for the cemetery.

In addition, according to the by-law for heritage site designation, the Wesleyan Old Methodist Cemetery is characterized by "its remaining gravesite markers... arranged predominantly in 3 parallel rows both upright and flat on the ground" (The Corporation of the Township of King, 2009a). Many of the original grave markers have disappeared and only about 40 markers are visible ranging in date from 1849 to 1901, listing approximately 86 names of the "earliest settlers, influential residents and business owners of the community" (The Corporation of the Township of King, 2009a). A Wesleyan Methodist church was originally built adjacent to the cemetery and was taken down in 1896. The material from the old church was used to construct a new church, known as the Nobleton United Church at 6076 King Road, and a water tower was later built on the old church site. The cemetery was closed to further burials in 1905 and is currently inactive (Nobleton United Church, 2020; OGS, 1992a, p.1; The Corporation of the Township of King, 2009a). The cemetery grounds are now maintained by the Township of King.

This cemetery is located within the overall study area immediately adjacent to a wastewater system servicing location (the "Forcemain Route") which encompasses the existing King Road ROW.

1.4.4.3 Chamberlain Burying Ground

The Chamberlain Burying Ground was established in 1847 by John Chamberlain, an English immigrant who donated a portion of his 100-acre property, measuring approximately 39,204 square feet at the southeast corner of Lot 8, Concession 10. The burial ground was intended as a family burial ground where members of the Chamberlain family were interred. Ten markers are present in the cemetery; in 1992, the cemetery transcript noted that these markers were clustered between two trees (OGS, 1992b; The Corporation of the Township of King, 2009b). This cemetery is located within 300 metres of the study area.

1.4.4.4 St. Andrew's Presbyterian Cemetery

St. Andrew's Presbyterian Cemetery was established ca. 1850 on a one-acre piece of land in the northeast corner of Lot 11, Concession 10. The cemetery was intended for use as a family burial site for property owners Duncan and Elizabeth McCallum, early Scottish immigrants. The St. Andrew's Presbyterian Church, also called the Tenth Line Presbyterian Church, was once located on the property from 1883 until it was removed in 1960. Also known as the Scotch Cemetery, 35 markers and headstones commemorate approximately 64 burials dating from 1850 to 1902, including McCallum family members and other early Scottish settlers of the community (The Corporation of the Township of King, 2009c). This cemetery is located within 300 metres of the study area.

1.4.4.5 St. Mary's Roman Catholic Church Cemetery

St. Mary's Roman Catholic Church Cemetery was established on an acre of land near the northeast corner of Lot 9, Concession 10 that was donated by Patrick and Catherine Trainor. A small frame church was constructed in 1855 and bricked over towards the end of the 19th century. Along with the church and cemetery, an old drive shed was also located on the property. In the early 1900s the driving shed was destroyed by a fire. The shed was later replaced by a cement structure and the timber used in the reconstruction was salvaged from a bridge on 12th Concession Road that was destroyed by a flash flood from the Humber River. The church serviced the Roman Catholic community, many of which were Irish settlers escaping the famine in Ireland. St. Mary's is also known as "The Mission Church". The earliest burial occurred in 1853. The church is the oldest continuously operating house of worship and the first Roman Catholic Church and cemetery in the Township of King. The church is now vacant and the congregation has moved to a new building on Highway 27 in Nobleton (Graveyard Junkie, 2011; OGS, 1988; Pavilons, N.D.; Salter, 2015). This cemetery is located within 300 metres of the study area.

1.4.5 Registered Archaeological Sites

Per *Section 1.1, Standard 1* and *Section 7.5.8, Standard 1* of the 2011 S&G, the *Ontario Archaeological Sites Database (OASD)* maintained by the *MHSTCI* was consulted in order to provide a summary of registered or known archaeological sites within a minimum one-kilometre distance of the study area limits.

According to the OASD, 36 registered archaeological sites are located within a one-kilometre radius of the study area (MHSTCI, 2020b) (**see Table 6**). All 36 registered archaeological sites are

located in the study area; none are located in or within proximity to any of the water or wastewater system servicing locations.

Table 6: Registered Archaeological Sites within One Kilometre of the Study Area

Borden #	Name	Cultural Affiliation	Type
<i>Registered archaeological sites within the study area</i>			
AlGv-131	Nobleton 1	Pre-Contact (Indigenous)	Findspot
AlGv-132	Nobleton 2	Early Woodland, Meadowood (Indigenous)	Findspot
AlGv-133	Nobleton 3	Pre-Contact (Indigenous)	Findspot
AlGv-214	Parker (H2)	Post-Contact (Euro-Canadian)	Cabin; homestead
AlGv-221	Hambly	Post-Contact (Euro-Canadian)	Homestead
AlGv-264	-	Pre-Contact (Indigenous)	Unknown
AlGv-265	-	Late Paleo-Indian, Hi-Lo	Findspot
AlGv-267	-	Post-Contact (Euro-Canadian)	Unknown
AlGv-268	-	Post-Contact (Euro-Canadian)	Unknown
AlGv-269	-	Post-Contact (Euro-Canadian)	Unknown
AlGv-270	-	Pre-Contact	Scatter
AlGv-271	-	Post-Contact (Euro-Canadian)	Unknown
AlGv-272	-	Post-Contact (Euro-Canadian)	Unknown
AlGv-273	-	Post-Contact (Euro-Canadian)	Unknown
AlGv-274	-	Pre-Contact	Camp/campsite
AlGv-275	-	Pre-Contact (Indigenous)	Findspot
AlGv-276	-	Pre-Contact	Camp/campsite
AlGv-277	-	Pre-Contact (Indigenous)	Findspot
AlGv-278	-	Pre-Contact (Indigenous)	Findspot
AlGv-279	-	Late Archaic (Indigenous)	Findspot
AlGv-280	-	Pre-Contact	Findspot
AlGv-281	-	Pre-Contact	Findspot
AlGv-282	-	Pre-Contact	Findspot
AlGv-283	-	Pre-Contact	Findspot
AlGv-284	-	Pre-Contact	Findspot
AlGv-285	-	Pre-Contact	Findspot
AlGv-286	-	Post-Contact (Euro-Canadian)	Other: church/chapel
AlGv-287	-	Post-Contact (Euro-Canadian)	Unknown
AlGv-303	Pringle Site	Post-Contact	Homestead
AlGv-382	AlGv-382	Post-Contact	Homestead
AlGv-402	H2	Post-Contact (Euro-Canadian)	House
AlGv-403	H3	Post-Contact (Euro-Canadian)	Homestead
AlGv-411	-	Post-Contact	Homestead
AlGv-428	13735 Hwy 27 H1	Post-Contact (Euro-Canadian)	Homestead
AlGw-33	Peppy	Pre-Contact	Unknown
AlGw-34	Vink	Pre-Contact	Unknown

“-” denotes details not provided in OASD

Per Section 1.3.1 of the 2011 S&G, previously registered archaeological sites in close proximity are considered to be features or characteristics that indicate archaeological potential. Therefore, given the presence of numerous registered archaeological sites in the study area, this feature contributes to establishing the archaeological potential of the study area.

1.4.6 Previous Archaeological Assessments

Per *Section 1.1, Standard 1* and *Section 7.5.8, Standards 4-5* of the 2011 S&G, to further establish the archaeological context of the study area, a review of previous AAs carried out within the limits of, or immediately adjacent (i.e., within 50 metres) to the study area — as documented by all available reports — was undertaken. Forty archaeological reports were identified (*see Table 7*). The limits of archaeological assessments that overlap with a water or wastewater system servicing location and recommend further stages of fieldwork (e.g., Stage 2 AA) without definitively eliminating areas from requiring further AA are depicted in **Map 12**. The limits of archaeological assessments that overlap with a water or wastewater system servicing location and eliminate areas from requiring further AA are depicted in the resulting Stage 1 AA mapping (*see Maps 13-27*).

Table 7: Previous Archaeological Assessments

Company, Report Date	Stage of Work	Relation to Study Area	Details and Recommendation
A.F.B.Y. Archaeological and Heritage Consultants, 2001	Stage 1-2 AA	Within the general study area	Associated with Block 12 of Draft Plan 19T-88107, measuring 1.4 hectares. During the Stage 2, no archaeological sites were encountered. It was recommended that the subject property be cleared of any further archaeological concerns.
A.M. Archaeological Associates, 2011	Stage 1 AA	Within the general study area; encompassing a portion of the Forcemain Route	Located along King Road from Highway 27 to Highway 400, plus a 100-metre zone along the north and south sides of the 7.2 kilometre project corridor. A property inspection was completed and determined the King Road ROW to be extensively and intensively disturbed. No further work within the ROW is required. All lands adjacent to the subject corridor that remain undisturbed/not too steep/not low lying and wet must be subjected to AA should the proposed future design expand beyond the limits of the existing King Road ROW. See Map 12 and Maps 25-27 .
AMICK Consultants Ltd., 2008	Stage 1-2 AA	Within the general study area	Located at the southwest corner of Wilsen Street and Highway 27 and measuring 1.19 hectares in size. During the Stage 2 AA, no archaeological resources were encountered. It was recommended that the proposed development be considered cleared of any further requirement for archaeological fieldwork.
AMICK Consultants Ltd., 2012	Stage 1-2 AA	Within the general study area	Encompassing the entire western half of Lot 8, Concession 8. No archaeological sites or resources were encountered during the Stage 2 AA. Consequently, it was recommended that no further archaeological assessment of the property is required.
AMICK Consultants Ltd., 2017	Stage 1-2 AA	Within the general study area	Associated with the AA of 13582 & 13580 Highway 27. During the Stage 2, three historic scatters and five isolated First Nations lithic finds were encountered; only two were registered as H2 (AIGv-402) and H3 (AIGv-403). A provisional date range gleaned from the artifact analysis places both sites in an occupational date range of 1830-1880. Further Stage 3 AA was recommended on H2 (AIGv-

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Company, Report Date	Stage of Work	Relation to Study Area	Details and Recommendation
			402) and H3 (AlGv-403) while no further work was recommended for the one historic scatter and all five isolated findspots.
AMICK Consultants Ltd., 2016	Stage 3 AA	Within the general study area	The Stage 3 AA of H2 (AlGv-402) and H3 (AlGv-403). A controlled surface pickup (CSP) was conducted at both sites, and a total of 49 test units were excavated at AlGv-402 yielding 1,049 artifacts and 48 test units were excavated at AlGv-403 yielding 121 artifacts. Both AlGv-402 and AlGv-403 were determined to have no significant cultural heritage value or interest and no further AA was recommended.
AMICK Consultants Ltd., 2019	Stage 1-2 AA	Within the general study area; adjacent to the Forcemain Route	Encompassing Parts 1-6 of Plan of Survey of Lots 2, 3 & 4 and Part of Lot 1 Registered Plan 19, Township of King (municipal addresses 6012 and 6024 King Road and 13046, 13056 and 13062 Highway 27). During the Stage 2 AA, no archaeological resources were encountered. Consequently, the following recommendations were made: 1) No further archaeological assessment of the subject area is warranted; 2) The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed; 3) The proposed undertaking is clear of any archaeological concern.
Archeoworks Inc., 2005a	Stage 1-3 AA	Within the general study area	Associated with the AA of a 166.823-acre parcel and the Stage 3 AA of the Parker Site (AlGv-214). During the Stage 2 AA, all land was surveyed except for 21.591 acres which was not systematically assessed (wet/low lying, and Block 865 that is to remain a protected woodlot). Two historic Euro-Canadian sites were found: H1 and H2 (AlGv-214); and two isolated non-diagnostic pre-contact findspots, P1 & P2, were recovered. Further Stage 3 AA was recommended for the H2 (AlGv-214) site, and no further AA was recommended on P1, P2 and H1. During the Stage 3 AA, the artifact analysis determined the site to date from 1840-1860s and was tied to Robert Parker and his family's occupation of the site. A total of six test units were excavated, one possible feature was encountered and a total of 312 artifacts were recovered. Further Stage 4 mitigation was recommended.
Archeoworks Inc., 2005b	Stage 4 Mitigation	Within the general study area	Associated with the mitigation of the Parker Site (AlGv-214), formerly the H2 site. During the Stage 4 mitigation, 1,575 square metres of topsoil was removed and uncovered a total of three cultural features: a midden, a privy and a house foundation. A total of 1,943 artifacts were recovered that were indicative of a family log house. The Parker site (AlGv-241) was recommended to be cleared of further archaeological consideration.
Archeoworks Inc., 2006a	Stage 1 AA	Within the general study area;	Associated with the water resource exploration for water supply and storage at N-B1 and a 500-metre buffer of N-B1. The northern portion of the 500-metre buffer

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		encompassing existing Well 2, existing Well 5 (Potential Well Site H) and part of the Forcemain Route	consisted of extant subdivisions and commercial areas, while the southern portion (encompassing N-B1) consisted of undisturbed rural lands. Stage 2 AA was recommended for all undisturbed areas prior to construction activities. See Map 12 .
Archeoworks Inc., 2006b	Stage 1-2 AA	Within the general study area	Associated with the AA of part of Lot 7, Concession 8 measuring a total of 44.73 acres. During the Stage 2 AA, no archaeological resources were encountered. It was recommended that the subject lands be considered free from further archaeological concerns.
Archeoworks Inc., 2010	Stage 1 AA	Within the general study area	Associated with the proposed watermain routes and storage tower (T-1, T-2, T-3, T-4a, T-4, T-5, T-6, T-7 and T-8) options along Highway 27. A property inspection was completed. Stage 2 AA was recommended on all undisturbed areas prior to construction activities.
Archeoworks Inc., 2018a	Stage 1 AA	Within the general study area	Located at municipal address 13735 Highway 27. Stage 2 AA recommended.
Archeoworks Inc., 2018b	Stage 2 AA	Within the general study area	Located at municipal address 13735 Highway 27. During the Stage 2 AA, one historic Euro-Canadian site was found: the 13735 Hwy 27 H1 Site (AlGv-428). A total of 113 artifacts were recovered and were dated from the 1840s to ca. 1900. Further Stage 3 AA recommended.
Archeoworks Inc., 2020	Stage 3 AA	Within the general study area	Associated with the excavation of the 13735 Hwy 27 H1 Site (AlGv-428). A total of 53 test units were excavated on a 10-metre grid yielding three possible cultural features and 6,764 artifacts. The material recovered from the cultural layer as well as the archival research determined there to a continuous occupation of the site area from the 1840s and extending into the 20 th century. The 13735 Hwy 27 H1 Site (AlGv-428) was determined to not have significant cultural heritage value or interest and no further work was recommended for this site.
Archeoworks Inc., 2012	Stage 1 AA	Within the general study area; encompasses part of the Forcemain Route	Proposed 13.05-hectare Tomlinson Gardens residential subdivision development and two other parcels of land adjacent to the southeast and southwest corners, measuring approximately 0.87 and 0.26 hectares respectively. Located at municipal addresses 6178, 6190, 6202, 6230, 6260 and 6288 King Road and 72 Russell Snider Drive. Stage 2 AA recommended for entire project area. See Map 12 .
Archeoworks Inc., 2013	Stage 2 AA	Within the general study area; adjacent to the Forcemain Route	Proposed 13.05-hectare Tomlinson Gardens residential subdivision development. Located at municipal addresses 6178, 6230, 6260 and 6288 King Road and 72 Russell Snider Drive. During the Stage 2 AA, despite careful scrutiny, no archaeological resources were encountered in those lands subjected to AA. A portion of the subject area remained

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Company, Report Date	Stage of Work	Relation to Study Area	Details and Recommendation
			outstanding and must be subjected to the appropriate methods of Stage 2 testing prior to any construction activities.
Bluestone Research Inc., 2017	Stage 1-2 AA	Within the general study area; encompasses part of the Forcemain Route	Proposed Via Moto subdivision located at municipal addresses 6178, 6190, 6202, 6230, 6260 and 6288 King Road and 72 Russell Snider Drive. Also included 6274 King Road. The Stage 2 AA did not result in the identification of any archaeological resources. No further AA of the property is required. See Map 24 .
Archeoworks Inc., 2014	Stage 1-2 AA	Within the general study area	Located at municipal address 13120 8 th Concession within part of Lot 6, Concession 8. During the Stage 2, no archaeological resources were encountered. Therefore, the subject area was recommended to be considered free of further archaeological concern.
ASI, 2000	Stage 1 AA	Within the general study area; encompassing the WRRF and Outfall Route and part of the Forcemain Route	Associated with the Phase 3 and 4 Class EA for sewage servicing in the community of Nobleton, encompassing an area of approximately 23.5 square kilometres. Stage 2 recommended within any undisturbed lands that may be impacted by construction activities related to the sewage servicing project. See Map 12 .
ASI, 2007a	Stage 1-2 AA	Within the general study area	Located at municipal address 5815 King Road. During the Stage 2 (which consisted of land only along the western limits of 5815 King Road), the subject area was determined to be disturbed and no archaeological resources were encountered. It was recommended that the subject property be considered free from further archaeological concern.
ASI, 2007b	Stage 1-2 AA	Within the general study area; encompassing existing Well 5 (Potential Well Site H)	Located on the east half of Lot 4, Concession 9 and comprising approximately 40 hectares. During the Stage 2 AA one historic site (AIGv-221, Hambly) was encountered. During the assessment, a local resident indicated that 12-15 gravestones had been located in the northeast corner of the subject property and were removed in the 1940s or 1950s by the previous landowners. This area (within Block 343) was subsequently subjected to topsoil removal; no grave shafts were observed. Further Stage 3 and 4 were recommended for the Hambly site (AIGv-221). The remainder of the subject area was considered free from further archaeological concern, with the caveat that should human remains be encountered in the northeast corner of the subject area during construction activities, the appropriate authorities should be contacted immediately. See Map 15 .
Fischer Archaeological Consulting, 2009	Stage 1-2 AA	Within the general study area	Located at the southwest corner of 15 th Sideroad and Highway 27, measuring approximately 4.32 hectares. During the Stage 2 AA, three historic Euro-Canadian

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			scatters (“clusters”) were identified: Artifact Cluster 1, Artifact Cluster 2 and Artifact Cluster 3. Archival research did not highlight any activity at the northeast corner of the lot until the 1860s, when that quarter was mortgaged. All three clusters were determined to not be archaeologically significant due to the late timeframe of the artifacts. It was determined that nothing of archaeological significance was discovered. No further archaeological work was recommended.
Museum of Ontario Archaeology, 1994	Stage 1-2 AA (equivalent)	Within the general study area	Associated with the Draft Plan of Subdivisions 19T-88107 and 19T-92003 located in Lot 5, Concession 8. During field survey, three isolated Indigenous findspots were discovered: AIGv-131, AIGv-132, AIGv-133. As these sites were isolated in nature, it was concluded that no significant heritage resources would be impacted by the proposed construction activities. It was recommended the project area be cleared of further archaeological concern.
The Archaeologists Inc., 2014a	Stage 1-2 AA	Within the general study area	Located at municipal address 13650 Highway 27. During the Stage 2 AA, one historic Euro-Canadian site was found, H1, consisting of 70 artifacts (30 artifacts were retained). Artifact analysis suggested a date range between 1840-1870. Stage 3 AA was recommended.
The Archaeologists Inc., 2014b	Stage 3 AA	Within the general study area	Associated with the AA of the H1 (AIGv-382) site located within 13650 Highway 27. During the Stage 3, a total of 569 artifacts were recovered from the CSP and excavation of 68 test units, and no cultural features were identified. Archival data suggests the site likely represents an occupation of the Sullivan family (ca. 1836-1889) in a log house or other structure lasting at least 30 years. Stage 4 mitigation is recommended for the H1 (AIGv-382) site.
The Archaeologists Inc., 2017a	Stage 4 Mitigation	Within the general study area	Associated with mitigation of the H1 (AIGv-382) site located within 13650 Highway 27. During the Stage 4, approximately 2,000 square metres of topsoil was mechanically removed. One cultural feature was uncovered and was identified as a 20 th century foundation with a plaster floor. A total of 217 artifacts were also recovered. The site was determined to represent a structure tied to the Sullivan family. AIGv-382 has been completely excavated and has no further cultural heritage value or interest.
The Archaeologists Inc., 2017b	Stage 1-2 AA	Within the general study area	Located at municipal address 12485 Concession Road 10. During the Stage 2 AA, one archaeological site (AIGv-411, Site H1), a mid-19 th century Euro-Canadian homestead, was discovered. The surface scatter consisted of approximately 101 artifacts, where 64 artifacts were retained for analysis, and suggested a date range of between 1830 and 1870. Further Stage 3 AA was recommended.

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Company, Report Date	Stage of Work	Relation to Study Area	Details and Recommendation
The Archaeologists Inc., 2018a	Stage 3 AA	Within the general study area	Associated with AA of Site AlGv-411 located within 12485 Concession Road 10. During the Stage 3, a CSP was completed yielding 137 artifacts and a total of 37 test units were excavated yielding 423 artifacts. No cultural features or midden areas were identified. Archival data suggests the site likely represents the initial occupation of the Charles Hambly family (ca. 1830 to the 20 th century). Stage 4 mitigation was recommended for Site AlGv-411.
The Archaeologists Inc., 2018b	Stage 4 Mitigation	Within the general study area	Associated with mitigation of Site AlGv-411 located within 12485 Concession Road 10. During the Stage 4, mechanical topsoil was removed resulting in the discovery of three cultural features: two structural remnants and a general refuse pit. A total of 318 artifacts were also recovered. The site was determined to represent a structure tied to the Hambly family, ca. 1830-1870 and beyond. Site AlGv-411 has been completely excavated and has no further cultural heritage value or interest.
This Land Archaeology Inc., 2013	Stage 3 AA	Within the general study area	Associated with the AA of the Hambly Site (AlGv-221) located in Lot 4, Concession 9. During the Stage 3, a CSP was completed yielding 1,273 artifacts and a total of 40 test units were excavated yielding 1,376 artifacts. No midden area was identified. Archival data suggests the site likely represents a structure owned by the Hambly family (ca. 1830 to 1870). Stage 4 mitigation was recommended for the Hambly Site.
This Land Archaeology Inc., 2018	Stage 4 Mitigation	Within the general study area	Associated with the mitigation of the Hambly Site (AlGv-221) located in Lot 4, Concession 9. During the Stage 4, mechanical topsoil removal occurred, resulting in the discovery of 41 cultural features: 22 were determined to be not cultural (i.e., animal burrows or root burn). A total of 6,242 artifacts were also recovered. The site was determined to represent a structure tied to the Hambly family, built pre-1845 and may have been used as a retail business by members of the Hambly family. There are no further concerns regarding archaeological resources associated with the Hambly Site (AlGv-221); this site has no further cultural heritage value or interest.
TRCA, 1988a,b	Unknown	Within the general study area	Associated with the discovery and documentation of AlGw-33 (Peppy Site) and AlGw-34 (Vink Site). Correspondence with the consultant firm (TRCA) provided details on the nature of the investigation: the sites “were identified as part of a Master Plan inventory and were never really investigated”; both were identified during pedestrian survey, are of unknown cultural affiliation and remain <i>in situ</i> ; “any future work in that area must be conducted by TRCA archaeologists as it is TRCA lands” (Templeton, 2020a). The two sites are located within the general study area, as determined through mapping provided within the site forms provided by the MHSTCI detailing the exact locations of the sites, and mapping

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Company, Report Date	Stage of Work	Relation to Study Area	Details and Recommendation
			provided by the TRCA detailing the extent of the field subjected to pedestrian survey.
TRCA, 2007b	Stage 1-2AA	Within the general study area; encompassing part of the WRRF Outfall Route	Associated with the Nobleton Sewer and Outfall Project in Lot 2, 3, and 4, Concession 10 WYS. The subject area consisted of two areas: Area A (initially 750m long and 2m wide, along and immediately south of an existing fence row, east of a gravel pit; the width was changed to 21m prior to survey) and Area B (meadow on the north bank of the Humber River). One isolated Indigenous findspot was recovered at Area A and no artifacts were recovered from Area B. It is recommended that all areas be cleared of any further archaeological concerns. See Map 16 .
TRCA, 2011	Stage 1-2 AA	Within the general study area	<p>Associated with the Slokker Property reforestation and Noble Ridge fill project at the southwest corner of 15th Sideroad and 8th Concession Road. During the Stage 2 AA, the subject area was divided into nine fields: Fields A to I where 22 discrete sites were encountered:</p> <p>Field A: one Euro-Canadian site (AlGv-269) and one lithic findspot (AlGv-275). Field B: one lithic scatter (AlGv-264) and three lithic findspots (AlGv-277, AlGv-278 and AlGv-279). Field C: two Euro-Canadian sites (AlGv-267 and AlGv-268) and one lithic findspot (AlGv-280). Field D: one lithic scatter (AlGv-270), and one lithic findspot (AlGv-284). Field E: remnants of a foundation and a number of brick fragments that were not collected (AlGv-286), likely a Methodist church. Field F: two Euro-Canadian sites (AlGv-272 and AlGv-273) and a lithic findspot (AlGv-285). Field G: two lithic scatters (AlGv-274 and AlGv-275) and three lithic findspots (AlGv-281, AlGv-282 and AlGv-283). Field H: contained a low-density scatter of materials throughout the barnyard, likely associated with the barn and the demolished homestead, registered as AlGv-271. Field I: single projectile point that was registered as AlGv-265.</p> <p>Recommendations: Fields A, C, E, F and G be cleared for on-going agricultural practices; Those sites located in Fields B and D will be protected by a fence that provides a 20-metre buffer between the site and imported fill from Noble Ridge; Field H will also have perimeter fencing that provides a 20-metre buffer between the imported fill and barnyard enclosure; Protective measures including GeoTextile overlaid with planking and soil will be placed in the area surrounding AlGv-265 in Field I to protect the site and prevent any ground disturbance from vehicles using the access route; All sites will continue to be monitored;</p>

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Company, Report Date	Stage of Work	Relation to Study Area	Details and Recommendation
			Any future development will trigger additional archaeological investigations.
TRCA, 2012a	Stage 1-2 AA	Within the general study area	Associated with the trail at the Noble Ridges SWM Pond. During the Stage 2 AA, a single Euro-Canadian site, the Pringle Site (AIGv-303) was discovered and included remnant foundations. A test pit survey was conducted next to the remnant foundations yielding 418 artifacts. No artifacts were recovered from the proposed trail. Recommendations: the project area on proponent lands slated for the construction of a trail be cleared of any further archaeological concerns; the Pringle site (AIGv-303), located on TRCA property and already impacted by the construction site, will be avoided and monitored; in the event any development is proposed within the vicinity of the Pringle site (AIGv-303), further assessment is required.
TRCA, 2012b	Stage 1-2 AA	Within the general study area	Associated with the Noble Ridge foundations at the Slokker Property. A thorough investigation of the project area was conducted to further document the Pringle site (AIGv-303) and to ensure no further impacts to the site would occur during the residential construction. During the Stage 2 AA, 202 artifacts were recovered, and the foundation was exposed, and a test unit was excavated in the southeastern quadrant of the foundation to determine the nature of the floor and recover artifacts. The artifact assemblage from the site is consistent with a domestic deposit associated with a residence constructed during the latter half of the nineteenth century. Recommendations: the Pringle site (AIGv-303) will remain <i>in situ</i> ; the site is considered as having a medium level of cultural heritage value and interest; should any future development or construction plans come within 70 metres of the aforementioned site additional Stage 3 and possibly Stage 4 excavations will be required; the site will continue to be periodically monitored to ensure no further impacts occur prior to further assessment.
TRCA, 2018	Stage 3 monitoring	Within the general study area	Project area is located within Lot 10, Concession 8 and falls within the 50-metre archaeological monitoring zone of sites AIGv-264 and AIGv-267. Despite careful scrutiny, no artifactual material or cultural features were located in the project area during the archaeological construction monitoring. The project area requires no further archaeological assessment.

1.4.7 Physical Features

1.4.7.1 Physiographic Region

The study area is located within the South Slope physiographic region of Southern Ontario. It is the southern slope of the Oak Ridges Moraine, but also includes a strip south of the Peel

Plain. This region covers approximately 2,400 square kilometres from the Niagara Escarpment to the Trent River. The South Slope contains a variety of soils that have been conducive to agricultural use. The soils in the west are developed upon more clayey than sandy tills, and the slopes are less steep than in the east. Portions of the South Slope region that lay in the interior, away from the lakeshore, were mainly colonized by the “second wave” of largely British immigrants after the Napoleonic Wars. Early settlers practiced mixed subsistence agriculture, although grain exportation did confer a measure of prosperity across the region, as evidenced by the construction of many fine fieldstone houses, the building of railroads and the improvement of main haulage roads. The decline of wheat growing, however, resulted in the replacement with commercial mixed farming in which beef cattle, hogs, and dairy butter were the primary income sources. The eastern portion of the South Slope region has preserved less of its rural character compared to the western portion, as large areas around Toronto have become more urbanized (Chapman and Putnam, 1984, pp.172-174).

1.4.7.2 Soil Types

Several soil types are found within the study area including Bottom Lands, Brighton sandy loam, Fox sandy loam, King clay loam and Monaghan clay loam. The study area is primarily located within King clay loam and Monaghan clay loam, and Bottom Lands are located along the numerous tributaries of the East Humber River and the Humber River. A small outcrop of Brighton sandy loam is present along King Road, west of Nobleton, and a small outcrop of Fox sandy loam is present at the immediate southwest corner of the study area. A description of their characteristics may be found in **Table 8** (Ontario Agricultural College, 1954).

Table 8: Study Area Soil Types

Soil Series and Type	Great Soil Group	Parent Material	Drainage	Topography and Stoniness
Bottom Lands	Alluvial	Irregularly stratified alluvial deposits	Variable	Variable; stonefree
Brighton sandy loam	Grey-Brown Podzolic	Well sorted grey, calcareous sand or stratified sand and gravel	Good	Smooth very gently sloping; stonefree
Fox sandy loam	Grey-Brown Podzolic	Well sorted calcareous gravelly outwash	Good	Smooth very gently sloping; stonefree
King clay loam	Grey-Brown Podzolic	Brown, calcareous gritty clay till	Good	Smooth, moderately to irregularly steeply sloping; few stones
Monaghan clay loam	Grey-Brown Podzolic	Brown, calcareous gritty clay till	Imperfect	Smooth gently sloping; few stones

1.4.7.3 Hydrological Features

Hydrological features such as primary water sources (i.e., lakes, rivers, creeks, streams) and secondary water sources (i.e., intermittent streams and creeks, springs, marshes, swamps) would have helped supply plant and food resources to the surrounding area and are indicators of archaeological potential (per *Section 1.3.1* of the 2011 S&G). The East Humber River, Humber

River and their tributaries bisect the study area. Therefore, this feature contributes to establishing the archaeological potential of the study area.

1.4.8 Current Land Conditions

The study area is situated mainly within a rural setting of the Township of King and the suburban setting of Nobleton. The study area encompasses typical features associated with a suburban community (residential subdivisions, schools, churches and cemeteries, business plazas, local small businesses, grocery store, restaurants, parks and community centre, public library, post office, fire station, etc.). The centre of the community is intersected by King Road and Highway 27 which lead outward to the largely undeveloped rural areas, consisting of open agricultural fields, woodlots and several farm complexes. The East Humber River, Humber River and their tributaries also intersect the study area. The topography is gently rolling and gradually decreases from north to south with an elevation range of 203-289 metres above sea level.

The seven water and wastewater system servicing locations are primarily located in previously developed lands that have been subjected to numerous disturbances (i.e., roadway construction and improvements, roadside ditching, installation of buried utilities, existing regional infrastructure such as water production wells, etc.). However, portions of these system servicing locations remain undeveloped; this consists of grassed margins, agricultural fields, areas of overgrown vegetation and manicured yards.

1.4.9 Date of Fieldwork

A desktop review of field conditions within the seven water and wastewater system servicing locations using information from aerial imagery (1954 to 2019) was undertaken on June 18th and 19th, 2020.

A property inspection was carried out for the seven water and wastewater system servicing locations on June 29th, 2020 (*see Section 2.0 for further details*). The purpose of the property inspection is to identify and describe areas of high potential requiring additional archaeological research; identify and describe areas of no/low potential not warranting further archaeological concern; and to help gather information to formulate appropriate Stage 2 AA strategies.

1.5 Confirmation of Archaeological Potential

Based on the information gathered from the background research documented in the preceding sections, elevated archaeological potential has been provisionally established within the study area limits. Features contributing to archaeological potential are summarized in **Appendix B**. Specific review and assessment of conditions within the seven proposed water and wastewater system servicing locations will be addressed in **Section 3.0**.

2.0 PROPERTY INSPECTION

The property inspection was conducted in compliance with the standards set forth in *Section 1.2* of the *2011 S&G*. In accordance with *Section 1.2, Standard 2* of the *2011 S&G*, the weather and lighting conditions (average of 24°C with clear skies) during the Stage 1 property inspection permitted good visibility of all parts of the water and wastewater system servicing locations and were conducive to the identification of features of archaeological potential.

The property inspection involved a visual inspection only and did not include excavation or collection of archaeological resources. The inspection was carried out by random spot-checking features previously identified during the desktop review, reviewing the water and wastewater system servicing locations to gain first-hand knowledge of the area's geography, topography, and current condition, and to evaluate and map archaeological potential (per *Section 1.2, Standard 1* of the *2011 S&G*). In accordance with *Section 1.2, Standards 3-6* of the *2011 S&G*, the property inspection involved visual confirmation of the presence/absence of previously identified features of archaeological potential, identification of additional features of archaeological potential not visible on mapping, and the identification and documentation of features that would affect archaeological assessment strategies (e.g., recent land disturbances, overgrown vegetation, wet areas, steep slope, heavy soils, structures and built features, etc.).

The water and wastewater system servicing locations were inspected from publicly accessible lands only or where permission was granted to access private lands. Coverage was sufficient to identify the presence or absence of any features of archaeological potential, including disturbances and areas of low potential, on both the public and private lands, (per *Section 1.2, Standard 1* of the *2011 S&G*). The visibility and identification of all features of archaeological potential was not impacted by not accessing the private lands directly.

The results of the property inspection and location and orientation information associated with a selection of photographs taken in the field are illustrated within **Maps 13-27**. Photographic images of the system servicing locations are presented within **Appendix C**. An inventory of the documentary record generated in the field can be found within **Appendix D**.

3.0 ANALYSIS AND CONCLUSIONS

In combination with data gathered from the background research (*see Sections 1.3 and 1.4*), a desktop review of aerial imagery, and the property inspection (*see Section 2.0*), an evaluation of the established archaeological potential of the water and wastewater system servicing locations was performed. The results of this evaluation are presented in **Maps 13-28**.

3.1 Previous Archaeological Assessments

Lands within the water and wastewater system servicing location limits which have already been subjected to an archaeological assessment (A.M. Archaeological Associates, 2011; ASI, 2007b; Bluestone Research Inc., 2017; TRCA, 2007b), and deemed free of further archaeological concern are recommended to be exempt from further assessment (*see Section 1.4.6, Table 7*).

Previously assessed lands cover Existing Well 5 and Potential Well Site H, located at 12860 Highway 27 (*see Map 15*), part of the WRRF Outfall Route (*see Map 16*) and parts of the Forcemain Route (*see Maps 24-27*).

3.2 Identified Deep and Extensive Disturbances

The water and wastewater system servicing locations were evaluated for deep and extensive land alterations – commonly referred to as disturbances – that have severely impacted the integrity of any archaeological resources and indicate that archaeological potential has been removed. Per *Section 1.3.2* of the *2011 S&G*, these include, but are not limited to: quarrying, major landscaping involving grading below topsoil, building footprints, or sewage and infrastructure development.

It is clearly evident from a detailed review of aerial imagery as discussed in *Section 1.3.4.2*, that a large portion of the water and wastewater system servicing locations have been subjected to deep and extensive disturbances from the construction of regional infrastructure (such as water production wells, etc.), King Road, and former and existing intersecting roadways, driveways and parking areas, structures, and various roadway improvements (*see Maps 13, 16-27; Images 1-37*). The level of disturbances was confirmed during the visual property inspection. Documented disturbances within the system servicing locations include:

- Existing Well 2: existing production well #2, pumphouse and treatment structure, watermains, one manhole, two monitoring wells, a chlorine contact pipe, an asphalt driveway and drainage ditching (*see Map 13; Images 1-3*);
- Nobleton WRRF, Outfall Route and access road: subjected to grading and construction activities associated with the installation of a small pond by 1995 and the WRRF and outfall by 2009 (*see Maps 16-18; Images 4-5*);

- Forcemain Route: former and existing asphalt and gravel roadways (King Road and various other intersecting roadways, driveways, and parking areas), existing structures, shallow and deep roadside ditching, culverts, asphalt, gravel and paving stone shoulders, traffic barriers, concrete curbs and sidewalks, buried utilities, previous reconstruction activities tied to the improvements of the various roadways (*see Maps 18-27; Images 6-32*);
- Janet Avenue SPS: previously subjected to grading and construction activities associated with the original installation of the forcemain and Janet Avenue SPS facilities by 2009 (*see Map 27; Images 32-37*).

The construction of these features would have resulted in severe damage to the integrity of any archaeological resources which may have been present within their footprints and, as such, are exempt from Stage 2 survey.

3.3 Physical Features of No or Low Archaeological Potential

The water and wastewater system servicing locations were also evaluated for physical features of no or low archaeological potential. These usually include but are not limited to: permanently wet areas, exposed bedrock, and steep slopes (greater than 20°) except in locations likely to contain pictographs or petroglyphs, as per *Section 2.1, Standard 2.a* of the *2011 S&G*. Physical features of low or no archaeological potential documented within the system servicing locations include:

- Existing Well 2: steep slope and a tributary of the East Humber River (*see Map 13; Images 38-39*);
- Future Well Site F: small pond (*see Map 14*);
- Forcemain: tributaries of the East Humber River (*see Map 23*);
- Janet Avenue SPS: low-lying and wet terrain and steep slope associated with a tributary of the East Humber River (*see Map 27; Images 40-41*).

Due to the no to low archaeological potential classification of these features, all areas documented in this section are exempt from Stage 2 survey.

3.4 Identified Areas of Archaeological Potential

Portions of the water and wastewater system servicing locations that neither exhibit extensively disturbed conditions nor contain physical features of no or low archaeological potential are therefore considered to retain the established archaeological potential. Documented areas of archaeological potential within the system servicing locations include:

- Existing Well 2: manicured lawn dotted with trees (*see Map 13; Images 42-44*);
- Future Well Site F: agricultural field (*see Map 14; Images 45-46*);
- Forcemain Route: manicured lawn, areas of overgrown vegetation and grassed margins (*see Maps 20-25; Images 47-53*);

- Janet Avenue SPS: areas of overgrown vegetation (*see Map 27*).

Given the established potential to recover archaeological resources within these identified areas, a Stage 2 AA will be required. Actively or recently cultivated agricultural land must be subjected to pedestrian survey, in accordance with the standards outlined in *Section 2.1.1* of the *2011 S&G*. In areas where ploughing is not possible or viable due to the limitations of narrow (10 metres wide or less) linear survey corridors or to the presence of overgrown vegetation or existing infrastructure and landscaping, a Stage 2 test pit survey at five metre intervals must be performed, in accordance with the standards outlined in *Section 2.1.2* of the *2011 S&G*. Per *Section 2.1.2, Standard 1.f* of the *2011 S&G*, where at the time of fieldwork the lands within a narrow linear survey corridor meet the standards as laid out within *Section 2.1.1* for pedestrian survey land preparation, pedestrian survey must be carried out.

3.5 Cemetery

As per the *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33* no intrusive activity may occur within the limits of a cemetery without consent from the *Bereavement Authority of Ontario (BAO)*. The *Registrar's Directive: Authorization for Stages 2-4 Archaeological Fieldwork (Assessments and Investigations) on Cemetery Lands* (dated February 12, 2021) also requires that a Cemetery Investigation Authorization (CIA) be obtained by a professionally licensed archaeologist whenever Stages 2-4 archaeological investigations are contemplated within a cemetery or within lands adjacent to a cemetery where the boundaries cannot be conclusively determined based on records, maps and plans of the cemetery. The CIA will relieve the licenced archaeologist of the prohibition and liability related to the intentional disturbance of a human burial within a cemetery should such an incident occur.

There is one 19th century cemetery located within an area that will be impacted by the proposed upgrades associated with the Nobleton Water and Wastewater Class EA project: the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) (established ca. 1849) located at municipal addresses 6400 and 6406 King Road. This cemetery is considered a sensitive cultural resource of high archaeological potential. Nineteenth century historic cemeteries were not highly regulated, and often employed markers of little substance that have since disappeared. The possible absence of grave markers can result in inaccurate depictions of the recognized cemetery property limits. The 'sneaking' of burials near the property limits of cemeteries is also a phenomenon associated with early 19th century church burial grounds where the congregation influenced who was buried within the cemetery. Furthermore, the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) is also designated under *Part IV* of the *Ontario Heritage Act* according to by-law number 2009-109 in the Township of King.

To gain a better understanding of the land use history within and immediately adjacent to the Wesleyan Old Methodist Cemetery (Cemetery on the Hill), multiple resources and contacts were consulted to gather as much information as possible, including the cemetery operator and the *BAO*. The Township of King acts as the cemetery operator for the Wesleyan Old Methodist

Cemetery (Cemetery on the Hill). A buffer of 20 metres was established around the cemetery within the adjacent wastewater system servicing location (Forcemain Route) and lands within this area were evaluated as having no potential or potential for unmarked burials. The collected data, combined with an on-site cemetery property inspection, resulted in an assessment of the potential for unmarked burials within the swaths of land adjacent to the Wesleyan Old Methodist Cemetery (Cemetery on the Hill).

Given that cemetery requirements are ongoing and ever-changing at the *MHSTCI*, *Archeoworks Inc.* presented the collected data and results of the cemetery property inspection and sought guidance from the *MHSTCI* (*see Supplementary Document – Section 1.0*). This was done to ensure recommendations regarding cemetery investigations are in line with the most up-to-date advice to guarantee that additional requirements and all possible options are provided. Upon provision of the gathered information, the *MHSTCI* offered feedback regarding the proposed cemetery investigation recommendations for those swaths of lands adjacent to the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) that fall within a wastewater system servicing location within the study area (*see Supplementary Document – Section 2.0*). Guidance provided by the *MHSTCI* is presented below.

Wesleyan Old Methodist Cemetery (Cemetery on the Hill)

The *MHSTCI* agreed with the recommendation that further archaeological assessment to confirm the presence or absence of burials (Stage 2 AA followed by Stage 3 mechanical topsoil removal or construction monitoring) is required within ten metres of the currently-recognized cemetery property limits and that a Cemetery Investigation Authorization (CIA) issued by the *BAO* must be obtained prior to conducting any invasive archaeological fieldwork (i.e., Stage 2/3/4 investigations; construction monitoring) within the study area (*see Map 28*).

While there still exists the potential for unmarked burials immediately adjacent (within 10 metres) to the currently recognized boundaries of the cemetery due primarily to the uncertainty of exact burial locations and lack of mapping to confirm the historic cemetery boundaries, the farthest portions of the cemetery investigation area (i.e., greater than 10 metres) do not retain potential. Therefore, there is no potential to encounter unmarked burials and further cemetery investigation is not required in these areas (i.e., the 10-20 metre portions of the cemetery investigation area). Areas within 10 metres within the King Road ROW must be subjected to Stage 2 test pit survey followed by mechanical topsoil removal (MTR). Upon completion of the Stage 2 AA, and regardless of those results, Stage 3 MTR will start at the farthest extent of the manicured lawn (where conditions permit) and move towards the assumed cemetery boundaries. Where conditions are not feasible to carry out MTR (i.e., due to the presence of existing infrastructure such as buried utilities), construction monitoring by a licenced archaeological will occur instead within the adjacent wastewater system servicing location within the King Road ROW. Due to the sensitivity of potentially uncovering human remains in the King Road ROW, monitoring during construction must be under the control of a licensed archaeologist until no potential for human burials has been confirmed in a given area. If human remains and/or graves shafts are encountered, all work should cease and the *BAO* be consulted regarding next steps. Pending on what is uncovered, additional cemetery investigations may be required.

Detailed recommendations for further archaeological assessment and cemetery investigations required for the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) within the adjacent Forcemain Route, as deemed appropriate by the *MHSTCI*, are provided in **Section 4.0 – Recommendations 5-7**.

4.0 RECOMMENDATIONS

Considering the findings outlined within this report, the following recommendations are presented:

1. Lands that were subjected to previous archaeological assessments (A.M. Archaeological Associates, 2011; ASI, 2007b; Bluestone Research Inc., 2017; TRCA, 2007b) and deemed free of further archaeological concern are recommended to be exempt from further assessment.
2. All areas that were identified as having archaeological potential removed are exempt from requiring Stage 2 AA.
3. All areas that were identified as having no or low archaeological potential are exempt from requiring Stage 2 AA.
4. All areas identified as retaining archaeological potential must be subjected to a Stage 2 AA. These areas must be subjected to pedestrian or test pit survey at five-metre intervals in accordance with the standards set within *Sections 2.1.1 and 2.1.2* of the *2011 S&G*.
 - a. Where at the time of fieldwork the lands within a narrow (10 metres wide or less) linear survey corridor meet the standards as laid out within *Section 2.1.1* of the *2011 S&G* for pedestrian survey land preparation, pedestrian survey must be carried out (per *Section 2.1.2, Standard 1.f*).
5. As per the *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33*, no intrusive activity may occur within the limits of the Wesleyan Old Methodist Cemetery (Cemetery on the Hill), also designated under *Part IV* of the *Ontario Heritage Act* according to by-law 2009-109, without consent from the cemetery operator and the *Bereavement Authority of Ontario (BAO)*.
6. Lands within the 20-metre cemetery investigation area surrounding the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) that were identified as having no potential for unmarked burials are considered free of further cemetery investigations.
7. Should proposed construction impacts occur within the swaths of land adjacent to the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) identified as having potential for the recovery of unmarked burials, the following archaeological/cemetery investigations are required:
 - a. As there is the potential for the Wesleyan Old Methodist Cemetery (Cemetery on the Hill) to extend into a wastewater system servicing location (Forcemain Route), a Cemetery Investigation Authorization (CIA) issued by the *Bereavement Authority of Ontario (BAO)* is required and needs to be obtained prior to conducting any soil-intrusive work (e.g., Stage 2/3/4 investigations; construction monitoring).

- b. As there is the potential to encounter both deeply buried archaeological resources and for archaeological resources to be present near the surface, per *Section 2.1.7, Standard 2* of the *2011 S&G*, surface survey methods (Stage 2 test pit survey) must occur within the grassed areas adjacent to the cemetery prior to mechanical excavation.
 - c. Following the completion of the Stage 2 AA, regardless of the results, per *Section 2.2, Guideline 4* of the *2011 S&G*, and in accordance with the *Registrar's Directive: Authorization for Stages 2-4 Archaeological Fieldwork (Assessments and Investigations) on Cemetery Lands* (dated February 12, 2021), further cemetery investigations are required to determine the boundaries of a cemetery where records, maps and plans of the cemetery cannot confirm the existence and exact locations of burials within that cemetery. The recommendations for further cemetery investigations are as follows:
 - i. In accordance with *Section 2.1.7, Standard 3, Section 3.3.3, Standard 2, and Section 4.2.3* of the *2011 S&G*, a Stage 3 investigation consisting of mechanical topsoil removal (MTR) must be undertaken following the lands immediately adjacent to the current cemetery limits, where feasible, to confirm the presence or absence of deeply buried human remains. Mechanical excavation must employ a flat-edged bucket and should begin at the furthest extent from the cemetery that will be investigated and move inward towards the assumed cemetery limits. Unless human remains are encountered, mechanical stripping of topsoil is to reach sterile subsoil depths.
 - ii. Where mechanical topsoil removal is not feasible due to existing roadway infrastructure (i.e., buried utilities), these areas will require on-site monitoring by a licensed archaeologist during any construction or other soil disturbing activities per *Section 2.1.7, Standard 4* of the *2011 S&G*, to confirm the presence or absence of deeply buried human remains. Due to the sensitivity of potentially uncovering human remains, monitoring during construction must be carried out by a licenced archaeologist until no potential for human burials has been confirmed in a given area.
 - iii. Per *Section 2.1.7, Standard 4b* of the *2011 S&G*, in the event human remains and/or graves shafts are encountered during construction monitoring, all work must cease and the *BAO* be consulted regarding next steps.
8. Should construction activities associated with this project, including construction laydown areas, extend beyond the assessed limits, further archaeological investigation will be required prior to construction activities in order to minimize impacts to cultural heritage resources.

No construction activities shall take place within the study area, and specifically the water and wastewater system servicing locations, prior to the *MHSTCI* (Archaeology Programs Unit)

confirming in writing that all archaeological licensing and technical review requirements have been satisfied.

5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

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

6.0 BIBLIOGRAPHY AND SOURCES

Abler, T. S. and Tooker, E. (1978). The Seneca. In B.G. Trigger, (Ed.). *Volume 15: Northeast*. Washington: Smithsonian Institution, pp. 505-517.

A.F.B.Y. Archaeological and Heritage Consultants (2001). *Stage 1 & 2 Archaeological Assessment: Part of Lot 5, Concession 8, Town of Nobleton, King Township, Part 12 - Plan # 19T-88107* (CIF# 2001-057-012).

A. M. Archaeological Associates (2011). *The Stage 1 Archaeological Assessment for the Municipality Class EA of King Road from Highway 27 to Highway 400, (Lots 5 & 6, Con. 5-8), King Township, R.M. York* (PIF# P035-131-2011).

AMICK Consultants Limited (2008). *Report on the 2008 Stage 1-2 Archaeological Assessment of Part of Lot 13, Registered Plan 19 and Part of Block C Registered Plan M-777 Township of King, Regional Municipality of York* (PIF# P038-318-2008).

AMICK Consultants Limited (2012). *Stage 1-2 Archaeological Assessment of Nobleton Valley Inc., Part of Lot 8, Concession 9 (Geographic Township of King), Village of Nobleton, County of York* (PIF# P058-847-2012).

AMICK Consultants Limited (2016). *Stage 3 Archaeological Assessment of Sites ALGv-402 & ALGv-403, 13580 & 13582 Highway 27, Part of Lot 9, Concession 9 (Geographic Township of King), County of York, Nobleton, Ontario* (PIF#s P1024-0155-2016 & P1024-0156-2016).

AMICK Consultants Limited (2017). *REVISED Stage 1-2 Archaeological Assessment of 13582 & 13580 Highway 27, Part of Lot 9, Concession 9 (Geographic Township of King, County of York) Nobleton, York Region* (PIF# P1024-0109-2015).

AMICK Consultants Limited (2019). *Stage 1-2 Archaeological Assessment of Parts 1-6 of Plan of Survey of Lots 2, 3 & 4 and Part of Lot 1 Registered Plan 19, Township of King, Regional Municipality of York, Part of Lot 6, Concession 9 (Geographic Township of King, County of York), Township of King, Regional Municipality of York* (PIF# P038-0985-2018).

ASI | Archaeological and Cultural Heritage Services (2000). *Class Environmental Assessment Phases 3 and 4 Town of Nobleton Sewage Servicing Regional Municipality of York, Ontario* (CIF# 2000-016-084).

ASI | Archaeological and Cultural Heritage Services (2007a). *Stage 1 and 2 Archaeological Assessment of 5815 King Road Part of Lot 5, Concession 8 Geographic Township of King County of York Now the Community of Nobleton, Township of King, Regional Municipality of York* (CIF# P046-064-2006).

ASI | Archaeological and Cultural Heritage Services (2007b). *Stage 1 and 2 Archaeological Assessment of the Proposed Nobleton Development Part of Lot 4, Concession 9 Geographic Township of King, County of York Community of Nobleton, RM of York* (CIF#s P047-122, P047-248-2006).

Archeoworks Inc. (2005a). *Stage 1-2 Archaeological Assessment of a 186.63-Acre Parcel and Stage 3 Archaeological Assessment of: The Parker Site: ALGv-214 Part of Lots 7, 8 & 9, Concession 8 Town of Nobleton, RM of York, Ontario* (CIF#s P029-045, P029-081, P029-095).

Archeoworks Inc. (2005b). *Stage 4 Archaeological Mitigation of The Parker Site: ALGv-214 Lot 8, Concession 8 Town of Nobleton Regional Municipality of York Ontario* (CIF# P029-176).

Archeoworks Inc. (2006a). *Stage 1 Archaeological Assessment (AA) for: Water Resource Exploration for Water Supply and Storage in the Town of Nobleton Regional Municipality of York Ontario Class EA* (PIF# P029-291-2006).

Archeoworks Inc. (2006b). *Stage 1-2 Archaeological Assessment of: Subdivision Draft Plan Part of Lot 7, Concession 8 Town of Nobleton Township of King Regional Municipality of York Ontario* (CIF# P029-269-2006).

Archeoworks Inc. (2010). *Stage 1 Archaeological Assessment (AA) of: Proposed Watermain Routes and Storage Tower Locations Town of Nobleton Regional Municipality of York Ontario Class EA* (PIF# P029-386-2007).

Archeoworks Inc. (2012). *Stage 1 Archaeological Assessment for the: Proposed Tomlinson Gardens Development and Two Adjacent Parcels Within Part of Lot 6, Concession 9 In the former Geographic Township of King Historical County of York Now the Township of King Regional Municipality of York Ontario* (PIF# P334-158-2012).

Archeoworks Inc. (2013). *Stage 2 Archaeological Assessment for the: Proposed Tomlinson Gardens Development Within Part of Lot 6, Concession 9 In the former Geographic Township of King Historical County of York Now the Township of King Regional Municipality of York Ontario* (PIF# P334-197-2012).

Archeoworks Inc. (2014). *Stage 1-2 Archaeological Assessment for the: Draft Plan of Subdivision Re-Zoning Within Part of Lot 6, Concession 8 In the Geographic Township of King Historical County of York Now in the Township of King Regional Municipality of York Ontario* (PIF# P390-0119-2014).

Archeoworks Inc. (2018a). *Stage 1 Archaeological Assessment for the Proposed Subdivision Development of 13735 Highway 27 Within part of Lot 10, Concession 8 In the Geographic Township of King (South) Former County of York Now the Township of King Regional Municipality of York Ontario* (PIF# P029-0972-2018).

Archeoworks Inc. (2018b) *Stage 2 Archaeological Assessment for the Proposed Residential Subdivision Development of 13735 Highway 27 Within Part of Lot 10, Concession 8 In the Geographic Township of King (South) Former County of York Now in the Township of King Regional Municipality of York Ontario* (PIF# P029-1011-2018).

Archeoworks Inc. (2020) *Stage 3 Archaeological Assessment of the 13735 Hwy 27 H1 Site (ALGv-428) As Part of the Proposed Residential Subdivision Development of 13735 Highway 27 Within Part of Lot 10, Concession 8 In the Geographic Township of King (South) Former County of York Now in the Township of King Regional Municipality of York Ontario* (PIF# P439-0069-2019).

Bereavement Authority of Ontario (BAO) (2021). REGISTRAR'S DIRECTIVE *Authorization for Stages 2-4 Archaeological Fieldwork (Assessments and Investigations) on Cemetery Lands (updated as of February 12, 2021)*. Toronto: Bereavement Authority of Ontario.

Bluestone Research Inc. (2017). *Stage 1-2 Archaeological Assessment of the Proposed Via Moto Subdivision, former County of York, Part of Lot 6, Con 9. Township of King, Regional Municipality of York, Ontario* (PIF# P344-0164-2017).

Chapman, L. J. and Putnam, D. F. (1984). *Physiography of Southern Ontario. 3rd ed. Ontario Geological Survey, Special Volume 2*. Toronto: Ministry of Natural Resources.

Dawson, K. C. A. (1983). *Prehistory of Northern Ontario*. Thunder Bay, Ontario: Thunder Bay Historical Museum Society.

Department of Indian Affairs (1891). *Indian Treaties and Surrenders from 1680 to 1890*. Ottawa: Browns Chamberlin Printers.

Dodd, C. F., Poulton, D. R., Lennox, P. A., Smith, D. G., and Warrick, G. A. (1990). The Middle Ontario Iroquoian Stage. In C.J. Ellis and N. Ferris, (Eds.) *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 321-359.

Ellis, C. J. and Deller, D. B. (1990). Paleo-Indians. In C.J. Ellis and N. Ferris, (Eds.). *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 37-64.

Ellis, C. J., Kenyon, I. T., and Spence, M. W. (1990). The Archaic. In C.J. Ellis and N. Ferris, (Eds.). *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 65-124.

Ellis, C. J. (2013). Before Pottery: Paleoindian and Archaic Hunter-Gathers. In M.K. Munson and S.M. Jamieson, (Eds.) *Before Ontario: The Archaeology of a Province*. Montreal & Kingston, Ontario: McGill Queen's University Press.

Ferris, N. and Spence, M. W. (1995). The Woodland Traditions in Southern Ontario. *Revista de Arqueologia Americana*, (9), 83-138.

Ferris, N. (2013). Seeing Ontario's Past Archaeologically. M.K. Munson and S.M. Jamieson, (Eds.) *Before Ontario: The Archaeology of a Province*. Montreal & Kingston, Ontario: McGill Queen's University Press, pp. 3-20.

Fisher Archaeological Consulting (2009). *York Elevated Storage Tank Project - Nobleton Tank King Township, Regional Municipality of York (Archaeological Stage 1: Background Research, Stage 2: Assessment) – Final Report (CIF# P042-185-2009)*.

Fox, W. A. and Garrad, C. (2004). Hurons in an Algonquian land. *Ontario Archaeology*, 77(78), pp. 121-134.

Fox, W. A. (1990). The Middle Woodland to Late Woodland Transition. In C.J. Ellis and N. Ferris, (Eds.) *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 171-188.

Gagné, M. (2015). *Woodland Culture*. [Online]. Available at: <https://thecanadianencyclopedia.ca/article/woodland-culture> [Accessed 10 June 2020].

Gibson, M. M. (2006). *In the Footsteps of the Mississaugas*. Mississauga, Ontario: Mississauga Heritage Foundation.

Gillham, E. M. (1975). *Early Settlements of King Township, Ontario*. [Online]. Available at: <https://cdm22007.contentdm.oclc.org/digital/collection/p22007coll8/id/226410/rec/1> [Accessed 10 June 2020].

Government of Ontario (1990). *Ontario Heritage Act, R.S.O. 1990, c. O.18, amended 2019*. [Online]. Available at: <https://www.ontario.ca/laws/statute/90o18> [Accessed 02 November 2020].

Government of Ontario (2014). *First Nations and Treaties Map*. [Online]. Available at: <https://files.ontario.ca/firstnationsandtreaties.pdf> [Accessed 10 June 2020].

Government of Ontario (2019). *Map of Ontario Treaties and Reserves*. [Online]. Available at: <https://www.ontario.ca/page/map-ontario-treaties-and-reserves> [Accessed 10 June 2020].

Graveyard Junkie (2011). *St. Mary's Catholic Church & Cemetery, Nobleton*. [Online]. Available at: <https://lostcemeteries.blogspot.com/2011/04/st-marys-catholic-church-cemetery.html> [Accessed 10 June 2020].

- Hall, A. J. (2015). *Royal Proclamation of 1763*. [Online]. Available at: <https://www.thecanadianencyclopedia.ca/article/royal-proclamation-of-1763> [Accessed 10 June 2020].
- Hall, R. (2019). *Upper Canada*. [Online]. Available at: <https://www.thecanadianencyclopedia.ca/en/article/upper-canada> [Accessed 10 June 2020].
- Hathaway, E. (1930). The River Credit and the Mississaugas. In *Ontario Historical Society Papers and Records Vol. xxvi*. Toronto: Ontario Historical Society.
- Heidenreich, C. E. (1978). Huron. In B.G. Trigger, (Ed.). *Volume 15: Northeast*. Washington: Smithsonian Institution, pp. 368-388
- Hessel, P. (1993) *The Algonkin Nation – The Algonkins of the Ottawa Valley: An Historical Outline*. Arnprior, Ontario: Kichesippi Books.
- Jaenen, C. J. (2013). *Treaty of Paris 1763*. [Online]. Available at: <https://www.thecanadianencyclopedia.ca/en/article/treaty-of-paris-1763> [Accessed 10 June 2020].
- Jaenen, C. J. (2014). *Treaty of Paris 1783*. [Online]. Available at: <https://www.thecanadianencyclopedia.ca/en/article/treaty-of-paris-1783> [Accessed 10 June 2020].
- Johnston, D. (2004). *Connecting People to Place: Great Lakes Aboriginal History in Cultural Context*. [Online]. Available at: http://www.attorneygeneral.jus.gov.on.ca/inquiries/ipperwash/transcripts/pdf/P1_Tab_1.pdf [Accessed 10 June 2020].
- McMillan, A. D. and Yellowhorn, E. (2004). *First People in Canada*. Vancouver, B.C.: Douglas & McIntyre.
- Migizi, G. and Kapyrka, J. (2015). *Michi Saagiig Historical/Background Context*. Unpublished manuscript courtesy of Gitiga Migizi and Dr. Julie Kapyrka of Curve Lake First Nation.
- Mika, N. and Mika, H. (1983). *Places in Ontario – Their Name Origins and History: Part II N-Z*. Belleville, Ontario: Mika Publishing Company.
- Mississauga of the Credit First Nation (MCFN) (2017a). *Mississaugas of the Credit First Nations Land Cessions 1781-1820 and Rouge Tract Claim, 2015*. [Online]. Available at: <http://mncfn.ca/wp-content/uploads/2019/11/Map-Land-Cessions-and-Rouge-Tract-Claim.jpg> [Accessed 10 June 2020].
- Mississauga of the Credit First Nation (MCFN) (2017b). *The Toronto Purchase Treaty No. 13 (1805)*. [Online]. Available at: <http://mncfn.ca/torontopurchase/> [Accessed 10 June 2020].

Mulvany, C. P. and Adam, G. M. (1885). *History of Toronto and County of York, Ontario: containing an outline of the history of the Dominion of Canada, a history of the city of Toronto and the county of York, with the townships, towns, villages, churches, schools; general and local statistics; biographical sketches, etc., etc. Volume 1.* [Online]. Available at: <https://archive.org/details/historyyork01unknuoft/page/n6> [Accessed 10 June 2020].

Museum of Ontario Archaeology (1994). *Archaeological Assessments of Draft Plans of Subdivisions 19T-88107 & 19T-92003, Nobleton, King Township, York Region* (CIF# 94-009).

Nobleton Tweedsmuir History (2015). *Book 5.* [Online]. Available at: <http://www.kinglibrary.ca/OCR/Nobleton%20Tweedsmuir%20History/Book%205/> [Accessed 10 June 2020].

Nobleton United Church (2020). *Our History.* [Online]. Available at: http://www.nobletonunitedchurch.com/Nobleton_United/Our_History.html [Accessed 10 June 2020].

Ontario Agricultural College (1954). *Soil Map of York County, Soil Survey Report No. 19.* Guelph: Soil Research Institute.

Ontario Genealogical Society (OGS) (1988). *St. Mary's Roman Catholic Church Cemetery – Cemetery Transcript.* Richmond Hill, Ontario: Ontario Genealogical Society, Toronto Branch.

Ontario Genealogical Society (OGS) (1992a). *Cemetery on the Hill (Nobleton) – Cemetery Transcript.* Richmond Hill, Ontario: Ontario Genealogical Society, Toronto Branch.

Ontario Genealogical Society (OGS) (1992b). *Chamberlain Burying Ground – Cemetery Transcript.* Richmond Hill, Ontario: Ontario Genealogical Society, Toronto Branch.

Ontario Genealogical Society (OGS) (1998). *Nobleton Community Cemetery – Cemetery Transcript.* Richmond Hill, Ontario: Ontario Genealogical Society, Toronto Branch.

Ontario Heritage Trust (OHT) (2020). *Plaque Database.* [Online]. Available at: <https://www.heritagetrust.on.ca/en/index.php/online-plaque-guide> [Accessed 10 June 2020].

Ontario Historical Plaques (2019). *Plaque Map.* [Online]. Available at: http://www.ontarioplaques.com/Menu_Map.html [Accessed 10 June 2020].

Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) (2011). *Standards and Guidelines for Consultant Archaeologists.* Toronto: Ministry of Heritage, Sport, Tourism and Culture Industries.

Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) (2020a). *List of Heritage Conservation Districts.* [Online]. Available at:

http://www.mtc.gov.on.ca/en/heritage/heritage_conserving_list.shtml [Accessed 10 June 2020].

Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) (2020b). *Sites within a One Kilometre Radius of the Study Area*, provided from the Ontario Archaeological Sites Database, 09 June 2020.

Pavilons, M. (N.D.) The New Chapter for Historic St. Mary's Church in King. *MOSAIC Magazine, Arts Society King*, p.7.

Ramsden, P. G. (1990). The Hurons: Archaeology and Culture History. In C.J. Ellis and N. Ferris, (Eds.) *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 361-384.

Regional Municipality of York (2016). *The Regional Municipality of York Water and Wastewater Master Plan*. [Online]. Available at:
<https://www.york.ca/wps/wcm/connect/yorkpublic/9602fc09-22ec-4202-8ce6-f2287a7b1aee/York+Region+Water+and+Wastewater+Master+Plan+2016pdf.pdf?MOD=AJPERES&CVID=mu89USL> [Accessed 16 June 2020].

Robinson, P. J. (1965). *Toronto during the French Regime: 1615-1793*. Toronto: University of Toronto Press.

Salter, B. (2015). St. Mary's Church. *MOSAIC Magazine, Arts Society King*, p.23.

Schmalz, P. S. (1991). *The Ojibwa of Southern Ontario*. Toronto: University of Toronto Press.

Smith, D. B. (2013). *Sacred Feathers: The Reverend Peter Jones (Kahkewaquonaby) and the Mississauga Indians*. Toronto: University of Toronto Press.

Smith, W. H. (1846). *Smith's Canadian Gazetteer; comprising Statistical and General Information Respecting All Parts of the Upper Province, or Canada West*. [Online]. Available at:
<https://archive.org/details/smithscanadianga00smitrich/page/n4/mode/2up> [Accessed 10 June 2020].

Spence, M. W., Pihl, R. H., and Murphy, C. R. (1990). Cultural Complexes of the Early and Middle Woodland Periods. In C.J. Ellis and N. Ferris, (Eds.) *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 125-169.

Surtees, R. J. (1986). *Treaty Research Report: The Williams Treaties*. [Online]. Available at
http://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/traw_1100100029001_eng.pdf [Accessed 10 June 2020].

Surtees, R. J. (1994). Land Cessions, 1763-1830. In E.S. Rogers and D.B. Smith, (Eds.). *Aboriginal Ontario: Historical Perspectives on the First Nations*. Toronto, Ontario: Dundurn Press Limited, pp. 92-121.

Sutherland, S. R. J. (2014). *Jay's Treaty*. [Online]. Available at: <https://www.thecanadianencyclopedia.ca/en/article/jays-treaty> [Accessed 10 June 2020].

Templeton, L. (2020a). Email to licensee of ALGw-33 & ALGw-34, re: Report Request: Nobleton, 10 June 2020.

The Archaeologists Inc. (2014a). *Stage 1&2 Archaeological Assessment of 13650 Highway 27, Part of Lot 10, Concession 9, Geographic Township of King Now the Town of Nobleton, Regional Municipality of York, Ontario* (PIF# P052-436-2013).

The Archaeologists Inc. (2014b). *Stage 3 Site-Specific Archaeological Assessment of Site ALGv-382, Part of Lot 10, Concession 9, Geographic Township of King Now the Town of Nobleton, Regional Municipality of York, Ontario* (PIF# P052-0532-2013).

The Archaeologists Inc. (2017a). *Stage 4 Excavation of Site ALGv-382, Part of Lot 10, Concession 9, Geographic Township of King Now the Town of Nobleton, Regional Municipality of York, Ontario* (PIF# P052-0610-2015).

The Archaeologists Inc. (2017b). *Stage 1 & 2 Archaeological Assessment for 12485 Concession Road 10, Part of Lot 2, Concession 9, (Geographical Township of King) Town of King, Regional Municipality of York* (PIF# P052-0694-2016).

The Archaeologists Inc. (2018a). *Stage 3 Site-Specific Archaeological Assessment of Site ALGv-411, Part of Lot 2, Concession 9, (Geographical Township of King) Town of King, Regional Municipality of York* (PIF# P052-0749-2016).

The Archaeologists Inc. (2018b). *Stage 4 Excavation of Site ALGv-411, Part of Lot 2, Concession 9, (Geographical Township of King), Town of King, Regional Municipality of York* (PIF# P052-0758-2016).

The Corporation of the Township of King (2009a). *By-Law Number 2009-109*. [Online]. Available at: <https://king.civicweb.net/document/22503> [Accessed 10 June 2020].

The Corporation of the Township of King (2009b). *By-Law Number 2009-97*. [Online]. Available at: <https://king.civicweb.net/document/22491> [Accessed 10 June 2020].

The Corporation of the Township of King (2009c). *By-Law Number 2009-104*. [Online]. Available at: <https://king.civicweb.net/document/22498> [Accessed 17 June 2020].

This Land Archaeology Inc. (2013). *Revised Report on the Stage 3 Archaeological Assessment of Maidenstone Developments Inc.'s Land in Nobleton, The Hambly Site (AIGv-221)* (PIF# P059-370-2012).

This Land Archaeology Inc. (2018). *Revised Final Excavation Report on the Stage 4 Salvage Excavations of the Hambly Site (AIGv-221) In Nobleton, Ontario* (PIF# P244-058-2013).

Toronto and Region Conservation Authority (TRCA) (1988a). *AIGw-33 Site Form*. On file with the Ministry of Heritage, Sport, Tourism and Culture Industries.

Toronto and Region Conservation Authority (TRCA) (1988b). *AIGw-34 Site Form*. On file with the Ministry of Heritage, Sport, Tourism and Culture Industries.

Toronto and Region Conservation Authority (TRCA) (2007a). *Rouge River State of the Watershed Report*. [Online]. Available at: <http://www.trca.on.ca/dotAsset/37769.pdf> [Accessed 10 June 2020].

Toronto and Region Conservation Authority (TRCA) (2007b). *Archaeological Stage 1-2 Assessment of the Nobleton Sewer and Outfall Project, Lot 2,3 and 4, Concession 10 WYS, King Township, York Region; KT-05-001* (CIF# P019-056).

Toronto and Region Conservation Authority (TRCA) (2011). *Archaeological Assessment of TRCA Property in King Township, York Region (Stages 1-2), Slokker Property Inventory and Noble Ridge Fill Project, Lots 9 and 10, Concession VIII Historic King Township, York County* (PIF#s P019-131-2008, P019-086-2007).

Toronto and Region Conservation Authority (TRCA) (2012a). *Archaeological Assessment in the Town of Nobleton, York Region (Stages 1-2), Trail at the Noble Ridge SWM Pond, Lots 8 and 9, Concession VIII, Historic King Township, York County, HRW-09-008* (PIF# P019-139-2009).

Toronto and Region Conservation Authority (TRCA) (2012b). *Archaeological Assessment (Stage 1-2) in the Town of Nobleton, Noble Ridge Foundations at the Slokker Property, Lot 9, Concession VIII, Historic King Township, York County, HRW-10-001* (PIF# P303-059-2010).

Toronto and Region Conservation Authority (TRCA) (2018). *Stage 3 Archaeological Monitoring Slokker Parking Lot Monitoring, Lot 10, Concession 8, Geographic Township of King, Historic York County in the Township of King, Regional Municipality of York* (PIF# P303-0514-2018).

Township of King (2005). *Official Plan: Nobleton – Schedule A: Land Use Plan*. [Online]. Available at: <http://www.king.ca/Government/Departments/Planning/Official%20Plan%20Documents/Documents/Schedule%20A%20-%20Land%20Use%20Plan.pdf> [Accessed 11 June 2020].

Township of King (2013). *Heritage Sites*. [Online]. Available at:
<http://www.king.ca/Government/Departments/Planning/Pages/Heritage-Sites.aspx> [Accessed 10 June 2020].

Township of King (2016). *History & Heritage*. [Online]. Available at:
<https://web.archive.org/web/20160405041340/http://www.king.ca/Visitors/HistoryandHeritage/Pages/default.aspx> [Accessed 10 June 2020].

Township of King Heritage Committee (2008). *Heritage Map*. [Online]. Available at:
<http://www.king.ca/Government/Departments/Planning/Documents/Heritage%20Properties%20Map.pdf> [Accessed 10 June 2020].

Trigger, B. G. (1994). The Original Iroquoians: Huron, Petun and Neutral. In E.S. Rogers and D.B. Smith, (Eds.). *Aboriginal Ontario: Historical Perspectives on the First Nations*. Toronto, Ontario: Dundurn Press Limited, pp. 41-63.

Warrick, G. A. (2000). The Precontact Iroquoian Occupation of Southern Ontario. In *Journal of World Prehistory*, 14(4), pp. 415-466.

Warrick, G. (2008). *A Population History of the Huron-Petun, A.D. 500-1650*. New York: Cambridge University Press.

Williamson, R. F. (1990). The Early Iroquoian Period of Southern Ontario. In C.J. Ellis and N. Ferris, (Eds.). *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 291-320.

Williamson, R. F. (2013). The Woodland Period, 900 BCE to 1700 CE. In M.K. Munson and S.M. Jamieson, (Eds.). *Before Ontario: The Archaeology of a Province*. Montreal & Kingston, Ontario: McGill Queen's University Press.

Wright, J. V. (1994). Before European Contact. In E.S. Rogers and D.B. Smith, (Eds.). *Aboriginal Ontario: Historical Perspectives on the First Nations*. Toronto, Ontario: Dundurn Press Limited, pp. 21-40.

Wright, J. V. (1999). *A History of the Native People of Canada: Volume II (1,000B.C. – A.D. 500)*. Hull, Quebec: Museum of Civilization.

MAP SOURCES:

CANADIAN COUNTY ATLAS DIGITAL PROJECT, RARE BOOKS AND SPECIAL COLLECTIONS, MCGILL UNIVERSITY LIBRARY, MONTREAL - The Canadian County Digital Atlas Project (McGill University, 2001)

- Miles & Co. (1878). *Illustrated Historical Atlas of the County of York, Ont.* [Online]. Available at: <https://digital.library.mcgill.ca/countyatlas/searchmapframes.php> [Accessed 10 June 2020].

NATURAL RESOURCES CANADA – TOPORAMA

- Natural Resources Canada (2013). *Atlas of Canada – Toporama: Bolton 030M13.* [Online]. Available at: <http://atlas.gc.ca/toporama/en/index.html> [Accessed 04 June 2020].

ONTARIO COUNCIL OF UNIVERSITY LIBRARIES, Historical Topographic Map Digitization Project

- Department of Militia and Defence (1914). *Topographic Map, Ontario, Bolton Sheet No.59,* [Digital]. <https://ocul.on.ca/topomaps/collection/> (16 June 2020).
- Department of National Defence (1940). *Topographic Map, Ontario, Bolton Sheet No. 030M13* original survey 1914; reprinted 1940 [Digital]. <https://ocul.on.ca/topomaps/collection/> (16 June 2020).

REGIONAL MUNICIPALITY OF YORK

- Regional Municipality of York (2020a). *Archaeological Potential Layer.* [Online]. Available at: <https://ww6.yorkmaps.ca/Html5Viewer24/Index.html?configBase=https://ww6.yorkmaps.ca/Geocortex/Essentials/Essentials43/REST/sites/LandInformation/viewers/YorkMaps/virtualdirectory/Resources/Config/Default> [Accessed 10 June 2020].
- Regional Municipality of York (2020b). *1954 Orthophotograph.* [Online]. Available at: <https://ww6.yorkmaps.ca/Html5Viewer24/Index.html?configBase=https://ww6.yorkmaps.ca/Geocortex/Essentials/Essentials43/REST/sites/CommunityServices/viewers/YorkMaps/virtualdirectory/Resources/Config/Default> [Accessed 16 June 2020].
- Regional Municipality of York (2020c). *1970 Orthophotograph.* [Online]. Available at: <https://ww6.yorkmaps.ca/Html5Viewer24/Index.html?configBase=https://ww6.yorkmaps.ca/Geocortex/Essentials/Essentials43/REST/sites/CommunityServices/viewers/YorkMaps/virtualdirectory/Resources/Config/Default> [Accessed 16 June 2020].
- Regional Municipality of York (2020d). *1988 Orthophotograph.* [Online]. Available at: <https://ww6.yorkmaps.ca/Html5Viewer24/Index.html?configBase=https://ww6.yorkmaps.ca/Geocortex/Essentials/Essentials43/REST/sites/CommunityServices/viewers/YorkMaps/virtualdirectory/Resources/Config/Default> [Accessed 16 June 2020].
- Regional Municipality of York (2020e). *2009 Orthophotograph.* [Online]. Available at: <https://ww6.yorkmaps.ca/Html5Viewer24/Index.html?configBase=https://ww6.yorkmaps.ca/Geocortex/Essentials/Essentials43/REST/sites/CommunityServices/viewers/YorkMaps/virtualdirectory/Resources/Config/Default> [Accessed 16 June 2020].
- Regional Municipality of York (2020f). *2019 Orthophotograph.* [Online]. Available at: <https://ww6.yorkmaps.ca/Html5Viewer24/Index.html?configBase=https://ww6.yorkmaps.ca/Geocortex/Essentials/Essentials43/REST/sites/CommunityServices/viewers/YorkMaps/virtualdirectory/Resources/Config/Default>

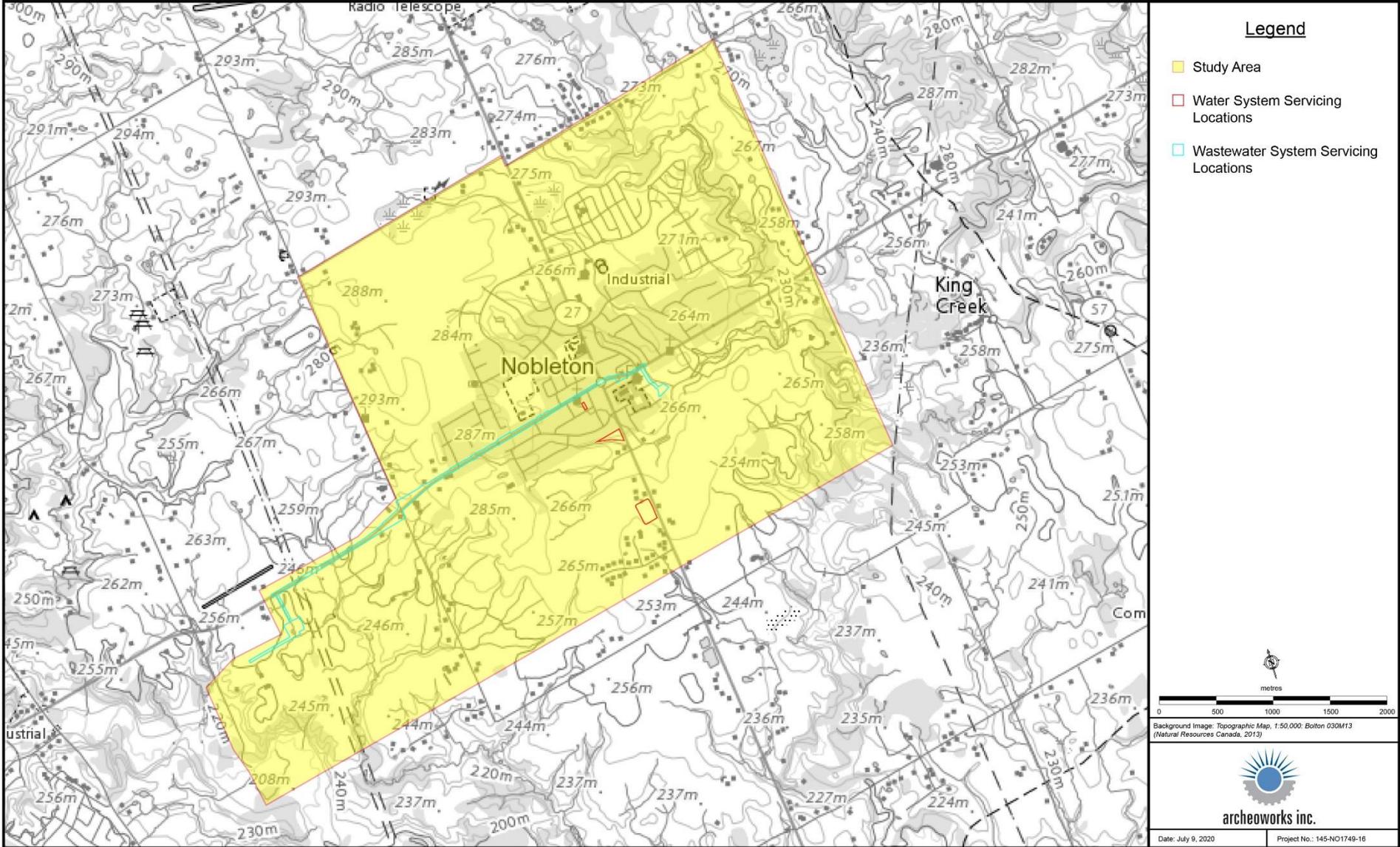
ca/Geocortex/Essentials/Essentials43/REST/sites/CommunityServices/viewers/YorkMaps/virtualdirectory/Resources/Config/Default [Accessed 16 June 2020].

**UNIVERSITY OF TORONTO MAP & DATA LIBRARY and the ONTARIO HISTORICAL COUNTY
MAPS PROJECT (OHCMP, 2019)**

- G. R. Tremaine (1860). *Map of the County of York, Canada West*. [Online]. Available at: <http://maps.library.utoronto.ca/hgis/countymaps/maps.html> [Accessed 10 June 2020].

APPENDICES

APPENDIX A: MAPS

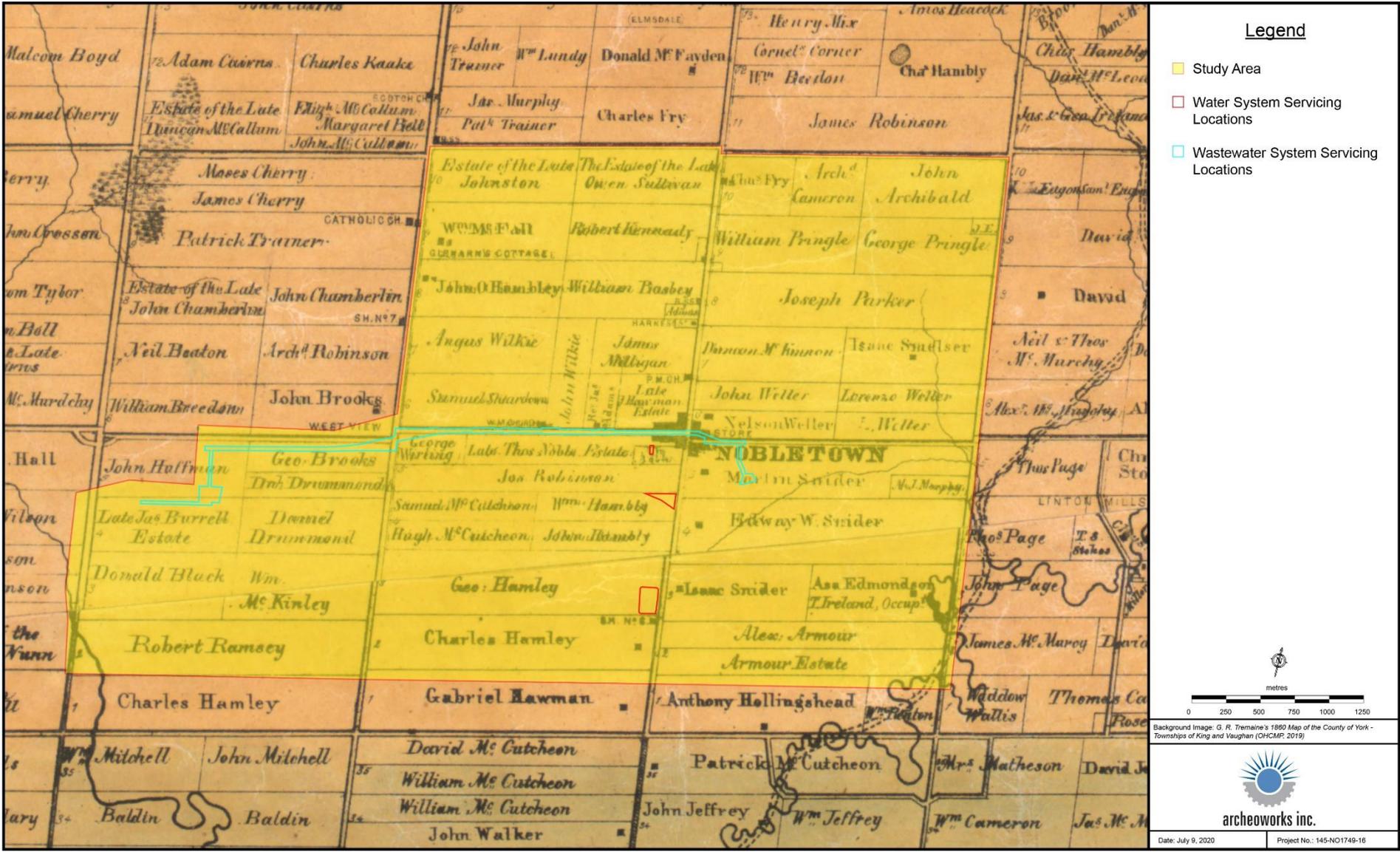


Map 1: Topographic Map, 1:50,000, Bolton 030M13 (Natural Resources Canada, 2013) identifying the Stage 1 AA study area.



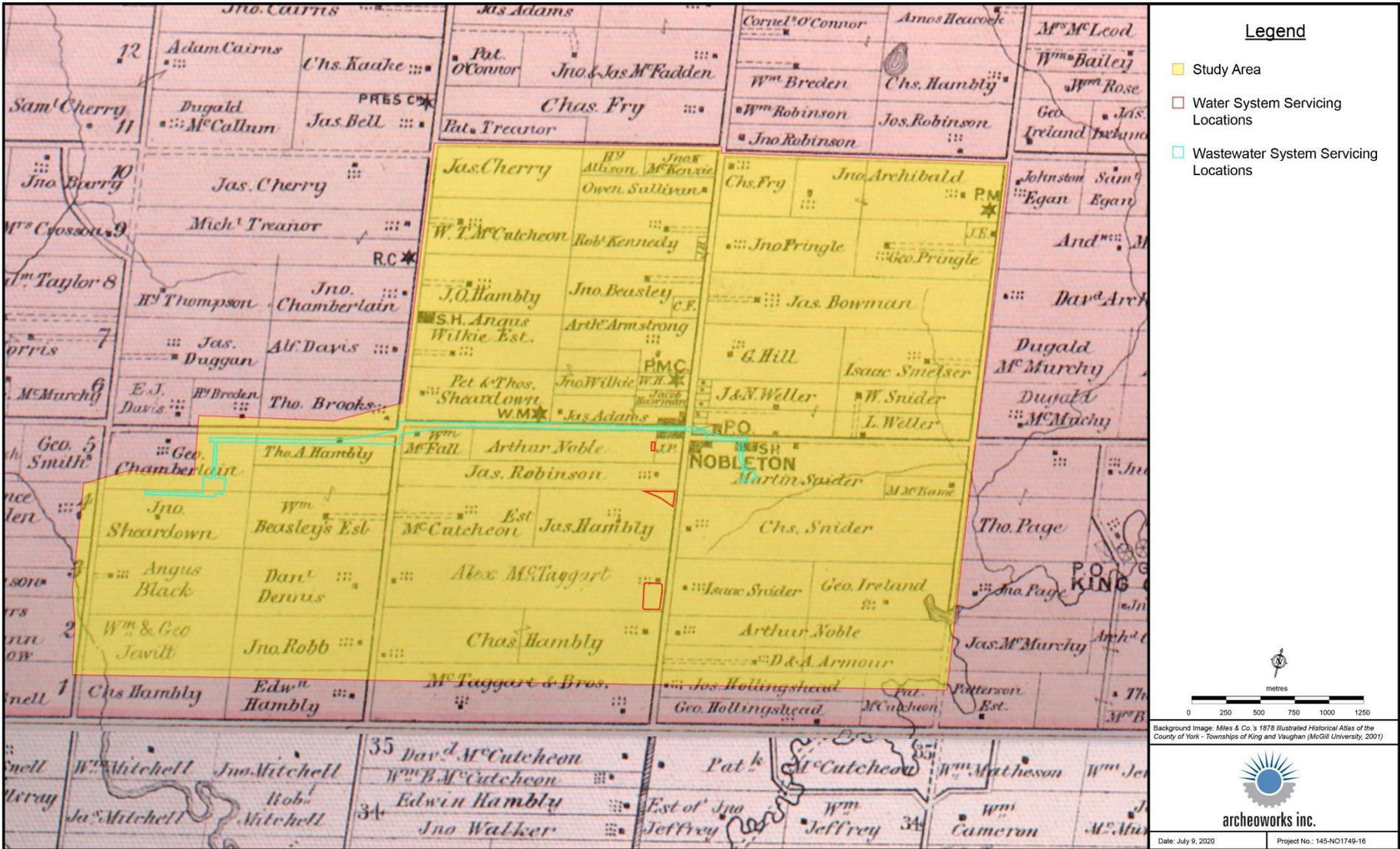
Map 2: Identifying areas of archaeological potential within the Stage 1 AA study area according to the York Region AMP (Regional Municipality of York, 2020a).

STAGE 1 AA FOR THE NOBLETON WATER AND WASTEWATER MUNICIPAL CLASS EA
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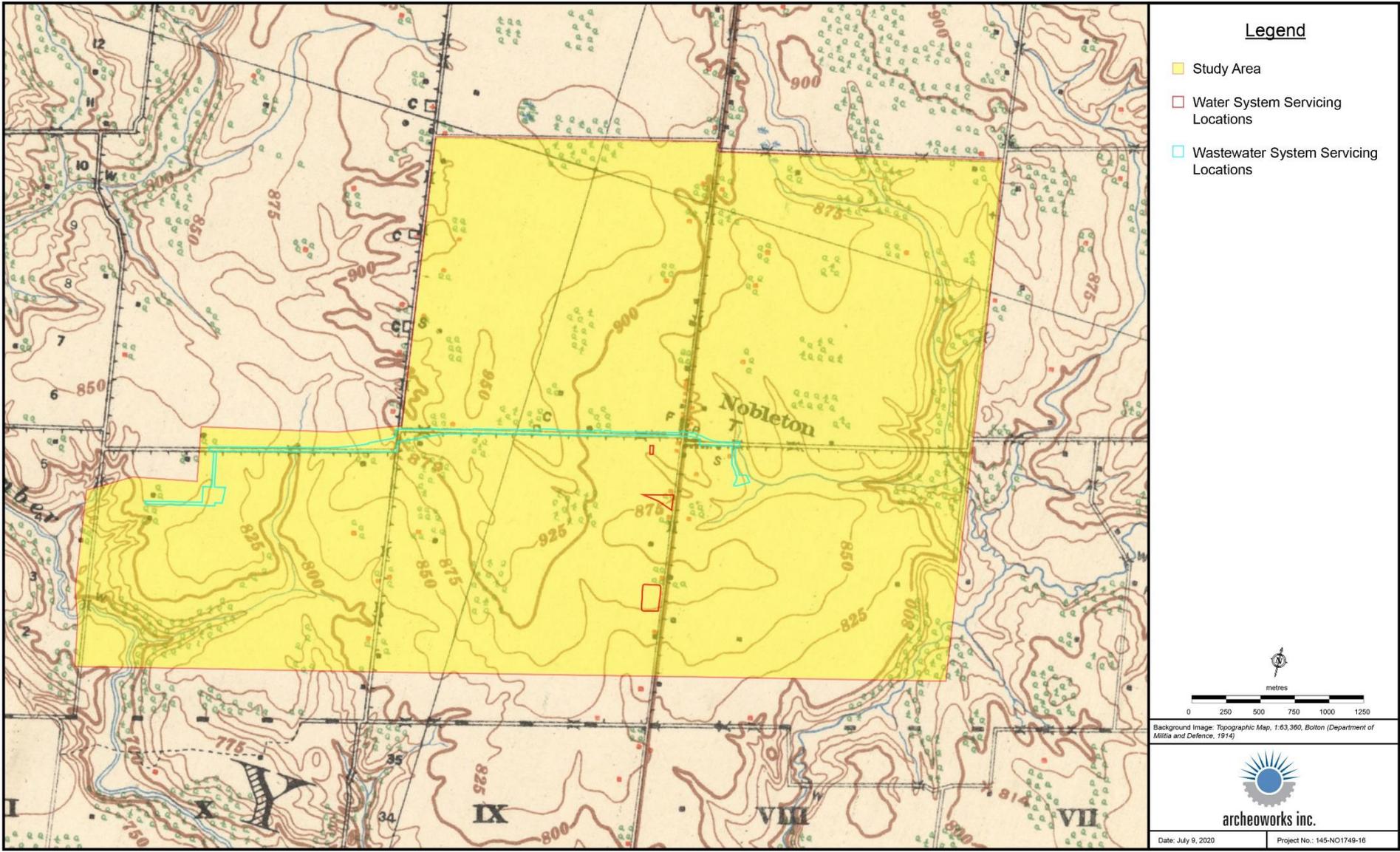
Map 3: Stage 1 AA study area within G. R. Tremaine's 1860 Map of the County of York – Townships of King and Vaughan (OHCMP, 2019).

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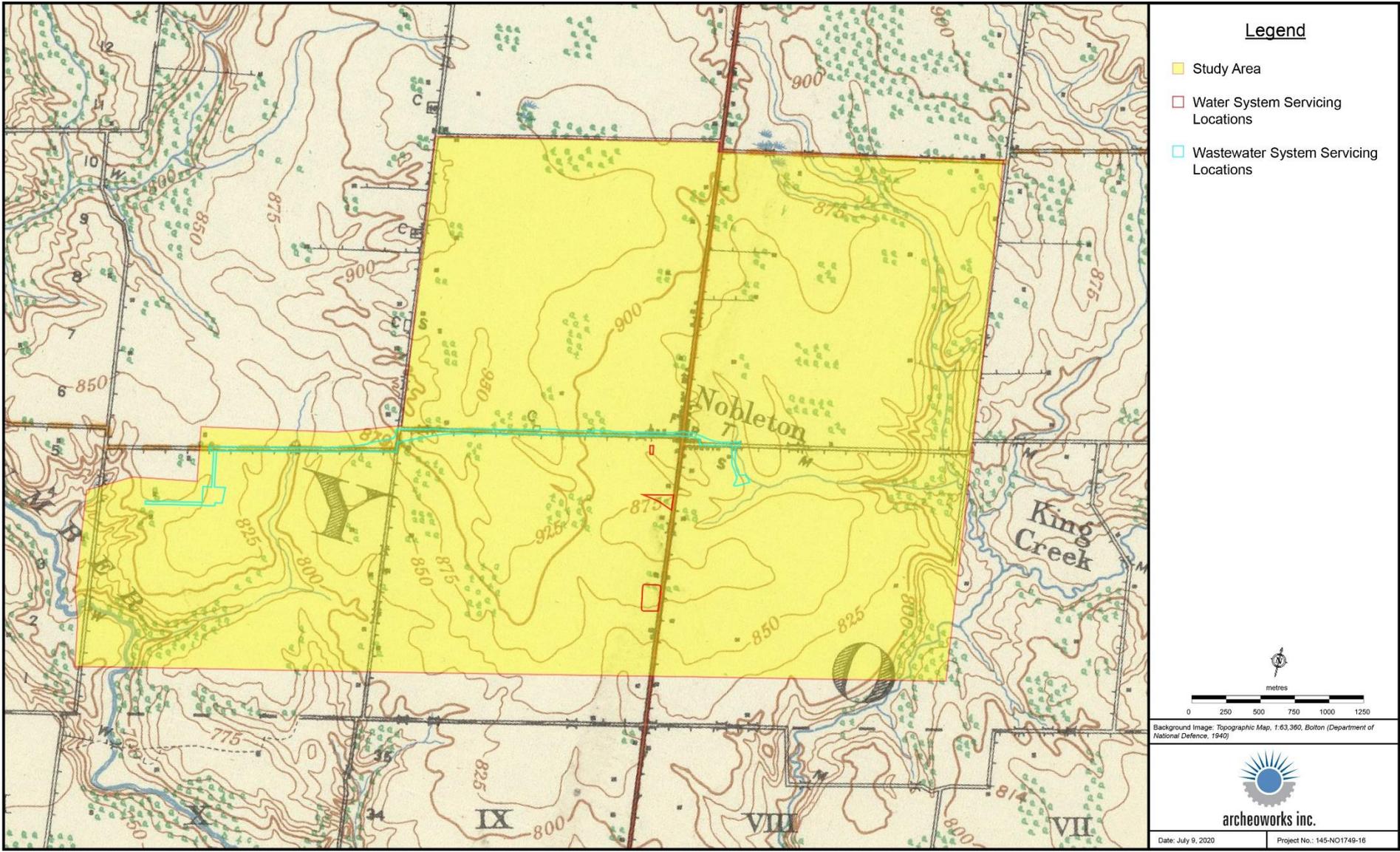
Map 4: Stage 1 AA study area within Miles & Co.'s 1878 Illustrated Historical Atlas of the County of York – Townships of King and Vaughan (McGill University, 2001).

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Map 5: Stage 1 AA study area within a 1914 Topographic Map (Department of Militia and Defence, 1914).

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Map 6: Stage 1 AA study area within a 1940 Topographic Map (Department of National Defence, 1940).

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Map 7: Stage 1 AA study area within a 1954 orthophotograph (Regional Municipality of York, 2020b).

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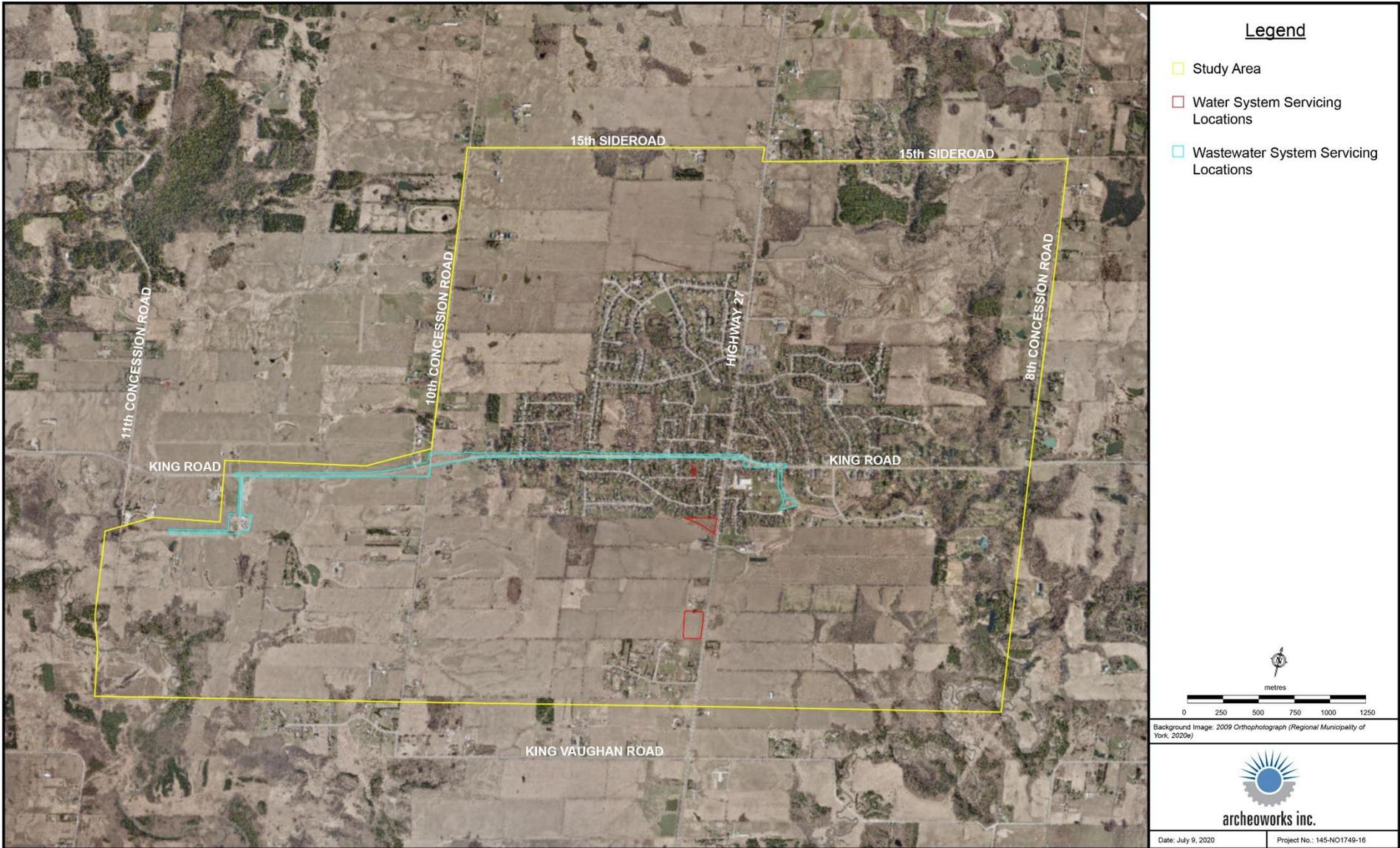
Map 8: Stage 1 AA study area within a 1970 orthophotograph (Regional Municipality of York, 2020c).

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Map 9: Stage 1 AA study area within a 1988 orthophotograph (Regional Municipality of York, 2020d).

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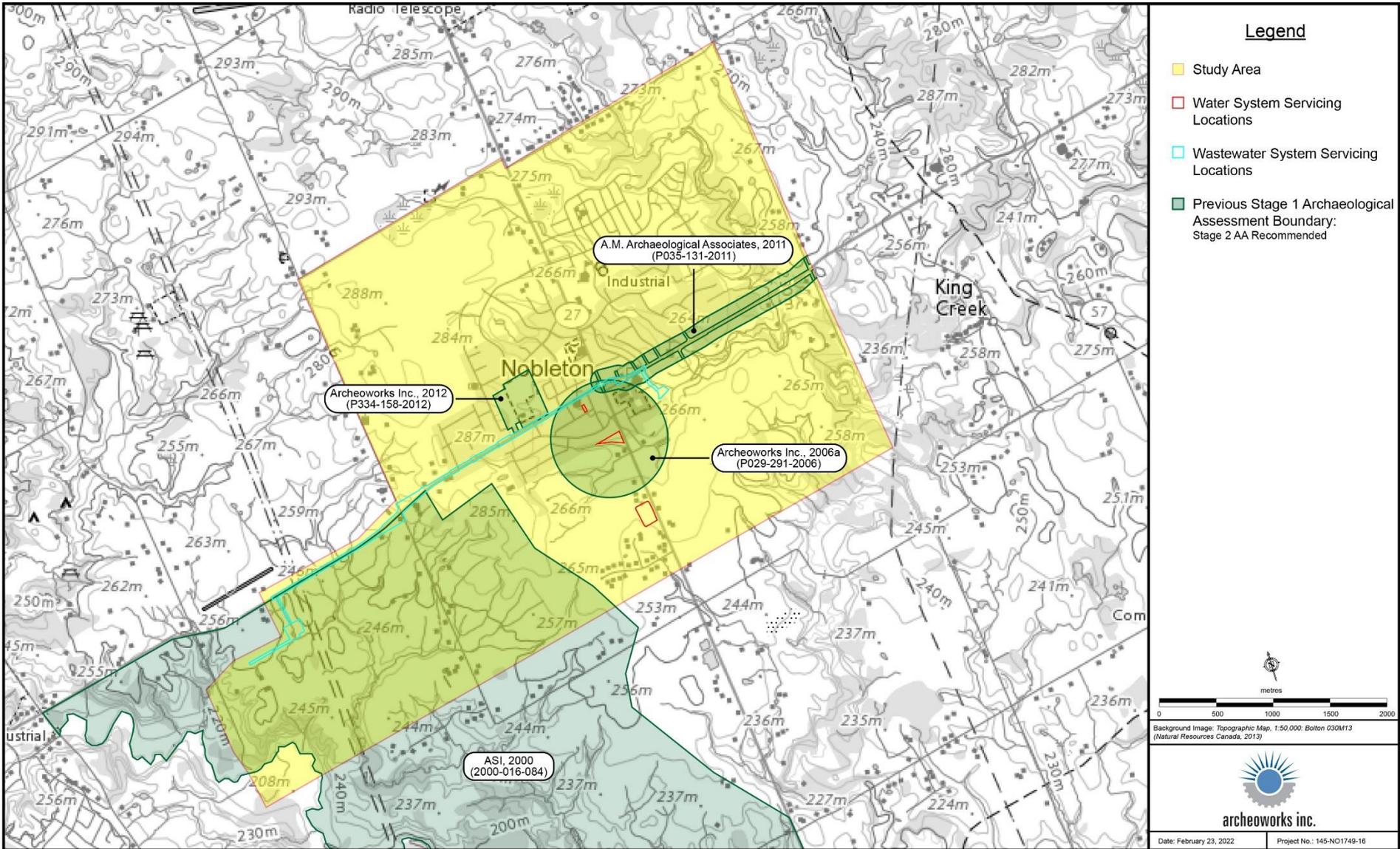
Map 10: Stage 1 AA study area within a 2009 orthophotograph (Regional Municipality of York, 2020e).

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Map 11: Stage 1 AA study area within a 2019 orthophotograph (Regional Municipality of York, 2020f).

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Map 12: Locations of previous Stage 1 AAs recommending Stage 2 AA within parts of the water and wastewater system servicing locations.

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Map 13: Stage 1 AA results – Existing Well 2.

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Map 14: Stage 1 AA results – Potential Well Site F.

STAGE 1 AA FOR THE NOBLETON WATER AND WASTEWATER MUNICIPAL CLASS EA
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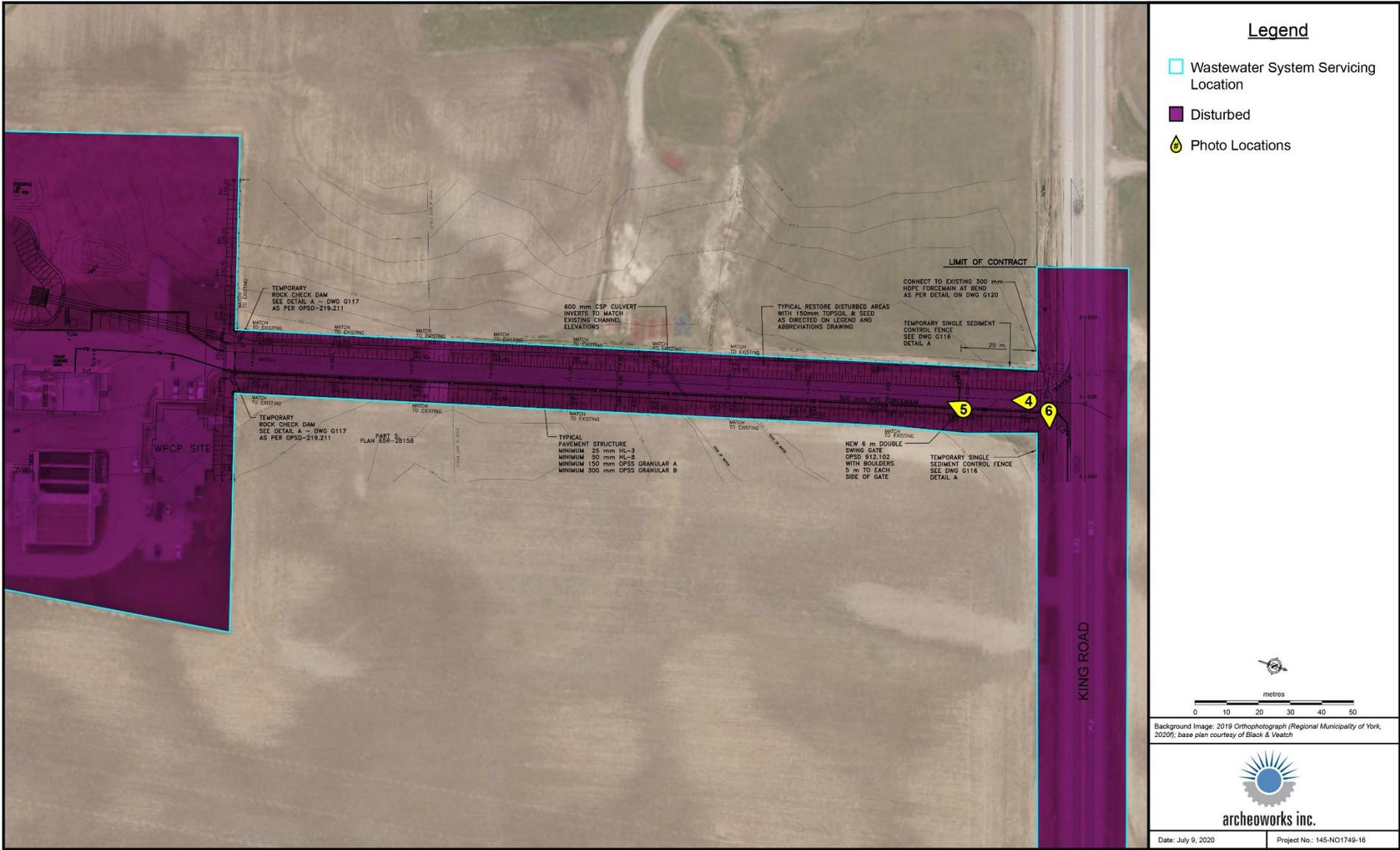
Map 15: Stage 1 AA results – Existing Well 5 and Potential Well Site H.

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Map 16: Stage 1 AA results – Nobleton WRRF Outfall Route to manhole 113.

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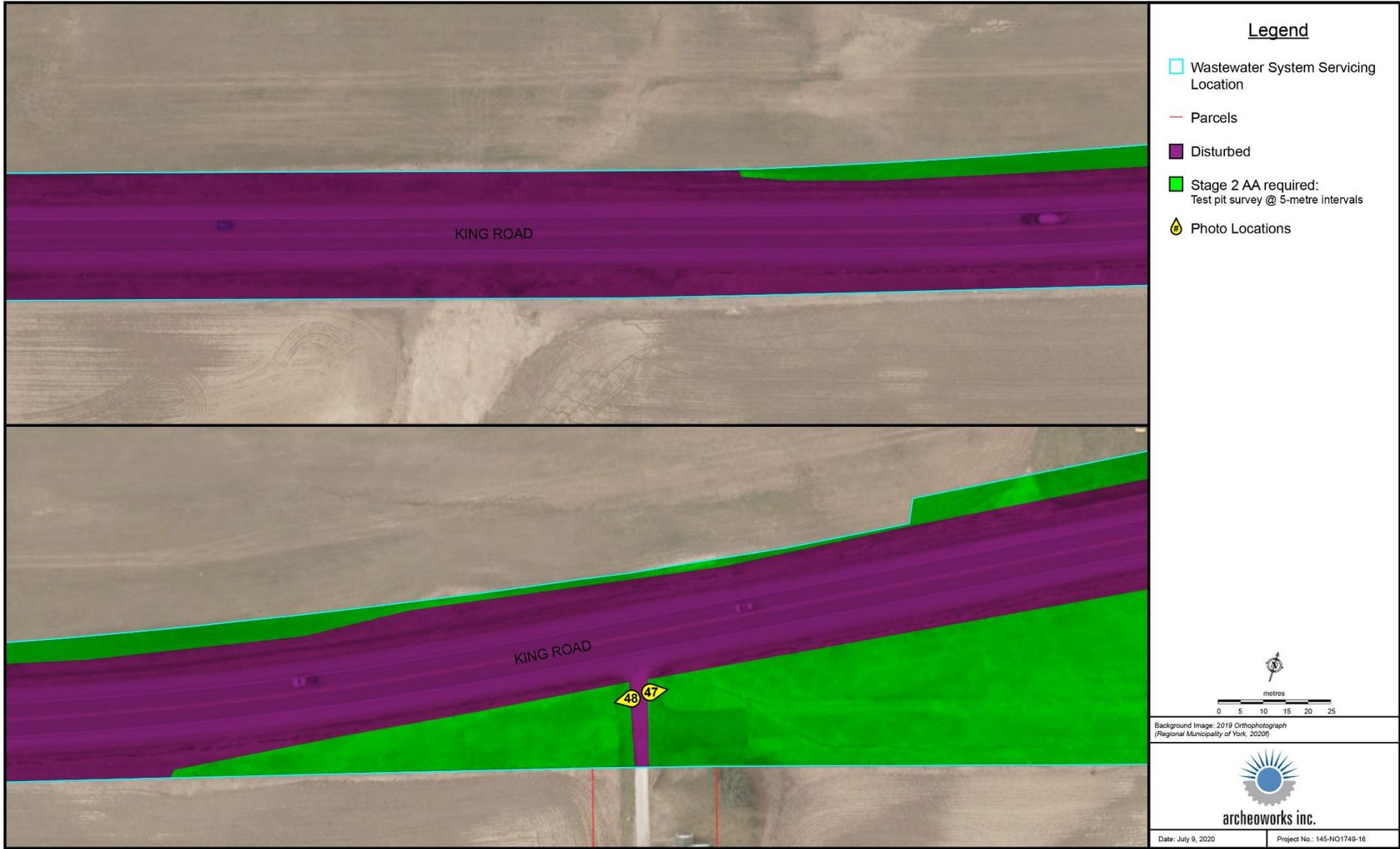
Map 18: Stage 1 AA results – Nobleton WRRF access road and Forcemain Route.

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Map 19: Stage 1 AA results – Forcemain Route.

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Map 20: Stage 1 AA results – Forcemain Route.

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Map 21: Stage 1 AA results – Forcemain Route.

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Map 22: Stage 1 AA results – Forcemain Route.

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Map 23: Stage 1 AA results – Forcemain Route.

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Map 24: Stage 1 AA results – Forcemain Route.

STAGE 1 AA FOR THE NOBLETON WATER AND WASTEWATER MUNICIPAL CLASS EA
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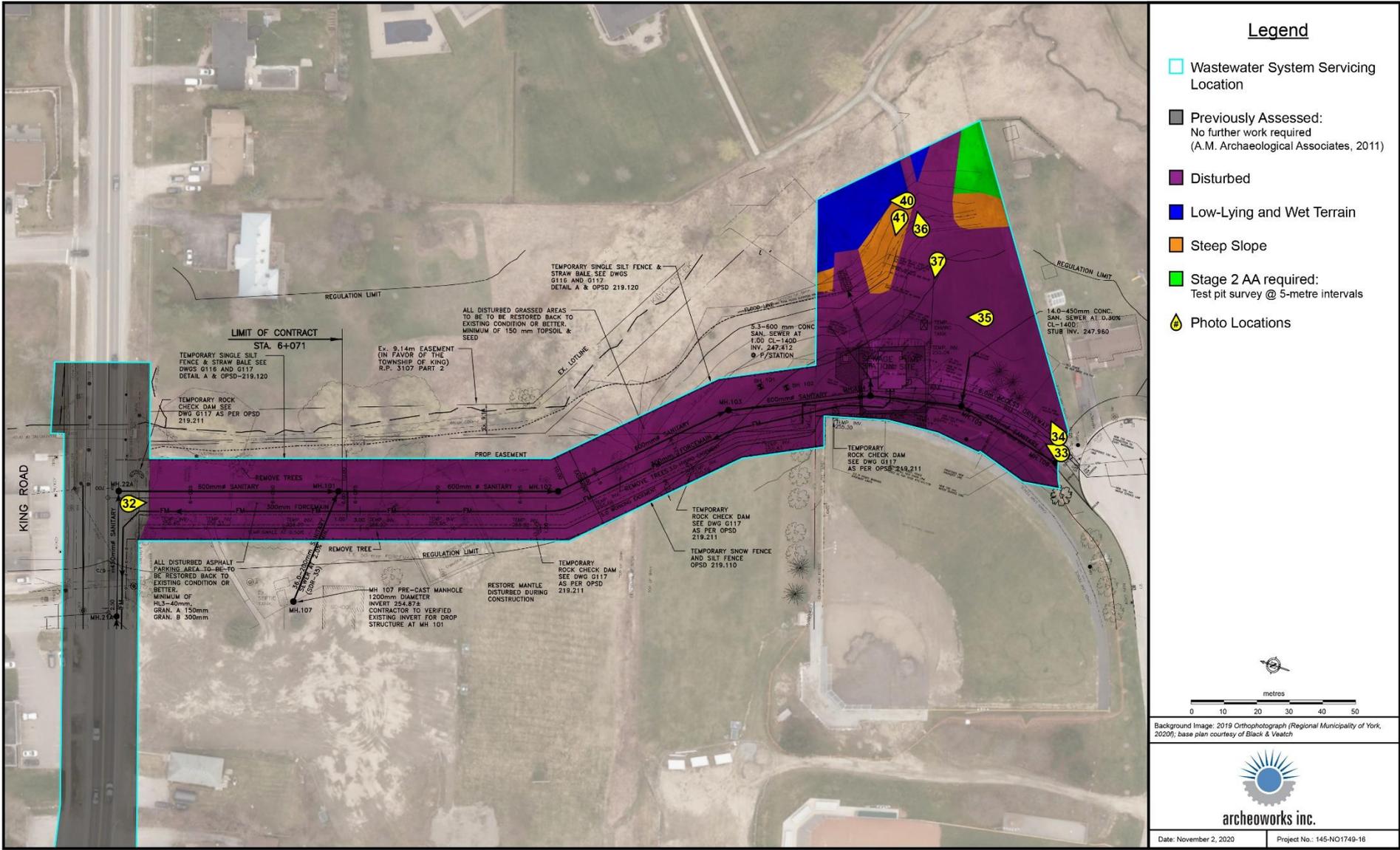
Map 25: Stage 1 AA results – Forcemain Route.

STAGE 1 AA FOR THE NOBLETON WATER AND WASTEWATER MUNICIPAL CLASS EA
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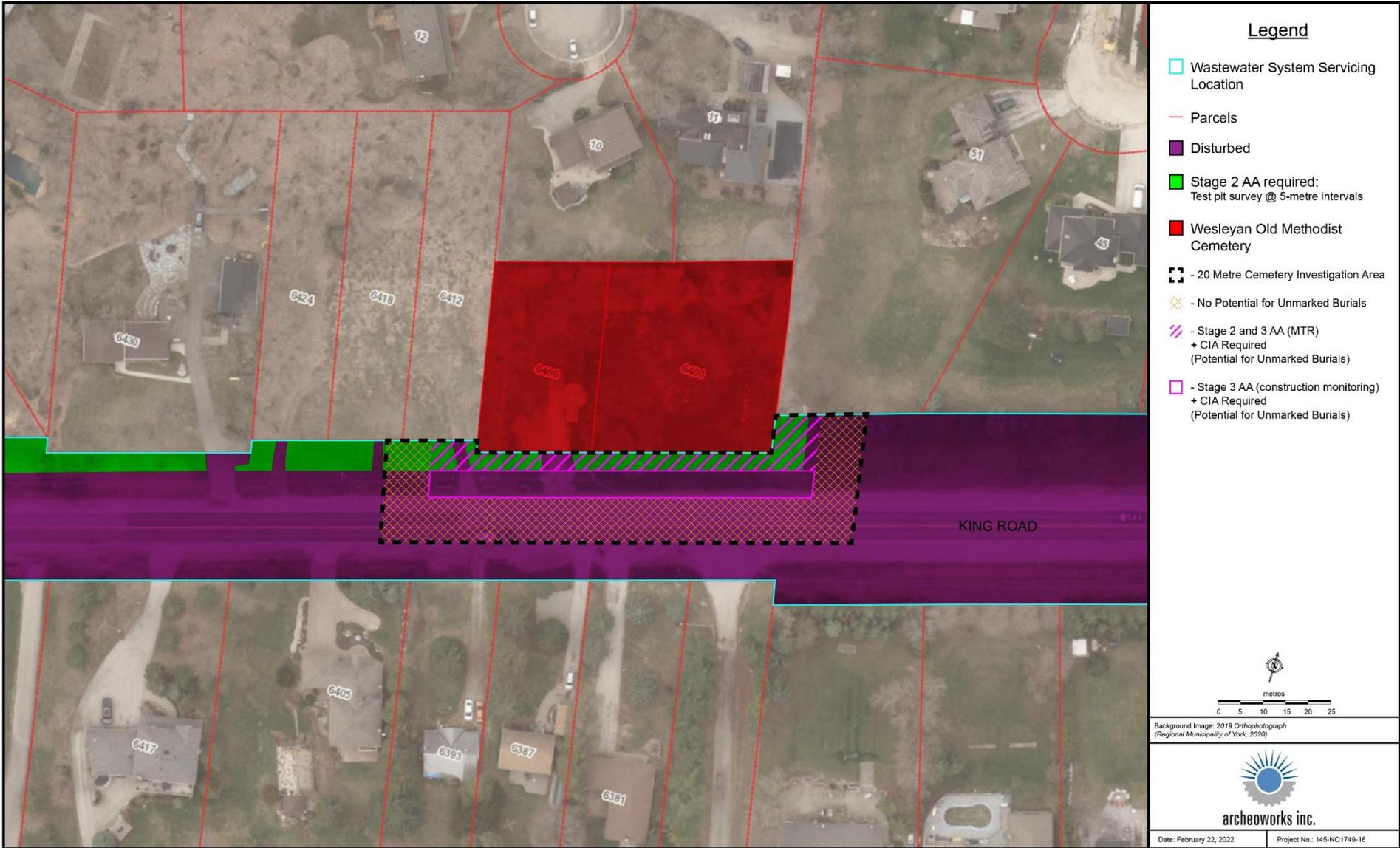
Map 26: Stage 1 AA results – Forcemain Route.

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Map 27: Stage 1 AA results – Forcemain Route and Janet Avenue SPS.

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Map 28: Stage 1 AA results – Wesleyan Old Methodist Cemetery (Cemetery on the Hill) adjacent to the Forcemain Route.

APPENDIX B: SUMMARY OF BACKGROUND RESEARCH

Feature of Archaeological Potential		Yes	No	Unknown	Comment
1	Known archaeological sites within 300 m?	X			If Yes, potential confirmed
Physical Features		Yes	No	Unknown	Comment
2	Is there water on or adjacent to the property?	X			If Yes, potential confirmed
2a	Presence of primary water source within 300 metres of the study area (lakes, rivers, streams, creeks)	X			If Yes, potential confirmed
2b	Presence of secondary water source within 300 metres of the study area (intermittent creeks and streams, springs, marshes, swamps)	X			If Yes, potential confirmed
2c	Features indicating past presence of water source within 300 metres (former shorelines, relic water channels, beach ridges)		X		If Yes, potential confirmed
2d	Accessible or inaccessible shoreline (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh)		X		If Yes, potential confirmed
3	Elevated topography (knolls, drumlins, eskers, plateaus, etc.)		X		If Yes to two or more of 3-5 or 7-10, potential confirmed
4	Pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground		X		If Yes to two or more of 3-5 or 7-10, potential confirmed
5	Distinctive land formations (mounds, caverns, waterfalls, peninsulas, etc.)		X		If Yes to two or more of 3-5 or 7-10, potential confirmed
Cultural Features		Yes	No	Unknown	Comment
6	Is there a known burial site or cemetery on or directly adjacent to the property?	X			If Yes, potential confirmed
7	Associated with food or scarce resource harvest areas (traditional fishing locations, food extraction areas, raw material outcrops, etc.)		X		If Yes to two or more of 3-5 or 7-10, potential confirmed
8	Indications of early Euro-Canadian settlement (monuments, cemeteries, structures, etc.) within 300 metres	X			If Yes to two or more of 3-5 or 7-10, potential confirmed
9	Associated with historic transportation route (historic road, trail, portage, rail corridor, etc.) within 100 metres of the property	X			If Yes to two or more of 3-5 or 7-10, potential confirmed
Property-specific Information		Yes	No	Unknown	Comment
10	Contains property designated under the Ontario Heritage Act	X			If Yes, potential confirmed
11	Local knowledge (Indigenous communities, heritage organizations, municipal heritage committees, etc.)		X		If Yes, potential confirmed
12	Recent ground disturbance, not including agricultural cultivation (post-1960, extensive and deep land alterations)	X - parts			If Yes, low archaeological potential is determined

APPENDIX C: IMAGES



Image 1: Existing Well 2 – View of disturbances associated with the well pumphouse/treatment structure, buried utilities and asphalt driveway.



Image 2: Existing Well 2 – View of disturbances associated with the asphalt driveway.



Image 3: Existing Well 2 – View of disturbances associated with drainage ditching.



Image 4: WRRF – View of disturbances associated with previous grading and construction activities tied to the installation of the WRRF and access road.

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Image 5: WRRF – View of disturbances associated with previous grading and construction activities tied to the installation of the WRRF, outfall and access road.



Image 6: Forcemain – View of disturbances associated with the roadway (King Road) and area subjected to previous grading and construction activities within the ROW and adjacent property.



Image 7: Forcemain – View of disturbances associated with King Road and previous grading and construction activities within the ROW (asphalt and gravel shoulder, ditching, built-up grassed margins, utilities).



Image 8: Forcemain – View of disturbances associated with King Road and built-up grassed margins within the ROW.



Image 9: Forcemain – View of disturbances associated with previous roadway improvements (drainage ditching, traffic barrier, asphalt and gravel shoulders, built-up grassed margins).



Image 10: Forcemain – View of disturbances associated with previous grading and construction activities and raised fill.



Image 11: Forcemain – View of disturbances associated with a structural footprint and an area of raised fill.



Image 12: Forcemain – View of disturbances associated with raised fill, drainage ditching and gravel shoulder.



Image 13: Forcemain – View of disturbances associated with a structural footprint and an area of raised fill.



Image 14: Forcemain – View of disturbances associated with an asphalt roadway (10th Concession Road) and a gravel access driveway.



Image 15: Forcemain – View of disturbances associated with 10th Concession Road and gravel shoulder, shallow ditching and built-up grassed margin (left).



Image 16: Forcemain – View of disturbances associated with a former road bed.



Image 17: Forcemain – View of gravel within former road bed.



Image 18: Forcemain – View of disturbances associated with previous property improvements (grading and construction activities), a former road bed and buried utilities (marker along traffic barrier).



Image 19: Forcemain – View of disturbances associated with the roadway, asphalt and gravel shoulder and drainage ditching.



Image 20: Forcemain – View of disturbances associated with a gravel driveway and buried utilities (hydro pole).



Image 21: Forcemain – View of disturbances associated with previous roadway improvements (road reconstruction, extensive ditching).

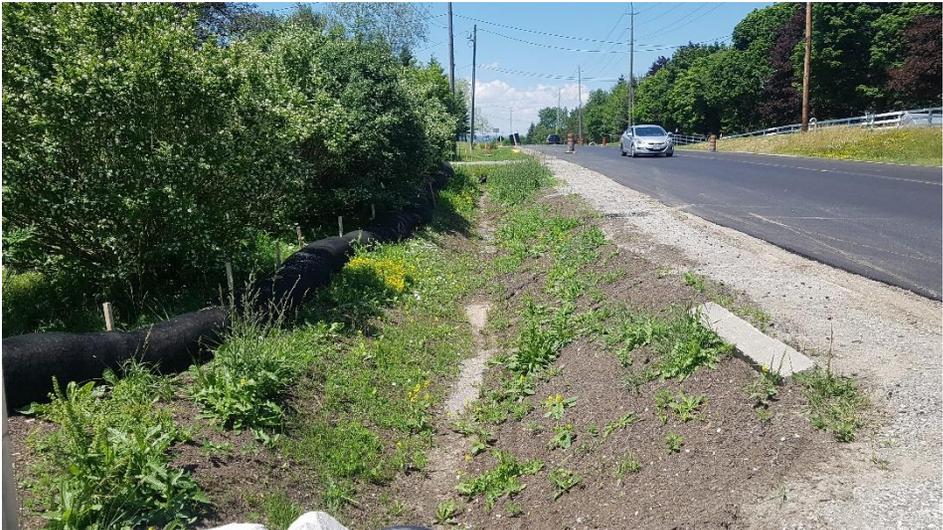


Image 22: Forcemain – View of disturbances associated with previous roadway improvements (road reconstruction, extensive ditching).



Image 23: Forcemain – View of disturbances associated with previous roadway improvements (road reconstruction, extensive ditching, utilities).



Image 24: Forcemain – View of disturbances associated with previous roadway improvements (road reconstruction, extensive ditching, utilities).