



45 BOYD STREET

Parking Study

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1.0 INTRODUCTION

Watt Consulting Group (WATT) was retained by Devon Properties to conduct a parking study to support the building permit application for 45 Boyd Street in the City of Victoria. The purpose of this study is to determine the parking demand for the site.

1.1 SUBJECT SITE

The proposed site is located at 45 Boyd Street in the City of Victoria (see [Figure 1](#)).

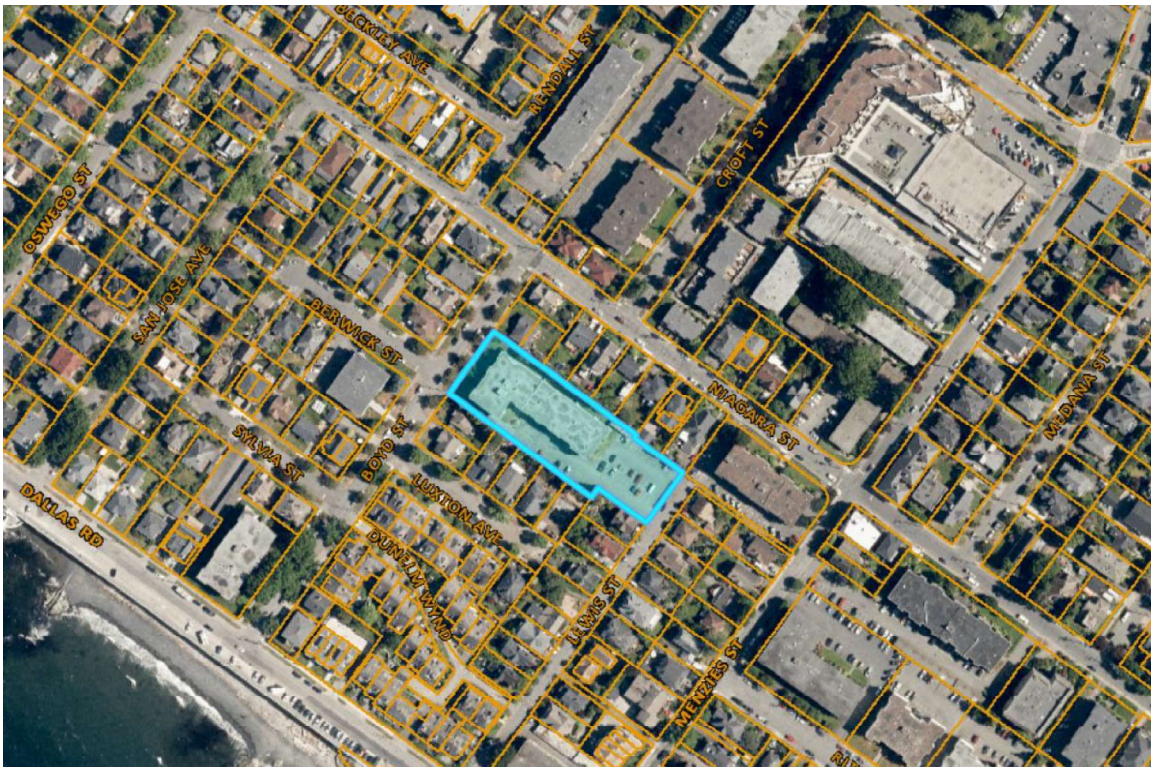


FIGURE 1. SUBJECT SITE



1.2 SITE CHARACTERISTICS & POLICY CONTEXT

The following provides information regarding services and transportation options in proximity to the site at 45 Boyd Street. In addition, the City of Victoria's planning policies pertaining to sustainable transportation and parking management are summarized.



CITY PLANNING POLICY

The City of Victoria's Official Community Plan (OCP) provides policies and objectives to guide decisions on planning and land management. Most recently updated in December of 2019, the OCP contains a number of 30-year goals in 17 distinct topic areas that give expression to Victoria's sustainability commitment and work toward the achievement of long-term sustainability goals. Section 7 of the OCP (Transportation and Mobility) contains a number of goals and policy directions to reduce overall dependency on single occupancy vehicles and prioritize sustainable modes of travel including walking, cycling, and transit, among others.

The OCP also supports transportation demand management and parking management strategies as outlined in sections 7.11 and 7.12. Specifically, Section 7.12 indicates that reductions in the parking requirements should be considered where:

7.12.1 Geographic location, residential and employment density, housing type, land use mix, transit accessibility, walkability, and other factors support non-auto mode choice or lower parking demand.

As subsequent sections demonstrate, the subject site benefits from access to a number of transportation options and services that reduce the need to own a vehicle and therefore warrant lower parking demand.



SERVICES

The site has direct access to a number of commercial and retail amenities. Within 450m (about a 5-minute walk) of the site, future residents could access the James Bay Square which offers a number of services such as a grocery store, medical, financial services, café, restaurants. The site also benefits from being 1.6km (about a 20-minute walk) from Downtown Victoria.



TRANSIT

The subject site has good access to transit, with bus stops on both sides of Niagara Street (at the intersection of Niagara Street & Menzies Street). The stops are serviced by Route 2 James Bay / South Oak Bay / Willows (average frequency 15 minutes), Route 3 James Bay / Royal Jubilee (average frequency 30 minutes). In addition the northbound stop is also serviced by Route 10 Royal Jubilee via Vic West (average frequency 30 minutes). Route 3 and Route 10 are interlined routes. Within a 1km (about a 12-minute walk or 4 stops via Route 10) from the site (Government Street and Superior Street), residents can access 12 bus routes (Routes 50, 70, 30, 31, 32, 47, 48, 61, 61x, 71, 72, 75) that allow access to various communities, employment centres and residential areas within the Capital Regional District.



WALKING

The subject site has a walk score¹ of 81, which means that the site is situated in a very walkable area. This indicates that most errands can be accomplished on foot. Sidewalks are provided on both sides of Boyd Street.

¹ More information about the site's Walk Score is available online at: <https://www.walkscore.com/score/45-boyd-st-victoria-bc-canada>



CYCLING

The subject site is located in an area where cycling is convenient for most trips. The subject site is located on a local street with no cycling infrastructure, however through a network of shared streets residents can access a number of amenities. In addition, residents can access Dallas Road, which currently has painted bike lanes and in the near future is expected to have a two-way protected bike lane on the south side of the road.

2.0 PROPOSED DEVELOPMENT

2.1 LAND USE

The subject site is an existing 71-unit market rental building called “Albion Court”. The building has a mix of unit types including 8 bachelors, 40 one-bedrooms, and 23 two-bedroom units. Unit sizes range from 391 sq.ft. to 940 sq.ft. The applicant is not proposing to increase the units in the building and therefore no changes to the land uses are expected.

2.2 PROPOSED PARKING SUPPLY

2.2.1 VEHICLE PARKING

The existing building has a total of 58 off-street parking spaces. The applicant is not proposing to increase the supply. Therefore, a total of 58 parking spaces are proposed for the subject site.

2.2.2 BICYCLE PARKING

The existing building has two storage units that hold a total of 64 long-term bicycle parking spaces. There are no short-term bicycle parking spaces provided at the site.



3.0 PARKING REQUIREMENT

3.1 VEHICLE PARKING

The City of Victoria’s Zoning Bylaw No. 80-159 (Schedule C) identifies the bylaw parking requirements for the site. Schedule C specifies parking requirements based on several different factors for multi-family uses including:

- **Class of Use (i.e. Housing Tenure)** – Condominium (dwelling unit in a building owned by a Strata Corporation); Apartment (dwelling unit secured as a rental in perpetuity through a legal agreement); Affordable (affordable dwelling units secure in perpetuity through a legal agreement); All other multiple dwellings.
- **Location** – Core Area, Village/Centre and Other Area; and
- **Unit Size** – <45m² (< 485 sq.ft.), 45m² to 70m² (485 - 750 sq.ft.), and >70m² (>750 sq.ft.)

The subject building falls in the ‘Other Area’ category under ‘All other multiple dwellings’ per Figure 1 of Schedule C. The site is required to provide a total of 87 off-street parking spaces comprising 80 residential spaces and 7 visitor spaces as shown in **Table 1**. Therefore, with 58 off-street parking spaces, the site is short 29 parking spaces per Schedule C.

TABLE 1. MULTI-FAMILY PARKING REQUIREMENT

Unit Type	Units	Schedule C Rate	Total Spaces Required
Bachelor 391 sq.ft. (36m ²)	8	0.85 spaces per unit (<45m ²)	7
1 bedroom 630 sq.ft. (59m ²)	40	1.00 spaces per unit (45-70m ²)	40
2 bedroom 854-952 sq.ft. (79-88m ²)	23	1.45 spaces per unit (>70m ²)	33
Visitor Parking	71	0.1 spaces per unit	7
TOTAL			87



3.2 BICYCLE PARKING

Per Table 2 of Schedule C, the subject site is required to provide one long-term bicycle parking space per unit that is less than 45m² and 1.25 spaces per unit for units that are 45m² or more. This results in a requirement of 87 long-term bicycle parking spaces.

The subject site is also required to provide 0.1 short-term bicycle parking spaces per unit, which results in 7 spaces.

The applicant is currently not meeting this requirement. Based on the existing bicycle parking supply the bicycle parking is short 23 long-term bicycle parking spaces and 7 short-term bicycle parking spaces.



4.0 EXPECTED PARKING DEMAND

Expected parking demand for the site is estimated in the following sections to determine if the proposed supply will adequately accommodate demand. Expected parking demand is based on [a] parking observations of the subject site to understand existing demand and [b] vehicle ownership data from the Insurance Corporation of British Columbia for a number of representative multi-family apartment sites.

4.1 RESIDENTIAL

4.1.1 PEAK PARKING DEMAND AT SUBJECT SITE

Observations of parked vehicles were completed at the subject site (45 Boyd Street) to understand peak parking demand. Observations were conducted at the following times:

- Sunday February 23rd at 9:00pm
- Tuesday February 25th at 9:30pm
- Wednesday February 26th at 9:30pm

The observation with the greater number of vehicles observed was taken as representative of peak demand. The highest number of parked vehicles was observed on Wednesday February 26th with 37 vehicles.

Vehicle ownership data was provided by the property manager and used to validate the observations to ensure the results are reflective of the actual parking demand. There are currently 39 assigned parking stalls to tenants. Therefore, the results are consistent and peak parking demand for the site is 39 vehicles (0.55 vehicles per unit).

4.1.2 ICBC VEHICLE OWNERSHIP DATA

Vehicle ownership data was obtained from the Insurance Corporation of British Columbia (ICBC) through their Vehicle Ownership Information Request program. These



data were originally obtained by the consultant in 2016 as part of updating the City of Victoria’s off-street parking requirements (Schedule C).

These data were included to understand peak parking demand among representative market rental buildings. There are a number of representative sites with vehicle ownership data from James Bay and other locations that fall under the “Other Area” geographic area in Schedule C. These sites were selected because they have similar geographic and transportation characteristics to the subject site. The vehicle ownership data does not include visitor parking demand.

Ten representative sites were selected comprising a total of 553 units, which was deemed to represent a sufficient sample size for this study. Results suggest an average parking demand rate of 0.63 vehicles per unit, ranging from 0.48 to 0.74 vehicles per unit. See **Table 2**.

TABLE 2. VEHICLE OWNERSHIP AT REPRESENTATIVE SITES

Address	No. Units	Owned Vehicles	Vehicle Demand (vehicles/unit)
425 Simcoe Street	175	105	0.60
1049 Southgate Street	29	14	0.48
1025 Linden Avenue	56	39	0.70
535 Niagara Street	65	48	0.74
967 Collinson Street	42	30	0.71
1317 Hillside Avenue	22	14	0.64
1140 Hillside Avenue	28	18	0.64
1928 Lee Avenue	43	27	0.63
1343 Harrison Street	44	26	0.59
1475 Pandora Avenue	49	30	0.61
Average			0.63



4.2 VISITOR PARKING

Observations were conducted as part of a study by Metro Vancouver² that concluded typical visitor parking demand is less than 0.1 vehicles per unit. This is similar to observations that were conducted for parking studies in the City of Langford and the City of Victoria, and indicates that visitor parking demand is not strongly influenced by location. As part of the update to the City of Victoria off-street parking requirements (Schedule C), the consulting team recommended a rate of 0.1 spaces per unit for visitor parking based on extensive research and data collection. The rate of 0.1 spaces per unit was ultimately adopted as the supply rate for visitor parking in Schedule C.

4.3 SUMMARY OF EXPECTED PARKING DEMAND

Based on the analysis at **Sections 4.1.1 & 4.1.2**, the expected resident parking demand could range from 0.55 to 0.63 vehicles per unit. The rate of 0.63 vehicles per unit is considered conservative and an appropriate demand rate for the site. Therefore, the expected resident parking demand is 45 vehicle parking spaces.

For the subject site, a rate of 0.1 vehicles per unit is considered appropriate for visitor parking spaces, which results in a total of 7 vehicle parking spaces.

The total parking demand for the site is expected to be 52 parking spaces, which is 6 spaces less than the existing parking supply (58 parking spaces).

² Metro Vancouver. (2018). The 2018 Regional Parking Study. Technical Report. Available online at: <http://www.metrovancouver.org/services/regional-planning/PlanningPublications/RegionalParkingStudy-TechnicalReport.pdf>



5.0 ON-STREET PARKING ASSESSMENT

On-street parking observations were completed to determine parking availability nearby the subject site. The majority of the on-street parking segments observed do not have parking restrictions. Streets with parking restrictions included Passenger Zone (5 minutes maximum) along Boyd Street and Residential Parking Only (RPO) restrictions along Niagara Street and on Boyd Street near Dallas Road.

Observations were completed on Tuesday February 25th at 9:30pm and Wednesday February 26th at 9:30pm to determine peak residential parking conditions. Evenings represent peak parking conditions for both residents and visitors alike according to the Urban Land Institute’s Shared Parking manual.³ For the purposes of the parking analysis, **Table 3** only shows the street segments with unrestricted parking. All the segments with Residential Parking Only and Passenger Zone restrictions have been excluded from the analysis as they do not constitute as available parking for residents of 45 Boyd Street.

TABLE 3. SUMMARY OF ON-STREET PARKING DEMAND

Road Segment		Side	Parking Supply	Feb 25, 2020		Feb 26, 2020	
				Observed	Occupancy	Observed	Occupancy
Boyd St	Niagara St – Luxton Ave	E	10	9	90%	10	100%
		W	9	9	100%	8	89%
	Luxton Ave – Dallas Rd	E	9	9	100%	9	100%
		W	9	8	89%	7	78%
Berwick St	Boyd St – end of St	N	8	5	63%	7	88%
		S	9	8	89%	8	89%
Lewis St	End of St – 45 Boyd St Driveway	E	NO PARKING				
		W	3	3	100%	3	100%
Total			57	51	89%	52	91%

³ Smith, M. (2005). Shared Parking, 2nd Edition. The Urban Land Institute.



Total parking supply among observed streets is 57 spaces (all unrestricted on-street spaces). On-street parking utilization was observed to be consistent on both days with Wednesday February 26th being slightly higher with 52 occupied parking spaces, which represents a peak parking occupancy of 91%. This indicates that only 5 spaces are available during the peak time. Overall, it appears that there is limited on-street parking available in proximity to the subject site. However, no spillover is expected from the subject site as the expected parking demand is anticipated to be accommodated by the existing parking supply.



6.0 CONCLUSIONS

The applicant is proposing to bring the building up to existing building code and is therefore subject to the parking requirements under the City of Victoria's Schedule C. The existing building contains 71 market rental units and provides 58 parking spaces, whereas the City's minimum parking requirement is 87 spaces (shortfall of 29 spaces)

The site's parking demand was determined through observations and ownership data from the subject site, in addition to vehicle ownership data from ICBC for a number of representative multi-family apartment sites. The expected parking demand for the site is 52 parking spaces, which is 6 spaces less than the existing parking supply.

The existing bicycle parking is deficient based on the bylaw's minimum requirement. The applicant should consider providing an additional 23 long-term bicycle parking spaces and 7 short-term bicycle parking spaces to meet this requirement.



7.0 RECOMMENDATIONS

It is expected that the existing parking supply will accommodate the expected parking demand and as such a parking variance is supported for the subject site. The applicant should provide additional bicycle parking spaces to meet the minimum requirement in Schedule C. For the long-term parking spaces, it is recommended that the applicant convert two vacant parking stalls to increase the bicycle parking supply by providing bike shelters or bike lockers.

For the short-term parking, the applicant should provide an outdoor bicycle rack with at least 7 spaces and locate it a maximum distance of 15m from the building entrance per Schedule C.

The following photos are for illustrative purposes to demonstrate some options that the applicant can pursue to increase the long-term bicycle parking supply.



FIGURE 2. EXAMPLES OF BIKE LOCKERS AT THE ROYAL BC MUSEUM (LEFT) AND THE MCTAVISH INTERCHANGE (RIGHT)



FIGURE 3. EXAMPLES OF BIKE SHELTERS AT THE COMOX VALLEY REGIONAL DISTRICT (LEFT), UNKNOWN LOCATION (RIGHT)

