COOK STREET AND PENDERGAST STREET TRANSPORTATION STUDY

Parking Study

Prepared for:	**Aragon Properties Ltd.**
Prepared by:	**Watt Consulting Group**
Our File:	**2255**
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1.0 INTRODUCTION

Watt Consulting Group was retained by Aragon Properties Ltd. to conduct a parking study for the proposed rezoning of 324/328 Cook Street and 1044-1054 Pendergast Street in the City of Victoria. 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 development site is located at 324/328 Cook Street and 1044-1054 Pendergast Street in the City of Victoria. The site at 324/328 Cook Street is currently zoned CR-3M (Commercial Residential Apartment) whereas 1044-1054 Pendergast Street is zoned as R-K (Medium Density Attached Dwelling). See **Figure 1**.

FIGURE 1. **SUBJECT SITE**

1.2 SITE CHARACTERISTICS

The following provides details regarding transportation options and services that are located in proximity to the site.

Services

The subject site is located in Cook Street Village, which is a vibrant commercial hub with a diverse array of amenities and services including grocery stores, coffee shops, medical / office space, and restaurants / pubs.

Transit

The subject site is nearby two bus stops (located at Cook Street and Oscar Street) that provide service to key destinations within the region including downtown Victoria. These bus stops are served by route 3 (Beacon Hill / Gonzales). Bus stops served by route 7 (UVic / Downtown) are within a 5-minute walk of the subject site.

The Victoria Region Transit Future Plan[1] provides guidance on future transit networks in the Victoria Region. The subject site is approximately 300m (less than 5-minute walk) from Fairfield Road, which is a proposed Frequent Transit Network corridor that will have a service frequency of 15 minutes or better between 7:00am to 10:00pm, 7 days a week.

Walking

The subject site can be described as very walkable with a walk score of 88, suggesting most errands can be accomplished on foot.[2] Sidewalks are provided on both sides of Pendergast Street and Cook Street and two enhanced marked crosswalks (e.g., zebra crossings) are within 40m of the subject site, which facilitates safe crossings of Cook Street at McKenzie Street and Oscar Street.

Cycling

There are no existing cycling facilities on Pendergast Street or Cook Street. However, according to the City of Victoria's long-term bike network ("Biketoria"), Cook Street has been identified as an "All Ages and Abilities" bike corridor, which would include protected bike lanes on both sides of Cook Street from Dallas Road (south) through the Village and connecting to the Fort Street and Pandora

[1] BC Transit. (2011). Transit Future Plan Victoria Region. Executive Summary. Available online at: https://bctransit.com/servlet/documents/1403641054491

[2] More information about the site's walk score is available online at: https://www.walkscore.com/score/324-cook-st-victoria-bc-canada

two-way cycle tracks (north).[3] These proposed changes will enhance the cycling conditions (and safety) of Cook Street Village, which will directly benefit future residents / customers of the subject site. The site is also in proximity to Vancouver Street, which is currently a signed bike route.

Carsharing

The Modo Car Cooperative ("Modo") is the most popular carsharing service in Greater Victoria. In 2015, there were 23 cars and 800 members; as of August 2017, there are 57 Modo vehicles and 2,629 members across the Greater Victoria region[4], suggesting that Modo is growing in popularity. Data provided by Modo in September 2017 showed that within 600m of the subject site there are 160 Modo members, suggesting that carsharing is a viable form of transportation in the neighbourhood.

Data also show that there are three Modo vehicles located within 400m of the subject site and six vehicles within 600m. Three of the vehicles, including one at Trutch Street and Fairfield Road, have utilization that is above the 70th percentile of the Modo Victoria fleet. This suggests that at least three of the six vehicles are being well used due to existing demand.[5] The other three vehicles have lower percentile utilization, which stand to benefit from new residents (and members) including those at the subject site.

1.3 CITY PLANNING POLICY

The City of Victoria's Official Community Plan (OCP) provides policies and objectives to guide decisions on planning and land management. Updated in 2012, 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.[6]

According to the OCP's Urban Place designations, Cook Street Village has been designated as a "Large Urban Village", defined as "low-rise and mid-rise multi-unit buildings up to approximately six storeys including row houses and apartments, freestanding commercial and mixed-use buildings"[7]. The City's 30-year growth management goals are to concentrate 40% of the overall population growth in Town Centres and Large Urban Villages, resulting in approximately 8,000 new residents by 2041. Some of the key policy objectives for Large Urban Villages are as follows:

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[3] City of Victoria. (2016). Committee of the Whole Report: Enhanced Bike Network and Proposed Implementation. Available online at: https://victoria.civicweb.net/FileStorage/BC8ECB37FA4447129938F0D1AF279711-Biketoria%20COTW%20final%20report%20April%2028%20-%20Final%20(Apri.pdf

[4] Email correspondence with Modo Business Development Manager on August 31, 2017.

[5] Email correspondence with Modo Business Development Manager on September 11, 2017.

[6] City of Victoria. (2012). Official Community Plan. Available online at: http://www.victoria.ca/assets/Departments/Planning~Development/Community~Planning/OCP/OCP_Book.pdf

[7] Ibid, pg. 39.

- To accommodate 40% of Victoria's anticipated population growth in the Town Centres and Large Urban Villages to encourage a mix of commercial and community services primarily serving the surrounding residential uses.
- To revitalize areas of commercial use into complete Large Urban Villages through human-scale design of buildings, streets, squares and other public spaces to increase vibrancy and strengthen commercial viability.

According to Map 43 of the OCP[8], a significant portion of the subject site falls within the Large Urban Village designation for Cook Street Village, suggesting that the City's planning policy supports residential and commercial growth in Cook Street Village.

2.0 PROPOSED DEVELOPMENT

2.1 LAND USE

The proposal is to rezone 324/328 Cook Street and 1044-1054 Pendergast Street to a site specific zone that would allow for a mixed-use commercial and residential building. A total of 48 units are proposed, which include a combination of one-, two-, and three-bedroom units. At this stage, the specific commercial / retail land uses have not been finalized but will include a total of 5,400 sq.ft. (502m^2). See **Table 1**.

TABLE 1. **SUMMARY OF PROPOSED DEVELOPMENT**

Land Use	Floor Area	Quantity
Multi-Family, One-Bedroom	732 to 795 sq.ft.	11
Multi-Family, Two-Bedroom	1,064 to 1,471 sq.ft.	27
Multi-Family, Three-Bedroom	1,265 to 1,660 sq.ft.	10
Commercial / Retail	1,800 sq.ft.	3
	Total	**48 Residential Units** **5,400 sq.ft. Commercial**

2.2 PROPOSED PARKING SUPPLY

The proposed parking supply is 88 parking spaces of which 80 will be underground and 8 as surface parking. The existing site contains eight parking spaces that are under a covenant by a neighbouring property – 1075 Pendergast Street. Those eight spaces will be included in the redevelopment of the site in the underground parking area but not included in the calculation of the proposed off-street parking supply. Therefore, a total of 80 parking spaces are provided and available to site residents, visitors, employees and customers.

The proposal also includes 48 long-term ("Class 1") bicycle parking spaces—one space per unit—along with 6 short-term ("Class 2") visitor parking spaces.

[8] Ibid. pg. 197.

3.0 PARKING REQUIREMENT

Schedule C of the City's Zoning Regulation Bylaw determines the minimum parking supply requirement. Per Schedule C, the 'Condominium Attached Dwelling' rate (1.5 spaces per unit) would apply to the multi-family use, resulting in a total requirement of 72 parking spaces. No less than 10% of the total parking spaces (approx. 7 spaces) must be designated for visitors. The 'retail stores, banks, personal services establishments or similar uses' is the most appropriate rate to apply to the proposed commercial floor area (1 per 37.5 m^2 GFA), resulting in a requirement of 13 parking spaces.

The total requirement for the site is 85 parking spaces (see **Table 2**).

TABLE 2. **PARKING REQUIREMENT**

Land Use	Quantity		Parking Requirement	
	Units	Floor Area	Rate	Quantity (spaces)
Residential	48		1.5 space / unit	72
Residential Visitor			10% of total spaces	
Commercial / Retail		5,400 sq.ft. (502m^2)	1 per 37.5 m^2	13
			Total	**85**

A discussion of the updated Schedule C regulations is provided in Section 4.1.1.

4.0 EXPECTED PARKING DEMAND

Expected parking demand is estimated in the following sections to determine if the proposed parking supply will adequately accommodate demand. Expected parking demand is based on vehicle ownership data from representative sites in the City, research on visitor parking demand, and observations of parking demand at commercial sites.

4.1 CONDOMINIUM

Vehicle ownership information was obtained from the Insurance Corporation of British Columbia (ICBC) for sites deemed to be representative of the subject site (see **Table 3**). All of the representative sites are condominiums located in and around Cook Street Village. The representative sites combine for a total of 197 units. The average vehicle ownership rate is 0.84 vehicles per unit and ranges from 0.63 to 1.40 vehicles per unit.

There is a significant amount of research suggesting that parking demand varies based on unit size, that is, the greater the number of bedrooms, the higher the parking demand. For each representative site, the total parking demand can be further assessed by unit size (i.e., number of bedrooms). Parking demand by unit size was calculated using:

1. Vehicle ownership information at each site;
2. The floor area of each unit, organized by unit type (e.g., one-bedroom, two-bedroom, etc.)[9]; and
3. The assumed "ratio differences" between each unit type based on the King County Metro[10] 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.

The proponent confirmed that all units that are 732-795 sq.ft. will be one-bedrooms, two-bedrooms are 1,064 to 1,471 sq.ft., and three-bedrooms are 1,265 to 1,660 sq.ft. By organizing the representative units into these unit size thresholds a more accurate demand rate could be inferred. Further, once the data were organized by unit size thresholds, the assumed ratio differences from the King County Metro study could be directly applied.

Only one of the representative sites (1035 Sutlej Street) had units of comparable size to the three-bedroom units proposed. There are a total of eight units at 1035 Sutlej Street that range from 1,300 to 1,600 sq.ft. However, with only 8 of the 197 representative units being greater than 1,400 sq.ft., the three-bedroom demand rate could not be reliably derived from the data.

To estimate the three-bedroom demand rate, the assumed ratio from the King County Metro study was applied. The study indicates that three-bedroom units have 15% higher parking demand than two-bedrooms. Therefore, a 15% adjustment factor results in a rate of 1.05 (1.03, rounded), or 11 vehicles for the three-bedroom units.

Results suggest average parking demand among these sites, by unit type, as follows:

- One-Bedroom Units (11) = 0.65 vehicles per unit, 7 vehicles
- Two-Bedroom Units (27) = 0.90 vehicles per unit, 24 vehicles
- Three-Bedroom Units (10) – 1.05 vehicle per unit, 11 vehicles

The results of this analysis conclude that resident parking demand will be 42 vehicles. See **Table 3**.

[9] The unit size for the nine representative sites was obtained from BC Assessment's e-value*BC* tool, which presents current floor area, property value and recent sales for over 2 million provinces in the province. More information is available online: https://evaluebc.bcassessment.ca/Default.aspx

[10] 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

TABLE 3. **VEHICLE OWNERSHIP AT REPRESENTATIVE SITES, BY UNIT SIZE**[11]

Site	Vehicle Ownership Rate (vehicles / unit)		
	Parking Demand (vehicles / unit)	**732-795 sq.ft.** (one-bedroom)	**1,064-1,471 sq.ft.** (two-bedroom)
240 Cook Street*	0.78	0.75	1.21
1035 Sutlej Street**	1.40	0.86	1.37
1035 Southgate Street**	0.76	--	0.76
1063 Southgate Street**	0.71	0.49	0.81
1110 Oscar Street**	0.68	--	0.68
439 Cook Street**	0.89	--	0.89
445 Cook Street***	0.90	0.68	1.08
1122 Hilda Street**	0.80	0.51	0.82
1121 Oscar Street**	0.63	--	0.63
Average	**0.84**	**0.65**	**0.90**

Vehicle ownership information obtained from Insurance Corporation of British Columbia (ICBC). These data do not include visitor vehicles.

*Information is current as of March 31, 2016 **Information is current as of December 31, 2014

***Information is current as of December 31, 2013

4.1.1 PARKING DEMAND IN PAST STUDIES

One of the most representative sites to the proposed development is a recently approved mixed-use development at the corner of Cook and Oliphant Street.[12] The site will contain 53 units and one commercial tenant. WATT Consulting Group completed the parking study for this development and used ICBC vehicle ownership data to project parking demand. Parking demand by unit type was not completed for the study but the recommended rate for the condominium units was 0.78 spaces per unit.

The development was approved with 50 parking spaces for residential uses, or 0.90 spaces per unit.[13]

4.1.2 REQUIREMENT UNDER REVISED SCHEDULE C

WATT Consulting Group is working with the City of Victoria to update its off-street parking regulations (Schedule C). A final draft of the document is now publicly available[14] but has not been formally adopted by City Council. As such, the rates have not been finalized.

[11] The subject site's proposed one-bedroom units are larger than many of the representative one-bedroom units where data are available. As such, some of the representative sites were excluded as data were not available. Similarly, only one of the representative sites had three-bedroom units of comparable size to the subject site (1,400 to 2,000 sq.ft.).

[12] For more information about the building see http://cookstvillage.com/

[13] Phone conversation held with de Hoog Kierulf architects on December 7, 2017.

[14] A final draft of the City of Victoria's Off-Street Parking Regulations (Schedule C) is available online at: http://www.victoria.ca/assets/Departments/Planning~Development/Development~Services/Documents/Schedule%20C%20Off-Street%20Parking%20Regulation_Final%20Draft.pdf

The subject site would fall in the 'Village / Centre' geographic area and constitute as 'multiple dwelling condominium' in the draft Schedule C off-street parking rates. All of the one-bedroom units would fall in the unit size category of 40m^2 to 70m^2 and be required to provide parking at rate of 0.85 spaces per unit, or 9 spaces (9.35, rounded). All of the two and three-bedroom units would be subject to the largest unit size category (i.e., >70m^2) and be required to provide 1.30 spaces per unit, or 48 spaces. Therefore, the total required parking under the updated Schedule C requirements is 57 parking spaces. This is approximately 36% higher than the expected parking demand calculated in Table 3.

The discrepancy between the estimated parking demand rates and the Schedule C supply rate is largely attributed to the more urban and walkable nature of Cook Street Village. While Cook Street Village is one of nine Large Urban Villages identified in the OCP, its proximity to the downtown, high walkability, and retail diversity all contribute—and help explain—its relatively lower vehicle ownership rates. As a result, the travel and parking demand patterns in Cook Street Village may be lower than other Large Urban Villages in Victoria.

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-residential.[15] More recent research found a visitor parking demand rate of 0.1 across 11 multi-family residential sites in proximity to downtown Victoria.[16] In addition, the proposed visitor parking rate for the updated Schedule C off-street parking regulations is 0.1 spaces per unit. It is therefore recommended that a rate of 0.1 spaces per unit be applied to the proposed development. A rate of 0.1 vehicles per unit results in a peak visitor parking demand of 5 vehicles.

4.3 COMMERCIAL

The proposal includes 5,400 sq.ft. of commercial / retail space, comprised of three commercial / retail units (CRU) at 1,800 sq.ft. each. The exact tenants are unknown at this time; however, the proponent has suggested that two of the three CRUs will likely be a café or restaurant. The other CRU may be a retail, office, or small grocery store. This section presents parking demand research on a variety of CRU land uses to help inform appropriate rates for the subject site.

Retail and office uses experience similar parking demand rates based on the following research and observations:

- Observations were conducted at retail sites in the City of Victoria[17], outside of downtown. The observations found a peak parking demand rate of 1 vehicle per 50m².

[15] 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

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

[17] WATT Consulting Group. (2016). Review of Zoning Regulation Bylaw Off-Street Parking Requirements (Schedule C). Working Paper No. 3: Parking Demand Assessment. Available online at:

- Observations were also completed as part of a study at Dockside Green in Victoria. Results suggested an average demand rate of 1 vehicle per 45m².
- The ITE Parking Generation Handbook recommends a parking demand rate of 1 vehicle per 43m².[18]

Grocery stores experience similar parking demand as retail; however, parking demand may vary depending on the size of the store. This finding was determined through the review of the City of Victoria's off-street parking requirements (Schedule C):

- Grocery stores can range widely in size and type. Stores specializing in health foods, natural foods, or specialty foods (e.g., Mother Nature's Market & Deli, Ageless Living Market, etc.) are typically much smaller and have less parking demand than large grocery stores of the supermarket variety (e.g., Save On Foods, Thrifty's etc.).

  As part of the research for the Schedule C off-street parking updates, it was determined that grocery stores that specialize in health foods, natural foods, or specialty foods have a floor area ranging from 110m^2 to 670m^2.[19] Conversely, grocery stores serving broader ranges of goods varied from 1,340m^2 to 2,790m^2. The recommendation from the research is that stores less than 800m^2 will experience parking demand similar to retail (1 vehicle per 40m^2 to 1 vehicle per 50m^2) while stores larger than 800m^2 will experience much higher parking demand in the range of 1 vehicle per 15m^2 to 1 vehicle per 20m^2.

Restaurants and cafés experience higher parking demand than retail or office sites.

- Observations of parking demand were completed at 11 restaurant sites outside of downtown Victoria that are believed to accommodate employee and customer vehicles on site (rather than on-street or elsewhere) and provide a full account of parking demand. The observations occurred in March 2016 as part of WATT's review of the City of Victoria's off-street parking requirements (Schedule C). Results suggest an average parking demand rate of 1 vehicle per 25m².[20]
- The ITE Parking Generation Handbook recommends a parking demand rate of 1 vehicle per 17m².[21] The locations and business types used to develop this rate are known to be suburban than Cook Street Village, and are therefore assumed to experience a higher parking demand than would be expected at the subject site.

http://www.victoria.ca/assets/Departments/Planning~Development/Community~Planning/Documents/Victoria%20Schedule%20C%20Parking%20Review_Working%20Paper%20no3_FINAL_Sept23-16.pdf

[18] Based on Land Use 876: Apparel Store. ITE Parking Generation handbook, 4th Edition.

[19] WATT Consulting Group. (2016). Review of Zoning Regulation Bylaw Off-Street Parking Requirements (Schedule C). Working Paper No. 3: Preliminary Recommendations. 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

[20] Ibid.

[21] Based on Land Use 932: High-Turnover (Sit-Down) Restaurant. ITE Parking Generation handbook, 4th Edition.

Based on these results, typical parking demand for retail, smaller grocery stores, and office sites is 1 vehicle per 50m² and typical parking demand for restaurant / café sites is 1 vehicle per 20m². To accommodate this variation, and to provide a certain amount of flexibility to the proponent, the following commercial demand rates are recommended:

- Office & Retail – 1 space per 50m^2
- Grocery Store (less than 800m^2) – 1 space per 50m^2
- Restaurant & Café – 1 space per 20m^2

Assuming two of the three CRU units will be a café and/or restaurant, their combined floor area will be 3,600 sq.ft. (334m^2), the expected parking demand is 17 vehicles. Assuming the other CRU unit is an office or retail space, the expected parking demand is 3 vehicles. Combined, the expected parking demand from the commercial land uses is 20 vehicles.

4.3.1 REQUIREMENT UNDER REVISED SCHEDULE C

The draft Schedule C off-street parking requirements have the following commercial rates for the 'Village / Centre' geographic area:

- Office – 1 space per 55m^2
- Retail – 1 space per 50 m^2
- Grocery Store (less than 800m^2) – 1 space per 50m^2
- Restaurant – 1 space per 25m^2

Applying the restaurant rate (1 per 25m^2) to the two CRU units (3,600 sq.ft.) would generate 13 vehicles (three less than the parking demand rate). Applying the office and/or retail rate (1 per 55m^2 and 1 per 50m^2, respectively) would result in approximately 3 vehicles. In summary, the draft Schedule C off-street parking supply commercial / retail rates would yield similar results to the parking demand estimated based on observations and ITE data.

4.4 SUMMARY OF EXPECTED PARKING DEMAND

The expected site parking demand is approximately 67 vehicles, 13 less than the proposed parking supply (see **Table 4**).

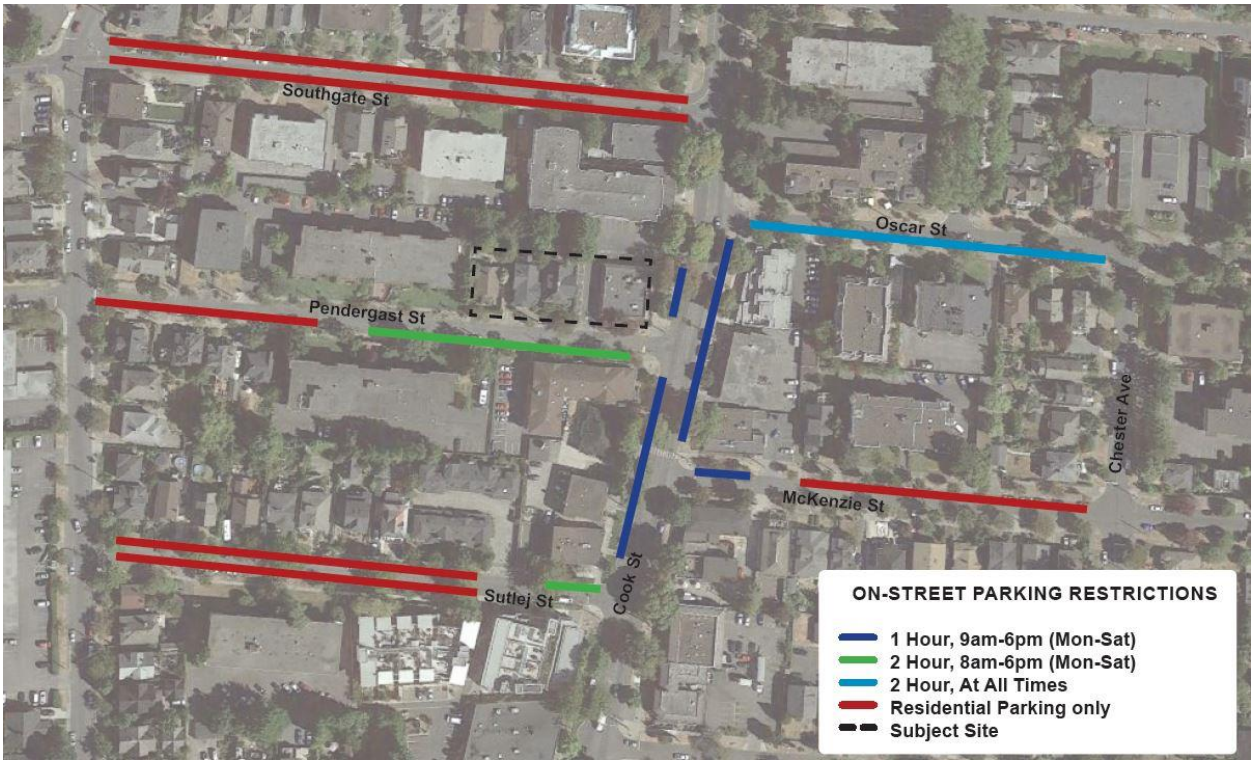
TABLE 4. **SUMMARY OF EXPECTED PARKING DEMAND**

Land Use		Units / Quantity	Expected Parking Demand	
			Rate	Total
Resident	One-Bedroom	11	0.65 / unit	7
	Two-Bedroom	27	0.90 / unit	24
	Three-Bedroom	10	1.05 / unit	11
Visitor		48	0.1 / unit	5
CRU	Café / Restaurant	334m^2 (3,600 sq.ft.)	1 per 20m^2	17
	Office / Retail	167m^2 (1,800 sq.ft.)	1 per 50m^2	3
			Total Expected Parking Demand	**67**

5.0 ON-STREET PARKING ASSESSMENT

On-street parking in the vicinity of the site is time limited (either one- or two-hour limit) on Cook Street and on portions of intersection streets, whereas residential only parking (RPO) restrictions are in-place on the majority of streets fronted by residential land uses (including Southgate Street, Pendergast Street, and Sutlej Street). See **Figure 2**.

FIGURE 2. **ON-STREET PARKING RESTRICTIONS**



Observations of on-street parking spaces were completed in February 2017 as part of the subject site's preliminary parking demand assessment. Observations were conducted across the three parking count periods. On-street parking utilization was observed to be the highest on Saturday February 25th at 3:00PM with 113 parked vehicles. This represents 66% occupancy of all parking spaces within the study area and results in a total of 57 vacant parking spaces – or approximately 15 available spaces when excluding Residential Parking Only. See **Figure 3**.

FIGURE 3. **ON-STREET PARKING UTILIZATION**

As discussed in Section 4.4, the expected commercial / retail parking demand is 20 vehicles. It is anticipated that customers will first park in the 8 available surface parking spaces on-site. The remaining 12 vehicles will park in the underground parking area. In some situations, customers may seek on-street parking.

The four areas where customer vehicles are most likely to seek on-street parking were observed as follows:

1. Pendergast Street (south side, immediately west of Cook Street), 2 hr max (8am-6pm, Monday-Saturday), 16 of 20 parking spaces occupied (80% occupancy).
2. Cook Street (west side, immediately south of Pendergast Street), 1 hr max (9am-6pm, Monday-Saturday), 8 of 8 parking spaces occupied (100% occupancy).
3. Cook Street (west side, immediately north of Pendergast Street), 1 hr max (9am-6pm, Monday-Saturday), 3 of 4 parking spaces occupied (75% occupancy).
4. Cook Street (east side, between McKenzie Street and Oscar Street), 1 hr max (9am-6pm, Monday-Saturday), 9 of 11 parking spaces occupied (82% occupancy).

The above analysis suggests that the four on-street parking blocks where customer vehicles are most likely to seek parking have approximately seven vacant parking spaces during peak Saturday conditions. This is sufficient capacity to accommodate some of the subject site's

customer vehicles, although it would bring the area's on-street parking supply to near capacity if vehicles cannot or choose not to access parking spaces on-site.

6.0 PARKING MANAGEMENT

As discussed in Section 4.4, the site's expected parking demand is 67 vehicles of which 20 are associated with the commercial / retail units. However, the commercial / retail demand is not expected to be 20 vehicles throughout the day. A time-of-day assessment was undertaken to further understand commercial / retail demand. This section provides recommendations on how the parking supply could be allocated to the various land uses. Ultimately, the proponent will need to decide on how best to allocate the parking spaces to suite the parking needs of the tenants.

The Urban Land Institute's (ULI) Shared Parking textbook provides peak parking demand factors for a variety of land uses. According to the ULI, the employee parking demand for café / restaurant uses represents a much smaller portion of the overall parking demand (90% customers, 10% employees).[22] Parking demand for the café / restaurant use is 17 vehicles, of which approximately 2 vehicles are attributed to employees and 15 for customers. According to the time-of-day analysis, the CRU weekday peak parking demand of 20 vehicles will occur from 10:00AM to 1:00PM. The analysis suggests that peak parking demand for customers and employees is 15 and 5 vehicles, respectively.

Based on the time-of-day assessment, it is recommended that the proponent consider two-hour time restriction signage for the eight surface parking spaces, which would be in effect for the duration of the work day (i.e., 9:00AM to 5:00PM). The proponent can consider extending these time restrictions to the weekend, too, although it may not be as critical. A time restriction will help to ensure that the parking spaces are prioritized for customers and visitors. A two-hour time restriction will help encourage turnover of the parking spaces allowing other customers and visitors to access them.

For the remaining 72 underground parking spaces, the recommended parking allocation is as follows:

- **5 Employee Spaces** – Peak employee parking demand is five vehicles. It is recommended that five parking spaces be assigned for employees in the underground parking area.
- **5 Residential Visitor Spaces** – According to ULI, visitor parking demand remains low for the majority of the weekday and weekend day at 20% of peak demand from 6am to 5pm. As such, it is anticipated that customers will use these parking spaces during the day whereas visitors will use them in the evening.

[22] Ratios were slightly adjusted from the following publication: Urban Land Institute. (2005). Shared Parking, 2nd Edition, Table 3-2, pg. 33.

- **14 Customer / Visitor Spaces** – Similar to the eight surface parking spaces, 14 underground parking spaces can be designated as time limited parking (i.e., two-hour), and be intended for customers and visitors of the site. In situations where the eight surface parking spaces are full, it is anticipated that customers and visitors will seek parking in the underground parking area.
- **48 Assigned Resident Spaces** – 48 resident spaces, about one space per unit, should be located in a secure and gated area of the underground parking area. These spaces should only be available to the residents of the site. The proponent may choose to allocate a higher number of spaces to the larger units if demand warrants.

As discussed in Section 2.0, there will also be eight covenanted parking spaces included in the redevelopment of the site in the underground parking area and be primarily used by the customers / visitors of 1075 Pendergast Street.

In summary, parking management approaches can be adopted to help better manage the commercial / retail parking demand. Time restricted parking in both the surface and underground parking areas can help ensure that there is a sufficient supply for visitors and customers to the site.

7.0 SUMMARY

The proposed development at 324/328 Cook Street & 1044-1054 Pendergast Street includes 48 condominium units and 5,400 sq.ft. of commercial / retail space. The proposed parking supply is 80 spaces (72 underground, 8 surface).

Parking demand was estimated based on vehicle ownership data and observations of representative sites in the City of Victoria. The expected parking demand for the site is 67 vehicles and is anticipated to be accommodated within the proposed off-street parking supply. Parking management approaches are outlined to help the proponent better manage the commercial / retail parking demand, which include time restrictions on all surface parking spaces and 14 underground parking spaces to accommodate commercial customers and visitors to the site.

7.1 RECOMMENDATIONS

1. The proposed parking supply (80 spaces) is supported as appropriate for this site.
2. Surface parking spaces and 14 parking spaces in the underground parking area should be restricted to 2-hour maximum stay from 9:00am to 5:00pm.