



Ref. No. 161-04044 Task 8

November 20, 2017

Ms. Ashley Blissett, P. Eng.
Senior Development Engineer
Halifax Regional Municipality
PO Box 1749
HALIFAX NS B3J 3A5

RE: Addendum Traffic Impact Statement, Proposed Multi-Tenant Residential Building with Ground Floor Commercial Space, Robie Street between Cunard Street and Compton Avenue, Halifax, NS

Dear Ms. Blissett:

This Addendum Traffic Impact Statement (TIS) has been prepared to consider impacts of land use changes that have occurred since the *Traffic Impact Statement, Proposed Multi-Tenant Residential Building with Ground Floor Commercial Space, Robie Street between Cunard Street and Compton Avenue, Halifax, NS*, was prepared by WSP Canada Inc., March 31, 2016.

The Addendum has been prepared to consider the following:

1. Both members of the public and HRM staff are understood to have expressed concerns for the proximity of the building to the property line possibly blocking vehicle sight line to the Robie Street crosswalk to the Commons.
2. While the 2016 land use included 100 apartment units and 9,040 SF of commercial space, the current proposed land use includes 95 apartment units and approximately 6,550 SF of commercial space.

Building Proximity and Sight Line to Crosswalk - It is understood that concerns have been expressed for the proximity of the building to the property line possibly blocking vehicle sight line to the Robie Street crosswalk to the Commons. Existing visibility for a driver turning right from Cunard Street to Robie Street is illustrated in the adjacent photos.



Photo 1

Photo 1, taken from the STOP line, shows the corner of the existing building and two poles. While the building does not impede visibility, the poles may momentarily block visibility.



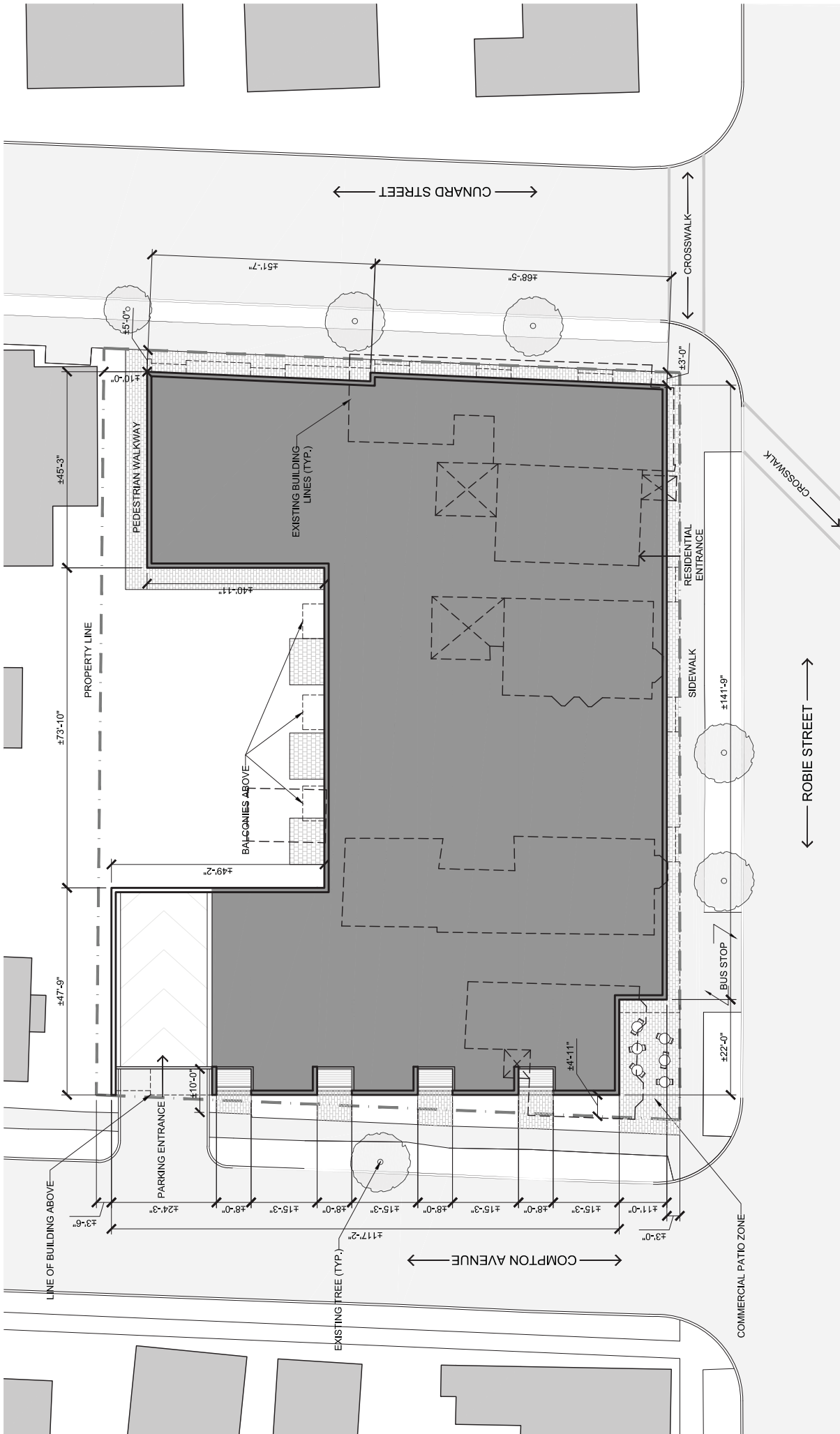
Photo 2

Photo 2, taken from just beyond the STOP bar, and Photo 3, taken as the vehicle begins to enter Robie Street, show that the driver has good visibility to the crosswalk.

While the existing buildings are over the property line on Cunard Street, and on the property line on Robie Street, the proposed building will be set-back three feet from both property lines. The proposed building will not impede visibility to the crosswalk (Figure 1A).



Photo 3



Trip Generation Estimates - Trip generation estimates for the proposed 2016 land use obtained from the March 2016 TIS, and trip generation estimates for the proposed 2017 land uses, prepared using published trip generation rates from *Trip Generation, 9th Edition*, are included in Table 1A.

Table 1A - Trip Generation Estimates for Proposed 2016 and 2017 Developments										
Land Use ¹	Units ²	Trip Generation Rates ³				Trips Generated ³				
		AM Peak		PM Peak		AM Peak		PM Peak		
		In	Out	In	Out	In	Out	In	Out	
Trip Generation Estimate for the Proposed 2016 Development ⁴										
Trip Generation Estimates for Proposed 2016 Development					16	26	34	30		
Trip Generation Estimates for Existing Site Buildings ⁶					3	6	6	6		
Additional Vehicle Trip Estimates for the Redeveloped Site in 2016 ⁷					13	20	28	24		
Trip Generation Estimate for the Proposed 2017 Development										
Mid-Rise Apartment (Land Use 223)	95 units	0.09	0.21	0.23	0.16	9	20	21	16	
Specialty Retail (Use Code 826) ⁵	6.550 KGLA	0.76	0.60	1.19	1.52	5	4	8	10	
Trip Generation Estimates for Proposed 2017 Development					14	24	29	26		
Trip Generation Estimates for Existing Site Buildings ⁶					3	6	6	6		
Additional Vehicle Trip Estimates for the Redeveloped Site in 2017 ⁷					11	18	23	20		
Change in Trip Estimates between 2014 and 2017 Land Uses										
Estimate of Trip Reduction from 2016 to 2017 Land Uses ⁸					(2)	(2)	(5)	(4)		
<p>NOTES: 1. Rates are for the indicated Land Use Codes, <i>Trip Generation, 9th Edition</i>, Institute of Transportation Engineers, 2012.</p> <p>2. KGLA is 'Gross Leasable Area x 1000 square feet'.</p> <p>3. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'.</p> <p>4. Trip generation estimates for the 2016 land use are from Table 1, <i>Traffic Impact Statement, Proposed Multi-Tenant Residential Building with Ground Floor Commercial Space, Robie Street between Cunard Street and Compton Avenue, Halifax, NS</i>, (WSP Canada Inc., March 31, 2016).</p> <p>5. The Speciality Retail (Land Use 826) rate for 'Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 PM' has been used. While the unit is considerably smaller than the average 69.0 KGLA in the published data (Page 1580), the published trip generation rate has been used since this is expected to be pedestrian oriented commercial space. Also, 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.</p> <p>6. These are the trips generated by existing residential apartment units and commercial space on the site which can be considered as a 'credit' for site trip generation estimates for the redeveloped site.</p> <p>7. These are the estimated additional trips that will be generated by the redeveloped site for both 2016 and 2017 land use plans after consideration of the 'credit' for trips generated by the existing land uses on the site.</p> <p>8. These are the estimated reductions in site generated trips between the proposed 2016 development and the 2017 proposed land uses.</p>										

After consideration of trip credits for existing development on the proposed site, Table 1 of the 2016 TIS included trip generation estimates of approximately 33 additional two-way vehicle trips (13 entering and 20 exiting) during the AM peak hour and 52 additional two-way vehicle trips (28 entering and 24 exiting) during the PM peak hour.

After consideration of trip credits for existing development on the proposed site, it is estimated that the proposed 2017 development will generate approximately 29 additional two-way vehicle trips (11 entering and 18 exiting) during the AM peak hour and 43 additional two-way vehicle trips (23 entering and 20 exiting) during the PM peak hour.

It is estimated that the proposed 2017 land uses site will generate 4 fewer two-way vehicle trips (2 less entering and 2 less exiting) during the AM peak hour and 9 fewer two-way vehicle trips (5 less entering and 4 less exiting) during the PM peak hour than the proposed 2016 development.

Summary -

1. The proposed 2017 development is planned to include approximately 95 apartment units, 6,550 SF of commercial space, and 95 below grade parking spaces which will be served by a driveway on Compton Avenue.
2. It is estimated that the proposed 2017 development will generate approximately 28 two-way vehicle trips (14 entering and 24 exiting) during the AM peak hour and 55 two-way vehicle trips (29 entering and 26 exiting) during the PM peak hour.
3. After consideration of trip credits for existing development on the proposed site, it is estimated that the proposed 2017 development will generate approximately 29 additional two-way vehicle trips (11 entering and 18 exiting) during the AM peak hour and 43 additional two-way vehicle trips (23 entering and 20 exiting) during the PM peak hour.
4. It is estimated that the proposed 2017 land uses will generate 4 fewer two-way vehicle trips (2 less entering and 2 less exiting) during the AM peak hour and 9 fewer two-way vehicle trips (5 less entering and 4 less exiting) during the PM peak hour than the proposed 2016 development.
5. Site observations from a vehicle turning from Cunard Street to Robie Street, review of the existing building locations on or near the property line, and proposed building location off-set three feet from both Cunard Street and Robie Street property lines, have shown that the proposed building will not impede visibility of the Robie Street crosswalk to the Commons. The Motor Vehicle Act also requires drivers of turning vehicles to yield to pedestrians in a crosswalk.

Conclusion -

6. Since the numbers of site generated trips estimated for the 2017 development are slightly less than those estimated for the proposed 2016 development, the conclusions reached in the March 2016 Traffic Impact Statement are still applicable for the proposed 2017 development:
“Since vehicle trips estimated to be generated by this site can be distributed west on Compton Avenue to Windsor Street and east to Robie Street, the low to moderate numbers of additional trips are not expected to have any significant impact to the level of performance of adjacent streets and intersections, or the regional street network.

Since the site has good pedestrian connections, as well as good transit service on Robie Street, it is possible that the numbers of site generated vehicle trips could be less than the estimated numbers.”

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

Sincerely:
Originally Signed

Senior Traffic Engineer
WSP Canada Inc.

