



Ref. No. 171-00927 Task 12

July 27, 2018

Mr. Cesar Saleh, P. Eng. Sent via Email to cesar.saleh@wmfares.com
VP Planning and Design
W.M. Fares Architects
3480 Joseph Howe Drive, 5th Floor
HALIFAX NS B3L 4H7

RE: Traffic Impact Statement for Proposed Multi-Unit Residential Building, Armstrong Court, Halifax

Dear Mr. Saleh:

Further to your Email on July 19, 2018, this is the Traffic Impact Statement for the proposed additional multi-unit residential building at Armstrong Court.

Description of Development Site - Armstrong Court is a short north-south cul-de-sac that intersects with Castle Hill Drive just north of its signalized intersection with Kearney Lake Road. Armstrong Court is a two lane street with curbs on both sides and a sidewalk along the east side. There are five single family residential units on the east side of Armstrong Court and there are private driveways from the bulb of the cul-de-sac to four multi-unit residential buildings with a total of 400 existing units. The proposed development (Figure 1) will include a seven story building with approximately 76 units to be constructed on the parking lot area (Photos 1 and 2) at the east end of the existing building at 60 -70 Armstrong Court. The site will continue to access Armstrong Court at an existing private driveway (Photos 3 and 4).



Photo 1 - Looking east from near the end of the existing building across the parking lot that will be used for the proposed building.

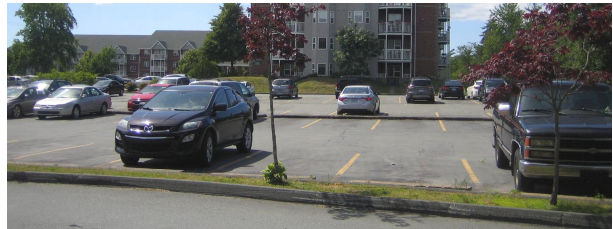


Photo 2 - Looking west from the existing site driveway across the parking lot that will be used for the proposed building.



Photo 3 - Looking left along the private driveway to other existing apartment buildings from the driveway for 50 - 70 Armstrong Court.



Photo 4 - Looking right along the private driveway towards the cul-de-sac bulb on Armstrong Court from the driveway for 50 - 70 Armstrong Court.

CASTLE HILL ADDITION (60-70 ARMISTONG COURT)			
DENSITY	1BR	2BR	TOTAL
100	3	7	10
200-700	18	48	66
TOTALS:	21 (28%)	55 (72%)	76
SITE DATA			
PROPERTY AREA	± 228,221 SF		
LOT COVERAGE (ADDITION)	± 15,600 SF (7%)		
TOTAL ADDITION GROSS FLOOR AREA	± 92,400 SF		
GROSS FLOOR-AREA RATIO	0.4		
AMENITY SPACE			
INDOOR AMENITY SPACE (LEVEL 100):	± 489 SF		
OUTDOOR AMENITY SPACE (65-70 ARMISTONG COURT):	± 33,794 SF		
PARKING			
UNDERGROUND PARKING:	± 34		
SURFACE PARKING (65-70 ARMISTONG COURT):	± 252		

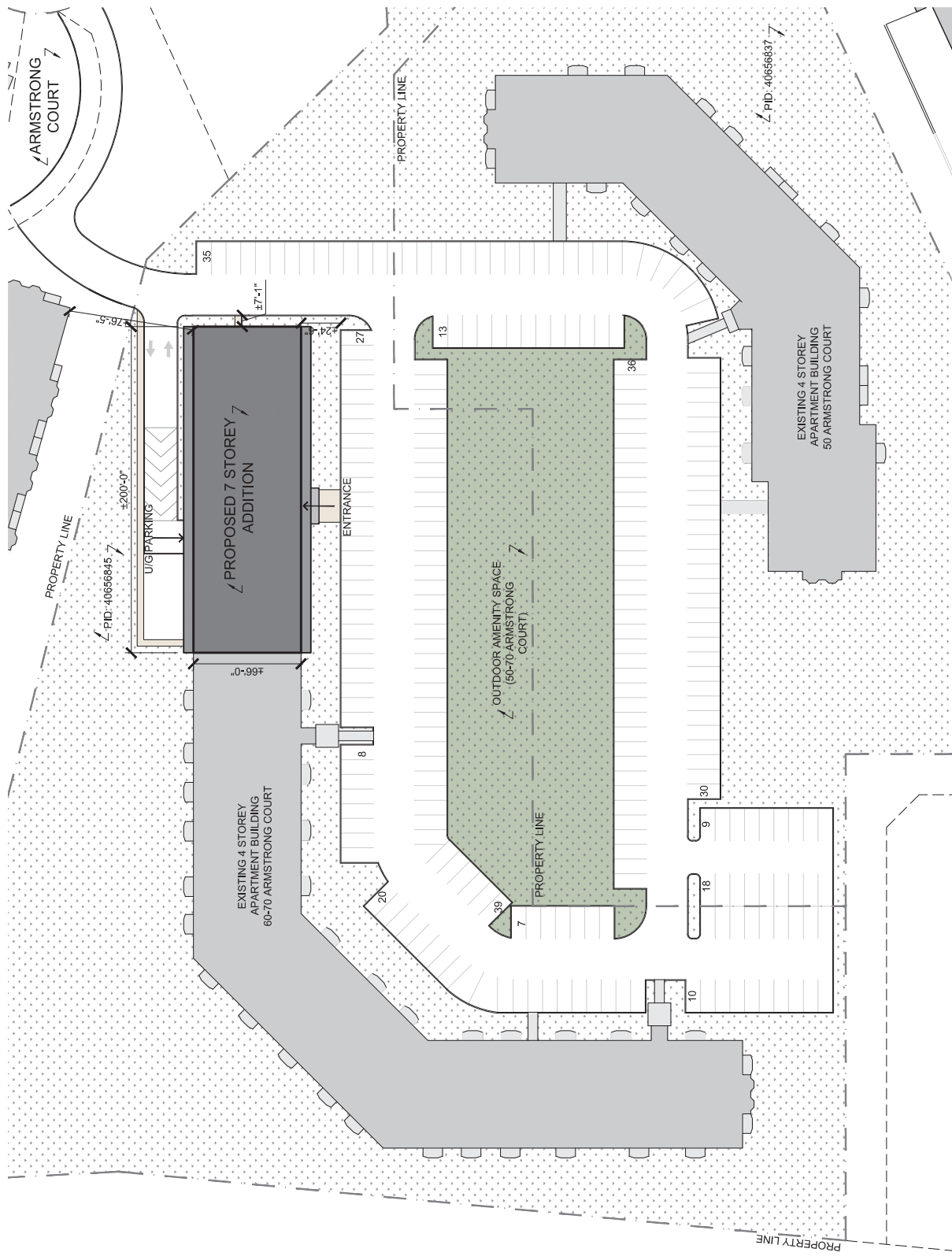


Figure 1
SITE PLAN + DATA TABLE

CASTLE HILL ADDITION
60-70 ARMISTONG COURT, HALIFAX, NS

Project No.: 2017.19
Scale: 1" = 60'-0"
Date: 4 Jun 2018



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Traffic Volumes - While traffic count data are not available for Armstrong Court, based on the existing residential units served by the street, two-way volumes are estimated to be approximately 150 vehicles per hour (vph) during the AM peak hour and 180 vph during the PM peak hour.

A turning movement count was obtained by HRM Traffic and Right of Way section at the Kearney Lake Road / Broadholme Lane and Castle Hill Drive intersection, just south of the Armstrong Court intersection with Castle Hill Drive, during mid-June 2016. The count indicated Castle Hill Drive two-way volumes of 305 vph during the AM peak hour and 330 vph during the PM peak hour between Armstrong Court and the signalized Kearney Lake Road intersection.

Transit Service - Halifax Transit provides service on Kearney Lake Road past the Castle Hill Drive intersection for Route Numbers 2, 16, 34 and 86. However, since the proposed building is approximately 350 meters from the intersection, transit usage has not been considered when preparing vehicle trip estimates for this project.

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

It is estimated that the proposed mid-rise apartment building will generate 28 two-way vehicle trips (7 entering and 21 exiting) during the AM peak hour and 34 two-way vehicle trips (21 entering and 13 exiting) during the PM peak hour.

Land Use ¹	Units ²	Trip Generation Rates ³				Estimated Trips Generated ³			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Mid-Rise Apartment (Land Use 223)	76 units	0.09	0.27	0.27	0.17	7	21	21	13

NOTES: 1. Rates are for the indicated Land Use Code, *Trip Generation, 10th Edition*, Institute of Transportation Engineers, 2017.
 2. Units are 'Number of Apartments'.
 3. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'.

Summary -

1. The proposed development will include a seven story building with approximately 76 units to be constructed on the parking lot area at the east end of the existing building at 60 -70 Armstrong Court. The site will continue to access Armstrong Court at an existing private driveway.
2. Armstrong Court is a short north-south cul-de-sac that intersects with Castle Hill Drive just north of its signalized intersection with Kearney Lake Road. Armstrong Court is a two lane street with curbs on both sides and a sidewalk along the east side. Armstrong Court two-way volumes are estimated to be approximately 150 vehicles per hour (vph) during the AM peak hour and 180 vph during the PM peak hour.
3. A count obtained by HRM Traffic and Right of Way section during mid-June 2016 indicated Castle Hill Drive two-way volumes of 305 vph during the AM peak hour and 330 vph during the PM peak hour on Castle Hill Drive between Armstrong Court and the signalized Kearney Lake Road intersection. These volumes also include trips to / from Armstrong Court.

4. It is estimated that the proposed 76 unit mid-rise apartment building will generate 28 two-way vehicle trips (7 entering and 21 exiting) during the AM peak hour and 34 two-way vehicle trips (21 entering and 13 exiting) during the PM peak hour.

Conclusion -

5. The low numbers of trips estimated to be generated by the proposed building are not expected to affect traffic operations on Armstrong Court, Castle Hill Drive, the signalized intersection of Kearney Lake Road and Castle Hill Drive, or the regional street system.

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

Sincerely:



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

