



**Heritage Impact Statement
2096 Wonderland Road North
City of London, Ontario**

Part Lot 20, Concession 5, Former Township
of London

April 10, 2018

Prepared for:

Invest Group Ltd.
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Mississauga ON, L4Z 1S2

Prepared by:

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Sign-off Sheet

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Approved by _____

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Jim Wilson, MA

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Executive Summary

Invest Group Ltd. retained Stantec Consulting Ltd (Stantec) to conduct a Heritage Impact Statement (HIS) for the property at 2096 Wonderland Road North, in the City of London, Ontario. The property is included on the City of London's list of heritage properties as a Priority 2 building, though it is not designated under Part IV of the Ontario Heritage Act. Invest Group Ltd. is considering a draft plan to rezone the property for townhouses.

The study area at 2096 Wonderland Road North contains a two storey Georgian residence that dates to approximately 1850, with a later addition. Landscape features including plantings and mature trees. The property is historically associated with the Warner family, who owned the property from 1819 to about 1891.

Determination of cultural heritage value or interest (CHVI) was undertaken according to criteria outlined in *Ontario Regulation 9/06* made under the *Ontario Heritage Act*. The property at 2096 Wonderland Road North was determined to have CHVI based on the design of the residence, its association with the Warner family, and for its connection to the early settlement and development of the former London Township.

The two storey residence is an example of the Georgian style. The residence is a symmetrical structure, with a low-pitched hip roof, bookend chimneys, buff brick exterior, brick voussoirs, and stone foundation.

The proposed changes in land-use to townhouse development in the study area will have an effect on the heritage value of this property since the house will be directly impacted and the historical connection to the land will be permanently altered.

Based on the impacts identified to this cultural heritage resource, two mitigation options have been identified. These options are ranked in order of preference. The recommended mitigation options include:

- 1) Relocation of the house is the preferred mitigation option for this property, if feasible. Relocation within the property is preferred in order to maintain some aspect of the contextual and historical associations the house has with its setting. If relocation within the site is demonstrated not to be feasible, relocation to an adjacent site is also a valid mitigation option, if an adjacent site is available. If relocation to an adjacent site is not possible, advertising the house for sale at a discounted price with the condition that the buyer relocate the house is also a valid relocation strategy. A structural engineer has indicated that relocation may be difficult and could potentially cause damage to the house and brick fireplaces.
- 2) If relocation of the house is not feasible, if no prospective buyer can be found to relocate the house, or if the structure is deemed not structurally sound enough to survive relocation, then documentation and salvage (as applicable) of the property is the next preferred mitigation option. Documentation and salvage should be carried out prior to relocation or demolition. Documentation activities should consist of the full heritage recording of the house and landscape through photography, photogrammetry, or LiDAR scan. Salvage activities should consist of the identification and recovery re-useable materials by a reputable salvage company or charity. The documentation and salvage work should be carried out under the direction of a Cultural Heritage Specialist in good professional standing with the Canadian Association of Heritage Professionals (CAHP).

The Executive Summary highlights key points from the report only; for complete information and findings the reader should examine the complete report.

Project Personnel

Project Manager:	Lashia Jones, MA, CAHP
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Independent Review:	Jim Wilson, MA

Acknowledgements

Kyle Gonyou	Heritage Planner, City of London
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1.0 STUDY PURPOSE AND METHODS

Invest Group Ltd. retained Stantec Consulting Ltd (Stantec) to prepare a Heritage Impact Statement (HIS) for the property located at 2096 Wonderland Road North, City of London, Ontario (Figure 1). The property is listed on the City of London's *Inventory of Heritage Resources* (City of London 2006) as a Priority 2 Property. The property is not designated under the *Ontario Heritage Act*. Redevelopment of the property is being proposed to remove the existing dwelling and rezone the property for townhouses (See Appendix A for Site Plans). As part of this approach, a HIS must be prepared. The overall objectives of the HIS will be to determine:

1. The cultural heritage value and heritage attributes (if applicable) of the property at 2096 Wonderland Road North.
2. The impact of the development proposal on identified heritage attributes or cultural heritage value of the property.
3. Appropriate alternatives and mitigation measures that will conserve the heritage value of the property.

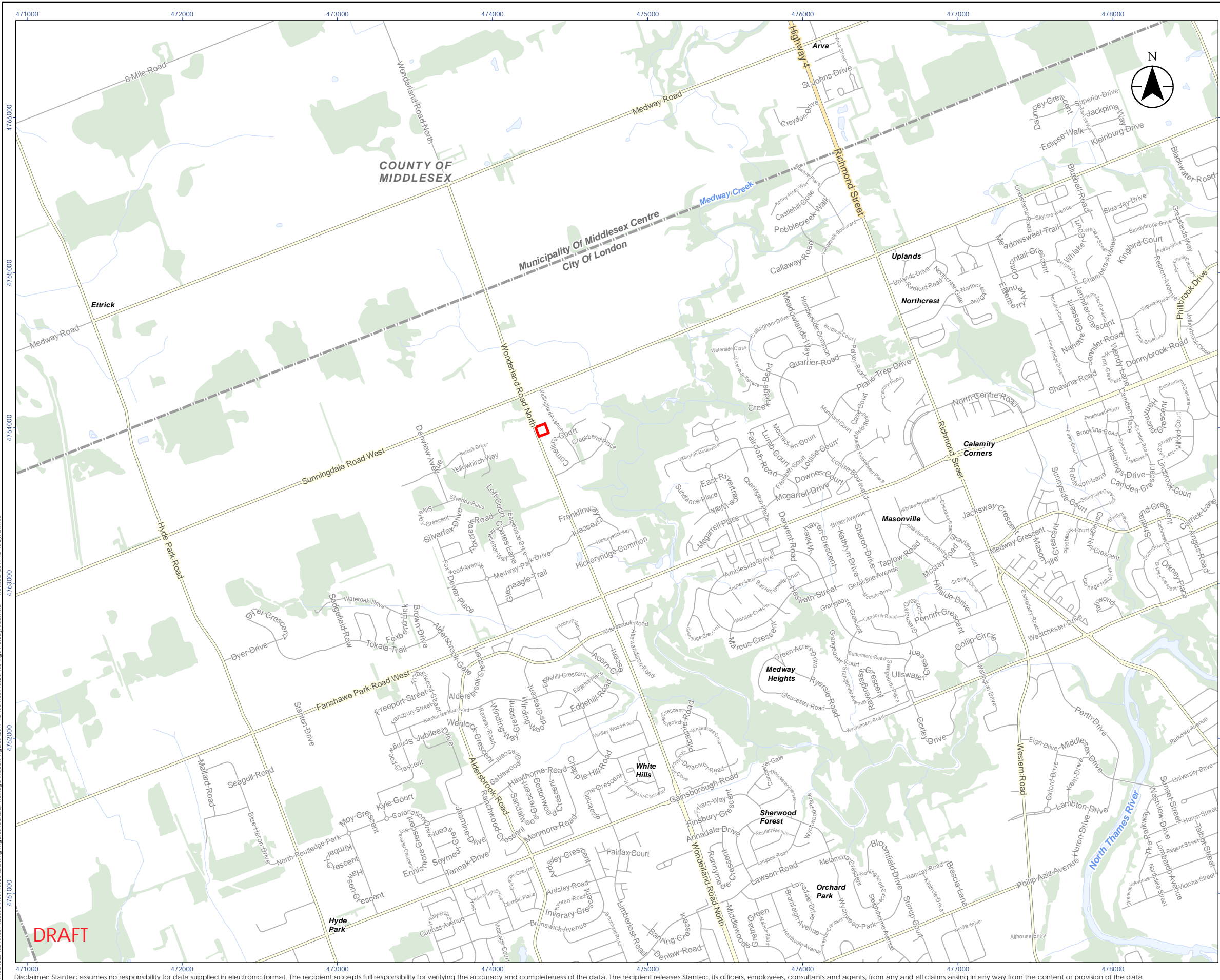
The City of London does not presently have a Terms of Reference for preparing HIS. The preparation of this report will be guided by the Ministry of Tourism, Culture and Sport's to InfoSheet #5 in *Heritage Resources in the Land Use Planning Process, Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* (Government of Ontario 2006a) (Info Sheet #5). This document uses *Ontario Regulation 9/06* for determination of cultural heritage value or interest (CHVI) and also provides guidance on the assessment of impacts based on CHVI resulting from a proposed change.

As per the guidance contained in *Infosheet #5*, this report contains the following components:

- historical research, site analysis and evaluation
- identification of the significant and heritage attributes of the cultural heritage resource
- description of the proposed development or site alteration
- measurement of development or site alteration impact
- consideration of alternative, mitigation and conservation methods
- implementation and monitoring
- summary statement and conservation recommendations

The study area, referred to throughout this HIS as the "property", contains two storey mid-19th century brick house and associated landscape features.

A site assessment of the study area was undertaken on December 11, 2017 by Frank Smith, MA, Cultural Heritage Specialist with Stantec. The weather conditions were overcast and calm. Historical research was conducted at the London Public Library and The University of Western Ontario to verify background information on the property and its context.



Legend

- Study Area
- Highway
- Major Road
- Minor Road
- Watercourse
- Municipal Boundary
- Waterbody
- Wooded Area

0 0.5 1 km
1:25,000 (At original document size of 11x17)

Notes

- Coordinate System: NAD 1983 UTM Zone 17N
- Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2017.

Project Location
City of London

160940525 REV A
Prepared by AMW on 2017-12-18
Technical Review by PD on 2017-12-08
Independent Review by ABC on yyyy-mm-dd

Client/Project
INVEST GROUP, LTD.
2096 WONDERLAND ROAD NORTH
HISTORICAL IMPACT STATEMENT

Figure No.
1

Title
Study Area

DRAFT

2.0 SITE HISTORY

2.1 INTRODUCTION

The study area is located at 2096 Wonderland Road North, in the former Township of London, now the City of London. The property is located at the northwestern edge of the City of London, approximately 1 kilometre south of the Municipality of Middlesex Centre. The study area is the property boundary of 2096 Wonderland Road North and is situated on part of Lot 20, Concession 5, former Township of London. The following sections outline the historical development of the study area from the time of Euro-Canadian settlement to the 20th century.

2.2 PHYSIOGRAPHY

The study area is situated with the Stratford Till Plain physiographic region of southern Ontario in undrumlinized till plain landform (Chapman and Putnam 1984). The Stratford Till Plain is a broad clay till plain extending from London to the Grand River Valley. The plain consists of a large ground moraine, interrupted by several terminal moraines. It is divided in its drainage by the Thames River in the centre and southern areas and by the Grand River in the northern area. The plain is included within the Lake Huron lake-effect belt and receives more precipitation than average in southern Ontario. This, combined with the good natural soil fertility, allows it to be one of the most agriculturally productive areas in Ontario (Chapman and Putnam 1984:133-134).

Till plains are large expanses of unstratified glacial drift deposited by glaciers and consisting of clay, sand, gravel or boulders intermixed in any proportion (Department of Agriculture 1976:40). The till plain within the study area was exposed following the retreat of the Laurentian glacier's Ontario lobe (Karrow and Warner 1990:15). The surficial geology of the study area indicates that it is underlain by deposits of glacial till. These till deposits are stone-poor and sandy-silt to silty sand in texture, and overlay a Paleozoic terrain (Ontario Geological Survey 1990).

The study area is located in proximity to Medway Creek. Medway Creek drains an area of approximately 205 square kilometres and is approximately 218 kilometres long. Medway Creek is documented to be habitat for the Rainbow Mussel, historically, an important resource for Aboriginal people (Government of Ontario 2012; Upper Thames River Conservation Authority 2012).

2.3 HISTORICAL DEVELOPMENT

2.3.1 Survey and Settlement

In the Canada Constitution Act of 1791, the British Parliament divided the Province of Quebec in two, creating Upper and Lower Canada. This division was both cultural and geographic. Upper Canada was created to carve out a new colony for the United Empire Loyalists and other English-speaking colonists settling in Canada (Taylor 2007: 2). John Graves Simcoe was appointed Lieutenant Governor of Upper Canada and arrived in June 1792 with grand plans to mold the colony into "the very image and transcript of that of Great Britain" (Taylor 2007: 9).

Part of Simcoe's transformative plan for Upper Canada included the use of English place-names that could easily be remembered and pronounced by Loyalist settlers and British immigrants. Simcoe took great interest in the forks of the

Thames River, and selected it as the site for the capital of Upper Canada in 1791. In accordance with his plans, he named the site London. Merchants in Upper Canada, as well as Guy Carleton, Governor of Canada, objected to the proposed site because of its inaccessibility. The capital never moved to London and was eventually transferred from Niagara-on-the-Lake to Toronto (Armstrong 1986: 21).

The London District was created in 1798 by an act of Parliament and included the counties of Middlesex, Huron, Norfolk and Oxford. Initially the County of Middlesex was comprised of ten townships: Aldborough, Dunwich, Southwold, Yarmouth, Malahide, Bayham, Delaware, Westminster, Dorchester, and London (Brock and Moon 1972: 69). London Township was the largest in Middlesex County and contained 96,000 acres (Page 1878: 9).

The first surveyor in the region, Abraham Iredell, reported the agricultural conditions in Southwestern Ontario to be among the finest in North America. The first settler in London Township was Joshua Applegarth, who arrived in 1807, and attempted to cultivate hemp before switching to other crops (Page 1878: 5).

London Township remained almost entirely unsettled until Thomas Talbot, along with surveyor Mahlon Burwell, planned to develop the township in 1810. Talbot would eventually be instrumental in the settlement of 29 townships in Southwestern Ontario. Before the outbreak of the War of 1812, Burwell surveyed Concessions 1-6 of the township, which includes the land in the study area (London Township History Book Committee [LTHBC] 2001a: 12). Burwell completed the rest of the survey in 1818. The first London Township town meeting was held on January 4, 1819, in Joshua Applegarth's house. (Armstrong 1986: 29).

2.3.2 19th Century Development

Settlement progressed during the first decades of the 19th century under the guidance of Thomas Talbot. In 1818, he recommended his relative, Richard Talbot, settle about 25 new families in London Township. These settlers had come from Ireland. In 1819, the population further increased when Thomas Talbot settled an additional 98 immigrants in London Township (LTHBC 2001a: 14).

Within 10 years, the average settler usually built a log cabin, stable, smoke house, granary, and barn on his property. Wheat was the preferred crop, and was shipped abroad from Port Stanley (LTHBC 2001a: 46). Settlers were also tasked with improving the local roads. The road allowance in the study area between became known as Cameron Side Road (today Wonderland Road North) (LTHBC 2001b: vii). Travel conditions in the Township remained arduous until the arrival of the Great Western Railway in London in 1853 (LTHBC 2001a:87).

By the early 1860s, most of the Township had been settled, including the lot within the study area (Figure 2). In 1864, there were 92,489 acres of land settled in the township: 35,684 acres for crops, 11,983 acres for pasture, 1,162 acres for gardens and orchards and the remainder were still classified as woods. Crops grown in the township included barley, peas, oats, Indian corn, potatoes, and turnips (The City of London and Middlesex County Directory and Gazetteer 1864). The American Civil War (1861-1865) also increased demand for barley, oats and livestock, leading farmers to transition away from wheat as their main crop (LTHBC 2001a: 49).

As the City of London grew, portions of London Township were annexed into the City of London. Land in the Township was first annexed in 1840 when the Town of London was established. The Town of London became the City of London in 1855 and continued to grow. In 1885, the City expanded east and annexed the Village of East London from the Township (Curtis 1992:13).

2.3.3 20th Century Development

The development of the Township in the 20th century is highly interconnected with the development of the City of London. London Township remained largely agricultural at the turn of the 20th century, in part because of the City of London's annexations. The effects of the First World War, the Great Depression, and the Second World War curtailed demand for new development in the City of London and the city boundaries remained unchanged (Curtis 1992: 15).

Like much of North America, London experienced rapid development and growth in the post-war era. By the 1950s, the City of London was almost fully developed and needed new land to continue growth. As demand for housing in the post-war era grew, London and Westminster Townships began to see significant development along their borders with the City of London. Between 1951 and 1956 the population of London Township increased 66% (Meligrana 2000: 8). In 1958, the City began the process of annexing 57,000 acres of land in London, West Nissouri, and Westminster, and North Dorchester Townships.

Some township residents opposed annexation, and believed their taxes would increase, with little in return from the City. Township officials claimed businesses chose to locate themselves in the township and should not be forced into the City. In May 1960, the Ontario Municipal Board ruled in favour of annexation and awarded 30,000 acres of land in London Township to the City. The annexation became effective in 1961 (Globe and Mail 1960: 10).

The study area remained in London Township until London's next major annexation of surrounding land in 1993, which deducted 84,014 acres from the Township, and annexed the study area into the City of London (LTHBC 2001a:36). The remaining part of London Township amalgamated with Lobo Township and Delaware Township on December 31, 1997 to create the Municipality of Middlesex Centre (LTHBC 2001a: 37).

The City of London is continuing to grow and develop in the 21st century. In 2016, the City of London had a population of 383,822 an increase of 4.8% since 2011 (Statistics Canada 2017).

2.3.4 Property History

The study area includes the north half of Lot 20, Concession 5, in the former Township of London. Lot 20 was split into two 100 acre parcels. The south half was granted to Orange Clark in September 1818 and the north half was granted in October 1819 to William Warner (Figure 2).

William Warner was born in 1801 in Ontario. According to the 1871 Census of Canada, the Warner family was Wesleyan Methodist of English origin. William lived with his son Wesley Warner, aged 30, his son's wife Esther, aged 27, of Irish descent, Emily Warner, aged 25, William L. Warner, aged 4, and Wesley Warner, aged 2 (Census of Canada 1871).

The 1861 Agricultural Census of Canada shows that William Warner still held the original 100 acres granted to him. Of that 100 acres, 65 were under cultivation. 40 acres was used for crops, 19 for pasture, and 6 for orchards or gardens. 35 acres remained forested. The cash value of the farm was \$5,500, slightly above average compared to other farms on Concession 5 and 6. On his farm, Warner grew wheat, peas, oats, Indian corn, potatoes, turnips, carrots, and hay (Census of Canada East, Canada West, Prince Edward Island, New Brunswick and Nova Scotia 1861). William and his wife Margaret were originally buried at Methodist Episcopal White Church at the southeast corner of present day Fanshawe Park Road and Wonderland Road. In 1934, their tombstones were placed into a

cairn—a popular practice at the time (Globe and Mail 1949). In the 1990s, Fanshawe Park Road was widened and the cairn was moved to St. John's Anglican Church where it remains today (LTHBC 2001a: 198).

Page's 1877 map of London Township shows a building present at approximately the same location as the current structure on the property (Figure 3). The map also depicts orchards and that the Warner family owned part of the adjacent lot. The existing residence at the property is a Georgian style building, a style popular in Upper Canada from 1780 to 1860, and which usually replaced a settler's first log-cabin structure (Kyles 2016). The Georgian style residence fell out of favour by 1860 as more ornate Victorian styles, such as Italianate, Queen Anne, and Vernacular residences, became increasingly popular. Therefore, the City of London's Inventory of Heritage Resources date of construction for this residence as circa 1850 is supported, and matches the period of construction of other Georgian residences in the City of London. The Warner family had a farm of an above average value, so they were able to afford a statelier two storey Georgian residence. The prevailing building style at the time in Ontario was the one and a half storey Ontario Gothic Cottage (University of Waterloo 2009).

After the death of William, the farm was inherited by his oldest son Wesley. He was described in the *London Advertiser* as an earnest man with a full beard of red whiskers, and devout Methodist. His political beliefs were Reform and he was a noted member of the temperance movement (London Advertiser 1891). Wesley lived on the farm with his wife Esther, aged 38. Together they had five children, Clara, aged 6, William Louis aged 14, and Alice, aged 3. In the 1881 Census of Canada they also had one servant, Elizabeth Floyd, an 18-year-old from England (Census of Canada 1881). By 1890, Wesley and Esther had two more children, Maggie, born 1882, and Walter, born 1887.

Tragedy struck the Warner family on Saturday March 21, 1891. That morning, Wesley and two of his daughters, Clara and Maggie, drove their carriage to market in London. During their trip back, the carriage was struck by a Canadian Pacific Railway train at a notorious crossing with a steep bank that did not offer a view of the tracks until within 25 feet of the railroad. Wesley, Clara, Maggie, and their two horses were instantly killed. The driver of the train, Thomas Rutledge, of the City of London, could not understand how the disaster happened. He explained he blew the train whistle twice at 400 yards. The previous week, Wesley and Esther had celebrated their 25th wedding anniversary and invited his neighbors over for a gathering (London Advertiser 1891).

By 1893, the remaining Warner family had left their farmstead and moved to the City of London to reside at 10 Hope Street (The City of London and Middlesex County Directory 1893: 326). Esther lived with her son William Louis, who supported the family as a laborer. The other surviving children, Alice and Walter also lived with them (Census of Canada 1901).

In a 1917 map of London Township, the owners of the north half of Lot 20, Concession 5 are listed as J., J.S., and D. McLarty (LTHBC 2001b: xiv). The 1911 Census of Canada lists the McLarty family as comprising John McLarty, head of the household, aged 55, his wife Margarette, aged 58, their children, Francis, aged 25, John, aged 20, and their grandson, John, aged 4 (Census of Canada 1911).

A 1940 map of London Township shows that the owner of the north half of Lot 20, Concession 5 was William May. William M. May (1887-1963) was the third son of Donald and Mary May, who had settled on the nearby south half of Lot 22, Concession 5. William married Sheila Kennedy (1892-1964) and together they had three daughters, Mary Rose, Edna, and Irene. Mary Rose married Patrick Rondo and eventually moved back to the property in the study area (LTHBC 2001b: 286-287).

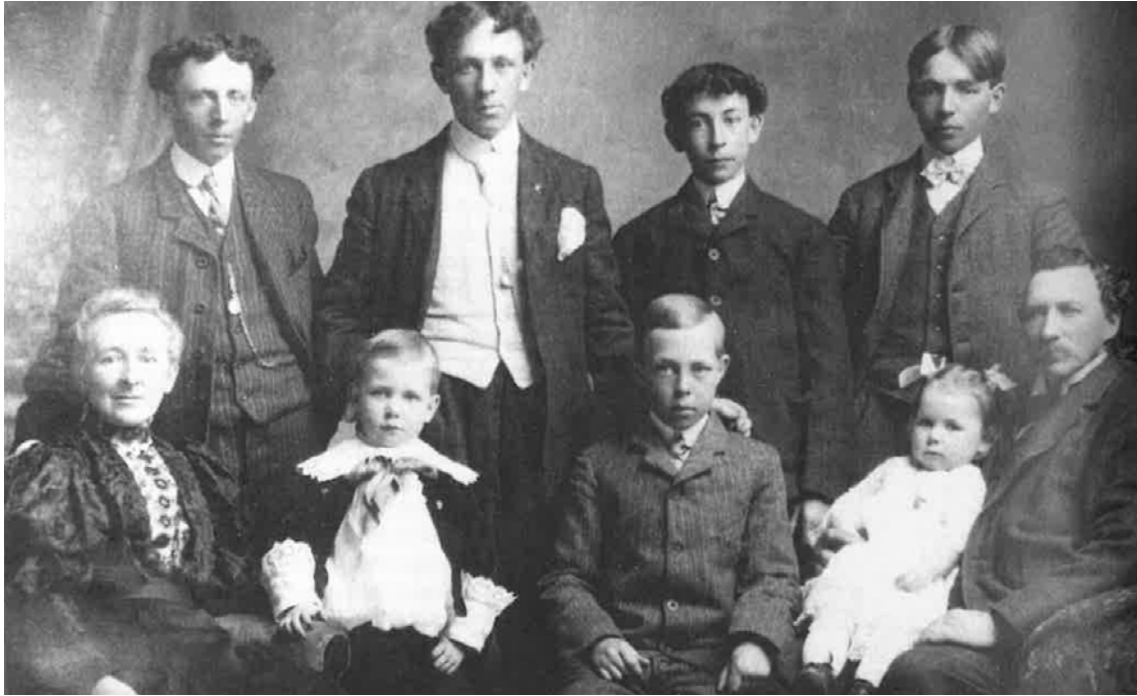


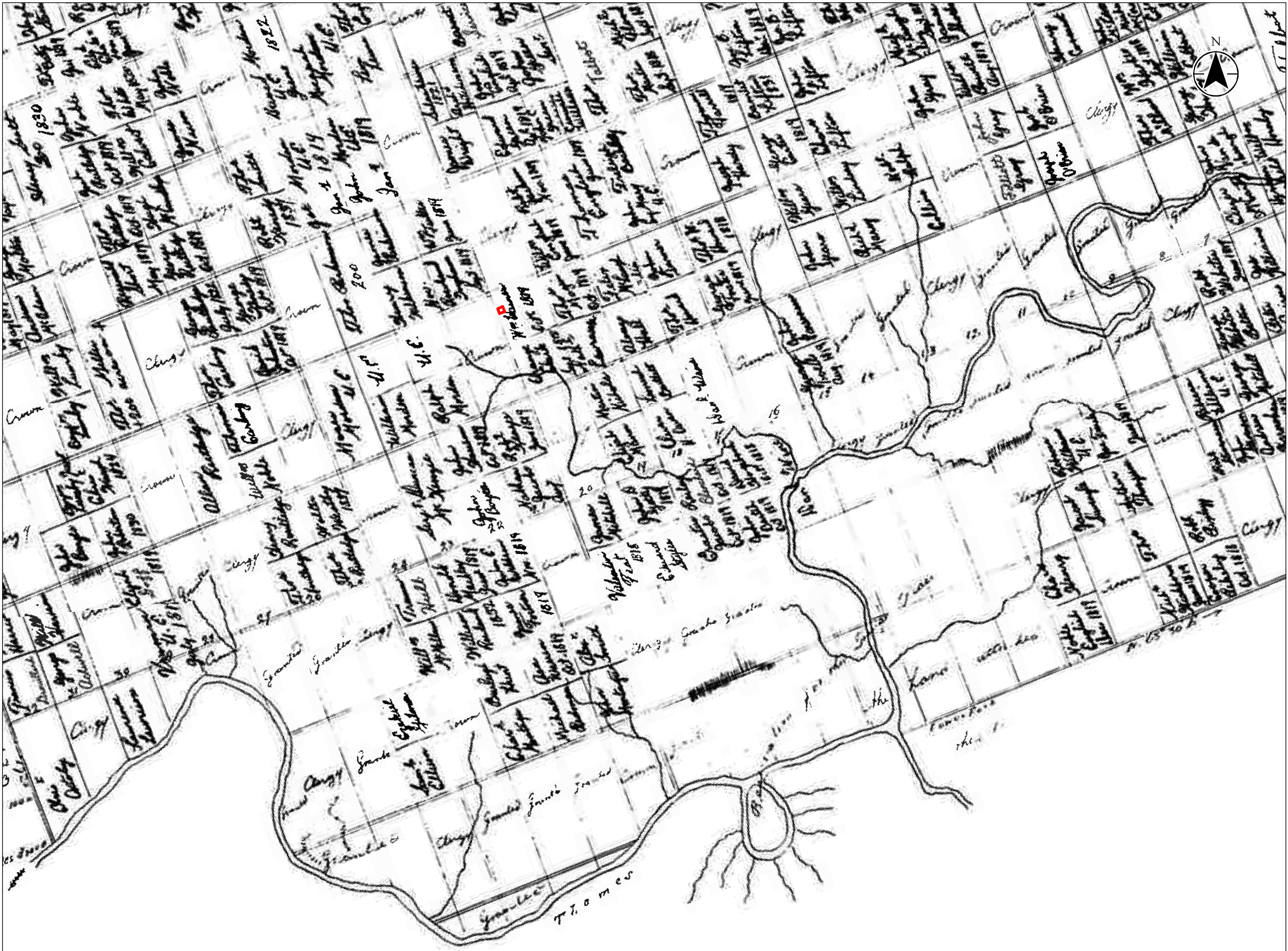
Plate 1: The May family in 1906, William May is second from left, standing (Source: London Township 2001b: 286)

In the post-war period, the property and surrounding area remained largely agricultural. A 1954 aerial photograph (Figure 4) of the study area shows an entirely agricultural landscape with the exception of a golf course (now part of Sunningdale Golf & Country Club) along Medway Creek, north of Sunningdale Road. By 1967, the Sunningdale Golf Course had been extended to the southern side of Sunningdale Road (Figure 5). Also during the mid-20th century, the Medway Valley Heritage Forest was created by the Upper Thames River Conservation Authority (Upper Thames River Conservation Authority n.d.). Included in the Medway Valley Heritage Forest-North is part of Lot 20, Concession 5. The study area remained mostly agricultural in the 1970s. Topographic mapping from 1973 shows the residence to be one of only four structures north of the intersection of Fanshawe Park Road and Wonderland and south of Sunningdale Road and Wonderland. Additionally, it shows that the Sunningdale Golf & Country Club owned land adjacent to the study area on the north side (Figure 6). By 1989, development was starting to take place north of Fanshawe Park Road along Wonderland, with the first subdivisions visible in aerial photos (Figure 7).

Wonderland Road in the study area was formerly called Cameron Side Road and by the 1960s it was officially called Hutton Road (Vernon's City Directory of London 1965). In 1978, the Guy Lombardo Bridge was constructed linking Hutton Road and Wonderland Road over the Thames River. The erection of the bridge led to the name Wonderland Road being applied to the entire north-south road in the area. Wonderland Road soon became one of the busiest north-south roads in London (Baker and Neary 2003:110).

By the turn of the 21st century, agriculture was still taking place on the lot, but the Sunningdale Golf & Country Club was now present in part of the north half of Lot 20, Concession 5 and development was accelerating along Fanshawe Park Road. In 2010, the farm on the property was developed into suburban housing. The Georgian residence remains, having been subdivided into an approximately 1 acre lot.

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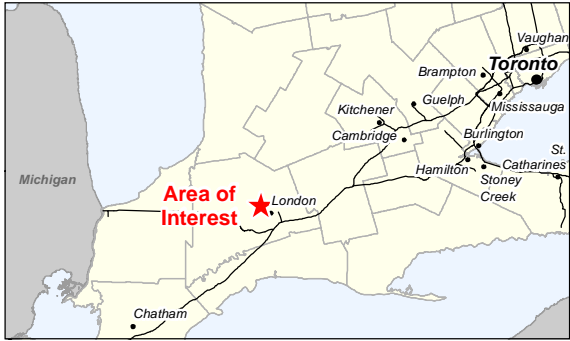
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Legend
Study Area (approximate)

FIGURE NOT TO SCALE

Notes
1. Source: London Township History Book Committee. 2001b. London Township Volume 2: Families Past and Present. Aylmer, Ontario: London Township History Book Committee, page viii.



Project Location: City of London
160940525 REVA
Prepared by AMW on 2017-12-18
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Independent Review by ABC on yyyy-mm-dd

Client/Project:
INVEST GROUP, LTD.
2096 WONDERLAND ROAD NORTH
HISTORICAL IMPACT STATEMENT

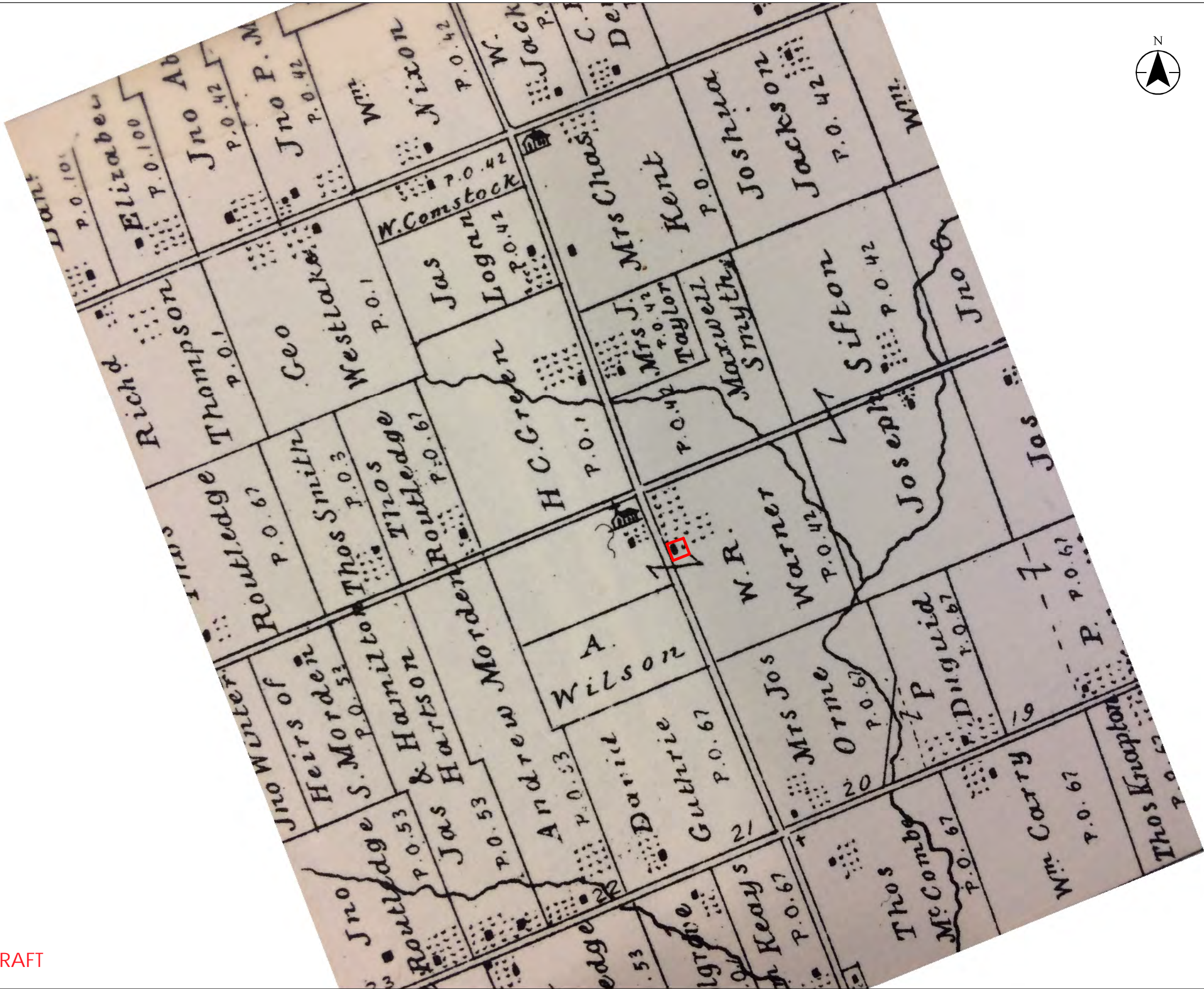
Figure No. 2

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Map of Grants in London Township

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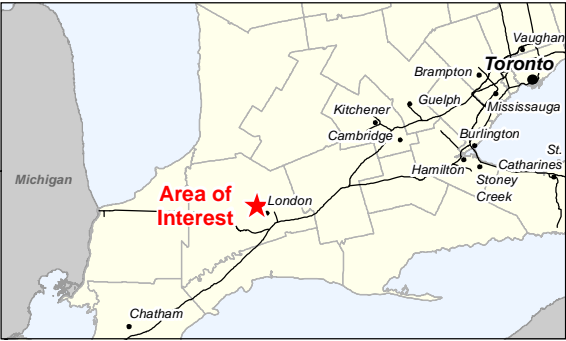
DRAFT



Legend
 Study Area (approximate)

FIGURE NOT TO SCALE

Notes
1. Source: Page, H.R. & Co. 1878. Illustrated Historical Atlas of the County of Middlesex: Toronto, Ontario: Correll, Craig & Co. Lith. Toronto.



Project Location
City of London
160940525 REVA
Prepared by AMW on 2017-12-18
Technical Review by PD on 2017-12-08
Independent Review by ABC on yyyy-mm-dd

Client/Project
INVEST GROUP, LTD.
2096 WONDERLAND ROAD NORTH
HISTORICAL IMPACT STATEMENT

Figure No.
3

DRAFT

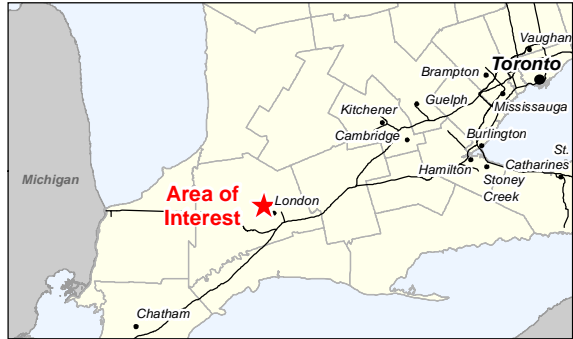
Title
Map of Study Area, 1877



Legend
[Red square] Study Area (approximate)

FIGURE NOT TO SCALE

Notes
1. Source: University of Toronto. n.d. 1954 Air Photos of Southern Ontario. Electronic Document: <https://mdl.library.utoronto.ca/collections/air-photos/1954-air-photos-southern-ontario/index>. Last Accessed: December 12, 2017



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2096 WONDERLAND ROAD NORTH
HISTORICAL IMPACT STATEMENT

Figure No.
4

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Title
Aerial View of Study Area, 1954

DRAFT



Legend
[Red Box] Study Area (approximate)

FIGURE NOT TO SCALE

Notes
1. Source: Lockwood Survey Corporation. 1967. London 1967, Line 5, Photo 51.



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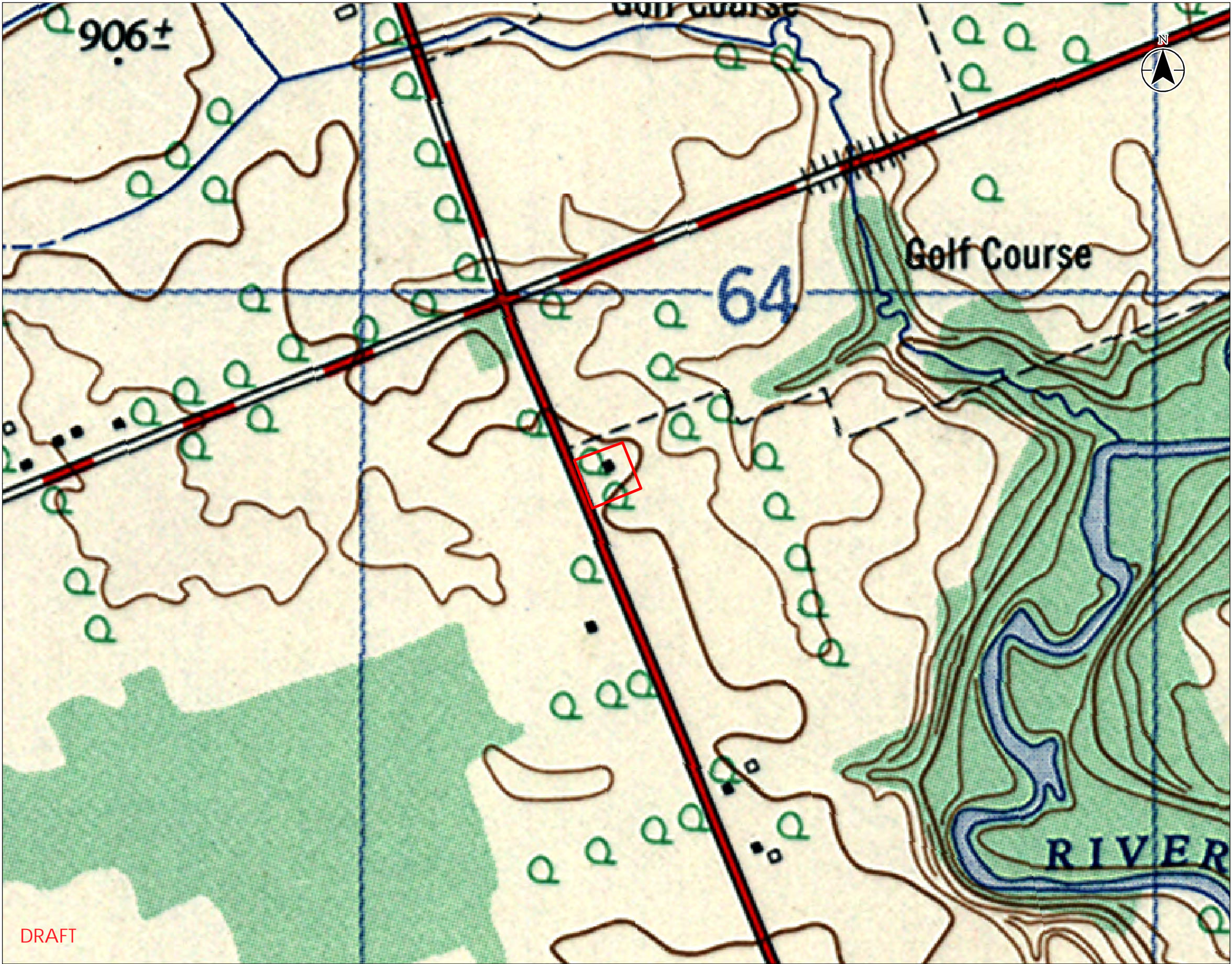
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HISTORICAL IMPACT STATEMENT

Figure No.
5

DRAFT

Title
Aerial View of Study Area, 1967

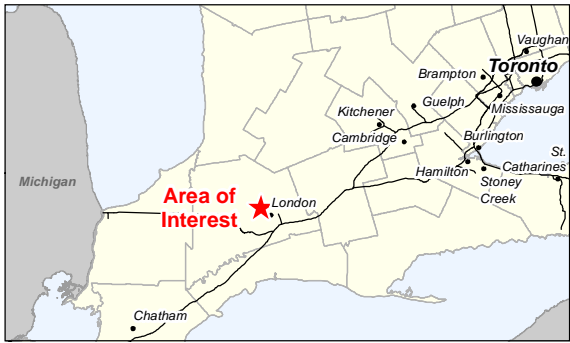
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Legend
Study Area (approximate)

FIGURE NOT TO SCALE

Notes
1. Source: Department of Energy, Mines and Resources. 1973. Arva, Middlesex County, London Township, Ontario. Canada Map Office: Ottawa.



Project Location
City of London
160940525 REVA
Prepared by AMW on 2017-12-19
Technical Review by PD on 2017-12-08
Independent Review by ABC on yyyy-mm-dd

Client/Project
INVEST GROUP, LTD.
2096 WONDERLAND ROAD NORTH
HISTORICAL IMPACT STATEMENT

Figure No.
6
DRAFT

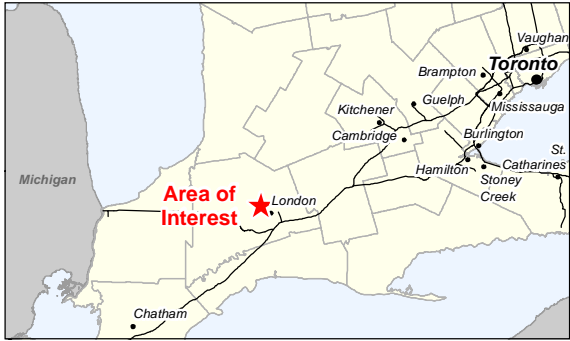
Title
Topographic Map of Study Area, 1973



Legend
 Study Area (approximate)

FIGURE NOT TO SCALE

Notes
1. Source: Northway Map Tech, Ltd. 1989. London 1989 Line 8 Photo Number 1040.



Project Location
City of London
160940525 REVA
Prepared by AMW on 2017-12-19
Technical Review by PD on 2017-12-08
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Client/Project
INVEST GROUP, LTD.
2096 WONDERLAND ROAD NORTH
HISTORICAL IMPACT STATEMENT

Figure No.
7

DRAFT

Title
Aerial View of Study Area, 1989

3.0 SITE DESCRIPTION

3.1 PLANNING FRAMEWORK

3.1.1 City of London Official Plan

The subject property, 2096 Wonderland Road North is listed as a 'Priority 2' property on the City of London's Register as per s. 27 OHA (Inventory of Heritage Resources) (City of London 2006). It is not designated under the *Ontario Heritage Act*. According to the City's Inventory, Priority 2 properties are those that are considered to be "buildings [that] merit designation under Part IV of the Ontario Heritage Act. They have significant architectural and/or historical value and may be worthy of protection by whatever incentives may be provided through zoning considerations, bonusing or financial advantages." The subject property was formerly listed as a 'Priority 1' property on the City of London's Register but was downgraded to a 'Priority 2' property in 2008. The letter confirming the amendment from a 'Priority 1' to a 'Priority 2' property is included in Appendix A.

The City of London Official Plan does not contain detailed policies with regard to properties listed on the City's heritage inventory. The City's Official Plan Section 13.1 contains the following objectives with regard to cultural heritage resources:

- Protect in accordance with Provincial policy those heritage resources which contribute to the identity and character of the City; (Clause i) amended by OPA 438 Dec. 17/09).
- Encourage the protection, enhancement, restoration, maintenance, and utilization of buildings, structures, areas, or sites within London which are considered to be of cultural heritage value or interest to the community; (Clause ii) amended by Ministry Mod. #30 Dec. 17/09).
- Encourage new development, redevelopment, and public works to be sensitive to, and in harmony with, the City's heritage resources; and (Clause iii) amended by OPA 438 Dec. 17/09).
- Increase public awareness and appreciation of the City's heritage resources, and encourage participation by the public, corporations, and other levels of government in the protection, restoration, and utilization of these resources.

3.2 LANDSCAPE SETTING

The subject property, 2096 Wonderland Road North, is set in an area transitioning from agricultural use to suburban development. While lands to the immediate west of the residence on the opposite side of Wonderland Road North remain agricultural, lands to the immediate north, east, and south of the study area on the eastern side of Wonderland Road North have been developed into suburban residences (Plate 2, Plate 3, Plate 4). A review of Google Earth Imagery demonstrated that the residential subdivision to the southeast was constructed between 2009-2011. The subdivision to the east and north was constructed between 2011 and 2013. Both subdivisions were constructed after the subject property was downgraded from a 'Priority 1' to a 'Priority 2' property on the City of London's heritage register.

Wonderland Road North is a paved, two lane road with a gravel shoulder on the western side of the road across from the residence and a paved shoulder that narrows in the study area to accommodate the front yard of the residence.

HERITAGE IMPACT STATEMENT, 2096 WONDERLAND ROAD NORTH, CITY OF LONDON, ONTARIO

The residence is connected to Wonderland Road North by a gravel driveway that leads to an asphalt parking surface on the eastern side of the residence adjacent to the garage. The front yard of the residence has mature evergreen and deciduous trees interspersed on a grass lawn.



Plate 2: Wonderland Road North looking North from subject property



Plate 3: Wonderland Road north looking South from subject property



Plate 4: Looking West across Wonderland Road North from subject property

3.3 2096 WONDERLAND ROAD NORTH

3.3.1 Residence Exterior

The residence at 2096 Wonderland Road North is a two-storey Georgian style farmhouse with a buff brick exterior and stone foundation. The house has a square shape plan, with an addition connecting to a modern garage on the east elevation. The addition likely dates to the 1970s or 1980s. According to the City of London Heritage Register, the original portion of the residence dates to about 1850. The original portion of the residence has a hip roof clad in asphalt shingles and bookend chimneys. The chimney on the south elevation is brick and the chimney on the northern elevation is clad in concrete, the original brick partially visible. The addition is a shed roof garage with loft that is connected to the residence by a buff brick flat roof addition to the original residence.

The front façade (western elevation) is symmetrical with a concrete partial entrance porch. Above the first storey are three modern windows with modern shutters. Each window has a brick voussoir. The first storey of the front façade has two modern windows with modern shutters that also have brick voussoirs. The main entrance has wooden lintels and a transom above the doorway. The door itself is modern (Plate 5).

The north elevation (side) on the second storey has two modern windows with brick voussoirs. The first storey also has two modern windows with brick voussoirs. The stone foundation of the residence is visible and this elevation has three modern basement windows with brick voussoirs just above the foundation where the buff brick exterior meets the stone foundation (Plate 6).

The east elevation (rear) of the second storey has two modern windows with brick voussoirs and a modern door that leads to the flat roof portion of the addition to the residence. The door has a brick voussoir above it. The first storey has one modern window with a brick voussoir and a slide doorway leading to a deck and detached sauna. The east elevation has a flat roof and buff brick addition that connects the original residence with the garage and loft. The flat roof addition has modern double doors and a transom. The garage has a shed roof with a loft and is clad in vertical wooden siding. The garage type is double (Plate 7).

The south elevation (side) has two modern windows on the second storey with brick voussoirs. The first storey has two modern windows with brick voussoirs. The foundation on this elevation is not as visible compared to the north elevation. Two basement windows are located below the first storey windows and these windows have brick voussoirs where the foundation meets the buff brick exterior (Plate 8).

Original architectural elements which form the heritage attributes of the residence are listed in Section 4.2.5 of this report.



Plate 5: Front façade (western elevation)



Plate 6: Northern elevation



Plate 7: Eastern elevation



Plate 8: Southern elevation

3.3.2 Residence Interior

The interior arrangement of the residence at 2096 Wonderland Road North is a typical layout for a 19th century Ontario farmhouse. The first storey contains a kitchen (Plate 9), a laundry room (part of the addition) (Plate 10), dining room (Plate 11, Plate 12), living room (Plate 13, Plate 14), bathroom (Plate 15), den (Plate 16), and foyer (Plate 17, Plate 18). The central portion of the first storey has a hallway with the front entrance door and a staircase which leads to the second storey (Plate 19, Plate 20, Plate 21, Plate 22). The dining room, central hallway, and living room, part of the foyer, and bathroom have wainscoting that is either painted white or naturally finished. The flooring in the foyer, bathroom, and kitchen is modern ceramic tile. The den is carpeted. The living room, dining room and central hallway feature wide plank wooden flooring that appears to be the original hardwood flooring.

The second storey is accessed through the staircase in the central hallway (Plate 23, Plate 24) of the residence and contains two bathrooms and four bedrooms. One bedroom was locked and inaccessible. One bedroom was carpeted, had a fireplace mantle, and an ensuite bathroom (Plate 25, Plate 26). The remainder of the accessible bedrooms had wooden flooring (Plate 27, Plate 28, Plate 29) and the bathroom accessible from the hallway had modern ceramic

flooring (Plate 30). All of the rooms, except the ensuite bathroom, are connected by a hallway with a hardwood floor (Plate 31).

The house features a basement, which is accessed via a door in the foyer. The basement encompasses the entirety of the original portion of the residence. The basement has stone walls and a poured concrete floor. The basement has hand hewn joists (Plate 32).

The doors in the residence are wooden and many of them feature skeleton key locks and ornate door knobs (Plate 33). The modern attached garage has a loft above it and is connected to the main residence via the laundry room (Plate 34).

Invest Group has advised Stantec that the roof of the residence leaks and that elevated levels of mold are present in the structure. A building condition specialist should be consulted to determine the impacts these issues may have on the residence. A copy of the Mold Report is in Appendix C.

Original architectural elements which form the heritage attributes of the residence are listed in Section 4.2.5 of this report.



Plate 9: Kitchen

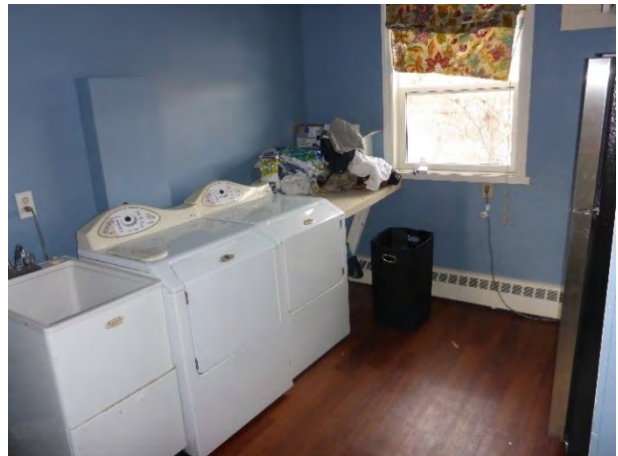


Plate 10: Laundry room



Plate 11: Dining room, east half



Plate 12: Dining room, west half



Plate 13: Living room, west half



Plate 14: Living room, east half



Plate 15: 1st Floor bathroom

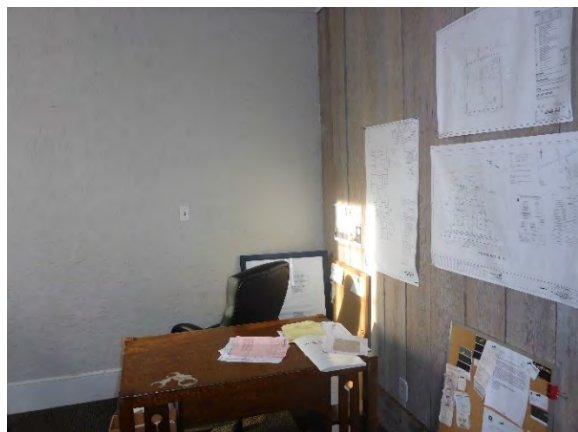


Plate 16: Den



Plate 17: Foyer



Plate 18: Foyer

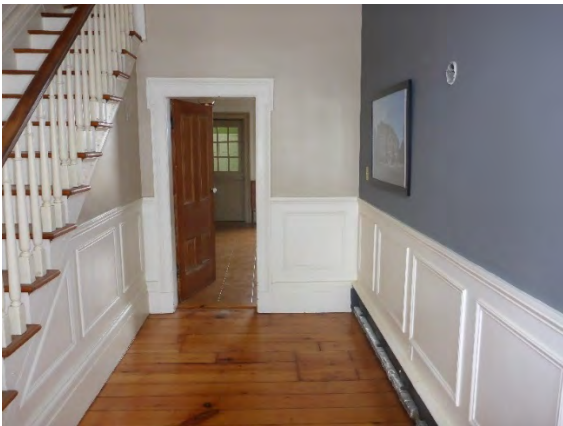


Plate 19: Central hallway



Plate 20: Central staircase



Plate 21: Central staircase



Plate 22: Entrance door

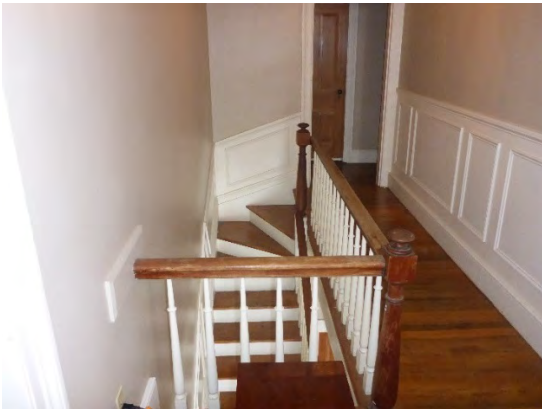


Plate 23: Staircase from 2nd floor



Plate 24: Staircase from 2nd floor



Plate 25: Northwest upstairs bedroom



Plate 26: Northwest upstairs bathroom (ensuite)



Plate 27: East upstairs bathroom

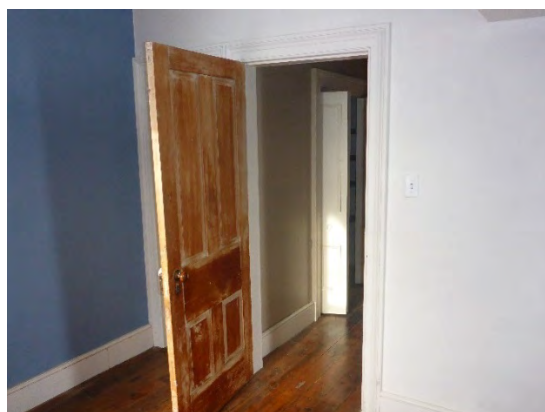


Plate 28: Southeast upstairs bedroom



Plate 29: Southeast, upstairs bedroom



Plate 30: Upstairs bathroom accessed from hallway.

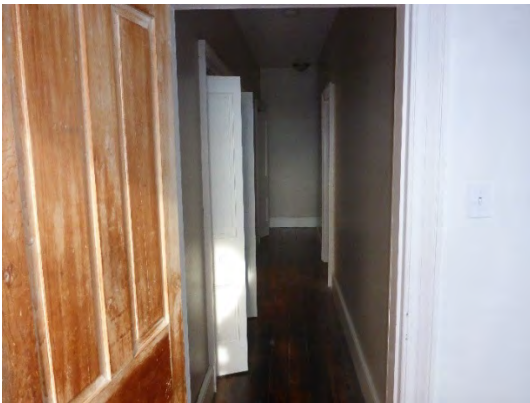


Plate 31: Upstairs Hallway



Plate 32: Basement with joists and foundation

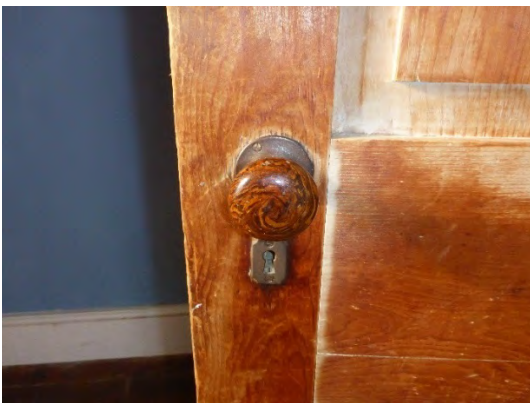


Plate 33: Door knob and skeleton key lock



Plate 34: Loft above garage

3.3.3 Outbuildings

The subject property contains one outbuilding, which is a sauna located on the southeast corner of the residence (Plate 35). The sauna is adjacent to a deck. In aerial photography until at least 1967, outbuildings which may have been barns are present at the east elevation of the property. These barns do not appear in the 1973 Topographic Map or 1989 aerial photo of the area.



Plate 35: Sauna and Deck

3.3.4 Landscape Features

The subject property contains several landscape features. The property contains a gravel driveway which leads to an asphalt driveway and parking area (Plate 36). There are a number of mature evergreen and deciduous trees on the property (Plate 37). The southeast corner of the property has an ornamental garden (Plate 38). The residence is surrounded with bushes and shrubs including boxwood and yew (Plate 39). The east (rear) elevation has a wooden deck.

To the west of the residence, on the other side of Wonderland Road North, is an agricultural field. New subdivisions surround the property on the north, east, and south sides.



Plate 36: Gravel driveway and mature trees on property, looking southwest



Plate 37: Mature trees on property, facing northwest



Plate 38: Garden area at southeast corner of lot.



Plate 39: Plantings at front façade of residence.

4.0 HERITAGE EVALUATION

4.1 ONTARIO REGULATION 9/06

The criteria for determining CHVI are defined by *Ontario Regulation 9/06 (O. Reg. 9/06)* (Government of Ontario 2006b). If a property meets one or more of the below criteria than it merits designation under Part IV of the *Ontario Heritage Act*.

In order to identify CHVI at least one of the following criteria must be met:

1. The property has design value or physical value because it:
 - i. is a rare, unique, representative or early example of a style, type, expression, material or construction method
 - ii. displays a high degree of craftsmanship or artistic merit
 - iii. demonstrates a high degree of technical or scientific achievement
2. The property has historical value or associative value because it:
 - i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community
 - ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture
 - iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community
3. The property has contextual value because it:
 - i. is important in defining, maintaining or supporting the character of an area
 - ii. is physically, functionally, visually or historically linked to its surroundings
 - iii. is a landmark

4.2 EVALUATION

The following table identifies which criteria of Ontario Regulation 9/06 are met. The following section is a detailed discussion of applying the criteria of Ontario Regulation 9/06 to the property. The evaluation is based on existing building conditions.

Table 1: Evaluation According to Ontario Regulation 9/06

Criteria of O. Reg 9.06	Y/N
Is a rare, unique, representative or early example of a style, type, expression, material or construction method	Y
Displays a high degree of craftsmanship or artistic merit	N
Demonstrates a high degree of technical or scientific achievement	N
Has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community	Y
Yields, or has the potential to yield, information that contributes to an understanding of a community or culture	N
Demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community	N
Is important in defining, maintaining or supporting the character of an area	N
Is physically, functionally, visually or historically linked to its surroundings	Y
Is a landmark	N

4.2.1 Design or Physical Value

The residence at 2096 Wonderland Road North is a Georgian farm house. It was built in approximately 1850, and the addition at the rear elevation dates to the 1970s to 1980s. The residence is a two storey house with a square plan and stone foundation. The front façade has a symmetrical layout with a hip roof, two chimneys, and modern asphalt shingles. The exterior is buff brick, with a common bond. The architectural details on the front façade include a transom, sidelights, and brick voussoirs. The windows are modern and the sills are metal or plastic. The windows on the front façade have modern shutters. The eaves on the front façade project off the roof line. A partial concrete porch leads to the main doorway. The side elevations of the residence are also symmetrical, with modern windows, and brick voussoirs. The rear section of the house has an addition that was built between the 1970s and 1980s. The addition is not sympathetic in nature and detracts from the architectural features of the rear elevation. The original portion of the residence on this elevation has modern windows and brick voussoirs.

The interior of the residence has a number of original architectural features, including but not limited to: wooden window surrounds with plain sills, fireplaces, door surrounds, door hardware, a central staircase and bannister rail, wainscoting, and hardwood floors.

According to City of London data, there is a total of 13 other Georgian style residences with buff brick and centre hall plans within City limits. Most of these buildings were constructed in areas that were not considered urban at the time of construction. The period of construction for these other Georgian residences is 1850 to 1869, with the later dates including architectural influences from the Italianate style. As there are approximately 6,000 properties listed and designated in the City of London, 14 Georgian style residences including 2096 Wonderland Road would indicate that this type of construction is relatively rare in the City.

The house was determined to have design value and to satisfy O. Reg. 9/06 (i.i) as it is a representative example of Georgian farmhouse that dates to the 1850s in the former London Township.

4.2.2 Historical or Associative Value

The residence at 2096 Wonderland Road North is historically associated with the Warner family, an early settler family in London Township (arriving in 1819). The residence was constructed for William Warner and he passed the

farmstead to his son Wesley Warner after his death. The residence's estimated date of construction on the London Heritage Register is 1850. This date is accurate because it matches the date of construction of other Georgian style residences within city limits and a date of construction after the early 1860s is unlikely as the Georgian style fell out of favour with architects and home owners around 1860.

William Warner is listed as receiving the northern half of Lot 20, Concession 5 from the Crown in 1819. William's son Wesley was a noted member of the community for his work in the temperance society but is not known to have made other notable contributions to the development of the community.

The property was determined to have historical or associative value and satisfy O. Reg. 9/06 (ii.i.) due to the property's association with the Warner family and the theme of agricultural settlement in London Township. The Warner family were the original settlers of Lot 20, Concession 5 and the family farmed the land for nearly 75 years, which establishes a direct historical association between the Warner family and the property, including the existing residential structure..

4.2.3 Contextual Value

The property at 2096 Wonderland Road North is part of a landscape transitioning away from agricultural use. During the 2010s, the properties to the north, east, and south of the study area were developed and a residential subdivision was constructed. To the west, on the other side of Wonderland Road North, the landscape remains agricultural, but new residential subdivisions can be seen beyond the farm field.

The residence at 2096 Wonderland Road North is physically and historically linked to its surroundings. As a 19th century farmhouse at its original location it is physically linked to 2096 Wonderland Road North. The residence is historically linked because it contextualizes the prominent role agriculture played in the development of the study area and London Township. The residence is also historically linked to the study area because it remains in its original location on the Warner farmstead. Because of this, the property was determined to have contextual value and satisfy O. Reg. 9/06 (iii.ii).

4.2.4 Statement of Cultural Heritage Value or Interest

The residence at 2096 Wonderland Road North has CHVI as a representative example of a mid-19th century Georgian farmhouse. The residence is a two storey structure with a low-pitched hip roof and bookend chimneys. It has a buff brick exterior with a common bond, brick voussoirs, and a stone foundation. The Georgian style of architecture is reflected in the symmetrical façade and minimal use of ornamentation and detailing.

The residence at 2096 Wonderland Road North has historical and associative value because of its link with the Warner family. William Warner was the original patent holder on the property, receiving it in 1819. His son, Wesley Warner, inherited the farmstead and was a noted member of London Township for his involvement in the temperance society.

The residence at 2096 Wonderland Road is physically and historically linked to its surroundings. It remains located in its original spot on the property and historically reflects the prominent role agriculture played in London Township.

The residence at 2096 Wonderland Road North has local significance for design/physical value, historical/associative, and contextual value. Accordingly, this resource meets the criteria for designation under Part IV of the Ontario Heritage Act.

4.2.5 Heritage Attributes

Based on the evaluation of CHVI, the following heritage attributes were identified for the house:

- Georgian two storey Ontario farmhouse
- Square shaped plan
- Low pitched hip roof with bookend chimneys
- Buff brick construction
- Field stone foundation
- Brick voussoirs above windows
- Original interior features including fireplaces, central staircase with a bannister, hardwood floors, door hardware, door surrounds, window surrounds, and wainscoting.

5.0 ASSESSMENT AND MITIGATION

5.1 DESCRIPTION OF THE PROPOSED UNDERTAKING

Invest Group Ltd has proposed to remove the existing structure, driveway, and sidewalk at 2096 Wonderland Road North to construct 18 townhouse unit. A draft of the site plan is available in Appendix B. The plan includes the construction of three structures, containing 18 townhouse units, and a driveway in the centre of the property.

5.2 ASSESSMENT OF IMPACTS

The residence at 2096 Wonderland Road North has CHVI since it meets the criteria for determining cultural heritage value included in *O. Reg 9/06*. Accordingly, the assessment of potential impacts is limited to the heritage attributes of 2096 Wonderland Road North (See section 4.2.5). Impacts are defined by Info Sheet #5, as discussed in Section 1.0.

Table 2: Evaluation of Potential Direct Impacts

Direct Impact	Relevance to 2096 Wonderland Rd. N.
Destruction of any, or part of any, <i>significant heritage attributes</i> or features.	Removal of the residence will result in the destruction of the identified heritage attributes and its historical and physical connection to the property. Therefore, mitigation measures are required.
Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance.	The owner is proposing to remove the residence. No alterations or modifications are planned for the structure. Therefore, no mitigation measures are required.

Table 3: Evaluation of Potential Indirect Impacts

Indirect Impact	Relevance to 2096 Wonderland Rd. N.
Shadows created that alter the appearance of a <i>heritage attribute</i> or change the viability of a natural feature or plantings, such as a garden	The owner is proposing to remove the residence, so there will be a direct impact. Once removed indirect impacts will not be a concern. Therefore, no mitigation measures are required.
Isolation of a <i>heritage attribute</i> from its surrounding environment, context or a <i>significant</i> relationship	The owner is proposing to remove the residence, so there will be a direct impact. Once removed indirect impacts will not be a concern. Therefore, no mitigation measures are required.
Direct or indirect obstruction of <i>significant</i> views or vistas within, from, or of built and natural features	The owner is proposing to remove the residence, so there will be a direct impact. Once removed indirect impacts will not be a concern. Therefore, no mitigation measures are required.
A change in land use such as rezoning a battlefield from open space to residential use, allowing new <i>development</i> or <i>site alteration</i> to fill in the formerly open spaces	The owner is proposing to remove the residence, so there will be a direct impact. Once removed indirect impacts will not be a concern. Therefore, no mitigation measures are required.
Land disturbances such as a change in grade that alters soil, and drainage patterns that adversely affect an <i>archaeological resource</i>	The owner is proposing to remove the residence, so there will be a direct impact. Once removed indirect impacts will not be a concern. Therefore, no mitigation measures are required.

5.3 MITIGATION OPTIONS

The residence at 2096 Wonderland Road North has CHVI since it meets the criteria set out in O. Reg 9/06 of the *Ontario Heritage Act*. Further, this house is listed on the City of London Heritage Register as a Priority 2 Building.

As identified in Tables 2 and 3, the proposed change in land use will have an adverse impact on the CHVI of this property. Accordingly, three mitigation options are presented, including:

- permanent retention of the house on site
- permanent relocation of the house
- demolition preceded by documentation and salvage

5.3.1 Retention

Generally, retention *in situ* is the preferred option when addressing any structure where CHVI has been identified, even if limited. The benefits of retaining a structure, or structures, must be balanced with site-specific considerations. Not only must the level of CHVI be considered, so too must the structural condition of the heritage resource, the site development plan and the context within which the structure, or structures, would be retained.

In the case of 2096 Wonderland Road North, the proposed change in land use and demolition of the residence will negatively impact the CHVI of the property. The scale of the development of the townhouses requires the removal of the existing residence. Retention of the residence *in situ* would require that the proposed townhouse plan be revised to allow for the existing house to remain. If retained, and townhouses are constructed around the house on the property, the contextual setting of the house will be diminished and the house may be isolated from its historical association with Wonderland Road North. Further, when the broader context of the area is considered, the lands adjacent to the study area are transitioning away from rural, agriculture use and towards new residential development. The residential subdivisions to the south, east, and north were constructed between 2009 and 2013, after the subject property was downgraded from a 'Priority 1' to a 'Priority 2' property on the City of London heritage register. Should the property be retained *in situ*, it would soon constitute a remnant landscape contextually removed from its historic surroundings and land use patterns. Accordingly, retention *in situ* is not considered the preferred mitigation option for the residence at 2096 Wonderland Road North.

5.3.2 Relocation

Where retention *in situ* is not feasible or preferred, relocation is often the next option considered to mitigate the loss of a heritage resource. As with retention, relocation of a structure or structures must be balanced with the CHVI identified. Relocation removes the resource from its contextual setting but allows for the preservation of noteworthy heritage attributes, particularly those identified to be of design or physical value (see Section 4.2.1). This is a viable option where the CHVI identified merits preservation and the integrity of the structure is determined to be sound.

The residence at 2096 Wonderland Road North is one of 14 Georgian style or Georgian influenced residences in the City of London's Heritage Register. There is approximately a total of 6,000 buildings on the list, making the Georgian style a relatively rare building style in the City of London. Therefore, relocation within the City of London is the preferred mitigation option to conserve the remaining Georgian residences in the City.

To retain the CHVI of the house, three relocation options should be considered, including:

- Relocation within the property
- Relocation to an unknown, but sympathetic, site such as the rural/agricultural land on the west side of Wonderland Road North
- Sale of the building at a discounted price if the buyer agrees to cover relocation expenses to a sympathetic site.

Of the three relocation options, relocation within the property is preferred since this would maintain the historical and contextual relationship between the house and the landscape. Relocation to an unknown, but sympathetic, property is the next preferred option since this would still maintain the CHVI of the residence, although to a lesser degree. An example of an appropriate, sympathetic location is the rural/agricultural land adjacent to the subject property on the west side of Wonderland Road North. Another possible relocation strategy is to offer the building for sale to the public or City of London for a discounted price (i.e. \$1) with the condition that the buyer agreed to relocate the residence. Advertising the house for sale will demonstrate that this mitigation option has been explored.

It is noted that a letter has been prepared following assessment of the house by Strik, Baldinelli, Moniz (SBM) Engineers (Appendix E), suggesting that relocating the house would be costly and difficult due to the brick construction, and may result in damage to the house and fireplaces.

5.3.3 Documentation and Salvage

Detailed documentation and salvage is often the preferred mitigation strategy where retention or relocation is not feasible or warranted. Documentation creates a public record of the structure, or structures, which provides researchers and the general public with a land use history, construction details, and photographic record of the resource. Through the selective salvage of identified heritage attributes and other materials, the CHVI of the property can be retained, if in a different context. Documentation and salvage acknowledges the heritage attributes in their current context and, where feasible, allows for reuse. Documentation should be carried out in advance of any changes made to the property.

In the event that relocation is not viable for the house at 2096 Wonderland Road North, documentation and salvage is an appropriate mitigation option. Documentation should be carried out in advance of any change to the property, including relocation or demolition activities. Documentation activities should consist of the full heritage recording of the house and landscape through photography, photogrammetry, or LiDAR scan. Salvage activities should consist of the identification and recovery re-useable materials by a reputable salvage company or charity such as The Timeless Material Company, Artefacts Salvage & Design, or Waterloo ReStore. If Documentation and Salvage is the chosen mitigation option, the client has already agreed to utilize architectural elements of the existing residence in the new development (see Appendix D for additional details).

6.0 RECOMMENDATIONS

The residence at 2096 Wonderland Road North has CHVI and was identified as a 'Priority 2' heritage resource on the City of London Heritage Inventory. Further, the heritage evaluation carried out in this HIS determined that the resource meets criteria set out in O. Reg. 9/06.

Based on the adverse impacts identified to this cultural heritage resource and the proposed site plan, the following mitigation measure are recommended:

- 3) Relocation of the house is the preferred mitigation option for this property, if feasible. Relocation within the property is preferred in order to maintain some aspect of the contextual and historical associations the house has with its setting. If relocation within the site is demonstrated not to be feasible, relocation to an adjacent site is also a valid mitigation option, if an adjacent site is available. If relocation to an adjacent site is not possible, advertising the house for sale at a discounted price with the condition that the buyer relocate the house is also a valid relocation strategy. A structural engineer has indicated that relocation may be difficult and could potentially cause damage to the house and brick fireplaces.
- 4) If relocation of the house is not feasible, if no prospective buyer can be found to relocate the house, or if the structure is deemed not structurally sound enough to survive relocation, then documentation and salvage (as applicable) of the property is the next preferred mitigation option. Documentation and salvage should be carried out prior to relocation or demolition. Documentation activities should consist of the full heritage recording of the house and landscape through photography, photogrammetry, or LiDAR scan. Salvage activities should consist of the identification and recovery re-useable materials by a reputable salvage company or charity. The documentation and salvage work should be carried out under the direction of a Cultural Heritage Specialist in good professional standing with the Canadian Association of Heritage Professionals (CAHP).

7.0 SOURCES

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APPENDICES

Appendix A AMENDING LETTER



300 Dufferin Avenue
P.O. Box 5035
London, ON
N6A 4L9

London
CANADA

February 5, 2008

Chair and Members
London Advisory Committee on Heritage

I hereby certify that the Municipal Council, at its session held on February 4, 2008 resolved:

5. That, on the recommendation of the London Advisory Committee on Heritage (LACH), the property located at 2096 Wonderland Road North **BE AMENDED** from a Priority 1 listing to a Priority 2 listing in the 2006 *Inventory of Heritage Resources*. (5/5/PC)

Kevin Bain
City Clerk
/hw

cc: R. Panzer, General Manager of Planning and Development
G. Barrett, Manager, Land Use Planning Policy
D. Menard, Heritage Planner

The Corporation of the City of London
Office: 519-661-2500 ext. 0969
Fax: 519-661-4892
www.london.ca



Appendix B PROPOSED DEVELOPMENT



2096 WONDERLAND RD N
LONDON, ON

PROPOSED DEVELOPMENT

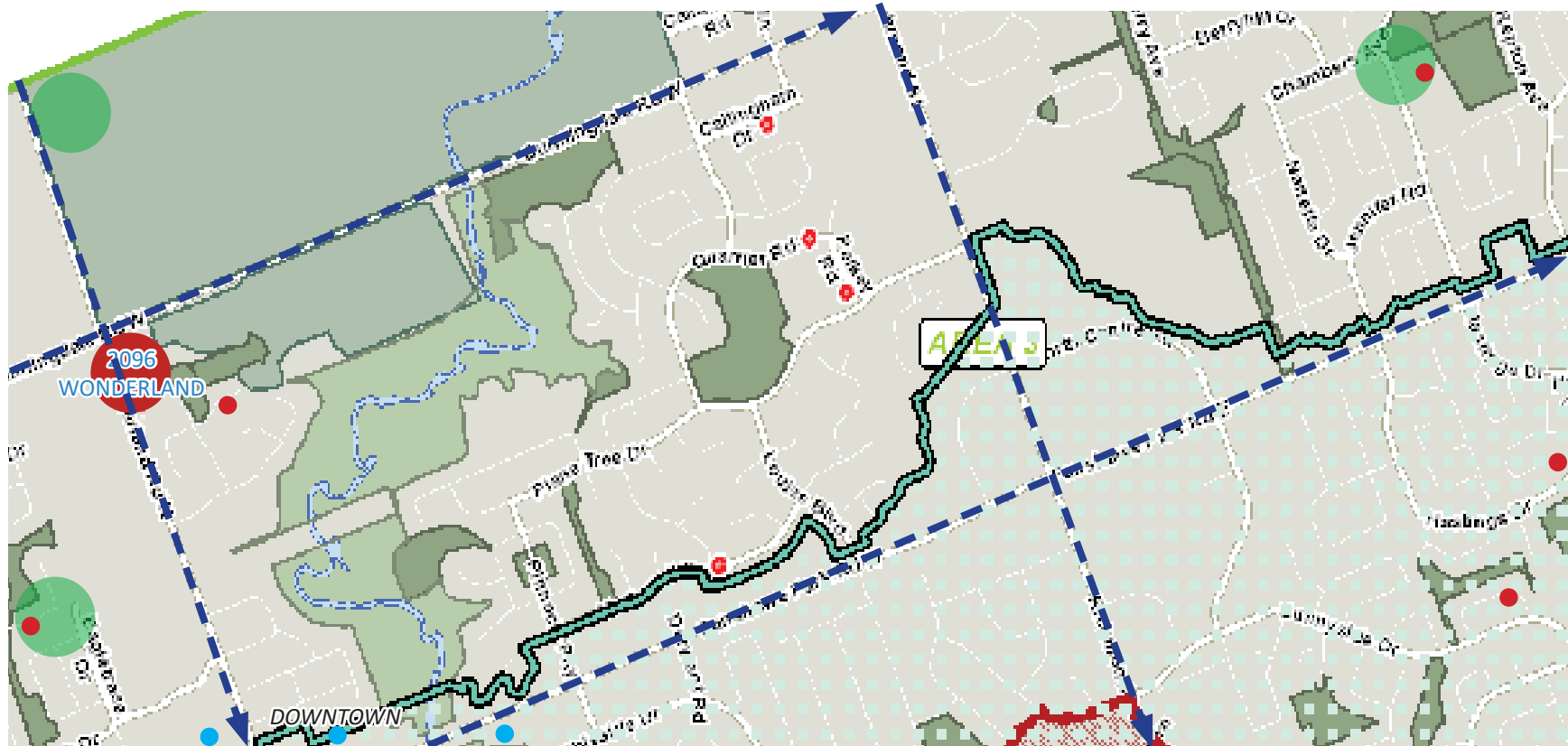
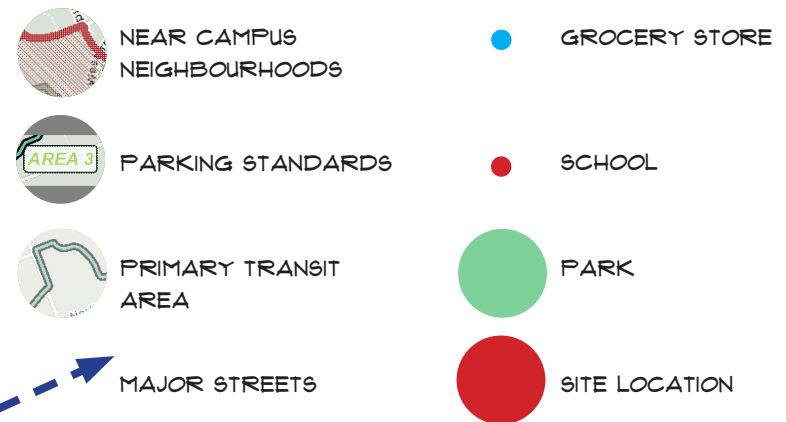
1.0 EXISTING SITE AND SURROUNDING AREAS

1.1 City Map: POINTS OF INTEREST



1.0 EXISTING SITE AND SURROUNDING AREAS

1.2 City Map: TRANSIT, SCHOOLS & RECREATION



1.0 EXISTING SITE AND SURROUNDING AREAS

1.3 City Map: SUBJECT SITE



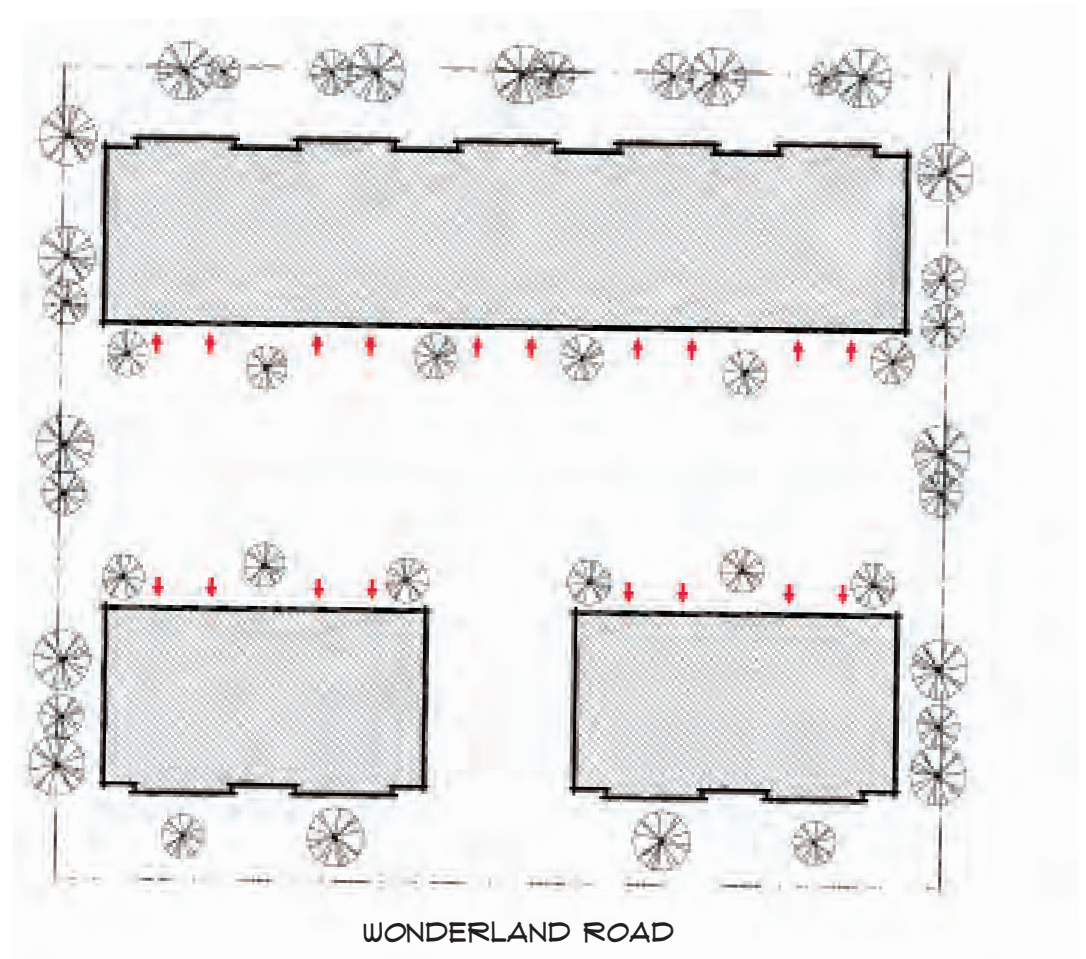
1.0 EXISTING SITE AND SURROUNDING AREAS

1.4 NEIGHBOURHOOD HOUSES



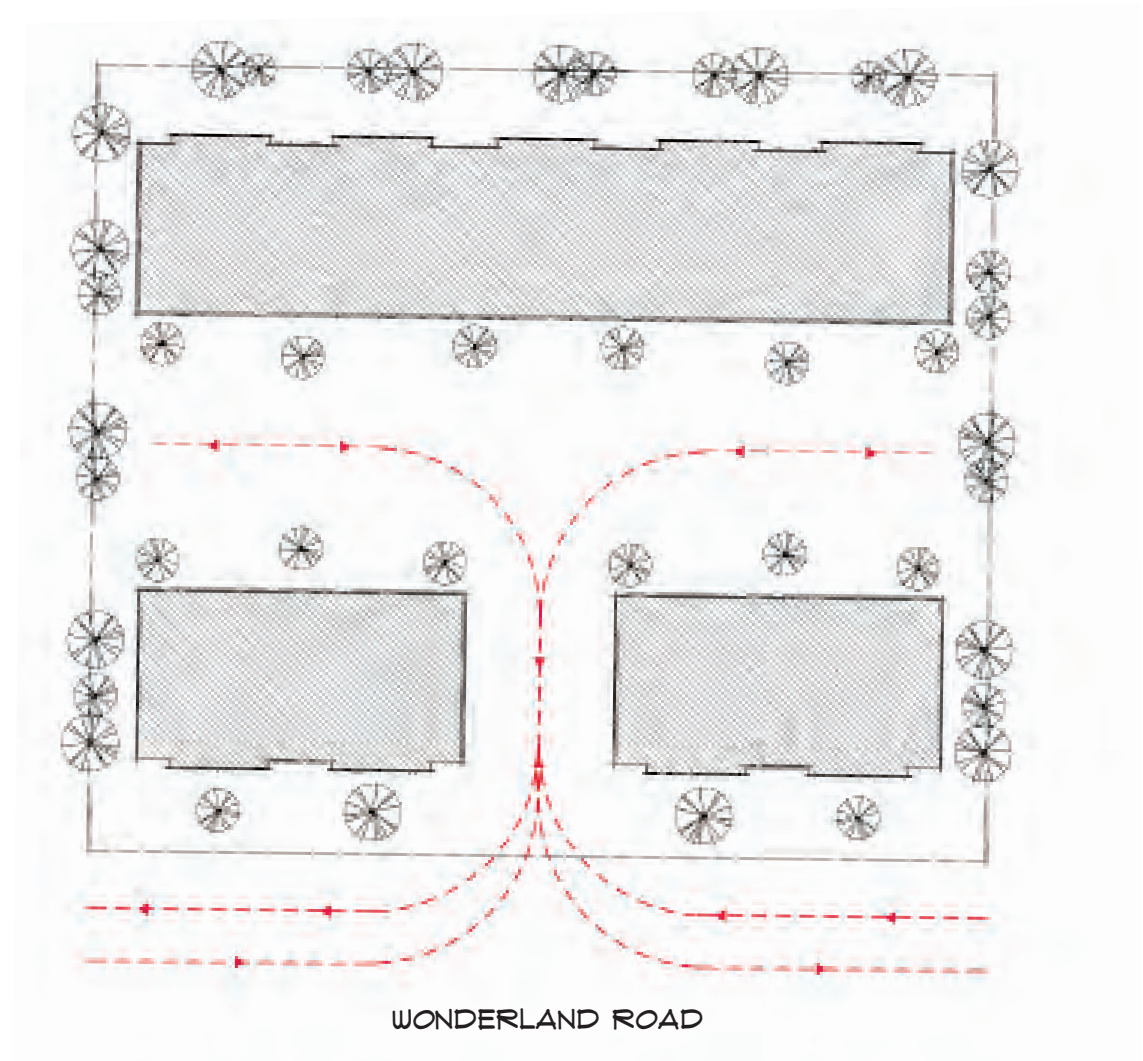
1.0 EXISTING SITE AND SURROUNDING AREAS

1.5 MASSING AND TOWN HOUSE ENTRANCE

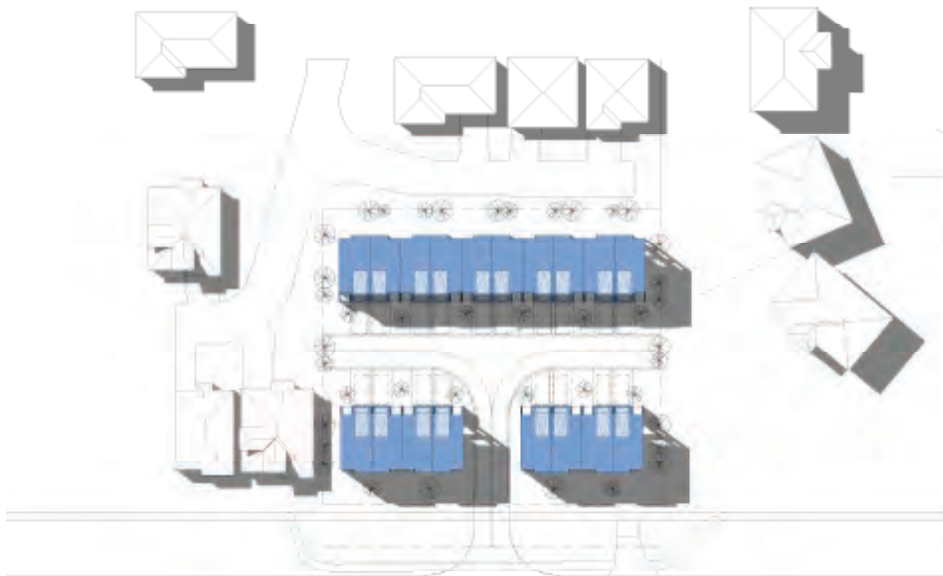


1.0 EXISTING SITE AND SURROUNDING AREAS

1.6 SITE ACCESS

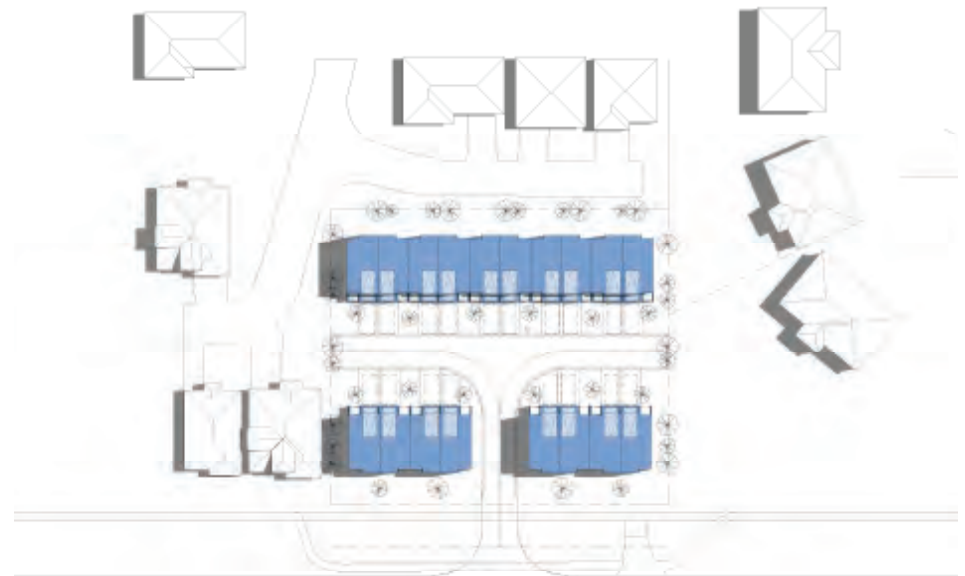


2.0 MASSING AND SHADOW STUDY



WONDERLAND ROAD NORTH

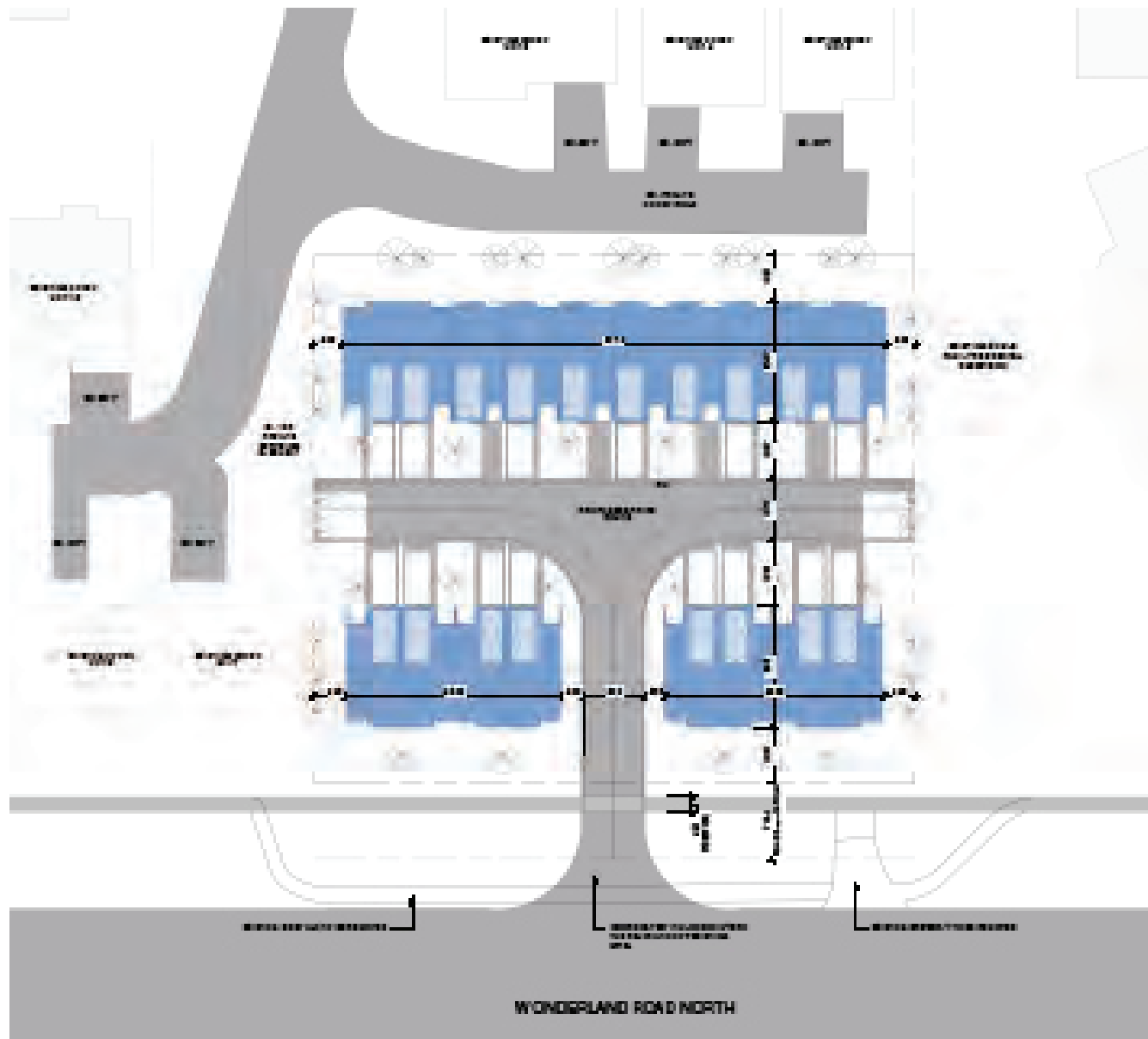
Shadow Study : June 15 @ 9.00am



WONDERLAND ROAD NORTH

Shadow Study : June 15 @ 2.00Pm

3.0 SITE PLAN AND STATISTICS



Site Statistics		
Address: 2096 Wonderland Road North Zoning: RB-5		
LEGAL DESCRIPTION:	xxx	
ZONING	REQUIRED/ALLOWED	PROPOSED
SITE (LOT) AREA:(min.)	800m ²	4046m ² GROSS 3,641m ² NET
LOT FRONTAGE (min.)	10 m	68.6 m
FRONT YARD (min.)	6 m	6 m
EXTERIOR YARD (min.)	3 m	6 m
INTERIOR AND REAR YARD (min.)	3m TO 6m DEPENDING ON BUILDING HEIGHT AND WINDOWS	3m TO 6m
LOT COVERAGE (max.)	40%	81.98%
LANDSCAPE, OPEN SPACE (min.)	30%	81.52%
BUILDING HEIGHT (max.)	12m	12m
UNITS		18
DENSITY (max.)	25 UNIT/ Ha	34.6 UNIT/ Ha GROSS 32.8 UNIT/ Ha NET
PARKING:	1.8 SPACE/ UNIT (min. 27)	36

4.0 REFERENCE ELEVATION



Appendix C MOLD REPORT



ICON HOME INSPECTIONS INC.
1867 PARKHURST AVE
LONDON, ON N5V 2C4

Certificate of Mold Analysis

Prepared for: ICON HOME INSPECTIONS INC.
Phone Number: (519) 495-4227
Fax Number:
Project Name:
Test Location: 2096 WONDERLAND RD N
LONDON, ON N6G 5C3
Chain of Custody #: 1014446
Received Date: February 7, 2017
Report Date: February 8, 2017

Carlos Ochoa, Technical and Quality Control Manager

Currently there are no Provincial regulations for evaluating potential health effects of fungal contamination and remediation. This information is subject to change as more information regarding fungal contaminants becomes available. For more information visit: <http://www.hc-sc.gc.ca/ewh-semt/air/in/poll/mould-moisissure/index-eng.php> or http://www.cmhc-schl.gc.ca/en/co/maho/yohoyohe/momo/momo_005.cfm. This document was designed to follow currently known industry guidelines for the interpretation of microbial sampling, analysis, and remediation. Since interpretation of mold analysis reports is a scientific work in progress, it may as such be changed at any time without notice. The client is solely responsible for the use or interpretation. PRO-LAB/SSPTM Inc. makes no express or implied warranties as to health of a property from only the samples sent to their laboratory for analysis. The Client is hereby notified that due to the subjective nature of fungal analysis and the mold growth process, laboratory samples can and do change over time relative to the originally sampled material. PRO-LAB/SSPTM Inc. reserves the right to properly dispose of all samples after the testing of such samples are sufficiently completed or after a 7 day period, whichever is greater. PRO-LAB/SSPTM Inc. participates in the AIHA EMPAT program (Lab # 184065)

For more information please contact PRO-LAB at (800) 427-0550 or email info@prolabinc.com



Prepared for : ICON HOME INSPECTIONS INC.

Test Address :

2096 WONDERLAND RD N
LONDON, ON N6G 5C3

ANALYSIS METHOD	Spore trap analysis			Spore trap analysis			Spore trap analysis			INTENTIONALLY BLANK		
LOCATION	KITCHEN			FRONT FOYER			BEDROOMS					
COC / LINE #	1014446-1			1014446-2			1014446-3					
SAMPLE TYPE & VOLUME	AIR-O-CELL - 150L			AIR-O-CELL - 150L			AIR-O-CELL - 150L					
SERIAL NUMBER	23095008			23095003			23095004					
COLLECTION DATE	Feb 6, 2017			Feb 6, 2017			Feb 6, 2017					
ANALYSIS DATE	Feb 8, 2017			Feb 8, 2017			Feb 8, 2017					
CONCLUSION	ELEVATED			ELEVATED			ELEVATED					
IDENTIFICATION	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total
Chaetomium				20	130	3						
Cladosporium	392	2,600	59	472	3,100	60	552	3,700	83			
Epicoccum				4	27	1						
Other Ascospores	28	190	4				12	80	2			
Other Basidiospores	4	27	1	12	80	2	20	130	3			
Penicillium/Aspergillus	236	1,600	36	264	1,800	35	80	530	12			
Polythrincium							4	27	1			
Stachybotrys				8	53	1						
TOTAL SPORES	660	4,417	100	780	5,190	100	668	4,467	100			
Minimum detection limit:	4	27		4	27		4	27				
BACKGROUND DEBRIS	Light			Light			Light					
OBSERVATIONS & COMMENTS												

Background debris qualitatively estimates the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories of Light, Moderate, Heavy and Too Heavy for Accurate Count, are used to indicate the amount of deposited debris. Increasing amounts of debris will obscure small spores and can prevent spores from impacting onto the slide. The actual number of spores present in the sample is likely higher than reported if the debris estimate is 'Heavy' or 'Too Heavy for Accurate Count'. All calculations are rounded to two significant figures and therefore, the total percentage of spore numbers may not equal 100%.

Minimum Detection Limit. Based on the volume of air sampled, this is the lowest number of spores that can be detected and is an estimate of the lowest concentration of spores that can be read in the sample. **NA** = Not Applicable.

Spores that were observed from the samples submitted are listed on this report. If a spore is not listed on this report it was not observed in the samples submitted.

Interpretation Guidelines: A determination is added to the report to help users interpret the mold analysis results. A mold report is only one aspect of an indoor air quality investigation. The most important aspect of mold growth in a living space is the availability of water. Without a source of water, mold generally will not become a problem in buildings. These determinations are in no way meant to imply any health outcomes or financial decisions based solely on this report. For questions relating to medical conditions you should consult an occupational or environmental health physician or professional.

Control is a baseline sample showing what the spore count and diversity is at the time of sampling. The control sample(s) is usually collected outside of the structure being tested and used to determine if this sample(s) is similar in diversity and abundance to the inside sample(s).

Elevated means that the amount and/or diversity of spores, as compared to the control sample(s), and other samples in our database, are higher than expected. This can indicate that fungi have grown because of a water leak or water intrusion. Fungi that are considered to be indicators of water damage include, but are not limited to: *Chaetomium*, *Fusarium*, *Memnoniella*, *Stachybotrys*, *Scopulariopsis*, *Ulocladium*.

Not Elevated means that the amount and/or the diversity of spores, as compared to the control sample and other samples in our database, are lower than expected and may indicate no problematic fungal growth.

Unusual means that the presence of current or former growth was observed in the analyzed sample. An abundance of spores are present, and/or growth structures including hyphae and/or fruiting bodies are present and associated with one or more of the types of mold/fungi identified in the analyzed sample.

Normal means that no presence of current or former growth was observed in the analyzed sample. If spores are recorded they are normally what is in the air and have settled on the surface(s) tested.



40 Hanlan Road, Suite #45, Vaughan, ON, L4L 3P6 Canada (800) 427-0550

Chain of Custody # 1014446

 Kitchen


Spores per cubic meter



40 Hanlan Road, Suite #45, Vaughan, ON, L4L 3P6 Canada (800) 427-0550

Chain of Custody # 1014446

 Front Foyer


Spores per cubic meter



40 Hanlan Road, Suite #45, Vaughan, ON, L4L 3P6 Canada (800) 427-0550

Chain of Custody # 1014446

 Bedrooms


Spores per cubic meter

Identification	Outdoor Habitat	Indoor Habitat	Allergic Potential	Comments
Chaetomium	Growing on dung, dead leaves, wood.	Cellulose substrates, especially wallboard, cardboard and wood. Not normally seen growing indoors unless the building material has been wetted. Unusual / Not Normal to be growing indoors.	Type I (hay fever and asthma) allergies.	Chaetomium is a water-indicating mold. Spores of this type of mold should not be observed in significantly higher numbers in the air above background/control. If growth and/or significantly higher than background/control spore numbers are reported, corrective action should be considered to reduce the source of water, moisture levels and/or spore numbers in the living space.
Cladosporium	The most common spore type reported in the air worldwide. Found on dead and dying plant litter, and soil.	Commonly found on wood and wallboard. Commonly grows on window sills, textiles and foods.	Type I (hay fever and asthma), Type III (hypersensitivity pneumonitis) allergies.	A very common and important allergen source both outdoors and indoors.
Epicoecum	Commonly found everywhere. Grows on plant debris, insects and soil.	Capable of growing on several different substrates, notably wallboard and paper.	Type I (hay fever and asthma) allergies.	Very common in the summer, especially in the midwest and during harvest time.
Ascospores	Common everywhere. Constitutes a large part of the airspora outside. Can reach very high numbers in the air outside during the spring and summer. Can increase in numbers during and after rainfalls.	Very few of this group grow inside. The notable exception is Chaetomium, Ascotricha and Peziza.	Little known for most of this group of fungi. Dependent on the type (see Chaetomium and Ascotricha).	
Basidiospores	Commonly found everywhere, especially in the late summer and fall. These spores are from Mushrooms.	Mushrooms are not normally found growing indoors, but can grow on wet lumber, especially in crawlspaces. Sometimes mushrooms can be seen growing in flower pots indoors.	Some allergenicity reported. Type I (hay fever, asthma) and Type III (hypersensitivity pneumonitis).	Among the group of Mushrooms (Basidiomycetes) are dry rot fungi Serpula and Poria that are particularly destructive to buildings.
Penicillium/Aspergillus	Common everywhere. Normally found in the air in small amounts in outdoor air. Grows on nearly everything.	Wetted wallboard, wood, food, leather, etc. Able to grow on many substrates indoors.	Type I (hay fever and asthma) allergies and Type III (hypersensitivity pneumonitis) allergies.	This is a combination group of Penicillium and Aspergillus and is used when only the spores are seen. The spores are so similar that they cannot be reliably separated into their respective genera.
Polythrincium	Rarely seen in air samples. Grows only on specific plants.	Does not grow indoors.	None known.	
Stachybotrys	Grows in the soil and decaying plant material.	Wallboards and other paper products that are wetted. Needs high water content in the substrate to grow. Not normally seen growing indoors unless the building material has been wetted. Unusual / Not Normal to be growing indoors.	Type I (hay fever and asthma) allergies.	Wet spored mold that generally must be dried out and disturbed before spores can be found in the air. Spores of this type of mold should not be observed in significant numbers in the air above background/control. If growth and/or significantly higher than background/control spore numbers are reported, corrective action should be considered to eliminate the water source, reduce moisture levels and/or spore numbers in the living space.

Prepared for : ICON HOME INSPECTIONS INC.

Test Address :

2096 WONDERLAND RD N
LONDON, ON N6G 5C3

Indoor Air Quality Testing

Introduction

The fungi are a large group of organisms that include mold. In nature, the fungi and mold help breakdown and recycle nutrients in the environment. Mold are the most common type of fungi that grow indoors. Mold are microscopic organisms that live on plants, in the soil, and on animals, in fact almost anywhere food and moisture are available. Mold is everywhere present in the outdoor and normal indoor environments. It is in the air and on surfaces as settled dust. Exposure to mold is inevitable in everyday life. Thus, exposure to mold is considered part of a normal activity for most people. Only environments for which extraordinary preparations have been taken don't have mold present in the air or on surfaces.

Understanding Mold

Under the right conditions (moisture, a food source, and time) mold will grow, multiply and produce spores. Mold grows throughout nature as well as the built environment. Mold reproduces by microscopic cells called "spores" that can be spread easily through the air. Mold spores are always present in the indoor and outdoor air. There are mold that can grow on any organic substrate including wood, paper, carpet, food, ceiling tiles, dried fish, carpet, or any surface where dust has accumulated. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. There is no practical way to eliminate all mold spores in the indoor environment. The way to control indoor mold growth is to control the amount of moisture available to the mold.

Mold growth can become a problem in your home or office where there is sufficient moisture and the right foodstuff is available. The key to preventing mold growth is to prevent all moisture problems. Of course, hidden mold can grow when there is water available behind walls, sinks, floors, etc. Indications of hidden moisture problems are discoloration of ceiling or walls, warped floors or condensation on the windows or walls.

Controlling Moisture

The most critical step in solving a mold problem is to accurately identify and fix the source(s) of moisture that allowed the growth to occur. In order to prevent mold from growing, it is important that water damaged areas be dried within a 24-48 hour period. If a small amount of mold is present in the home, the mold can be cleaned up with a mild detergent and the excess water or moisture removed. It is not necessary to try and kill the mold or its spores. You can carefully remove the moldy materials if necessary. There are many common sources of excess moisture that can contribute to indoor mold growth. Some of the primary means of moisture entry into homes and buildings are water leakage (such as roof or plumbing leaks), vapor migration, capillary movement, air infiltration, humidifier use, and inadequate venting of kitchen and bath humidity. The key to controlling moisture is to generally reduce indoor humidity within 35% - 60% (depending what climate you live in) and fix all leaks whatever their cause.

Mold Growth Sources

If the source of moisture is not easily detected or you have a hidden water leak, mold testing can be helpful. Often a roof leak or a plumbing leak can be identified as the source. The difficulty arises when there is an odor present or when an occupant shows signs of mold exposure but no visible mold can be seen. Excess water intrusion can also lead to dry rot of lumber and cause a serious structural defect in buildings.

Health Related Risks

Based on the Institute of Medicine and the National Academy of Sciences, dampness and mold in homes is associated with increases in several adverse health effects including cough, upper respiratory symptoms, wheeze, and exacerbation of asthma. Mold and fungi contain many known allergens and toxins that can adversely affect your health. Scientific evidence suggests that the disease of asthma may be more prevalent in damp affected buildings. Dampness and mold in homes, office buildings and schools represent a public health problem. The Institute of Medicine concluded, "When microbial contamination is found, it should be eliminated by means that not only limit the possibility of recurrence but also limit exposure of occupants and persons conducting the remediation".

Mold Sampling Methods

The goal of sampling is to learn about the levels of mold growth and amplification in buildings. There are no EPA or OSHA standards for levels of fungi and mold in indoor environments. There are also no standard collection methods. However, several generally accepted collection methods are available to inspectors to study mold (and bacteria) in indoor environments. Comparison with reference samples can be a useful approach. Reference samples are usually taken outdoors and sometimes samples can be taken from "non-complaint" areas. In general, indoor fungal concentrations should be similar to or lower than outdoor levels. High levels of mold only found inside buildings often suggest indoor amplification of the fungi. Furthermore, the detection of water-indicating fungi, even at low levels, may require further evaluation. There are several types of testing methods that can detect the presence of mold. They can be used to find mold spores that are suspended in air, in settled dust, or mold growing on surfaces of building materials and furnishings. There are different methods that can identify types of live mold and dead mold in a sampled environment. Mold spores can be allergenic and toxic even when dead.

All sampled material obtained in the laboratory is analyzed using modern microscopic methods, standard and innovative mycological techniques, analyzed at 630 – 1,000 times magnification.

Testing for mold with an accredited laboratory is the best way to determine if you have mold and what type of mold it is.

Surface Sampling Methods

Surface sampling can be useful for differentiating between mold growth and stains of various kinds. This type of sampling is used to identify the type of mold growth that may be present and help investigate water intrusion. Surface sampling can help the interpretation of building inspections when used correctly. The following are the different types of surface samples that are commonly used to perform a direct examination of a specific location. Spore counts per area are not normally useful.

Tape (or tape-lift)

These samples are collected using clear adhesive tape or adhesive slide for microscopic examination of suspect stains, settled dust and spores. Tape lifts are an excellent, non-destructive method of sampling. The laboratory is usually able to determine if there is current or former mold growth or if only normally settled spores were sampled.

Bulk

This is a destructive test of materials (e.g., settled dust, sections of wallboard, pieces of duct lining, carpet segments, return-air filters, etc.) to determine if they contain or show mold growth. Bulk sampling collects a portion of material small enough to be transported conveniently and handled easily in the laboratory while still representing the material being sampled. A representative sample is taken from the bulk sample and can be cultured for species identification or analyzed using direct microscopy for genus identification. The laboratory is usually able to determine if there is current or former mold growth or if only normally settled spores were sampled.

Swab

A sterile cotton or synthetic fiber-tipped swab is used to test an area of suspected mold growth. Samples obtained using this method can be cultured for species identification or analyzed using direct microscopy for genus identification. The laboratory is usually able to determine if there is current or former mold growth or if only normally settled spores were sampled. Identified spores are generally reported as "present/absent".

Carpet (filter-type) Cassette

A carpet cassette is used with a portable air pump (flow rate usually doesn't matter) to collect mold, pollen and other particulates. Samples obtained using this method can be cultured for species identification or analyzed using direct microscopy for genus identification. This method is usually used to determine a presence or absence of water-indicating mold in a carpet. The laboratory is usually able to determine if there is current or former mold growth or if only normally settled spores were sampled.

Air Sampling Methods

Air samples are possibly the most common type of environmental sample that investigators collect to study bioaerosols (mold, pollen, particulates). The physics of removing particles from the air and the general principles of good sample collection apply to all airborne materials, whether biological or other origin. Therefore, many of the basic principles investigators use to identify and quantify other airborne particulate matter can be adapted to bioaerosol sampling. Common to all aerosol samplers is consideration of collection efficiency. The following are the two most common forms of air sampling methods.

“Non-Viable Methods” *(The Laboratory results are reported in “spores per cubic meter (sp/m³)”)*

Z5 Cassette

The Z⁵ spore trap is used with a portable air pump (5 liters/minute for 1 to 5 minutes) to rapidly collect airborne aerosols including mold, pollen and other airborne particulates. Air is drawn through a small slit at the top of the cassette and spores are trapped on a sticky surface on a small glass slide inside the cassette. They are efficient at collecting spores as small as 1µm.

Micro5 Cassette

The Micro5 Microcell spore trap cassette is used with a portable air pump (5 liters/minute for 1 to 5 minutes) to collect airborne aerosols including mold, pollen and other airborne particulates. Air is drawn through a small circular hole at the top of the cassette and spores are trapped on a sticky coated glass slide inside the cassette. They are efficient at collecting spores as small as 0.8µm.

Air-O-Cell Cassette

The Air-O-Cell spore trap cassette is used with a portable air pump (15 liters/minute for 1 to 10 minutes) to collect airborne aerosols including mold, pollen and other airborne particulates. Air is drawn through a small opening at the top of the cassette and spores are trapped on a sticky coated glass slide inside the cassette. These cassettes are efficient at collecting spores as small as 2.6µm.

Allergenco-D Cassette

The Allergenco-D spore trap cassette is used with a portable air pump (15 liters/minute for 1 to 10 minutes) to collect airborne aerosols including mold, pollen and other airborne particulates. Air is drawn through a small opening at the top of the cassette and spores are trapped on a sticky coated glass slide inside the cassette. These cassettes are efficient at collecting spores as small as 1.7µm.

“Viable Methods” *(The Laboratory results are reported in “colony forming units per cubic meter (CFU/m³)”)*

Agar Impaction Plates

The agar impaction plates are used with a portable air pump (28.3 liters/minute for 1 to 3 minutes) to collect airborne mold. This is called “viable sampling” because it only grows what is alive at the time of testing. Air is drawn through a 200-400 holes at the top of the impactor and spores are trapped in the agar media. The agar plate should be shipped to the laboratory immediately or kept cool until it can be shipped. These cassettes are 90% efficient at collecting spores as small as 0.7µm. The laboratory results are reported in “colony forming units per cubic meter (CFU/m³)”.

Data Interpretation

Information (data) on mold in buildings can consist of the simple observation of fungal growth on a wall, analytical measurements from hundreds of environmental samples, or the results of a survey of building occupants with and without particular building-related conditions. Data interpretation is the process whereby investigators make decisions on (a) the relevance to human exposure of environmental observations and measurements, (b) the strength of associations between exposure and health status, and (c) the probability of current or future risks. These interpretation steps are followed by decisions on what measures can be taken to interrupt exposure and prevent future problems.

Remediation of Mold

Prevention of mold growth indoors is only possible if the factors that allow it to grow are identified and controlled. When prevention has failed and visible growth has occurred in a home or building, remediation and/or restoration may be required. The extent of the mold growth will determine the scope of the remediation required. The goal of remediation is to remove or clean mold-damaged material using work practices that protect occupants by controlling the dispersion of mold from the work area and protect the workers from exposure to mold. You should consult a professional when contemplating fixing a large area of mold growth. Generally, remediation requires (a) removal of porous materials showing extensive microbial growth, (b) physical removal of surface microbial growth on non-porous materials to typical background levels, and (c) reduction of moisture to levels that do not support microbial growth. Identification of the conditions that contributed to microbial proliferation in a home or building is the most important step in remediation. No effective control strategy can be implemented without a clear understanding of the events or building dynamics responsible for microbial growth. Following the completion of the remediation process, mold testing should be performed to obtain clearance.

Symptoms of Mold Exposure

The most common symptoms of mold exposure are runny nose, eye irritation, cough, congestion, and aggravation of asthma. Individuals with persistent health problems that appear to be related to mold or other types of air quality contaminant exposure should see their physicians for a referral to specialists who are trained in occupational/environmental medicine or related specialties and are knowledgeable about these types of exposures. Decisions about removing individuals from an affected area must be based on the results of such medical evaluation. Mold is naturally present in outdoor environments and we share the same air between the indoor and outdoor, it is impossible to eliminate all mold spores indoors.

Ten Things You Should Know About Mold

- 1) Potential health effects and symptoms associated with mold exposures include allergic reactions, asthma, and other respiratory problems.
- 2) There is no practical way to completely eliminate mold and mold spores in the indoor environment. The way to control indoor mold growth is to control moisture.
- 3) If mold is a problem in your home or building, you must clean up the mold and eliminate sources of moisture.
- 4) To prevent mold growth any source of a water problem or leak must be repaired.
- 5) Indoor humidity must be reduced (generally below 60%) to reduce the chances of mold growth by: adequately venting bathrooms, dryers, and other moisture-generating sources to the outside; using air conditioners and de-humidifiers; increasing ventilation; and using exhaust fans whenever cooking, dishwashing and cleaning.
- 6) Clean and dry any damp or wet building materials and furnishings within 24-48 hours to prevent mold growth.
- 7) Clean mold off of hard surfaces with water and detergent and dry completely.
- 8) Prevent condensation: reduce the potential for condensation on cold surfaces (e.g., windows, piping, exterior walls, roof, or floors) by adding insulation.
- 9) In areas where there is a perpetual moisture problem on the floor, do not install carpeting
- 10) Mold can be found almost anywhere. Mold can grow on wood, paper, carpet, foods; almost anything can support some mold growth provided there is moisture, time to grow and food to eat.

References & Resources

Bioaerosols: Assessment and Control, Janet Macher, Sc.D., M.P.H., Editor. 1999. ACGIH, 1330 Kemper Meadow Drive, Cincinnati, OH 45240-1634.

Health Implications of Fungi in Indoor Environments, Edited by R.A. Samson. 1994. Elsevier Science, P.O. Box 945, Madison Square Station, New York, NY 10159-0945.

Damp Indoor Spaces and Health, Institute of Medicine of the National Academies, Washington, DC, 2004

Field Guide for the Determination of Biological Contaminants in Environmental Samples, 2nd Edition, Edited by L-L. Hung, et al. AIHA, Fairfax, VA, 2005.

Recognition, Evaluation, and Control of Indoor Mold, Edited by B. Prezant, et al. AIHA, Fairfax, VA, 2008.

Useful Websites

www.acgih.org/resources/links.htm

American Conference of Governmental Industrial Hygienists - information on Indoor Air Quality and useful links

www.cal-iaq.org

California Indoor Air Quality Program - California Indoor Air Quality resources and useful links

www.health.state.ny.us/environmental/indoors/air/mold.htm

New York State Department of Health - New York state recommendations for IAQ, indoor mold inspections, remediation, and prevention

<http://www.nyc.gov/html/doh/html/epi/moldrpt1.shtml>

Guidelines for Assessment and Remediation of Fungi in Indoor Environments – a good reference for mold clean up and removal

orf.od.nih.gov/PoliciesAndGuidelines/ORFPolicies/MoldPrevPolicy.htm

National Institutes of Health - information mold prevention and remediation

<http://www.niehs.nih.gov/health/topics/agents/mold/index.cfm>

National Institute of Environmental Health Sciences - information on mold

www.epa.gov/mold/

United States Environmental Protection Agency website on mold and moisture

www.aaaai.org/nab/index.cfm?p=faq

American Academy of Allergy, Asthma, and Immunology – information on mold and allergies and outdoor allergens

<http://www.aanma.org/?s=mold>

Allergy & Asthma Network – information for homes about allergies and asthma

<http://www.homeenergyresourcecenter.org>

Minnesota Department of Commerce Energy Information Center – good information on moisture control in homes

<http://eetd.lbl.gov/ie/>

Governmental Indoor Environment Department – good information on indoor health, comfort and energy efficiency in buildings

<http://www.osha.gov/dts/shib/shib101003.html>

Occupational US Department of Labor (OSHA) - A Brief Guide to Mold in the Workplace

Appendix D **DOCUMENTATION AND SALVAGE PLANS**

Invest letterhead

January 12, 2018

**Heidy Schopf, MES, CAHP
Cultural Heritage Specialist
Stantec Consulting Ltd.
300W-675 Cochrane Drive
Markham ON
L3R 0B8**

Re: HIA for 2096 Wonderland Road North, City of London -- Invest Group

Dear Heidy:

This is to confirm that Invest Group will make every effort to utilize and recycle the existing salvageable heritage materials from the existing residence at 2096 Wonderland Road North in its proposed 18-unit townhouse development to be located on the same site. For example, the yellow brick could be used for landscape design elements such as garden walls and gateway entrance piers.

Also, if the City finds it valuable and has a place to show the existing residence, Invest Group is prepared to have a table model built of the residence as part of the heritage documentation option .

Thank you.

Sincerely,

**Sinan Saltaji
Managing Partner
Invest Group**

Appendix E ENGINEERING LETTER

SBM-18-0566
29 March 2018

Kirkness Consulting
Attn: Laverne Kirkness

2096 Wonderland Rd N
London, Ontario

Laverne;

This is to confirm we visited the above site on the afternoon of 23 March 2018, as per your request, to review the existing two storey dwelling on the above site.

The existing building was found to be a two storey home built around 1860 with a one storey addition & garage at the rear of the original house. The main floor & second floor of the home were mostly finished at the time of inspection. Partial access to the existing attic space was provided at the time of inspection. The existing roof framing was timber trusses with stick framed rough lumber rafters. The existing floor construction was 2"x12" rough lumber floor joists at 16" o/c spanning front to back with an approximate span of 17'-0". The existing main floor wall construction was found to be triple wythe masonry construction with an approximate wall height of 10'-0". The existing second floor wall construction was found to be triple wythe masonry construction with an approximate wall height of 9'-0". The existing crawl space had an approximate ceiling height of 6'-2". The existing foundation wall was rubble/fieldstone with mortar. We were unable to inspect the existing foundation wall thoroughly as the crawl space had approx. 16" of water on the floor at the time of inspection.

Two masonry fireplaces were on the main floor with chimneys extending up through the roof structure. The fireplaces continued down to a double wythe masonry foundation in the basement. We completed a walkthrough of the exterior of the building. Some brick cracking was noted with some areas having previous re-pointing. All sides of the existing building had large window openings on both the main floor & second floor.

Based on the weight of the existing building, the lateral strength of the existing wall framing, and the wall, roof & floor construction of the existing building, moving the building to a different location either on the site or off the site would be extremely difficult and costly, if even possible. The existing masonry fireplaces would likely be damaged during moving due to the height & construction of the fireplaces. Due to the construction of the existing building, the building is likely to be extensively damaged during moving.

We trust this report meets your satisfaction, if you need further clarification please do not hesitate to contact us.



Regards,
Strik Baldinelli Moniz Ltd.

Aaron Strik

Aaron Strik, P.Eng
Principal