



**HERITAGE OVERVIEW: 666, 676, 684, AND
696 CHATHAM STREET WEST, WINDSOR,
ONTARIO
FINAL REPORT**

June 5, 2023

Prepared for:
Magnificent Homes
425 Newbold Street
London, Ontario N6E 1K2

Prepared by:
Stantec Consulting Ltd
600-171 Queens Avenue
London, Ontario N6A 5J7

Project Number:
160940899

Heritage Overview: 666, 676, 684, and 696 Chatham Street West, Windsor, Ontario

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Prepared by: _____
Signature

Frank Smith, MA, CAHP

Printed Name

Reviewed by: _____
Signature

Lashia Jones, MA, CAHP

Printed Name

Approved by: _____
Signature

Meaghan Rivard, MA, CAHP

Print Name



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Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by Magnificent Homes (the Client) to complete a Heritage Overview for the properties at 666, 676, 684, and 696 Chatham Street West in the City of Windsor (the City), Ontario. These properties are currently vacant and the client is proposing to redevelop the properties and construct a residential 16 storey building containing 88 residential units. The proposed redevelopment is located within the “Old Town Neighbourhood” of the *Downtown Windsor Enhancement Strategy and Community Improvement Plan*. The vacant properties are also situated directly adjacent to three properties listed on the City’s Municipal Heritage Register, including 181, 187, and 193-195 Janette Avenue. The City has requested that a Heritage Overview containing a site description, review of existing historic character, assessment of impacts, and mitigation measures be prepared for the proposed redevelopment. The Heritage Overview assesses the impacts of the proposed undertaking on the Old Town Neighbourhood as a distinct character area and on previously identified built heritage resources located within the Old Town Neighbourhood.

The proposed undertaking will result in direct impacts through alteration to the Old Town Neighbourhood and Study Area by the introduction of a new modern building. In addition, there is a risk of direct impact through removal if it is not possible to retain the mature northern catalpa street trees. If the existing northern catalpa trees are retained, they are at risk of indirect impact through land disturbance during the construction phase of the project.

To mitigate impacts to the Old Town Neighbourhood character and previously identified built heritage resources, the proposed redevelopment has been designed to harmonize with its surrounding streetscape and the wider Old Town Neighbourhood. As such, mitigation measures for the Old Town Neighbourhood from the proposed redevelopment are limited to the existing northern catalpa street trees.

To mitigate risks to the trees if they are retained, an arborist report should be completed to determine appropriate measures to protect the limbs and roots of these trees. If retention of the existing northern catalpa trees is not feasible, an appropriate design guideline to mitigate the loss of the trees is to maximize the density of new street-trees by minimum spacing of new trees to acceptable municipal urban forestry guidelines, and adherence with principles of Crime Prevention Through Environmental Design (CPTED). The street tree species selection at the site plan approval stage should be determined by the project Landscape Architect working with the project certified Arborist taking all site conditions into account. The final site plans should be reviewed and approved by a Cultural Heritage Landscape Architect or Arborist with experience in cultural heritage landscapes or historic tree types who can also provide input into the arrangement and species selection.

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:	Meaghan Rivard, MA, CAHP
Heritage Consultant:	Meaghan Rivard, MA, CAHP
Report Writer:	Frank Smith, MA, CAHP
GIS Specialist:	Josh Sa
Administrative Assistant:	Kerry-Lynn Brown
Quality Reviewer:	Lashia Jones, MA, CAHP David Waverman, CSLA, OALA, CAHP
Independent Reviewer:	Tracie Carmichael, BA, B.Ed.



Abbreviations

CAHP	Canadian Association of Heritage Professionals
CBC	Canadian Broadcasting Corporation
CIP	<i>Downtown Windsor Enhancement Strategy and Community Improvement Plan</i>
CPTED	Crime Prevention Through Environmental Design
MA	Master of Arts
MCM	Ministry of Citizenship and Multiculturalism



1 Introduction

1.1 Study Purpose

Stantec Consulting Ltd. (Stantec) was retained by Magnificent Homes (the Client) to complete a Heritage Overview for the properties at 666, 676, 684, and 696 Chatham Street West in the City of Windsor (the City), Ontario. These properties are currently vacant and the client is proposing to redevelop the properties and construct a residential 16 storey building containing 88 residential units. The proposed redevelopment is located within the “Old Town Neighbourhood” of the *Downtown Windsor Enhancement Strategy and Community Improvement Plan* (Figure 1). The vacant properties are also situated directly adjacent to three properties listed on the City’s Municipal Heritage Register, including 181, 187, and 193-195 Janette Avenue. The City has requested that a Heritage Overview containing a site description, review of existing historic character, assessment of impacts, and mitigation measures be prepared for the proposed redevelopment. The Heritage Overview assesses the impacts of the proposed undertaking on the Old Town Neighbourhood as a distinct character area and on previously identified built heritage resources located within the Old Town Neighbourhood.

For the purpose of this Heritage Overview, the Study Area is compromised of the municipal property boundaries of 666, 676, 684, and 696 Chatham Street West (Figure 1).

1.2 Methodology

1.2.1 City of Windsor Official Plan

The City’s *Official Plan* under Section 9 includes the City’s goal, objectives, and policies related to heritage conservation. This section of the plan was approved by the Ministry of Municipal Affairs and Housing on January 6, 2012 (City of Windsor 2012: 9-1). Applicable to this Heritage Overview is Section 9.3.7.1 (b) included below:

Ensuring that secondary plan studies, community improvement plans and other planning studies identify heritage resources which may exist in the areas under study and propose means to protect and enhance those heritage resources.

(City of Windsor 2012: 9-7)

1.2.2 Downtown Windsor Enhancement Strategy and Community Improvement Plan

The *Downtown Windsor Enhancement Strategy and Community Improvement Plan* (CIP) was adopted by City Council on September 29, 2017 and adopted as a by-law on October 16, 2017 (City of Windsor 2017). The City initiated the Plan in 2015 with the purpose of creating an updated vision, strategy, and action plan to guide, leverage, and expand on the ongoing revitalization efforts and investments occurring in the downtown (City of Windsor 2017: 1). Under Section 6, the CIP identifies specific Neighbourhood



and District Areas, that each have their own character, scale, sense of place, population, and range of services and amenities. The intent of the breakdown by neighbourhoods and district areas to provide a clear flexible framework to guide development (City of Windsor 2017: 106). The Study Area is situated within the Old Town Neighbourhood, an area comprised of early 20th century residences and small scale commercial along Pitt Street, Chatham Street, and University Avenue. The plan sets an “area vision” for this neighbourhood:

To be an attractive residential neighbourhood with a mix of high and low density residential that is developed in a compatible manner within the existing heritage context. This area should also provide an opportunity for small scale commercial and live/work opportunities.

(City of Windsor 2017: 125)

The Study Area is located on vacant land. The Plan provides and outlines development opportunities for vacant land within the Old Town Neighbourhood:

This small area has a significant amount of vacant land and surface parking lots that could be put to a higher and better use.

(City of Windsor 2017: 125)

1.2.3 Field Program

A site assessment was undertaken on June 21, 2022, by Frank Smith, Cultural Heritage Specialist. The weather conditions were sunny and hot. The site visit consisted of a pedestrian survey of the property and the Old Town Neighbourhood. Photographs of the Study Area were taken on a Nikon D5300 at a resolution of 300 dots per inch and 6000 by 4000 pixels. Photographs of the Old Town Neighbourhood used for contextual purposes were digitally recorded on an iPhone XR using the ESRI Collector application.

1.2.4 Assessment of Impacts

The assessment of impacts is based on the impacts defined in the Ministry Citizenship and Multiculturalism(MCM) *Infosheet #5 Heritage Impact Assessments and Conservation Plans* (Infosheet #5). Impacts to heritage resources may be direct or indirect.

Direct impacts include:

- Destruction of any, or part of any, significant heritage attributes or features
- Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance

Indirect impacts do not result in the direct destruction or alteration of the feature or its heritage attributes, but may indirectly affect the cultural heritage value or interest of a property by creating:

- Shadows that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden
- Isolation of a heritage attribute from its surrounding environment, context or a significant relationship
- Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features



- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces
- Land disturbances such as a change in grade that alters soil, and drainage patterns that adversely affect an archaeological resource

(Government of Ontario 2006)

In addition to direct impacts related to destruction, the Heritage Overview also evaluated the potential for indirect impacts resulting from the vibrations of construction and the transportation of project components and personnel. This was categorized together with land disturbance. Although the effect of traffic and construction vibrations on historic period structures is not fully understood, vibrations may be perceptible in buildings with a setback of less than 40 metres from the curbside (Crispino and D'Apuzzo 2001; Ellis 1987; Rainer 1982; Wiss 1981). For the purposes of this study, a 50-metre buffer is used to represent a conservative approach to delineate potential effects related to vibration. The proximity of the proposed development to heritage resources was considered in this assessment.

1.2.5 Mitigation Options

In addition to providing a framework to assess the impacts of a proposed undertaking, the MCM Infosheet #5 also provide methods to minimize or avoid impacts on cultural heritage resources. These include, but are not limited to:

- Alternative development approaches
- Isolating development and site alteration from significant built and natural features and vistas
- Design guidelines that harmonize mass, setback, setting, and materials
- Limiting height and density
- Allowing only compatible infill and additions
- Reversible alterations
- Buffer zones, site plan control, and other planning mechanisms

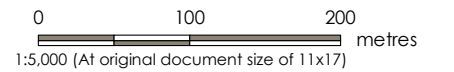
(Government of Ontario 2006)





Legend

- Study Area
- Old Town Neighbourhood



- Notes
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Project Location: City of Windsor
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Client/Project
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 HERITAGE OVERVIEW—666, 676, 684, AND 696
 CHATHAM STREET WEST, WINDSOR, ONTARIO

Figure No.
 1

Title
 Location of Study Area and Old Town
 Neighbourhood

2 Site Description

2.1 Study Area

The Study Area is situated at the southwest corner of Chatham Street West and Caron Avenue in the City's downtown. Based on a review of aerial photographs the properties at 666, 676, 684, and 696 Chatham Street West formerly contained residences that were demolished mostly between 2002 and 2004. Chatham Street West is a two lane one way westbound street and Caron Avenue is a two lane roadway. The Study Area is currently an empty lot, and no visual indication exists to differentiate each municipal address. The properties are currently landscaped with a lawn and trees. Trees include two mature northern catalpa trees, a thornless honey locust, white spruce, a Norway spruce, and a dead deciduous tree (Plate 1 to Plate 4). The northern catalpa tree was a popular ornamental tree during the 19th and early 20th centuries and was valued for its large leaves and white flowers. Northern catalpa trees are currently infrequently planted due to their high maintenance requirements (University of New Hampshire 2022). The remaining trees on the property are popular and common trees into the present-day.



Plate 1: Looking south at Study Area



Plate 2: Looking north at Study Area

2 Site Description

May 23, 2023



Plate 3: Looking south at northern catalpa trees



Plate 4: Looking north at northern catalpa tree canopies

2.2 Old Town Neighbourhood

The Old Town Neighbourhood has a mixed character and contains a mix of surface parking lots, civic buildings, low to high density residential buildings, and commercial structures. The north boundary of the neighbourhood is Riverside Drive West, the west boundary is Caron Street, the south boundary is University Avenue West, and the east boundary is Bruce Avenue (City of Windsor 2017: 124).

This section of the Old Town Neighbourhood on Riverside Drive contains the highest density residential structures including the Dieppe Tower and the Water Park Place Condominiums (Plate 5). The remainder of the Old Town Neighbourhood along Riverside Drive West consists of vacant lots and the Canadian Broadcasting Corporation (CBC) Windsor studio and broadcast tower (Plate 6 and Plate 7). This section of the Old Town Neighbourhood contains access to the riverfront trail and offers scenic views of the Detroit skyline and Detroit River (Plate 8).

Between Riverside Drive West and Pitt Street West, the Old Town Neighbourhood contains a mix of mostly detached mid-rise apartment buildings, residences, and commercial structures. Some of the residences have been converted to commercial use. In general, the structures in this area date to the late 19th to early 20th century and are Ontario vernacular structures with some examples of Queen Anne and Edwardian design influences (Plate 9 to Plate 11). Between Pitt Street West and Chatham Street West the Old Town Neighbourhood primarily contains detached residences dating to the late 19th to early 20th century. Many of these properties are landscaped with mature trees (Plate 12 and Plate 13). Along University Avenue the Old Town Neighbourhood is primarily commercial in character and includes a large surface parking lot (Plate 14 and Plate 15). The west side of Caron Avenue in the Old Town Neighbourhood is dominated by a surface parking lot stretching from University Avenue West to just north of Pitt Street West (Plate 16).

The western edge of the Old Town Neighbourhood contains Salter Avenue and Crawford Avenue. This section is visually and physically separated from the eastern section by the former right of way of the Canadian Pacific Railway. As a result, motorists and pedestrians are required to cross bridges at



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2 Site Description

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Riverside Drive West and University Avenue West to cross into the western section of the Old Town Neighbourhood. Salter Avenue is a mix of commercial and residential use while Crawford Avenue is residential with the exception of part of the CBC property (Plate 17 and Plate 18). The residences in this area consist of detached structures mostly dating to the late 19th to early 20th century with some modern infill (Plate 19).



Plate 5: Looking east at high density residential towers



Plate 6: Looking south at vacant lots



Plate 7: Looking south at CBC facility



Plate 8: Looking north at Detroit skyline and Detroit River



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2 Site Description
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Plate 9: Looking north at commercial building at 656 Pitt Street



Plate 10: Looking west at Edwardian style apartment at 147 Janette Avenue



Plate 11: Looking south at 163-165 Janette Street, a residence converted to commercial use



Plate 12: Looking east on Janette Avenue between Pitt Street West and Chatham Street West



Heritage Overview: 666, 676, 684, and 696 Chatham Street West, Windsor, Ontario
2 Site Description
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Plate 13: Looking west on Bruce Avenue at 19th century residence



Plate 14: Looking west at surface parking



Plate 15: Commercial properties on University Avenue West, looking north



Plate 16: Looking south on Caron Avenue



Heritage Overview: 666, 676, 684, and 696 Chatham Street West, Windsor, Ontario
2 Site Description
May 23, 2023



Plate 17: Looking north on Crawford Avenue



Plate 18: Looking north on Salter Avenue



Plate 19: 19th century residence at 274 Crawford Street, looking east



3 Heritage Character Description of Old Town Neighbourhood

3.1 Design Character

The Old Town Neighbourhood contains a mix of design styles that reflect the various periods of development and redevelopment of the Old Town Neighbourhood. Structures within the Old Town Neighbourhood dating to the late 19th century to early 20th century include representative architectural styles typical to the period in which the structures were built such as Queen Anne Revival, Edwardian, and Ontario vernacular.

The Queen Anne style was popular in Ontario from about 1880 to 1910. Queen Anne residences typically contain irregular plans, irregular and intersecting roofs, projecting bays, and classically inspired ornamentation (Blumenson 1990: 102). Examples of the Queen Anne style within the Old Town Neighbourhood include the block of detached houses at 164, 174, 178, and 190 Janette Avenue. Common materials used for these residences in the Old Town Neighbourhood include red buff brick. A number of Queen Anne residences in the neighbourhood have been clad with modern siding. While many of these structures have had modern window replacements or have been reclad in siding, they generally retain a medium to high degree of heritage integrity and remain readily identifiable as Queen Anne style structures.

The Edwardian style was popular in Ontario between about 1900 and 1930. In general, the Edwardian style began a trend into simpler building design and styles that continued into the mid-20th century. Edwardian style residences commonly include a simple roof and balanced proportions. Classically inspired ornamentation is also used, especially as part of a frontispiece (Blumenson 1990: 166). Examples of Edwardian architecture within the Old Town Neighbourhood include the semi-attached residences at 629 and 639 Chatham Street West, the Dieppe Park Apartments at 524 Pitt Street West, and 147 Janette Avenue. Common materials used for these residences in the Old Town Neighbourhood include red brick and painted brick. While many of these structures have had modern window replacements, they generally retain a medium to high degree of heritage integrity and remain readily identifiable as Edwardian structures.

The Old Town Neighbourhood also contains examples of Ontario vernacular structures common to the late 19th to mid-20th century. Vernacular structures use locally available building materials and often adhere less strictly to popular design styles. Vernacular structures in the Old Town Neighbourhood include the detached residence at 563 Pitt Street West and the semi-attached residence at 250 and 256 Crawford Avenue. These residences are often clad in red brick or modern siding. While many Ontario vernacular structures have had modern window replacements or have been reclad in modern siding their form and massing remain readily identifiable as late 19th to early 20th century structures.

The Old Town Neighbourhood also contains examples of mid-20th century and late 20th century infill such as the residence 264 Crawford Avenue, the Windsor Utilities Commission Hydro Substation at 191 Bruce Avenue, and the Dieppe Tower at 120 Caron Avenue. With the exception of the high-rise Dieppe Tower



and high-rise Water Park Place Condominiums, the infill within the neighbourhood generally respects the massing and setback of the late 19th to early 20th century residences which preceded them. Except for the Water Park Place Condominiums, these structures usually have red brick or buff brick exteriors. Many of the properties dating to the late 19th to early 20th century are landscaped with mature deciduous street trees.

3.2 Historical Character

The Old Town Neighbourhood is an example of a residential area spurred by the development of a streetcar network. In 1874, present-day University Avenue was laid out to create a streetcar line (Walkerville Times 2015). University Avenue is the present-day south boundary of the Old Town Neighbourhood. Residential development spurred by streetcar development typically included rectilinear plans, generally detached houses on narrow lots, and small front yard setbacks with porches (McAlester 2021: 66-67).

During the late 19th and early 20th century Windsor experienced steady growth and the population increased from 10,322 in 1891 to 38,591 in 1921 (Dominion Bureau of Statistics 1953). Historical mapping from 1878 shows that much of the present-day street grid of the neighbourhood had yet to be laid out (Walling 1878). By 1913, the present-day street grid had been laid out and the area was hatched in topographic mapping indicating it had been thickly settled (Department of Militia and Defence 1913). Therefore, much of the development of the Old Town Neighbourhood occurred between about 1880 and 1910.

3.3 Contextual Character

The general character of the Old Town Neighbourhood is mixed, and sections of streetscape are dominated by surface parking lots and high rise towers. As a result, the Old Town Neighbourhood does not have a unique or definable streetscape. However, sections of the Old Town Neighbourhood do contain distinct areas from a cultural heritage perspective. From a contextual perspective, Janette Street between Chatham Street West and Pitt Street West contains a relatively intact late 19th to early 20th century streetscape. This gives this section of Janette Street a unique and definable character.

While concentrations of late 19th to early 20th century structures are also present on Chatham Street West, Bruce Avenue, and Crawford Avenue these sections contain a higher degree of infill and surface parking and do not present a coherent streetscape from a cultural heritage perspective.






3.4 Previously Identified Built Heritage Resources

The Old Town Neighbourhood contains built heritage resources on the City's Municipal Heritage Register. Table 3.1 contains a summary of these resources and their proximity to the Study Area and Figure 2 shows their location in the Old Town Neighbourhood relative to the Study Area.






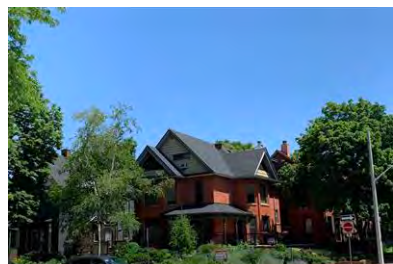

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3 Heritage Character Description of Old Town Neighbourhood
 May 23, 2023

Table 3-1: Previously Identified Built Heritage Resources

Address	Photo	Heritage Status	Brief Description	Relation to Study Area
639 Chatham Street West		Listed	Two and one half storey semi detached residence with a hip roof and red brick cladding	16 metres to the southeast
629 Chatham Street West		Listed	Two and one half storey semi detached residence with a hip roof and red brick cladding	20 metres to the southeast
211 Janette Avenue		Listed	Two and one half storey residence with a hip roof and modern cladding	30 metres to the southeast
193-195 Janette Avenue		Listed	Two and one half storey duplex with a hip roof and red brick cladding	Adjacent
187 Janette Avenue		Listed	Two storey residence with front facing gable roof and modern cladding	Adjacent








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181 Janette Avenue		Listed	Two storey residence with hip roof and modern cladding	Adjacent
163 Janette Avenue		Listed	Two and one half storey semi detached residence with a hip roof and red brick cladding	23 metres to the northeast
631 Pitt Street West		Listed	Two storey residence with a flat roof and red brick cladding	16 metres to the northeast
190 Janette Avenue		Listed	Two and one half storey residence with intersecting gable roof and red brick cladding	63 metres to the east
178 Janette Avenue		Listed	Two and one half storey residence with intersecting gable roof and modern cladding	63 metres to the east








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174 Janette Avenue		Listed	Two and one half storey residence with front facing gable roof and modern cladding	63 metres to the east
164 Janette Avenue/587 Pitt Street West		Listed	Two storey residence with a cross gable roof and buff brick cladding	60 metres to the northeast
563 Pitt Street West		Listed	Two storey residence with a cross gable roof and modern cladding	81 metres to the northeast
560 Chatham Street West		Listed	Two storey semi detached residence with a side gable roof and red brick cladding	80 metres to the east
570 Chatham Street West		Listed	Two storey semi detached residence with a side gable roof and red brick cladding	77 metres to the east



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<p>173 Bruce Avenue</p>		<p>Listed</p>	<p>Two storey residence with a front facing gable roof and red brick cladding</p>	<p>106 metres to the east</p>
<p>147 Janette Avenue (Wilshire Apartments)</p>		<p>Listed</p>	<p>Three storey apartment building with a flat roof and red brick cladding</p>	<p>53 metres to the north</p>
<p>594 Pitt Street West</p>		<p>Listed</p>	<p>One and one half storey residence with an intersecting gable roof and red brick cladding</p>	<p>74 metres to the northeast</p>
<p>570 Pitt Street West</p>		<p>Listed</p>	<p>One and one half storey residence with an intersecting gable roof and modern cladding</p>	<p>85 metres to the northeast</p>
<p>552-554 Pitt Street West (Billing Apartments)</p>		<p>Listed</p>	<p>Three storey apartment building with a flat roof and painted brick exterior</p>	<p>97 metres to the northeast</p>



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3 Heritage Character Description of Old Town Neighbourhood

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<p>524 Pitt Street West (Cairngorm Apartments)</p>		<p>Listed</p>	<p>Three storey apartment building with a flat roof and red brick exterior</p>	<p>115 metres to the northeast</p>
<p>137 Bruce Avenue (Palmer Apartments)</p>		<p>Listed</p>	<p>Three storey apartment building with a flat roof and red brick exterior</p>	<p>141 metres to the northeast</p>
<p>825 Riverside Drive West (CBC TV/Radio)</p>		<p>Listed</p>	<p>Two storey broadcast facility with flat roof and buff brick and glazed brick exterior</p>	<p>140 metres to the northwest</p>
<p>274 Crawford Avenue</p>		<p>Listed</p>	<p>Two and one half storey residence with a cross gable roof and red brick exterior</p>	<p>200 metres to the southwest</p>



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331500

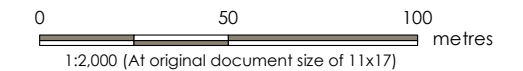


Legend

- Study Area
- Old Town Neighbourhood
- Listed Heritage Properties

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Project Location: City of Windsor
 160940899 REVA
 Prepared by JSa on 2023-05-09

Client/Project
 MAGNIFICENT HOMES
 HERITAGE OVERVIEW—666, 676, 684, AND 696
 CHATHAM STREET WEST, WINDSOR, ONTARIO

Figure No.
 2

Title
 Previously Identified Built Heritage Resources

3.5 Summary

Based on the above discussion, the following heritage characteristics were determined for the Old Town Neighbourhood:

- Rectilinear neighbourhood plan typical to areas developed along former streetcar trackage
- Concentrations of late 19th to early 20th century detached and semi-attached residences on Janette Street, Chatham Street West, Bruce Avenue, and Crawford Avenue that share a similar setback, height, materials, and massing. Many of these residences are listed on the Windsor Heritage Register
- Edwardian apartment buildings on Pitt Street West
- Mature deciduous street trees
- Views of the Detroit River and City of Detroit from Riverside Drive West



4 Impact Assessment

4.1 Description of Proposed Undertaking

The Client is proposing to construct a 16 storey residential building at 666, 676, 684, and 696 Chatham Street West. The proposal includes 88 residential units. The west and east elevations of the proposed structure would be approximately 31 metres in length and the north and south elevations would be approximately 39 metres in length. The west elevation will contain a loading bay and the main (south) elevation would include the principal entrance and garage entrance. The south and west elevations would be partially soft-scaped and if possible, include the retention of the existing trees. A site plan and rendering of the proposed undertaking is included in Appendix A.

4.2 Assessment of Impacts

An assessment of impacts to the heritage characteristics of the Old Town Neighbourhood as a result of the proposed undertaking is contained in Table 4.1 and Table 4.2. Impacts are defined by InfoSheet #5 (see Section 1.2.3). This assessment of impacts includes the consideration of previously identified built heritage resources (see Section 3.4).

Table 4-1: Evaluation of Potential Direct Impacts

Direct Impact	Impact Anticipated	Relevance to Old Town Neighbourhood
Destruction of any, or part of any, <i>significant heritage attributes</i> or features.	Possible	The proposed undertaking includes the retention of existing street trees. However, if retention of the two mature northern catalpa trees is not possible, the proposed undertaking would result in the removal of the mature street trees located in the Study Area. Mature street trees are a heritage characteristic of the Old Town Neighbourhood and the CIP notes that “mature trees contribute to the character of the neighbourhood in a positive way” (City of Windsor 2017) Therefore, mitigation measures are required.
Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance.	Yes	The proposed undertaking would result in alteration to the Old Town Neighbourhood through the introduction of a new development. Therefore, mitigation measures are required.



Table 4-2: Evaluation of Potential Indirect Impacts

Indirect Impact	Impact Anticipated	Relevance to Old Town Neighbourhood
<p>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</p>	No	<p>A shadow study has been completed under a separate cover (Baird AE 2022). While the new building may cast shadows during certain times of the day, they will not alter the appearance or viability of adjacent trees or result in the casting of permanent shadows on adjacent built heritage resources that may alter their appearance.</p> <p>While the proposed undertaking may increase the amount of shade cast on the northern catalpa street trees, if retained, this is not expected to be enough to change the viability of the remaining trees as no changes are currently proposed on adjacent properties that would reduce sunlight.</p> <p>Therefore, no mitigation measures are required.</p>
<p>Isolation of a <i>heritage attribute</i> from its surrounding environment, context, or a <i>significant</i> relationship</p>	No	<p>The Study Area contains an empty lot. The redevelopment of the property will not result in the isolation of any heritage characteristics of the Old Town Neighbourhood. Therefore, no mitigation measures are required.</p>
<p>Direct or indirect obstruction of <i>significant</i> views or vistas within, from, or of built and natural features</p>	No	<p>Views of the Detroit River and City of Detroit from within the Old Town Neighbourhood are limited to the northern edge of the neighbourhood near and on Riverside Drive West. No significant views were identified within the part of the Old Town Neighbourhood where the redevelopment is proposed. Therefore, no mitigation measures are required.</p>
<p>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</p>	No	<p>The properties consisting of the Study Area are currently vacant. Historically, these properties have been used for residential purposes. The proposed undertaking will result in a change of land use from vacant open space to residential and commercial use. The switch from vacant space to residential and commercial use is consistent with the goals of the CIP. In addition, the City's <i>Official Plan</i> designates the Old Town Neighbourhood as mixed use (City of Windsor 2017: 126).</p> <p>Therefore, no mitigation measures are required.</p>
<p>Land disturbances such as a change in grade that alters soil, and drainage patterns that adversely affect an <i>archaeological resource</i></p>	Possible	<p>Typically, indirect impacts resulting from land disturbances apply to archaeological resources, which are beyond the scope of this report. However, land disturbance from construction (e.g., site grading and related construction activities) may also have the potential to impact built heritage resources through temporary vibrations during the construction period that may cause shifts in foundations or masonry structures that can impact a built heritage resource. To determine the potential of the vibration impacts from the proposed undertaking, a supplementary letter was completed by Soil & Materials Engineering Inc. in December 2022. The letter determined that the construction process will not result in significant vibrations based on the selection of a slab-on-grade or cast-in-place concrete. (A copy of the supplementary letter is included in Appendix B). The selection of this type of foundation should be confirmed during the site plan approval process.</p> <p>If the existing street trees are retained, the proposed undertaking has the potential to impact the trees through land disturbance as construction and grading activity is likely required adjacent to the trees.</p> <p>Therefore, mitigation measures may be required.</p>



5 Mitigation

5.1 InfoSheet #5 Mitigation Options

As identified in Table 4.1 and Table 4.2, the proposed undertaking will result in a direct impact to the Old Town Neighbourhood through the introduction of a new development and the potential removal of mature street trees or their disturbance through root impact or limb damage. Accordingly, the mitigation options identified in InfoSheet #5 (see Section 1.2.4) have been explored below.

Alternative development approaches: The proposed development contains the type of intensification of vacant lands encouraged as part of the CIP. An alternative development approach is not feasible given the size of the properties and the proposed intensification.

(SSPL 2023).

Isolating development and site alteration from significant built and natural features and vistas:

The proposed development has been designed to accommodate the existing street trees on the site to facilitate their retention, if feasible. If the existing northern catalpa street trees are retained, there is the potential that the roots and limbs of the trees could be damaged during construction. An arborist report should be completed to determine appropriate measures to protect the limbs and roots of these trees if their retention is feasible.

Design guidelines that harmonize mass, setback, setting, and materials: The proposed redevelopment has been designed to harmonize with the streetscape of Chatham Street West and the Old Town Neighbourhood, including the listed built heritage resources located within the Old Town Neighbourhood. The podium level of the proposed structure will contain a setback that matches the existing structures on Chatham Street West and will be clad in red brick. This is a material sympathetic with the streetscape of Chatham Street West and the wider Old Town Neighbourhood.

While the podium will be five storeys in height, the street level of the podium has been designed to harmonize with the massing of the existing streetscape. The massing of the previously identified built heritage resources between Chatham Street and Pitt Street consist of semi-detached or duplex two to three storey structures. Most of these structures contain medium to steep roof pitches which give the structures a massing similar to a three to four storey structure. Many of the first storeys of the late 19th to early 20th century residences along Chatham Street also contain porches. The podium has been designed to harmonize with the existing structures through use of metal roof flashing and awnings that are designed to be sympathetic to the late 19th to early 20th century residences on Chatham Street West. The use of awnings and flashing on the first storey of the podium is designed to evoke this historic streetscape and retain the human scale of the area. Renderings of the podium and its relationship with the surrounding area are contained in the Urban Design Study (Baird AE 2023).

The proposed redevelopment will enhance the setting of Chatham Street West as the site is currently vacant lots. As referenced in Section 1.2.2, the replacement of vacant lots with higher density development is recommended by the Downtown Windsor Community Improvement Plan. In addition,



based on the findings of the Planning Rationale Report, the proposed development conforms with the City of Windsor Official Plan and City of Windsor Intensification Guidelines (SSPL 2023).

If retention of the existing northern catalpa trees is not feasible, an appropriate design guideline to mitigate the loss of the trees is to maximize the density of new street-trees by minimum spacing of new trees to acceptable municipal urban forestry guidelines, and adherence with principles of Crime Prevention Through Environmental Design (CPTED). The street tree species selection at the site plan approval stage should be determined by the project Landscape Architect working with the project certified Arborist taking all site conditions into account. The final site plans should be reviewed and approved by a Cultural Heritage Landscape Architect or Arborist with experience in cultural heritage landscapes or historic tree types who can also provide input into the arrangement and species selection.

Limiting Height and Density: The proposed development contains the type of intensification of vacant lands encouraged as part of the CIP. Limiting the height or density of the proposed development is not feasible given the size of the properties and the proposed intensification. In addition, site plan constraints require the loading areas and garage entrances to be located at the southeast corner of the proposed structure. As a result, this presently soft scaped area with two mature trees will become a hardscaped surface and the northern catalpa trees could not be retained even if the height and density of the building was reduced.

Allowing only compatible infill: The proposed development contains the type of intensification of vacant lands encouraged as part of the CIP. Therefore, this mitigation measure has been implemented in the proposed development.

Reversible alterations: Given that the direct impact is the construction of a new building, reversible alterations are not feasible.

Buffer zones, site plan control, and other planning mechanisms: Planning mechanisms and site plan controls to lessen impacts to adjacent built heritage resources during the construction phase of the project are not required based on the potential selection of a slab-on-grade raft foundation or cast-in-place concrete foundation. The selection of this type of foundation should be confirmed during the site plan approval process (Appendix B).



6 Recommendations

The proposed redevelopment has been designed to harmonize with its surrounding streetscape and the wider Old Town Neighbourhood, including the existing built heritage resources listed on the City of Windsor Heritage Register. As such, mitigation measures for the Old Town Neighbourhood from the proposed redevelopment are limited to the existing northern catalpa street trees within the Study Area.

If the existing northern catalpa street trees are retained, there is the potential that the roots and limbs of the trees could be damaged during construction. An arborist report should be completed to determine appropriate measures to protect the limbs and roots of these trees if their retention is feasible.

If retention of the existing northern catalpa trees is not feasible, an appropriate design guideline to mitigate the loss of the trees is to maximize the density of new street-trees by minimal spacing of new trees to acceptable municipal urban forestry guidelines, and with principles of Crime Prevention Through Environmental Design (CPTED) adhered to. The street tree species selection at the site plan approval stage should be determined by the project Landscape Architect working with the project certified Arborist taking all site conditions into account. The final site plans should be reviewed and approved by a Cultural Heritage Landscape Architect or Arborist with experience in cultural heritage landscapes or historic tree types who can also provide input into the arrangement and species selection.

It is recommended to maximize the spacing of new street-trees by following acceptable City of Windsor urban forestry standards and guidelines, and with adherence to the principles of CPTED. The street tree species selection at the site plan approval stage should be determined by the project Landscape Architect working with the project Arborist taking all site conditions into account. The final site plans should be reviewed and approved by a Cultural Heritage Landscape Architect or Arborist with experience in cultural heritage landscapes or historic tree types who can also provide input into the arrangement and species selection.



7 Closure

This report has been prepared for the sole benefit of Magnificent Homes and may not be used by any third party without the express written consent of Stantec Consulting Ltd. Any use which a third party makes of this report is the responsibility of such third party.

We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Stantec Consulting Ltd.



8 References

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Heritage Overview: 666, 676, 684, and 696 Chatham Street West, Windsor, Ontario

8 References

May 23, 2023

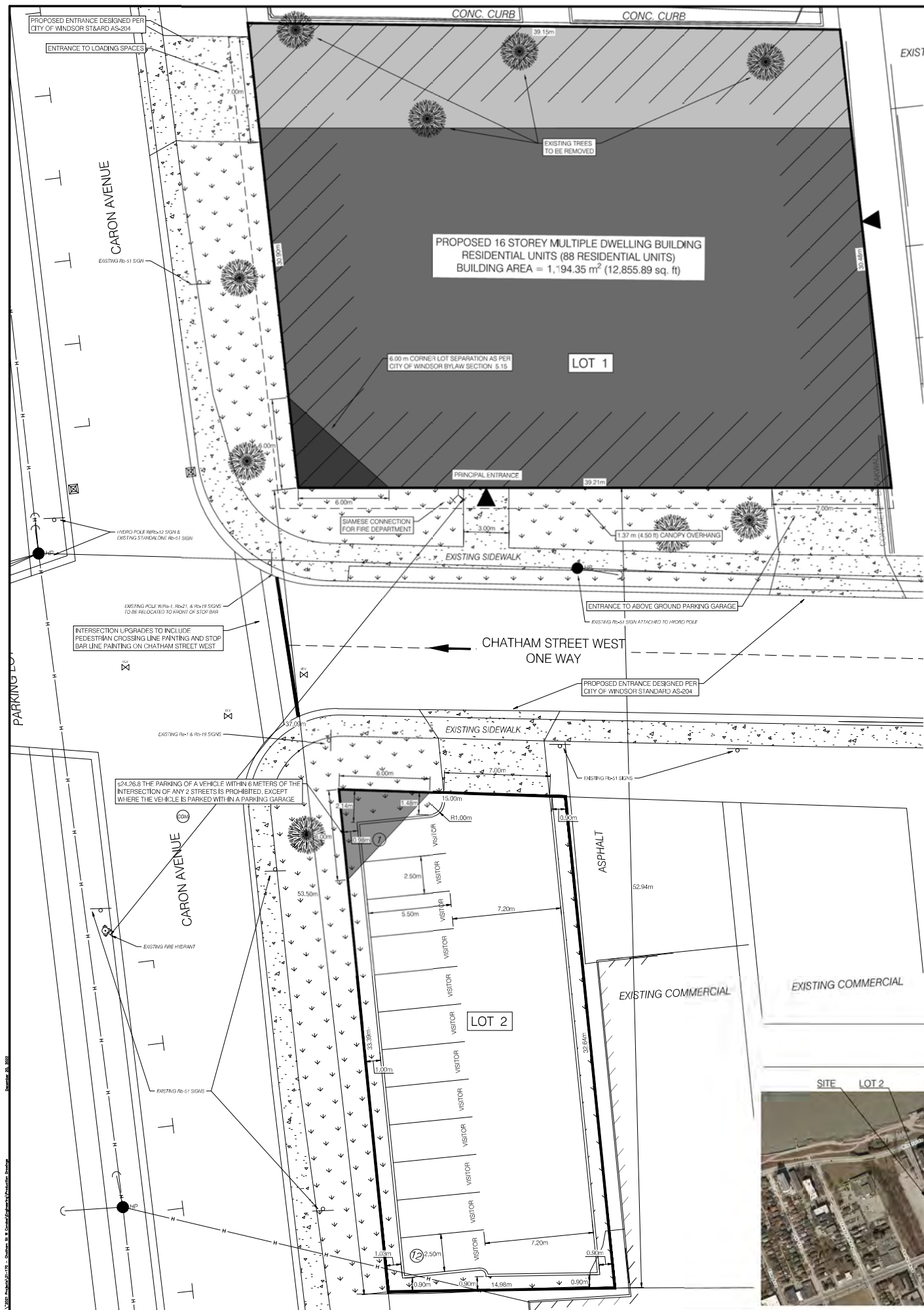
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Heritage Overview: 666, 676, 684, and 696 Chatham Street West, Windsor, Ontario
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Appendix A Site Plan





LEGEND

①	NUMBERED PARKING SPACES
○	PARKING/ROAD SIGN
⦿	FIRE HYDRANT
▲	BUILDING ENTRANCE
●	HYDRO POLE (HP)
—	OVERHEAD HYDRO CABLE
⌒	GUY WIRE
⊠	EXISTING CATCH BASIN
⊙	EXISTING COMBINED SEWER MANHOLE
⊗	EXISTING WATER VALVE
●	EXISTING TREES
□	LANDSCAPE OPEN SPACE
▨	SIDEWALK/CONCRETE
▩	PROPOSED BUILDING
▧	PROPOSED 5 STOREY PODIUM (FLOORS 1-5)
▨	PROPOSED 11 STOREY TOWER (FLOORS 6-16)
—	PROPERTY LINE

SITE DATA:

SITE ZONING:	COMMERCIAL DISTRICT 3.6 (CD3.6)		
PERMITTED USE:	RETAIL STORE, DWELLING UNITS IN A COMBINED USE BUILDING WITH ANY ONE OR MORE PREVIOUSLY LISTED USES, AMONGST OTHER USES PERMITTED WITHIN THE CD3.6 ZONE		
PROPOSED ZONING:	COMMERCIAL DISTRICT 3.6 SITE SPECIFIC PROVISION XX (CD3.6-S.20(1)XX)		
PROPOSED USE:	MULTIPLE DWELLING BUILDING, AMONGST OTHER USES WITHIN THE CD3.6-S.20(1)XX ZONE		
DESCRIPTION:	REQUIRED:	PROVIDED:	ZONING COMPLIANCE:
MIN. LOT AREA:	N/A	1,194.35 m ² (12,855.89 sq. ft) 0.12 ha (0.30 ac)	COMPLIES
MIN. FRONTAGE:	N/A	30.90 m (101.38 ft)	COMPLIES
MIN. INTERIOR YARD SETBACK (NORTH):	N/A	0.00 m (0.00 ft)	COMPLIES
MIN. EXTERIOR YARD SETBACK (SOUTH):	N/A	0.00 m (0.00 ft)	COMPLIES
MIN. REAR YARD SETBACK (EAST):	N/A	0.00 m (0.00 ft)	COMPLIES
MIN. FRONT YARD SETBACK (WEST):	N/A	0.00 m (0.00 ft)	COMPLIES
LOT COVERAGE:	N/A	100.00% (1,194.35 m ² , 12,855.89 sq. ft)	COMPLIES
BUILDING HEIGHT:	MAX. 20.00 m (65.62 ft)	53.34m (175.00 ft)	RELIEF REQUESTED
DRIVE-WAY WIDTH:	MIN. 3.50 m (11.48 ft)	7.00 m (22.96 ft)	COMPLIES
CORNER LOT:	MIN. 6.00 m (19.69 ft) SEPARATION BETWEEN ANY PART OF ANY BUILDING OR STRUCTURE & THE POINT OF INTERSECTION OF ANY 2 STREETS	0.00 m (0.00 ft)	RELIEF REQUESTED
AMENITY AREA: (INCLUDES YOGA ROOM, FITNESS ROOM, 2 LOUNGES, GAMES ROOM, PARTY ROOM & OPEN AMENITY DECK - REFER TO FLOOR PLANS 1 & 5)	MIN. OF 12.00 m ² (129.17 sq. ft) PER DWELLING UNIT 88 DWELLING UNITS @ 12.00 m ² = 1,056.00 m ² (11,366.69 sq. ft) REQ.	10.89 m ² PER DWELLING UNIT PROV. TOTAL PROV. = 958.62 m ² (10,318.47 sq. ft)	RELIEF REQUESTED
PARKING FOR MULTIPLE DWELLING BUILDING - DWELLING UNITS (INCLUDES REQ. # OF ACCESSIBLE SPACES): (PLEASE SEE FLOORS 2-4 FLOOR PLAN SHEET FOR PARKING SPACE LOCATION)	SITE LOCATED WITHIN CITY OF WINDSOR CENTRAL BUSINESS DISTRICT THEREFORE NO SPACES REQUIRED FOR FIRST 6 DWELLING UNITS & 1 SPACE FOR EACH ADDITIONAL DWELLING UNIT = 88 UNITS = 82 SPACES REQ.	82 SPACES PROV.	COMPLIES
ACCESSIBLE PARKING: (PLEASE SEE FLOORS 2 & 3 FLOOR PLAN SHEET FOR ACCESSIBLE PARKING SPACE LOCATION)	TYPE A SPACE: 2% OF PARKING SPACES = 2 SPACES TYPE B SPACE: 2% OF PARKING SPACES = 2 SPACES 4 ACCESSIBLE SPACES TOTAL	4 SPACES PROV. 2 TYPE 'A' SPACES 2 TYPE 'B' SPACES	COMPLIES
VISITOR PARKING SPACES:	MIN. 15% OF PARKING SPACES TO BE MARKED AS VISITOR PARKING = 12 VISITOR SPACES REQ.	12 SPACES PROV.	COMPLIES
BIKE PARKING SPACES: (PLEASE SEE FIRST FLOOR PLAN SHEET FOR TENANT STORAGE LOCATION)	2 FOR THE FIRST 19 SPACES PLUS 1 FOR EACH ADDITIONAL 20 SPACES = 6 SPACES REQ.	6 SPACES PROV.	COMPLIES
LOADING SPACES: (PLEASE SEE FIRST FLOOR PLAN SHEET FOR LOADING SPACE LOCATION)	RESIDENTIAL DWELLING UNITS SPACES REQ. BASED ON GFA: RESIDENTIAL GFA = 8,836.94 m ² (95,120.00 sq. ft); THEREFORE 2 SPACES REQ.	2 SPACES PROV.	COMPLIES
PARKING AREA SEPARATION REQUIREMENTS FOR LOT 2			
PARKING AREA FROM:	MINIMUM SEPARATION REQ.	MINIMUM SEPARATION PROV.	ZONING COMPLIANCE:
ANY OTHER STREET	3.00 m (9.84 ft)	0.98 m (3.22 ft)	RELIEF REQUESTED
AN INTERIOR LOT LINE OR ALLEY	0.90 m (2.95 ft)	0.90 m (2.95 ft)	COMPLIES
s24.26.8 THE PARKING OF A VEHICLE WITHIN 6 METERS OF THE INTERSECTION OF ANY 2 STREETS IS PROHIBITED EXCEPT WHERE THE VEHICLE IS PARKED WITHIN A PARKING GARAGE	6.00 m (19.69 ft)	0.00 m (0.00 ft)	RELIEF REQUESTED
FOR ALL DWELLINGS OR DWELLING UNITS IN A COMBINED USE BUILDING, ALL REQUIRED PARKING SPACES, VISITOR PARKING SPACES & ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SAME LOT AS THE DWELLINGS OR DWELLING UNITS THEY ARE INTENDED TO SERVE	0.00 m (0.00 ft)	53.50 m (175.52 ft) LOCATED WITHIN 53.50 m OF THE NEAREST LOT LINE OF THE L& OCCUPIED BY THE MULTIPLE DWELLING	RELIEF REQUESTED
LOT / BUILDING INFO:			
TOTAL LOT AREA LOT 1:	1,194.35 m ² (12,855.89 sq. ft) 0.12 ha (0.30 ac)		
LOT 2:	491.84 m ² (5,294.08 sq. ft) 0.05 ha (0.12 ac)		
TOTAL BUILDING AREA:	1,194.35 m ² (12,855.89 sq. ft)		
TOTAL RESIDENTIAL DWELLING UNITS:	88		
TOTAL RESIDENTIAL DWELLING GFA:	TOTAL = 8,836.93 m ² (95,120.00 sq. ft); FLOOR 5 = 321.44 m ² (3,460.00 sq. ft); FLOORS 6-14 = 6,973.30 m ² (75,060.00 sq. ft); FLOORS 15 & 16 = 1,542.19 m ² (16,600.00 sq. ft)		
HEIGHT OF BUILDING & NO. OF STOREYS:	53.34 m (175.00 ft) TALL & 16 STOREY		
TOTAL PARKING SPACES PROV. = 82 (ST&RD SPACES = 78, ACCESSIBLE SPACES = 4)			
BUILDING USE & OCCUPANCY:	RESIDENTIAL C		
NOTES:			
1. ALL FIRE DEPARTMENT SIGNAGE TO BE COMPLETED AFTER CONSTRUCTION IN COORDINATION WITH FIRE DEPARTMENT.			
2. ALL ACCESSIBLE TYPE 'A' SPACES TO HAVE RB-93 SIGNAGE INSTALLED & TYPE 'B' SPACES TO HAVE RB-93 SIGNAGE INSTALLED.			
3. GARBAGE DISPOSAL UNIT LOCATED WITHIN THE BUILDING, TO BE ROLLED OUT TO LOADING AREAS FOR PRIVATE SERVICE PICK UP (PLEASE SEE FIRST FLOOR PLAN FOR LOCATION OF REFUSE AREA).			
4. ALL LIGHTING TO BE DARK SKY COMPLIANT.			
5. FIRE ROUTE TO BE IN COMPLIANCE WITH OBC REQUIREMENTS.			

BAIRDIAE
architecture & engineering
1350 Provincial Road, Unit 700
Windsor ON N8W 5W1

27 Princess Street, Unit 102
Leamington ON N8H 2X8

CHATHAM ST. WEST CONDOS
606 CHATHAM ST. WEST WINDSOR, ONTARIO
CONCEPT SITE PLAN - OPA-ZBA SUBMISSION

DATE: DECEMBER 20, 2022
SCALE: 1:150
DRN BY: CS
CHK BY: BP

JOB NUMBER: 21-170
SHEET NUMBER: 01



CHATHAM STREET WEST RESIDENTIAL DEVELOPMENT

696 CHATHAM ST. WEST, WINDSOR, ONTARIO
FEBRUARY 3, 2023















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May 23, 2023

Appendix B Vibration Supplementary Letter





SOIL & MATERIALS ENGINEERING INC.
CONSULTING ENGINEERS

December 6, 2022

Job No. 21G102
Report 2 – Rev 01

Baird AE
700 Provincial Road, Suite 1350
Windsor, ON N8W 5W1

Attention: Paul Weidl, OAA, RAMICH
pweidl@bairdae.ca

Re: Supplementary Letter of Raft Slab Recommendations and Vibrations for the 16-Storey Mixed Used Development, North Corner of Caron Avenue and Chatham Street West, Windsor, Ontario

Dear Sir:

Soil & Materials Engineering completed a recent geotechnical investigation for the subject property, “*Geotechnical Investigation for the 16-Storey Mixed-Use Development with Surface Parking North and South Corner of Caron Avenue and Chatham Street West, Windsor, Ontario*.” June 2022. Soil & Materials Engineering.” The foundation type was not decided during our investigation. In accordance with the request received from Paul Weidl of Baird AE, Soil & Materials Engineering was asked to provide suggested soil bearing pressures and any comments with associated construction for the following:

- ULS and SLS soil bearing pressures for raft slab (slab-on-grade)
- Caisson Recommendations
- Vibrations

Raft Slab

For the following raft slab foundations, assumptions are outlined below,

- Slab-on-grade would be placed below the topsoil and fill at 1.5 metres below ground surface
- The current site development is not considering a basement at this time

GEOTECHNICAL ENGINEERING AND CONSTRUCTION MATERIALS INSPECTION & TESTING

2000 Legacy Park Drive • Windsor, Ontario • N8W 5S6

Phone 519-966-8863 • Fax 519-966-8870 • email: ctsoil@ctsoil.com • www.ctsoil.com

**Supplementary Letter of Raft Slab Recommendations and Vibrations for the 16-Storey
Mixed Used Development, North Corner of Caron Avenue and Chatham Street West
Windsor, Ontario**

- The total area is consistent with the original site plan provided by BAIRD AE in 2021. Building width of 30.9 m and length of 39.2 metres. Total surface area of 1211 m².
- No preliminary loads were available at the time of writing this letter

Ultimate Limit States

The Factored Gross Geotechnical Resistance (ULS) for the following foundations are:

Depth (m)	Factored Geotechnical Resistance, ΦR , at U.L.S. (kPa)* (Gross Bearing)
	30.9 m by 39.2 m Rectangular Mat
1.5	250

* Some locations may require subexcavation in order to achieve the stipulated bearing capacities.

The factored geotechnical resistance at ultimate limit states incorporates 0.50 as an applied resistance factor, Φ , to the ultimate geotechnical resistance. These values are net of the lowest surcharge pressure on the soil surrounding the mat foundation.

Serviceability Limit States

The gross allowable Geotechnical Resistance (SLS) for the following foundations are:

Depth (m)	Geotechnical Resistance at S.L.S. (kPa)*
	30.9 m by 39.2 m Rectangular Mat
1.5	170

* Some locations may require subexcavation in order to achieve the stipulated bearing capacities.

The expected total and differential settlements for mat foundation constructed as outlined previously will be 25 mm and 20 mm, respectively. However, a detailed geo-structural interaction analysis must be completed for proper evaluation. A finite element analysis must be completed once the preliminary loading is available and provided to the geotechnical consultant. We expect at least three iterations will be conducted before the raft slab foundation is finalized.

Supplementary Letter of Raft Slab Recommendations and Vibrations for the 16-Storey
Mixed Used Development, North Corner of Caron Avenue and Chatham Street West
Windsor, Ontario

Cast-in Place Concrete Caissons

If the caissons are placed 3.0 metres below ground surface, the following net allowable loads would apply for various diameters:

Diameter	0.6 metres (2 feet)	0.75 metres (2.5 feet)	1.2 metres (4 feet)
Net Allowable Load	160 kN	250 kN	500 kN

The allowable soil does not include the skin friction along the caisson that would increase the ultimate geotechnical capacity. Once the loads become available, they should be presented to Soil & Materials Engineering for further review, if cast-in-place concrete caissons are selected as the foundation type.

Vibrations During Construction

If a slab-on-grade raft foundation or cast-in-place concrete foundations are selected, then there will be no significant vibrations imparted from the construction process.

Supplementary Letter of Raft Slab Recommendations and Vibrations for the 16-Storey
Mixed Used Development, North Corner of Caron Avenue and Chatham Street West
Windsor, Ontario

Conclusion

This report presents our interpretation of factual information obtained from the investigation and is intended for the use of the design engineer. The testholes are considered widely spaced. If, during construction, subsurface conditions encountered are materially different than that described in this report or other supplementary reports completed by Soil & Materials Engineering for the subject property, Soil & Materials Engineering Inc. should be contacted immediately to provide guidance in the field.

We trust this report is presented in a format suitable for your use. Should questions arise pertaining to specific or isolated loading conditions (e.g. utility distribution) or any other aspect of the subject project, do not hesitate to contact us.

Regards,
Soil & Materials Engineering Inc.



B. Purcka, EIT
Geotechnical EIT



T.O'Dwyer, P.Eng.
Consulting Engineer



cc.
Magnificent Homes (Sean Eden)
HGS Limited Consulting Engineers (Hany Abdelmessih)