

Project 161-04044-05

October 3, 2016

Mr. Cesar Saleh, P. Eng. VP Planning and Design W.M. Fares Group 3480 Joseph Howe Drive, 5th Floor HALIFAX NS B3L 4H7

Sent via Email to cesar.saleh@wmfares.com

RE: Addendum Traffic Impact Statement for The Stackhouse on Bilby, 5516 to 5532 Bilby Street, Halifax (Traffic Impact Statement - Proposed Residential Development - 5530 and 5532 Bilby Street, WSP Canada Inc., April 29, 2013)

Dear Mr. Saleh:

This is the Addendum to the April 29, 2013, Traffic Impact Statement (TIS) for the proposed Residential Development project at 5530 and 5532 Bilby Street that was prepared by WSP Canada Inc. (April 2013) to account for site and project changes.

Background - Since the April 2013 TIS was prepared for a 32 unit apartment building at 5530 and 5532 Bilby Street, the developer has acquired 5516 Bilby Street (Figure 1, and Photos 1 and 2), enlarged the proposed building to include 62 residential units and 933 square feet of community related retail space (Figure 2), and relocated the parking garage driveway easterly on Bilby Street.

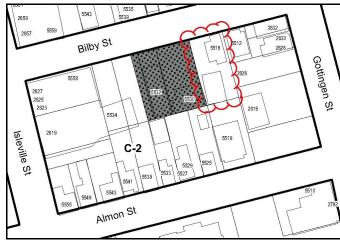


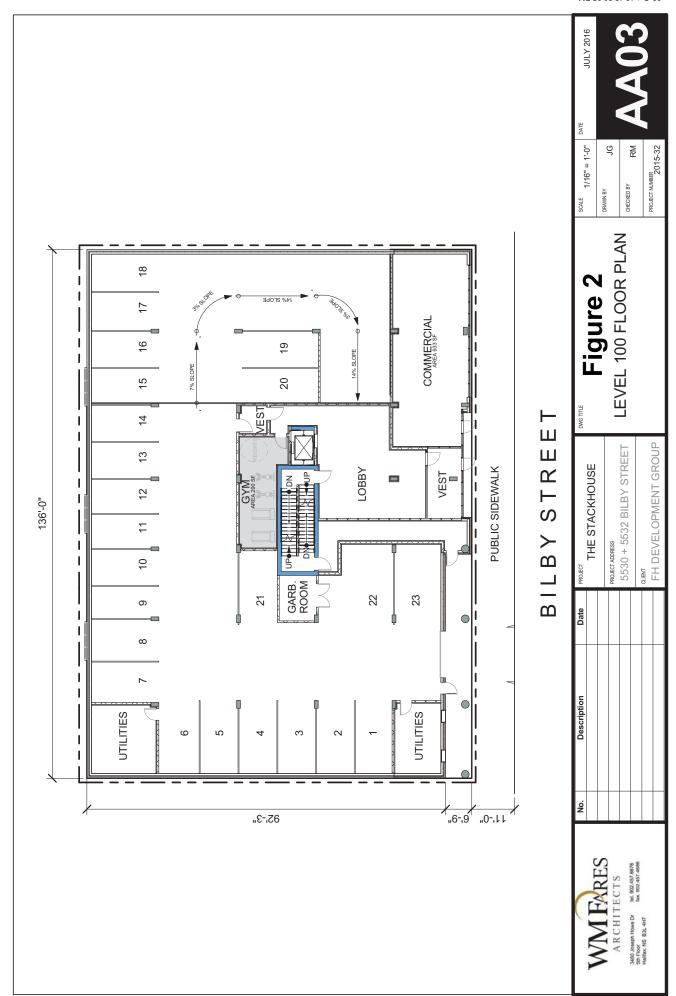
Figure 1 - Development site at 5516 to 5532 Bilby Street.



Photo 1 - The proposed site driveway will be near the existing driveway for 5516 Bilby Street to the right of the photo. The existing site includes the residential building and a 1200 SF automotive service garage visible to the right of the photo.



Photo 2 - Looking easterly along Bilby Street towards the site. 5516 Bilby Street is to the left of the photo and the portion of the site included in the 2013 TIS is the cleared space to the right of the photo.



The parking garage driveway will be towards the east end on the site near the existing driveway for 5516 Bilby Street shown in Photo 1. Visibility is good on both Bilby Street approaches to the driveway as illustrated in Photos 3 and 4. Also, since the ground floor level of the building will be set back from the property line, there is expected to be good visibility between vehicle drivers exiting the parking garage driveway and pedestrians on the sidewalk.





from the proposed site driveway.

Photo 3 - Looking west on Bilby Street towards Isleville Street Photo 4 - Looking east on Bilby Street towards Gottingen Street from the proposed site driveway.

Trip Generation - Trip generation estimates for the proposed 62 unit building with 52 parking spaces, as well as trip estimates for existing land uses, prepared using published trip generation rates from *Trip Generation*, 9th *Edition*, are included in Table 1.

Table 1 - Trip Generation Estimates for Proposed Development									
Land Use ¹	Units ²	Trip Generation Rates ³				Trips Generated ³			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	ln	Out	In	Out
Trip Generation Estimates for Proposed Development at 5516 to 5532 Bilby Street									
Mid-Rise Apartment (Land Use 223)	62 units	0.09	0.21	0.23	0.16	6	13	14	10
Specialty Retail (Land Use 826) ⁴	0.933 KGLA	0.76	0.60	1.19	1.52	1	1	1	1
Total Trip Generation Estimates for Proposed Development						7	14	15	11
30% Reduction for Non-Vehicle Trips ⁵						2	4	4	3
Adjusted Trip Estimates for Site Generated Trips						5	10	11	8
Trip Generation Estimate for Existing Trips Generated by 5516 Bilby Street									
Residential (Land Use 210)	2 units	0.19	0.56	0.63	0.37	0	1	1	1
Automotive Care Center (Land Use 942) 4	1.2 KGLA	1.49	0.76	1.49	1.62	2	1	2	2
Trip Generation Estimates for Existing Land Use 5516 Bilby Street						2	2	3	3
Additional Vehicle Trip Estimates for the Proposed Development						3	8	8	5

NOTES: 1.

- Rates are for the indicated Land Use Codes, Trip Generation, 9th Edition, Institute of Transportation Engineers, 2012.
- KGLA is 'Gross Leasable Area x 1000 square feet'.
- Rates are 'vehicles per hour per unit': trips generated are 'vehicles per hour for peak hours'.
- The Speciality Retail (Land Use 826) rate for 'Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 PM' has 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 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.
- Since the site is near Gottingen Street that has very good transit service, a 30% reduction in site generated vehicle trips for the residential units has been assumed to account for transit, bicycle, and walking trips.

WSP Canada Inc. October 3, 2016 While land uses on 5530 and 5532 Bilby Street that were existing when the 2013 TIS was prepared have been removed (Photo 2), existing land uses on 5516 Bilby Street include a building with two residential units and an approximately 1,200 SF automotive service garage (Photos 1 and 2).

After adjustment for 30% non-vehicle trips, it is estimated that the proposed 62 unit building with 52 parking spaces will generate 15 two-way vehicle trips (5 entering and 10 leaving) during the AM peak hour and 19 two-way vehicle trips (11 entering and 8 leaving) during the PM peak hour.

When vehicle trips generated by the existing land uses are considered, it is estimated that the site will generate 11 additional two-way vehicle trips (3 entering and 8 leaving) during the AM peak hour and 13 additional two-way vehicle trips (8 entering and 5 leaving) during the PM peak hour.

Conclusion - Since the numbers of site generated trips are low, the conclusion included with the 2013 TIS is still considered to be applicable:

"Given that the increase in traffic is slight and that the site has excellent access to transit, site generated trips are not expected to have any significant impact to levels of performance on adjacent street and intersections or to the regional street system."

If you have any questions, please contact me by telephone at 902-443-7747 or Email to ken.obrien@wspgroup.com.

Sincerely:
Original Signed

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

