October 16, 2025

PROJECT NO: 2709-7165

SENT VIA E-MAIL

Town of Milton
150 Mary Street
Milton, ON L9T 6Z5

Attention: **Sian Younan**
Town of Milton

RE: **TRANSPORTATION BRIEF**
PROPOSED INDUSTRIAL DEVELOPMENT
7072 SIXTH LINE
TOWN OF MILTON

Dear Sian,

C.F. Crozier & Associates Inc. (Crozier) was retained by Target Truck Sales to prepare a Transportation Brief (TB) in support of an Official Plan Amendment (OPA), Zoning By-Law Amendment (ZBA), and Site Plan Approval (SPA) for the proposed industrial development located at 7072 Sixth Line in the Town of Milton (Town).

The Transportation Brief herein reviews the following aspects of the development from a transportation engineering perspective:

- Trip Generation
- Parking and Loading Requirements
- Site Access Review
- Transportation Demand Management (TDM) Measures
- Vehicle Turning Diagrams
- Pavement Marking and Signage Plan

This Transportation Brief has been completed in accordance with the agreed upon Terms of Reference with Town of Milton staff, received on November 8th, 2024. The Terms of Reference are included in correspondence as **Attachment 1**.

1.0 Development Proposal

The Subject Property covers an area of approximately 1.07 ha and is located in a rural area with agricultural lands and undeveloped greenfield, northwest of Sixth Line and Derry Road. The property is currently bound by Sixth Line to the east, agricultural lands to the south and west, and agricultural and natural heritage lands to the north.

Based on the Concept Plan prepared by GSAI dated October 1st, 2025, the elements envisioned for this development include:

- A proposed 1-storey, 720 m^2 industrial building with
    - 3 Loading spaces
    - 24 Vehicle parking spaces
    - 13 Trailer parking spaces
    - 4 bicycle parking spaces
- Existing site access at Sixth Line to remain.

The Concept Plan is included as **Attachment 2** of this letter.

2.0 Trip Generation

The trip generation for the site was forecasted using published data from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The ITE Trip Generation Manual is a compendium of industry collected trip generation data across North America for a variety of land uses and is used industry wide as a source for trip generation forecasts.

As the future tenant and specific use of the site have not been confirmed at this time, trip generation for the following industrial Land Use Categories (LUC) were reviewed:

- LUC 110: General Light Industrial
- LUC 140: Manufacturing
- LUC 150: Warehousing

Average rates and fitted curve equations for a General Urban/Suburban setting were reviewed for each LUC above. The fitted curve equation for LUC 150 "Warehousing" was found to be the most conservative trip generation forecast and was reviewed herein. The forecasted weekday a.m. and p.m. trip generation for the site is outlined in **Table 1** below.

ITE Trip Generation Excerpts are included in **Attachment 3.**

Table 1: Trip Generation

ITE Land Use Category	GFA	Peak Hour	Trips Generated		
			Inbound	Outbound	Total
LUC 150 "Warehousing" General Urban/Suburban	7,750 ft²	A.M.	19 (77%)	6 (23%)	25 0.12(x) + 23.62 x = 1000 ft²
		P.M.	8 (28%)	19 (72%)	27 0.12(x) + 26.48 x = 1000 ft²

Based on the ITE Trip Generation estimates, the proposed industrial development is forecasted to generate an upper bound of 25 and 27 total two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively.

2.1 Traffic Operational Impact

As the proposed development is expected to generate a total of 25 and 27 two-way trips during the weekday a.m. and p.m. peak hours, respectively. The trip generation forecasts are minimal from a traffic operations perspective and are typically not associated with traffic operational issues. As such, minimal traffic impact is expected in the boundary road network, and a traffic capacity analysis has not been undertaken herein.

It is noted the trip generation above does not consider the existing industrial use of the site. Thus, the net trip generation is expected to be lower. Regardless, the aforementioned trip generation is relatively low and typically not associated with traffic operational issues.

3.0 Zoning By-Law Review

The Subject Property is located northwest of the intersection Derry Road and Sixth Line, part of the Town's urban area as defined in Schedule A of the Zoning By-Law 016-2014. The Town of Milton Zoning By-Law (ZBL) 016-2014 parking and loading requirements have been reviewed in the following sections.

3.1 Vehicle Parking Requirements Review

Table 2 outlines the Town ZBL's minimum vehicle parking requirements.

Table 2: Parking Requirements

Land Use	GFA	Minimum Vehicle Parking Rates	Parking Spaces
Industrial	720 m^2	1 space per 30 m^2	**24 spaces**
Total Parking Supply			**24 spaces**

The Town's ZBL requires the proposed development to provide 24 vehicle parking spaces. As the Concept Plan proposes 24 vehicle parking spaces, the proposed development adheres to the Town's ZBL requirements.

3.2 Accessible Parking Review

Based on Table 5H of the Town's ZBL, where 13 to 100 vehicle parking spaces are required, 4% of the total vehicle parking must be accessible parking. As 24 vehicle parking spaces are required, a minimum of one (1) accessible parking space is required. As the Concept Plan proposes two (2) accessible parking spaces, the accessible parking space requirements are met.

3.3 Bicycle Parking Review

Per Table 5I of the Town's ZBL, bicycle parking spaces are required for "*all other commercial, employment, and institutional uses*" at a rate of 3% of the total required parking spaces of the lot. Accordingly, one (1) bicycle parking space is required for the development. As the Concept Plan proposes four (4) bicycle parking spaces, the bicycle parking space requirements are met.

3.4 Loading Review

Based on Table 5J of the Town's ZBL, a loading space or loading area is required for any non-residential buildings. As the development has a GFA of 720 m^2, 1 loading area is required. As the site proposes three (3) loading spaces with separate waste collection loading area, the minimum loading requirements are met.

4.0 Site Access Review

This section reviews the adequacy of the proposed full-moves access at Sixth Line. The intersection sight distance, access spacing and corner clearance at the proposed access were compared to the Transportation Association of Canada (TAC) guidelines.

4.1 Intersection Sight Distance Assessment

The available sightlines at the proposed full-moves site access on Sixth Line were measured and compared to the standards set out in the TAC Geometric Design Guide for Canadian Roads. Section 9.9 of TAC GDGCR provides intersection sight distance for different intersection control types. The applicable cases are as follows:

- Case B – Intersections with stop control on the minor road
    - Case B1 – Left turn from the minor road
    - Case B2 – Right turn from the minor road

Intersection sight distance is calculated using equation 9.9.1 from the TAC GDGCR as outlined below:

$$ISD = 0.278 * V_{major} * t_g$$

Where:

- ISD = Intersection Sight Distance
- V_{major} = design speed of roadway (km/h)
- t_g = assumed time gap for vehicles to turn from stop onto roadway (s)

Sight distance was measured from the site access using the following assumptions:

- A conservative driver eye height of 1.08 metres for a passenger car, and
- A 4.4 metre setback from the approximate extension of the outer curb to represent a vehicle waiting to exit the site.

The design speed of a roadway in a suburban/rural environment is typically 20 km/h greater than the posted speed limit. Sixth Line has a posted speed limit of 60 km/h. Accordingly, a design speed of 80 km/h was assumed for the analysis. In this case, a combination truck (WB-20) was used as the design vehicle for the assessment.

Table 3 summarizes the sight distance analysis for the proposed site access.

Table 3: Intersection Sight Distance Assessment

Feature	Case B1 – Left Turn	Case B2 – Right Turn
Time Gap	11.5 s	10.5 s
Required Sight Distance	260 m	235 m
Available Sight Distance	260 m +	235 m +

As outlined in **Table 3**, the minimum sight distance requirements are satisfied at the proposed site access to Sixth Line for both left and right turns, supporting full-moves at the site access.

4.2 Corner Clearance Assessment

Per TAC GDGCR, the recommended minimum spacing downstream and upstream from a signalized intersection on collector road is 55 meters. (Figure 8.8.2).

The site access is proposed to be situated approximately 245 meters north of the Derry Road East and Sixth Line intersection. Therefore, the intersection spacing for the proposed site access on Sixth Line is expected to be sufficient.

4.3 Access Spacing Assessment

Per TAC GDGCR, the recommended minimum spacing from an adjacent driveway or access for a collector road is 3.0 meters for industrial/commercial land uses. (Figure 8.9.2)

There are no existing driveways adjacent to the Subject Site, and the potential access for the proposed industrial development to the south is located more than 15 metres south of the proposed site access.

As the proposed full-moves site access meets the sight distance, corner clearance, and access spacing requirements outlined in TAC GDGCR, the full-moves access is supported.

5.0 Vehicle Turning Diagrams

Based on the Vehicle Turning Diagrams included in **Attachment 4**, passenger vehicles, tractor trailers, fire trucks, and waste collection trucks can safely access and circulate the site without operational conflicts. Therefore, the Concept Plan is supported from a vehicle circulation perspective.

6.0 Pavement Marking and Signage Plan

The Pavement Marking and Signage Plan is included within **Attachment 5** and illustrates the signage and pavement markings to support parking, loading and circulation within the proposed development.

7.0 Transportation Demand Management (TDM)

The site specific TDM measures herein are expected to reduce single-occupancy vehicle (SOV) trips and increase sustainable mode share. The TDM measures outlined in **Table 4**, are only recommended at this time and will be confirmed during the detailed submission.

Table 4: Specific TDM Recommendations

Recommended TDM Measure	Implementation Summary
TDM Information Package for On-Site Employees	TDM information packages can be provided directly to employees upon employment (and updated periodically), and can comprise of active transportation network maps, transit maps, and transit schedules. Prior to employment, future employees can also be informed of the active transportation and TDM opportunities of the proposed development. Periodic updates can be provided via marketing materials posted in the common area, sent via the employer's internal employee web portal or by monthly email. This increased awareness and education of convenient transit options has been historically shown to increase transit mode share in similar developments and would be expected to provide similar benefits to the proposed development.
Secure Bicycle Parking	While the existing cycling infrastructure in the area is limited, the incorporation of dedicated on-site bicycle parking will enhance

Recommended TDM Measure	Implementation Summary
	the development's long-term viability and align with future sustainable mobility trends. Although the Town's Zoning By-law only mandates a minimum requirement of one (1) bicycle parking space within the development, the provision of additional safe and secure bicycle parking facilities is strongly recommended. Facilitating access to such infrastructure will foster confidence and reliability among prospective cyclists, promoting cycling as a viable and sustainable mode of transportation.
Bicycle Repair Station	A bicycle repair station with a toolkit and pump are also recommended. These stations can be provided near the bicycle parking provided to promote cycling use. These stations also increase confidence and reliability for prospective cyclists to cycle as their primary mode of transportation.
Priority Carpool Parking Spaces	Priority carpool parking spaces are also recommended to be provided near the building entrances. This allows employees to have convenient carpool parking spaces to make carpooling an attractive option to further reduce single occupant vehicle trips. Carpool coordination and sign ups can be further facilitated via the employer's internal employee web portal.

8.0 Conclusions

Target Truck Sales proposes the construction of an industrial building with a GFA of 720 m^2.

A review of the trip generation indicates that the proposed industrial development is anticipated to generate a total of 25 and 27 two-way trips during the weekday a.m. and p.m. peak hours respectively. As the development proposal is small from a vehicle trip generation perspective, a full traffic operational analysis has not been conducted.

The development meets the Town of Milton Zoning By-Law minimum requirements for vehicle parking, accessible parking, and bicycle parking, as well as loading.

The sight distance assessment for the proposed site access at Sixth Line confirms that adequate sight lines are available for vehicles exiting the site to safely complete both left and right turn movements. Corner clearance and access spacing requirements per TAC CDGCR are also met. Accordingly, a full-moves site access is supportable.

There are several opportunities for the development to promote TDM measures in support of reduced single occupancy vehicle use including:

- TDM Information Package
- Secure Bicycle Parking
- Bike Repair Station
- Priority Carpool spaces

The Vehicle Turning Diagrams demonstrate that all design vehicles can safely maneuver around the Subject Site. Thus, the Concept Plan is supportable from a vehicle circulation perspective.

We trust that this Transportation Brief addresses the Town's transportation-related concerns. Should you have any questions or require any further information, please feel free to contact the undersigned.

Respectfully submitted by,

C.F. CROZIER & ASSOCIATES INC.

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Engineering Intern, Transportation

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Enclosed
Attachment 1: Correspondence
Attachment 2: Concept Plan
Attachment 3: ITE Trip Generation Excerpts
Attachment 4: Vehicle Turning Diagrams
Attachment 5: Pavement Marking and Signage Plan

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Attachment 1

Correspondence

Attachment 2

Concept Plan

Attachment 3

ITE Trip Generation Excerpts

Attachment 4

Vehicle Turning Diagrams

Attachment 5

Pavement Marking and Signage Plan