

TRANSPORTATION PLANNERS AND ENGINEERS



November 26th, 2018
04-17-0059

Kristine Liu
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VIA EMAIL: kliu@thesalientgroup.com

Dear Kristine:

Re: **825 Fort Street Mixed-Use Development**
Parking & Trip Generation Review Update – Letter Report V3

The following letter summarizes the findings and recommendations of our parking and trip generation review for the Salient Group's (Salient) proposed mixed-use development at 825 Fort Street in Victoria, BC. This version 4 document is an update to our September 4th, 2018 report addressing comments from City Transportation staff. The proposed development is located on Fort Street between Blanshard Street and Quadra Street in Downtown Victoria, and now consists of approximately 100 purpose-built rental units (previously 98 units) with ground floor commercial retail.

Salient is seeking a variance on the parking requirement for the development which is lower than the minimum parking requirements outlined in the City of Victoria's recently updated Off-Street Parking Regulations for Downtown (i.e. Zoning Bylaw 80-159 - Schedule C). This letter provides support for the proposed parking supply to accompany the DP application submission, and has been updated to include information on the expected future site trip generation as requested by the City.

Please do not hesitate to contact us should you have any questions in this regard.

Yours truly,
Bunt & Associates

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1. INTRODUCTION

1.1 OUR UNDERSTANDING

The Salient Group (Salient) has plans to redevelop the existing commercial properties at 819-827 Fort Street between Blanshard and Quadra Streets in Victoria, BC. The proposal calls for the redevelopment of three existing commercial buildings – a 2-storey, 3-storey, and another two-storey into a 10-storey mixed-use rental residential building (100 units) with commercial uses (approximately 4,879 sq ft) on the ground level. The historic building facades would be maintained to preserve the existing character of the street frontage on Fort Street.

The priority task for this assignment is to provide guidance to the Project Team on the amount of parking required to meet the needs of the development moving forward through the pre-application stage towards Rezoning and DP stages. The plan is currently proposing approximately 57 (including 13 spaces shared between residential visitors and commercial uses) parking spaces in an underground parkade with 2 full levels of parking accessed off of Fort Street. Given the constraints on the site from a design and cost perspective, combined with the site's highly accessible central location within Downtown Victoria, it is most practical to provide parking below the City's requirements.

The site location is highlighted at **Figure 1**.

Figure 1: Site Location



To help provide insight on understanding the appropriate parking supply to recommend for the proposed development, parking demand surveys were carried out for 3 selected rental properties near downtown. The results of which are presented in **Section 2**.

2. DATA COLLECTION & RESULTS

2.1 Survey Details

Parking demand surveys were conducted for two weekdays (Tuesday September 19th, 2017 and Wednesday September 20th, 2017), and from 6pm to 11pm. This time frame was chosen as most residents are home in the late evening period and therefore this would provide a reasonable indication of the peak parking demands for the building. Parking occupancy counts were conducted every 30 minutes for the on-site parking at three different rental buildings, as well as some immediate on street parking nearby. The three sites included in the study were as follows:

1. "The Q" – 655 Douglas Street;
2. "Parkside Towers" – 890 Academy Close; and,
3. "Marifield Park" – 562-566 Simcoe Street

These sites were selected given they were all rental apartment properties near Downtown Victoria, and were accessible for the purposes of conducting surveys. Further, Bunt has vehicle ownership data for the latter two sites from a previous study prepared for another rental property in downtown. The survey locations are highlighted on **Exhibit 1**.

2.2 Parking Demand Results

The following presents the results from the parking demand surveys. **Figures 2 – 4** present the parking demand profiles for the three survey sites. The peak parking demand for each building is highlighted in the context of a demand rate per residential unit in **Table 2.1** to help inform our parking supply recommendation.

Table 2.1: Peak Parking Demand Rates

BUILDING	# OF UNITS	NUMBER OF ON-SITE PARKING SPACES (INCL. VISITOR)	PARKING SUPPLY RATE	PEAK PARKING DEMAND ON-SITE (INCL. VISITOR) AND ON-STREET	PEAK ON-SITE PARKING OCCUPANCY RATE	PEAK PARKING DEMAND RATE (PER UNIT)*
655 Douglas Street (The Q)	124	67	0.54	45 (on-site); 2 (on-street)	67%	0.38
890 Academy Close (Parkside Towers)	55	34	0.62	32 (on-site); 3 on-street	94%	0.64
562-566 Simcoe Street (Marifield Park)	108	88	0.81	70 (on-site); 4 (on-street)	80%	0.69
AVERAGE			0.66			0.57

*Includes observed on-street parking demands from Section 2.4.

As shown, the parking supply rates increase the further away from the downtown core you go with the lowest rate at 0.54 spaces per unit (including visitor parking) at The Q, up to 0.81 spaces per unit at Marifield Park in James Bay. Similarly, the peak parking demand rates follows suit with the lowest rate observed at The Q (0.36 spaces per unit including visitors) and the highest rate observed at Marifield Park (0.69 spaces per unit). The average peak parking demand rate is 0.57 spaces per unit.

It should be noted, however, that The Q has 2 on-site car share vehicles which are also used by residents, which help towards supporting a lower parking supply (and demand) for that building.

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Exhibit 1 Parking Survey Locations

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Figure 2: Off-Street Parking Occupancy at 655 Douglas Street

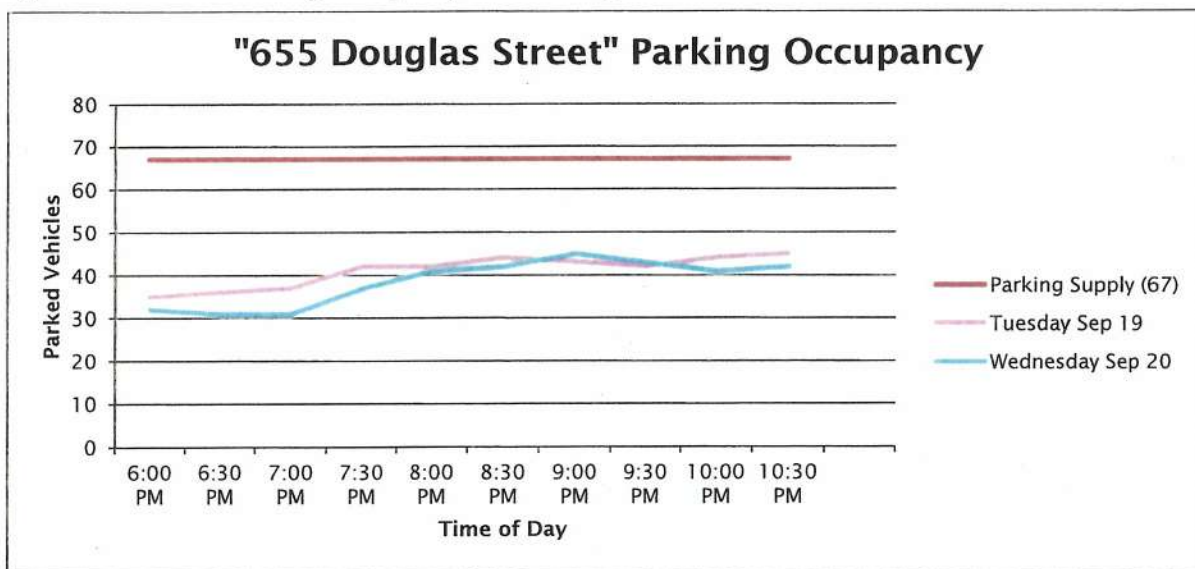


Figure 3: Off-Street Parking Occupancy at 890 Academy Close

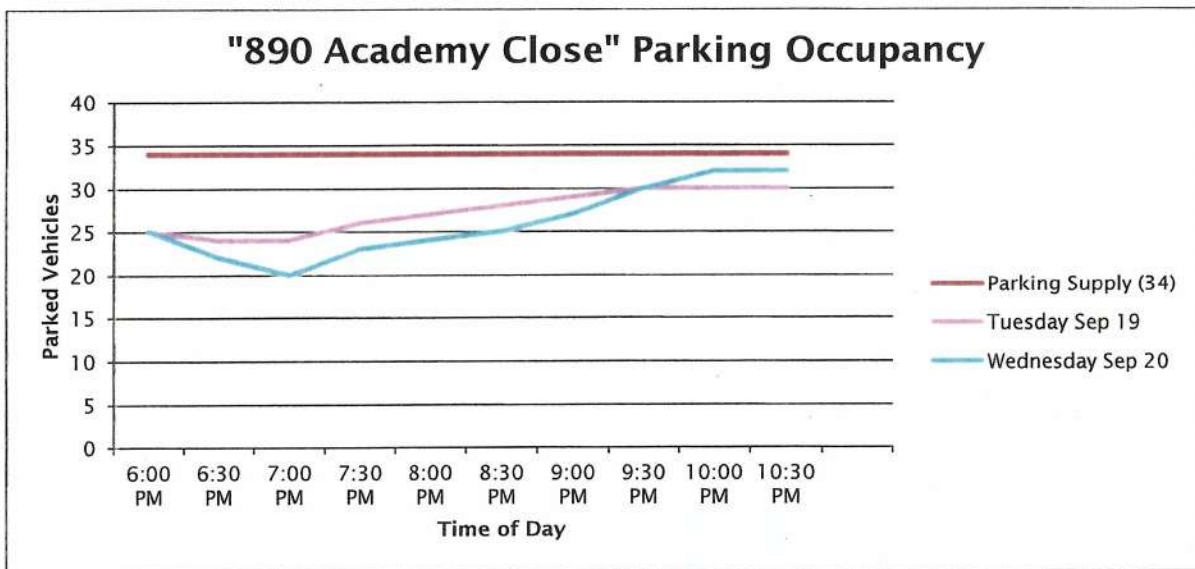
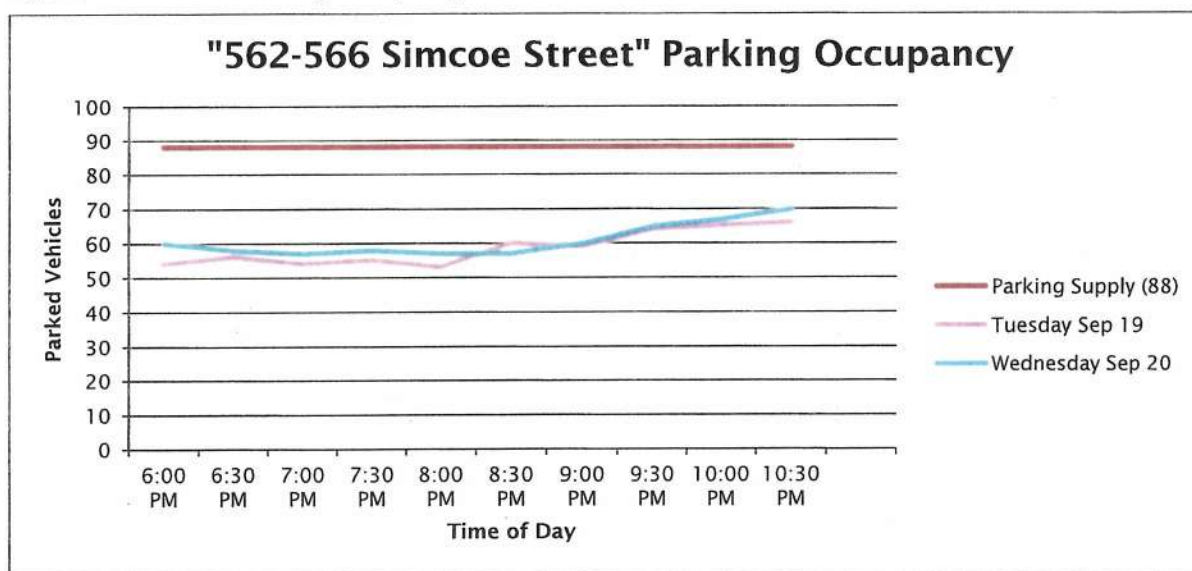


Figure 4: Off-Street Parking Occupancy at 562-566 Simcoe Street



As shown, peak parking occupancy rates varied between the sites with the lowest observed occupancy being 67% at The Q, and the highest observed occupancy being 94% at Parkside Towers.

2.3 Vehicle Ownership Data

As noted, Bunt had previously collected vehicle ownership data from ICBC (circa 2012) for Parkside Towers, and Marifield Park as part of another study. The results of that inquiry showed that the two properties had the following vehicle ownership rates:

- Parkside Towers – 0.63 registered vehicles per unit
- Marifield Park – 0.54 registered vehicles per unit

Interestingly, while Marifield Park shows a lower vehicle ownership rate per unit, it has a higher peak parking demand per unit. The ICBC data is consistent with our counted demand surveys – the variation is likely in part due to the different time of surveys but generally they are consistent. The average rate is 0.59 vehicles registered per unit.

2.4 On-Street Parking Observations

On-Street parking demand was observed at each of the three sites to ascertain if there was any further parking demand for the buildings not contained on-site. Peak on-street parking demands for the buildings were as follows:

- The Q – 2 vehicles observed parking on Blanshard Street for the building;
- Parkside Towers – 3 vehicles observed parking on Quadra Street and north side of Academy Close for the building; and,
- Marifield Park – 4 vehicles observed parking on Simcoe Street for the building

These numbers were included in the parking demand rates in Table 2.1, though it was difficult to know if they are residents, visitors, or perhaps deliveries or for other purposes. However, they have been factored in developing the recommended on-site parking supply for robustness.

Anecdotally, Bunt observed the parking demand on the 800 Block of Fort Street at 4:30pm on each of the survey days. We estimated the parking supply on the block to be 35 spaces, and the parking demand was observed to be 25 vehicles on the Tuesday and 27 vehicles on the Thursday which indicates there is some spare capacity on the block during the peak weekday afternoon period.

2.5 Visitor Parking Review

The Metro Vancouver Apartment Parking Study (MVAPS – September 2012) reviewed parking demands and supply requirements in municipalities across Metro Vancouver including visitor parking demands and requirements. The study found that the typical municipal bylaw requirement for visitor parking was 0.20 spaces per unit, while observed peak parking demand rates were below 0.1 spaces per unit. These findings are consistent with past Bunt observations which show that visitor parking demand rates are typically between 0.06 – 0.10 spaces per unit during peak times.

Given this demand rate, the proposed development is anticipated to need around 6 – 10 visitor parking spaces during peak demand periods.

3. CITY OF VICTORIA PARKING REQUIREMENT

3.1 City of Victoria Bylaw Parking Rates

The City of Victoria's Zoning Bylaw NO. 80-159, Schedule C outlines the newly updated off-street parking requirements for new developments in Downtown Victoria. **Table 3.1** summarizes the City's parking requirement based on the current proposal.

Table 3.1: City of Victoria Parking Requirement

USE	UNIT SIZE	# OF PROPOSED UNITS/GFA (M ²)	PROPOSED PARKING RATE ^a	REQUIRED PARKING SPACES
Residential - Rental	<45m ²	38 units	0.50 spaces per unit	19
	45-70m ²	55 units	0.60 spaces per unit	33
	>70m ²	7 units	1.00 space per unit	7
	<i>Sub-total</i>	<i>100</i>	<i>-</i>	<i>59</i>
Visitor Parking	-	100	0.10 spaces per unit	10
Commercial Retail	-	452m ²	1 space per 80m ²	6
TOTAL				75

As shown, the City's Zoning Bylaw requires a parking supply of 75 spaces for the proposed development including 69 spaces for residential uses (including for 10 spaces for visitors), and 6 spaces for commercial retail uses. Nevertheless, the project would still be requiring a parking variance of 18 spaces from the newly updated bylaw.

However, given our understanding of parking demand for similar rental projects near Downtown Victoria and the context of the proposed site's location near to extensive transit service, pedestrian and cycling facilities, as well as car-share vehicles it is apparent that the future parking demand for the proposed development would in fact be much lower than the City's requirement.

Parking needs for the proposed ground floor commercial space will be met through the provision of 13 parking spaces on Level P1 which will be designated as shared use spaces between residential visitor and commercial uses (10 marked as visitor spaces to be shared during the daytime between 8am – 5pm, and 3 marked as commercial spaces to be shared in the evening 5pm to 8am). With commercial parking demands peaking during the daytime and residential visitor demands peaking in the evening, the offset allows for sharing parking spaces between these uses for efficiency. This will be further supported by on-street parking along the Fort Street.

Parking summary and recommendations are provided in **Section 4**.

4. PARKING SUMMARY AND RECOMMENDATIONS

Based on observations of parking demands for rental apartment buildings near Downtown Victoria, as well as previous data for vehicle ownership for two of the survey sites, and understanding potential visitor parking demands for the development, we would be comfortable recommending the following parking supply rates for the proposed development given its more centralized location, contingent on the level of TDM measures being pursued.

- **Resident Parking Supply Rate:** 0.35 – 0.55 spaces per unit (low end with a more robust TDM plan including transit pass subsidies, a car-share vehicle, innovative bicycle parking and end-of-trip facilities (i.e. bike wash, repair tools etc.) , or other tangible measures, and higher end with little to no TDM measures)
- **Visitor Parking Supply Rate:** 0.06 – 0.10 spaces per unit (as per level of TDM measures being pursued, and sharing with commercial uses.
- **Commercial Retail Parking Supply Rate:** 1 space per 80m² (6 spaces) with sharing between residential visitor and commercial uses.

Total Parking Supply Rate for Residential Uses: 0.41 – 0.65 parking spaces per unit

Based on these rates, the development would be required to provide in the range of 41 – 65 parking spaces for residential uses depending on the level of TDM measures being pursued for the project.

The additional 6 commercial spaces required would be partially included in the visitor parking supply ratio above, however notwithstanding this would result in a total of 47 – 71 spaces being required to meet the needs of the project depending on the level of TDM measures provided for the development. This indicates that the proposed supply of approximately 57 spaces should be sufficient to meet the expected demands of the development given its central and highly accessible location downtown, and if some tangible TDM measures are provided. *Note that these rates may be subject to change when specific details on the proposed TDM measures are confirmed.*

This would equate to a variance from the City's Zoning Bylaw No. 80 – 159 Schedule C parking requirement by 28 spaces for the lower range and 4 spaces for the upper range.

Based on our past experience on similar projects it is anticipated that the City could consider a variance provided a strong commitment to TDM measures is provided by the project. Measures currently being contemplated include:

- Information package on travel options for new residents;
- Provision of car-share program;
- Provision of transit pass subsidies;
- Additional secure bicycle parking for residents and employees above the bylaw requirement (as an example, the City of Vancouver and City of North Vancouver allow for a reduction in vehicle parking with the provision of additional secure bike parking above the bylaw of 1 for every 5 spaces - Vancouver, and 1 for every 6 total spaces - North Vancouver;
- Associated bicycle end/start-of-trip facilities (i.e. cleaning, repair facilities for residents and commercial staff); and,
- Provision of 2-3 motorcycle/electric scooter parking spaces.

5. TRIP GENERATION REVIEW

The City has requested some preliminary information on expected vehicle trip generation for the proposed development. Presumably the existing site generates some amount of vehicle trips today and it would be typical to strip these from the estimated new trips to develop the net trip gain for the site. However, the existing site is only partially occupied, and was observed anecdotally to have nominal vehicle trip generation given there is no specified parking and the site is easily accessible by other modes. Therefore, to be conservative the estimated trip generation presented below does not take the existing site trip generation into account.

Table 5.1 summarizes the expected range of vehicle trip generation rates and resulting site vehicle trips (based on the proposed 100 residential units) for the proposed development based on the latest trip generation data available from the Institute of Transportation Engineers Trip Generation Manual (10th Edition).

Table 5.1: Peak Hour Vehicle Trip Generation Rates and Estimated Vehicle Trips

LAND USE CODE	TRIP GENERATION RATES (TRIPS PER UNIT)						ESTIMATED VEHICLE TRIPS					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
231 Mid-Rise Residential with Ground Floor Commercial	0.08	0.22	0.30	0.25	0.11	0.36	8	22	30	25	11	36
221 Multi-Family Housing (Mid-Rise)	0.09	0.27	0.36	0.27	0.17	0.44	9	27	36	27	17	44

Trip Rate Descriptions:

1. Mid-rise residential with 1st-floor commercial are mixed-use multifamily housing buildings that have between three and 10 levels (floors) and include retail space on the first level. These facilities are typically found in dense multi-use urban and center city core settings.

2. Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have between three and 10 levels (floors).

As shown, given the trip generation rates for mid-rise residential buildings from ITE, the development would be expected to generate somewhere in the range of 30-36 vehicle trips in the morning peak hour, and 36 to 44 trips in the PM peak hour (not including a potential reduction for existing site trips). However, given the descriptions of the land use codes, Code 231 Mid-Rise Residential with Ground Floor Commercial is the most appropriate for the proposed development, indicating the site would be on the lower end of this range (i.e. 30 trips in the morning peak hour, and 36 trips in the afternoon peak hour).

This level of traffic would represent approximately 1 vehicle every 1.5 - 2 minutes on the adjacent road network and is not expected to result in any operational concerns.

cc: Robert Fung, Salient Group