

April 30, 2025



RE: 24-568 Sonnys Road - Traffic Impact Statement

DesignPoint Engineering & Surveying Ltd. is pleased to submit this traffic impact statement for the proposed development at 5249 St Margarets Bay Road, Upper Tantallon. The preliminary design includes a 2-story building with 31 residential units on the upper floor and a ground floor commercial to accommodate an expanded Home Hardware store.

### Site Location

The site is located on St Margarets Bay Road, Upper Tantallon near the intersection of Peggys Cove Road. An existing driveway serves the parcel (PID 41454133) on Sonnys Road.



Figure 1: Location of the proposed development



### St. Margaret's Bay Road

St. Margaret's Bay Road is a two-lane arterial road that runs in a general north-to-south direction. There is a posted speed limit of 60 kph. There are gravel shoulders along the roadway.

### Sonnys Road

Sonnys Road is a two-lane east-west local roadway with gravel shoulders. The roadway forms the east leg of the signalized intersection. It provides access to a number of commercial properties and parking to the St. Margarets Bay Trail.

### Peggys Cove Road

Peggy Cove Road is a two-lane east-west arterial roadway that is owned and operated by the Nova Scotia Department of Public Works (NSDPW). The roadway has a posted speed limit of 70 km/hr and gravel shoulders.

# **Proposed Site Description**

This proposal involves redeveloping at the lots the 5249 St Margarets Bay Road and 51 Sonnys Road. The proposed site layout includes a private driveway (that loops through the development). The general configuration of the site is shown in the figure below:

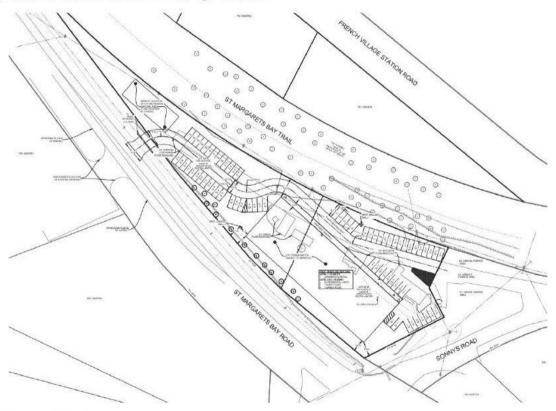


Figure 2: Proposed site plan

# Trip Generation

Site-generated trips have been estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11<sup>th</sup> edition. The land codes 220 and 812 for Multi-family Housing and Building Materials / Lumber Store were used. The site is expected to generate **61 two-way** trips during the AM Peak and **77 two-way** trips during the PM Peak.



Table 1: Trip generation calculations per ITE Trip Generation Manual, 11th edition.

Land Use	Code	Units	Variable	Trip Generation Rates <sup>1</sup>				Trips Generated					
				AM Peak			PM Peak		AM Peak		PM Peak		
				Rate	In	Out	Rate	ln	Out	In	Out	ln	Out
Low Rise Apartment	220	31	Dwellings	0.97	24%	76%	1.10	63%	37%	7	23	21	13
Building Materials and Lumber Store	812	19.2	1000 sq.ft GFA	1.59	62%	38%	2.25	46%	54%	19	12	20	23
75375 V/100-2000-2000-2016										26	34	41	36
Estimated Site Generated Tri	os									61 77		77	
Notes:	1. Trip generation rates from ITE Trip Generation Manual, 11th Edition, average rates												
	2. Apr-29-2025												

## Access Review

The proposed site layout has two (2) access points to the proposed development (See Figure 2). There is an existing driveway access on Sonnys Road and proposed access on St. Margarets Bay Road. The general location of the proposed access points is shown below.



Figure 3: Access points

Stopping sight distance (SSD) is the minimum required observation distance for a vehicle to perceive and stop for obstacles at a given speed.

Intersection sight distance is the time gap a design vehicle needs to judge and safely enter an intersection.

This portion of St. Margarets Bay Road has a posted speed limit of 60 kph. To reflect the nature of this roadway and likely operating speeds, a design speed of 70 kph was used to assess adequate sight distances.







Figure 4: St. Margarets Bay looking south

Figure 5: St. Margarets Bay Road looking north

Field visits were carried out on September 6<sup>th</sup> & 9<sup>th</sup>,2024 to review the access points and to determine the available sight distances at the location. A summary of the findings is provided in Table 2.

Table 2: Summary of Sight Distances for proposed access on St. Margaret's Bay Road

Approach	Design Speed	Minimum SSD*	Minimum ISD* for right turns	Minimum ISD* for left turns	Measured Sight distance
Northbound					130 m
Southbound	60	105	130	150	>200 m

<sup>\*</sup>As per TAC manual

The proposed access on St. Margarets Bay Road meets all sight distance requirements for the southbound approach.

On the northbound approach, the available sight distance was measured based on the assumption that the proposed driveway would be opposite the Royal Bank entrance. When combined with the clearing of vegetation within the right-of-way, the available sight distance will be approximately 130 metres. This is limited by the traffic signals which will create gaps in the traffic stream.

See the sketch on the following page.



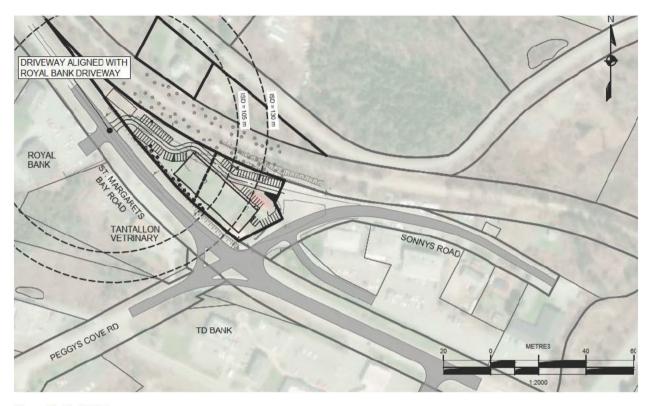


Figure 6 - Sight Distances

### Conclusion

The proposed development on Sonnys Road in Upper Tantallon includes 31 residential units and a ground-floor commercial space for an expanded Home Hardware store. The development is expected to generate 61 AM and 77 PM two-way peak hour trips. Access will be via the existing driveway and a new proposed access on St Margarets Bay Road opposite the Royal Bank entrance.

Adequate SSD and ISD is available for the proposed St Margarets Bay Road entrance if vegetation is removed from within the right-of-way. We recommend clearing the sightlines within the right-of-way on an ongoing basis.

If you have any questions about this traffic impact statement, please contact me at

Thank you,

DesignPoint Engineering & Surveying Ltd.

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