# STRIP PLAZAS IN THE SUBURBS: A REDEVELOPMENT FRAMEWORK FOR CONVENIENCE CENTRES

by

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Master of Planning In Urban Development Ryerson University

**Abstract** 

Convenience centres are a prominent retail form in the suburban communities of Toronto.

Built to satisfy the goods and service needs of the people who inhabit the suburbs,

convenience centres were first built in the post-war era, and consist of one-story retail

units connected by a shared canopy. They have one or more rows of parking adjacent to the

street and are designed to create a convenient experience for drivers. Convenience centres

in Toronto typically occupy real estate along the Avenues and major arterial roads: areas

designated in the City of Toronto Official plan to support future intensification, density, and

housing. Therefore, the research in this project describes a set of recommendations in the

form of a framework for redevelopment of convenience centres. It also outlines a case

study for a site in Scarborough, Ontario, in which this framework was applied.

Key words: retail; strip plaza; convenience centre; suburbs; redevelopment; Toronto;

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# 1.0 Purpose

The intent of this project is to describe the development of retail spaces in the suburban communities of Toronto, specifically the class of shopping centre called the "convenience centre". The case will be made for the transformation of the convenience centre, and the reasons why these sites have the potential to have a higher and better use in an evolving suburban context.

A framework will be presented to solve the problem of underutilized sites currently occupied by convenience centres. Sites ideal for redevelopment will share common characteristics, detailed in this project. A accompanying series of recommendations will be outlined, creating a useful guide for developers, property owners, and city planners to assess the lifespan of a convenience centre in the Greater Toronto Area.

The proposed redevelopment framework will be applied to an actual site, in the Case Study section of this project. A full concept plan will be outlined, describing the current state of the site, the opportunities and constraints of the site, a new concept for the site, and the planning rationale.

## 2.0 Problem

## 2.1 Definition and characteristics of convenience centres

Suburbanization in Canada is a well-known story. Since the beginning of the 20th century, families have moved from inner city neighbourhoods to the outskirts of major cities in search of a different life which may have included more affordable housing, larger homes, larger lot sizes and new communities.

Much, if not all, of Canada experienced a housing boom in the years after World War Two changing the labor market and urban landscape. Returning veterans and their families needed homes and much of the development that was put on hold to focus on war efforts was channeled into building new communities in or around large Canadian cities. Life in the suburbs developed through the early half of the 1900s. By the 1950s, not only were new neighborhoods of homes being developed but also new community spaces such as schools and churches and the need for places for suburbanites to shop and access services were recognized.

New types of retail came out of the suburban development in much of Canada particularly the Greater Toronto Area. Table 1, from the International Council of Shopping Centres, shows a hierarchy of traditional shopping centres<sup>1</sup>.

For a shopping centre to be considered a convenience centre, it must have the following qualities (ICSC, 2010):

- Open air centre between 10,000 and 39,999 square feet (gross leasable area)
- Provides a narrow mix of goods and personal services to a very limited trade area,
   including walk-in traffic

<sup>&</sup>lt;sup>1</sup> International Council of Shopping Centres (ICSC) (2000) A Brief History of Shopping Centres, ICSC News. <a href="http://icsc.org/srch/about/impactofshoppingcentres/briefhistory.html">http://icsc.org/srch/about/impactofshoppingcentres/briefhistory.html</a>

- Linear configuration with an attached row of stores or service outlets owned and managed as a coherent retail unit
- On-site parking usually located in front of the stores
- Open canopies may connect the storefronts, but a convenience centre does not have enclosed walkways linking the stores
- Primary trade area—or the area from which 60-80% of the centre's sales originate—is generally up to two kilometers
- Generally single title ownership

This project will focus on the origin of the convenience centre, and some of the factors that contributed to the decline in viability of these sites.

## 2.2 Origin of the convenience centre

Early convenience centres were part of the larger urban form called the "commercial strip". Commercial strips outside of the downtown of major cities can be dated to the late-nineteenth-century. "Strip malls" (or convenience centres) began to appear in the 1930s and 1940s². The strip mall was "a row of shops, often with a single canopy, providing space for 'pull-in' parking directly off the street"³.

The amount of parking has grown over time now accounting for 80% of the lot<sup>4</sup>. Both the larger category of commercial strips and the smaller "strip malls" were actively competing with downtowns and often "included a post office, bank, church or other social amenities"<sup>5</sup>.

Initially, many suburban commercial strip malls and plazas were coined "taxpayer strips", because the "cheap, flimsy one-storey structures" were built along the arterial roadways leading away from downtown were designed to "produce enough revenue to pay the taxes and hold the property for more intense development in the future". Thus, "taxpayer strips" demanded lower rents than downtown yet large populations of customers lived nearby.

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<sup>&</sup>lt;sup>2</sup> Dunham-Jones, E and Williamson, J. (2009). Retrofitting suburbia: urban design solutions for redesigning suburbs. Hoboken: John Wiley & Sons, Inc.

<sup>&</sup>lt;sup>3</sup> Dunham-Jones, E and Williamson, J. (2009). Retrofitting suburbia: urban design solutions for redesigning suburbs. Hoboken: John Wiley & Sons, Inc.

<sup>&</sup>lt;sup>4</sup> Dunham-Jones, E and Williamson, J. (2009). Retrofitting suburbia: urban design solutions for redesigning suburbs. Hoboken: John Wiley & Sons, Inc.

<sup>&</sup>lt;sup>5</sup> Dunham-Jones, E and Williamson, J. (2009). Retrofitting suburbia: urban design solutions for redesigning suburbs. Hoboken: John Wiley & Sons, Inc.

<sup>&</sup>lt;sup>6</sup> Loukaitou-Sideris, A. (1997) Inner-City Commercial Strips: Evolution, Decay: Retrofit? The Town Planning Review 68 (1), 1-29.

## 2.3 Factors contributing to the decline of convenience centres

It is evident that convenience centres were built to compliment residential expansion into the outskirts of urban centres. It is also well-recognized that suburban communities have undergone many changes and certain development types that were once profitable and useful have lost their appeal. The complexities of the changing viability of these uses is not within the scope of this project but it is imperative to understand that there are specific factors contributing to the decline of convenience centres:

- (1) **Vacant space**: Retail space in the suburbs in general was "growing five to six times faster than retail sales", and since the recession in the United States and Canada in 2009, it has been proven that there is too much retail space, leading to vacancies in retail strips and convenience centres<sup>7</sup>.
- (2) **Rise of the "big box":** Large-format retail in Canada, sparked by the implementation of free trade agreements in the late 1980s and early 1990s, the decline of the value of the Canadian dollar from 1992-2004, and the trend towards the development of auto accessible locations on inexpensive farmland, led to the development of "big box" stores that allowed consumers a one-stop-shop experience<sup>8</sup>.
- (3) **Increased in e-commerce**: Canadians are spending more online, and are preferring to shop at e-commerce sites, compared to small businesses<sup>9</sup>. This may affect the viability of small businesses in bricks-and-mortar locations such as convenience centres.

<sup>&</sup>lt;sup>7</sup> McMahon, E. (2011) "The Future of the Strip?" Urban Land Magazine. Retrieved from: <a href="https://urbanland.uli.org/economy-markets-trends/the-future-of-the-strip/">https://urbanland.uli.org/economy-markets-trends/the-future-of-the-strip/</a>.

<sup>&</sup>lt;sup>8</sup> Buliung, R. and Hernandez, T. (2009) Places to Shop and Places to Grow: Power retail, consumer travel behaviour and urban growth management in the Greater Toronto Area. Neptis Foundation.

<sup>&</sup>lt;sup>9</sup> Canadian Internet Registration Authority (2016). "The State of E-Commerce in Canada – CIRA Internet Factbook." Retrieved from: https://cira.ca/sites/default/files/public/Ecommerce-Factbook-March-2016.pdf

- (4) **Lack of connectivity:** "Increasingly, retail development is reconnecting with the larger community around it, becoming integrated into a total destination where people can participate even when they are not shopping<sup>10</sup>." By reimagining the economically and functionally blighted convenience centres of today as new community spaces that are not only retail destinations but also places to live and gather, the full potential of these small but well-located parcels can be fulfilled.
- (5) **Market demographics**: The population of the suburbs is aging, with baby boomers and their children aging in place in the homes they purchased in the 1950s, 60s and 70s, while at the same time, younger people are remaining single longer or may choose single parenthood. Immigration continues to drive changes in the suburbs, resulting in a more "cosmopolitan expectation"<sup>11</sup>. "In response to this demographic change, retailing can be expected to take on a new face in place of the freestanding retail strips that were designed for a different time and for a different consumer"<sup>12</sup>.
- (6) **Opportunity for mixed-use**: A mixed-use centre "with street life, outdoor dining and places to hang out, walk and window-shop are much more likely to get the affection and the dollars of young shoppers than auto-dependent strip"<sup>13</sup>. Mixed-use sites can also help to achieve: (a) an urban environment that can be active at all hours of the day; (b) a range of housing options; (c) increased housing affordability and; (d) less car dependency<sup>14</sup>.
- (7) **Remain in-step with policy**: The Growth Plan for the Greater Golden Horseshoe is a vision statement for growth and development in Ontario. It puts emphasis on "creating complete communities, which accommodate both

<sup>&</sup>lt;sup>10</sup> Beyard, M. and Pawlukiewicz, M. (2001). Ten Principles for Reinventing America's Suburban Strips. Urban Land Institute

<sup>&</sup>lt;sup>11</sup> Beyard, M. and Pawlukiewicz, M. (2001). Ten Principles for Reinventing America's Suburban Strips. Urban Land Institute.

<sup>&</sup>lt;sup>12</sup> Beyard, M. and Pawlukiewicz, M. (2001). Ten Principles for Reinventing America's Suburban Strips. Urban Land Institute.

<sup>&</sup>lt;sup>13</sup> McMahon, E. (2011) "The Future of the Strip?" Urban Land Magazine. Retrieved from: https://urbanland.uli.org/economy-markets-trends/the-future-of-the-strip/.

<sup>&</sup>lt;sup>14</sup> Grant, J. (2002). Mixed Use in Theory and Practice: Canadian Experience with Implementing a Planning Principle. APA Journal, 68(1).

residents and jobs"<sup>15</sup>. Complete communities should develop, the policy states, with "a diverse mix of land uses, a range and mix of employment and housing types, high quality public open space and easy to access local stores and services"<sup>16</sup>. This could be achieved by converting convenience centres into mixed-use parcels.

(8) **Loss of market viability:** convenience centres, as mentioned above, were typically built between 1950 and 1980, and as such will require maintenance and updates to the building and parking lots. When referencing the cost of updating these buildings, is it becoming financially feasible to explore redevelopment opportunities.

## 2.4 Highest and best use in the suburbs

It is important, for the purposes of this project, to define what the "highest and best use" is in the context of suburban Toronto.

Several factors contribute to an analysis of highest and best use: (1) legally feasible, (2) physically possible, (3) financially feasible and (4) most profitable.

When analysing the legally permissible possibilities of a site, it is important to consider policy intension, zoning, and surrounding uses. For example, in the suburbs of Toronto, the intent is that density be concentrated to the Avenues, therefore the highest and best use of a site on an Avenue would be to build at higher density. Other aspects of policy will dictate highest and best use, including zoning by-laws such as: lot area coverage, height maximums and permitted uses.

<sup>&</sup>lt;sup>15</sup> Government of Ontario (2017) Growth Plan for the Greater Golden Horseshoe. http://placestogrow.ca/images/pdfs/ggh2017/en/growth%20plan%20%282017%29 .pdf

<sup>&</sup>lt;sup>16</sup> Government of Ontario (2017) Growth Plan for the Greater Golden Horseshoe. http://placestogrow.ca/images/pdfs/ggh2017/en/growth%20plan%20%282017%29 .pdf

When analysing what is physically possible on a site, the shape, size, topography and accessibility are taken into account. Sites that are well connected by transit and roadways will be able to support higher density and height than sites that are less accessible.

Financial feasibility of a site when assessing highest and best use is the type of development that is most appropriate for the market. For example, in the suburbs of Toronto it has been most financially feasible to develop single-family homes because they are historically most at demand in the market.

Finally, the element of what is most profitable on the site is an analysis of the cost of development compared to the expected income of the property. This will be dictated by land costs, development costs, operating costs, and rents in the area (both commercial and residential). Profit can be calculated as a return on equity (ROE) and a rate of return (ROR).

With the above factors considered, the highest and best use for convenience centre sites in the suburbs of Toronto will involve the following: mixed-use buildings on sites located on major arterial roadways, that will allow for mid-rise development (8-10 storeys) and will generate ROEs (profit to equity ratio) and RORs (profit to cost ratios) that are equal to or higher than the current commercial uses. Mixed-use may take the form of residential-commercial uses, or commercial-employment uses, or a commercial-residential-employment uses. The particular mix of uses on each site will be dependent on various factors, including surrounding uses and demand for certain uses in different parts of the city.

## 3.0 Toronto context

### 3.1 Convenience centres in Toronto

While convenience centres are a product of suburban life across Canada, there are elements of these sites that are specific to Toronto.

Suburban development began in Toronto in the post-war era. "Toronto and the surrounding towns expanded at an unprecedented rate" and buying or building a house became cheaper and easier than ever, thanks to provisions in the 1946 National Housing Act and the new Canada Mortgage and Housing Corporation<sup>17</sup>. By the end of the 20th century, "roughly three-quarters of the city's population" embraced the new way of life that suburbia provided<sup>18</sup>.

With the new residential development came the need for places to shop. "The commercial structure of Toronto consists of a set of hierarchies of centres, unplanned in the older parts of the city, planned in the post-war areas, which satisfy the convenience and shopping needs of the immediately surrounding area to a certain level of retail specialization" Convenience centres in the suburbs were intended to serve this specific need. According to Dunham-Jones and Williamson (2009), the building of shopping centres such as convenience centres in the suburbs of Toronto, can be attributed to two main factors: The postwar economic boom that the entire country of Canada enjoyed through the 1960s, leading to both commercial and residential development and; the suburban development boom that followed the new highways and bypasses (in this case, specifically the 400-series highways)<sup>20</sup>.

<sup>-</sup>

<sup>&</sup>lt;sup>17</sup> Canada Mortgage and Housing Corporation (2017). History of CMHC. https://www.cmhc-schl.gc.ca/en/corp/about/hi/ City of Toronto (n.d.) The Great Demographic Revolution.

<sup>&</sup>lt;sup>18</sup> Canada Mortgage and Housing Corporation (2017). History of CMHC. https://www.cmhc-schl.gc.ca/en/corp/about/hi/ City of Toronto (n.d.) The Great Demographic Revolution.

<sup>&</sup>lt;sup>19</sup> Simmons, J.W. (1966) Toronto's Changing Retail Complex: A Study in Growth and Blight. Chicago: Public Litho Service Inc.

<sup>&</sup>lt;sup>20</sup> Dunham-Jones, E and Williamson, J. (2009). Retrofitting suburbia: urban design solutions for redesigning suburbs. Hoboken: John Wiley & Sons, Inc.

While often overlooked when discussing contributions to the vibrant lives of Canadian cities, the suburban communities of the Greater Toronto Area prove that there is potential to create complete, walkable, profitable mixed-use spaces outside of the city centre. The suburbs grew out of the post-war building boom of the 1950s and '60s. The suburban residential neighbourhoods required small scale local retail that would provide goods and services close to homes. Thus, the rise of the convenience centres in suburban Toronto.

## 3.2 Policy approaches

In order to create a framework for redevelopment of suburban convenience centres in Toronto and other cities in Canada, it is imperative to highlight the approach to this built form type in policy documents.

The City of Toronto Official Plan (2015), has several areas that address the revitalization of suburban strip retail. These specific policies are listed below:

#### Chapter 3.1 - The Built Environment

#### <u>Chapter 3.1.2 – Built Form</u>

- "Over the next several decades, the majority of the new growth will take place in areas of the City where intensification is appropriate... along the Avenues. This is an extraordinary opportunity to build the next generation of buildings."
- 1. New development will be located and organized to fit with its existing and/or planned context. (a) generally locating buildings parallel to the street... On a corner site, the development should be located along both adjacent street frontages and give prominence to the corner; (b) locating main building entrances so that they are clearly visible and directly accessible from the public sidewalk;
- 2. New development will locate and organize vehicle parking, vehicular access and service areas and utilities to minimize their impact on the property and on surrounding properties.

  (a) using shared service areas where possible within development block(s) including public and private lanes; (d) providing underground parking...; (e) limiting surface parking between the front face of a building and the public street and/or sidewalk

#### Chapter 3.5 Toronto's Economic Health

"By designating areas suitable for population and job growth, this Plan creates
opportunities for development to accommodate diverse business ventures... along the
Avenues. By moving away from specialized, single-use districts and emphasizing the mixing
of urban activities, this Plan sets out flexible and adaptive policies..."

#### <u>Chapter 3.5.1 Supporting the Foundations of Competitiveness</u>

• 3. A balanced growth of jobs and housing across the City will be pursued to: (a) Maintain a complete community; (b) Reduce the need for long distance commuting... (d) Increase the proportion of travel by transit, walking and cycling.

#### **Chapter 3.5.3 The Future of Retailing**

- "The pattern of retailing activity in Toronto has evolved over time... The retail sector has seen some dramatic shifts over the past 25 years. Retailing will continue to be an important part of the economy, however, the retail patterns that exist today are very different from those of 15 to 20 years ago, and there is every reason to expect that those patterns will continue to evolve over the next 30 years."
- "Many plazas, malls and arterial roads which previously had permissions for only
  commercial uses are designated as Mixed-Use Areas to permit residential uses as an
  alternative to or to support existing retail space that is not faring well and to
  implement the reurbanization goals of the Plan."
- 4. In order to provide local opportunities for small businesses and maintain the safety, comfort and amenity of shopping areas, zoning regulations for ground floor commercial retail uses in new buildings in... Mixed-Use Areas along pedestrian shopping strips where most storefronts are located at the street line, may provide for a maximum store or commercial unit size based on the following considerations: (a) the prevailing sizes of existing stores and commercial units in the area; (c) the provision of a range of store and commercial unit sizes to meet the range of local needs including day-to-day convenience shopping and other household goods and services; (e) the need for 'eyes on the street'; (f) the rhythm and flow of storefronts on the strip; and (g) the potential for the building design, particularly the street façade, to address the safety, comfort and amenity of the shopping area.

#### <u>Chapter 4 – Land Use Designations</u>

#### Chapter 4.5 Mixed-Use Areas

- "Mixed-Use Areas will absorb most of the anticipated increase in retail, office and service employment in Toronto in the coming decades, as well as much of the new housing. The proportion of commercial and residential uses will vary widely among Mixed-Use Areas. For example,... much of the new development along the Avenues will have a residential emphasis."
- "Not all Mixed-Use Areas will experience the same scale or intensity of development.
   Development along the Avenues will generally be at a much lower scale than in the
   Downtown and most often at a lower scale than in the Centres."
- 2. In Mixed-Use Areas development will: (a) create a balance of high quality commercial, residential, institutional and open space uses that reduce automobile dependency and meets the needs of the local community; (b) provide for new jobs and homes for Toronto's growing population on underutilized lands in... the Avenues..."; (f) provide an attractive, comfortable and safe pedestrian environment; (g) take advantage of nearby transit services; (k) provide indoor and outdoor recreation space for building residents in every significant multi-unit residential development.

The above policies can apply to the redevelopment of suburban convenience centres, from strip mall buildings located at the back edge of a site with a large parking lot along the frontage, to sites with mid-rise mixed-use buildings including storefronts pulled to the street, residential units in upper storeys and parking underground. The location of suburban convenient centres, along Avenues and in Mixed-Use Areas, allows for redevelopment that creates housing, shopping and employment opportunities as complete communities in close proximity to many transit options.

The proposed framework for redevelopment of convenience centres outlined in this research complied with the policies of the City of Toronto Official Plan. Specifically, it supports the intent of the policies addressing redevelopment on the Avenues and the evolution of strip retail in the City and in the suburbs.

## 4.0 Solution

It has been discussed that suburban convenience centres have the potential to be redeveloped into sites that can be used for a higher and better use. It is important to note that not all convenience centres are created equal. Some will have characteristics that lend themselves to a viability for redevelopment that other sites will not. Section 4.1 Site Characteristics will describe the elements of a convenience centre site that will contribute to achieving the goal of complete communities in the suburbs of Toronto.

### 4.1 Site characteristics

When determining the viability of redevelopment for a specific site of a current suburban convenience centre, it is important that the site has the following characteristics:

- **Provincial Policy designation**: sites should be located in an area that is intended by the Provincial Policy Statement (2014) to absorb residential development and intensification
- **Official Plan designation**: sites should be designated "Mixed-Use" (or equivalent) in the Official Plan
- **Zoning By-law designation**: sites best suited for redevelopment will be zoned for a combination of residential and commercial/office uses. Sites best suited for redevelopment will also have the following allowances:
  - Density: sites should be permitted to have a total Floor Space Index of between 3.0 and 4.0.
  - Height: sites should be permitted a total building height of up to 28 meters, or 10 storeys
- Location: sites that are best suited for redevelopment will be close to local services, including schools, places of worship, libraries and grocery stores. This will allow for residents and visitors of the site to have access to services that are not feasible to be included on-site.
- **Circulation system**: sites should have direct access (within one kilometer) to major arterial roads, to ensure the financial stability of retail units on site.

- **Transit**: sites should be well connected by multiple levels of transit, including buses, and/or higher order transit
- **Pedestrian and cyclist access**: sites best suited for redevelopment will ideally have access to established pedestrian and cycling networks. This includes sidewalks, walkways, pathways, and bike lanes/infrastructure. If pedestrian/cyclist access is not currently available near or on-site, it is recommended that this infrastructure be a priority of redevelopment.

Although it is not necessary to fulfill all characteristics above for a site to be considered for redevelopment, it is recommended that most characteristic be satisfied. If most characteristics are satisfied, it can be assumed that the site will also lend itself to be financially viable to redevelopment, as policy designation, location, and access all dictate profitability.

## 4.2 Framework for redevelopment

In order to ensure that suburban convenience centres are repurposed into spaces that create a mix of uses and represent a higher and better use, the following design and concept elements should be considered:

Recommendation	Rationale	Application	Policy Implication
Remove surface parking	Creates a walkable community     Encourages active transportation (walking and cycling)	<ul> <li>Design underground parking, where applicable</li> <li>Negotiate a reduction of parking requirements with City of Toronto Planning Department</li> </ul>	Lessen parking     requirement for     mixed-use     development     proposals     Less setback     requirements from     front lot line     Design and     implement active     transportation     network on major     arterial roads     abutting mixed-use     designated sites

Recommendation	Rationale	Application	Policy Implication
Mid-rise height and density	<ul> <li>Ensures development in established suburban neighborhoods remains properly scaled</li> <li>Creates opportunity for mid-rise housing</li> </ul>	<ul> <li>Build 7-10 storeys of residential units, above 1 storey of commercial units</li> <li>Ensure height of building is equal to or less than the width of Avenue right-of-way (ex. Mid-rise building on a 26 m right-of-way should be 26 m/8 storeys in height or less</li> </ul>	<ul> <li>Allow for 28 metres         (10 storeys) of         maximum height         requirements in the         zoning by-law</li> <li>Comply with         "Performance         Standards for Mid-         Rise Buildings, City         of Toronto, 2010.<sup>21</sup></li> </ul>
Pedestrian scale- built form	Creates a "Main Street" feeling of dense, micro-retail at grade	Multitude of step backs at different heights create a façade at the street level that mimics the existing one- or two-storey retail built form	Ensure compliance with "Performance Standards for Mid- rise Buildings", City of Toronto, 2010
Family-friendly development	Help families     currently seeking     housing in suburban     areas to find     adequate-sized     residential units with     access to community     services (i.e. day     cares, recreation     facilities, seniors'     centres, etc.)	Design community spaces directly within proposed building	<ul> <li>Adhere to "Growing Up: Planning for Children in New Vertical Communities" Draft Urban Design Guidelines (2017)</li> <li>Adhere to the City of Toronto Official Plan section 3.2.1 – Housing</li> <li>Adhere to the City of Toronto Official Plan section 3.2.2 – Community Services and Facilities</li> </ul>

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<sup>&</sup>lt;sup>21</sup> City of Toronto (2010). Section 3: Performance Standards for Mid-Rise Buildings. Retrieved from: <a href="https://www.toronto.ca/wp-content/uploads/2017/08/960c-Performance-Standards-for-Mid-Rise-Buildings.pdf">https://www.toronto.ca/wp-content/uploads/2017/08/960c-Performance-Standards-for-Mid-Rise-Buildings.pdf</a>

Recommendation	Rationale	Application	Policy Implication
Replace existing	Secures future retail	Require at least 80%	• Ensure "Mixed Use"
or create new	opportunities on a	of area of existing	areas require
retail	site that has existing	retail spaces are	development to have
opportunities	retail	designed into new	retail at grade
	<ul> <li>Protects unique</li> </ul>	building	
	stores and services		
	which may exist in		
	the neighbourhood		
	(i.e. demographically		
	specific retailers)		
	<ul> <li>Could provide</li> </ul>		
	flexible retail spaces		
Ease stress on rental market	Opportunity for purpose-built rental,	Negotiate a proportion of	Possible creation of new Official Plan
	which will ease stress	redevelopment	policy encouraging
	on Toronto's rental	projects involving	purpose-built rental
	market	former suburban	requirement in new
		convenience centres	mixed-use
		to include purpose-	developments in
		built rental	designated areas
1A7-111-1-	T ' '' 1 ' 1 ' 1	apartment housing	r l'
Walkable Community	Limiting vehicular	Vehicle entry to	• Ensure compliance
Community	access from the	parking facility	with "Performance
	Avenue creates a	(surface or	Standards for Mid-
	protected and	underground) be from a lane at the	rise Buildings", City
	enhanced public realm on the street		of Toronto, 2010
	realm on the street	rear of the site, accessed from the	• Ensure compliance
		side street	with "Toronto
		Side street	Pedestrian Charter" (2002)

In order to employ the framework set out above, the following sections of the report will detail a Case Study that outlines a redevelopment plan for a convenience centre in Scarborough, which incorporates the principles of this framework.

# 5.0 Case study

## 5.1 Summary

This proposal includes one nine-storey mixed-use building on the site located at 2563-2585 Victoria Park Avenue, Toronto. This building will produce 138 purpose-built rental apartment units, 1,188 m² of gross floor area of retail units, 1,181 m² gross floor area of community space, 219 m² of a rooftop garden, 97 vehicular parking spaces, and 486 bicycle parking spaces.

The site, municipally known as 2863-2585 Victoria Park Avenue in Scarborough is located approximately 85 meters (0.08 kilometers) south of the corner of Victoria Park Avenue and Sheppard Avenue East. The site is currently a retail strip plaza, including restaurants, a dental centre, a bank, a pastry shop, a nail salon, an optical centre and payday loan store. The site is surrounded by mixed-use buildings and commercial buildings to the north, east and south and single-family homes to the west. The site is well serviced by transit via the Toronto Transit Commission and GO Transit, and in close proximity to Highway 401 and Highway 404/Don Valley Parkway.

The site is subject to policies and regulations at the provincial and municipal level. At the provincial level, the Provincial Policy Statement (PPS) emphasizes development within "settlement areas" including a desire for residential development and intensification. Additionally, Places to Grow: Growth Plan for the Greater Golden Horseshoe indicates 60% of residential development occurring annually will be within the delineated built up area, in which the site is located<sup>22</sup>.

The site is located within an Avenue and within a Mixed-Use Area designation in the City of Toronto Official Plan (2010). Development along the Avenues is intended to absorb

 $<sup>^{22}</sup>$  Government of Ontario (2017) Growth Plan for the Greater Golden Horseshoe.  $http://placestogrow.ca/images/pdfs/ggh2017/en/growth\%20plan\%20\%282017\%29\ .pdf$ 

reurbanization and are encouraged to create new housing and job opportunities.

Development within the Mixed-Use Areas are intended to absorb most of the anticipated increase in retail and service employment in Toronto, as well as much of the new housing.

The site is regulated by the City of Toronto Zoning By-law 569-2013. It is zoned for Commercial-Residential uses, but several elements of the current zoning will need to be amended to support redevelopment.

The proposed development on this site is consistent with the goals of the Provincial Policy Statement and Growth Plan for the Greater Golden Horseshoe. It provides a mid-rise, mixed-use building with retail, community space and residential units. It also complies with the Mixed-Use Areas and Avenues designations in the City of Toronto Official Plan.

The proposed development and accompanying zoning by-law amendments are consistent with provincial and municipal planning policy and represent good planning.

#### 5.2 Matrix

#### 1. LOCATION

#### 1.1. Municipal Address

A) 2563-2585 Victoria Park Ave., Scarborough, ON M1T 1A4

#### 1.2. Geography

A) North edge: N71°33'EB) East edge: N17°55'WC) West edge: N17°55'W

D) South edge: N72°21'30"E

#### 1.3. Context

A) The site is located in the former municipality of Scarborough, in the Sullivan community. (Map 1)

#### 2. SITE DESCRIPTION

#### 2.1. Site Size/Dimensions

A) The site is 48.8 metres wide, by 104.2 metres long. (Map 2)

#### 2.2. Total Area

A) The total area of the site is 5,084.96 square metres (54,734.05 sq.ft., 0.5 ha, 1.25 acres)

#### 2.3. Easement Locations

A) There are no easements on this site.

#### 3. LAND VALUE

#### 3.1. Comparable

- A) 4379 Kingston Rd., West Hill, Toronto, Ont. M1E 2M9 23
  - a) \$3,590,000.00
  - b) Zoning: Commercial-Retail under the Former General Zoning By-law 10327 (Scarborough)
  - c) Lot size: 30,053 sq. ft. (2,792 m<sup>2</sup>, 0.28 ha, 0.69 acres)
  - d) Freestanding, corner plaza at Kingston Rd. & Lawrence Ave.
- B) 636-646 Danforth Rd., Toronto, Ont. M4K 1R3 <sup>24</sup>
  - a) \$2,999,000.00
  - b) Zoning: CR 3.0 (c25;r2.5) SS2 (x2426)

<sup>&</sup>lt;sup>23</sup> Retrieved from: <a href="https://www.remax.ca/on/toronto-real-estate/na-4379-kingston-rd-na-crea">https://www.remax.ca/on/toronto-real-estate/na-4379-kingston-rd-na-crea</a> id19187950-lst/ <sup>24</sup> Retrieved from: <a href="https://www.collierscanada.com/24036#">https://www.collierscanada.com/24036#</a>. Wq6CwxPwbBI

- c) Lot size: 21,000 sq. ft. (1,950 m<sup>2</sup>, 0.19 ha, 0.48 acres)
- d) Building size: 10,500 sq. ft.
- e) Freestanding, corner plaza at St. Clair Ave. E & Kennedy Rd.

#### 4. LOCAL CONTEXT

#### 4.1. Surrounding Land Uses

A) In general, the site is contained within a suburban setting, surrounded mostly by single family homes and low density commercial/retail uses. According to the City of Toronto Zoning By-Law 569-2013, there are eleven surrounding land uses (Map 3): Residential Apartment Commercial (RAC), Residential Semi Detached (RS), Residential Apartment (RA), Residential Multiple Dwelling (RM), Residential Detached (RD), Open Space Recreation (OR), Open Space (O), Commercial Residential (CR), Commercial Local (CL), Institution General (I), and Institution Place of Worship (IPW).

#### 4.2. Projected Land Use Changes

- A) There are no explicit projected land use changes to this site.
- B) It is important to note that Victoria Park Avenue is projected to eventually undergo road widening, from 26 meters (86 feet) to 38 meters (126 feet).

#### 4.3. Local Services

- A) Within 2 kilometers of the site, there are several community and private services. There are:
  - a) Catholic elementary schools: 5<sup>25</sup>
  - b) Public elementary schools: 14 (Map 4)
  - c) Public high schools: 2 (Map 4)
  - d) Places of worship: 11
  - e) Grocery stores: 3
  - f) Childcare centres: 13
  - g) Community centres: 4
  - h) Libraries: 5

### 4.4. Access to Circulation System

#### 4.4.1. Access to Road Network

- A) The site is well connected to the local and regional road network.
- B) The site has direct access to Victoria Park Avenue.
- C) The property has access to Sheppard Avenue East, the Macdonald-Cartier Freeway (King's Highway 401) and the Don Valley Parkway (King's Highway 404). (Map 5)

<sup>&</sup>lt;sup>25</sup> Retrieved from: https://www.tcdsb.org/school/InteractiveTorontoMaps/Pages/default.aspx

#### 4.4.2. Access to Transit

- A) The site is well connected to local transit.
- B) The site is serviced by the following Toronto Transit Commission bus lines: #24 A, #24 E, #85, #167 B, #169 A, #169 B, and #190 (Map 6).
- C) The site is 2 kilometers from Toronto Transit Commission Don Mills Station, which is serviced by Line 4 Sheppard subway. (Map 6)
- D) The site is 3.5 kilometers from the GO Transit Agincourt Station, which is serviced by Route 70, 71 (Stouffville) by train and bus. (Map 6)

### 4.4.3. Pedestrian and Cyclist Access

- A) The site has access to pedestrian sidewalks on Victoria Park Avenue, and Esquire Road.
- B) As indicated on the Toronto Cycling Map (Map 7), there is no bike infrastructure adjacent to the site.

#### 5. OFFICIAL PLAN, SECONDARY PLAN AND ZONING REGULATIONS

#### 5.1. Official Plan Policies

- A) This property is subject to the policies within the City of Toronto Official Plan (2015), including:
  - a) Chapter 1 "Making Choices", sections 1.1, and 1.2
  - b) Chapter 2 "Shaping the City", sections 2.1, 2.2.3, 2.3.1, 2.4
    - i) This site is located within an "Avenue" as specified by City of Toronto Official Plan Urban Structure Map 2 (Map 8).
  - c) Chapter 3 "Building a Successful City", sections 3.1.1, 3.1.2, 3.1.4, 3.2.1, 3.2.2, 3.2.3, 3.3, 3.4, 3.5.
  - d) Chapter 4 "Land Use Designations", section 4.5
    - i) The site is located within a "Mixed-Use Area", as specified by Toronto Official Plan Land Use Plan Map 19 (Map 9).
- B) The site is not subject to any Site and Area Specific Policies, as specified by City of Toronto Official Plan Site and Area Specific Policies Map Map 30 (Map 10).
- C) The site is not subject to any Special Policy Areas, as specified by City of Toronto Official Plan Special Policy Areas Key Map Map 10 (Map 11).

#### 5.2. Secondary Plan Policies

**5.2.1.** The site is not subject to a Secondary Plan, as specified by City of Toronto Official Plan Secondary Plan Key Map – Map 35 (Map 12).

#### 5.3. Zoning By-law

#### **5.3.1.** Present Zoning

- A) The site is subject to City of Toronto Zoning Bylaw 569-2013.
- B) The site is presently zoned as "Commercial Residential" and presents zoning "CR 0.33 (c0.33; r0.0) SS3 (x489)".
- C) The site is subject to the following sections of City of Toronto Zoning Bylaw 569-2013:
  - a) Chapter 40 Commercial Residential, section 40.5
  - b) Chapter 40.10 Commercial Residential Zone (CR), sections 40.10.1, 40.10.20, 40.10.30, 40.10.40, 40.10.50, 40.10.80, 40.10.90, 40.10.150
  - c) Chapter 900 Site Specific Exceptions, section 900.11.10(489)
    - This exception specifies the setbacks of any building or structure on the site.
- D) The site is subject to terms of the City of Toronto Zoning By-law 569-2013 pertaining to Policy Area 4 (Map 35).
- E) The site is subject to terms of the City of Toronto Zoning By-law 569-2013 pertaining to CR Standard Set 3 (Map 36).

#### 5.3.2. Permitted Uses

- A) The permitted uses on the site, per City of Toronto Zoning By-law 569-2013 Chapter 40.10, are as follows:
  - a) Commercial uses: Ambulance depot, art gallery, artist studio, automatic banking centre, community centre, courts of law, education use, financial institution, fire hall, library, massage therapy, medical office, museum, office, park, passenger terminal, performing arts studio, personal service shop, pet series, police station, post-secondary school, production studio, religious education use, retail store, software development and processing, veterinary hospital, wellness centre
  - b) There are also several permitted commercial uses with conditions (40.10.20.20).
  - c) Residential uses: dwelling unit, hospice care home, nursing home, religious residence, residential care home, respite care facility, retirement home, student residence

#### 5.3.3. Landscape Requirements

- A) The site is subject to the following sections of the City of Toronto Zoning Bylaw 569-2013, applying to landscape requirements:
  - a) 40.10.50.10(1)(B)(i): 3.0-meter-wide strip of landscaping must be provided between any lot line that abuts a street and those portions of a main wall

#### 5.3.4. Parking Requirements

A) Vehicular parking

- a) The current parking requirements for the site are described in Table 200.5.10.1 "Parking Space Rates and Parking Space Occupancy".
- b) The site is located within Policy Area 4 (INSERT MAP), and therefore the requirements on the site for parking are as follows, for its current use as retail stores:
  - i) Minimum of 1.0 parking space for each 100 square metres of gross floor area
  - ii) Maximum of 4.0 parking spaces for each 100 square metres of gross floor area
  - iii) The parking occupancy rates are as follows:
    - (1) AM (6 am to noon): 20%
    - (2) PM (noon to 6 pm): 100%
    - (3) Evening (6 pm to 6 am): 100%

#### B) Bicycle Parking

- a) The current bicycle parking requirements are described in City of Toronto Zoning By-law 569-2013, 203.5.10.1 (Table 230.5.10.1(1)).
- b) The site is located in Bicycle Zone 2 (City of Toronto Zoning Bylaw 569-2013 230.5.1.10(11)).
- c) The minimum number of short-term bicycle parking spaces to be provided is:
  - i) 3 plus 0.25 bicycle parking spaces for each 100 square meters of interior floor area.

#### **5.3.5.** Off-Street Loading Requirements

- A) The site is subject to the following sections of the City of Toronto Zoning Bylaw 569-2013, applying to loading requirements:
  - a) 40.10.90.40(1): where a lot abuts a lane, vehicle access to a loading space must be from the lane

#### 5.4. Existing Buildable Area

#### **5.4.1. Density**

- A) The density of the site is described by the Floor Space Index. The FSI for the site is: 0.33 for commercial uses and 0 for residential uses.
  - a) This FSI would allow 18,062.3 gross square feet (1,678.04 m2) of commercial uses on the site, and no area of residential uses.

#### **5.4.2.** Lot Coverage

A) The lot coverage on the site is 40%, specified in the Toronto City Planning Lot Coverage Overlap Index Map M (Map 13).

#### 5.4.3. Maximum Height

A) The height permitted on the site is 11.0 meters, specified in the Toronto City Planning Height Overlap Index Map M (Map 14).

B) The required minimum height of first storey (measured between the floor of the first storey and the ceiling of the first storey) is 4.5 meters. (City of Toronto Zoning Bylaw 569-2013; 40.10.40.10(5)).

#### 5.4.4. Setbacks

- A) The site is subject to the following requirements, found in in the City of Toronto Zoning Bylaw 569-2013; 40.10.40.70(10):
- B) The building must be set back:
  - a) At least 7.5 meters from the rear lot line of the lot abutting the lane on the opposite side of the lane
  - b) The main wall must be set back at least 5.5 metres from a side lot line that is not adjacent to a street or lane
  - c) No building on the lot may penetrate a 45 degree angular plane projected, starting at a height of 10.5 meters above the average elevation of the ground along the rear lot line.

#### 5.4.5. Current Building Area

A) There is currently one building on the site (Map 15). The area of this building is approximately: 1,978.8 m<sup>2</sup> (21,299.6 sq. ft.).

#### 5.5. Provincial/Regional Guiding Policies

### **5.5.1.** Provincial Policy Statement

A) The site is subject to the Provincial Policy Statement (2014), and the following specific sections should be noted: Sections 1.1, 1.2, 1.3 1.4, 1.5, 1.6, and 1.7.

#### 5.5.2. Places to Grow

- A) The site is subject to the Growth Plan for the Greater Golden Horseshoe as part of the Places to Grow Act, 2005, S.O. 2005, c.13<sup>26</sup>. The site is considered within the "Grater Golden Horseshoe Growth Plan Area (Ontario Regulation 416/05), as specified in Schedule 1 Greater Golden Horseshoe Growth Plan Area Map (Map 16).
- B) The following sections of the Growth Plan for the Greater Golden Horseshoe should be noted: 1.1, 1.2, 2.1, 2.2.1, 2.2.2, 2.2.4, 2.2.5, 2.2.6, 5.1 and 5.2.4.
- C) The site is within a "built up area", according to Schedule 4 Urban Growth Centres, and is in close proximity to an Urban Growth Centre (Scarborough Centre). (Map 17).

#### 5.5.3. Niagara Escarpment Planning and Development Act

<sup>&</sup>lt;sup>26</sup> Government of Ontario (2017) Growth Plan for the Greater Golden Horseshoe. http://placestogrow.ca/images/pdfs/ggh2017/en/growth%20plan%20%282017%29 .pdf

A) The site is not located within the jurisdiction of the Niagara Escarpment Planning and Development Act, R.S.O. 1990, c.N.2, as specified in Niagara Escarpment Plan Maps Index Map (Map 18).

#### **5.5.4.** Oak Ridges Moraine Conservation Act

A) The site is not located within the jurisdiction of the Oak Ridges Moraine Conservation Act, 2001, S.O. 2001, c.31, as specified in Oak Ridges Moraine Conservation Plan Land Use Designation Map (Map 19).

#### 5.5.5. Greenbelt Act

- A) The site is located within the "Settlement Areas Outside the Greenbelt", according to the Greenbelt Act, 2005, S.O. 2005, c.1, specified in Schedule 1 Greenbelt Area Map (Map 20).
- B) The following sections of the Greenbelt Act should be noted: 1, 3.4, 4, 5

#### **5.5.6.** Conservation Authority

A) The site does not fall within an area regulated by the Toronto and Region Conservation Authority (Map 21).

#### 6. NATURAL PHYSICAL FEATURES

#### 6.1. Elevation

A) The maximum elevation on the site is 174 m, and the minimum is 175 m (Map 22).

#### **6.2. Soils**

A) The soils on the site are classified as "Young tills"; sandy silt till), according to the Ministry of Natural Resources Ontario Geological Survey Preliminary Map P.2204 Geological Series (Map 23).

#### 6.3. Flora/Fauna

- A) The site is within the Mixwood Plains ecozone, Lake Erie Lowland ecoregion, and ecodistrict 563, according to the Ministry of Agriculture and Agri-Food Canada Terrestrial Ecozones, Ecoregions and Ecodistricts province of Ontario map (Map 24).
- B) The flora of this ecoregion is as follows: "Climax vegetation is characterized by sugar maple, beech, white and red oak, shagbark hickory, black walnut, and butternut. Moist sites are characterized by white elm, eastern cottonwood, balsam poplar, red and black ash, and silver maple. Drier and warmer sites contain black, chestnut, and chinquapin oak. Tulip tree, sycamore, and bitternut hickory occur on moist slopes." <sup>27</sup>
- C) The fauna of this ecoregion is as follows: "Characteristic wildlife species include white-tailed deer, grey and red squirrel, and chipmunk. Bird species

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<sup>&</sup>lt;sup>27</sup> Retrieved from: http://ecozones.ca/english/region/135.html

include the cardinal, wood thrush, screech owl, mourning dove, green heron, pileated and red-bellied woodpecker, and wild turkey"28

### 6.4. Archaeological/Historical Context

- 6.4.1. There has been identified archaeological potential on site. This should be invested further, prior to development. (Map 31).
- 6.4.2. The site is not located within an area identified by the City of Toronto as a Natural Heritage System Area (Map 33).

#### 6.5. Landscaped Elements

- A) There are no significant landscaped elements on the site. To the west of the site, there is grass between the site line and the sidewalk, in the right-of-way of Victoria Park Avenue.
- B) The site is not located within an Environmentally Sensitive Area, per the City of Toronto Interactive Map (Map 32).

#### 7. MAN-MADE FEATURES

#### 7.1. Existing Built Form

A) There currently exists a one story, multi-unit strip plaza on the site. The existing uses and tenants are described below.

### 7.2. Adjacent Built Form

- A) Directly to the north of the site, there is a mixed-use building with a singletenant retail at grade and office uses above (4-5 storeys)
- B) To the north of the site, across Sheppard Avenue East, there are properties consisting of mixed-use/retail (1-2 storeys), residential apartment (~15 storeys), and a gas station (1 storey).
- C) To the west of the site, there are properties consisting of retail (1 storey), mixed-use/office (8-10 storeys), and office (5-6 storeys).
- D) To the south of the site, there are properties consisting of retail (1-2 storeys), and residential (single family homes, 2 storeys).
- E) To the east of the site, across the lane, there are properties consisting of residential (single family homes, 2 storeys).

### 7.3. Existing Uses/Tenants

- A) Currently on the site there are eleven (11) tenants.
  - a. Bank (with drive-thru)
  - b. Pastry shop
  - c. Eye glass store/optical centre
  - d. Nail salon
  - e. Fast food (burritos) restaurant
  - f. Fast food (burgers) restaurant
  - g. Restaurant (fish and chips)

<sup>&</sup>lt;sup>28</sup> Retrieved from: http://ecozones.ca/english/region/135.html

- h. Restaurant (Middle Eastern)
- i. Restaurant (Asian)
- j. Dental centre
- k. Payday loan store

#### 8. CIRCULATION

#### 8.1. Pedestrian and Vehicular Circulation

- A) The site is abutted by Victoria Park Avenue to the west, and Esquire Road to the south. It is also in proximity to Sheppard Avenue East to the north (100 m).
  - a) Victoria Park Avenue is designated as a "Major Arterial Road" according to the City of Toronto Road Classification System (Map 34).
  - b) Victoria Park Avenue has a right-of-way width of 36 meters, and Sheppard Avenue East has a right-of-way width of 36 meters, as specified in Toronto Official Plan Right-of-Way Widths Associated with Existing Major Streets Map Map 3 (Map 25).

#### 8.2. Traffic Analysis

- A) The following traffic analysis is according to the 2011 Traffic Volumes at Signalized Intersections in Toronto data set<sup>29</sup>
  - a) At the intersection of Sheppard Ave. E. and Victoria Park Ave., for an 8 hour period (5/4/2010) there were: 4481 (pedestrian), 37,556 (vehicles).
  - b) At the intersection of Victoria Park Ave. and Consumers Rd. (south of the site), for an 8 hour period (2/8/2012) there were: 1,232 (pedestrians), 30,228 (vehicles).

#### 8.3. Access to Public Transit

- A) Sheppard Avenue East, located approximately 100 meters north, is considered a "Transit Corridor", as specified in Toronto Official Plan Higher Order Transit Corridors Map Map 4 (Map 26).
- B) The site is abutted by Victoria Park Avenue to the east and Sheppard Avenue East to the north (100 m). Both avenues are considered "Transit Priority Segments", specified by Toronto Official Plan Surface Transit Priority Network Map Map 5 (Map 27).
- C) The site is situated along the proposed Sheppard East LRT line. This project is expected to begin in 2021 and will be a combination of above-grade and tunneled light rail transit. There will be a station at Sheppard Avenue East and Victoria Park Avenue that will service the site.<sup>30</sup>

#### 8.4. Site Access/Egress

 $^{29}$  Retrieved from: https://fusiontables.google.com/DataSource?docid=1WK2kZZogEfdDd7SwXg4gfKlbeGChnJZpKpEfa7u#map:id=3

<sup>&</sup>lt;sup>30</sup> Retrieved from: http://www.thecrosstown.ca/sites/default/files/sheppard\_fact\_sheet\_may\_2015\_0.pdf

- A) The site has an access/egress point at the north east corner to Victoria Park Avenue (two-way vehicle entrance/exit), as well as at the south east corner to Esquire Rd. (two-way vehicle entrance/exit). The site also has vehicular/pedestrian access to the lane to the west, via a driveway at the southwest corner.
- B) It should be noted that the municipal lane to the west of the site comes to a dead end at the north end, and only has access/egress to Esquire Rd. to the south.

#### 9. UTILITIES

### 9.1. Servicing Available

#### 9.1.1. Water, Storm Sewer, and Sanitation Sewer

A) The site is serviced by Toronto Water, a division of the City of Toronto.

#### 9.1.2. Electrical

A) The site is serviced by Toronto Hydro-Electric System Limited.

#### 9.1.3. Telecommunications

A) The site is serviced by Bell, Rogers, Routcom, and Xplornet for Internet service providers (Map 28).

#### 9.1.4. Waste Management

A) The site is serviced by the Solid Waste Management Services, a division of the City of Toronto.

#### 9.2. Emergency Services

#### 9.2.1. Fire Protection

A) The site is serviced by the Toronto Fire Services. There are two nearby fire stations: Station 115 (115 Parkway Forest Dr.) and Station 244 (2340 Birchmount Rd.).

#### 9.2.2. Police Services

A) The site is serviced by the Toronto Police Service, 42 Division, located at 242 Milner Avenue.

#### 9.2.3. Ambulance Services

A) The site is serviced by the Toronto Paramedic Services, Station 23, located at 115 Parkway Forest Drive.

#### **10**. **CLIMATE**

#### 10.1. **Precipitation**

A) Average precipitation in Scarborough in June is 70 millimeters, in September is 69 millimeters, in December is 59 millimeters, and in March is 62 millimeters (Chart 1)31

#### 10.2. **Temperature**

A) Average temperature in Scarborough in June is 24 degrees Celsius, in September is 22 degrees Celsius, in December is 1 degree Celsius, and in March is 4 degrees Celsius (Chart 1) 32

#### 10.3. Winds

A) Average wind speed in Scarborough in June is 19km/h, in September is 19km/h, in December is 28km/h, and in March is 28km/h (Chart 2) 33

#### **Solar Exposure** 10.4.

A) The solar exposure data can be found in Chart 3A, Chart 3B, Chart 3C, and Chart 3D.

#### 10.5. Natural Disaster Risk

- A) The City of Toronto is subject to the following extreme weather and natural disasters:34
  - a) Extreme cold; extreme heat; lightning; flooding
- B) The following is a list of natural disasters that have affected the site and surrounding areas since 1900:
  - a) July 1936 heat event
  - b) December 1944 winter storm
  - c) August 1953 heat event
  - d) October 1954 hurricane/typhoon/tropical storm
  - e) July 1963 drought
  - f) January 1973 drought
  - g) August 1976- flood
  - h) January 1982 cold event
  - i) July 1983 drought
  - j) December 1989 cold event
  - k) July 1992 flood
  - l) June 2001 drought

https://www.meteoblue.com/en/weather/forecast/modelclimate/scarborough\_canada\_6948711)

https://www.meteoblue.com/en/weather/forecast/modelclimate/

scarborough\_canada\_6948711) 33 Retrieved from: https://www.meteoblue.com/en/weather/forecast/modelclimate/

scarborough\_canada\_6948711) <sup>34</sup>Retrieved from: https://www.toronto.ca/community-people/public-safety-alerts/emergency-preparedness/types-of-emergencies/

<sup>31</sup> Retrieved from:

<sup>&</sup>lt;sup>32</sup> Retrieved from:

- m) August 2005 tornado
- n) April 2009 severe thunderstorm
- o) July 2009 severe thunderstorm
- p) August 2009 tornado
- q) July 2013 flood
- r) December 2013 winter storm

### 11. SENSORY

### 11.1. Sensory Analysis

A) The site is subject to noise extremities from nearby highways, as the most prominent sensory influencer.

### 11.2. Views/Vistas

A) The site is not subject to any identified views from the public realm, as specified in Toronto Official Plan Identified Views from the Public Realm Map – Map 7A (Map 29).

### 12. CULTURAL

### 12.1. Local Demographics

- A) The site is located within the City of Toronto Ward 40- Scarborough-Agincourt (Map 30).
- B) According to the census (2011)<sup>35</sup>
  - a) The population of Ward 40 was 62,030. This creates a population density of 5.32 thousand people per  $km^2$ . The median age in this ward is 42 years.
  - b) The average household size is 2.73 people. 48.7% of households in this ward live in apartment buildings of 5 storeys or more, 36.7 live in houses, 11.7% live in row/townhouses, and 2.9% live in apartment buildings of 5 storeys or less.
  - c) Most respondents in Ward 40 listed English as their mother tongue (35.8%); the next most answered mother tongue languages were: Chinese (not otherwise specified) (9.5%), Mandarin (7.5%), and Cantonese (7.4%). It is important to note that these languages were higher than the Toronto averages.
- C) According to the National Household Survey (2011)<sup>36</sup>
  - a) 53% of respondents in Ward 40 have a post-secondary certificate, diploma or degree

 $<sup>^{35}</sup>Retrieved \ from: https://www.toronto.ca/wp-content/uploads/2017/10/97d9-City-Planning-Ward-40-Profile-2011.pdf$ 

<sup>&</sup>lt;sup>36</sup>Retrieved from: https://www.toronto.ca/wp-content/uploads/2017/10/97d9-City-Planning-Ward-40-<u>Profile-2011.pdf</u>

- b) The average monthly rent was reported as \$933 (less than Toronto average \$1,026).
- c) The average yearly income of was \$64,464 (less than Toronto average, \$87,038).
- d) 65% of respondents were born outside of Canada.
- e) The unemployment rate was 10.4 (higher than Toronto rate, 9.3).

### 13. DRAINAGE AND LANDFORMS

### 13.1. Drainage

A) The contours of the site suggest that drainage will occur from west to east, as the western portion of the site has an elevation of 175 m and the eastern portion has an elevation of 174 m.

### 5.3 Opportunities and constraints analysis

The following analysis will describe the main benefits of and drawbacks to redevelopment of the site.

The following elements create **opportunities** for redevelopment of the site:

- **Provincial Policy**: the site is located in a "settlement area" designated by the Provincial Policy Statement, and a "built up area" in the Growth Plan for the Greater Golden Horseshoe, indicating the desire for residential and commercial development, as well as intensification.
- **City of Toronto Official Plan Policy**: the site is located within a Mixed-Use Area in the City of Toronto Official Plan, indicating a desire for development that would have a combination of residential and commercial uses.
- **Location**: The site is located along an Avenue, allowing for redevelopment potential outlined in the City of Toronto Official Plan. The site is also located in proximity to many local services, including schools, places of worship, and libraries.
- **Property value**: Comparable sites are being valued from \$2.9 to \$3.6 million, with similar existing built forms. The potential generated revenue of redevelopment of this site suggests that there will be a profit created from the current value to the future value.
- **Circulation System**: The site is located in a location that allows for direct access to a Major Arterial Road (Victoria Park Avenue) and is in close proximity to another Major Arterial Road (Sheppard Avenue East) and two provincial highways (the Macdonald-Carter Freeway- Highway 401, and the Don Valley Parkway- Highway 404).
- **Transit**: The site is well connected to local transit, including direct access to seven TTC bus routes, and in close proximity to Line 4 Sheppard subway and GO Transit train and bus service. The site will also be serviced by the future Sheppard East LRT line, which will provide rapid transit access to the existing Yonge-Bloor/Danforth subway lines.

• **Servicing**: The site will continue to have adequate servicing in the areas of water, gas, electrical, telecommunications, waste management, fire protection, police services and ambulance services.

The following are elements of the site that may present **constraints** for redevelopment:

- Pedestrian and Cyclist Access: There is currently no bike infrastructure on Victoria Park Avenue or Sheppard Avenue East, but the proposed redevelopment plan recommends that this be established.
- **Current zoning**: There are several constraints provided by the site's current zoning designation, including: permitted residential-uses FSI at 0.0, permitted lot coverage at 40%, required setbacks, and permitted height at 11.0 metres. These restrictions do not permit intensification or redevelopment for a mixed-use building.

In summary, the opportunities for redevelopment strongly outweigh the constraints, therefore redevelopment is advised and supported. The constraints listed will be addressed in the *Plan Proposal* section.

### 5.4 Proposal

### 14. PROPOSED REDEVELOPMENT PLAN SUMMARY

### 14.1. Plan Principles

The redevelopment plan for the site will adhere to the following four principles:

- (1) *Increased Density*: development will intensify the site through additional height and storeys, which is in accordance with the City of Toronto Official Plan intent for Avenues.
- (2) *Diversity of Uses*: development will create a combination of retail storefronts, residential units and community spaces within the site that will service not only residents of the building but the community at large.
- (3) *Pedestrian Scale*: development will create ease of access for pedestrians, including welcoming storefronts along the sidewalk, and building step backs that ensure pedestrian-scaled built form.
- (4) *Active Lifestyle Friendly*: development will create a mixed-use community that allows for work, life and play to coexist and eliminates the need for multiple vehicular trips in daily life.

### 14.2. Concept Summary

Development will take place on the site in the form of a mid-rise mixed-use building. The building will provide purpose-built rental apartment housing above small-scale retail stores. It will have community space dedicated on site for both residents and community members, a private, open-air courtyard, a public rooftop garden, as well as an underground parking facility.

### **Residential Uses**

The residential units on site will be purpose-built rental apartment housing and will be located between floors two and nine, in the form of one-bedroom, two-bedroom, and three-bedroom units. This will allow rental accommodation opportunities for single persons, couples, and families at various stages of life and assist in decreasing rental housing shortfalls in the City of Toronto.

A private, open air courtyard will be located on the west-side of the second storey, directly above the loading bays on the first floor. The courtyard will provide outdoor space for residential tenants and could include such amenities as: child-specific play equipment and/or pet-friendly spaces. The tenants on the second storey will have direct access to the courtyard via a door off of the exterior of their unit while all other residential tenants will have access through a door and hallway on the second storey. The residential lobby will have an entrance on Esquire Road which will provide privacy and avoid impeding foot traffic for pedestrians on Victoria Park Avenue.

### **Commercial Uses**

The non-residential uses on site will be retail stores and a community space. The designated community space on site could have a variety of public and/or private tenants, such as a daycare, seniors' facilities, or indoor recreational facilities. The retail storefronts on site will be tailored to the existing tenants and the broader community needs and will be encouraged to service various aspects of daily life, including food and drink, financial services, health services and leisure.

### **Green Roof**

There will be a green roof on the roof of the ninth floor. This space could be designed as an extensive, or semi-intensive green roof, according to the City of Toronto Green Roof By-law (2010).

For complete site plan, floor plans and building renderings, please see Case Study Appendices A, B, and C.

### 15. BUILT FORM PROPOSAL

### 15.1. Built Form Types Proposed

The built form on site will be a nine-storey (27.1 m) mixed-use building, with residential units, retail units and a community centre unit. The ground floor of the building will be 98.5 metres in width, 35.8 metres in depth, and 4.7 metres in height. All additional storeys are 2.8 metres in height. The dimensions of the additional floors in the building can be found in Table 2.

### 15.2. On-Site Uses Proposed

A total of 138 apartment rental units will be created on site. This will include 52 one-bedroom units, 55 two-bedroom units, and 31 three-bedroom units. Units will be purpose-built rental apartments.

In addition to residential uses, there will be retail units on site. A total of 1,174  $m^2$  gross floor area (939.4  $m^2$  with building efficiency of 80%) of retail space will be located on the first floor. This could create 11 retail doors, each with approximately 86.4  $m^2$  of useable floor space. Space could be adapted for larger retail uses, if applicable.

There will be space allocated for a community centre on the first floor of the building on site, with gross floor area of  $1,174.2 \text{ m}^2$  (939.4 m<sup>2</sup> with 80% building efficiency).

There will be a green roof on the tenth floor. This outdoor space will have a gross floor area of 1,048.0  $m^2$  (838.4  $m^2$  with 80% building efficiency), and will be planted with grasses, sedums and other drought-resistant plants.

There will be one floor (P1) of underground parking for all uses on site. This level of parking will be 3,526.3 m<sup>2</sup> gross floor area (2,821 m<sup>2</sup> with building efficiency of 80%) and allow for 117 vehicular parking spaces and 486 bicycle parking spaces.

### 16. PROPOSED CIRCULATION PLAN

### 16.1. Road Allocation/Internal Circulation Allocation

No new roadways will be constructed on site. Vehicular and bicycle access to the underground parking levels, as well as building servicing and access to the loading bays will be via the existing lane to the west of the site. This lane is currently 9 m wide and will allow for two-way traffic on and off the site via Esquire Road to the south.

### 16.2. Pedestrian Pathways

Pedestrian pathways on site will be along the existing sidewalk on Victoria Park Avenue. It is recommended that the sidewalk on Victoria Park Avenue be expanded from the existing 1.5 m wide, to 3.5 m wide, to allow for ease of pedestrian access to storefronts on site, as well as the development of a complete public realm with lighting, seating, and other amenities. This widening has been accounted for in the site plan (Appendix A).

### 16.3. Cycling Pathways

It is recommended that cycling pathways take the form of a designated bike lane in the vehicular lane to the west of the site. This will allow for safe entry to and exit from the underground parking on site. It is also recommended that cycling lanes be added during the improvements to the public realm/right-of-way of Victoria Park Avenue, detailed above in *16.2 Pedestrian Pathways*. Designated cycling pathways to and from the site will ensure that the businesses and residences of the proposed building will be able to choose active transportation.

### 17. LAND BUDGET ALLOCATION

See Table 3.

### 18. PROPOSED BUILT FORM INVENTORY

### **18.1.** Required Zoning Amendments

The following are the required zoning amendments for the redevelopment of the site:

- A) Zone Label:
  - a) Whereas the City of Toronto Zoning By-law 569-2013 zone label reads "CR 0.33 (c0.33;r0.0) SS3 (x489)", change to read: "CR 2.0 (c0.37;r3.14) SS3 (x489)".
- B) Permitted Building Types:
  - a) Whereas changing the zone label to read ""CR 2.0 (c0.37;r1.63) SS3 (x489)", the following building types for dwelling units will now be permitted:
    - i) Mixed-Use Building on a lot that has a zone label with an "r" value that is greater than 0.0

### C) Density:

- a) Whereas changing the zone label to read "CR 2.0 (c0.37;r1.63) SS3 (x489)", the density will now permit:
  - i) A floor space density of 0.37 for non-residential uses (per City of Toronto Zoning By-law 569-2013 40.5.1.10(3)(A)(i))
  - ii) A floor space density of 1.63 for residential uses (per City of Toronto Zoning By-law 569-2013 40.5.1.10(3)(A)(ii))

### D) Maximum Height:

a) Whereas City of Toronto Zoning By-law 569-2013 40.10.40.10(3) reads: "In the CR zone subject to Development Standard Set 3 (SS3), the permitted maximum height of a building or structure on a lot is: (A) the numerical value, in metres, following the letters HT on the Height Overlay Map", which in reference to the site in question is 11.0 metres, add an additional Site

Specific By-law, City of Toronto Zoning By-law 569-2013 900.11.10.xx to read "(C) The maximum height of a building or structure on a lot is: 25.0 m."

### E) Lot Coverage:

a) Whereas City of Toronto Zoning By-law 569-2013 Table 200.5.10.1 (1) requires: "In the CR zone: (A) if a lot is in an area with a numerical value on the Lot Coverage Overlay Map, that numerical value is the permitted maximum lot coverage, as a percentage of the lot area", which in reference to the site in question is 40%, add an additional Site Specific By-law, City of Toronto Zoning By-law 569-2013 900.11.10.xx to read "(D) The lot coverage ratio for the lot is 70%".

### F) Parking Requirements

a) Whereas City of Toronto Zoning By-law 569-2013 Table 200.5.10.1 requires the following for commercial uses: minimum 1.0 parking spaces for each 100 square meters of gross floor area, maximum 4.0 parking spaces for each 100 square meters of gross floor area, add an additional Site Specific By-law, City of Toronto Zoning By-law 569-2013 900.11.10.xx to read "(D) In reference to parking requirements, there are no requirements pertaining to commercial uses."

### 18.2. Required Official Plan Amendments

A) There are no amendments required for the City of Toronto Official Plan (2015).

### **18.3.** Built Form Unit Inventory

See Table 4.

### 18.4. Parking Provision and Design

- A) There will be a total of 117 vehicular parking stalls, located on floor P1. The vehicular parking stalls proposed is 61 stalls less than required in the City of Toronto Zoning By-law. The proposal includes less parking due to the existence of a nearby "pay-to-park" lot with 1135 spaces, located ~50 meters from the site. This parking lot will be adequate for the parking needs of visitors to the site for the retail or community space.<sup>37</sup>
- B) There will be a total of 486 bicycle parking spaces, located on floor P1. This is in accordance with City of Toronto Zoning By-law 569-2013 Table 230.5.10.1(1).
- C) There will be 1 loading space on site, in accordance with City of Toronto Zoning By-law 569-2013 40.10.90.1(1). All loading spaces will be located on the ground level of the building.
- D) Design of parking and loading spaces:
  - a) Vehicular parking spaces will be designed in accordance with City of Toronto Zoning By-law 569-2013 200.5.1.10(2):
    - i) Length of 5.6 metres
    - ii) Width of 2.6 metres
  - b) Bicycle parking spaces will be designed in accordance with City of Toronto Zoning By-law 569-2013 230.5.1.10(4):
    - i) Length of 1.8 metres
    - ii) Width of 0.6 metres
    - iii) Vertical clearance of 1.9 metres
  - c) Loading spaces will be designed in accordance with City of Toronto Zoning By-law 569-2013 220.5.10(8)(D):

<sup>&</sup>lt;sup>37</sup> Retrieved from: https://lots.impark.com//imp/en?latlng=43.653226,-79.38318429999998#details=9,385

- i) Length of 13.0 metres
- ii) Width of 4.0 metres
- iii) Vertical clearance of 6.1 metres

### 5.5 Planning justification

The proposed development consists of one nine-story, mid-rise, mixed-use building, including 138 purpose-built residential apartment units, ground-floor retail and community space, one floor of underground parking (117 vehicular parking spaces and 486 bicycle parking spaces), and a rooftop garden.

The proposed development is consistent with the Provincial Policy Statement, which emphasizes residential development in areas serviced by existing community resources and transit. The property is within the "built-up area" in the Provincial Growth Plan and will contribute to the goals of the plan to provide intensification near transit lines.

It is consistent with the intent of the City of Toronto Official Plan designation for Mixed-Use Areas, which outlines that sites within this designation will absorb most of the anticipated increase in retail and service employment in Toronto, as well as much of the new housing and Avenues, which are intended to absorb reurbanization and are encouraged to create new housing and job opportunities.

The proposed increase in height and density requirements, in relation to the City of Toronto Zoning By-law 569-2013 will ensure that the development will be complimentary of the scale of surrounding commercial and residential built form. The proposed building design, including the setbacks and step backs, will ensure that there is adequate integration with the established neighbourhoods to the west.

The overall design of the building will be in compliance with the City of Toronto's Performance Standards for Mid-rise Buildings<sup>38</sup>. The building is no taller than the right-of-way (Victoria Park Avenue) is wide; the building provides transition in the form of step-backs to surrounding neighbourhoods; the ground floor provides uses that enliven

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<sup>&</sup>lt;sup>38</sup> City of Toronto (2010). Section 3: Performance Standards for Mid-Rise Buildings. Retrieved from: <a href="https://www.toronto.ca/wp-content/uploads/2017/08/960c-Performance-Standards-for-Mid-Rise-Buildings.pdf">https://www.toronto.ca/wp-content/uploads/2017/08/960c-Performance-Standards-for-Mid-Rise-Buildings.pdf</a>

sidewalks and create safe pedestrian conditions; and the proposal limits vehicular access to the side street and laneway.

The development will include rental apartment units, in various sizes (one bedroom, two bedrooms and three bedrooms). This will ensure that the development will support the changing demographics of the area, as well as support the City of Toronto's intention to preserve and create new family-sized residential units<sup>39</sup>.

The development proposes a change from the existing single-storey retail built form to a mid-rise, mixed-use building, which will support the City of Toronto's need for rental housing and will preserve the retail opportunities on site. It will also add a community space that will serve both the residence of the building, as well as the surrounding neighbourhood. The rooftop garden including in the development will serve as outdoor amenity space.

The site is well serviced by public infrastructure, road networks, local and regional transit, and community services, which all support the increased density described in this proposal. It is especially pertinent to note that this development will be serviced by the future Sheppard East LRT line.

The constraints to this site are able to be accommodated. Pedestrian access will be enhanced by the improvements to the public realm outlined in the proposal and it is recommended to plan for cycling infrastructure to be added to Victoria Park Avenue. The proposal acknowledges that the necessary zoning by-law amendments will need to be approved prior to construction.

https://www.toronto.ca/legdocs/mmis/2007/pg/bgrd/

backgroundfile-5883.pdf

<sup>&</sup>lt;sup>39</sup> City of Toronto (2007). Staff Action Report: Encouraging New and Protecting Existing Family-Sized Units (reference number: pg070065). Retrieved from:

The development proposed on this site is in line with the goals of the provincial and local planning policy and regulations. The height and density of this development provides adequate setbacks and step backs and is consistent with mid-rise development guidelines. There are no significant shadow, wind or environmental impacts of the proposed development. The proposed parking supply will be sufficient for both residents of the apartment units and visitors to the site. An acceptable pedestrian scale has been achieved with frontage and street wall.

Based on the above assessment, this proposal represents good and sound planning and should be approved.

# 6.0 Appendices

TABLE 1: Canadian Retail Real Estate Types Summary

of Retail Real Estate	Concept	Gross Leasable Area (Square Feet)	Anchor
ping Centres	Shopping Centre		
1- Convenience	Open-air property with a few tenants that offer a narrow mix of goods and personal services to a very limited trade area, including walk-in traffic. The configuration is typically linear, with an attached row of stores or service outlets owned and managed as a coherent retail unit and with on-site parking usually in front of the stores.	10,000-39,000	Typically anchored by a convenience store.
2- Neighbourhood	Open-air property designed to address the daily needs of consumers in the immediate neighborhood but with a broader offering than the convenience centre. It is usually configured as a straight-line strip with adequate off-street parking at the front and has in most cases a limited trade area of less than five kilometers.	40,000-99,999	Generally anchored by a supermarket—or, in recent year a drugstore or a discount store.
3- Community	Open-air and/or enclosed property that also focuses on daily needs but with a wider range of soft goods and services than neighborhood centers. It is basically a cluster of attached retail units that can be open-air and/or enclosed with significant off-street paved parking surrounding the building that can be generally accessed from two or more sides. Its trade area is usually less than 10 kilometers—with exceptions in less populated areas.	100,000-460,000	Usually anchored by more than one large-format store, which could be a convenience-based tenant, such as a supermarket or a super drugstore, or a more general merchandise-oriented tenant, such as a discount department store or a value-oriented big box category- dominant retailer.
4- Regional Mall	Enclosed comparison-based centre that focuses on general merchandise or fashion-oriented offerings but that also provides services in full depth and variety. It usually has an inward orientation of the stores connected by common areas/walkways or "malls", flanked on one or both sides by various entrances with off- street surface and/or structured parking surrounding the outside perimeter. It could be multi-leveled with escalators, stairs and elevators between levels. There may be outparcels or pad store locations. A regional mall could be located in downtown areas of major metropolitan markets and be called a "downtown regional mall". Its primary trade area is eight to twenty kilometers.	300,000-799,999	Generally anchored by at least two large-format stores, most often department stores occupying typically a minimum of 70,000 square feet. Possibly anchored as w in recent years by large-format discount stores and/or anchors or big-box specialty retailers occupying between 15,000 and 40,000 square feet.
5- Super-regional Mai	Similar in concept to the regional mall but has a deeper breadth and depth of merchandise and stores (including destination retailers), a larger food court, a greater offering of food stores and service uses and a more comprehensive mix of entertainment activities and clining options. It is often situated on mass transit lines and along major highway comidors. Its primary trade area is ten to thirty kilometers and encompasses an extensive population base.	800,000+	Generally anchored by at least three large-format stores and of the same type as for regional malls. However, anchors tend to be more numerous in super-regional tha regional malls.
B- Specialty Sh	nopping Centre		
1- Power	Open-air centre that typically comprises three or more large-format retailers ("big boxes" or "category- dominant anchors") that are mostly freestanding (unconnected). It may also have a few small specialty tenants—mostly in the scattered multi-tenant buildings on the site. As with other open-air centres, ample on- site paved parking is located in front of the stores and around the site at the ground level. Its primary trade area is eight to twenty kilometers.	100,000-1,000,000	Usually anchored by discount department stores, warehouse clubs, off-price stores or other "category kille i.e., stores that offer a vast selection in related- merchandise categories at very competitive retail prices
2- Factory Outlet	Open-air and/or enclosed centre that comprise manufacturers' and retailers' outlet stores selling brand-name goods at a discount—usually selling surplus stock, prior-season or slow selling merchandise and especially designed merchandise. Its primary trade area is twenty to fifty kilometers.	50,000-400,000	Generally not anchored, although certain brand-name slores may serve as "magnet" tenants.
3- Lifestyle	Open-air centre mostly located in a residential neighborhood that generally includes at least 50,000 square feet of retail space (GLA) occupied by chain specialty stores but also restaurants, specialty food stores and entertainment venues. This multi-purpose leisure-time destination has design ambience and amenities such as fountains and street furniture that are conducive to casual browsing. Its primary trade area is ten to twenty kilometers.	150,000-500,000	May be anchored by a large-format specialty store, a smaller version of a department store and/or entertainmovenues such as cinemas.

(International Council of Shopping Centres, 2010).

TABLE 2: Building Floor Area

Floor	Use	Gross Floor Area (m2)
P1	Vehicular & Bike Parking	3,526.3
1	Retail	1,174.2
	Community Centre	1,174.2
	Loading Bay	587.1
	Residential Lobby	587.1
2	Residential	2,939.2
	Courtyard	587.1
3	Residential	2,939.2
4	Residential	2,939.2
5	Residential	1,993.6
6	Residential	1,993.6
7	Residential	1,048.0
8	Residential	1,048.0
9	Residential	1,048.0
10	Green roof	1,048.0
Total Parking		3,526.3
Total Non-Residential		3,522.7
Total Residential		15,948.6
Total C	outdoor Space	1,635.1

TABLE 3: Land Budget Allocation

Use	Area	Percentage
Developable Land	5,084.9 m <sup>2</sup>	
Rights of Way (Existing)	0 m <sup>2</sup>	0%
Rights of Way (Proposed)	0 m <sup>2</sup>	0%
Parkland Dedication*	0 m <sup>2</sup>	0%
Built Form	3,526.3 m <sup>2</sup>	69%
Pedestrian pathways	0 m <sup>2</sup>	0%
Open Space	1,558.7 m <sup>2</sup>	31%
TOTAL	5,084.96 m <sup>2</sup>	100%

<sup>\*</sup>It is recommended that parkland dedication be given as cash-in-lieu as it is not feasible to dedicate land on site for park space. This is in conjunction with the existing uses of the site.

TABLE 4: Built Form Unit Inventory

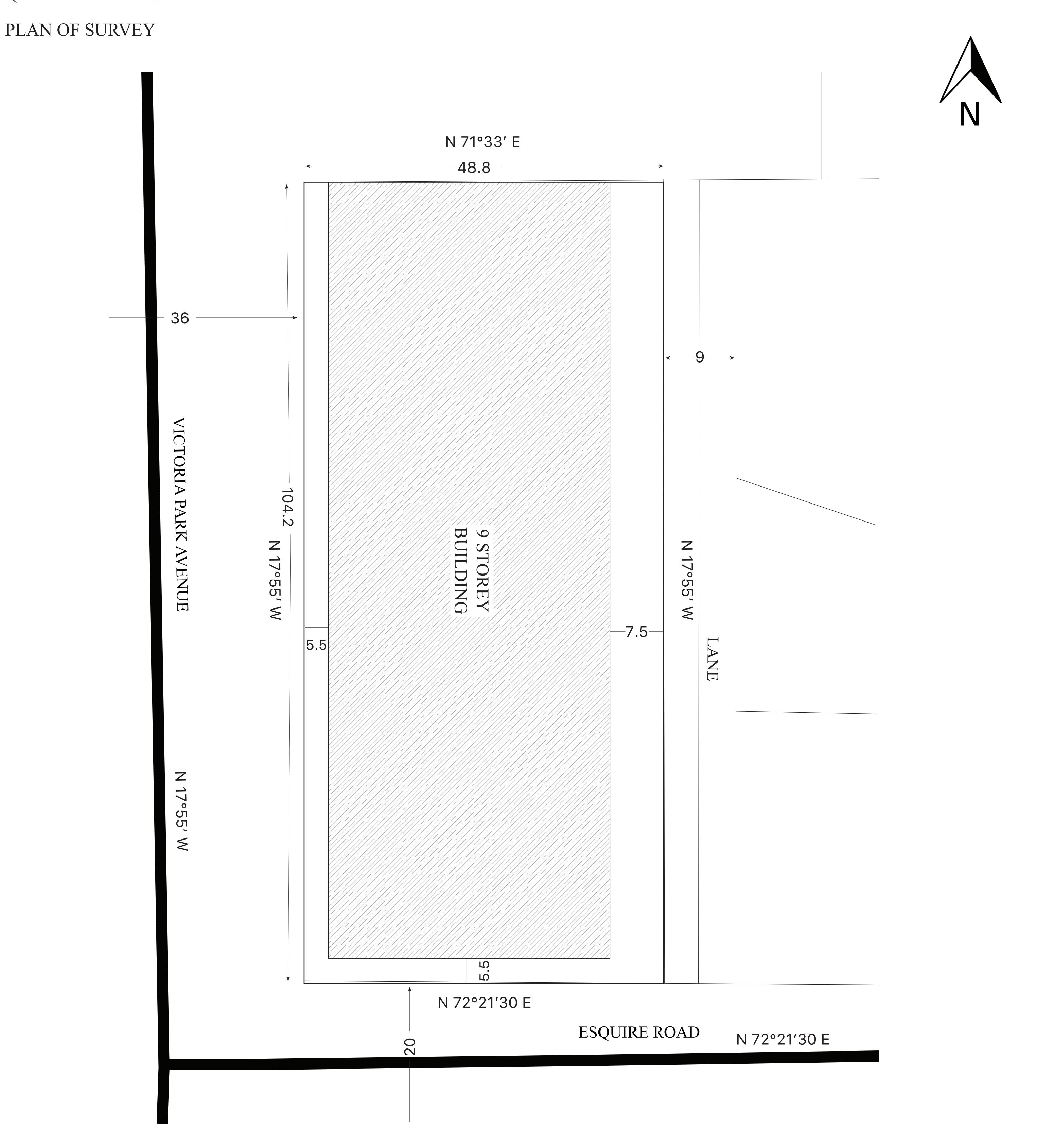
UNIT TYPE		Size per unit (m²)	Total Number of Units	Total floor area (m²)
Residential				
	One-bedroom	69	52	3,588.0
	Two-bedroom	97	55	5,335.0
	Three-bedroom	120	31	3,720.0
Commercial	Community Centre	945	1	939.4
	Retail*	86	11	939.4

<sup>\*</sup>Size and number of retail units will depend on anchor tenants and individual unit design

# DRAFT PLAN OF SUBDIVISION OF PART OF LOT 35 CONCESSION III TOWNSHIP OF SCARBOROUGH

(scale 1:1000)

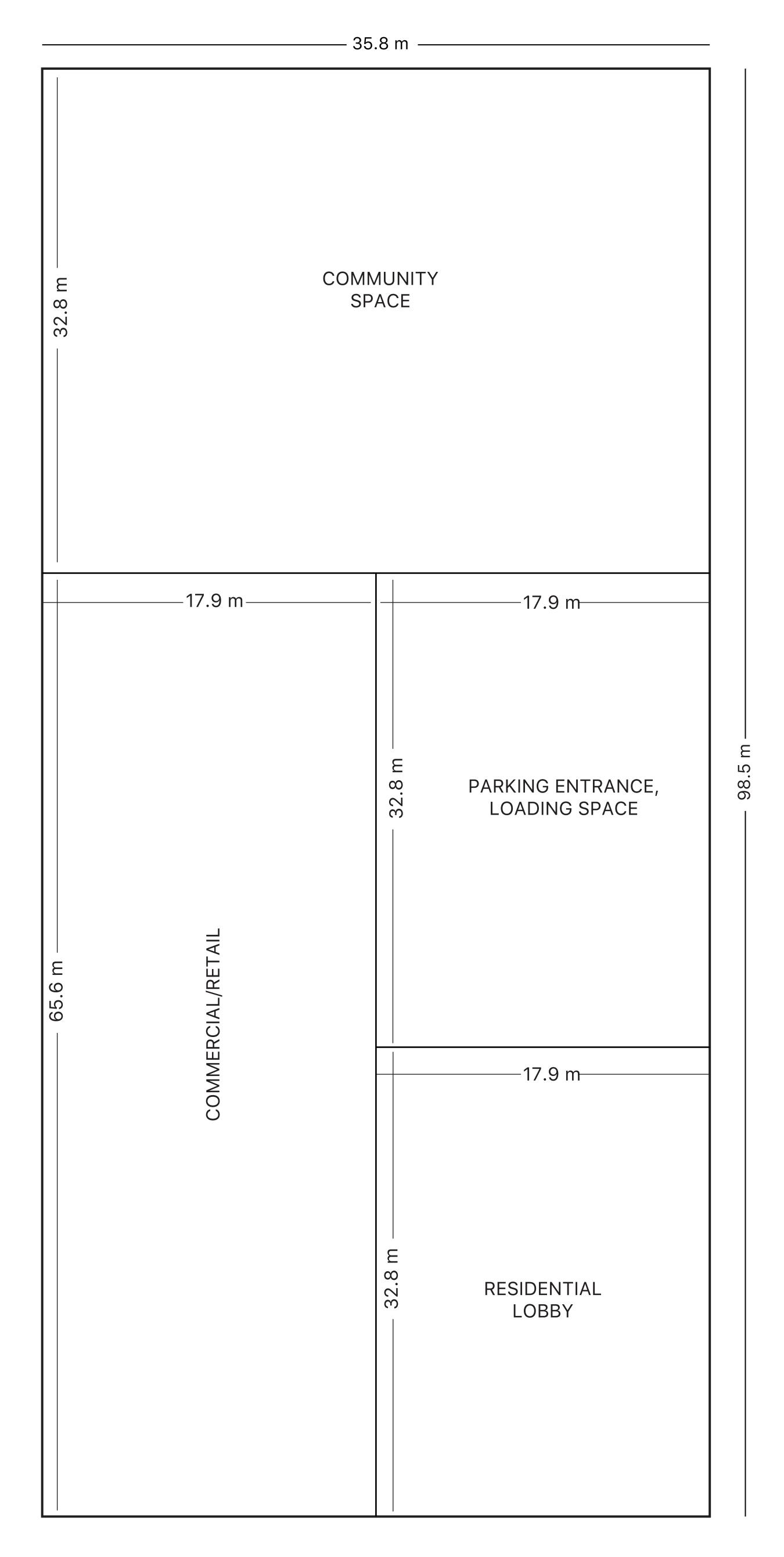


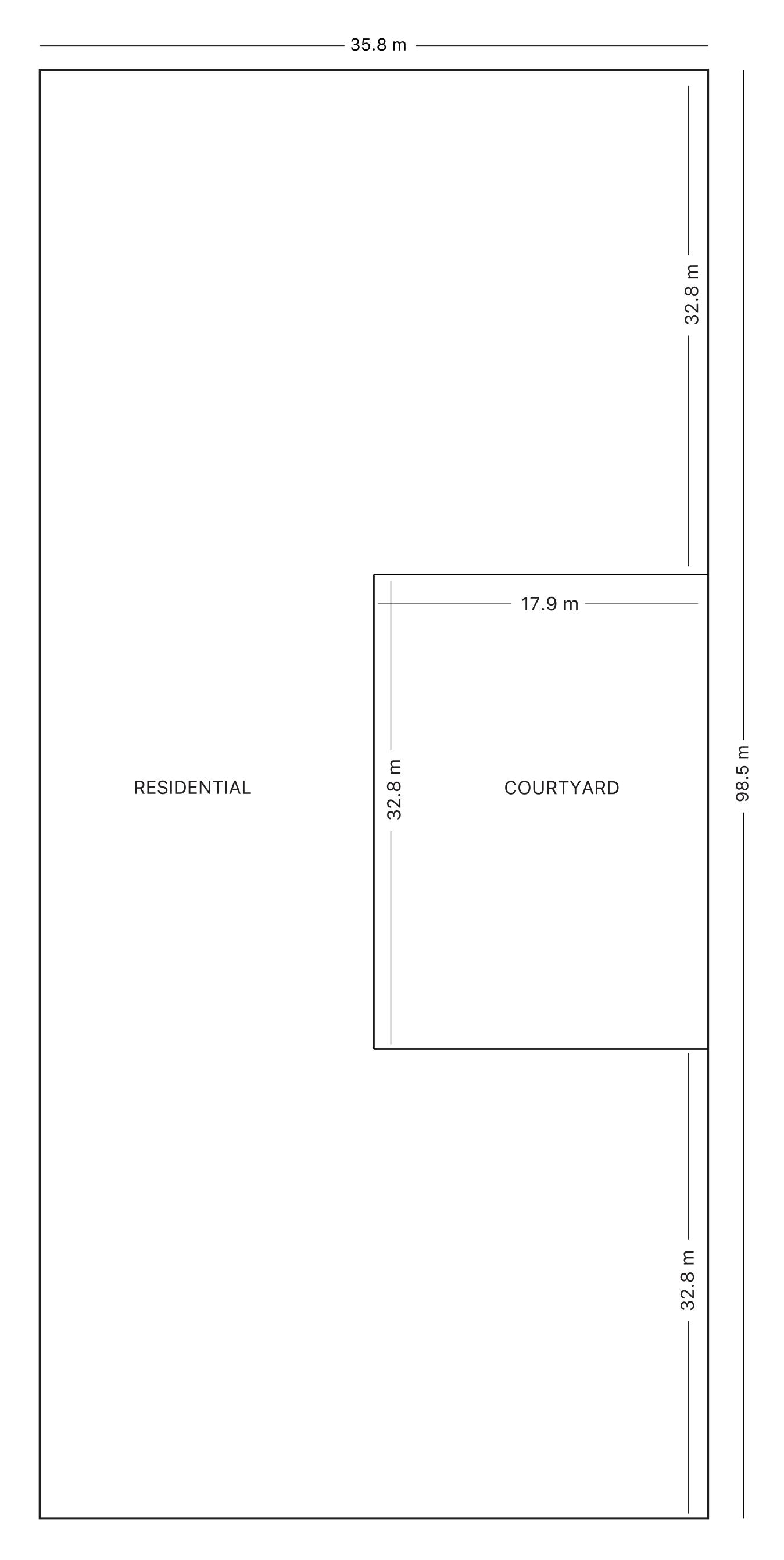


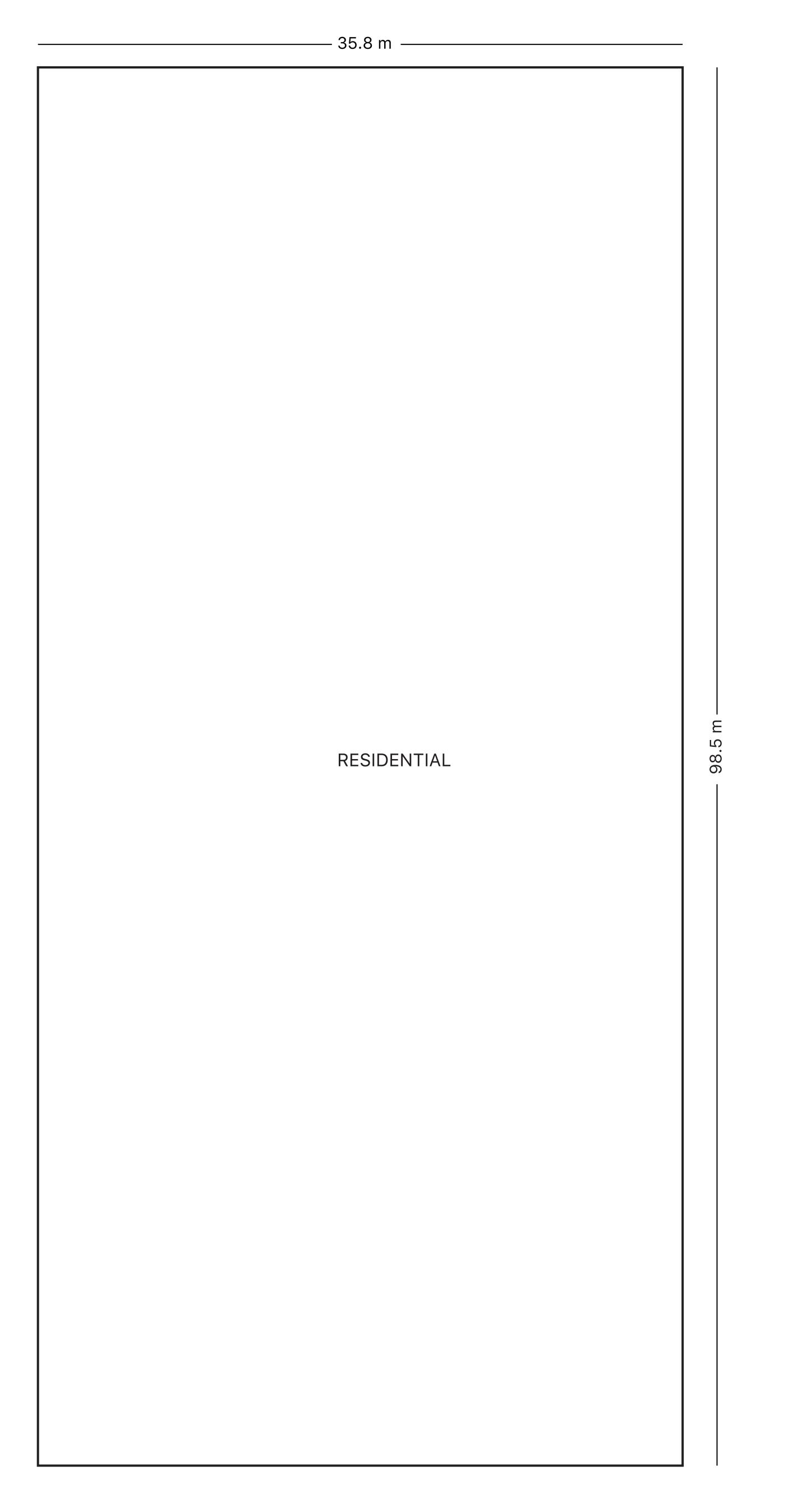
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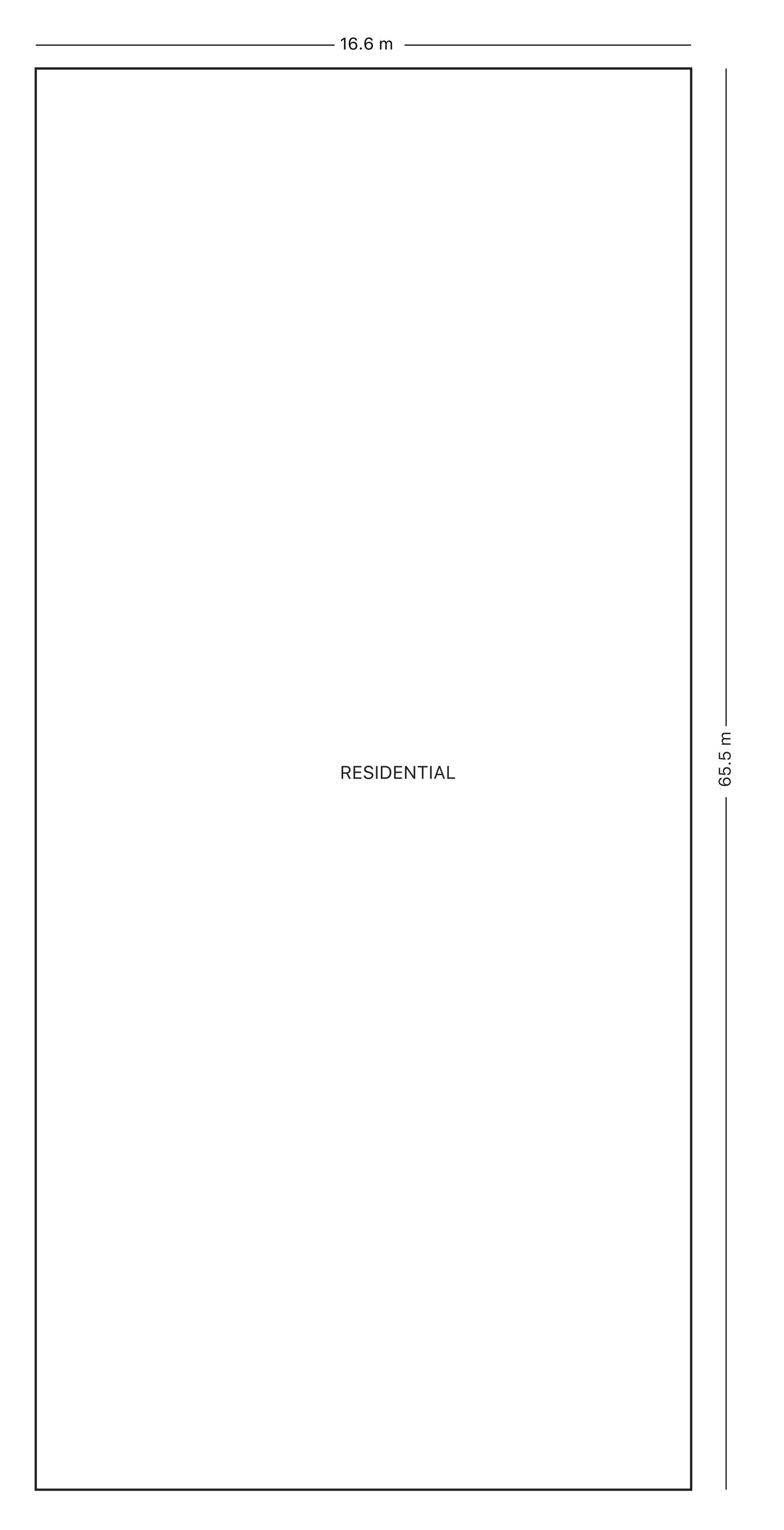
5, 085.0 **Dwelling Units:** Floor Area Breakdown: Site Area (sq.m.): <u>Height</u> 104.2 Storeys: Above Grade Below Grade Frontage (m): Tenure Type: Apartment 27.1 15,948.6 Depth (m): 48.8 Metres: Rooms: Residential GFA (sq.m.): Total Ground Floor Area (sq.m.): 3526.3 Bachelor: Retail GFA (sq.m.): 939.4 52 Total Residential GFA (sq.m.): 15,948.6 Parking Spaces: 117 1 Bedroom: Office GFA (sq.m.): Total Non-Residential GFA (sq.m.): 55 3,522.7 Loading Docks: 2 Bedroom: Industrial GFA (sq.m.): Total GFA (sq.m.): 31 20,075.0 3+ Bedroom: Institutional GFA (sq.m.) 939.4 Total Units: 138 Lot coverage ratio: Parking GFA (sq.m.) 3,526.3 70% 3.9 Floor Space Index:

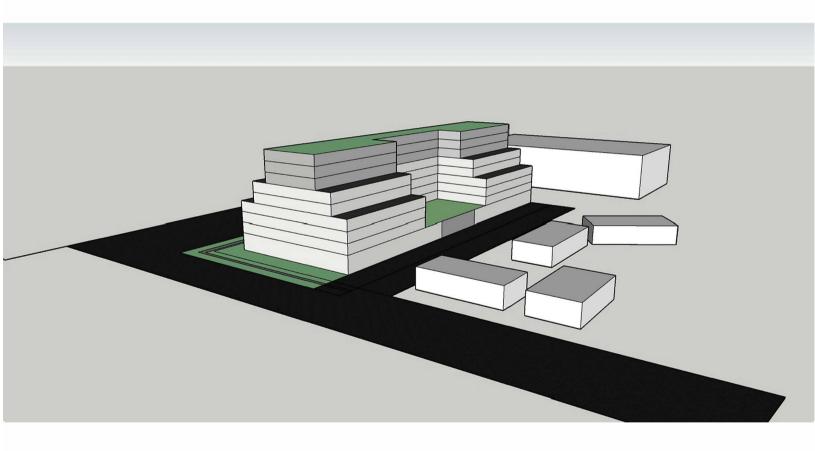
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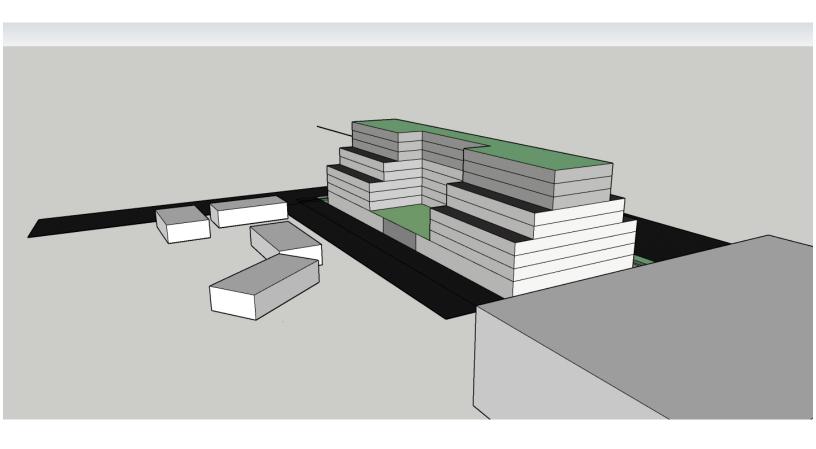


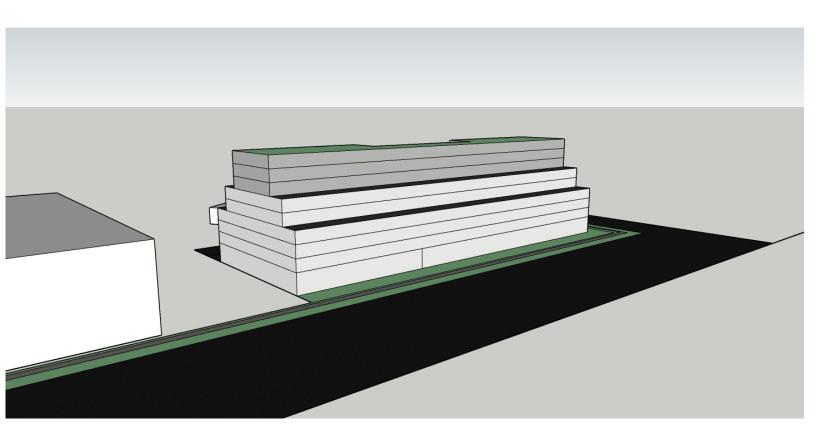


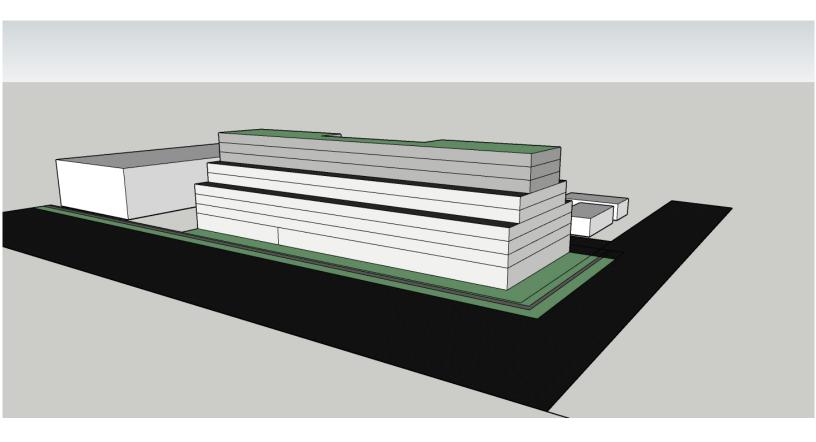




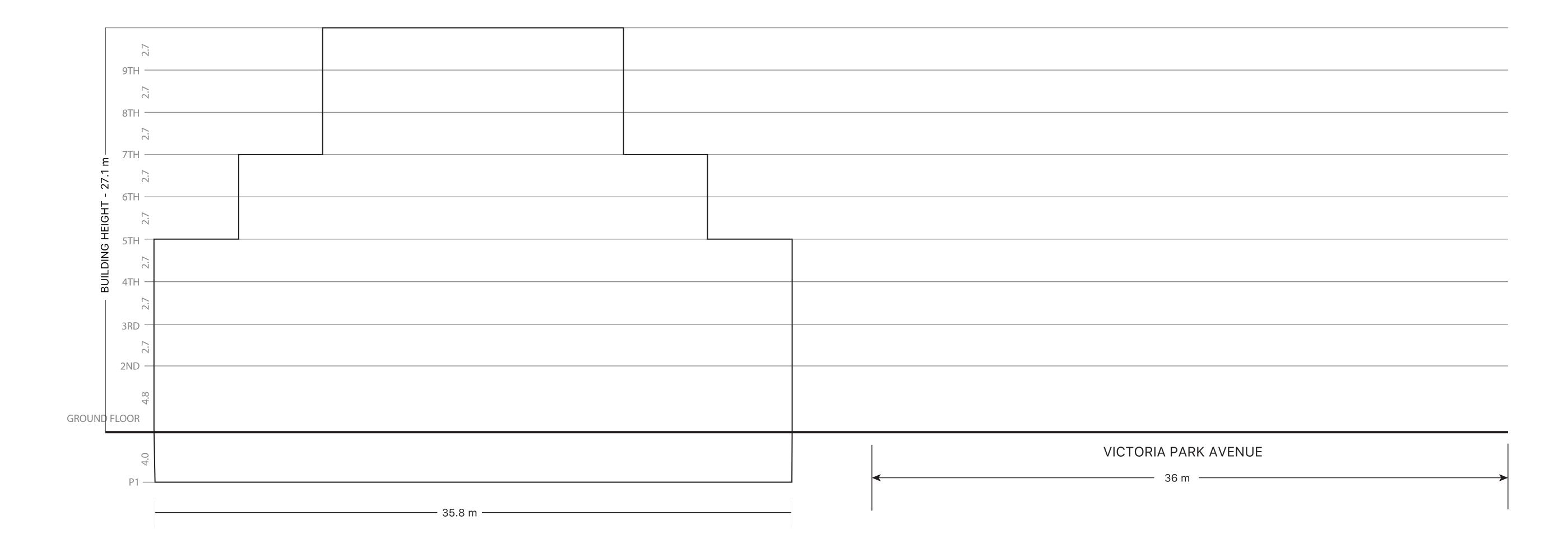




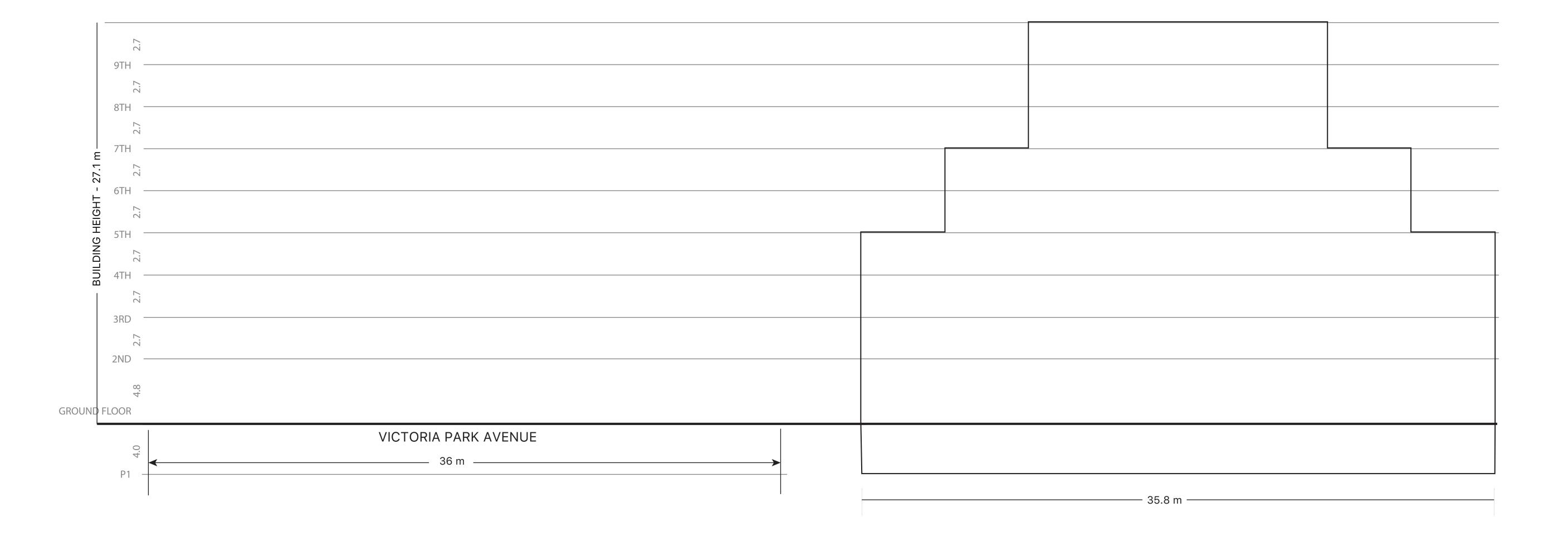














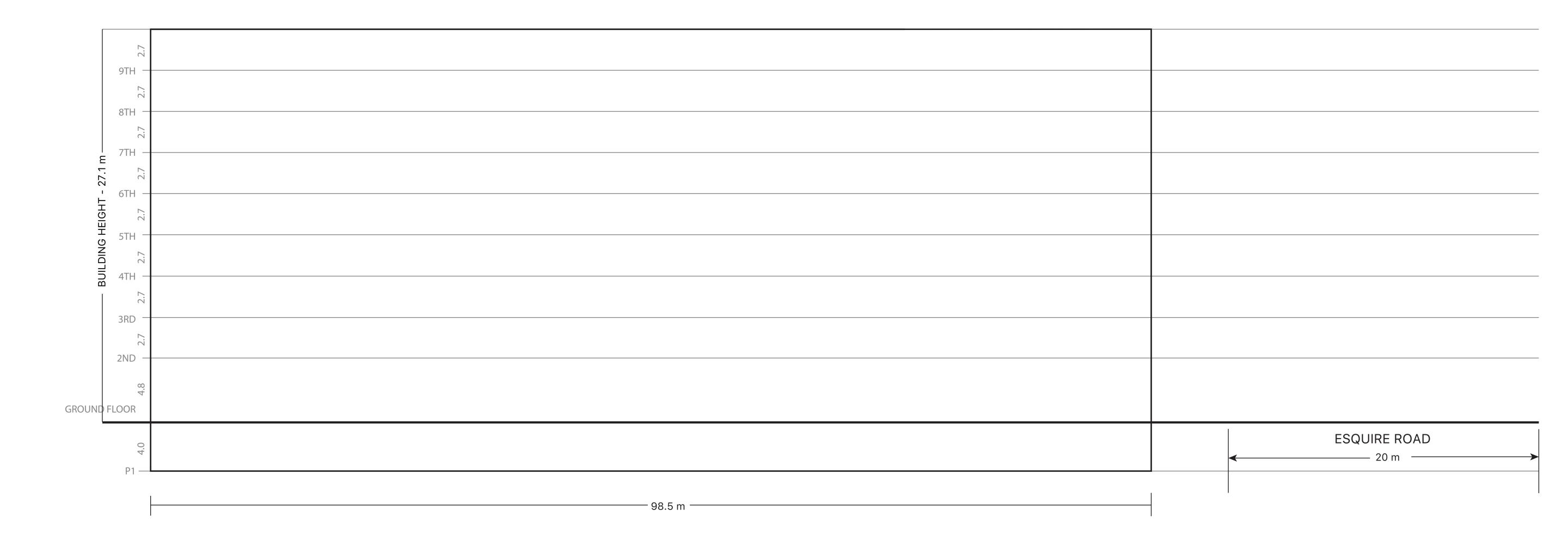
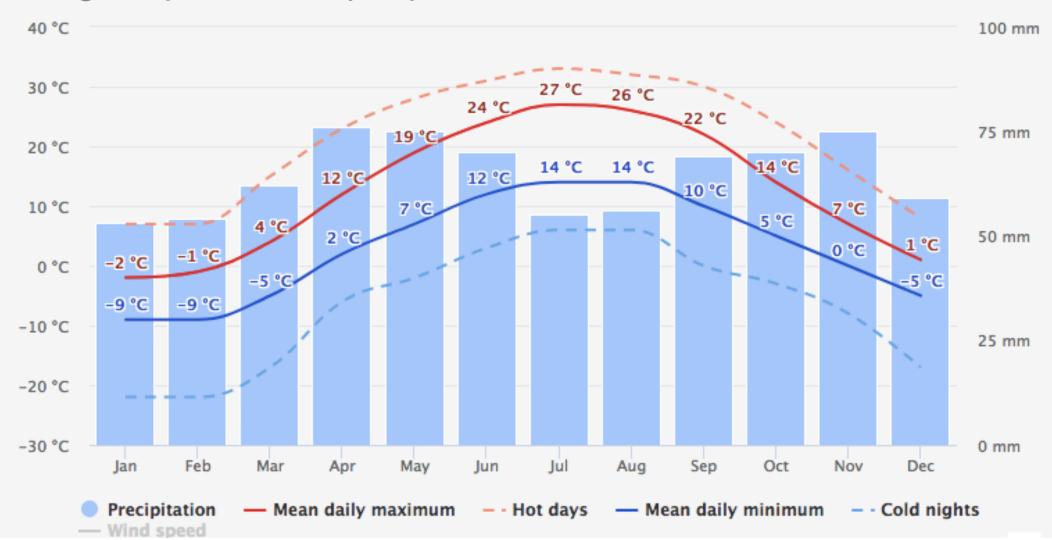






Chart 1: Average Temperature and Precipitation

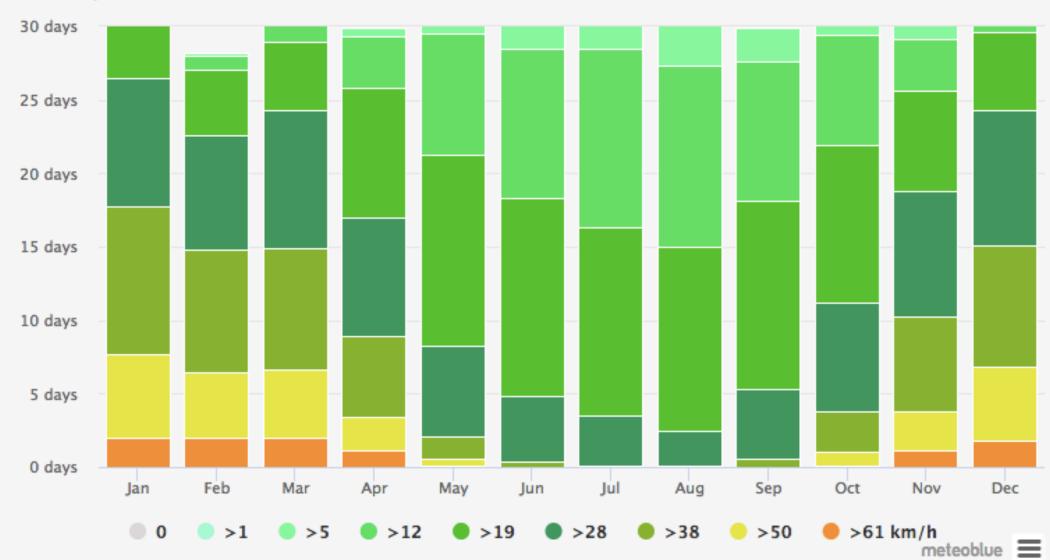
## Average temperatures and precipitation



Source: meteoblue.ca

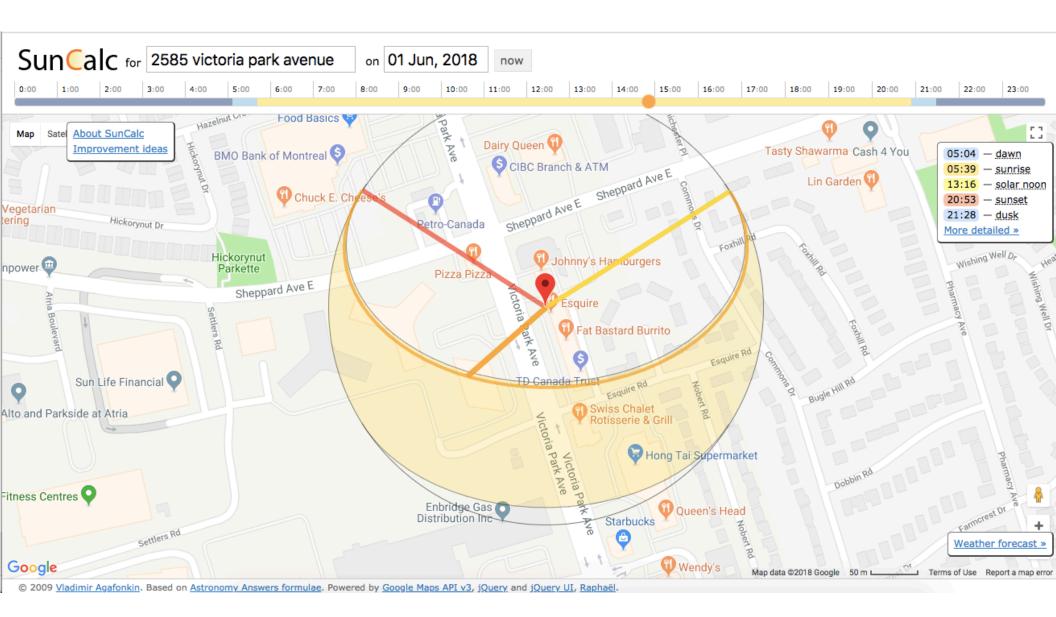
Chart 2: Wind speed

# Wind speed



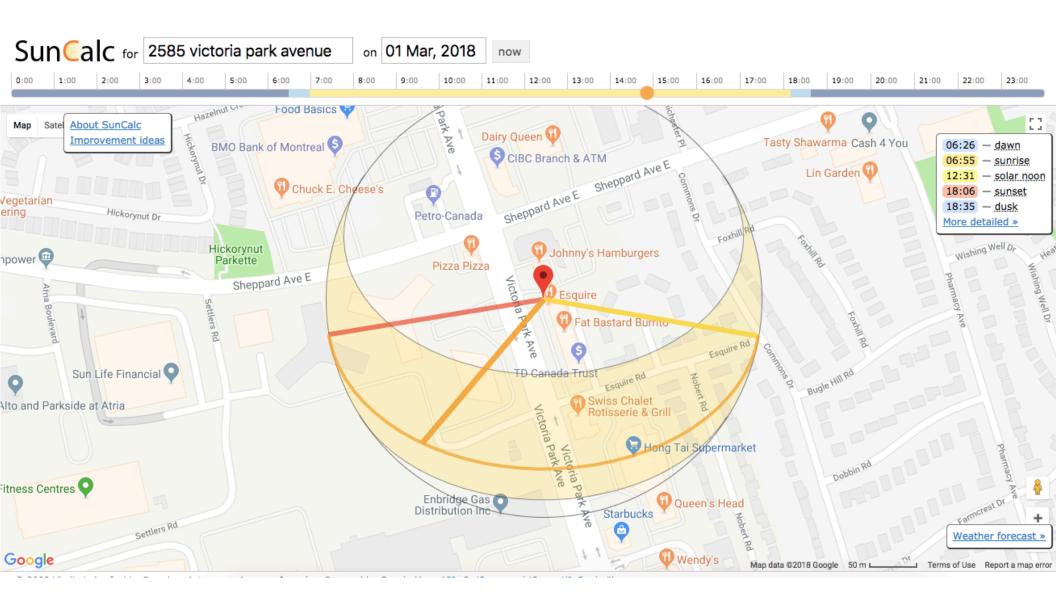
Source: meteoblue.ca

Chart 3A: Solar exposure (June)



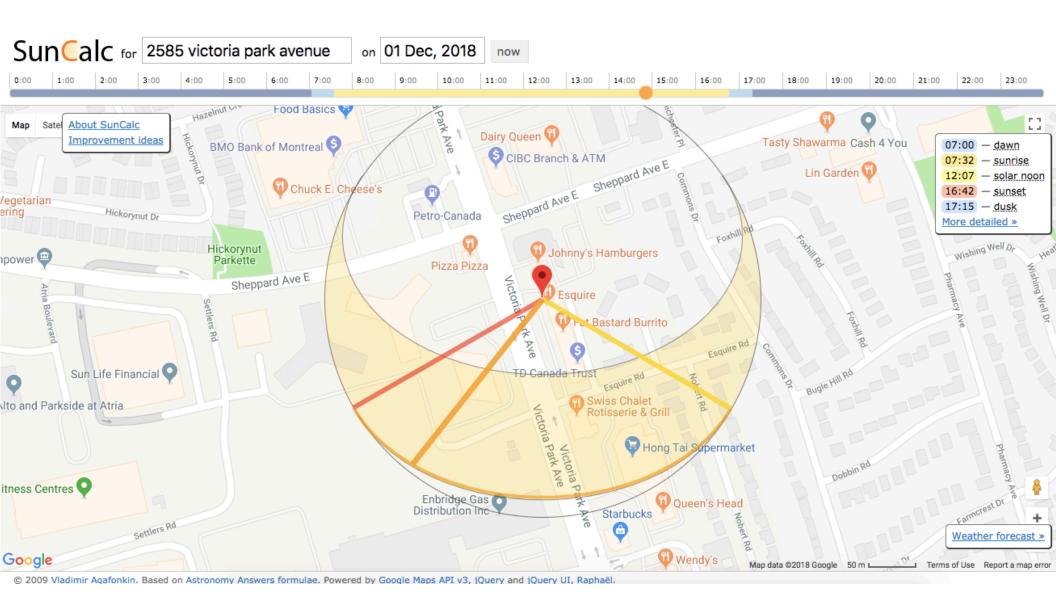
Source: Suncalc.com

Chart 3B: Solar exposure (March)



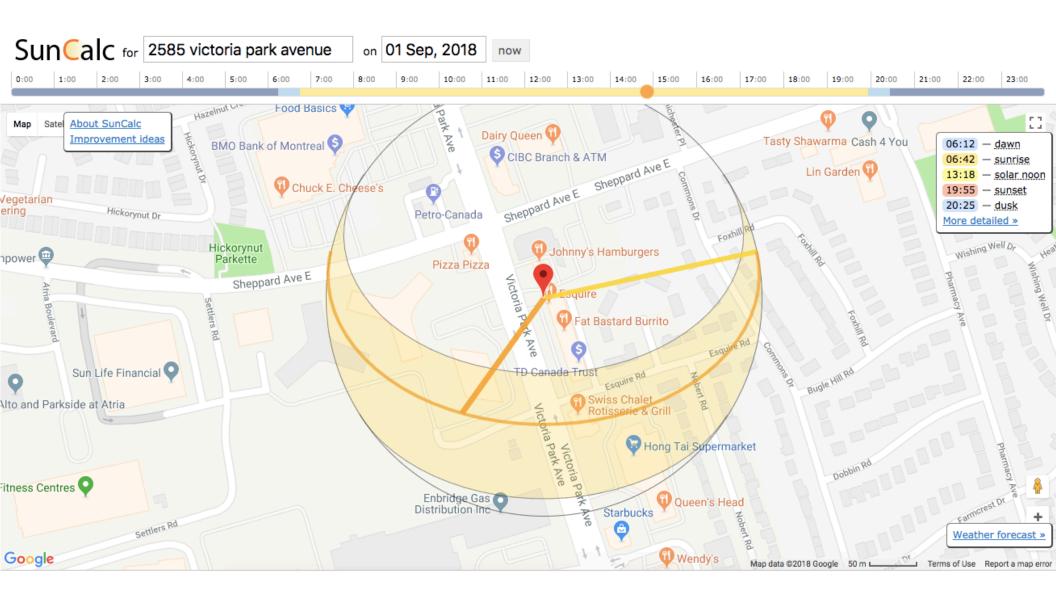
Source: Suncalc.com

### Chart 3C: Solar exposure (December)

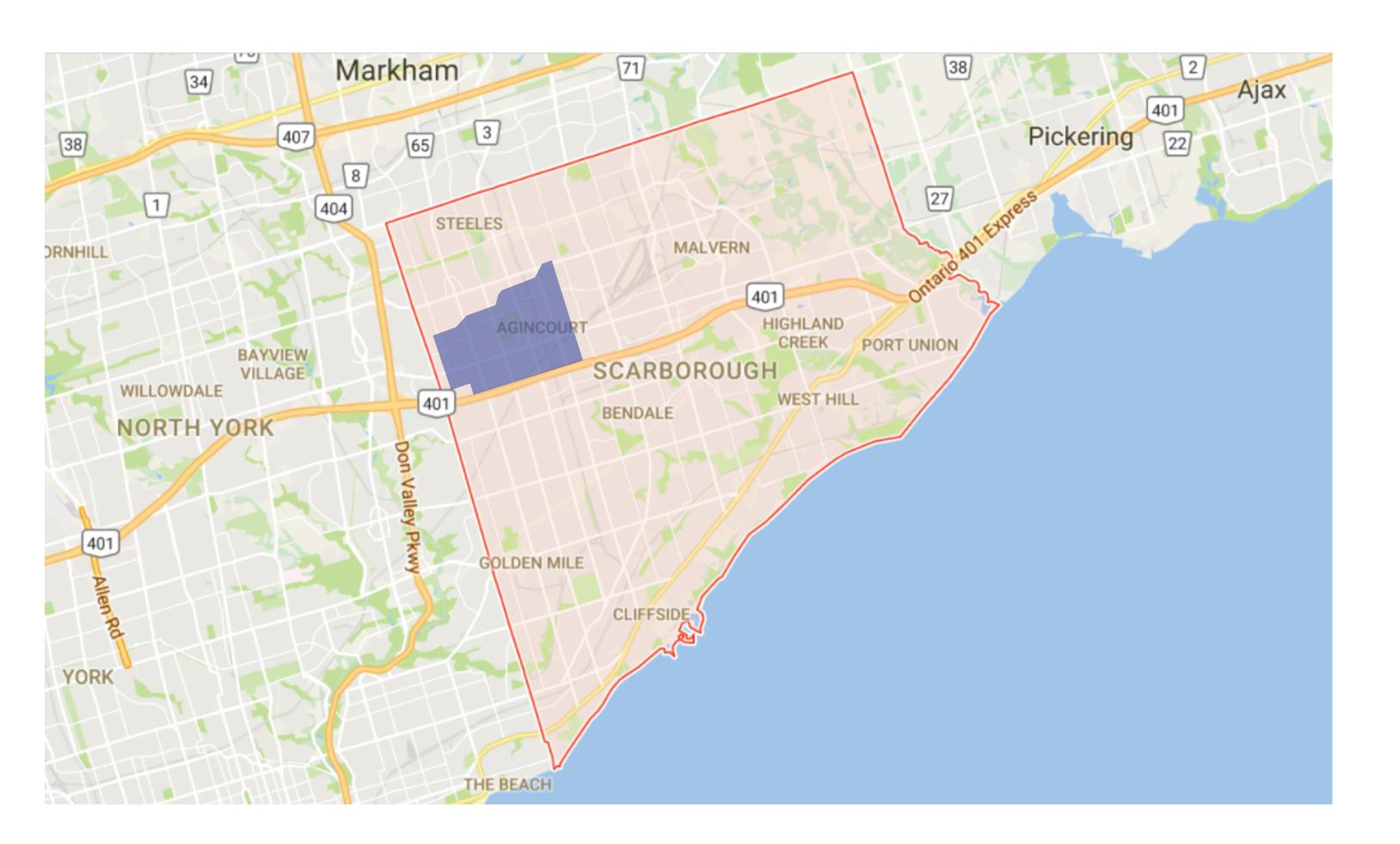


Source: Suncalc.com

Chart 3D: Solar exposure (September)



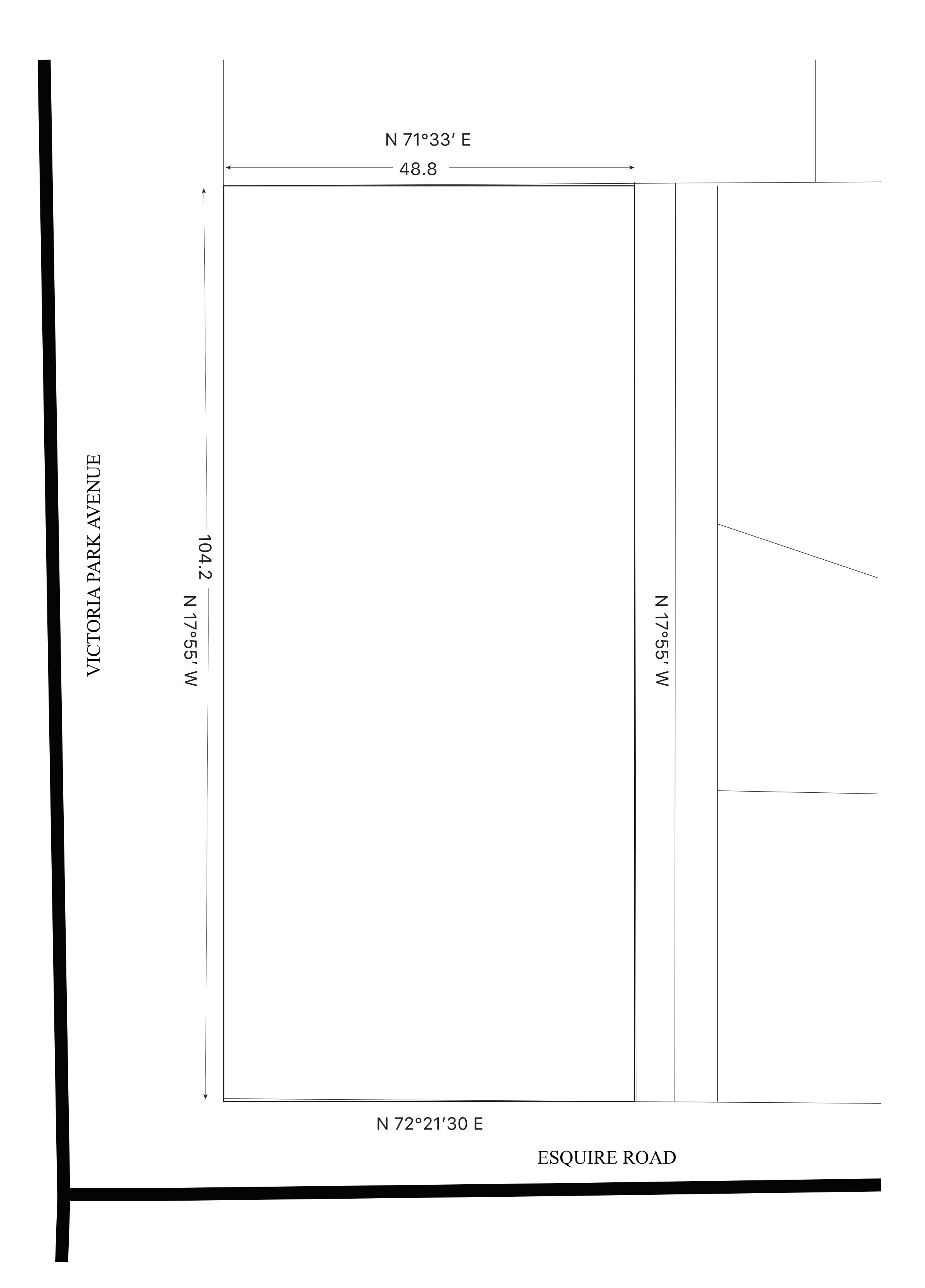
Source: Suncalc.com



Source of base map: Google Maps

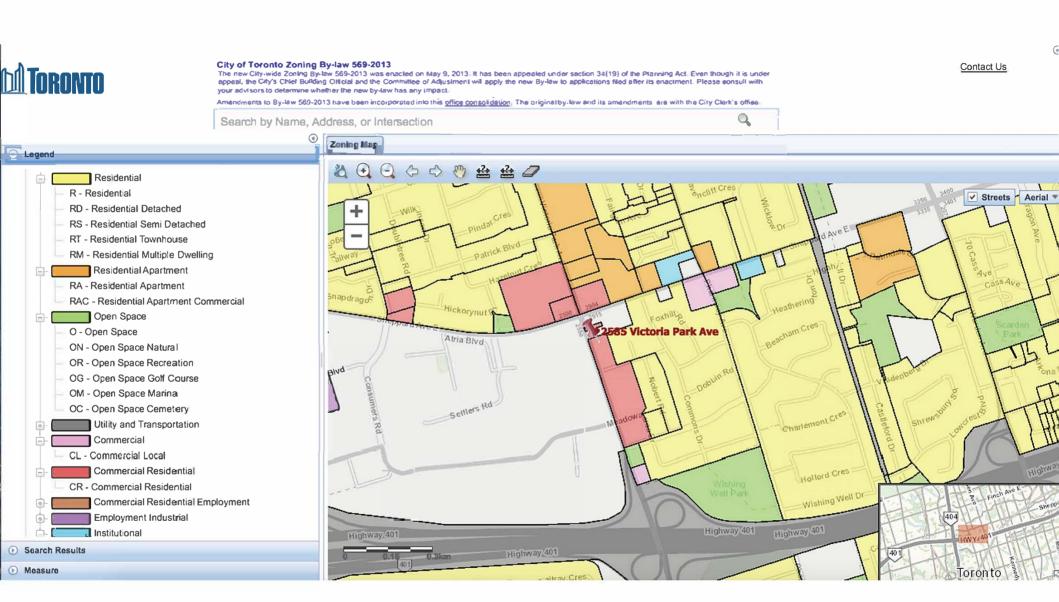
Sullivan Neighbourhood

Scarborough



70

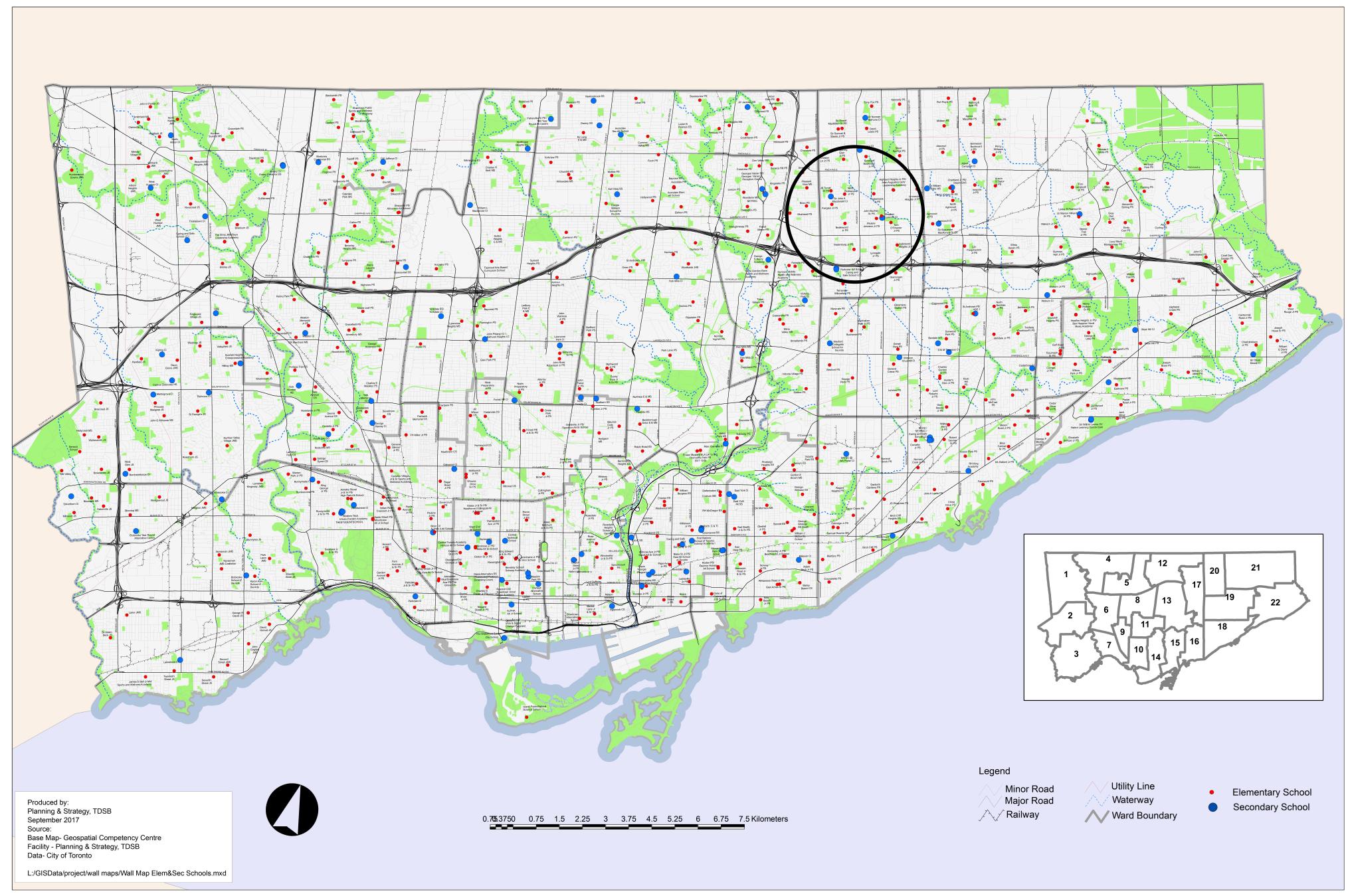
Map 3: Surrounding Land Uses



Source: City of Toronto Zoning By-Law 569-2013

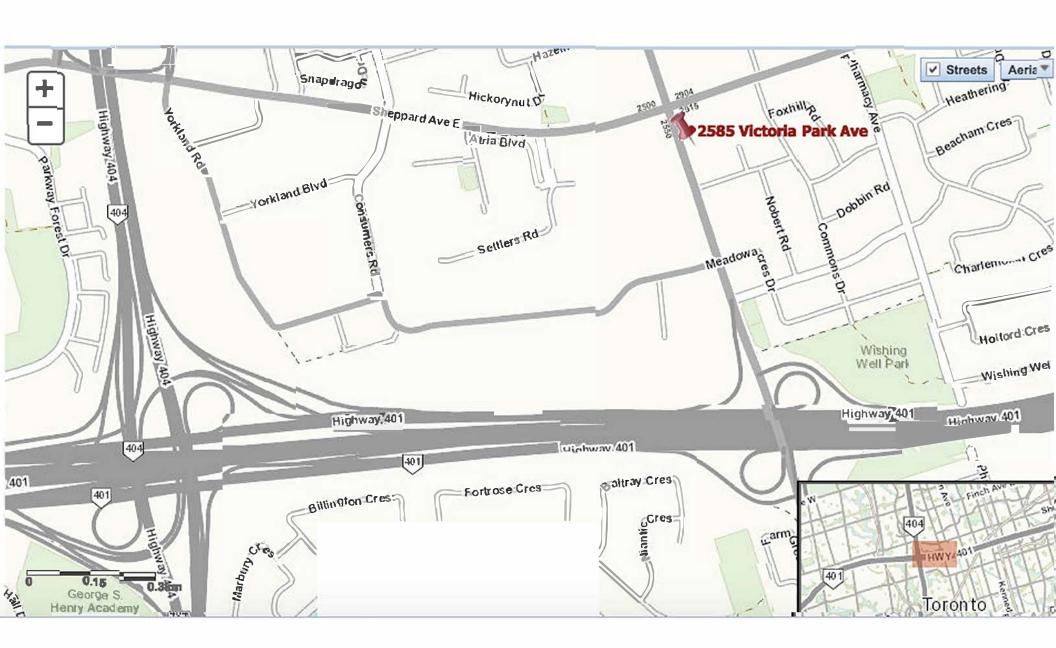


## **Toronto District School Board**



Source: tdsb.ca

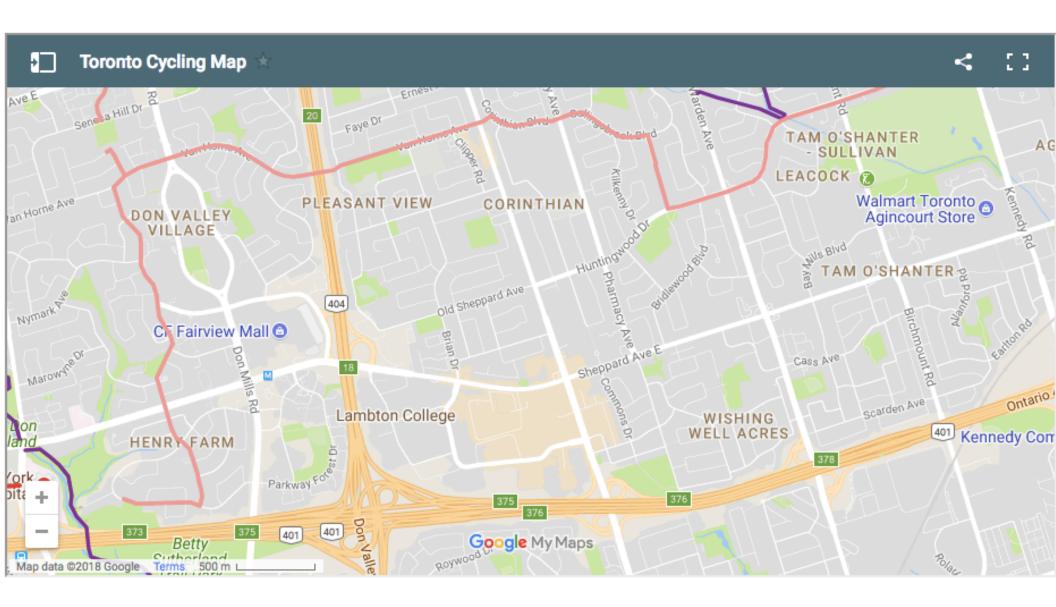
Map 5: Access to road network



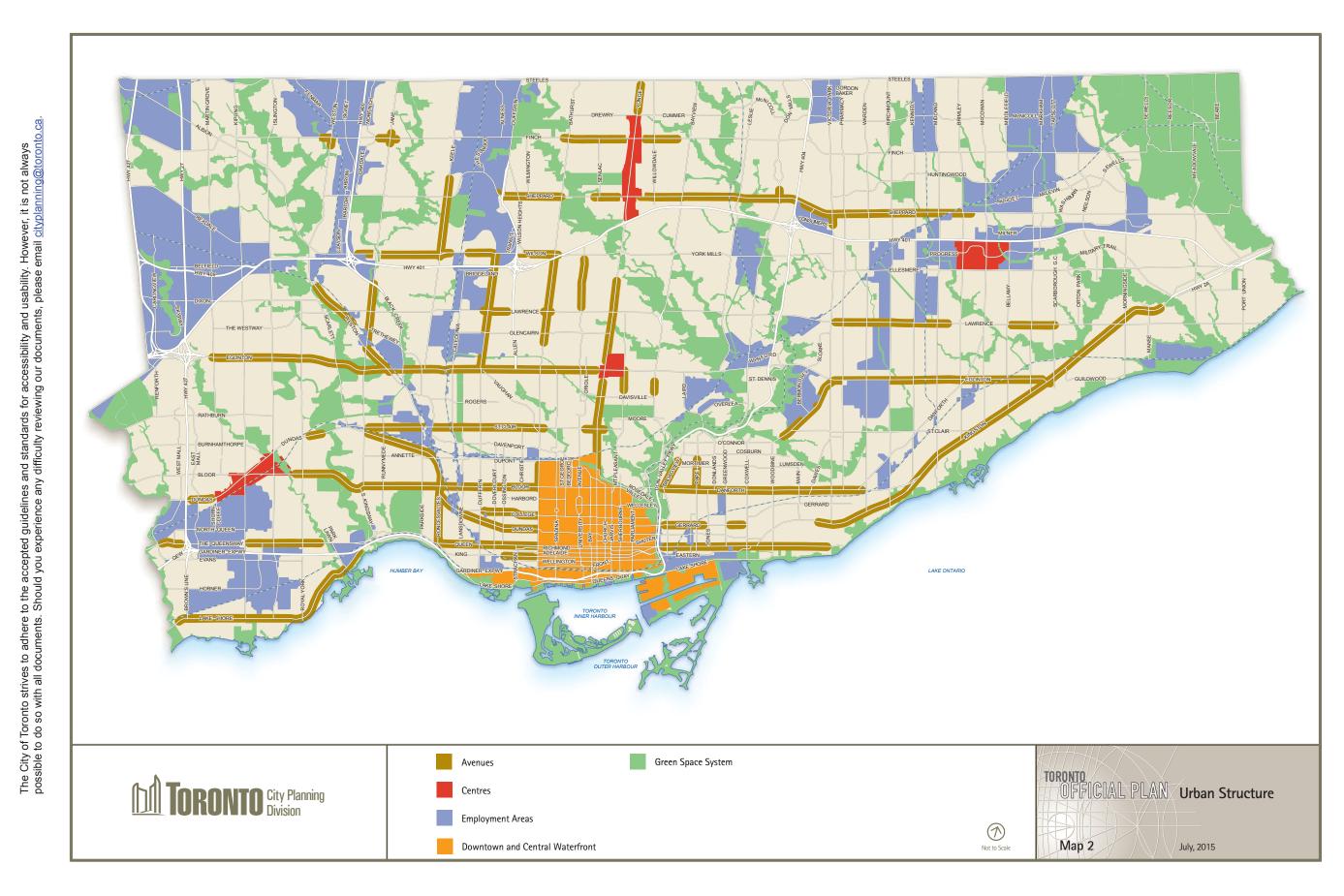
Map 6: Access to transit

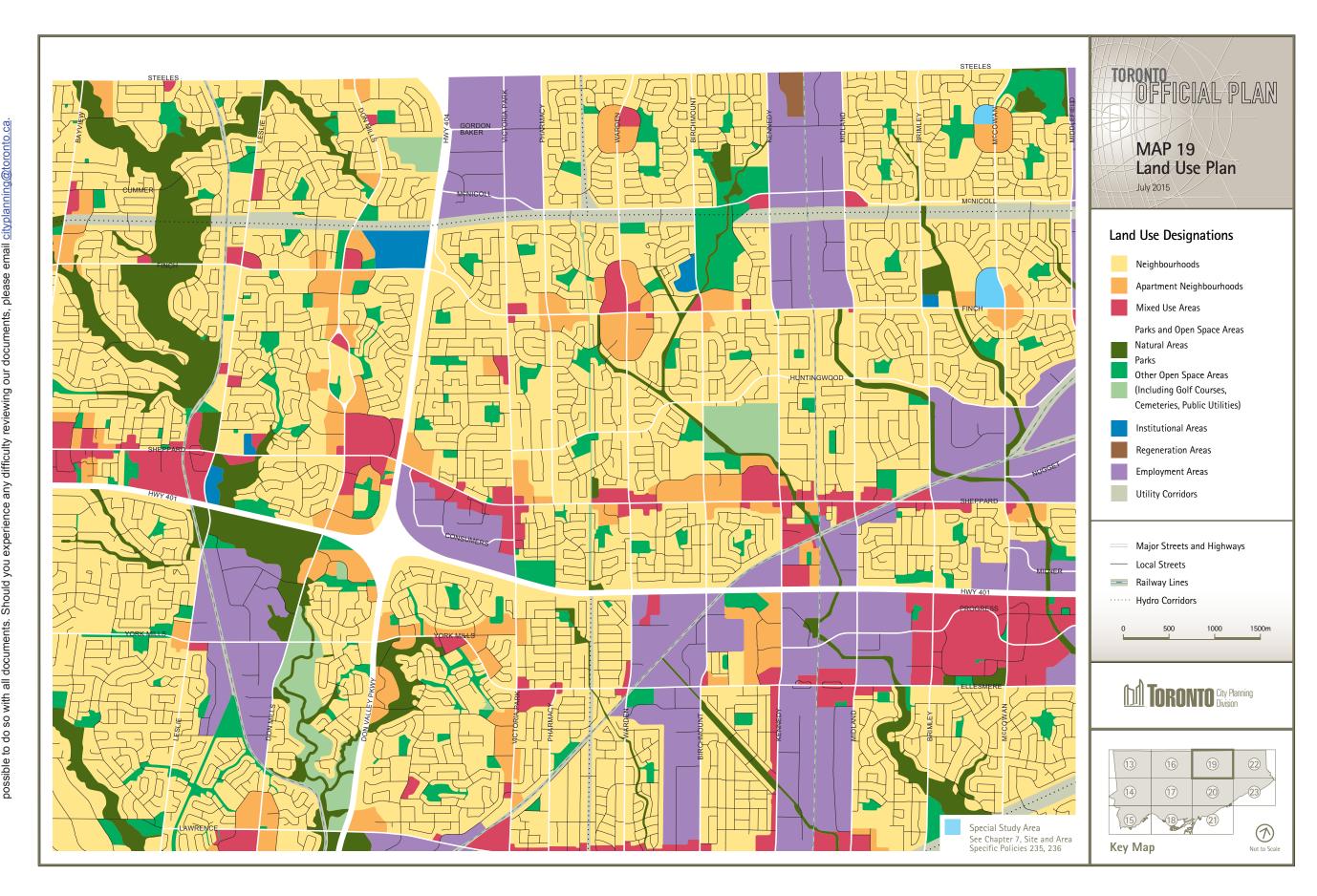
Source: Toronto Transit Commission

Map 7: Pedestrian and cyclist access

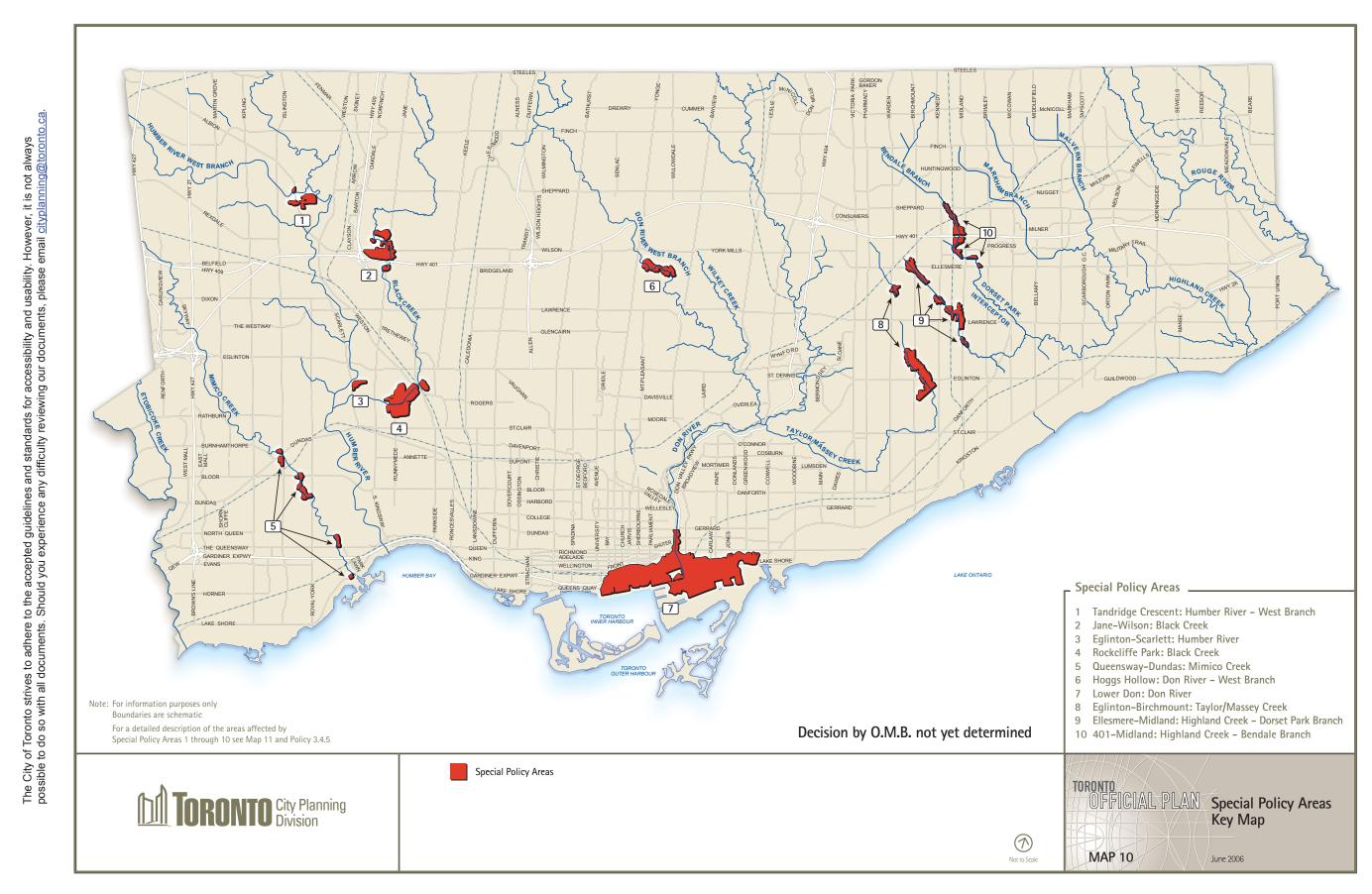


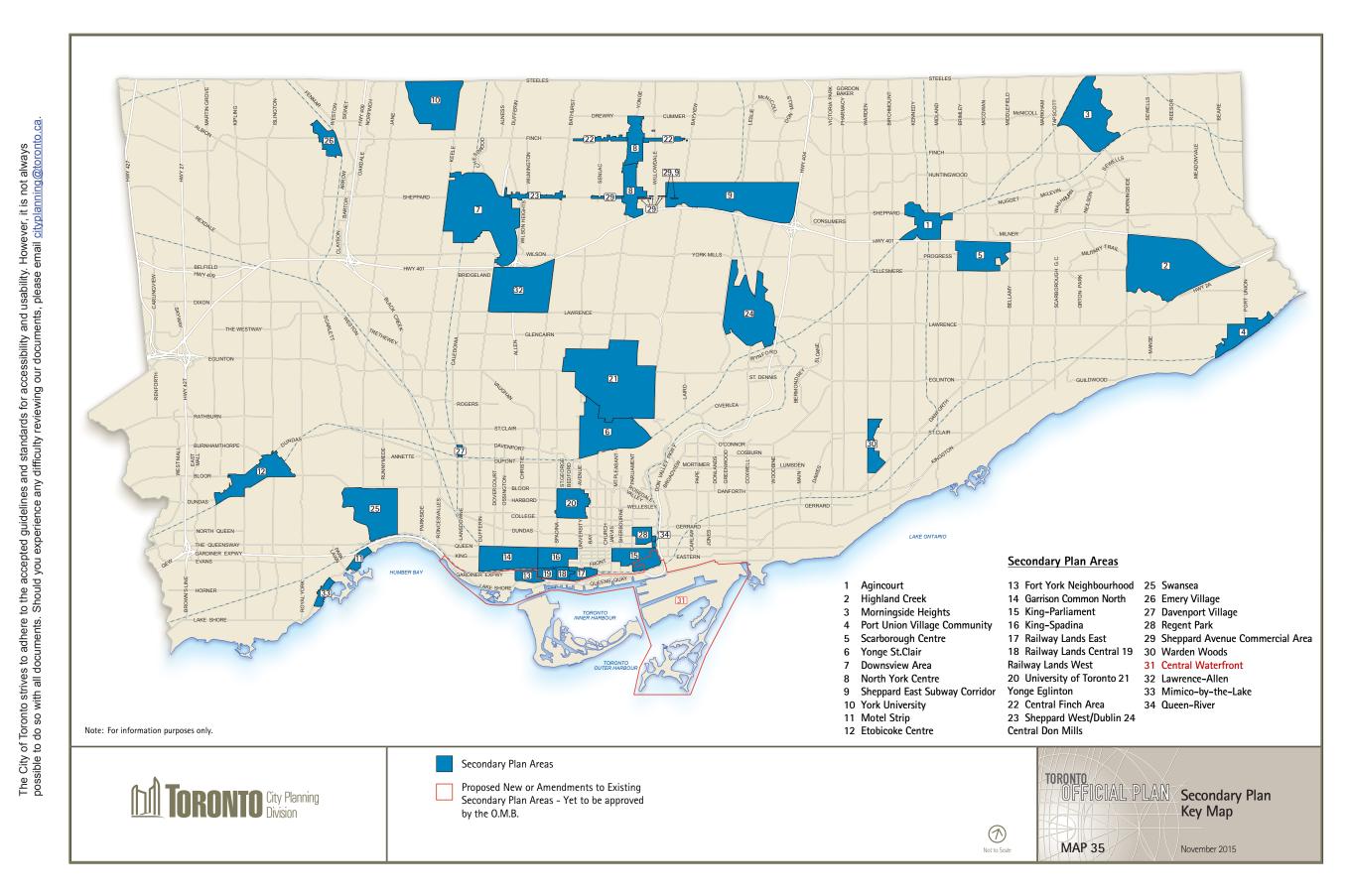
Source:





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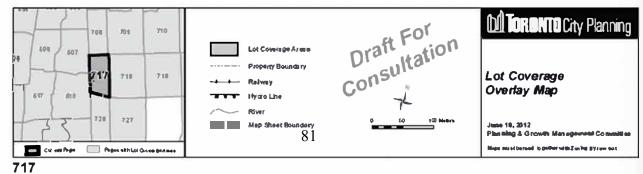




Source: City of Toronto Official Plan

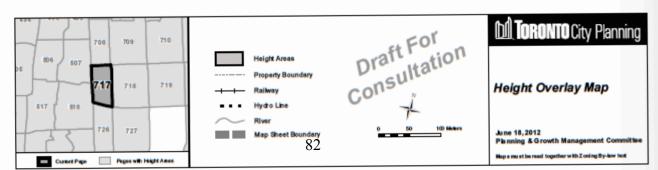
Map 13: Toronto City. Planning Lot Coverage Overlap Index Map M
717\_\_\_\_\_\_





Source: City of Toronto Official Plan

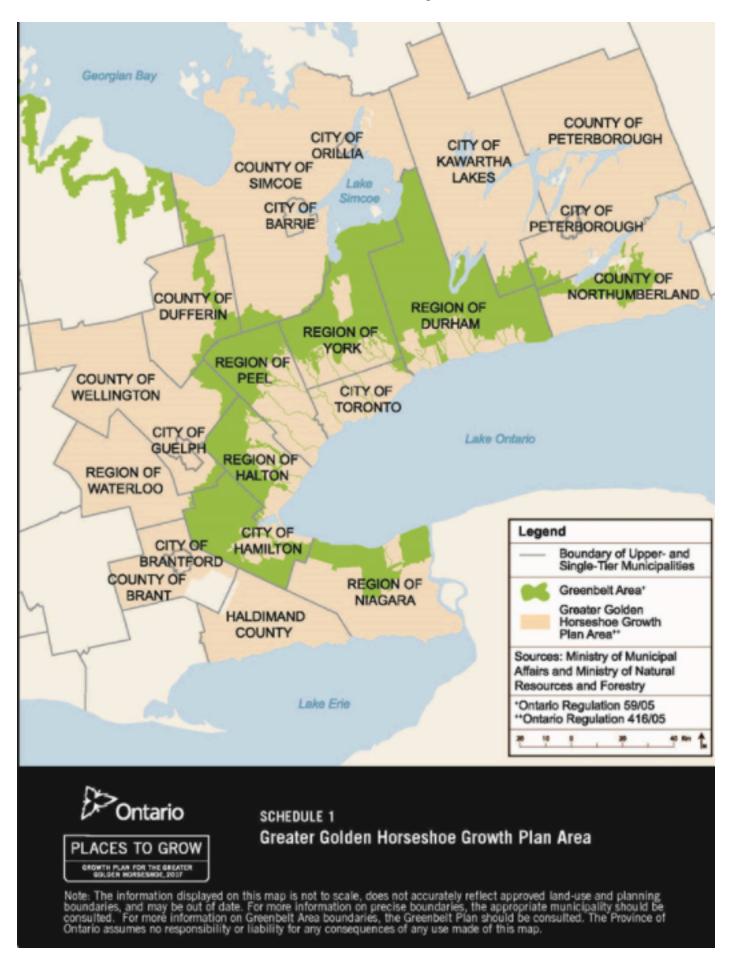


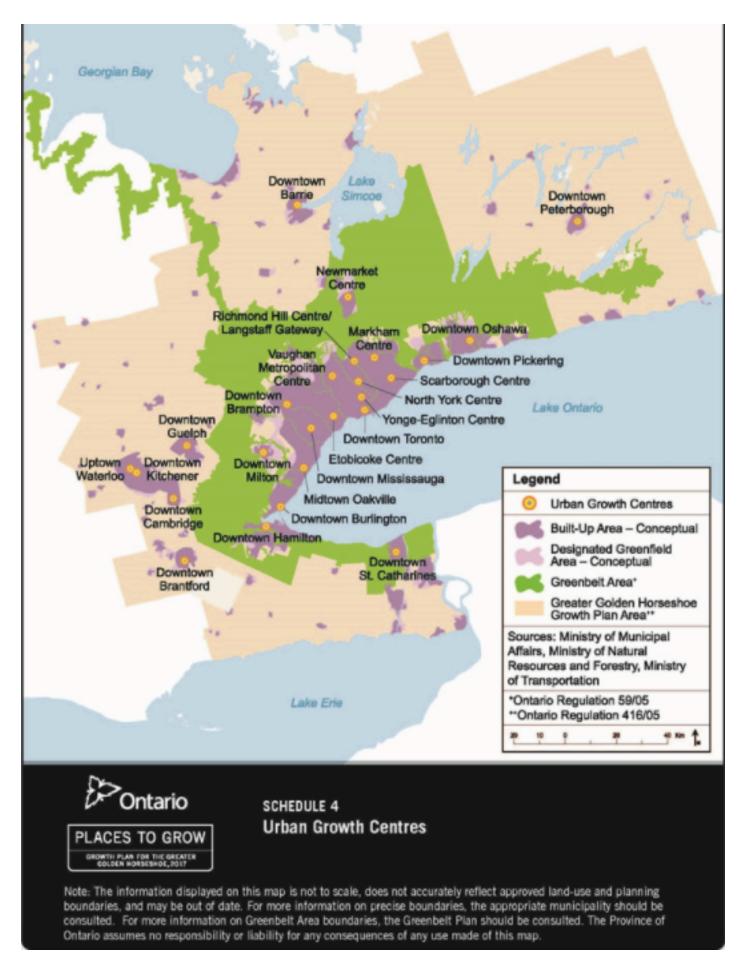


Source: City of Toronto Official Plan

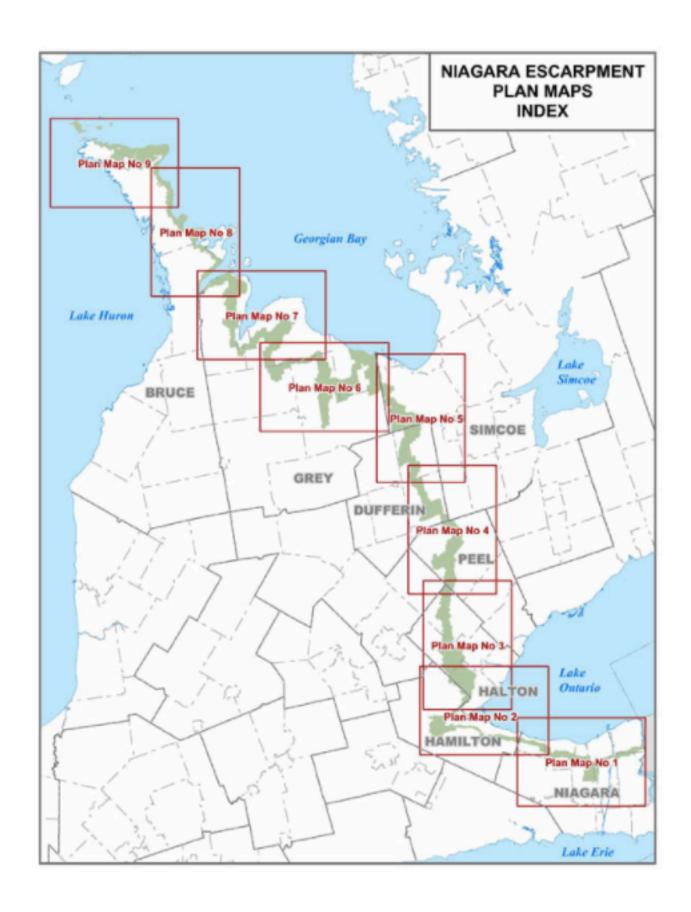


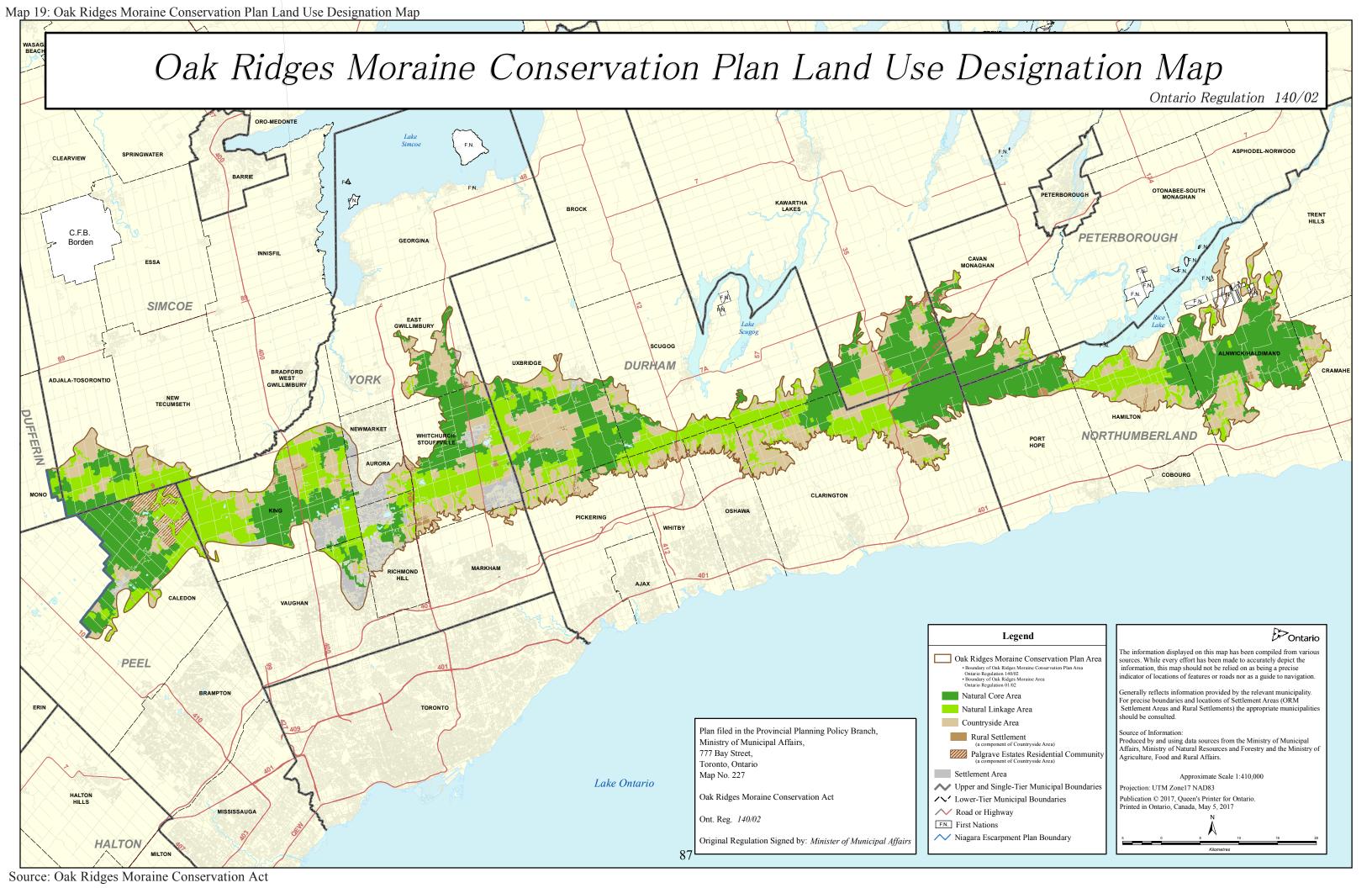
Map 16: Schedule 1 – Greater Golden Horseshoe Growth Plan Area Map





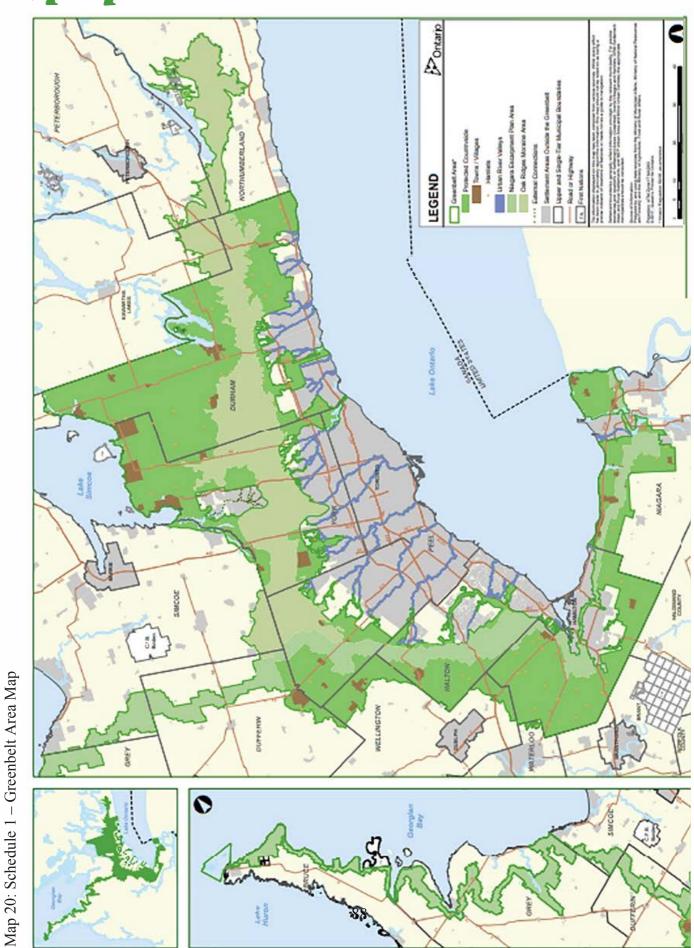
85





### Schedule 1: Genenbelt Area

# greenbelt



Map 21: Toronto and Region Conservation Authority area

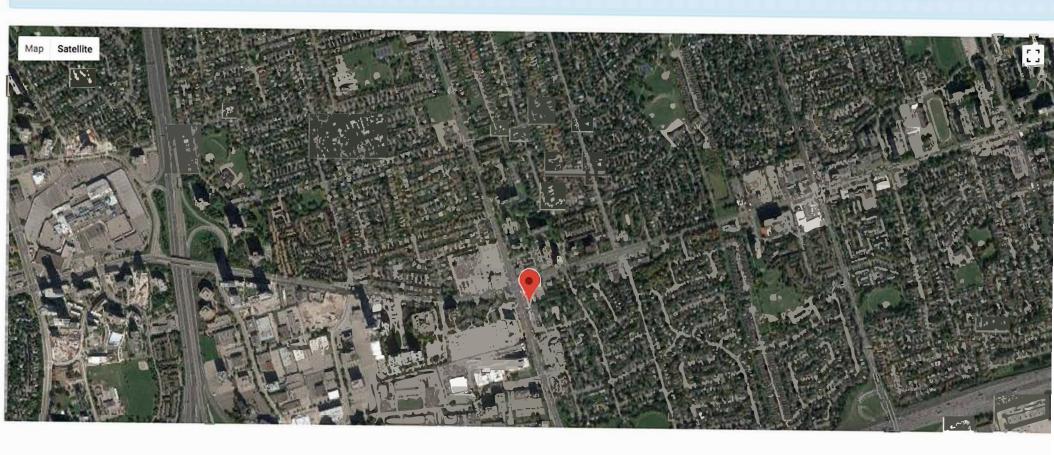
### 2585 victoria park avenue

**SEARCH** 

✓ I agree that I have read and understood the Terms and Conditions

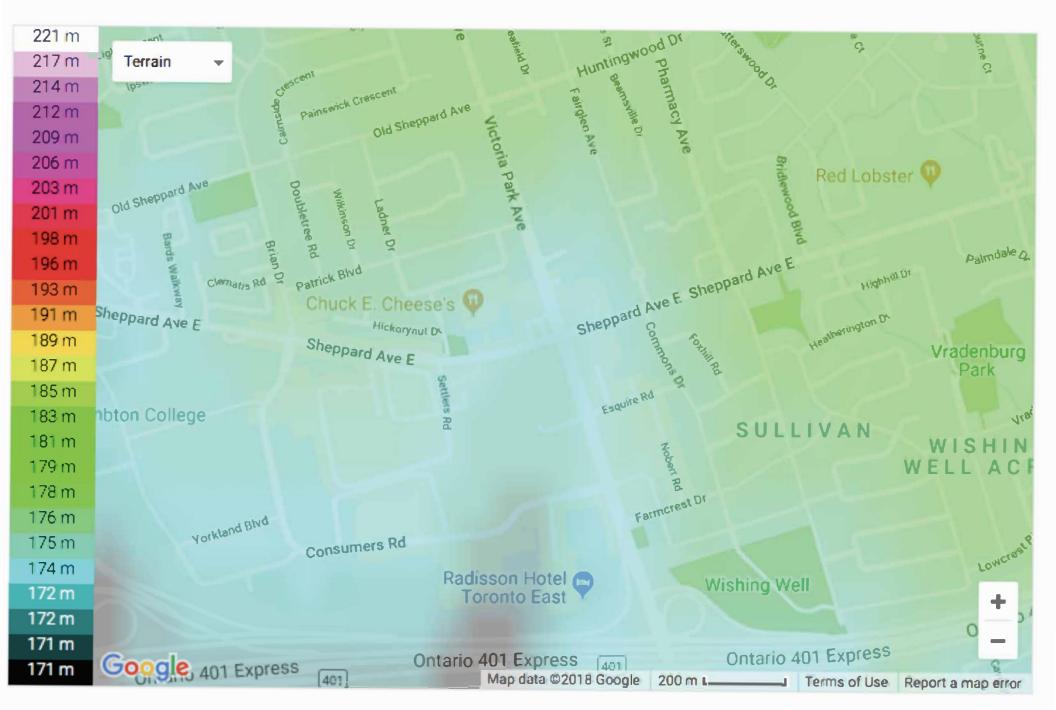
That address does not appear to be within a TRCA Regulated Area.

REQUEST MORE INFORMATION ON THIS LOCATION



Source: Toronto and Region Conservation Authority

Map 22: Elevation



MARGINAL NOTES

Map 22: MNR Ontario Geological Survey Preliminary Map P.2204 Geological Series

of recent and glacial deposits in the Metropolitan Toronto and surrounding areas. The colours and patterns on the map depict the type of sediment on the ground surface. The profiles provide the local sequence of sedImentary layers; the legend lists all of the deposits, generally from oldest (at the bottom) to youngest (at the top). The legend is organized by origin of deposit (rivers, lakes, and ice); some units are therefore not isted chronologically and footnotes provide time terms for those excep-

The bedrock consists of shale, interbedded dolomitic siltstone, and minor igo. These beds, named the Georgian Bay Formation, are approximately 250 m thick and dip to the southeast at about 5 m/km. Following long periods of additional sedimentation and erosion, the ancient Laurentian River and its tributaries cut several deep, poorly-defined bedrock valleys trending northwest-southeast across the area (see cross-sections). They have an important influence on drift thickness and groundwater distribution in the Toronto area.

The landscape of Toronto and the surrounding territory features two gently sloping surfaces divided by a prominent shore-bluff formed by glacial Lake Iroquois. South of this shore-bluff, the old lake bottom is almost level. North of the Iroquois bluff, the surface is a gently undulating till plain that gradually rises towards the north until it meets the Oak Ridges Moraine. This till plain includes several oval hills oriented southeast:/northwest. These drumlins indicate that glacial ice moved out of the Lake Ontario basin towards the northwest, Lake-bottom sediments did not cover these drumlins below the Iroquois bluff in the southeast

The early studies and formal stratigraphy of the glacial and recent depo-

TABLE 1 SUMMARY OF LAKES IN THE TORONTO AREA.

	m (feet) a.s.l.	years B.P. <sup>2</sup>	
Lake Ontario	75 (246)	present	Toronto Islands, beache
Admiralty	~ 0	> 10 000	no deposits
Lake Iroquois	130 (425)	12 500 - 12 000	spits, sand, silt
Peel ponds	183+ (600+)	13 000 - 12 500	sand, silt
Thorncliffe lakes	130+ (425+)	50 000 - 22 000	Thorncliffe Formation
low lake stage	< 69 (< 255)	75 000	Pottery Road Formation
Lake Scarborough	122 (400)	~ 90 000	Scarborough Formation
Lake Coleman	95 (310)	> 125 000	Don Formation

2. B.P. - Before present.

and have been correlated to the Sangamonian Interglacial, judged to be older than 125 000 years. Scarborough Formation: Another old lake, Lake Scarborough deposited

excessive seepage of groundwater and piping at the sand/clay boundary, The Scarborough Formation, about 90 000 years old, represents the earliest Wisconsinan age deposits in the Toronto area.

about 75 000 years B.P. Sunnybrook Till: As glacier ice returned to the Toronto area it moved out

of the Lake Ontario basin incorporating pre-existing deposits, especially Lake Scarborough clays. This ice then deposited a clay-rich till known as

region, two tills, the Seminary (unit 2b) and the Meadowcliffe (unit 2a) interrupt this complex lake sequence. Fossil remains from these deposits ndicate cool-climate conditions similar to the Scarborough Formation lake beds. Radiocarbon dating, however, shows the Thorncliffe Formation to date from roughly 22 000 to 50 000 years B.P. (Middle Wisconsin-

13 000 years ago.

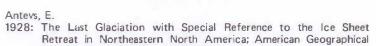
drained towards the Ontario basin. This created extensive shallow lakes over large areas of Peel and adjacent counties. The lake deposits (units 7 and 8)1, termed the Peel ponds, consist of a thin covering of sand,. silt, and minor clay.

including those of glacial Lake Iroquois.

drained via the Hudson River at Rome, New York. This stable stage formed the prominent shoreline features of glacial Lake Iroquois between 12 500 and 12 000 years B.P. Westward moving lake currents built sandy, pebbly spits or islands (unit 11), which are similar to the present Toronto Islands. A well-marked shoreline, including bluffs up to 15 m high, was established across the centre of the City of Toronto, south of St. Clair Avenue. In Toronto, the elevations for this shoreline range from 53 m (174 feet) in the east, to 61 m (200 feet) in the west, above Lake Ontario. This is due to warping of the land-surface following glaciation. Additional Lake Iroquois deposits include a general covering of sand (unit 10) below the shoreline, to a silty bottom cover (unit 9) in the eastern extent of the

Recent deposits: Due to extensive valley erosion during late-glacial and recent times modern river deposits (unit 13) are spread over very wide floodplains of the modern rivers. Sediment supply to Lake Ontario by these rivers and by bluff erosion at the Scarborough bluffs has formed spits, creating the present Toronto Islands. Considerable fill (unit 15) has been added to the islands and waterfront since about 1910, especially for such new projects as Harbourfront, Ashbridge's Bay, and Bluffer's

<sup>1</sup> Due to the scale and availability of the mapping all of these deposits may



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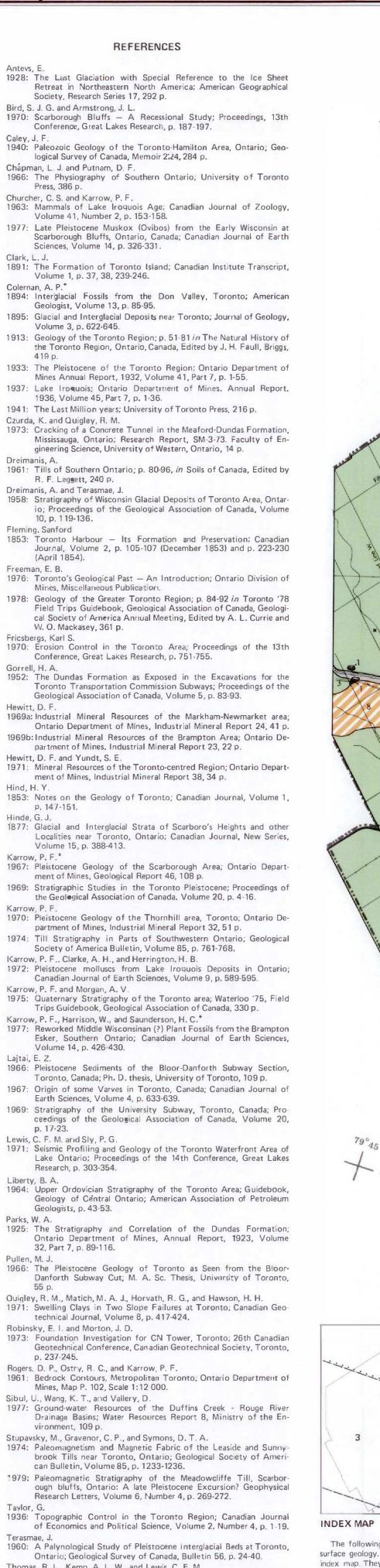
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MUNICIPALITY OF METROPOLITAN TORONTO Lake Ontario **PURPOSE OF THE MAP** Quaternary geology involves the events and deposits of glacial and recent times: elements that have shaped the landscape and soil strata of the Toronto region. The purpose of this map, then, is to summarize existing information concerning the Quaternary (and bedrock) geology of this region. This map serves as an introduction to further geological and geotechnical studies in the Toronto area. Therefore, the expected users include the general public, students, and earth-science professionals. This is part of a series of publications that will outline the urban geology, including engineering aspects, of the Toronto area. This publication is composed of several elements. The geological map (scale 1:100 000) is supplemented by north-south and west-east crosssections (scale 1:25 000) drawn along the subway routes. The detailed geology of well-studied locations is presented as reference sections. More specific information is available from the individual maps Lake Ontario (see index map) and the bibliography. (75 metres a.s.l.) Feet Metres Feet Metres a.s.l. Metres Feet unПybrook Drift (Bloor Member) unnybrook Till Halton Till unnybrook Drift Wentworth Till gravel nnybrook Till trery Road Fm. Sunnybrook Til Scarborough Fm carborough Fm Scarborough Fm.? sand, gravel BLUFFER'S PARK on Fm./York Till Georgian Bay Fm 5 km Don Valley Woodbridge 3. Stratigraphy of the Scarborough Bluffs Brickyard Railway Cut Horizontal scale is 1:24,000. Vertical exaggeration is x 8. REFERENCE SECTIONS (1-3)0 5 10 km The following references were the source of most of the Metres Feet surface geology. The areas of these maps are shown on the index map. They are at a larger scale and will generally provide the user with more detailed information for particular areas. All have been published by the Ontario Department (or Division) of Mines. 1. Coleman (1933): The Pleistocene of the Toronto Region; ODM Map 41g. Scale 1:63 360. 2. Hewitt (1969a): Industrial minerals of the Markham-Newmarket area; ODM Map 2124. Scale 1:63 360. 3. Hewitt (1969b): Industrial mineral resources of the Brampton area; ODM Map 2176. Scale 1:63 360. 4. Karrow (1965): Pleistocene geology of the Scarborough area; ODM Maps 2076 and 2077. Scale 1:31 680. 5. Karrow (1970): Pleistocene geology of the Thornhill area; ODM Preliminary Map P. 244. Scale 1:25 000. Pleistocene geology of the Township of North York; ODM Map 1955-6. Scale 1:31 680. SECTION N-S 7. Watt (1968): Pleistocene geology of Etobicoke; ODM Map 2111, Scale 1:31 680. (Yonge Street subway) 8. White (1973): Quaternary geology of Bolton; ODM Map 2275. Scale 1:63 360. Horizontal scale is 1:25,000. Vertical exaggeration is x 10. Note: This index includes only the most recently published

Ministry of Hon. James A. C. Auld

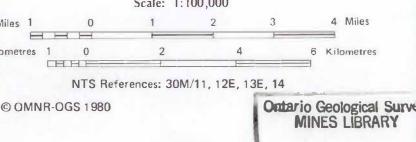
Resources Deputy Minister

ONTARIO GEOLOGICAL SURVEY PRELIMINARY MAP P. 2204 GEOLOGICAL SERIES

**QUATERNARY GEOLOGY** 

# **TORONTO SURROUNDING AREA**





QUATERNARY RECEIVED RECENT DEPOS 15: Man-made deposits: fill. 14 Lake Ontario beach and nearshore deposits: sand,

**LEGEND** 

organic material. **ICE-AGE DEPOSITS** RIVER DEPOSITS Older river deposits<sup>a</sup>: sand, gravel in terrace remnants.

13 Modern river deposits: sand, silt, minor gravel and

**GLACIAL LAKE DEPOSITS** 1 Lake Iroquois<sup>b</sup>, beach or bar deposits: gravel, sand. 10 Lake Iroquois, shallow-water deposits: sand, silty 9 Lake Iroquois, deeper-water deposits: silt, clay.

Peel ponds; shallow-water deposits: sand. Peel ponds; deeper-water deposits: silt, clay. 6 Older lakes<sup>C</sup>; shallow-water deposits: sand (Formations: 6a, Thorncliffe; 6b, Scarborough; 6c, Don).

Older lakes; deeper-water deposits: silt, clay. (Formations: 5a, Thorncliffe; 5b, Scarborough; 5c, Donl. GLACIAL ICE DEPOSITS 4 Ice-contact deposits: sand, gravel, silt in eskers and morainic ridges. oung tills<sup>b</sup>: clayey silt till (Wildfield, 3a; Halton, 3b)

BEDROCK

nale, interbedded siltstone, and minor limestone,

and sandy silt till (Wentworth, 3c; Leaside, 3d). Older tills<sup>C</sup>: silty clay to silt till (Meadowcliffe, 2a; Seminary, 2b; Sunnybrook, 2c) to clayey sand till (York, 2d). PALEOZOIC ORDOVICIAN

> a. Multiple age: 12a, deposited at levels lower than Lake Iroquois; 12b, Pottery Road Formation; 12c, pre-Wisconsinan? b. Late Wisconsinan, c. Middle Wisconsinan and older.

## **SYMBOLS**

Georgian Bay Formation).

direction of ice move-Small bedrock outcrop. Lake Iroquois shoreline. W Location of cross-

## Quaternary map, two types of profiles have been added to the

map. First, generalized cross-sections located along the existing subway routes show the depth and variation of the sediments to bedrock. Section W-E, the Bloor Street subway line, illustrates the thicker, more complex sediments located in Scarborough relative to the thin deposits in Etobicoke. Section N-S, the Yonge Street subway line, shows thick sediment patterns north of the Lake Iroquois shoreline and thinner deposits on the lake plain to the south. Second, three reference sections are included as examples of the

detailed geological information that provides the basis for extending the Quaternary stratigraphy in the Toronto area. The formal Quaternary stratigraphic names have been added to these sections for the interested reader. The reference sections are modified from: 1. Terasmae (1960;

2. Karrow and Morgan 1975; 3. Karrow 1967. The subway profiles were supplied by J. Wong of the Toronto Transit Commission with additional data from Watt (1954, 1957, and 1968).

### SOURCES OF INFORMATION

H. Q. Golder Associates Ltd. Toronto Transit Commission

Ministry of Transportation and Communications (Ontario) Ontario Hydro City of Toronto Public Works Department Metropolitan Toronto and Region Conservation Authority

John Westgate, unpublished data Drafting by D. C. Roumbanis and Lorraine Farrell. Design by D. R. Sharpe and Raimonds Bałgalvis.

Toronto. Metric Conversion Factor: 1 foot = 0.3048 m

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Information from this publication may be quoted if credit is given. It is recommended that reference to this map be made in the following form:

1980: Quaternary Geology of Toronto and Surrounding Area;

INTRODUCTION This Quaternary geological map presents the distribution and sequence

BEDROCK GEOLOGY

limestone, which were deposited in shallow seas about 450 million years TOPOGRAPHY

portion of the area. Dissecting these two sloping plains are large river valleys which, in part, mirror the preglacial river valleys cut in the bedrock surface. These large valleys (of the Humber, Don, and Rouge rivers) were not totally formed by present-day river discharge, Major erosion occurred during the drainage of a series of late-glacial lakes.

### QUATERNARY GEOLOGY

sits in the Toronto area are summarized by Karrow (1969). The basic sequence of deposits, representing three main glacial and three nonglacial periods, was known over 100 years ago. The Toronto sequence is famous across North America because of the well-preserved record of fossil-rich deposits indicating both warm-climate and cool-climate conditions. The warm-climate interglacial beds (Don Formation: 5c, 6c) indicate temperate climates, up to 3°C (average) warmer than present. The cool-climate intraglacial beds (Scarborough Formation: 5b, 6b) indicate conditions possibly 5°C cooler than present. Detailed studies of these fossiliferous beds and adjacent glacial deposits have revealed an intricate story of the events and climates over the past 200 000 years in the Toronto area. The following description traces this history sequentially.

# QUATERNARY HISTORY

York Till: The oldest exposed glacial deposits in the Toronto area are known as the York Till (unit 2d; see reference section, sections 1 and 2) It is a dense clayey to sand till that has incorporated much of the underlying Georgian Bay Formation, upon which it usually rests. This till is videspread, commonly being found in excavations in downtown Toronto. York Till underlies the interglacial Don beds and represents a glaciation Illinoisan Stage) predating the other tills (Wisconsinan Stage) in the Toronto region, about 200 000 years ago.

Don Formation: Following the deposition of York Till, climates warmed dramatically, to about 3°C warmer than present day climate. The warmclimate fossils are contained in deltaic deposits of clay, sand, and gravel (units 5c, 6c), representing the oldest in a series of lakes (Table 1) to affect the Toronto area. This lake, called Lake Coleman, stood 20 m (65 feet) or more above Lake Ontario (75 m, 246 feet). Its deltaic deposits cover about 65 km<sup>2</sup>, with up to 10 m of sediment. The Don beds are also commonly encountered in downtown excavations.

1. All lake levels (where appropriate) are measured approximately from their

Examples of important fossil remains include Black Locust (a tree which presently grows far to the south of Toronto), insects, bison, and large fresh-water clams, which are key indicators of these beds. The warmclimate Don beds lie between the deposits of two major glacial episodes

deltaic sediments (units 5b, 6b) up to 50 m thick at an elevation reaching 47 m (154 feet) above Lake Ontario. This high lake level was created by advancing glacial ice blocking drainage down the St. Lawrence River. In contrast to the underlying Don beds, the Scarborough beds contain fossils (plant fragments, pollen, and shells) that indicate cool-climate (boreal) conditions, about 5°C cooler than present. These deposits cover about 195 km<sup>2</sup> and they are prominently displayed along the Scarborough bluffs (see reference section 3). Here, the deltaic deposits consist of a lower clay member and an upper sand member, a situation that leads to

Pottery Road Formation: Lake leveils in the Toronto area fell to an unknown level (less than 69 m, 225 feet) following Lake Scarborough. Rivers flowing into this low stage cut valleys that were partially filled with sand and gravel. These deposits (unit 12c) are well exposed at the Don Valley brickyard. The Pottery Road Formation is early Wisconsinan in age, based on its correlation with deposits at St. Pierre, Ouebec, dated

the Sunnybrook Till (unit 2c) about 70 000 years B.P. This close relationship to the Scarborough Formation and the widespread extent of such a uniform till sheet allows it to be an important marker bed throughout Thorncliffe Formation: Fluctuating lake beds created by nearby oscillations of the glacier resulted (mainly) in the deposition of lake deposits (units 5a, 6a): stratified sands, silt, and varved clay. In the Scarborough

Young Tills: Once again the glaciers returned, depositing younger tills (late Wisconsinan time) in the Toronto area. Included in this group (unit 3) are several tills, the extent of which is not known in detail. Generally, dense sandy tills (Leaside, 3d, and Wentworth, 3c) underlie the clavey silt to silty tills (Halton, 3b, and Wildfield, 3a) and together cover most of the present land surface. These tills were deposited between 22 000 and

Eskers and Kames: During this latest glacial episode, silt, sand, and gravel were deposited in subglacial channels and crevasses to form the esker and kame deposits (unit 4) of the Brampton esker and the Oak Ridges Moraine near Maple. Both of these deposits are overlain by the Halton Till (3b) of this glacial substage. Peel ponds: As the last ice sheet melted away, it ponded meltwaters that

As waters fell to lower levels, the major river valleys of the Toronto region were eroded and lateral terraces (unit 12)1 were graded to these levels, Lake Iroquois: Lake levels stabilized while the water in the Ontario basin

> 1954: Correlation of the Pleistocene Geology as Seen in the Subway with That of the Toronto Region, Canada; Proceedings of the Geological 1957: Pleistocene Geology and Groundwater Resources of the Township 1968: Pleistocene Geology and Groundwater Resources, Township of

io Division of Mines, Geological Report 117, 119 p.

\*Contains additional earlier references.

Source: Ontario Ministry of Natural Resources

map for an area.

Metres Feet

Drumlin (line indicates

CROSS-SECTIONS AND REFERENCE SECTIONS In order to expand the general information illustrated on the

## Geology compiled (1980) from published maps (see index map).

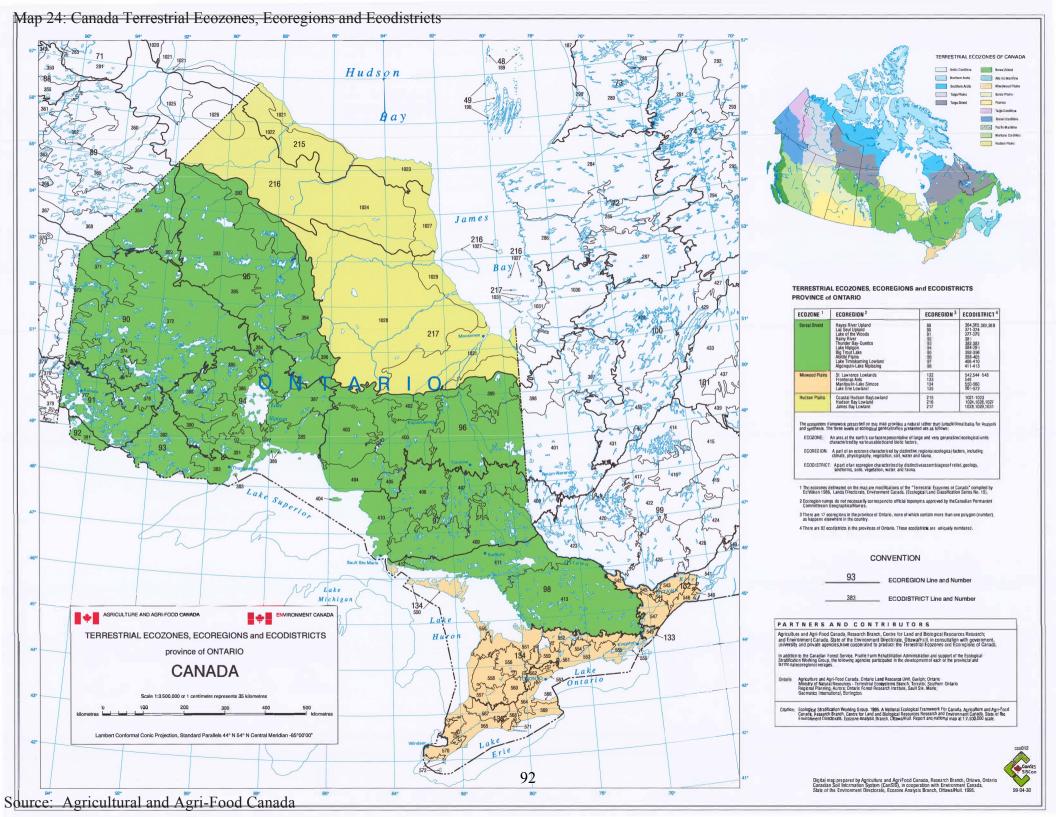
Additional data were made available by the following: Metropolitan Toronto Works Department

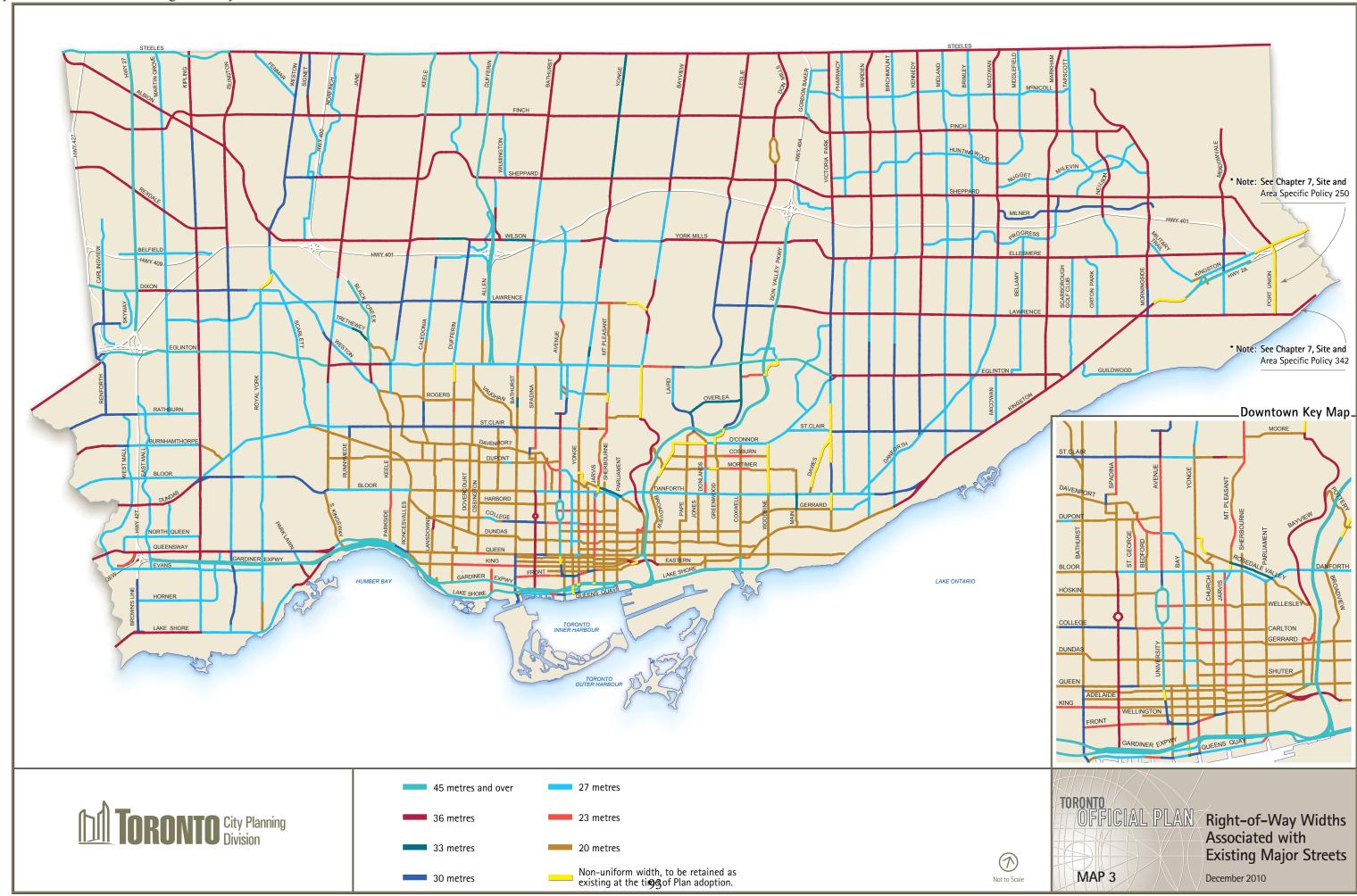
City of Toronto Planning Board

Base-map supplied by the Public Works Department, City of

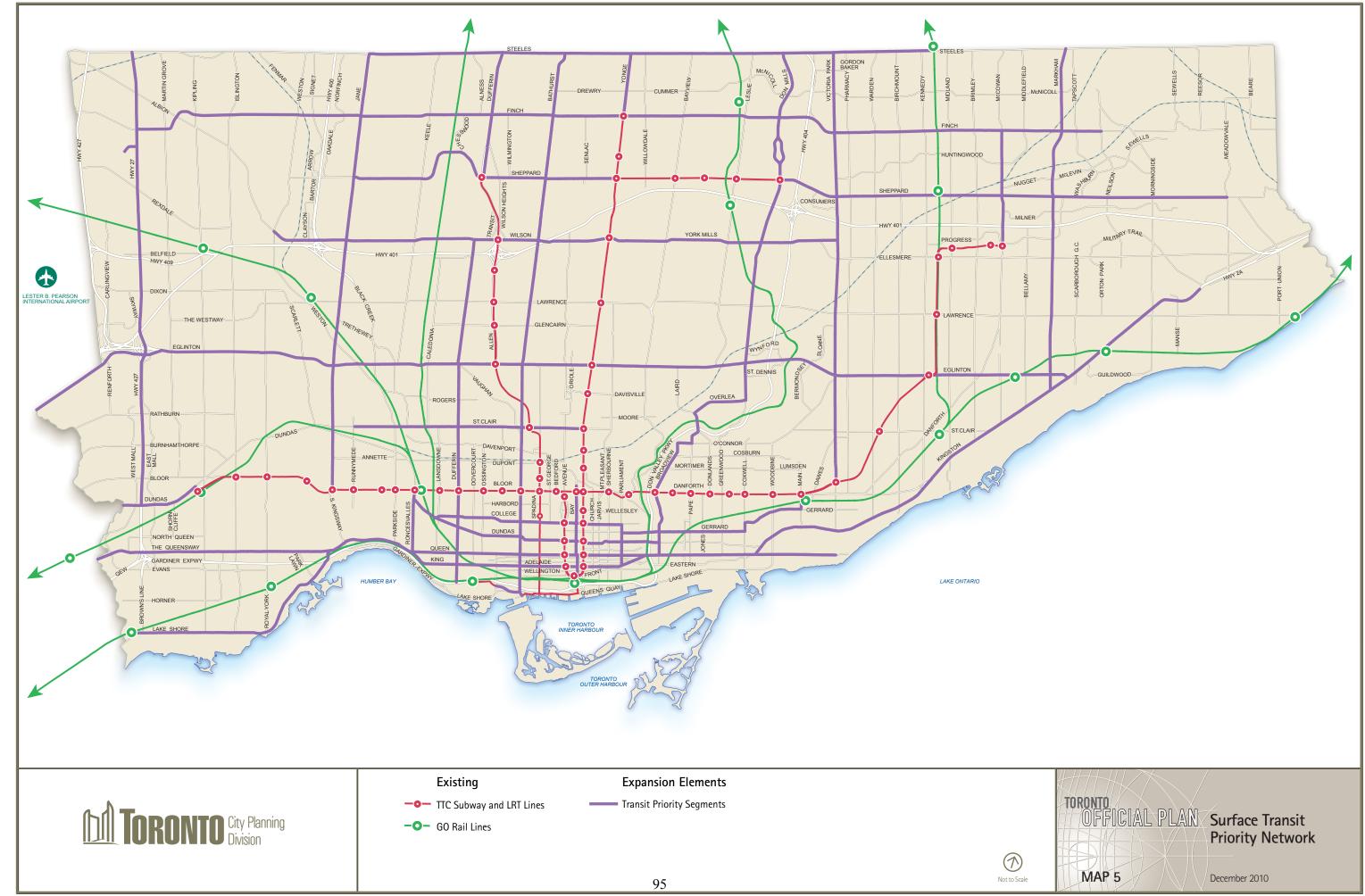
Issued 1980

Ontario Geological Survey Preliminary Map P. 2204, Geological Series. Scale 1:100 000. Compiled 1980.

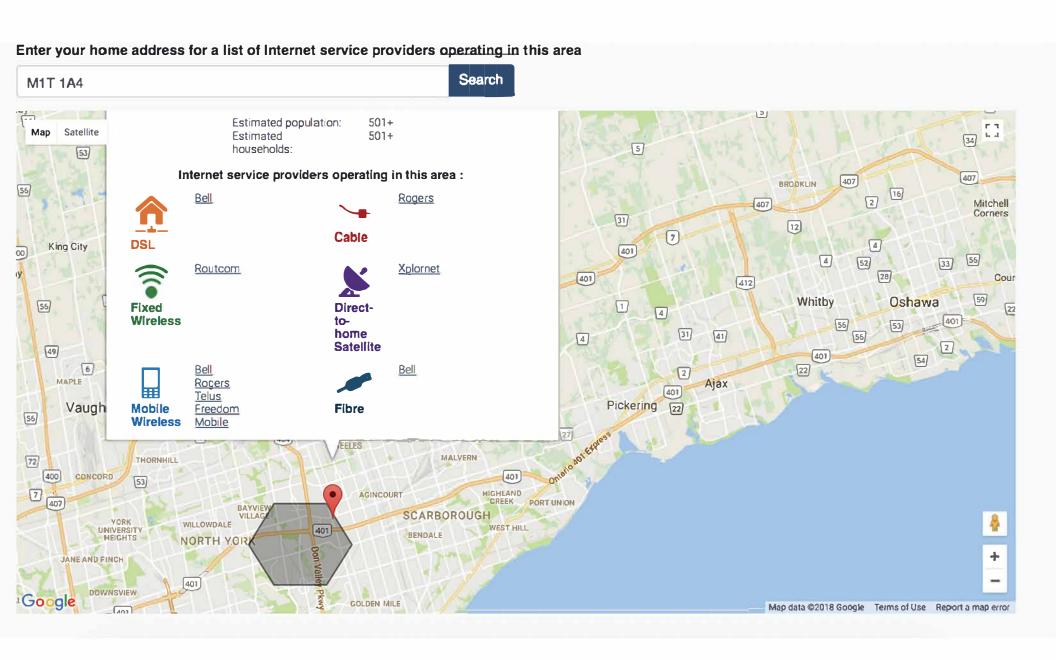




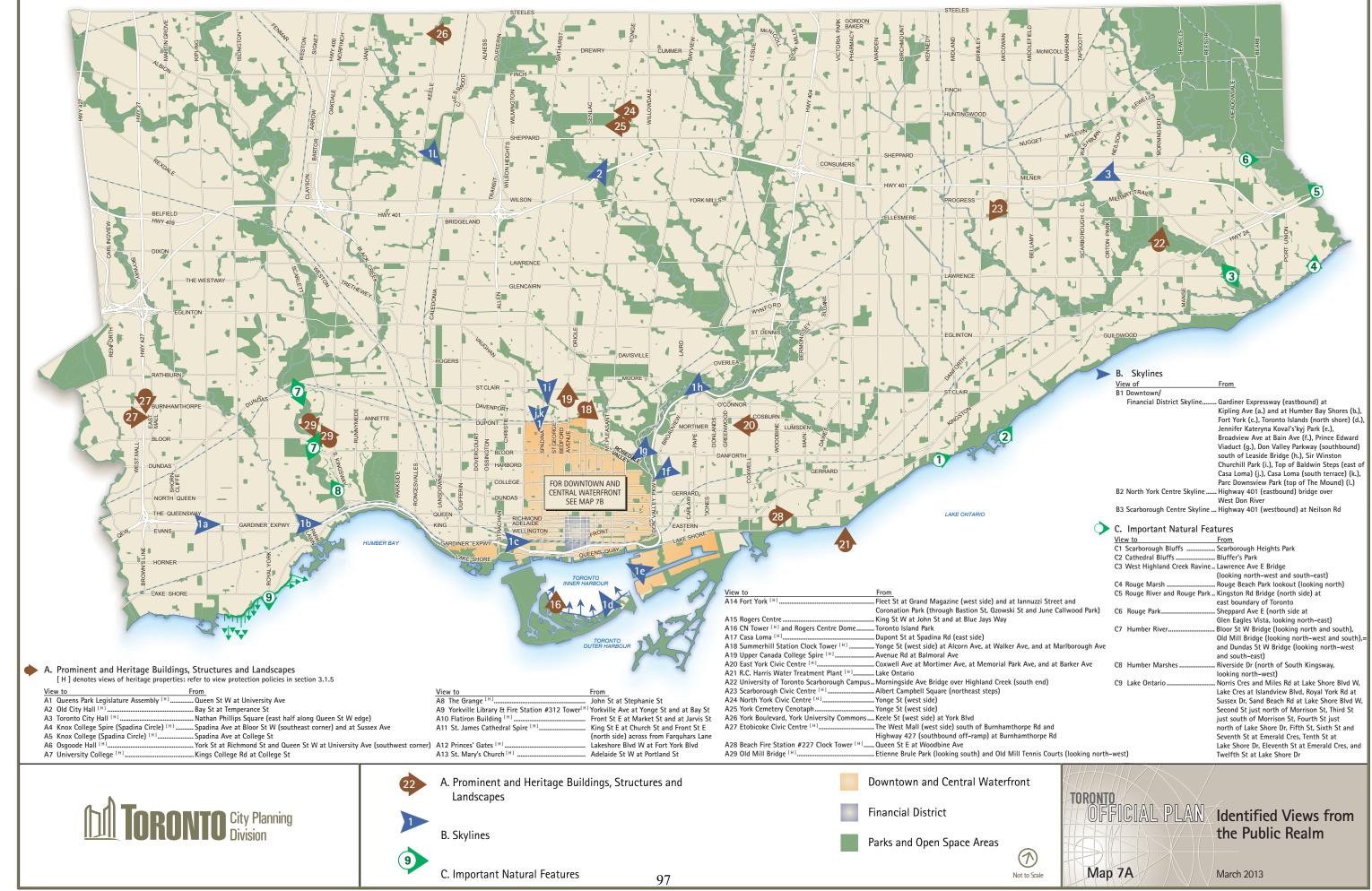




Map 28: Telecommunications



Source: Government of Canada

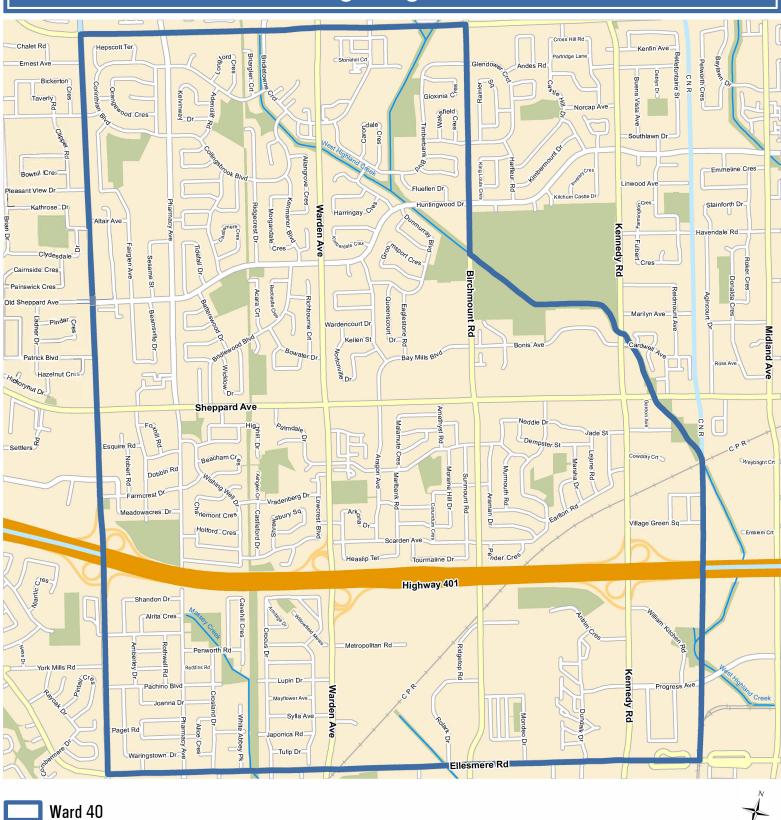


Source: City of Toronto Official Plan

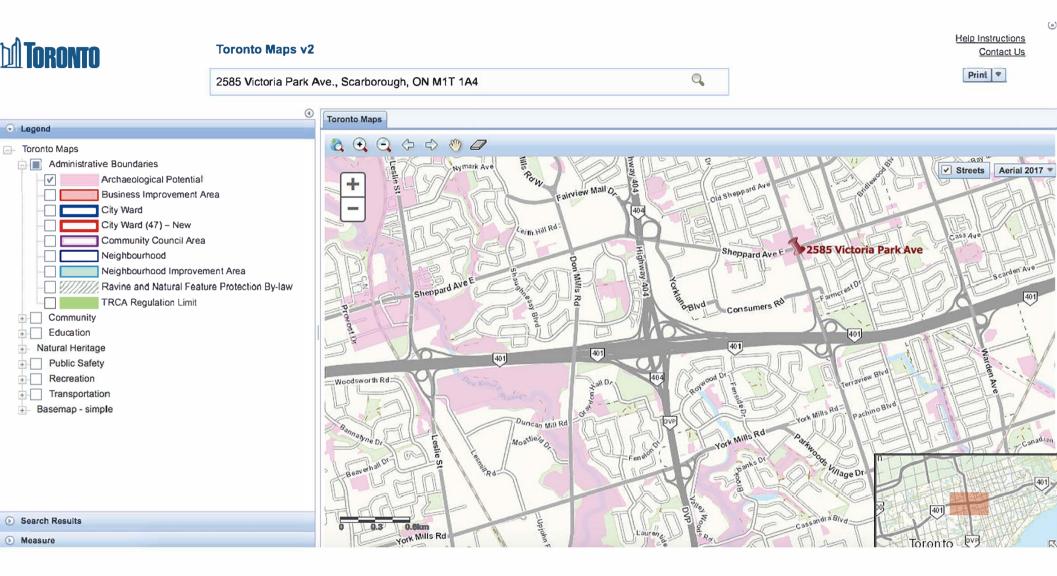
### City of Toronto Ward Profiles

## Ward 40 - Scarborough-Agincourt

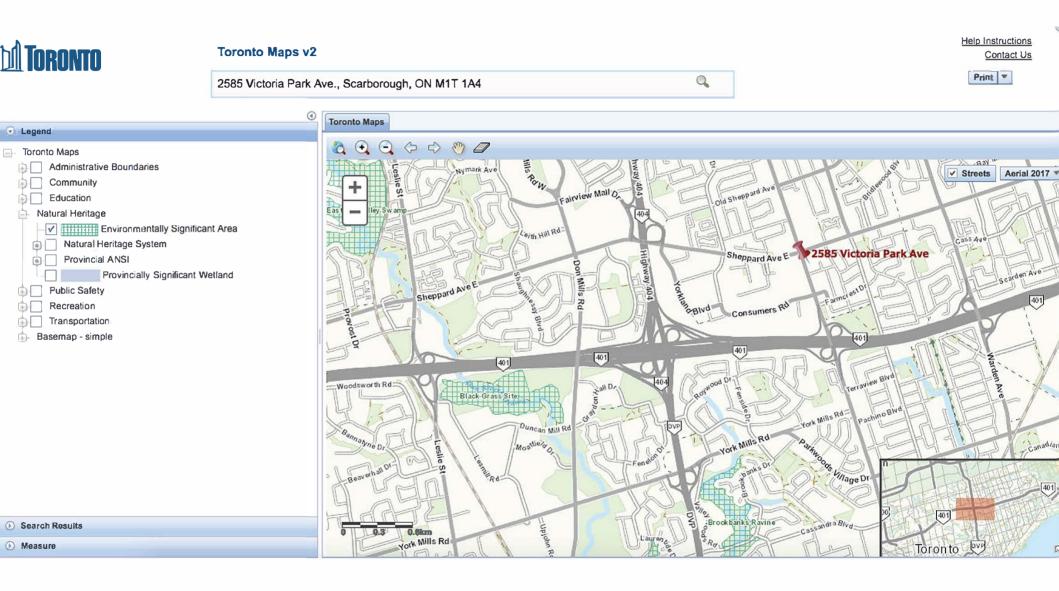




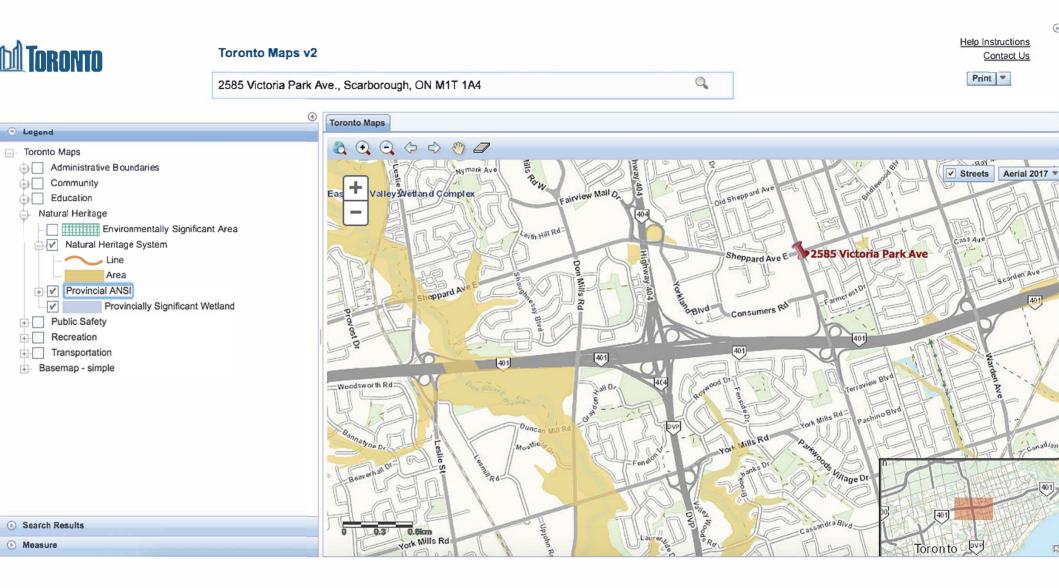
Map 31: Archaeological Potential

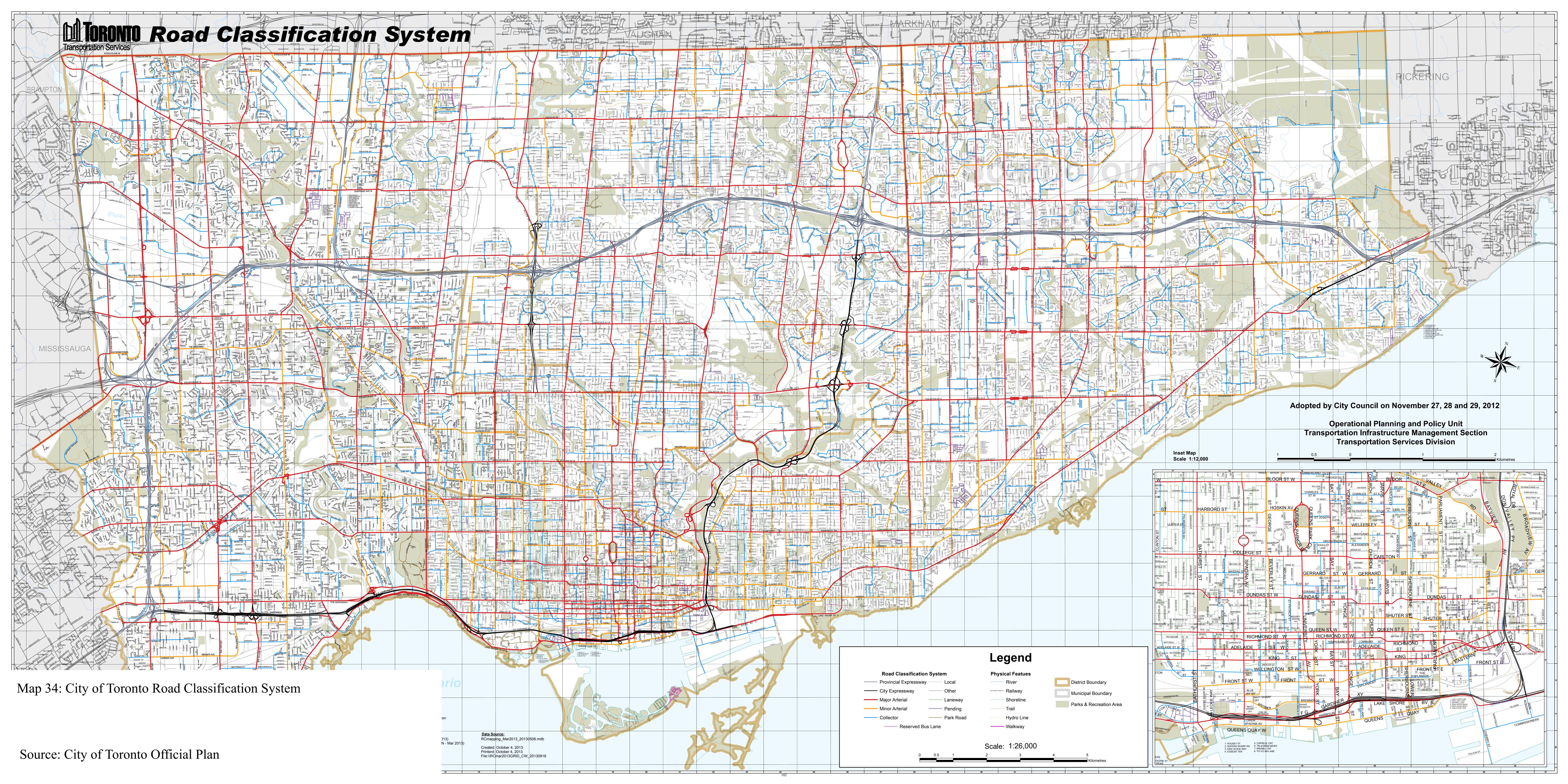


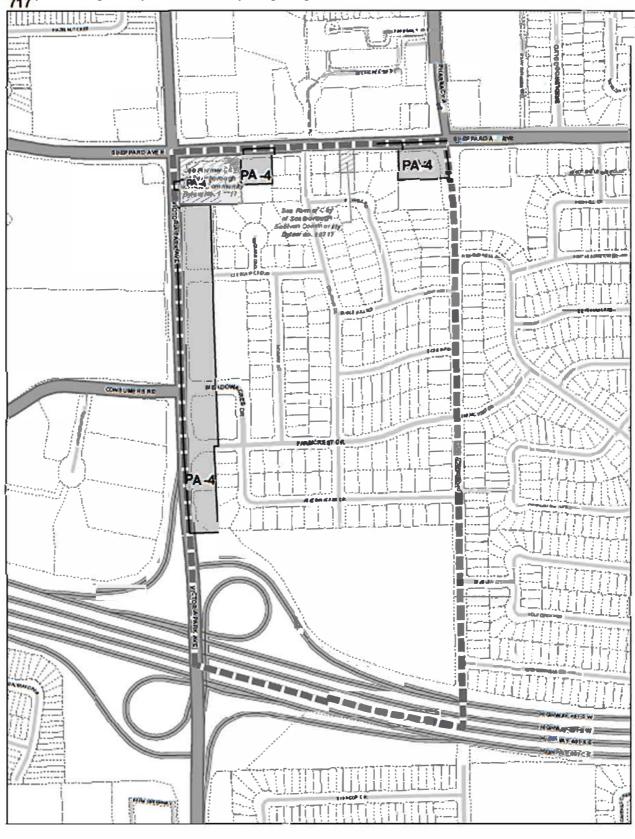
Map 32: Environmentally Significant Areas



Map 33: Natural Heritage System









Source: City of Toronto Official Plan

