

TOWN OF CALEDON
PLANNING
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September 8, 2026

Transportation Impact Study

PROPOSED TRANSPORT TRUCK & TRAILER PARKING FACILITY

12541 & 12577 Airport Road
Town of Caledon, ON

August 26, 2026
Project No: NT-20-104

Town File No.: RZ 2021-0011

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August 26, 2026

Nishan Transport Inc.
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Attention: Rajwinder Singh

**Re: Engineering Service – Transportation Impact Study
Proposed Transport Truck & Trailer Parking Facility
12541 & 12577 Airport Road, Town of Caledon
Our Project No. NT-20-104**

NexTrans Consulting Engineers (a Division of NextEng Consulting Group Inc.) is pleased to present the enclosed Transportation Impact Study in support of a Zoning By-law Amendment application for a proposed temporary transport truck and trailer parking facility.

On behalf of our Client, Nishan Transport Inc., we also acknowledge the transportation related comments issued by the Town and Region's reviewing agencies.

The 11.85ha subject lands are located on the east side of Airport Road, approximately 1.2 km north of the intersection of Perdue Court, Davis Lane and Airport Road, in the Town of Caledon. The subject lands are currently vacant. The subject lands are currently vacant. The proposed development includes an interim condition consisting of a temporary truck and trailer parking facility with 163 vehicle parking spaces. Under ultimate conditions, a portion of the interim truck and trailer parking facility will be redeveloped to accommodate an 8,800 m² cross-dock facility, a two-storey office building, and an ancillary six-bay truck wash facility, while maintaining truck and trailer parking on the remainder of the site. The ultimate condition also proposes 145 vehicle parking spaces. Vehicular access to the site is proposed via a full-movement driveway onto Airport Road near the northern property line.

This study provides an assessment of the forecast site traffic and also provides response to the comments issued by reviewing agencies, which are provided as follows:

Town of Caledon, Planning Department

1. *Development Engineering respectfully defers review and approval of the Traffic Brief to the Towns Transportation Department and the Region of Peel.*

NEXTRANS RESPONSE: Acknowledged.

Town of Caledon, Engineering Services Department, Transportation

2. *The comments on the traffic analyses will be deferred to the Region. Please note that Transportation Engineering reserves the right for additional comments based on a revised submission.*

NEXTRANS RESPONSE: Acknowledged.

York Region, Traffic Development

3. *The Region is in receipt of a Traffic Brief and will provide comments under a separate cover.*

NEXTRANS RESPONSE: Acknowledged.

4. *The Region is not in support of the multiple accesses to this property.*

NEXTRANS RESPONSE: Acknowledged. The concept plan illustrates 1 full movement driveway near the north property line.

5. *The proposed accesses at their current locations on Airport Road are not in accordance with the Regional Standards based on 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. This portion of Airport Road is classified as a Suburban Connector which calls for 300m spacing for full moves to full moves access and 75m spacing for full moves to a right-in/right-out.*

NEXTRANS RESPONSE: The Region's comments regarding the Road Characterization Study (RCS) have been reviewed. Given the subject site's approximately 235 m frontage and the existing full-moves access on the adjacent property located near the shared property line, the preferred 300 m full-moves access spacing cannot be achieved regardless of the access location. A shared access arrangement was explored; however, the adjacent landowner is not interested in pursuing this option at this time. A full-moves access is required to accommodate the operational needs of the proposed temporary truck parking facility, while the anticipated low traffic volumes are expected to result in minimal interaction with the adjacent access. Furthermore, Peel Region's planned future minor collector road along the common property boundary is anticipated to ultimately provide access to both properties, making the proposed Airport Road access an interim solution until the collector road is constructed.

6. *Access consolidation will be required, the Owner should look to create interconnectivity within the site and with neighbouring properties on Airport Road in an effort to provide sufficient access and traffic flow to and from the lands.*

NEXTRANS RESPONSE: The Region's objective of access consolidation and interconnectivity is acknowledged. The Owner has explored the potential for a shared access with the adjacent property to the north; however, the neighbouring landowner has advised that they are not interested in pursuing such an arrangement at this time. Accordingly, access consolidation cannot be achieved at this stage. Notwithstanding, the proposed use is temporary in nature and Peel Region's planned future minor collector road along the common property boundary is anticipated to ultimately provide access to both properties, facilitating the Region's long-term access management objectives.

7. *The Region requests that a functional design be included as part of the next submission which addresses auxiliary turn lane requirements and geometrics for any and all accesses proposed off of Airport Road.*

NEXTRANS RESPONSE: The requested functional design has not been prepared as part of this submission, as the proposed access arrangement remains under review and has not yet been finalized. Preparing a functional design prior to confirmation of the access configuration may result in unnecessary redesign should revisions to the access location or configuration be required. Subject to the Region confirming the proposed access arrangement in principle,

a functional design illustrating the access geometrics and any required auxiliary turn lane improvements can be prepared as part of a subsequent submission.

York Region, Public Works

8. *The Region in theory is in support of one access to the site, the Region cannot support a full moves access to the site as it is currently shown.*

NEXTRANS RESPONSE: The Region's objective of access consolidation and interconnectivity is acknowledged. The Owner has explored the potential for a shared access with the adjacent property to the north; however, the neighbouring landowner has advised that they are not interested in pursuing such an arrangement at this time. Accordingly, access consolidation cannot be achieved at this stage. Notwithstanding, the proposed use is temporary in nature and Peel Region's planned future minor collector road along the common property boundary is anticipated to ultimately provide access to both properties, facilitating the Region's long-term access management objectives.

9. *The Region requests that a functional design be included as part of the next submission which addresses auxiliary turn lane requirements and geometrics for any and all accesses proposed off of Airport Road.*

NEXTRANS RESPONSE: The requested functional design has not been prepared as part of this submission, as the proposed access arrangement remains under review and has not yet been finalized. Preparing a functional design prior to confirmation of the access configuration may result in unnecessary redesign should revisions to the access location or configuration be required. Subject to the Region confirming the proposed access arrangement in principle, a functional design illustrating the access geometrics and any required auxiliary turn lane improvements can be prepared as part of a subsequent submission.

10. *The Region in theory could support a centrally located left-in/right-in/right-out access, with proper auxiliary turn lanes and after site line analysis is completed.*

NEXTRANS RESPONSE: The Region's comments have been considered. The proposed access has since been relocated from the previously proposed central location to avoid the Natural Heritage System (NHS), improve available sight distance, and better accommodate the operational requirements of the proposed temporary truck parking facility. The rationale supporting the revised access location and configuration is provided in the accompanying Transportation Impact Study.

11. *The other accesses (existing driveways) are to be closed and the boulevard reinstated, as it states in the Traffic Brief that these buildings will be converted into offices for the development.*

NEXTRANS RESPONSE: Acknowledged. One consolidated access is proposed for the subject site.

12. *These buildings should have interconnection internally on the site and not access via Airport Road.*

NEXTRANS RESPONSE: Acknowledged. One consolidated access is proposed for the subject site.

13. *Access consolidation will be required, the Owner should look to create interconnectivity within the site and with neighbouring properties on Airport Road, in an effort to provide sufficient access and traffic flow to and from the lands.*

NEXTRANS RESPONSE: The Region's comments are acknowledged. The Owner explored the potential for a shared access with the adjacent property; however, the neighbouring landowner is not interested in pursuing such an arrangement at this time. Accordingly, access consolidation cannot presently be achieved. The proposed access is intended as an interim solution, with future access opportunities to be considered as the surrounding road network and adjacent lands develop.

14. *This site will require auxiliary turn lanes. The Region requests that a functional design be included as part of the next submission which addresses auxiliary turn lane requirements and geometrics for the access proposed off of Airport Road.*

NEXTRANS RESPONSE: A functional design has not been prepared at this stage, as the proposed access arrangement is still being finalized. Once the access location and configuration have been confirmed, the functional design will be completed as part of a future submission.

This study concludes that the forecast site traffic associated with both the interim and ultimate development conditions, will have a negligible impact on the surrounding road network. Accordingly, the proposed development can be accommodated by the existing and planned transportation network. We trust the enclosed report sufficiently addresses your requirements. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Yours truly,

NEXTRANS CONSULTING ENGINEERS

Prepared by:



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Transportation Analyst

Reviewed & Approved by:



Richard Pernicky, MITE
Principal

Issues and Revisions Registry

Identification	Date	Description of issued and/or revision
Traffic Brief	December 7, 2021	1 st Submission
Transportation Impact Study	August 26, 2026	2 nd Submission

EXECUTIVE SUMMARY

NexTrans Consulting Engineers (a Division of NextEng Consulting Group Inc.) is pleased to present the enclosed Transportation Impact Study in support of a Zoning By-law Amendment application for a proposed temporary truck and trailer parking facility under interim conditions and a transportation depot incorporating a cross-dock facility under ultimate conditions.

Development Proposal

The subject lands are currently vacant. The proposed development includes an interim condition consisting of a temporary truck and trailer parking facility with 163 vehicle parking spaces. Under ultimate conditions, a portion of the interim truck and trailer parking facility will be redeveloped to accommodate an 8,800 m² cross-dock facility, a two-storey office building, and an ancillary six-bay truck wash facility, while maintaining truck and trailer parking on the remainder of the site. The ultimate condition also proposes 145 vehicle parking spaces. Vehicular access to the site is proposed via a full-movement driveway onto Airport Road near the northern property line.

Under interim site traffic conditions, the site is projected to generate a total of 37 two-way trips (19 inbound and 18 outbound) during AM peak hour and a total of 60 two-way trips (35 inbound and 24 outbound) during PM peak hour. The site is ultimately projected to generate a total of 170 two-way trips (137 inbound and 32 outbound) during AM peak hour and 188 two-way trips (53 inbound and 135 outbound) during PM peak hour.

Capacity Analysis

Under existing conditions, the study area intersections and proposed site access are operating with residual capacity, acceptable levels of service, and manageable delays and queues. Under 2033 future background conditions, operational constraints are forecast at the study area intersections, particularly during the PM peak hour at Airport Road/Old School Road/Healey Road; however, these deficiencies are attributable to background traffic growth and occur independently of the proposed development.

Under 2033 future total conditions, the interim development is expected to have only a marginal impact on network operations, with the proposed site access continuing to operate with residual capacity and acceptable levels of service. Under ultimate conditions with the planned roadway improvements, including the Airport Road widening and Airport Road/Old School Road/Healey Road roundabout, network operations are substantially improved, although operational constraints remain at Airport Road/Mayfield Road.

Access Review

Under interim conditions, the proposed full-movement access onto Airport Road is considered appropriate despite not meeting the Region of Peel's 300 m access spacing guideline, given the site constraints, proximity and low traffic volumes of the neighbouring access, and temporary nature of the proposed use. Sight distance is adequate, and a dedicated left-turn storage lane is not warranted based on the forecast traffic volumes.

Under ultimate conditions, the site is considered a high-impact development under Peel Region's access management thresholds, with physical access restrictions and auxiliary turn lanes appropriate; the planned centre two-way left-turn lane on Airport Road will accommodate the auxiliary lane requirement. The future east-west collector road may provide an opportunity for a more comprehensive long-term access arrangement.

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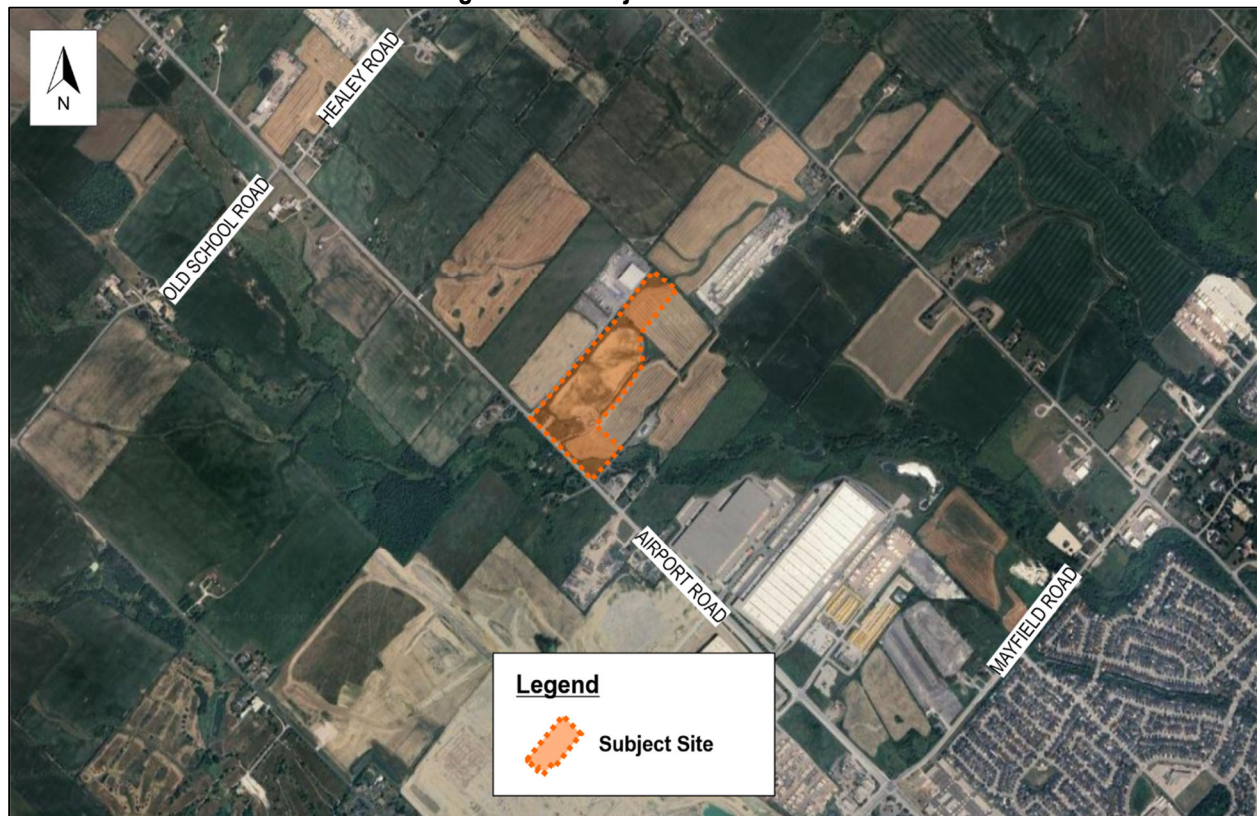
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1.0 INTRODUCTION

NexTrans Consulting Engineers (a Division of NextEng Consulting Group Inc.) is pleased to present the enclosed Transportation Impact Study in support of a Zoning By-law Amendment application for a proposed temporary transport truck and trailer parking facility. The 11.85ha subject lands are located on the east side of Airport Road, approximately 1.2 km north of the intersection of Perdue Court, Davis Lane and Airport Road, in the Town of Caledon.

The location of the proposed development is illustrated in **Figure 1-1**.

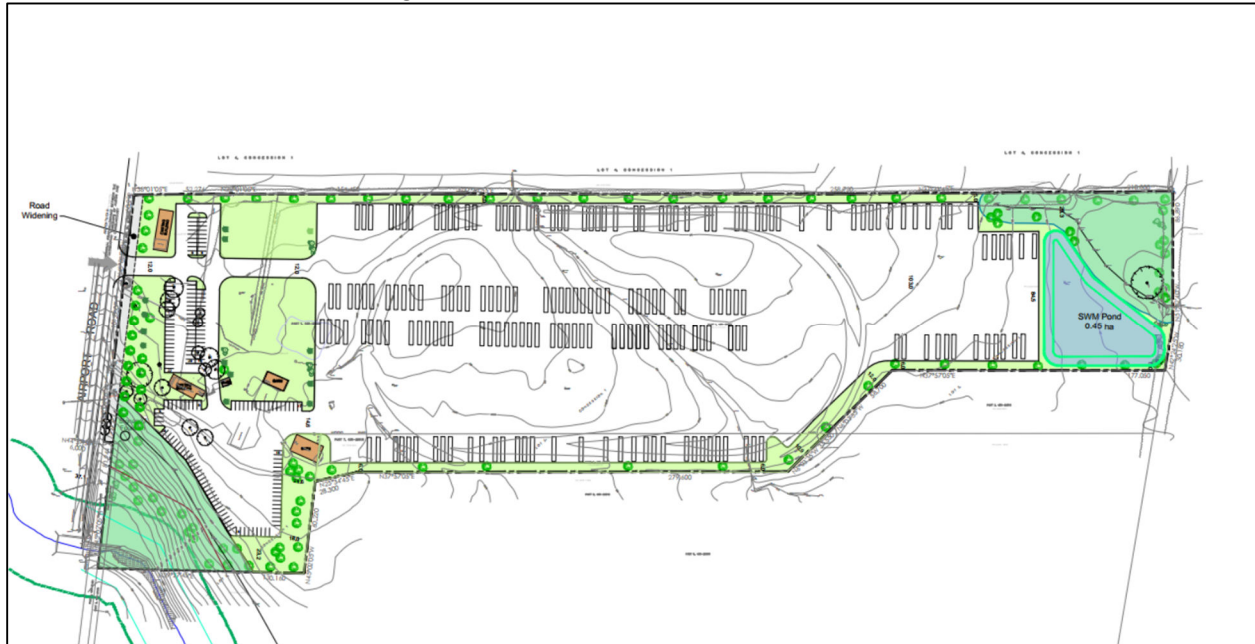
Figure 1-1 – Subject Site Location



The subject lands are currently vacant. The proposed development includes an interim condition consisting of a temporary truck and trailer parking facility with 163 vehicle parking spaces. Under ultimate conditions, a portion of the interim truck and trailer parking facility will be redeveloped to accommodate an 8,800 m² cross-dock facility, a two-storey office building, and an ancillary six-bay truck wash facility, while maintaining truck and trailer parking on the remainder of the site. The ultimate condition also proposes 145 vehicle parking spaces. Vehicular access to the site is proposed via a full-movement driveway onto Airport Road near the northern property line.

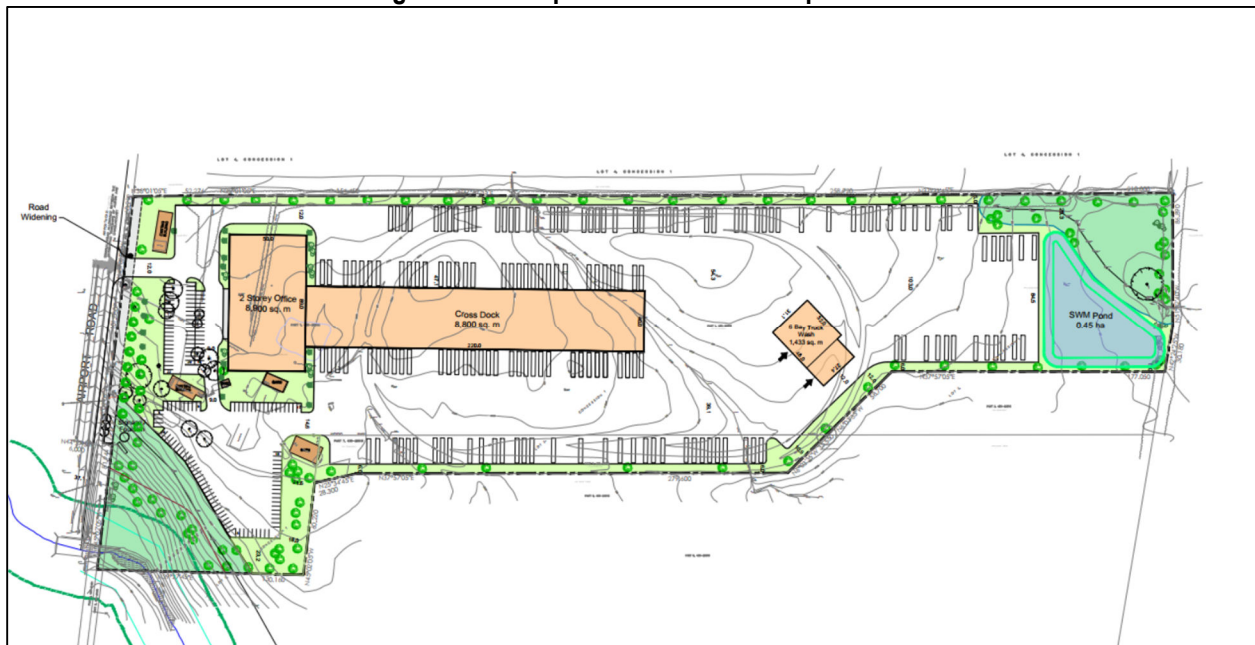
The concept plan of the interim condition is illustrated in **Figure 1-2**.

Figure 1-2 – Proposed Interim Concept Plan



The concept plan of the proposed ultimate condition is illustrated in **Figure 1-3**, and both concept plans are enclosed in full detail in **Appendix A**.

Figure 1-3 – Proposed Ultimate Concept Plan



1.1. Study Approach

The weekday morning (AM) and weekday afternoon (PM) peak hours were assessed. Existing conditions were evaluated using a 2026 baseline year. An assumed build-out year of 2028 was adopted, with a five-year horizon (2033) selected for the assessment of the future traffic conditions. The Terms of Reference established with the Town and the Region, as well as correspondence, are enclosed in **Appendix B**.

2.0 EXISTING TRAFFIC CONDITIONS

2.1. Existing Road Network

The proposed transport truck & trailer parking facility is located to the northwest corner of the Mayfield Road and Dixie Road intersection, in the Town of Caledon. The existing road network is described as follows:

Airport Road is a north-south Regional roadway under the jurisdiction of the Region of Peel. Within the study area, Airport Road is generally comprised of a two-lane rural cross-section with one travel lane provided in each direction. The roadway is characterized by paved shoulders, open drainage ditches, and a posted speed limit of 80 km/h. Access to adjacent properties is generally provided via private driveways, with land uses consisting primarily of rural residential, agricultural, and industrial/commercial developments.

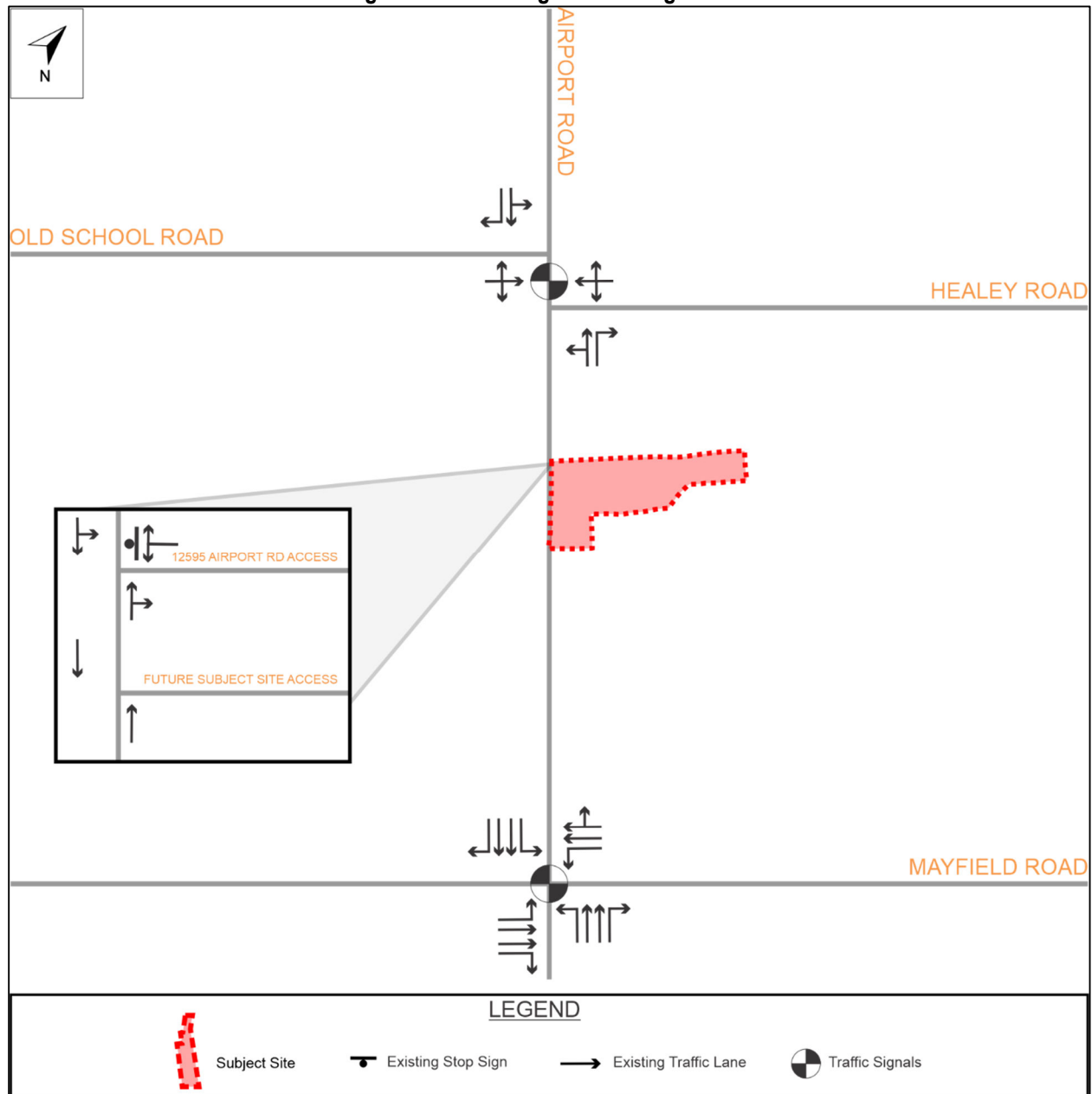
Old School Road is an east-west Regional roadway under the jurisdiction of the Region of Peel. Within the vicinity of the subject site, the roadway generally consists of a two-lane rural cross-section with one travel lane in each direction, paved shoulders, and open drainage ditches. The posted speed limit is generally 80 km/h. The roadway provides connectivity between Airport Road and surrounding rural and industrial areas and accommodates a mix of local and through traffic.

Healey Road is an east-west Regional roadway under the jurisdiction of the Region of Peel. Within the study area, Healey Road generally consists of a two-lane rural cross-section with one travel lane in each direction. The roadway includes paved shoulders with roadside drainage provided by open ditches, and is subject to a posted speed limit of 80 km/h. Healey Road serves industrial and rural land uses within the area and provides access to Airport Road and the surrounding Regional road network.

Mayfield Road / Regional Road 14: is an east-west regional road under the jurisdiction of Peel Region within the Town of Caledon and is classified as a Major Arterial Road. Mayfield Road near the study area has an existing six-lane cross section (three lanes per direction) to the west of Dixie Road and an existing five-lane cross section (three lanes in the northbound direction and two lanes in the southbound direction) to the east of Dixie Road and a posted speed limit of 80 km/h.

Figure 2-1 depicts the lane configuration of the existing road network.

Figure 2-1 – Existing Lane Configuration



2.2. Existing Active Transportation Infrastructure

Sidewalks

There are no dedicated active transportation facilities (e.g., sidewalks, bicycle lanes, or multi-use trails) within the immediate vicinity of the subject site. Pedestrian and cyclist activity is therefore anticipated to be limited.

2.3. Existing Transit Network

There are no public transit services operating within the immediate vicinity of the subject site. Given the nature of the proposed temporary truck parking facility, the majority of site trips are expected to occur by truck or private vehicle.

2.4. Existing Traffic Volumes

Weekday morning and afternoon peak period turning movement counts (TMC) were undertaken by Spectrum Traffic Inc. for all study area intersections.

The signal timing plan for the signalized intersection of Airport Road and Mayfield Road was obtained from Peel Region.

Existing TMC data and signal timing plans are enclosed in **Appendix C**. A summary of traffic data collection is detailed in **Table 2.1**.

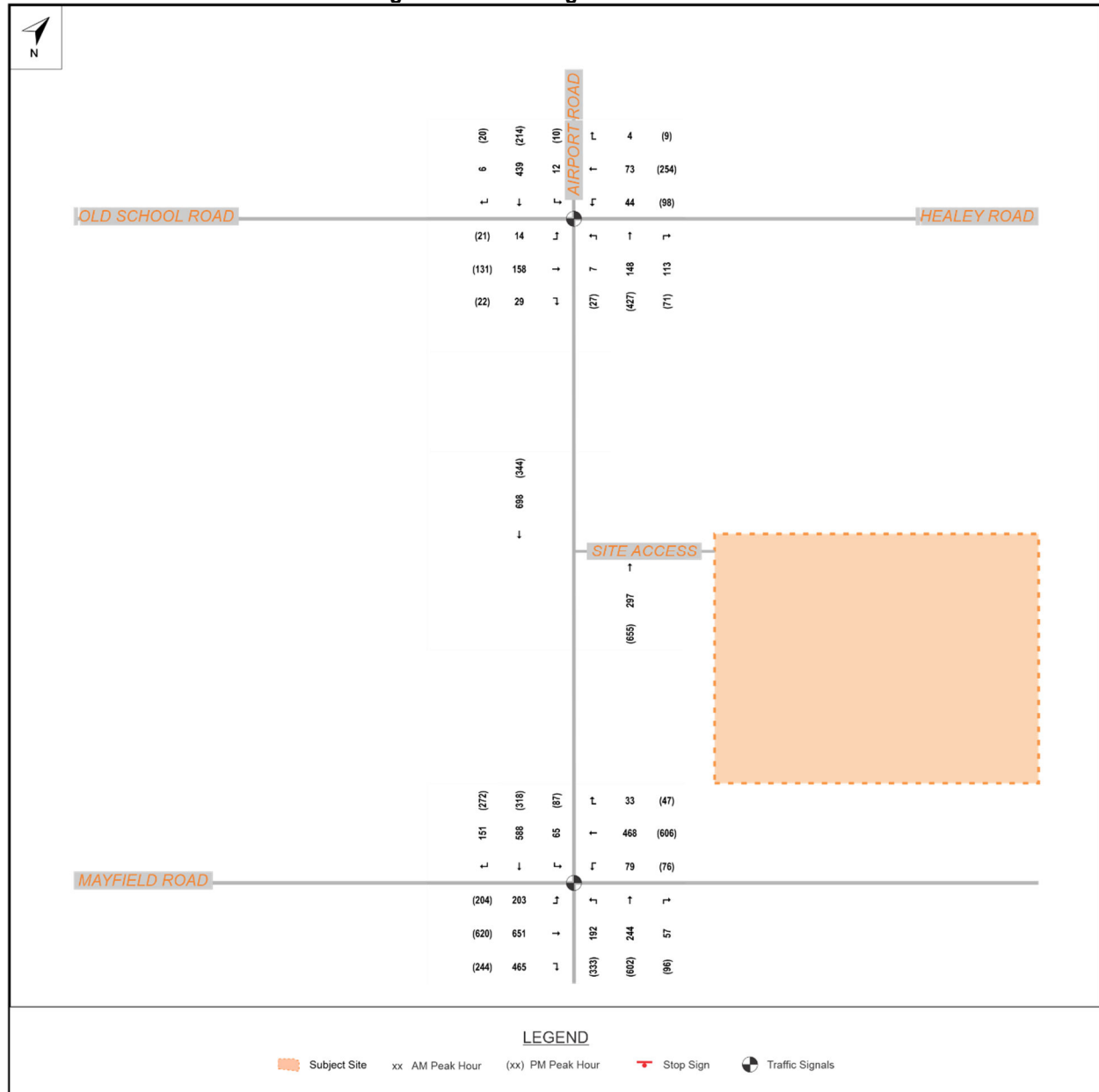
Table 2.1: Traffic Data Collection Summary

Intersection	Survey Date
Turning Movement Count Data	
Airport Road & Old School Road/Healey Road	November 4, 2024
Airport Road & 12541 Airport Road	May 20, 2026
Airport Road & Mayfield Road	May 20, 2026
Signal Timing Plans	
Airport Road & Old School Road/Healey Road	November 7, 2024
Airport Road & Mayfield Road	May 28, 2026

2.5. Existing Traffic Assessment

The existing traffic volumes are illustrated in **Figure 2-2** and were analyzed using Synchro 10 software. The methodology of the software follows the procedures described and outlined in the highway capacity manual, HCM 2000, published by the Transportation Research Board.

Figure 2-2 – Existing Traffic Volumes



Peak hour factors (PHFs) were applied to each study area intersection for the weekday AM, weekday PM and Saturday peak hours. The detailed Synchro output is provided in **Appendix D**. The results of the capacity analysis are summarized in **Tables 2.2**.

Table 2.2: Existing Traffic Assessments

Table 2.2: Existing Traffic Assessments											
Intersection	Movement	Weekday AM Peak Hour					Weekday PM Peak Hour				
		v/c	Delay (s)	LOS	Queue		v/c	Delay (s)	LOS	Queue	
					50 th	95 th				50 th	95 th
Signalized Intersections											
Airport Road & Old School Road/Healey Road	Overall	0.63	26.8	C	-	-	0.62	28.2	C	-	-
	EBL	0.45	28.2	C	26.1	59.8	0.43	28.0	C	26.7	60.3
	EBT	0.50	33.2	C	17.9	40.0	0.49	34.1	C	18.6	40.6
	EBR	0.31	19.2	B	17.5	34.0	0.32	20.3	C	18.5	35.8
	WBL	0.07	10.6	B	0.0	5.0	0.07	11.2	B	0.0	5.3
	WBT	0.81	31.4	C	63.7	106.5	0.82	33.9	C	67.3	112.4
Airport Road & Mayfield Road	Overall	0.69	33.9	C	-	-	0.65	39.4	D	-	-
	EBL	0.77	38.8	D	33.7	45.0	0.75	41.4	D	40.2	50.8
	EBT	0.72	39.7	D	79.6	91.6	0.78	48.8	D	91.7	103.8
	EBR	0.57	36.6	D	33.4	67.2	0.42	40.1	D	11.0	42.0
	WBL	0.44	29.2	C	11.9	19.0	0.46	37.6	D	14.2	21.6
	WBT	0.63	39.3	D	58.2	68.1	0.79	56.0	E	72.7	84.5
	NBL	0.56	21.4	C	24.7	46.0	0.51	20.5	C	26.2	49.3
	NBT	0.22	24.0	C	22.0	36.7	0.21	23.9	C	23.0	40.2
	NBR	0.05	22.3	C	0.0	4.7	0.05	22.3	C	0.0	6.5
	SBL	0.17	21.4	C	8.3	19.0	0.16	22.0	C	8.8	20.4
	SBT	0.53	31.8	C	64.3	88.2	0.50	32.6	C	67.2	103.3
	SBR	0.15	26.5	C	0.0	15.9	0.15	27.5	C	0.0	18.1

Based on the capacity analysis of existing traffic conditions, all study area intersections are currently operating with residual capacity, acceptable levels of service and manageable delay and queue lengths. The subject driveway also operates with acceptable levels of service, residual capacity and with negligible delay and queue lengths.

3.0 FUTURE BACKGROUND CONDITIONS

An assumed build-out year of 2028 was adopted, with a five-year horizon (2033) selected for the future assessment.

3.1. Planned Transportation Infrastructure Improvements

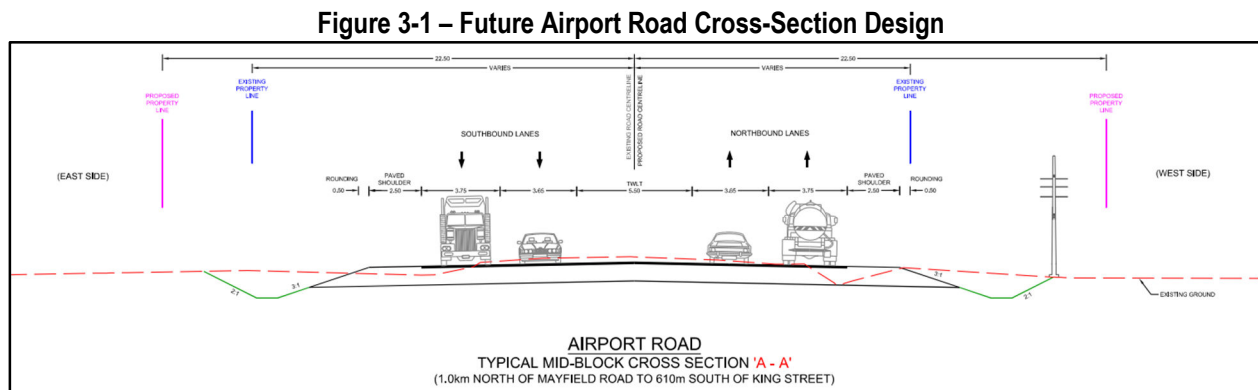
The Peel Region Municipal Class Environmental Assessment of Airport Road from 1.0km north of Mayfield Road to 0.6km north of King Street and the Airport Road – Design Plan Between Mayfield Road and King Street was reviewed to determine the future transportation network on Airport Road.

3.1.1. Airport Road Widening

Based on the results of the EA traffic analysis, Regional staff determined recommended several measures. Two of the measures recommended by Regional staff by 2031 are noted below:

- By 2031, a road widening to five lanes (four through lanes and a centre two-way left-turn) on Airport Road within the study will be required based on link level volumes and signal/roundabout analysis.
- Airport Road/Old School Road/ Healey Road – a partial 2-lane roundabout is recommended by 2031 with two entries and approaches on the north and south approaches and either a right turn bypass or a flared two-lane entry on Healey Road.

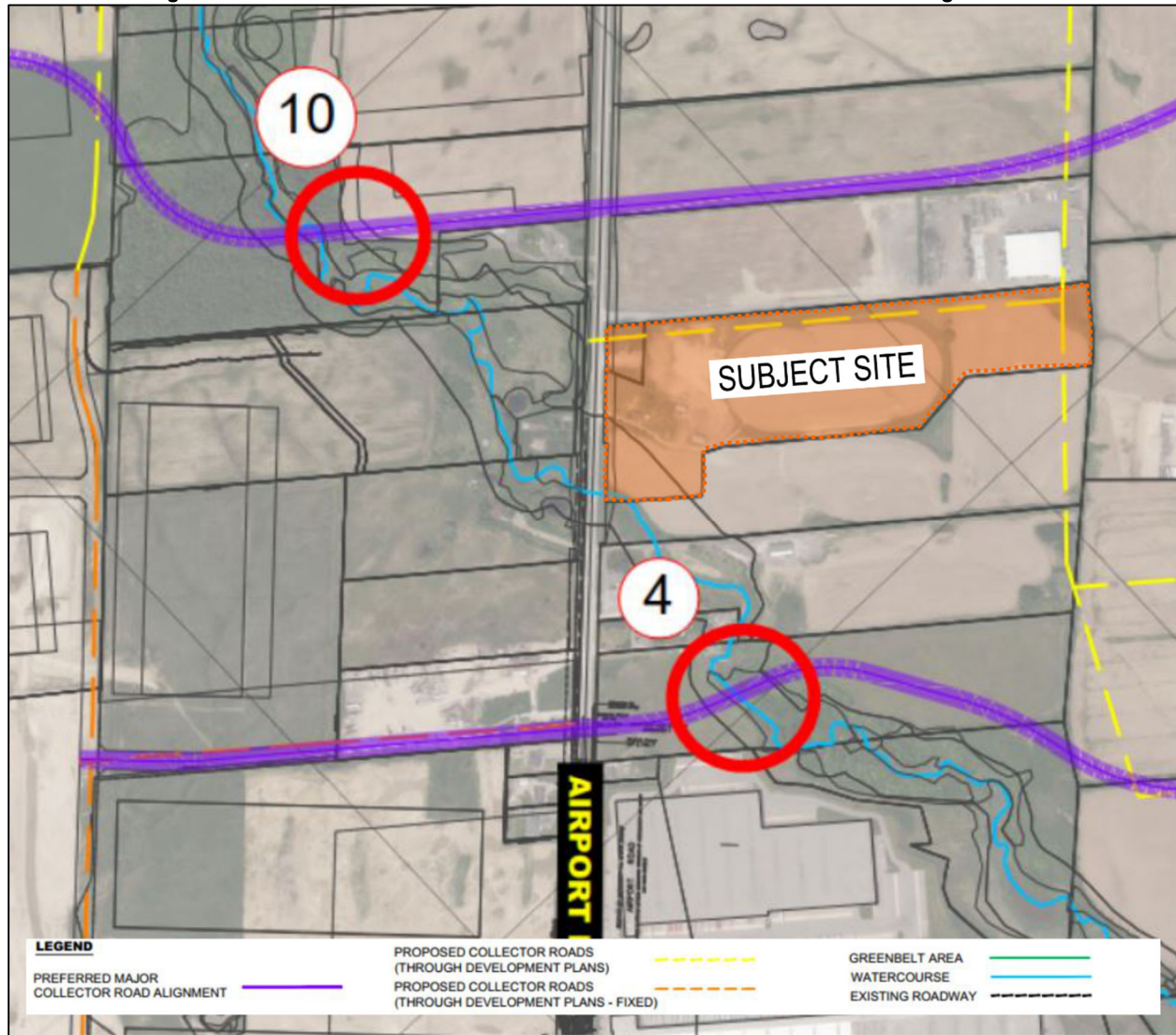
The above-noted measures will be modeled for the future background traffic conditions to reflect the Region's ultimate roadway design. An excerpt of the typical Airport Road cross-section design is illustrated in **Figure 3-1** below.



3.1.2. Caledon MMTMP Addendum Preferred Alternative Alignments

The Town of Caledon's Multimodal Transportation Master Plan (MMTMP) Addendum identifies several planned transportation improvements within the vicinity of the subject lands to accommodate future growth. In particular, the MMTMP identifies the preferred alignment of an east-west collector road generally along the northern limit of the subject lands. An excerpt from the MMTMP Addendum illustrating the planned future road network is provided in **Figure 3-2**.

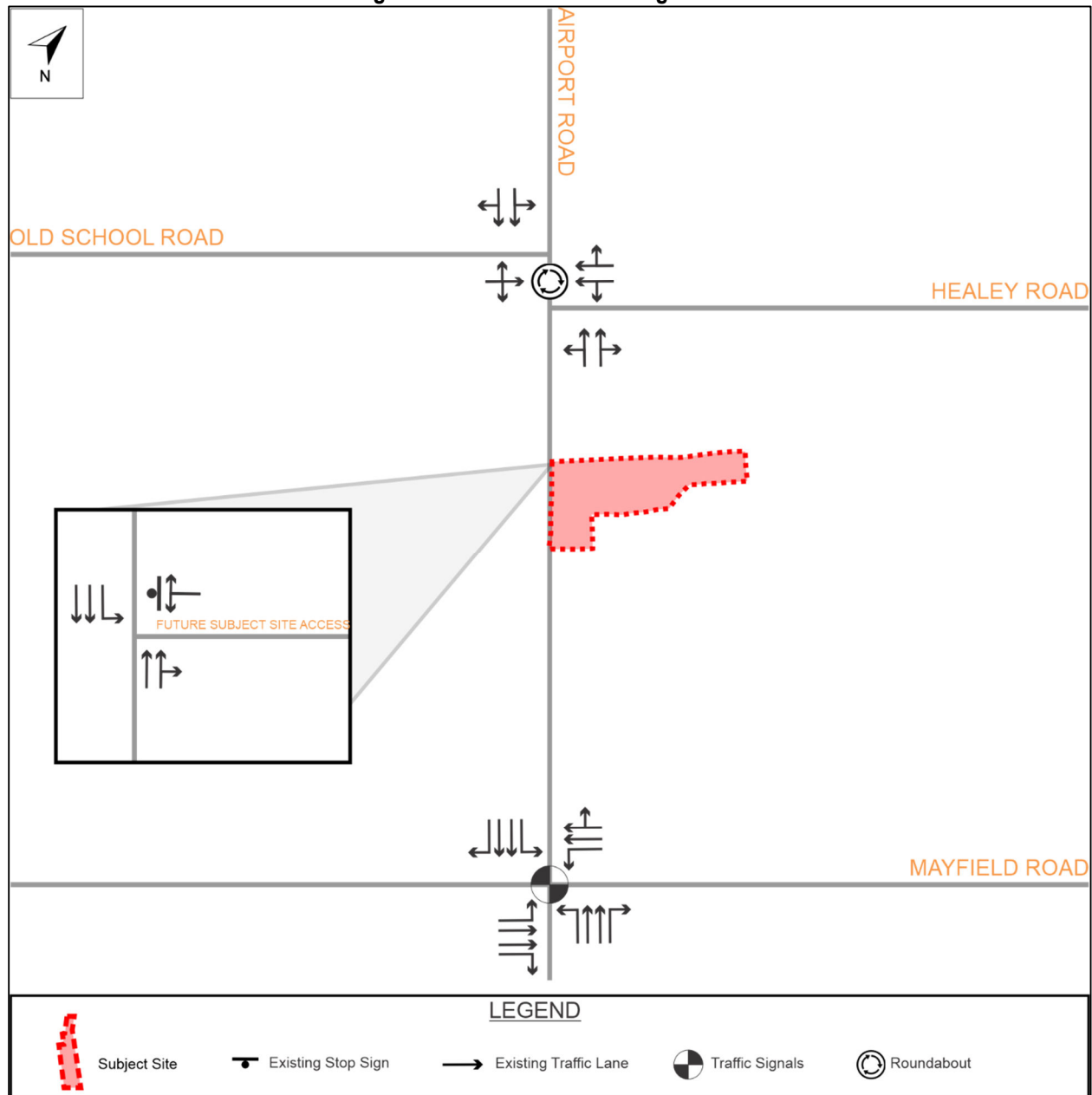
Figure 3-2 – Town of Caledon MMTMP Addendum Preferred Alternative Alignments



The proposed east-west collector road is intended to connect to Airport Road and form part of the ultimate transportation network serving future development within the area. However, as the alignment, implementation timing, intersection configuration, and ultimate access arrangements associated with the future collector road have not yet been finalized, the proposed collector road has not been incorporated into the transportation analysis.

Accordingly, the transportation analysis has been completed under two roadway network scenarios. The first scenario considers the existing roadway network, while the second considers the planned widening of Airport Road and the implementation of the proposed roundabout at the intersection of Airport Road and Old School Road/Healey Road. The future roadway network configuration considered in the transportation analysis is illustrated in **Figure 3-3**.

Figure 3-3 – Future Lane Configuration



Future background traffic conditions were assessed under both the existing roadway network and the future roadway network scenarios to evaluate the operational performance of the surrounding transportation system under planned infrastructure improvements.

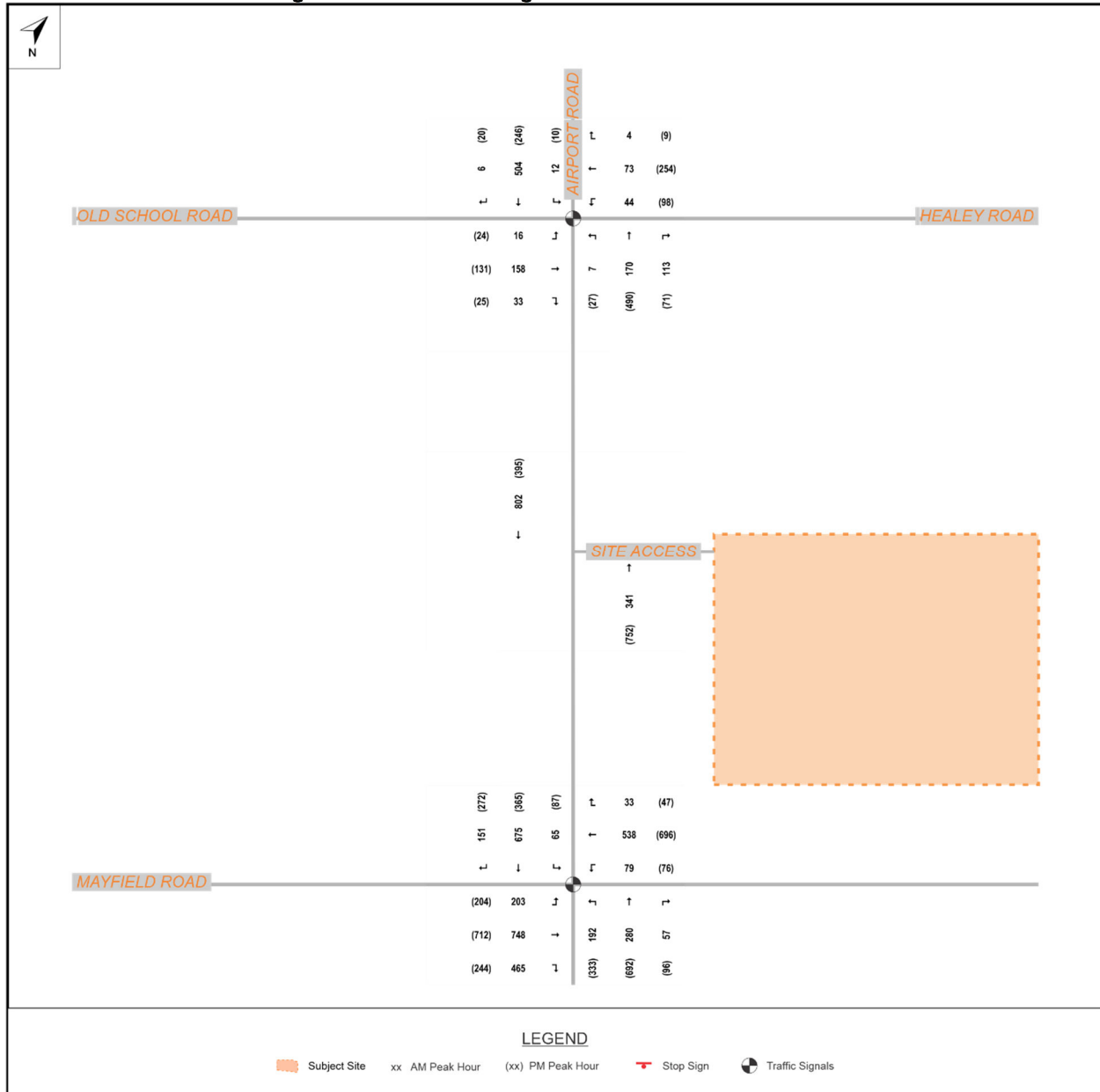
3.2. Future Corridor Growth

Corridor growth was forecasted by applying an annual 2% growth rate to the existing traffic volumes. The selected growth rate is consistent with recent Transportation Impact Studies prepared for background developments within the area of the subject site.

It is to be noted that the Town of Caledon provided 2051 EMME model forecasts associated with the Multi-Modal Transportation Master Plan (MMTMP) Addendum; however, the corresponding base-year EMME model was not provided and as such, future corridor growth could not be reliably derived for the future assessment horizon. As such, the 2% annual growth rate was adopted instead.

The future background growth traffic volumes (existing traffic volumes + 2% growth) are illustrated in **Figure 3-4**.

Figure 3-4 – Future Background Growth Traffic Volumes



3.3. Background Developments

The following development applications were included in our assessment of background traffic:

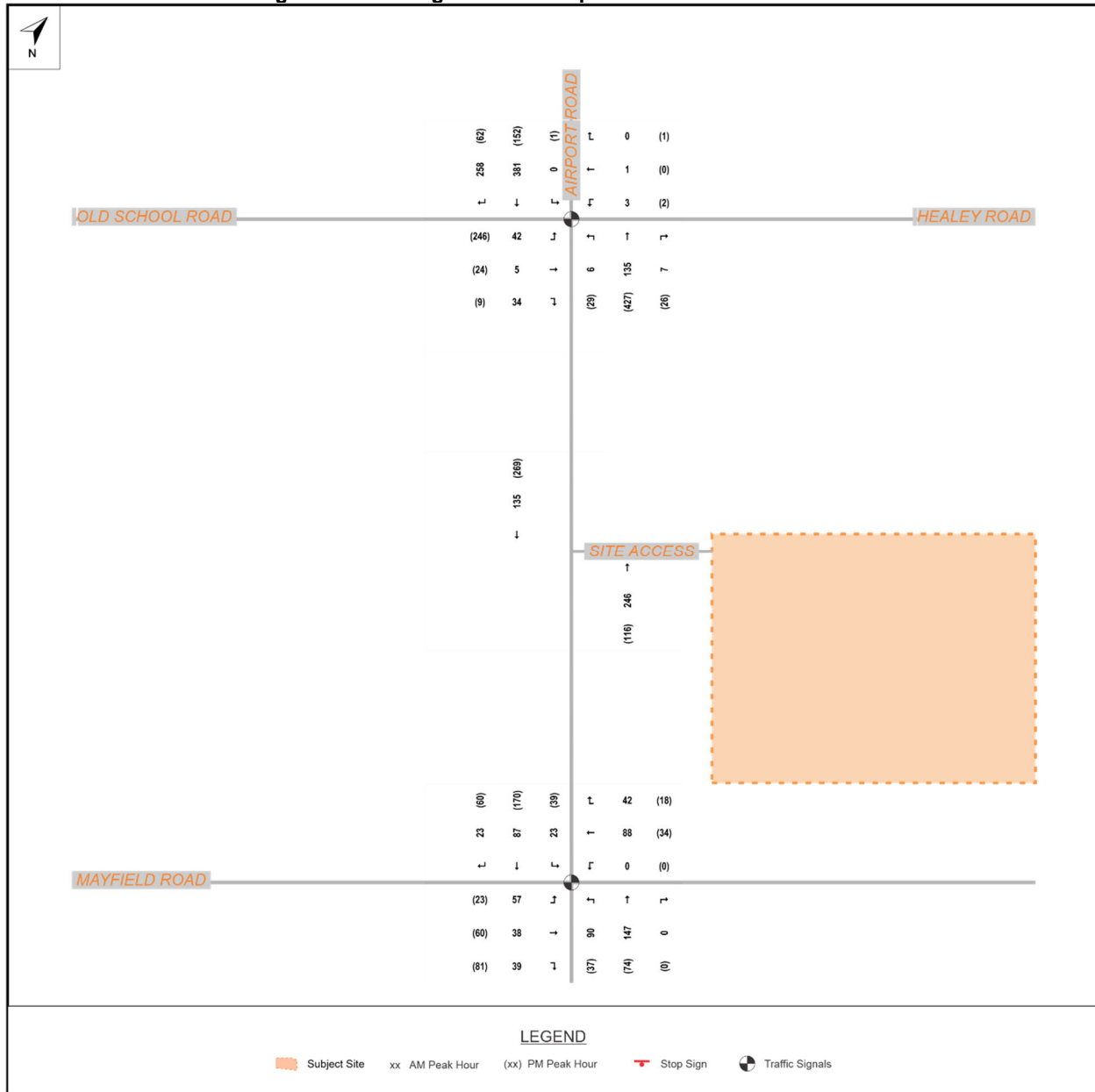
1. 12245 Torbram Road – Plan of Subdivision 21T-21002C
2. 0 Airport Road – Secondary Plan – OPA 2025-0012
3. 13291 Airport Road – ZBA 2025-0011

The following background development was reviewed; however, in reviewing the associated traffic report, it is noted that no site traffic volumes were assigned to the study area road network and was not considered in this assessment.

4. Tullamore Subdivision – Plan of Subdivision 21T-25006C

Excerpts of the site traffic forecasts from the traffic studies prepared for each of the above-noted developments are enclosed in **Appendix E**. The sum of the background development site traffic volumes is illustrated in **Figure 3-5**.

Figure 3-5 – Background Development Site Traffic Volumes

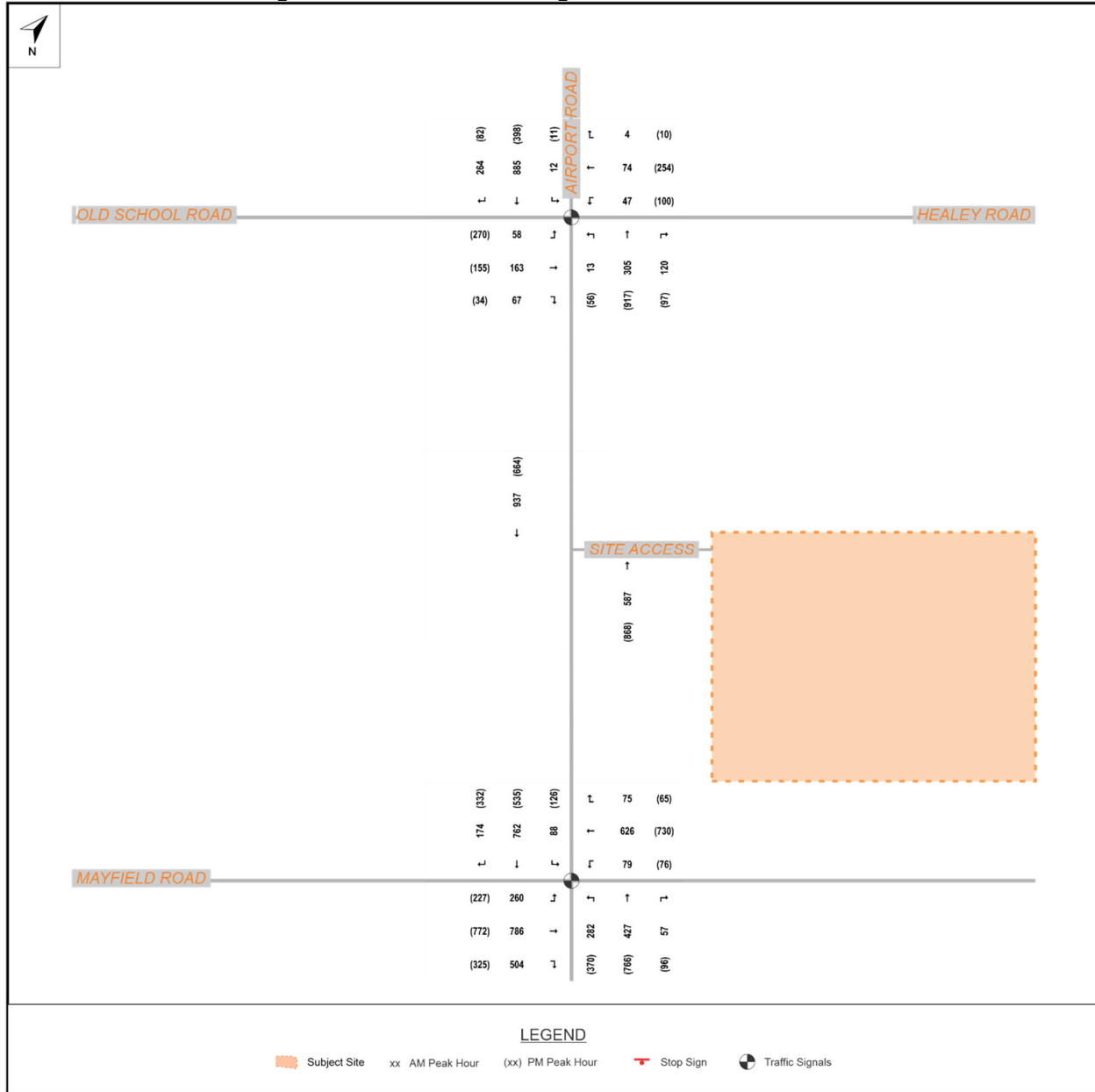


3.4. Future Background Traffic Assessment

To establish a baseline traffic condition for the assessment of the future background total traffic volumes (i.e., future background growth + background development traffic), the traffic volumes were assessed initially under existing road conditions (i.e., assuming no changes to the existing road network). Subsequently, the traffic volumes were assessed under the future road network, which considers the widening of Airport Road and the installation of a roundabout at the intersection of Airport Road and Old School Road / Healey Road.

The estimated 2033 future background total traffic volumes are illustrated in **Figure 3-6**.

Figure 3-6 – 2033 Future Background Total Traffic Volumes



3.4.1. Existing Road Network

The methodology used for the 2033 future background traffic analysis under the existing road network follows the procedures described and outlined in HCM 2000, published by the Transportation Research Board. The detailed calculations are enclosed in **Appendix F** and **Table 3.1** summarizes the level of service at the study area intersections under future background traffic conditions.

Table 3.1: 2033 Future Background Traffic Assessments (Existing Road Network)

Intersection	Movement	Weekday AM Peak Hour					Weekday PM Peak Hour				
		v/c	Delay (s)	LOS	Queue		v/c	Delay (s)	LOS	Queue	
					50 th	95 th				50 th	95 th
Signalized Intersections											
Airport Road & Old School Road/Healey Road	Overall	0.97	52.8	D	-	-	1.40	241.5	F	-	-
	EBT	0.99	97.4	F	67.9	131.5	1.57	323.4	F	166.7	243.5
	WBT	0.63	54.6	D	29.0	48.7	0.86	61.2	E	88.6	125.0
	NBT	0.67	23.1	C	53.5	98.1	1.64	329.3	F	359.7	460.8
	NBR	0.08	7.3	A	0.0	4.6	0.08	7.5	A	4.4	9.0
	SBT	1.04	68.7	E	235.9	332.0	1.33	202.8	F	136.0	208.9
	SBR	0.22	5.9	A	3.1	10.7	0.05	10.2	B	0.0	5.9
Airport Road & Mayfield Road	Overall	1.14	47.8	D	-	-	0.99	46.8	D	-	-
	EBL	1.14	126.8	F	46.3	98.1	0.92	70.2	E	44.4	82.3
	EBT	0.76	37.8	D	94.1	115.3	0.68	37.1	D	95.5	116.9
	EBR	0.64	35.6	D	50.1	93.0	0.25	29.3	C	1.6	21.2
	WBL	0.48	27.2	C	10.8	19.0	0.35	29.6	C	11.1	19.0
	WBT	0.78	41.0	D	82.8	100.9	0.89	55.2	E	112.3	139.0
	NBL	1.04	95.6	F	54.8	125.0	0.98	72.0	E	72.5	144.9
	NBT	0.45	30.9	C	45.9	64.0	0.76	44.2	D	108.2	150.8
	NBR	0.05	26.3	C	0.0	4.7	0.13	32.4	C	4.2	19.6
	SBL	0.30	26.1	C	12.7	24.5	0.60	36.0	D	21.6	37.2
	SBT	0.84	48.0	D	95.4	120.0	0.65	47.5	D	72.7	92.7
	SBR	0.17	32.4	C	0.0	17.4	0.30	41.5	D	4.8	32.8

Based on the results of the capacity analysis under 2033 future background traffic conditions, both study area intersections are projected to experience increased congestion relative to existing conditions, with several critical movements operating near or over capacity during the AM and PM peak hours. At the Airport Road and Old School Road/Healey Road intersection, the overall intersection v/c ratio is projected to increase to 0.97 (LOS D) during the AM peak hour and 1.40 (LOS F) during the PM peak hour. During the AM peak hour, the southbound through movement is projected to operate at v/c = 1.04 (LOS E), with a 95th percentile queue of approximately 332 m. During the PM peak hour, more significant capacity constraints are projected, including the eastbound through movement at v/c = 1.57 (LOS F), the northbound through movement at v/c = 1.64 (LOS F), and the southbound through movement at v/c = 1.33 (LOS F). The corresponding 95th percentile queues for these movements are approximately 244 m, 461 m, and 209 m, respectively.

At the Airport Road and Mayfield Road intersection, the overall intersection v/c ratio is projected to be 1.14 (LOS D) during the AM peak hour and 0.99 (LOS D) during the PM peak hour. During the AM peak hour, the eastbound left-turn movement and northbound left-turn movement are projected to operate at v/c = 1.14 (LOS E) and v/c = 1.04 (LOS F), respectively, with 95th percentile queues of approximately 98 m and 125 m. During the PM peak hour, the overall intersection is projected to remain within capacity; however, the northbound left movement is expected to operate with a v/c = 0.98 (LOS E), with a 95th percentile queue length of 145m.

On this basis, the future background analysis indicates that the study area intersections are expected to experience notable operational constraints independent of the proposed development, particularly during the PM peak hour at the Airport Road and Old School Road/Healey Road intersection. These background deficiencies are primarily associated with the forecast growth in traffic along Airport Road and the surrounding road network and further demonstrate the need for planned improvements to the surrounding transportation network. In particular, the projected deterioration in intersection operations supports the planned widening of Airport Road and implementation of a roundabout at the Airport Road and Old School Road/Healey Road intersection, which are intended to

accommodate future traffic growth and improve the overall operation of the corridor. These planned improvements have therefore been considered as part of the future roadway network assessment presented in this study.

3.4.2. Ultimate Road Network

Given that the impacts of the planned road infrastructure improvements are limited to the Airport Road and Old School Road/Healey Road intersection within the study area, the analysis of the future roadway network was limited to this intersection. The methodology used for the 2033 future background traffic analysis under the ultimate road network follows the procedures described and outlined in HCM 2010 Roundabout, published by the Transportation Research Board.

The detailed calculations are enclosed in **Appendix G** and **Table 3.2** summarizes the level of service at the study area intersections under future background traffic conditions.

Table 3.2: 2033 Future Background Traffic Assessments (Ultimate Road Network)

Intersection	Movement	Weekday AM Peak Hour				Weekday PM Peak Hour			
		v/c	Delay (s/veh)	LOS	95 th Queue (veh)	v/c	Delay (s/veh)	LOS	95 th Queue (veh)
Airport Road & Old School Road/Healey Road	EBL	0.48	16.7	C	3	0.65	17.8	C	5
	EBT	0.14	9.0	A	0	0.05	6.2	A	0
	WBL	0.08	5.7	A	0	0.44	18.2	C	2
	WBT	0.09	5.7	A	0	0.46	17.8	C	2
	WBR	0.00	4.5	A	0	0.03	9.2	A	0
	NBL	0.21	7.2	A	1	0.64	16.1	C	5
	NBT	0.24	7.4	A	1	0.70	18.4	C	6
	NBR	0.15	5.5	A	1	0.11	5.0	A	0
	SBL	0.50	10.4	B	3	0.30	9.1	A	1
	SBT	0.56	11.7	B	4	0.33	9.5	A	1
	SBR	0.31	7.3	A	1	0.10	5.2	A	0

Based on the results of the operational analysis of the 2033 future background traffic conditions under the ultimate road network, the study area intersections and the subject driveway are projected to operate with residual capacity, acceptable levels of service, and manageable delay and queue lengths during both the AM and PM peak hours.

Compared to the baseline future background scenario, the planned roadway improvements substantially improve the operational performance of the Airport Road and Old School Road/Healey Road intersection by providing additional capacity through the planned widening of Airport Road and improving the efficiency of intersection operations through the implementation of a roundabout.

4.0 SITE TRAFFIC

4.1. Trip Generation

The proposed development is intended to accommodate a transportation-related operation similar to an existing facility operated by the Owner on Dixie Road in the Town of Caledon. The existing Dixie Road facility is currently operational and accommodates truck and trailer parking operations similar to those proposed under the interim and ultimate conditions for the subject lands. As the existing operation is representative of the proposed use and is currently operational, traffic counts were undertaken at the existing Dixie Road facility to establish the observed trip-making characteristics of the operation.

The TMC data collection at the existing Dixie Road facility are tabulated in **Table 4.1**.

Table 4.1: Proxy Site Trips

Source	Morning Peak Hour			Afternoon Peak Hour		
	In	Out	Total	In	Out	Total
TMC Data Collection	17	16	33	32	22	54

The observed driveway traffic volumes at the existing Dixie Road facility have been used as the basis for estimating site traffic at the proposed Airport Road development, providing a site-specific basis that reflects the Owner's existing transportation operation. Given that the subject lands comprise approximately 11.85 ha, compared to 10.70 ha for the Dixie Road facility, a scaling factor of 1.11 (11.85 ha / 10.70 ha) was applied to account for the difference in site area.

Interim Site Condition

The resulting projected site traffic is summarized in **Table 4.2** for the interim site condition.

Table 4.2: Projected Interim Site Traffic Generation

Source	Parameter	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Dixie Road Proxy Site	Car Trips	17	1	18	17	24	41
	Truck Trips	2	17	19	19	0	19
	Total Trips	19	18	37	35	24	60

Under interim site traffic conditions, the site is projected to generate a total of 37 two-way trips (19 inbound and 18 outbound) during AM peak hour and a total of 60 two-way trips (35 inbound and 24 outbound) during PM peak hour.

Ultimate Site Condition

The ultimate development proposes the construction of an 8,800 m² cross-dock facility, an associated 8,900 m² two-storey office, and an ancillary 1,433 m² six-bay truck wash facility, while retaining a portion of the existing truck and trailer parking operation. Under the ultimate condition, approximately 70% of the subject lands would remain dedicated to the truck and trailer parking operation, with the remaining lands occupied by the proposed cross-dock facility, office, truck wash, stormwater management facility, access, and associated site features.

To determine the projected ultimate site traffic volumes for the proposed cross-dock and associated office, the Institute of Transportation Engineers (ITE) Trip Generation Manual 12th Edition was used. Accordingly, ITE Land Use Code (LUC) 150 – Warehouse was used to estimate trips for the proposed cross-dock and ITE LUC 710 – General Office Building was used to estimate trips for the proposed office building.

The trip forecasts for the ultimate site condition are detailed in **Table 4.3**.

Table 4.3: Projected Ultimate Site Traffic Generation

Source	Parameter	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Ultimate Remaining Truck & Trailer Parking Operation							
Dixie Proxy Site	Car Trips	12	1	12	12	17	29
	Truck Trips	2	12	13	13	0	13
ITE Trips							
ITE LUC 150 - Warehouse	Car Trips	18	5	23	8	22	30
	Truck Trips	1	1	2	1	1	2
ITE LUC 150 - Warehouse	Car Trips	105	14	119	18	95	113
	Truck Trips	0	0	0	1	0	1
Total		137	32	170	53	135	188

The site is ultimately projected to generate a total of 170 two-way trips (137 inbound and 32 outbound) during AM peak hour and 188 two-way trips (53 inbound and 135 outbound) during PM peak hour.

4.2. Trip Distribution

The trip distribution assumptions are based on the existing directional distribution of traffic entering and exiting the subject site, together with existing travel patterns within the study area road network and engineering judgement regarding the routes most likely to be used by site traffic.

Trip distribution is summarized in **Table 4.3** and trip assignment for the interim site condition is illustrated in **Figure 4-1** and the trip assignment for the ultimate site condition is illustrated in **Figure 4-2**.

Table 4.4 – Site Traffic Trip Distribution

Corridor	Direction	AM		PM	
		Inbound	Outbound	Inbound	Outbound
Airport Road	North	40%	37%	56%	29%
	South	58%	59%	42%	67%
Old School Road	West	1%	1%	1%	2%
Healey Road	East	1%	1%	1%	2%
Total		100%	100%	100%	100%

Figure 4-1 – Interim Site Traffic Volumes

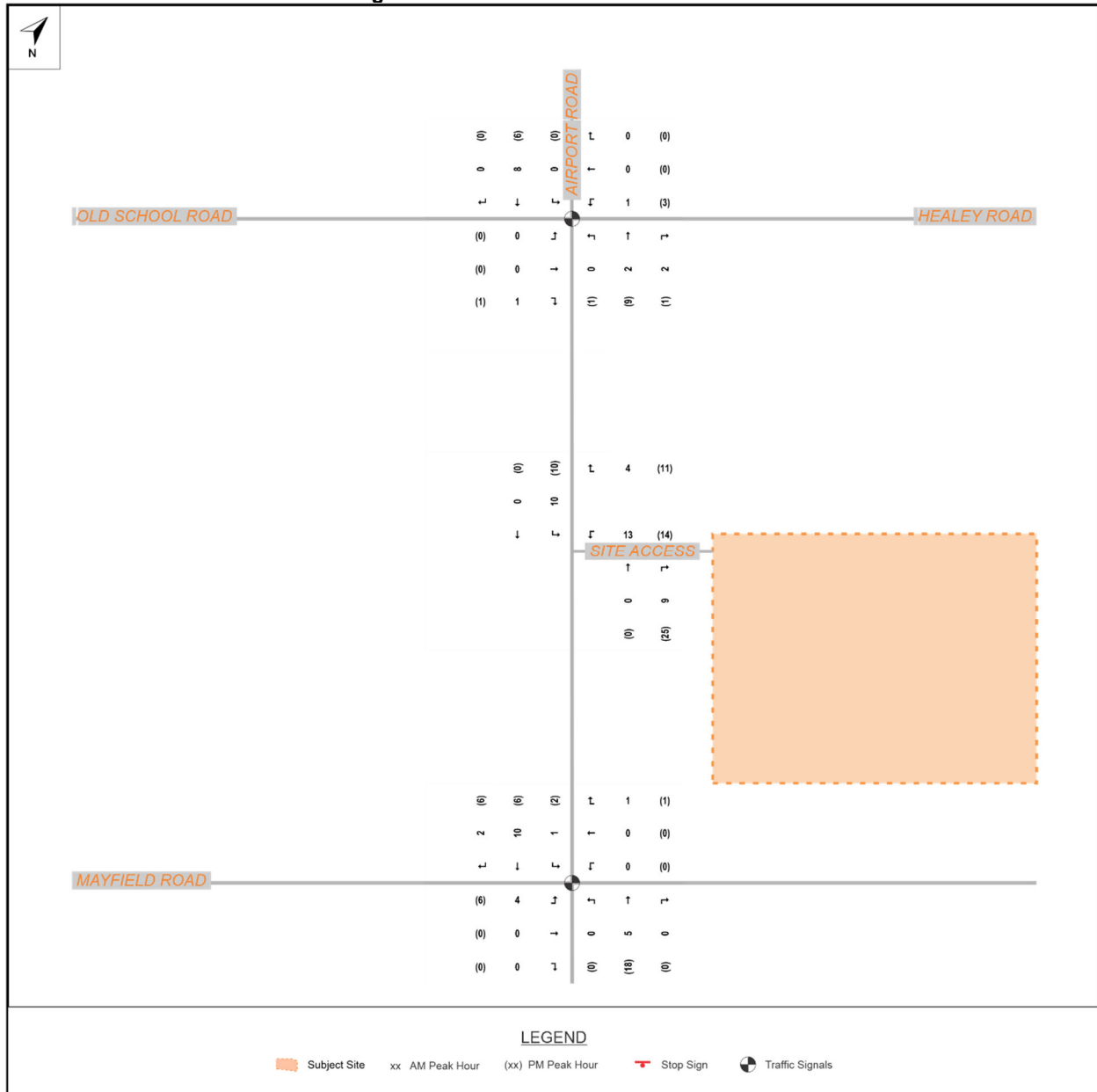
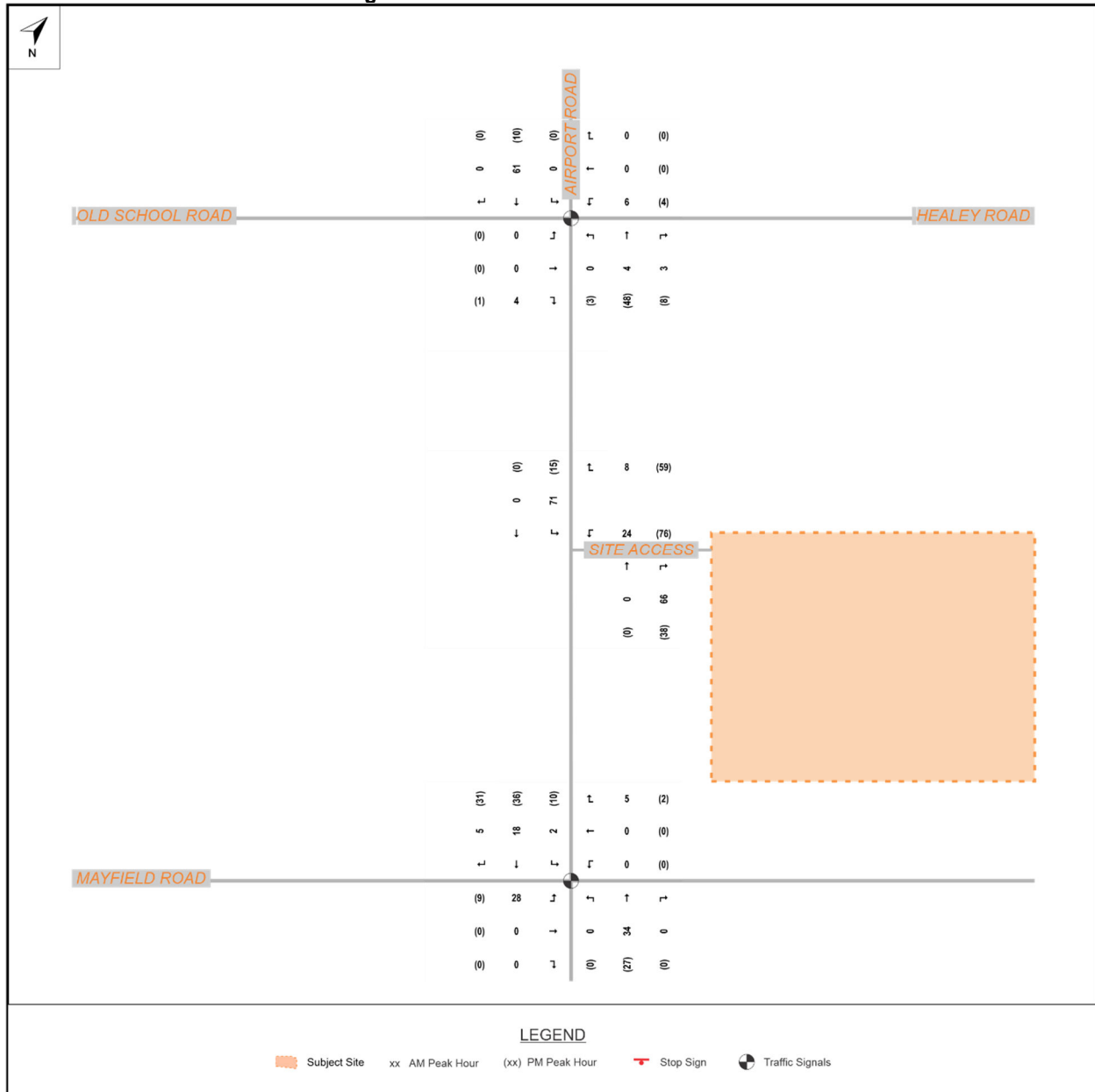


Figure 4-2 – Ultimate Site Traffic Volumes



5.0 FUTURE TOTAL ANALYSIS

Future total traffic conditions were assessed by combining the projected future background traffic volumes with the traffic generated by the proposed development. To account for the interim and ultimate development conditions and the planned improvements to the surrounding road network, the future total analysis considers the following roadway and development scenarios:

1. Future Total – Interim Condition: Existing roadway network with the proposed temporary truck and trailer parking facility.

2. Future Total – Ultimate Condition (Existing Road Network): Existing roadway network with the proposed ultimate development, consisting of the retained truck and trailer parking operation, cross-dock facility, office, and ancillary truck wash.
3. Future Total – Ultimate Condition (Ultimate Road Network): Planned roadway network improvements, including the widening of Airport Road and implementation of a roundabout at the Airport Road and Old School Road/Healey Road intersection, with the proposed ultimate development.

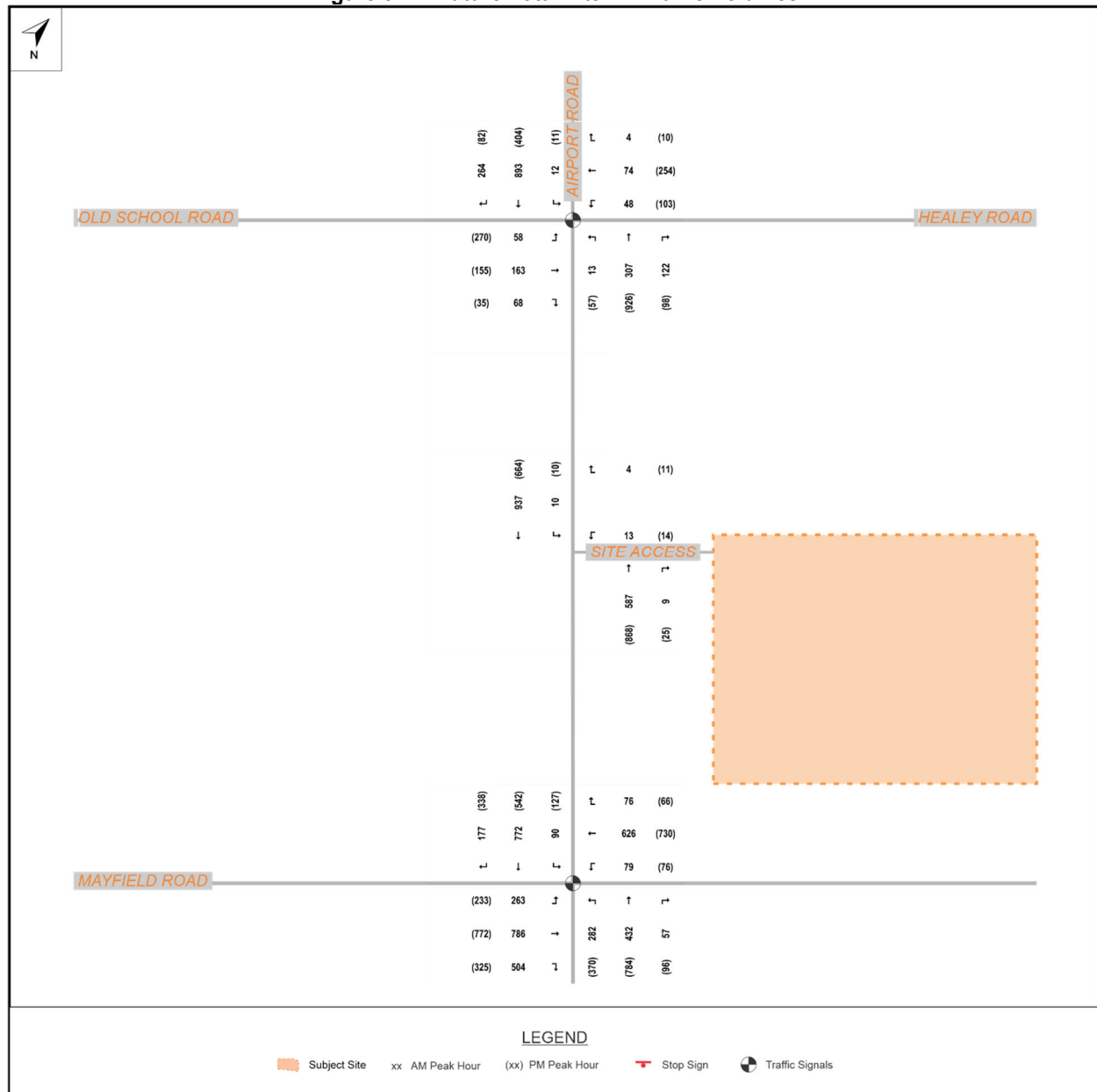
The future total analysis under the interim condition provides an assessment of the temporary truck and trailer parking operation prior to build-out of the ultimate development. The ultimate condition under the existing roadway network provides a conservative assessment of the proposed development independent of the planned roadway improvements, while the ultimate roadway network scenario represents the anticipated long-term condition with both the proposed development and planned transportation improvements in place.

5.1. Future Total – Existing Road Network

The 2033 future total interim traffic conditions were assessed based on the existing roadway network and the proposed temporary truck and trailer parking facility on the subject lands. Future total traffic volumes were established by combining the 2033 future background traffic volumes with the projected traffic generated by the interim site condition. The resulting traffic volumes were assigned to the study area road network in accordance with the trip distribution and assignment assumptions outlined in this report.

The future total interim traffic volumes are illustrated in **Figure 5-1**.

Figure 5-1 – Future Total Interim Traffic Volumes



5.1.1. Interim Site Condition

The results of the operational analysis are enclosed in **Appendix H** and are summarized in **Table 5.1**.

Table 5.1: 2033 Future Total Interim Traffic Assessments (Existing Road Network)

Intersection	Movement	Weekday AM Peak Hour					Weekday PM Peak Hour				
		v/c	Delay (s)	LOS	Queue		v/c	Delay (s)	LOS	Queue	
					50 th	95 th				50 th	95 th
Signalized Intersections											
Airport Road & Old School Road/Healey Road	Overall	0.98	54.6	D	-	-	1.43	252.8	F	-	-
	EBT	0.99	98.3	F	68.3	132.0	1.57	325.0	F	167.8	244.0
	WBT	0.63	55.0	D	29.3	49.2	0.86	61.2	E	89.4	125.9
	NBT	0.70	24.5	C	55.3	102.3	1.69	352.0	F	369.3	469.4
	NBR	0.08	7.3	A	0.0	4.7	0.08	7.5	A	4.4	9.1
	SBT	1.05	71.8	E	240.6	336.4	1.35	212.6	F	139.6	212.1
	SBR	0.22	5.9	A	3.2	10.8	0.05	10.3	B	0.0	5.9
Airport Road & Mayfield Road	Overall	1.16	48.7	D	-	-	1.01	48.0	D	-	-
	EBL	1.15	132.5	F	48.4	100.3	0.91	67.5	E	45.7	87.1
	EBT	0.76	37.8	D	94.1	115.3	0.67	36.2	D	93.1	116.9
	EBR	0.65	35.6	D	50.4	93.2	0.24	28.8	C	1.6	21.2
	WBL	0.48	27.2	C	10.8	19.0	0.35	29.6	C	10.8	19.0
	WBT	0.78	41.1	D	83.0	101.0	0.90	56.0	E	112.5	139.4
	NBL	1.05	99.2	F	57.4	127.4	1.02	83.9	F	73.6	145.9
	NBT	0.46	31.0	C	46.4	64.7	0.80	46.3	D	114.3	156.6
	NBR	0.05	26.3	C	0.0	4.7	0.13	33.0	C	4.3	19.6
	SBL	0.30	26.2	C	12.8	24.7	0.63	37.9	D	22.5	37.6
	SBT	0.86	49.3	D	97.2	122.1	0.65	47.6	D	73.5	93.8
	SBR	0.18	32.6	C	0.0	17.5	0.32	41.8	D	6.0	35.1
Signalized Intersections											
Airport Road & Site Access	WBLR	0.17	42.3	E	-	4.5	0.19	35.6	E	-	5.0
	SBL	0.01	0.4	A	-	0.3	0.02	0.4	A	-	0.4

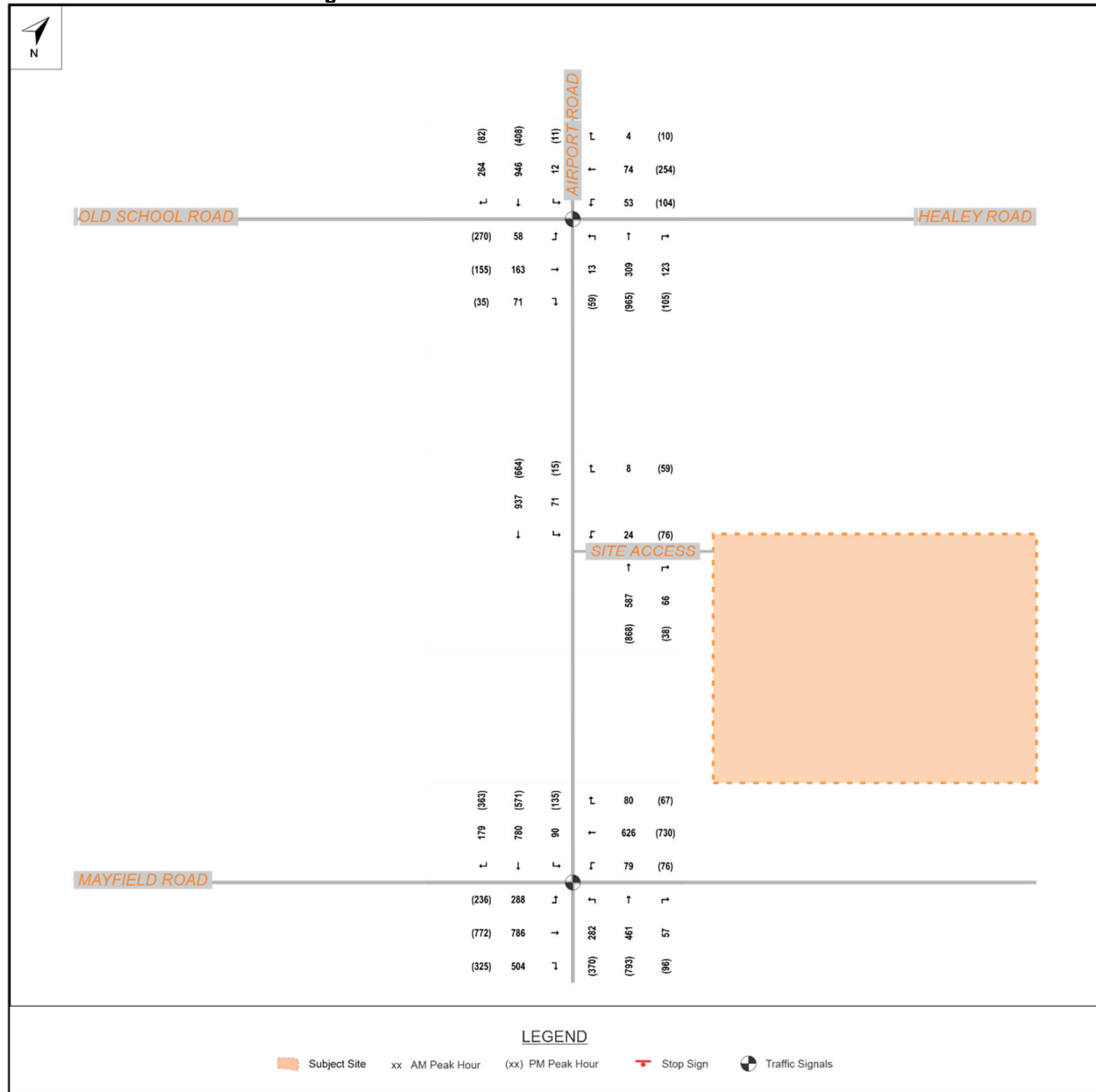
Based on the results of the capacity analysis under 2033 future total interim traffic conditions, the addition of traffic associated with the temporary truck and trailer parking facility results in a marginal increase in overall intersection v/c ratios and delay relative to the future background condition. The Airport Road and Old School Road/Healey Road intersection is projected to operate at an overall v/c ratio of 0.98 (LOS D) during the AM peak hour and 1.43 (LOS F) during the PM peak hour, compared to 0.97 and 1.40, respectively, under future background conditions. At the Airport Road and Mayfield Road intersection, the overall v/c ratio is projected to increase to 1.16 (LOS D) during the AM peak hour and 1.01 (LOS D) during the PM peak hour, compared to 1.14 and 0.99 under future background conditions.

The operational deficiencies identified under future total interim conditions are generally consistent with those identified under future background conditions and are primarily attributable to background traffic growth. The temporary truck and trailer parking facility results in minimal incremental impacts to the surrounding road network, with the study area intersections experiencing only minor increases in v/c ratios, delay, and queue lengths. The proposed site access is also projected to operate with residual capacity and acceptable levels of service during both peak hours. On this basis, the temporary truck and trailer parking operation is not expected to materially worsen the existing background operational constraints within the study area.

5.1.2. Ultimate Site Condition

The future total ultimate traffic volumes are illustrated in **Figure 5-2**.

Figure 5-2 – Future Total Ultimate Traffic Volumes



The results of the operational analysis are enclosed in **Appendix I** and are summarized in **Table 5.2**.

Table 5.2: 2033 Future Total Ultimate Traffic Assessments (Existing Road Network)

Intersection	Movement	Weekday AM Peak Hour					Weekday PM Peak Hour				
		v/c	Delay (s)	LOS	Queue		v/c	Delay (s)	LOS	Queue	
					50 th	95 th				50 th	95 th
Signalized Intersections											
Airport Road & Old School Road/Healey Road	Overall	1.02	69.1	E	-	-	1.48	273.9	F	-	-
	EBT	1.01	102.1	F	70.2	133.7	1.58	327.4	F	168.0	244.0
	WBT	0.65	55.4	E	30.4	51.1	0.86	61.2	E	89.8	126.3
	NBT	0.89	44.7	D	66.6	134.5	1.79	397.4	F	393.8	494.8
	NBR	0.08	7.3	A	0.0	4.7	0.09	7.6	A	4.9	9.7
	SBT	1.12	94.5	F	268.6	364.9	1.36	217.9	F	141.8	214.2
	SBR	0.23	6.1	A	3.8	11.6	0.05	10.4	B	0.0	5.9
Airport Road & Mayfield Road	Overall	1.22	52.2	D	-	-	1.03	49.6	D	-	-
	EBL	1.26	172.1	F	62.1	115.7	0.92	68.3	E	46.3	89.3
	EBT	0.76	37.6	D	94.1	115.3	0.67	36.0	D	92.4	116.9
	EBR	0.65	35.6	D	50.4	93.2	0.24	28.6	C	1.6	21.2
	WBL	0.48	27.2	C	10.8	19.0	0.34	29.6	C	10.7	19.0
	WBT	0.78	41.1	D	83.5	101.4	0.90	56.0	E	112.3	139.4
	NBL	1.06	103.8	F	58.6	128.9	1.06	96.8	F	84.7	153.0
	NBT	0.49	31.5	C	50.2	69.3	0.82	47.8	D	117.6	159.6
	NBR	0.05	26.4	C	0.0	4.7	0.13	33.5	C	4.3	19.6
	SBL	0.32	26.4	C	12.9	24.9	0.68	40.4	D	24.3	39.8
	SBT	0.87	50.3	D	98.6	123.9	0.69	48.7	D	78.6	99.7
	SBR	0.18	32.7	C	0.0	17.5	0.39	43.5	D	11.9	45.6
Signalized Intersections											
Airport Road & Site Access	WBLR	0.42	75.8	F	-	13.1	1.05	154.7	F	-	60.2
	SBL	0.09	2.9	A	-	2.3	0.02	0.6	A	-	0.5

Based on the results of the capacity analysis under 2033 future total ultimate traffic conditions with the existing roadway network, the study area intersections are projected to experience similar operational constraints to those identified under future background conditions, with some additional impacts associated with the ultimate development. At the Airport Road and Old School Road/Healey Road intersection, the overall intersection v/c ratio is projected to increase from 0.97 to 1.02 (LOS E) during the AM peak hour and from 1.40 to 1.48 (LOS F) during the PM peak hour. The most significant impacts occur during the PM peak hour, with the eastbound through movement operating at v/c = 1.58 (LOS F), the northbound through movement at v/c = 1.79 (LOS F), and the southbound through movement at v/c = 1.36 (LOS F). Corresponding 95th percentile queues are approximately 244 m, 495 m, and 214 m, respectively.

At the Airport Road and Mayfield Road intersection, the overall intersection v/c ratio is projected to increase from 1.14 to 1.20 (LOS E) during the AM peak hour and from 0.99 to 1.03 (LOS E) during the PM peak hour. During the AM peak hour, the eastbound left-turn and northbound left-turn movements operate at v/c = 1.26 (LOS F) and 1.06 (LOS F), respectively, with 95th percentile queues of approximately 116 m and 129 m. During the PM peak hour, the northbound left-turn movement operates at v/c = 1.06 (LOS F), with a 95th percentile queue of approximately 153 m.

The proposed Airport Road site access is projected to operate with a v/c ratio of 0.42 (LOS A) during the AM peak hour and 1.05 (LOS F) during the PM peak hour for the westbound left-turn movement. The corresponding 95th percentile queue is approximately 60 m during the PM peak hour. The high PM peak hour v/c ratio reflects the forecast left-turn demand associated with the proposed site access and supports the provision of the dedicated left-turn lane identified elsewhere in this report.

On this basis, the ultimate development results in incremental increases in traffic and operational impacts relative to the future background condition; however, the majority of the significant operational constraints remain associated with the background traffic demand and existing roadway network. The results also reinforce the importance of the planned Airport Road widening and Airport Road/Old School Road/Healey Road roundabout in accommodating future traffic growth within the study area.

5.2. Future Total – Ultimate Road Network

The 2033 future total ultimate traffic conditions under the ultimate roadway network were assessed based on the planned roadway improvements and the proposed ultimate development on the subject lands. Future total traffic volumes were established by combining the 2033 future background traffic volumes with the projected traffic generated by the ultimate site condition, consisting of the retained truck and trailer parking operation, cross-dock facility, associated office, and ancillary truck wash. The planned roadway improvements, including the widening of Airport Road and implementation of a roundabout at the Airport Road and Old School Road/Healey Road intersection, were incorporated into the analysis. The resulting traffic volumes were assigned to the study area road network in accordance with the trip distribution and assignment assumptions outlined in this report.

The results of the operational analysis are enclosed in **Appendix J** and are summarized in **Table 5.3** and **Table 5.4**.

Table 5.3: 2033 Future Total Ultimate Traffic Assessments (Future Road Network)

Intersection	Movement	Weekday AM Peak Hour					Weekday PM Peak Hour				
		v/c	Delay (s)	LOS	Queue		v/c	Delay (s)	LOS	Queue	
					50 th	95 th				50 th	95 th
Signalized Intersections											
Airport Road & Mayfield Road	Overall	1.22	52.2	D	-	-	1.03	49.6	D	-	-
	EBL	1.26	172.1	F	62.1	115.7	0.92	68.3	E	46.3	89.3
	EBT	0.76	37.6	D	94.1	115.3	0.67	36.0	D	92.4	116.9
	EBR	0.65	35.6	D	50.4	93.2	0.24	28.6	C	1.6	21.2
	WBL	0.48	27.2	C	10.8	19.0	0.34	29.6	C	10.7	19.0
	WBT	0.78	41.1	D	83.5	101.4	0.90	56.0	E	112.3	139.4
	NBL	1.06	103.8	F	58.6	128.9	1.06	96.8	F	84.7	153.0
	NBT	0.49	31.5	C	50.2	69.3	0.82	47.8	D	117.6	159.6
	NBR	0.05	26.4	C	0.0	4.7	0.13	33.5	C	4.3	19.6
	SBL	0.32	26.4	C	12.9	24.9	0.68	40.4	D	24.3	39.8
	SBT	0.87	50.3	D	98.6	123.9	0.69	48.7	D	78.6	99.7
SBR	0.18	32.7	C	0.0	17.5	0.39	43.5	D	11.9	45.6	
Signalized Intersections											
Airport Road & Site Access	WBLR	0.10	15.8	C	-	2.4	0.39	20.5	C	-	13.7
	SBL	0.09	9.5	A	-	2.3	0.02	10.2	B	-	0.5

Table 5.4: 2033 Future Total Ultimate Traffic Assessments (Future Road Network)

Table 6.4: 2005 Future Total Estimate Traffic Assessments (Future Road Network)									
Intersection	Movement	Weekday AM Peak Hour				Weekday PM Peak Hour			
		v/c	Delay (s/veh)	LOS	95 th Queue (veh)	v/c	Delay (s/veh)	LOS	95 th Queue (veh)
Roundabout Intersection									
Airport Road & Old School Road/Healey Road	EBL	0.51	18.4	C	3	0.66	18.3	C	5
	EBT	0.16	9.7	A	1	0.06	6.3	A	0
	WBL	0.09	5.8	A	0	0.46	19.7	C	2
	WBT	0.09	5.7	A	0	0.48	19.2	C	3
	WBR	0.00	4.5	A	0	0.03	9.6	A	0
	NBL	0.22	7.3	A	1	0.67	17.4	C	5
	NBT	0.24	7.5	A	1	0.74	20.4	C	7
	NBR	0.15	5.5	A	1	0.12	5.1	A	0
	SBL	0.54	11.2	B	3	0.31	9.3	A	1
	SBT	0.60	12.7	B	4	0.34	9.7	A	2
	SBR	0.31	7.3	A	1	0.10	5.2	A	0

Based on the results of the capacity analysis of the 2033 future total ultimate traffic conditions with the ultimate road network, the intersection of Airport Road and Old School Road/Healey road is projected to operate with residual capacity and with acceptable levels of service following the implementation of the planned roundabout.

At the Airport Road and Mayfield Road intersection, which is not directly affected by the planned roadway improvements assessed herein, operational constraints remain under future total ultimate conditions. The overall intersection is projected to operate at v/c = 1.22 (LOS E) during the AM peak hour and v/c = 1.03 (LOS D) during the PM peak hour. During the AM peak hour, the eastbound left-turn and northbound left-turn movements are projected to operate at v/c = 1.26 (LOS F) and 1.06 (LOS F), respectively, with 95th percentile queues of approximately 116 m and 129 m. During the PM peak hour, the northbound left-turn movement remains constrained at v/c = 1.06 (LOS F), with a 95th percentile queue of approximately 153 m.

The proposed Airport Road site access is projected to operate with substantial residual capacity under the ultimate roadway network, with the westbound left-turn movement operating at v/c = 0.10 (LOS C) during the AM peak hour and v/c = 0.39 (LOS C) during the PM peak hour. The southbound left-turn movement is projected to operate at LOS A/B, with minimal queueing.

On this basis, the planned widening of Airport Road and implementation of the roundabout at the Airport Road and Old School Road/Healey Road intersection substantially improve the operational performance of the surrounding transportation network and address the significant deficiencies identified under the future background and future total conditions at that intersection. The Airport Road and Mayfield Road intersection remains subject to operational constraints under the future total ultimate condition, which are independent of the planned improvements assessed as part of this study. **The proposed site access, however, is projected to operate acceptably with substantial residual capacity under the ultimate roadway network.**

Given the projected operational constraints at the Airport Road and Mayfield Road intersection under future total ultimate traffic conditions, it is recommended that the Region continue to monitor traffic volumes and operational conditions at this intersection as background developments within the surrounding area are developed. The projected deficiencies are primarily attributable to traffic associated with these background developments and are not expected to be materially influenced by the proposed development. Monitoring of the intersection following the build-out of the

surrounding developments would provide an opportunity to reassess actual traffic patterns and identify potential operational improvements, if warranted.

6.0 PARKING ASSESSMENT

6.1. Parking Requirements

6.1.1. Vehicle Parking Requirements

The subject lands are currently zoned under the Town of Caledon's Zoning By-law 2006-50. The interim condition maintains the existing truck and trailer parking operation and does not propose any modifications to the existing parking supply. Accordingly, a detailed parking assessment has been undertaken for the ultimate development condition only.

The parking requirements were calculated based on the requirements outlined in the By-law and are summarized in **Table 6.1** below.

Table 6.1: Vehicle Parking Requirements Zoning By-law 2006-50

Type	GFA	Parking Rate	Parking Required
Transportation Depot	17,700 m ²	0 – 7,000m ² : 1 space/90m ² + 7,000m ² – 20,000 m ² : 1 space/145m ²	152 spaces

Based on the existing zoning for the subject site, a total of 152 vehicle parking spaces is required under ultimate site conditions.

6.1.2. Barrier Free Parking Requirements

Schedule "K" of the Town's Zoning By-law 2015-058 prescribes barrier free parking requirements. The barrier free parking requirements for the site are detailed in **Table 6.2**.

Table 6.2: Barrier Free Parking Requirements

Total No. of Parking Spaces Required	Parking Rate	Required Type A Spaces	Required Type B Spaces	Total Barrier Free Spaces Required
152 spaces	1 accessible space + 3%	3	3	6

In accordance with the Town's Zoning By-law requirements for barrier free parking, a total of five (5) barrier-free parking spaces (two (2) Type A spaces and three (3) Type B spaces) is required.

7.0 SITE PLAN REVIEW

7.1. Vehicle Maneuverability Assessment

AutoTURN software was used to generate a vehicular turning template to confirm and demonstrate the accessibility of the proposed study area. The AutoTURN analysis demonstrates that a standard truck and trailer (WB-20 TAC-2017) can access the subject site and maneuver the proposed parking spaces. The AutoTURN analysis is provided in **Appendix K**.

7.2. Access Review

7.2.1. Access Restrictions

Based on the volume thresholds for access control detailed in Table 5 of the Access Management Elements section of Peel Region's Road Characterization Study, for re-developments and intensifications, the low impact threshold is less than 60 veh/hr during peak hour, the medium impact threshold is 60-100 veh/hr during peak hour and the high impact threshold is over 100 veh/hr during peak hour. Based on the trip generation calculations for the ultimate site condition, the proposed development is projected to generate a total of 37 two-way trips during AM peak hour and 60 two-way trips during PM peak hour under interim site conditions and 170 two-way trips during AM peak hour and 188 two-way trips during PM peak hour under ultimate site conditions. The Re-Development/Intensification volume thresholds for access control are detailed in **Table 7.1**.

Table 7.1: Volume Thresholds for Access Control

Re-Development/Intensification			
	Low Impact	Medium Impact	High Impact
	less than 60 veh/hr peak hour	60-100 veh/hr peak hour	over 100 veh/hr peak hour
Physical Access Restriction	N/A	N/A	Yes
Auxiliary Lane(s) Requirement	N/A	N/A	Yes
Access Restriction on Title	N/A*	Yes	Yes
Auxiliary Lane(s) Requirements on Title	N/A	Yes	Yes

Source: Peel Region Road Characterization Study, 2013

Based on the above volume thresholds, the applicable access management elements are applicable as follows:

Physical Access Restriction

Based on the above table, no access restrictions are required for the subject site under interim site conditions but under ultimate site conditions, the development is considered high impact and physical access restrictions are appropriate.

Auxiliary Lane(s) Requirement

Based on the above table, no auxiliary turn lanes are required to accommodate the forecast site traffic under interim conditions; however, under ultimate conditions, auxiliary turn lanes are required. It is to be noted that the planned ultimate roadway condition on Airport Road includes a centre two-way left-turn lane, thereby accommodating this requirement.

Access Restriction on Title

Based on the above table, access restrictions on title are not applicable in Rural Road Conditions under the interim site condition.

Auxiliary Lane(s) Requirements on Title

Based on the above table, auxiliary turn lane requirements on title are not applicable for the subject site, nor are they required based on the volume thresholds under interim conditions.

7.2.2. Access Spacing

In addition to the access restriction requirements discussed above, the proposed access has been reviewed with respect to the access spacing criteria outlined in Table 2 – Median Opening Spacing of the Region of Peel Road Characterization Study (RCS). Airport Road is identified as a Suburban Connector, for which the RCS recommends a minimum spacing of 300 m between full-movement accesses.

The subject lands have approximately 235 m of frontage along Airport Road. As such, the 300 m minimum spacing requirement for full-movement accesses cannot be achieved within the subject frontage. Furthermore, the existing full-movement access serving the neighbouring lands to the north is located approximately 35 m north of the proposed site access and is situated at the southern limit of the neighbouring property, effectively precluding the establishment of a full-movement access farther north along the subject frontage while maintaining the required separation from the neighbouring access.

The potential to relocate the proposed access farther south along the subject frontage was also considered. However, the southern portion of the subject lands is characterized by challenging topography and constrained sight lines, which would introduce additional geometric and safety considerations associated with relocating the access to this location. The proposed access location therefore represents a balance between the applicable access spacing objectives, the physical constraints of the subject lands, and the operational requirements of the proposed truck and trailer parking facility.

The neighbouring access to the north serves a separate development and is expected to generate relatively low traffic volumes. As such, interactions between vehicles using the neighbouring access and the proposed site access are expected to be limited. The Owner has also previously explored the potential to consolidate the two accesses through a shared access arrangement; however, the neighbouring property owner is not interested in pursuing a shared access at this time.

Given the temporary nature of the proposed use, the relatively low traffic volumes associated with the neighbouring access, and the physical constraints associated with relocating the access farther south, the proposed access arrangement is considered appropriate for the interim condition. In the longer term, the future east-west collector road identified in the Town of Caledon's Multimodal Transportation Master Plan Addendum may provide an opportunity for a more comprehensive access arrangement; however, the alignment, timing, and ultimate access arrangements associated with the collector road have not yet been finalized and therefore have not been relied upon in establishing the current access arrangement.

7.2.3. Left-Turn Lane Warrant

The MTO Design Supplement to the TAC Geometric Design Guide for Canadian Roads (April 2020) was reviewed to determine the left-turn storage lane requirements for the proposed full-moves site access onto Woodbine Avenue under future total interim traffic conditions.

For the purposes of this assessment, a 90 km/h design speed (80 km/h posted speed plus a 10 km/h design allowance) was adopted. The PM peak hour represents the critical period for left-turning traffic into the site, with a projected left-turning volume of 10 vehicles per hour, an advancing volume of 674 vehicles per hour, and an opposing through volume of 868 vehicles per hour. Based on these traffic volumes, Exhibit 9A-19 was used to assess the need for a left-turn storage lane.

As illustrated in **Appendix L**, the projected traffic volumes fall outside the warrant region for a left-turn storage lane. It is noted that the projected left-turning traffic represents only 1.48% of the advancing traffic volume, which is below the 5% minimum left-turn volume threshold represented in the applicable warrant exhibit. As such, the projected left-turn demand does not meet the minimum volume threshold for consideration within the warrant assessment, and a dedicated left-turn storage lane is not warranted at the proposed site access under future total conditions. Notwithstanding, the planned widening of Airport Road will provide a centre two-way left-turn lane along the roadway, which will accommodate left-turning vehicles entering the proposed site access.

7.2.4. Sightline Analysis

7.2.5. Stopping Sight Distance

For the purposes of the stopping sight distance assessment, a design speed of 90 km/h was adopted for Airport Road in accordance with the Geometric Design Guide for Canadian Roads (Transportation Association of Canada (TAC), 2017). A driver eye height of 1.05 m and an object height of 0.38 m, representing vehicle taillights, were assumed for the stopping sight distance assessment. For intersection sight distance assessments, an object height of 1.30 m, representing the top of a passenger vehicle, was adopted.

The effect of roadway grade on Airport Road was considered in determining the required stopping sight distance. Based on the roadway profile, a grade of approximately +0.015 was applied for the north approach and -0.0378 for the south approach. In accordance with Section 2.5.3 of the TAC Geometric Design Guide for Canadian Roads (2017), the braking distance is determined using the following equation:

$$d_b = V^2 / 254[(a/9.81) \pm G]$$

Where:

d_b = Braking distance (m)

V = Design speed (km/h)

a = Deceleration rate (3.4 m/s²)

G = Roadway grade (expressed as a decimal)

Then:

$$\text{Stopping Sight Distance} = 0.278tV + d_b$$

Where $t = 2.5s$

Applying the above methodology results in required stopping sight distances of approximately 154 m for the north approach and 166 m for the south approach.

Available stopping sight distances at the site access were determined through on-site observations and are summarized in **Table 7.2**.

Table 7.2 – Stopping Sight Distance Assessment at Site Access

Approach	Required	Achieved	Difference
North Approach	155m	+200m	+45m
South Approach	166m	+200m	+34m

As shown in Table 7.2, the available stopping sight distance exceeds the minimum TAC requirement for both approaches, with a minimum surplus of 43 m. Accordingly, the available stopping sight distance at the site access satisfies the applicable design requirements and is considered adequate to safely accommodate vehicles accessing the proposed development.

7.2.6. Departure Sight Distance

To assess vehicles departing the proposed site access, a departure sight distance assessment was undertaken in accordance with Case B1 – Left Turn from the Minor Road described in Section 9.9.2.3 of the Geometric Design Guide for Canadian Roads (Transportation Association of Canada (TAC), 2017). This case evaluates the sight distance required for a vehicle stopped at the site access to safely complete a left-turn manoeuvre onto the major roadway under stop-controlled conditions.

In accordance with TAC (2017), the required intersection sight distance along the major roadway is determined using the following equation:

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

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); and,

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

For Case B1, a design speed of 90 km/h and a time gap of 7.5 seconds were adopted, resulting in the following required departure sight distance:

$$\begin{aligned} ISD &= 0.278 \times 90 \times 7.5 \\ &= 187.65\text{m say } \mathbf{190\text{m}} \end{aligned}$$

Available departure sight distances at the proposed site access were determined through on-site observations and are summarized in **Table 7.3**.

Table 7.3 – Departure Sight Distance Assessment at Site Access

Approach	Required	Achieved	Difference
Northbound	190m	+200m	+10m
Southbound	190m	+200m	+10m

As shown in Table 7.3, the available departure sight distance exceeds the minimum TAC requirement in both directions, with a minimum surplus of 10 m. Accordingly, drivers exiting the site will have sufficient visibility of approaching traffic to safely complete left-turn manoeuvres onto Dixie Road under stop-controlled conditions.

Sight Distance Summary

Based on the results of the stopping and departure sight distance assessments, the available sight distance at the proposed site access exceeds the minimum requirements of the Geometric Design Guide for Canadian Roads (TAC, 2017) for both approaching and departing vehicles. The assessment confirms that drivers entering or exiting the site will have adequate visibility of approaching traffic to safely undertake the required manoeuvres, while through traffic

on Airport Road will have sufficient stopping sight distance to react to vehicles accessing the site. Accordingly, the existing full-movement site access is considered appropriate and can be expected to continue operating safely under the forecast traffic conditions associated with the proposed development.

8.0 CONCLUSION / FINDINGS

8.1. Study Findings

The findings of our analysis are as follows:

- The subject lands are currently vacant. The proposed development includes an interim condition consisting of a temporary truck and trailer parking facility with 163 vehicle parking spaces. Under ultimate conditions, a portion of the interim truck and trailer parking facility will be redeveloped to accommodate an 8,800 m² cross-dock facility, a two-storey office building, and an ancillary six-bay truck wash facility, while maintaining truck and trailer parking on the remainder of the site. The ultimate condition also proposes 145 vehicle parking spaces. Vehicular access to the site is proposed via a full-movement driveway onto Airport Road near the northern property line.
- Based on the capacity analysis of existing traffic conditions, all study area intersections are currently operating with residual capacity, acceptable levels of service and manageable delay and queue lengths. The subject driveway also operates with acceptable levels of service, residual capacity and with negligible delay and queue lengths.
- The Region of Peel has identified significant transportation infrastructure improvements within the study area, including the widening of Airport Road and Mayfield Road, intersection upgrades, and active transportation enhancements. These planned improvements are intended to increase roadway capacity, improve traffic operations, and support future growth within the surrounding area.
- The planned transportation network improvements include the widening of Airport Road to five lanes (four through lanes and a centre two-way left-turn lane) and implementation of a partial two-lane roundabout at the Airport Road/Old School Road/Healey Road intersection by 2031, while the future east-west collector road identified in the Town of Caledon's MMTMP Addendum has not been incorporated into the analysis as its alignment, timing, intersection configuration, and access arrangements have not yet been finalized.
- 2033 future background conditions indicate notable operational constraints at both study area intersections, particularly during the PM peak hour at Airport Road and Old School Road/Healey Road, with deficiencies occurring independently of the proposed development; these results further support the need for the planned widening of Airport Road and implementation of a roundabout at Airport Road/Old School Road/Healey Road to accommodate future traffic growth and improve corridor operations.
- The 2033 future background analysis under the ultimate road network indicates that the study area intersections and subject driveway are projected to operate with residual capacity, acceptable levels of service, and manageable delays and queues, with the planned Airport Road widening and Airport Road/Old School Road/Healey Road roundabout substantially improving intersection operations relative to the baseline future background condition.
- Under interim site traffic conditions, the site is projected to generate a total of 37 two-way trips (19 inbound and 18 outbound) during AM peak hour and a total of 60 two-way trips (35 inbound and 24 outbound) during PM peak hour.
- The site is ultimately projected to generate a total of 170 two-way trips (137 inbound and 32 outbound) during AM peak hour and 188 two-way trips (53 inbound and 135 outbound) during PM peak hour.

- The 2033 future total interim analysis indicates that the temporary truck and trailer parking facility would result in only marginal increases in v/c ratios, delay, and queue lengths relative to future background conditions, with the proposed site access operating with residual capacity and acceptable levels of service; as such, the interim operation is not expected to materially worsen the existing background operational constraints within the study area.
- The 2033 future total ultimate analysis under the ultimate roadway network indicates that the planned Airport Road widening and Airport Road/Old School Road/Healey Road roundabout substantially improve network operations, with the intersection operating with residual capacity and acceptable levels of service and the proposed Airport Road site access operating with substantial residual capacity and acceptable operations; however, operational constraints remain at the Airport Road and Mayfield Road intersection, which is not directly affected by the planned roadway improvements.
- Based on the existing zoning for the subject site, a total of 152 vehicle parking spaces is required under ultimate site conditions.
- In accordance with the Town's Zoning By-law requirements for barrier free parking, a total of five (5) barrier-free parking spaces (two (2) Type A spaces and three (3) Type B spaces) is required.
- The AutoTURN analysis confirms that a standard WB-20 truck and trailer (TAC-2017) can safely access the subject site and maneuver within the proposed truck and trailer parking areas, demonstrating that the proposed site layout can accommodate the design vehicle.
- Based on Peel Region's volume thresholds, no access restrictions or auxiliary turn lanes are required under interim conditions; however, under ultimate conditions, the site is considered a high-impact development and physical access restrictions and auxiliary turn lanes are appropriate, with the planned centre two-way left-turn lane on Airport Road accommodating the auxiliary lane requirement.
- The proposed access does not meet the Region of Peel RCS minimum 300 m spacing requirement for full-movement accesses on Airport Road; however, given the limited frontage, the existing neighbouring access approximately 35 m north, the challenging topography and sight-line constraints to the south, the low traffic volumes at the neighbouring access, and the temporary nature of the proposed use, the proposed access location is considered appropriate for the interim condition, with the future east-west collector road potentially providing an opportunity for a more comprehensive access arrangement.
- Based on the MTO Design Supplement to the TAC Geometric Design Guide and the adopted 90 km/h design speed, the projected PM peak hour left-turn demand of 10 vehicles per hour (1.48% of the advancing volume) falls outside the warrant region of Exhibit 9A-19; therefore, a dedicated left-turn storage lane is not warranted under future total interim conditions, with the planned centre two-way left-turn lane on Airport Road accommodating left-turning vehicles entering the site.
- The available stopping and departure sight distances at the proposed site access exceed the minimum TAC (2017) requirements, providing adequate visibility for vehicles entering and exiting the site and sufficient stopping sight distance for through traffic on Airport Road; accordingly, the existing full-movement site access is considered appropriate and can be expected to operate safely under the forecast traffic conditions.

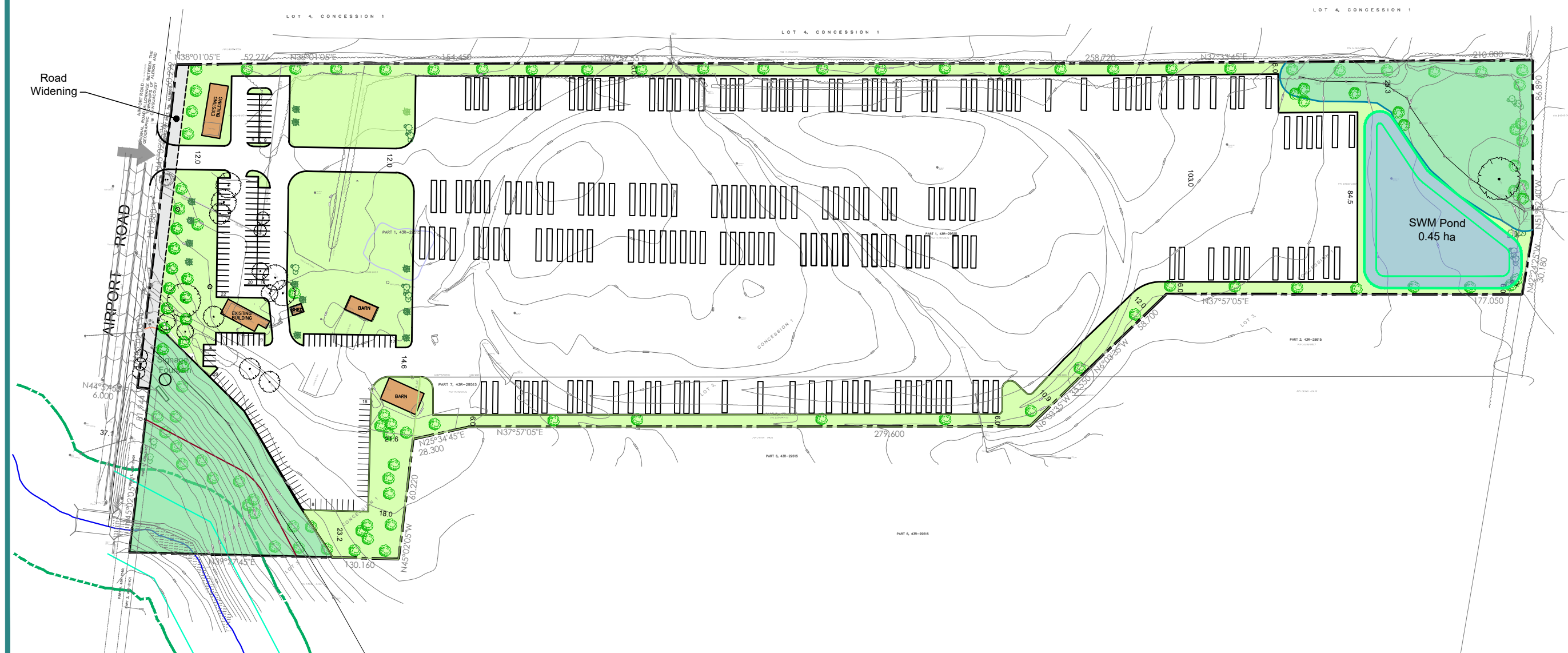
8.2. Study Conclusions & Recommendations

Based on the findings of this study, our report concludes and / or recommends the following:

- The proposed development is not expected to materially impact the surrounding road network, with only marginal increases in delay, v/c ratios, and queues under interim conditions and generally acceptable operations under ultimate conditions following the planned roadway improvements.
- The proposed development provides the required parking supply, including five barrier-free spaces, and the AutoTURN assessment confirms that the site can safely accommodate the WB-20 design vehicle.
- The proposed full-movement access is considered appropriate for the interim condition, with adequate sight distance and no requirement for a dedicated left-turn storage lane; the planned centre two-way left-turn lane on Airport Road will accommodate the ultimate auxiliary lane requirement.
- The planned widening of Airport Road and improvements at Airport Road/Old School Road/Healey Road will improve future network operations, while the future east-west collector road may provide an opportunity for a more comprehensive long-term access arrangement.

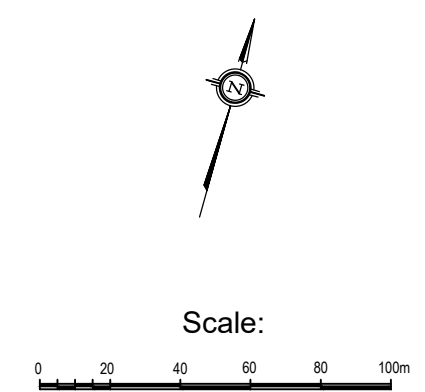
APPENDIX A:

Site Plan



- Subject Lands - 11.85 ha
- Watercourse
- Watercourse +30m
- Meanderbelt
- Meanderbelt +30m
- Swamp Edge
- Top of Bank 10m Buffer
- Wetland 10m Buffer

Schedule of Land Use	
Area of Buildings	0.07 ha
Gravel Parking Area	8.07 ha
Vegetation Groundcover	2.08 ha
Stormwater Pond	0.45 ha
Environmental Area	1.18 ha
Total Area	11.85 ha
Vehicle Parking Spaces	163



CONCEPTUAL TRANSPORT TRUCK / TRAILER PARKING LAYOUT

12541 & 12577 AIRPORT ROAD

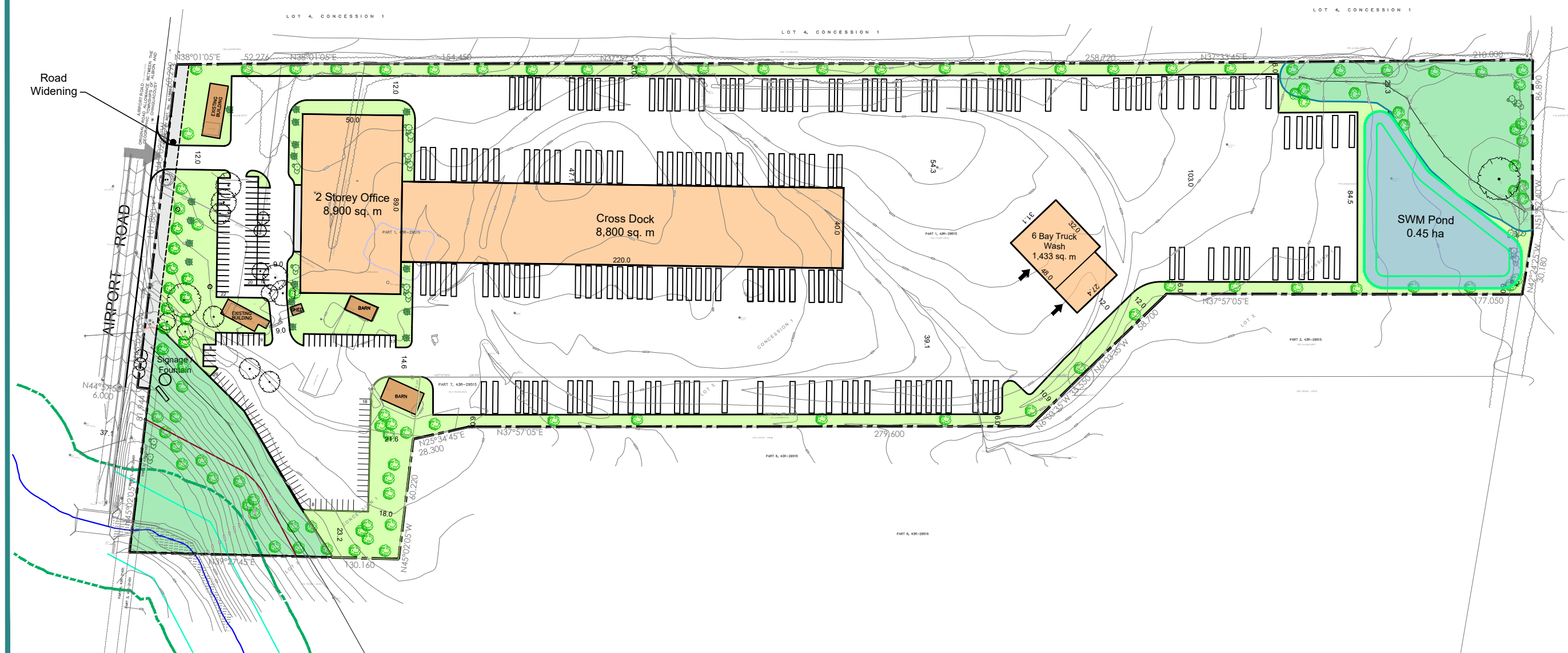
**Town of Caledon
Regional Municipality of Peel**

Date	Revision	By
Aug 25 / 23		
May 25 / 26		
Aug 3 / 26		

Prepared For:

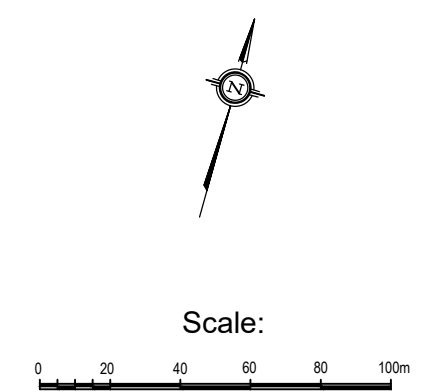
MGP Malone Given Parsons
140 Redburn Drive, Suite 201 | Markham, ON | L3R 9K3
905 553 6176 | mgp.ca

MGP File: 19-2801



- Subject Lands - 11.85 ha
- Watercourse
- Watercourse +30m
- Meanderbelt
- Meanderbelt +30m
- Swamp Edge
- Top of Bank 10m Buffer
- Wetland 10m Buffer

Schedule of Land Use	
Area of Buildings	1.53 ha
Gravel Parking Area	7.05 ha
Vegetation Groundcover	1.64 ha
Stormwater Pond	0.45 ha
Environmental Area	1.18 ha
Total Area	11.85 ha
Vehicle Parking Spaces	145



CONCEPTUAL CROSS-DECK FACILITY
12541 & 12577 AIRPORT ROAD
Town of Caledon
Regional Municipality of Peel

Date	Revision	By
Aug 25 / 23		
May 25 / 26		
Aug 5 / 26		

Prepared For:

MGP File: 19-2801

APPENDIX B:

Terms of Reference

520 Industrial Parkway South, Suite 201
Aurora, Ontario L4G 6W8

Phone: 905-503-2563
www.nexttrans.ca

nexttrans
CONSULTING ENGINEERS

NextEng Consulting Group Inc.

To: Emma Howlett, Town of Caledon
Hashim Hamdani, Region of Peel

From: Kristian Aviles, Nexttrans Consulting Engineers

Date: May 12, 2026

Re: **Terms of Reference – Transportation Impact Study**
Proposed Truck Parking Development
12541 & 12577 Airport Road, Town of Caledon
Our Project No. NT-20-104

INTRODUCTION

We wish to confirm the following work plan for a Transportation Impact Study for a proposed truck parking development located on the east side of Airport Road, north of Mayfield Road, municipally known as 12541 & 12577 Airport Road, (herein referred to as the “subject site”), in the Town of Caledon. The subject site is designated under the Town of Caledon’s Zoning By-law. The subject lands are currently occupied by an existing single-family dwelling. **Figure 1** illustrates the location of the subject site.

Figure 1: Subject Site Location



Kristian Aviles

From: Manoj Singh <Manoj.Singh@caledon.ca>
Sent: May 25, 2026 10:52 AM
To: Kristian Aviles
Cc: Tong Wang
Subject: RE: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)
Attachments: NT-20-104 - Terms of Reference - 12541 & 12577 Airport Road.pdf; Town of Caledon Transportation Impact Study ToR.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

Good morning Kristian,

Transportation Engineering has reviewed the attached Terms of Reference (TOR) for a proposed truck and trailer parking facility development at 12541 & 12577 Airport Road in the Town of Caledon, located on the east side of Airport Road, north of Mayfield Road, and offers the following comments:

General Comment:

- Ensure that the proposal and Transportation Impact Study (TIS) conform to the requirements of the Town's TOR and TIS Guidelines. The Town's TOR is attached for reference; and
- Please contact trafficcalming@caledon.ca and/or Traffic data - peelregion.ca, as required, for information on any TMCs or historical AADT volumes.

Advisory Comment:

- In accordance with the Caledon Multi-Modal Transportation Master Plan Addendum, a collector road is to be proposed to the north and east of the subject lands which will straddle the subject lands and the property to the north and east. Given the temporary nature of this application, Transportation Engineering will not be asking to protect for these lands at this time; however, this comment is offered as an advisory to be aware of. Please refer to the [Caledon Multi-Modal Transportation Master Plan Addendum](#) which speaks to this alignment and for more information.

Site Access:

- Given that Airport Road is classified a Regional Arterial as per Schedule C1: Town-wide Transportation Network of the Future Caledon Official Plan, please confirm with the Region of Peel that they have no concerns with the proposed vehicular access off Airport Road. Additionally, as part of the TIS, please provide us with acceptable written confirmation acknowledging the Region of Peel's approval for this access, and ensure that all relevant Access permit(s) are obtained.

Study Area:

- The following intersections should also be taken into consideration:
 - Airport Road and Mayfield Road (signalized); and

- Airport Road and Old School Road / Healy Road (signalized).

Background Traffic:

- **General Corridor Growth Rate:**

- Growth rates are to be established based on the more conservative of either the Caledon Multi-Modal Transportation Master Plan ultimate volumes (which can be found in the Appendix of that study available online: [Caledon Multi-Modal Transportation Master Plan](#)) or based on near-by traffic counts that are not older than two (2) years. Given the development context in Caledon, which is heavily greenfield, a typically two (2) percent growth rate will not be accepted unless justified.

- **Road Network Improvements:**

- As per Figure C4: 2051 Town-wide Transit Network of the Future Caledon Official Plan, Airport Road from Mayfield Road to Old School Road / Healy Road is proposed to be a local transit route. Therefore, please coordinate with the Region of Peel and local transit agencies to discuss how this can be considered as part of the proposal;
- Airport Road is classified as a Regional Arterial; therefore, please confirm with the Region of Peel the extent of the land conveyance that may be required along Airport Road for the section abutting the development site frontage;
- Coordinate with the Region of Peel for the implementation of any active transportation improvements or facilities along Airport Road, such as a multi-use path, etc. along the site frontage; and
- As per the Network Recommendations Map within the Active Caledon Transportation Master Plan, a multi-use trail (MUT) is shown which appears to be through the subject lands. Please coordinate with the Town's Parks and Natural Heritage regarding any MUT through and within the vicinity of the proposed development.

- **Background Development Traffic:**

- In addition to the background developments shown in the TOR, 13291 Airport should also be considered; and
- The transportation consultant is responsible for ensuring that the list of background developments is updated at the time of study preparation, using the Town's Development Applications Map and in coordination with Town staff.

Trip Generation, Distribution and Assignment:

- Consider a minimum of two (2) to three (3) proxy sites to be used as part of the analyses with a similar size and scale and transportation context to the proposed development; and
- Planned Highway 413 will be located north of this proposed development. Ensure that the trip distribution and assignment capture southbound trips coming from Highway 413 located to the north of this proposed development.

Site Plan Review:

- **Vehicle Manoeuvre Analysis:**

- Ensure that acceptable Vehicular Manoeuvring Diagrams (VMDs) are included for all applicable design and collection vehicles that will be utilizing the site access and site internally; and
- Provided that any adjacent parking and loading spaces are occupied while vehicles are conducting manoeuvres, the transportation consultant must ensure that there are no conflicts with these parked vehicles.

Parking and Loading:

- The proposal must comply with the requirements of parking, loading and delivery spaces as per the Town's Zoning By-law 2006-50, as amended. Any deviation from these requirements must be acceptably justified in order for the Town to consider what is being proposed.

Future Traffic Scenarios, Remedial Measures, Access Review and Transportation Demand Management:

- This is acceptable.

Please be advised that the Town reserves the right to request additional information and/or analyses to be included as part of the TIS following a formal submission of the Application to Planning.

If you have any questions regarding the above comments, please let me know.

Thanks,
Manoj

Manoj Singh, EIT, CAPM, C.E.T.

Project Manager, Sustainable Transportation
Engineering, Public Works & Transportation
Office: 905-584-2272, Ext: 4289
Email: Manoj.Singh@caledon.ca



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From: Manoj Singh

Sent: Friday, May 22, 2026 3:59 PM

To: Kristian Aviles <kristian@nextrans.ca>

Subject: RE: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

Hi Kristian,

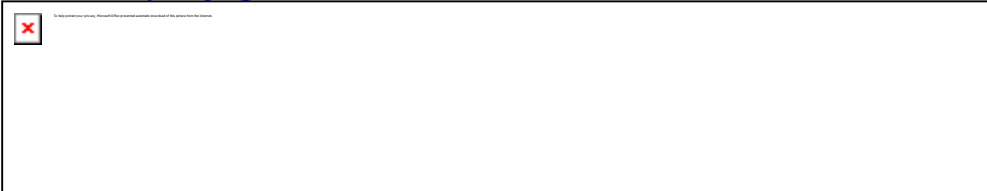
Sure. I will aim to provide you with comments early next week.

Have a wonderful weekend.

Thanks,
Manoj

Manoj Singh

Project Manager Sustainable Transportation
Engineering Public Works & Transportation
Office: 905-584-2272 Extn: 4289
Email: Manoj.Singh@caledon.ca



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From: Kristian Aviles <kristian@nextrans.ca>
Sent: Friday, May 22, 2026 11:35 AM
To: Manoj Singh <Manoj.Singh@caledon.ca>
Subject: RE: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

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Thanks Manoj. Any efforts made to expedite the TOR comments for early next week would be greatly appreciate.

Kristian Aviles, B.Eng.
Transportation Analyst

o: 905-503-2563 ext. 206
c: 647-928-1222
e: kristian@nextrans.ca
w: www.nextrans.ca

NexTrans Consulting Engineers
A Division of NextEng Consulting Group Inc.
520 Industrial Parkway South, Suite 201
Aurora ON L4G 6W8

From: Manoj Singh <Manoj.Singh@caledon.ca>
Sent: May 22, 2026 11:13 AM
To: Kristian Aviles <kristian@nextrans.ca>
Subject: RE: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

Thanks, Kristian, for your response.

Please expect a response on the TOR from the Town next week.

If you have any questions, please let me know.

Thanks,
Manoj

Manoj Singh

Project Manager Sustainable Transportation
Engineering Public Works & Transportation
Office: 905-584-2272 Extn: 4289
Email: Manoj.Singh@caledon.ca



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From: Kristian Aviles <kristian@nextrans.ca>

Sent: Wednesday, May 20, 2026 9:36 PM

To: Manoj Singh <Manoj.Singh@caledon.ca>

Subject: RE: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

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Hi Manoj,

Response provided below in red.

Thank you,

Kristian Aviles, B.Eng.
Transportation Analyst

o: 905-503-2563 ext. 206
c: 647-928-1222
e: kristian@nextrans.ca
w: www.nextrans.ca

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A Division of NextEng Consulting Group Inc.
520 Industrial Parkway South, Suite 201
Aurora ON L4G 6W8

From: Manoj Singh <Manoj.Singh@caledon.ca>

Sent: May 19, 2026 2:53 PM

To: Kristian Aviles <kristian@nextrans.ca>

Subject: RE: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

Hi Kristian,

Thank you for sharing the attached concept plan. Two questions below:

The attached concept plan you've now shared, is this what the Town could envision for the proposal or something very similar?

The proposal is to remain similar to what was previously proposed.

Also, is the proposal for a temporary use to legalize an existing use or not?

The proposal is for a temporary use.

Thanks,

Manoj

Manoj Singh

Project Manager Sustainable Transportation

Engineering Public Works & Transportation

Office: 905-584-2272 Extn: 4289

Email: Manoj.Singh@caledon.ca



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From: Kristian Aviles <kristian@nextrans.ca>

Sent: Tuesday, May 19, 2026 1:58 PM

To: Manoj Singh <Manoj.Singh@caledon.ca>

Subject: RE: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

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Hi Manoj,

Please see the attached concept plan from the previous 2021 submission, noting that there haven't been any updates made to the development concept since then.

Thank you,

Kristian Aviles, B.Eng.

Transportation Analyst

o: 905-503-2563 ext. 206

c: 647-928-1222

e: kristian@nextrans.ca

w: www.nextrans.ca

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From: Manoj Singh <Manoj.Singh@caledon.ca>

Sent: May 19, 2026 12:30 PM

To: Kristian Aviles <kristian@nextrans.ca>

Subject: FW: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

Hi Kristian,

My name is Manoj Singh, and I am from the Town of Caledon Transportation Engineering Department. I've been assigned to review the attached TOR for the above-noted site.

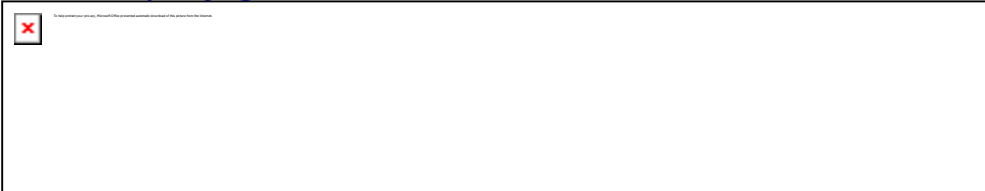
Can you please provide a copy of the concept plan noted in the attached? Also, are you aware of what the scale of this proposed development will be?

If you have any questions, please let me know.

Thanks,
Manoj

Manoj Singh

Project Manager Sustainable Transportation
Engineering Public Works & Transportation
Office: 905-584-2272 Extn: 4289
Email: Manoj.Singh@caledon.ca



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From: Tong Wang <Tong.Wang@caledon.ca>
Sent: Tuesday, May 12, 2026 1:44 PM
To: Manoj Singh <Manoj.Singh@caledon.ca>
Cc: Emma Howlett <Emma.Howlett@caledon.ca>
Subject: FW: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

Manoj can you take a look at this ToR

Tong Wang

Manager Transportation Engineering
Engineering Public Works & Transportation
Office: 905-584-2272 Extn: 4596
Email: Tong.Wang@caledon.ca



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From: Kristian Aviles <kristian@nextrans.ca>
Sent: Tuesday, May 12, 2026 1:25 PM

To: Hamdani, Hashim <hashim.hamdani@peelregion.ca>; Emma Howlett <Emma.Howlett@caledon.ca>

Subject: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

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.

Good afternoon,

Please see the attached terms of reference for the scope of work for a Transportation Impact Study for a proposed truck and trailer parking facility located at 12541 & 12577 Airport Road in the Town of Caledon.

Please advise as soon as possible whether the proposed scope of work is acceptable, as we are aiming to coordinate TMC data collection ASAP.

Thank you,

Kristian Aviles, B.Eng.

Transportation Analyst

o: 905-503-2563 ext. 206

c: 647-928-1222

e: kristian@nextrans.ca

w: www.nextrans.ca

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The concept plan envisions a transport truck and trailer parking facility on the 11.85ha subject lands. Vehicular access to the subject lands is envisioned via a full movement driveway onto Airport Road.

Nextrans proposes to prepare the Transportation Impact Study in accordance with the Town of Caledon Traffic Impact and Parking Study Terms of Reference and the Region of Peel's Traffic Impact Study Guidelines.

STUDY AREA

Nextrans proposes to collect turning movement count (TMC) data at the following study area intersections during AM (7:00 AM – 10:00 AM) and PM (4:00 PM – 7:00 PM) peak periods:

1. 12541 Airport Road / Airport Road (unsignalized).

BACKGROUND TRAFFIC

General Corridor Growth Rate

Nextrans will consult with Town and Region staff as necessary to determine corridor growth rates within the study area. In lieu of sufficient data to establish corridor growth, a conservative 2% growth rate per annum will be applied to existing traffic volumes to project future growth.

Road Network Improvements

Nextrans notes that Peel Region Capital Project 14-4030 involves the widening of Airport Road, which is planned to start in late 2026. As such, the future scenarios assessed in our study will account for the planned widening of Airport Road.

Background Development Traffic

Nextrans has identified the following background development within the area surrounding the subject site that will be considered within the traffic analysis as background development traffic volumes.

- 12245 Torbram Road – SPA 2024-0056
- 33 Perdue Court – SPA 2015-0058
- 0 Airport Road – RZ 2021-0014
- 12151 Airport Road, 6086, 6186, 6206 & 6230 Mayfield Road – SBD 21T-25006C

Nextrans requests all relevant background traffic documents be made available for inclusion in our analysis.

TRIP GENERATION, DISTRIBUTION, & ASSIGNMENT

Trip generation for the proposed development will be estimated based on applicable rates and equations published in the ITE Trip Generation Manual, 12th Edition, including the newly introduced land use category for truck and trailer parking facilities. In addition, observed trip generation characteristics from comparable facilities previously surveyed by our office will be reviewed and considered as part of the analysis to ensure the trip generation assumptions are representative of the proposed development.

FUTURE TRAFFIC SCENARIOS

Future background and future total traffic operations analyses will be undertaken for the 2033 horizon year, representing a five (5)-year planning horizon from the assumed full build-out year of 2028.

REMEDIAL MEASURES

Under future total conditions, critical movements will be identified. Critical movements include through movements or shared through/turning movements that operate at a v/c of 0.90 or above, exclusive movements that exceed a v/c of 1.00 will be identified, and movements with 95th percentile queues that exceed the storage length.

Remedial actions such as intersection road improvements (e.g. road widening, additional road lane) or signal timing split optimization (cycle length will remain unchanged) will be considered. If remedial measures are to be implemented, a scenario will be provided demonstrating the change in intersection operations.

SITE PLAN REVIEW

Vehicle Maneuverability Analysis

A vehicle swept path analysis will be undertaken to confirm the on-site functionality of driveway entrances, drive aisles, parking spaces, loading spaces, etc., of the subject site for typical vehicles that are intended to access the subject site.

Access Review

An access review will be undertaken to assess the proposed site access configuration and its interaction with the adjacent roadway network. The review will consider access location, spacing, sight distance, traffic operations, safety, and conformance with applicable municipal and/or regional design criteria. Potential access-related improvements, including auxiliary turn lanes, and driveway modifications, will be identified where warranted.

PARKING & LOADING

The study will provide a review of the proposed vehicular parking space provision and the minimum vehicular parking space requirements from the Town's Comprehensive Zoning By-law Section 5 – Parking, Loading and Delivery Standards, as amended.

TRANSPORTATION DEMAND MANAGEMENT

A review of existing nearby transportation facilities and possible initiatives and policies to promote and encourage modes of transportation in lieu of single occupant vehicle (SOV) trips will be made to influence the travel behaviour of residents and visitors to reduce travel demand and create a more efficient transportation network.

We trust the enclosed sufficiently addresses your needs. Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

NEXTRANS CONSULTING ENGINEERS



Kristian Aviles, B.Eng
Transportation Analyst

Kristian Aviles

From: Xiao, Kaiwen <kaiwen.xiao@peelregion.ca>
Sent: May 14, 2026 2:26 PM
To: Kristian Aviles
Cc: Hamdani, Hashim; Emma Howlett
Subject: Transportation Development Comments: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Kristian,

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

- Regional Road 7 (Airport Road) – Suburban Connector

Access Type	Minimum Spacing Requirement
Full to Full	300 m
Full to RI/RO	75 m
RI/RO to RI/RO	75 m
Full to LI/RI/RO	150 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.
- Access type/road connections, location and configuration (including the need for auxiliary turn lanes) will be determined after receipt and review of the Traffic Impact study.

Site Traffic – Trip Generation Estimations

- Acceptable

Proxy Site

- Min. one proxy site should be considered and used in the TIS.

Future Total Traffic Assessment

- Acceptable

Existing Site Conditions

- Please provide the existing traffic environment around the site, including existing road network and existing traffic volume.

Study Intersections

- Please consider the following intersection depending on truck routes been considered:
 - The intersection of Airport Road and Mayfield Road

Internal Site Circulation/Traffic Safety

- Please note that AutoTURN assessment will need to be prepared and provided in the TIS, using the appropriate design vehicles that will utilize the access.

Future Road / Transit / Active Transportation Network

- Please note that there is a Capital Project within the vicinity of this site; Capital Project #14-4030 Road Widening - Airport Road - from Mayfield Road to King Street. The Project Manager for the Capital Project is Jerry Tan. Jerry must be consulted for any additional requirements that may be necessitated do to the Capital Project, including but not limited to additional property requirements over and above the Official Plan requirements, pedestrian infrastructure and any other urbanization that may be required (jerry.tan@peelregion.ca).
- The future E-W collector along Airport Road is located at the north of the subject property; please contact the Town of Caledon to obtain more information about it.

Contacts

- Please see the following contacts to obtain data for your analysis:
 - Please contact Transportation Planning (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 Sean Nix (sean.nix@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 of Town of Caledon & the Region of Peel to obtain details on the surrounding developments in the area that would affect traffic capacity in the planning horizon years.

Thank you!

Warm regards,
Kaiwen Xiao



Specialist, Transportation Development
Transportation Division, Public Works
10 Peel Centre Drive Suite B, 4th Floor
Brampton, ON L6T 4B9

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From: Hamdani, Hashim <Hashim.Hamdani@peelregion.ca>

Sent: Tuesday, May 12, 2026 1:50 PM

To: Xiao, Kaiwen <kaiwen.xiao@peelregion.ca>

Subject: FW: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

FYI

Hashim Ali Hamdani

Supervisor

Transportation Development
Transportation Division, Public Works

10 Peel Centre Drive Suite B, 4th Floor

Brampton, ON L6T 4B9

905-791-7800 Ext. 7852

905-872-2353 (cell)



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From: Kristian Aviles <kristian@nextrans.ca>

Sent: May 12, 2026 1:25 PM

To: Hamdani, Hashim <Hashim.Hamdani@peelregion.ca>; Emma Howlett <emma.howlett@caledon.ca>

Subject: Transportation Impact Study Terms of Reference - 12541 & 12577 Airport Road (RZ 2021-0011)

CAUTION: External Email. Do not click on links or open attachments you do not trust.

Good afternoon,

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Please advise as soon as possible whether the proposed scope of work is acceptable, as we are aiming to coordinate TMC data collection ASAP.

Thank you,

Kristian Aviles, B.Eng.

Transportation Analyst

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520 Industrial Parkway South, Suite 201

Aurora ON L4G 6W8

APPENDIX C:

Traffic Data



Turning Movement Count (2 . AIRPORT ROAD & MAYFIELD ROAD) CustID: 00717433

Start Time	Southbound AIRPORT RD						Westbound MAYFIELD RD						Northbound AIRPORT RD						Eastbound MAYFIELD RD						Int. Total (15 min)	Int. Total (1 hr)
	Right N-W	Thru N-S	Left N-E	UTurn N-N	Peds N:	Approach Total	Right E-N	Thru E-W	Left E-S	UTurn E-E	Peds E:	Approach Total	Right S-E	Thru S-N	Left S-W	UTurn S-S	Peds S:	Approach Total	Right W-S	Thru W-E	Left W-N	UTurn W-W	Peds W:	Approach Total		
2026-05-20 07:00:00	40	120	17	0	0	177	15	102	14	0	0	131	13	58	41	0	0	112	96	126	46	0	0	268	688	
2026-05-20 07:15:00	37	122	16	0	0	175	6	96	14	0	1	116	9	52	28	0	1	89	141	150	50	0	0	341	721	
2026-05-20 07:30:00	37	154	13	0	1	204	3	129	21	0	1	153	13	54	47	0	0	114	104	184	49	0	0	337	808	
2026-05-20 07:45:00	39	174	14	0	1	227	12	112	18	0	2	142	14	59	49	0	1	122	102	170	52	0	2	324	815	3032
2026-05-20 08:00:00	34	141	17	0	0	192	9	117	21	0	4	147	11	71	39	0	0	121	131	149	53	0	0	333	793	3137
2026-05-20 08:15:00	41	119	21	0	3	181	9	110	19	0	5	138	19	60	57	0	0	136	128	148	49	0	0	325	780	3196
2026-05-20 08:30:00	40	121	24	0	1	185	10	104	10	0	1	124	26	58	59	0	0	143	100	145	45	1	0	291	743	3131
2026-05-20 08:45:00	16	91	28	1	0	136	17	127	16	0	0	160	10	55	50	0	1	115	118	151	45	0	1	314	725	3041
2026-05-20 09:00:00	32	93	24	0	0	149	19	105	23	0	3	147	13	63	40	0	0	116	100	140	51	0	0	291	703	2951
2026-05-20 09:15:00	41	128	22	0	1	191	20	102	18	0	2	140	12	55	53	0	1	120	73	109	47	0	2	229	680	2851
2026-05-20 09:30:00	42	80	17	2	0	141	9	110	21	0	0	140	21	57	50	0	2	128	83	126	46	0	2	255	664	2772
2026-05-20 09:45:00	40	81	15	0	1	136	14	87	22	0	2	123	15	41	31	0	0	87	63	118	47	0	0	228	574	2621
BREAK																										
2026-05-20 16:00:00	39	71	19	1	0	130	16	131	13	0	1	160	14	99	58	0	3	171	51	134	49	0	3	234	695	
2026-05-20 16:15:00	55	87	25	0	0	167	17	139	18	0	2	174	21	149	76	0	1	246	52	147	50	0	2	249	836	
2026-05-20 16:30:00	70	94	26	1	1	191	12	145	17	0	2	174	19	141	74	0	1	234	40	163	47	0	2	250	849	
2026-05-20 16:45:00	64	74	28	0	0	166	14	157	31	0	2	202	29	148	77	0	9	254	53	160	57	0	5	270	892	3272
2026-05-20 17:00:00	80	94	26	0	0	200	12	125	20	0	1	157	20	166	78	0	4	264	70	127	56	0	1	253	874	3451
2026-05-20 17:15:00	60	68	14	0	0	142	11	158	15	1	4	185	19	146	94	0	3	259	60	158	42	1	7	261	847	3462
2026-05-20 17:30:00	68	82	19	0	0	169	10	166	10	0	0	186	28	142	84	0	1	254	61	175	49	0	2	285	894	3507
2026-05-20 17:45:00	52	73	19	0	0	144	13	143	21	0	1	177	26	124	86	0	5	236	49	153	44	0	2	246	803	3418
2026-05-20 18:00:00	60	68	11	0	0	139	13	175	19	0	3	207	23	116	87	1	2	227	65	143	29	0	2	237	810	3354
2026-05-20 18:15:00	50	61	20	0	2	131	13	167	16	0	2	196	22	115	75	1	3	213	58	185	42	1	3	286	826	3333
2026-05-20 18:30:00	41	65	20	0	2	126	6	146	24	0	9	176	21	84	103	0	3	208	73	129	46	1	3	249	759	3198
2026-05-20 18:45:00	39	65	17	0	1	121	10	161	18	0	2	189	17	102	94	0	0	213	68	125	22	0	0	215	738	3133
Grand Total	1117	2326	472	5	14	3920	290	3114	439	1	50	3844	435	2216	1531	2	41	4184	1939	3515	1113	4	39	6571	18519	-
Approach%	28.5%	59.3%	12%	0.1%	-	-	7.5%	81%	11.4%	0%	-	-	10.4%	53%	36.6%	0%	-	-	29.5%	53.5%	16.9%	0.1%	-	-	-	-
Totals %	6%	12.6%	2.5%	0%	-	21.2%	1.6%	16.8%	2.4%	0%	-	20.8%	2.3%	12%	8.3%	0%	-	22.6%	10.5%	19%	6%	0%	-	35.5%	-	-
Heavy	315	298	81	0	-	-	146	415	113	0	-	-	164	342	86	0	-	-	97	400	348	0	-	-	-	-
Heavy %	28.2%	12.8%	17.2%	0%	-	-	50.3%	13.3%	25.7%	0%	-	-	37.7%	15.4%	5.6%	0%	-	-	5%	11.4%	31.3%	0%	-	-	-	-
Bicycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycle %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Peak Hour: 07:30 AM - 08:30 AM Weather: Broken Clouds (11 °C)

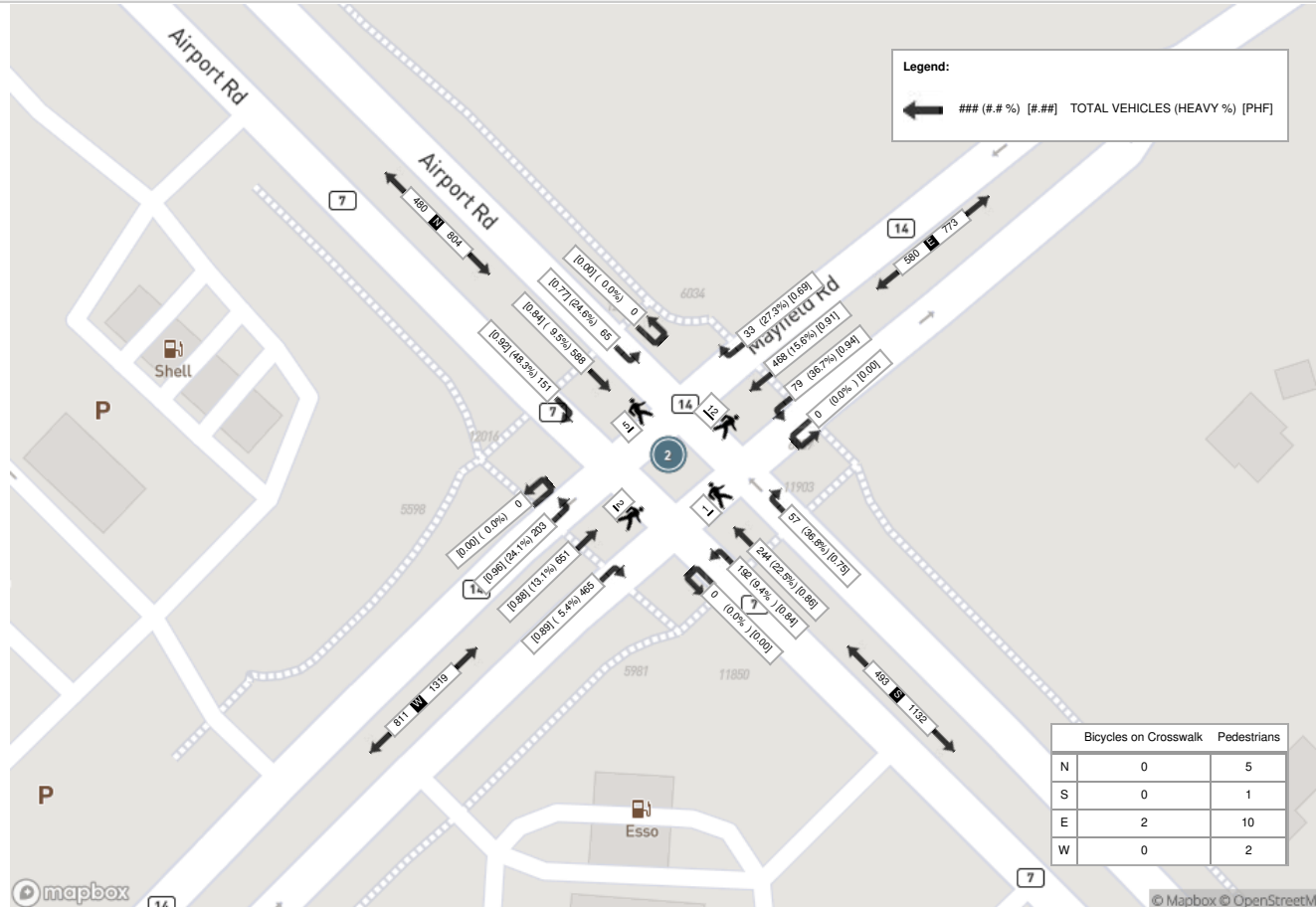
Start Time	Southbound AIRPORT RD						Westbound MAYFIELD RD						Northbound AIRPORT RD						Eastbound MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
2026-05-20 07:30:00	37	154	13	0	1	204	3	129	21	0	1	153	13	54	47	0	0	114	104	184	49	0	0	337	808
2026-05-20 07:45:00	39	174	14	0	1	227	12	112	18	0	2	142	14	59	49	0	1	122	102	170	52	0	2	324	815
2026-05-20 08:00:00	34	141	17	0	0	192	9	117	21	0	4	147	11	71	39	0	0	121	131	149	53	0	0	333	793
2026-05-20 08:15:00	41	119	21	0	3	181	9	110	19	0	5	138	19	60	57	0	0	136	128	148	49	0	0	325	780
Grand Total	151	588	65	0	5	804	33	468	79	0	12	580	57	244	192	0	1	493	465	651	203	0	2	1319	3196
Approach%	18.8%	73.1%	8.1%	0%		-	5.7%	80.7%	13.6%	0%		-	11.6%	49.5%	38.9%	0%		-	35.3%	49.4%	15.4%	0%		-	-
Totals %	4.7%	18.4%	2%	0%		25.2%	1%	14.6%	2.5%	0%		18.1%	1.8%	7.6%	6%	0%		15.4%	14.5%	20.4%	6.4%	0%		41.3%	-
PHF	0.92	0.84	0.77	0		0.89	0.69	0.91	0.94	0		0.95	0.75	0.86	0.84	0		0.91	0.89	0.88	0.96	0		0.98	0.98
Heavy	73	56	16	0		145	9	73	29	0		111	21	55	18	0		94	25	85	49	0		159	509
Heavy %	48.3%	9.5%	24.6%	0%		18%	27.3%	15.6%	36.7%	0%		19.1%	36.8%	22.5%	9.4%	0%		19.1%	5.4%	13.1%	24.1%	0%		12.1%	15.9%
Lights	78	532	49	0		659	24	395	50	0		469	36	189	174	0		399	440	566	154	0		1160	2687
Lights %	51.7%	90.5%	75.4%	0%		82%	72.7%	84.4%	63.3%	0%		80.9%	63.2%	77.5%	90.6%	0%		80.9%	94.6%	86.9%	75.9%	0%		87.9%	84.1%
Single-Unit Trucks	32	19	2	0		53	5	41	9	0		55	6	28	10	0		44	10	41	24	0		75	227
Single-Unit Trucks %	21.2%	3.2%	3.1%	0%		6.6%	15.2%	8.8%	11.4%	0%		9.5%	10.5%	11.5%	5.2%	0%		8.9%	2.2%	6.3%	11.8%	0%		5.7%	7.1%
Buses	7	11	3	0		21	1	4	1	0		6	6	11	2	0		19	5	8	6	0		19	65
Buses %	4.6%	1.9%	4.6%	0%		2.6%	3%	0.9%	1.3%	0%		1%	10.5%	4.5%	1%	0%		3.9%	1.1%	1.2%	3%	0%		1.4%	2%
Articulated Trucks	34	26	11	0		71	3	28	19	0		50	9	16	6	0		31	10	36	19	0		65	217
Articulated Trucks %	22.5%	4.4%	16.9%	0%		8.8%	9.1%	6%	24.1%	0%		8.6%	15.8%	6.6%	3.1%	0%		6.3%	2.2%	5.5%	9.4%	0%		4.9%	6.8%
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%
Pedestrians	-	-	-	-	5	-	-	-	-	-	10	-	-	-	-	-	1	-	-	-	-	-	2	-	-
Pedestrians%	-	-	-	-	25%	-	-	-	-	-	50%	-	-	-	-	-	5%	-	-	-	-	-	10%	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	-	0%	-	-	-	-	-	10%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-



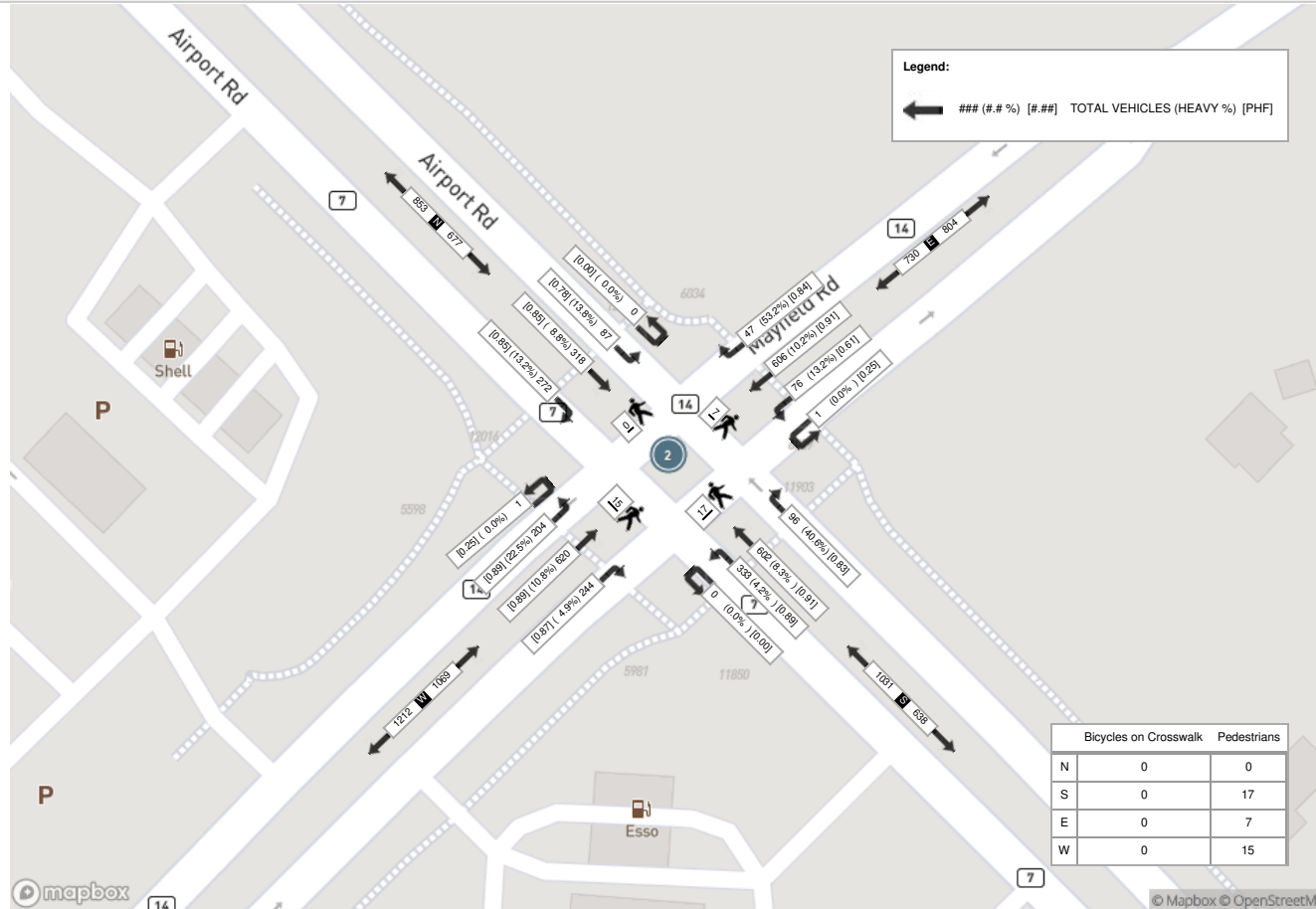
Peak Hour: 04:45 PM - 05:45 PM Weather: Broken Clouds (18 °C)

Start Time	Southbound AIRPORT RD						Westbound MAYFIELD RD						Northbound AIRPORT RD						Eastbound MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
2026-05-20 16:45:00	64	74	28	0	0	166	14	157	31	0	2	202	29	148	77	0	9	254	53	160	57	0	5	270	892
2026-05-20 17:00:00	80	94	26	0	0	200	12	125	20	0	1	157	20	166	78	0	4	264	70	127	56	0	1	253	874
2026-05-20 17:15:00	60	68	14	0	0	142	11	158	15	1	4	185	19	146	94	0	3	259	60	158	42	1	7	261	847
2026-05-20 17:30:00	68	82	19	0	0	169	10	166	10	0	0	186	28	142	84	0	1	254	61	175	49	0	2	285	894
Grand Total	272	318	87	0	0	677	47	606	76	1	7	730	96	602	333	0	17	1031	244	620	204	1	15	1069	3507
Approach%	40.2%	47%	12.9%	0%		-	6.4%	83%	10.4%	0.1%		-	9.3%	58.4%	32.3%	0%		-	22.8%	58%	19.1%	0.1%		-	-
Totals %	7.8%	9.1%	2.5%	0%		19.3%	1.3%	17.3%	2.2%	0%		20.8%	2.7%	17.2%	9.5%	0%		29.4%	7%	17.7%	5.8%	0%		30.5%	-
PHF	0.85	0.85	0.78	0		0.85	0.84	0.91	0.61	0.25		0.9	0.83	0.91	0.89	0		0.98	0.87	0.89	0.89	0.25		0.94	0.98
Heavy	36	28	12	0		76	25	62	10	0		97	39	50	14	0		103	12	67	46	0		125	401
Heavy %	13.2%	8.8%	13.8%	0%		11.2%	53.2%	10.2%	13.2%	0%		13.3%	40.6%	8.3%	4.2%	0%		10%	4.9%	10.8%	22.5%	0%		11.7%	11.4%
Lights	236	289	75	0		600	22	544	66	1		633	57	552	319	0		928	232	553	158	1		944	3105
Lights %	86.8%	90.9%	86.2%	0%		88.6%	46.8%	89.8%	86.8%	100%		86.7%	59.4%	91.7%	95.8%	0%		90%	95.1%	89.2%	77.5%	100%		88.3%	88.5%
Single-Unit Trucks	17	12	8	0		37	4	22	7	0		33	13	16	6	0		35	4	31	11	0		46	151
Single-Unit Trucks %	6.3%	3.8%	9.2%	0%		5.5%	8.5%	3.6%	9.2%	0%		4.5%	13.5%	2.7%	1.8%	0%		3.4%	1.6%	5%	5.4%	0%		4.3%	4.3%
Buses	2	4	0	0		6	1	2	0	0		3	5	7	1	0		13	1	1	11	0		13	35
Buses %	0.7%	1.3%	0%	0%		0.9%	2.1%	0.3%	0%	0%		0.4%	5.2%	1.2%	0.3%	0%		1.3%	0.4%	0.2%	5.4%	0%		1.2%	1%
Articulated Trucks	17	12	4	0		33	20	38	3	0		61	21	27	7	0		55	7	35	24	0		66	215
Articulated Trucks %	6.3%	3.8%	4.6%	0%		4.9%	42.6%	6.3%	3.9%	0%		8.4%	21.9%	4.5%	2.1%	0%		5.3%	2.9%	5.6%	11.8%	0%		6.2%	6.1%
Bicycles on Road	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	1
Bicycles on Road %	0%	0.3%	0%	0%		0.1%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%
Pedestrians	-	-	-	-	0	-	-	-	-	7	-	-	-	-	-	17	-	-	-	-	-	15	-	-	-
Pedestrians%	-	-	-	-	0%	-	-	-	-	17.9%	-	-	-	-	43.6%	-	-	-	-	-	-	38.5%	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-
Bicycles on Crosswalk%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-

Peak Hour: 07:30 AM - 08:30 AM Weather: Broken Clouds (11 °C)



Peak Hour: 04:45 PM - 05:45 PM Weather: Broken Clouds (18 °C)





Turning Movement Count (1 . 12541 AIRPORT ROAD & MAYFIELD ROAD)

Start Time	Southbound AIRPORT RD					Westbound 12541 AIRPORT ROAD					Northbound AIRPORT RD					Int. Total (15 min)	Int. Total (1 hr)
	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	UTurn S:S	Peds S:	Approach Total		
2026-05-20 07:00:00	130	0	0	0	130	0	0	0	0	0	0	72	0	0	72	202	
2026-05-20 07:15:00	167	0	0	0	167	0	0	0	0	0	0	73	0	0	73	240	
2026-05-20 07:30:00	171	0	0	0	171	0	0	0	0	0	0	59	0	0	59	230	
2026-05-20 07:45:00	196	0	0	0	196	0	0	0	0	0	0	88	0	0	88	284	956
2026-05-20 08:00:00	164	0	0	0	164	0	0	0	0	0	0	77	0	0	77	241	995
2026-05-20 08:15:00	165	0	0	0	165	0	0	0	0	0	1	65	0	0	66	231	986
2026-05-20 08:30:00	136	0	0	0	136	0	0	0	0	0	1	69	0	0	70	206	962
2026-05-20 08:45:00	95	0	0	0	95	0	0	0	0	0	0	65	0	0	65	160	838
2026-05-20 09:00:00	100	0	0	0	100	0	1	0	0	1	0	52	0	0	52	153	750
2026-05-20 09:15:00	121	0	0	0	121	0	1	0	0	1	0	63	0	0	63	185	704
2026-05-20 09:30:00	85	0	0	0	85	0	1	0	0	1	1	68	0	0	69	155	653
2026-05-20 09:45:00	83	0	0	0	83	0	1	0	0	1	0	52	0	0	52	136	629
BREAK																	
2026-05-20 16:00:00	82	0	0	0	82	0	0	0	0	0	0	142	0	0	142	224	
2026-05-20 16:15:00	78	0	0	0	78	0	0	0	0	0	0	160	0	0	160	238	
2026-05-20 16:30:00	99	0	0	0	99	1	0	0	0	1	1	141	0	0	142	242	
2026-05-20 16:45:00	86	0	0	0	86	0	0	0	0	0	0	158	1	0	159	245	949
2026-05-20 17:00:00	89	0	0	0	89	0	0	0	0	0	0	165	0	0	165	254	979
2026-05-20 17:15:00	70	0	0	0	70	0	0	0	0	0	0	158	0	0	158	228	969
2026-05-20 17:30:00	99	0	0	0	99	0	0	0	0	0	0	174	0	0	174	273	1000
2026-05-20 17:45:00	93	0	0	0	93	0	0	0	0	0	0	136	0	0	136	229	984
2026-05-20 18:00:00	92	0	0	0	92	0	0	0	0	0	0	120	0	0	120	212	942
2026-05-20 18:15:00	90	0	0	0	90	0	0	0	0	0	1	135	0	0	136	226	940
2026-05-20 18:30:00	71	0	0	0	71	0	0	0	0	0	0	95	0	0	95	166	833
2026-05-20 18:45:00	67	0	0	0	67	0	0	0	0	0	1	101	0	0	102	169	773
Grand Total	2629	0	0	0	2629	1	4	0	0	5	6	2488	1	0	2495	5129	-
Approach%	100%	0%	0%		-	20%	80%	0%		-	0.2%	99.7%	0%		-	-	-
Totals %	51.3%	0%	0%		51.3%	0%	0.1%	0%		0.1%	0.1%	48.5%	0%		48.6%	-	-
Heavy	388	0	0		-	0	4	0		-	1	315	0		-	-	-
Heavy %	14.8%	0%	0%		-	0%	100%	0%		-	16.7%	12.7%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-



Peak Hour: 07:15 AM - 08:15 AM Weather: Broken Clouds (11 °C)

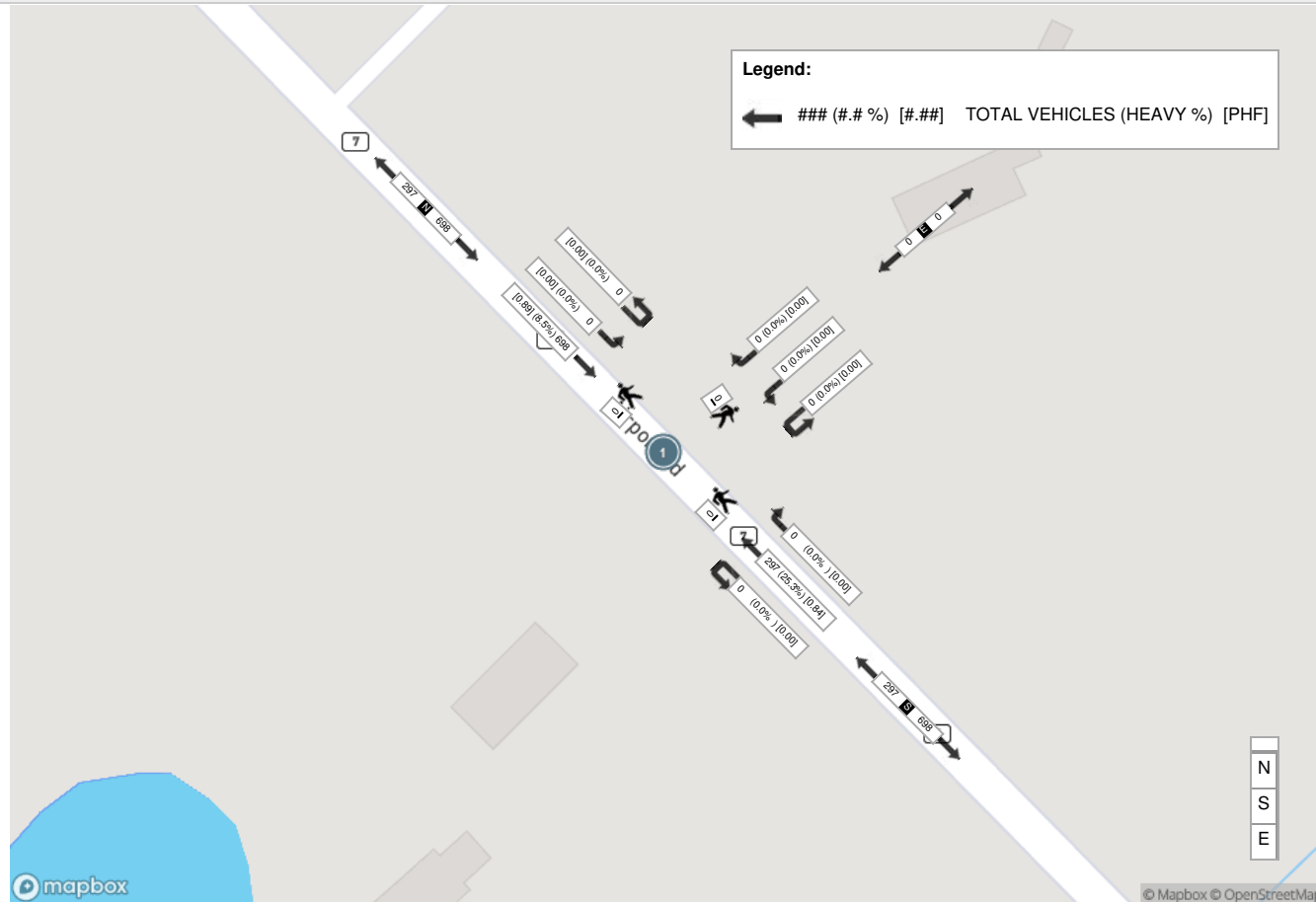
Start Time	Southbound AIRPORT RD					Westbound 12541 AIRPORT ROAD					Northbound AIRPORT RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
2026-05-20 07:15:00	167	0	0	0	167	0	0	0	0	0	0	73	0	0	73	240
2026-05-20 07:30:00	171	0	0	0	171	0	0	0	0	0	0	59	0	0	59	230
2026-05-20 07:45:00	196	0	0	0	196	0	0	0	0	0	0	88	0	0	88	284
2026-05-20 08:00:00	164	0	0	0	164	0	0	0	0	0	0	77	0	0	77	241
Grand Total	698	0	0	0	698	0	0	0	0	0	0	297	0	0	297	995
Approach%	100%	0%	0%		-	0%	0%	0%		-	0%	100%	0%		-	-
Totals %	70.2%	0%	0%		70.2%	0%	0%	0%		0%	0%	29.8%	0%		29.8%	-
PHF	0.89	0	0		0.89	0	0	0		0	0	0.84	0		0.84	0.88
Heavy	59	0	0		59	0	0	0		0	0	75	0		75	134
Heavy %	8.5%	0%	0%		8.5%	0%	0%	0%		0%	0%	25.3%	0%		25.3%	13.5%
Lights	639	0	0		639	0	0	0		0	0	222	0		222	861
Lights %	91.5%	0%	0%		91.5%	0%	0%	0%		0%	0%	74.7%	0%		74.7%	86.5%
Single-Unit Trucks	31	0	0		31	0	0	0		0	0	45	0		45	76
Single-Unit Trucks %	4.4%	0%	0%		4.4%	0%	0%	0%		0%	0%	15.2%	0%		15.2%	7.6%
Buses	5	0	0		5	0	0	0		0	0	8	0		8	13
Buses %	0.7%	0%	0%		0.7%	0%	0%	0%		0%	0%	2.7%	0%		2.7%	1.3%
Articulated Trucks	23	0	0		23	0	0	0		0	0	22	0		22	45
Articulated Trucks %	3.3%	0%	0%		3.3%	0%	0%	0%		0%	0%	7.4%	0%		7.4%	4.5%
Bicycles on Road	0	0	0		0	0	0	0		0	0	0	0		0	0
Bicycles on Road %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	0%



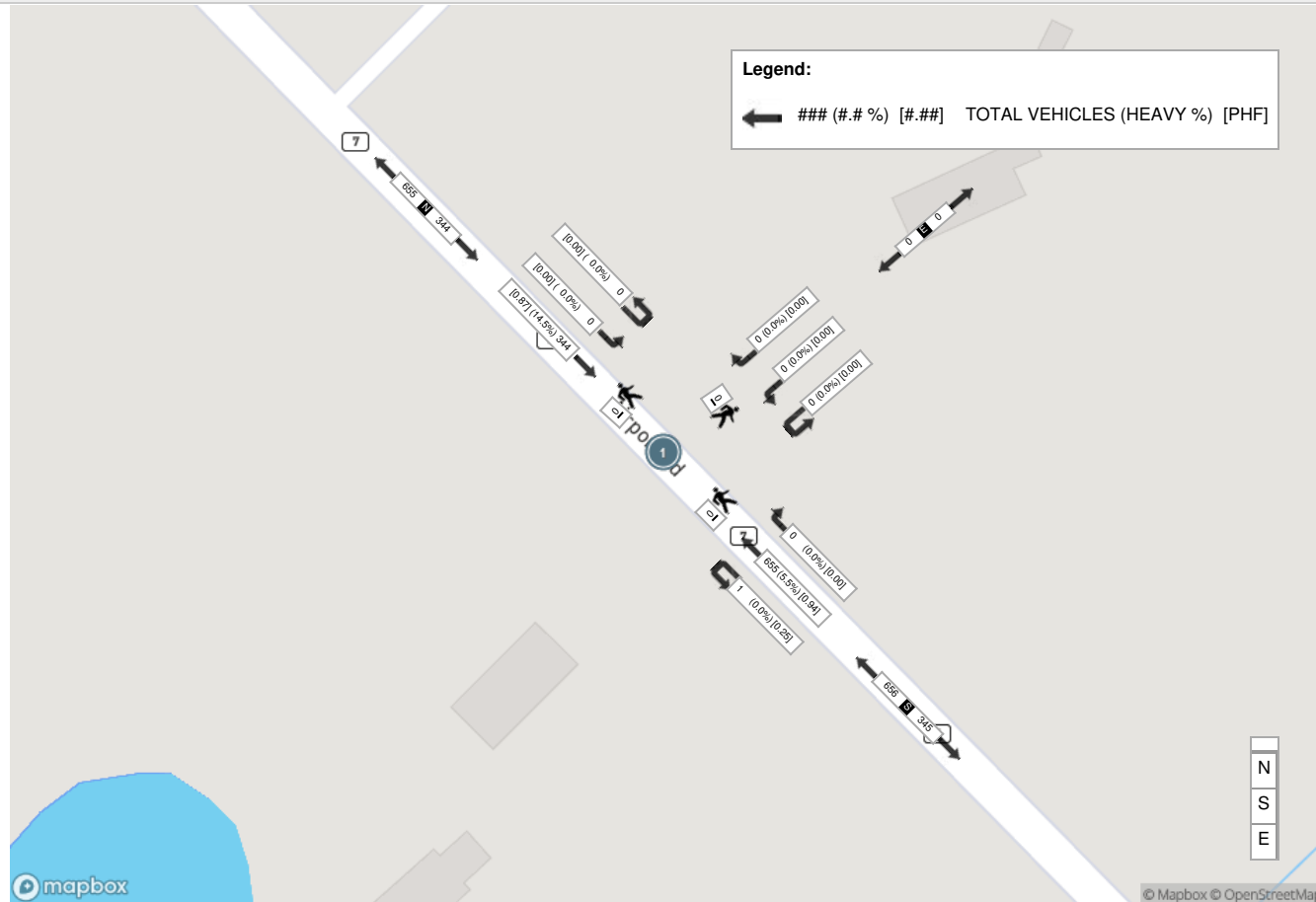
Peak Hour: 04:45 PM - 05:45 PM Weather: Broken Clouds (18 °C)

Start Time	Southbound AIRPORT RD					Westbound 12541 AIRPORT ROAD					Northbound AIRPORT RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
2026-05-20 16:45:00	86	0	0	0	86	0	0	0	0	0	0	158	1	0	159	245
2026-05-20 17:00:00	89	0	0	0	89	0	0	0	0	0	0	165	0	0	165	254
2026-05-20 17:15:00	70	0	0	0	70	0	0	0	0	0	0	158	0	0	158	228
2026-05-20 17:30:00	99	0	0	0	99	0	0	0	0	0	0	174	0	0	174	273
Grand Total	344	0	0	0	344	0	0	0	0	0	0	655	1	0	656	1000
Approach%	100%	0%	0%		-	0%	0%	0%		-	0%	99.8%	0.2%		-	-
Totals %	34.4%	0%	0%		34.4%	0%	0%	0%		0%	0%	65.5%	0.1%		65.6%	-
PHF	0.87	0	0		0.87	0	0	0		0	0	0.94	0.25		0.94	0.92
Heavy	50	0	0		50	0	0	0		0	0	36	0		36	86
Heavy %	14.5%	0%	0%		14.5%	0%	0%	0%		0%	0%	5.5%	0%		5.5%	8.6%
Lights	294	0	0		294	0	0	0		0	0	619	1		620	914
Lights %	85.5%	0%	0%		85.5%	0%	0%	0%		0%	0%	94.5%	100%		94.5%	91.4%
Single-Unit Trucks	24	0	0		24	0	0	0		0	0	16	0		16	40
Single-Unit Trucks %	7%	0%	0%		7%	0%	0%	0%		0%	0%	2.4%	0%		2.4%	4%
Buses	4	0	0		4	0	0	0		0	0	0	0		0	4
Buses %	1.2%	0%	0%		1.2%	0%	0%	0%		0%	0%	0%	0%		0%	0.4%
Articulated Trucks	22	0	0		22	0	0	0		0	0	20	0		20	42
Articulated Trucks %	6.4%	0%	0%		6.4%	0%	0%	0%		0%	0%	3.1%	0%		3%	4.2%
Bicycles on Road	0	0	0		0	0	0	0		0	0	0	0		0	0
Bicycles on Road %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	0%

Peak Hour: 07:15 AM - 08:15 AM Weather: Broken Clouds (11 °C)



Peak Hour: 04:45 PM - 05:45 PM Weather: Broken Clouds (18 °C)





Turning Movement Count (1 . AIRPORT RD & OLD SCHOOL RD) CustID: 00720510

Start Time	Southbound AIRPORT RD					Northbound AIRPORT RD					Eastbound OLD SCHOOL RD					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	UTurn N:N	Peds N:	Approach Total	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Left W:N	UTurn W:W	Peds W:	Approach Total		
2025-03-05 07:00:00	2	113	0	0	115	23	8	0	0	31	26	1	0	0	27	173	
2025-03-05 07:15:00	3	139	0	0	142	32	15	0	0	47	34	6	0	0	40	229	
2025-03-05 07:30:00	5	123	0	0	128	27	15	0	0	42	45	3	0	0	48	218	
2025-03-05 07:45:00	3	114	0	0	117	35	13	0	0	48	61	1	0	0	62	227	847
2025-03-05 08:00:00	3	96	0	0	99	36	17	0	0	53	39	2	0	0	41	193	867
2025-03-05 08:15:00	1	110	0	0	111	40	8	0	0	48	43	2	0	0	45	204	842
2025-03-05 08:30:00	2	85	0	0	87	39	9	0	0	48	28	2	0	0	30	165	789
2025-03-05 08:45:00	0	75	0	0	75	40	12	0	0	52	45	2	0	0	47	174	736
2025-03-05 09:00:00	2	73	0	0	75	42	9	0	0	51	34	2	0	0	36	162	705
2025-03-05 09:15:00	2	89	0	0	91	30	13	0	0	43	26	2	0	0	28	162	663
2025-03-05 09:30:00	0	57	0	0	57	36	13	0	0	49	23	1	0	0	24	130	628
2025-03-05 09:45:00	3	57	0	0	60	26	10	0	0	36	15	1	0	0	16	112	566
BREAK																	
2025-03-05 15:00:00	2	43	0	0	45	71	26	0	0	97	31	7	0	0	38	180	
2025-03-05 15:15:00	3	37	0	0	40	96	47	0	0	143	39	3	0	0	42	225	
2025-03-05 15:30:00	6	49	0	0	55	93	44	0	0	137	28	2	0	0	30	222	
2025-03-05 15:45:00	1	46	0	0	47	108	67	0	0	175	19	2	0	0	21	243	870
2025-03-05 16:00:00	3	50	0	0	53	90	52	0	0	142	28	5	0	0	33	228	918
2025-03-05 16:15:00	4	46	0	0	50	90	44	0	0	134	26	4	0	0	30	214	907
2025-03-05 16:30:00	3	34	0	0	37	116	61	0	0	177	20	6	0	0	26	240	925
2025-03-05 16:45:00	6	53	0	0	59	118	64	0	0	182	17	4	0	0	21	262	944
2025-03-05 17:00:00	7	48	0	0	55	90	36	0	0	126	20	2	0	0	22	203	919
2025-03-05 17:15:00	2	40	0	0	42	100	44	0	0	144	17	3	0	0	20	206	911
2025-03-05 17:30:00	2	34	0	0	36	92	33	0	0	125	19	5	0	0	24	185	856
2025-03-05 17:45:00	2	42	0	0	44	108	48	0	0	156	16	1	0	0	17	217	811
Grand Total	67	1653	0	0	1720	1578	708	0	0	2286	699	69	0	0	768	4774	-
Approach%	3.9%	96.1%	0%		-	69%	31%	0%		-	91%	9%	0%		-	-	-
Totals %	1.4%	34.6%	0%		36%	33.1%	14.8%	0%		47.9%	14.6%	1.4%	0%		16.1%	-	-
Heavy	2	210	0		-	150	5	0		-	15	6	0		-	-	-
Heavy %	3%	12.7%	0%		-	9.5%	0.7%	0%		-	2.1%	8.7%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-



Peak Hour: 07:15 AM - 08:15 AM Weather: Mist (2 °C)

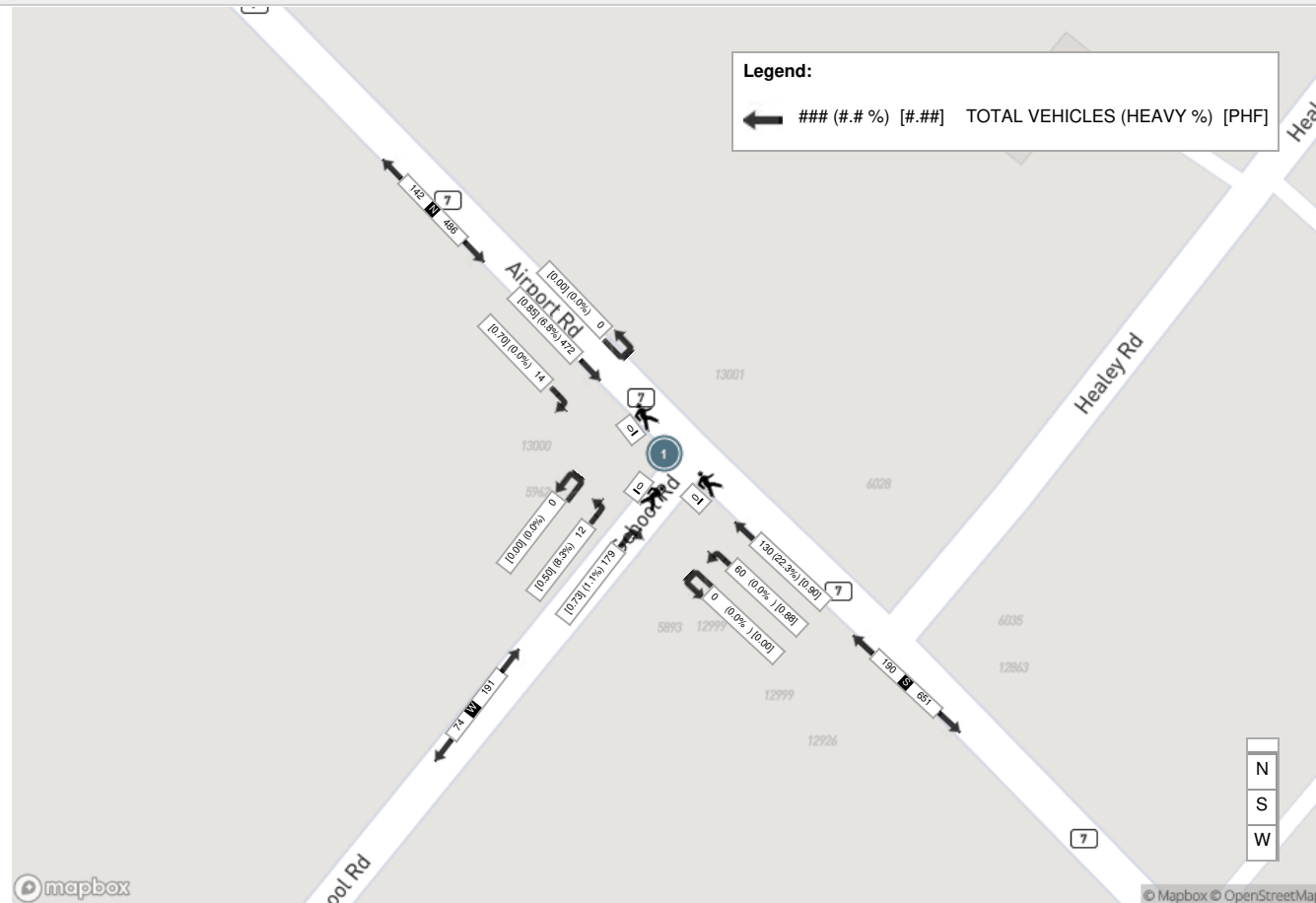
Start Time	Southbound AIRPORT RD					Northbound AIRPORT RD					Eastbound OLD SCHOOL RD					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
2025-03-05 07:15:00	3	139	0	0	142	32	15	0	0	47	34	6	0	0	40	229
2025-03-05 07:30:00	5	123	0	0	128	27	15	0	0	42	45	3	0	0	48	218
2025-03-05 07:45:00	3	114	0	0	117	35	13	0	0	48	61	1	0	0	62	227
2025-03-05 08:00:00	3	96	0	0	99	36	17	0	0	53	39	2	0	0	41	193
Grand Total	14	472	0	0	486	130	60	0	0	190	179	12	0	0	191	867
Approach%	2.9%	97.1%	0%		-	68.4%	31.6%	0%		-	93.7%	6.3%	0%		-	-
Totals %	1.6%	54.4%	0%		56.1%	15%	6.9%	0%		21.9%	20.6%	1.4%	0%		22%	-
PHF	0.7	0.85	0		0.86	0.9	0.88	0		0.9	0.73	0.5	0		0.77	0.95
Heavy	0	32	0		32	29	0	0		29	2	1	0		3	64
Heavy %	0%	6.8%	0%		6.6%	22.3%	0%	0%		15.3%	1.1%	8.3%	0%		1.6%	7.4%
Lights	14	440	0		454	101	60	0		161	177	11	0		188	803
Lights %	100%	93.2%	0%		93.4%	77.7%	100%	0%		84.7%	98.9%	91.7%	0%		98.4%	92.6%
Single-Unit Trucks	0	10	0		10	10	0	0		10	0	0	0		0	20
Single-Unit Trucks %	0%	2.1%	0%		2.1%	7.7%	0%	0%		5.3%	0%	0%	0%		0%	2.3%
Buses	0	3	0		3	11	0	0		11	2	1	0		3	17
Buses %	0%	0.6%	0%		0.6%	8.5%	0%	0%		5.8%	1.1%	8.3%	0%		1.6%	2%
Articulated Trucks	0	19	0		19	8	0	0		8	0	0	0		0	27
Articulated Trucks %	0%	4%	0%		3.9%	6.2%	0%	0%		4.2%	0%	0%	0%		0%	3.1%



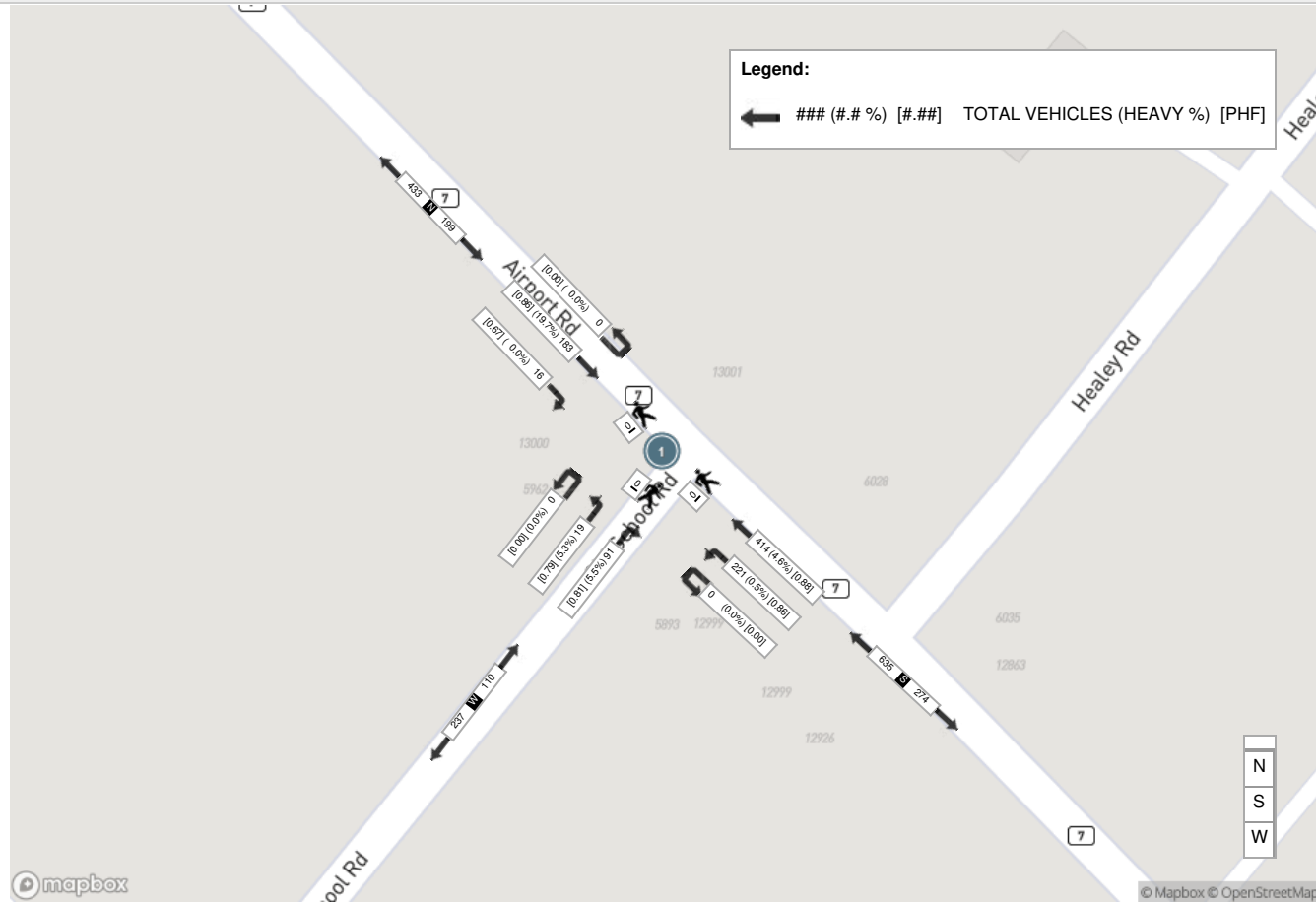
Peak Hour: 04:00 PM - 05:00 PM Weather: Mist (6 °C)

Start Time	Southbound AIRPORT RD					Northbound AIRPORT RD					Eastbound OLD SCHOOL RD					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
2025-03-05 16:00:00	3	50	0	0	53	90	52	0	0	142	28	5	0	0	33	228
2025-03-05 16:15:00	4	46	0	0	50	90	44	0	0	134	26	4	0	0	30	214
2025-03-05 16:30:00	3	34	0	0	37	116	61	0	0	177	20	6	0	0	26	240
2025-03-05 16:45:00	6	53	0	0	59	118	64	0	0	182	17	4	0	0	21	262
Grand Total	16	183	0	0	199	414	221	0	0	635	91	19	0	0	110	944
Approach%	8%	92%	0%		-	65.2%	34.8%	0%		-	82.7%	17.3%	0%		-	-
Totals %	1.7%	19.4%	0%		21.1%	43.9%	23.4%	0%		67.3%	9.6%	2%	0%		11.7%	-
PHF	0.67	0.86	0		0.84	0.88	0.86	0		0.87	0.81	0.79	0		0.83	0.9
Heavy	0	36	0		36	19	1	0		20	5	1	0		6	62
Heavy %	0%	19.7%	0%		18.1%	4.6%	0.5%	0%		3.1%	5.5%	5.3%	0%		5.5%	6.6%
Lights	16	147	0		163	395	220	0		615	86	18	0		104	882
Lights %	100%	80.3%	0%		81.9%	95.4%	99.5%	0%		96.9%	94.5%	94.7%	0%		94.5%	93.4%
Single-Unit Trucks	0	11	0		11	4	0	0		4	2	1	0		3	18
Single-Unit Trucks %	0%	6%	0%		5.5%	1%	0%	0%		0.6%	2.2%	5.3%	0%		2.7%	1.9%
Buses	0	15	0		15	4	0	0		4	3	0	0		3	22
Buses %	0%	8.2%	0%		7.5%	1%	0%	0%		0.6%	3.3%	0%	0%		2.7%	2.3%
Articulated Trucks	0	10	0		10	11	1	0		12	0	0	0		0	22
Articulated Trucks %	0%	5.5%	0%		5%	2.7%	0.5%	0%		1.9%	0%	0%	0%		0%	2.3%

Peak Hour: 07:15 AM - 08:15 AM Weather: Mist (2 °C)



Peak Hour: 04:00 PM - 05:00 PM Weather: Mist (6 °C)



REGIONAL MUNICIPALITY OF PEEL										
Traffic Signal Timing Parameters										
Database Date		Nov. 07, 2024			Prepared Date		Nov. 07, 2024			
Database Rev		Rev. 2			Completed By		A.P			
Timing Card / Field rev		N/A			Checked By		M.H			
Location Airport Road @ Old School Road/ Healey Road										
Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)			
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS	
1	Not in Use	-	-	-	-	-	-	-	-	
2	Airport Road - SB	12.0	10.0	5.0	4.6	3.1	70.0	40.0	60.0	
3	Old School Road - EB + OL SB RT	8.0	10.0	10.0	4.2	2.0	25.0	15.0	28.0	
4	Healey Road - WB + OL NB RT	8.0	10.0	10.0	4.2	2.0	25.0	25.0	42.0	
5	Not in Use	-	-	-	-	-	-	-	-	
6	Airport Road - NB	12.0	10.0	5.0	4.6	3.1	70.0	40.0	60.0	
7	Not in Use	-	-	-	-	-	-	-	-	
8	Computer Phase	8.0	10.0	10.0	4.2	2.0	50.0	40.0	70.0	
System Control No Semi-Actuated Mode Yes					TIME (M-F)		PEAK	CYCLE LENGTH (s)		OFFSET (s)
					06:00 - 09:00		AM	120		0
					09:00 - 15:00		OFF	80		0
					15:00 - 19:00		PM	130		0

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date		May 22, 2026			Prepared Date		May 28, 2026			
Database Rev		22-May			Completed By		AA			
Timing Card / Field rev		SITE			Checked By		MY			
Location	Airport Rd @ Mayfield Rd									
Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)			
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS	
1	Airport Rd - NB P.P. LT	5.0	-	-	3.0	-	12.0	12.0	17.0	
2	Airport Rd - SB	12.0	12.0	23.0	4.0	2.9	43.0	43.0	43.0	
3	Mayfield Rd - EB P.P. LT	5.0	-	-	3.0	-	15.0	15.0	25.0	
4	Mayfield Rd - WB	12.0	12.0	27.0	4.0	3.1	50.0	50.0	50.0	
5	Airport Rd - SB P.P. LT	5.0	-	-	3.0	-	12.0	12.0	17.0	
6	Airport Rd - NB	12.0	12.0	23.0	4.0	2.9	43.0	43.0	43.0	
7	Mayfield Rd - WB P.P. LT	5.0	-	-	3.0	-	15.0	15.0	25.0	
8	Mayfield Rd - EB	12.0	12.0	27.0	4.0	3.1	50.0	50.0	50.0	
System Control Yes Semi-Actuated Mode Yes					TIME (M-F)		PEAK	CYCLE LENGTH (s)		OFFSET (s)
					06:30 - 9:00		AM	120		30
					09:00 - 15:00		OFF	120		94
					15:00 - 19:30		PM	135		65

APPENDIX D:

Existing Traffic Assessment

Queues

Existing AM Traffic

08/25/2026

1: Airport Road & Old School Road/Healey Road



Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	214	129	164	120	480	6
Act Effect Green (s)	20.4	11.4	28.1	47.3	28.1	56.4
Actuated g/C Ratio	0.25	0.14	0.35	0.59	0.35	0.70
v/c Ratio	0.46	0.51	0.31	0.13	0.81	0.01
Control Delay	31.5	41.2	20.5	1.5	35.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.5	41.2	20.5	1.5	35.2	0.0
LOS	C	D	C	A	D	A
Approach Delay	31.5	41.2	12.5		34.8	
Approach LOS	C	D	B		C	
Queue Length 50th (m)	26.1	17.9	17.5	0.0	63.7	0.0
Queue Length 95th (m)	59.8	40.0	34.0	5.0	106.5	0.0
Internal Link Dist (m)	531.3	642.7	1270.3		873.5	
Turn Bay Length (m)				15.0		40.0
Base Capacity (vph)	468	427	1188	944	1340	987
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.30	0.14	0.13	0.36	0.01

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 80.4

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 29.2

Intersection LOS: C

Intersection Capacity Utilization 64.0%

ICU Level of Service B

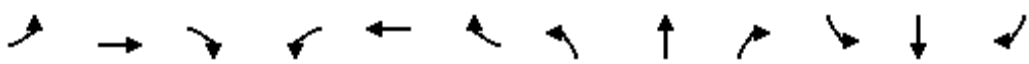
Analysis Period (min) 15

HCM Signalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

Existing AM Traffic

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔		↔	↔
Traffic Volume (vph)	14	158	29	44	73	4	7	148	113	12	439	6
Future Volume (vph)	14	158	29	44	73	4	7	148	113	12	439	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.98			1.00			1.00	0.85		1.00	0.85
Flt Protected		1.00			0.98			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1828			1790			1539	1541		1711	1396
Flt Permitted		1.00			0.98			0.97	1.00		0.99	1.00
Satd. Flow (perm)		1828			1790			1503	1541		1696	1396
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	15	168	31	47	78	4	7	157	120	13	467	6
RTOR Reduction (vph)	0	4	0	0	1	0	0	0	61	0	0	2
Lane Group Flow (vph)	0	210	0	0	128	0	0	164	59	0	480	4
Heavy Vehicles (%)	21%	1%	3%	7%	4%	0%	14%	25%	6%	17%	12%	17%
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Actuated Green, G (s)		20.4			11.4			28.1	39.5		28.1	48.5
Effective Green, g (s)		20.4			11.4			28.1	39.5		28.1	48.5
Actuated g/C Ratio		0.25			0.14			0.35	0.49		0.35	0.61
Clearance Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		466			255			527	880		595	846
v/s Ratio Prot		c0.11			c0.07				0.01			0.00
v/s Ratio Perm								0.11	0.03		c0.28	0.00
v/c Ratio		0.45			0.50			0.31	0.07		0.81	0.00
Uniform Delay, d1		25.1			31.7			18.9	10.6		23.5	6.2
Progression Factor		1.00			1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2		3.1			1.6			0.3	0.0		7.9	0.0
Delay (s)		28.2			33.2			19.2	10.6		31.4	6.2
Level of Service		C			C			B	B		C	A
Approach Delay (s)		28.2			33.2			15.6			31.1	
Approach LOS		C			C			B			C	
Intersection Summary												
HCM 2000 Control Delay			26.8									
HCM 2000 Volume to Capacity ratio			0.63									
Actuated Cycle Length (s)			80.0						20.1			
Intersection Capacity Utilization			64.0%									
Analysis Period (min)			15									
c Critical Lane Group												

Queues
3: Airport Road & Mayfield Road

Existing AM Traffic

08/25/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	221	708	505	86	545	196	265	62	71	639	164
Act Effct Green (s)	50.3	36.6	36.6	47.0	32.8	61.5	48.9	48.9	56.1	44.2	44.2
Actuated g/C Ratio	0.42	0.30	0.30	0.39	0.27	0.51	0.41	0.41	0.47	0.37	0.37
v/c Ratio	0.75	0.72	0.71	0.39	0.64	0.53	0.22	0.12	0.16	0.52	0.33
Control Delay	39.1	41.4	16.9	23.9	40.6	24.9	26.8	2.9	18.4	33.5	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.1	41.4	16.9	23.9	40.6	24.9	26.8	2.9	18.4	33.5	6.7
LOS	D	D	B	C	D	C	C	A	B	C	A
Approach Delay	32.4			38.3			23.3			27.2	
Approach LOS	C			D			C			C	
Queue Length 50th (m)	33.7	79.6	33.4	11.9	58.2	24.7	22.0	0.0	8.3	64.3	0.0
Queue Length 95th (m)	45.0	91.6	67.2	19.0	68.1	46.0	36.7	4.7	19.0	88.2	15.9
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	293	1154	770	241	1109	369	1208	528	470	1221	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.61	0.66	0.36	0.49	0.53	0.22	0.12	0.15	0.52	0.33
Intersection Summary											
Cycle Length: 120											
Actuated Cycle Length: 120											
Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 0.75											
Intersection Signal Delay: 30.8						Intersection LOS: C					
Intersection Capacity Utilization 86.2%						ICU Level of Service E					
Analysis Period (min) 15											

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

Existing AM Traffic

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	651	465	79	468	33	192	244	57	65	588	151
Future Volume (vph)	203	651	465	79	468	33	192	244	57	65	588	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1471	3230	1535	1332	3093		1674	2968	1163	1453	3318	1088
Flt Permitted	0.30	1.00	1.00	0.25	1.00		0.29	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	460	3230	1535	352	3093		510	2968	1163	900	3318	1088
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	708	505	86	509	36	196	265	62	71	639	164
RTOR Reduction (vph)	0	0	240	0	5	0	0	0	37	0	0	104
Lane Group Flow (vph)	221	708	265	86	540	0	196	265	25	71	639	60
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	24%	13%	5%	37%	16%	27%	9%	23%	37%	25%	10%	48%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	48.4	36.6	36.6	42.2	33.4		57.6	47.7	47.7	50.5	43.6	43.6
Effective Green, g (s)	48.4	36.6	36.6	42.2	33.4		57.6	47.7	47.7	50.5	43.6	43.6
Actuated g/C Ratio	0.40	0.31	0.31	0.35	0.28		0.48	0.40	0.40	0.42	0.36	0.36
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	286	985	468	195	860		351	1179	462	410	1205	395
v/s Ratio Prot	c0.08	0.22		0.03	0.17		c0.05	0.09		0.01	0.19	
v/s Ratio Perm	c0.23		0.17	0.12			c0.22		0.02	0.06		0.05
v/c Ratio	0.77	0.72	0.57	0.44	0.63		0.56	0.22	0.05	0.17	0.53	0.15
Uniform Delay, d1	26.6	37.1	35.0	27.6	37.9		19.4	23.9	22.3	21.2	30.1	25.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.2	2.5	1.6	1.6	1.4		1.9	0.1	0.0	0.2	1.7	0.8
Delay (s)	38.8	39.7	36.6	29.2	39.3		21.4	24.0	22.3	21.4	31.8	26.5
Level of Service	D	D	D	C	D		C	C	C	C	C	C
Approach Delay (s)		38.5			37.9			22.8			30.0	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay			33.9			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			86.2%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Queues

Existing PM Traffic

08/25/2026

1: Airport Road & Old School Road/Healey Road



Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	214	129	164	120	480	6
Act Effect Green (s)	22.2	12.1	28.7	48.6	28.7	58.8
Actuated g/C Ratio	0.27	0.14	0.34	0.58	0.34	0.70
v/c Ratio	0.44	0.50	0.32	0.13	0.82	0.01
Control Delay	31.2	41.5	21.8	1.6	37.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.2	41.5	21.8	1.6	37.9	0.0
LOS	C	D	C	A	D	A
Approach Delay	31.2	41.5	13.3		37.4	
Approach LOS	C	D	B		D	
Queue Length 50th (m)	26.7	18.6	18.5	0.0	67.3	0.0
Queue Length 95th (m)	60.3	40.6	35.8	5.3	112.4	0.0
Internal Link Dist (m)	531.3	642.7	1270.3		873.5	
Turn Bay Length (m)				15.0		40.0
Base Capacity (vph)	491	783	960	954	1084	990
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.16	0.17	0.13	0.44	0.01

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 83.5

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 30.5

Intersection LOS: C

Intersection Capacity Utilization 64.0%

ICU Level of Service B

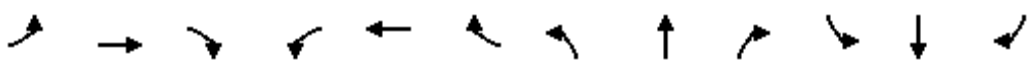
Analysis Period (min) 15

HCM Signalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

Existing PM Traffic

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔		↔	↔
Traffic Volume (vph)	14	158	29	44	73	4	7	148	113	12	439	6
Future Volume (vph)	14	158	29	44	73	4	7	148	113	12	439	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.98			1.00			1.00	0.85		1.00	0.85
Flt Protected		1.00			0.98			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1828			1790			1539	1541		1711	1396
Flt Permitted		1.00			0.98			0.97	1.00		0.99	1.00
Satd. Flow (perm)		1828			1790			1503	1541		1696	1396
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	15	168	31	47	78	4	7	157	120	13	467	6
RTOR Reduction (vph)	0	4	0	0	1	0	0	0	61	0	0	2
Lane Group Flow (vph)	0	210	0	0	128	0	0	164	59	0	480	4
Heavy Vehicles (%)	21%	1%	3%	7%	4%	0%	14%	25%	6%	17%	12%	17%
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Actuated Green, G (s)		22.2			12.1			28.7	40.8		28.7	50.9
Effective Green, g (s)		22.2			12.1			28.7	40.8		28.7	50.9
Actuated g/C Ratio		0.27			0.15			0.35	0.49		0.35	0.61
Clearance Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		488			260			519	871		585	855
v/s Ratio Prot		c0.11			c0.07				0.01			0.00
v/s Ratio Perm								0.11	0.03		c0.28	0.00
v/c Ratio		0.43			0.49			0.32	0.07		0.82	0.00
Uniform Delay, d1		25.2			32.7			20.0	11.1		24.8	6.3
Progression Factor		1.00			1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2		2.7			1.5			0.4	0.0		9.0	0.0
Delay (s)		28.0			34.1			20.3	11.2		33.9	6.3
Level of Service		C			C			C	B		C	A
Approach Delay (s)		28.0			34.1			16.5			33.5	
Approach LOS		C			C			B			C	
Intersection Summary												
HCM 2000 Control Delay			28.2			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			83.1			Sum of lost time (s)			20.1			
Intersection Capacity Utilization			64.0%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

Queues
3: Airport Road & Mayfield Road

Existing PM Traffic

08/25/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	221	708	505	86	545	196	265	62	71	639	164
Act Effct Green (s)	56.0	38.1	38.1	44.7	29.8	73.0	59.0	59.0	65.3	52.5	52.5
Actuated g/C Ratio	0.41	0.28	0.28	0.33	0.22	0.54	0.44	0.44	0.48	0.39	0.39
v/c Ratio	0.72	0.78	0.67	0.44	0.79	0.49	0.20	0.11	0.15	0.50	0.31
Control Delay	39.7	50.4	10.0	30.4	57.6	22.6	27.2	3.9	18.7	35.5	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.7	50.4	10.0	30.4	57.6	22.6	27.2	3.9	18.7	35.5	7.0
LOS	D	D	A	C	E	C	C	A	B	D	A
Approach Delay	34.5			53.9			22.7			28.8	
Approach LOS	C			D			C			C	
Queue Length 50th (m)	40.2	91.7	11.0	14.2	72.7	26.2	23.0	0.0	8.8	67.2	0.0
Queue Length 95th (m)	50.8	103.8	42.0	21.6	84.5	49.3	40.2	6.5	20.4	103.3	18.1
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	330	1045	800	303	986	413	1296	553	522	1290	523
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.68	0.63	0.28	0.55	0.47	0.20	0.11	0.14	0.50	0.31
Intersection Summary											
Cycle Length: 135											
Actuated Cycle Length: 135											
Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 0.79											
Intersection Signal Delay: 34.8						Intersection LOS: C					
Intersection Capacity Utilization 86.2%						ICU Level of Service E					
Analysis Period (min) 15											

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

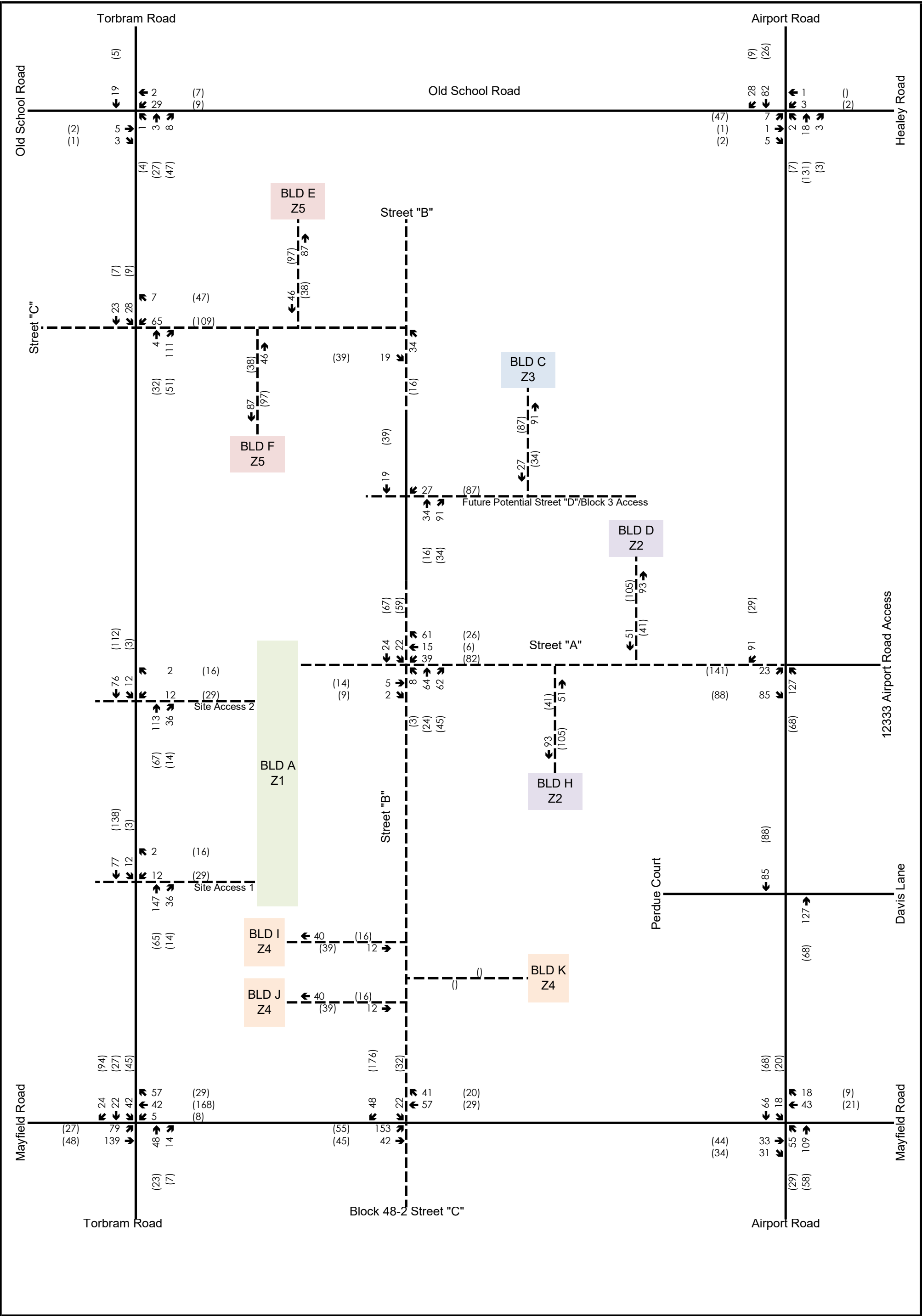
Existing PM Traffic

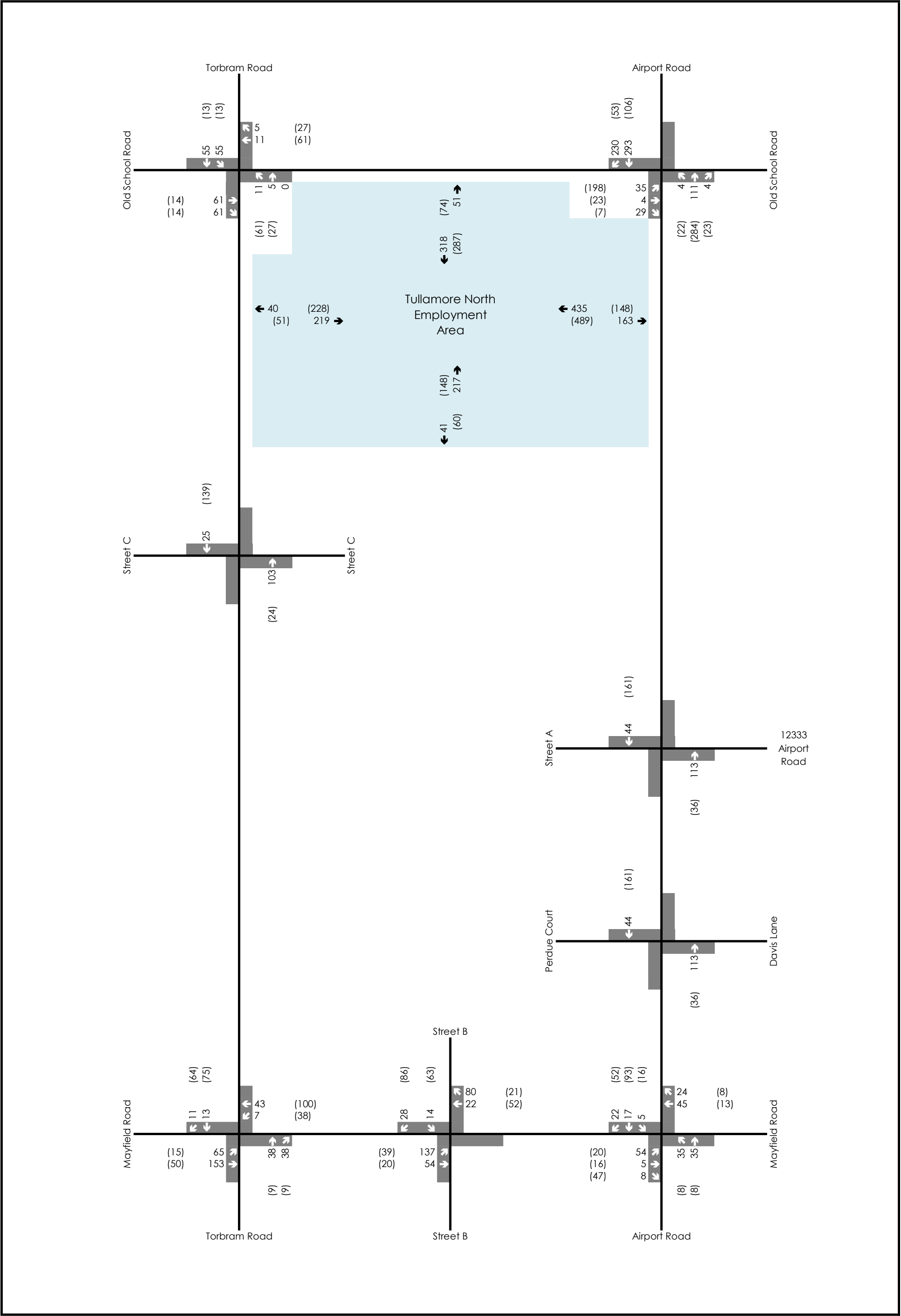
08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	651	465	79	468	33	192	244	57	65	588	151
Future Volume (vph)	203	651	465	79	468	33	192	244	57	65	588	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1471	3230	1535	1332	3093		1674	2968	1161	1452	3318	1088
Flt Permitted	0.23	1.00	1.00	0.26	1.00		0.30	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	359	3230	1535	358	3093		525	2968	1161	899	3318	1088
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	708	505	86	509	36	196	265	62	71	639	164
RTOR Reduction (vph)	0	0	323	0	5	0	0	0	35	0	0	100
Lane Group Flow (vph)	221	708	182	86	540	0	196	265	27	71	639	64
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	24%	13%	5%	37%	16%	27%	9%	23%	37%	25%	10%	48%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	51.9	38.1	38.1	40.6	29.8		69.1	58.4	58.4	60.2	52.5	52.5
Effective Green, g (s)	51.9	38.1	38.1	40.6	29.8		69.1	58.4	58.4	60.2	52.5	52.5
Actuated g/C Ratio	0.38	0.28	0.28	0.30	0.22		0.51	0.43	0.43	0.45	0.39	0.39
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	295	911	433	185	682		384	1283	502	432	1290	423
v/s Ratio Prot	c0.11	c0.22		0.04	0.17		c0.05	0.09		0.01	0.19	
v/s Ratio Perm	0.18		0.12	0.10			c0.21		0.02	0.06		0.06
v/c Ratio	0.75	0.78	0.42	0.46	0.79		0.51	0.21	0.05	0.16	0.50	0.15
Uniform Delay, d1	31.5	44.5	39.5	35.7	49.7		19.4	23.9	22.2	21.8	31.2	26.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.0	4.2	0.7	1.8	6.3		1.1	0.1	0.0	0.2	1.4	0.8
Delay (s)	41.4	48.8	40.1	37.6	56.0		20.5	23.9	22.3	22.0	32.6	27.5
Level of Service	D	D	D	D	E		C	C	C	C	C	C
Approach Delay (s)		44.6			53.5			22.5			30.8	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay			39.4			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			135.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			86.2%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

APPENDIX E:

Background Study Site Traffic Excerpts





APPENDIX F:

Interim 2033 Future Background Traffic Calculations

Queues

Future Background AM Interim

08/25/2026

1: Airport Road & Old School Road/Healey Road



Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	306	133	338	128	954	281
Act Effect Green (s)	20.0	13.7	62.4	83.8	62.4	90.1
Actuated g/C Ratio	0.17	0.12	0.54	0.72	0.54	0.78
v/c Ratio	0.99	0.63	0.67	0.11	1.04	0.25
Control Delay	95.5	61.9	28.7	1.0	70.0	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.5	61.9	28.7	1.0	70.0	1.7
LOS	F	E	C	A	E	A
Approach Delay	95.5	61.9	21.1		54.4	
Approach LOS	F	E	C		D	
Queue Length 50th (m)	67.9	29.0	53.5	0.0	~235.9	3.1
Queue Length 95th (m)	#131.5	48.7	98.1	4.6	#332.0	10.7
Internal Link Dist (m)	531.3	642.7	1270.3		873.5	
Turn Bay Length (m)				15.0		40.0
Base Capacity (vph)	310	290	502	1135	913	1130
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.46	0.67	0.11	1.04	0.25

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 116.2

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 53.5

Intersection LOS: D

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

Future Background AM Interim

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	163	67	47	74	4	13	305	120	12	885	264
Future Volume (vph)	58	163	67	47	74	4	13	305	120	12	885	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.97			1.00			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.98			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1746			1788			1539	1541		1713	1396
Flt Permitted		0.99			0.98			0.61	1.00		0.99	1.00
Satd. Flow (perm)		1746			1788			936	1541		1703	1396
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	62	173	71	50	79	4	14	324	128	13	941	281
RTOR Reduction (vph)	0	9	0	0	1	0	0	0	44	0	0	62
Lane Group Flow (vph)	0	297	0	0	132	0	0	338	84	0	954	219
Heavy Vehicles (%)	21%	1%	3%	7%	4%	0%	14%	25%	6%	17%	12%	17%
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Actuated Green, G (s)		20.0			13.7			62.4	76.1		62.4	82.4
Effective Green, g (s)		20.0			13.7			62.4	76.1		62.4	82.4
Actuated g/C Ratio		0.17			0.12			0.54	0.65		0.54	0.71
Clearance Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		300			210			502	1091		914	989
v/s Ratio Prot		c0.17			c0.07				0.01			0.04
v/s Ratio Perm								0.36	0.05		c0.56	0.12
v/c Ratio		0.99			0.63			0.67	0.08		1.04	0.22
Uniform Delay, d1		48.0			48.8			19.5	7.3		26.9	5.8
Progression Factor		1.00			1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2		49.4			5.8			3.6	0.0		41.8	0.1
Delay (s)		97.4			54.6			23.1	7.3		68.7	5.9
Level of Service		F			D			C	A		E	A
Approach Delay (s)		97.4			54.6			18.7			54.4	
Approach LOS		F			D			B			D	
Intersection Summary												
HCM 2000 Control Delay			52.8			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			116.2			Sum of lost time (s)			20.1			
Intersection Capacity Utilization			87.3%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Queues
3: Airport Road & Mayfield Road

Future Background AM Interim

08/25/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	282	854	548	86	762	288	464	62	96	828	189
Act Effect Green (s)	55.3	41.7	41.7	51.4	37.5	56.1	41.9	41.9	48.8	36.3	36.3
Actuated g/C Ratio	0.46	0.35	0.35	0.43	0.31	0.47	0.35	0.35	0.41	0.30	0.30
v/c Ratio	1.11	0.76	0.74	0.42	0.79	1.02	0.45	0.13	0.27	0.83	0.41
Control Delay	113.0	39.9	21.0	23.1	43.1	88.9	33.3	3.0	21.6	47.1	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.0	39.9	21.0	23.1	43.1	88.9	33.3	3.0	21.6	47.1	7.4
LOS	F	D	C	C	D	F	C	A	C	D	A
Approach Delay	46.0			41.0			50.6			38.2	
Approach LOS	D			D			D			D	
Queue Length 50th (m)	~46.3	94.1	50.1	10.8	82.8	~54.8	45.9	0.0	12.7	95.4	0.0
Queue Length 95th (m)	#98.1	115.3	93.0	19.0	100.9	#125.0	64.0	4.7	24.5	120.0	17.4
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	254	1160	751	229	1101	282	1035	465	360	1003	460
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.74	0.73	0.38	0.69	1.02	0.45	0.13	0.27	0.83	0.41

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay: 44.0

Intersection LOS: D

Intersection Capacity Utilization 99.2%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

Future Background AM Interim

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	786	504	79	626	75	282	427	57	88	762	174
Future Volume (vph)	259	786	504	79	626	75	282	427	57	88	762	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1472	3230	1535	1332	3059		1674	2968	1163	1456	3318	1088
Flt Permitted	0.19	1.00	1.00	0.20	1.00		0.14	1.00	1.00	0.49	1.00	1.00
Satd. Flow (perm)	297	3230	1535	277	3059		243	2968	1163	744	3318	1088
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	282	854	548	86	680	82	288	464	62	96	828	189
RTOR Reduction (vph)	0	0	204	0	8	0	0	0	41	0	0	133
Lane Group Flow (vph)	282	854	344	86	754	0	288	464	21	96	828	56
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	24%	13%	5%	37%	16%	27%	9%	23%	37%	25%	10%	48%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	53.1	41.7	41.7	46.5	38.1		52.9	41.3	41.3	44.3	35.7	35.7
Effective Green, g (s)	53.1	41.7	41.7	46.5	38.1		52.9	41.3	41.3	44.3	35.7	35.7
Actuated g/C Ratio	0.44	0.35	0.35	0.39	0.32		0.44	0.34	0.34	0.37	0.30	0.30
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	1122	533	181	971		276	1021	400	325	987	323
v/s Ratio Prot	c0.11	0.26		0.03	0.25		c0.12	0.16		0.02	0.25	
v/s Ratio Perm	c0.39		0.22	0.15			c0.34		0.02	0.09		0.05
v/c Ratio	1.14	0.76	0.64	0.48	0.78		1.04	0.45	0.05	0.30	0.84	0.17
Uniform Delay, d1	27.6	34.7	32.9	25.3	37.1		29.6	30.6	26.3	25.6	39.5	31.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	99.2	3.1	2.7	2.0	3.9		66.0	0.3	0.1	0.5	8.5	1.2
Delay (s)	126.8	37.8	35.6	27.2	41.0		95.6	30.9	26.3	26.1	48.0	32.4
Level of Service	F	D	D	C	D		F	C	C	C	D	C
Approach Delay (s)		52.0			39.6			53.5			43.4	
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			47.8			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.14									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			99.2%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

1: Airport Road & Old School Road/Healey Road



Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	477	379	1013	101	426	85
Act Effect Green (s)	21.8	29.3	52.4	89.4	52.4	82.0
Actuated g/C Ratio	0.18	0.24	0.42	0.72	0.42	0.66
v/c Ratio	1.56	0.87	1.64	0.09	1.33	0.08
Control Delay	303.6	65.1	321.2	3.6	199.7	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	303.6	65.1	321.2	3.6	199.7	2.1
LOS	F	E	F	A	F	A
Approach Delay	303.6	65.1	292.4		166.9	
Approach LOS	F	E	F		F	
Queue Length 50th (m)	~166.7	88.6	~359.7	4.4	~136.0	0.0
Queue Length 95th (m)	#243.5	125.0	#460.8	9.0	#208.9	5.9
Internal Link Dist (m)	531.3	642.7	1270.3		873.5	
Turn Bay Length (m)				15.0		40.0
Base Capacity (vph)	305	536	619	1128	320	1059
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.56	0.71	1.64	0.09	1.33	0.08

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 123.7

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.64

Intersection Signal Delay: 234.0

Intersection LOS: F

Intersection Capacity Utilization 140.4%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

Future Background PM Interim

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	155	34	100	254	10	56	917	97	11	398	82
Future Volume (vph)	270	155	34	100	254	10	56	917	97	11	398	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.99			1.00			1.00	0.85		1.00	0.85
Flt Protected		0.97			0.99			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1717			1850			1822	1570		1577	1555
Flt Permitted		0.97			0.99			0.80	1.00		0.48	1.00
Satd. Flow (perm)		1717			1850			1462	1570		759	1555
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	281	161	35	104	265	10	58	955	101	11	415	85
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	11	0	0	34
Lane Group Flow (vph)	0	475	0	0	378	0	0	1013	90	0	426	51
Heavy Vehicles (%)	10%	2%	14%	4%	1%	11%	7%	5%	4%	10%	22%	5%
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6			2	
Permitted Phases							6		6	2		2
Actuated Green, G (s)		21.8			29.3			52.4	81.7		52.4	74.2
Effective Green, g (s)		21.8			29.3			52.4	81.7		52.4	74.2
Actuated g/C Ratio		0.18			0.24			0.42	0.66		0.42	0.60
Clearance Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		302			438			619	1116		321	933
v/s Ratio Prot		c0.28			c0.20				0.02			0.01
v/s Ratio Perm								c0.69	0.04		0.56	0.02
v/c Ratio		1.57			0.86			1.64	0.08		1.33	0.05
Uniform Delay, d1		50.9			45.2			35.6	7.5		35.6	10.2
Progression Factor		1.00			1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2		272.5			16.0			293.7	0.0		167.2	0.0
Delay (s)		323.4			61.2			329.3	7.5		202.8	10.2
Level of Service		F			E			F	A		F	B
Approach Delay (s)		323.4			61.2			300.1			170.8	
Approach LOS		F			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		241.5										F
HCM 2000 Volume to Capacity ratio		1.40										
Actuated Cycle Length (s)		123.6							20.1			
Intersection Capacity Utilization		140.4%										H
ICU Level of Service												
Analysis Period (min)		15										
c Critical Lane Group												

Queues
3: Airport Road & Mayfield Road

Future Background PM Interim

08/25/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	246	839	353	83	863	378	833	104	136	582	361
Act Effect Green (s)	66.7	50.5	50.5	54.2	41.0	61.1	43.7	43.7	51.7	36.1	36.1
Actuated g/C Ratio	0.49	0.37	0.37	0.40	0.30	0.45	0.32	0.32	0.38	0.27	0.27
v/c Ratio	0.90	0.68	0.45	0.33	0.89	0.96	0.76	0.25	0.57	0.65	0.58
Control Delay	65.4	38.4	5.0	21.5	56.4	68.2	47.8	13.3	33.4	47.9	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	38.4	5.0	21.5	56.4	68.2	47.8	13.3	33.4	47.9	9.6
LOS	E	D	A	C	E	E	D	B	C	D	A
Approach Delay	34.8			53.4			50.9			33.2	
Approach LOS	C			D			D			C	
Queue Length 50th (m)	44.4	95.5	1.6	11.1	112.3	~72.5	108.2	4.2	21.6	72.7	4.8
Queue Length 95th (m)	#82.3	116.9	21.2	19.0	139.0	#144.9	#150.8	19.6	37.2	92.7	32.8
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	305	1231	780	398	1021	393	1094	423	265	895	622
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.68	0.45	0.21	0.85	0.96	0.76	0.25	0.51	0.65	0.58

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 42.6

Intersection LOS: D

Intersection Capacity Utilization 102.7%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

Future Background PM Interim

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	772	325	76	730	64	370	766	96	125	535	332
Future Volume (vph)	226	772	325	76	730	64	370	766	96	125	535	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1484	3288	1510	1614	3177		1753	3380	1135	1600	3349	1403
Flt Permitted	0.12	1.00	1.00	0.25	1.00		0.25	1.00	1.00	0.20	1.00	1.00
Satd. Flow (perm)	191	3288	1510	420	3177		464	3380	1135	335	3349	1403
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	246	839	353	83	793	70	378	833	104	136	582	361
RTOR Reduction (vph)	0	0	215	0	5	0	0	0	55	0	0	247
Lane Group Flow (vph)	246	839	138	83	858	0	378	833	49	136	582	114
Confl. Peds. (#/hr)			17	17			15		7	7		15
Heavy Vehicles (%)	23%	11%	5%	13%	10%	53%	4%	8%	41%	14%	9%	13%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	62.6	50.5	50.5	50.1	41.0		58.4	43.7	43.7	47.8	36.1	36.1
Effective Green, g (s)	62.6	50.5	50.5	50.1	41.0		58.4	43.7	43.7	47.8	36.1	36.1
Actuated g/C Ratio	0.46	0.37	0.37	0.37	0.30		0.43	0.32	0.32	0.35	0.27	0.27
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	266	1229	564	236	964		385	1094	367	228	895	375
v/s Ratio Prot	c0.13	0.26		0.02	0.27		c0.14	0.25		0.05	0.17	
v/s Ratio Perm	c0.30		0.09	0.11			c0.28		0.04	0.16		0.08
v/c Ratio	0.92	0.68	0.25	0.35	0.89		0.98	0.76	0.13	0.60	0.65	0.30
Uniform Delay, d1	34.8	35.5	29.1	28.7	44.9		31.2	41.0	32.3	31.9	43.9	39.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	35.4	1.6	0.2	0.9	10.3		40.8	3.2	0.2	4.2	3.7	2.1
Delay (s)	70.2	37.1	29.3	29.6	55.2		72.0	44.2	32.4	36.0	47.5	41.5
Level of Service	E	D	C	C	E		E	D	C	D	D	D
Approach Delay (s)		40.9			52.9			51.2			44.1	
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			46.8			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.99									
Actuated Cycle Length (s)			135.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			102.7%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

APPENDIX G:

Ultimate 2033 Future Background Traffic Calculations

HCM Unsignalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

Future Background AM Ultimate

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized			MOYes			MOYes			MOYes			MOYes
Traffic Volume (veh/h)	58	163	67	47	74	4	13	305	120	12	885	264
Future Volume (veh/h)	58	163	67	47	74	4	13	305	120	12	885	264
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	62	173	71	50	79	4	14	324	128	13	941	281
Approach Volume (veh/h)		235			129			338			954	
Crossing Volume (veh/h)		1004			400			248			143	
High Capacity (veh/h)		620			1011			1140			1238	
High v/c (veh/h)		0.38			0.13			0.30			0.77	
Low Capacity (veh/h)		481			823			939			1028	
Low v/c (veh/h)		0.49			0.16			0.36			0.93	
Intersection Summary												
Maximum v/c High			0.77									
Maximum v/c Low			0.93									
Intersection Capacity Utilization			70.8%			ICU Level of Service				C		

Intersection											
Intersection Delay, s/veh	9.9										
Intersection LOS	A										
Approach	EB			WB			NB			SB	
Entry Lanes	1			2			2			2	
Conflicting Circle Lanes	2			2			2			2	
Adj Approach Flow, veh/h	306			133			466			1235	
Demand Flow Rate, veh/h	323			140			557			1398	
Vehicles Circulating, veh/h	1123			496			265			152	
Vehicles Exiting, veh/h	98			190			1108			480	
Follow-Up Headway, s	3.186			3.186			3.186			3.186	
Ped Vol Crossing Leg, #/h	0			0			0			0	
Ped Cap Adj	1.000			1.000			1.000			1.000	
Approach Delay, s/veh	14.9			5.7			6.8			10.2	
Approach LOS	B			A			A			B	
Lane	Left	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Designated Moves	LT	R	LT	TR	R	LT	TR	R	LT	TR	R
Assumed Moves	LT	R	LT	TR	R	LT	TR	R	LT	TR	R
RT Channelized		Yield			Yield			Yield			Yield
Lane Util	1.000		0.471	0.529		0.470	0.530		0.470	0.530	
Critical Headway, s	4.113		4.293	4.113		4.293	4.113		4.293	4.113	
Entry Flow, veh/h	250	73	64	72	4	198	223	136	502	567	329
Cap Entry Lane, veh/h	515	520	779	798	807	926	939	934	1008	1016	1055
Entry HV Adj Factor	0.941	0.971	0.946	0.948	1.000	0.802	0.803	0.943	0.893	0.892	0.855
Flow Entry, veh/h	235	71	61	68	4	159	179	128	448	506	281
Cap Entry, veh/h	484	505	737	757	807	743	754	882	901	906	902
V/C Ratio	0.486	0.141	0.082	0.090	0.005	0.214	0.238	0.145	0.498	0.558	0.312
Control Delay, s/veh	16.7	9.0	5.7	5.7	4.5	7.2	7.4	5.5	10.4	11.7	7.3
LOS	C	A	A	A	A	A	A	A	B	B	A
95th %tile Queue, veh	3	0	0	0	0	1	1	1	3	4	1

HCM Unsignalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

Future Background AM Ultimate

08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized			MOYes			MOYes			MOYes			MOYes
Traffic Volume (veh/h)	270	155	34	100	254	10	56	917	97	11	398	82
Future Volume (veh/h)	270	155	34	100	254	10	56	917	97	11	398	82
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	281	161	35	104	265	10	58	955	101	11	415	85
Approach Volume (veh/h)		442			369			1013			426	
Crossing Volume (veh/h)		530			1294#			453			427	
High Capacity (veh/h)		911			488			969			989	
High v/c (veh/h)		0.49			0.76			1.05			0.43	
Low Capacity (veh/h)		735			369			786			804	
Low v/c (veh/h)		0.60			1.00			1.29			0.53	
Intersection Summary												
Maximum v/c High			1.05									
Maximum v/c Low			1.29									
Intersection Capacity Utilization			92.7%			ICU Level of Service				F		
# Crossing flow exceeds 1200, method is not applicable												

Intersection											
Intersection Delay, s/veh	15.0										
Intersection LOS	C										
Approach	EB			WB			NB			SB	
Entry Lanes	1			2			2			2	
Conflicting Circle Lanes	2			2			2			2	
Adj Approach Flow, veh/h	477			379			1114			511	
Demand Flow Rate, veh/h	513			387			1170			607	
Vehicles Circulating, veh/h	626			1374			485			438	
Vehicles Exiting, veh/h	330			176			614			1312	
Follow-Up Headway, s	3.186			3.186			3.186			3.186	
Ped Vol Crossing Leg, #/h	0			0			0			0	
Ped Cap Adj	1.000			1.000			1.000			1.000	
Approach Delay, s/veh	16.9			17.8			16.2			8.6	
Approach LOS	C			C			C			A	
Lane	Left	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Designated Moves	LT	R	LT	TR	R	LT	TR	R	LT	TR	R
Assumed Moves	LT	R	LT	TR	R	LT	TR	R	LT	TR	R
RT Channelized	Yield			Yield			Yield			Yield	
Lane Util	1.000		0.471	0.529		0.470	0.530		0.469	0.531	
Critical Headway, s	4.113		4.293	4.113		4.293	4.113		4.293	4.113	
Entry Flow, veh/h	473	40	177	199	11	501	564	105	243	275	89
Cap Entry Lane, veh/h	729	735	403	432	451	785	805	948	814	832	897
Entry HV Adj Factor	0.934	0.877	0.981	0.984	0.901	0.951	0.952	0.962	0.823	0.821	0.952
Flow Entry, veh/h	442	35	174	196	10	476	537	101	200	226	85
Cap Entry, veh/h	681	645	395	425	406	747	766	911	670	682	854
V/C Ratio	0.649	0.054	0.439	0.461	0.025	0.638	0.701	0.111	0.299	0.331	0.100
Control Delay, s/veh	17.8	6.2	18.2	17.8	9.2	16.1	18.4	5.0	9.1	9.5	5.2
LOS	C	A	C	C	A	C	C	A	A	A	A
95th %tile Queue, veh	5	0	2	2	0	5	6	0	1	1	0

APPENDIX H:

Interim 2033 Future Total Traffic Calculations

Queues

Future Background AM Interim

1: Airport Road & Old School Road/Healey Road

08/25/2026



Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	307	134	341	130	963	281
Act Effect Green (s)	20.0	13.7	62.3	83.8	62.3	90.1
Actuated g/C Ratio	0.17	0.12	0.54	0.72	0.54	0.78
v/c Ratio	0.99	0.63	0.70	0.11	1.05	0.25
Control Delay	96.7	62.0	30.4	1.0	73.3	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.7	62.0	30.4	1.0	73.3	1.7
LOS	F	E	C	A	E	A
Approach Delay	96.7	62.0	22.3		57.1	
Approach LOS	F	E	C		E	
Queue Length 50th (m)	68.3	29.3	55.3	0.0	~240.6	3.2
Queue Length 95th (m)	#132.0	49.2	102.3	4.7	#336.4	10.8
Internal Link Dist (m)	531.3	642.7	1270.3		873.5	
Turn Bay Length (m)				15.0		40.0
Base Capacity (vph)	309	290	487	1135	913	1129
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.46	0.70	0.11	1.05	0.25

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 116.2

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 55.5

Intersection LOS: E

Intersection Capacity Utilization 87.9%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

Future Background AM Interim

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	163	68	48	74	4	13	307	122	12	893	264
Future Volume (vph)	58	163	68	48	74	4	13	307	122	12	893	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.97			1.00			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.98			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1746			1788			1539	1541		1713	1396
Flt Permitted		0.99			0.98			0.59	1.00		0.99	1.00
Satd. Flow (perm)		1746			1788			908	1541		1703	1396
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	62	173	72	51	79	4	14	327	130	13	950	281
RTOR Reduction (vph)	0	9	0	0	1	0	0	0	45	0	0	61
Lane Group Flow (vph)	0	298	0	0	133	0	0	341	85	0	963	220
Heavy Vehicles (%)	21%	1%	3%	7%	4%	0%	14%	25%	6%	17%	12%	17%
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Actuated Green, G (s)		20.0			13.7			62.4	76.1		62.4	82.4
Effective Green, g (s)		20.0			13.7			62.4	76.1		62.4	82.4
Actuated g/C Ratio		0.17			0.12			0.54	0.65		0.54	0.71
Clearance Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		300			210			487	1091		914	989
v/s Ratio Prot		c0.17			c0.07				0.01			0.04
v/s Ratio Perm								0.38	0.05		c0.57	0.12
v/c Ratio		0.99			0.63			0.70	0.08		1.05	0.22
Uniform Delay, d1		48.0			48.9			20.0	7.3		26.9	5.8
Progression Factor		1.00			1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2		50.2			6.1			4.5	0.0		44.9	0.1
Delay (s)		98.3			55.0			24.5	7.3		71.8	5.9
Level of Service		F			D			C	A		E	A
Approach Delay (s)		98.3			55.0			19.7			56.9	
Approach LOS		F			D			B			E	
Intersection Summary												
HCM 2000 Control Delay		54.6										
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		116.2							20.1			
Intersection Capacity Utilization		87.9%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

2: Airport Road & Site Access

Future Background AM Interim

08/25/2026

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	4	587	9	10	937
Future Volume (Veh/h)	13	4	587	9	10	937
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	15	5	667	10	11	1065
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	1759	672			677	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1759	672			677	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	84	99			99	
cM capacity (veh/h)	93	459			924	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	20	677	1076			
Volume Left	15	0	11			
Volume Right	5	10	0			
cSH	116	1700	924			
Volume to Capacity	0.17	0.40	0.01			
Queue Length 95th (m)	4.5	0.0	0.3			
Control Delay (s)	42.3	0.0	0.4			
Lane LOS	E		A			
Approach Delay (s)	42.3	0.0	0.4			
Approach LOS	E					
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		67.3%		ICU Level of Service		C
Analysis Period (min)		15				

Queues
3: Airport Road & Mayfield Road

Future Background AM Interim

08/25/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	286	854	548	86	763	288	468	62	97	839	191
Act Effect Green (s)	55.4	41.7	41.7	51.4	37.5	56.1	41.9	41.9	48.6	36.1	36.1
Actuated g/C Ratio	0.46	0.35	0.35	0.43	0.31	0.47	0.35	0.35	0.40	0.30	0.30
v/c Ratio	1.13	0.76	0.74	0.42	0.79	1.03	0.45	0.13	0.28	0.84	0.42
Control Delay	119.3	39.9	21.1	23.1	43.1	92.2	33.3	3.0	21.7	48.2	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	119.3	39.9	21.1	23.1	43.1	92.2	33.3	3.0	21.7	48.2	7.4
LOS	F	D	C	C	D	F	C	A	C	D	A
Approach Delay	47.3			41.1			51.8			39.0	
Approach LOS	D			D			D			D	
Queue Length 50th (m)	~48.4	94.1	50.4	10.8	83.0	~57.4	46.4	0.0	12.8	97.2	0.0
Queue Length 95th (m)	#100.3	115.3	93.2	19.0	101.0	#127.4	64.7	4.7	24.7	122.1	17.5
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	254	1161	751	229	1101	279	1035	465	357	998	460
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.13	0.74	0.73	0.38	0.69	1.03	0.45	0.13	0.27	0.84	0.42

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 44.8

Intersection LOS: D

Intersection Capacity Utilization 99.4%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

Future Background AM Interim

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	263	786	504	79	626	76	282	431	57	89	772	176
Future Volume (vph)	263	786	504	79	626	76	282	431	57	89	772	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1472	3230	1535	1332	3058		1674	2968	1163	1456	3318	1088
Flt Permitted	0.19	1.00	1.00	0.20	1.00		0.13	1.00	1.00	0.48	1.00	1.00
Satd. Flow (perm)	296	3230	1535	277	3058		230	2968	1163	741	3318	1088
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	286	854	548	86	680	83	288	468	62	97	839	191
RTOR Reduction (vph)	0	0	204	0	8	0	0	0	41	0	0	134
Lane Group Flow (vph)	286	854	344	86	755	0	288	468	21	97	839	57
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	24%	13%	5%	37%	16%	27%	9%	23%	37%	25%	10%	48%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	53.1	41.7	41.7	46.5	38.1		52.9	41.3	41.3	44.1	35.5	35.5
Effective Green, g (s)	53.1	41.7	41.7	46.5	38.1		52.9	41.3	41.3	44.1	35.5	35.5
Actuated g/C Ratio	0.44	0.35	0.35	0.39	0.32		0.44	0.34	0.34	0.37	0.30	0.30
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	1122	533	181	970		274	1021	400	323	981	321
v/s Ratio Prot	c0.12	0.26		0.03	0.25		c0.13	0.16		0.02	0.25	
v/s Ratio Perm	c0.39		0.22	0.15			c0.34		0.02	0.09		0.05
v/c Ratio	1.15	0.76	0.65	0.48	0.78		1.05	0.46	0.05	0.30	0.86	0.18
Uniform Delay, d1	27.6	34.7	32.9	25.3	37.1		30.8	30.6	26.3	25.7	39.8	31.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	104.9	3.1	2.7	2.0	4.0		68.4	0.3	0.1	0.5	9.5	1.2
Delay (s)	132.5	37.8	35.6	27.2	41.1		99.2	31.0	26.3	26.2	49.3	32.6
Level of Service	F	D	D	C	D		F	C	C	C	D	C
Approach Delay (s)		53.2			39.7			54.6			44.5	
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			48.7			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.16									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			99.4%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

Queues

Future Total PM Interim

08/25/2026

1: Airport Road & Old School Road/Healey Road



Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	478	382	1024	102	432	85
Act Effect Green (s)	21.9	29.7	52.4	89.8	52.4	82.0
Actuated g/C Ratio	0.18	0.24	0.42	0.72	0.42	0.66
v/c Ratio	1.57	0.86	1.69	0.09	1.35	0.08
Control Delay	306.8	64.9	343.5	3.6	208.8	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	306.8	64.9	343.5	3.6	208.8	2.1
LOS	F	E	F	A	F	A
Approach Delay	306.8	64.9	312.7		174.8	
Approach LOS	F	E	F		F	
Queue Length 50th (m)	~167.8	89.4	~369.3	4.4	~139.6	0.0
Queue Length 95th (m)	#244.0	125.9	#469.4	9.1	#212.1	5.9
Internal Link Dist (m)	531.3	642.7	1270.3		873.5	
Turn Bay Length (m)				15.0		40.0
Base Capacity (vph)	304	535	607	1142	320	1056
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.57	0.71	1.69	0.09	1.35	0.08

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 124.1

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.69

Intersection Signal Delay: 245.3

Intersection LOS: F

Intersection Capacity Utilization 140.6%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

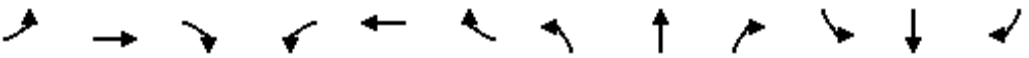
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

Future Total PM Interim

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔		↔	↔
Traffic Volume (vph)	270	155	35	103	254	10	57	926	98	11	404	82
Future Volume (vph)	270	155	35	103	254	10	57	926	98	11	404	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.99			1.00			1.00	0.85		1.00	0.85
Flt Protected		0.97			0.99			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1717			1849			1822	1570		1577	1555
Flt Permitted		0.97			0.99			0.79	1.00		0.48	1.00
Satd. Flow (perm)		1717			1849			1436	1570		758	1555
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	281	161	36	107	265	10	59	965	102	11	421	85
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	10	0	0	34
Lane Group Flow (vph)	0	476	0	0	381	0	0	1024	92	0	432	51
Heavy Vehicles (%)	10%	2%	14%	4%	1%	11%	7%	5%	4%	10%	22%	5%
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6			2	
Permitted Phases							6		6	2		2
Actuated Green, G (s)		21.8			29.6			52.4	82.0		52.4	74.2
Effective Green, g (s)		21.8			29.6			52.4	82.0		52.4	74.2
Actuated g/C Ratio		0.18			0.24			0.42	0.66		0.42	0.60
Clearance Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		302			441			607	1117		320	931
v/s Ratio Prot		c0.28			c0.21				0.02			0.01
v/s Ratio Perm								c0.71	0.04		0.57	0.02
v/c Ratio		1.57			0.86			1.69	0.08		1.35	0.05
Uniform Delay, d1		51.1			45.2			35.8	7.5		35.8	10.3
Progression Factor		1.00			1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2		274.0			16.0			316.3	0.0		176.8	0.0
Delay (s)		325.0			61.2			352.0	7.5		212.6	10.3
Level of Service		F			E			F	A		F	B
Approach Delay (s)		325.0			61.2			320.8			179.3	
Approach LOS		F			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		252.8										
HCM 2000 Volume to Capacity ratio		1.43										
Actuated Cycle Length (s)		123.9							20.1			
Intersection Capacity Utilization		140.6%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

2: Airport Road & Site Access

Future Total PM Interim

08/25/2026

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	14	11	868	25	10	664
Future Volume (Veh/h)	14	11	868	25	10	664
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	12	943	27	11	722
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	1700	956			970	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1700	956			970	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	96			98	
cM capacity (veh/h)	101	315			719	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	27	970	733			
Volume Left	15	0	11			
Volume Right	12	27	0			
cSH	144	1700	719			
Volume to Capacity	0.19	0.57	0.02			
Queue Length 95th (m)	5.0	0.0	0.4			
Control Delay (s)	35.6	0.0	0.4			
Lane LOS	E		A			
Approach Delay (s)	35.6	0.0	0.4			
Approach LOS	E					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			57.2%	ICU Level of Service		B
Analysis Period (min)			15			

Queues
3: Airport Road & Mayfield Road

Future Total PM Interim
08/25/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	252	839	353	83	865	378	852	104	138	588	366
Act Effect Green (s)	67.6	51.4	51.4	53.9	40.8	60.2	42.7	42.7	51.8	36.1	36.1
Actuated g/C Ratio	0.50	0.38	0.38	0.40	0.30	0.45	0.32	0.32	0.38	0.27	0.27
v/c Ratio	0.89	0.67	0.45	0.33	0.90	0.99	0.80	0.25	0.61	0.66	0.59
Control Delay	63.2	37.5	5.0	21.1	57.4	77.5	50.0	13.4	35.6	48.1	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.2	37.5	5.0	21.1	57.4	77.5	50.0	13.4	35.6	48.1	10.1
LOS	E	D	A	C	E	E	D	B	D	D	B
Approach Delay	34.0			54.2			54.9			33.8	
Approach LOS	C			D			D			C	
Queue Length 50th (m)	45.7	93.1	1.6	10.8	112.5	~73.6	114.3	4.3	22.5	73.5	6.0
Queue Length 95th (m)	#87.1	116.9	21.2	19.0	139.4	#145.9	#156.6	19.6	37.6	93.8	35.1
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	305	1253	787	405	1014	380	1069	415	253	895	621
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.67	0.45	0.20	0.85	0.99	0.80	0.25	0.55	0.66	0.59

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 43.7

Intersection LOS: D

Intersection Capacity Utilization 103.1%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

Future Total PM Interim

08/25/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (vph)	232	772	325	76	730	66	370	784	96	127	541	337
Future Volume (vph)	232	772	325	76	730	66	370	784	96	127	541	337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1484	3288	1510	1613	3174		1753	3380	1135	1601	3349	1403
Flt Permitted	0.12	1.00	1.00	0.26	1.00		0.25	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	187	3288	1510	438	3174		457	3380	1135	295	3349	1403
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	252	839	353	83	793	72	378	852	104	138	588	366
RTOR Reduction (vph)	0	0	212	0	5	0	0	0	56	0	0	246
Lane Group Flow (vph)	252	839	141	83	860	0	378	852	48	138	588	120
Confl. Peds. (#/hr)			17	17			15		7	7		15
Heavy Vehicles (%)	23%	11%	5%	13%	10%	53%	4%	8%	41%	14%	9%	13%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	63.4	51.4	51.4	49.8	40.8		57.6	42.8	42.8	48.0	36.2	36.2
Effective Green, g (s)	63.4	51.4	51.4	49.8	40.8		57.6	42.8	42.8	48.0	36.2	36.2
Actuated g/C Ratio	0.47	0.38	0.38	0.37	0.30		0.43	0.32	0.32	0.36	0.27	0.27
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	276	1251	574	239	959		371	1071	359	219	898	376
v/s Ratio Prot	c0.13	0.26		0.02	0.27		c0.14	0.25		0.06	0.18	
v/s Ratio Perm	c0.30		0.09	0.10			c0.30		0.04	0.17		0.09
v/c Ratio	0.91	0.67	0.24	0.35	0.90		1.02	0.80	0.13	0.63	0.65	0.32
Uniform Delay, d1	35.4	34.8	28.5	28.7	45.1		32.3	42.1	32.9	32.1	43.9	39.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	32.2	1.4	0.2	0.9	10.9		51.6	4.2	0.2	5.8	3.7	2.2
Delay (s)	67.5	36.2	28.8	29.6	56.0		83.9	46.3	33.0	37.9	47.6	41.8
Level of Service	E	D	C	C	E		F	D	C	D	D	D
Approach Delay (s)		39.8			53.7			55.9			44.4	
Approach LOS		D			D			E			D	
Intersection Summary												
HCM 2000 Control Delay			48.0			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			1.01									
Actuated Cycle Length (s)			135.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			103.1%			ICU Level of Service			G			
Analysis Period (min)			15									

c Critical Lane Group

APPENDIX I:

Ultimate 2033 Future Total Traffic Calculations

Queues

1: Airport Road & Old School Road/Healey Road



Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	311	139	343	131	1019	281
Act Effect Green (s)	20.0	14.0	62.4	84.1	62.4	90.1
Actuated g/C Ratio	0.17	0.12	0.54	0.72	0.54	0.77
v/c Ratio	1.01	0.65	0.88	0.11	1.12	0.25
Control Delay	99.7	62.7	51.0	1.0	95.3	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.7	62.7	51.0	1.0	95.3	1.8
LOS	F	E	D	A	F	A
Approach Delay	99.7	62.7	37.2		75.1	
Approach LOS	F	E	D		E	
Queue Length 50th (m)	~70.2	30.4	66.6	0.0	~268.6	3.8
Queue Length 95th (m)	#133.7	51.1	#134.5	4.7	#364.9	11.6
Internal Link Dist (m)	531.3	642.7	1270.3		873.5	
Turn Bay Length (m)				15.0		40.0
Base Capacity (vph)	309	289	388	1134	912	1124
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.48	0.88	0.12	1.12	0.25

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 116.5

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 69.7

Intersection LOS: E

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

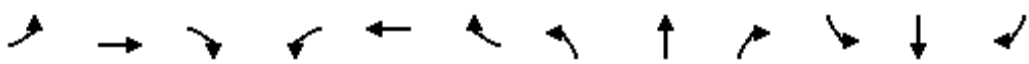
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

FTAM Ultimate Traffic

08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔		↔	↔
Traffic Volume (vph)	58	163	71	53	74	4	13	309	123	12	946	264
Future Volume (vph)	58	163	71	53	74	4	13	309	123	12	946	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.97			1.00			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.98			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1744			1785			1539	1541		1713	1396
Flt Permitted		0.99			0.98			0.47	1.00		0.99	1.00
Satd. Flow (perm)		1744			1785			724	1541		1704	1396
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	62	173	76	56	79	4	14	329	131	13	1006	281
RTOR Reduction (vph)	0	10	0	0	1	0	0	0	45	0	0	58
Lane Group Flow (vph)	0	301	0	0	138	0	0	343	86	0	1019	223
Heavy Vehicles (%)	21%	1%	3%	7%	4%	0%	14%	25%	6%	17%	12%	17%
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Actuated Green, G (s)		20.0			14.0			62.4	76.4		62.4	82.4
Effective Green, g (s)		20.0			14.0			62.4	76.4		62.4	82.4
Actuated g/C Ratio		0.17			0.12			0.54	0.66		0.54	0.71
Clearance Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		299			214			387	1092		912	987
v/s Ratio Prot		c0.17			c0.08				0.01			0.04
v/s Ratio Perm								0.47	0.05		c0.60	0.12
v/c Ratio		1.01			0.65			0.89	0.08		1.12	0.23
Uniform Delay, d1		48.2			48.9			23.9	7.3		27.1	5.9
Progression Factor		1.00			1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2		53.8			6.5			20.8	0.0		67.5	0.1
Delay (s)		102.1			55.4			44.7	7.3		94.5	6.1
Level of Service		F			E			D	A		F	A
Approach Delay (s)		102.1			55.4			34.4			75.4	
Approach LOS		F			E			C			E	
Intersection Summary												
HCM 2000 Control Delay			69.1									HCM 2000 Level of Service E
HCM 2000 Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			116.5									Sum of lost time (s) 20.1
Intersection Capacity Utilization			90.9%									ICU Level of Service E
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

2: Airport Road & Site Access

FTAM Ultimate Traffic
08/26/2026

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	24	8	587	66	71	937
Future Volume (Veh/h)	24	8	587	66	71	937
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	27	9	667	75	81	1065
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	1932	704			742	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1932	704			742	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	60	98			91	
cM capacity (veh/h)	67	440			874	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	36	742	1146			
Volume Left	27	0	81			
Volume Right	9	75	0			
cSH	85	1700	874			
Volume to Capacity	0.42	0.44	0.09			
Queue Length 95th (m)	13.1	0.0	2.3			
Control Delay (s)	75.8	0.0	2.9			
Lane LOS	F		A			
Approach Delay (s)	75.8	0.0	2.9			
Approach LOS	F					
Intersection Summary						
Average Delay		3.1				
Intersection Capacity Utilization		101.5%		ICU Level of Service		G
Analysis Period (min)		15				

Queues
3: Airport Road & Mayfield Road

FTAM Ultimate Traffic
08/26/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	312	854	548	86	766	288	500	62	98	848	193
Act Effect Green (s)	55.4	41.8	41.8	51.3	37.5	56.1	41.9	41.9	48.6	36.1	36.1
Actuated g/C Ratio	0.46	0.35	0.35	0.43	0.31	0.47	0.35	0.35	0.40	0.30	0.30
v/c Ratio	1.23	0.76	0.74	0.42	0.79	1.04	0.48	0.13	0.29	0.85	0.42
Control Delay	158.1	39.9	21.1	23.1	43.3	95.8	33.9	3.0	21.9	48.9	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	158.1	39.9	21.1	23.1	43.3	95.8	33.9	3.0	21.9	48.9	7.4
LOS	F	D	C	C	D	F	C	A	C	D	A
Approach Delay	55.4			41.3			52.6			39.5	
Approach LOS	E			D			D			D	
Queue Length 50th (m)	~62.1	94.1	50.4	10.8	83.5	~58.6	50.2	0.0	12.9	98.6	0.0
Queue Length 95th (m)	#115.7	115.3	93.2	19.0	101.4	#128.9	69.3	4.7	24.9	#123.9	17.5
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	253	1161	752	229	1100	276	1035	465	345	998	462
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.23	0.74	0.73	0.38	0.70	1.04	0.48	0.13	0.28	0.85	0.42

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.23

Intersection Signal Delay: 48.3

Intersection LOS: D

Intersection Capacity Utilization 100.8%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

FTAM Ultimate Traffic

08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	287	786	504	79	626	79	282	460	57	90	780	178
Future Volume (vph)	287	786	504	79	626	79	282	460	57	90	780	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1472	3230	1535	1332	3055		1674	2968	1163	1456	3318	1088
Flt Permitted	0.19	1.00	1.00	0.20	1.00		0.13	1.00	1.00	0.46	1.00	1.00
Satd. Flow (perm)	295	3230	1535	278	3055		220	2968	1163	702	3318	1088
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	312	854	548	86	680	86	288	500	62	98	848	193
RTOR Reduction (vph)	0	0	203	0	9	0	0	0	41	0	0	136
Lane Group Flow (vph)	312	854	345	86	757	0	288	500	21	98	848	57
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	24%	13%	5%	37%	16%	27%	9%	23%	37%	25%	10%	48%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	53.2	41.8	41.8	46.6	38.2		52.8	41.2	41.2	44.0	35.4	35.4
Effective Green, g (s)	53.2	41.8	41.8	46.6	38.2		52.8	41.2	41.2	44.0	35.4	35.4
Actuated g/C Ratio	0.44	0.35	0.35	0.39	0.32		0.44	0.34	0.34	0.37	0.29	0.29
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	1125	534	181	972		271	1019	399	311	978	320
v/s Ratio Prot	c0.13	0.26		0.03	0.25		c0.13	0.17		0.02	0.26	
v/s Ratio Perm	c0.43		0.22	0.15			c0.34		0.02	0.09		0.05
v/c Ratio	1.26	0.76	0.65	0.48	0.78		1.06	0.49	0.05	0.32	0.87	0.18
Uniform Delay, d1	27.6	34.6	32.9	25.2	37.1		31.6	31.1	26.4	25.8	40.1	31.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	144.6	3.0	2.7	2.0	4.0		72.2	0.4	0.1	0.6	10.2	1.2
Delay (s)	172.1	37.6	35.6	27.2	41.1		103.8	31.5	26.4	26.4	50.3	32.7
Level of Service	F	D	D	C	D		F	C	C	C	D	C
Approach Delay (s)		61.4			39.7			55.6			45.3	
Approach LOS		E			D			E			D	
Intersection Summary												
HCM 2000 Control Delay			52.2			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.22									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			100.8%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

Queues

1: Airport Road & Old School Road/Healey Road



Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	478	383	1066	109	436	85
Act Effect Green (s)	21.8	29.7	52.4	89.8	52.4	82.0
Actuated g/C Ratio	0.18	0.24	0.42	0.72	0.42	0.66
v/c Ratio	1.57	0.86	1.79	0.10	1.36	0.08
Control Delay	306.8	64.9	387.0	3.6	213.9	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	306.8	64.9	387.0	3.6	213.9	2.1
LOS	F	E	F	A	F	A
Approach Delay	306.8	64.9	351.4		179.3	
Approach LOS	F	E	F		F	
Queue Length 50th (m)	~168.0	89.8	~393.8	4.9	~141.8	0.0
Queue Length 95th (m)	#244.0	126.3	#494.8	9.7	#214.2	5.9
Internal Link Dist (m)	531.3	642.7	1270.3		873.5	
Turn Bay Length (m)				15.0		40.0
Base Capacity (vph)	304	534	596	1142	320	1055
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.57	0.72	1.79	0.10	1.36	0.08

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 124.1

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.79

Intersection Signal Delay: 265.1

Intersection LOS: F

Intersection Capacity Utilization 142.8%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

FTPM Ultimate Traffic

08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔		↔	↔
Traffic Volume (vph)	270	155	35	104	254	10	59	965	105	11	408	82
Future Volume (vph)	270	155	35	104	254	10	59	965	105	11	408	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.99			1.00			1.00	0.85		1.00	0.85
Flt Protected		0.97			0.99			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1717			1849			1822	1570		1577	1555
Flt Permitted		0.97			0.99			0.77	1.00		0.48	1.00
Satd. Flow (perm)		1717			1849			1412	1570		758	1555
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	281	161	36	108	265	10	61	1005	109	11	425	85
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	11	0	0	34
Lane Group Flow (vph)	0	476	0	0	382	0	0	1066	98	0	436	51
Heavy Vehicles (%)	10%	2%	14%	4%	1%	11%	7%	5%	4%	10%	22%	5%
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6			2	
Permitted Phases							6		6	2		2
Actuated Green, G (s)		21.8			29.7			52.4	82.1		52.4	74.2
Effective Green, g (s)		21.8			29.7			52.4	82.1		52.4	74.2
Actuated g/C Ratio		0.18			0.24			0.42	0.66		0.42	0.60
Clearance Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		301			442			596	1117		320	930
v/s Ratio Prot		c0.28			c0.21				0.02			0.01
v/s Ratio Perm								c0.75	0.04		0.58	0.02
v/c Ratio		1.58			0.86			1.79	0.09		1.36	0.05
Uniform Delay, d1		51.1			45.2			35.8	7.5		35.8	10.3
Progression Factor		1.00			1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2		276.3			16.0			361.6	0.0		182.1	0.0
Delay (s)		327.4			61.2			397.4	7.6		217.9	10.4
Level of Service		F			E			F	A		F	B
Approach Delay (s)		327.4			61.2			361.2			184.0	
Approach LOS		F			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		273.9										
HCM 2000 Volume to Capacity ratio		1.48										
Actuated Cycle Length (s)		124.0							20.1			
Intersection Capacity Utilization		142.8%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

2: Airport Road & Site Access

FTPM Ultimate Traffic

08/26/2026

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	76	59	868	38	15	664
Future Volume (Veh/h)	76	59	868	38	15	664
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	83	64	943	41	16	722
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	1718	964			984	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1718	964			984	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	15	80			98	
cM capacity (veh/h)	98	313			710	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	147	984	738			
Volume Left	83	0	16			
Volume Right	64	41	0			
cSH	139	1700	710			
Volume to Capacity	1.05	0.58	0.02			
Queue Length 95th (m)	60.2	0.0	0.5			
Control Delay (s)	154.7	0.0	0.6			
Lane LOS	F		A			
Approach Delay (s)	154.7	0.0	0.6			
Approach LOS	F					
Intersection Summary						
Average Delay		12.4				
Intersection Capacity Utilization		62.5%		ICU Level of Service		B
Analysis Period (min)		15				

Queues
3: Airport Road & Mayfield Road

FTPM Ultimate Traffic

08/26/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	255	839	353	83	865	378	862	104	147	621	393
Act Effect Green (s)	67.8	51.6	51.6	54.0	40.8	59.7	42.2	42.2	52.2	36.1	36.1
Actuated g/C Ratio	0.50	0.38	0.38	0.40	0.30	0.44	0.31	0.31	0.39	0.27	0.27
v/c Ratio	0.90	0.67	0.45	0.33	0.90	1.04	0.82	0.25	0.65	0.69	0.63
Control Delay	63.9	37.3	5.0	21.0	57.3	89.5	51.4	13.5	38.2	49.3	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.9	37.3	5.0	21.0	57.3	89.5	51.4	13.5	38.2	49.3	12.6
LOS	E	D	A	C	E	F	D	B	D	D	B
Approach Delay	34.1			54.1			59.2			35.5	
Approach LOS	C			D			E			D	
Queue Length 50th (m)	46.3	92.4	1.6	10.7	112.3	~84.7	117.6	4.3	24.3	78.6	11.9
Queue Length 95th (m)	#89.3	116.9	21.2	19.0	139.4	#153.0	#159.6	19.6	39.8	99.7	45.6
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	305	1257	789	407	1014	364	1055	410	246	895	620
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.67	0.45	0.20	0.85	1.04	0.82	0.25	0.60	0.69	0.63

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 45.2

Intersection LOS: D

Intersection Capacity Utilization 103.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

FTPM Ultimate Traffic

08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	772	325	76	730	66	370	793	96	135	571	362
Future Volume (vph)	235	772	325	76	730	66	370	793	96	135	571	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1484	3288	1510	1613	3174		1753	3380	1135	1601	3349	1403
Flt Permitted	0.12	1.00	1.00	0.26	1.00		0.23	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	187	3288	1510	442	3174		415	3380	1135	273	3349	1403
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	255	839	353	83	793	72	378	862	104	147	621	393
RTOR Reduction (vph)	0	0	212	0	5	0	0	0	56	0	0	245
Lane Group Flow (vph)	255	839	141	83	860	0	378	862	48	147	621	148
Confl. Peds. (#/hr)			17	17			15		7	7		15
Heavy Vehicles (%)	23%	11%	5%	13%	10%	53%	4%	8%	41%	14%	9%	13%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	63.6	51.6	51.6	49.8	40.8		57.4	42.2	42.2	48.4	36.2	36.2
Effective Green, g (s)	63.6	51.6	51.6	49.8	40.8		57.4	42.2	42.2	48.4	36.2	36.2
Actuated g/C Ratio	0.47	0.38	0.38	0.37	0.30		0.43	0.31	0.31	0.36	0.27	0.27
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	278	1256	577	241	959		356	1056	354	217	898	376
v/s Ratio Prot	c0.13	0.26		0.02	0.27		c0.14	0.26		0.06	0.19	
v/s Ratio Perm	c0.30		0.09	0.10			c0.31		0.04	0.18		0.11
v/c Ratio	0.92	0.67	0.24	0.34	0.90		1.06	0.82	0.13	0.68	0.69	0.39
Uniform Delay, d1	35.6	34.6	28.4	28.7	45.1		31.8	42.8	33.3	32.3	44.4	40.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	32.7	1.4	0.2	0.9	10.9		65.0	5.0	0.2	8.1	4.4	3.1
Delay (s)	68.3	36.0	28.6	29.6	56.0		96.8	47.8	33.5	40.4	48.7	43.5
Level of Service	E	D	C	C	E		F	D	C	D	D	D
Approach Delay (s)		39.9			53.7			60.5			45.9	
Approach LOS		D			D			E			D	
Intersection Summary												
HCM 2000 Control Delay			49.6			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			135.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			103.3%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

APPENDIX J:

Ultimate 2033 Future Background Traffic Calculations (Ultimate Road Network)

HCM Unsignalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

FTAM Ultimate Traffic
08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized			MOYes			MOYes			MOYes			MOYes
Traffic Volume (veh/h)	58	163	71	53	74	4	13	309	123	12	946	264
Future Volume (veh/h)	58	163	71	53	74	4	13	309	123	12	946	264
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	62	173	76	56	79	4	14	329	131	13	1006	281
Approach Volume (veh/h)		235			135			343			1019	
Crossing Volume (veh/h)		1075			405			248			149	
High Capacity (veh/h)		585			1007			1140			1233	
High v/c (veh/h)		0.40			0.13			0.30			0.83	
Low Capacity (veh/h)		451			820			939			1023	
Low v/c (veh/h)		0.52			0.16			0.37			1.00	
Intersection Summary												
Maximum v/c High			0.83									
Maximum v/c Low			1.00									
Intersection Capacity Utilization			72.7%			ICU Level of Service				C		

Intersection											
Intersection Delay, s/veh	10.5										
Intersection LOS	B										
Approach	EB			WB			NB			SB	
Entry Lanes	1			2			2			2	
Conflicting Circle Lanes	2			2			2			2	
Adj Approach Flow, veh/h	311			139			474			1300	
Demand Flow Rate, veh/h	328			146			566			1471	
Vehicles Circulating, veh/h	1202			502			265			158	
Vehicles Exiting, veh/h	98			190			1187			486	
Follow-Up Headway, s	3.186			3.186			3.186			3.186	
Ped Vol Crossing Leg, #/h	0			0			0			0	
Ped Cap Adj	1.000			1.000			1.000			1.000	
Approach Delay, s/veh	16.3			5.7			6.9			11.0	
Approach LOS	C			A			A			B	
Lane	Left	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Designated Moves	LT	R	LT	TR	R	LT	TR	R	LT	TR	R
Assumed Moves	LT	R	LT	TR	R	LT	TR	R	LT	TR	R
RT Channelized	Yield			Yield			Yield			Yield	
Lane Util	1.000		0.472	0.528		0.471	0.529		0.470	0.530	
Critical Headway, s	4.113		4.293	4.113		4.293	4.113		4.293	4.113	
Entry Flow, veh/h	250	78	67	75	4	201	226	139	537	605	329
Cap Entry Lane, veh/h	487	492	775	795	804	926	939	934	1004	1012	1055
Entry HV Adj Factor	0.941	0.971	0.946	0.953	1.000	0.802	0.804	0.943	0.892	0.893	0.855
Flow Entry, veh/h	235	76	63	71	4	161	182	131	479	540	281
Cap Entry, veh/h	458	478	734	758	804	742	755	882	895	903	902
V/C Ratio	0.513	0.159	0.086	0.094	0.005	0.217	0.241	0.149	0.535	0.598	0.312
Control Delay, s/veh	18.4	9.7	5.8	5.7	4.5	7.3	7.5	5.5	11.2	12.7	7.3
LOS	C	A	A	A	A	A	A	A	B	B	A
95th %tile Queue, veh	3	1	0	0	0	1	1	1	3	4	1

HCM Unsignalized Intersection Capacity Analysis

2: Airport Road & Site Access

FTAM Ultimate Traffic

08/26/2026

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	24	8	587	66	71	937
Future Volume (Veh/h)	24	8	587	66	71	937
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	27	9	667	75	81	1065
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLT		TWLT	
Median storage (veh)			2		2	
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1399	371			742	
vC1, stage 1 conf vol	704					
vC2, stage 2 conf vol	694					
vCu, unblocked vol	1399	371			742	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	99			91	
cM capacity (veh/h)	324	632			874	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	36	445	297	81	532	532
Volume Left	27	0	0	81	0	0
Volume Right	9	0	75	0	0	0
cSH	369	1700	1700	874	1700	1700
Volume to Capacity	0.10	0.26	0.17	0.09	0.31	0.31
Queue Length 95th (m)	2.4	0.0	0.0	2.3	0.0	0.0
Control Delay (s)	15.8	0.0	0.0	9.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	15.8	0.0		0.7		
Approach LOS	C					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			35.9%		ICU Level of Service	A
Analysis Period (min)			15			

Queues
3: Airport Road & Mayfield Road

FTAM Ultimate Traffic
08/26/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	312	854	548	86	766	288	500	62	98	848	193
Act Effect Green (s)	55.4	41.8	41.8	51.3	37.5	56.1	41.9	41.9	48.6	36.1	36.1
Actuated g/C Ratio	0.46	0.35	0.35	0.43	0.31	0.47	0.35	0.35	0.40	0.30	0.30
v/c Ratio	1.23	0.76	0.74	0.42	0.79	1.04	0.48	0.13	0.29	0.85	0.42
Control Delay	158.1	39.9	21.1	23.1	43.3	95.8	33.9	3.0	21.9	48.9	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	158.1	39.9	21.1	23.1	43.3	95.8	33.9	3.0	21.9	48.9	7.4
LOS	F	D	C	C	D	F	C	A	C	D	A
Approach Delay	55.4			41.3			52.6			39.5	
Approach LOS	E			D			D			D	
Queue Length 50th (m)	~62.1	94.1	50.4	10.8	83.5	~58.6	50.2	0.0	12.9	98.6	0.0
Queue Length 95th (m)	#115.7	115.3	93.2	19.0	101.4	#128.9	69.3	4.7	24.9	#123.9	17.5
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	253	1161	752	229	1100	276	1035	465	345	998	462
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.23	0.74	0.73	0.38	0.70	1.04	0.48	0.13	0.28	0.85	0.42

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.23

Intersection Signal Delay: 48.3

Intersection LOS: D

Intersection Capacity Utilization 100.8%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

FTAM Ultimate Traffic

08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	287	786	504	79	626	79	282	460	57	90	780	178
Future Volume (vph)	287	786	504	79	626	79	282	460	57	90	780	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1472	3230	1535	1332	3055		1674	2968	1163	1456	3318	1088
Flt Permitted	0.19	1.00	1.00	0.20	1.00		0.13	1.00	1.00	0.46	1.00	1.00
Satd. Flow (perm)	295	3230	1535	278	3055		220	2968	1163	702	3318	1088
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	312	854	548	86	680	86	288	500	62	98	848	193
RTOR Reduction (vph)	0	0	203	0	9	0	0	0	41	0	0	136
Lane Group Flow (vph)	312	854	345	86	757	0	288	500	21	98	848	57
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	24%	13%	5%	37%	16%	27%	9%	23%	37%	25%	10%	48%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	53.2	41.8	41.8	46.6	38.2		52.8	41.2	41.2	44.0	35.4	35.4
Effective Green, g (s)	53.2	41.8	41.8	46.6	38.2		52.8	41.2	41.2	44.0	35.4	35.4
Actuated g/C Ratio	0.44	0.35	0.35	0.39	0.32		0.44	0.34	0.34	0.37	0.29	0.29
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	1125	534	181	972		271	1019	399	311	978	320
v/s Ratio Prot	c0.13	0.26		0.03	0.25		c0.13	0.17		0.02	0.26	
v/s Ratio Perm	c0.43		0.22	0.15			c0.34		0.02	0.09		0.05
v/c Ratio	1.26	0.76	0.65	0.48	0.78		1.06	0.49	0.05	0.32	0.87	0.18
Uniform Delay, d1	27.6	34.6	32.9	25.2	37.1		31.6	31.1	26.4	25.8	40.1	31.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	144.6	3.0	2.7	2.0	4.0		72.2	0.4	0.1	0.6	10.2	1.2
Delay (s)	172.1	37.6	35.6	27.2	41.1		103.8	31.5	26.4	26.4	50.3	32.7
Level of Service	F	D	D	C	D		F	C	C	C	D	C
Approach Delay (s)		61.4			39.7			55.6			45.3	
Approach LOS		E			D			E			D	
Intersection Summary												
HCM 2000 Control Delay			52.2			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.22									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			100.8%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

1: Airport Road & Old School Road/Healey Road

FTPM Ultimate Traffic
08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized			MOYes			MOYes			MOYes			MOYes
Traffic Volume (veh/h)	270	155	35	104	254	10	59	965	105	11	408	82
Future Volume (veh/h)	270	155	35	104	254	10	59	965	105	11	408	82
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	281	161	36	108	265	10	61	1005	109	11	425	85
Approach Volume (veh/h)		442			373			1066			436	
Crossing Volume (veh/h)		544			1347#			453			434	
High Capacity (veh/h)		901			467			969			984	
High v/c (veh/h)		0.49			0.80			1.10			0.44	
Low Capacity (veh/h)		726			351			786			799	
Low v/c (veh/h)		0.61			1.06			1.36			0.55	
Intersection Summary												
Maximum v/c High			1.10									
Maximum v/c Low			1.36									
Intersection Capacity Utilization			94.9%			ICU Level of Service				F		
# Crossing flow exceeds 1200, method is not applicable												

Intersection											
Intersection Delay, s/veh	16.0										
Intersection LOS	C										
Approach	EB			WB			NB			SB	
Entry Lanes	1			2			2			2	
Conflicting Circle Lanes	2			2			2			2	
Adj Approach Flow, veh/h	478			383			1175			521	
Demand Flow Rate, veh/h	514			391			1233			619	
Vehicles Circulating, veh/h	643			1429			485			445	
Vehicles Exiting, veh/h	333			176			631			1364	
Follow-Up Headway, s	3.186			3.186			3.186			3.186	
Ped Vol Crossing Leg, #/h	0			0			0			0	
Ped Cap Adj	1.000			1.000			1.000			1.000	
Approach Delay, s/veh	17.4			19.2			17.7			8.8	
Approach LOS	C			C			C			A	
Lane	Left	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Designated Moves	LT	R	LT	TR	R	LT	TR	R	LT	TR	R
Assumed Moves	LT	R	LT	TR	R	LT	TR	R	LT	TR	R
RT Channelized	Yield			Yield			Yield			Yield	
Lane Util	1.000		0.471	0.529		0.470	0.530		0.470	0.530	
Critical Headway, s	4.113		4.293	4.113		4.293	4.113		4.293	4.113	
Entry Flow, veh/h	473	41	179	201	11	526	594	113	249	281	89
Cap Entry Lane, veh/h	720	726	387	416	435	785	805	948	809	828	895
Entry HV Adj Factor	0.934	0.877	0.980	0.984	0.901	0.952	0.951	0.962	0.822	0.822	0.952
Flow Entry, veh/h	442	36	175	198	10	501	565	109	205	231	85
Cap Entry, veh/h	673	637	379	409	392	748	765	911	665	680	852
V/C Ratio	0.657	0.056	0.463	0.484	0.026	0.670	0.738	0.120	0.308	0.340	0.100
Control Delay, s/veh	18.3	6.3	19.7	19.2	9.6	17.4	20.4	5.1	9.3	9.7	5.2
LOS	C	A	C	C	A	C	C	A	A	A	A
95th %tile Queue, veh	5	0	2	3	0	5	7	0	1	2	0

HCM Unsignalized Intersection Capacity Analysis

2: Airport Road & Site Access

FTPM Ultimate Traffic

08/26/2026

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	76	59	868	38	15	664
Future Volume (Veh/h)	76	59	868	38	15	664
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	83	64	943	41	16	722
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLT		TWLT	
Median storage (veh)			2		2	
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1356	492			984	
vC1, stage 1 conf vol	964					
vC2, stage 2 conf vol	393					
vCu, unblocked vol	1356	492			984	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	73	88			98	
cM capacity (veh/h)	309	528			710	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	147	629	355	16	361	361
Volume Left	83	0	0	16	0	0
Volume Right	64	0	41	0	0	0
cSH	377	1700	1700	710	1700	1700
Volume to Capacity	0.39	0.37	0.21	0.02	0.21	0.21
Queue Length 95th (m)	13.7	0.0	0.0	0.5	0.0	0.0
Control Delay (s)	20.5	0.0	0.0	10.2	0.0	0.0
Lane LOS	C			B		
Approach Delay (s)	20.5	0.0		0.2		
Approach LOS	C					
Intersection Summary						
Average Delay			1.7			
Intersection Capacity Utilization			39.7%		ICU Level of Service	A
Analysis Period (min)			15			

Queues
3: Airport Road & Mayfield Road

FTPM Ultimate Traffic
08/26/2026

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	255	839	353	83	865	378	862	104	147	621	393
Act Effect Green (s)	67.8	51.6	51.6	54.0	40.8	59.7	42.2	42.2	52.2	36.1	36.1
Actuated g/C Ratio	0.50	0.38	0.38	0.40	0.30	0.44	0.31	0.31	0.39	0.27	0.27
v/c Ratio	0.90	0.67	0.45	0.33	0.90	1.04	0.82	0.25	0.65	0.69	0.63
Control Delay	63.9	37.3	5.0	21.0	57.3	89.5	51.4	13.5	38.2	49.3	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.9	37.3	5.0	21.0	57.3	89.5	51.4	13.5	38.2	49.3	12.6
LOS	E	D	A	C	E	F	D	B	D	D	B
Approach Delay	34.1			54.1			59.2			35.5	
Approach LOS	C			D			E			D	
Queue Length 50th (m)	46.3	92.4	1.6	10.7	112.3	~84.7	117.6	4.3	24.3	78.6	11.9
Queue Length 95th (m)	#89.3	116.9	21.2	19.0	139.4	#153.0	#159.6	19.6	39.8	99.7	45.6
Internal Link Dist (m)	827.3			885.2			713.8			1118.5	
Turn Bay Length (m)	225.0			30.0			90.0			105.0	
Base Capacity (vph)	305	1257	789	407	1014	364	1055	410	246	895	620
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.67	0.45	0.20	0.85	1.04	0.82	0.25	0.60	0.69	0.63

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 45.2

Intersection LOS: D

Intersection Capacity Utilization 103.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Airport Road & Mayfield Road

FTPM Ultimate Traffic

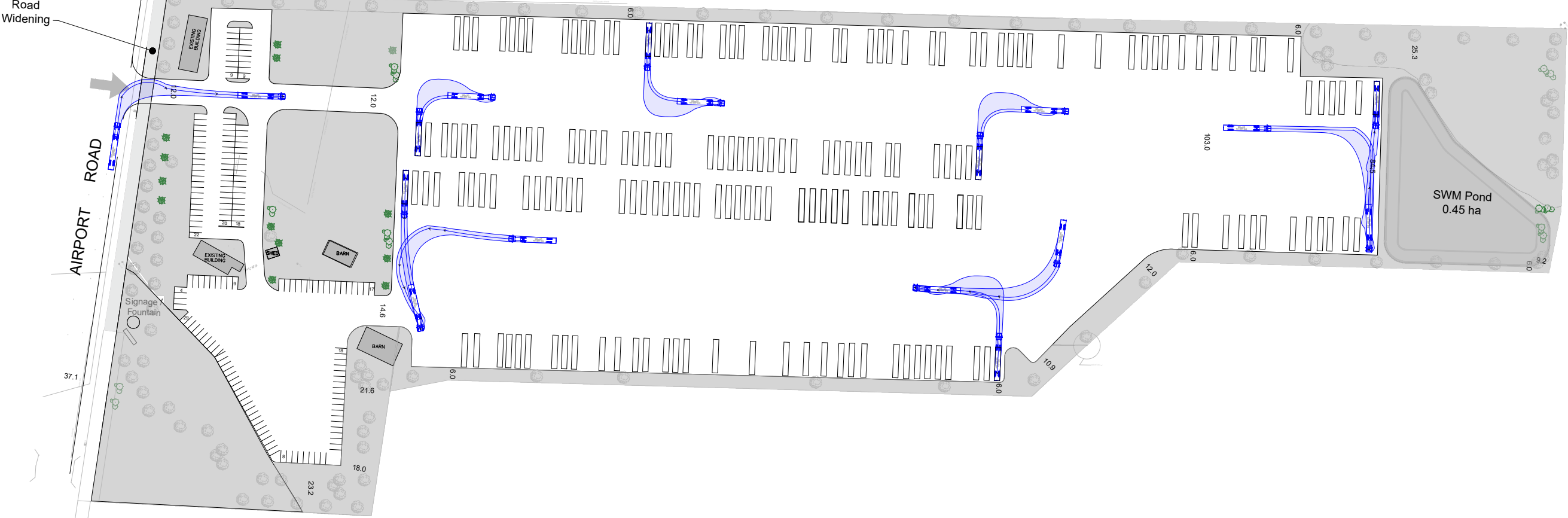
08/26/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (vph)	235	772	325	76	730	66	370	793	96	135	571	362
Future Volume (vph)	235	772	325	76	730	66	370	793	96	135	571	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1484	3288	1510	1613	3174		1753	3380	1135	1601	3349	1403
Flt Permitted	0.12	1.00	1.00	0.26	1.00		0.23	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	187	3288	1510	442	3174		415	3380	1135	273	3349	1403
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	255	839	353	83	793	72	378	862	104	147	621	393
RTOR Reduction (vph)	0	0	212	0	5	0	0	0	56	0	0	245
Lane Group Flow (vph)	255	839	141	83	860	0	378	862	48	147	621	148
Confl. Peds. (#/hr)			17	17			15		7	7		15
Heavy Vehicles (%)	23%	11%	5%	13%	10%	53%	4%	8%	41%	14%	9%	13%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	63.6	51.6	51.6	49.8	40.8		57.4	42.2	42.2	48.4	36.2	36.2
Effective Green, g (s)	63.6	51.6	51.6	49.8	40.8		57.4	42.2	42.2	48.4	36.2	36.2
Actuated g/C Ratio	0.47	0.38	0.38	0.37	0.30		0.43	0.31	0.31	0.36	0.27	0.27
Clearance Time (s)	3.0	7.1	7.1	3.0	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	278	1256	577	241	959		356	1056	354	217	898	376
v/s Ratio Prot	c0.13	0.26		0.02	0.27		c0.14	0.26		0.06	0.19	
v/s Ratio Perm	c0.30		0.09	0.10			c0.31		0.04	0.18		0.11
v/c Ratio	0.92	0.67	0.24	0.34	0.90		1.06	0.82	0.13	0.68	0.69	0.39
Uniform Delay, d1	35.6	34.6	28.4	28.7	45.1		31.8	42.8	33.3	32.3	44.4	40.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	32.7	1.4	0.2	0.9	10.9		65.0	5.0	0.2	8.1	4.4	3.1
Delay (s)	68.3	36.0	28.6	29.6	56.0		96.8	47.8	33.5	40.4	48.7	43.5
Level of Service	E	D	C	C	E		F	D	C	D	D	D
Approach Delay (s)		39.9			53.7			60.5			45.9	
Approach LOS		D			D			E			D	
Intersection Summary												
HCM 2000 Control Delay			49.6			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			135.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			103.3%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

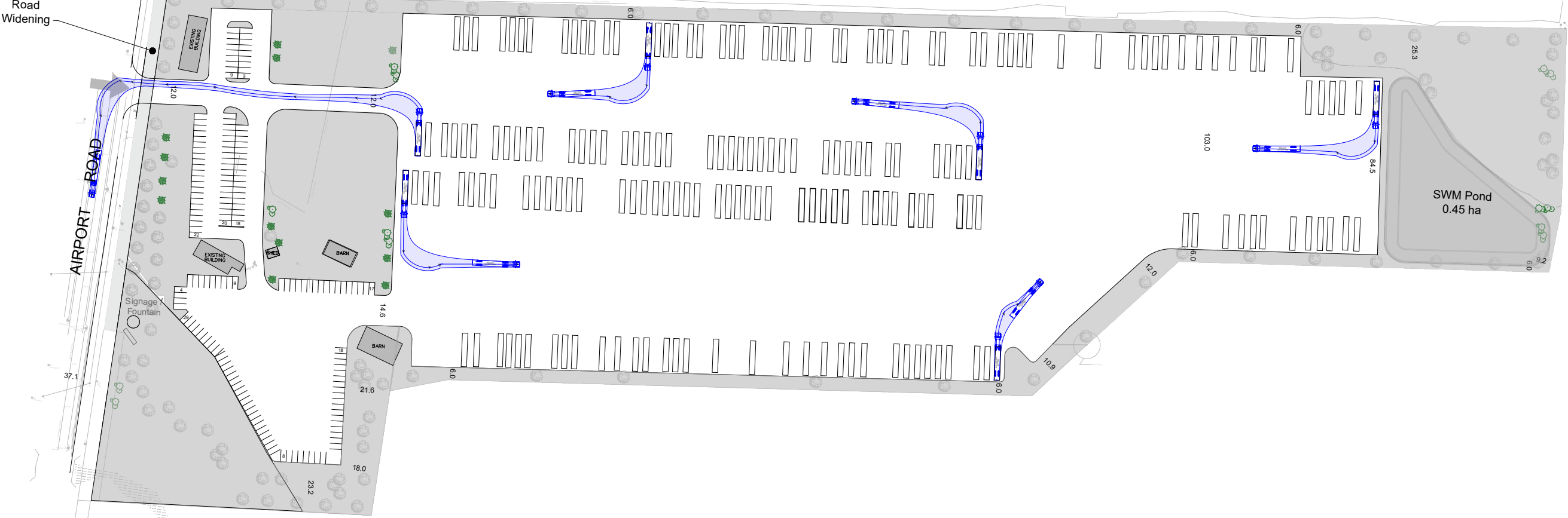
APPENDIX K:

AutoTURN Analysis

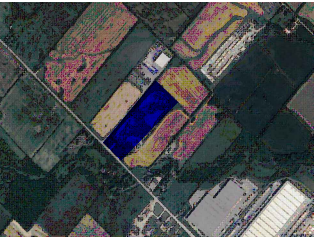
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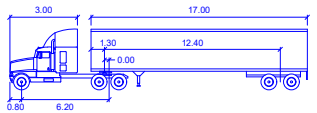
OUTBOUND



KEY PLAN



DESIGN VEHICLE



WB-20			
Tractor Width	3.00	Lock to Lock Time	6.0
Tractor Track	0.60	Steering Angle	28.2
Tractor Wheelbase	6.20	Articulating Angle	70.0
Trailer Width	2.60		
Trailer Track	2.60		

SCALE: NTS

REVISIONS			
NO	REVISION	DATE	BY

STAMP	

nextrans
CONSULTING ENGINEERS
Suite 201, 520 Industrial Parkway South
Aurora ON L4G 6W8
Tel: 905-503-2563
Web: www.nextrans.ca

PROJECT NAME:
Truck & Trailer Parking
Facility

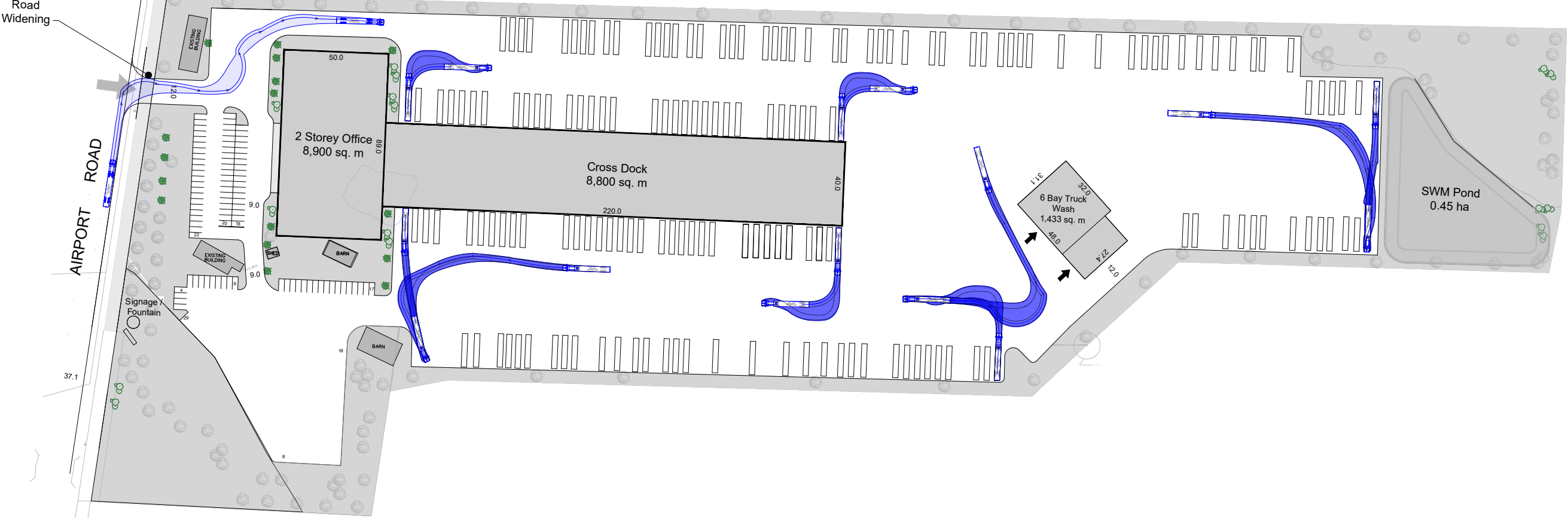
12541 & 12577 Airport
Road

Town of Caledon

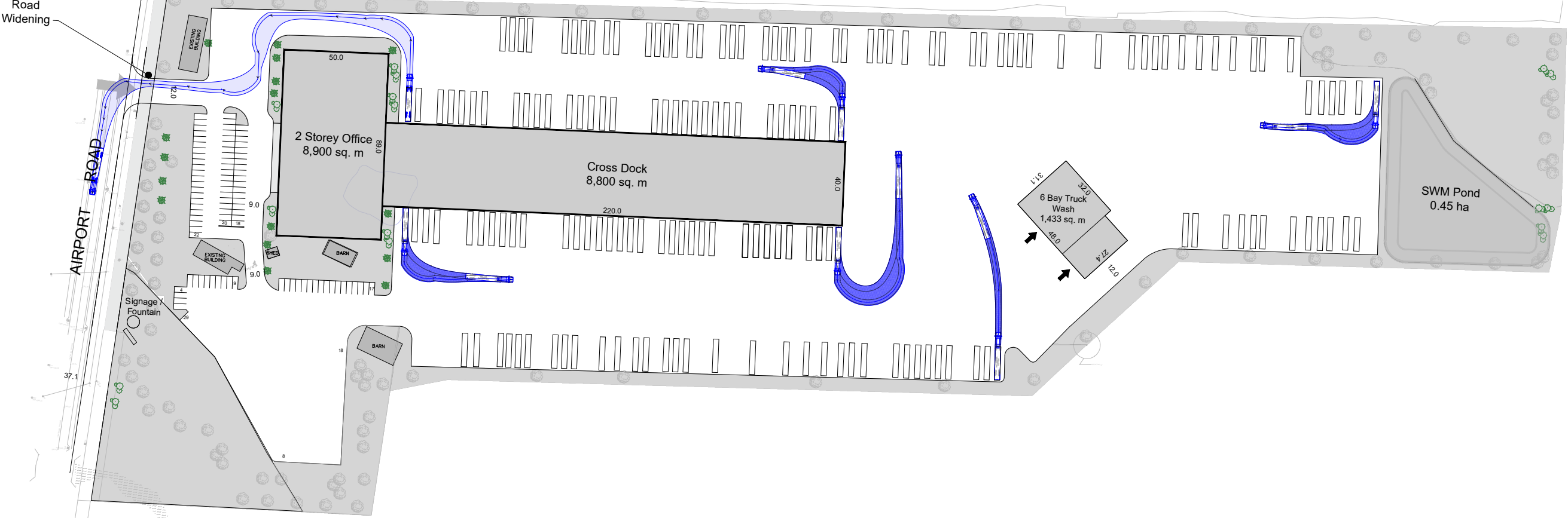
DRAWING TITLE:
AutoTURN Analysis
WB-20 TAC-2017
(Interim Condition)

DESIGN BY: J.P.	DATE: August 7, 2026
CHECKED BY: K.A.	PROJECT NO. NT-20-105
DRAWN BY: J.P.	DRAWING NO.
SCALE: NTS	Figure 1

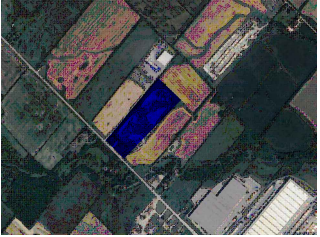
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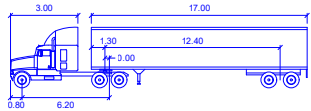
OUTBOUND



KEY PLAN



DESIGN VEHICLE



WB-20			
meters			
Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Tractor Width	: 2.60	Steering Angle	: 28.2
Tractor Track	: 2.60	Articulating Angle	: 70.0
Tractor Track	: 2.60		

SCALE: NTS

REVISIONS

NO	REVISION	DATE	BY

STAMP



PROJECT NAME:
Truck & Trailer Parking
Facility

12541 & 12577 Airport
Road

Town of Caledon

DRAWING TITLE:
AutoTURN Analysis
WB-20 TAC-2017
(Ultimate Condition)

DESIGN BY: J.P.	DATE: August 7, 2026
CHECKED BY: K.A.	PROJECT NO.
DRAWN BY: J.P.	NT-20-105
SCALE: NTS	DRAWING NO.

Figure 2

APPENDIX L:

Left Turn Lane Warrant Analysis

Exhibit 9A-19