



June 17, 2025

Khalsa Gurmat Academy Toronto
6600 Mayfield Rd, Brampton
ON L6P 0H8

Attention: Ms. Armit Kaur

**Re: Existing Place of Worship – 3 Year Temporary Use
6600 Mayfield Road
Town of Caledon, the Regional Municipality of Peel
Transportation Impact Study**

Dear Ms. Kaur,

CGE Consulting is pleased to submit this Transportation Impact Study in support of the proposed three-year temporary use of the existing Sikh Temple at 6600 Mayfield Road in the Town of Caledon. The study was conducted in accordance with the Town's requirements and incorporates feedback from both Municipal and Regional staff.

The analysis confirms that the temple's operations can be accommodated within the existing transportation network without significant impacts. The provided parking supply of 57 spaces plus three barrier-free spaces, for a total of 60 spaces exceeds the requirements of the Town Zoning By-law. Sight distance measurements along Mayfield Road substantially exceed minimum standards, ensuring safe vehicle access, while the low turning volumes eliminate the need for dedicated turn lanes.

To further promote sustainable transportation, the study includes a Transportation Demand Management Plan that outlines strategies for carpooling, cycling infrastructure, and event-day traffic coordination.

Should you require any additional information or clarification regarding this study, please do not hesitate to contact the undersigned.

Yours truly,

CGE TRANSPORTATION CONSULTING

A handwritten signature in blue ink, appearing to read 'Casey Ge', written over a faint, larger version of the signature.

Casey Ge, P.Eng.
President

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1.0 INTRODUCTION

CGE Consulting has been retained by Khalsa Gurmat Academy Toronto to complete a Transportation Impact Study for the 3-year temporary use for the existing place of worship located at 6600 Mayfield Road in the Town of Caledon, the Regional Municipality of Peel.

The objective of this traffic study is to:

- Undertake turning movement counts at the existing Mayfield and site access intersection during Saturday and Sunday between the hours of 10:00 am and 2:00 pm as directed by the Town of Caledon to understand the current level of traffic at the site.
- Describe in detail the type of operations at the site.
- Explain the site operations and address the traffic impacts.
- Discuss the parking needs of the existing and additional parking spaces (if there is a deficiency per ZBL requirements).
- Investigate site access and on-site circulation.

CGE Consulting submitted a detailed scope of work to the Town of Caledon and the Regional Municipality of Peel and staff have provided input into the proposed terms of reference which informed the general work program for the enclosed study and have been included in **Appendix A**.

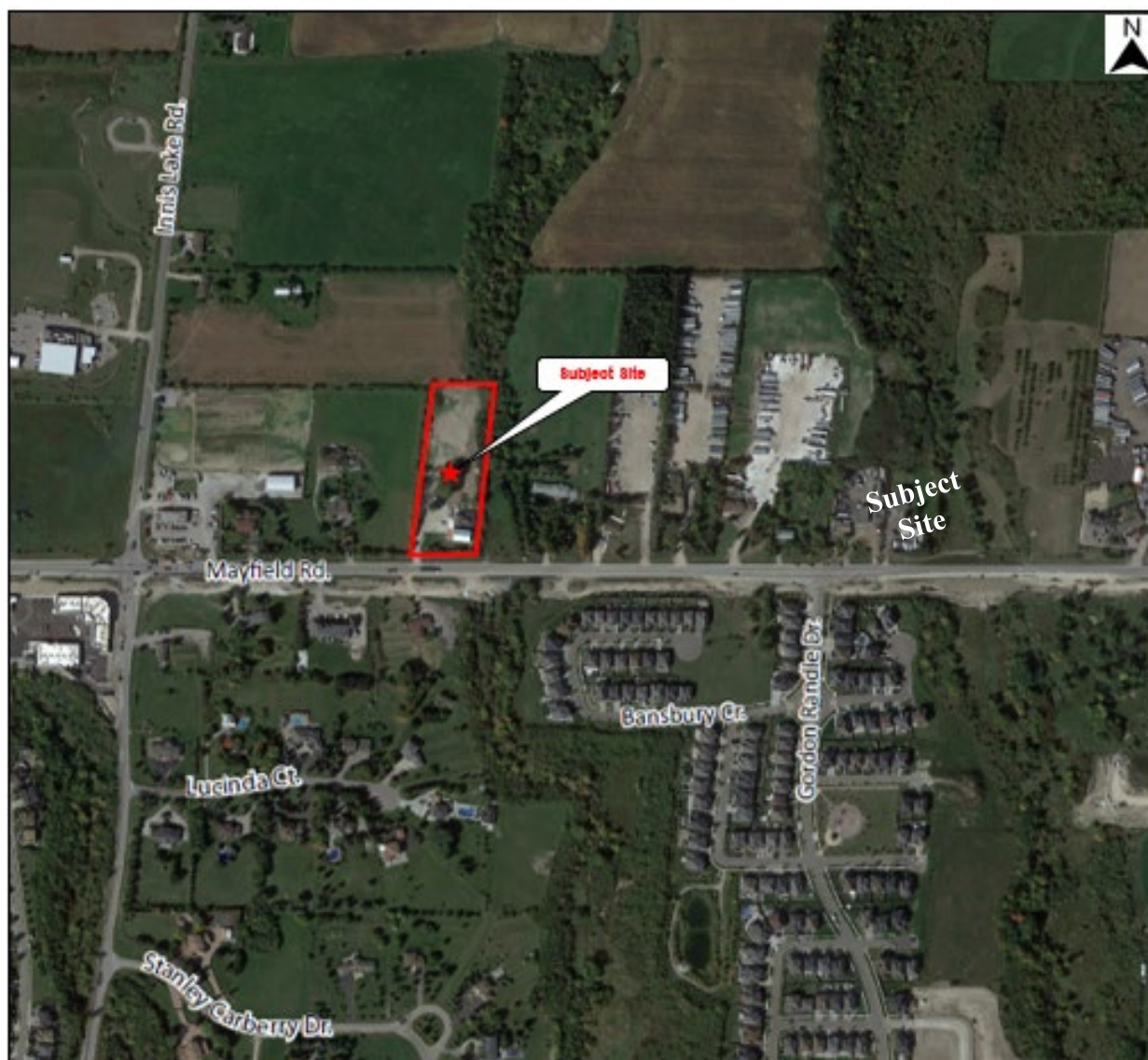
2.0 STUDY AREA CONTEXT

2.1 Site Location

The subject site is 1.1 hectare and is developed with a converted house and pre-fab addition at the southeast corner of the property that is used for the existing Place of Worship and associated community uses. A paved parking area is located on the west side of the building with landscaped areas for recreational use located to the south and north.

The surrounding land-uses to the east and west are primarily agriculture with some scattered residential properties. The south side is mostly residential. The location of the proposed development is illustrated in **Figure 1**.

Figure 1 Site Location

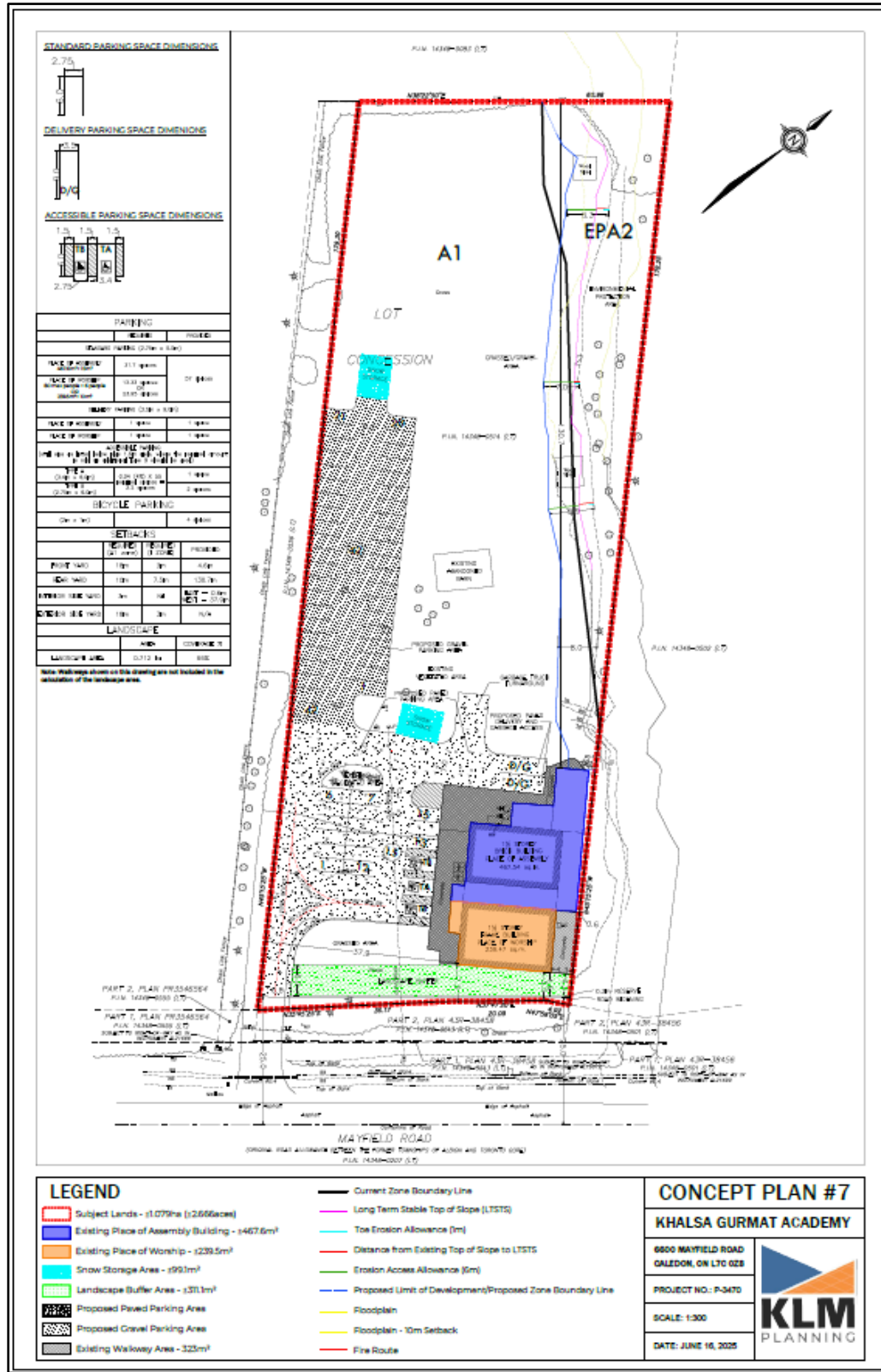


Source: Google Maps

2.2 Development Proposal Description

Based on the concept plan, prepared by KLM Planning, dated June 11, 2025, is shown in **Figure 2**. The proposal is to file a 3-year Temporary Use Zoning By-law Amendment Application to the Town to allow the existing Place of Worship and associated community uses to operate temporarily over the next 3-years as permitted by the Planning Act and the Town's OPA policies while the Town's newly adopted OPA (March 26, 2024) that redesignated the subject lands to New Community Areas and will allow Institutional uses proceeds through the Province approval and appeals processes.

Figure 2 Proposed Site Plan



2.3 Existing Road Network

The existing road network, lane configuration and existing traffic control for the study area are shown in **Figure 3**. The details are described below:

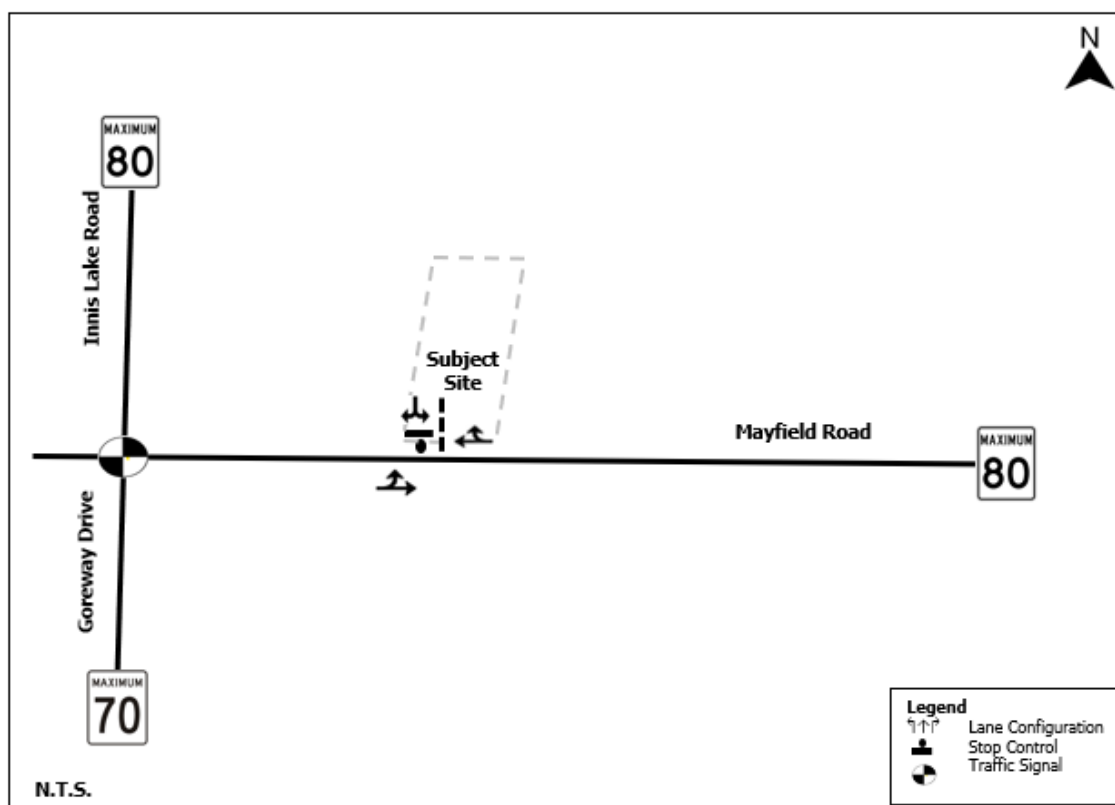
Mayfield Road is a major east-west arterial regional road under the jurisdiction of Peel Region. The road has two general purpose lanes, and it maintains a posted speed limit is 80 km/h in the vicinity of the site.

Images of the site and surrounding area were taken during the site visit on Wednesday July 3, 2024, and are provided in **Appendix B**.

Currently, public transit near the site is very limited and here is an overview of the available services:

Route 81 (Mayfield West) serves communities in Caledon near the temple site, including Mayfield West and Southfields Village. It connects these areas to northern Brampton, providing access to the broader Brampton Transit network. The route operates Monday through Saturday, with service from approximately 6:00 AM to 8:15 PM on weekdays and until 6:45 PM on Saturdays, with buses every 45 minutes.

Figure 3 Existing Road Network



3.0 TRAFFIC VOLUMES

3.1 Existing Traffic Volumes

To assess existing traffic conditions at the site access, and in accordance with the Town's direction, traffic movement counts were conducted by Ontario Traffic Inc. on Saturday, May 3, 2025, and Sunday, May 4, 2025, between 10:00 a.m. and 2:00 p.m. at the site access and along Mayfield Road.

While the Region of Peel requested an analysis of two off-site intersections, these were not included in the study. Since the analysis focuses on weekend traffic conditions, the potential impacts on these intersections are expected to be minimal given the typically lower traffic volumes. As such, the analysis was limited to the site access.

The intersections identified by the Region were:

- Mayfield Road and Goreway Drive / Innis Lake Road
- Mayfield Road and Centreville Creek Road / McVean Drive

Figure 4 and **Figure 5** illustrate the existing traffic volumes during Saturday and Sunday peak hours. A copy of the detailed traffic movement count data is provided in **Appendix C**.

Figure 4 Existing Traffic Volumes – Saturday Peak Hour

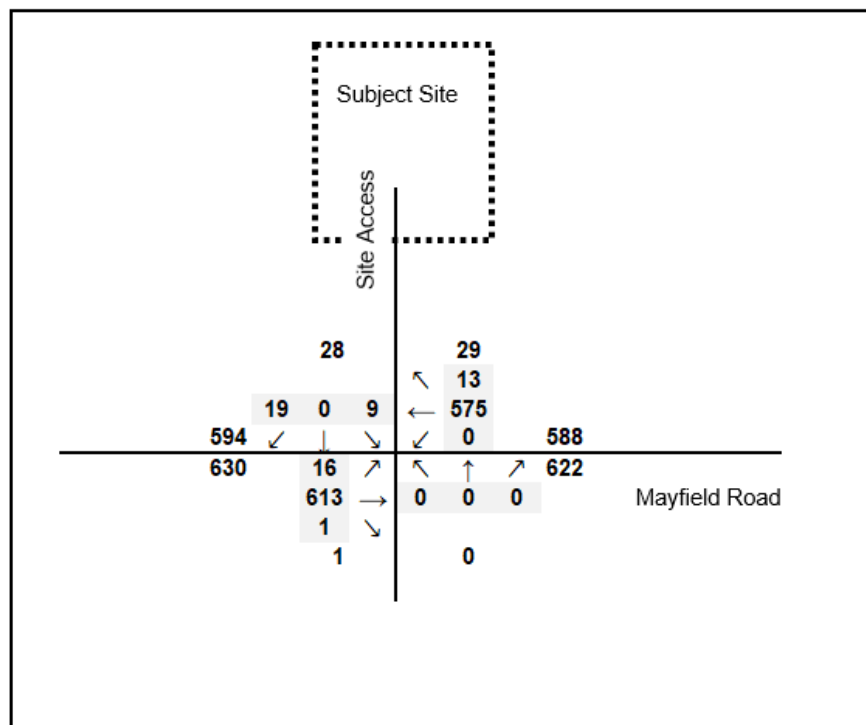
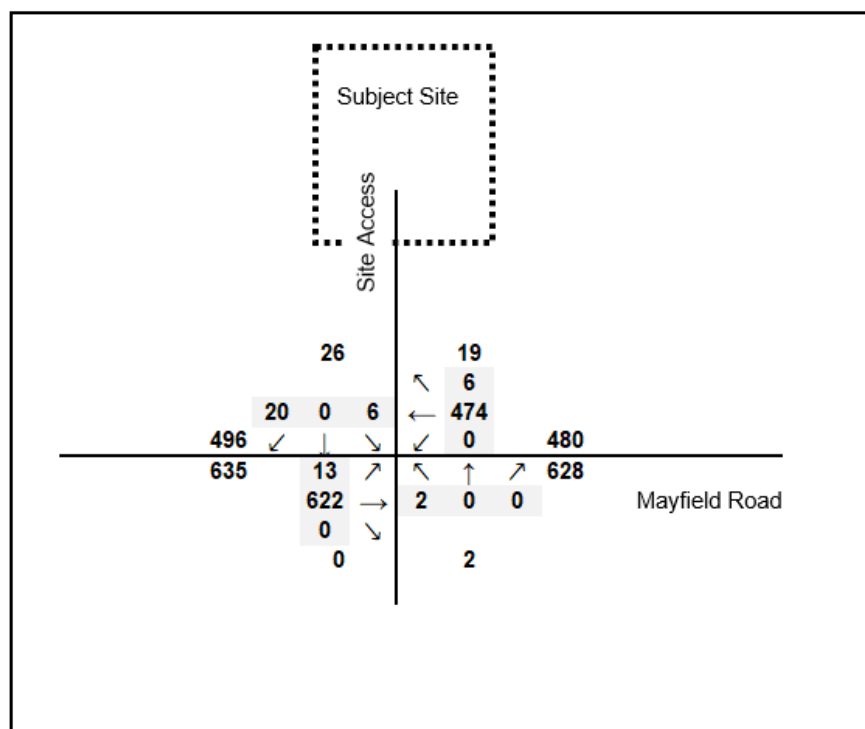


Figure 5 Traffic Volumes – Sunday Peak Hour



The TMC data indicates that during the Saturday peak hour, the total traffic passing by the site access is approximately 1,201 vehicles (613 eastbound and 588 westbound), and during the Sunday peak hour, it is approximately 1,096 vehicles (622 eastbound and 474 westbound).

3.2 Site Trip Generation During the Saturday and Sunday Peak Hours

The site trip generation during the Saturday and Sunday peak hours was derived from the traffic movement counts and is summarized in **Table 1**.

Table 1 Auto Site Trip Generation

Land Use	Saturday Peak Hour			Sunday Peak Hour		
	In	Out	Total	In	Out	Total
Place of Worship (Sikh Temple)	29	28	57	19	26	45

The subject site is expected to generate approximately 57 (29 inbound and 28 outbound) during the Saturday peak hour, and 45 (19 inbound and 16 outbound) during the Sunday peak hour. These volumes are below the typical daily traffic variation on Mayfield Road and are not anticipated to significantly impact traffic operations.

Although the site trip generation during the weekend peak hour periods is relatively low, it is important to note that religious services at Sikh temples typically occur outside of weekday AM and PM peak periods, with higher attendance usually observed on weekends or during special events. On average, regular services attract between 60 to 80 attendees, many of whom arrive in shared vehicles. This translates to approximately 30 to 40 vehicles per service. Given the distributed arrival and departure times and the availability of on-site parking, the anticipated traffic volumes are not expected to have a significant impact on the surrounding road network.

3.3 Existing Operational Analysis

Intersection capacity analyses contained in this study were undertaken using the Synchro software (Version 11), which is based on the methodologies and procedures outlined in the Highway Capacity Manual (HCM) 2000 published by the Transportation Research Board.

Mayfield Road has free flow traffic in the eastbound and westbound directions, while the temple access operates with a stop control. The existing volumes passing the site access

is relatively low and the Synchro analysis indicate that all movements operate at acceptable levels of service.

Table 2 summarizes the analysis results for existing traffic conditions. Detailed Synchro Analyses are provided in **Appendix D**. Level of service definition are provided in **Appendix E**.

Table 2 Intersection Capacity Analysis Summary

Intersection	Movement	Saturday Peak Hour				Sunday Peak Hour			
		LOS	v/c	Delays	Queue	LOS	v/c	Delays	Queue
Mayfield Road & Temple Access	EB LT	A	0.02	0.5	0.4	A	0.01	0.4	0.3
	WB RT	A	0.38	0.0	0.0	A	0.31	0.0	0.0
	SB LR	C	0.10	18.3	2.7	C	0.08	15.2	2.0
	Overall	B (0.7s)				A (0.5s)			

The intersection analysis at Mayfield Road and the Temple Access indicates excellent operational performance during both the Saturday and Sunday peak hours. All movements operate at LOS C or better, with very low V/C ratios and minimal delays. The westbound right-turn movement experiences the highest V/C ratio (0.38 on Saturday and 0.31 on Sunday) yet still performs at LOS A with no measurable queuing. The southbound left-right movement operates at LOS C, but with low delays (18.3 seconds Saturday, 15.2 seconds Sunday) and short queues 2.7 and 2.0 vehicles, respectively.

Overall, the intersection functions well with minimal congestion or operational concerns.

4.0 SITE PARKING ASSESSMENT

This section reviews the parking requirement for vehicle users as outlined in the Town of Caledon Zoning By-law 2006-50.

4.1 Town Zoning By-law Vehicle Parking Requirements

The Town's Zoning By-law 2006-50, the minimum required parking standards are as follow:

- **Place of Assembly Parking Requirements:**
 - 1 parking space per 15 m² of net floor area or portion thereof
- **Place of Worship Parking Requirements:**

- the greater of 1 parking space per 6 persons design capacity of the worship area or 1 parking space for 10 m² of net floor area or portion thereof of the worship areas and any accessory use areas, excluding residential uses
- **Barrier-Free Parking Requirements:**
 - 4% of the total number of parking spaces.
- **Bicycle Parking Requirements**
 - Bicycle parking isn't required under the current Town's Zoning By-Law.

Table 3 summarizes the minimum parking requirement calculations for the subject site under The Town's Zoning By-Law 2006-50.

Table 3 The Town's Zoning Parking Requirement Summary

Land Use	Required Number of Parking Spaces			Provided Number of Parking Spaces
	By-law 2006-50			
	Gross Floor Area (GFA)	Rate (spaces/m²)	Total	
Place pf Assembly	467.6 m²	15/100 m²	32	57
Place of Worship	239.5 m²	10/100 m²	24	
Accessible Parking		4% of total parking		3
Total Vehicle Parking Spaces			56	60

The Town of Caledon Zoning By-law requires a total of 56 vehicle parking spaces for the proposed site, based on a rate of 15 spaces per 100 m² for the place of assembly and 10 spaces per 100 m² for the place of worship. This includes a requirement for two barrier-free parking spaces. The site proposes to provide 60 parking spaces, including three barrier-free spaces, which exceeds the Zoning By-law parking requirements.

Based on the Town's Zoning By-law the site is required to provide two loading spaces one for the place of assembly and one for the place of worship. The site meets this requirement by providing two loading spaces.

The Town's Zoning By-law does not specify bicycle parking requirements; however, the site proposes four bicycle parking spaces to accommodate employees and visitors who choose to cycle and need a secure place to lock their bikes.

5.0 SITE ACCESS ON MAYFIELD ROAD

5.1 Right Turn-Lane Analysis

In general, an exclusive right turn should be considered when the volume of right turning vehicles is between 10-20% of the through traffic volume, subject to a minimum of 60 vehicles/hour in the design hour. The Transportation Association of Canada (TAC) Geometrics Design Guide for Canadian Roads recommends the use of a right turn lane when the volume of decelerating or accelerating vehicles compared with the through traffic causes undue hazard.

Table 4 shows the combined existing and site traffic volumes used in the analysis.

Table 4 Right Turn-Lane Analysis

Access	Approach	Saturday Peak Hour			Sunday Peak Hour			Hourly Threshold	Turn Lane Needed?
		Through	Right	%	Through	Right	%		
Mayfield Road & Site Access	East	575	13	2%	474	6	1%	60	No

Based on the turn lane warrant analysis, the volume of right-turning vehicles from Mayfield Road onto the site access during both the Saturday and Sunday peak hours falls well below the threshold of 60 vehicles per hour. Specifically, only 13 right-turning vehicles or 2% were observed during the Saturday peak hour, and 6 right-turning vehicles or 1% during the Sunday peak hour. Given these low volumes, a dedicated right-turn lane is not warranted and is therefore not recommended.

5.2 Left Turn-Lane Analysis

The Ministry of Transportation of Ontario (MTO) Geometric Design Standards for Ontario Highways provides graphical thresholds/warrants based on the design speed, amount of advancing traffic, amount of oncoming traffic, and percentage of left turns. According to the MTO standards, a left turn-lane is generally warranted if the percentage of left turns exceeds 5% of the total volume during the peak hour. **Table 5** shows the combined existing and site traffic volumes used in the analysis.

Table 5 Left Turn-Lane Analysis

Access	Peak Hour	Approach	Design Speed	Advancing Volume	Opposing Volume	Left Turn Volume	%Left Turn	Turn Lane Warranted
Mayfield Road & Site Access	Saturday	West	100	613	575	16	3%	No
	Sunday			622	474	13	2%	No

A review of the left-turn lane warrant for eastbound traffic on Mayfield Road at the site access indicates that a dedicated left-turn lane is not warranted. During the Saturday peak hour, 16 vehicles, representing three percent of the advancing volume, were observed making a left turn, while on Sunday, the count was 13 vehicles, or two percent. These volumes are significantly below typical thresholds used to justify a separate left-turn lane, even at the design speed of 100 kilometres per hour. As a result, no eastbound left-turn lane is recommended at the site access.

6.0 SIGHTLINE ASSESSMENT

6.1 Intersection Design Sight Distance

There are two terminologies to consider for the sight distances:

- 1) Stopping Sight Distance
- 2) Decision Sight Distance or Intersection Sight Distance.

In simple terms, stopping sight distance is the minimum distance required for a vehicle to stop safely if an incident occurs. Decision sight distance gives drivers additional reaction time to stop at a comfortable pace in case of unexpected situations. While decision sight distance is always desirable, stopping sight distance is considered adequate for safe maneuvers.

The posted speed limit on Mayfield Road is 80 km/h, and the design speed is assumed to be 100 km per hour. According to the *Geometric Design Guide for Canadian Roads*, Chapter 9 – Intersections, Subsection 9.9.2.3, published by the Transportation Association of Canada in June 2017, the intersection sight distance (ISD) is calculated using the following equation:

$$ISD = 0.278 \times V_{\text{major}} \times t_g$$

Where:

ISD = intersection sight distance (length of the leg of sight triangle along the major road) (m)

V_{major} = design speed of the major road (km/h)

t_g = time gap for minor road vehicle to enter the major road (s)

6.2 Left Turn from Stop

According to the *Geometric Design Guide for Canadian Roads*, the minimum sight distance for a left turn from a stop is calculated as:

Passenger Car = $0.278 \times 100 \times 7.5 = 209$ metres

6.3 Right Turn from Stop

Similarly, the minimum sight distance for a right turn from a stop is:

Passenger Car = $0.278 \times 100 \times 6.5 = 181$ metres

Table 6 summarizes the minimum sightline requirements and the proposed sightline distance.

Table 6 Sightline Distance Review

Intersection	Speed (km/h)		Sightline		
	Posted	Design	Required (m)	Provided (m)	
				East	West
Mayfield Road & Site Access	80	100	209 (left turn) 181 (right turn)	>400	>300

The sightline distance diagram is shown in **Figure 6**. The sight line distance to the west is more than 300 metres and more than 400 metres to the east along Mayfield Road.

Figure 6 Sightline Distances on Mayfield Road



7.0 TRANSPORTATION MANAGEMENT PLAN

To support sustainable transportation choices and reduce the vehicular impact of the proposed site, a comprehensive Transportation Demand Management (TDM) strategy has been developed. The site anticipates its highest activity levels on weekends between 10:00 a.m. and 2:00 p.m., which avoids overlap with typical weekday commuter peak periods.

The TDM plan focuses on minimizing single-occupant vehicle trips and promoting alternative modes of transportation through the following key initiatives:

- **Carpool Incentives:** Designated parking spaces will be reserved for carpool vehicles to encourage shared trips among attendees.
- **Bicycle Facilities:** Secure bicycle racks will be provided on-site to support visitors and employees who cycle.
- **Ridesharing Promotion:** The temple will actively encourage ridesharing through its website, social media platforms, and community newsletters.

Although the site currently has limited access to fixed-route public transit, efforts will be made to coordinate with local transit authorities to explore demand-responsive transit options during peak events. The temple may also consider organizing private shuttle services for major gatherings.

To further manage traffic flow and parking during busy periods, the temple will implement volunteer-led traffic control and on-site event parking coordination. Wayfinding signage and on-site personnel will facilitate smooth vehicle circulation and prioritize pedestrian safety. The site layout includes appropriate internal walkways and crossings to support safe and efficient movement for all users.

These TDM measures will be monitored annually, and feedback will be gathered from users to evaluate effectiveness. Adjustments will be made as necessary to enhance efficiency and ensure that the temple continues to support the Town's transportation sustainability objectives.

8.0 ON-SITE CIRCULATION

Vehicle circulation within the subject site was evaluated using AutoTurn vehicle turning simulation software to ensure that service vehicles can safely and efficiently access and navigate the site.

The following design vehicle was assessed:

- **Garbage Truck:** A typical municipal garbage truck, represented as a Medium Single-Unit (MSU) vehicle in accordance with the *Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (2017)*, was analyzed for its ability to enter, circulate within, and exit the site via the main access driveway.

Maneuvering diagrams for the garbage truck are provided in **Appendix F**. As shown in the diagrams, adequate space is available on-site to accommodate the garbage truck's turning movements without operational concerns.

9.0 SUMMARY AND CONCLUSIONS

CGE Consulting was retained by Khalsa Gurmat Academy Toronto to complete a TIS in support of a 3-year Temporary Use Zoning By-law Amendment for the existing place of worship located at 6600 Mayfield Road in the Town of Caledon. The objective of the study was to assess traffic impacts, site operations, parking adequacy, site access, and on-site circulation during the temple's busiest period — weekends between 10:00 a.m. and 2:00 p.m.

Key Findings:

- **Traffic Volumes & Operations:** Turning movement counts conducted on-site during the weekend peak hours showed modest levels of site-generated traffic — 57 trips on Saturday and 45 on Sunday. Synchro analysis confirmed that all turning movements at the site access operate at acceptable LOS C or better with minimal delays and queues.
- **Parking Assessment:** Based on the Town of Caledon Zoning By-law 2006-50, the site requires 56 vehicle parking spaces. The site proposes to provide 57 standard spaces and three barrier-free spaces, for a total of 60 spaces, which exceeds the Town's Zoning By-law parking rate requirements.

- **Turn Lane Warrants:** Analyses of both left- and right-turn warrants indicate that neither a dedicated eastbound left-turn lane nor a westbound right-turn lane is warranted at the site access on Mayfield Road, based on observed volumes and applicable TAC and MTO thresholds.
- **Sightline Review:** Sight distance measurements at the site access significantly exceed the minimum requirements for both left and right turning vehicles, confirming safe visibility conditions for entering and exiting vehicles.
- **Transportation Demand Management:** A comprehensive TDM plan is proposed to support sustainable transportation choices. Key initiatives include promoting carpooling, adding bicycle facilities, and coordinating event-day traffic with volunteers and signage. The temple will explore transit partnerships and monitor these strategies annually.
- **On-Site Circulation:** An AutoTurn analysis confirmed that standard municipal service vehicles, including a MSU garbage truck, can safely enter, circulate within, and exit the site without operational issues. Sufficient space is available to accommodate turning movements in accordance with the TAC design guidelines.

The proposed temporary use of the site as a place of worship is not anticipated to create any significant impacts on the surrounding transportation network. The site-generated traffic is low and occurs outside weekday commuter peak periods, the parking supply is compliant with zoning requirements, and the access operates with excellent levels of service. Sightlines, circulation, and servicing considerations are all deemed acceptable.

Based on this assessment, the proposed 3-year temporary use of the site can be supported from a transportation planning and engineering perspective.

Appendix A

Pre-Consultation Comments



MEMORANDUM

Transportation Engineering Public Works & Transportation Department

Date: May 9th, 2025
To: Casey Ge, P.Eng., President
CGE Consulting
From: Emma Howlett, EIT., Transportation Coordinator
Engineering, Public Works, & Transportation Department
Subject: 6600 Mayfield Road Temple TOR

Transportation Engineering has completed the review of the Terms of Reference document for the 6600 Mayfield Road Temple (PRE 2024-0018) and offers the below comments.

General Comments: Please be aware that the Town of Caledon differs to the Region of Peel with regard to the operations, access management, review of capacity on Regional Roads. Accordingly, the terms of reference should be commented on by the Region of Peel. For clarification, Mayfield Rd. is under regional jurisdiction as such the access should adhere to regional standards and should be approved by regional staff.

If the scope of the study changes significantly please reach out to Town Staff for updated comments, including but not limited to Background Developments.

Peak Periods: Please note that Sikh Temple peak periods are not the typical weekday periods. As most services tend to occur on Sunday mornings, this should be considered in the peak periods.

Site Access & On-Site Circulation: Use standard vehicles where Caledon/Regional specific vehicles are not relevant, for example, the use of PTAC for critical passenger vehicle parking spaces.

Parking Analysis:

- Barrier-free accessible spaces should be designed according to the requirements contained within the [Town's Traffic By-Law](#). Please note this link has been updated.
- Ensure the Loading / Delivery spaces meet the Town's Zoning By-Law Requirements in both quantity and dimensions, and provide justification if relief is required.
- Based on the PARC form Zoning has yet to specify the number of required parking spaces based on the proposed use, if required Transportation Staff recommend providing justification for any parking reductions once zoning requirements are established.
 - Should parking surveys be required please circulate the proposed workplan for town transportation staff review prior to collecting data.

Site Plan: Add dimensions of the parking and delivery spaces.

Note: Detailed Site Plan comments such as Bicycle Parking recommendations and Pavement Markings and Signage Plan requirements to follow in subsequent applications, if required.

Please let me know if you have any questions or require any additional information

Regards,

Emma Howlett, EIT.
Transportation Coordinator
Engineering, Public Works, & Transportation Department



MEMORANDUM

Transportation Engineering Public Works & Transportation Department

Date: July 15th, 2024
To: Casey Ge, P.Eng., President
CGE Consulting
From: Emma Howlett, EIT., Transportation Coordinator
Transportation Engineering, Public Works, & Transportation Department
Subject: 6600 Mayfield Road Temple

Transportation Engineering has completed the review of the Terms of Reference document for the 6600 Mayfield Road Temple (PRE 2024-0018) and offers the below comments.

General Comments:

- Please be aware that the Town of Caledon differs to the Region of Peel with regard to the operations, access management, review of capacity on Regional Roads. Accordingly, the terms of reference should be commented on by the Region of Peel. For clarification, Mayfield Rd. is under regional jurisdiction as such the access should adhere to regional standards and should be approved by regional staff.

Peak Periods

- Please note that Sikh Temple peak periods are not the typical weekday periods. As most services tend to occur from 10 a.m. to 2 p.m. on Saturdays and Sundays, peak periods should be updated to reflect this.

Site Access & On-Site Circulation:

- Use standard vehicles where Caledon/Regional specific vehicles are not relevant, for example the use of PTAC for critical passenger vehicle parking spaces.

Parking Analysis:

- Should parking surveys be required please circulate the proposed locations for town staff review prior to collecting data.
- Barrier-free accessible spaces should be designed according to the requirements contained within the [Town's Traffic By-Law](#). Please note town staff are working on [updating the By-Law](#). Should the updated By-law come into effect prior to approval, the updated standards should be followed.
- Please consider if Bicycle Parking space(s) are relevant to the current proposal. Please document decision in the parking justification section for staff review.

Note that Transportation Engineering reserves the right for additional comments based on a revised submission.

Please let me know if you have any questions or require any additional information.

Regards,

Emma Howlett, EIT.
Transportation Coordinator
Engineering, Public Works, & Transportation Department

From: Pelopidas, Chrissy <chrissy.pelopidas@peelregion.ca>
Sent: Friday, May 16, 2025 9:11 AM
To: Casey Ge <casey@cgeconsulting.ca>
Cc: Shen, Yifan <yifan.shen@peelregion.ca>
Subject: FW: 6600 Mayfield Road Temple - Region of Peel Comments: TIS TOR

Good morning Casey,

Regional staff have reviewed the TOR and offer the following comments:

Please see the comments below and the [link](#) for the detailed Region of Peel TIS formatting and contact information for background traffic (growth rate, AADT, signal timing, etc.).

- Regional Road 14 (Mayfield Road) – Industrial Connector

Access Type	Minimum Spacing Requirement
Full to Full	450 m
Full to RI/RO	100 m
RI/RO to RI/RO	100 m

- Please review the Controlled Access By-law 62-2013, which speaks to the [Road Characterization Study \(RCS\)](#). The RCS defines our various road classifications as well as the minimum access spacing distances that are associated with them.
- [Analysis Period](#) - Please also include a weekend peak hour during which the temple will be conducting its services.
- [Intersections](#) - Please include the following intersections:
 - Mayfield Road & Goreway Drive / Innis Lake Road
 - Mayfield Road & Centreville Creek Road / McVean Drive
- [Horizon Years](#) - Please include a 3-year horizon period.
- [AUTOTurn analysis](#) - Please use the largest vehicle type accessing this site (ex. Fire truck).
- Please see the following contacts to obtain data for your analysis:
 - Please contact transportationplanningdata@peelregion.ca to confirm growth rates along the subject Regional road(s).
 - Please contact Damian Jamroz (damian.jamroz@peelregion.ca) Supervisor of Traffic Operations to obtain the most recent TMCs and/or average annual daily traffic (AADT).
 - Please contact Rebecca Caughey (Rebecca.caughey@peelregion.ca) Supervisor of Traffic Signals and Streetlighting, to obtain traffic signal timing parameters and ensure that the information includes the appropriate walk/don't walk splits, recall modes and offsets.
 - Please contact your Local Municipality Planning Department and use the City of Brampton's [PlanningViewer \(brampton.ca\)](#) to obtain details on surrounding developments in the area that would affect traffic capacity in the planning horizon year(s).

If you have any questions, I encourage you to reach out directly to **Yifan Shen, Transportation Development Specialist**, as you continue to prepare the TIS TOR. I am sharing these comments with you as Yifan is currently out of office, but will return at the end of the month.

Thank you,

Chrissy Pelopidas MPI

Planner

Planning and Development Services | Public Works
Region of Peel
10 Peel Centre Drive Suite B, 4th Floor, Brampton Ontario L6T 4B9
Phone: 289-305-7875
E-mail: chrissy.pelopidas@peelregion.ca



From: Tam, Sonia <sonia.tam@peelregion.ca>

Sent: May 7, 2025 2:51 PM
To: Casey Ge <casey@cgeconsulting.ca>; Pelopidas, Chrissy <chrissy.pelopidas@peelregion.ca>
Subject: FW: 6600 Mayfield Road Temple

Hi Casey,

[@Pelopidas, Chrissy](#) is the planner on file for PARC-24-018C. She will circulate to the appropriate reviewers.

Best,



Sonia Tam, M.Pl., RPP, MCIP
Principal Planner
Development Services Division,
Public Works
10 Peel Centre Drive 4th Floor
Suite B
E: sonia.tam@peelregion.ca
T: 289-305-7815

From: Casey Ge <casey@cgeconsulting.ca>

Sent: May 7, 2025 12:06 PM
To: Tam, Sonia <sonia.tam@peelregion.ca>
Cc: Emma Howlett <emma.howlett@caledon.ca>; Khalsa Academy <khalsagurmatacademy5@gmail.com>; Jivtesh Bhaila - NES LTD <jivteshnoble@gmail.com>
Subject: FW: 6600 Mayfield Road Temple

CAUTION: EXTERNAL MAIL. DO NOT CLICK ON LINKS OR OPEN ATTACHMENTS YOU DO NOT TRUST.

Good morning Sonia,

I'm sending you the Terms of Reference for the Transportation Study for your review, along with the latest site plan for your information.

Emma, thank you for providing draft comments last year. If you could kindly review the attached site plan and confirm whether your previous comments are still applicable, that would be greatly appreciated.

Thank you,

Casey Ge, P.Eng.

President

CGE Consulting

e: casey@cgeconsulting.ca

p: 416-602-1885

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From: Emma Howlett <Emma.Howlett@caledon.ca>

Sent: July 15, 2024 10:17 AM
To: Casey Ge <casey@cgeconsulting.ca>
Cc: Kavleen Younan <Kavleen.Younan@caledon.ca>
Subject: RE: 6600 Mayfield Road Temple

Hello Casey

To help you get started Transportation Engineering Staff DRAFT Comments are attached. The comments are sent in draft form as they are subject to change upon receipt of the updated site plan.

Hope this helps,

Emma Howlett, EIT

Transportation Coordinator, Engineering, Public Works, & Transportation Department

Office: 905.584.2272 x 4309 | Email: Emma.Howlett@caledon.ca

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From: Casey Ge <casey@cgeconsulting.ca>
Sent: July 15, 2024 9:54 AM
To: Emma Howlett <Emma.Howlett@caledon.ca>
Cc: Kavleen Younan <Kavleen.Younan@caledon.ca>
Subject: RE: 6600 Mayfield Road Temple

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Good morning Emma, I spoke to the planner Grant Uyeyama from KLM. Apparently there was some updates that need to be done on the latest site plan so he will send me the site plan once it's ready.

Thank you for following up with me. I appreciate your attention on this matter.

Best Regards,

Casey Ge, P.Eng.

President

CGE Consulting

e: casey@cgeconsulting.ca

p: 416-602-1885

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From: Emma Howlett <Emma.Howlett@caledon.ca>
Sent: Monday, July 15, 2024 9:42 AM
To: Casey Ge <casey@cgeconsulting.ca>
Cc: Kavleen Younan <Kavleen.Younan@caledon.ca>
Subject: RE: 6600 Mayfield Road Temple

Good morning Casey!

Hope you're doing well just following up on this inquiry regarding an updated a site plan. Do you have one?

Regards,

Emma Howlett, EIT

Transportation Coordinator, Engineering, Public Works, & Transportation Department

Office: 905.584.2272 x 4309 | Email: Emma.Howlett@caledon.ca

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From: Kavleen Younan <Kavleen.Younan@caledon.ca>

Sent: July 10, 2024 10:25 AM
To: casey@cgeconsulting.ca
Cc: Emma Howlett <Emma.Howlett@caledon.ca>
Subject: RE: 6600 Mayfield Road Temple

Morning Casey,

Hope you're well. I was just wondering if you have a more updated site plan/concept plan than what was provided at the PARC stage?

Thanks!

Kavleen S. Younan, P.Eng.

Transportation Engineer

Engineering, Public Works & Transportation Department

Email: kavleen.younan@caledon.ca

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From: Casey Ge <casey@cgeconsulting.ca>

Sent: July 8, 2024 11:20 AM
To: Emma Howlett <Emma.Howlett@caledon.ca>
Subject: 6600 Mayfield Road Temple

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the contents to be safe.

Hello Emma, please kindly see the attached TOR for traffic study for the temporary silk temple located at 6600 Mayfield Road in Caledon.

Look forward to hear from you.

Thank you

Casey Ge, P.Eng.

President

CGE Consulting

e: casey@cgeconsulting.ca

p: 416-602-1885

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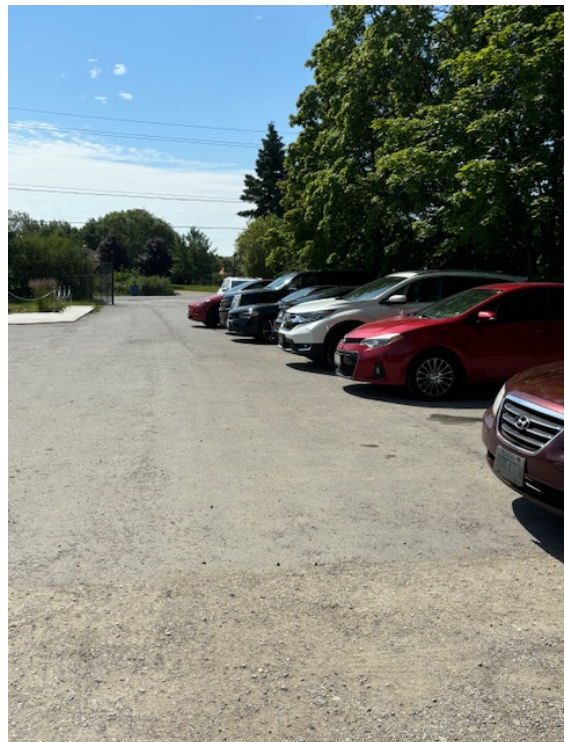
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Appendix B

Site Visit Images

**6600 Mayfield Rod
Site Visit – July 3, 2024**



Parking Lot Area – Paved and Unpaved



Parking Lot Area and Existing Building



Main Entrance and Temple Loan Sign

Appendix C

Traffic Movement Count Data

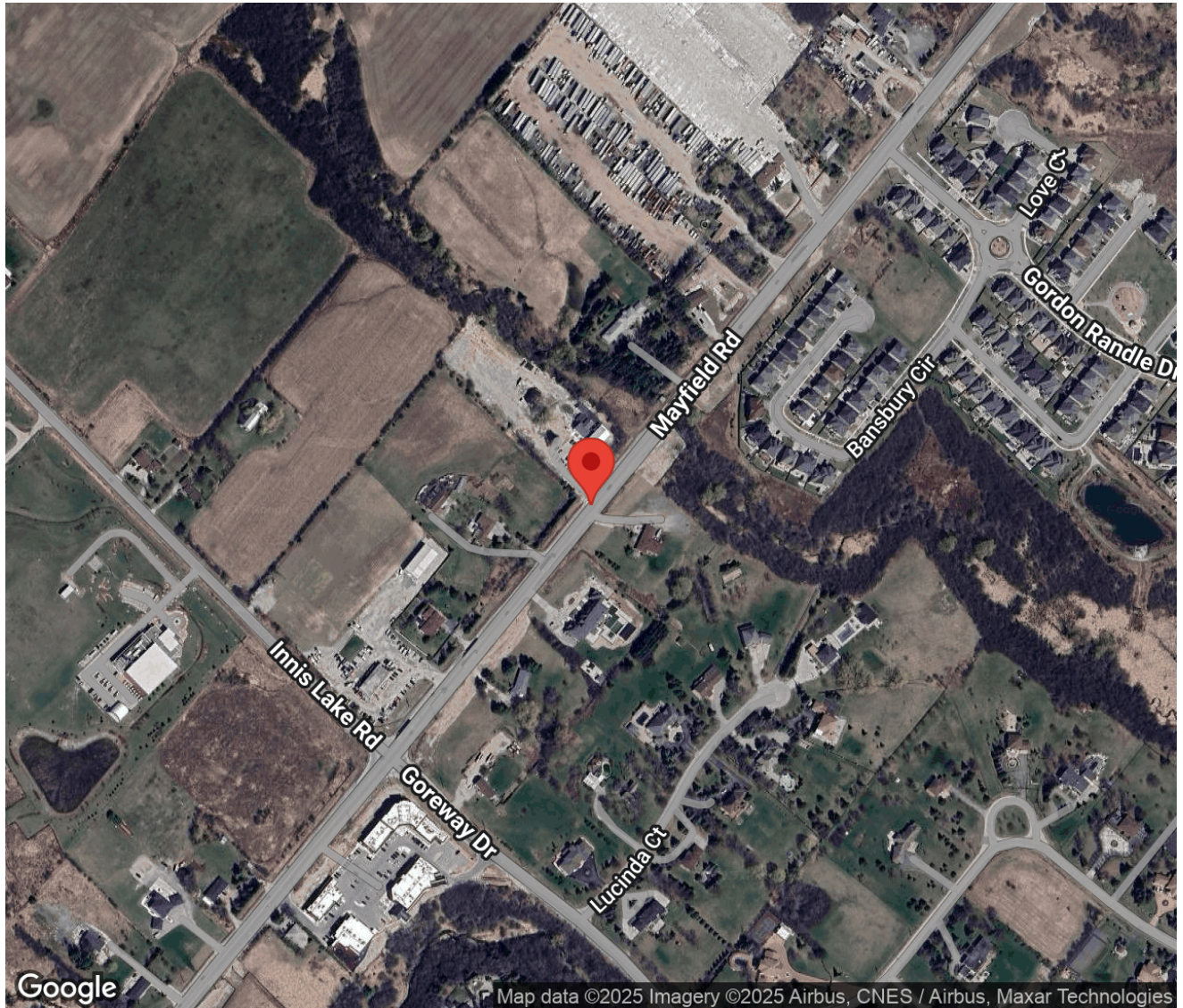
Project #25-142 - CGE Transportation Consulting

Intersection Count Report

Intersection: Mayfield Rd & 6600 Mayfield Rd
Municipality: Caledon
Count Date: Saturday, May 03, 2025
Site Code: 2514200001
Count Categories: Cars, Trucks, Bicycles, Pedestrians
Count Period: 10:00-14:00
Weather: Clear
Comments:

Traffic Count Map

Intersection:	Mayfield Rd & 6600 Mayfield Rd
Site Code:	2514200001
Municipality:	Caledon
Count Date:	May 03, 2025



Traffic Count Summary

Intersection: Mayfield Rd & 6600 Mayfield Rd
 Site Code: 2514200001
 Municipality: Caledon
 Count Date: May 03, 2025

6600 Mayfield Rd - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
10:00 - 11:00	4	0	9	0	13	0	2	0	1	0	3	1	16
11:00 - 12:00	11	0	7	0	18	0	1	0	0	0	1	1	19
12:00 - 13:00	4	0	17	0	21	0	0	0	1	0	1	2	22
13:00 - 14:00	9	0	19	0	28	0	0	0	0	0	0	0	28
GRAND TOTAL	28	0	52	0	80	0	3	0	2	0	5	4	85

Traffic Count Summary

Intersection: Mayfield Rd & 6600 Mayfield Rd
 Site Code: 2514200001
 Municipality: Caledon
 Count Date: May 03, 2025

Mayfield Rd - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
10:00 - 11:00	0	438	10	0	448	0	7	478	1	0	486	0	934
11:00 - 12:00	0	470	8	0	478	2	15	553	1	0	569	0	1047
12:00 - 13:00	1	576	6	0	583	1	16	572	1	1	590	0	1173
13:00 - 14:00	0	575	13	0	588	0	16	613	1	0	630	0	1218
GRAND TOTAL	1	2059	37	0	2097	3	54	2216	4	1	2275	0	4372

[illegible]

[illegible]

Traffic Count Data

Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200001
Municipality: Caledon
Count Date: May 03, 2025

East Approach - Mayfield Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
10:00	0	101	2	0	103	0	4	0	0	4	0	0	0	0	0	0
10:15	0	96	3	0	99	0	12	0	0	12	0	0	0	0	0	0
10:30	0	100	2	0	102	0	8	0	0	8	0	0	0	0	0	0
10:45	0	111	3	0	114	0	6	0	0	6	0	0	0	0	0	0
11:00	0	127	2	0	129	0	14	0	0	14	0	0	0	0	0	0
11:15	0	86	1	0	87	0	11	0	0	11	0	0	0	0	0	1
11:30	0	95	1	0	96	0	9	0	0	9	0	0	0	0	0	1
11:45	0	120	4	0	124	0	8	0	0	8	0	0	0	0	0	0
12:00	0	140	1	0	141	0	8	0	0	8	0	0	0	0	0	1
12:15	0	150	1	0	151	0	11	0	0	11	0	0	0	0	0	0
12:30	1	114	3	0	118	0	13	0	0	13	0	0	0	0	0	0
12:45	0	131	1	0	132	0	9	0	0	9	0	0	0	0	0	0
13:00	0	121	3	0	124	0	16	0	0	16	0	0	0	0	0	0
13:15	0	140	0	0	140	0	10	0	0	10	0	0	0	0	0	0
13:30	0	140	5	0	145	0	7	0	0	7	0	0	0	0	0	0
13:45	0	134	5	0	139	0	7	0	0	7	0	0	0	0	0	0
SUBTOTAL	1	1906	37	0	1944	0	153	0	0	153	0	0	0	0	0	3
GRAND TOTAL	1	1906	37	0	1944	0	153	0	0	153	0	0	0	0	0	3

Traffic Count Data

Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200001
Municipality: Caledon
Count Date: May 03, 2025

West Approach - Mayfield Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
10:00	2	90	0	0	92	0	11	0	0	11	0	1	0	0	1	0
10:15	1	115	1	0	117	0	9	0	0	9	0	0	0	0	0	0
10:30	2	100	0	0	102	0	6	0	0	6	0	0	0	0	0	0
10:45	2	130	0	0	132	0	16	0	0	16	0	0	0	0	0	0
11:00	3	138	0	0	141	0	10	0	0	10	0	0	0	0	0	0
11:15	3	122	0	0	125	0	5	0	0	5	0	0	0	0	0	0
11:30	5	127	0	0	132	0	11	0	0	11	0	0	0	0	0	0
11:45	4	126	1	0	131	0	14	0	0	14	0	0	0	0	0	0
12:00	4	134	0	0	138	0	6	0	0	6	0	0	0	0	0	0
12:15	4	137	1	1	143	0	8	0	0	8	0	0	0	0	0	0
12:30	1	114	0	0	115	0	20	0	0	20	0	0	0	0	0	0
12:45	7	132	0	0	139	0	21	0	0	21	0	0	0	0	0	0
13:00	2	121	0	0	123	0	13	0	0	13	0	0	0	0	0	0
13:15	4	158	0	0	162	0	11	0	0	11	0	0	0	0	0	0
13:30	3	118	1	0	122	0	15	0	0	15	0	0	0	0	0	0
13:45	7	166	0	0	173	0	11	0	0	11	0	0	0	0	0	0
SUBTOTAL	54	2028	4	1	2087	0	187	0	0	187	0	1	0	0	1	0
GRAND TOTAL	54	2028	4	1	2087	0	187	0	0	187	0	1	0	0	1	0

Peak Hour Diagram

Specified Period

From: 10:00:00
To: 14:00:00

One Hour Peak

From: 13:00:00
To: 14:00:00




Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200001
Count Date: May 03, 2025

Weather conditions: Clear




**** Unsignalized Intersection ****





Major Road: Mayfield Rd runs E/W

North Approach




	Out	In	Total
	28	29	57
	0	0	0
	0	0	0
Totals	28	29	57

6600 Mayfield Rd








	0	0	0	0
	0	0	0	0
	19	0	9	0
Totals	19	0	9	0

East Approach

	Out	In	Total
	548	572	1120
	40	50	90
	0	0	0
Totals	588	622	1210

Mayfield Rd

				Totals
	0	0	0	0
	0	0	16	16
	0	50	563	613
	0	0	1	1








Peds: 0






Peds: 0








Peds: 0

Mayfield Rd

Totals			
	0	0	0
	13	13	0
	575	535	40
	0	0	0




West Approach

	Out	In	Total
	580	554	1134
	50	40	90
	0	0	0
Totals	630	594	1224


Totals				
	0	0	0	0
	0	0	0	0
	0	0	0	0

Private Driveway

South Approach

	Out	In	Total
	0	1	1
	0	0	0
	0	0	0
Totals	0	1	1

 - Cars

 - Trucks

 - Bicycles

Comments

Peak Hour Summary

Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200001
Count Date: May 03, 2025
Period: 10:00 - 14:00

Peak Hour Data (13:00 - 14:00)

Start Time	North Approach 6600 Mayfield Rd						South Approach Private Driveway						East Approach Mayfield Rd						West Approach Mayfield Rd						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
13:00	0	0	6	0	0	6	0	0	0	0	0	0	0	137	3	0	0	140	2	134	0	0	0	136	282
13:15	3	0	3	0	0	6	0	0	0	0	0	0	0	150	0	0	0	150	4	169	0	0	0	173	329
13:30	4	0	2	0	0	6	0	0	0	0	0	0	0	147	5	0	0	152	3	133	1	0	0	137	295
13:45	2	0	8	0	0	10	0	0	0	0	0	0	0	141	5	0	0	146	7	177	0	0	0	184	340
Grand Total	9	0	19	0	0	28	0	0	0	0	0	0	0	575	13	0	0	588	16	613	1	0	0	630	1246
Approach %	32.1	0	67.9	0	-	-	0	0	0	0	-	-	0	97.8	2.2	0	-	-	2.5	97.3	0.2	0	-	-	-
Totals %	0.7	0	1.5	0	-	2.2	0	0	0	0	-	0	0	46.1	1	0	-	47.2	1.3	49.2	0.1	0	-	50.6	-
PHF	0.56	0	0.59	0	-	0.7	0	0	0	0	-	0	0	0.96	0.65	0	-	0.97	0.57	0.87	0.25	0	-	0.86	0.92
Cars	9	0	19	0	-	28	0	0	0	0	-	0	0	535	13	0	-	548	16	563	1	0	-	580	1156
% Cars	100	0	100	0	-	100	0	0	0	0	-	0	0	93	100	0	-	93.2	100	91.8	100	0	-	92.1	92.8
Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	40	0	0	-	40	0	50	0	0	-	50	90
% Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	7	0	0	-	6.8	0	8.2	0	0	-	7.9	7.2
Bicycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
Peds	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	0
% Peds	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-

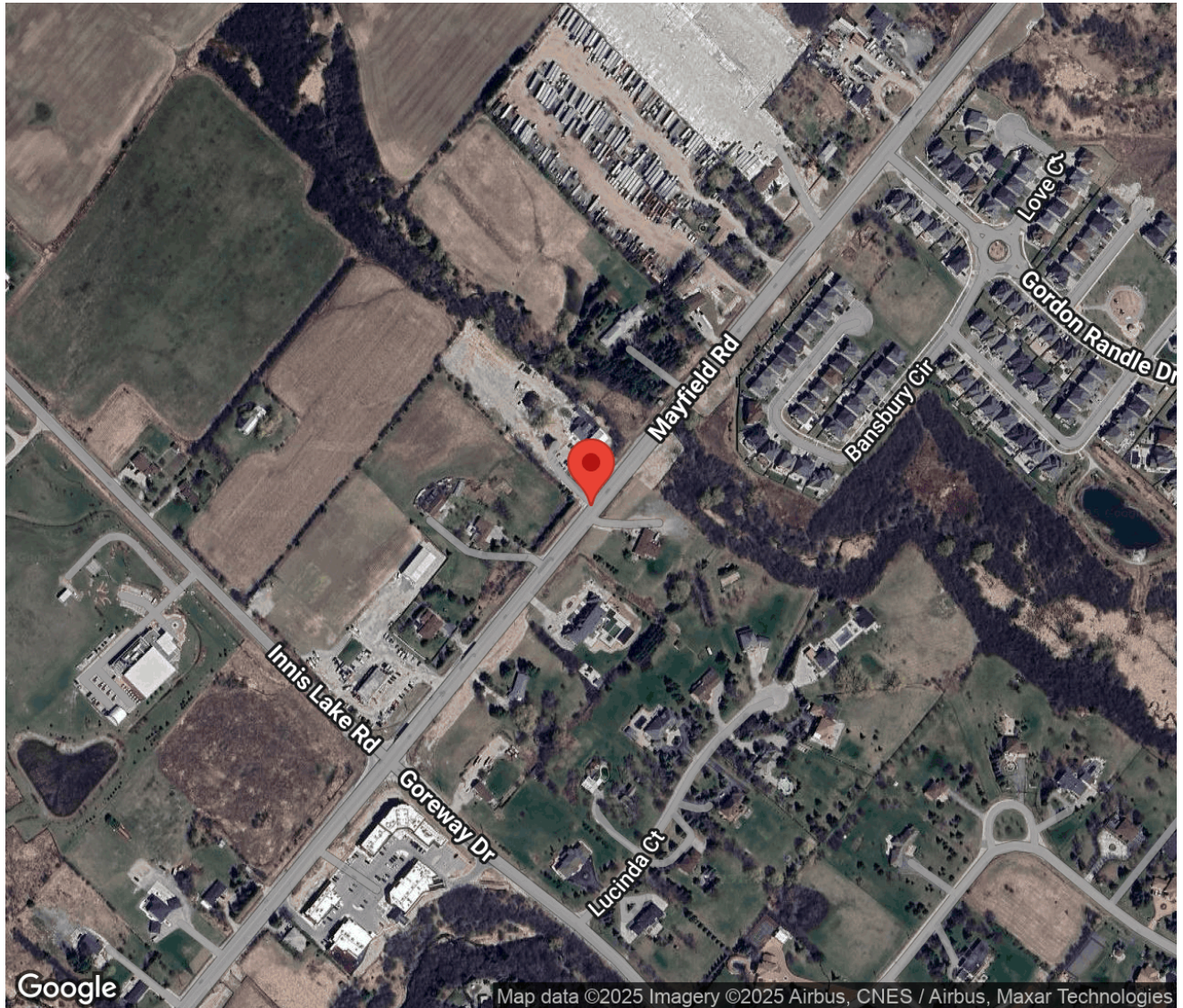
Project #25-142 - CGE Transportation Consulting

Intersection Count Report

Intersection: Mayfield Rd & 6600 Mayfield Rd
Municipality: Caledon
Count Date: Sunday, May 04, 2025
Site Code: 2514200002
Count Categories: Cars, Trucks, Bicycles, Pedestrians
Count Period: 10:00-14:00
Weather: Clear
Comments:

Traffic Count Map

Intersection:	Mayfield Rd & 6600 Mayfield Rd
Site Code:	2514200002
Municipality:	Caledon
Count Date:	May 04, 2025



Traffic Count Summary

Intersection: Mayfield Rd & 6600 Mayfield Rd
 Site Code: 2514200002
 Municipality: Caledon
 Count Date: May 04, 2025

6600 Mayfield Rd - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
10:00 - 11:00	2	0	6	0	8	0	3	0	0	0	3	1	11
11:00 - 12:00	3	0	10	0	13	0	0	0	0	0	0	0	13
12:00 - 13:00	7	0	5	0	12	0	1	0	1	0	2	0	14
13:00 - 14:00	6	0	20	0	26	0	2	0	0	0	2	0	28
GRAND TOTAL	18	0	41	0	59	0	6	0	1	0	7	1	66

Traffic Count Summary

Intersection: Mayfield Rd & 6600 Mayfield Rd
 Site Code: 2514200002
 Municipality: Caledon
 Count Date: May 04, 2025

Mayfield Rd - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
10:00 - 11:00	0	355	2	0	357	2	10	462	2	0	474	0	831
11:00 - 12:00	0	405	6	1	412	2	12	470	0	0	482	0	894
12:00 - 13:00	0	421	10	0	431	0	11	533	1	0	545	0	976
13:00 - 14:00	0	474	6	0	480	0	13	622	0	0	635	0	1115
GRAND TOTAL	0	1655	24	1	1680	4	46	2087	3	0	2136	0	3816

Traffic Count Data

Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200002
Municipality: Caledon
Count Date: May 04, 2025

North Approach - 6600 Mayfield Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
10:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
10:15	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
11:15	1	0	4	0	5	0	0	0	0	0	0	0	1	0	1	0
11:30	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
11:45	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
12:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:15	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:30	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
12:45	2	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0
13:00	2	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0
13:15	2	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0
13:30	2	0	10	0	12	0	0	0	0	0	0	0	1	0	1	0
13:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	18	0	39	0	57	0	0	0	0	0	0	0	2	0	2	0
GRAND TOTAL	18	0	39	0	57	0	0	0	0	0	0	0	2	0	2	0

[illegible]

Traffic Count Data

Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200002
Municipality: Caledon
Count Date: May 04, 2025

East Approach - Mayfield Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
10:00	0	72	0	0	72	0	4	0	0	4	0	0	0	0	0	1
10:15	0	83	1	0	84	0	8	0	0	8	0	0	0	0	0	0
10:30	0	91	1	0	92	0	9	0	0	9	0	0	0	0	0	1
10:45	0	77	0	0	77	0	10	0	0	10	0	1	0	0	1	0
11:00	0	93	1	0	94	0	12	0	0	12	0	0	0	0	0	0
11:15	0	96	2	0	98	0	12	0	0	12	0	0	0	0	0	1
11:30	0	82	1	0	83	0	8	0	0	8	0	0	0	0	0	0
11:45	0	91	2	0	93	0	11	0	1	12	0	0	0	0	0	1
12:00	0	90	2	0	92	0	9	0	0	9	0	0	0	0	0	0
12:15	0	94	6	0	100	0	10	0	0	10	0	0	0	0	0	0
12:30	0	94	1	0	95	0	7	0	0	7	0	0	0	0	0	0
12:45	0	108	1	0	109	0	9	0	0	9	0	0	0	0	0	0
13:00	0	135	0	0	135	0	2	0	0	2	0	0	0	0	0	0
13:15	0	120	2	0	122	0	8	0	0	8	0	0	0	0	0	0
13:30	0	84	2	0	86	0	6	0	0	6	0	0	0	0	0	0
13:45	0	112	2	0	114	0	7	0	0	7	0	0	0	0	0	0
SUBTOTAL	0	1522	24	0	1546	0	132	0	1	133	0	1	0	0	1	4
GRAND TOTAL	0	1522	24	0	1546	0	132	0	1	133	0	1	0	0	1	4

Traffic Count Data

Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200002
Municipality: Caledon
Count Date: May 04, 2025

West Approach - Mayfield Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
10:00	2	100	1	0	103	0	6	0	0	6	0	0	0	0	0	0
10:15	3	102	0	0	105	0	6	0	0	6	0	0	0	0	0	0
10:30	1	121	0	0	122	0	11	0	0	11	0	0	0	0	0	0
10:45	4	111	1	0	116	0	5	0	0	5	0	0	0	0	0	0
11:00	2	94	0	0	96	0	6	0	0	6	0	0	0	0	0	0
11:15	6	104	0	0	110	0	7	0	0	7	0	0	0	0	0	0
11:30	4	124	0	0	128	0	6	0	0	6	0	0	0	0	0	0
11:45	0	119	0	0	119	0	10	0	0	10	0	0	0	0	0	0
12:00	0	118	1	0	119	0	7	0	0	7	0	0	0	0	0	0
12:15	2	114	0	0	116	0	6	0	0	6	0	0	0	0	0	0
12:30	5	155	0	0	160	0	9	0	0	9	0	0	0	0	0	0
12:45	4	119	0	0	123	0	5	0	0	5	0	0	0	0	0	0
13:00	3	161	0	0	164	0	6	0	0	6	0	0	0	0	0	0
13:15	2	134	0	0	136	0	10	0	0	10	0	0	0	0	0	0
13:30	5	152	0	0	157	0	12	0	0	12	0	0	0	0	0	0
13:45	3	137	0	0	140	0	10	0	0	10	0	0	0	0	0	0
SUBTOTAL	46	1965	3	0	2014	0	122	0	0	122	0	0	0	0	0	0
GRAND TOTAL	46	1965	3	0	2014	0	122	0	0	122	0	0	0	0	0	0

Peak Hour Diagram

Specified Period

From: 10:00:00
To: 14:00:00

One Hour Peak

From: 13:00:00
To: 14:00:00

Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200002
Count Date: May 04, 2025

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Mayfield Rd runs E/W

North Approach

	Out	In	Total
	25	19	44
	0	0	0
	1	0	1
Totals	26	19	45

6600 Mayfield Rd

	1	0	0	0
	0	0	0	0
	19	0	6	0
Totals	20	0	6	0

East Approach

	Out	In	Total
	457	590	1047
	23	38	61
	0	0	0
Totals	480	628	1108

Mayfield Rd

				Totals
	0	0	0	0
	0	0	13	13
	0	38	584	622
	0	0	0	0

Peds: 0



Peds: 0

Peds: 0

Mayfield Rd

Totals			
	0	0	0
	6	6	0
	474	451	23
	0	0	0

West Approach

	Out	In	Total
	597	472	1069
	38	23	61
	0	1	1
Totals	635	496	1131

Totals				
	2	0	0	0
	0	0	0	0
	0	0	0	0

Private Driveway

South Approach

	Out	In	Total
	2	0	2
	0	0	0
	0	0	0
Totals	2	0	2

- Cars

- Trucks

- Bicycles

Comments

Peak Hour Summary

Intersection: Mayfield Rd & 6600 Mayfield Rd
Site Code: 2514200002
Count Date: May 04, 2025
Period: 10:00 - 14:00

Peak Hour Data (13:00 - 14:00)

Start Time	North Approach 6600 Mayfield Rd						South Approach Private Driveway						East Approach Mayfield Rd						West Approach Mayfield Rd						Total Vehicles
	←	↑	→	↺	Peds	Total	←	↑	→	↺	Peds	Total	←	↑	→	↺	Peds	Total	←	↑	→	↺	Peds	Total	
13:00	2	0	4	0	0	6	1	0	0	0	0	1	0	137	0	0	0	137	3	167	0	0	0	170	314
13:15	2	0	4	0	0	6	0	0	0	0	0	0	0	128	2	0	0	130	2	144	0	0	0	146	282
13:30	2	0	11	0	0	13	1	0	0	0	0	1	0	90	2	0	0	92	5	164	0	0	0	169	275
13:45	0	0	1	0	0	1	0	0	0	0	0	0	0	119	2	0	0	121	3	147	0	0	0	150	272
Grand Total	6	0	20	0	0	26	2	0	0	0	0	2	0	474	6	0	0	480	13	622	0	0	0	635	1143
Approach %	23.1	0	76.9	0	-	-	100	0	0	0	-	-	0	98.8	1.3	0	-	-	2	98	0	0	-	-	-
Totals %	0.5	0	1.7	0	-	2.3	0.2	0	0	0	0.2	-	0	41.5	0.5	0	-	42	1.1	54.4	0	0	-	55.6	-
PHF	0.75	0	0.45	0	-	0.5	0.5	0	0	0	0.5	-	0	0.86	0.75	0	-	0.88	0.65	0.93	0	0	-	0.93	0.91
Cars	6	0	19	0	-	25	2	0	0	0	-	2	0	451	6	0	-	457	13	584	0	0	-	597	1081
% Cars	100	0	95	0	-	96.2	100	0	0	0	100	-	0	95.1	100	0	-	95.2	100	93.9	0	0	-	94	94.6
Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	23	0	0	-	23	0	38	0	0	-	38	61
% Trucks	0	0	0	0	-	0	0	0	0	0	0	-	0	4.9	0	0	-	4.8	0	6.1	0	0	-	6	5.3
Bicycles	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles	0	0	5	0	-	3.8	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	0.1
Peds	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	0
% Peds	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-




Appendix D

Synchro Analysis Worksheets

Lanes, Volumes, Timings
4: Mayfield Road & Site Access

Saturday Peak Hour
05-14-2025






Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	613	575	13	9	19
Future Volume (vph)	16	613	575	13	9	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.909	
Flt Protected		0.999			0.984	
Satd. Flow (prot)	0	1761	1773	0	1699	0
Flt Permitted		0.999			0.984	
Satd. Flow (perm)	0	1761	1773	0	1699	0
Link Speed (k/h)		80	80		50	
Link Distance (m)		323.1	267.7		107.3	
Travel Time (s)		14.5	12.0		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	7%	0%	0%	0%
Adj. Flow (vph)	17	666	625	14	10	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	683	639	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	55.1%			ICU Level of Service B		
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

4: Mayfield Road & Site Access

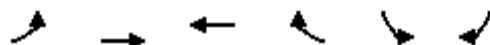
Saturday Peak Hour
05-14-2025






Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	613	575	13	9	19
Future Volume (Veh/h)	16	613	575	13	9	19
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	666	625	14	10	21
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	639				1332	632
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	639				1332	632
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				94	96
cM capacity (veh/h)	955				169	484
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	683	639	31			
Volume Left	17	0	10			
Volume Right	0	14	21			
cSH	955	1700	302			
Volume to Capacity	0.02	0.38	0.10			
Queue Length 95th (m)	0.4	0.0	2.7			
Control Delay (s)	0.5	0.0	18.3			
Lane LOS	A		C			
Approach Delay (s)	0.5	0.0	18.3			
Approach LOS			C			
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			55.1%		ICU Level of Service	
Analysis Period (min)			15		B	

Lanes, Volumes, Timings
4: Mayfield Road & Site Access

Sunday Peak Hour
05-14-2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	13	622	474	6	6	20
Future Volume (vph)	13	622	474	6	6	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.898	
Flt Protected		0.999			0.988	
Satd. Flow (prot)	0	1793	1807	0	1686	0
Flt Permitted		0.999			0.988	
Satd. Flow (perm)	0	1793	1807	0	1686	0
Link Speed (k/h)		80	80		50	
Link Distance (m)		323.1	267.7		107.3	
Travel Time (s)		14.5	12.0		7.7	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	6%	5%	0%	0%	0%
Adj. Flow (vph)	14	684	521	7	7	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	698	528	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	53.2%			ICU Level of Service A		
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

4: Mayfield Road & Site Access

Sunday Peak Hour
05-14-2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	622	474	6	6	20
Future Volume (Veh/h)	13	622	474	6	6	20
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	14	684	521	7	7	22
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	528				1236	524
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	528				1236	524
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				96	96
cM capacity (veh/h)	1049				194	557
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	698	528	29			
Volume Left	14	0	7			
Volume Right	0	7	22			
cSH	1049	1700	383			
Volume to Capacity	0.01	0.31	0.08			
Queue Length 95th (m)	0.3	0.0	2.0			
Control Delay (s)	0.4	0.0	15.2			
Lane LOS	A		C			
Approach Delay (s)	0.4	0.0	15.2			
Approach LOS			C			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			53.2%	ICU Level of Service		A
Analysis Period (min)			15			

Appendix E

Level of Service Definition

LEVEL OF SERVICE ANALYSIS AT SIGNALIZED INTERSECTIONS

To assist in clarifying the arithmetic analysis associated with traffic engineering, it is often useful to refer to “Level of Service”. The term Level of Service implies a qualitative measure of traffic flow at an intersection. It is dependent upon vehicle delay and vehicle queue lengths at the approaches. Specifically, Level of Service criteria are stated in terms of the average stopped delay per vehicle for a 15-minute analysis period. The following table describes the characteristics of each level:

<u>Level of Service</u>	<u>Features</u>	<u>Stopped Delay per Vehicle (sec)</u>
A	At this level of service, almost no signal phase is fully utilized by traffic. Very seldom does a vehicle wait longer than one red indication. The approach appears open, turning movements are easily made and drivers have freedom of operation.	≤ 5.0
B	At this level, an occasional signal phase is fully utilized and many phases approach full use. Many drivers begin to feel somewhat restricted within platoons of vehicles approaching the intersection.	$> 5.0 \text{ and } \leq 15.0$
C	At this level, the operation is stable though with more frequent fully utilized signal phases. Drivers feel more restricted and occasionally may have to wait more than one red signal indication, and queues may develop behind turning vehicles. This level is normally employed in urban intersection design.	$> 15.0 \text{ and } \leq 25.0$
D	At this level, the motorist experiences increasing restriction and instability of flow. There are substantial delays to approaching vehicles during short peaks within the peak period, but there are enough cycles with lower demand to permit occasional clearance of developing queues and prevent excessive backups.	$> 25.0 \text{ and } \leq 40.0$
E	At this level, capacity is reached. There are long queues of vehicles waiting upstream of the intersection and delays to vehicles may extend to several signal cycles.	$> 40.0 \text{ and } \leq 60.0$
F	At this level, saturation occurs, with vehicle demand exceeding the available capacity.	> 60.0

LEVEL OF SERVICE ANALYSIS AT UNSIGNALIZED INTERSECTIONS⁽¹⁾

The term "level of service" implies a qualitative measure of traffic flow at an intersection. It is dependent upon the vehicle delay and vehicle queue lengths at approaches. The level of service at unsignalized intersections is often related to the delay accumulated by flows on the minor streets, caused by all other conflicting movements. The following table describes the characteristics of each level.

Level of Service	Features
A	Little or no traffic delay occurs. Approaches appear open, turning movements are easily made, and drivers have freedom of operation.
B	Short traffic delays occur. Many drivers begin to feel somewhat restricted in terms of freedom of operation.
C	Average traffic delays occur. Operations are generally stable, but drivers emerging from the minor street may experience difficulty in completing their movement. This may occasionally impact on the stability of flow on the major street.
D	Long traffic delays occur. Motorists emerging from the minor street experience significant restriction and frustration. Drivers on the major street will experience congestion and delay as drivers emerging from the minor street interfere with the major through movements.
E	Very long traffic delays occur. Operations approach the capacity of the intersection.
F	Saturation occurs, with vehicle demand exceeding the available capacity. Very long traffic delays occur.

⁽¹⁾ Highway Capacity Manual - Special Report No. 209, Transportation Research Board, 1985.

Appendix F

AutoTurn Swept Path Diagrams

