



August 5, 2022

Project No. 222069

George Habib
3048382 Nova Scotia Limited
Email: [REDACTED]

Re: 95 Montebello Drive Rezoning – Traffic Impact Statement

Mr. Habib,

1 Introduction

Harbourside Transportation Consultants has completed a traffic impact statement, as per Halifax Regional Municipality (HRM) requirements, in support of the planning application for an amendment to the existing development agreement at Civic #95 Montebello Drive (PID 40340051) in Dartmouth, Nova Scotia.

The property is located on the northwest quadrant of the intersection of Montebello Drive and Caledonia Road/Breeze Drive. An existing pizza take-out store (Mun'cheez Pizza Mart) and pet supply store (Planet Paws Pet Essentials) operate out of the commercial building on the property. The site context is shown in Figure 1.

The existing uses are not consistent with the property's current zoning designating designation. The property is located in the Dartmouth Land Use By-Law¹ area and currently has the land use zoning designation R-3 (Multiple Family Residential) Zone – Medium Density. The planning application is being submitted to permit the uses allowed under the land use zoning designation to C-1 (Local Business) Zone.

¹ Dartmouth Land Use By-Law, Halifax Regional Municipality, July 2022

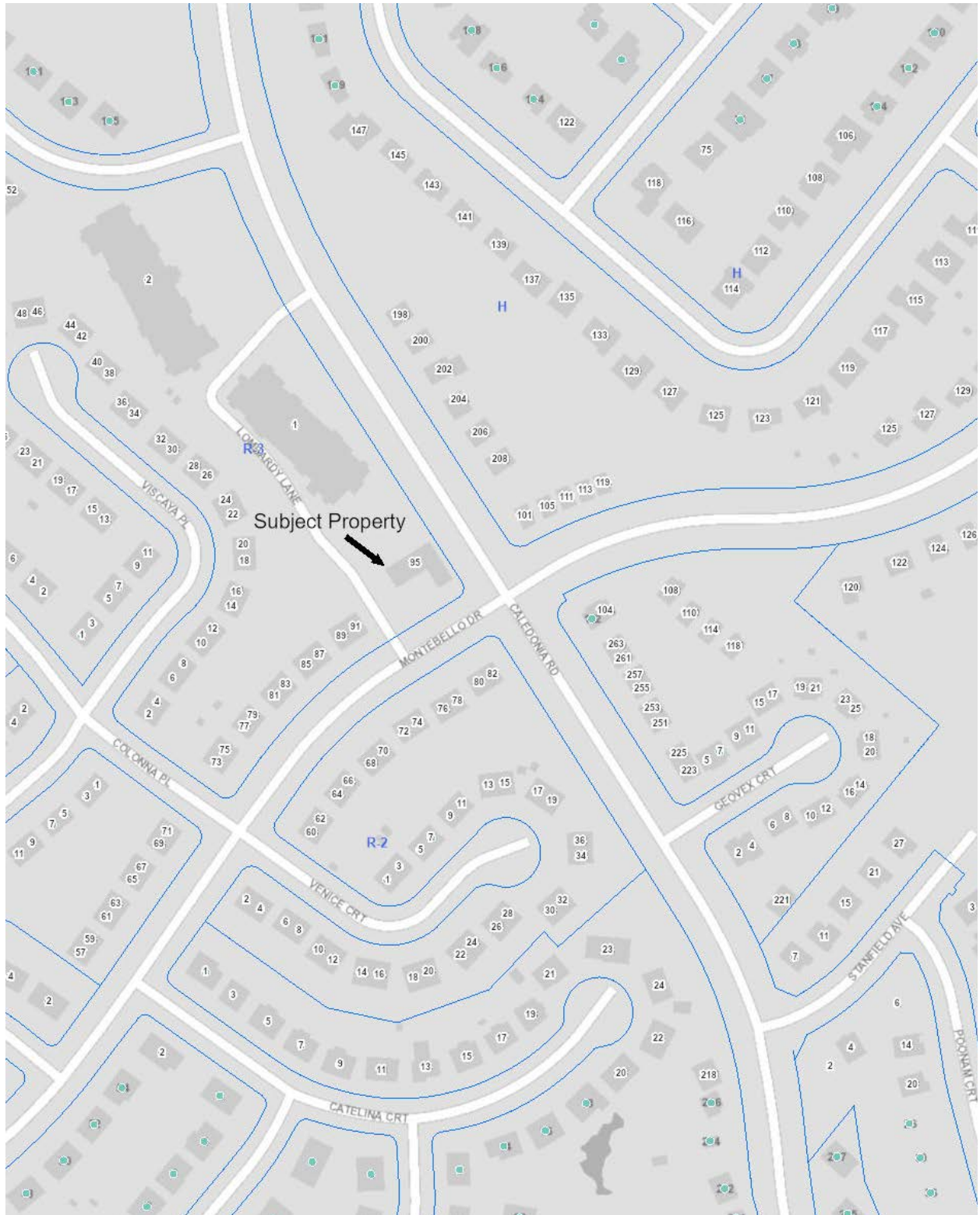


Figure 1: Site Context (Source: ExploreHRM Interactive Map)



2 Existing Transportation Network

Montebello Drive is a collector roadway that runs east-west between Caledonia Road and Waverley Road. Montebello Drive has a two-lane cross section and a posted speed limit of 50 km/h. On-street parking is permitted on both sides of the roadway. Sidewalks are provided on both sides of the roadway. The Montebello Drive cross section is shown in Figure 2.



Figure 2: Montebello Drive

Caledonia Road is a major collector roadway that runs north-south between Montebello Drive and Main Street. Breeze Drive extends the major collector corridor from north from Montebello Drive to Waverley Road. Caledonia Road has a two-lane cross section and a posted speed limit of 50 km/h. On-street parking is permitted on both sides of the roadway. Sidewalks are provided on both sides of the roadway. Caledonia Road/Breeze Drive is a suggested bike route. The Caledonia Road cross section is shown in Figure 3.



Figure 3: Caledonia Road

The intersection of Montebello Drive and Caledonia Road/Breeze Drive is unsignalized with all-way stop control. There are crosswalks provided on all approaches to the intersection. The intersection is shown in Figure 4.



Figure 4: Intersection of Montebello Drive and Caledonia Road/Breeze Drive

Caledonia Road and Montebello Drive are serviced by Halifax Transit Route 54 Montebello which provides service from the Montebello neighbourhood to the Mic Mac Terminal, the Alderney Ferry Terminal and the Bridge Terminal. Bus stops are located on Caledonia Road on the approach to the intersection with Montebello Drive, a walking distance of less than 100 metres from the site or a walking duration of approximately 1 minute.

3 Site Access

Vehicle access to/from the site is accommodate through one driveway on Montebello Drive. The existing access is located approximately 40 metres west of Caledonia Road/Breeze Drive (centreline to centreline distance).

A sight distance review was completed at the existing access to confirm that the existing sight lines meet the minimum stopping and turning sight distance requirements of the Transportation



Association of Canada's (TAC) Geometric Design Guide for Canadian Roads². The minimum stopping and turning sight distance requirements for a two-lane roadway with a design speed of 50 km/h are:

- ▶ Minimum stopping sight distance = 65 metres;
- ▶ Minimum turning sight distance – left-turn from stop = 105 metres; and
- ▶ Minimum turning sight distance – right-turn from stop = 95 metres.

The sight lines west of the access (looking to the right) are shown in Figure 5, sight lines extend past the intersection the intersection with Colonna Place/Venice Court indicating that there is over 115 metres of sight distance available. The minimum stopping and turning sight distance requirements are met west of the access.



Figure 5: Sight Line West of Access (Looking to the Right)

² Geometric Design Guide for Canadian Roads, Transportation Association of Canada, June 2017.



The sight lines east of the access (looking to the left) are shown in Figure 6, there is over 105 metres of sight distance available on Caledonia Road. While the minimum stopping and turning sight distance requirements are met east of the access on Caledonia Road, there is less than 65 metres of stopping sight distance to the intersection with Caledonia Road/Breeze Drive for vehicles turning onto Montebello Drive from Caledonia Road/Breeze Drive. However, given that there are clear sight lines between the access and all approaches to the intersection and the low speed of vehicle maneuvers from the all-way stop control, the access location does not create significant safety or operational problems. The location of the access point at the western edge of the property provides the maximum distance to the intersection possible for the site.



Figure 6: Sight Line East of Access (Looking to the Left)

4 Current Business Operations

The two existing business operating at 95 Montebello Drive include a pizza take-out store (Mun'cheez Pizza Mart) and pet supply store (Planet Paws Pet Essentials). Mun'cheez Pizza Mart operates seven days a week from 10 a.m. to 9 p.m. and Planet Paws Pet Essentials operates Monday to Friday from 10 a.m. to 8 p.m. and Saturday to Sunday from 10 a.m. to 6 p.m.



4.1 Site Trip Generation

The Institute of Transportation Engineers (ITE) Trip Generation Manual³ was used to estimate the vehicle trip generation for the existing site land uses. Two land use codes were used:

- ▶ 822 Strip Retail Plaza (<40k), General Urban/Suburban; and
- ▶ 930 Fast Casual Restaurant, General Urban/Suburban.

Table 1 summarizes the trip generation rates for the land use codes.

Table 1: Trip Generation Rates

Land Use	AM Peak Hour			PM Peak Hour		
	Rate	Entering	Exiting	Rate	Entering	Exiting
822 Strip Retail Plaza (<40k)	2.36	60%	40%	6.59	50%	50%
930 Fast Casual Restaurant	1.43	50%	50%	12.55	55%	45%
Note: Rates are in vehicles per hour (vph)/1000 square feet of Gross Floor Area (GFA)						

The weekday morning (AM) and afternoon (PM) peak hour trip generation estimates for the site are summarized in Table 2. On a typical weekday, the site is estimated to generate 5 vehicle trips in the morning peak hour (3 trips entering and 2 trips exiting) and 28 vehicle trips in the afternoon peak hour (14 trips entering and 14 trips exiting).

Table 2: Trip Generation Estimates

Land Use	1000 ft ²	ITE	AM Peak Hour			PM Peak Hour		
			Total	Entering	Exiting	Total	Entering	Exiting
Planet Paws Pet Essentials	1.4	822	3	2	1	9	4	5
Mun'cheez Pizza Mart	1.5	930	2	1	1	19	10	9
Total Trips Generated (vph)			5	3	2	28	14	14

5 Impacts

The following uses are permitted in the C-1 (Local Business) Zone:

- ▶ residential R-1, R-2, and TH uses;
- ▶ food and grocery stores;
- ▶ local offices including offices of professional people providing personal services;
- ▶ public offices;
- ▶ personal service shops;
- ▶ restaurants;

³ Trip Generation Manual, 11th edition, Institute of Transportation Engineers, September 2021.



- ▶ veterinary clinics without outdoor runs; and
- ▶ uses accessory to any of the foregoing uses.

There are no proposed changes to existing operations on the site at this time, the vehicle trips are existing trips already accommodated by the transportation network. Changing the property's existing development agreement to allow land use zoning designation to C-1 (Local Business) Zone will not have an immediate impact on traffic operations.

Should the development agreement be amended, the grocery store and restaurant use are expected to be the permitted uses with the highest trip generation. A grocery store is not a feasible future use given the size of the site, therefore any of the other permitted uses are unlikely to generate more trips than site's current restaurant/retail uses. Future changes to business operations under the C-1 (Local Business) Zone designation are not expected to have an appreciable 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

Michael MacDonald, P. Eng.
Senior Transportation Engineer, Principal
Tel: 902-405-4655
Email: mmacdonald@harboursideengineering.ca

