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Attn: Mayor and Members of Council

June 21, 2023

Past submissions:
-September 30, 2021
-January 25, 2021
-June 15, 2021
-November 2, 2021
-June 16, 2022

RE: RE-ZONING AND DEVELOPMENT PERMIT APPLICATION: 1042-1044 RICHARDSON STREET

Dear Mayor and Members of Council,

We are pleased to submit an updated Rezoning and Development Permit Application for 1042-1044 Richardson Street. Following the 5-4 referral motion made by Council on July 14, 2022 for staff to *"work with the applicant on a revised application for rental housing that achieves greater consistency with the Fairfield Neighbourhood Plan and other City of Victoria policies, particularly as it relates to liveability of future residents on this parcel, as well as liveability of residents on neighbouring parcels"*, we worked with planning staff on revision options for a re-submission, trying to refine the design reviewed at the COTW. However, due to requested changes to density, height, and setbacks deemed necessary to adequately address the motion, the project was considered to be no longer feasible without a significant re-design. Rather than abandon the project as a rental proposal (or altogether), we decided to revise and re-submit the proposal as a houseplex, which retained the existing buildings on-site with a proposed addition. This housing form was suggested as being 'ideal' for the proposed site by Mayor and Council at the COTW meeting (**Appendix A** outlines how this revision responds to the staff review and ADP).

Still pursuant of the principal objectives of the original proposal, such as sustainable energy efficient design, adding rental stock in the rental retention zone of Fairfield, and being bike-oriented, this proposal would create six additional purpose built rental units on the site (for a total of 11 rental units). The plan includes a NEW accessible unit, as well as a NEW 3-bedrrom rental unit. With this revision, we feel that this re-submission adequately responds to all comments made by Mayor and Council at the COTW meeting on July 14, 2022, where a five-storey 20-unit, purpose-built rental building was considered (See **Figure 1** for an illustration of changes). This letter explains how this proposal aligns with existing policies and will contribute the Fairfield Neighbourhood of Victoria.

Figure 1: Project Redesign Illustration

July 14, 2022 COTW Proposal (20 Unit Rental Building)

June 15, 2023 Proposal (11 Unit Rental Building)

DESCRIPTION OF PROPOSAL

This re-zoning and development permit application is requesting to re-zone the current site from R-K to a site-specific zone to allow for construction of an addition to the front of the existing main building which would increase the total number of rental units in the main building from 4 to 10, while retaining the existing garden suite, for a total of 11 purpose-built rental units. The following unit mix is proposed:

- One 3-bedroom units
- Two 2-bedroom units
- Six 1-bedroom units (Including one NEW accessible unit)
- One bachelor unit and one bachelor (loft unit) (the Retained Garden Suite)

Due to the extent of the renovation and addition, existing tenants will be displaced. Consistent with the City of Victoria Tenant Assistance Policy (2019), a Tenant Assistance Plan has been developed, and has been provided to tenants.

NEIGHBOURHOOD CONTEXT, SITE CHARACTERISTICS & EXISTING ZONING

1042-1044 Richardson St. is located mid-block on the 1000 block of Richardson St. on a flat lot that is artificially elevated from the street (it is one building east of Cook St.). The project site is comprised of one legal lot that is 668m2 lot (7190 sq. ft) in size. The site is situated in a densely populated portion of Fairfield that is in close proximity to the downtown core and is surrounded by a mix of multi-residential units including a blend of strata condominiums, rental apartments, and townhouses. To the east of the property is a large three-storey rental apartment building (1050 Richardson St.). North of the site (1035 McClure St.) is a four-storey condo building containing 29 units, with at grade parking both uncovered and enclosed within a single storey garage that runs along the westerly property line of 1042Richardson St. Across the Street is four storey rental apartment building. Other nearby multi-unit properties on Richardson St. include two townhouse developments, a four storey 20-unit condo building, and two other four-storey rental apartment buildings (See **Figure 3** for reference images).

The 1000 Block of Richardson St. exemplifies the accretion of urban form and character and is distinguished by diverse architectural forms with generally large footprints that were completed in different eras. This ranges from traditional walk-up apartments completed in the 1950s and 1960s, to more contemporary strata condo and townhouse projects completed in the 1990s and early 2000s. The most recent addition to the streetscape is 1020 Richardson St. (Terra Verde by Abstract Developments completed in 2011).

Figure 2: Project Site (1042-1044 Richardson Street)

The subject site at 1042-1044 Richardson St. is the only site on the block that has not been developed to a higher density (with the exception of heritage homes fronting Vancouver St.), and would be the first new rental units to be added to the street since the 1960s. The site is currently zoned R-K (Medium Density Attached Dwelling District) and hosts two structures with a totalof five rental units: A main house that contains three one-bedroom units and a bachelor suite, and a separate carriage house / garden suite (bachelor suite), both of which are proposed to be retained and improved in this proposal. The five existing units do not have any off-street parking or bicycle parking.

Figure 3: Site Context (Multi-Residential Units Surrounding Project Site)

1050 Richardson Street (Immediate Neighbour)

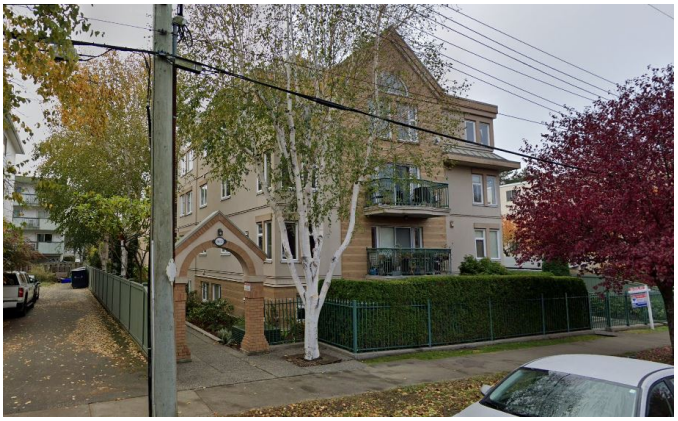
1035 McClure St. (Immediate Neighbour)

1041 Richardson Street
(Immediately Across Street)

1045-1051 Richardson Street and 666 Cook Street
(Immediately Across Street)

1020 Richardson Street
(One lot over on same side of street)

1037 Richardson Street
(One lot over across the street)



ARCHITECTURAL EXPRESSION

The proposed building form and character retains the traditional design elements of the current buildings, originally constructed in 1910, while adding some contemporary elements such as a metal roof detail. This varied design complements the diverse architectural forms on the 1000 block of Richardson Street.

Providing an exterior entry for each of the units, the renovation and addition aimed to retain as many existing entrances as possible to limit impacts on neighbouring properties. In total four of the seven existing building entrances were retained, all of which are located near the rear of the site. The proposal adds three new entrances fronting Richardson, two new entrances on the east side of the property (replacing a single entry point in approximately the same location, which was formerly the main entry to the building), and three new entrances along the west side of the property (replacing a single entry point to a single suite). The three entrances on the west side of the property oriented towards the west property line are sunken to limit any impacts on the neighbouring site.

The architectural design aimed to provide private outdoor space to as many units as possible. In total, ten of the eleven units have private outdoor spaces, with the remaining unit having a Juliet balcony and access to the shared rear yard space. This is a significant improvement from the existing design where only two units have semi-private outdoor space (sharing the rear yard). There are no balconies on the east side of the building, which has a setback of 1.17M (the existing building setback). The easterly setback for the addition is enhanced, ranging from 2.27m (to an entry landing) to 3.67M for the building façade of the new proposed addition.

DEVELOPMENT PERMIT & POLICY GUIDELINES

Below is a summary of how building design aligns with the Official Community Plan (2012; Updated February 27, 2020), Fairfield Neighbourhood Plan (2019), and City of Victoria's Design Guidelines for Multi-Unit Residential, Commercial & Industrial Development (2012).

1. Official Community Plan

This site is designated as Urban Residential in the Official Community Plan (OCP). In the OCP, Urban Residential sites support attached and detached buildings up to three storeys and mid-rise multi-unit buildings up to approximately six stories and floor space ratios ranging from up to 1.2:1.0 to 2.5:1.0 depending on location. This proposal aligns with the OCP in terms of use and density.

2. Fairfield Neighbourhood Plan

This site is located in the Rental 'Retention Sub-area' of Fairfield. In this area, development that retains and/or increases the supply of rental stock is encouraged (Section 8), with development up to approximately 2.0: 1.0 FSR and six storeys (20 Meters) to be considered (p. 74, 2019). At 3 storeys and 1.1: 1.0 FSR, this proposal is significantly lower in terms of building height and density than the guidelines set out in the Fairfield Plan. The adaptive reuse of the existing buildings on the site also aligns with several objectives in the Fairfield Plan.

With housing affordability and increased diversity of housing options being central to the Fairfield Neighbourhood Plan, unit mix was selected to meet specific needs set out in the local area plan. Specifically, the inclusion of a 3-bedroom unit, and an accessible unit, as sec. 9.1.2 stated that more housing is needed which is geared towards "families (3+bedrooms), seniors and working people with low incomes".

Form and Character Objectives for Urban Residential Areas in the Fairfield Neighbourhood Plan were used as a guide in the design of this proposal. Being pedestrian-centric was foundational to design. This was achieved by incorporating walkways around the building, and locating the bicycle room near the front of the site, close to the street for easy access. There is a shared rear yard garden area, intended to serve as a comfortably sized outdoor gathering place for residents to enjoy.

3. Multi-unit Residential Design Guidelines:

Details of design were guided by the City of Victoria Design Guidelines for Multi-Unit Residential, Commercial and Industrial (2012). Below are examples of how the proposal aligns with these guidelines, with specific reference to site siting, massing, street relationship and exterior finishes:

- **Site siting:** The siting of the proposed building maintains the continuity of the street edge on Richardson St., providing some space for front yard landscaping (Sec. 2.3.2). The proposed front yard setback will bring the property in line with other buildings along Richardson Street to create a more consistent streetscape. The generous boulevard on Richardson St. further softens the interface of the building with Richardson St. Siting the building close to the front of the property also allows for spatial separation from neighbouring buildings.

- **Streetscape / Street-relationship:** The building interfaces with the street by providing a prominent shared entrance and staircase access to three of the units fronting Richardson Street. Pedestrian oriented pathways with wayfinding signage provide access to the remaining units. At two stories, the building will not have a dominating presence on the street, as it is among the lowest buildings on the block. Privacy impacts of adjacent buildings were carefully considered in the re-design, with the majority of principal windows face away from existing buildings, with most windows facing onto Richardson Street or to the West. Entrances on the West façade are sunken, with screening (fencing), to limit impacts on the neighbouring site.

- **Exterior Finishes:** The finishes selected deliberately avoid a mashup of material, colour and texture and relies on a well composed, intentional architecture that is durable, and timeless. This ensures that the building is maintainable and weathers/ages consistently, rather than presenting a varied protocol for maintenance through the life of the building.

- **Landscape:** The proposed landscape plan optimizes replacement trees along the building frontage and rear yard. A mix of soft ground covers and hardscape pavers and surfacing are composed to reinforce paths and movement on the site.

TRANSPORTATION

This proposal not proposing to add any off-street parking spaces to the site. Watt Consulting Group conducted a parking analysis relating to this proposal examining expected demand and recommending a number of Transportation Demand Measures (TDM) aimed at reducing the use of private vehicles as a transportation typology, and a demand for on-site and off-street parking. This proposal provides the following TDM measures recommended by Watt Consulting Group. These include:

1. Committing to purchase of an electric or hybrid Modo carshare vehicle for the site and providing memberships to each unit, which will provide a viable mobility option for residents and reduce dependency on vehicle ownership.
    a. A dedicated on-street parking stall for car share with an accompanying electric vehicle charging station is proposed. This stall would increase visibility and promote car sharing use in the larger

community. On-street charging infrastructure will be constructed by the developer to the satisfaction of the Director of Engineering and Public Works. Following installation, ownership of the charging station will be transferred to the City of Victoria. An off-street parking stall will be provided should the car share vehicle need to be relocated due to street maintenance or renewal. This parking stall will be used for visitor parking in the interim. Car share memberships and usage credits will be provided to all residents.

2. Providing 17 long-term bike parking spaces, which are conveniently located in secure bike room near the front of the property. Electric bike charging is accessible long-term bicycle parking stalls, and 4 of the long-term spaces can accommodate cargo bikes. *Note: this space could also be used for other types of sustainable transpiration devices to meet the unique transportation needs of residents, such as electric scooters (i.e. vespas, mobility scooters, standing powered scooters, etc.)*;
3. Providing a shared electric bike program for the building (3 bikes, including one cargo bike)

Figure 4: Walkscore.com

Proximity to the downtown core and amenities at Cook St. Village is central to the parking variance request. It is expected that the site will service those who are within walking distance to their place of work, and being that it is a rental building, will have lower vehicle ownership rates than typical strata condominium projects. According to walkscore.com the site is 'very walkable' (walkscore of 93) and has 'excellent' access to public transit (transit score of 88). It is also situated on a dedicated All Ages and Abilities (AAA) bicycle route and is a 'biker's paradise' with a bike score of 83. The location in proximity to established and emerging bike routes, influenced design of the building to encourage and support the use of bicycles.

The parking study conducted by Watt found that the provision of zero residential parking is supportable based on other car-free developments recently approved in Greater Victoria along with a sample of other case studies in Canada. Further, the site's access to Victoria's AAA cycling network and high-quality transit service will make it easier for future residents to use sustainable transportation modes for various trip purposes. By committing to the TDMs proposed, Watt Consulting belives that the provision of zero off-street parking spaces is supportable (See **Appendix B** for the Complete Parking Study)

IMPACTS

At two stories, this proposal will remain at the same height it has been since initial construction (1910), and will be lower in height than neighbouring buildings to the east and north, which are three and four stories respectively. As the addition is located at the front of the site (towards Richardson Street) there will be limited shadowing implications, with shadows from the addition being cast primarily onto the at grade parking lot of the 1035 McClure Street. There are no balconies facing immediate neighbours on the east or north of the building. All balconies and principal windows are oriented towards Richardson Street, or to the West, which overlooks at grade parking for 1035 McClure Street.

INFRASTRUCTURE

There are existing services and sidewalk on the property frontage. A sanitary impact assessment was conducted which indicated that the proposed development would not increase the sanitary load on the City System any more than what could be discharged from the site under the existing zoning.

HERITAGE

Building structures included in this proposal do not have recognized heritage value. The Senior Heritage Planner for the City of Victoria was contacted, and following review, it was determined that the building does not have enough character or value to justify the city pursuing heritage designation. However, character elements of the existing buildings are being included in the proposed addition to retain the existing form and character.

SAFETY AND SECURITY

The proposal acknowledges and integrates key CPTED principals to maintain and increase safety and security. There are three unit entrances with direct access to the street. 'Eyes on the street' are increased with views from principal living spaces being directed towards Richardson Street and open air parking areas on neighbouring sites. Site lighting will be used illuminate pathways and shared areas with ambient light provided to promote safety and visibility of landscaped areas.

GREEN BUILDING FEATURES

The following is a list of green building initiatives that will be deployed within the project:

- Meeting Step 3 of the BC Energy Step Code.
- Use of exterior durable materials designed to last the life-span of the building and be easily/readily maintained.
- Providing directly metered suites with multiple thermostatically controlled heating zones in each residence.
- Rough-in for Solar Panels Ready on the roof of the building.
- Use of LED lighting throughout the project
- Low-VOC paint in all interior areas.
- Low-flow plumbing fixtures used throughout all units.
- Secure bike storage with electrical outlets for electric bicycle charging.

Note: As this proposal is submitted after May 1, 2023, new enhanced energy efficiency requirements of the 5th revision to the 2018 BC Building Code are now in effect. These latest standards, which mandate a roughly 20% improvement in insulation values under the prescriptive path, will be incorporated into the building permit application.

PROJECT BENEFITS AND AMENITIES

- This project will bring 6 new units of rental housing stock to the City of Victoria. This includes a 3-bedroom unit and an adaptable rental unit. The unit mix provided is specifically designed in response to community feedback collected in the Fairfield Plan development, which suggested more housing in Fairfield targeted to families(3+bedrooms), seniors and working people with low incomes (sec. 9.1.2)."
- The car-share vehicle provided will contribute to an increasing fleet of shared vehicles in Victoria, which will not only be accessible for residents of 1042-1044 Richardson St., but also to members of the community at large.
- The overt mobility strategy prioritizes the use of bicycles as a prominent lifestyle feature, ensuring bicycle use is convenient and highly accessible.

PROJECT TEAM

We are pleased to be working with a talented project team of professionals local to Victoria, with extensive experience working with the City of Victoria. These include:

- Christine Lintott Architects Inc., Architect
- LADR Landscape Architects, Landscape
- Spot Design Co., Interior Design
- Powell & Associates, Land Surveyors
- McElhanny, Civil Engineer
- Skyline Engineering, Structural Engineer
- Talbot MacKenzie & Associates, Consulting Arborists
- Watt Consulting Group, Parking Study

CONCLUSION

The previous staff report concluded that *"due to the scale and massing of the development and the relatively small site size, the proposed land use is inconsistent with the OCP and Fairfield Neighbourhood Plan, which supports lower scale three-storey buildings such as houseplexes, townhouses, additions to existing house conversions or small apartment buildings as opposed to a five to six-storey building with multiple dwellings."* We feel this revision responds directly to all comments made by Staff, Council and the ADP, providing revised plans for a lower density three-storey houseplex, which will be constructed in the form of a renovation and addition, which preserves the form and character of the site. We feel that this application will provide can breathe fresh air into an aging building, providing thoughtfully designed, sustainable, rental units that will serve the Fairfield community for years to come.

Thank you for reviewing this proposal to redevelop 1042-1044 Richardson Street. If you have any questions or require further clarification of any part of this proposal, please do not hesitate to contact me directly.

Sincerely,

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APPENDIX A: APPLICANT RESPONSES TO STAFF REVIEW & ADP

APPLICANT RESPONSES TO STAFF REPORT (REVISIONS FOLLOEING COTW REPORT JULY 14, 2022)

Staff Report Considerations (Rezoning Application)	Revisions / Applicant Response
• Due to the location of the property and relatively small lot size, the proposal is considered inconsistent with the Official Community Plan, 2012 (OCP) Urban Residential Urban Place Designation, which envisions buildings up to 1.2:1 FSR and three-storeys in height.	The revised proposal is consistent with the OCP. At 1.1: 1.0 FSR and 3 stories in height it is under the height and densities to be considered in this zone (buildings up to 1.2:1 FSR and three-storeys in height).
• The proposal is consistent with the OCP housing policies which support replacement of existing rental units with a rent level secured through a legal agreement and a mix of housing types and unit sizes in all neighbourhoods.	NO CHANGE REQUIRED: The proposal continues to be consistent with housing policies.
• The proposal is considered inconsistent with the Fairfield Neighbourhood Plan, which supports townhouses, houseplexes or small-scale apartments up to three-storeys in height on smaller Urban Residential sites.	The project has been revised to a houseplex (still rental), which is under three stories in height, which is consistent with the Fairfield Neighbourhood Plan.
• The proposal is considered consistent with the Fairfield Neighbourhood Plan policies for the Urban Residential sites in the Rental Retention Area which supports new rental and rental replacement secured with a legal agreement.	NO CHANGE REQUIRED: The proposal is still consistent with the Fairfield Neighbourhood Plan policies for the Urban Residential sites in the Rental Retention Area. Bonus density is not requested above 1.2:1.0 FSR.
• The applicant has provided a Tenant Assistance Plan consistent with the Tenant Assistance Policy.	NO CHANGE REQUIRED: A Tenant Assistance Plan has been provided as per the Tenant Assistance Policy.
• The proposal is for a purpose-built market rental building, which will be secured for the greater of 60 years or the life of the building through a legal agreement, and is therefore exempt from the Inclusionary Housing and Community Amenity Policy	NO CHANGE REQUIRED: The proposal is for a purpose-built market rental building, which will be secured for the greater of 60 years or the life of the building through a legal agreement, and is therefore exempt from the Inclusionary Housing and Community Amenity Policy.
Staff Report Considerations (Development Permit with Variance Application)	**Revisions / Applicant Response**
• The proposal is inconsistent with the objective and guidelines for Development Permit Area 16: General Form and Character, which encourage new residential buildings to respect the character of established areas through appropriate form and massing that is compatible, unifying, and sensitive to context.	The proposal has been revised to align with guidelines in Development Permit Area 16. By retaining the existing buildings on the site, the form and character of the buildings will remain, as well as the height of the buildings and massing. Through construction of an addition to the front of the site, the front setback is will become in alignment with the streetscape of Richardson Street. The height of the existing building is among the lowest on the block, surrounded by primarily 3-4 storey buildings.
• The exterior corridors and circulation space do not count towards the FSR calculation but do contribute to the bulk of the building.	N/A: There are no longer any exterior corridors in the proposal.

• The proposed building height combined with a lack of sufficient setbacks and units oriented in each direction may have a negative impact on the liveability of neighbouring	The only setback changing in this proposal is the front yard setback which will be brought into alignment with other buildings on the block (it is current out of alignment and context). New Windows added are concentrated towards the street and new side yard of the property.
• The proposed increase in site coverage and limited open site space limits the opportunity to provide at-grade landscaping and amenity space.	The existing rear landscaped yard area on site is retained in this proposal. Screening and privacy will be improved between neighbouring sites with the addition of larger trees located in the rear yard. By eliminating the driveway additional trees have been able to be added to the front of the site and boulevard.
• The proposed parking variance is considered supportable as the applicant is offering car share memberships and usage credits as well as enhanced bicycle parking to mitigate any impact.	This proposal continues to offer an electric modo carshare vehicle (on street in the same location to serve residents of the proposed development and the community), modo memberships for residents and enhanced on-site bicycle parking amenities. However, with the retention of the existing buildings, no off-street vehicle parking is provided in the revised proposal. An accessible on-street parking space is also proposed. One of the new one-bedroom units is designed to be accessible.

APPLICANT ADVISORY DESIGN PANEL RESPONSES (REVISIONS RESPONDING TO SEPTEMBER 22, 2021 MOTION):

Staff Report Considerations (Development Permit with Variance Application)	**Revisions / Applicant Response**
• Variances are not supportable. For example, the proposal has only a third of the site area required in this zone.	While lot consolidation is not possible in this location, the extent of all variances requested (excluding off-street parking) were significantly reduced in this re-submission as a houseplex.
• The architectural expression, particularly the stair tower, has a more institutional rather than a residential expression as outlined in the guidelines.	N/A. The stair tower has been removed from the design. The revised application is for a houseplex, which is clearly residential in form.
• Open space requirement is 50% and the project proposed 28.7%.	Open site space for the project has increased to 45% from 28.7%. There is significantly more at grade green space included in this application.
• Maximum site coverage required is 40% and the project proposed 60.02%.	Site coverage has been reduced from 60.02% to 55%. The re-design of the proposal centered around retention and re-use of existing structures which resulted in a slightly higher site coverage than would be typical if the project were new construction, which would have been higher it stature. We feel that the lower height off-sets site coverage in this application.
• Re-examination of the materiality particularly regarding the exterior cladding	Materiality of the proposal has been revised as per ADP comments.

APPENDIX B: PARKING STUDY (WATT CONSULTING GROUP)

1042-1044 RICHARDSON STREET

Parking Study

Tanner Vollema, EIT
Author

Tim Shah, RPP, MCIP
Sr. Transportation Planner & Planning Lead
Reviewer

Prepared For: 1248330 BC Ltd.
Date: June 21, 2023
Our File No: 2893.B01

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1.0 INTRODUCTION

Watt Consulting Group (WATT) was retained by 1248330 BC Ltd. to conduct a parking study for the proposed development at 1042-1044 Richardson Street in the City of Victoria. The purpose of this study is to determine the parking demand for the site and identify transportation demand management strategies to help the applicant reduce the expected parking demand.

1.1 Subject Site

The proposed development is located at 1042-1044 Richardson Street in the City of Victoria (see **Figure 1**). It is currently zoned R-K (Medium Density Attached Dwelling District) and hosts two structures with five rental units.

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 1042-1044 Richardson Street. In addition, the City of Victoria's planning policies pertaining to sustainable transportation and parking management are summarized.

CITY & NEIGHBOURHOOD 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 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.*"

The City also adopted the Fairfield Neighbourhood Plan[1] in September 2019. That Plan includes relevant policy direction pertaining to housing and transportation in the Fairfield neighbourhood. Developed in collaboration with the neighbourhood through an engagement process, one of the key plan directions is to "retain rental housing and add new rental and ownership housing". Part of realizing this direction is to direct contributions from new development to create new, on-site affordable

[1] City of Victoria. (2019). Fairfield Neighbourhood Plan. Available online at: https://www.victoria.ca/assets/Departments/Planning~Development/Community~Planning/Local~Area~Planning/Fairfield~Gonzales/Fairfield_NP_Final-web.pdf

housing. In addition, the parking management section of the Plan includes direction to prioritize parking for bicycles, mobility devices, carshare vehicles, and electric transportation—all of which are included in the proposed development.

Lastly, the City of Victoria adopted its Sustainable Mobility Strategy in 2020.[2] The Strategy intends to address significant advancements occurring in the mobility space, such as the introduction of new mobility modes, shared mobility services, ride hailing and e-mobility devices. The Strategy's mission is as follows:

"Stewarding and transforming the right-of-way to meet the demands of our growing city; increasing access to mobility choices, opportunities, and services; and promoting equity, accessibility, and environmental health through our transportation investments."

The Strategy also contains several targets and indicators, many of which are relevant for parking and for this parking study. By 2026, the City would like to reduce average vehicle ownership per household by 30% from 2017 levels. Further, by 2030, the City would like to see [a] a doubling of transit ridership to, from, and within the City, [b] 55% of all trips made to, from, within Victoria are by walking, rolling, or cycling, and [c] all Victoria neighbourhoods are "complete" by design, where residents can meet their daily needs within a 15-minute walk.

Achieving these targets will require new developments to be approved in already walkable and compact areas with access to transportation options and where residents will not be reliant on their vehicles for most trips. The subject site is already conducive to a "car-light" lifestyle, as discussed in the following sections.

[2] City of Victoria. (2020). GO Victoria: Sustainable Mobility Strategy. Available online at: https://www.victoria.ca/assets/Community/Cycling/GoVictoria_2020DEC.pdf

SERVICES

The site has direct access to commercial and retail amenities. Cook Street Village is within 550m (about a 5-minute walk) of the site, where several commercial amenities and personal services are located including a grocery store, medical, pharmacy, financial services, café, and restaurants. The site is also on the edge of downtown Victoria, where even more personal services and amenities are available.

TRANSIT

The subject site is within 50m (1-minute) walk of bus stops on Richardson Street and 100m of a pair of stops on Cook Street. The bus stops on Richardson Street are serviced by Route 1 (South Oak Bay / Downtown) and those on Cook Street by the Route 3 (James Bay / Royal Jubilee. Both routes provide 30-minute service during the weekday peak periods, with the Route 3 also providing service throughout the day seven days per week.

The site is also less than 200m (2-minute walk) from Fairfield Road, which is designated as a Frequent Transit Corridor in the Victoria Regional Transit Future Plan.[3] All frequent transit corridors will see convenient, reliable and frequent (15 minutes or better between 7:00 a.m. and 10:00 p.m.) transit service seven days a week.

WALKING

The subject site has a walk score[4] of 85, which means that it is situated in a very walkable area. This indicates that most errands can be accomplished on foot. Sidewalks are provided on both sides of Richardson Street and along Cook Street. There is also a crosswalk on the

[3] BC Transit. (2011). Transit Future Plan: Victoria Region. Available online at: https://www.bctransit.com/documents/1507213421003

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

south side of the Cook Street / Richardson Street intersection, which provides a safe crossing for pedestrians.

CYCLING

The subject site is in an area where cycling is convenient for most trips. Richardson Street has recently been upgraded to an All Ages and Abilities (AAA) cycling corridor through the installation of infrastructure improvements including new pedestrian amenities (e.g., new and upgraded pedestrian crossings, new sidewalks), traffic calming benefits (e.g., posted speed limit of 30 km/hr and traffic diversion), and additional landscaping and public realm upgrades and is a shared-use neighbourhood bikeway that runs from Vancouver Stret to Foul Bay Road. The site is also in proximity to Vancouver Street, which is another AAA bike route which provides north-south connectivity to other parts of Victoria's existing bike network including to the Fort Street and Pandora Avenue protected bike lanes.

In summary, the new AAA cycling facilities on Richardson Street and Vancouver Street provide excellent cycling conditions around the subject site and thereby increase the overall appeal of cycling among future residents of the site.

CARSHARING

Carsharing programs are an effective way for people to save on the cost of owning a vehicle while having access to a convenient means of transportation. The Modo Car Cooperative ("Modo") is the most popular carsharing service in Greater Victoria. According to Modo's Car Map, there are 10 vehicles within a 500m radius (5-7 minute walk) of the subject site (see **Figure 2**). This indicates that residents of the future site have several carshare vehicle options available to them, which can support a car-free or car-light lifestyle.

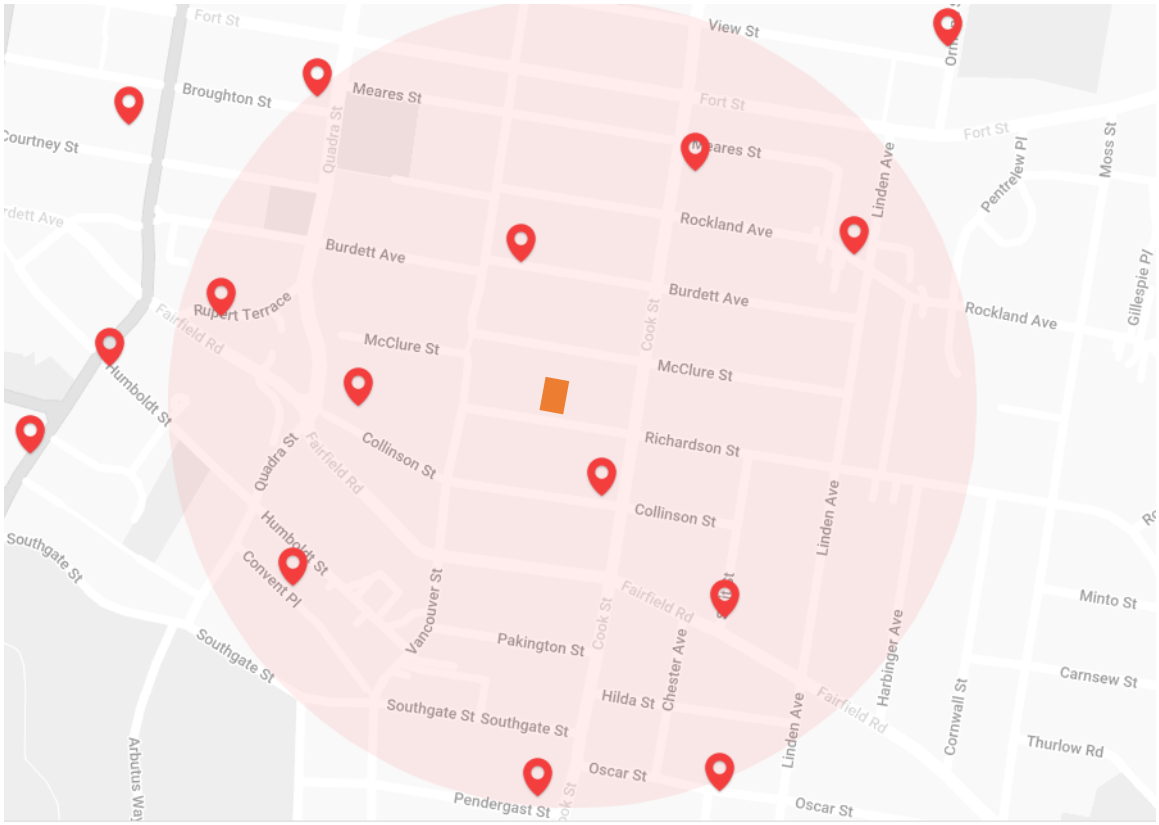

Figure 2. Modo Carshare Vehicles within 500m of Subject Site

2.0 PROPOSED DEVELOPMENT

2.1 Land Use

The proposed development is for an 11-unit market rental development. The proposed development will include a mix of bedroom types from studio to three-bedrooms (see **Table 1**).

Table 1 – Summary of Land Uses

Housing Tenure	Unit Type	Quantity
Market Rental	Studio	1
	One-bedroom	7
	Two-bedroom	2
	Three-bedroom	1
	Total	**11**

2.2 Proposed Parking Supply

2.2.1 Vehicle Parking

The applicant is proposing no off-street parking. As part of the applicant's proposed transportation demand management program (see **Section 6.1**), one on-street parking space will be provided for a Modo carshare vehicle that will include a Level 2 electric vehicle charging station for the vehicle.

2.2.2 Bicycle Parking

The proposed bicycle parking supply includes 17 secured long-term spaces (1.5 spaces per unit) and six short-term spaces. Each long-term bicycle parking space will have access to a 120V wall outlet to facilitate charging for electric bike owners. All long-term bikes will be in a secure, weather protected location. In addition, 4 of 17 long-term spaces (24%) will be designed to accommodate larger bicycles such as electric cargo bikes and bikes with trailers to make it easier to own a cargo bike at the development.

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 per Figure 1 of Schedule C and the 'Apartment' land use per Table 1. Based on the Schedule C requirements, the site is required to provide a total of 11 off-street parking spaces (10.8, rounded) comprising 10 residential spaces and 1 visitor space.

Table 2 – Summary of Parking Requirement

Use	Unit Size	Rate	Unit Quantity	Requirement
Apartment	<45m²	0.75 / unit	1	1
	45m² to 70m²	0.9 / unit	7	6
	>70m²	1.3 / unit	2	3
	Visitor	0.1 / unit	11	1
			Total	**11**

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 45m^2 in area and 1.25 spaces per unit for units that are 45m^2 or more. This results in a requirement of 14 long-term bicycle parking spaces. The applicant is exceeding this requirement by 3 bicycle parking spaces.

The subject site is also required to provide a minimum of 6 short-term bicycle parking spaces, which the applicant is meeting.

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 several representative multi-family apartment sites and [c] research from recent past parking studies completed in the City of Victoria.

4.1 Market Rental

4.1.1 Site Selection

Observations of parked vehicles were completed at 16 market rental buildings in the Fairfield neighbourhood and Cook Street Village representing a total of 516 units. Site selection was based on the following criteria:

- **Location**. Sites were selected in the Fairfield neighbourhood to ensure consistency in urban and transportation characteristics. Further, the Fairfield Neighbourhood Plan contains several guiding principles along with transportation and housing policy direction for the neighbourhood, which will result in changes to the urban fabric and transportation network. As such, selecting sites in the Fairfield neighbourhood provide an indication of what parking demand is today and how it might evolve as the recommendations in the Fairfield Neighbourhood Plan are implemented.
- **Walk Score**. Only sites that had a walk score of 80 and above were selected to resemble the walkability of the subject site.

4.1.2 Observations

Observations of parking utilization were conducted at representative sites during the typical weekday peak hour period for residential land uses. For the purposes of this study and to ensure that it overestimated rather than underestimated demand, the greater number of observed vehicles between each data collection exercise were used for the representative peak demand at each location. Parking demand ranged from 0.42 vehicles per unit to 1 vehicle per unit, with an average parking demand of 0.60 vehicles per unit as shown in **Table 3**. Observations were conducted from 9:00-10:30pm on Tuesday September 8 and Wednesday September 9, 2020.

Table 3 – Parking Demand at Representative Sites

Address	Number of Units	Peak Observed Vehicles	Parking Demand (Vehicles / Unit)
777 Cook Street	41	41	1.00
820 Cook Street	21	18	0.86
1060 Pakington Street	33	16	0.48
1233 Fairfield Road	60	32	0.53
955 Cook Street	31	13	0.42
825 Cook Street	44	19	0.43
915 Cook Street	31	13	0.42
1150 Hilda Street	21	11	0.52
430 Chester Avenue	31	15	0.48
999 Southgate Street	31	20	0.65
715 Vancouver Street	46	21	0.46
350 Linden Avenue	39	17	0.44
505 Trutch Street	33	18	0.55
1208 Rockland Avenue	7	7	1.00
		Average	**0.60**

4.1.3 Adjustment Factors

Observations are a useful method of assessing parking demand rates; however, there are limitations. One such limitation is the fact that an observation may not "catch" all residents while they are home with their parked car on-site. On a typical weeknight in times prior to public health measures recently put in place due to COVID-19, it would be expected that some residents return home very late at night or in the next morning or have driven out of town for business or vacation.

For instance, a large-scale apartment parking study commissioned by Metro Vancouver reported that observations of parking occupancy (percent of stalls occupied by a car or truck) increased later in the night. The study also suggested that occupancy surveys that start between 9PM – 10:30PM should have a 10% adjustment factor. Based on the available research, a conservative 10% adjustment factor is considered appropriate for the observations. For parking studies such as this one taking place during the gradual easing of social distancing, retaining the adjustment factor helps ensure that the parking demand estimates reflect a conservative (i.e. higher) estimation of demand.

Table 4 shows the difference between the observed parking demand and the adjusted parking demand rate, reflecting the 10% increase for "missed vehicles". The average observed demand rate increased from 0.6 to 0.65 vehicles per unit (excluding visitor parking).

This finding is supported by the research that was undertaken as part of the Schedule C update for the City of Victoria. According to the multi-family residential parking demand analysis, which contained 126 buildings and 6,475 units across the City of Victoria, the average parking demand for market rental sites was reported as 0.54 vehicles per unit or 0.70 vehicles per unit as the 85th percentile demand.[5,6]

[5] WATT Consulting Group & City of Victoria. (2016). Working Paper no.3: Parking Demand Assessment, Review of Zoning Regulation Bylaw Off-Street Parking Requirements (Schedule C).
[6] Some parking studies tend to plan for the 80th or 85th percentile demand rather than the average. This means 85% of sites will have peak parking at or below the rate 0f 0.70 vehicles per unit.

Table 4 – Adjusted Parking Demand at Representative Sites

Address	Number of Units	Parking Demand (Vehicles / Unit)	Adjusted Parking Demand (Vehicles / Unit)
777 Cook Street	41	1.00	1.10
820 Cook Street	21	0.86	0.94
1060 Pakington Street	33	0.48	0.53
1233 Fairfield Road	60	0.53	0.59
955 Cook Street	31	0.42	0.46
825 Cook Street	44	0.43	0.48
915 Cook Street	31	0.42	0.46
1150 Hilda Street	21	0.52	0.58
430 Chester Avenue	31	0.48	0.53
999 Southgate Street	31	0.65	0.71
715 Vancouver Street	46	0.46	0.50
350 Linden Avenue	39	0.44	0.48
505 Trutch Street	33	0.55	0.60
1208 Rockland Avenue	7	1.00	1.10
	Average	**0.60**	**0.65**

4.1.4 Parking Demand by Unit Type

Unit size type refers to the number of bedrooms provided within a residential unit. Research has shown that larger units will generally have more occupants or a family, therefore increasing the likelihood that additional vehicles will be owned by occupants and growing the parking demand.[7] As part of the Schedule C update, parking demand was shown to differ by unit type among the 6,475 multi-family residential units that were included in the sample.[8] This research, in addition to the stakeholder consultation that was conducted as part of the Schedule C update, resulted in recommendations to amend the multi-family residential parking requirements in Schedule C to include rates by unit size.

Based on the research above, and the fact that the City of Victoria's Schedule C requirements differ rates by unit size, parking data collected for this study was assessed to reflect unit type using the following steps:

- Parking demand was calculated and adjusted by 10%;
- Existing breakdown of bedrooms per unit at each site was acquired from the Canada Mortgage and Housing Corporation (CMHC); and
- The assumed "ratio differences" in parking demand between each unit type was based on the 2018 Metro Vancouver Parking Study, which recommends, for market rental units, that one-bedroom units have a 117% higher parking demand than studio units; two-bedroom units have a 26% higher parking demand than one-bedroom units; and three plus-bedroom units have a 23% higher parking demand than two-bedroom units.[9]

As indicated in Section 2.1, the proposed development includes 1 studio unit, 7 one-bedroom units, 2 two-bedroom units, and 1 three-bedroom unit. Applying the Metro Vancouver ratios to the parking demand data, the studio rate is 0.33 vehicles (spaces)

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[7] Potoglou, D., & Kanaroglou, P.S. (2008). Modelling car ownership in urban areas: a case study of Hamilton, Canada. *Journal of Transport Geography*, 16(1): 42–54.
[8] WATT Consulting Group & City of Victoria. (2016). Working Paper no.3: Parking Demand Assessment, Review of Zoning Regulation Bylaw Off-Street Parking Requirements (Schedule C).
[9] Metro Vancouver. (2018). Regional Parking Study – Technical Report, pg. 18. Available online at: http://www.metrovancouver.org/services/regional-planning/PlanningPublications/RegionalParkingStudy-TechnicalReport.pdf

per unit, the one-bedroom rate is 0.6 vehicles (spaces) per unit, and the two-bedroom rate is 0.8 vehicles (spaces) per unit.

As the 516-unit parking survey sample only includes 3 three-bedroom units (which is less than 1 percent), the three-bedroom rate could not be reliably derived from the data. As such, the three-bedroom ratio from the Metro Vancouver study was applied to the two-bedroom parking demand rate (0.8 vehicles per unit). With three-bedroom units having 23% higher demand than two-bedrooms, the three-bedroom rate is 1 vehicle per unit.

In summary, based on the analysis above, the following are the recommended demand rates for the market rental units:

- Studio = 0.33 spaces per unit
- One-bedroom = 0.6 spaces per unit
- Two-bedroom = 0.8 spaces per unit
- Three-bedroom = 1 space per unit

4.1.5 Precedent Sites

There have been other proposed market rental buildings proposed in the neighbourhood that have sought a parking variance. As an example, a 31-unit market rental building was proposed at 1015 Cook Street. The Schedule C parking requirement for the development was 19 parking spaces; however, through a combination of proposed transportation demand management measures including three carshare vehicles, carshare memberships for each unit, two long-term bike parking spaces above and beyond the bylaw, and an at-grade bike parking room with end-of-trip facilities, the applicant was able to secure a 15-space parking variance from the City. As such, the

development was approved to provide three parking spaces for carshare vehicles and one visitor space—a total of four off-street spaces.[10,11]

4.2 Visitor Parking

Observations were conducted as part of a study by Metro Vancouver[12] 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.

A rate of 0.1 spaces per unit is recommended for the proposed development, which results in 1 parking space.

[10] City of Victoria. (2020). Council Report for Meeting of July 9, 2020, Update on Rezoning Application No. 00670 and Development Permit with Variance Application No. 00131 for 1015 Cook Street, Available online at: https://pub-victoria.escribemeetings.com/filestream.ashx?DocumentId=57189

[11] Hillel Architecture. (2019). Multi-family Residential Proposal 1015 Cook Street, Victoria, BC. Available online at: https://tender.victoria.ca/webapps/ourcity/Prospero/FileDownload.aspx?fileId=200BAF79-59E7-46BD-887C-0432F13A593C&folderId=75738C181031135335193179

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

4.3 Summary of Expected Parking Demand

Based on the analysis, the total expected parking demand for the site is 9 spaces (see Table 5).

Table 5 – Summary of Expected Parking Demand

Land Use	Unit Type	Units	Expected Parking Demand	
			Rate	Total
Market Rental	Studio	1	0.33 / unit	0.3
	One-bedroom	7	0.6 / unit	4.2
	Two-bedroom	2	0.8 / unit	1.6
	Three-bedroom	1	1 / unit	1.0
Visitor		11	0.1 / unit	1.1
Total Expected Parking Demand				**9 spaces**

5.0 ON-STREET PARKING ASSESSMENT

On-street parking observations were completed to determine parking availability nearby the subject site. All of the on-street parking segments observed have a parking restriction, including residential parking only and 2-hour parking only (9:00am-6:00pm). Counts were completed on the following streets:

- Richardson Street
    - Vancouver Street to Cook Street
    - Cook Street to Trutch Street
- Vancouver Street
    - Richardson Street to McClure Street
    - Collinson Street to Richardson Street

Two observations were conducted on Wednesday, June 14th, 2023, with one observation conducted at 7:30pm and one observation conducted 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.[13]

A total of 89 on-street parking spaces were observed. On-street parking utilization was observed to be consistent during both observations with 68-72 spaces occupied. This represents a peak parking occupancy of 76%-81%, which indicates that there are still approximately 17-21 spaces available during the observations. However, the on-street parking conditions on Richardson Street between Vancouver Street and Cook Street were highly utilized with over 93% occupancy on during the later (9:30pm) count. This indicates that the on-street conditions in proximity to the subject site have high occupancy and cannot accommodate any spillover from the proposed development.

Table 6 presents a summary of the on-street parking assessment. In the table under "Restrictions," "RPO" indicates "Residential Parking Only."

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

Table 6 – Summary of On-Street Parking Assessment

Street		Side	Restrictions	Parking Supply (spaces)	Vehicles Observed			
					Weds. 6/14/2023 7:30PM		Weds. 6/14/2023 9:30PM	
					Vehicles Observed	Occupancy	Vehicles Observed	Occupancy
Richardson Street	Vancouver St - Cook St	N	RPO	18	15	83%	15	83%
		S	RPO	23	21	91%	23	100%
	Cook St - Su'it St	N	2hr, 9am-6pm, M-F	4	4	100%	4	100%
			RPO	7	6	86%	7	100%
		S	RPO	11	5	45%	7	64%
Vancouver Street	Richardson St - McClure St	W	No Parking, 9am-6pm, M-F	8	2	25%	4	50%
		E	2hr, 9am-6pm M-Sat	5	2	40%	3	60%
	Collinson St - Richardson St	W	No Parking, 9am-6pm, M-F	7	7	100%	5	71%
		E	2hr, 9am-6pm M-Sat	6	6	100%	4	67%
Total				**89**	**68**	**76%**	**72**	**81%**

6.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation demand management (TDM) is the application of strategies and policies to influence individual travel choice, most commonly to reduce single-occupant vehicle travel. TDM measures typically aim to encourage sustainable travel, enhance travel options, and decrease parking demand. The following sections present several TDM measures that the applicant is committing to, which will reduce the amount of vehicle parking required for the development. An approximate reduction in parking demand is provided for each TDM measure.

6.1 Carsharing

6.1.1 Overview

As indicated in Section 1.2, there are 10 Modo vehicles within 500m of the subject site and an even greater number of vehicles in the larger Fairfield neighbourhood.[14] This is providing the area with adequate carsharing service and availability. Further, according to the 2017 CRD Regional Household Travel Survey, Victoria South—where the subject site is located—has one of the highest shares of households in the region with one vehicle (60%), which can make carsharing an even more viable option for families who may require a vehicle for only select trips.[15]

Part of the reason why carsharing is expanding locally and being supported by municipalities is because of its ability to reduce household vehicle ownership and parking demand. A recent 2018 study from Metro Vancouver analyzed 3,405 survey respondents from carsharing users in the region and found that users of Car2go and Modo reported reduced vehicle ownership after joining a carsharing service. The impact was larger for Modo users; households joining Modo reduced their ownership from an average of 0.68 to 0.36 vehicles. Further, Modo members were close to five times more likely to reduce car ownership compared to Car2go users.

[14] The location of Modo vehicles is shown on the Modo car map, which is available online at: https://modo.coop/car-map
[15] Capital Regional District. (2017). CRD Origin-Destination 2017 Household Travel Survey, pg. 105. Available online at: https://www.crd.bc.ca/docs/default-source/regional-planning-pdf/transportation/crd-2017-od-survey-report-20180622-sm.pdf?sfvrsn=4fcbe7ca_2

Additional research has found the following:

- A 2016 study in San Francisco reported that the potential for carsharing to reduce vehicle ownership is strongly tied to the built environment, housing density, transit accessibility, and the availability of parking.[16]
- A 2013 study from the City of Toronto looked at the relationship between the presence of carsharing in a residential building and its impact on vehicle ownership. The study surveyed residents of buildings with and without dedicated carshare vehicles. The study found that the presence of dedicated carshare vehicles had a statistically significant impact on reduced vehicle ownership and parking demand. Specifically, 29% of carshare users gave up a vehicle after becoming a member and 55% of carshare users forgone purchasing a car because of carsharing participation.[17]

Other studies have specifically explored whether the placement and location of a carsharing vehicle can have a positive impact on utilization. One study reported that on-street carshare vehicles can contribute to the growth of carsharing in two ways: (1) the time savings and convenience of on-street spaces can attract new members to carsharing organizations and (2) the better visibility of carshare vehicles parked on the street can serve as advertising that can show the benefits of membership.[18]

While a study has not yet been completed in Greater Victoria to understand the impacts of carsharing on vehicle ownership or the specific placement of the vehicle, the results would likely be similar especially for households living in more urban areas such as Victoria where there is greater access to multiple transportation options.

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[16] Clewlow, R.R. (2016). Carsharing and sustainable travel behaviour: Results from the San Francisco Bay Area. *Transport Policy*, 51, 158-164.
[17] Engel-Yan, D., & D. Passmore. (2013). Carsharing and Car Ownership at the Building Scale. Journal of the American Planning Association, 79(1), 82-91.
[18] Osgood, A. (2010). On-Street Parking Spaces for Shared Cars. Access Magazine, available online at: http://www.accessmagazine.org/wp-content/uploads/sites/7/2016/01/access-36sharedparking.pdf

6.1.2 Recommendation

Based on discussions with the applicant, they are going to provide Modo with a one-time financial contribution of approximately $40,000-49,000 (plus taxes) to be used for the purchase of one electric carshare vehicle that will be in a designated on-street space in front of the site. The on-street space will include an electric vehicle charging station that the applicant will purchase, which will be an additional $10,000 (capital cost + installation).

As part of the arrangement with Modo, the applicant will secure 11 Modo Partnership Memberships (one for each unit) valid for the lifetime of the development. This will allow residents to benefit from Modo membership privileges and the lowest usage rates. Residents will be able to benefit from easy access to the vehicle in front of the site, along with the 10 other Modo vehicles within a 5-7 minute walk.

A parking demand reduction of 20% is supported with the provision of a carshare vehicle and memberships.

6.2 Additional Long-term Bike Parking

6.2.1 Overview

The applicant is committing to provide 17 long-term bike parking spaces, which results in 1.5 spaces per unit. This exceeds the Schedule C requirement by 3 spaces (21%). The provision of additional bicycle parking spaces can support residents to satisfy potential bicycle demand in the present and future. Insufficient bicycle parking is considered a key barrier to promoting cycling, with additional bicycle parking associated with an increase of cycling by 10 to 40%.[19]

[19] Hein, E. & Buehler, R. (2019). Bicycle parking: a systematic review of scientific literature on parking behaviour, parking preferences, and their influence on cycling and travel behaviour. *Transport Reviews*, 39(5).

6.2.2 Recommendation

A parking demand reduction of 2% is supported for every additional 10% of long-term bicycle spaces provided beyond what is required in Schedule C. Therefore, a parking demand reduction of 4% is supported.

6.3 Shared Electric Bike Program

6.3.1 Overview

E-bikes are electric bicycles with an electric motor of 500 watts or less and functioning pedals that are limited to a top speed of 32 km/h without pedalling. They are an emerging transportation phenomenon that are gaining popularity worldwide. With supportive cycling infrastructure in place, E-bikes have the potential to substitute for, or completely replace, almost all trips taken by a gasoline powered car, which could address congestion issues and mitigate parking challenges within urban areas.

The applicant is considering the provision of a shared electric bike program in the proposed development, which will make cycling more attractive for residents and help them complete a variety of trips that would otherwise be done by car, transit, or another mode. The provision of electric bikes is anticipated to have an impact on vehicle ownership at the site; however, as electric bikes are an emerging form of mobility, there is limited research that has quantified the impact of these bikes on vehicle ownership / parking demand. A recent study presented results of a North American survey of electric bike owners. The study reported that e-bikes have the capacity to replace various modes of transportation commonly used for utilitarian and recreational trips including motor vehicles, public transit, and regular bicycles.

Example of an urban e-bike (top) and cargo e-bike (bottom). In Greater Victoria, the price range of an electric bike is $2,500-$10,000. Providing a mix of e-bikes in the shared e-bike program can help meet the various travel needs of future residents (e.g., shopping, appointments, recreational, etc.)

The study reported that 62% of e-bike trips replaced trips that otherwise would have been taken by car. Of these trips previously taken by car, 45.8% were commute trips to work or school, 44.7% were other utilitarian trips (entertainment, personal errands,

visiting friends and family, or other), and 9.4% were recreation or exercise trips. The average length of these previous car trips was 15 kilometres.[20] A more recent study found that approximately 39 kilometres of driving per week is displaced by the average e-bike adopter along with 14 kilometres of travel by conventional bicycle.[21]

A 2020 scoping review looked at 76 studies that have been published to date on electric bikes. It found that the proportion of car journeys substituted following acquisition of an e-bike ranged from 20% to 86%, with three studies reporting the substitution of short car journeys with the e-bike.[22] Lastly, a 2020 study found that people who purchased an e-bike increased their bicycle use from 2.1 to 9.2 km per day on average.[23]

6.3.2 Recommendation

Based on discussions with the applicant, they are going to provide three shared electric bikes, one of which will be a cargo bike. To ensure the shared e-bike program is managed efficiently, it is recommended that the applicant consider the following:

- The shared e-bike program should be managed by the property manager.
- The process to reserve an e-bike should be done on a first come first serve basis but can be determined by the property manager later.
- Overall e-bike utilization should be carefully monitored in the first year. If demand is consistently high, consideration should be given to adding more e-bikes to the fleet after year 1.
- Building tenants should be discouraged from using the e-bikes for work trips. The e-bikes should be intended for various trip purposes including errands, shopping, appointments, etc., which are all shorter duration trips and would allow the e-bikes to be more available to the site for other residents.

[20] MacArthur, J., Harpool, M., & D. Scheppke. (2018). A North American Survey of Electric Bicycle Owners. National Institute for Transportation and Communities, NITC-RR-1041.
[21] Bigazzi, A & E Berjisian. (2019). Electric Bicycles: Can they reduce driving and emissions in Canada. Plan Canada Fall 2019.
[22] Bourne, J.E., Cooper, A.R., Kelly, P., Kinnear, F.J., England, C., Leary, S., and A. Page. (2020). The impact of e-cycling on travel behaviour: A scoping review. Journal of Transportation Health, 19.
[23] Fyhri, A & H.B. Sundfor. (2020). Do people who buy e-bikes cycle more? Transportation Research Part D, 86, 1-7.

With the provision of a shared electric bike program, a 10% reduction in resident parking demand is supported.

6.4 Electric Bike Parking

6.4.1 Overview

As stated previously, electric bicycles can displace trips made by private vehicles and in some cases, substitute for private vehicles altogether. Equally important, though, is the provision of parking facilities to accommodate electric bike users. According to research completed in Greater Victoria, one of the top barriers facing prospective e-bike users is the fear that their bicycle might be stolen.[24] That same research found that prospective e-bike users would feel more comfortable if they could park their bicycle in a locked or supervised area.

The Capital Region Local Government Electric Vehicle + Electric Bike Infrastructure Planning Guide[25] includes e-bike parking design guidelines to help address the concerns of current and prospective e-bike owners as well as to increase overall e-bike ownership in the Capital Region. The guide recommends that new developments provide 50% of the long-term bicycle parking with access to an 110V wall outlet. Further, 10% of the long-term spaces are recommended to be provided as cargo racks to accommodate e-bikes.

6.4.2 Recommendation

Based on discussions with the applicant, they will be committing to the following:

1. **Oversized Bike Parking** | 24% of the long-term bicycle parking spaces (4 spaces) will be designed for oversized bicycles (2.6m stall depth), which are harder to fit in a standard bike rack where the stall depth is 1.8 metres.

[24] WATT Consulting Group. (2018). Capital Region Local Government Electric Vehicle + Electric Bike Infrastructure Backgrounder. Available online at: https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/electric-vehicle-and-e-bike-infrastructure-backgrounder-sept-2018.pdf?sfvrsn=a067c5ca_2

[25] WATT Consulting Group. (2018). Capital Region Local Government Electric Vehicle + Electric Bike Infrastructure Planning Guide. Available online at: https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/infrastructure-planning-guide_capital-region-ev-ebike-infrastructure-project-nov-2018.pdf?sfvrsn=d767c5ca_2

Oversized bikes are typically longer than regular bicycles because they can carry cargo and/or multiple passengers and can be a popular option for young families.

2. **Access to Charging** | 100% of the long-term bicycle parking spaces will have direct access to an 110V wall outlet to help facilitate charging for e-bike owners and/or prospective e-bike owners.
3. **Secured Location** | all long-term bike parking spaces will be in a secure access-controlled location, which is especially important for e-bike users to minimize bike theft.

A 5% reduction in resident parking demand is supported with the provision of electric bike parking.

6.5 TDM Summary

A summary of the proposed TDM measures and parking reductions is provided in **Table 7**. A resident parking reduction of 39% is supported with all of the TDM measures that the applicant is committing to. This represents a reduction in the estimated resident parking demand by 5 spaces. Therefore, the total parking demand would be 6 spaces.

Table 7 – Summary of Estimated Parking Demand with TDM

TDM Measure	Provision	Parking Demand / Reduction
Baseline Residential Parking Demand		8 spaces (per Table 5)
Total Residential Parking Demand Reduction		39% (3 spaces)
Carshare Vehicle	One (1) vehicle	20%
Additional Bike Parking	21% additional	4%
Shared Electric Bike Program	Three (3) bikes	10%
Electric Bicycle Parking + Long-term Bicycle Parking	24% oversized bike parking spaces 100% of long-term spaces with access to 110V outlet	5%
Estimated Residential Parking Demand with TDM		5 spaces
Estimated Visitor Parking Demand		1 space
Total Site Parking Demand with TDM		6 spaces (5 resident + 1 visitor)

7.0 REVIEW OF ZERO-PARKING DEVELOPMENTS

With the recommended TDM measure, the overall parking demand for the site will still be 6 spaces. With the provision of zero parking, this means that the site is effectively short 6 spaces. However, over the last few years, there has been a growing trend of car-free residential developments recognizing that buildings that are centrally located with access transportation options may not require as much—or any—off-street vehicle parking.

To determine the viability of providing no resident parking, this section reviews six multi-family buildings in Canada that were constructed without any resident parking supply. The case studies highlighted below are in different cities and have distinct characteristics.

Table 8 – Case Studies of Developments with No Residential Parking

Site	Tenure	Unit Type	Unit Count
133 East 4th 133 East Fourth Street, North Vancouver	Below Market Rental	Mix 400 to 730 sq. ft.	23
Crawford Block 8222 Gateway Boulevard, Edmonton	Market Rental	Studio 400 sq. ft.	40
The Janion 456 Pandora Avenue, Victoria	Condo	Mix 250 to 1,000 sq. ft.	121
The N3 431 8 Avenue SE, Calgary	Condo	Studio 445 sq. ft.	167
The Residences at RCMI 436 University Avenue, Toronto	Condo	Mix 473 to 762 sq. ft.	318

Outreach was conducted with three of the case studies in a past parking study completed by WATT including the Janion, the N3, and the Residences at RCMI.[26] Representatives from each building confirmed that residents have managed without access to a private vehicle and have taken advantage of the sustainable transportation options and TDM amenities available to them to live a car-free lifestyle.

Further, data from the City of Seattle illustrates a growing trend of multi-family apartment buildings being constructed without any resident parking, especially among micro-unit buildings with good access to public transit.[27]

In addition to the above case studies, the District of Saanich and City of Victoria recently approved their first developments with zero parking. The development in Saanich is for a nine-unit townhouse complex and includes 18 bicycle parking spaces, 9 cargo bicycle parking spaces (and additional space for nine cargo bikes) and includes Modo carshare memberships for each unit.[28] Similarly, the City of Victoria approved the 633 Belton Avenue development, a six-unit complex in Vic West which includes 21 bicycle parking spaces (including 7 cargo bikes) as well as a Modo carsharing vehicle and resident memberships.[29]

These examples of recently approved zero-parking developments are projects of varying size and scale, and they highlight the changing political landscape and community appetite for zero-parking developments. The case studies confirm that there are several factors necessary for a zero-parking residential development including:

- Proximity to transit
- Proximity to active transportation network
- Parking for sustainable modes
- Availability of carshare

[26] WATT Consulting Group. (2017). The HIVE – 736 Princess Avenue Parking Study.
[27] Rosenberg, M. (2016). Seattle builds lots of new apartments, but not so many parking spots. The Seattle Times, available online at: http://www.seattletimes.com/business/real-estate/seattle-builds-lots-of-new-apartments-but-not-so-many-parking-spots/
[28] Available online at: https://www.saanichnews.com/news/saanich-approves-citys-first-ever-development-with-zero-parking/
[29] Available online at: https://www.vicnews.com/news/victoria-supports-zero-parking-houseplex-in-nod-to-families-ditching-the-car/

Based on the subject site's transportation characteristics, and research from other zero-parking buildings in Canada, the provision of no resident parking is not anticipated to have any immediate impacts to the surrounding neighbourhood.

8.0 CONCLUSIONS

The proposed development at 1042-1044 Richardson Street is a 11-unit purpose-built market rental residential development including maintaining the existing single unit building and constructing a new 10-unit building and is intended to be a car-free development with no off-street parking provided. To support this, the developer proposes to dedicate one on-street space for use by an electric Modo carshare vehicle and provide 17 long-term bicycle parking spaces (including 4 overside spaces for use by cargo bikes) in a secure bike storage room.

Expected parking demand for this development was estimated based on observational data collected from representative sites in the Fairfield neighbourhood, ICBC vehicle ownership data for affordable (non-subsidized) sites, and other parking studies completed in the City of Victoria. Based on these observations the peak parking demand is 9 spaces (8 resident, 1 visitor). Based on discussions with the applicant, they are going to commit to four TDM measures including [a] a carshare program, [b] additional bike parking, [c] a shared e-bike program and [d] e-bike parking. Committing to all four TDM measures is anticipated to reduce resident parking demand by 3 spaces, which would bring the total site demand to 6 parking spaces (5 resident, 1 visitor).

The study found that the provision of zero residential parking is supportable based on other car-free developments recently approved in Greater Victoria along with a sample of other case studies in Canada. Further, the site's access to Victoria's AAA cycling network and high-quality transit service will make it easier for future residents to use sustainable transportation modes for various trip purposes.

With the applicant committing to all the TDM measures, the provision of zero off-street parking spaces is supported.