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Project name:
70 Hope Avenue Trip Generation Letter

Project ref:
60635701.08

From:
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Date:
April 8, 2025

To:
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Memo

1. Introduction

The City of Hamilton's Municipal Land Development Office is seeking to redevelop a municipally owned surplus property located at **70 Hope Avenue** in Hamilton, Ontario. The subject site is currently a surface parking lot (named Municipal Parking Car Park 4) that provides 65 parking stalls. It is proposed for redevelopment to support affordable housing. Two development scenarios are being considered:

- **Scenario 1:** A three-storey multiple dwelling containing up to 54 one-bedroom units, or
- **Scenario 2:** A cluster of 12 triplex buildings comprising up to 36 units in total.

To support a Zoning By-law Amendment application, this Trip Generation Letter has been prepared to estimate the number of vehicular trips anticipated to be generated by the proposed development. The analysis includes a comparison to existing conditions, a qualitative assessment of potential transportation network impacts, and the identification of potential mitigation measures.

Figure 1: Approximate Development Footprint

2. Trip Generation

The trip generation of the proposed residential development was forecasted using published data from the Institute of Transportation Engineers (ITE) Trip Generation Manual. It is noted that the proposed development is for affordable rental housing. While this may result in slightly higher occupancy per unit, it may also correlate with lower vehicle ownership and trip-making rates. For consistency with ITE methodology, trip generation for both scenarios have been estimated based on the number of dwelling units rather than the number of residents.

Scenario 1 has been evaluated using Land Use Code 221 – Multifamily Housing (Mid-Rise). This land use category represents residential buildings with between three and ten stories, typically with shared building access and common internal hallways, and is commonly applied to apartment-style developments such as the one proposed in Scenario 1.

Scenario 2 has been evaluated using Land Use Code 220 – Multifamily Housing (Low-Rise). This land use category represents residential buildings with one or two stories that contain at least four dwelling units per building, typically including apartments, townhouses, and condominiums. While the proposed development in Scenario 2 consists of twelve triplex buildings—each containing three dwelling units, this category has been applied as the closest representative low-rise multifamily typology for the purposes of estimating trip generation.

A summary of the resultant trips calculated using the ITE Trip Generation Manual for the above noted land uses / scenarios is provided below in **Table 1**.

Table 1: Trip Generation Results

Land Use (Units/GFA)	AM Peak Hour				PM Peak Hour			
	Equation	Vehicle Trips Generated			Equation	Vehicle Trips Generated		
		Inbound	Outbound	Total		Inbound	Outbound	Total
Scenario 1: Land Use: 221 Multifamily Housing (Mid-Rise) 54 Units	T = 0.44(X) - 4.65	5	14	19	T = 0.51(X) - 5.79	13	9	22
Scenario 2: Land Use: 220 Multifamily Housing (Low-Rise) 36 Units	Ln(T) = 0.94 Ln(X) - 0.29	6	16	22	T = 0.66(X) + 1.41	15	10	25

*X: Number of Dwelling Units

*T: Net Total Vehicle Trips

3. Findings

Trip generation estimates have been prepared for two residential development scenarios proposed at 70 Hope Avenue in Hamilton. Scenario 1 considers a 54-unit mid-rise apartment building, while Scenario 2 evaluates a low-rise development comprising 36 units in twelve triplex buildings. Estimates are based on ITE Trip Generation Manual land use codes 221 and 220, respectively, with trip generation calculated per dwelling unit.

The site is currently used as municipal car park, which provides 65 surface parking stalls. As it does not serve a specific trip-generating land use and functions solely as a general-purpose parking lot, it does not generate meaningful peak-hour traffic on its own. Therefore, the net new trips generated by the proposed development are expected to be approximately equal to the full trip generation estimates presented for each scenario. However, the removal of the existing lot may result in some parking displacement to nearby streets or municipal lots. While this impact is expected to be minor and dispersed, it may lead to localized increases in parking demand or circulation as drivers seek alternatives.

Based on the trip generation analysis, the following numbers represent the net increase in peak-hour vehicle trips compared to existing conditions. Under Scenario 1, the site is anticipated to generate a net increase of 19 vehicle trips during the AM peak hour and 22 vehicle trips during the PM peak hour. Scenario 2 is expected to generate a net increase of 22 AM peak hour vehicle trips and 25 PM peak hour vehicle trips.

From a qualitative perspective, both land use scenarios are expected to generate minimal impacts on the surrounding transportation network. The projected trip volumes fall within the capacity of typical urban roads. The site's location within an established urban area provides relatively direct access to public transit and active transportation infrastructure, which may reduce reliance on private vehicles. It is located approximately 250 m from a separated bikeway along Cannon Street East, an east–west corridor, and about 130 m from multiple bus stops along Kenilworth Avenue North, a north–south arterial road. This positions the site with strong multimodal connectivity in both directions, supporting walking, cycling, and transit use. In addition, the proposed development is intended for affordable housing, which typically correlates with lower vehicle ownership and a greater reliance on public transit and active transportation. These factors combined may result in lower actual vehicle trip generation than estimated using standard ITE rates.

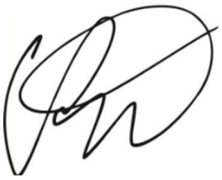
Given the modest scale of the proposed development and the projected trip generation, no major off-site transportation improvements are proposed at this time. However, to enhance multimodal accessibility and support the City of Hamilton’s transportation objectives, the following site-specific measures may be considered during the site plan approval process:

- **Improve walkability** by ensuring safe and direct pedestrian connections to nearby sidewalks, bus stops, and community amenities. This can take the form of provision for direct accessible pedestrian access to the building’s main entrance and connection to the adjacent sidewalks.
- **Enhance access to transit** through improved wayfinding, sidewalk continuity, or shelter upgrades at nearby bus stops.
- **Evaluate opportunities to add or connect to existing bike lanes**, particularly in support of the nearby separated bikeway on Cannon Street East.
- **Assess local traffic signal timing and intersection operations**, if warranted, to optimize traffic flow and minimize potential delay impacts. This may include adding additional “green time” to certain phases or movements if degradation of traffic operations was observed.

These measures would support a more integrated, multimodal development and align with broader goals for sustainable transportation and neighborhood connectivity.

Should you have any questions related to this document please do not hesitate to call at 604-345-1579.

Regards,



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