



Enhancing our communities



Bayside Apartments, Barrie

PARKING STUDY

Vitmont Holdings (Barrie) Inc.

Document Control

File:

Prepared by:

Prepared for:

420373

Tatham Engineering Limited

Vitmont Holdings (Barrie) Inc.

41 King Street, Unit 4

100 Caster Avenue

Date:

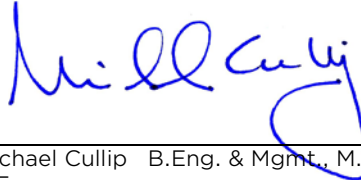
Barrie, Ontario L4N 6B5

Woodbridge, Ontario L4L 5Y9

**January 12,
2021**

T 705-733-9037

tathameng.com

Authored by:	Reviewed by:
	 
David Perks M.Sc., PTP Transportation Planner, Project Manager	Michael Cullip B.Eng. & Mgmt., M.Eng., P.Eng Vice President Head Office Operations

Disclaimer	Copyright
The information contained in this document is solely for the use of the Client identified on the cover sheet for the purpose for which it has been prepared and Tatham Engineering Limited undertakes no duty to or accepts any responsibility to any third party who may rely upon this document.	This document may not be used for any purpose other than that provided in the contract between the Owner/Client and the Engineer nor may any section or element of this document be removed, reproduced, electronically stored or transmitted in any form without the express written consent of Tatham Engineering Limited.

Issue	Date	Description
1	September 11, 2020	Issued for Site Plan Approval
2	January 12, 2021	Site Plan Approval (2 nd Submission)

Document Contents

1	Introduction	1
2	Proposed Development	2
2.1	Site Location	2
2.2	Development Details	2
2.3	Parking Supply	2
3	Parking Review.....	3
3.1	Municipal Parking Standards	3
3.2	ITE Parking Generation Manual, 5 th Edition	4
3.3	Parking Surveys at Proxy Sites	5
3.4	City of Vaughan Parking Study	8
3.5	Parking Reductions – Residential Land-Use	9
3.6	Affordable Housing.....	10
3.7	Active Transportation Improvements	10
3.8	Summary	10
4	Parking Needs Assessment	12
4.1	Parking Justification	12
4.2	Recommendation.....	15
5	Summary.....	16



Tables

Table 1: Parking Rates by Municipality – Apartment	4
Table 2: ITE Parking Generation – Residential Condominium/Apartment.....	5
Table 3: ITE Parking Generation – Affordable Housing	5
Table 4: Parking Survey – Georgian Towers	7
Table 5: Parking Survey – Maplewood Place	7
Table 6: Parking Survey – Wellington Place Apartments.....	8
Table 7: Parking Survey – Kempenfelt View Apartments	8
Table 8: Vaughan Parking Study – Recommended Parking Rates (Multi Family Dwelling)	9
Table 9: 79 Collier Street Parking Supply – Vaughan Parking Rates (Draft)	14

Figures

Figure 1: Site Location	17
Figure 2: Site Plan	18
Figure 3: Proxy Site Locations	19



1 Introduction

Tatham Engineering Limited was retained by Vitmont Holdings (Barrie) Inc. to conduct a parking study in support of the proposed Bayside Apartments residential development, to be located at 79 Collier Street within the City of Barrie. The location of the subject site and the immediate area road network are illustrated in Figure 1.

The purpose of this study is to establish the parking needs of the subject property. In this regard, the study has considered the City of Barrie's current parking requirements, parking survey results from proxy sites within Barrie, parking standards adopted by other municipalities, findings from similar parking studies and methodologies employed in establishing parking demand.



2 Proposed Development

2.1 SITE LOCATION

The subject site is located at 79 Collier Street in the City of Barrie (as per Figure 1). The property is bounded by Collier Street to the north, Mulcaster Street to the east and existing commercial development to the west and south.

2.2 DEVELOPMENT DETAILS

The proposed development is a 16-storey, 136-unit apartment building. With respect to unit type, the site will include the following:

- studio - 7 units;
- 1-bedroom - 78 units; and
- 2-bedroom - 51 units.

A site plan is provided in Figure 2. It is noted that the unit mix will consist of 108 for market rental units and 28 affordable housing units.

2.3 PARKING SUPPLY

The proposed development will provide 112 parking spaces - translating to an overall parking supply rate of 0.82 spaces per unit.

The proposed breakdown of the parking supply is as follows:

- 95 spaces for the 108 market rental units (translating to 0.88 spaces per unit); and
- 17 spaces for the 28 affordable housing units (translating to 0.60 spaces per unit).

Based on the proposed use and the associated parking requirements noted in the *City of Barrie Comprehensive Zoning By-law 2009-141*, the proposed parking supply does not satisfy the existing parking requirements of the City of Barrie. It is the intent of this parking study to review the proposed parking supply in context of available parking data for apartment buildings, establish the parking needs for the site and recommend an appropriate parking requirement.



3 Parking Review

To establish an appropriate parking supply for the site, a review was conducted to consider the following:

- City of Barrie Comprehensive Zoning By-law 2009-141 parking requirements;
- residential parking standards adopted by other municipalities;
- parking demands as per the *ITE Parking Generation Manual, 5th Edition*;
- key findings from other parking studies; and
- results of proxy site parking surveys.

3.1 MUNICIPAL PARKING STANDARDS

3.1.1 City of Barrie

The *City of Barrie Comprehensive Zoning By-law 2009-141* requires that a residential building located within the urban growth centre provide 1.0 space per unit. The City's by-law does not indicate a specific provision for visitor parking, although it is expected that visitors would utilize on-street parking or municipal lots in the area.

3.1.2 Other Municipalities

Parking standards adopted by other municipalities for the apartment building land-use (or equivalent use) are summarized in Table 1.

As indicated, the parking rates for apartment land-uses range between 0.75 and 1.40 spaces per unit. While some municipalities provide blanket rates for an entire geographical region regardless of development attributes, area demographics or population densities, the municipalities of Kitchener, Newmarket, North Bay, Orillia and Peterborough have adopted rates based on site location (i.e. lower parking rates in the downtown areas and higher rates in areas with lower development density). The lower rates in urban growth centres and downtown cores recognize that sites within these areas are typically better served by transit and are closer in proximity to necessary amenities/services and thus have a lesser reliance on the private automobile. As previously noted, the City of Barrie has employed a similar approach for sites within the City's urban growth centre (rates have been reduced from 1.5 spaces per unit to 1.0 space per unit) and is further considering the same for its intensification nodes and corridors.



Table 1: Parking Rates by Municipality – Apartment

MUNICIPALITY	PARKING RATES		
	BASE	VISITOR	TOTAL
City of Barrie (Urban Growth Centre)	1.0	not specified	1.0
City of Cambridge	1.0 spaces per unit	0.25 spaces per unit	1.25 spaces per unit
City of Guelph	1.0	0.25	1.25
City of Kitchener (Urban Growth Centre)	1.0	0	1.0
Town of Newmarket (Urban Centre)	0.7 to 1.2	0.15	0.85 to 1.40
City of North Bay (Commercial Core)	0.50	not specified	0.50
City of Orillia (Downtown Zone)	0.75	not specified	0.75
City of Owen Sound	1.25	not specified	1.25
City of Peterborough (Regional Centre/CBD)	1.0	not specified	1.0

3.2 ITE PARKING GENERATION MANUAL, 5TH EDITION

The Institute of Transportation Engineers (ITE) *Parking Generation Manual, 5th Edition*¹, provides parking supply and demand data for several residential land-uses. In considering the subject development, the data provided for the *multifamily housing - high-rise* (ITE code 222) and *affordable housing* (ITE code 223) land-uses were reviewed.

The ITE data for the *multifamily housing - high-rise* use is summarized in Table 2. It is noted that the ITE data reflects center city core conditions. As noted in Table 2, the ITE *Parking Generation Manual* includes a fitted curve equation that is derived from the parking demand data for the noted land-use. The fitted curve equation can be used to estimate parking demand and can be applied when the Coefficient of Determination (R^2) is greater than 0.50. The R^2 value is a statistical measure that illustrates the relationship between an independent variable (in this case dwelling units) and dependent variable (parked cars). For example, an R^2 value of 0.75 indicates

¹ *Parking Generation Manual, 5th Edition*. Institute of Transportation Engineers. January 2019



that 75% of the variance in the number of parked cars is accounted for by the variance in the number of dwelling units. With respect to the *multifamily housing - high-rise* land-use, the R^2 value is 0.73, indicating that the number of dwelling units is a good indicator of parking demand based on ITE's data set. When applying the fitted curve equation to the proposed 136-unit apartment development, the estimated parking demand is 64 parked vehicles.

Table 2: ITE Parking Generation - Residential Condominium/Apartment

TYPE OF PARKING RATE	PARKING RATES
Average Parking Supply	0.70 spaces per unit
Average Parking Demand	0.46
Peak Parking Demand Range	0.25 to 0.67
Parking Demand - Fitted Curve Equation ^{1,2}	$\ln(P) = 0.94\ln(X) - 0.47$

¹ fitted curve equation where P = number of parked cars and X = number of dwelling units

² reflects peak weekday parking demand (Mon-Fri) between 10:00PM and 5:00AM

As previously noted, the *ITE Parking Generation Manual* also provides data for the *affordable housing* (ITE code 223) land-use, as summarized in Table 3. Similar to *multifamily housing - mid-rise*, the ITE data reflects a dense multi-use urban location.

Table 3: ITE Parking Generation - Affordable Housing

TYPE OF PARKING RATE	PARKING RATES
Average Parking Supply	0.60 spaces per unit
Average Parking Demand	0.53
Peak Parking Demand Range	0.25 to 1.43

As indicated, the ITE data indicates an average parking supply of 0.60 spaces per unit and an average parking demand of 0.53 spaces per unit.

3.3 PARKING SURVEYS AT PROXY SITES

3.3.1 Proxy Sites

Parking surveys were conducted at four proxy sites within the City of Barrie, the locations of which are illustrated in Figure 3. The sites reflect apartment buildings with rental units (as opposed to condominium units, which are owned rather than rented), which is representative of



the proposed development. While there are several condominium style buildings in the downtown area, these are not considered comparable to the proposed development in terms of parking demand, recognizing that vehicle ownership varies between owned and rented units. The sites were identified with input from City staff. A brief description of each proxy site is provided below.

Georgian Towers, 262 Rose Street

Georgian Towers is an 8-storey, 84-unit apartment building located on Rose Street, immediately west of Duckworth Street. While not located within the City's downtown, the site is located along one of the City's intensification corridors (Duckworth Street). The site has a parking supply of 104 spaces, translating to 1.24 spaces per unit.

Maplewood Place, 101 Kozlov Street

Maplewood Place is a 7-storey, 129-unit apartment building located on Kozlov Street, west of Bayfield Street. This site is located in close proximity to several amenities and services along Bayfield Street. The Bayfield Street corridor also has regular transit service, connecting the area to the downtown core. The site provides 202 parking spaces, or 1.57 spaces per unit.

Wellington Place Apartments, 135/139 Wellington Street

Wellington Place consists of a 6-storey, 65-unit building (135 Wellington Street) and a 2-storey 20-unit building (139 Wellington Street). The site is not located within the downtown core, but is located adjacent to several amenities (bank, medical centre, grocery store, pharmacy, strip mall, etc.). The site also has a transit stop in front of the building and is within 600 metres of the Dunlop Street corridor. In terms of parking supply, the site has 76 spaces - or 0.89 spaces per unit.

Kempfenfelt View Apartments, 35 Blake Street

Kempfenfelt View Apartments is a 4-storey, 52-unit apartment located on Blake Street, immediately east of Collier Street and Dunlop Street (Dunlop Street becomes Blake Street at its intersection with Collier Street). The site is located on the east limit of the downtown area, approximately 800 metres from the subject site. The development has 22 private garage spaces and 33 surface/covered spaces for a total of 55 parking spaces, or 1.06 spaces per unit.

3.3.2 Parking Surveys

The parking surveys were conducted by Tatham Engineering staff on Saturday September 5, 2020 (10:00PM to 1:00AM) and Tuesday September 8, 2020 (7:00PM to 10:00PM). The surveys were conducted on a weekday and weekend evening to ensure peak parking demand was



captured (i.e. when most residents would be home). Each site was visited 3 times over the 3-hour period. The parking survey data and resulting parking demands are provided in Table 4 through Table 7.

With respect to the Kempenfelt View Apartments, it could not be determined as to whether the private garages were occupied by a vehicle. As such, the survey data has assumed that each of the private garages was occupied (thus ensuring a conservative approach).

Table 4: Parking Survey - Georgian Towers

PARKING STATISTICS	WEEKDAY PARKING DEMAND			WEEKEND PARKING DEMAND		
	Count 1	Count 2	Count 3	Count 1	Count 2	Count 3
Number of units	84 apartment units					
Parking Supply	104 spaces (1.24 spaces/unit)					
Parking Demand	72	75	76	76	76	74
Parking Demand per Unit	0.86	0.89	0.90	0.90	0.90	0.88

Table 5: Parking Survey - Maplewood Place

PARKING STATISTICS	WEEKDAY PARKING DEMAND			WEEKEND PARKING DEMAND		
	Count 1	Count 2	Count 3	Count 1	Count 2	Count 3
Number of units	129 apartment units					
Parking Supply	202 spaces (1.57 spaces/unit)					
Parking Demand	83	75	80	82	76	75
Parking Demand per Unit	0.64	0.58	0.62	0.64	0.59	0.58



Table 6: Parking Survey - Wellington Place Apartments

PARKING STATISTICS	WEEKDAY PARKING DEMAND			WEEKEND PARKING DEMAND		
	Count 1	Count 2	Count 3	Count 1	Count 2	Count 3
Number of units	85 apartment units					
Parking Supply	76 spaces (0.89 spaces/unit)					
Parking Demand	65	59	57	27	59	59
Parking Demand per Unit	0.76	0.69	0.67	0.67	0.69	0.69

Table 7: Parking Survey - Kempenfelt View Apartments

PARKING STATISTICS	WEEKDAY PARKING DEMAND			WEEKEND PARKING DEMAND		
	Count 1	Count 2	Count 3	Count 1	Count 2	Count 3
Number of units	52 apartment units					
Parking Supply	55 spaces (1.06 spaces/unit)					
Parking Demand	44	44	44	45	47	47
Parking Demand per Unit	0.85	0.85	0.85	0.87	0.90	0.90

As indicated, the parking demand at the proxy sites ranges between 0.58 and 0.90 spaces per unit. It is noted that the demand is fairly consistent between the weekday and weekend peak periods for each site. The observed demand is slightly higher than the ITE demand data, although this is not unexpected given that the proxy sites are not located in the city centre.

3.4 CITY OF VAUGHAN PARKING STUDY

In 2010, the City of Vaughan commissioned a review of the City's parking standards. The review was documented in the *Review of Parking Standards contained within the City of Vaughan's Comprehensive Zoning By-Law: Draft Parking Standards Report*². While the report remained in draft, the recommendations were endorsed in the *City of Vaughan Transportation Master Plan*. While it is recognized that the review was specific to Vaughan's parking standards, the draft

² Review of Parking Standards contained within the City of Vaughan's Comprehensive Zoning By-law: Draft Parking Standards Report. IBI Group. March 2010.



report is comprehensive in its review of parking standards for multiple land-uses and contains valuable insights with respect to establishing parking rates.

The report identified that parking rates must balance competing objectives – such as ensuring sufficient parking supply while encouraging non-auto modes of transportation. Recognizing that development characteristics and transit provision can vary based on location, the report established a set of “urban structure categories”. The following categories were recommended:

- high order transit hubs;
- primary centres/primary intensification corridors;
- local centres; and
- rest of the City.

In addition to establishing parking requirements by location, the report also recommended that rates vary by the size of dwelling unit as determined by the number of bedrooms. The parking rates recommended for a multiple family dwelling (which includes high rise family housing) are summarized in Table 8.

Table 8: Vaughan Parking Study – Recommended Parking Rates (Multi Family Dwelling)

POLICY AREA	RESIDENT PARKING RATES (PER UNIT)		
	1 Bedroom	2 Bedroom	3+ Bedroom
Rest of City (base rate)	0.90	1.10	1.20
High Order Transit Hubs	0.70	0.90	1.00
Local Centres	0.80	1.00	1.10
Primary Centres/ Primary Intensification Areas	0.85	0.95	1.15

As indicated, the recommended parking rates range from 0.70 to 1.20 spaces per unit, depending on location of site and size of dwelling unit.

3.5 PARKING REDUCTIONS – RESIDENTIAL LAND-USE

The *Review of Parking Standards* contained within the *City of Vaughan’s Comprehensive Zoning By-Law: Draft Parking Standards Report* notes that reducing the minimum parking requirement for residential uses is typically low risk, recognizing that parking availability is usually a key decision for a prospective purchaser or renter. Developers are not inclined to reduce parking supply to the extent that it compromises the marketability of the development. It is further noted



that providing surplus parking increases the cost of a development. Thus, minimizing the parking requirement to the extent possible reduces development costs, in turn making dwelling units more affordable.

3.6 AFFORDABLE HOUSING

Affordable housing units typically generate less parking demand than for market rental units. In consideration of this, the City of North Bay has adopted a reduced parking rate of 0.5 spaces per unit for affordable housing developments (regardless of location within the City). Similarly, the City of Sudbury permits a 25% reduction in the applicable parking rate for dwelling units that are subject to an affordable housing agreement with the City.

The *Collingwood Affordable Housing Traffic Impact Study & Parking Study for Simcoe County Housing Corporation*³ assessed the parking needs for an affordable housing development in the Town of Collingwood. The study included parking data for six housing developments operated by the Barrie Municipal Non-Profit Housing Corporation. Each site consisted of a 60/40 unit mix of Rent Geared to Income (RGI) units and for market units. The data provided for the subject sites indicated an average utilization rate of 0.52 spaces per dwelling unit.

3.7 ACTIVE TRANSPORTATION IMPROVEMENTS

As per *The City of Barrie Transportation Master Plan*⁴, Collier Street has been identified for active transportation improvements by 2041. Bicycle lanes are proposed for Collier Street between Bayfield Street and Blake Street. In general, active transportation initiatives seek to improve accessibility for a wider range of road users while reducing reliance on the private automobile.

3.8 SUMMARY

The key findings of the parking review are summarized below.

- The proposed parking supply for the site is 112 spaces, or 0.82 spaces per unit
- In considering for market and affordable housing units, the proposed parking supply is 0.88 spaces per for market unit and 0.60 spaces per affordable housing unit.
- Based on the City of Barrie parking requirements and the proposed development plan, the site is required to supply 136 parking spaces, or 1.0 space per unit.
- Parking rates adopted by other local municipalities range from 0.75 to 1.40 spaces per unit (inclusive of visitor parking).

³ *Collingwood Affordable Housing Traffic Impact Study & Parking Study for Simcoe County Housing Corporation*. JD Northcote Engineering Inc. February 2017

⁴ *The City of Barrie Transportation Master Plan - Final Report*. WSP. June 2019.



- Affordable housing units typically generate less parking demand than for market units, as recognized by some municipalities (North Bay and Sudbury) which have adopted lower parking requirements for the affordable housing use.
- ITE Parking Generation data for the affordable housing land-use indicates an average parking supply of 0.60 spaces per unit, and peak parking demand rates ranging from 0.25 to 1.43 spaces per unit, with an average peak parking demand of 0.53 spaces per unit.
- ITE Parking Generation data for the *multifamily housing - high-rise* land-use indicates an average parking supply of 0.70 spaces per unit, and peak parking demand rates ranging from 0.25 to 0.67 spaces per unit, with an average peak parking demand of 0.46 spaces per unit.
- As per the ITE fitted curve equation for peak parking demand (weekdays, 10:00PM to 5:00AM) for the *multifamily housing - high-rise* land-use, the peak parking demand for the subject 136-unit development is estimated at 64 parked vehicles (or 0.47 spaces per unit).
- Parking surveys conducted at proxy sites in September 2020 indicate peak parking demands in the order of 0.58 to 0.90 spaces per unit.
- Reduced parking minimums for residential uses are typically low risk, recognizing that parking availability is usually a priority for purchasers (i.e. prospective renters will not rent units in developments that cannot meet their vehicle parking needs) – thus, developments with reduced parking will only attract renters with one or no vehicles, rather than multi-vehicle owners.
- Planned active transportation improvements to the study area will improve connectivity of the site while reducing reliance on the private automobile.



4 Parking Needs Assessment

As previously noted, the site plan indicates a parking supply of 112 spaces, whereas the City of Barrie's parking requirements for the proposed use is 136 spaces. Based on the parking review detailed in Chapter 3, the following justification is provided in support of the proposed parking supply for the proposed apartment development.

4.1 PARKING JUSTIFICATION

4.1.1 Proxy Site Parking Surveys

The proposed parking supply is supported in part by the results of the parking surveys conducted at the various proxy sites, where the observed peak parking demand was in the order of 0.58 to 0.90 spaces per unit. It is noted that the subject site is located within the downtown core; whereas the proxy sites are located outside the core and may be more reliant on the private automobile. Thus, it is reasonable to assume that the parking demand for the proposed development will be somewhat lower by comparison.

With respect to the Kempenfelt View Apartments development (located closest to the subject development site and the City's downtown), the observed peak parking demand was 0.90 spaces per unit; however, recognizing that the proxy site has private garage parking that has been assumed as occupied, this estimate is considered conservative (i.e. it is likely that some portion of the private garages are used for storage rather than parking, similar to townhouses and single family homes).

Based on the results of the proxy site parking surveys, the proposed parking supply (0.82 spaces per unit) is considered reasonable and supportable.

4.1.2 Parking Standards in Local Municipalities

A review of parking standards adopted by surrounding municipalities reveals a consistent approach with respect to parking rates for the residential use, with 1.25 spaces per unit as the most common requirement. However, many municipalities are also adopting lower parking requirements for development within urban growth centres and downtown cores. The cities of North Bay (0.50 spaces per unit) and Orillia (0.75 spaces per unit) have adopted rates considerably lower than those proposed. The Town of Newmarket has also adopted rates as low as 0.85 spaces per unit (depending on unit size and location).

As previously noted, the subject site is located within the City's downtown core, which is well served by transit (existing transit routes on Collier Street include routes 8A, 8B, 100A, 100B, 100C and 100D) and surrounded by various services, amenities and employment opportunities. In this



respect, residents will not be as dependent on the private automobile when compared to development outside of the city core (including some of the proxy sites surveyed). Thus, it is not unreasonable to expect that a reduced parking rate could be supported for the site.

4.1.3 Affordable Housing Units

Affordable housing units typically generate less parking demand than for market apartment units. As previously noted, the site will accommodate 28 affordable housing units. Based on parking rates adopted in the City of North Bay for affordable housing developments (0.5 spaces per unit), ITE average parking demand for affordable housing (0.53 spaces per unit) and utilization rates observed at Barrie Municipal Non-Profit Housing Corporation sites (0.52 spaces per unit), a reduced parking rate could be applied to the units to be designated as affordable housing units.

With the provision of 28 affordable housing units, and further assuming a parking rate of 0.6 spaces per affordable unit, the site would be required to provide 17 parking spaces to service the affordable units. In considering the proposed overall parking supply of 112 spaces, this would leave 95 spaces to serve the remaining 108 for market units - translating to a parking rate of 0.88 spaces per market unit.

It is further noted that providing surplus parking increases the cost of a development. Thus, minimizing the parking requirement to the extent possible reduces development costs, in turn supporting the proposal to provide affordable housing units.

4.1.4 City of Vaughan

The City of Vaughan parking review study recommended parking rates ranging from 0.70 to 1.20 spaces per unit, depending on location of site and size of dwelling unit. The parking requirements for the subject site based on the previously noted unit mix and the recommended parking rates contained in the Vaughan Parking Study have been summarized in Table 9. The parking rates for the Local Centre and Primary Centre (both of which may be considered reflective of the City's downtown area) have been considered in the summary.

In applying the recommended parking rates for the Local Centre and Primary Intensification Area, the resulting parking supply (as per the Vaughan Parking Study) would be in the order of 0.88 to 0.90 spaces per unit (or 119 to 121 spaces). These rates are comparable to the proposed parking rate of 0.88 spaces per unit for the for market units. It is noted that the Vaughan study did not consider affordable housing units, which (as previously established) generate lower parking demand.



Table 9: 79 Collier Street Parking Supply - Vaughan Parking Rates (Draft)

UNIT TYPE	# OF UNITS	PARKING RATES AND REQUIREMENTS			
		Local Centre		Primary Centre	
		Rate	Requirement	Rate	Requirement
Bachelor	7	0.80	6	0.85	6
1-Bedroom	78	0.80	62	0.85	66
2-Bedroom	51	1.00	51	0.95	49
Total	136	0.88	119	0.90	121

4.1.5 ITE Parking Rates

The proposed overall parking supply rate for the site (0.82 spaces per unit) is above the range of peak parking demand rates noted in the ITE Parking Generation manual for similar land uses (0.25 to 0.67 spaces per unit). Furthermore, in considering the peak parking demand fitted curve equation for the *multifamily housing - high-rise* land-use, the estimated peak parking demand for the subject site is 64 vehicles, or 0.47 spaces per unit. In this respect, the proposed parking rate for the site is supported by the empirical ITE parking generation data and not otherwise considered artificially low or unreasonable. It is further noted that the ITE parking data for the *affordable housing* use also supports the proposed parking supply (0.60 spaces per unit) for the affordable housing units.

4.1.6 Active Transportation Improvements & Transit Service

The proposed bicycle lanes for Collier Street will improve connectivity of the site for a wider range of road users and reduce reliance on the private automobile - thus providing support to the proposed parking rate reduction. In consideration of future bicycle lanes, additional supportive measures on site, such as internal bicycle parking, will be provided to further support the proposed parking rate.

The site is also located such that ready access to Barrie Transit will be provided, to offer alternative modes of travel to the automobile (and hence reducing reliance on the automobile).

4.1.7 Transportation Demand Management

While the available parking data suggests that the proposed parking supply can be supported, additional transportation demand management (TDM) measures can be considered to further support the proposed variance. The following TDM measures are being considered for the site:



Unbundled Parking

By offering unbundled parking, residents have the option of renting a space for an additional fee or forgoing a parking space if unneeded. Rather than providing each unit with a space, unbundled parking ensures that only those residents requiring a space have access to one; whereas residents who do not require a space save on their monthly rental costs. Unbundled parking is considered an equitable approach (i.e. only those requiring parking pay for the space, rather than having the cost of parking shared across all residents regardless of use) and can reduce the total amount of parking required to support the needs of the development.

In addition to unbundled parking, consideration may also be given to limiting parking spaces available to the various unit types (i.e. by number of bedrooms). This approach may not be necessary depending on the results of an unbundled parking program.

Bicycle Storage

As previously noted, bicycle lanes and active transportation improvements are recommended for the area. To further encourage and support active transportation among residents, it is internal and secure bicycle storage will be provided within the building. This allows residents to own and store a bicycle in a dedicated bicycle storage area rather than store their bicycle within the residential unit. Removing the encumbrance of carrying a bicycle up and down the elevator and storing it in the apartment unit will increase the likelihood of bicycle ownership among residents.

Transit Supportive Measures

To support the use of public transit, prepaid transit passes will be distributed to new residents at time of occupancy (value to be determined through discussion with City staff). Furthermore, in-lobby transit boards will be provided to inform residents of the transit schedule for nearby routes.

4.2 RECOMMENDATION

In consideration of the above, the proposed parking supply of 112 spaces, or 0.82 spaces per unit, is considered reasonable.



5 Summary

This parking justification study has reviewed the proposed parking supply for the proposed 136-unit apartment development to be located at 79 Collier Street in the City of Barrie. The proposed parking supply for the site is 112 spaces, or 0.82 spaces per unit. When considering unit type (i.e. for market units vs affordable housing units), the proposed parking supply translates to 0.88 spaces per market rental unit (95 spaces) and 0.60 spaces per affordable housing unit (17 spaces).

The study has reviewed the proposed parking supply in consideration of parking survey data conducted at proxy sites, parking standards adopted by adjacent municipalities, published ITE parking generation data and the findings of other parking study research. While the proposed parking supply does not satisfy the minimum parking requirements as per the City's zoning by-law, it is ultimately supported by the parking demand survey data collected from the proxy sites and available parking demand data for affordable housing developments. Furthermore, the proposed parking rate is comparable to parking supply standards in adjacent municipalities and parking demand rates for similar uses as published by ITE.

In consideration of this review, the proposed parking supply for the 79 Collier Street development is considered reasonable.

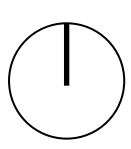
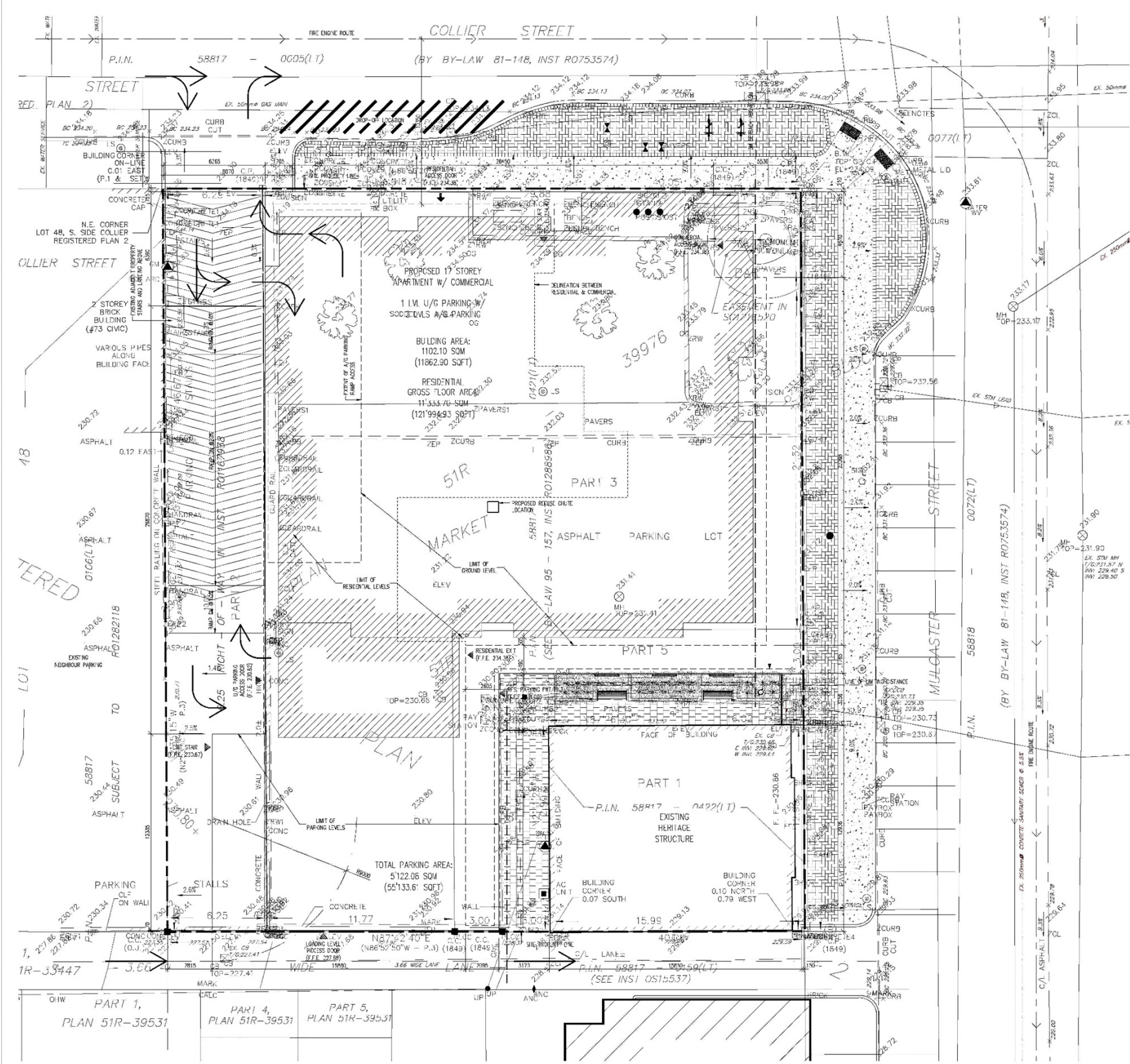




Bayside Apartments

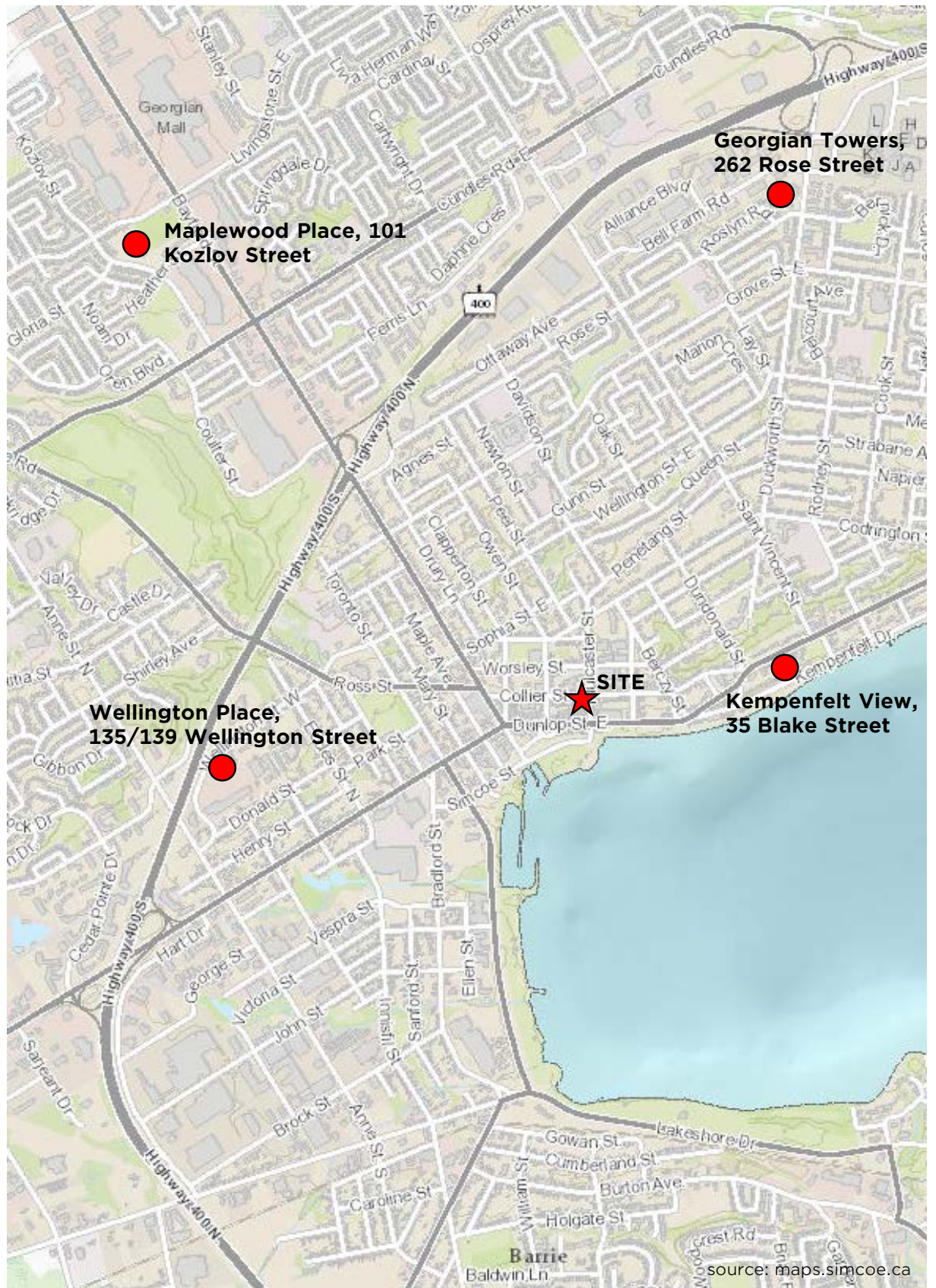
Figure 1: Site Location





Bayside Apartments
Figure 2: Site Plan





Bayside Apartments
Figure 3: Proxy Site Locations

