

Ref. No. 181-08144

July 13, 2018

T. A. Scott Architecture 220 Windmill Road, Unit #2 DARTMOUTH NS B3A 1G2

Sent via Email to tascott@tascottarchitecture.com

RE: Traffic Impact Statement, Multi-Unit Residential Development with Ground Floor Commercial Space, 358 to 364 Portland Street, Dartmouth

Dear Mr. Scott:

This is the Traffic Impact Statement that you have requested for the proposed Multi-Unit Residential Development with Ground Floor Commercial Space on Portland Street, Dartmouth.

Description of Development Site - The proposed development (Figure 1), which is on vacant land on the south side of the Portland Street just east of Rodney Road, includes Civic Numbers 358, 360, and 364 Portland Street, as well as Civic Number 36 A on Rodney Road. The development is planned to include three buildings with a total of approximately 105 apartment units, and with a total of approximately 6,360 SF of ground floor commercial space in buildings A and B. A single site driveway is proposed on Portland Street between buildings A and B. Visibility is good on both Portland Street approaches to the driveway as illustrated in Photos 1 and 2. Since the ground floor levels of the proposed buildings (Figure 1) are set back from the sidewalk, it is expected that there will be good visibility between drivers exiting the driveway and pedestrians on the sidewalk.



Photo 1 - Looking west on Portland Street towards Rodney Photo 2 - Looking east on Portland Street towards Lakefront Road from the proposed site driveway.

Road from the proposed site driveway.

Portland Street is a two lane east - west arterial street at the site driveway. There are curbs and sidewalks on both sides of the street (Photos 1 and 2). Parking is not permitted on either side of the street adjacent to the site.

Description of Pedestrian Facilities - There are sidewalks on both sides of Portland Street and it is understood that sidewalks will be provided along the sides of the site driveway. There is a marked crosswalk across Portland Street with actuated amber flashing lights approximately 160 meters east of the site just east of Lakefront Road.

Transit Service - Halifax Transit provides service on Portland Street for Route Numbers 58, 59, 61, 68, and 159 with transit stops just west of the site as well as about 100 meters east of the site.



Traffic Volumes - A turning movement count obtained by HRM Traffic and Right of Way section at the Prince Arthur Avenue intersection (approximately 300 meters east of the site) at the end of July 2016 indicated Portland Street two-way volumes of 805 vehicles per hour (vph) during the AM peak hour and 1,140 vph during the PM peak hour. However, since that count was obtained during summer traffic conditions, a count obtained by HRM during September 2014 which indicated Portland Street two-way volumes of 1,040 vehicles per hour (vph) during the AM peak hour and 1,300 vph during the PM peak hour, is considered to provide a more appropriate volume for this location.

Trip Generation Estimate for Proposed Development - Trip generation estimates, prepared using published trip generation equations from *Trip Generation*, 10th Edition, (Institute of Transportation Engineers, 2017), are included in Table 1.

Since Portland Street is a transit corridor and significant numbers of site generated trips are expected to be non-auto trips (transit, walking, or bicycle), a 20% reduction for non-auto trips has been used in this area. While a higher percentage reduction could be considered consistent with the 60% target for Regional Center set for 2031 by the *Integrated Mobility Plan* (HRM 2017), a 20% reduction for non-auto trips has been considered to be appropriate for this area on Portland Street.

After a 20% reduction for non-auto trips, it is estimated that the proposed mid-rise apartment buildings with ground floor commercial space will generate 29 two-way vehicle trips (7 entering and 22 exiting) during the AM peak hour and 36 two-way vehicle trips (22 entering and 14 exiting) during the PM peak hour.

Table 1 - Trip Generation Estimates for the Proposed Development											
	- 1		Trip Generation Rates ³				Trips Generated ³				
Land	Use '	¹ Units ²	AM Peak		PM Peak		AM Peak		PM Peak		
			In	Out	In	Out	In	Out	In	Out	
Mid-Rise Apartment (Land Use 223		105 units	0.09	0.27	0.27	0.17	9	28	28	18	
Specialty Retail ⁴ (Land Use 826)		6.36 KGLA	0.76	0.60	1.19	1.52	5	4	8	10	
Total Trip Generation Estimates for Proposed Development							14	32	36	28	
20% Reduction for High Pedestrian and Transit Usage 5							2	6	6	4	
Adjusted Trip Generation Estimates for Proposed Development							7	22	22	14	
	 NOTES: 1. Rates are for the indicated Land Use Code, <i>Trip Generation</i>, 10th Edition, Institute of Transportation Engineers, 2017, except as noted. 2. Units are 'Number of Apartments'; KGLA is 'Gross Leasable Area x 1000 square feet'. 3. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'. 4. Since 10th Edition does not include Specialty Retail, rates for Land Use 826 from the 9th Edition have been used. Since there is no published rate for the AM peak hour of adjacent street for this Land Use, and since AM peak hour 										

Since there is no published rate for the AM peak hour of adjacent street for this Land Use, and since AM peak hour trips to Speciality Retail are generally low, AM trip rates have been assumed to be 50% of the PM rate with reversal of the directional split.

5. Since the site is well served by transit, trip generation estimates have been reduced by 20% to account for non-auto trips expected for this development.

Summary -

1. The proposed development on the south side of Portland Street east of Rodney Road is planned to include three buildings with a total of approximately 105 apartment units and 6,360 SF of ground floor commercial space.

- Portrand Street is a two lane east west arterial street at the site driveway. There are curbs and sidewalks on both sides of the street. Parking is not permitted on either side of the street adjacent to the site. Two-way volumes on Portland Street are approximately 1.040 vehicles.
- 3 The site will be served by a driveway on Portland Street between Buildings A and B near the mid-point of the site frontage on Portland Street. Visibility is good on both Portland Street approaches to the driveway. Since the ground floor level of the proposed buildings is set back from the sidewalk, there is expected to be good visibility between drivers exiting the driveway and pedestrians on the sidewalk.

per hour (vph) during the AM peak hour and 1,300 vph during the PM peak hour near the site.

4 After a 20% reduction for non-auto trips, it is estimated that the proposed mid-rise apartment buildings with ground floor commercial space will generate 29 two-way vehicle trips (7 entering and 22 exiting) during the AM peak hour and 36 two-way vehicle trips (22 entering and 14 exiting) during the PM peak hour.

Conclusion -

driveway.

2.

5 While peak hourly volumes are moderate to high on Portland Street, the low numbers of site trips are not expected to have any significant impact to the operation of Portland Street adjacent intersections, or the regional street system.

If you have any questions, please contactime by Email to ken oblich@wsp.com or telephone 902-452-7747

Since(ely -

Ken O'Brien, P. Eng Senior Traffic Engineer WSP Canada Inc

