July 21, 2025

Halifax Regional Municipality
PO Box 1749
Halifax, NS
B3J 3A5

Attention: Ashley Blissett
Email: blissea@halifax.ca

Dear Ashley:

RE: 25-447 - Traffic Impact Statement – Civic 348 Pleasant Street, Woodside, NS

Background

DesignPoint Engineering & Surveying has been retained to complete the traffic impact statement (TIS) for a proposed residential development located at Civic 348, Pleasant Street in Woodside NS. The development will consist of 50-multi-residential units. The proposed site location is shown in Figure 1.

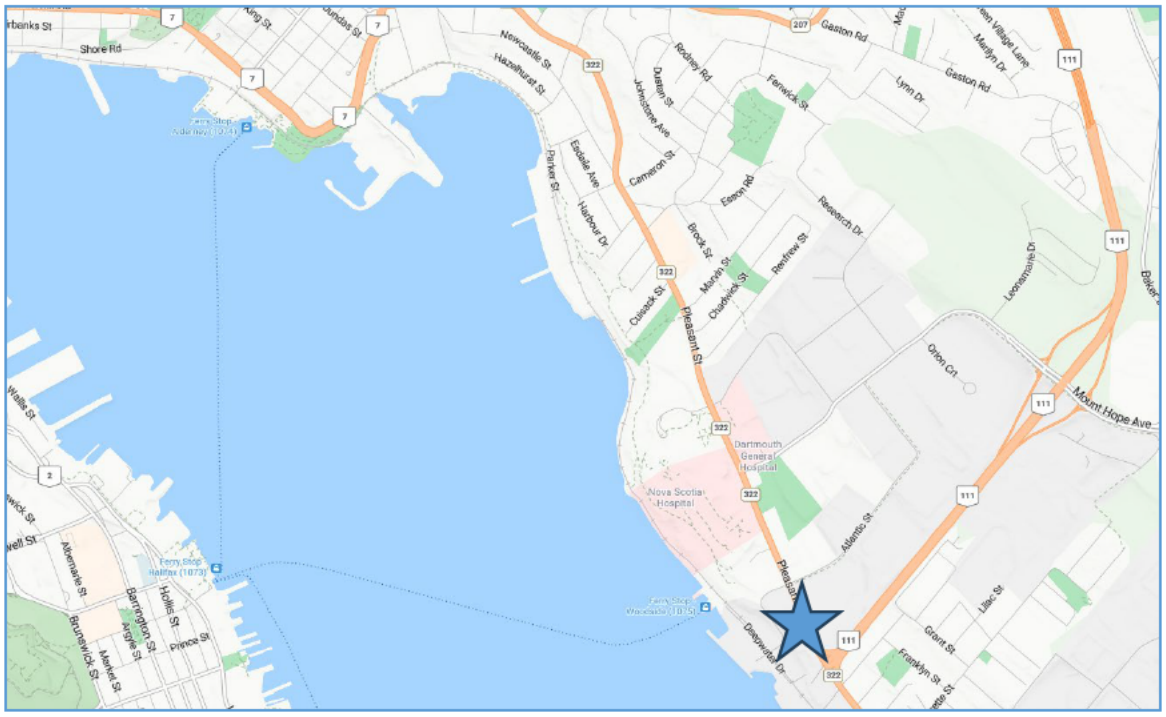


Figure 1 - Site Location

The proposed site is located just south of the Nova Scotia Hospital and is a short walk to the Woodside Industrial Park and the Woodside Ferry Terminal.

The HRM TIS Guide notes that it is impossible to provide generic criteria governing the need for a TIS. It notes that as a rough guide, a TIS will generally be required if the proposed development will add more than 100 peak hour peak direction person trips to the transportation system.

Study Area

Pleasant Street

Pleasant Street is a four-lane major collector roadway that connects Downtown Dartmouth to Eastern Passage. The posted speed is 50 km/h.

Figure 2- Pleasant Street Looking West

Halifax Transit provides service on Pleasant Street. The figure below shows the nearby transit routes in the area.

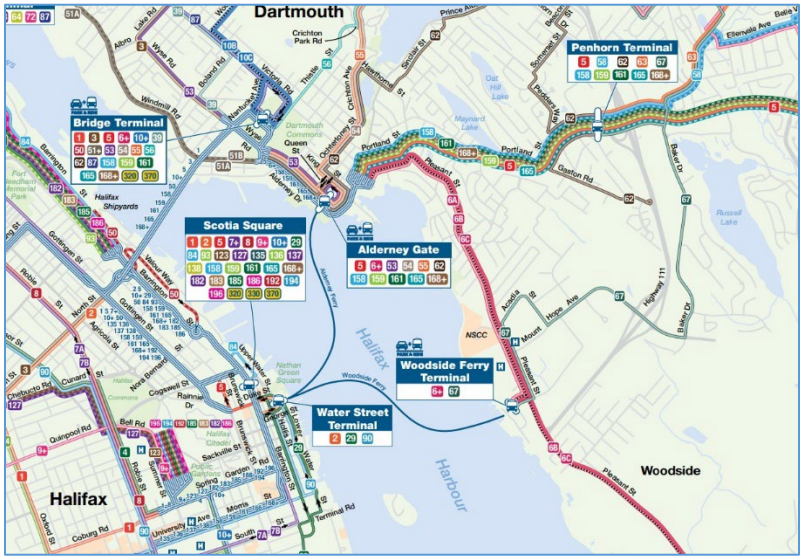
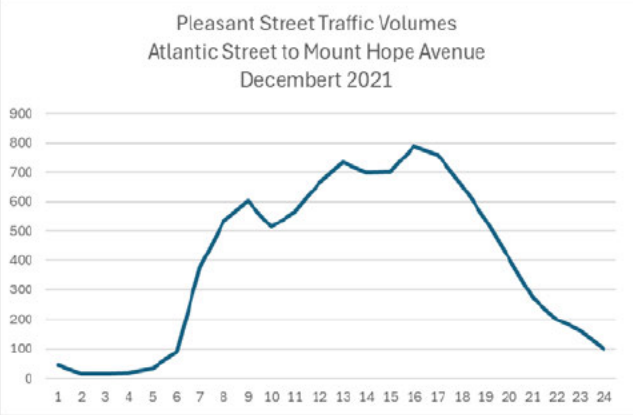


Figure 3 - Transit Routes

Existing Conditions

Traffic volume data for Pleasant Street was obtained from Halifax Open Data for the week of December 6-12, 2021. It should be noted that this was during the Covid-19 pandemic. Average weekday peak hour counts were as follows:

- ADT 9500 vpd
- AM Peak Hour 725 vph
- PM Peak Hour 800 vph



A speed survey was also available for the week of May 7-15, 2025, for the section from Atlantic Street to Acadia Street. It indicated that the 85th percentile speed was 59 km/h.

The speed survey also included the following AAWT, AM and PM peak hour traffic estimates.

- ADT 11,800 vpd
- AM Peak Hour 870 vph
- PM Peak Hour 930 vph

The higher values were used for this statement.

Site Traffic Generation

Site traffic generation was estimated using the ITE Trip Generation Manual, 11th edition, and was calculated using the following assumptions:

Trip Generation Assumptions	
Land Use Code	221 – Mid-Rise multi-family
Average HH Size	2.25
Total # of Units	50
Total Population	110
Non-Auto Mode Choice	30%[1]
Vehicle Occupancy	1.2[2]

The trip generation results are shown in in Table 1.

[1] The proposed site is within the Regional Centre. A non-auto mode choice of 30% was used as this aligns with the targets set out in the HRM Integrated Mobility Plan IMP).
[2] This is consistent with the HRM IMP

Table 1 - Trip Generation Estimates

Land Use	Code	Units	Variable	Trip Generation Rates						Trips Generated			
				AM Peak			PM Peak			AM Peak		PM Peak	
				Rate	In	Out	Rate	In	Out	In	Out	In	Out
Single Family Homes	221	110	persons	0.58	37%	63%	0.70	72.0%	28.0%	24	40	55	22
Non Auto Mode Choice (30%)										7	12	17	6
Total vehicle trips based on vehicle occupancy of 1.2 persons per vehicle										**14**	**23**	**32**	**13**
Total Trips										**37**		**45**	
Notes:	1. Trip generation rates from ITE *Trip Generation Manual*, 11th Edition.												

Access Management Review

It was assumed that access to the development will be via the existing driveway. A field visit was carried out on July 9th to measure stopping sight distance.

Stopping sight distance (SSD) is the minimum requirement for sight distances at driveways and intersections. It is the distance a vehicle takes to avoid encountering an obstacle at the relative speed. It is the combination of the distance travelled during the perception and reaction time, the time it takes a driver to determine the need to stop, and the braking distance, which is the distance travelled once the brakes are applied to when the vehicle comes to a stop. The results are shown below:

Approach	Design Speed (km/h)	Minimum SSD (m)	Measured Sight Distance
From the North	60 km/h	85	110m +/-
From the South			130m +/-

Figure 4 -Sight Distance Approaching from the South

Figure 5- Sight Distance Approaching from the North

In addition to SSD, the following design elements were considered:

1. **Spacing of Adjacent Driveways**

   The nearest adjacent driveway to the proposed entrance serves a single-family dwelling. The centerline distance between the two driveways is approximately 20 metres. While HRM does not specify the minimum distance for driveways, HRM Bylaw 300 does specify that no driveway shall be located within 8 metres of the intersection of a local street.

   The Nova Scotia Department of Public Works' (NSDPW) Access Management Guidelines specifies a minimum driveway spacing of 20 metres for collector roadways.

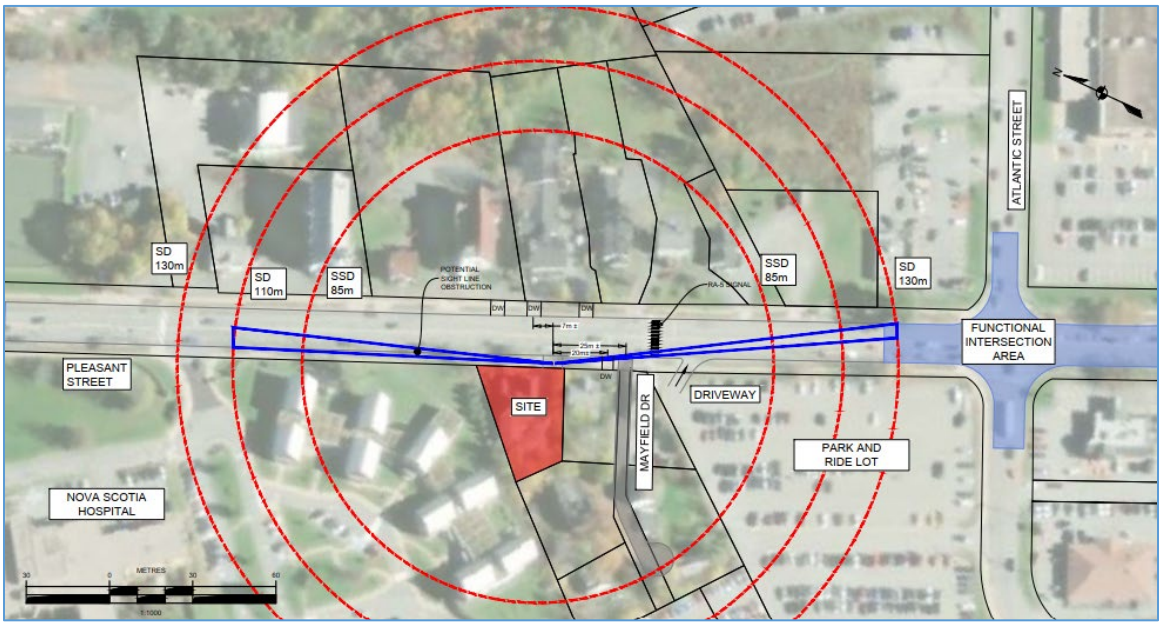


Figure 6 - Sight Distance

2. **Spacing of opposite driveways.**
   Driveways on the opposite side of the roadway should be aligned where possible. The driveway opposite the proposed entrance serves a single-family dwelling. The NSDPW Access Management Guidelines indicate that this does not apply to low volume driveways (< 10 vph).

3. **Encroachment onto the Functional area of adjacent intersections**
   The Transportation Association of Canada's Design Guidelines for Canadian Roads recommends that driveways should not be located within the functional area of an intersection. The proposed driveway is located outside of the functional area of the Pleasant Street at Atlantic Street intersection.

4. **Corner Clearances**
   HRM By-Law 300 specifies that no driveway shall be located within 8 metres of the intersection of a local street. The distance from the proposed entrance to Mayfield Drive is approximately 25 metres.

Summary

- DesignPoint Engineering and Surveying has been engaged to prepare the traffic impact statement for a proposed residential development located at Civic 348, Pleasant Street in Woodside, NS.

- The development will consist of 50 multi-residential units

- The proposed development is expected to generate 37 AM Peak and 45 PM peak hour trips respectively. This represents approximately 5.1% of the average weekday AM peak hour, and 5.6% of the average weekday PM peak hour volume.

- An access management review indicates the following:
  - The proposed entrance meets the minimum HRM stopping sight distance requirement for a driveway based on a design speed of 60 km/h
  - Minimum driveway spacing (adjacent and opposite) requirements are met
  - Minimum corner clearance to Mayfield Drive is met
  - The proposed entrance is located outside of the Pleasant/Atlantic Street functional intersection area

Closing

If you have any questions on the contents of this report, please do not hesitate to contact me directly.

Thank you,
DesignPoint Engineering & Surveying Ltd.

[redacted]

Paul. V. Burgess, M.Eng., P.Eng
Senior Transportation Engineer