



415 / 435 Michigan Street Infill Development

Parking Study

Prepared for: **CitySpaces Consulting**

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Our File: **2193**

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1.0 INTRODUCTION

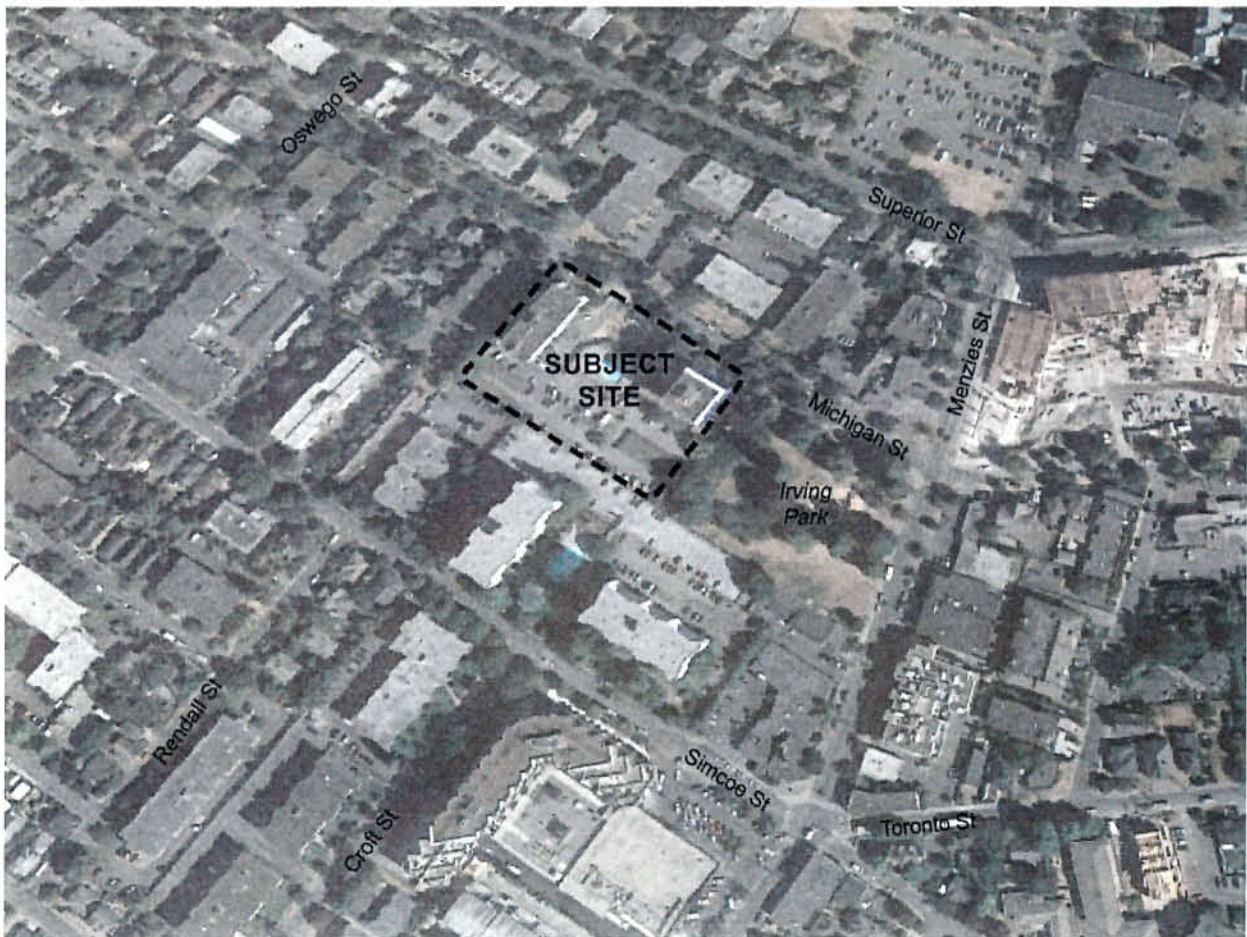
Watt Consulting Group ("WATT") was retained by CitySpaces Consulting to prepare a parking study for the proposed multi-family residential infill development at 415 / 435 Michigan Street in James Bay. The purpose of this study is to determine if the proposed parking supply will accommodate parking demand by considering demand at representative sites and in consideration of parking management approaches.

1.1 SUBJECT SITE

The proposed redevelopment site is 415 / 435 Michigan Street, in James Bay. See **Figure 1**.

The site is zoned R3-H: High Density Multiple Dwelling District.

FIGURE 1. SUBJECT SITE



1.2 SITE CHARACTERISTICS

The subject site is located near the centre of the James Bay neighbourhood, offering varied transportation options and proximity to employment, services, and recreation. The following is an overview of context and transportation options.

1.2.1 CONTEXT

The site is located less than 300m from James Bay Square which is identified as a “Large Urban Village” in the City’s Official Community Plan. Small Urban Villages are defined as a mix of commercial and community services primarily serving the surrounding residential area¹. This acts as a local amenity, providing the majority of commercial (retail, office, and restaurant), medical services, and postal services. The site is also located 1-km from downtown Victoria (measured to Douglas Street and Fort Street), which provides all services residents may require.

1.2.2 “WALKABILITY”

Michigan Street as well as the majority of roads surrounding the site have adequate sidewalks on both sides of the road. There are also crosswalks at major intersections. The site has a Walkscore of 88², suggesting it is very walkable and most errands can be accomplished on foot.

1.2.3 CYCLING

The site is not located in close proximity to any major cycling networks (bike lanes, multi-use paths, etc.), however, the majority of James Bay consists of lower volume roads (but narrow) that facilitate a safe and enjoyably cycling experience.

As identified in the City’s Official Community Plan³, Superior Street is an identified Shared Greenway – located on primary and secondary arterial and primary collector roads and are designed for pedestrian, bicycles, and other non-motorized rolling traffic, and motor vehicles; and Simcoe Street, Toronto Street and Government Street are identified as People Priority Greenways – located on traffic-calmed secondary collector and local roads and are designed for pedestrians, bicycles and other non-motorized rolling traffic and motor vehicles.

1.2.4 PUBLIC TRANSIT

The closest bus stop to the site is at Michigan Street and Menzies Street, and serves Route 3 | Beacon Hill/Gonzales, Route 27 | Gordon Head (evening and Sunday Service Only), Route 28 | Downtown/Beacon Hill (evening and Sunday Service Only), and Route 30 | Royal Oak

¹ City of Victoria Official Community Plan, Section 6: Land Management and Development, pg. 35. Obtained online at: http://www.victoria.ca/assets/Departments/Planning-Development/Community-Planning/OCP/OCP_Book.pdf

² <https://www.walkscore.com/score/415-michigan-st-victoria-bc-canada>

³ City of Victoria Official Community Plan, Section 7: Transportation and Mobility, pg 58-59. Obtained online at: http://www.victoria.ca/assets/Departments/Planning-Development/Community-Planning/OCP/OCP_Book.pdf

Exchange/Beacon Hill. Other routes that serve James Bay (closest bus stops on Oswego Street) are Route 31 | Royal Oak Exchange/James Bay and Route 19 | Hillside Mall. The site is also located approximately 450m from the legislature transit exchange that provides access to many transit routes that provide service throughout the CRD.

1.2.5 CARSHARE

Modo Cooperative operates carsharing in the region. Monthly Modo members pay \$5 per month, a \$10 registration fee, \$8 per hour (including gas, insurance, and maintenance) and receive the first 200 kilometres of their trip for free. Member-owned memberships are \$500 (refundable share purchase). The closest vehicle to the site is located at Michigan Street and Menzies Street. There are two other vehicles located in close proximity to the site, on Croft Street (between Simcoe Street and Niagara Street), and on Toronto Street at Huntington Place.

2.0 LAND USE

2.1 EXISTING LAND USE

The site currently contains 195 Multi-Family Residential units between two buildings. All units are rental apartments offered at market rates.

2.2 PROPOSED LAND USE

The proposal is to retain all existing apartment units and to add 24 new townhouse units - 12 studio and 12 two-bedroom; a total of 219 units. The townhouse units would occupy the grass / landscape area that fronts Michigan Street between the two existing buildings.

The development also includes 32 Class I horizontal bike parking spaces (which are a preferred design over vertical wall spaces) and two additional 6-space racks for visitors.

2.3 PARKING SUPPLY

The development proposal is to add the new Townhouse units in a currently unoccupied space and to retain the existing parking supply. The site contains 138 parking spaces. This is a total site parking supply of 0.63 parking spaces per unit.

3.0 PARKING REQUIREMENT

The site's minimum required parking supply is based on the City's *Zoning Bylaw, Schedule C*. The total site parking requirement is 285 parking spaces, based on a minimum required parking supply rate of 1.3 spaces per unit.

3.1 UPDATED SCHEDULE C REQUIREMENTS

WATT has been working with the City of Victoria to review and update its off-street parking requirements (Schedule C) to align regulations with actual parking demand, current trends, and community planning objectives. At the time of writing of this parking study, the Schedule C off-street parking regulations are in draft stage⁴.

The review and update to the regulations have been considering parking demand by several different factors (for multi-family uses) including:

- **Tenure** - Condominium (dwelling unit in a building owned by a Strata Corporation) or Apartment (dwelling unit secured as a rental in perpetuity through a legal agreement)
- **Location** - Core Area, Village/Centre and Other Area; and
- **Unit Size** - <40m², 40m² to 70m², and >70m²

Based on the draft revised regulations, the subject site is considered an Apartment, in "Other Areas", with unit sizes under each category. See **Table 2**. This suggests that if the draft Schedule C regulations were applied to the proposed development, a parking requirement of 269 spaces; 16 spaces less than the current City approved parking requirements.

TABLE 2. SUMMARY OF PARKING REQUIREMENT, DRAFT SCHEDULE C REGULATIONS, ("OTHER AREAS")

Size	Quantity	Parking Req't Rate	Parking Req't
< 40m ²	72 units	0.85 / unit	61
40m ² to 70m ²	61 units	1.00 / unit	61
> 70m ²	86 units	1.45 / unit	125
Visitor Spaces	219 units	0.10	22
Total Required Parking			269

Although the site is located in "Other Areas", the site is located a parcel away from the Village "James Bay Village", which is subject to lower parking requirements. If the site were located in the Village, the site would have a parking requirement of 236 spaces; 33 spaces less than the requirement in "Other Areas". See **Table 3**.

⁴ The draft Schedule C document is available on the City's website here:
http://www.victoria.ca/assets/Departments/Planning-Development/Development-Services/Documents/Schedule%20C%20Off-Street%20Parking%20Regulation_Final%20Draft.pdf

TABLE 3. SUMMARY OF PARKING REQUIREMENT, DRAFT SCHEDULE C REGULATIONS ("VILLAGE/CENTRE")

Size	Quantity	Parking Req't Rate	Parking Req't
< 40m ²	72 units	0.70 / unit	50
40m ² to 70m ²	61 units	0.85 / unit	52
> 70m ²	86 units	1.30 / unit	112
Visitor Spaces	219 units	0.10	22
Total Required Parking			236

4.0 FUTURE PARKING CONDITIONS

The appropriateness of utilizing the existing site parking supply to accommodate both the existing site uses and the proposed infill development is considered in the following section.

4.1 EXPECTED RESIDENT PARKING DEMAND

4.1.1 ON-SITE PARKING DEMAND

The existing site parking utilization was surveyed. The site contains two apartment buildings with a total of 195 units. 176 units were occupied during the study, due to renovations of the buildings⁵.

The existing site was observed over four observation periods to determine the utilization of the existing parking supply. Observations were conducted at the following times:

- Saturday, May 13, 2017 @ 2:00PM
- Monday, May 15, 2017 @ 9:00PM
- Tuesday, May 16, 2017 @ 9:00PM
- Wednesday, May 17, 2017 @ 9:00PM

Results concluded that 104 vehicles park on-site during the peak period (Weekday, 9:00PM). This represents an overall occupancy rate of 75% and a parking demand rate of 0.59 vehicles per occupied unit. This suggests that 34 parking spaces are unoccupied during peak periods and available as parking for the proposed infill development.

4.1.2 ON-STREET PARKING DEMAND

The subject site was determined to contain 40% of all units that front onto Michigan Street between Simcoe Street and Menzies Street. On-street parking observations were conducted in this area (See Section 5.0) and resulted in a peak on-street occupancy of 62 vehicles.

⁵ Confirmed by applicant on October 3, 2017 and reconfirmed on November 15, 2017

Assuming the vehicles on the street, are in relation to the units on Michigan Street, this suggests that 25⁶ of these vehicles are attributed to the site. Adding these vehicle numbers to the peak observed vehicles on site (104 vehicles), this suggests a demand of 129 vehicles. This suggests an existing parking demand rate of 0.73 vehicles per occupied unit.

4.1.3 PARKING DEMAND BY UNIT TYPE

Significant research has suggested that parking demand varies by unit type (number of bedrooms or floor area). Parking demand at the site was broken down by unit type based on the following:

1. Peak parking demand at the existing site;
2. The existing breakdown of unit type at the site; and
3. The assumed “ratio differences” between each unit type, based on the King County Metro⁷ study which recommends one-bedroom units have a 20% higher parking demand than bachelor units, two-bedroom units have a 60% higher parking demand than one-bedroom units, and three-bedroom units have a 15% higher parking demand than two-bedroom units.

Results suggest the following parking demand rates by unit type:

- Bachelor Units – 0.56 vehicles per unit
- One-Bedroom Units – 0.67 vehicles per unit
- Two-Bedroom Units – 1.07 vehicles per unit

4.1.4 VEHICLE OWNERSHIP INFORMATION

Vehicle ownership information was obtained for market rental sites in the City of Victoria as part of the Schedule C, Parking Regulations review. Parking information was obtained for 34 sites in total⁸. Vehicle ownership information for sites that are located in James Bay (deemed to be the most representative to the subject site) include the following:

- 425 Simcoe Street | 175 units, 105 registered vehicles = 0.60 vehicles per unit
- 535 Niagara Street | 65 units, 48 registered vehicles = 0.74 vehicles per unit

Results of vehicle ownership information for sites in James Bay further support and are consistent with the results of observations at the subject site.

⁶ This estimated parking demand is expected to remain on-street post-development

⁷ King County Metro. (2013). Right Size Parking Model Code. Table 2, page 21. Available online at: <http://metro.kingcounty.gov/programs-projects/right-size-parking/pdf/140110-rsp-model-code.pdf>

⁸ Review of Zoning Regulation Bylaw Off0Street Parking Requirement (Schedule C), Working Paper No.3. Available online at: http://www.victoria.ca/assets/Departments/Planning-Development/Community-Planning/Documents/Victoria%20Schedule%20C%20Parking%20Review_Working%20Paper%20no3_FINAL_Sept23-16.pdf

4.2 VISITOR PARKING DEMAND

Visitor parking demand rates have been demonstrated in the range of 0.05 to 0.07 vehicles per unit for multi-family residential.⁹ More recent research found a visitor parking demand rate of 0.1 across 11 multi-family residential sites in proximity to downtown Victoria.¹⁰ A conservative estimate of 0.1 vehicles per unit is seen as appropriate for the site.

4.3 TOTAL EXPECTED PARKING DEMAND

Total site parking demand is based on existing site parking demand, observations and research. Results suggest the following:

- Bachelor Units = 0.56 vehicles per unit X 12 units = 7 vehicles
- Two-Bedroom Units = 1.07 vehicles per unit X 12 units = 13 vehicles
- Visitor Parking Demand = 0.1 vehicles per unit X 24 units = 2 vehicles
- Existing Peak On-Site Parking Demand = 104 vehicles
- Vacant Units¹¹ = 0.73 vehicles per unit X 19 units = 14 vehicles
- Total Revised Parking Demand = 140 vehicles

This suggests expected total site parking demand will be for 140 vehicles, two more than proposed parking supply which is not expected to impact neighbourhood parking conditions. See *Section 5.0*.

5.0 ON-STREET PARKING CONDITIONS

On-street parking conditions were conducted on Michigan Street from Oswego Street to Menzies Street to determine availability of on-street parking spaces in the case of spillover from the site. Observations were conducted during the following time periods:

- Saturday May 13, 2017 | 2:00pm
- Monday May 15, 2017 | 9:00pm
- Tuesday May 16, 2017 | 9:00pm
- Wednesday May 17, 2017 | 9:00pm
- Thursday February 1, 2018 | 1:30pm

Peak observation occurred on Thursday February 1, 2018 at 1:30pm with a total of 68 vehicles observed at 67% occupancy. This suggests there are still approximately 33 parking spaces still available to site residents and visitors. This time period reflects the peak period for the surrounding commercial land uses, and does not represent peak resident demand periods.

⁹ Based on observations of visitor parking conducted in 2015 for two studies of multi-family residential sites (one adjacent to downtown Victoria, the other in Langford) and findings from the 2012 Metro Vancouver Apartment Parking Study (Table 31, pg50) available at:
www.metrovancouver.org/services/regionalplanning/PlanningPublications/Apartment_Parking_Study_TechnicalReport.pdf

¹⁰ Based on observations of visitor parking conducted in 2016 for 12 multi-family residential sites in proximity to downtown Victoria.

¹¹ The client mentioned there were 19 vacant units at the time of the study. The existing parking demand does not take into account parking generated from these units, however, it is expected that these units will be occupied at some point, and thus will generate parking.

Peak period for residents occurred on Tuesday May 16, 2017 at 9:00pm with a total of 62 vehicles observed at 61% occupancy. This suggests there are still approximately 39 parking spaces available to site residents or visitors. Those parking spaces that are available to residents (restricted to Residential Parking Only, 8am-6pm, Monday to Friday) had an occupancy of 71% with 24 parking spaces still available.

This suggests there is on-street capacity to accommodate two additional vehicles from the site without displacing existing vehicles on-street.

6.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation demand management (TDM) is the application of strategies and policies to influence individual travel mode choice, most commonly to reduce single-occupancy trips. Although parking demand is expected to be accommodated on site, the applicant may consider TDM programs to make alternative transportation options more attractive. Programs available include the following:

Bike Parking. The applicant is proposing to provide 32 Class I bike parking spaces for the new units – representing eight “bonus” spaces that are in addition to the parking requirement. The applicant is also providing three 6-space Class II bike racks (18 spaces in total), that are also in excess of the parking requirement (the new units only require one Class II space).

Transit Passes. BC Transit does not currently provide a resident transit pass program with a significant financial reduction. The applicant may consider contributing a lump sum to a transportation fund to subsidize transit pass costs for residents over a defined period of time. A monthly BC Transit pass is \$85.

Transit Stops. The closest bus stops to the site on Menzies Street are equipped with a pole (identifying it as a bus stop), and a bench. The applicant may coordinate with BC Transit to provide a shelter, transit information and proper lighting.

Information. The proponent may develop an information package to be distributed to all new residents of the building. The package should include pertinent details regarding transportation options surrounding the site, as well as services that are available.

Carshare. Victoria’s carshare program is currently managed by Modo Cooperative. The closest carshare vehicle to the site is down the street at Michigan Street and Menzies Street. The applicant may consider purchasing carshare memberships for residents on a first-come, first-serve basis.

7.0 SUMMARY

The existing site consists of 195 units, all apartment rentals. The proposed development is to provide an additional 24 townhouse units (bachelor and two-bedroom units), for a total of 219 units. The proposed parking supply is 138 parking spaces, a total proposed parking supply of 0.63 parking spaces per unit.

Expected parking demand at the site is based on the existing site parking demand in consideration of on-street parking conditions, with support from representative sites. This suggests that total expected parking demand will be for 140 vehicles, two more than the proposed parking supply. On-street parking conditions were assessed surrounding the site and suggest that a spillover of two vehicles will be accommodated on-street without displacing any existing vehicles.

Transportation demand management programs were considered to further support the reduction in parking supply. The applicant is providing additional bike parking (for the new units) from the bike parking requirement. Other programs identified included transit passes, transit stops, carshare program, rideshare program and information.

7.1 RECOMMENDATIONS

The existing site parking supply is expected to accommodate the proposed infill development with the potential spillover of two vehicles, which is not expected to negatively impact neighbourhood parking conditions.