

Evergreen Drive Traffic Impact Statement

July 2025

Prepared for
OT Developments



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Prepared by

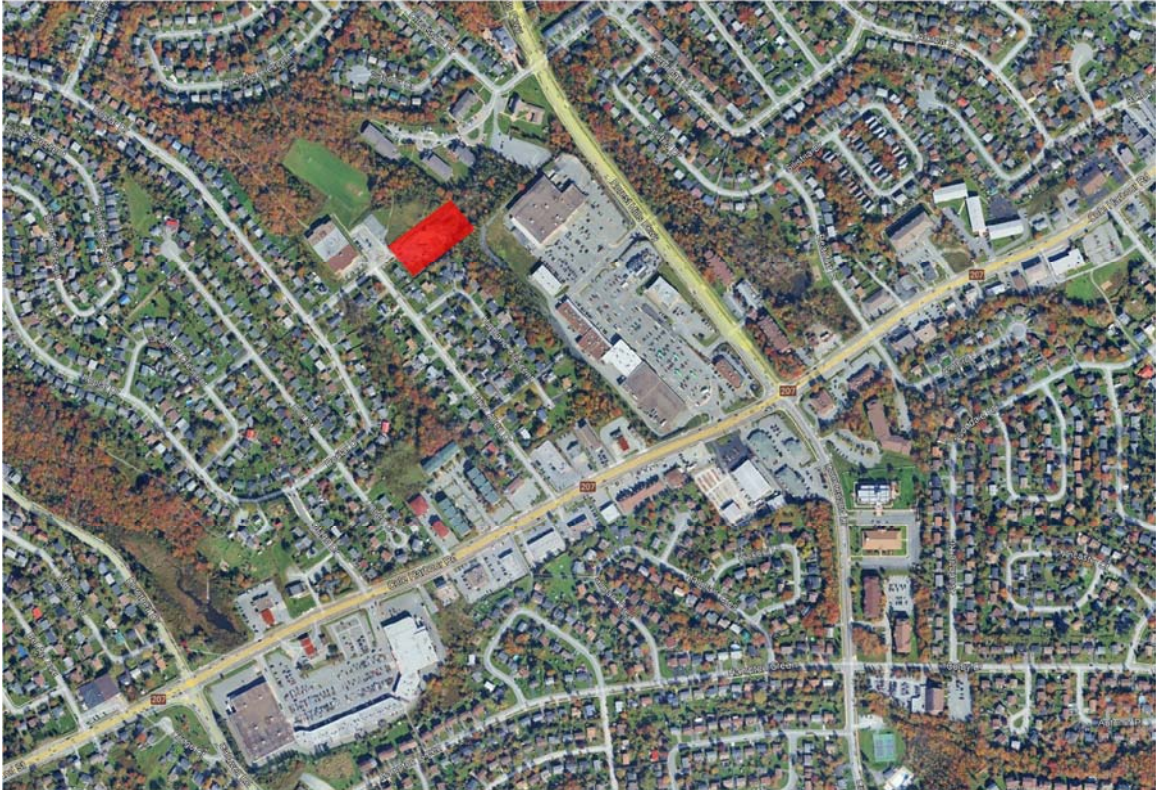
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1 Introduction

1.1 Background

OT Developments Ltd is working on a proposal to create a new residential development on their property at the eastern end of Evergreen Drive in Cole Harbour, Nova Scotia. Exhibit 1.1 shows the site in red in the context of the surrounding area.

Exhibit 1.1 – Proposed Residential Development in Cole Harbour, Nova Scotia



Source: Google Earth

A total of 16 townhouses will be created and each of these townhouses will have an option for internal secondary units (in-law suites).

Access to the property will be from two new private lanes (Kousa Lane and Carawatha Lane) at the eastern end of Evergreen Drive.

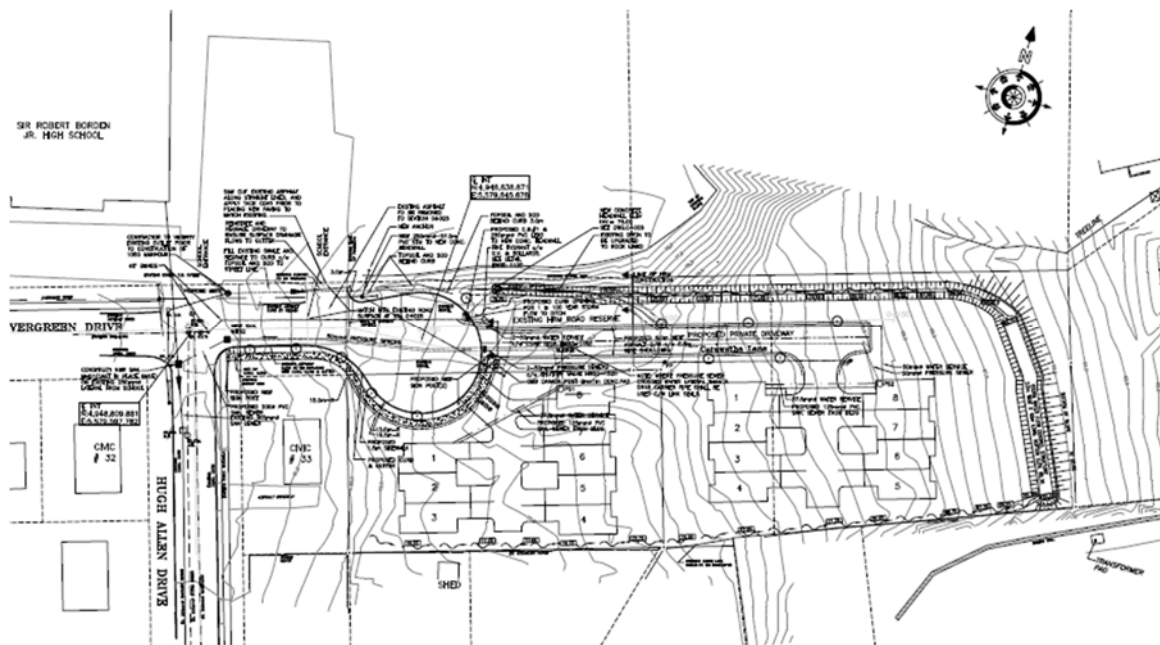
Each townhouse will have a minimum of 1 parking space with additional spaces for secondary suites as required by HRM Land Use Bylaws.

Refer to Exhibit 1.2 for a photo of the site and Exhibit 1.3 for a proposed Site Plan as provided by OT Developments/Eastpoint Engineering.

Exhibit 1.2 – Kousa Lane in Cole Harbour, Nova Scotia



Exhibit 1.3 – Proposed Site Plan at Kousa Lane and Carawatha Lane



JRL consulting was retained to prepare a Traffic Impact Statement (TIS) to assess the potential traffic impacts of the proposed residential development in Cole Harbour, Nova Scotia.

The purpose of a Traffic Impact Statement is to provide a high level overview of a proposed development including estimates of site-generated traffic along with an initial review of existing traffic counts in the general area of the proposed development. This information will form part of the initial application to HRM which will be reviewed by staff and council. We are pleased to submit this report which summarizes our findings and provides the information required by HRM for review.

2 Existing Traffic Conditions

2.1 Description

The principal routes affected by this development are Evergreen Drive, Hugh Allen Drive and Cole Harbour Road. Exhibit 2.1 summarizes HRM's Characteristics of Street Classes from HRM's Municipal Service Systems Design Guidelines.

Exhibit 2.1 - HRM Characteristics of Street Classes

Characteristic	Arterial Street	Major Collector	Minor Collector	Local Industrial	Local Street
1. Traffic Service Function	First Consideration	Traffic movement primary consideration, land access secondary consideration, some parking	Traffic movement of equal importance with land access, parking permitted	Traffic movement secondary consideration with land access primary consideration, parking permitted	Traffic movement secondary consideration with land access primary consideration, parking permitted
2. Land Access Function	Limited Access with no parking				
3. Range of design traffic average daily volume	More than 20,000	12,000 to 20,000 or more	Up to 12,000	Less than 3,000	Less than 3,000
4. Characteristics of traffic flow	Uninterrupted flow except at signals; w/ pedestrian overpass	Uninterrupted flow except at signals and crosswalks	Interrupted flow	Interrupted flow	Interrupted flow
5. Average running speed in off-peak conditions	50-70 km/hr	40-60 km/hr	30-50 km/hr	15-30 km/hr	15-30 km/hr
6. Vehicle types	All types	All types but trucks may be limited	All types with truck limitation	All types	Passenger and service vehicles, transit buses; large vehicles restricted
7. Connects to	Expressways, arterials, major collectors, minor collectors	Expressways, arterials, major collectors, minor collectors, some locals	Arterials, major collectors, minor collectors, locals	Some major collectors, minor collectors, locals	Some major collectors, minor collectors, locals

Evergreen Drive is a short, local road that runs from Poplar Drive to High Allen Drive. It has a posted speed of 50 km/hr (30km maximum when children are present). It provides access to Sir Robert Borden Junior High School and residential homes. There is a concrete sidewalk on the northern side and a marked cross walk to the west on Poplar Drive. Traffic Calming is in place.

High Allen Drive is a local road that runs in a north-south direction from Evergreen Drive to Cole Harbour Road. It has a posted speed of 50 km/hr (30km maximum when children are present). It provides access to Sir Robert Borden Junior High School and residential home and commercial land uses. There is a concrete sidewalk on the eastern side. Traffic Calming is in place.

Cole Harbour Road (Route 207) is a local collector road that runs in a general east-west from the downtown Dartmouth to Porters Lake. It has two lanes in each direction and a posted speed of 50 km/hr. Traffic signals are located at its intersection with Hugh Allen Drive. Concrete sidewalks are located on both the north and south sides of Cole Harbour Road.

Refer to Exhibit 2.2 for photos of the Study Area around the proposed development.

Exhibit 2.2 – Study Area Photos



Evergreen Drive at Hugh Allen Drive looking east



Hugh Allen Drive at Evergreen Drive looking north



Sir Robert Borden Junior High Driveway at Evergreen Drive looking south



Evergreen Drive at Hugh Allen Drive looking west



Evergreen Drive at Poplar Drive looking west (with traffic calming speed hump)



Evergreen Drive at Poplar Drive looking east (school speed zone signage)



Evergreen Drive at Poplar Drive looking south (marked crosswalk)



Evergreen Drive at Poplar Drive looking north (marked crosswalk)

2.2 Existing Traffic Volumes

We completed a site review on July 18, 2025 of the area around the proposed development which is located at the eastern end of Evergreen Drive just east of Hugh Allen Drive and near the entrance to Sir Robert Borden Junior High School. Existing traffic in this area is primarily driven by the Junior High School (student drop offs/pickups and employees).

HRM completed a speed survey in December 2023 near 20 High Allen Drive and this survey also picked up vehicles counts (AAWT and AM and PM peak hours).

The average speed at this location was 42.7 km/hr and the 85th percentile speed was 51 km/hr.

The AM peak hour for northbound traffic begins at 8am while the PM peak hour for northbound traffic begins at 6pm. The AM peak hour for southbound traffic begins at 9am while the PM peak hour for southbound traffic begins at 3pm. These site area peak hours are influenced by Sir Robert Borden Junior High School.

We added a 2% annual background growth rate to the volumes captured in the HRM speed counts to estimate traffic in 2025 as summarized in Exhibit 2.3.

Exhibit 2.3 – Hugh Allen Drive Estimate Existing Traffic 2025

Location	Direction	AM PEAK	PM PEAK	AAWT
20 Hugh Allen Drive	Northbound	56	46	459
	Southbound	45	55	375

2.3 Trip Distribution

The proposed development is residential so the majority of vehicles will head south on Hugh Allen Drive to access Cole Harbour Road in the AM peak hour where they will travel west towards Halifax/Dartmouth. This will reverse in the PM peak hour as residents return home from work/school etc.

We have reviewed traffic counts on Cole Harbour Road to the east for another recent traffic impact statement and those counts showed that the majority of vehicles on Cole Harbour Road in the AM peak hour are heading west towards Halifax/Dartmouth (77%) and the majority of vehicles in the PM peak hour are traveling eastbound (61%) away from the Halifax/Dartmouth.

2.4 Transit and Pedestrians

The area is well serviced by Halifax Transit including Route 61 North Preston that travels on Poplar Drive near the proposed development and offers regular service 7 days a week with connections to the rest of the transit network HRM. There are also many other key transit routes that travel on Cold Harbour Road which is a short walk from the proposed development. Refer to Exhibit 2.4 and 2.5.

Concrete sidewalks are located throughout the study area supporting a pedestrian-friendly neighborhood including the north side of Evergreen Drive and the east side of Hugh Allen Drive which connects to Cole Harbour Road which has multiple pedestrian facilities.

Exhibit 2.4 – Halifax Transit Route Map in Cole Harbour, Nova Scotia

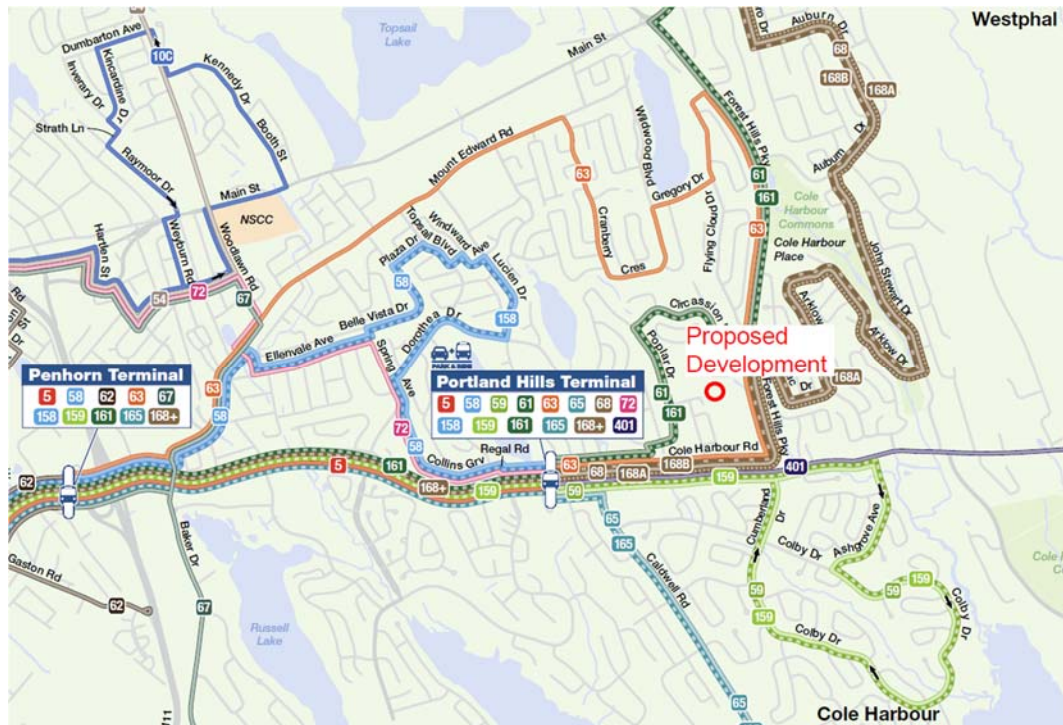
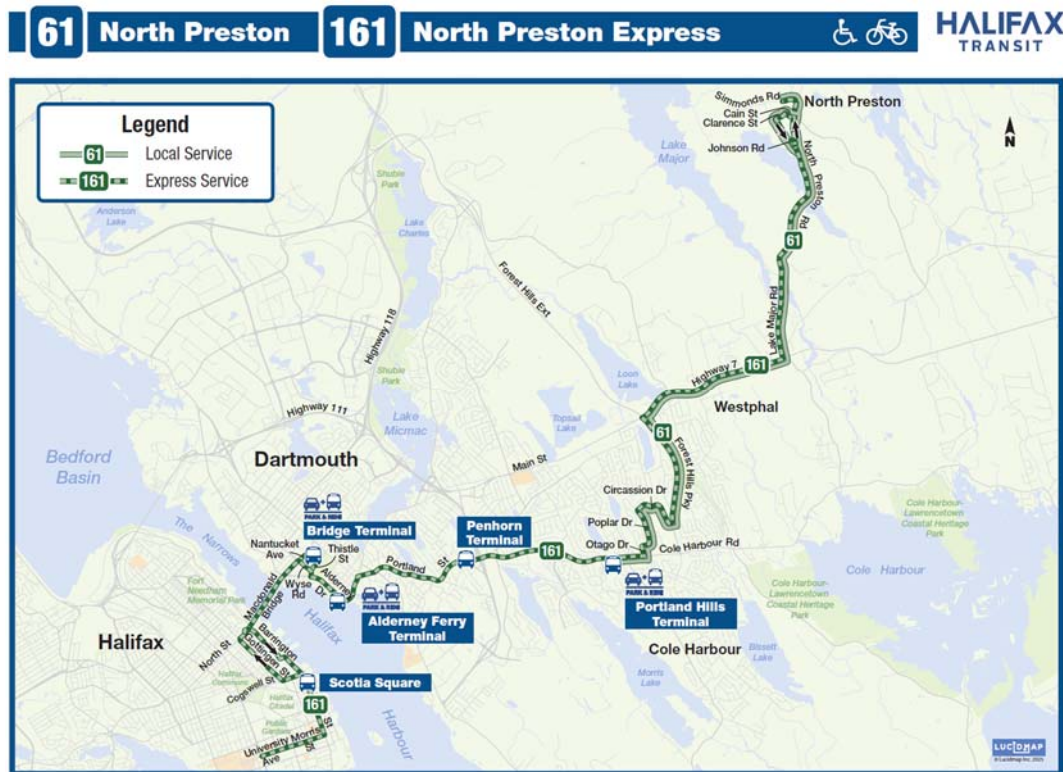


Exhibit 2.4 – Halifax Transit Route 61 North Preston



2.5 Stopping Sight Distance

As per the Transportation of Canada Geometric Design Guide for Canadian Roads, adequate stopping sight distance *"is essential for safe operation that the vehicle operator be able to see far enough ahead to stop if necessary. Conditions that would force a vehicle operator to stop are for example, an object on the roadway, a culvert washout or other fault in the roadway. Adequate stopping site distance is required throughout the length of the roadway. Minimum stopping site distance is the sum of two distances namely:*

- *Brake reaction distance*

The distance travelled during the brake reaction time, that is the time that elapses from the instant an object, for which the driver decides to stop, comes into view to the instant the driver takes remedial action (contacts brake pedal).

- *Braking distance*

The distance travelled from the time that braking begins to the time the vehicle comes to a stop."

The proposed development will be located at the eastern end of Evergreen Drive and it be accessed through two new local, private roads. The posted speed limit is 50 km/hr which requires a stopping sight distance of 65 meters. Construction of the extension has commenced as captured in Exhibit 2.2 and we did not observe any concerns with stopping sight distance during our site visit.

3 Site Generated Traffic

3.1 Trip Generation

The proposed residential development will have a total of 16 townhouses and each of these townhouses will have an option for an internal secondary units (in-law suites) for a total of 32 potential separate residential units.

We completed trip generation estimates using equations provided in Institute for Transportation Engineer's Trip Generation Manual 11th Edition with the following Land Use Codes:

- ITE Land Use 220 Multifamily Housing (Low-Rise)

"Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse." The unit of measurement for average vehicle trip ends is dwelling units.

Exhibit 3.1 – Estimated Future Site Generated Traffic Volumes

LAND USE	QUANTITY	AM PEAK			PM PEAK		
		TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Multifamily (low-rise) ITE Land Use 220 Fitted Curve	32	33	25%	75%	34	63%	37%
			8	25		22	12
Multifamily (low-rise) ITE Land Use 220 Average Rate	32	13	25%	75%	16	63%	37%
			3	10		10	6

The fitted curve assessment likely overestimates trip generation for a smaller unit count as proposed in this development so we have shown both to assess a range of site generated traffic volumes. The proposed secondary suites may also result in less traffic generated during peak hours as they may include extended family, seniors etc.

We estimate that the proposed development will generate additional net new traffic volumes of up to **33** vehicles (8 enter and 25 exit) in the AM peak hour up to **34** vehicles (22 enter and 12 exit) in the PM peak hour.

We do expect actual site generated traffic to be less than the fitted curve estimates for ITE Land Use 220 as outlined above and also due to the close proximity of transit services.

4 Conclusions and Recommendations

- This Traffic Impact Statement has provided a high level overview of the proposed development of 16 new townhouses and each of these townhouses will have an option for an internal secondary units (in-law suites) for a total of 32 potential separate residential units.
- It includes an estimate of new site generated trips and an assessment of existing traffic volumes in the surrounding area.
- Access to the property will be from two new private lanes (Kousa Lane and Carawatha Lane) at the eastern end of Evergreen Drive.
- Each townhouse will have a minimum of 1 parking space with additional spaces for secondary suites as required by HRM Land Use Bylaws.
- Based on ITE Trip Generation Rates, we estimate that the proposed development will generate new traffic volumes of up to **33** vehicles in the AM peak hour (8 enter and 25 exit) and **34** vehicles in the PM peak hour (22 enter and 12 exit). We do expect actual site generated traffic to be less than the fitted curve estimates for ITE Land Use 220 as the secondary units may include extended families and the area is well served by Halifax Transit.
- Site generated traffic will most likely follow existing trip distribution patterns in the AM and PM peak hours with the majority of traffic traveling west towards Halifax/Dartmouth (77%) in the AM peak hour and the majority of traffic heading eastbound during the PM peak hour (61%) as residents return home from work.
- Stopping Sight Distance is adequate on Evergreen Drive at the proposed access to the two new private lanes
- The area around the proposed development is serviced by Halifax Transit on Route 61 North Preston and many other routes on Cole Harbour Road that provide regular service 7 days a week with connections to the rest of the transit network in HRM.
- This proposed development site fits well with HRM's Active Transportation Program that aims to help residents bike, walk and use other human power ways to move around the city. HRM's Integrated Mobility Plan (IMP) has set a target that at least 30% of trips will be made by walking, bicycling or transit while no more than 70% will be made by private vehicles
- We recommend that the driveway be designed and constructed in accordance with HRM Design Guidelines and Transportation Association of Canada standards.
- Traffic created by this proposed residential development is not significant so we do not expect any significant impacts to the surrounding transportation network in Cole Harbour, Nova Scotia.