

March 10, 2020

Reference No. 202026

Cesar Saleh
WM Fares Architects
3480 Joseph Howe Drive, Suite 500
Halifax, NS B3L 4H7

Re: 48-50 Old Sambro Road, Halifax, NS – Traffic Impact Statement

Mr. Saleh,

Harbourside Transportation Consultants has completed a traffic impact statement, as per Halifax Regional Municipality (HRM) requirements, to support the development application for the development of 48-50 Old Sambro Road in Halifax, Nova Scotia.

Site Context: The development site is located on Old Sambro Road, near the intersection with Northwest Arm Drive. The site context is illustrated in Figure 1.

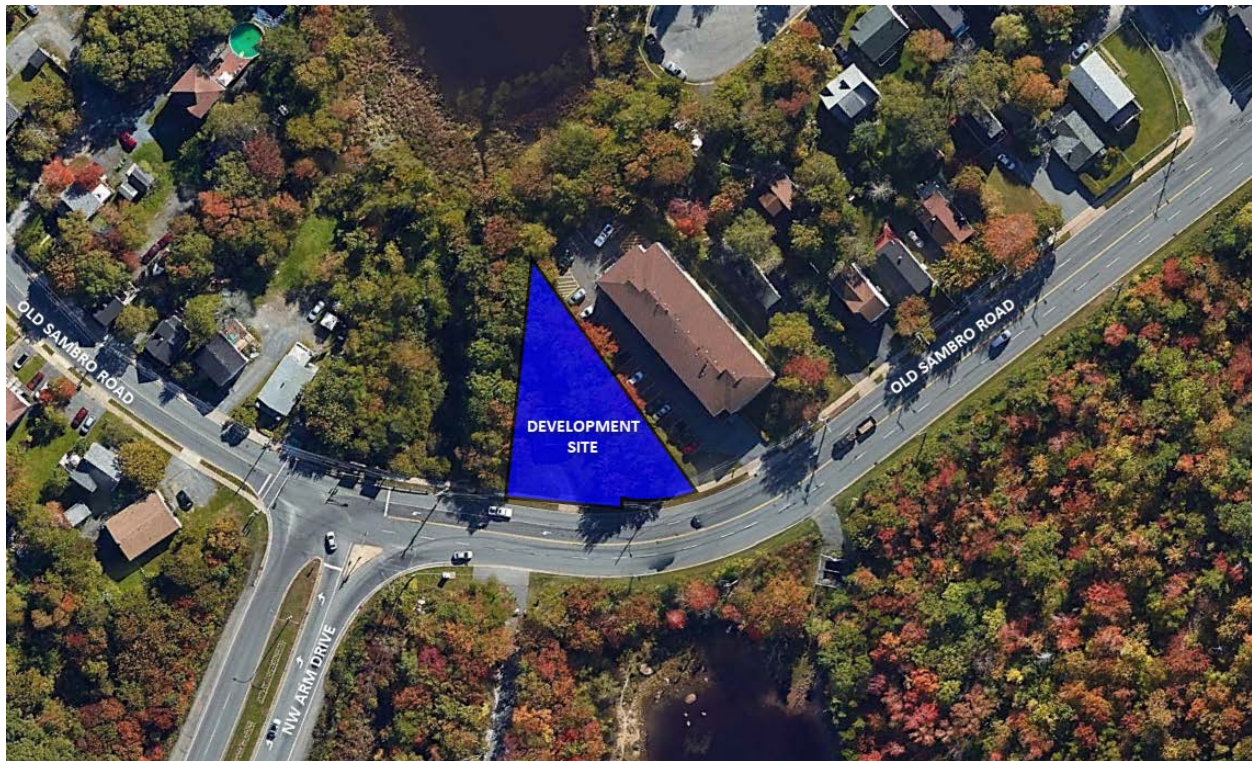


Figure 1: Site Context

Old Sambro Road is an arterial roadway that runs north-south and provides access to Northwest Arm Drive, an arterial that provides access to Highway 102 and Dunbrack Street. Old Sambro Road has a four-lane cross section with sidewalk on one side, separated by a grass boulevard (Figure 2). Old Sambro Road



has a posted speed limit of 50 km/h. The adjacent intersection with Northwest Arm Drive is a three way signalized intersection (Figure 3).



Figure 2: Old Sambro Road



Figure 3: Old Sambro Road & Northwest Arm Drive Intersection



The area is serviced by Halifax Transit Route 32 – Cowie Hill Express. Bus stops are located on Old Sambro Road approximately 200 metres south of the development site (Stop 6608) and approximately 300 metres north of the site (Stop 7394) both travelling south.

Existing Site Land Use: The site is currently vacant with no existing structures present. There is one existing access to the site on to Old Sambro Road.



Figure 4: Existing Site Land Use

Proposed Development: The proposed development will include a low-rise residential building with 13 units. The development plan is shown in Figure 5. The development will include an underground parking garage containing 13 spaces.

Access: The proposed development will maintain one access, moving the location to the far north end of the Old Sambro Road frontage. Pedestrian connections will be provided from the sidewalk on Old Sambro Road to the residential entrance and exit.

The HRM By-Law Number S-300 for Respecting Streets states no driveway shall be located within 30 metres of a street intersection that is controlled by traffic signals. This condition has been met for the proposed access location.



Figure 5: Site Development Plan

Sight Distance: The sight distance at the proposed new access location was reviewed to ensure the required sight distance is available. For arterial roadways, the HRM *Municipal Design Guidelines* (2013) specifies that the minimum stopping sight distance and minimum turning sight distance should meet the requirements of the Transportation Association of Canada's (TAC) *Geometric Design Guide for Canadian Roads*. The TAC *Geometric Design Guide for Canadian Roads* specifies the following sight distance requirements for a design speed of 50 km/h, with a 4-6% grade on the left approach and 0-3% grade on the right approach:

- Minimum stopping sight distance = 70 metres
- Minimum turning sight distance – left-turn from stop = 105 metres
- Minimum turning sight distance – right-turn from stop = 105 metres

Approximate measurements for sight distances were calculated and the turning sight distance for a left turn from stop meets the requirements of 105 metres (Figure 6). The stopping site distance for vehicles turning right into the site and the turning sight distance for a right turn from stopped onto Old Sambro Road are both approximately 35 metres (Figure 7).



Figure 6: Right View from Access to Old Sambro Road



Figure 7: Left View from Access to Old Sambro Road

Trip Generation: The vehicle trip generation estimates for the development were quantified using trip generation rates from the 10th edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. The weekday morning (AM) and afternoon (PM) peak hour trip generation estimates for the proposed development are summarized in Table 1. On a typical weekday, the proposed development is



expected to generate 6 vehicle trips in the morning peak hour (1 trip in/5 trips out) and 7 vehicle trips in the afternoon peak hour (4 trips in/3 trips out).

Table 1: Trip Generation Estimates

ITE Land Use Code	Units ¹	Trip Generation Rates ²						Trips Generated ³					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
		Rate	In	Out	Rate	In	Out	Total	In	Out	Total	In	Out
220 - Multifamily Housing (Low-Rise)	13	0.46	23%	77%	0.56	63%	37%	6	1	5	7	4	3
Total Trips Generated								6	1	5	7	4	3

1. Residential units are 'dwelling units'.
2. Trip generation rates are in 'vehicles per hour per unit.'
3. Trips generated are in 'vehicles per hour.'

Impact to Surrounding Roadways: Based on field observations, the peak-direction traffic on Old Sambro Road is northbound during the morning peak hour (travelling towards Northwest Arm Drive) and southbound during the afternoon peak hour (exiting Northwest Arm Drive).

The trip generation estimates indicate that the proposed development will generate less than 5 vehicle trips in the peak direction of traffic on Old Sambro Road during the peak hours. It is anticipated that the new vehicle trips associated with the proposed development can be accommodated along Old Sambro Road with a negligible impact on traffic operations. It should be noted that this consists of a high-level qualitative assessment, therefore no analytical capacity calculations have been completed to support the assessment.

If you have any questions or additional discussion, please feel free to contact the undersigned.

Regards,

Original Signed

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