August 2009

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT

Mattamy Homes Richmond Subdivision
Part of Lot 22, Concessions 2 to 4
Geographic Township of Goulbourn
City of Ottawa, Ontario

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REPORT

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Executive Summary

An archaeological assessment (Stages 1 and 2) was conducted on behalf of Mattamy Homes Ltd. for a 152 hectare property located on Lot 22, Concessions 2, 3, and 4, in the Geographic Township of Goulbourn, Carleton County, now the City of Ottawa. This assessment was undertaken in order to meet the requirements of a standard condition of development approval.

The Stage 2 assessment of the ploughed fields was conducted by the standard pedestrian survey method at an interval of five metres. The Stage 2 assessment of the woodlot was conducted by the standard shovel test pit method, also at an interval of five metres. All areas that were not disturbed were subject to the Stage 2 archaeological field assessment.

The Stage 2 field assessment resulted in the identification of four archaeological sites. Locations 1 to 3 are late 19th century and early 20th century historic Euro-Canadian scatters associated with structures still standing in the first half of the 20th century. Given the limited size of the Stage 2 assemblages and the late dates of the material collected, the three sites are deemed to be of low cultural heritage value or interest and no further archaeological assessment is recommended. Location 4 consists of a relatively dense scatter of mid-to-late 19th century historic Euro-Canadian artifacts associated with a structure that was still in existence early in the 20th century. However given the earlier date of the material culture present and the size of the assemblage at Location 4, this site exhibits sufficient cultural heritage value to warrant a Stage 3 archaeological assessment. No sites with a pre-contact or historic Aboriginal affiliation were found during the Stage 2 field assessment.

The Ontario Ministry of Culture is asked to review the results presented and accept this report into the Provincial Register of Archaeological Reports. Additional archaeological assessment is still required and so the archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.

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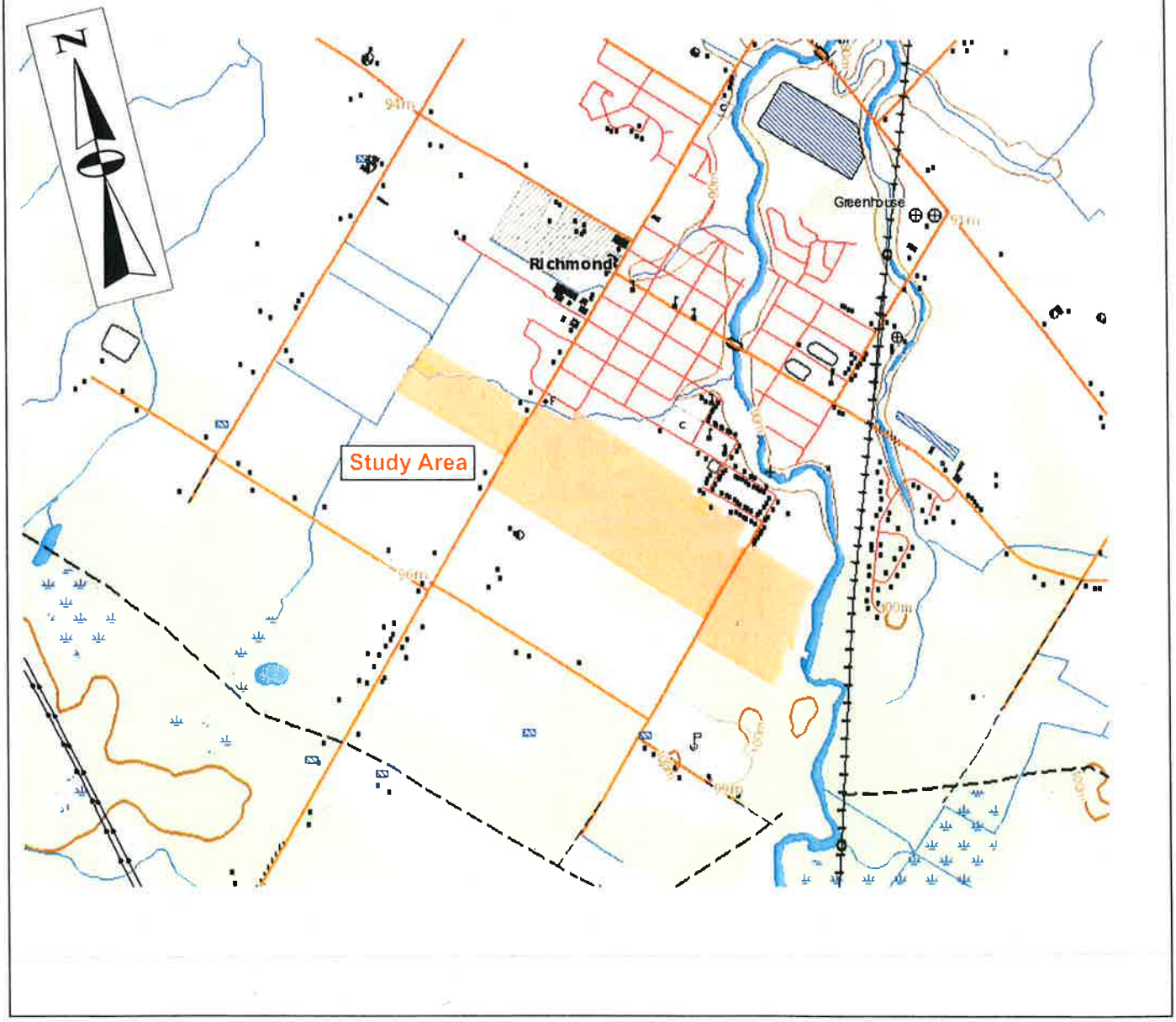
1.0 INTRODUCTION

An archaeological assessment (Stages 1 and 2) was conducted on behalf of Mattamy Homes Ltd. for a 152 hectare property located on Lot 22, Concessions 2, 3, and 4, in the Geographic Township of Goulbourn, Carleton County, now the City of Ottawa. This assessment was undertaken in order to meet the requirements of a standard condition of development approval.

The study area consists primarily of ploughed and well weathered agricultural fields, extending from Franktown Road to the northwest and Ottawa Street in the southeast and bordered by Joy's Road and Queen Charlotte Street to the southwest and northeast respectively. The Stage 2 assessment of the ploughed fields was conducted by the standard pedestrian survey method at an interval of five metres. The Stage 2 assessment of the small woodlot located near the northern limit of the study area was conducted by the standard shovel test pit method, also at an interval of five metres. All areas that were not disturbed or poorly drained were subject to the Stage 2 archaeological field assessment (Figure 1).

The Stage 2 field assessment was conducted on June 9th to 10th, 2008, October 28th, 2008, and April 21st, 2009 under archaeological consulting license P001, issued to Jim Wilson, M.A., by the Ontario Ministry of Culture. The Stage 2 field assessment resulted in the identification of four archaeological sites. Locations 1 to 3 are late 19th century and early 20th century historic Euro-Canadian scatters associated with structures still standing in the first half of the 20th century. Given the limited size of the Stage 2 assemblages and the late dates of the material collected, the three sites are deemed to be of low cultural heritage value or interest and no further archaeological assessment is recommended. Location 4 consists of a relatively dense scatter of mid-to-late 19th century historic Euro-Canadian artifacts associated with a structure that was still in existence early in the 20th century. However given the earlier date of the material culture present and the size of the assemblage at Location 4, this site exhibits sufficient cultural heritage value to warrant a Stage 3 archaeological assessment. No sites with a pre-contact or historic Aboriginal affiliation were found during the Stage 2 field assessment.

The Ontario Ministry of Culture is asked to review the results presented and accept this report into the Provincial Register of Archaeological Reports. Additional archaeological assessment is still required and so the archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.



0 500 1000m

LEGEND

Study Area

REFERENCE

DRAWING BASED ON
2001 *Topographic Map Sheet 31G/4: Kemptville* (Edition 8). Centre for Topographic Information, Natural Resources Canada, Ottawa.

NOTES

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT **Stages 1 & 2 Archaeological Assessment Mattamy Homes Richmond Subdivision City of Ottawa, Ontario**

TITLE **Location of Study Area**

Golder Associates

PROJECT No	08-1136-010-0	FILE No 0811360100-R01001
CADD	IJ June 17/09	SCALE AS SHOWN REV.
CHECK		**FIGURE 1**

2.0 STUDY METHODS

2.1 Stage 1 Background Research

In compliance with the provincial regulations set out in the *Archaeological Assessment Technical Guidelines* (Government of Ontario 1993), the Stage 1 Archaeological Overview/ Background Study included:

- a review of the land use history, including pertinent historic maps; and
- an examination of the National Site Registration Database to determine the presence of known archaeological sites in an around the project area.

In addition to the visual evaluation of the subject property, background research was conducted at the Ministry of Culture Office in Toronto, the University of Western Ontario Serge E. Sauer Map Library, and the corporate library of Golder Associates Ltd.

2.2 Stage 2 Field Assessment Methods

The study area consists primarily of ploughed and well weathered agricultural fields, extending from Franktown Road to the northwest and Ottawa Street in the southeast and bordered by Joy's Road and Queen Charlotte Street to the southwest and northeast respectively.

The Stage 2 assessment of the ploughed fields was conducted by the standard pedestrian survey method at an interval of five metres (Plate 1). In the event that an artifact was encountered during the pedestrian survey, survey intervals were intensified to one metre within a 20 metre radius of the find. Ground surface visibility was excellent. The Stage 2 assessment of the woodlot (Plate 2) was conducted by the standard shovel test pit method, also at an interval of five metres. Each test pit was approximately 30 centimetres in diameter, was dug to subsoil with all soil screened through six millimetre mesh hardware cloth, and was back filled. In the event an artifact was encountered in a test pit, additional test pits were dug at a 2.5 metre interval in the four cardinal directions from the pit.

At the south end of the woodlot, there was a small area of modern debris and disturbance which was not assessed (Plate 3). A low, wet area surrounding a small stream running beside the woodlot was also not assessed (Plate 4). An area of modern building debris located along the east edge of the study area near Ottawa Street was not assessed (Plate 5). Each of these areas was determined in the field to have low potential for archaeological resources. Figure 2 illustrates a detailed plan of the subject property with the methods and results of the Stage 2 field assessment.

The weather during the Stage 2 archaeological assessment was sunny and humid during June 9th to 10th, 2008; overcast during October 28th, 2008; and was cool and overcast on April 21st, 2009. At no time were the conditions detrimental to the recovery of archaeological material. Permission to enter the property and remove artifacts was given by Susan Murphy of Mattamy Homes. All recovered artifacts will be housed at the London office of Golder Associates Limited until their transfer to the Ontario Ministry of Culture collections facility located at 900 Highbury Avenue, London.

Plate 1: Stage 2 Field Conditions, Pedestrian Survey, Assessed at Five Metre Intervals

Plate 2: Stage 2 Field Conditions, Test Pit Survey, Assessed at Five Metre Intervals

Plate 3: Stage 2 Field Conditions, South End of Woodlot, Recent Disturbance, Not Assessed

Plate 4: Stage 2 Field Conditions, Low Wet Area Surrounding Stream in North End of Study Area, Not Assessed

Plate 5: Stage 2 Field Conditions, Eastern Portion of Study Area, Recent Disturbance, Not Assessed

LEGEND

- Study Area
- Pedestrian Survey, 5m intervals
- Test Pit Survey, 5m intervals
- Disturbed Area, not assessed
- Wet Area, not assessed
- Archaeological Location, no Stage 3 recommended
- Archaeological Location, Stage 3 recommended

REFERENCE

DRAWING BASED ON
Mapping Provided by Client and Field Director's Notes

NOTES

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ALL LOCATIONS ARE APPROXIMATE.

PROJECT **Stages 1 & 2 Archaeological Assessment Mattamy Homes Richmond Subdivision City of Ottawa, Ontario**

TITLE

Stage 2 Field Methods and Results

Golder Associates

PROJECT No.		08-1136-010-0	FILE No. 0811360100-R01002
			SCALE AS SHOWN REV.
CADD	IJ	June 19/09	
CHECK			**FIGURE 2**

3.0 RESULTS

3.1 Background Research

3.1.1 The Natural Environment

The study area is considered part of the Russell and Prescott Sand Plains (Chapman and Putnam 1984: 208-210). This physiographic region:

> *...is a group of large sand plains separated by the clays of the lower Ottawa valley. ... [T]he whole complex was at first a continuous delta built by the Ottawa River and its north bank tributaries into the Champlain Sea. Formed during one stage, it was cut to pieces later by the Ottawa River when it first rose above sea level...Most of the area lies within the drainage basin of the South Nation River, but smaller parts drain to the Rideau and the Ottawa. Drainage is good for a short distance back from the bordering escarpments but becomes progressively poorer toward the interiors. There are a few streams within the sand plains as the water percolates into the sand beds and issues from the bluffs as springs to drain into the clay floored valleys... . All these soils are low in fertility, being deficient in lime, nitrogen, potash, phosphorus, and manganese.*
>
> (Chapman and Putnam 1984: 208-210)

The soils of the study area are loamy sand. The closest potable water sources are the Jock River, immediately southeast of the study area, and a tributary of the Jock River running through the north end of the study area (Figure 1).

3.1.2 Pre-contact Aboriginal Archaeological Resources and Potential

Table 1 provides a general outline of the culture history for the City of Ottawa drawn from Ellis and Ferris (1990). Previous archaeological assessments and research surveys have demonstrated that the City of Ottawa was utilized by pre-contact Aboriginal peoples.

Table 1: Cultural Chronology for the City of Ottawa

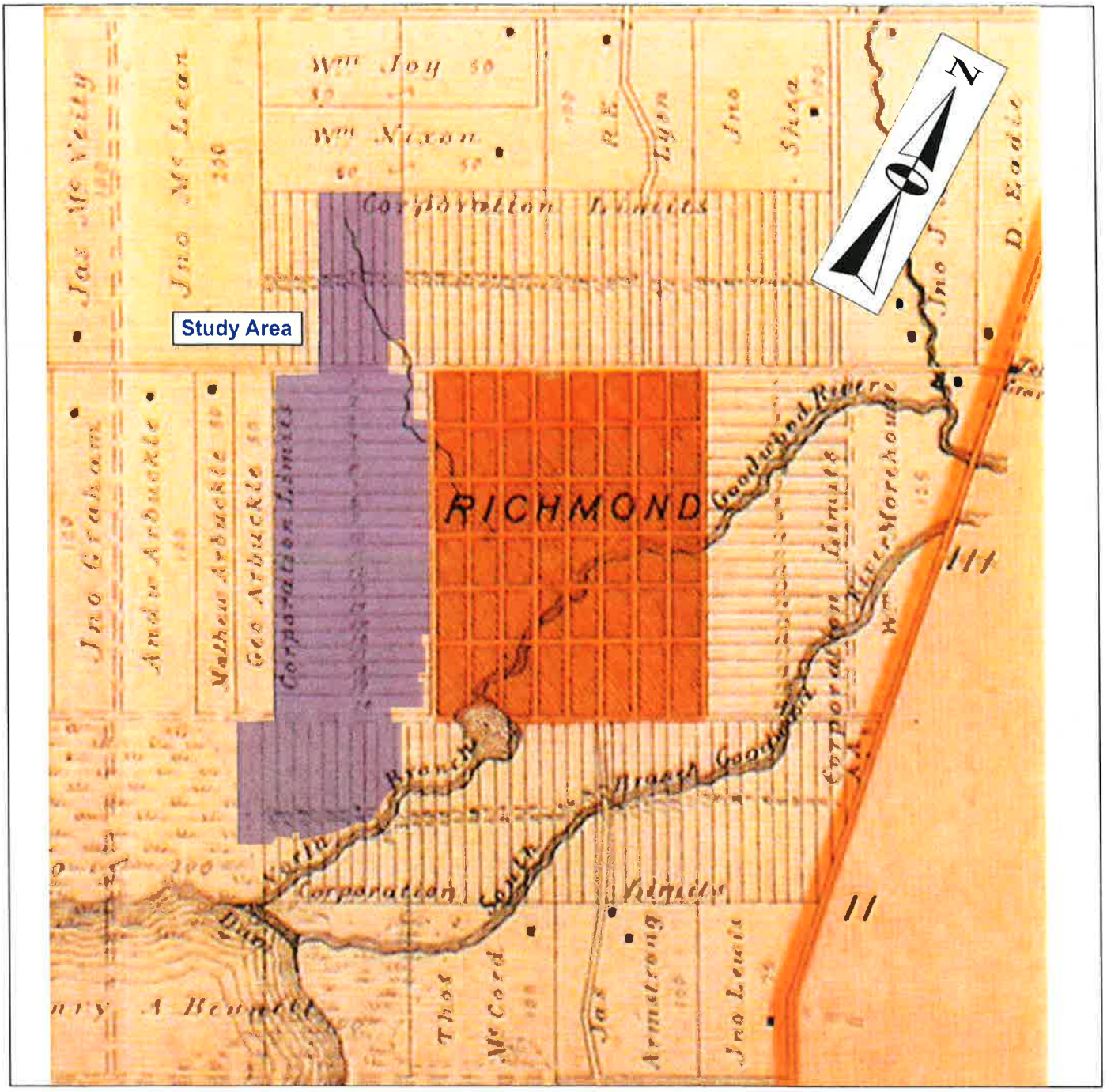
Period	Characteristics	Time Period	Comments
Early Palaeo-Indian	Fluted Projectiles	9000 - 8400 B.C.	covered by Champlain Sea or ice sheets
Late Palaeo-Indian	Hi-Lo Projectiles	8400 - 8000B.C.	first sporadic occupation of area
Early Archaic	Kirk and Bifurcate Base Points	8000 - 6000 B.C.	slow population growth
Middle Archaic	Brewerton-like points	6000 - 2500 B.C.	environment similar to present
Late Archaic	Lamoka (narrow points)	2000 - 1800 B.C.	increasing site size
	Broadpoints	1800 - 1500 B.C.	large chipped lithic tools
	Small Points	1500 - 1100B.C.	introduction of bow hunting

Period	Characteristics	Time Period	Comments
Terminal Archaic	Hind Points	1100 - 950 B.C.	emergence of true cemeteries
Early Woodland	Meadowood Points	950 - 350 B.C.	introduction of pottery
Middle Woodland	Point Peninsula Complex	350 B.C. - A.D.850	increased sedentism
Late Woodland	Various Algonkian Groups	A.D. 850 - 1600	hunter-gatherer groups
Contact Aboriginal	Various Algonkian Groups	A.D. 1600 - 1875	early written records and treaties
Late Historic	Euro-Canadian	A.D. 1793 - present	European settlement

According to the Ontario Ministry of Culture archaeological sites database (Government of Ontario n.d.), previous archaeological assessments have resulted in the documentation of no archaeological sites within three kilometres of the study area. Given the proximity of the Jock River and a tributary, the potential for pre-contact Aboriginal archaeological resources was judged to be moderate.

3.1.3 Potential for Historic Archaeological Sites

The *Illustrated Historical Atlas of the County of Carleton* (H. Belden and Company 1879) shows the historic settlement of Goulbourn Township, Carleton County. The maps also mark out any important structures such as churches, cemeteries, mills, Orange Halls, town halls, schoolhouses, and post offices. The map of Goulbourn Township clearly shows the study area adjacent to the settled portion of the town of Richmond within the corporation limits, but no structures are illustrated (Figure 3). However, this map might only show a schematic depiction of the existing lots and structures that might exist but are not recorded. The first federal government topographic map of the area, the 1908 1:63360 "One Mile" Map, shows three structures within the study area which no longer exist (Figure 4). These structures are numbered sequentially on the map from north to south. As will be seen in Section 3.2 below, Structure 1 corresponds to Location 4, Structure 2 corresponds to Locations 1 and 2, and Structure 3 corresponds to Location 3. The 1930 topographic map also shows the same three structures. Due to the proximity of adjacent historic Euro-Canadian settlements, historic major roads intersecting the study area, and the proximity of major watercourses, the potential for historic material was judged to be moderate to high.



LEGEND

Study Area

REFERENCE

DRAWING BASED ON
Belden, H. and Company
1879 *Illustrated Historical Atlas of the County of Carleton (and City of Ottawa), Ontario*. 1997 reprint. Wilson's Publishing Company, Campbellford.

NOTES

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ALL LOCATIONS ARE APPROXIMATE.

PROJECT **Stages 1 & 2 Archaeological Assessment Mattamy Homes Richmond Subdivision City of Ottawa, Ontario**

TITLE **Portion of the Map of the Township of Goulbourn from the 1879 *Illustrated Historical Atlas of the County of Carleton***

Golder Associates

PROJECT No.		08-1136-010-0	FILE No. 0811360100-R01003
			SCALE NOT TO SCALE REV.
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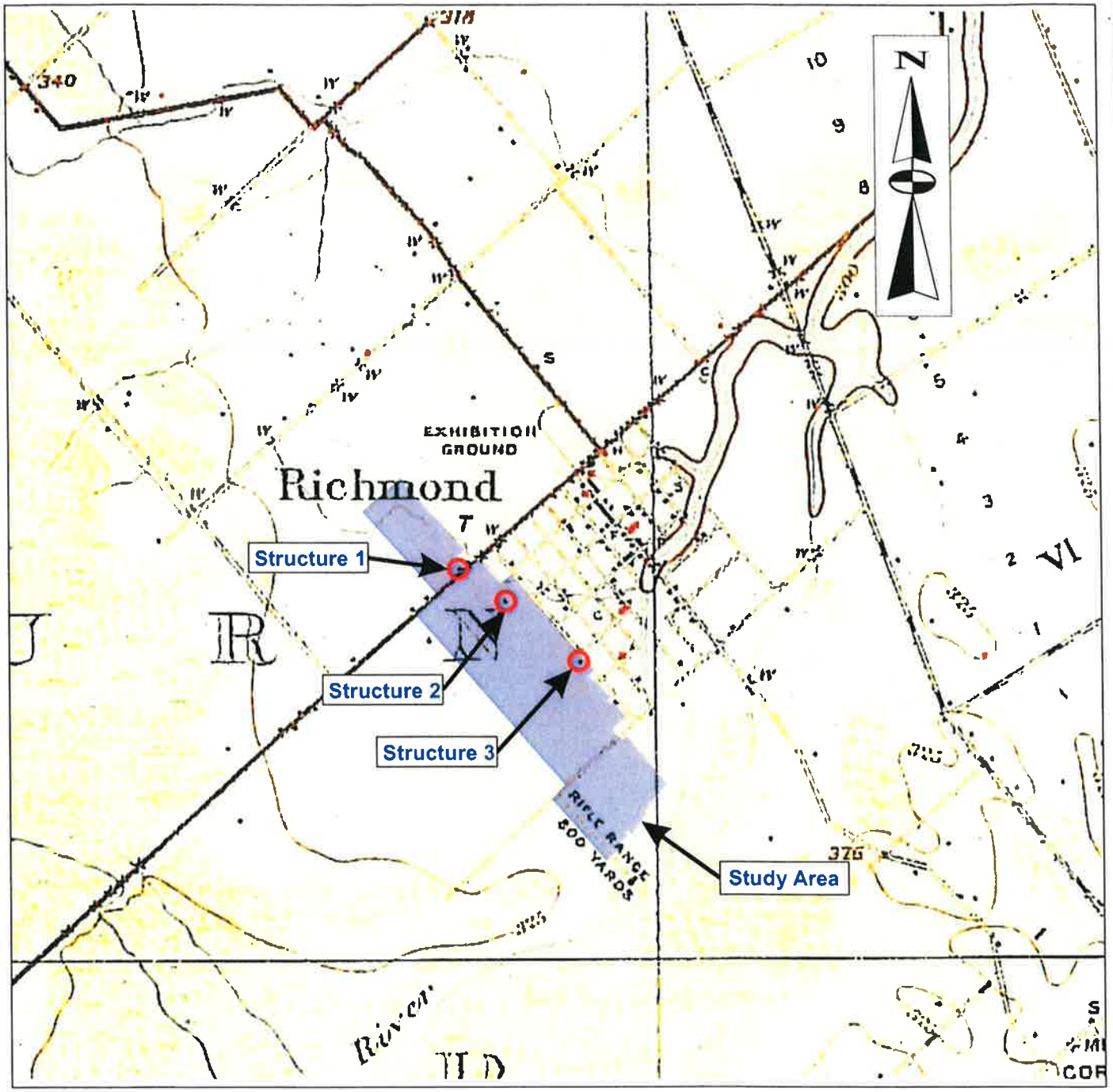

LEGEND

- Study Area
- Structure Discussed in Text

REFERENCE

DRAWING BASED ON
Government of Canada
1908 *Topographic Map Sheet 31G/4: Kemptville* (Edition 1). Department of Militia and Defence, Ottawa.

NOTES

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ALL LOCATIONS ARE APPROXIMATE.

PROJECT: **Stages 1 & 2 Archaeological Assessment Mattamy Homes Richmond Subdivision City of Ottawa, Ontario**

TITLE: **Portion of the 1908 "One Mile" Map of the Kemptville Area**

Golder Associates

PROJECT No.	08-1136-010-0	FILE No.	0811360100-R01004
		SCALE	NOT TO SCALE REV
CADD	JM	July 2/09	
CHECK			

FIGURE 4

3.2 Stage 2 Field Assessment Results

Within the study area, four archaeological locations were identified. Each location is discussed separately below and the complete catalogue of all four locations is given in Appendix A. Their GPS coordinates, using the Military Grid System, are recorded in Appendix B.

3.2.1 Location 1

Location 1 consists of a 30 metre by 60 metre scatter of mid to late 19th century and recent Euro-Canadian material running on a northeast to southwest axis close to the tree line at the southeast end of the study area. The location within the study area is illustrated in Figure 2. In total, a sample of 19 Euro-Canadian artifacts was collected from the surface, all domestic artifacts. Each artifact class is discussed in greater detail below. Appendix A provides a complete catalogue listing of the Stage 2 recoveries.

3.2.2 Domestic Artifacts

A total of 19 domestic artifacts were recovered during the Stage 2 assessment of Location 1. This collection includes 14 ceramic artifacts and five glass artifacts.

3.2.2.1 Ceramic Artifacts

In total, 14 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 1. Included in this total are five fragments of whiteware, three fragments of ironstone, three fragments of utilitarian wares, two fragments of porcelain, and one unidentified ceramic fragment. Table 2 provides a breakdown of the ceramic assemblage by ware type for Location 1 while Table 3 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 2: Summary of Ceramic Collection According to Ware Type, Location 1

Artifact	Frequency	%
whiteware	5	35.71
ironstone	3	21.43
utilitarian	3	21.43
porcelain	2	14.29
ceramic, unidentified	1	7.14
Total	**14**	**100.00**

Table 3: Summary of Ceramic Collection According to Decorative Style, Location 1

Artifact	Frequency	%
whiteware, transfer printed	3	21.43
whiteware, plain	2	14.29
ironstone, plain	2	14.29
earthenware, red	2	14.29
porcelain, plain	1	7.14
porcelain, moulded	1	7.14
ironstone, transfer printed	1	7.14
ceramic, miscellaneous unidentified	1	7.14
stoneware	1	7.14
Total	**14**	**100.00**

White Earthenware

Five fragments of whiteware were recovered from the Stage 2 assessment of Location 1. Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830's. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. The collection includes three transfer printed fragments (Plate 6:1) and two plain.

Plate 6: Location 1 Examples of Whiteware (actual size)

1: Transfer Printed Whiteware
Location 1

Transfer printed whiteware became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common. The colours of transfer printed pieces from Location 1 include blue and black.

Ironstone

Ironstone or graniteware is a variety of refined white earthenware introduced in the 1840's that became extremely popular in Upper Canada by the 1860's (Kenyon 1985). It is usually much thicker than other whiteware, and often decorated with raised moulded designs of wheat or fruit. Three ironstone fragments were collected from Location 1 including two plain and one transfer printed fragment (Plate 7:1).

Plate 7: Location 1 Example of Transfer Printed Ironstone (actual size)

1: Transfer Printed Ironstone
Location 1

Utilitarian Earthenware

Three utilitarian earthenware fragments were also collected from Location 1: including two fragments of red earthenware and one single fragment of stoneware. Red earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels. Stoneware vessels were also produced throughout the 19th century, becoming more durable and refined over time.

Porcelain

Porcelain is a type of earthenware fired at such a high temperature that the clay has begun to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario, however by the turn of the century it becomes relatively common, as production techniques were developed in Europe which greatly reduced costs. Two pieces of porcelain were recovered from Location 1 including one plain white and one moulded fragment (Plate 8:1). All of the porcelain recovered appear to be 20th century pieces.

Plate 8: Location 1 Example of Moulded Porcelain (actual size)

1: Moulded Porcelain
Location 1

Undetermined Ceramic Type

One of the ceramic pieces recovered from Location 1 could not be catalogued into a specific ceramic-ware classification. This piece was so heavily damaged and fragmentary that it was impossible to accurately identify by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site, the damaged piece was simply classified as miscellaneous unidentified ceramic.

3.2.2.2 Glass Artifacts

A total of five glass artifacts were collected during the Stage 2 assessment of Location 1. This assemblage consists exclusively of bottle glass fragments. The collection includes two hand-tooled bottle lip fragments, later in date due to the regular nature of the application (Plate 9:1). In the 19th century, glass lips were tooled with the use of a lipping tool to produce a uniform shape, but these tools become more prominent during the latter part of the 19th century (Jones and Sullivan 1989: 42). One fragment also contains embossed numbers on the base, suggesting a later production date. The colours of bottle glass represented in this collection include: two aqua, one olive, one blue and one clear. Due to the fragmentary nature of the bottle glass shards, they can only be classified according to colour and the colour of bottle glass alone is very limited with regards to providing dates of manufacture for glass bottles (Lindsey 2008).

Plate 9: Location 1 Examples of Bottle Glass Lip Fragments (actual size)

1: Bottle Glass Fragments
Location 1

3.2.3 Summary

The artifacts collected from Location 1 represent a range of late 19th century and 20th century Euro-Canadian cultural material. The most common types of ceramics recovered from Location 1 were small samples of late 19th century whitewares and later ironstone, as well as 20th century porcelain. There is also a small sample of bottle glass corresponding to a later manufacture date. This location, along with Location 2, is in close proximity to Structure 2 noted on the 1908 and 1930 topographic maps of Richmond (see Section 3.1.3 above and Figure 4). Given the late dates attributed to the ceramic collection, the small number of artifacts in the Stage 2 collection, and the 20th century date of the associated structure no longer standing, the cultural heritage value and interest of this site is judged to be low and no further archaeological assessment is recommended.

3.2.4 Location 2

Location 2 consists of a sparse 15 metre by 50 metre scatter of mid-to-late and recent Euro-Canadian material approximately 40 metres west of Location 1, in the southeast end of the study area. The location within the study area is illustrated in Figure 2. In total, a sample of seven Euro-Canadian artifacts was collected from the surface, including five domestic and two structural. Each artifact class is discussed in greater detail below. Table 4 provides a summary of the Stage 2 artifacts collected from Location 2. Appendix A provides a complete catalogue listing of the Stage 2 recoveries.

Table 4: Stage 2 Artifact Summary for Location 2

Artifact	Frequency	%
domestic	5	71.43
structural	2	28.57
Total Stage 2 Artifacts	**7**	**100.00**

3.2.5 Domestic Artifacts

A total of five domestic artifacts were recovered during the Stage 2 assessment of Location 2. This collection includes four ceramic artifacts and one glass artifact.

3.2.5.1 Ceramic Artifacts

In total, four fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 2. Included in this total are three fragments of plain ironstone and one fragment of plain whiteware.

Ironstone

Ironstone or graniteware is a variety of refined white earthenware introduced in the 1840's that became extremely popular in Upper Canada by the 1860's (Kenyon 1985). It is usually much thicker than other whiteware, and often decorated with raised moulded designs of wheat or fruit. Three plain, undecorated ironstone fragments were collected from Location 2 (Plate 10:1).

Plate 10: Location 2 Example of Ironstone (actual size)

1: Ironstone
Location 2

White Earthenware

One fragment of plain whiteware was recovered during the Stage 2 assessment of Location 2 (Plate 11:1). Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830's. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century.

Plate 11: Location 2 Example of Whiteware (actual size)

1: Whiteware
Location 2

3.2.5.2 Glass Artifacts

One domestic glass artifact was collected during the Stage 2 assessment of Location 2, one fragment of aqua coloured bottle glass. Due to the fragmentary nature of the bottle glass shard, it can only be classified according to colour and the colour of bottle glass alone is very limited with regards to providing dates of manufacture for glass bottles (Lindsey 2008).

3.2.6 Structural Artifacts

The structural assemblage from Location 2 consists of two shards of window glass. One shard is 1.5 millimetres thick and the other is 2 millimetres thick. Ian Kenyon (1980) provides a pre-1850 date for window panes that have an average thickness of less than 1.6 millimetres. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes. These window glass shards date to the mid-to-late 19th century or later. The sample of window glass from Location 2 is minor and cannot solely be used to date the site.

3.2.7 Summary

The artifacts collected from Location 2 represent a small scatter of late 19th century Euro-Canadian cultural material. The ceramics recovered from Location 2 were plain fragments of late ironstone and whiteware. There is one shard of bottle glass that is temporally undiagnostic. This location, along with Location 1, is in close proximity to Structure 2 noted on the 1908 and 1930 topographic maps of Richmond (see Section 3.1.3 above and Figure 4). Given the late dates attributed to the ceramic collection, the small number of artifacts in the Stage 2 collection, and the 20th century date of the associated structure no longer standing, the cultural heritage value and interest of this site is judged to be low and no further archaeological assessment is recommended.

3.2.8 Location 3

Location 3 consists of a 15 metre by 50 metre scatter of mid to late and recent Euro-Canadian material located approximately 100 metres west from the northwest end of Queen Charlotte Street. The location within the study area is illustrated in Figure 2. In total, a sample of 20 Euro-Canadian artifacts was collected from the surface, all domestic. Each artifact class is discussed in greater detail below. Appendix A provides a complete catalogue listing of the Stage 2 recoveries.

3.2.9 Domestic Artifacts

A total of 20 domestic artifacts were recovered during the Stage 2 assessment of Location 3. This collection includes nine ceramic artifacts and 11 glass artifacts.

3.2.9.1 Ceramic Artifacts

In total, nine fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 3. Included in this total are seven fragments of ironstone, one fragment of whiteware, and one piece of porcelain. Table 5 provides a breakdown of the ceramic assemblage by ware type for Location 3 while Table 6 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 5: Summary of Ceramic Collection According to Ware Type, Location 3

Artifact	Frequency	%
ironstone	7	77.78
whiteware	1	11.11
porcelain	1	11.11
Total	**9**	**100.00**

Table 6: Summary of Ceramic Collection According to Decorative Style, Location 3

Artifact	Frequency	%
ironstone, plain	6	66.67
ironstone, moulded	1	11.11
whiteware, transfer printed	1	11.11
porcelain, painted	1	11.11
Total	**9**	**100.00**

Ironstone

Ironstone or graniteware is a variety of refined white earthenware introduced in the 1840's that became extremely popular in Upper Canada by the 1860's (Kenyon 1985). It is usually much thicker than other whiteware, and often decorated with raised moulded designs of wheat or fruit. Seven ironstone fragments were collected from Location 3, including six plain and one moulded (Plate 12:1).

Plate 12: Location 3 Example of Ironstone (actual size)

1: Moulded Ironstone
Location 3

White Earthenware

One fragment of whiteware was recovered from the Stage 2 assessment of Location 3. Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830's. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. The collection includes one late 19th century black transfer printed fragment (Plate 13:1). Transfer printed whiteware became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common.

Plate 13: Location 3 Example of Whiteware (actual size)

1: Transfer Printed Whiteware
Location 3

Porcelain

Porcelain is a type of earthenware fired at such a high temperature that the clay has begun to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario, however by the turn of the century it becomes relatively common, as production techniques were developed in Europe which greatly reduced costs. One piece of gilt porcelain was recovered from Location 3. The porcelain recovered from Location 3 appears to be 20th century.

3.2.9.2 Glass Artifacts

A total of 11 glass artifacts were collected during the Stage 2 assessment of Location 3. This assemblage consists exclusively of bottle glass fragments. The collection includes three hand finished bottle lip fragments (Plate 14:1); manufactured later in the 19th century (Jones and Sullivan 1989). The colours of bottle glass represented in this collection include: three green, three aqua, two clear, two purple, and one fragment of brown glass. Due to the fragmentary nature of the bottle glass shards, they can only be classified according to colour and the colour of bottle glass alone is very limited with regards to providing dates of manufacture for glass bottles (Lindsey 2008).

Plate 14: Location 3 Examples of Bottle Glass Lip Fragments (actual size)

1: Glass Bottles
Location 3

3.2.10 Summary

The artifacts collected from Location 3 represent a range of late 19th century and 20th century Euro-Canadian cultural material. The most common types of ceramics recovered from Location 3 were later ironstone and whiteware, as well as 20th century porcelain. There is also a sample of bottle glass corresponding to a later 19th century manufacture date.

Table 8: Summary of Ceramic Collection According to Ware Type, Location 4

Artifact	Frequency	%
whiteware	16	44.44
ironstone	12	33.33
utilitarian	7	19.44
yelloware	1	2.78
Total	**36**	**100.00**

Table 9: Summary of Ceramic Collection According to Decorative Style, Location 4

Artifact	Frequency	%
ironstone	7	19.44
ironstone, moulded	5	13.88
whiteware, transfer printed	4	11.11
whiteware, painted	4	11.11
earthenware, red	4	11.11
whiteware, sponged	3	8.33
whiteware, banded	2	5.56
whiteware, stamped	2	5.56
stoneware	2	5.56
whiteware, flow transfer printed	1	2.78
yelloware	1	2.78
earthenware, yellow	1	2.78
Total	**36**	**100.00**

White Earthenware

Sixteen fragments of whiteware were recovered from the Stage 2 assessment of Location 4. Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830's.

Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. The collection includes four painted (Plate 15:1), four transfer printed (Plate 15:2), three sponged, two banded, two stamped (Plate 15:3), and one flow transfer printed (Plate 15:4).

Plate 15: Location 4 Examples of Whiteware (actual size)

1: Painted Whiteware
Location 4

2: Transfer Printed Whiteware
Location 4

3: Stamped Whiteware
Location 4

4: Flow Transfer Printed Whiteware
Location 4

The hand painted whiteware collection from Location 4 consists of two monochromatic blue pieces and two polychrome fragments. The polychrome painted wares of this type were popular from as early as 1830 through to the 1870's and would be considered "Late Palette" colours.

Transfer printed whiteware became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common. The colours of transfer printed pieces from Location 4 include three blue and one purple.

Sponged whiteware ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840's and remained common until the 1870's. All three of the sponged pieces are decorated using only blue.

Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue. Banded pieces may also include inlaid and cut away slip decoration and bands of lathe turned grooves or patterns.

Banding occurred both as a primary decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware. Two banded pieces were collected from Location 4, both with blue slip banding which is consistent with later 19th century banded wares.

Stamping involved the transfer of paint to the bisque surface through the use of a stamp most frequently made of sponge. This decorative technique usually dates to the second half of the 19th century. The stamped wares from Location 4 are red and brown respectively.

Flow transfer printed whiteware, where the pigment is allowed to flow into the glaze, became popular in the 1840's and 50's, with a later revival in the 1890's. The collection from Location 4 contains one fragment of flow blue transfer printed whiteware.

Ironstone

Ironstone or graniteware is a variety of refined white earthenware introduced in the 1840's that became extremely popular in Upper Canada by the 1860's (Kenyon 1985). It is usually much thicker than other whiteware, and often decorated with raised moulded designs of wheat or fruit. There are several plain pieces of ironstone in the Location 4 collection as well as five pieces bearing a moulded decoration (Plate 16:1). The discernible moulded patterns include one with the popular wheat motif and another bearing a basket and floral design. Starting in the 1860's the "wheat" design, also referred to as "Ceres" was the most popular ironstone pattern produced (Kenyon 1985).

Plate 16: Location 4 Example of Ironstone (actual size)

1: Moulded Ironstone
Location 4

Utilitarian Earthenware

Seven utilitarian earthenware fragments were also collected from Location 4, including four fragments of red earthenware, two fragments of stoneware, and a single fragment of yellow earthenware. Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels. Stoneware vessels were also produced throughout the 19th century, becoming more durable and refined over time.

Yelloware

The Location 4 assemblage also contains one fragment of yelloware. Yelloware ceramics were first manufactured in the 1840's, and continue to be manufactured in limited quantities today.

3.2.12.2 Glass Artifacts

A total of two glass artifacts were collected during the Stage 2 assessment of Location 4, both bottle glass fragments. The colours of bottle glass represented in this collection are one aqua and one purple. Due to the fragmentary nature of the bottle glass shards, they can only be classified according to colour and the colour of bottle glass alone is very limited with regards to providing dates of manufacture for glass bottles (Lindsey 2008).

3.2.13 Personal Artifacts

The personal items category for Location 4 include one white clay pipe stem (Plate 17:1), one white clay pipe bowl fragment (Plate 17:2), and a bell (Plate 17:3). White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). The bell is corroded and temporally undiagnostic.

Plate 17: Location 4 Example of White Clay Pipe Fragments (actual size)

1: White Clay Pipe Stem
Location 4

2: White Clay Pipe Bowl
Location 4

3: Bell
Location 4

3.2.14 Structural Artifacts

The structural assemblage includes two fragments of window glass. The window glass shards measure over 2.0 millimetres thick. Ian Kenyon (1980) provides a pre-1850 date for window panes that have an average thickness of less than 1.6 millimetres. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes. These window glass shards date to the mid-to-late 19th century or later.

4.0 SUMMARY AND RECOMMENDATIONS

An archaeological assessment (Stages 1 and 2) was conducted for a 152 hectare property located on Lot 22, Concessions 2, 3 and 4, in the Geographic Township of Goulbourn, Carleton County, now the City of Ottawa. This assessment was undertaken in order to meet the requirements of a standard condition of development approval.

The Stage 2 field assessment resulted in the identification of four archaeological sites. Locations 1 to 3 are late 19th century and early 20th century historic Euro-Canadian scatters associated with structures still standing in the first half of the 20th century. Given the limited size of the Stage 2 assemblages and the late dates of the material collected, the three sites are deemed to be of low cultural heritage value or interest and no further archaeological assessment is recommended. Location 4 consists of a relatively dense scatter of mid-to-late 19th century historic Euro-Canadian artifacts associated with a structure that was still in existence early in the 20th century. However given the earlier date of the material culture present and the size of the assemblage at Location 4 this site exhibits sufficient cultural heritage value to warrant a Stage 3 archaeological assessment. No sites with a pre-contact or historic Aboriginal affiliation were found during the Stage 2 field assessment.

The Ontario Ministry of Culture is asked to review the results presented and accept this report into the Provincial Register of Archaeological Reports. Additional archaeological assessment is still required and so the archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.

Should deeply buried archaeological material be found during construction activities, the Ontario Ministry of Culture should be notified immediately (416) 314-7174. In the event that human remains are encountered during construction, the proponent should immediately contact both the Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Small Businesses and Consumer Services, (416) 326-8404.

5.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

Golder Associates Ltd. has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied is made.

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Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the Ministry of Culture's Archaeological Assessment Technical Guidelines (1993) (Stages 1-3 and Reporting Format).

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APPENDIX A

Stage 2 Artifact Catalogue

APPENDIX A
STAGE 2 ARTIFACT CATALOGUE

Location 1

Cat. #	Context	Artifact	Freq.	Comments
1	surface	whiteware	2	
2	surface	whiteware, transfer printed	3	2 blue, 1 black
3	surface	porcelain, plain	1	
4	surface	porcelain, moulded	1	
5	surface	ironstone	2	
6	surface	ironstone, transfer printed	1	blue
7	surface	misc. ceramic	1	
8	surface	stoneware	1	green slipt
9	surface	earthenware, red	2	
10	surface	glass, bottle	5	2 aqua (1 with applied tooled lip, 1 base with embossed numbers seam through base), 1 olive, 1 clear, 1 blue (partial rim, flared)

Location 2

Cat. #	Context	Artifact	Freq.	Comments
1	surface	whiteware, plain	1	
2	surface	ironstone, plain	3	
3	surface	glass, window	2	1 @ 1.5mm, 1 @ 2mm
4	surface	glass, bottle	1	aqua

Location 3

Cat. #	Context	Artifact	Freq.	Comments
1	surface	porcelain, painted	1	embossed gold leaf
2	surface	ironstone, moulded	1	
3	surface	ironstone	6	
4	surface	whiteware, transfer printed	1	black
5	surface	glass, bottle	11	3 green (1 with applied lip), 1 brown, 2 clear (1 with applied lip), 2 purple, 3 aqua (1 applied tooled lip)

Location 4

Cat. #	Context	Artifact	Freq.	Comments
1	surface	whiteware, transfer printed	4	1 purple, 3 blue
2	surface	whiteware, sponged	3	blue
3	surface	whiteware, banded	2	blue
4	surface	whiteware, painted	4	2 blue, 2 red & green
5	surface	whiteware, flow transfer printed	1	blue
6	surface	whiteware, stamped	2	1 red, 1 brown
7	surface	yelloware	1	
8	surface	ironstone, plain	7	
9	surface	ironstone, moulded	5	1 with wheat design, 1 with basket weave and floral pattern
10	surface	earthenware, red	4	
11	surface	earthenware, yellow	1	
12	surface	stoneware	2	
13	surface	white clay pipe bowl	1	plain
14	surface	white clay pipe stem	1	plain
15	surface	glass, bottle	2	1 purple, 1 aqua
16	surface	glass, window	2	1 @ 2.2mm, 1 @ 2.7mm
17	surface	bell	1	

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APPENDIX B

MGRS Co-ordinates for the Stage 2 Archaeological Locations

APPENDIX B
MGRS COORDINATES FOR THE STAGE 2 ARCHAEOLOGICAL LOCATIONS

Site Name	MGRS Coordinates
Location 1	18T VR 33811/04006
Location 2	18T VR 33748/03944
Location 3	18T VR 34069/03655
Location 4	10T VR 33299/04232

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