March 18, 2022
04-21-0441

Devon Harlos
Development Coordinator
CPA Development Consultants Inc.
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Vancouver, BC
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VIA EMAIL: devon@cpadevelopment.ca

Dear Devon:

Re: Pemberton Affordable Housing Development (Lot 2 Harrow Road)
Transportation Review

As requested, Bunt & Associates Engineering Ltd. (Bunt) has conducted a Transportation Review for the proposed affordable housing development at Lot 2 Harrow Road in Pemberton, BC. This study is required as part of the project approval process with the Village of Pemberton. The purpose of Bunt's review was to provide a high-level study of the development's traffic impact and to assess the adequacy of the proposed parking supply.

We trust that the attached information will be of assistance. Please do not hesitate to contact us should you have any questions or comments.

Yours truly,
Bunt & Associates

James Lee, P.Eng., MBA, PMP
Associate, Senior Transportation Engineer

1. INTRODUCTION

Sea to Sky Community Services (SSCS) is proposing an affordable multi-family residential housing development at Lot 2 Harrow Road in the northwest corner of Pemberton Portage Road (Hwy 99) & Harrow Road in Pemberton, BC. To support the project, CPA Development Consultants (CPA) is acting as the project's Development Manager. The site location is shown in **Exhibit 1.1**.

The development plan includes 63 rental units, comprised of a mix of 1, 2, and 3-bedroom units. As the development will be a BC Housing Community Housing Fund project, the development will include 30% market rental units and 70% non-market rental units, consistent with the program's requirements. In addition, the development will also include 7,685 sq.ft. (714 sq.m.) of SSCS programming space and 1,386 sq.ft. (129 sq.m.) of general market retail space.

To help maintain housing affordability and better match the anticipated parking demand for the proposed housing types, the project is proposing a reduced off-street parking supply compared to what is required by the Village of Pemberton (VoP) Zoning Bylaw. In response to the proposed reduced parking rates and as a requirement for project approval, the VoP requires that a Transportation Review be conducted to rationalize and confirm the adequacy of the planned parking supply, as well as to provide a high-level traffic impact assessment for the development.

In response to this requirement, CPA, on behalf of SSCS, retained Bunt & Associates Engineering Ltd. (Bunt) to conduct the required study. The following document provides the key findings of Bunt's Transportation Review.

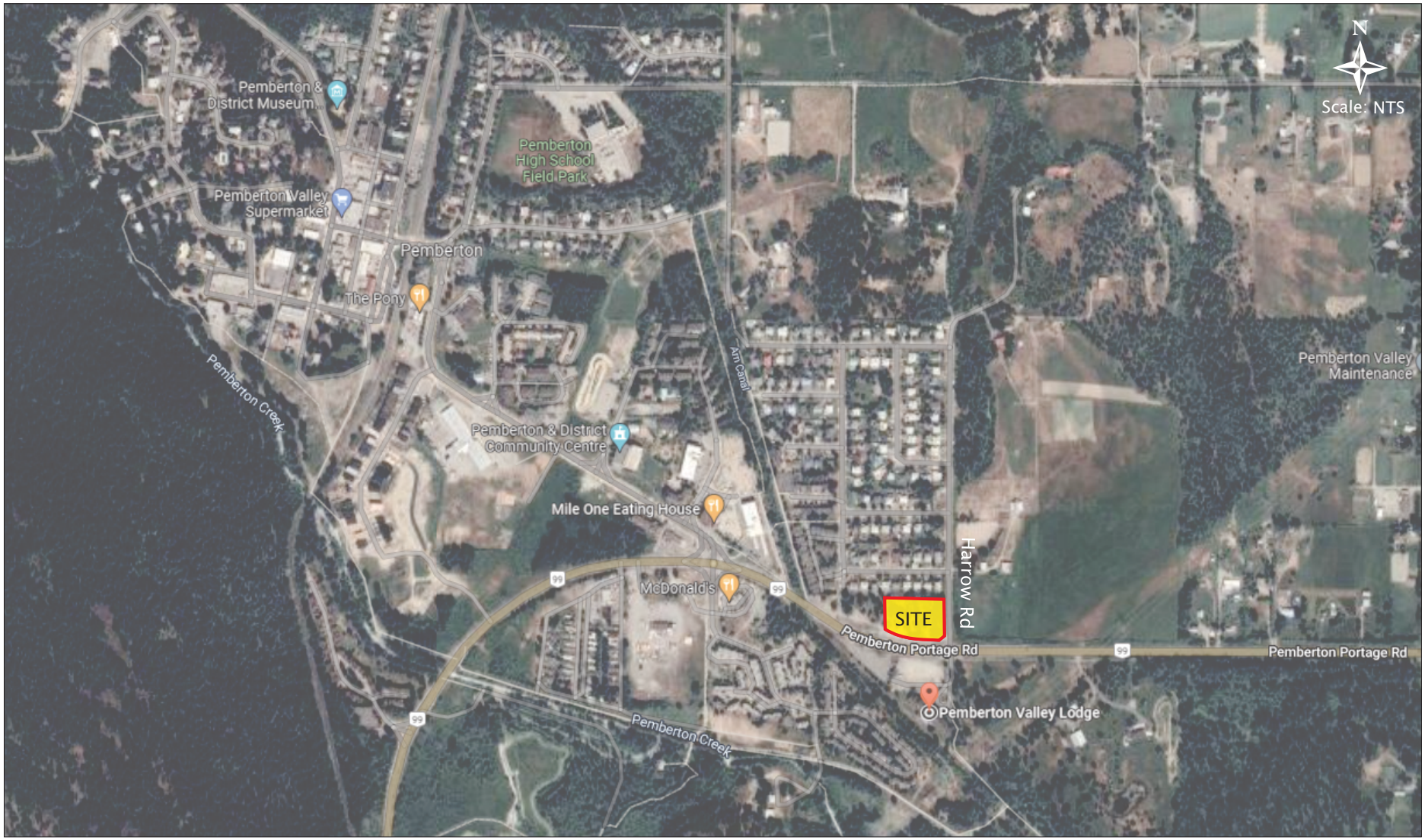

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Exhibit 1.1

Site Location

Pemberton Affordable Housing Development
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2. PROPOSED DEVELOPMENT

2.1 Existing Site Context

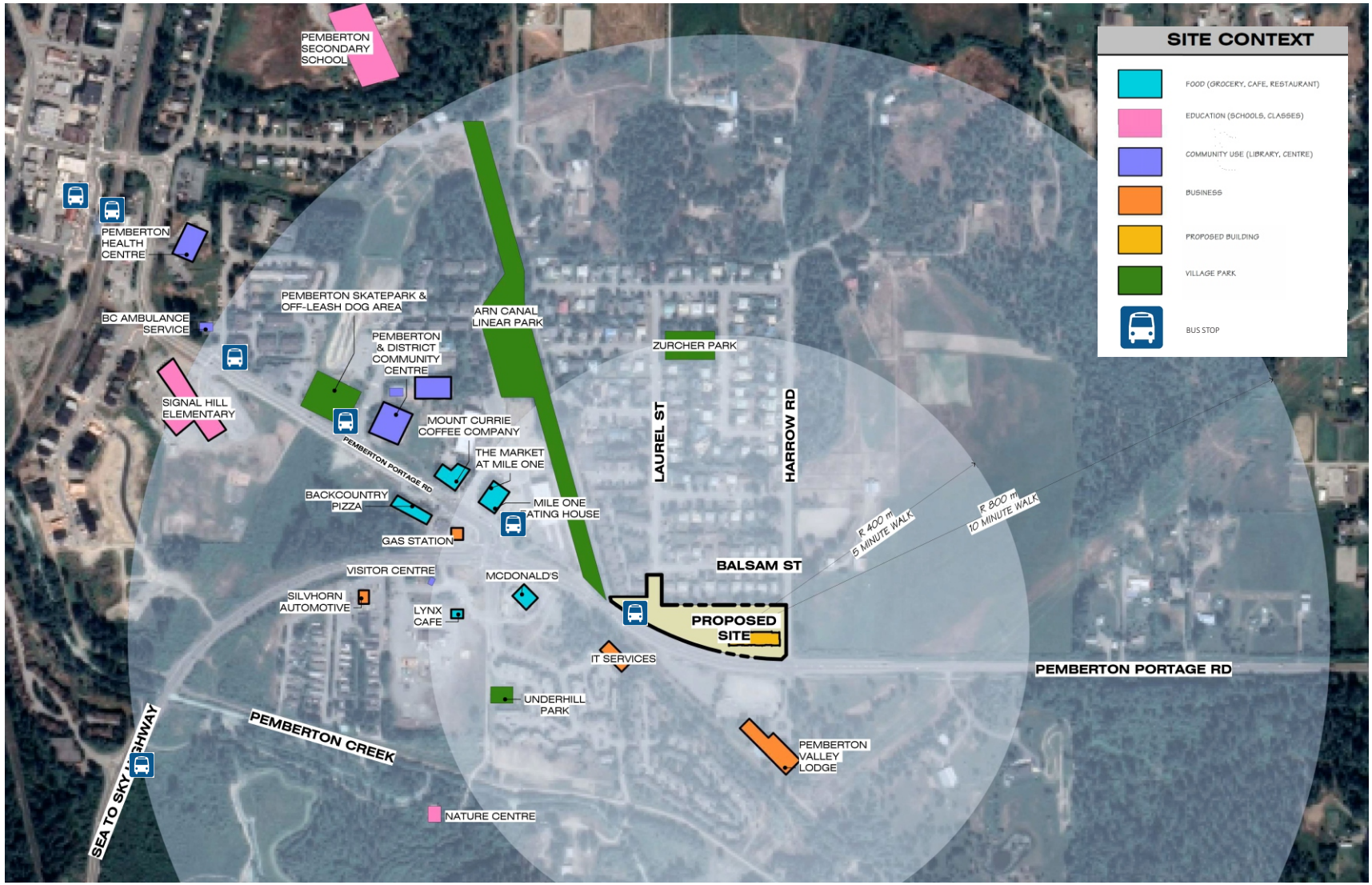
Under existing conditions, the development site is unoccupied and largely forested. The site sits near the eastern edge of the Village and is located immediately south of a single-family housing residential neighbourhood. Within 800m of the site (i.e., about a 10-minute walk) are several local amenities including restaurants, schools, parks, and a community centre. Furthermore, while transit service within Pemberton is limited, a bus stop is located on Pemberton Portage Road (Highway 99) immediately southwest of the site which is serviced by the *100 Pemberton Local* bus route. In addition, although there are currently no on-street cycling facilities provided within Pemberton, VoP is currently conducting a Cycling Network Plan study. Preliminary plans for this study have indicated a proposed future Neighbourhood Bikeway along Harrow Road on the east side of the site and a Multi-Use path along the south side of the site running parallel with Pemberton Portage Road (Highway 99). **Exhibit 2.1** illustrates the existing local site context.

2.2 Development Plan

Table 2.1 provides a detailed breakdown of the proposed development plan.

Table 2.1: Development Plan

LAND USE	CATEGORY	SUB-CATEGORY	SIZE
Residential (Rental)	Affordable Market Rental (30%; 18 units)	1-Bedroom	9 units
		2-Bedroom	7 units
		3-Bedroom	2 units
	Rent Geared to Income (50%; 32 units)	1-Bedroom	16 units
		2-Bedroom	12 units
		3-Bedroom	4 units
	Deep Subsidy/ Shelter (20%; 13 units)	1-Bedroom	6 units
		2-Bedroom	5 units
		3-Bedroom	2 units
Community Use	SSCS Programming Space	-	7,685 sq.ft. (714 sq.m.)
Commercial	Market Retail	-	1,386 sq.ft. (129 sq.m.)
TOTAL	RESIDENTIAL TOTAL	1-BEDROOM	31 UNITS
		2-BEDROOM	24 UNITS
		3-BEDROOM	8 UNITS
		TOTAL	63 UNITS
	COMMUNITY USE TOTAL	SSCS PROGRAMMING SPACE	7,685 SQ.FT. (714 SQ.M.)
	COMMERCIAL TOTAL	RETAIL	1,386 SQ.FT. (129 SQ.M.)



Source: Station One Architects

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Exhibit 2.1

Existing Site Context

Pemberton Affordable Housing Development
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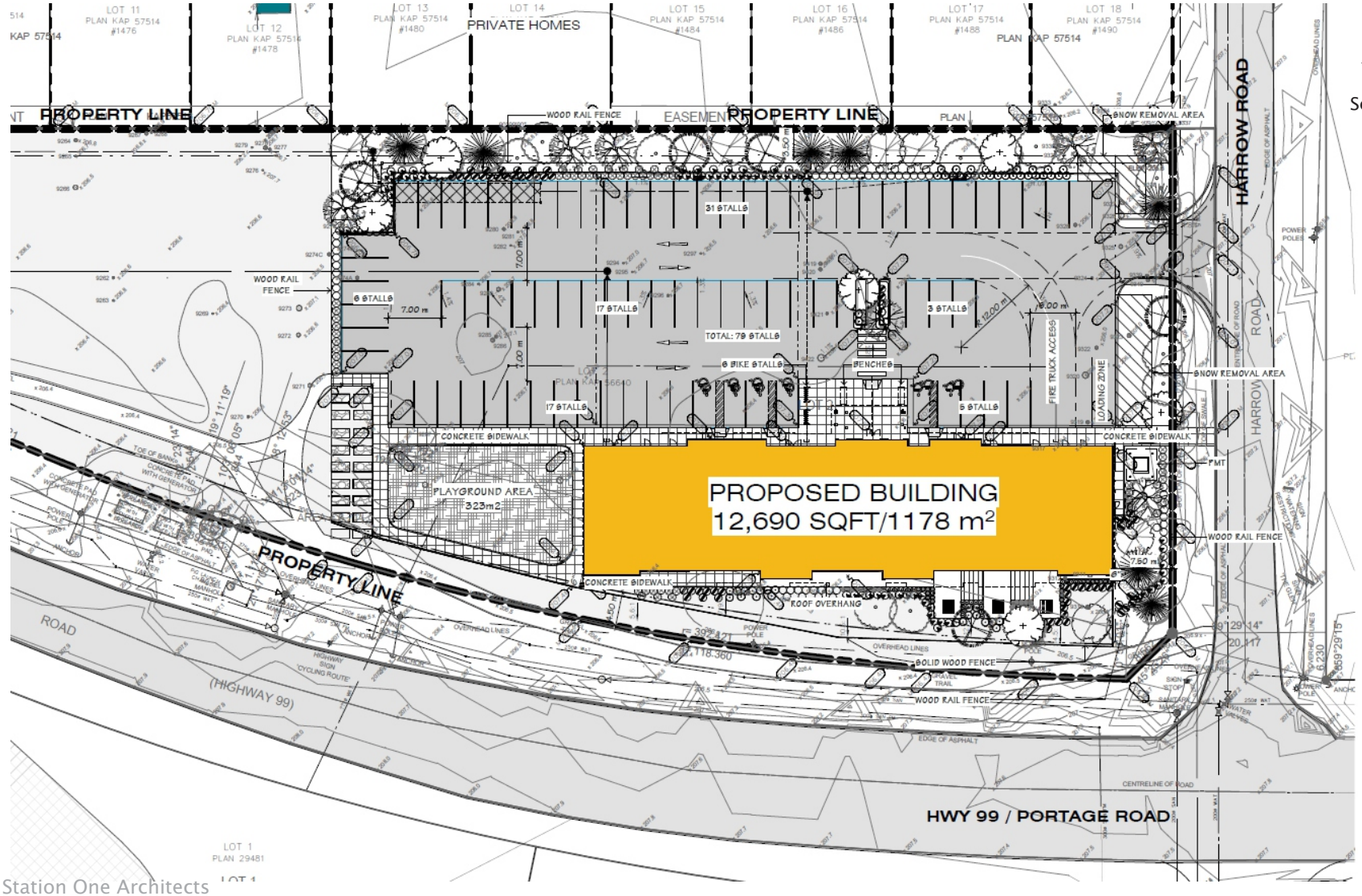
As the table indicates, the proposed development includes a mix of residential units (30% market, 70% non-market), community use space, and commercial retail space. For the residential space, the development will include 31 1-bedroom units, 24 2-bedroom units, and 8 3-bedroom units, with all 1-bedroom units being targeted towards Seniors. In terms of the income eligibility levels for the units, the 30% (18) market rental units will be "affordable market rental", which are designed for people who have low-to-moderate incomes. The 70% (45) non-market units will include 50% (32) rent-geared-to-income (RGI) units and 20% (13) deep subsidy/shelter units. RGI units have rent partially subsidized and set to be 30% of a household's total gross income, which is required to be no more than the Housing Income Limits (HILs) for gross household income set by BC Housing. Deep subsidy/shelter units are heavily subsidized and targeted toward low-income individuals and families.

In addition to the residential space, the development will include 7,685 sq.ft. (714 sq.m.) of programming space purpose-built for SSCS and 1,386 sq.ft. (129 sq.m.) of general market retail space comprised of two commercial retail units (CRUs). The programming space will be used for SSCS support services, which would include programs such as counselling, one-on-one social services, community living group programs, child/parent programming, etc. For SSCS programs, SSCS staff will often pick up clients or meet them where they are. While this is not guaranteed for every client or program, SSCS staff try to accommodate the needs of the client as best they can.

Exhibit 2.2 illustrates the proposed site plan concept. As shown, vehicular access to the development will be on the east side of the site on Harrow Road approximately 60m north of the Harrow Road & Pemberton Portage Road intersection.



Source: Station One Architects

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Exhibit 2.2
Site Plan

Pemberton Affordable Housing Development
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3. TRAFFIC IMPACT ASSESSMENT

3.1 Trip Generation Estimate

To estimate the number of vehicle trips to be generated by the proposed development during the critical weekday AM and PM peak hours, Bunt applied standard vehicle trip rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed.). **Table 3.1** summarizes the assumed trip rates and resulting trip generation estimates.

Table 3.1: Peak Hour ITE Vehicle Trip Rates

LAND USE	SIZE (NET NEW UNITS)	DESCRIPTION	AM PEAK HOUR			PM PEAK HOUR			SOURCE
			IN	OUT	TOTAL	IN	OUT	TOTAL	
Multi-Family Residential	63 units	Trip Rate[1]	23%	77%	0.37	61%	39%	0.39	ITE: Multifamily Mid-Rise (221)
		Vehicle Trips	5	18	23	15	10	25	
SSCS Programming Space	7,685 sq.ft.	Trip Rate[2]	66%	34%	1.91	47%	53%	2.50	ITE: Recreational Community Centre (495)
		Vehicle Trips	10	5	15	9	10	19	
Market Retail	1,386 sq.ft.	Trip Rate[2]	60%	40%	0.94	50%	50%	6.59	ITE: Strip Retail Plaza (<40k sq.f.t) (822)
		Vehicle Trips	1	1	2	5	5	10	
			16	24	40	29	25	54	

1. Trip rate is calculated in "vehicle trips per dwelling unit"
2. Trip rate is calculated in "vehicle trips per 1,000 sq.ft."

The estimated vehicle trip generation is approximately 40 (16 in, 24 out) trips in the AM peak hour and 54 (29 in, 25 out) trips in the PM peak hour. This level of trip generation translates to fewer than 1 new vehicle trip per minute on average during either peak hour.

3.2 Anticipated Traffic Impact

Typically, peak hour trip generation of 100 vehicle trips or fewer is not expected to have a material impact on the adjacent street network. As shown above, the anticipated trip generation is considerably lower than this threshold during both of the busy peak hour periods, and thus even lower during all other hours of the day.

For this reason, the anticipated site trips are not expected to materially impact intersection traffic capacity and therefore a detailed traffic operations analysis was not considered necessary for this study.

4. PARKING SUPPLY REQUIREMENT

4.1 Vehicle Parking

Table 4.1 provides a comparison of the development's required off-street vehicle parking supply based on the Village of Pemberton's Zoning Bylaw to the proposed supply.

Table 4.1: Vehicle Parking Supply

LAND USE	SUB USE	SIZE	BYLAW RATE[1]	PROPOSED RATE	REQUIRED (SPACES)	PROPOSED (SPACES)	DIFFERENCE (SPACES)
Residential (Rental)	1-Bedroom	31	0.75 spaces per dwelling unit (DU)[2]	*Discussed in Section 5.3*	23	51	-22
	2-Bedroom	24	1.5 spaces per DU[2]		36		
	3-Bedroom	8	1.75 spaces per DU[2]		14		
	Visitor	63	0.25 spaces per DU	0.06 spaces per DU	16	4	-13
Community Use	SSCS Programming Space	7,685 sq.ft. (714 sq.m.)	1 space per 37 sq.m. of GFA	1 space per 37 sq.m. of GFA	19	19[3]	0
Commercial	Market Retail	1,386 sq.ft. (129 sq.m.)	1 space per 28 sq.m. of GFA	1 space per 28 sq.m. of GFA	5	5[4]	0
				RESIDENTIAL TOTAL	89 TOTAL 73 RESIDENT 16 VISITOR	55 TOTAL 51 RESIDENT 4 VISITOR	-34 TOTAL -22 RESIDENT -12 VISITOR
				COMMUNITY USE: SSCS PROGRAMMING SPACE TOTAL	19	19	0
				COMMERCIAL: MARKET RETAIL TOTAL	5	5	0
				COMBINED TOTAL	113	79	-34

1. Source: Village of Pemberton Zoning Bylaw – Section 8.3 & 8.4
2. Apartment rates account for 0.25 space/ unit reduction from the regular Apartment rates for Affordable Rental and Rental Housing
3. The SSCS parking will be shared with residential visitor parking on weekday evenings and all day weekends.
4. The market retail parking will be shared with residential visitor parking on weekday evenings and weekend evenings.

As the table indicates, the required parking supply for the development is 113 spaces, including 89 residential (73 resident, 16 visitor), 19 SSCS programming, and 5 retail spaces.

While the Developer plans to meet the Bylaw requirement for the SSCS programming space and commercial retail space, to better meet the anticipated residential parking demand, the Developer proposes to provide 55 residential spaces, consisting of 51 resident and 4 visitor spaces. To supplement the visitor parking, the SSCS programming space parking is also planned to be shared with residential

visitors on weekday evenings and all day weekends, while the market retail parking is proposed to be shared with residential visitors on weekday evenings and weekend evenings. In total, the proposed supply would fall 35 spaces short of the total parking requirement, translating to a required 31% variance from the overall parking supply requirement.

Given this shortfall, to assess whether the proposed residential parking supply would be adequate to meet the actual parking demand, a parking supply analysis for the residential component was conducted. The findings of this assessment are summarized in the following section.

5. RESIDENTIAL PARKING SUPPLY ASSESSMENT

5.1 Overview

The Village of Pemberton's Zoning Bylaw (Section 8.7) allows a reduction of 0.25 spaces per unit to the regular Apartment Dwelling rate when a multi-family building is used for affordable purchased or rental housing, such as the subject development. This reduced parking rate was reflected in the parking supply table in the previous section. As both industry studies and Bunt's own collected parking data have indicated that income level and tenure (i.e., rental vs strata-owned) are two factors that significantly impact vehicle ownership levels at residential developments, offering a reduction for these factors is appropriate.

Upon closer review of the VoP Zoning Bylaw, however, it is Bunt's opinion that even after applying the allowable discount, the off-street parking requirement would still overstate the anticipated residential parking demand given the specific attributes of the proposed development. Based on industry studies, there is a distinct and significant difference in the parking demand characteristics between strata-owned, market rental, and non-market rental housing. Given the findings of these studies, the allowable rate discount of 0.25 spaces per unit is likely not adequate for many of the unit types proposed for this project.

In addition, while the rate discount acknowledges that income level and tenure have an impact on vehicle ownership levels, it does not properly account for the spectrum of housing income levels that exist. In other words, by having only a single discount rate, it implies that all "affordable" housing is the same from a parking demand perspective. In reality, there is a significant difference in the vehicle ownership levels associated with different income levels within the "affordable" housing category. Furthermore, the parking requirement for the development does also not take into account the age of the expected tenants, which also impacts vehicle ownership levels.

Given that the proposed affordable housing development is planned to include a spectrum of income levels and the fact that all 1-bedroom units will be targeted toward Seniors, the Zoning Bylaw requirement is likely not appropriate for many units within this development. The following sections further elaborate on how these factors would be expected to influence vehicle ownership.

In addition to resident parking, based on both data collected for previous projects and the findings of local industry studies, it is also Bunt's opinion that the Zoning Bylaw's visitor parking rate of 0.25 spaces per unit would overstate the actual demand. As such, further discussion on visitor parking is also provided below.

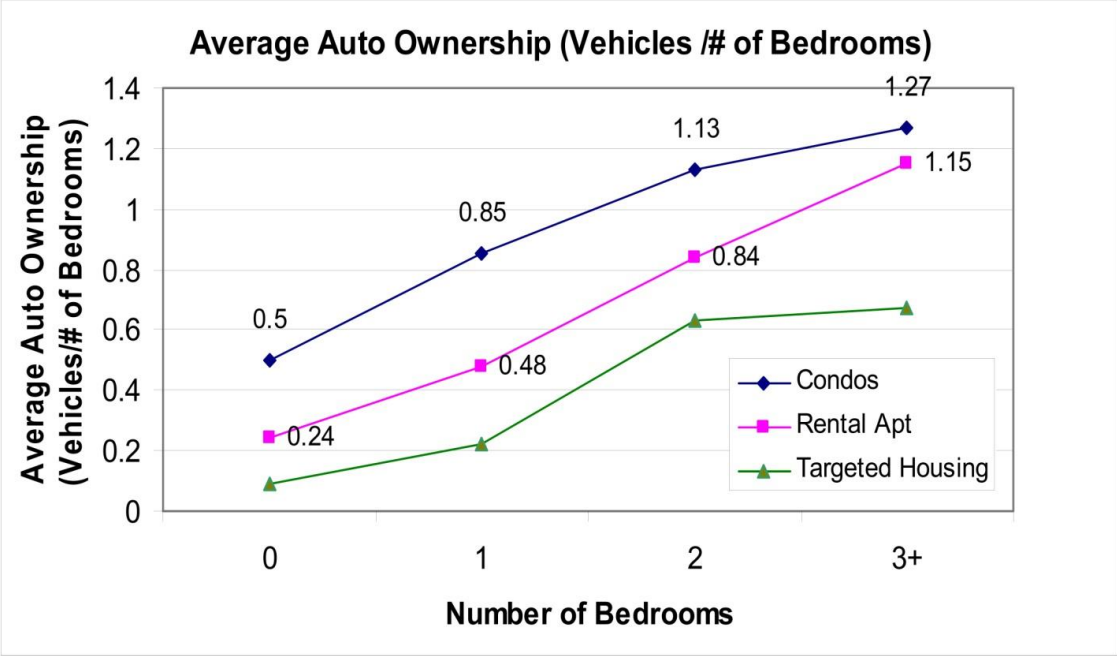
5.2 Resident Parking

The following sections include information on how the factors noted above impact resident parking demand based on the findings of industry studies. From these studies, a recommended parking rate is provided.

5.2.1 Effect of Tenure and Income

In terms of tenure, rental units tend to have lower auto ownership levels compared to strata-owned units. This contention is supported by the findings of a large 2007 City of Toronto study that studied the ownership levels of residents of approximately 4,700 apartment buildings. The findings are illustrated in **Figure 5.1,** which clearly demonstrate the relationship of vehicle ownership versus both tenure and income.

Figure 5.1: 2006 Average Auto Ownership by Housing Type and No. of Bedrooms



Source: City of Toronto Parking Standards Review – Phase Two Apartment Building/Multi-Unit Block Developments Component, New Zoning Bylaw Project, Cansult Limited, February 2007

As the figure indicates, regular strata "Condos" were found to have vehicle ownership rates ranging from 0.5 to 1.27 vehicles per unit, depending on the unit size. In comparison, market "Rental" units were shown to have vehicle ownership rates ranging from 0.24 to 1.15 vehicles per unit, translating to rates 10% to 50% lower than the strata units. Finally, non-market "Targeted" rental units were found to have vehicle ownership rates of 0.10 to 0.65 vehicles per unit, which equates to a reduction of 40% to 80% compared to strata units.

In terms of more local studies, the findings from the 2018 Regional Parking Study (RPS) conducted by Metro Vancouver and TransLink further support the notion that tenure and auto ownership are interrelated. The study included: (1) a comprehensive Household Survey program of over 1,500 strata and rental apartment households in Greater Vancouver, (2) a Parking Facilities Survey at over 70 apartment sites, and (3) a Street Parking Survey on streets near the selected apartment sites. This study was an update to a similar comprehensive parking study, the Metro Vancouver Apartment Parking Study (MVAPS) released in September of 2012.

For reference, the 2018 Regional Parking Study can be found at the following link:

http://www.metrovancouver.org/services/regional-planning/PlanningPublications/RegionalParkingStudy-TechnicalReport.pdf

In addition, the 2012 Metro Vancouver Apartment Parking Study can be found at:

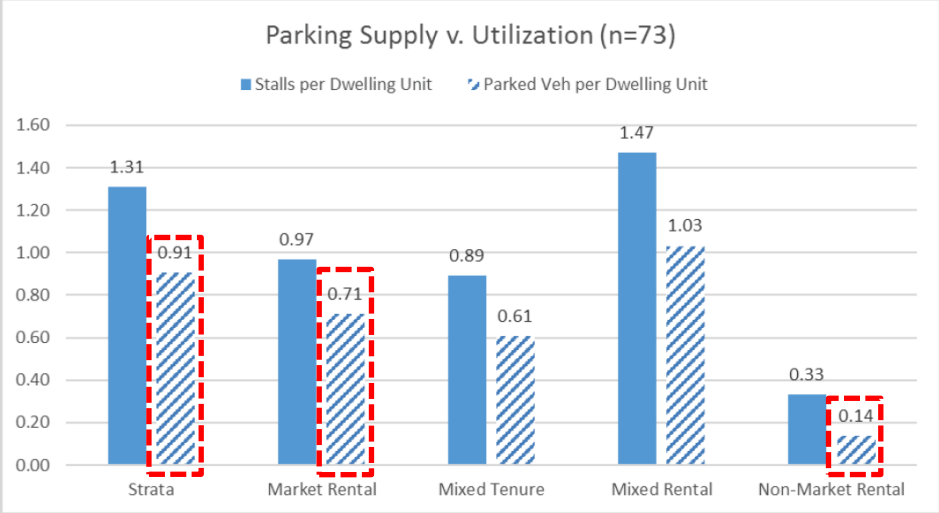
http://www.metrovancouver.org/services/regional-planning/PlanningPublications/Apartment_Parking_Study_TechnicalReport.pdf

Key findings of the 2018 RPS included:

- The Household Survey indicated that strata units have average auto ownerships of 1.30 vehicles per household. In comparison, market rental units were shown to have auto ownership levels of 1.07 vehicles per household, while non-market rental units indicated 0.54 vehicles per household. These levels translate to 18% and 58% lower ownership rates for market rental and non-market rental units, respectively, compared to strata units.

- The Parking Facilities survey found that the average parking demand at strata-owned sites was 0.91 vehicles per unit. In contrast, market rental units were shown to have parking demand levels of 0.71 vehicles per unit, while non-market rental units indicated a demand of 0.14 vehicles per unit. These levels translate to 22% and 85% lower parking demand rates for market rental and non-market rental units, respectively, compared to strata units. This comparison is shown in **Figure 5.2**.

Figure 5.2: Parking Demand by Tenure Type Comparison



Source: Progress Update on the 2018 Regional Parking Study Memo, Figure 1

While these specific rates would not necessarily be appropriate for the proposed development, this data suggests that in general, market rental units are expected to experience parking demand rates ranging from 18% to 22% lower than strata units, while non-market rental units are expected to generate demand ranging from 58% to 85% lower than strata units.

In comparison, the VoP's 0.25 space per unit discount rate for affordable rental housing translates to reductions ranging from 12.5% to 25% from the regular Apartment Dwelling strata rate, depending on the unit size. These discounts are summarized in **Table 5.1** below.

Table 5.1: Village of Pemberton Zoning Bylaw Affordable Rental Housing Discount

UNIT TYPE	BYLAW RATE[1] (SPACES/ UNIT)	DISCOUNT (SPACES/ UNIT)	ADJUSTED RATE[2] (SPACES/ UNIT)	% REDUCTION
1-Bedroom	1.0	0.25	0.75	**25%**
2-Bedroom	1.75	0.25	1.50	**14%**
3-Bedroom	2.0	0.25	1.75	**12.5%**

1. Regular "Apartment Dwelling" parking rate for strata housing (Bylaw 8.3)
2. Adjusted "Apartment Dwelling" parking rate after "Affordable Rental Housing" discount is applied. (Bylaw 8.7)

As shown, the percent reductions applied to the regular VoP Zoning Bylaw rates for affordable rental housing (i.e., 12.5%-25%) are similar to the percent reductions found between strata and market rental

housing in the RPS study (i.e., 18%-22%). For this reason, the discounted Bylaw rates may in fact be appropriate for the affordable market rental units of the proposed development.

In terms of the proposed non-market rental housing, however, the discount applied may not be adequate, as the RPS indicated that the reduction in vehicle ownership levels between strata units and non-market rental units is significantly greater. This conclusion was further substantiated by the findings in the Toronto study. The following section provides additional information on how different income levels for non-market housing are shown to impact vehicle ownership.

5.2.2 Vehicle Ownership by Income Level

Both industry studies and the findings of Bunt's own data collection have indicated a strong relationship between income levels of residents and expected vehicle ownership. In other words, as income decreases, auto ownership and use decrease. This intuitively makes sense, as many of the residents in a non-market housing development simply do not have the financial resources necessary to pay for a private vehicle, insurance, gas, and maintenance. This is particularly true for those residents living in units with the highest subsidy levels, i.e., deep subsidy/shelter units.

In addition to the data shown above, the Canada Mortgage and Housing Corporation (CMHC) (Research Highlight, Socio-Economic Series Issue 50- Revision 2) also concluded that household income is the second-best predictor of auto ownership. A study reported in the Australia Transportation Forum (2007) confirmed a strong correlation between vehicle ownership and household income. A study published by Pushkar et al (TRB 2000) based on a survey of 115,000 households in Toronto indicated that higher income households owned more vehicles. A study conducted by Bunt & Associates in the Vancouver area in the early 1990s and in the Calgary area in 2003 also supported a positive, almost linear relationship between income and auto ownership.

The City of Mississauga conducted a study of over 4,600 non-profit rental housing units by various income stratifications and by unit size. **Figure 5.3** summarizes the proposed minimum parking guidelines resulting from the survey findings from this study for market rental units, "shallow" (lower) subsidy units, and "deep" (higher) subsidy units.

Figure 5.3: Proposed Minimum Parking Guidelines for Non-Seniors Apartments

Subsidy Category	Unit Size	Vehicle Ownership Rate
Market	One Bedroom	0.75
	Two Bedroom	0.90
	Three Bedroom	1.14
	Four Bedroom	1.21
Shallow	One Bedroom	0.40
	Two Bedroom	0.60
	Three Bedroom	0.74
	Four Bedroom	1.10
Deep	One Bedroom	0.31
	Two Bedroom	0.50
	Three Bedroom	0.70
	Four Bedroom	0.97

Source: City of Mississauga Policy & Planning Division, Parking Guidelines for Public and Private Non-Profit Housing, March 2005

Again, a clear relationship can be seen that supports Bunt's contention that the lower the income level, the lower the auto ownership will be, and subsequently, the lower the parking requirement should be.

5.2.3 Effect of Age

As the age of a resident increases, the likelihood of that resident owning a vehicle and actively driving decreases. In general, people often move to a Seniors Housing development in part because they either no longer want or are able to drive themselves to purchase groceries, engage in social activities, etc., and therefore take advantage of the amenities and services offered at these developments. Subsequently, the vehicle ownership of these residents is considerably lower than that of residents at non-Seniors developments.

While the proposed development will not be formally registered as a Seniors Housing development, all 1-bedroom units will be targeted toward Seniors and will be designed and operated accordingly. Based on conversations with the Developer, eight of the 1-bedroom units will be designed as accessible, while the remainder of all units in the development (regardless of size) will be designed as adaptable.

As mentioned previously, the site is located within 800m (~10-minute walk) of several amenities such as restaurants, parks, and a community centre, and has a bus stop serviced by the *100 Pemberton Local* bus route located immediately southwest of the site (although service frequency is limited). In addition, SSCS operates a "Better at Home Program" which operates within Pemberton and the surrounding area which offers transportation services to Seniors to attend appointments, pick up medications or groceries, and/or perform other necessary errands.

In combination, these factors would enable Seniors to access many essential amenities without relying on owning a private vehicle. For these reasons, it is expected that the 1-bedroom units for the proposed

development will experience a lower parking demand than if the units were not targeted at this specific age group.

5.3 Recommended Resident Parking Rates

As noted earlier, the data from the industry studies suggest that the Village of Pemberton's current discounted parking rate may in fact be appropriate for the affordable market rental units of the proposed development. However, given the relationship between income level and vehicle ownership, it is likely that residents of the non-market units (i.e., RGI and deep subsidy/shelter units) would have considerably lower vehicle ownership levels, with the residents of the deep subsidy/shelter units likely not owning any vehicles at all.

As such, when developing recommended parking rates, for the affordable market rental units, the current discounted Bylaw rates were simply used. For the RGI units, Bunt applied a blanket reduction factor to the discounted Bylaw rates equivalent to the difference between the "shallow" and "market" subsidy categories shown earlier in Figure 5.3, which was approximately 30% (i.e., average difference for all unit sizes). Finally, for the deep subsidy/shelter units, as the Developer has indicated that residents for these units are not expected to own their own vehicles, Bunt did not recommend any designated resident parking for these units. Using this approach, **Table 5.2** below summarizes Bunt's recommended parking rates and subsequent supply, and compares the recommended supply to the proposed supply.

Table 5.2: Recommended Resident Parking Rates by Income Level and Size

DESCRIPTION	QTY (DWELLING UNITS (DU))	RECOMMENDED RATE (SPACES/DU)	RECOMMENDED (SPACES)	PROPOSED (SPACES)	DIFFERENCE (SPACES)
AFFORDABLE MARKET RENTAL					
1 Bedroom	9	0.75[1]	7		
2 Bedroom	7	1.50[1]	11		
3 Bedroom	2	1.75[1]	3		
Sub-Total	**18**	-	**21**		
RENT GEARED TO INCOME					
1 Bedroom	16	0.50	8		
2 Bedroom	12	1.05	13		
3 Bedroom	4	1.23	5		
Sub-Total	**32**	-	**26**		
DEEP SUBSIDY/SHELTER					
1 Bedroom	6	0	0		
2 Bedroom	5	0	0		
3 Bedroom	2	0	0		
Sub-Total	**13**	**0**	**0**		
OVERALL					
1 Bedroom	31	0.48	15		
2 Bedroom	24	0.96	23		
3 Bedroom	8	1.00	8		
RESIDENT TOTAL	63	0.75	47	51	+4

1. Rates reflect the discounted Village of Pemberton Zoning Bylaw rates for Affordable/Rental Apartment Dwellings
2. Rates reflect the discounted Bylaw rates reduced by 30%.

As the table indicates, Bunt's recommended parking rates, which vary by income level and unit size, result in a recommended resident parking supply of 47 spaces. In comparison, the Developer proposes to provide 51 spaces, which equates to just over 1 space per unit for all units, except for the deep subsidy/shelter units. As the proposed supply exceeds Bunt's recommendation by 4 spaces, the resident parking for the development is expected to be adequate to accommodate the anticipated parking demand.

5.4 Residential Visitor Parking

In addition to the resident parking rates, it is Bunt's opinion that the VoP's visitor parking rate would also be higher than the anticipated demand rate given data collected for previous Bunt parking studies and the findings of general industry studies.

5.4.1 Previous Bunt Parking Studies

Table 5.3 below provides a summary of the peak visitor parking rates observed at several multi-family residential towers in Metro Vancouver. At these locations, peak visitor parking demand data was collected over the course of one to four days.

Table 5.3: Visitor Parking Studies by Bunt

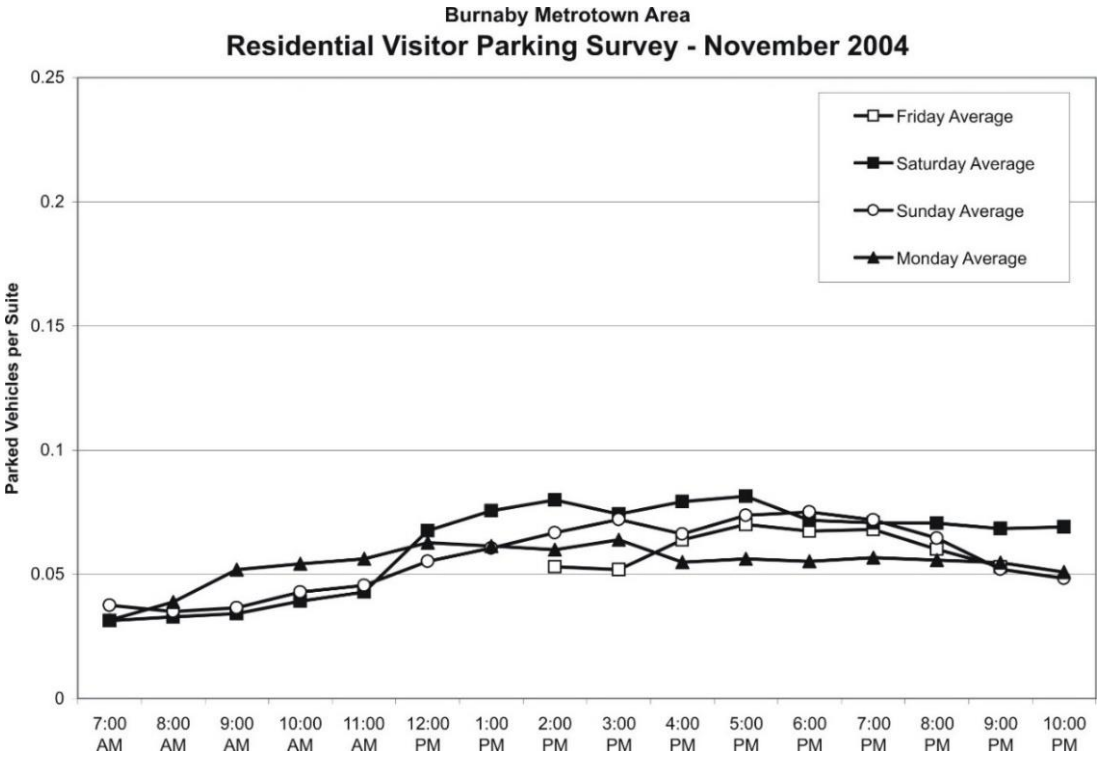
DESCRIPTION	MUNICIPALITY	# DAYS OF DATA	PEAK VISITOR PARKING DEMAND RATE (SPACES/UNIT)
One Lonsdale Corridor Rental Tower	City of North Vancouver	1 Day	0.05
Two Guildford Town Centre Apartment Towers	City of Surrey	4 Days	0.08
Six Metrotown Area Apartment Towers	City of Burnaby	2 Days	0.08

The peak visitor parking demand rate observed ranged from 0.05 to 0.08 spaces per unit. This visitor parking demand falls well under the 0.25 spaces per unit required by the Village of Pemberton.

It should be noted that during the Guildford Towers visitor parking surveys, which covered Friday and Saturday afternoon and evening periods at two high-rise towers, Bunt interviewed the drivers who were using the designated visitor parking spaces. Over 50% of these users indicated that they were residents using the visitor parking for short-term convenience parking. As such, it is Bunt's view that this may be a common occurrence, leading to higher than required visitor parking rates when such rates are based solely on direct observation.

To provide an indication of how visitor parking demand varies over the course of a day, **Figure 5.4** provides the average observed parking demand profile from the six Metrotown area apartment towers included in Table 5.3. As the figure indicates, visitor parking demand is generally highest on weekend afternoons, with the highest demand found to be on Saturday afternoon with a demand rate of 0.08 spaces per unit.

Figure 3.4 Residential Visitor Parking Survey – November 2004



5.4.2 Metro Vancouver Apartment Parking Study (2012) & Regional Parking Study (2018)

One of the key findings of the 2012 MVAPS was that visitor parking may be oversupplied throughout the region. Specifically, observed parking demand rates were below 0.10 space per apartment unit, compared to the typical municipal requirement of 0.20 visitor spaces per apartment unit. In comparison, the Village of Pemberton's visitor parking rate is even higher at 0.25 spaces per unit.

In addition, interviews undertaken with apartment developers as part of this study indicated that a visitor parking rate of 0.20 spaces per unit was found to be excessive in their experience. As such, in some instances, surplus visitor spaces have been sold to tenants as privately assigned spaces rather than retained as designated visitor parking.

While the 2018 RPS did not explicitly collect on-site visitor parking supply and demand data, the study did find from a Household Survey that available on-site visitor parking was reported to be most difficult to find during weekends, holidays, and on special occasions, indicating that these are the busiest periods of demand. This is consistent with Bunt's data presented in the figure above, which indicated that Saturday afternoons experienced the greatest demand.

5.4.3 Proposed Visitor Parking Supply

While the VoP's Zoning Bylaw requires that 16 dedicated visitor parking spaces (i.e., 0.25 spaces per unit) be supplied, given the data above, to provide a more appropriate supply and more efficient arrangement, the visitor parking supply for the development is proposed to be 4 spaces (i.e., 0.06 spaces per unit) combined with a shared parking arrangement with both the SSCS programming space and commercial retail parking supply. Specifically, on weekday evenings and all day on weekends, the 19 SSCS programming space parking spaces will be shared with residential visitors. In addition, on weekday evenings and weekend evenings, the 5 commercial retail parking spaces will be shared with residential visitors.

This proposed arrangement is meant to take advantage of the fact that the parking demand for these uses tends to peak at different times of the day and on different days. For example, residential visitor parking tends to peak both during the daytime on weekends and in the early evening on weekdays. Generally speaking, the parking demand for the SSCS programming space is expected to be highest during the weekday daytime, but be lowest or non-existent (i.e., at times when the SSCS programming space is closed) during the weekday evenings and weekends. Furthermore, the commercial retail parking demand is expected to be highest during the daytime on both weekdays and weekends, but lower or non-existent during the evenings when the retail stores are closed. By sharing the non-residential parking with residential visitors during off-peak times for these commercial and community uses, peak visitor demand will be accommodated without needing to construct excessive parking that may sit vacant at most times of the day.

Given the data above, the peak visitor parking demand is expected be in the range of 0.05 to 0.08 and no more than 0.10 spaces per unit, which translates to a peak demand of 6 spaces, occurring on weekends and on weekday evenings. As such, the ability for visitors to use the SSCS programming space and commercial retail parking during these times, resulting in an effective supply of 28 spaces during weekday and weekend evenings and 23 spaces during weekend daytimes, is expected to enable the site to accommodate the peak visitor parking demand despite having only 4 dedicated full-time visitor spaces.

6. SUMMARY

Sea to Sky Community Services (SSCS) is proposing an affordable multi-family residential development at Lot 2 Harrow Road in the northwest corner of Pemberton Portage Road (Hwy 99) & Harrow Road in Pemberton, BC. The development plan includes 63 rental units, consisting of 31 1-bedroom units, 24 2-bedroom units, and 8 3-bedroom units, with all the 1-bedroom units being targeted towards Seniors. The development will include 30% affordable market rental units and 70% non-market rental units. In addition to the residential space, the development will also include 7,685 sq.ft. (714 sq.m.) of SSCS programming space and 1,386 sq.ft. (129 sq.m.) of general market retail space.

In terms of site traffic, the development is expected to generate approximately 40 and 54 vehicle trips in the AM and PM peak hours, respectively. This translates to fewer than 1 new vehicle trip per minute on average during either peak hour. Typically, peak hour trip generation of 100 vehicle trips or fewer is not expected to have a material impact on the adjacent street network. As the anticipated trip generation is considerably lower than this threshold, the development is not expected to result in any traffic operations issues at the nearby intersections.

In terms of parking, to better suit the anticipated demand and to maintain housing affordability for the development, the Developer proposes to provide off-street parking for the residential space at rates lower than those outlined by the Village of Pemberton's Zoning Bylaw. Given that the development is planned to consist of entirely rental units targeted at lower-income Seniors and families, the bylaw rate would likely result in an oversupply of parking, even after applying the allowable rate discount for affordable/rental housing. As such, while the required residential parking supply is 89 spaces (73 resident, 16 visitor), the Developer proposes 55 spaces (51 resident, 4 visitor), representing a shortfall of 34 spaces (22 resident, 12 visitor).

Research as presented herein on the factors influencing auto ownership (i.e., tenure, income levels, and age), combined with the fact that the proposed supply exceeds Bunt's recommended supply (which is based on a rational breakdown of rates specific to the size, target demographic, and subsidy level of the units), strongly supports the proposed reduced resident parking supply. In terms of visitor parking, data collected by Bunt for previous projects and the findings of local industry studies, combined with a proposed shared parking arrangement that allows the SSCS programming space and commercial retail parking to be used by residential visitors during off-peak time for the non-residential uses, support a reduced visitor parking rate.

For these reasons, it is Bunt's opinion that the proposed resident and visitor parking rates are appropriate for the development and will be able to accommodate the expected parking demand. Furthermore, it is worth acknowledging that the parking demand is expected to be accommodated on-site and not rely on the usage of on-street parking.