TOWN OF CALEDON
PLANNING
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TRANSPORTATION IMPACT STUDY

TULLAMORE INDUSTRIAL GP LIMITED
TULLAMORE LANDS,
0 & 12245 TORBRAM ROAD

TOWN OF CALEDON
REGION OF PEEL

PREPARED FOR:

TULLAMORE INDUSTRIAL GP LIMITED

PREPARED BY:

C.F. CROZIER & ASSOCIATES INC.
211 YONGE STREET, SUITE 600
TORONTO, ON M5B 1M4

April 2024

CFCA FILE NO. 2022-5842

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Revision Number	Date	Comments
Rev.0	June 2021	Issued for 1st Submission
Rev.1	December 2021	Updated and issued for 2nd Submission
Rev.2	April 2023	Updated and issued for 3rd Submission
Rev.3	October 2023	Updated and issued for 4th Submission
Rev.4	April 2024	Updated and issued for 5th Submission

Executive Summary

C.F. Crozier & Associates Inc. (Crozier) was retained by Tullamore Industrial GP Limited to undertake a Transportation Impact Study in support of the planning applications for the development of Tullamore Lands, situated at 0 & 12245 Torbram Road in the Town of Caledon. The development lands encompass a total approximate area of 502 acres (203 ha) and consists primarily of greenfield area, the proposed project envisions the development of an industrial park.

A Transportation Impact Study (TIS) was previously prepared and submitted in June 2021 based on an older Site Plan, the TIS was updated an issued for resubmission in December 2021, April 2023, and October 2023. This Transportation Impact Study Update has been prepared address the Town and Region's comments dated March 20, 2024, regarding the Official Plan Amendment (OPA) and Draft Plan of Subdivision (DPS) submissions associated with the Tullamore Lands.

The Transportation Study analyzes the following existing intersections:

- External Road Network
    - Torbram Road at Old School Road
    - Mayfield Road at Torbram Road
    - Mayfield Road at Street "B"
    - Mayfield Road at Airport Road
    - Airport Road at Davis Lane/ Perdue Crescent
    - Airport Road at 12333 Airport Road/Street "A"
- Internal Road Network
    - Torbram Road at Street "C"
    - Torbram Road at Site Access 1
    - Torbram Road at Site Access 2
    - Street "B" & Street "A"
    - Street "B" & Street "C"
    - Street "B" & Potential Future Street "D"/ Block 3 Access

The intersection of Airport Road with Mayfield Road is currently operating at LOS "C" during the weekday a.m. and p.m. peak hours. The intersection's maximum control delay is 24.0 seconds and 31.3 seconds in the weekday a.m. and p.m. peak hours respectively Furthermore, no queuing or capacity constraints are forecast at the roundabout.

The remaining signalized intersections of Mayfield Road at Torbram Road, and Airport Road at 12333 Airport Road/Street "A" are currently operating acceptably with LOS "C" or better during the a.m. and p.m. peak hours. Again, no queuing or capacity constraints are forecast at the roundabout.

The unsignalized intersection of Airport Road at Perdue Court/Davis Lane currently operates at LOS "F". While the volumes may not warrant signalization, it should be strongly considered in the future to address the long delays.

As per comments by the Town of Caledon, an industry standard growth rate of 2.0% per annum was applied to Town Collector roads (Torbram Road and Old School Road) beyond the existing condition year. It is noted that growth is not required to be applied to local roads.

The remaining Regional Roads (Airport Road and Mayfield Road) were grown according to growth forecasts in coordination with the Region. However, no forecasts for Regional roadways were available in the horizons beyond 2031. As a result, reasonable growth rates were assumed for the Regional Roads beyond the 2031 horizon until 2036.

The growth rates applied for all roadways were generally consistent with the approved Block 48-2 TIS. The growth rates used are summarized in **Table E1**.

Table E1: Background Growth Rates

Corridor	Growth Rate	
	2022-2031	2031-2036
Airport Road (Regional Road 7)	1%	
Mayfield Road (Regional Road 14)	5%	2%
Torbram Road	2%	
Perdue Court/Davis Lane	0%	
Old School Road	2%	

A 2% growth rate was applied to Mayfield Road traffic volumes after the 2031 horizon since the 5% per annum growth rate is not expected to be sustained over a 15-year period especially after accounting for all the background traffic.

As a result of the significant growth expected in the area, the Region, as well as the approved Block 48-2 TIS, has identified and recommended several future background roadway improvements in the study area to be accounted for within specific horizon years, a number of the associated improvements recommended in Block 48-2 and per the Region's Transportation Master Plan have been implemented. However, additional planned improvements associated with the buildout of Block 48-2 are still expected, such as the 1.0 km long widening of Airport Road 1.0 km north of Mayfield Road.

The improvements are summarized in **Table E2** below.

Table E2: Future Background Roadway Improvements (Capital Projects)

Roadway	Segment / Intersection	Improvement	Timeline	Source
Mayfield Road	Bramalea Road to Airport Road (RR 7)	Widening from two (2) lanes to six (6) lanes	Completed[1] (2022)	Region of Peel 2021 Budget / Region of Peel Transportation Master Plan
	Airport Road (RR 7) to The Gore Road (RR 8)	Widening from two (2) lanes to five (5) lanes	2023	
	Airport Road (RR 7) to Clarkway Drive	Widening from five (5) lanes to six (6) lanes	2026-2031	
Airport Road	1 km North of Mayfield Road (RR 14) to King Street (RR 9)	Widening from two (2) lanes to five (5) lanes	2024	Region of Peel 2021 Budget / Region of Peel Transportation Master Plan
	Airport Road (RR 7) and King Street	Traffic calming measures: Implement Roundabout	2024	Region of Peel Environmental Study Report (October 2015)
	Airport Road (RR 7) and Healey Road / Old School Road	Traffic calming measures: Implement Roundabout	2024	

Note 1: The widening of Mayfield Road from Bramalea Road to Airport Road was included in this analysis as the base condition.

Appendix J contains information regarding the planned and recommended background roadway improvements.

Intersection analysis of the ultimate 2036 future background traffic volumes indicate the boundary road network will continue to operate at "D" or better with the exception of Airport Road at Davis Lane/ Perdue Crescent. The maximum volume-to-capacity ratio of 1.05 was observed for westbound left movement for Mayfield Road at Torbram Road, the intersection is operating with a maximum control delay of 41.8 seconds or less.

Summary of Future Background Recommended Improvements

The following capacity improvements are recommended to accommodate expected future background growth total volumes in the ultimate 2036 horizon year:

- **Mayfield Road at Torbram Road (Signalized Intersection)**
    - Westbound left turn lane with 195 m storage (90 m increase from Existing).
    - Northbound left turn lane with 185 m storage (105m increase from Existing).
    - Actuated coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length increases to Mayfield Road at Torbram Road to 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively.

- **Mayfield Road at Block 48-2 Street "C" (Signalized Access)**
    - Eastbound right turn lane with 75 m storage.
    - Northbound left turn lane with 60 m storage.
    - Actuated coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length of 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively, for Mayfield Road at Street "B"/Block 48-2 Street "C".
- **Mayfield Road at Airport Road (Signalized Intersection)**
    - Eastbound left turn lane with 310 storage (110 m increase from Existing).
    - Eastbound right turn lane with 80 m storage (20 m increase from Existing).
    - Northbound left turn lane with 185 m storage (90 m increase from Existing). This can be accommodated within the concrete median.
    - Add westbound left protected permissive phase in signal timing plan.
- **Airport Road at Davis Lane/ Perdue Crescent (Minor Stop-Controlled Intersection)**
    - Monitor traffic volumes and implement signalization to address minor street delays.
    - Westbound left turn lane with 40 m storage (10 m increase from Existing). Note the existing pavement width can accommodate this via pavement markings.

The proposed industrial warehouse development is forecasted to generate approximately 719 and 737 total two-way passenger car trips during the weekday a.m. and p.m. peak hours, respectively, and approximately 179 and 186 total two-way heavy truck trips during the weekday a.m. and p.m. peak hours, respectively.

Analysis of 2026, 2031 and 2036 future total traffic operations indicate that the addition of site traffic to boundary road network is expected to have a minor impact on traffic delay and queues when compared to 2026, 2031 and 2036 future background traffic operations.

The signalized intersection of Airport Road and Mayfield Road is expected to operate at a level of service (LOS) "D" during the weekday a.m. and p.m. peak hours. Compared to the future background conditions, site generated traffic is expected to increase the control delay by 5.9s and 6.1s during the weekday a.m. and p.m. peak periods, respectively. From an overall perspective, site-generated traffic is not expected to materially impact the main intersection of Mayfield Road and Airport Road. The maximum volume-to-capacity ratios for individual movements are 0.98 (EBL) and 1.01 (NBL) in the weekday a.m. and p.m. peak hours, respectively. These ratios indicate that the intersection is expected to operate at capacity during the weekday a.m. and p.m. peak hours.

The proposed signalized site access to Airport Road is expected to operate at LOS "A" and "B" in the weekday a.m. and p.m. peak hours, respectively.

The proposed signalized site access to Mayfield Road is expected to operate at LOS "D" and "B" in the weekday a.m. and p.m. peak hours, respectively.

The remaining proposed unsignalized site accesses are expected to operate at LOS "B" or better the weekday a.m. and p.m. peak hours.

Summary of Future Total Recommended Improvements

In addition to the background improvements proposed in the road network as summarized in **Table E2** and those summarized in the preceding section, the following improvements are recommended for consideration at the noted intersections to accommodate site generated traffic.

- **Airport Road at Street "A"/ 12333 Airport Road (Signalized Access)**
    - Construct a northbound left turn lane with at least 55m storage.
    - Construct an eastbound left turn lane with at least 55m of storage (TWLTL available)
    - Construct a westbound left turn lane with at least 50m of storage (pavement width currently available and can be implemented via pavement markings)
    - Construct a southbound right turn lane with at least 25 m of storage (min. required for Wb-20 trucks).
- **Mayfield Road at Street "B" (Signalized Access)**
    - Construct an eastbound left turn lane with at least 100 m of storage.
    - Construct an eastbound right turn lane with at least 70 m of storage.
    - Construct a northbound left turn lane with at least 60 m of storage.
    - Construct a westbound right turn lane with at least 45 m of storage (to accommodate potential LCVs).
- **Torbram Road and Street "C" (Unsignalized Access)**
    - Construct a westbound left turn lane with minimum 20m of storage.
- **Mayfield Road at Torbram Road (Signalized Intersection)**
    - In order to accommodate the 95th percentile eastbound left turn queues, 190 m storage (90 m increase from Future Background) would be required. However, a review of the simulation indicates that the increase in queuing is primarily due to eastbound through traffic queues extending past the taper such that vehicles intending to access the auxiliary turn lane would be required to wait until the through queues cleared sufficiently to access the turn lane. Moreover, the increase from 37 to 116 vehicles per hour as a result of the development traffic in the critical a.m. peak hour would not by itself trigger 90 m of additional storage under normal circumstances.
    - Similarly, in order to accommodate 95th percentile eastbound right turn lane queues, an auxiliary lane with 270 m storage (190 m increase from Future Background) would be required. However, based on a review of the simulation the increase in queuing was similarly found to be due to through traffic queues extending past the beginning of the eastbound right-turn lane. Moreover, the proposed development contributes no traffic volumes to this movement.

- On this basis, it is recommended that traffic along the Mayfield corridor be monitored as surrounding growth advances to avoid overbuilding infrastructure, since a relatively high growth rate of 5% until 2031 was adopted as requested by the Region.

- **Mayfield Road at Airport Road (Signalized Intersection)**
  - Eastbound right turn lane with 80m storage (0m increase from Future Background).
  - Westbound left turn lane with 295 m storage (can be accommodated as part of 2026-2031 road widening).
  - Westbound right turn lane with 170 m storage (can be accommodated as part of 2026-2031 road widening).
  - Northbound left turn lane with 195 m storage (10 m increase from Future Background).
  - Southbound left turn lane with 105 m storage (can be accommodated as part of 2026-2031 road widening)
  - Implement a protected WBL turn phase in both peak hours and optimize the signal timing. This includes considering a reduction in pedestrian walk times to 3 seconds, the pedestrian "do not walk" times remain unchanged from existing. It is recommended that traffic along the Mayfield corridor be monitored over time to confirm traffic growth and signal timing coordination.
- **Airport Road at Davis Lane/ Perdue Crescent (Minor Stop-Controlled Intersection)**
  - Consider signalization of the intersection to reduce minor street delays as recommended for future background conditions. It is noted that the long delays are generally associated with background traffic volumes and not as a result of the site traffic.
  - Increase Westbound left turn lane to 45 m storage (5 m increase from Future Background). Note the existing pavement width can accommodate this via pavement markings.
- **Internal Road Network**
  - 3.0m Multiuse paths are recommended and proposed on both sides of all internal collector roadways.
  - Thought not warranted from a traffic control perspective, All-Way Stop Controls are recommended to provide safe pedestrian crossings at the internal collector road intersections of:
    - Street "B" and Street "A"
    - Street "B" and Street "C"
  - In the future when Street "D" is implemented between Airport Road and Street D, an all-way stop control is recommended to be implemented at the Street "B" and Future Potential Street "D" intersection to provide safe pedestrian crossing opportunities.

- Subject Development will adopt an urban cross section for all three internal collector roadways, Street "A", Street "B", and Street "C", as well as the future potential Street "D" once implemented. This cross section proposes two 3.5m curb lanes, a 5.0m two-way left turn lane, and 3.0m multiuse pathways (MUPs) on both sides of the roadway. The MUPs will also be separated from the roadway by 3.0m boulevards. This cross section supports all modes of transportation.

- **Mayfield Road Corridor**

  - Implement coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length increases throughout the corridor to 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively to match the Airport Road and Mayfield Road intersection. Recommended for Future Background conditions as well.

  - We also note that the speed limit along Mayfield Road within the study area for westbound traffic is 60km/h from Airport Road to approximately 440m west of Airport Road, after which the speed limit transitions to 80km/h speed limit. For eastbound traffic along Mayfield Road, the speed limit is 80km/h between Torbram Road to approximately 450m west of Airport Road. As the subject lands in addition to the Block 48-2 residential community develop, the mobility environment along Mayfield Road is expected to change due to increased pedestrian and cycling activity, as well as new transit stops proposed along Mayfield Road. Accordingly, we recommend the Region consider reductions in posted speed limit to provide a consistent 60 km/h across the site's frontage in the future as the environment is transformed.

- **Torbram Road Corridor**

  - It is understood that the Town has additional considerations for the ultimate buildout of Torbram Road as either a two-lane or four-lane urban cross section. The Town's Official Plan indicates Torbram will be a Town Arterial Road with a 30 m ROW, as such, this study has assumed a two-lane urban cross section to ensure a conservative assessment until additional details are available. The details of the ultimate ROW considerations, and scheduling of this roadway will be subject to the completion of the ongoing Multimodal Transportation Master Plan currently being undertaken by the Town. Relevant excerpts from the Town's Official Plan can be found in **Appendix N.**

- **Active Transportation**

  - The Subject Development will adopt a cross section with Multi-Use Pathways (MUPs) on both sides of the road for all three internal collector roadways, Street "A", Street "B", Street "C", and the Future Street "D". This cross section proposes two 3.5m curb lanes, a 5.0m two-way left turn lane, and 3.0m multiuse pathways (MUPs) on both sides of the roadway. The MUPs will also be separated from the roadway by 3.0m boulevards. This cross section supports all modes of transportation and provides added separation between active transportation and vehicular traffic, which is of increased importance to a development such as the subject proposal that anticipates frequent heavy truck traffic.

  - It is noted that a multiuse trail (MUT) is also proposed through the Greenbelt block, south of Block 2, which will provide an active transportation connection between Torbram Road and Street B.

- **Transit Routes**

    - The site's orientation offers opportunities for a bus loop route internal to the site for existing transit routes (e.g., Brampton Transit Route 30), as is similarly existing with the industrial development east of Airport Road (12333 Airport Road). Further discussions with the transit agencies are recommended to identify and plan for future transit routes within the site.

    - It is also recommended that bus stops adjacent to the internal intersections Street "B" at Street "A" and Street "B" at Street "C" be protected for, to permit installation when transit routes are finalized.

    - In the interim condition a bus stop is recommended southwest corner of the intersection of Airport Road at Street "B" to provide connectivity to the existing Brampton Transit Route 30 without modification the route required as the current route services the properties at 12333 Airport Road and can service the Subject Lands as it turns left onto Airport Road before continuing south.

    - We recommend further coordination with Brampton Transit and the Town to explore opportunities to further extend Route 14 (Torbram Road) to provide service within the lands. The existing Route 14 is already proposed to extend to Mayfield Road once Block 48-2 is built out; and we understand that bus route extensions may require transit supportive development to occur prior to the implementation of new or extended routes. Nonetheless, the 26 m ROW proposed for all internal collectors is adequate to support bus stop facilities within the subject development once future routes are confirmed.

    - Any proposed bus stops should be located within 400 m walking distance of principal entrances to each building. As Street "B" is the main north-south spinal road servicing the developments, it should be adequately equipped to provide bus stops within 400 m of all building entrances with mid-block bus stops provided as necessary.

- **Proposed and Recommended Mobility Network**

    - Per discussion with the Town of Caledon, a network of continuous collector roadways is preferred as the Town looks to establish a collector road network. A potential collector roadway network beyond the subject lands is capable of meeting the objectives set out by the Town.

    - It is re-iterated that any visualization of a potential road network beyond the development proposal represents a potential road network that could be established as part of future block plan, secondary plan or LOG work and is not intended to represent a specific proposal of collector road alignments through adjacent lands. A future secondary plan or LOG work would be required to establish a wider transportation network.

    - The development will adopt a 26 m ROW urban cross section for the internal collector roadways including a 3.0 m multi-use path on both sides of the roadway. This cross-section can adequately support future transit along the internal roadways and facilitate safe and connected active transportation network in the area.

- **Transportation Demand Management Strategies**
    - A number of TDM Strategies have been recommended for consideration at the overall development lands and future individual building Site Plan Application level including:
        - Protect for future transit routes along the internal collector network and potential bus stop locations at the internal collector intersections.
    - Encourage bicycle parking during the future development of individual Site Plans.
    - Encourage off-peak shift changes to reduce traffic demand during the peak hours.
    - Encourage implementation of EV charging during the individual building Site Plan development process.
    - Encourage future tenants to join Smart Commute.
    - Encourage implementation of priority carpool spaces near building entrances etc.
    - Provide direct pedestrian connections from bus stops to adjacent blocks where possible. Provide direct pedestrian connections from the collector road sidewalks where possible.

The proposed development can be supported from a traffic operations perspective with the recommended improvements as the site-generated traffic is not expected have a material effect on the operations of the existing roadway network. The internal roadways can facilitate future transit routes, and coordination with transit agencies are recommended to plan and protect for the implementation of future transit services internal to the site.

Furthermore, the sensitivity analysis indicates that the widening of Torbram Road is not required to support full buildout of the development lands. Specifically, the full buildout of the lands can be supported prior to the widening of Torbram Road, with the recommendations noted below on the Airport Road and Torbram Road intersections.

A number of TDM opportunities including transit implementation, provision of priority carpool parking, Smart Commute integration and promotion, and bicycle parking should be explored and further refined through subsequent submissions.

The proposed parking and loading supply are in surplus when compared to the applicable Town and MZO Zoning By-law requirements for the site. It is noted that the parking and loading requirements have been assessed on a high level and the parking and loading supply for each building will be assessed in detail on an individual basis during the Site Plan Application stage. It is also noted that while the car parking supply is already in surplus, the trailer parking supply was not accounted for in either the loading bay or car parking supply.

The analysis contained within this report was prepared using the information received from the proponent, the most recent Draft Plan prepared by Weston Consulting dated April 16, 2024, as well as the Site Plan prepared by Turner Fleisher Architects Inc. dated March 28, 2024. Any minor changes to the Draft Plan or the Site Plan are not expected to affect the conclusions contained within this report.

In conclusion, the proposed industrial development at Tullamore Industrial lands in the Town of Caledon, can be supported from a transportation operations and safety perspective.

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1.0 Introduction

1.1 Background

C.F. Crozier & Associates Inc. (Crozier) was retained by Tullamore Industrial GP Limited to undertake a Transportation Impact Study (TIS) in support of the planning applications for the industrial development located in the Tullamore Lands, 0 & 12245 Torbram Road in the Town of Caledon.

A Transportation Impact Study (TIS) was previously prepared and submitted in June 2021 based on an older Site Plan, the TIS was updated an issued for resubmission in December 2021, April 2023, and October 2023. This Transportation Impact Study Update has been prepared address the Town and Region's comments dated March 20, 2024, regarding the Official Plan Amendment (OPA) and Draft Plan of Subdivision (DPS) submissions associated with the Tullamore Lands.

The Town and Region's comments with associated responses, and the established Terms of References are included in **Appendix A**.

1.2 Development Proposal

The development proposes an industrial park consisting of 137 ha. **Table 1** summarizes the proposed development statistics. The most recent Draft Plan prepared by Weston Consulting dated April 16, 2024, has been provided as **Figure 1.** The Site Plan prepared by Turner Fleisher Architects Inc. dated March 28, 2024, showing the building statistics has been provided in **Appendix B**.

Table 1: Development Proposal

Block	Building	Land Use	GFA (ft²)	Parking Supply		
				Loading Bays	Car Parking	Trailer Parking
1	Building A	Industrial Warehouse	1,124,218	270	535	600
3	Building C[1]		784,700	81	319	179
4	Building D		978,800	168	546	173
7	Building E		963,300	100	480	291
8	Building F		797,500	170	389	135
5	Building H		938,973	95	543	61
2	Building I		290,400	74	326	47
2	Building J		99,000	26	138	11
Total			5,976,891	**984**	**3,276**	**1,497**

Note: The site statistics shown differ from the statistics used in the analysis found in **Section 4.0** and **5.0**. The overall trip generation for the site has reduced by 18 trips in the a.m. and p.m. peak hours for the latest Site Plan in comparison to the trip generation used at the time of this analysis and is therefore considered conservative The Site Plan statistics shown are from the latest Site Plan (dated, March 28, 2024), provided in **Appendix B**.

Table 2 outlines the proposed development's gross floor area (GFA) in comparison that outlined in the previously submitted TIS Update (Crozier, October 2023). The table also illustrates that the current proposal has slightly smaller GFA when compared with the previous proposal; therefore, it should be noted that from a trip generation perspective, a decrease in trips would result. **Section 4.0** reviews the trip generation based on the previous site statistics; this analysis is therefore considered conservative.

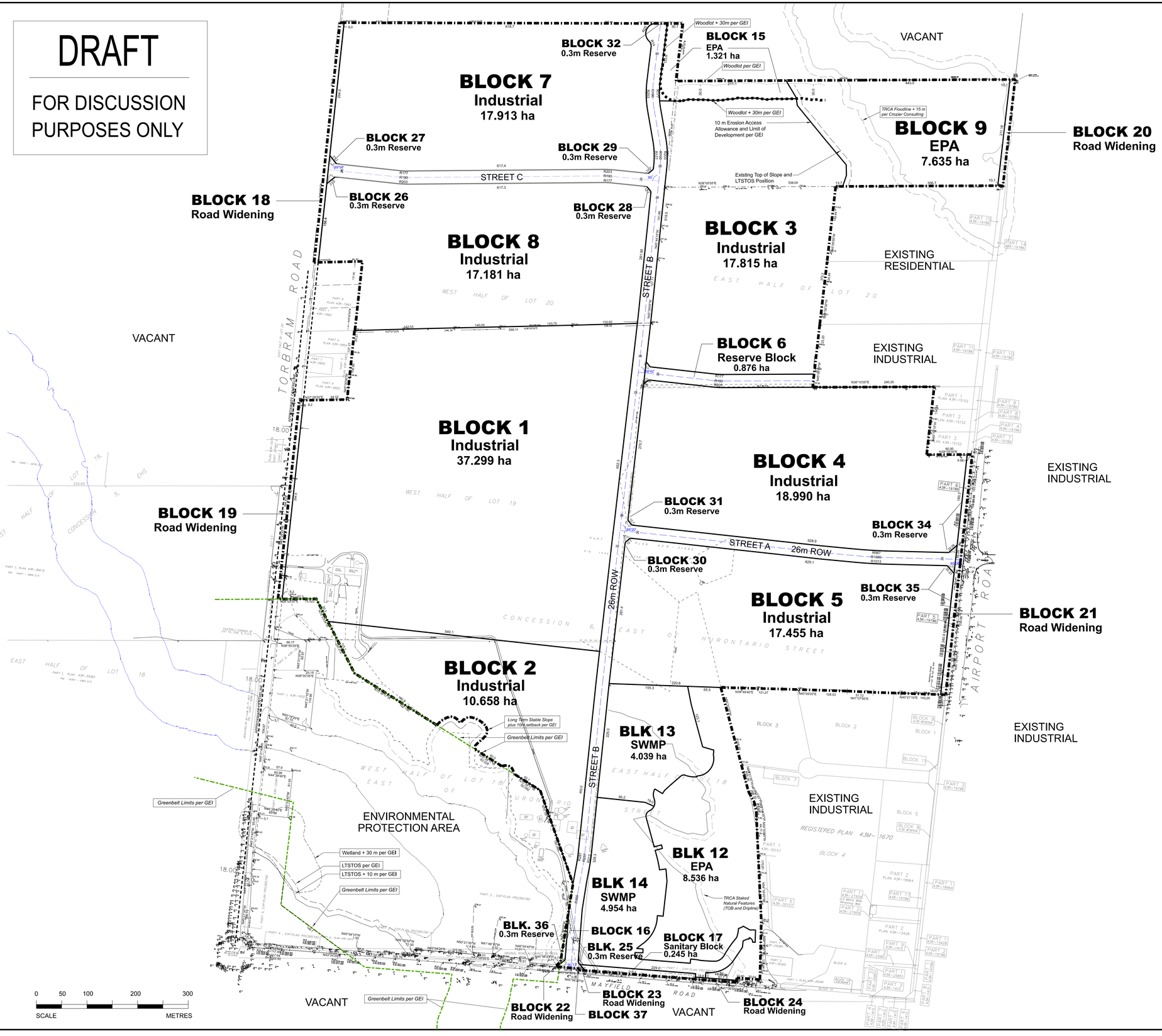
Table 2: Development Proposal (Comparison)

Block	Building	GFA (sq. ft)	
		Previous Submission October 2023	**Current Proposal April 2024**
1	Building A	1,083,946	1,083,946 (+40,272)
3	Building C[1]	784,700	784,700
4	Building D	1,009,216	1,009,216 (-30,416)
7	Building E	1,008,900	1,008,900 (-45,600)
8	Building F	797,500	797,500
5	Building H	975,874	938,973 (-36,901)
2	Building I	360,760	290,400 (-70,360)
2	Building J	99,000	99,000
Total		**6,119,896**	**5,976,891** (-143,005)

A multiuse trail (MUT) is also now proposed through the Greenbelt block, south of Block 2, which will provide an active transportation connection between Torbram Road and Street B. This proposed MUT was not considered in the previous October 2023 Submission, more details outlining the proposed MUT can be found in **Section 9.1.**

DRAFT

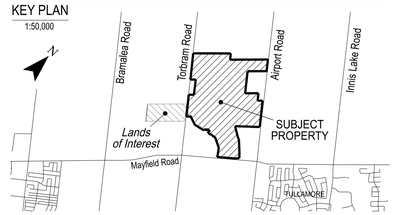
FOR DISCUSSION PURPOSES ONLY



DRAFT PLAN OF SUBDIVISION

PART OF LOTS 18, 19 AND 20, CONCESSION 6
EAST OF HURONTARIO STREET
PART OF LOTS THE ROAD ALLOWANCE
BETWEEN LOTS 17 AND 18, CONCESSION 6
EAST OF HURONTARIO STREET
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL

KEY PLAN
1:50,000



OWNER'S CERTIFICATE:

I authorize Weston Consulting Group Inc. to prepare and submit this plan for draft approval.

Date: _____

Tullamore Industrial GP Limited
John McGovern, Senior Vice President, Policy and Planning
75 Tiverton Court, Markham, Ontario L3R 4M8
TEL: 905.888.1277 x 228
e: john.mcgovern@rlcgroup.ca

SURVEYOR'S CERTIFICATE:

I hereby certify that the boundaries of the lands being subdivided and their correct relationship to the adjacent lands are accurately and correctly shown on this plan.

Date: _____

Name of Surveyor, OLIP
Ontario Land Surveyor

YOUNG & YOUNG SURVEYING INC.
2 HOLLAND DRIVE, UNIT 5, BOLTON,
ONTARIO L7E 1E1
PHONE: 905.951.6000,FAX: 905.857.4811
www.youngsurveying.ca, info@youngsurveying.ca

ADDITIONAL INFORMATION:

[Section 51(17) of the Planning Act, R.S.O. 1990, c. P.13], as amended to March 24, 2024.
a), b), e), f), g), & j) - on plan.
c) - on key plan
d) - see statistics
h) - piped water to be installed by developer
i) - clay loam / loam
k) - all services to be made available by developer
l) - nil

DEVELOPMENT STATISTICS:

BLOCKS	AREA(HA)
Industrial [Block 1-5,7-8]:	137.311 ha
Reserve Block [Block 6]:	0.876 ha
Environmental Protection Area [Block 9,12,15]:	17.492 ha
SWMP [Blocks 13,14]:	8.993 ha
Block 16:	0.043 ha
Block 17 Sanitary Block:	0.245 ha
Road Widening [Block 18-24]:	1.432 ha
0.3m Reserve [Block 25-36]:	0.033 ha
Block 37:	0.005 ha
Roads:	8.373 ha
Total:	174.803 ha

WESTON CONSULTING

Vaughan: 201 Millway Ave, Suite 19
Vaughan, Ontario L4K 5K8
T. 905.738.8080 F. 905.738.6637

Toronto: 268 Berkeley St.
Toronto, Ontario M5A 2X1
T. 416.640.9917 F. 905.738.6637

1-800.363.3558 westonconsulting.com

REVISIONS LIST

16 APR 2024	Remove Greenbelt lands & Future Community Block. Add Blk 36 reserve.
12 APR 2024	Add blocks 36-39 per GEI. Remove original Wetlands. Overlay updated GEI linework.
12-22 FEB 2024	Revise Blks 3/9 limits & Greenbelt per GEI & EPA Blk 12 & SWMP Blks 13&14 per Crozier
07-09 FEB 2024	Revise Blks 1,2, 2-14 per Crozier 2024-02-07 site plan. Digitize revised road widening
11-16 JAN 2024	Revise EPA Blk 12 & SWMP Blks 13 & 14 per Crozier. Add/remove 9m Blk 2 easement
24 OCT 2023	Revise Crest of Slope & Woodlot+setbacks per GEI Mapping & SWM-EPA-Buffer per Crozier
28 MAR 2023	Revise block limits per Site Plan. Modify Park blk to include parking area & ilink.
18 JAN 2023	Revise block limits per 2023-01-12 Site Plan & TRCA limits
16 DEC 2022	Exclude NHS Constraints. Modify Blk 4 & per Turner Fleischer 2022-12-13 Site Plan
13 DEC 2022	Revise per Crozier Street A modifications & Crest of Slope - NHS Constraints per GEI
23 NOV 2022	Adjusted Blocks per Crozier site plan & R-Plan boundaries
18 FEB 2022	Adjusted Blocks and updated TRCA survey with natural features
13-20 OCT 2021	Combine blocks 1 and 2. Adjust plan with ground topo survey
23-24 AUG 2021	Increased SWMP Revise Street A & B sight triangles

Drawing Number:

File Number:	10208
Drawn By:	SM
Planner:	DC
Scale:	1:3500
CAD:	10208/Draft plans/D13_V2_2024-04-16.dgn

D13

FIGURE 1

1.3 Purpose and Scope

The purpose of this study is to evaluate the impacts of the proposed development on the surrounding road network, and to recommend mitigation measures to address the transportation impacts, if warranted.

The study reviews the following key aspects of the proposed development from a transportation engineering perspective:

- Existing, future background, and future total traffic operations on the boundary road network during the weekday a.m. and p.m. peak hours.
- Forecasted trip generation and distribution of the proposed development.
- Mitigation measures to support the proposed development, if required.
- Transportation safety components, including sight distance requirements at the site accesses, access spacing and restrictions, and general safety issues pertaining to road users.
- Feasibility of the proposed site-specific parking rates in lieu of the rates per the Town's By-Laws.
- Transportation Demand Management (TDM) opportunities to reduce single-occupancy vehicle (SOV) trips.

The following intersections were reviewed as part of the study area:

- External Road Network
    - Torbram Road at Old School Road
    - Mayfield Road at Torbram Road
    - Mayfield Road at Street "B"
    - Mayfield Road at Airport Road
    - Airport Road at Davis Lane/ Perdue Crescent
    - Airport Road at 12333 Airport Road/Street "A"
- Internal Road Network
    - Torbram Road at Street "C"
    - Torbram Road at Site Access 1
    - Torbram Road at Site Access 2
    - Street "B" & Street "A"
    - Street "B" & Street "C"
    - Street "B" & Future Potential Street "D"

The following horizon timeframes were analyzed in this study, consistent with the Region of Peel Traffic Impact Study guidelines:

- Existing conditions (2022)
- Full-build out horizon (2026) Future Conditions
- Five years horizon (2031) and ten-year horizon (2036) post build-out
- Weekday a.m. and p.m. peak hours

This study has been completed in accordance with the procedures set out by Peel Region's Traffic Impact Study Guidelines, with the associated analysis and findings outlined herein.

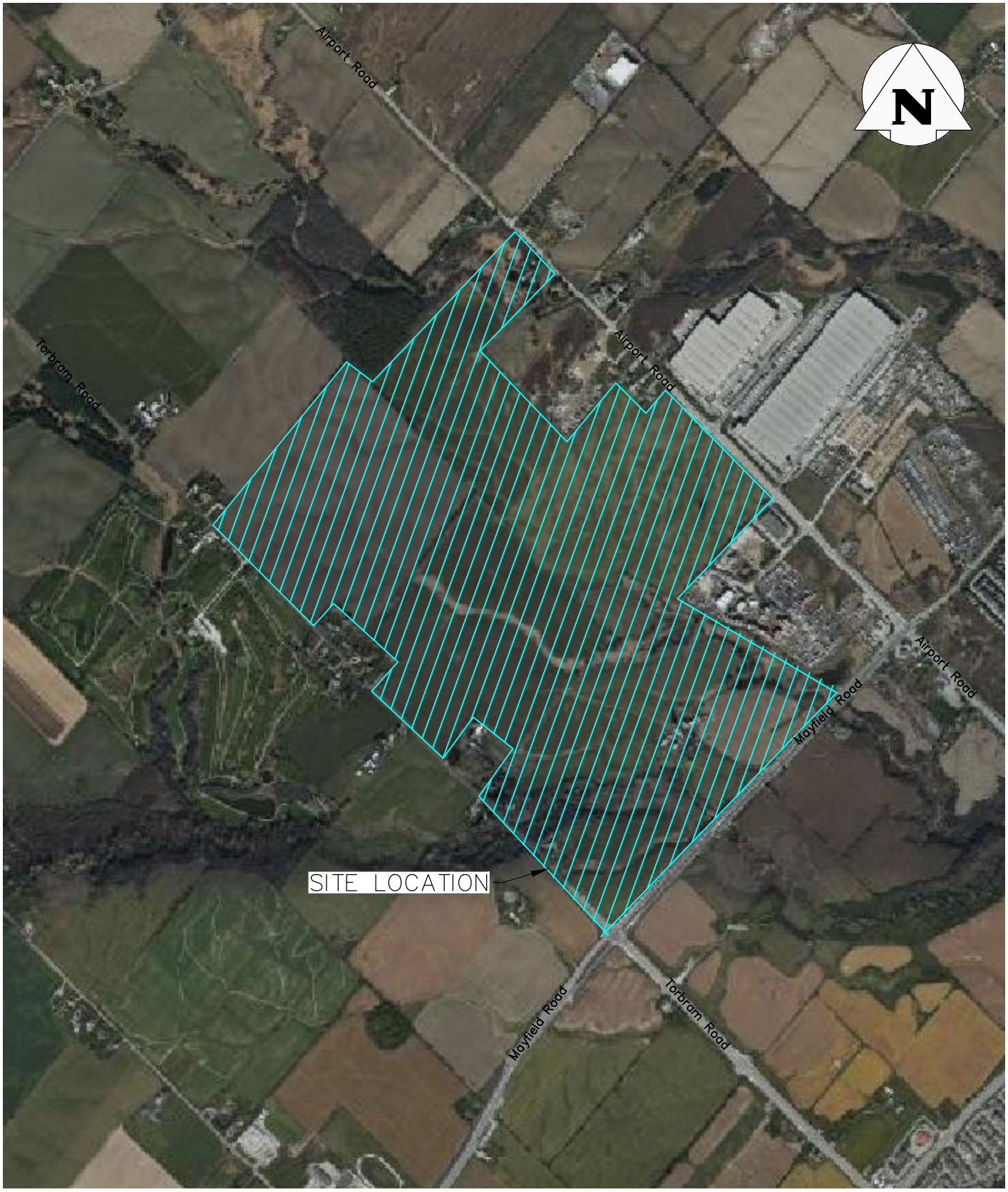
The report has been prepared in accordance with the established Terms of References received from the Town and Region on December 16, 2022, and December 2, 2022, respectively. The established Terms of References from the Town and Region are included in **Appendix C.**

2.0 Existing Conditions

2.1 Development Lands

The development lands encompass a total approximate area of 502 acres (203 ha) and consists primarily of greenfield area. The subject lands are zoned by the Town of Caledon By-Law. The site is located in Zone 4 and classified as Agricultural (A1), and segments of the study lands are zoned as an Environmental Protection Area (EPA2). Relevant zoning map excerpts are included in **Appendix D.**

Figure 2 illustrates the study area.



TULLAMORE LANDS, 0 & 12245 TORBRAM ROAD, TOWN OF CALEDON

SITE LOCATION

CROZIER CONSULTING ENGINEERS
211 YONGE STREET
SUITE 600
TORONTO, ON M5B 1M4
416-477-3392 T
WWW.CFCROZIER.CA

Drawn	Design	Project No.	
I.A.	T.D.S.	2022-5842	
Date	Check	Scale	Dwg.
2023/01/30	M.L.	N.T.S	FIG. 02

2.2 Study Road Network

The directional orientation of the study roadways is slightly skewed; however, it is generally understood that to/away from the lake are considered the north/south directions and parallel along the lake are considered the east/west directions. To ensure clarity and consistency in this report, the direction of Airport Road and Torbram Road are designated as north-south roadways while Mayfield Road, Old School Road/Healey Road, and Perdue Court/Davis Lane are designated as east-west roadways.

Airport Road (Regional Road 7) is a north-south roadway with a four-lane urban cross-section. Airport Road is under the jurisdiction of Peel Region and is defined as an arterial road. The roadway has a mixed-use path available on the east side of the roadway and has a posted speed limit of 80 km/h and 60 km/h north and south of Perdue Court/Davis Lane, respectively.

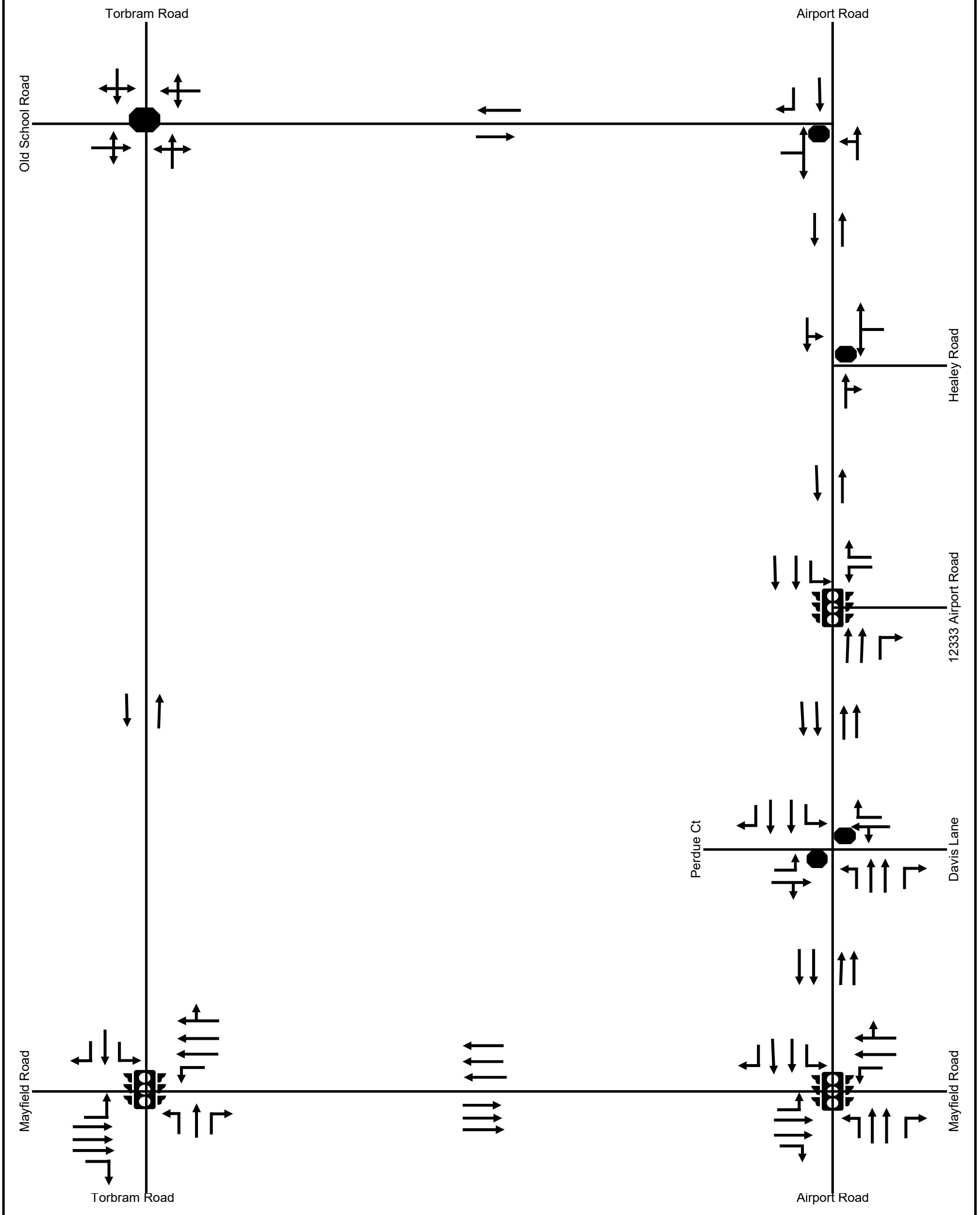
Mayfield Road (Regional Road 14) is an east-west roadway with a four-lane urban cross-section. Mayfield Road is under the jurisdiction of Peel Region and defined as an arterial road. The roadway has a multiuse path available on one side of the roadway. For westbound traffic, Mayfield Road has a posted speed limit of 60 km/h from Airport Road to approximately 460 m west of Airport Road, after which the speed limit transitions to 80 km/h. For eastbound traffic, the posted speed limit of 80 km/h exists from Torbram Road to approximately 450m west of Airport Road.

Torbram Road is a north-south roadway and is defined as a collector road. Torbram Road is under the jurisdiction of the Town of Caledon and the City of Brampton on the segments north and south of Mayfield Road, respectively. The roadway segment south of Mayfield Road has a four-lane urban cross-section and has a sidewalk and mixed-use path available on either side. The roadway segment north of Mayfield Road has a two-lane rural cross-section and no sidewalks available on either side. The posted speed limit on Torbram Road is 70 km/h throughout the study area.

Perdue Court/Davis Lane are east-west roadways, and both are classified as local roads under the jurisdiction of the Town of Caledon. Davis Lane is the roadway segment east of Airport Road and has a two-lane rural cross-section, with no sidewalks available on either side. Perdue Court is the roadway segment west of Airport Road and has a two-lane urban cross-section with a sidewalk available on one side of the road. The speed limit on these roadways is assumed to be 50 km/h.

Old School Road/Healey Road is an east-west roadway and is classified as a collector road under the jurisdiction of the Town of Caledon. The road has a two-lane rural cross-section, with no sidewalks available on either side. The posted speed limit on Old School Road is 70 km/h throughout the study area, and the speed limit on Healey Road is posted at 70 km/h.

Figure 3 illustrates the study road network.



Legend

Stop Controlled

Signal Controlled

Tullamore Industrial

Existing Lane Configurations

CROZIER CONSULTING ENGINEERS

Figure 3

Project No. 2022-5842

Date. 2023.10.20

Analyst. TDS

2.3 Public Transit

Brampton Transit operates bus routes within the study area. **Table 3** below outlines the existing transit routes, days of operation, peak hour headways, and the location of bus stops in the study area.

Table 3: Transit Routes

Route	Direction	Span	Days of Operation	Peak Hour Headways (min)	Transit and Connecting Stops in Study Area
Brampton Transit, 30 Airport Road	Two-Way North-South	Mayfield Road/ 12333 Airport Rd (Legacy warehouse) to Westwood Mall Terminal	Monday – Sunday	8 mins	12333 Airport Rd (Legacy warehouse)

As shown above, Brampton transit operates one local bus within the study area. The existing stops on Airport Road north of Mayfield Road would provide limited access to the proposed site and would require long walking trips to and from the existing bus stops. **Appendix E** contains the systemwide transit map for route mapping by Brampton Transit.

2.4 Traffic Data

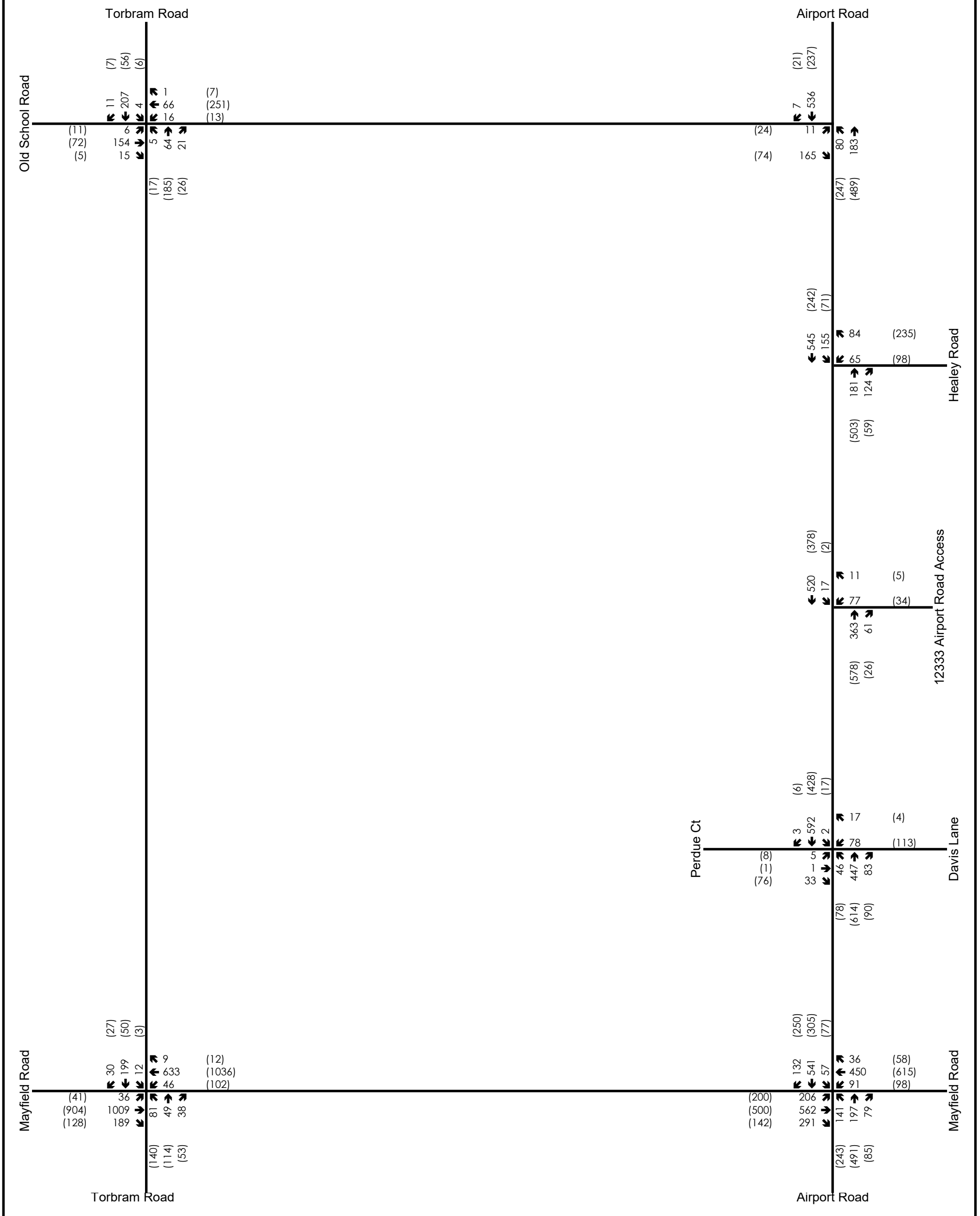
In accordance with the Town and Region Terms of Reference, new turning movement counts for the 2022 were collected at the following intersections by Spectrum Traffic Inc. at the associated timeframes as summarized in **Table 4**.

Signal timing plans for the study intersection were provided by Peel Region staff for modelling purposes. Intersection analysis was conducted utilizing peak hour factors (PHFs) of 1.0 per Region of Peel modelling guidelines.

Table 4: Traffic Data

Intersection	TMC Date	Timing Plan Date
Torbram Road at Old School Road	September 13, 2022	N/A
Mayfield Road at Torbram Road	September 13, 2022	June 18, 2021
Mayfield Road at Airport Road	September 13, 2022	June 23, 2021
Airport Road at Davis Lane/Perdue Crescent	September 13, 2022	N/A
Airport Rd & 12333 Airport Rd	September 13, 2022	June 18, 2021
Airport Road at Healey Road	September 13, 2022	N/A
Airport Road at Old School Road	September 13, 2022	N/A

The traffic count data and signal timing plans are provided in **Appendix E.** Existing traffic volumes are illustrated in **Figure 4**.



Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Tullamore Industrial

2022 Existing Traffic Volumes

CROZIER CONSULTING ENGINEERS

Figure 4

Project No. 2022-5842
Date. 2023.10.20
Analyst. TDS

2.5 Traffic Modeling

The assessment of intersections is based on the method outlined in the "Highway Capacity Manual, 2000" using Synchro 11 modelling software. Intersections are assessed using the Level of Service (LOS) metric, with ranges of delay designated a letter ranging from "A" to "F". For stop-controlled intersections, a Level of Service "A" or "B" would typically be expected during off-peak hours when there are lower traffic volumes on roadways. Levels of Service "C" to "F" would characteristically be measured during commuter peak hours when greater traffic volumes produce longer travel times. The Level of Service definitions for signalized and stop-controlled intersections is included in **Appendix F**.

Per the Region's modelling guidelines, Peak Hour Factors of 1.0 were used for all horizons. No lost time adjustments or adjustments to saturation flow rates or any other modelling parameters were adopted.

2.6 Intersection Operations

The traffic operations at the study intersections were analyzed based on the traffic volumes and signal timing plans as summarized in **Table 4**. Detailed capacity analyses are included in **Appendix G**. The intersection operation was analyzed based on the traffic volumes illustrated in **Figure 4**. **Table 5** outlines the 2022 existing traffic operations.

Table 5: 2022 Existing Levels of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Torbram Road at Old School Road	Stop Control (All Way)	A.M.	9.9 s [A]	None	0.32 (SBLTR)	None
		P.M.	11.1 s [B]	None	0.40 (WBTR)	None
Mayfield Road at Torbram Road	Signal	A.M.	27.0 s [C]	None	0.49 (EBT)	None
		P.M.	26.8 s [C]	None	0.43 (WBTR)	None
Mayfield Road at Airport Road	Signal	A.M.	24.0 s [C]	None	0.60 (EBL)	None
		P.M.	31.3 s [C]	None	0.63 (NBL)	80m>70m (WBTR) 145m>95m (NBL)
Airport Road at Davis Lane/ Perdue Crescent	Stop Control (Minor)	A.M.	32.7 s [D]	None	0.38 (WBL)	None
		P.M.	118.2 s [F]	118.2 s [F] (WBL)	0.89 (WBL)	35m>30m (WBL)
Airport Road & 12333 Airport Road/Street "A"	Signal	A.M.	7.8 s [A]	None	0.48 (WBL)	None
		P.M.	4.5 s [A]	None	0.23 (WBL)	None
Airport Road at Healey Road	Stop Control (Minor)	A.M.	28.3 s [D]	None	0.52 (WBLR)	None
		P.M.	62.1 s [F]	62.1 s [F] (WBLR)	0.93 (WBLR)	None
Airport Road at Old School Road	Stop Control (Minor)	A.M.	15.5 s [C]	None	0.34 (EBLR)	None
		P.M.	16.8 s [C]	None	0.24 (EBLR)	None

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).

Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.

All intersections are currently operating acceptably with LOS "C" or better during the weekday a.m. and p.m. peak hours with the exception of Airport Road at Davis Lane/ Perdue Crescent and Airport Road at Healey Road.

The unsignalized intersection of Airport Road at Healey Road is currently operates at LOS "D" and "F" during the weekday a.m. and p.m. peak hours respectively. It is noted that this intersection is to be altered into a roundabout with connections to Old School Road and operations are expected to improve significantly in future horizon years as is discussed in the following sections.

The unsignalized intersection of Airport Road at Perdue Court/Davis Lane currently operates at LOS "D" and "F" during the weekday a.m. and p.m. peak hours respectively. These conditions are due to the stop-controlled conditions, particularly westbound left turn movements intending to travel south on Airport Road. As discussed below, the intersection will likely need to be signalized in the future to address traffic delays to increased traffic on Airport Road.

2.6.1 Traffic Signal Warrant Assessment - Airport Road at Perdue Court/Davis Lane

Traffic signal warrant analysis was conducted using an Ontario Traffic Manual (OTM) Book 12 configured excel sheet based on the average hourly volume approach for the intersection of Airport Road at Perdue Court/Davis Lane.

Based on delays to cross traffic, traffic signals are warranted at the intersection of Airport Road at Perdue Court/Davis Lane under existing conditions. It is recommended that signalization be considered for this intersection to alleviate existing the high levels of delay for minor street movements. Signalization would also increase the safety for left turning vehicles onto Airport Road.

It is noted that Airport Road is to be widened to 4 lanes throughout the study area in 2024 and traffic conditions are expected to improve along the corridor. Therefore, the intersection of Airport Road and Perdue Court/Davis Lane should be monitored, and signalization should be implemented if warranted or to provide safe pedestrian crossing opportunities as the area develops.

As discussed in following sections, this study intersection is recommended to be signalized in the future based on high delays to left turning traffic from Perdue Court/Davis Lane result but has not been modelled as such in this analysis. The intersection serves as an access to two developments not associated with the subject development of this property.

Signal Warrant analysis excerpts are included in **Appendix H**.

3.0 Future Background Conditions

3.1 Study Horizons

Based on the Terms of Reference correspondence included in **Appendix C**, study horizon years of the full build-out (2026), as well as a five-year horizon (2031) and ten-year horizon (2036) post build-out were considered for analysis.

3.2 Background Developments

Refer to **Table 6** below for a list of background developments from which traffic volume forecasts were derived to estimate future background traffic volumes.

It is noted that all developments in **Table 6** were initially forecasted to be completed and implemented by 2022. However, a number of the major developments, particularly Block 48-1 and Block 48-2 were only partly built out by the existing 2022 horizon based on a review of aerial imagery. **Section 3.2.1** outlines the methodology of deriving the remaining background assignments for the 2026, 2031 and 2036 horizons.

Table 6: Background Developments

No.	Development Address	Proposed Development	Buildout Horizon	Source
1	Block 48-2 Brampton Area 48 Landowners	1,723 single-detached units 240 semi-detached units 1,208 townhouse units 220 Apartment units 9.34 ha District Retail 4.09 ha mixed use 1.0 ha convenience retail 3 Elementary Schools 2 secondary schools 2 Places of Worship	100% Build-out 2026	Block 48-2 TIS (Cole, 2017)
2	Block 48-1 Countryside Villages	1,323 low density residential units 1,324 med-density residential units 11,295 sq. m retail GFA 4 Elementary Schools	50% by 2022 100% by 2026	Block 48-1 TIS (MMM, 2015)
3	Countryside Villages Secondary Plan – Employment Centre	6,080 employees	25% Build-out 2022 Full Build-out 2023	Block 48-1 TIS (MMM, 2015)
4	0 Airport Road/ 6034 Mayfield Road	479,375 ft^2 of General Light Industrial Land Use	100% Build-out 2026	6034 Mayfield Road TIS (WSP, 2021)

3.2.1 2022 "Existing" Study Horizon

As of the 2022 existing study horizon, approximately 50% of the Block 48-1 Phase 1 development was built-out and assumed to be occupied based on a review of aerial imagery. The remaining 50% of Block 48-1 was assumed to be completed by the 2026 horizon year.

Additionally, none of Block 48-2 has not been built out based on aerial imagery by the 2022 horizon. The Block 48-2 development is expected to be fully built out by 2026.

Lastly, the Countryside Villages Secondary Plan – Employment Centre was assumed to only be built out 25% by 2022. The remaining 75% of this development would be expected to be built out by 2026.

3.2.2 2026 - 2036 Study Horizons

Therefore, the total background assignment for the 2026 horizon comprised of 50% of Block 48-1 site trips, 75% of the Countryside Villages Secondary Plan – Employment Traffic site trips, in addition to site generated traffic associated with the Block 48-2 development.

50% of the site traffic from the Block 48-1 development (extracted from the MMM Report) was subtracted from the volumes from Figure 5-3 of the Cole Report to determine the 2026 background volumes from Block 48-1.

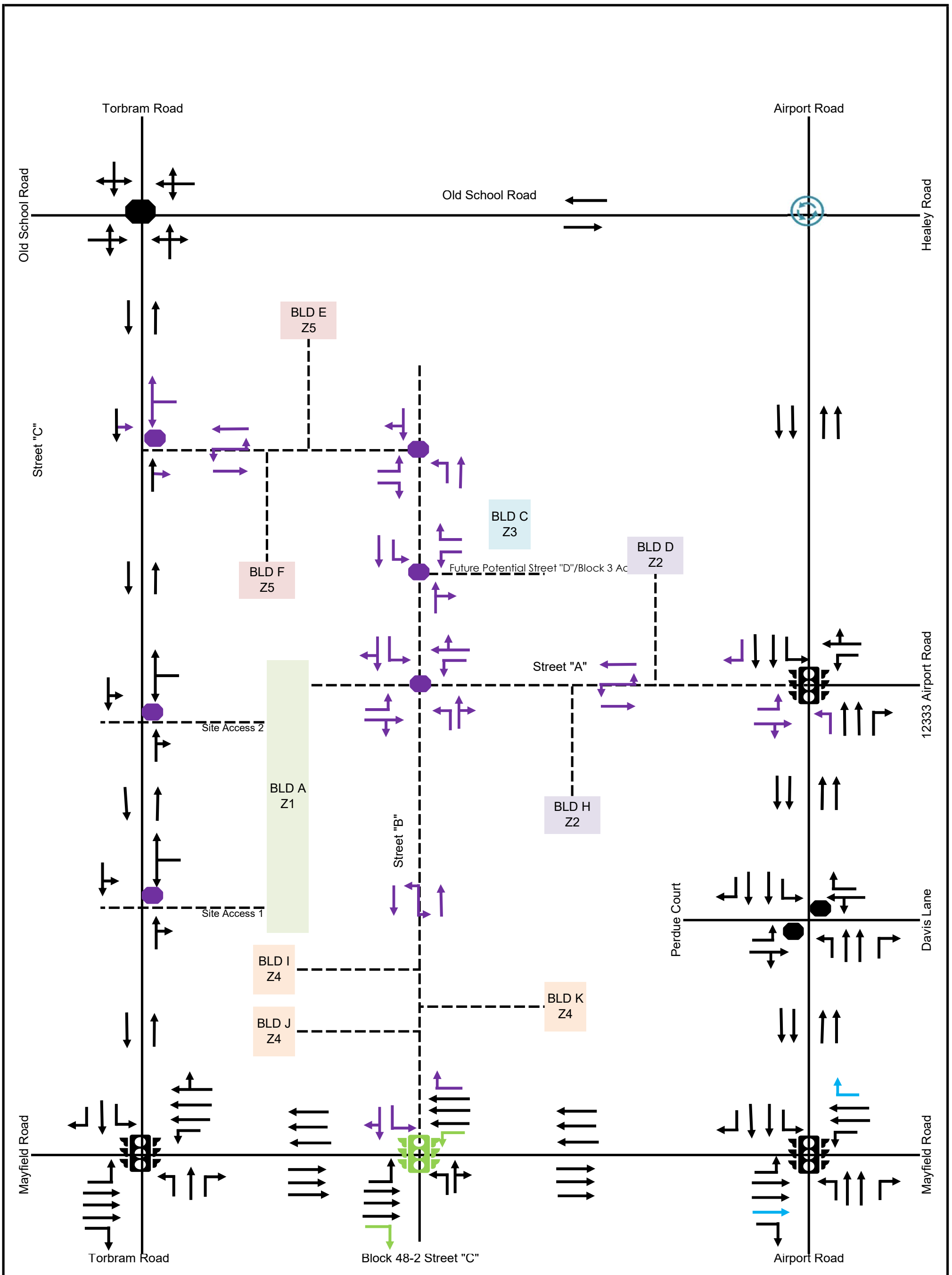
75% of the site traffic from the Countryside Villages Secondary Plan – Employment Traffic was derived by subtracting the 2015 background traffic from the 2020 background traffic in the Block 48-1 TIS (MMM, 2015) and multiplying the volumes by a factor of 1.5. The Block 48-1 TIS (MMM, 2015) provided multiple background development volumes amalgamate into the 2015 horizon years and including 50% of site traffic from Countryside Villages Secondary Plan – Employment Traffic, the 2020 horizon year used the same value and added just the remaining 50% of the Countryside Villages Secondary Plan – Employment Traffic. Therefore, the difference in the two sets of volumes yielded 50% of the background traffic volumes associated with the Countryside Villages Secondary Plan – Employment Traffic. These volumes were then multiplied by a factor of 1.5 to yield 75% of the background traffic volumes associated with the Countryside Villages Secondary Plan – Employment which would be applicable to future horizon years within this analysis.

It is noted that the volumes from the Block 48-1 development presented at the intersection of Mayfield Road at Bramalea Road were assumed to all be through trips going east/west along Mayfield Road in the study area.

As requested by Town and Region staff, the background development at 6034 Mayfield Road was included in the Future Background horizons. It is noted that the development was included as a background development in the April 2023 and October 2023 TIS Update analysis' but was not noted in **Table 6.** The development has now been added to the table but already existed in the analysis, it is noted that the background volumes have not changed for this reason.

The 2026 Future Lane Configurations of the boundary road network are shown in **Figure 5**. The background development volumes are illustrated in **Figure 6**.

At the request of the Town, individual trip assignment figures for the background developments have been included in **Appendix I** in addition to the details on the background developments.



Legend

Control	Improvements
Stop Controlled	Planned
Signal Controlled	FB Recommended
Roundabout	FT Recommended

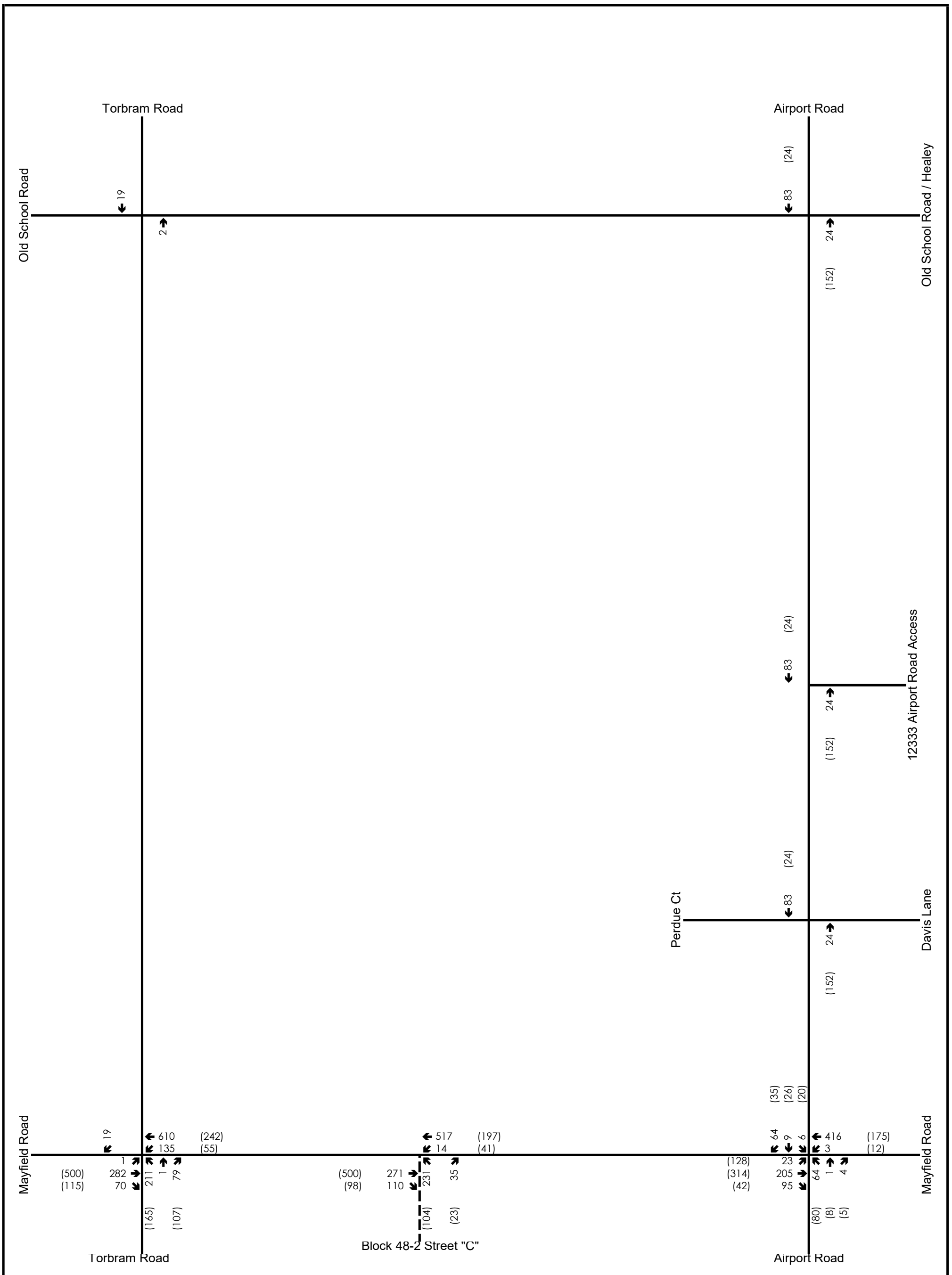
Tullamore Industrial

2026 Lane Configurations

CROZIER CONSULTING ENGINEERS

Figure 5

Project No. 2022-5842
Date. 2023.10.20
Analyst. TDS



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 6
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	Background Development Volumes		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS

3.3 Traffic Growth Rates

As per comments by the Town of Caledon, an industry standard growth rate of 2.0% per annum was applied to Town Collector roads. Growth is not required to be applied to local roads.

Growth rates are extracted from Block 48-2, City's approved Block 48-2 TIS and Sandringham East Plan Traffic Letter Update and are replicated in **Table 7** below:

Table 7: Background Growth Rates

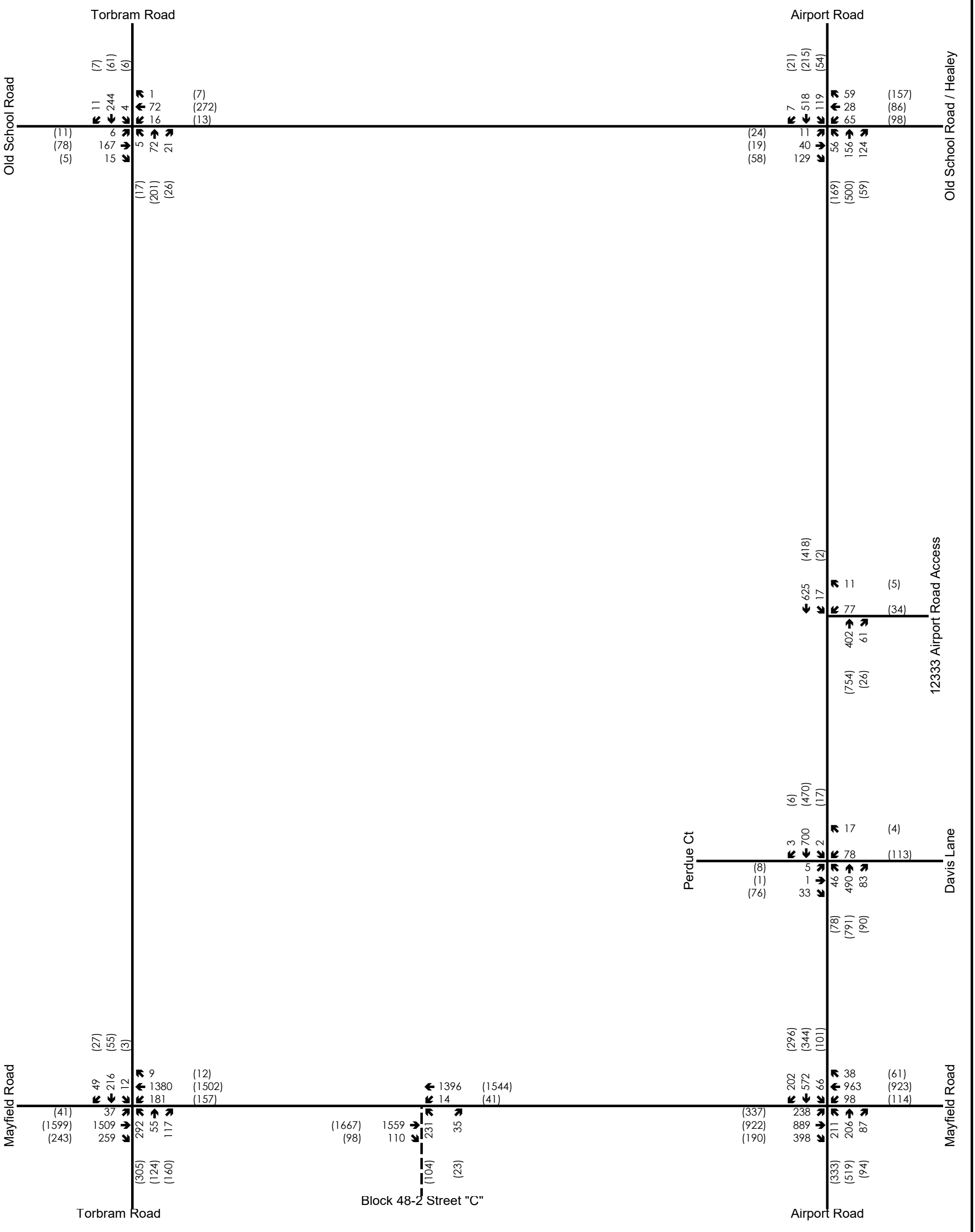
Intersection	Growth Rates	
	2022-2031	2031-2036
Airport Road (Regional Road 7)	1%	
Mayfield Road (Regional Road 14)	5%	2%
Torbram Road	2%	
Perdue Court/Davis Lane	0%	
Old School Road/Healey Road	2%	

Given the high levels of background traffic assigned, a 2% growth rate was applied to Mayfield Road traffic volumes after the 2031 horizon. This was applied as consistent with the Town collector growth rates requested, as a 5% growth rate compounded over a 15-year horizon may result in over-estimates for an extended period.

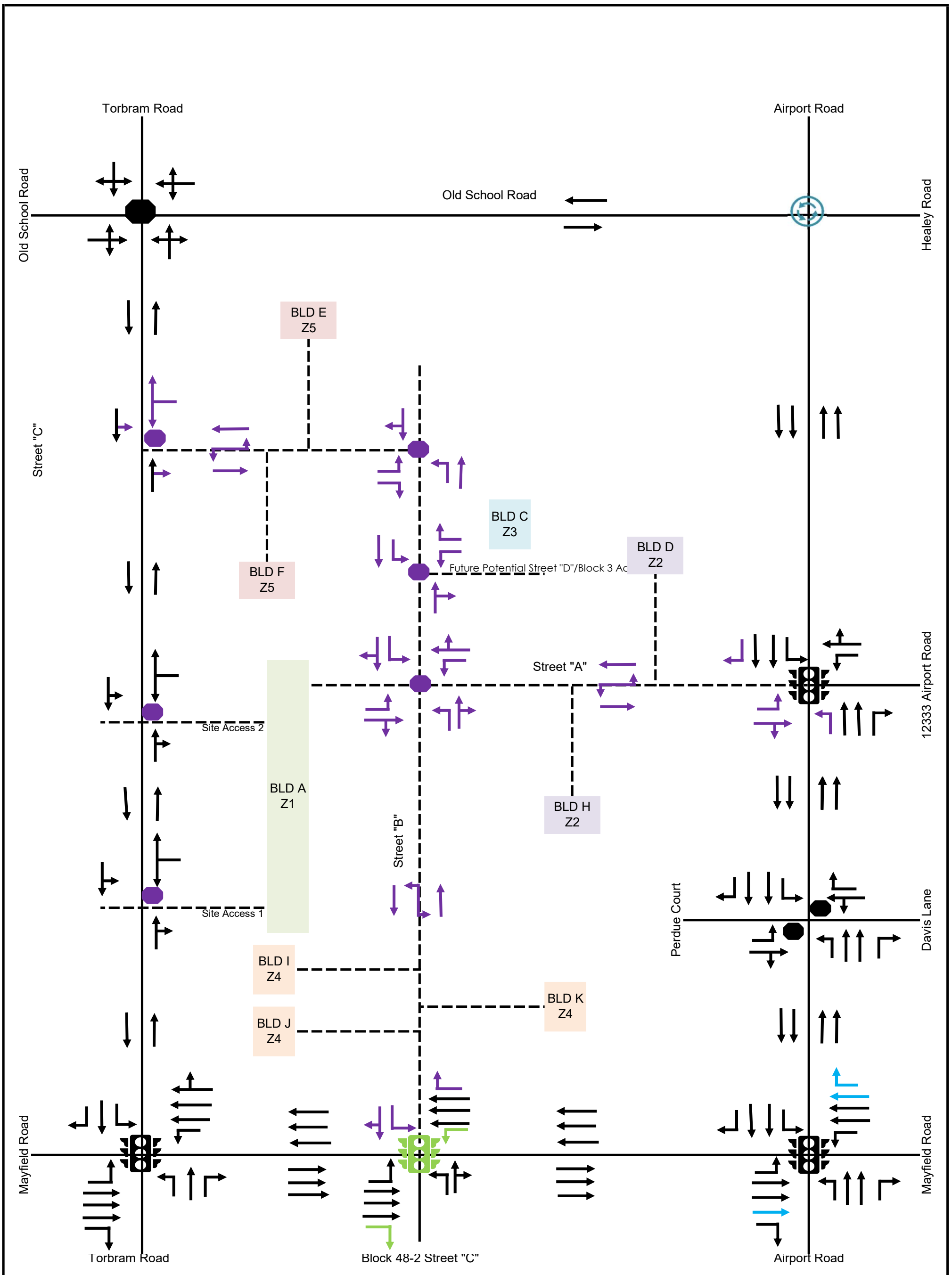
The 2026, 2031 and 2036 future background traffic volumes are also illustrated in **Figure 7, Figure 9** and **Figure 10**, respectively. **Figure 8** summarizes the 2031 & 2036 Future Lane configuration of the boundary road network. Details on background traffic volumes and developments are also included per **Appendix I.**

3.4 Future Roadway Improvements

The Region as well as the approved Block 48-2 TIS has identified and recommended several future background roadway improvements in the study area to be accounted for in the in their appropriate horizons. It is noted that with the recent completion of the Mayfield Road widening to a six-lane cross section west Airport Road, a number of the associated improvements recommended in Block 48-2 and per the Region's Transportation Master Plan have been implemented. However, additional planned improvements associated with the buildout of Block 48-2 and Airport Road widening from 1.0 km north of Mayfield Road have also been identified. The improvements are summarized in **Table 8** below.



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 7
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2026 Future Background Traffic		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS



Legend

Control	Improvements
Stop Controlled	Planned
Signal Controlled	FB Recommended
Roundabout	FT Recommended

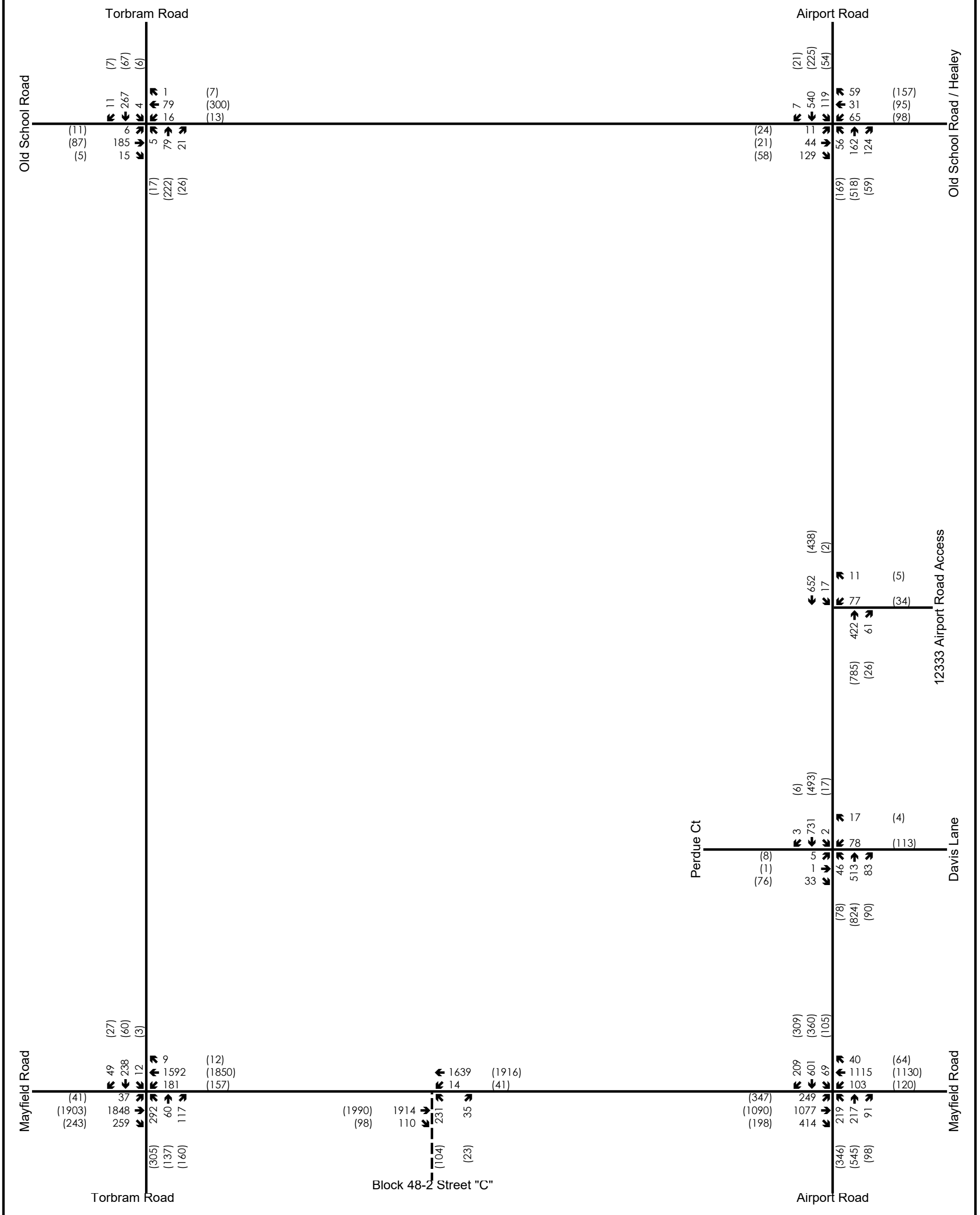
Tullamore Industrial

2031 & 2036 Lane Configurations

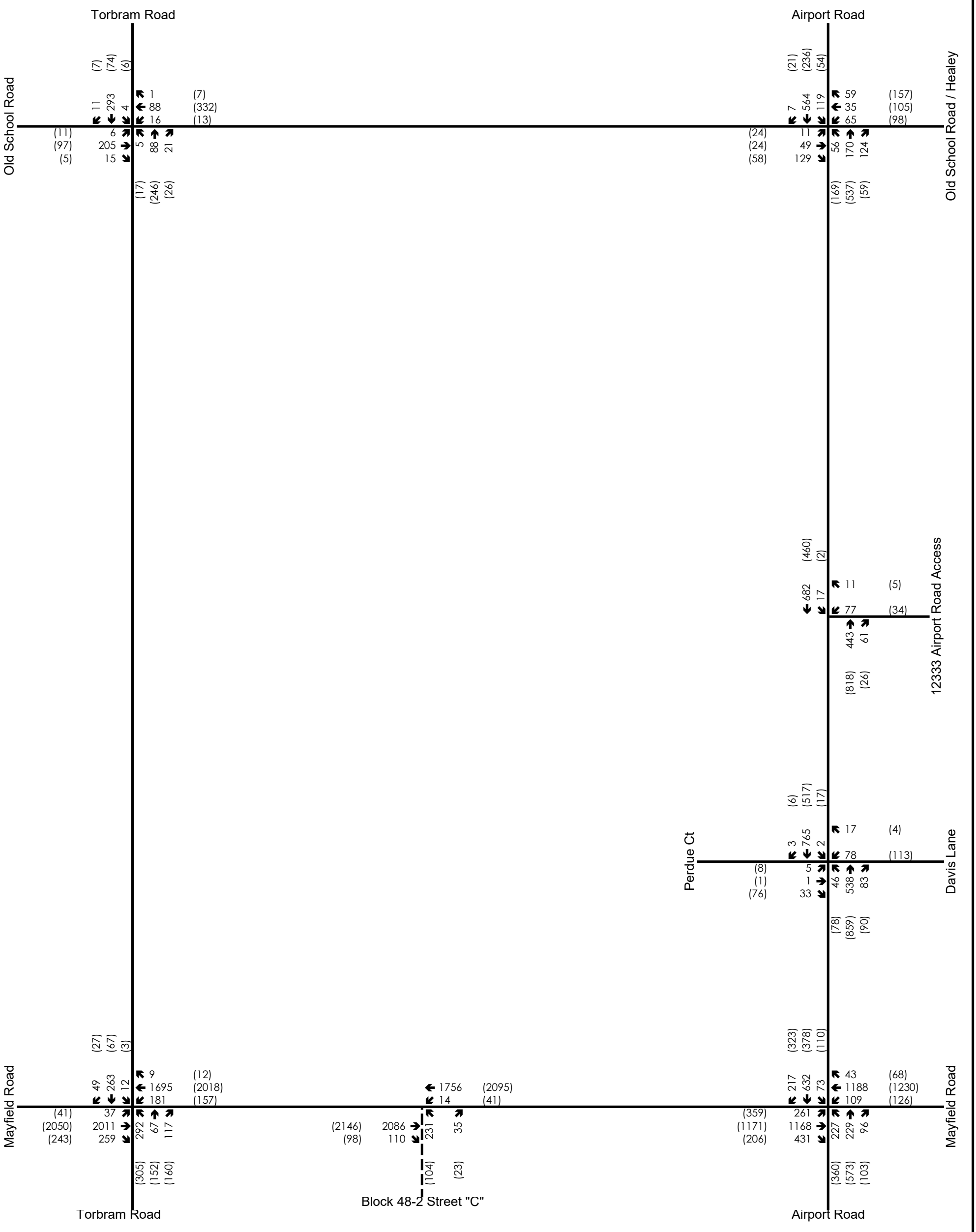
CROZIER CONSULTING ENGINEERS

Figure 8

Project No. 2022-5842
Date. 2023.10.20
Analyst. TDS



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 9
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2031 Future Background Traffic		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 10
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2036 Future Background Traffic		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS

Table 8: Planned Roadway Improvements (Capital Projects)

Roadway	Segment / Intersection	Improvement	Timeline	Source
Mayfield Road	Bramalea Road to Airport Road (RR 7)	Widening from two (2) lanes to six (6) lanes	Completed[1] (2022)	Region of Peel 2021 Budget / Region of Peel Transportation Master Plan
	Airport Road (RR 7) to The Gore Road (RR 8)	Widening from two (2) lanes to five (5) lanes	2023	
	Airport Road (RR 7) to Clarkway Drive	Widening from five (5) lanes to six (6) lanes	2026-2031	
Airport Road	1 km North of Mayfield Road (RR 14) to King Street (RR 9)	Widening from two (2) lanes to five (5) lanes	2024	
	Airport Road (RR 7) and King Street	Traffic calming measures: Implement Roundabout	2024	Region of Peel Environmental Study Report (October 2015)
	Airport Road (RR 7) and Healey Road / Old School Road	Traffic calming measures: Implement Roundabout	2024	

Note 1: The widening of Mayfield Road from Bramalea Road to Airport Road was included in this analysis as the base condition.

Appendix J contains information regarding the planned and recommended background roadway improvements.

3.4.1 GTA West Corridor (Highway 413)

Surrounding the study area, the Province of Ontario has plans to develop a GTA West Corridor (also and herein referred to as Highway 413) which would connect Peel, Halton, and York Region. The development of Highway 413 would consist of 400-series highway, a transitway, and potential goods movement priority features.

The implementation of Highway 413 is expected to alleviate existing traffic congestion along the east-west direction, as well as support further population and employment growth within the GTA. Furthermore, the construction of this new highway will provide convenient routing options as an expressway to get to major destinations across the GTA.

The alignment of the future Highway 413 would include several proposed interchanges including with Airport Road north of the site, which would be expected to provide additional connectivity to traffic in the surrounding road network.

The impacts of the implementation of the future Highway 413 with respect to changes in background traffic volumes and trip distribution during the analysis horizon years have not been identified at this time. Moreover, it is understood that the planning for this new connection is still in the early stages and is not expected for completion within the ultimate study horizon. Accordingly, related impacts have not been accounted for in this analysis.

3.5 Intersection Modelling

The intersections were modelled per the planned roadway improvements summarized in **Table 8** above. The modelling parameters surrounding these improvements are discussed below.

Airport Road at Old School Road

Roundabout analysis at the intersection of Airport Road at Old School Road was completed based on the parameters shown below.

As identified in the Airport Road EA, the intersection of Airport Road and Old School Road is planned for a future roundabout. Similar to the Airport Road EA, the ARCADY model using the ARCADY Junctions 8 analysis software was used to assess the operational performance of the intersection under the future horizon scenarios. The roundabout geometrics inputs used to calibrate the model are outlined in **Table 7**. These geometrics were determined through measurements of the 60% civil design drawings of the Airport Road widening project.

Table 9: Airport Road at Old School Road – Roundabout Geometry

Leg/Approach	Approach Road Half-Width (m)	Entry Width (m)	Effective Flare Length (m)	Entry Radius (m)	Inscribed Circle Diameter (m)	Conflict (Entry) Angle (Deg)
Airport Road (North)	7.4	10.0	40.0	30.0	45.0	16.0
Airport Road (South)	7.4	10.0	30.0	29.0	55.0	18.0
Healey Road (East)	7.4	10.0	30.0	24.0	55.0	20.0
Old School Road (West)	3.4	3.4	0.0	31.0	55.0	15.0

Moreover, a y-intercept value of 90% was also used as consistent with the Airport Road EA, which was used to account for the unfamiliarity of roundabouts to motorists in the GTA compared to in the United Kingdom. In subsequent submissions, this intersection along with the Torbram Road at Old School Road intersection will be reviewed.

Relevant Excerpts from the Airport Road EA can be found in **Appendix K**.

Mayfield at Torbram Road

As mentioned in **Table 6**, the background development of Block 48-2 is expected to be built out by the 2026 horizon year, this development includes the addition of an actuated-coordinated intersection at Mayfield Road at Block 48-2 "Street C". Mayfield Road at Torbram Road is currently a pre-timed signalized intersection, it was updated to be actuated-coordinated with the same cycle length as other existing and planned intersections along the Mayfield Road corridor.

3.6 Intersection Operations

The future background intersection operations at the study intersections were analyzed using the 2026, 2031 and 2036 future background traffic volumes illustrated previously in **Figure 7, Figure 9** and **Figure 10**, respectively.

Due to the various road improvements within the study area as discussed in **Section 4.4**, signal timing plans are expected to change, therefore, optimized signal timings splits were used for analysis in future horizon years following 2022. Furthermore, a protected permissive phase was added for the westbound left turn at Mayfield Road and Airport Road under optimized conditions in the 2026 horizon year and then implemented in all future horizons as the base assumption. Detailed capacity analysis worksheets and tables are included in **Appendix G**.

Table 10, Table 11, Table 12, and **Table 13** outline the 2026, 2026 (optimized) 2031 and 2036 future background traffic operations, respectively. **Table 14** outlines the operations of the proposed roundabout in all three horizon years.

Table 10: 2026 Future Background Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Torbram Road at Old School Road	Stop Control (All Way)	A.M.	10.7 s [B]	None	0.38 (SBLTR)	None
		P.M.	11.9 s [B]	None	0.44 (WBLTR)	None
Mayfield Road at Torbram Road	Signal	A.M.	27.8 s [C]	None	0.86 (EBT)	120m > 80m (NBL)
		P.M.	25.3 s [C]	None	0.82 (EBT)	90m > 80m (NBL)
Mayfield Road at Block 48-2 Street "C"	Signal	A.M.	50.4 s [D]	None	0.75 (EBT)	70m (EBR)[3]
		P.M.	52.0 s [D]	None	0.71 (EBT)	70m (EBR)[3]
Mayfield Road at Airport Road	Signal	A.M.	37.8 s [D]	90.9 s [F] (EBL)	0.92 (EBL)	85m > 60m (EBR) 75m > 60m (WBR) 120m>90m (NBL)
		P.M.	42.7 s [D]	113.5 s [F] (EBL) 85.9 s [F] (WBL)	0.97 (EBL) 0.93 (WBT)	205m>200m (EBL) 210m > 165m (WBL) 850m > 60m (WBR) 215m > 95m (NBL)
Airport Road at Davis Lane/ Perdue Crescent	Stop Control (Minor)	A.M.	42.2 s [E]	None	0.45 (WBL)	None
		P.M.	271.9 s [F]	271.9 s [F] (WBL)	1.27 (WBL)	35m>30m(WBL)
Airport Road & 12333 Airport Road	Signal	A.M.	7.2 s [A]	None	0.44 (WBL)	None
		P.M.	4.4 s [A]	None	0.26 (NBT)	None

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).

Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.

Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

The signal timing plans at Mayfield Road at Airport Road were optimized under 2026 conditions to add a westbound left protected permissive phase. The westbound left is currently the only left turn phase at the intersection without a protected permissive phase, therefore the protected phase was added based on traffic volumes and delays to improve operations. The protected phase was implemented into the base condition for 2031 and 2036 horizon years.

The comparison of operation with and without the protected westbound left turn lane are shown in **Table 9** below.

Table 11: 2026 Future Background (Optimized) Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Mayfield Road at Airport Road	Signal	A.M.	37.8 s [D]	90.9 s [F] (EBL)	0.92 (EBL)	85m > 60m (EBR) 75m > 60m (WBR) 120m>90m (NBL)
		P.M.	42.7 s [D]	113.5 s [F] (EBL) 85.9 s [F] (WBL)	0.97 (EBL) 0.93 (WBT)	205m>200m (EBL) 210m > 165m (WBL) 850m > 60m (WBR) 215m > 95m (NBL)
	Signal (Opt.)	A.M.	37.9 [D]	94.9 s [F] (EBL)	0.93 (EBL)	80m > 60m (EBR) 150m > 95m (NBL)
		P.M.	41.6 [D]	113.5 s [F] (EBL)	0.97 (EBL) 0.93 (WBT)	125m > 60m (WBR) 210m > 95m (NBL)

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road approach (HCM 2000).

Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.

Table 12: 2031 Future Background Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Torbram Road at Old School Road	Stop Control (All Way)	A.M.	11.5 s [B]	None	0.42 (SBLTR)	None
		P.M.	13.1 s [B]	None	0.50 (WBLTR)	None
Mayfield Road at Torbram Road	Signal	A.M.	33.6 s [C]	None	0.92 (EBT)	185m > 80m (NBL)
		P.M.	27.3 s [C]	None	0.87 (EBT)	95m > 80m (NBL)
Mayfield Road at Block 48-2 Street "C"	Signal	A.M.	36.4 s [D]	None	0.76 (EBT)	80m (EBR)[3] 55m (NBL)[3]
		P.M.	39.3 s [D]	None	0.69 (EBT)	70m (EBR)[3]
Mayfield Road at Airport Road	Signal	A.M.	35.9 s [D]	None	0.90 (EBL)	85m > 60m (EBR) 155m > 95m (NBL)
		P.M.	38.1 s [D]	97.1 s [F] (EBL)	0.97 (EBL)	235m>200m (EBL) 65m > 60m (EBR) 195m > 95m (NBL)
Airport Road at Davis Lane/ Perdue Crescent	Stop Control (Minor)	A.M.	47.1 s [E]	None	0.49 (WBL)	None
		P.M.	323.3 s [F]	323.3 s [F] (WBL)	1.39 (WBL)	40m > 30m (WBL)
Airport Road & 12333 Airport Road	Signal	A.M.	7.2 s [A]	None	0.44 (WBL)	None
		P.M.	4.3 s [A]	None	0.27 (NBT)	None

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).

Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.

Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

Table 13: 2036 Future Background Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Torbram Road at Old School Road	Stop Control (All Way)	A.M.	12.6 s [B]	None	0.47 (SBLTR)	None
		P.M.	15.0 s [B]	None	0.56 (WBLTR)	None
Mayfield Road at Torbram Road	Signal	A.M.	39.2 s [D]	114.4 [F] (WBL)	1.05 (WBL) 0.97 (EBT)	195m>125m (EBR) 150m>105m (WBL) 185m>80m (NBL)
		P.M.	30.6 s [C]	None	0.90 (EBT)	115m>80m (NBL)
Mayfield Road at Block 48-2 Street "C"	Signal	A.M.	31.4 s [C]	None	0.77 (EBT)	70m (EBR)[3] 60m (NBL)[3]
		P.M.	33.1 s [C]	None	0.70 (EBT)	75m (EBR)[3]
Mayfield Road at Airport Road	Signal	A.M.	36.4 s [D]	82.1 s [F] (EBL)	0.94 (EBL)	80m>60m (EBR) 145m>95m (NBL)
		P.M.	41.8 s [D]	97.5 s [F] (EBL)	1.00 (EBL) 0.93 (WBT)	310m>200m (EBL) 80m>60m (EBR) 185m>95m (NBL)
Airport Road at Davis Lane/ Perdue Crescent	Stop Control (Minor)	A.M.	53.4 s [E]	53.4 s [F] (WBL)	0.53 (WBL)	None
		P.M.	384.5 s [F]	384.5 s [F] (WBL)	1.52 (WBL)	40m>30m (WBL)
Airport Road & 12333 Airport Road	Signal	A.M.	7.1 s [A]	None	0.44 (WBL)	None
		P.M.	4.3 s [A]	None	0.28 (NBT)	None

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).

Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.

Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

Table 14: Airport Rd./Old School Rd./Healey Rd. Roundabout Future Background Level of Service

Horizon Year	Weekday A.M. Peak Hour						Weekday P.M. Peak Hour					
	Overall	App.[1]	Delay	LOS	V/C	95th % Queue[1]	Overall	App.[1]	Delay	LOS	V/C	95th % Queue[1]
2026	Delay: 2.72s LOS: A	EB	7.87s	A	0.28	~1	Delay: 2.29s LOS: A	EB	5.34s	A	0.13	~1
		NB	1.91s	A	0.15	~1		NB	2.07s	A	0.30	~1
		WB	1.74s	A	0.07	~1		WB	2.07s	A	0.16	~1
		SB	2.05s	A	0.27	~1		SB	2.11s	A	0.15	~1
2031	Delay: 2.77s LOS: A	EB	8.12s	A	0.29	~1	Delay: 2.32s LOS: A	EB	5.40s	A	0.13	~1
		NB	1.92s	A	0.15	~1		NB	2.10s	A	0.30	~1
		WB	1.75s	A	0.07	~1		WB	2.10s	A	0.17	~1
		SB	2.08s	A	0.28	~1		SB	2.13s	A	0.15	~1
2036	Delay: 2.83s LOS: A	EB	8.42s	A	0.31	~1	Delay: 2.35s LOS: A	EB	5.47s	A	0.14	~1
		NB	1.94s	A	0.16	~1		NB	2.12s	A	0.31	~1
		WB	1.76s	A	0.07	~1		WB	2.13s	A	0.18	~1
		SB	2.12s	A	0.29	~1		SB	2.15s	A	0.16	~1

Note 1: App. – Intersection Approach.

The intersection of Airport Road and Old School Road / Healey Road is projected to operate acceptably under each of the future background scenarios, at a LOS "A" during both the a.m. and p.m. peak hours. Additionally, no queuing or capacity constraints are forecast at the roundabout.

The signalized intersection of Airport Road and Mayfield Road is expected to operate at a level of service (LOS) "D". The intersection's maximum control delay is 36.4 seconds and 41.8 seconds in the weekday a.m. and p.m. peak hours respectively, the maximum volume-to-capacity ratios are 0.94 (EBL) and 1.00 (EBL) in the weekday a.m. and p.m. peak hours, respectively and the maximum 95th percentile queue length is 205 metres and 230 metres in the weekday a.m. and p.m. peak hours, respectively.

These metrics indicate that the intersection is operating efficiently with moderate delays in the weekday a.m. and p.m. peak hours. These metrics also indicate that intersection performance is expected to improve materially with the additional widening of Mayfield Road east of Airport Road, to a six-lane cross section as compared to with existing conditions. As we understand that the detailed design of the east approach has not yet been finalized, westbound left turn lane geometry should be designed to accommodate ultimate queues in the 2026 through 2036 study horizons.

The signalized intersection of Mayfield Road and Torbram Road is expected to operate at a level of service (LOS) "D" and "C" during the weekday a.m. and p.m. peak hours, respectively. No critical control delay in the weekday a.m. or p.m. peak hours is expected, the maximum volume-to-capacity ratios are 1.05 (WBL) and 0.90 (EBT) in the weekday a.m. and p.m. peak hours, respectively. The maximum 95th percentile queue length is 145 metres and 100 metres in the weekday a.m. and p.m. peak hours, respectively. These metrics indicate that while the overall intersection is operating with acceptable delays, specific movements are expected to operate close to and slightly above capacity.

The unsignalized intersection of Airport Road at Perdue Court/Davis Lane is expected to operate at LOS "E" and "F" during the weekday a.m. and p.m. peak hours respectively. As discussed in **Section 2.6**, this is largely attributed to the stop-controlled movements and westbound left turns, this intersection may need to be signalized in the future as traffic volumes increase along the Airport Road corridor, as signalization is already warranted at this time.

The remaining intersections are operating acceptably at LOS "C" or better in the weekday a.m. and p.m. peak hours.

3.7 Summary of Recommended Improvements to Accommodate Background Growth

Based on the growth expected around the boundary road network, the following improvements are recommended for consideration at the noted intersections to accommodate the growth without considerations of site generated traffic.

- **Mayfield Road at Torbram Road (Signalized Intersection)**
    - Westbound left turn lane with 195 m storage (90 m increase from Existing).
    - Northbound left turn lane with 185 m storage (105m increase from Existing).
    - Actuated coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length increases to Mayfield Road at Torbram Road to 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively.
- **Mayfield Road at Block 48-2 Street "C" (Signalized Access)**
    - Eastbound right turn lane with 75 m storage.
    - Northbound left turn lane with 60 m storage.
    - Actuated coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length of 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively, for Mayfield Road at Street "B"/Block 48-2 Street "C".
- **Mayfield Road at Airport Road (Signalized Intersection)**
    - Eastbound left turn lane with 310 storage (110 m increase from Existing).
    - Eastbound right turn lane with 80 m storage (20 m increase from Existing).
    - Northbound left turn lane with 185 m storage (90 m increase from Existing). This can be accommodated within the concrete median.
    - Add westbound left protected permissive phase in signal timing plan.
- **Airport Road at Davis Lane/ Perdue Crescent (Minor Stop-Controlled Intersection)**
    - Monitor traffic volumes and implement signalization to address minor street delays.
    - Westbound left turn lane with 40 m storage (10 m increase from Existing). Note the existing pavement width can accommodate this via pavement markings.

3.7.1 Torbram Road Widening

We understand that the Town has additional considerations for the ultimate buildout of Torbram Road as a two-lane or four-lane urban cross section. However, the details of the ultimate ROW considerations, and scheduling of this roadway will be subject to the completion of the ongoing Multimodal Transportation Master Plan currently being undertaken by the Town. In addition, completion of a Class Environmental Assessment may also be required. It is noted that operational analysis was conducted for all horizon years with the current two-lane cross section and no operational issues were noted.

4.0 Site Generated Traffic

The proposed development will result in additional vehicles on the surrounding network that previously did not exist, and the following section outlines the methodology used to estimate the generation and distribution of trips expected to be generated by the proposed development.

4.1 Division of Sites

It is noted the most recent Site Plan (attached in **Appendix B**), eight buildings are proposed for the subject development. For the purpose of transportation analysis within this report, different zones have been assigned to the proposed development for trip distribution purposes, as summarized in **Table 15** below and are illustrated in

Figure 11.

Table 15: Transportation Zones

Zone	Building(s)
1	Building A
2	Building D
	Building H
3	Building C
4	Building I
	Building J
	Building K
5	Building E
	Building F

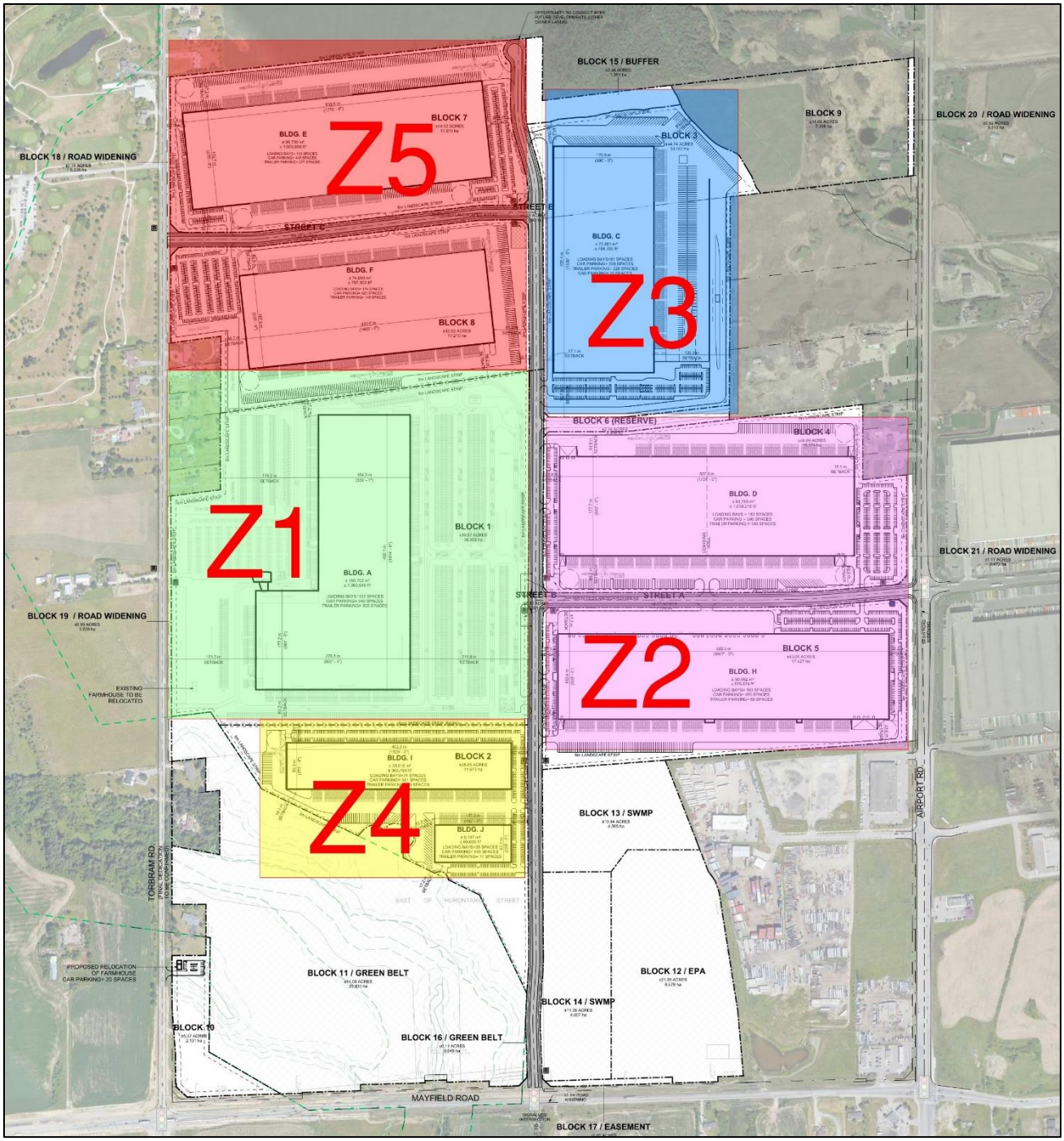


Figure 11: Site Generated Traffic Zones

4.2 Trip Generation

The trip generation at the proposed development was forecasted using the rates provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Land Use Code (LUC) 150 "Warehousing" was used to generate the estimated site trips generated by the proposed industrial development. A fitted curve equation is provided for LUC 150 "Warehousing", and the number of data plots exceeds 20 points. As such, the fitted curve equation was used to forecast trip generation for the proposed development during the a.m. and p.m. peak periods.

2016 Transportation Tomorrow Survey (TTS) data was used to determine the existing modal split. Based on the available data for the zone of the development (2006 GTA Zone 3014) and a nearby industrial development zone (2006 GTA Zone 3015), a modal split of 0% was determined. As such, there was no modal split adjustment for trips generated at the proposed site. However, we understand that future transit considerations may contribute to peak hour automobile mode split reductions.

Per the ITE Trip Generation Handbook 3rd Edition Table I.1, approximately 20% of site generated traffic with LUC 150 "Warehousing" during weekdays consists of heavy truck traffic. Site traffic generated by similar land use LUC 130 "Industrial Park" consists of between 1-31% of heavy truck traffic during the weekday peak hours with an average of 13%, and site traffic generated by similar land use LUC 152 "High-Cube Warehouse/Distribution Centre" consists of between 9-29% of heavy truck traffic during the weekday peak hours. Therefore, an estimate of 20% for heavy truck traffic is considered reasonable.

The trip generation characteristics for each zone has been broken down in terms of the total vehicle trip generation, passenger car trip generation and heavy truck traffic trip generation in **Table 16, Table 17,** and **Table 18** respectively. **Figure 12, Figure 13,** and **Figure 14** illustrate the trip assignment for cars, trucks, and the overall total for the proposed development, respectively.

Table 16: Total Vehicle Trip Generation

Zone	Building(s)	Size (SF GFA)	A.M. Peak Trip Generation			P.M. Peak Trip Generation		
			T = 0.12 X + 23.62			T = 0.12 X + 26.48		
			In	Out	Total	In	Out	Total
1	Building A	1,083,946	118	35	154	44	113	157
Zone 1 Total			**118**	**35**	**154**	**44**	**113**	**157**
2	Building D	1,009,216	111	33	145	41	106	148
	Building H	975,874	73	68	141	40	103	144
Zone 2 Total			**185**	**101**	**285**	**82**	**210**	**291**
3	Building C	784,700	91	27	118	34	87	121
Zone 3 Total			**91**	**27**	**118**	**34**	**87**	**121**
4	Building I	360,760	52	15	67	20	50	70
	Building J	99,000	27	8	35	11	28	39
Zone 4 Total			**79**	**23**	**102**	**31**	**78**	**109**
5	Building E	1,008,900	111	33	145	41	106	148
	Building F	797,500	62	57	119	34	88	122
Zone 5 Total			**173**	**91**	**264**	**76**	**194**	**270**
Total		**6,119,896**	**646**	**277**	**923**	**266**	**681**	**947**

Table 17: Passenger Car Trip Generation

Zone	Building(s)	Size (SF GFA)	A.M. Peak Trip Generation			P.M. Peak Trip Generation		
			80% Total Vehicle Traffic					
			In	Out	Total	In	Out	Total
1	Building A	1,083,946	95	28	123	35	90	125
Zone 1 Total			**95**	**28**	**123**	**35**	**90**	**125**
2	Building D	1,009,216	89	27	116	33	85	118
	Building H	975,874	59	54	113	32	83	115
Zone 2 Total			**148**	**81**	**228**	**65**	**168**	**233**
3	Building C	784,700	73	22	94	27	69	97
Zone 3 Total			**73**	**22**	**94**	**27**	**69**	**97**
4	Building I	360,760	42	12	54	16	40	56
	Building J	99,000	22	6	28	9	22	31
Zone 4 Total			**63**	**18**	**82**	**25**	**62**	**87**
5	Building E	1,008,900	89	27	116	33	85	118
	Building F	797,500	50	46	95	27	70	98
Zone 5 Total			**139**	**72**	**211**	**60**	**155**	**216**
Total		**6,119,896**	**518**	**221**	**738**	**212**	**544**	**758**

Table 18: Truck Trip Generation

Zone	Building(s)	Size (SF GFA)	A.M. Peak Trip Generation			P.M. Peak Trip Generation		
			20% Total Vehicle Traffic					
			In	Out	Total	In	Out	Total
1	Building A	1,083,946	23	7	31	9	23	32
Zone 1 Total			**23**	**7**	**31**	**9**	**23**	**32**
2	Building D	1,009,216	22	6	29	8	21	30
	Building H	975,874	14	14	28	8	20	29
Zone 2 Total			**37**	**20**	**57**	**17**	**42**	**58**
3	Building C	784,700	18	5	24	7	18	24
Zone 3 Total			**18**	**5**	**24**	**7**	**18**	**24**
4	Building I	360,760	10	3	13	4	10	14
	Building J	99,000	5	2	7	2	6	8
Zone 4 Total			**16**	**5**	**20**	**6**	**16**	**22**
5	Building E	1,008,900	22	6	29	8	21	30
	Building F	797,500	12	11	24	7	18	24
Zone 5 Total			**34**	**19**	**53**	**16**	**39**	**54**
Total		**6,119,896**	**128**	**56**	**185**	**55**	**138**	**190**

The proposed industrial warehouse development is expected to generate approximately 923 and 947 two-way trips, inclusive of passenger cars and trucks. A total of 738 and 758 two-way passenger car trips are expected during the weekday a.m. and p.m. peak hours, respectively; and approximately 185 and 190 total two-way truck trips are expected during the weekday a.m. and p.m. peak hours, respectively.

It is noted that due to the Site Plan being in development at the time this analysis was being conducted the site statistics shown in **Table 16, Table 17,** and **Table 18** slightly differ from the statistics found in the latest Site Plan. The overall trip generation for the site has reduced by 18 trips in the a.m. and p.m. peak hours for the latest Site Plan in comparison to the trip generation used at the time of this analysis and is therefore considered conservative. The Site Plan statistics shown are from the latest Site Plan (dated, March 28, 2024), provided in **Appendix B**.

4.3 Trip Distribution and Assignment

4.3.1 Passenger Cars

The passenger car trips generated at the proposed industrial development were distributed to the surrounding road network based on 2016 Transportation Tomorrow Survey (TTS) data. The TTS is a comprehensive survey consisting of transportation patterns for households in the Greater Toronto and Hamilton Area (GTHA) and surrounding area.

The subject property is located in 2006 GTA Zone 3014, with primarily agricultural and some existing industrial buildings. The adjacent zone, (GTA Zone 3015) also consists of industrial facilities and was included in the trip distribution analysis to determine more accurate results as representative proxy sites. As such, the TTS results were filtered to reflect auto trips within the two zones during the weekday a.m. and p.m. periods. From this query, trip origins were determined, and the percentage of trips assigned from each origin was accounted for.

Appendix L includes the TTS data. The resulting trip distribution is summarized in **Table 19.**

Table 19: Trip Distribution

Arriving From / Departing To	A.M.		P.M.	
	Inbound	Outbound	Inbound	Outbound
North	20%	10%	15%	30%
South	35%	45%	44%	20%
East	10%	20%	12%	10%
West	35%	25%	29%	40%

The distribution of trips outlined in **Table 19** were further divided based on the most convenient travel route expected for each gateway to each zone, as further elaborated upon in the following sections.

4.3.2 Passenger Trips

The passenger trip distributions for each zone, summarized in **Table 20** were derived based on the most convenient travel route expected from each gateway based on the proximity of passenger vehicle entrance/exits expected to be used for buildings situated in each zone. Zone-based site-generated trips were then distributed to the study road network based on the distributions outlined below.

For instance, the majority of northbound/southbound traffic destined for Zone 2 (Buildings C, D, or H) are expected to use the Airport Road access to the site via Airport Road. As such, the distribution of northbound/southbound-destined inbound and outbound traffic for Zone 2 would be expected to wholly use Airport Road, as demonstrated in **Table 20** below.

Table 20: Passenger Trip Zone Directional Distributions

Direction	North		East		South		West	
Zone/via	Torbram	Airport	Mayfield	Healey	Torbram	Airport	Mayfield	Old School
1	100%	0%	90%	10%	100%	0%	90%	10%
2	0%	100%	80%	20%	0%	100%	90%	10%
3	0%	100%	100%	0%	30%	70%	100%	0%

4	0%	100%	100%	0%	30%	70%	100%	0%
5	0%	100%	100%	0%	30%	70%	100%	0%

The total distribution of the passenger trips is represented in **Table 21** below.

Table 21: Passenger Trip Inbound and Outbound Total Distributions

Direction	North		East		South		West		Total
Zone/via	Torbram	Airport	Mayfield	Healey	Torbram	Airport	Mayfield	Old School	
A.M.									
Inbound	4%	16%	9%	1%	12%	23%	33%	2%	100%
Outbound	1%	9%	18%	2%	13%	32%	24%	1%	100%
P.M.									
Inbound	3%	12%	11%	1%	15%	29%	28%	1%	100%
Outbound	5%	25%	9%	1%	7%	13%	38%	2%	100%

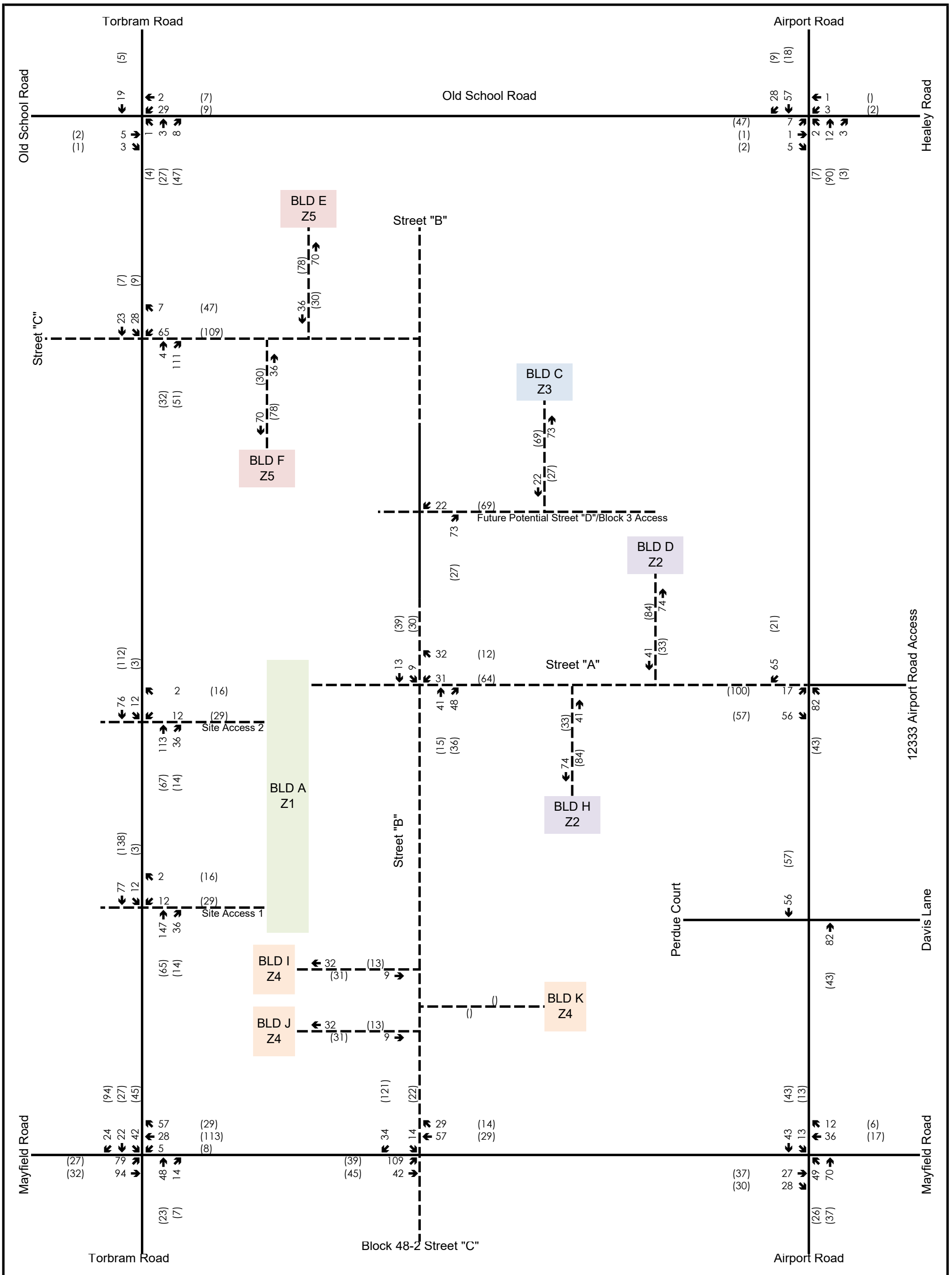
We understand that it is the intent of the Town to either reconstruct Torbram to a two-lane urban cross section, or a four-lane urban cross section. However, details on Torbram Road plans will result from the Town's ongoing Multimodal Transportation Master Plan (MMTMP) and additional commentary will be provided at such time.

Additionally, a sensitivity analysis was conducted to analyze operations under the assumption that all Zone 5 traffic only uses the internal road network via Mayfield Road and Airport Road. The results are shown in **Section 5.0** and conclude that the traffic operations can function adequately under this assumption.

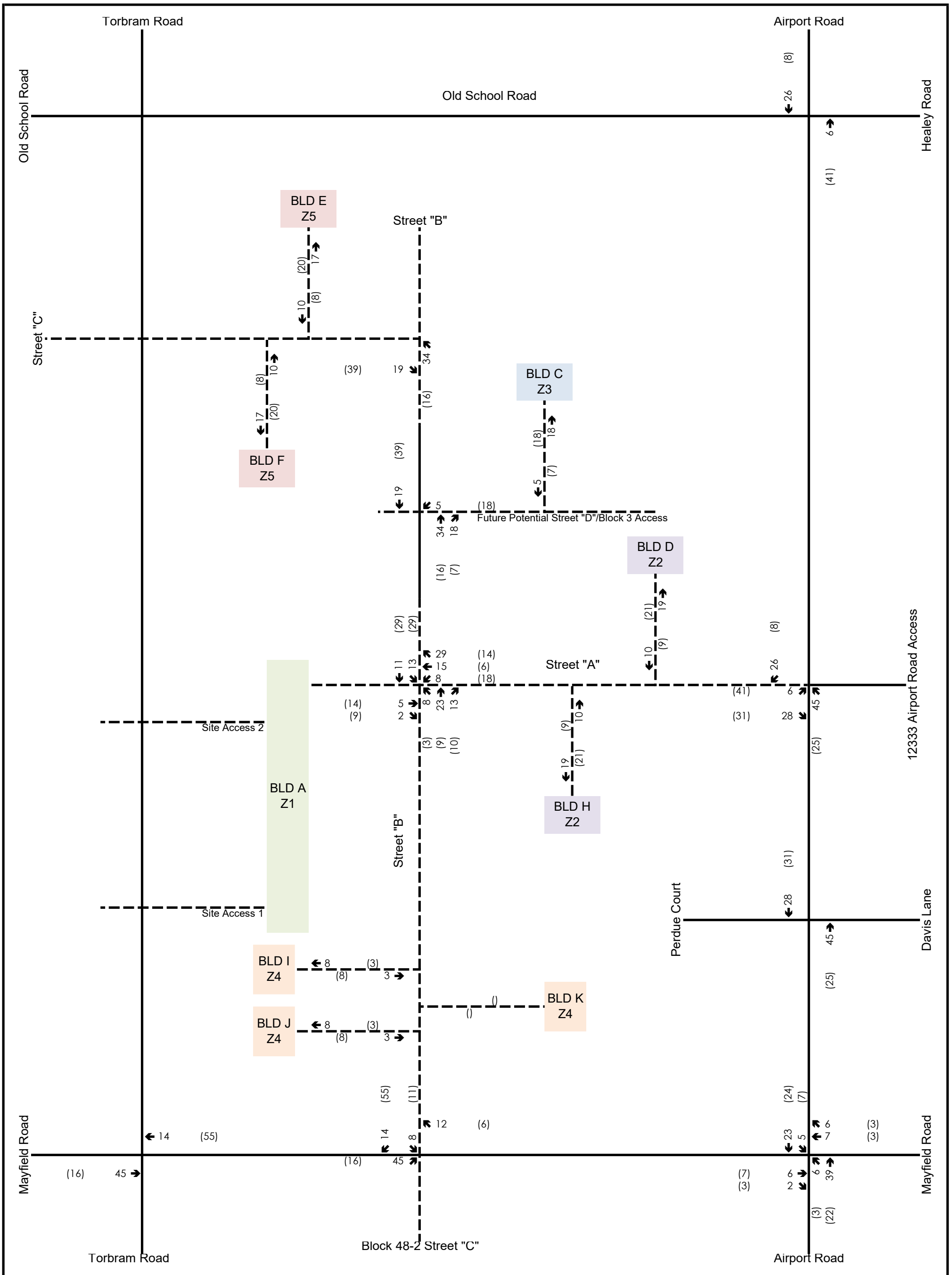
4.3.3 Heavy Trucks

The heavy vehicle trips generated by the proposed development were distributed to the boundary road network for each zone based on expected travel routes for heavy truck traffic, and roadways which permit heavy truck traffic. Truck trip volumes on the existing road network and the Region's Goods Movement Strategy were also reviewed. It was determined that the distribution of trucks would primarily rely on Airport Road for north-south connectivity, and Mayfield Road for east-west connectivity, as Torbram Road, Old School Road and Healey Road are not expected to provide sufficient capacity for heavy vehicle traffic. As such, all heavy vehicle trips were distributed to Airport Road for north-south trips, and Mayfield Road for east-west trips. The site trips were assigned similarly to the passenger vehicle distributions, using the most logical routes expected for each gateway to the nearest site access(es).

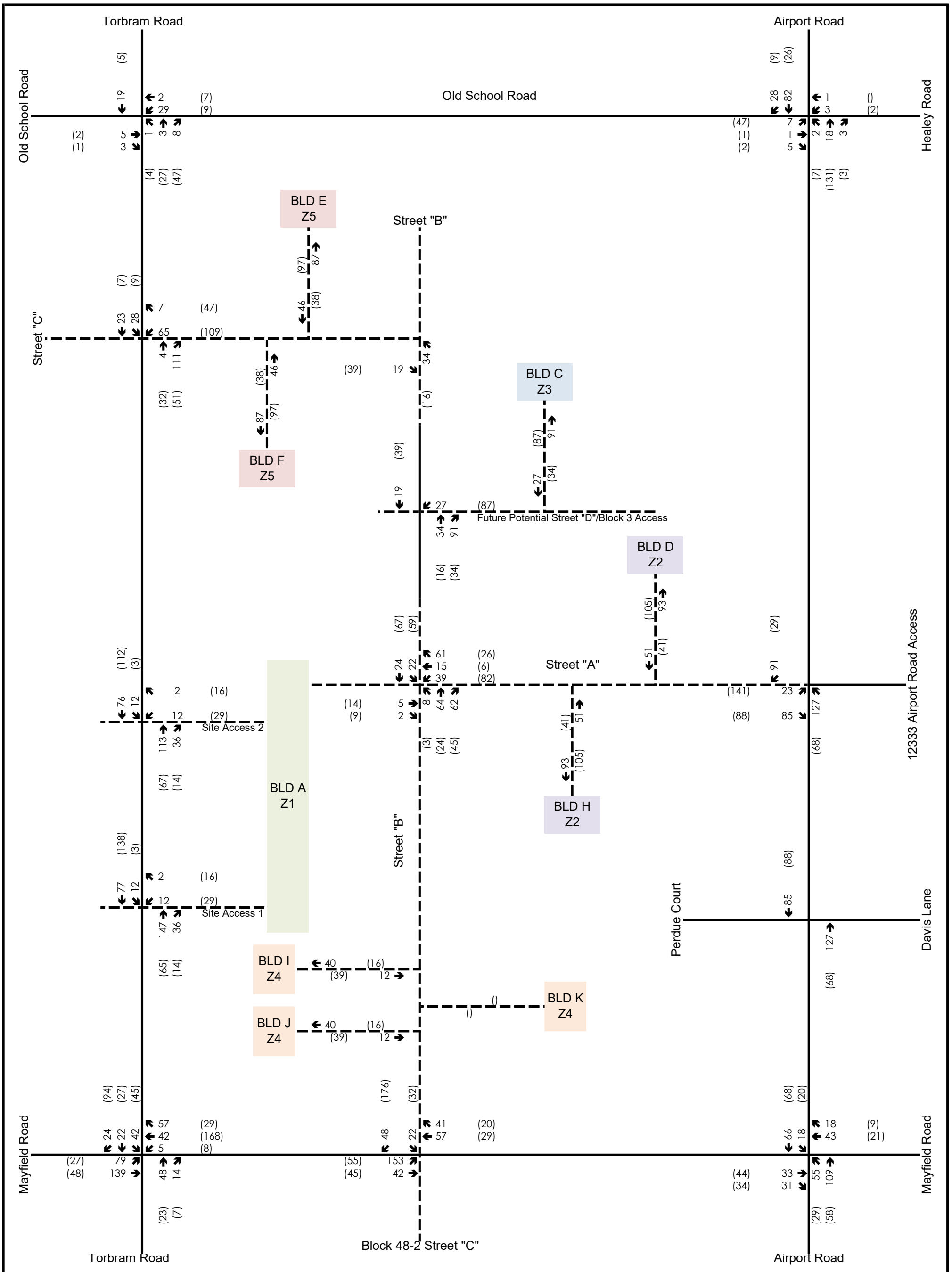
Appendix M contains detailed trip distribution worksheets. The total passenger, truck and overall trip assignments have been provided in **Figure 12, Figure 13,** and **Figure 14**.



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 12
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	Trip Assignment (Car)		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 13
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	Trip Assignment (Trucks)		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS

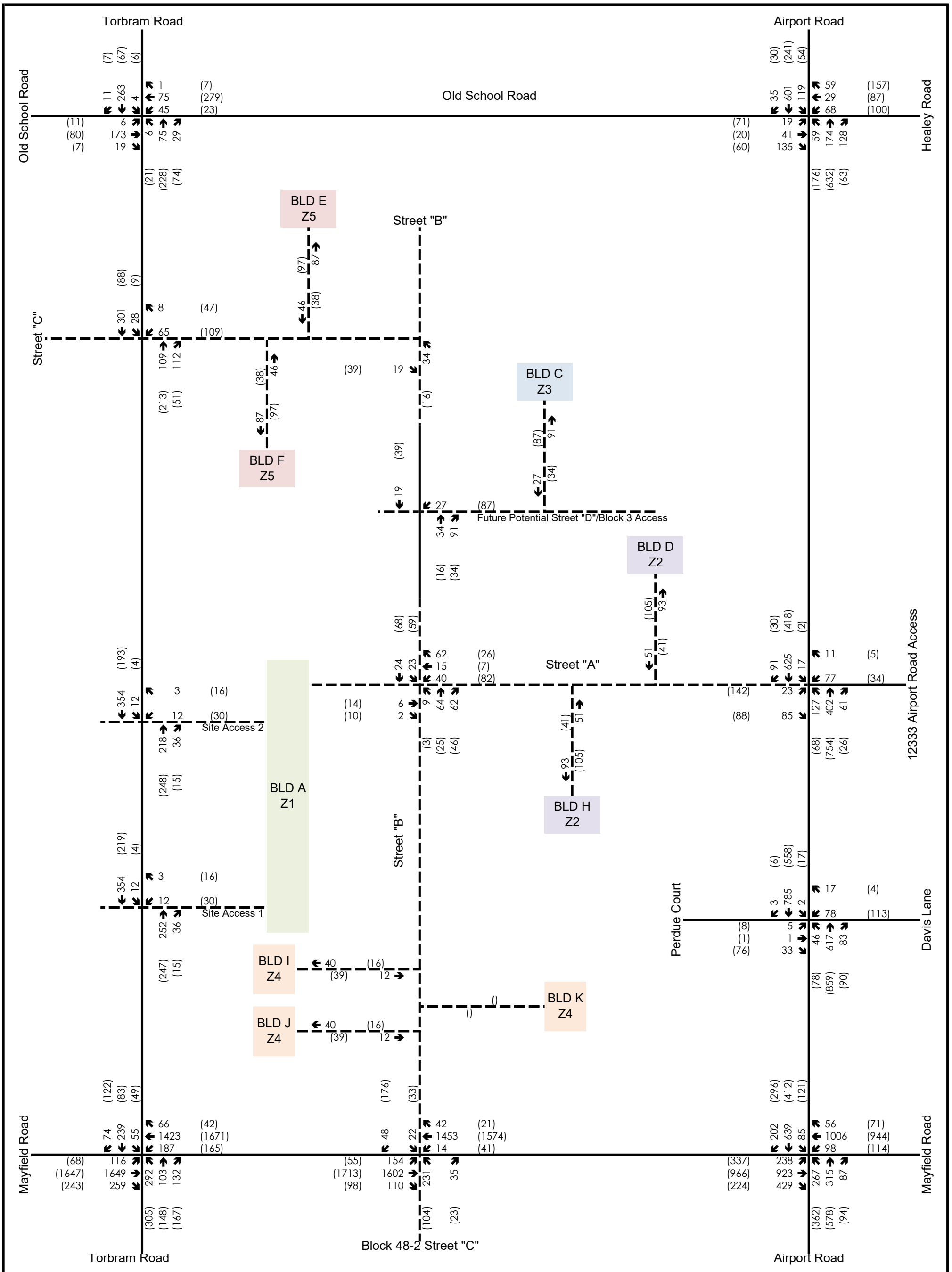


Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 14
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	Trip Assignment (Total)		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS

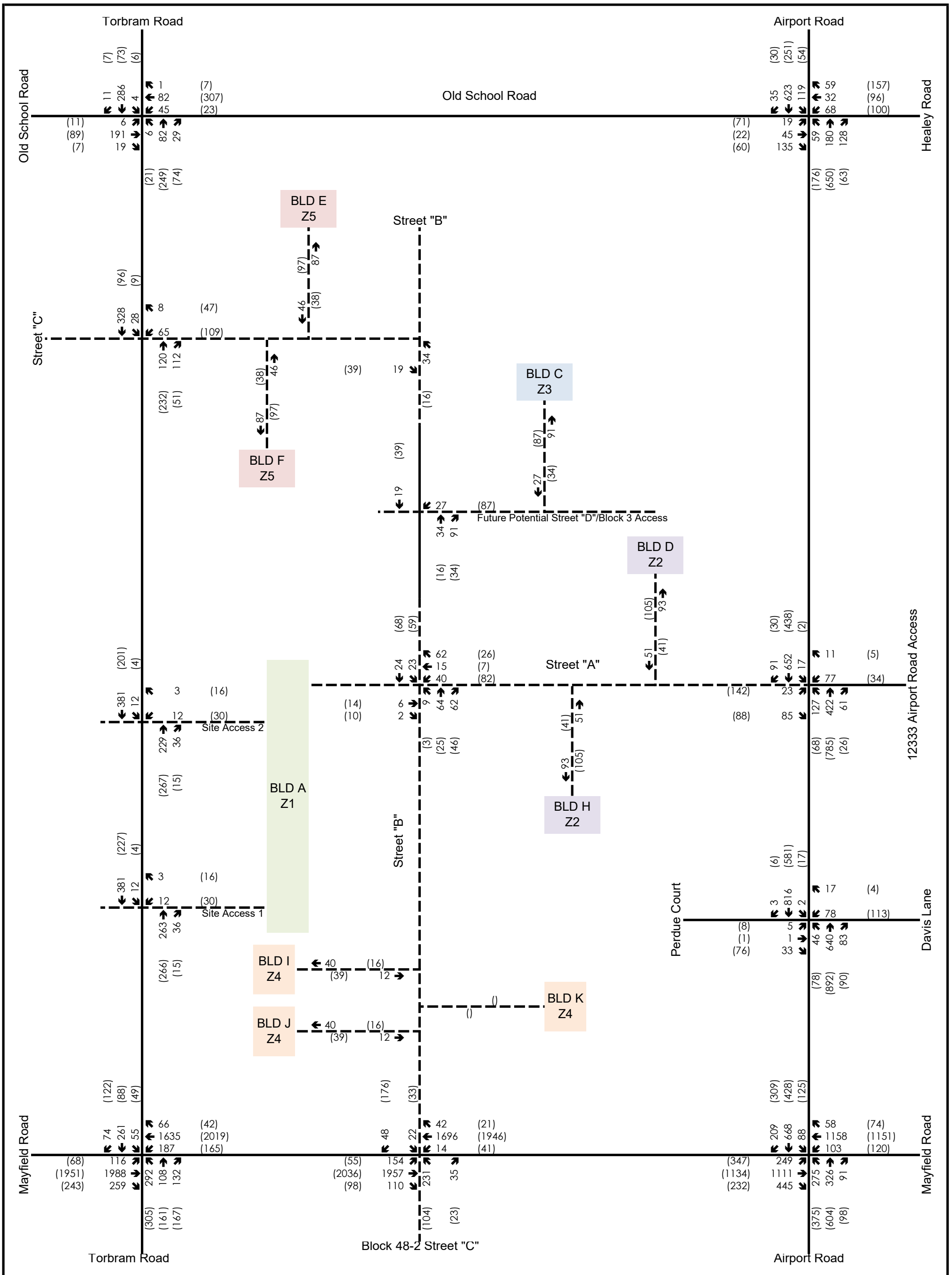
5.0 Total Traffic Conditions

5.1 Intersection Operations

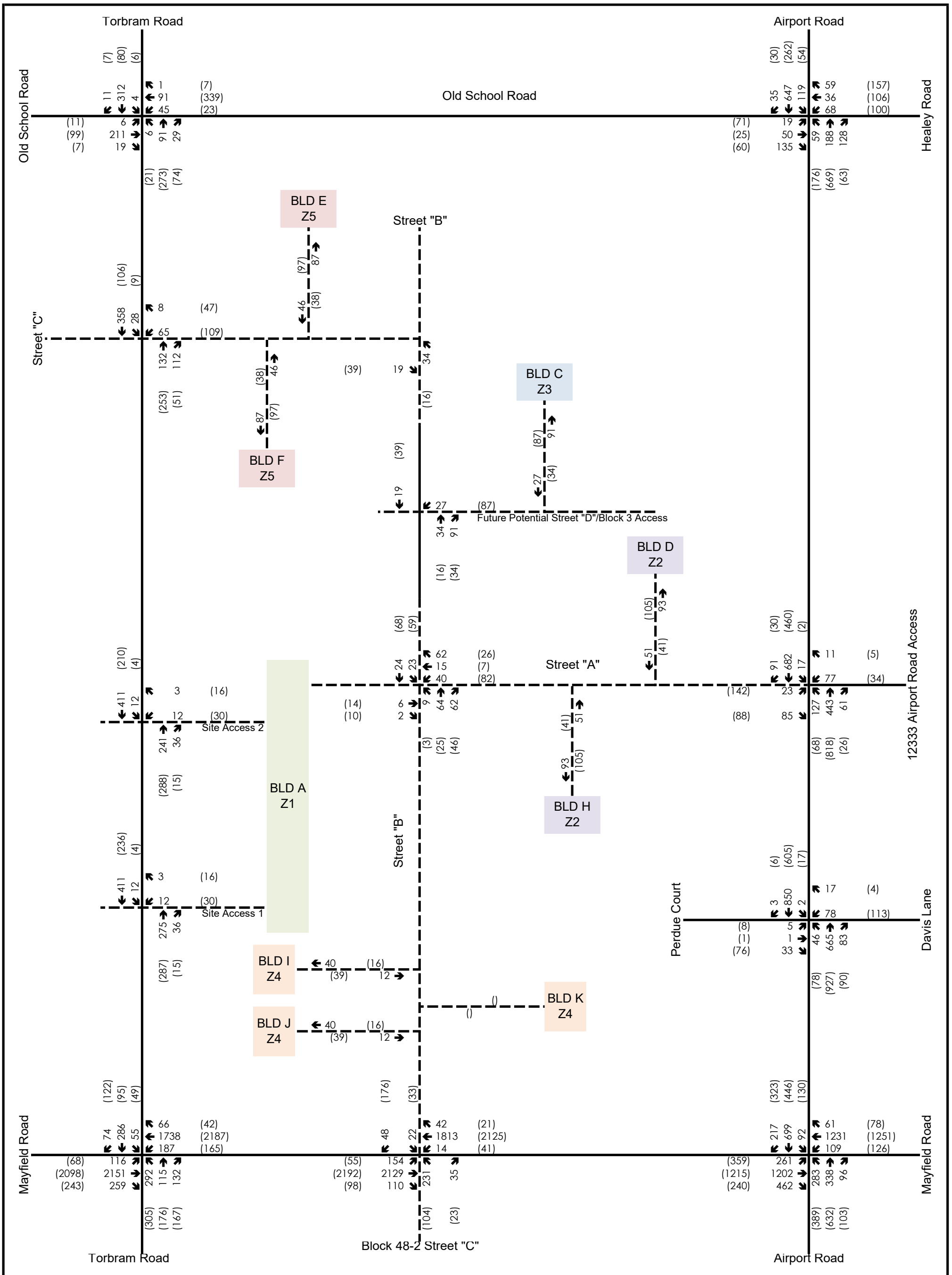
Traffic operations at the study intersections were analyzed following the addition of site generated traffic volumes. The total traffic volumes for 2026, 2031 and 2036 future total traffic are illustrated in **Figure 15, Figure 16,** and **Figure 17,** respectively. **Table 22, Table 23, Table 24, Table 25** and **Table 26** the 2026, 2026 (optimized), 2031, 2036, and 2036 (optimized) future total traffic operations, respectively. In addition, **Table 27** outlines the operations of the proposed roundabout in all three horizon years. the Detailed capacity analysis worksheets are included in **Appendix G.**



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 15
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2026 Future Total Traffic		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 16
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2031 Future Total Traffic		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 17
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2036 Future Total Traffic		Project No. 2022-5842 Date. 2023.10.20 Analyst. TDS

Table 22: 2026 Future Total Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Torbram Road at Old School Road	Stop Control (All Way)	A.M.	11.7 s [B]	None	0.42 (SBLTR)	None
		P.M.	13.6 s [A]	None	0.51 (NBLTR)	None
Torbram Road at Street "C"	Stop Control (Minor)	A.M.	13.9 s [B]	None	0.15 (WBL)	None
		P.M.	12.2 s [B]	None	0.19 (WBL)	None
Mayfield Road at Torbram Road	Signal	A.M.	33.4 s [C]	None	0.92 (WBL)	130m>105m (WBL) 175m > 80m (NBL)
		P.M.	25.7 s [C]	None	0.82 (WBL)	120m > 80m (NBL)
Mayfield Road at Street "B"	Signal	A.M.	44.0 s [D]	None	0.83 (WBT)	80m (EBL)[3] 60m (EBR)[3] 60m (WBR)[3] 55m (NBL)[3]
		P.M.	48.5 s [D]	None	0.72 (WBT)	75m (EBR)[3]
Mayfield Road at Airport Road	Signal	A.M.	40.6 s [D]	96.3 s [F](WBL)	0.96 (EBL) 0.91(WBT)	250m > 200m (EBL) 85m > 60m (EBR) 90m > 60m (WBR) 215m > 95m (NBL)
		P.M.	44.5 s [D]	129.8 s [F] (EBL) 86.7s [F] (WBL)	1.05 (EBL) 0.95 (NBL) 0.92(WBT) 0.95(NBL)	300m > 200m (EBL) 310m > 165m (WBL) 120m > 60m (WBR) 210m > 95m (NBL)
Airport Road at Davis Lane/ Perdue Crescent	Stop Control (Minor)	A.M.	70.7 s [F]	70.7 s [F] (EBL)	0.62 (WBL)	35m > 30m(WBL)
		P.M.	418.5 s [F]	418.5 s [F] (EBL)	1.59 (WBL)	40m > 30m (WBL)
Airport Road at 12333 Airport Road/Street "A"	Signal	A.M.	7.8 s [A]	None	0.55 (WBL)	None
		P.M.	11.7 s [B]	None	0.69 (EBL)	None
Torbram Road at Site Access 1	Stop Control (Minor)	A.M.	13.5 s [B]	None	0.18 (NBTR)	None
		P.M.	11.8 s [B]	None	0.17 (NBTR)	None
Torbram Road at Site Access 2	Stop Control (Minor)	A.M.	13.1 s [B]	None	0.16 (NBTR)	None
		P.M.	11.6 s [B]	None	0.17 (NBTR)	None
Street "B" & Street "A"	Stop Control (All Way)	A.M.	7.7 s [A]	None	0.17 (NBTR)	None
		P.M.	8.3 s [A]	None	0.14 (WBL)	None
Street "B" & Street "C"	Stop Control (All Way)	A.M.	7.4 s [A]	None	0.05 (NBL)	None
		P.M.	7.0 s [A]	None	0.05 (EBR)	None

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Street "B" & Potential Future Street "D"/Block 3 Access	Stop Control (All Way)	A.M.	7.7 s [A]	None	0.15 (NBL)	None
		P.M.	7.9s [A]	None	0.14 (WBL)	None

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).
Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.
Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

The signal timing plans at Mayfield Road at Airport Road were optimized under 2026 conditions to add a westbound left protected permissive phase. The westbound left is currently the only left turn phase at the intersection without a protected permissive phase, therefore the protected phase was added based on traffic volumes and delays to improve operations. The protected phase was implemented into the base condition for 2031 and 2036 horizon years.

The comparison of operation with and without the protected westbound left turn lane are shown in **Table 21** below.

Table 23: 2026 Future Total (Optimized) Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Mayfield Road at Airport Road	Signal	A.M.	40.6 s [D]	96.3 s [F](WBL)	0.96 (EBL) 0.91(WBT)	205m > 200m (EBL) 80m > 60m (EBR) 115m > 60m (WBR) 215m > 95m (NBL)
		P.M.	44.5 s [D]	129.8 s [F] (EBL) 86.7s [F] (WBL)	1.05 (EBL) 0.95 (NBL) 0.92(WBT) 0.95(NBL)	280m > 200m (EBL) 320m > 165m (WBL) 105m > 60m (WBR) 195m > 95m (NBL)
	Signal (Opt.)	A.M.	41.5 s [D]	92.2 s [F] (EBL)	0.94 (EBL) 0.93 (WBT)	80m > 60m (EBR) 110m > 60m (WBR) 200m > 95m (NBL)
		P.M.	43.3 s [D]	121.1 s [F] (EBL) 85.8 s [F] (NBL)	1.02 (EBL) 1.01 (NBL)	260m > 200m (EBL) 120m > 60m (WBR) 185m > 95m (NBL)

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).
Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.
Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

Table 24: 2031 Future Total Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Torbram Road at Old School Road	Stop Control (All Way)	A.M.	12.6 s [B]	None	0.47 (SBLTR)	None
		P.M.	15.2 s [C]	None	0.56 (WBLTR, NBLTR)	None
Torbram Road at Street "C"	Stop Control (Minor)	A.M.	14.5 s [B]	None	0.16 (WBL)	None
		P.M.	12.5 s [B]	None	0.20 (WBL)	None
Mayfield Road at Torbram Road	Signal	A.M.	38.6 s [D]	None	0.97 (EBT)	155m > 100m (EBL) 175m>125m (EBR) 175m > 80m (NBL)
		P.M.	30.3 s [C]	None	0.87 (EBT)	125m > 80m (NBL)
Mayfield Road at Street "B"	Signal	A.M.	37.7 s [D]	None	0.85 (WBT)	100m (EBL) [3] 70m (EBR) [3] 50m (WBR) [3] 60m (NBL) [3]
		P.M.	35.6 s [D]	None	0.73 (WBT)	75m (EBR) [3]
Mayfield Road at Airport Road	Signal	A.M.	40.0 s [D]	90.6 s [F] (EBL)	0.96 (EBL)	245m>200m (EBL) 80m > 60m (EBR) 180m > 95m (NBL)
		P.M.	42.6 s [D]	104.0 s [F] (EBL)	0.99 (EBL)	295m > 200m (EBL) 80m > 60m (EBR) 200m > 95m (NBL)
Airport Road at Davis Lane/ Perdue Crescent	Stop Control (Minor)	A.M.	81.2 s [F]	81.2 s [F] (WBL)	0.66 (WBL)	None
		P.M.	487.3 s [F]	487.3 s [F] (WBL)	1.73 (WBL)	45m > 30m (WBL)
Airport Road at 12333 Airport Road/Street "A"	Signal	A.M.	7.8 s [A]	None	0.55 (WBL)	None
		P.M.	11.6 s [B]	None	0.69 (EBL)	None
Torbram Road at Site Access 1	Stop Control (Minor)	A.M.	13.9 s [B]	None	0.19 (NBTR)	None
		P.M.	12.1 s [B]	None	0.18 (NBTR)	None
Torbram Road at Site Access 2	Stop Control (Minor)	A.M.	13.5 s [B]	None	0.17 (NBTR)	None
		P.M.	11.8 s [B]	None	0.18 (NBTR)	None
Street "B" & Street "A"	Stop Control (All Way)	A.M.	7.7 s [A]	None	0.17 (NBTR)	None
		P.M.	8.3 s [A]	None	0.14 (WBL)	None
Street "B" & Street "C"	Stop Control (All Way)	A.M.	7.4 s [A]	None	0.05 (NBL)	None
		P.M.	7.4 s [A]	None	0.05 (EBR)	None

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Street "B" & Potential Future Street "D"/Block 3 Access	Stop Control (All Way)	A.M.	7.7 s [A]	None	0.15 (NBTR)	None
		P.M.	7.9 s [A]	None	0.14 (WBL)	None

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).
Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.
Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

Table 25: 2036 Future Total Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Torbram Road at Old School Road	Stop Control (All Way)	A.M.	12.2 s [B]	None	0.52 (SBLTR)	None
		P.M.	17.8 s [C]	None	0.63 (WBLTR, NBLTR)	None
Torbram Road at Street "C"	Stop Control (Minor)	A.M.	15.2 s [C]	None	0.17 (WBL)	None
		P.M.	12.9 s [B]	None	0.21 (WBL)	None
Mayfield Road at Torbram Road	Signal	A.M.	48.1 s [D]	None	1.05 (EBT)	190m>100m (EBL) 270m>125m (EBR) 160m > 80m (NBL)
		P.M.	30.3 s [C]	None	0.87 (EBT)	120m > 80m (NBL)
Mayfield Road at Street "B"	Signal	A.M.	37.4 s [D]	None	0.86 (WBT)	100m (EBL)[3] 70m (EBR)[3] 60m (NBL)[3]
		P.M.	18.0 s [B]	None	0.79 (WBT)	None
Mayfield Road at Airport Road	Signal	A.M.	42.0 s [D]	92.3 s [F] (EBL)	0.98 (EBL)	210m>200m (EBL) 80m > 60m(EBR) 190m > 95m (NBL)
		P.M.	47.8 s [D]	None	1.00 (NBL) 0.98 (EBL) 0.97 (WBT)	225m>200m (EBL) 60m>60m (EBR) 295m>165m (WBL) 170m> 60m(WBR) 195m > 95m (NBL) 105m>100m (SBL)
Airport Road at Davis Lane/ Perdue Crescent	Stop Control (Minor)	A.M.	95.3 s [F]	95.3 s [F] (WBL)	0.72 (WBL)	30m > 30m (WBL)
		P.M.	567.9 s [F]	567.9 s [F] (WBL)	1.89 (WBL)	45m>30m (WBL)

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Airport Road at 12333 Airport Road/Street "A"	Signal	A.M.	8.0 s [A]	None	0.57 (WBL)	None
		P.M.	11.6 s [B]	None	0.69 (EBL)	None
Torbram Road at Site Access 1	Stop Control (Minor)	A.M.	14.5 s [B]	None	0.20 (NBTR)	None
		P.M.	12.4 s [B]	None	0.19 (NBTR)	None
Torbram Road at Site Access 2	Stop Control (Minor)	A.M.	14.0 s [B]	None	0.18 (NBTR)	None
		P.M.	12.2 s [B]	None	0.19 (NBTR)	None
Street "B" & Street "A"	Stop Control (All Way)	A.M.	7.7 s [A]	None	0.17 (NBTR)	None
		P.M.	8.3 s [A]	None	0.14 (WBL)	None
Street "B" & Street "C"	Stop Control (All Way)	A.M.	7.4 s [A]	None	0.05 (NBL)	None
		P.M.	7.4 s [A]	None	0.05 (EBR)	None
Street "B" & Potential Future Street "D"/Block 3 Access	Stop Control (All Way)	A.M.	7.7 s [A]	None	0.15 (NBL)	None
		P.M.	7.9 s [A]	None	0.14 (WBL)	None

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).

Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.

Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

In the ultimate condition, further optimized signal timing plans were evaluated at the intersection of Mayfield Road at Airport Road. Walk times were reduced to 3 seconds and the splits have been optimized. Additionally, a LOS time adjust of -2 was applied to left turns at Mayfield Road at Airport Road to account for inter-green left turn movements given the high left turn volumes and opposing through traffic.

The comparison of operation with and without the protected westbound left turn lane are shown in **Table 26** below.

Table 26: 2036 Future Total (Optimized) Level of Service

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Mayfield Road at Airport Road	Signal	A.M.	42.0 s [D]	92.3 s [F] (EBL)	0.98 (EBL)	210m>200m (EBL) 80m > 60m(EBR) 190m > 95m (NBL)
		P.M.	47.8 s [D]	None	1.00 (NBL) 0.98 (EBL) 0.97 (WBT)	225m>200m (EBL) 60m>60m (EBR) 295m>165m (WBL) 170m> 60m(WBR) 195m > 95m (NBL) 105m>100m (SBL)
	Signal (Opt.)	A.M.	41.4 s [D]	None	0.88 (EBL)	195m>200m (EBL) 165m > 80m (NBL)
		P.M.	41.4 s [D]	None	0.94 (NBL) 0.93 (EBL)	120m > 95m (NBL)

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).
Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.
Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

The signalized intersection of Airport Road and Mayfield Road is expected to operate at a level of service (LOS) "D" during the weekday a.m. and p.m. peak hours. The intersection's maximum control delay is 42.0 seconds and 47.8 seconds in the weekday a.m. and p.m. peak hours respectively, the maximum volume-to-capacity ratios are 0.98 (EBL) and 1.00 (NBL) in the weekday a.m. and p.m. peak hours, respectively and the maximum 95th percentile queue length is 215 metres and 295 metres in the weekday a.m. and p.m. peak hours respectively. Some movements in the intersection are also forecasted to operate at or above the theoretical capacity with queues occasionally extended beyond the provided storage length and vehicles may require more than one cycle length to proceed during the peak hours. These conditions are typical within congested areas during the peak periods. It is noted that while some queues may exceed the storage length, the additional queues may be accommodated in the provided taper. In addition, while select individual movements are expected to operate at capacity, the overall delay is moderate.

Compared to the future background conditions, site generated traffic is expected to increase the control delay by 5.6 s and 6.0 s during the weekday a.m. and p.m. peak periods, respectively. From an overall perspective, site-generated traffic is not expected to materially impact the main intersection of Mayfield Road and Airport Road.

In the optimized signal timing plan scenario, the intersection of Airport Road at Mayfield Road is expected to operate at LOS "D" during the weekday a.m. and p.m. peak hours with a maximum control delay of by 41.4 seconds and 41.4 seconds in the weekday a.m. and p.m. peak hours, respectively. The optimization resulted in the maximum volume-to-capacity ratios are 0.88 (EBL) and 0.94 (NBL) in the weekday a.m. and p.m. peak hours respectively, and the maximum 95th percentile queue length is 195 metres and 120 metres in the weekday a.m. and p.m. peak hours respectively.

The signalized intersection of Mayfield Road and Torbram Road is expected to operate at a level of service (LOS) "D" and "C" during the weekday a.m. and p.m. peak hours respectively. The intersection's maximum control delay is 48.1 seconds in weekday a.m. and 30.3 seconds in the weekday p.m. peak hours respectively, with no critical control delays. The maximum volume-to-capacity ratios are 1.05 (EBT) and 0.87 (EBT) in the weekday a.m. and p.m. peak hours respectively, and the maximum 95th percentile queue length is 270 metres and 120 metres in the weekday a.m. and p.m. peak hours respectively.

The unsignalized intersection of Airport Road at Perdue Court/Davis Lane is expected to operate at LOS "F" during the weekday a.m. and p.m. peak hours. As discussed in **Section 2.6**, this is largely attributed to the stop-controlled movements and westbound left turns, this intersection will likely need to be signalized in the future, as signalization is warranted at this time.

The signalized intersection of Mayfield Road at the Street "B" is expected to operate acceptably with LOS "D" and "B" during the weekday a.m. and p.m. peak hours, respectively. Furthermore, no queuing or capacity constraints are forecast at the intersection.

All proposed site accesses, as well as internal north-south and east-west collector roadways are expected to operate with a LOS "B" or better with the exception or Mayfield Road and Street "B" which is expected to operate at a LOS "D" in the weekday a.m. peak hour. The two internal stop-controlled intersections are expected to operate at a LOS "A". Therefore, all site accesses are expected to operate satisfactorily.

Table 27: Airport Rd./Old School Rd./Healey Rd. Roundabout Future Total Level of Service

Horizon Year	Weekday A.M. Peak Hour						Weekday P.M. Peak Hour					
	Overall	App.[1]	Delay	LOS	V/C	95th % Queue[1]	Overall	App.[1]	Delay	LOS	V/C	95th % Queue[1]
2026	Delay: 2.96s LOS: A	EB	9.09s	A	0.33	~1	Delay: 2.61s LOS: A	EB	5.82s	A	0.20	~1
		NB	1.95s	A	0.16	~1		NB	2.40s	A	0.37	~1
		WB	1.76s	A	0.07	~1		WB	2.29s	A	0.18	~1
		SB	2.26s	A	0.32	~1		SB	2.15s	A	0.16	~1
2031	Delay: 3.02s LOS: A	EB	9.43s	A	0.35	~1	Delay: 2.64s LOS: A	EB	5.91s	A	0.20	~1
		NB	1.96s	A	0.17	~1		NB	2.44s	A	0.38	~1
		WB	1.76s	A	0.07	~1		WB	2.32s	A	0.19	~1
		SB	2.30s	A	0.33	~1		SB	2.18s	A	0.17	~1
2036	Delay: 3.10s LOS: A	EB	9.84s	A	0.36	~1	Delay: 2.68s LOS: A	EB	6.00s	A	0.21	~1
		NB	1.97s	A	0.17	~1		NB	2.47s	A	0.38	~1
		WB	1.77s	A	0.07	~1		WB	2.36s	A	0.19	~1
		SB	2.34s	A	0.34	~1		SB	2.20s	A	0.17	~1

Note 1: App. – Intersection Approach.

The intersection of Airport Road and Old School Road / Healey Road is projected to operate acceptably under each of the future total scenarios, at a LOS "A" during both the a.m. and p.m. peak hours. Compared to future background conditions, the intersection is expected to operate with no more than two seconds of additional control delay per vehicle during the peak hours as a

result of development traffic. Furthermore, no queuing or capacity constraints are forecast at the roundabout.

An important consideration to note is that some of the future background growth rates adopted in the study as provided by the Region can be considered relatively high (e.g. 5% on Mayfield Road from 2022 – 2031). As evidenced by the newest turning movement counts conducted in 2022, traffic growth previously forecasted has not yet materialised and the observed 2022 volumes are lower than the traffic volumes formerly predicted. In addition, changes in workplace policies across the GTA to permit hybrid (work from home and periodic office attendance) arrangements has resulted in changes to travel patterns on major commuter corridors. In addition, a number of significant approved background developments (e.g. Block 48-1 & Block 48-2) have not been built out at the rate previously anticipated; meanwhile the subject development is planning for construction to commence in 2024 with relevant permits for construction access as well as topsoil stripping. Accordingly, it is recommended that the traffic volumes be monitored along the Mayfield Road corridor as the surrounding area is built out to confirm future traffic volumes and timing for anticipated roadway improvements.

5.1.1 Traffic Signal Warrant Assessment – Mayfield Road at Street "B"

Traffic signal warrant analysis was conducted using an Ontario Traffic Manual (OTM) Book 12 configured excel sheet based on the average hourly volume approach for the intersection of Mayfield Road at Street "B".

Based on minimum vehicular traffic and delays to cross traffic, traffic signals are warranted at the intersection of Mayfield Road at Street "B" under full-build out conditions. The intersection has been modelled as such for this analysis.

Signal Warrant analysis excerpts are included in **Appendix H**.

5.1.2 Traffic Signal Warrant Assessment – Torbram Road at Street "C"

Traffic signal warrant analysis was conducted using an Ontario Traffic Manual (OTM) Book 12 configured excel sheet based on the average hourly volume approach for the intersection of Torbram Road at Street "C".

Based on minimum vehicular traffic, delays to cross traffic, and 4-hour volumes associated with the intersection, traffic signals are not technically warranted at the intersection of Torbram Road at Street "B" under full-build out conditions. As such the intersection has been modelled with stop control for this analysis.

Although signalization is not warranted at this approach based on vehicle volumes, it may be considered in the future to increase pedestrian mobility and safety in the area, particularly in the future once development west of Torbram Road occurs.

Signal Warrant analysis excerpts are included in **Appendix H**.

5.1.3 Traffic Signal Warrant Assessment – Internal Intersections

Traffic signal warrant analysis was conducted using an Ontario Traffic Manual (OTM) Book 12 configured excel sheet based on the average hourly volume approach for all internal intersections as requested by the Town. These intersections include Street B at Street A, Street B at Street C, and Street B at the Potential Future Street D/Block 3 Access.

Based on minimum vehicular traffic, delays to cross traffic, and 4-hour volumes associated with the intersections, traffic signals are not technically warranted at any of the internal intersections under full-build out conditions. As such the intersections have been modelled with stop control for this analysis.

5.1.4 Auxiliary Right and Left-Turn Lane Analysis – Unsignalized Torbram Road Intersections

Ultimate auxiliary southbound left-turn lane and auxiliary northbound right-turn lane requirements were analyzed at the proposed Torbram Road Connections at Street "C", Site Access 1, and Site Access 2. Under 2026 and 2036 Future Total conditions no auxiliary left, or right turn lanes are warranted.

Auxiliary Left-Turn Lane and Right-Turn Warrant analysis excerpts are included in **Appendix H**.

5.2 Torbram Road Sensitivity Analysis

As discussed in **Section 3.7.1**, we understand that the Town has additional considerations for the ultimate buildout of Torbram Road as a two-lane or four-lane urban cross section. However, the details of the ultimate ROW considerations, and scheduling of this roadway will be subject to the completion of the ongoing Multimodal Transportation Master Plan currently being undertaken by the Town. In addition, completion of a Class Environmental Assessment may also be required for ultimate delivery of an upgraded Torbram Road.

Based on the above, a sensitivity analysis was conducted where traffic is generally diverted away from Torbram Road such that Street "C" roadway is not utilized by any of the site generated traffic. Instead, all the traffic is modelled so that the traffic enters and exits via the Street "A" and Street "B" accesses with exception of some of Zone 1's passenger vehicle traffic, which has proposed a direct access to Torbram to serve passenger vehicles. The purpose of this sensitivity analysis is to determine if the full buildout of the development can be supported prior to the formal upgrading of Torbram Road, and if any modifications to the Mayfield and Airport Road intersections would be required to do so.

Table 28: 2036 Future Total Level of Service – Torbram Sensitivity Analysis

Intersection	Control	Peak Hour	Intersection Control Delay - LOS[1]	Critical Individual Movement Delays	Critical V/C Ratio [2]	95th Percentile Queue > Storage Length
Mayfield Road at Torbram Road	Signal (Opt.)	A.M.	52.8 s [D]	89.0 s [F](WBL)	1.08 (EBT)	190m > 100m (EBL) 270m > 125m (EBR) 120m > 105m (WBL) 165m > 80m (NBL)
		P.M.	34.1 s [C]	None	0.93 (EBT)	145m > 80m (NBL)
Mayfield Road at Street "B"[4]	Signal	A.M.	34.1 s [C]	None	0.88 (EBL)	100m (EBL)[3] 75m (EBR)[3] 60m (NBL)[3]
		P.M.	18.9 s [B]	None	0.79 (WBT)	None
Mayfield Road at Airport Road	Signal (Opt.)	A.M.	41.4 s [D]	None	0.98 (EBL)	210m>200m (EBL) 80m > 60m (EBR) 210m > 95m (NBL)
		P.M.	47.8 s [D]	None	1.00 (NBL) 0.98 (EBL) 0.97 (WBT)	255m > 200m (EBL) 240m > 165m (WBL) 160m > 60m (WBR) 185m > 95m (NBL)
Airport Road at Davis Lane/ Perdue Crescent	Stop Control (Minor)	A.M.	95.3 s [F]	95.3 s [F] (WBL)	0.72 (WBL)	35m > 30m (WBL)
		P.M.	567.9 s [F]	567.9 s [F] (WBL)	1.89 (WBL)	45m > 30m (WBL)
Airport Road at 12333 Airport Road/Street "A"[4]	Signal	A.M.	8.0 s [A]	None	0.57 (WBL)	None
		P.M.	14.3 s [B]	None	0.76 (EBL)	65m > 55m (EBL)

Note 1: The Level of Service of a signalized intersection is based on the average control delay per vehicle (Synchro/ICU). The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road movement (HCM 2000).

Note 2: The critical v/c ratio is considered to be the maximum v/c ratio for movements at the intersection. In addition, all v/c ratios greater than 0.90 for through or shared through/turning movements, as well as greater than 1.00 for exclusive movements are highlighted.

Note 3: The intersection of Mayfield Road at Street "B" has not been constructed yet. Therefore, these queues indicate higher than standard storage distances for auxiliary turn lanes and serve as a recommendation for the storage lengths the intersection should be constructed with.

Note 4: Due to the Draft Plan being in development at the time this analysis was being conducted the naming convention of the internal road network used in the final Draft Plan differs from the naming convention used in this analysis. The internal roads listed as Steet "A". Street "B", and Street "C" in the latest Draft Plan and this report are named Airport Connector, Mayfield Connector, and Torbram Connector, respectively within the Synchro and Sim Traffic reports attached to Appendix G.

The sensitivity analysis indicates that the widening of Torbram Road is not required to support full buildout since the resulting operations of the major intersections and remaining site accesses remain similar when compared to the base case analysis. While we understand that Torbram Road will ultimately require widening in the future, the results indicate that the full buildout can be supported prior to the completion of the widening works. It should also be noted that the base case scenario also did not account for a widening of the Torbram Road cross-section.

5.3 Summary of Recommended Improvements to Accommodate Site-Generated Traffic

In addition to the background improvements proposed in the road network as summarized in **Section 3.4** and **Table 6**, as well as the improvements to accommodate background growth summarized in **Section 3.7**, the following improvements are recommended for consideration at the noted intersections to accommodate the site generated traffic.

- **Mayfield Road at Torbram Road (Signalized Intersection)**
    - In order to accommodate the 95th percentile eastbound left turn queues, 190 m storage (90 m increase from Future Background) would be required. However, a review of the simulation indicates that the increase in queuing is primarily due to eastbound through traffic queues extending past the taper such that vehicles intending to access the auxiliary turn lane would be required to wait until the through queues cleared sufficiently to access the turn lane. Moreover, the increase from 37 to 116 vehicles per hour as a result of the development traffic in the critical a.m. peak hour would not by itself trigger 90 m of additional storage under normal circumstances.
    - Similarly, in order to accommodate 95th percentile eastbound right turn lane queues, an auxiliary lane with 270 m storage (190 m increase from Future Background) would be required. However, based on a review of the simulation the increase in queuing was similarly found to be due to through traffic queues extending past the beginning of the eastbound right-turn lane. Moreover, the proposed development contributes no traffic volumes to this movement.
    - On this basis, it is recommended that traffic along the Mayfield corridor be monitored as surrounding growth advances to avoid overbuilding infrastructure, since a relatively high growth rate of 5% until 2031 was adopted as requested by the Region.
- **Mayfield Road at Street "B" (Signalized Access)**
    - Construct an eastbound left turn lane with at least 100 m of storage.
    - Construct an eastbound right turn lane with at least 70 m of storage.
    - Construct a northbound left turn lane with at least 60 m of storage.
    - Construct a westbound right turn lane with at least 45 m of storage (to accommodate potential LCVs).
- **Airport Road at Street "A" (Signalized Access)**
    - Construct a northbound left turn lane with at least 55m of storage.
    - Construct an eastbound left turn lane with at least 55m of storage (TWLTL available)
    - Construct a westbound left turn lane with at least 50m of storage (pavement width currently available and can be implemented via pavement markings)
    - Construct a southbound right turn lane with at least 25m of storage. (min. required for Wb-20 trucks).

- **Mayfield Road at Airport Road (Signalized Intersection)**
    - Eastbound right turn lane with 80m storage (0m increase from Future Background).
    - Westbound left turn lane with 295 m storage (can be accommodated as part of 2026-2031 road widening).
    - Westbound right turn lane with 170 m storage (can be accommodated as part of 2026-2031 road widening).
    - Northbound left turn lane with 195 m storage (10 m increase from Future Background).
    - Southbound left turn lane with 105 m storage (can be accommodated as part of 2026-2031 road widening)
    - Implement a protected WBL turn phase in both peak hours and optimize the signal timing. This includes reducing the pedestrian walk times to 3 seconds, the pedestrian "do not walk" times remain unchanged from existing. It is recommended that traffic along the Mayfield corridor be monitored over time to confirm traffic growth and signal timing coordination.
- **Airport Road at Davis Lane/ Perdue Crescent (Minor Stop-Controlled Intersection)**
    - Consider signalization of the intersection to reduce minor street delays as recommended for future background conditions. It is noted that the long delays are generally associated with background traffic volumes and not as a result of the site traffic.
    - Increase Westbound left turn lane to 45 m storage (5 m increase from Future Background). Note the existing pavement width can accommodate this via pavement markings.
- **Internal Road Network**
    - The internal road network should be constructed with one lane in each direction as well as a two-way-left-turn lane to facilitate left turn movements for an overall three lane cross section. Further details on the proposed cross-section are discussed in **Section 8.2**.
    - All way stop-controlled intersections are proposed for the three internal intersections to facilitate safe pedestrian and bicycle crossing.
    - 3.0 metre Multiuse Paths are recommended on both sides of all internal roadways.
- **Mayfield Road Corridor**
    - Implement coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length increases throughout the corridor to 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively to match the Airport Road and Mayfield Road intersection (also recommended for Future Background conditions). As previously noted, it is recommended that traffic along the Mayfield corridor be monitored as the area is built out to confirm traffic growth and signal timing coordination.

- We also note that the speed limit along Mayfield Road within the study area for westbound traffic is 60km/h from Airport Road to approximately 440m west of Airport Road, after which the speed limit transitions to 80km/h speed limit. For eastbound traffic along Mayfield Road, the speed limit is 80km/h between Torbram Road to approximately 450m west of Airport Road. As the subject lands in addition to the Block 48-2 residential community develop, the mobility environment along Mayfield Road is expected to change due to increased pedestrian and cycling activity, as well as new transit stops proposed along Mayfield Road. Accordingly, we recommend the Region consider reductions in posted speed limit to provide a consistent 60 km/h across the site's frontage in the future as the environment is transformed.

- **Torbram Road Corridor**

  - It is understood that the Town has additional considerations for the ultimate buildout of Torbram Road as either a two-lane or four-lane urban cross section. The Town's Official Plan indicates Torbram will be a Town Arterial Road with a 30 m ROW, as such, this study has assumed a two-lane urban cross section to ensure a conservative assessment until additional details are available. The details of the ultimate ROW considerations, and scheduling of this roadway will be subject to the completion of the ongoing Multimodal Transportation Master Plan currently being undertaken by the Town. Relevant excerpts from the Town's Official Plan can be found in **Appendix N.**

6.0 Sight Distance Review

The available sightlines at the future intersections of Airport Road at 12333 Airport Road/Street "A" and Mayfield Road at Street "B" were measured and compared to the standards set out in the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (GDGCR), June 2017.

Per Case D of the TAC GDGCR, at signalized intersections the first vehicle stopped on one approach should be visible to drivers of the first vehicle stopped at the other approaches. These conditions are satisfied and therefore sight distance is not expected to be an issue. In addition, as these proposed connections represent the fourth leg of an existing or planned intersection, final design of these intersections will be required to ensure adequate sight distance exists and that proposed lane configurations can accommodate the swept paths of the design vehicles (WB-20 trucks).

Per Town and Region's comments, the intersection angles are required to be within 85-95 degrees. The proposed connections to Mayfield Road, Torbram Road, and Airport Road also satisfy these requirements.

As the internal public roadways are relatively straight with little horizontal curvature, no issues with sight distance are expected for the proposed accesses to the north-south collector and east-west collectors. Moreover, individual Site Plans are expected to be further refined and final designs will ensure that site accesses provide adequate sight distance and facilitate safe internal circulation.

7.0 Parking & Loading Review

The Tullamore Lands are subject to the Minister's Zoning Order (MZO) – O.Reg. 483/22, which was adopted on September 9, 2022, and includes an exception to the parking requirements outlined in the Town of Caledon Zoning By-Law 2006-50.

The required parking rate for the Tullamore lands in accordance with the Minister's Zoning Order (MZO) – O.Reg. 483/22 is as follows:

- 1 space per 230 m^2 of net floor area

Per the Town of Caledon's Zoning By-Law minimum loading space requirements, industrial buildings with similar land use to the proposed development with a net floor area of 7,441 m^2 or greater are required to provide:

- 3 loading spaces +1 space/9,300 m^2 or portion thereof in excess of 7,441 m^2

Given that, all of the proposed buildings exceed the 7,441 m^2 threshold, this requirement was used to evaluate the loading supply for all buildings in the proposed industrial park.

The above parking requirements assume that the gross floor areas equal net floor area as the Draft Plans are not sufficiently advanced to identify net floor area for each building. The adequacy of the parking and loading supply for each building will be assessed on an individual basis during the Site Plan Approval stage.

Accordingly, the loading and parking space requirement and supply by building is outlined is outlined in **Table 29** below.

Table 29: Minimum Zoning By-law Parking and Loading Requirements

Building(s)	Size (SM GFA)	Parking Supply				
		Required Loading	Loading Bay Supply (Surplus/Deficit)	Required Car Parking	Car Parking Supply (Surplus/Deficit)	Trailer Parking Supply
Building A	104,443	14	270 **(+256)**	455	535 **(+80)**	600
Building C	72,901	11	81 **(+70)**	317	319 **(+2)**	179
Building D	90,933	12	168 **(+156)**	396	546 **(+150)**	173
Building E	89,493	12	100 **(+80)**	390	480 **(+90)**	291
Building F	74,090	11	170 **(+159)**	323	389 **(+66)**	135
Building H	87,230	12	95 **(+83)**	380	543 **(+163)**	61
Building I	26,979	6	74 **(+68)**	118	326 **(+208)**	47
Building J	9,197	4	26 **(+22)**	40	138 **(+98)**	11
Total	568,557	82	984 **(+902)**	2,419	3,276 **(+857)**	1,497

As outlined above, the Town's Zoning By-Law and Minister's Zoning Order (MZO) – O.Reg. 483/22 requires the proposed development to provide a total of 84 loading spaces and 2,475 parking spaces. Since the Site Plan proposes the use of 984 loading spaces and 3,276 parking spaces, the development proposed of a loading surplus of 902 spaces and a parking surplus of 857 spaces. Therefore, the proposed loading and parking supply satisfies the Zoning By-law and Minister's Zoning Order requirements for the site. It is noted that the parking and loading requirements have been assessed on a high level and the parking and loading supply for each building will be assessed in detail on an individual basis during the Site Plan Application stage. It is also noted that while the car parking supply is already in surplus, the trailer parking supply was not accounted for in either the loading bay or car parking supply.

The relevant excerpts from the Town of Caledon By-Law and Minister's Zoning Order are provided in **Appendix O**.

8.0 Proposed & Potential Mobility Network

At the Town's request, this section reviews the potential for a mobility road network from a wider context, for lands beyond the proposed industrial subdivision. The proposed mobility network provides details for proposed internal infrastructure in the Subject Development, as well as potential collector roadways and transit routes to service the Town of Caledon from a wider context.

This section herein highlights additional considerations for a transportation network beyond the subject lands, per request by the Town. It is underscored that while lands beyond the proposed development are **not** the subject of this development application, the Town has requested a review of a potential transportation network beyond the lands to ensure that policy objectives can be met, and that the proposed development does not preclude the development of an extended collector road network. The purpose of this review, therefore, is to illustrate that a future transportation network beyond the subject lands could be implemented, while satisfying the City and Region's policy objectives.

It is underscored that any visualization of a potential road network beyond the development proposal represents a potential road network that could be established as part of future development process and is not intended to represent a specific proposal of collector road alignments through adjacent lands. Moreover, illustrations of collector roadways represent a connection in-principle, and not specific alignment proposals. Further study by the Town and/or relevant landowners would be required to refine locations of collector roadways where required.

8.1 Internal Collector Road Network

The subject development will be supported by 3 collector roadways. Street "A", Street "B", and Street "C" connect to Airport Road, Mayfield Road, and Torbram Road, respectively. Street "A" and Street "C" will function as east-west collector roadways which connect to the proposed north-south collector roadway, Street "B", which acts as a spine through the development lands. The internal collector roadways are represented on the Draft Plan attached as **Figure 1**.

The proposed specifications for the internal collector roadways can are shown in **Table 30** below.

Table 30: Internal Collector Road Network

Street	Direction	External Road Network Connection	Control	Spacing to Closest Intersection	Proposed Right of Way
Street "A	East-West	Airport Road	Signal	>400m to Airport Road at Davis Lane/ Perdue Crescent	26m
Street "B"	North-South	Mayfield Road	Signal	>650m to future Mayfield Road and Torbram Road	26m
Street "C"	East-West	Torbram Road	Stop	>500m to Future Site Access 1	26m
Future Potential Street "D"	East-West	N/A; Future Extension to Airport Road	Stop	>350m to Street A at Street B	26m

Intersection Spacing

Within the study area per the Region's Road Characterization Study, Airport Road is classified as a Suburban Connector which requires a spacing of 300m between full moves intersections. Similarly, Mayfield Road is classified as an Industrial Connector which required a 450m spacing between full moves intersections.

Per discussion with Town staff, the desired spacing for collector road intersections is 400m. The proposed internal collector intersections have a spacing of 400m or greater to the nearest intersection with the exception of Future Potential Street D and Street A which has a spacing of at least 300m along Street B.

We note that the Town requested the extension of Street "C" from Street B to Airport Road; however, multiple environmental constraints (discussed in **Section 8.3**) prohibited the feasibility of an east-west collector in this area. In lieu of this request, a reserve block (Block 6) has been proposed in the Draft Plan to accommodate a Future Street "D", consistent with a 26m ROW for the internal collector road network. The Future Street D would connect Street B to Airport Road and potentially continue eastward to Innis Lake Road. The continuation of the Future Street "D" beyond the subject lands will also depend on future redevelopment associated with the properties fronting Airport Road, with the ability to satisfy the Region's minimum 300m spacing between full moves accesses along Airport Road. The future Street "D" is also at least 300 m north of Street "A", along Street "B". The remaining proposed intersection locations therefore do not preclude future signalization opportunities, if warranted.

Per **Section 5.1.1**, the intersection of Mayfield Road at Steet "B" is warranted for signalization and has been proposed as such, consistent with the future requirements of the Block 48-2 road network. The intersection Airport Road at Street "A" proposed to be signalized as the existing intersection is already signalized, and Street "A" will form the fourth (western) leg of this existing T-intersection. The intersection of Torbram Road at Street "C" is proposed to be stop controlled but has the required access spacing to be signalized in the future, should it be warranted. It should be noted that a signal is not warranted at the intersection within our study horizon; however, in the future as development to the west occurs and Street "C" extends west of Torbram Road, signalization may be explored to provide safe pedestrian crossing opportunities in the future. Signal Warrant analysis excerpts are included in **Appendix H**.

8.2 Cross Section Requirements

Per correspondence with the Town of Caledon, an urban cross section consistent with the section used for George Bolton Parkway in the Town is preferred for the Subject Development's internal collector roadways. The Subject Development will adopt this cross section for all three internal collector roadways, Street "A", Street "B", Street "C", and the Future Street "D". This cross section proposes two 3.5m curb lanes, a 5.0m two-way left turn lane, and 3.0m multiuse pathways (MUPs) on both sides of the roadway. The MUPs will also be separated from the roadway by 3.0m boulevards. This cross section supports all modes of transportation, and provides added separation between active transportation and vehicular traffic, which is of increased importance to a development such as the subject proposal that anticipates frequent heavy truck traffic Details for the cross section can be found in **Figure 18.**

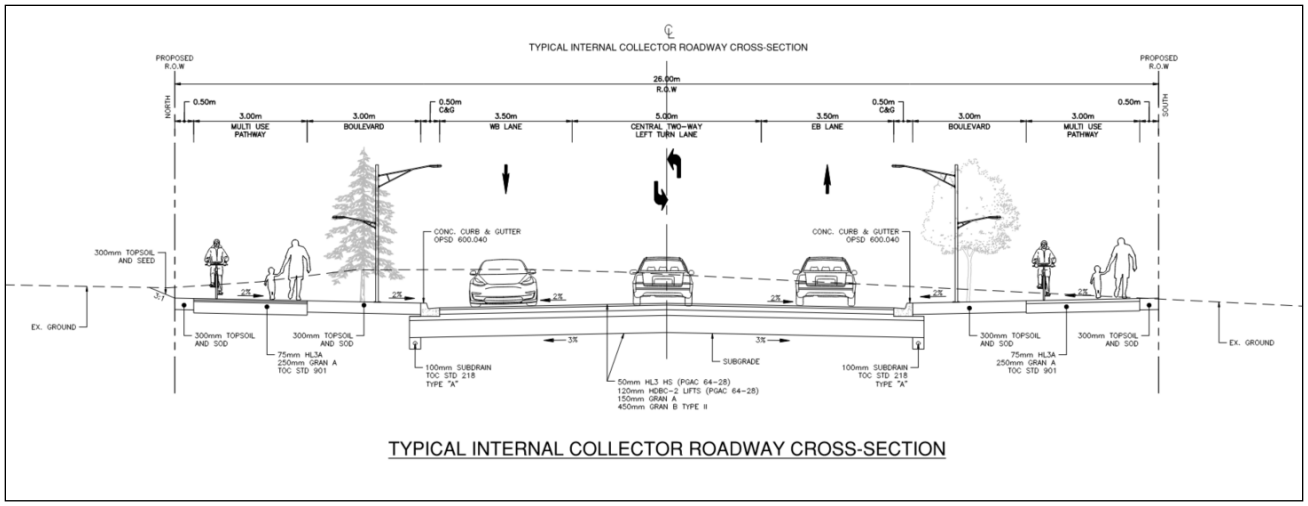


Figure 18: Proposed 26m Cross-Section

The Town of Caledon official drawings for the cross section can be found in **Appendix P**.

8.3 Mobility from a Wider Context

8.3.1 Considerations for Continuous Collector Roadways

At the Town's request, this section reviews the potential for a collector road network from a wider context, for lands beyond the proposed industrial development. It should be noted that a potential road network beyond the subject lands represents a potential collector network only and is not being proposed as part of this development application. The potential collector network illustrated should serve as a concept that could potentially be implemented, which builds upon the mobility network proposed in the Subject development application. Prior to proposing a detailed collector road network, further review and study from the Town or relevant landowners will be required. The illustrations of potential road network concepts beyond these lands do not represent proposed locations, or crossings. The illustrations, however, represent one of many potential concepts that could be implemented with the future buildout of the surrounding area. Moreover, the illustrated network does not preclude the addition of further collector and local roadways that would otherwise contribute to the creation of a modified grid system.

Per discussion with the Town of Caledon, continuous east-west connectivity is desired as the Town looks to establish a wider mobility network beyond the Subject Lands. However, in the southern part of Caledon within the study area it should be noted that there are several Natural Heritage System constraints that may impact the feasibility of ultimately implementing continuous network, without conducting further review. Such constraints are also compounded by intersection spacing requirements discussed in **Section 8.1**, property constraints, as well as practical grading considerations of how existing roadways currently cross these constraints.

Further to the above, the Town's Draft Official Plan (2022) describes collector roads as follows:

- Roadways under the Town's jurisdiction.
- Serve low to moderate volumes of short distance traffic between local and arterial roads.
- Provide individual property access with some limitations.
- Will have a 20 to 26 metre road allowance with 2 to 4 lane capability.

- On-street parking may be permitted.
- Require the provision of pedestrian facilities on both sides of the road, as deemed feasible.

The proposed internal network satisfies all these requirements and can be achieved for lands beyond the subject development.

In reviewing the opportunities for a connected collector road network beyond the Subject Lands, opportunities were reviewed from a number of perspectives including:

- Property constraints
- Natural Heritage System constraints
- Grading considerations
- Intersection spacing considerations

With these considerations in mind, opportunities for a potential collector network have been identified, that demonstrates the ability for both east-west and north-south connectivity beyond the Subject Lands in a modified grid pattern. Per discussion with the Town, an expanded study area generally bound by Mayfield Road, Bramalea Road, Old School Road and Innis Lake Road was considered. The sections that follow.

The Potential Future of Caledon Network was evaluated based on multiple criteria to optimise the network. The preference of the Town of Caledon is for the collector roadway network to feature continuous roadways; while the Subject Lands are able to provide the foundation for a continuous north-south collector, environmental and grading constraints limit opportunities for multiple continuous east-west collectors within the extended study area.

8.3.2 Collector Roadway Considerations & Connectivity Constraints

The subject lands propose a foundation for a continuous north-south collector through the lands, beyond which there are opportunities for extended east-west collector roadways. However, within the subject lands, the proposed east-west collector network is based on local constraints and design requirements for each block.

Street "A" forms the west approach of the existing Airport Road intersection with 12333 Airport Road access. It is noted that the east approach of this intersection is a private roadway and does not provide public connectivity opportunities east of Airport Road. Moreover, this private road does not extend beyond Salt Creek and therefore would not provide a continuous east-west road connection to Innis Lake Road.

Similarly, due to the Environmental Policy Area 1 Zone in the northeast corner of the site fronting Airport Road, Street "C" is limited in the extent of it's east-west connectivity beyond its current terminus at Street "B". The northeast area of the Draft Plan has a number of environmental constraints including those associated with Redside Dace habitat, Salt Creek and its valleylands, existing wetlands and wetland buffers, and the northern Significant Woodland and its buffer. Additional details of these environmental constraints can be found in the Tullamore Employment Lands Comprehensive Environmental Impact Study and Management Plan (CEISMP), prepared by GEI Consultants (October 2023). An excerpt from the CEISMP (Figure 12) is attached herein as **Appendix R**. Were Street C to extend eastwards towards Airport Road, additional constraints at the Norris Bridge along Airport Road also exist which impact feasibility when considering future infrastructure associated with a ne intersection such as auxiliary turn lanes. Street "C" however has

the potential to extend west of Torbram Road; but an extension to Bramalea Road will be subject to further review, given the Natural Heritage constraints within this area west of Torbram Road.

In consideration of these constraints, a reserve block to accommodate a Future Potential Street "D" was proposed, between Street "A" and Street "C", as reflected on the Draft Plan. The preferred alignment of Street "D" as illustrated in the Draft Plan was selected as a feasible opportunity for additional east-west connectivity between Street B and Airport Road and avoids the Salt Creek Corridor and associated environmental constraints in the area. The Future Street "D" also considers property lines of neighbouring lands fronting Airport Road, and upon future redevelopment Streer D can be extended eastward to Airport Road creating a future signalized intersection with Airport Road approx. 400m north of Street A, exceeding the Region's minimum spacing criteria. Subject to review of additional environmental constraints, the future roadway will also have the potential to extend eastward to connect to Innis Lake Road.

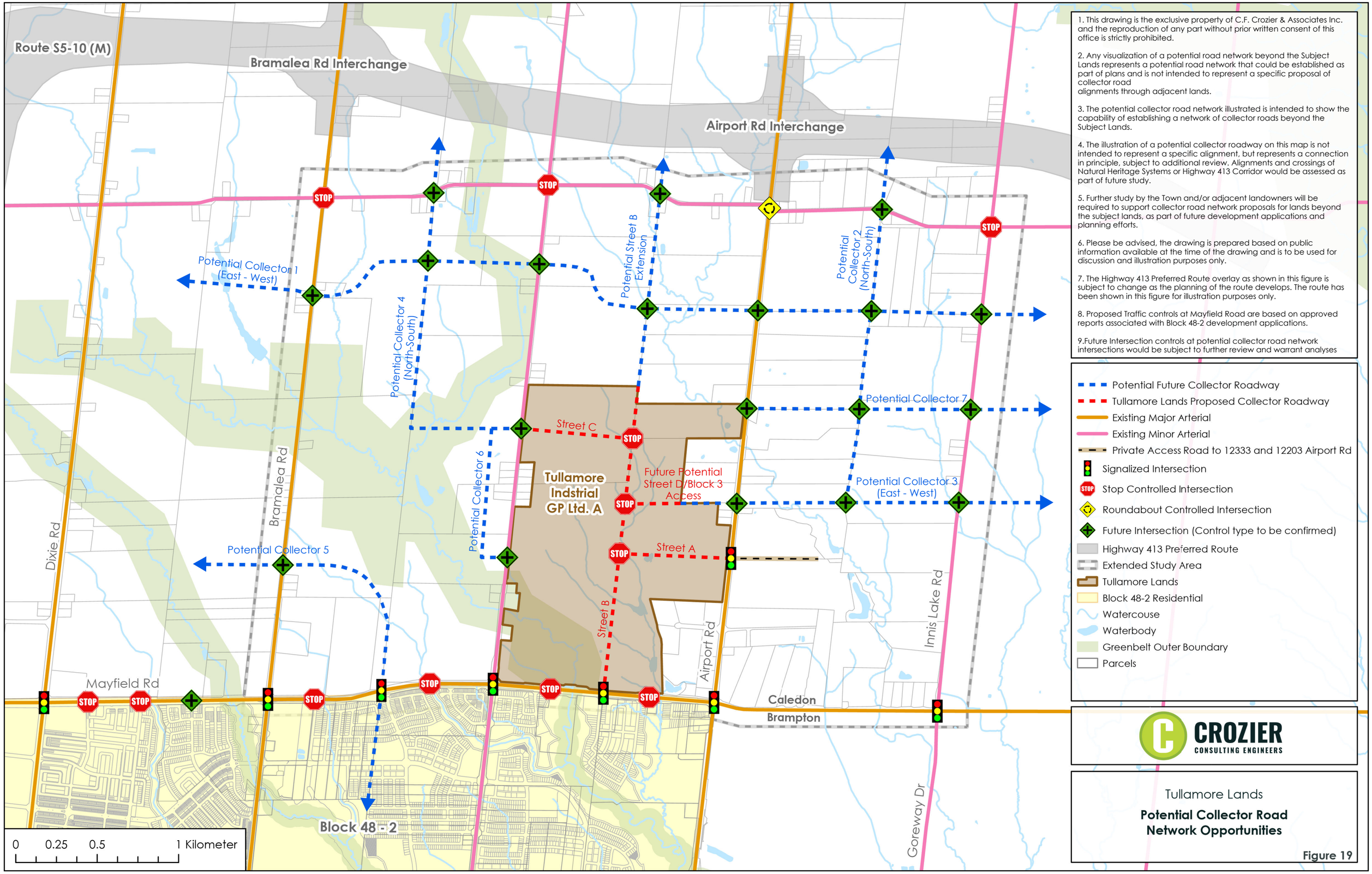
It should also be noted that grading and environmental constraints for east-west crossing opportunities have been noted along the north-south arterials of Innis Lake Road, Airport Road, Torbram Road, and Bramalea Road. As these constraints and Natural Heritage System crossings generally occur in different locations along these corridors, opportunities for continuous east-west collectors in a traditional grid pattern over larger distances within the extended study area will be subject to additional study due to these considerations.

Relevant excerpts from the Town's Zoning By-Law Maps can be found in **Appendix D**.

8.3.3 Potential Collector Network Opportunities

An illustration showing a potential Town of Caledon collector roadway network is shown in **Figure 19**. It is noted that additional collector connections beyond those illustrated in **Figure 19** are possible, subject to the requirements for individual parcel and/or land assembly access, within a similar or modified mobility framework. As previously noted, the presence of Natural Heritage Systems west of Torbram Road may result in constraints to achieving multiple continuous east-west collectors between Innis Lake Road and Bramalea Road; however, east-west connectivity is provided as part of this potential network, and the collector functions can operate consistent with the functional requirements identified per the Town's Draft Official Plan (2022) as discussed in **Section 8.3**.

The Potential Future Town of Caledon Collector Road Network is represented in **Figure 19**.



1. This drawing is the exclusive property of C.F. Crozier & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. Any visualization of a potential road network beyond the Subject Lands represents a potential road network that could be established as part of plans and is not intended to represent a specific proposal of collector road alignments through adjacent lands.

3. The potential collector road network illustrated is intended to show the capability of establishing a network of collector roads beyond the Subject Lands.

4. The illustration of a potential collector roadway on this map is not intended to represent a specific alignment, but represents a connection in principle, subject to additional review. Alignments and crossings of Natural Heritage Systems or Highway 413 Corridor would be assessed as part of future study.

5. Further study by the Town and/or adjacent landowners will be required to support collector road network proposals for lands beyond the subject lands, as part of future development applications and planning efforts.

6. Please be advised, the drawing is prepared based on public information available at the time of the drawing and is to be used for discussion and illustration purposes only.

7. The Highway 413 Preferred Route overlay as shown in this figure is subject to change as the planning of the route develops. The route has been shown in this figure for illustration purposes only.

8. Proposed Traffic controls at Mayfield Road are based on approved reports associated with Block 48-2 development applications.

9.Future Intersection controls at potential collector road network intersections would be subject to further review and warrant analyses

- Potential Future Collector Roadway
- Tullamore Lands Proposed Collector Roadway
- Existing Major Arterial
- Existing Minor Arterial
- Private Access Road to 12333 and 12203 Airport Rd
- Signalized Intersection
- Stop Controlled Intersection
- Roundabout Controlled Intersection
- Future Intersection (Control type to be confirmed)
- Highway 413 Preferred Route
- Extended Study Area
- Tullamore Lands
- Block 48-2 Residential
- Watercouse
- Waterbody
- Greenbelt Outer Boundary
- Parcels

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Potential Collector Road Network Opportunities

Figure 19

Crozier Project No. 2022-5842

The Town's Transportation Master Plan and Draft Official Plan (2022) defines collector roads as roads which "serve low to moderate volumes of short distance traffic between local and arterial roads.". Streets A, B, C, and Future Potential Street D within the Subject Lands allow for connectivity to the boundary arterial network in an efficient manner and provides pedestrian facilities on both sides of the roadway. As illustrated in **Figure 19**, collector road connectivity from a wider context beyond the subject lands is not precluded with the establishment of the proposed collector road network within the development. As it is expected that active transportation facilities will be supported on both sides of future roadways, and future collector roads will support future transit service, there is potential to establish a wider collector road network that serves the needs of all road users including pedestrians, cyclists, transit riders and motorists.

In addition, due to the scale of industrial development being proposed, it is expected that passenger car and truck traffic utilizing Streets "A, "B", C, and Future Street "D" would be destined to the subject site and potential future development abutting the lands to the north, instead of using the collector roads as a thoroughfare to bypass surrounding arterials. This is not atypical for more modern large scale business parks, which require much larger blocks due to larger GFA requirements for industrial warehouses and distribution centres. This trend can be seen in similar existing developments within the Town that are surrounded by Natural Heritage Systems such as the as the Employment Lands at within the Coleraine West Employment Area – within which George Bolton Parkway is the only east-west collector road between Mayfield Road and Healy Road.

Notwithstanding the above, the Town's vision for more continuous east-west collectors is achievable and can be facilitated by the proposed mobility network within the Draft Plan. Specifically, the proposed road network does not preclude the Town from establishing further east-west connectivity beyond the subject lands, creating a modified grid road network to support future development**.** We recommend further study by the Town and/or adjacent landowners to assess local constraints and further develop a wider collector network beyond the subject lands.

8.4 Potential Collector Network Policy Conformance Opportunities

It is re-iterated that any visualization of a potential road network beyond the development proposal represents a potential road network that could be established as part of future study by the Town or adjacent landowners. It is recognized that the establishment of any potential network will be required to demonstrate its abilities to meet the Town's transportation policy objectives per the Town's prevailing Official Plan and Draft Official Plan (2022). Key aspects of the potential collector network's conformance with these Official Plans are highlighted in a checklist provided in **Appendix Q**, which demonstrate that the proposed development does not preclude the establishment of a wider collector road network that satisfies the Town's transportation policy objectives.

The Potential Future of Caledon Network was evaluated based on multiple criteria to optimise the network. The preference of the Town of Caledon is for the collector roadway network to feature continuous roadways; while the Subject Lands are able to provide the foundation for a continuous north-south collector, multiple environmental and grading constraints prohibit a continuous east-west collector through the lands.

8.5 Potential Collector Roadway Network Policy Conformance

It is re-iterated that any visualization of a potential road network beyond the development proposal represents a potential road network that could be established as part of future block plan, secondary plan or LOG work and is not intended to represent a specific proposal of collector road alignments through adjacent lands.

The potential future network has been evaluated and designed to meet transportation policies in the prevailing Town of Caledon Official Plan, key aspects of the Official Plan conformance within the potential collector roadway network are highlighted in a checklist provided in **Appendix Q**.

A future secondary plan or LOG work would be required to establish a wider transportation network, the checklist provides rational to support that the potential collector roadway network can achieve the Town's policy objectives.

9.0 Transportation Demand Management Considerations

To reduce single-occupant vehicle (SOV) use, the following Transportation Demand Management (TDM) Plan proposes several low-impact opportunities to promote alternative modes of transportation for the overall industrial area. The considerations are generally high-level for the entire area and will be refined in greater detail as part of refinements to the Draft Plan and as part of the individual Site Plan Applications for each building in the future.

9.1 Active Transportation Plan

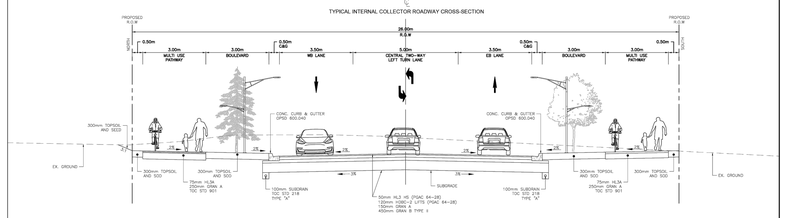
As discussed in **Section 8.2**, the subject lands will adopt a 26.0m urban cross section including a 3.0 metre multi-use path on both sides of all internal collector roadways. The multi-use path's enable pedestrian and cyclist mobility and connectivity with the surrounding lands.

The existing boundary road networks use mixed-use pedestrian cyclist paths (such as the south side of Mayfield Road) to provide access for active transportation. As such, the proposed multi-use paths connecting buildings to the surrounding multiuse path network will promote active transportation in the area via dedicated facilities. Further pedestrian and cyclist friendly design standards should also be employed with the paths, such as the provision of adequate lighting, and avoiding steep grades or stairwells for grade transitions. The proposed active transportation plan also provides direct connectivity to planned and existing transit stops within the area. As the active transportation facilitates are multiuse paths accommodating both pedestrians and cyclists, it is expected that intersection crossings will accommodate bicycle crossing features consistent with Ontario Traffic Manual (OTM) Book 18 – Cycling Facilitates requirements.

A multiuse trail (MUT) is also proposed through the Greenbelt block, south of Block 2, which will provide an active transportation connection between Torbram Road and Street B. This proposed MUT will also be consistent with the future MUT envisioned in the Town's Active Transportation Master Plan - Network Recommendations Map. The details of the MUT will be coordinated with the Town through a separate detail design process; however, the cross-section is expected to consistent with the Town's Trail Classification and Design cross sections, highlighted in the Town's Active Transportation Master Plan Public Information Centre (PIC) #2. We also recommend further discussion with the Town during the detail design process on implementation and phasing of the MUT, considering that Torbram Road does not currently have active transportation facilities on either side, but is scheduled for widening to 4-lanes with future active transportation facilities in the future.

Excerpts of the Town's Active Transportation Network Recommendations Map as well as the MUT cross sections are highlighted in **Appendix S**.

The proposed Active Transportation Plan for the Subject Lands is illustrated in **Figure 20**.



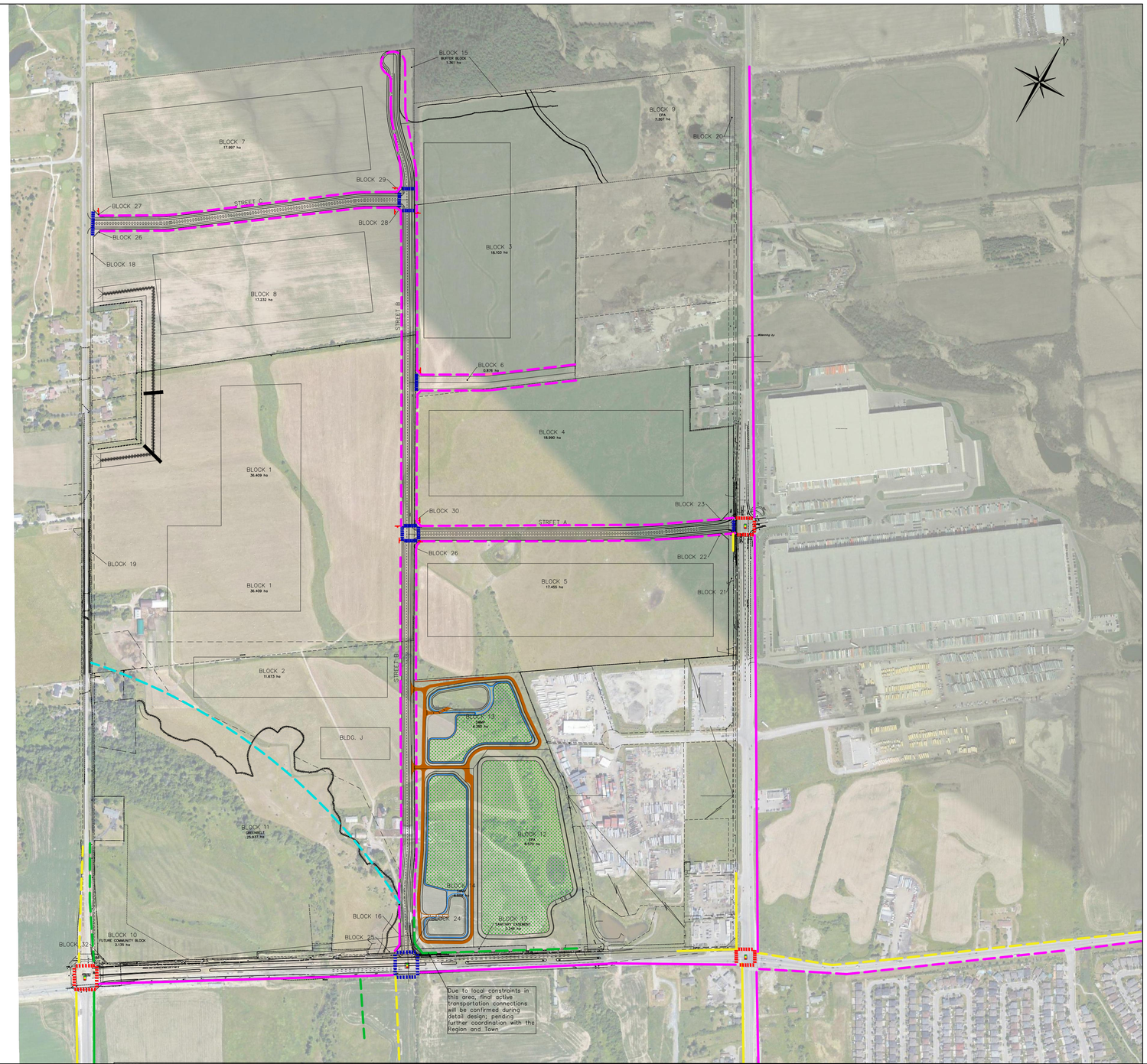
TYPICAL INTERNAL COLLECTOR ROADWAY CROSS-SECTION

LEGEND

	Property Line
	Existing 2.0m Multi–Use Pathway
	Existing 3.0m Multi–Use Pathway
	Future Proposed Pedestrian and Cyclist Crosswalk
	Existing Pedestrian and Cyclist Crosswalk
	Potential Maitenance Road for SWM Ponds/off Road Trail
	Future 3.0m Multi–Use Pathway
	Future 2.0m Multi–Use Pathway
	Existing Traffic Signals
	Proposed Traffic Signals
	Proposed Stop Sign
	Proposed Internal Collector Roadway
	Existing 1.5m Sidewalk
	Proposed 1.5m Sidewalk
	Future Multi–Use Trail

NOTES:

1. This drawing is the exclusive property of C.F Crozier & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.
2. Please be advised, the active transportation features beyond the subjects lands illustrated have been prepared based on public information available at the time of the drawing and is to be used for discussion and illustration purposes only.
3. This figure is not to be scaled.
4. It should be noted that the detail design of the Future Multi–Use Trail would be completed at a later stage, we have highlighted the potential location for it. Furthermore, since Torbram Road does not currently have Active Transportation facilities, it may also make sense for the trail to be constructed when Torbram Road's scheduled widening is undergone.



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PROJECT
TULLAMORE LANDS
TOWN OF CALEDON

Drawing
ACTIVE TRANSPORTATION PLAN

CROZIER CONSULTING ENGINEERS
211 YONGE STREET
SUITE 600
TORONTO, ON, M5B 1M4
416-477-3392 T
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	I.A	Check By	T.D.S.
Date	2024/04/16	Check By	M.L.
Project	2022-5842		
Scale	N.T.S.	Drawing	FIG 20

9.1.1 Active Transportation Future Considerations

Several initiatives can be implemented at the site to promote active transportation within the proposed development area.

Specifically, for pedestrians, weather protection may also be provided at high-pedestrian volume areas such as main intersections, building entrances, transit stops and other major locations within the site. Street furniture such as benches and facilities may also be provided for refuge and creating distinct pedestrian zones, though the positioning of these facilities should not impede accessibility. The materials, colors, and styles of these fixtures should ideally be complementary to the architectural style of the proposed development and overall community.

For cyclists, secure bicycle parking facilities may be considered for employees. Additionally, the addition of showering, changing and clothing storage facilities on-site would ease the use of cycle commuting for employees.

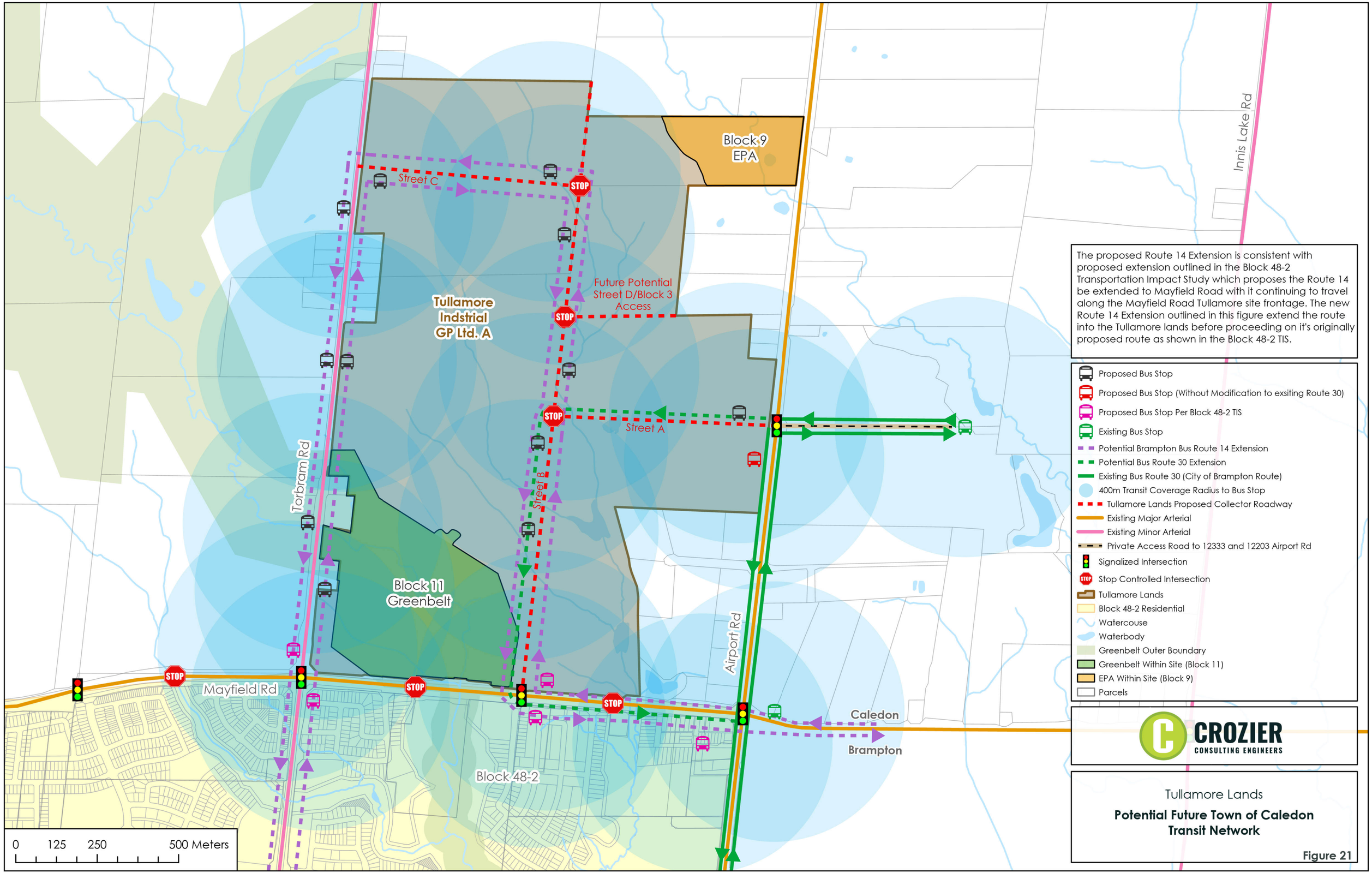
The Town of Caledon currently does not have minimum bicycle paring requirements. However, the minimum bike parking facilities for industrial use per the Peel Region Health Study Framework is 0.06 units per 100 sq. m. for occupants, and 0.1 for 100 sq. m. for visitors. This therefore would require 338 employee and 563 visitor bike spaces at the proposed development from this perspective. We also understand that the Town is currently preparing an Active Transportation Master Plan, and per the PIC#3 bike parking rate of 1 bike parking space per net 200 m^2 of net floor area of office space is being contemplated.

It is recommended that bicycle parking be provided for the subject site to support cycling as primary mode share, particularly for future employees that reside within a reasonable cycling distance from the development (e.g., within Block 48-1 and Block 48-2). However, final cycling supply requirements should be discussed with the Town as individual building Site Plans advance in lieu of Zoning By-law requirements from the Town.

9.2 Future Transit Considerations

The implementation of transit TDM measures are to promote public transit as an accessible and desirable mode of transit to the proposed site. While limited transit is available to the subject site along Mayfield Road and Airport Road, the development is expected to accommodate a number of employees in the future that would benefit from increased transit service availability.

The internal north-south and east-west collector roadways propose a 26.0m ROW as discussed in **Section 8.2**. This cross section can accommodate future transit vehicles along the internal roadways, and the ROW is adequate to accommodate future transit stops/bus pads internal to the site once transit routes are further established. The site's orientation offers opportunities for a bus loop route internal to the site for existing transit routes (e.g., Brampton Transit Route 30 and Brampton Transit Route 14), as is similarly existing with the industrial development east of Airport Road (12333 Airport Road). It is recommended that the existing Route 30 and the future extended Route 14 be extended into the subject lands to facilitate the development. **Figure 21** illustrates a potential transit route to service the site, this route would serve as extension to the existing Brampton Transit Route 30. It is noted that the Town of Caledon prefers bus stops located within 300-400m walking distance of the principal entrances to each building. Given the proposed 26m ROW and cross section discussed in **Section 8.2**, ample opportunities to ensure bus stops are located close to the intersections and building entrances are available. As Street "B" is the main north-south spinal road servicing the developments, it should be adequately equipped to provide bus stops spaced less than 400m away with mid-block bus stops provided as necessary. **Figure 21** illustrates the Site's transit coverage within 400m of each bus stop location.



The proposed Route 14 Extension is consistent with proposed extension outlined in the Block 48-2 Transportation Impact Study which proposes the Route 14 be extended to Mayfield Road with it continuing to travel along the Mayfield Road Tullamore site frontage. The new Route 14 Extension outlined in this figure extend the route into the Tullamore lands before proceeding on it's originally proposed route as shown in the Block 48-2 TIS.

- Proposed Bus Stop
- Proposed Bus Stop (Without Modification to exsiting Route 30)
- Proposed Bus Stop Per Block 48-2 TIS
- Existing Bus Stop
- Potential Brampton Bus Route 14 Extension
- Potential Bus Route 30 Extension
- Existing Bus Route 30 (City of Brampton Route)
- 400m Transit Coverage Radius to Bus Stop
- Tullamore Lands Proposed Collector Roadway
- Existing Major Arterial
- Existing Minor Arterial
- Private Access Road to 12333 and 12203 Airport Rd
- Signalized Intersection
- Stop Controlled Intersection
- Tullamore Lands
- Block 48-2 Residential
- Watercouse
- Waterbody
- Greenbelt Outer Boundary
- Greenbelt Within Site (Block 11)
- EPA Within Site (Block 9)
- Parcels

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Tullamore Lands

Potential Future Town of Caledon Transit Network

Figure 21

Based on discussions with Brampton Transit and the Town of Caledon there are multiple opportunities to service the Subject Lands. It should be noted that further discussions with the transit agencies are recommended to identify and plan for future transit routes within the site. Two potential routes servicing the Subject Lands via a modification of Brampton Transit Route 30 were discussed. Moreover, another potential route to service the west and north portions of the subject lands are via a modification of Brampton Transit Route 14, which was proposed to be extended once Block 48-2 was implemented. Both routes would utilise Steet "B" as the main north-south transit spine of the Subject Lands:

Route 30 Extension

- Option 1: In the interim condition a bus stop should be provided at the southwest corner of the intersection of Airport Road at Street "B". The current Brampton Transit route would be maintained as it services the properties at 12333 Airport Road and can service the Subject Lands as it turns left onto Airport Road before continuing south. Since, Buildings D and H are planned to be built out first among the buildings proposed for the Subject Lands, the bus stop in the southwest corner would be an immediate and implementable transit solution as it would not require any modification to the existing Route 30 and would be within 400m of entrances to Buildings D and H as required by the Town of Caledon. This bus stop is depicted in **Figure 21** outlined with a red circle, and is also detailed in functional design per **Appendix T**.

- Option 2: As shown in **Figure 21**, a route extension/modification to Route 30 which forms a loop in the southern half has been discussed as a preferred route to service the lands as they are built out further. It is noted that the Buildings C, F, and E in the northern portion of the subject lands are planned as the last phase of the buildings within the subject development and this route would not adequately service those buildings. The Route is illustrated in the figure so that it continues the regular route before turning left onto Street A, turning left onto Street B, and turning left onto Mayfield Road before turning right onto Airport Road and continuing south. It is noted that this loop can be flipped so that the bus would turn left onto Mayfield Road with proceeding right turns through the Subject Lands before returning to Airport Road to continue south. This would reduce delays as right-turns are generally preferred to left-turns, but the orientation of the route is subject to review by operational planning team at Brampton Transit.

Route 14 Extension

- As shown in **Figure 21**, there is further potential for Brampton Transit's Route 14 to be extended on Torbram Road past Mayfield Road to the Subject Development's Street C. It is noted that this Route 14 Extension to Mayfield Road is already proposed in the Block 48-2 with it continuing to travel along the Mayfield Road, and subject site's frontage. The new potential Route 14 Extension outlined in this **Figure 21** extends the route into the Tullamore Lands via Torbram Road before looping back to Mayfield Road via Street B on its originally proposed route as shown in the Block 48-2 TIS. The route proposed in the Block 48-2 TIS is included in **Appendix I**.

Implementation of transit service is expected to contribute to reduced automobile mode share, which was not accounted for in the preceding analysis as implementation of transit within the site has not been confirmed at this time.

Additionally, further consultation can be undertaken with Brampton Transit to provide additional facilities at the transit stops servicing the site, including weather-protected shelters and benches. We recommend further discussions with the Town and Brampton Transit to collaborate on route design,

and timing, once tenants and operational details such as shift change times are known following future building occupancy.

9.3 Electric Vehicle Parking and Carpooling

The focus of parking and carpooling related TDM measures would be to reduce SOV commuting patterns and avoid parking surplus.

- Electric Vehicle (EV) Infrastructure
    - There is an opportunity to include energized outlets capable of providing charging for electric vehicle spaces. These parking spaces are recommended to be priority spaces for electric vehicles. This will be evaluated during the individual building Site Plan Approval process.
- Carpooling Opportunities
    - As the site is not located with access to significant transit opportunities, the provision of carpool opportunities is recommended to provide reasonable TDM opportunities for employees to reduce SOV trips. The provision of dedicated or priority carpool parking spots may also be implemented to promote carpooling. These carpooling spots should offer benefits such as being located in favorable locations (close to main entrances or buildings). As referenced in the following section, resources to access carpooling may be facilitated through resources such as Smart Commute or through the employer(s) at the proposed site.

9.4 Smart Commute

Smart Commute is a not-for-profit Transportation Management Association (TMA) committed to acting on climate change, mitigating traffic congestion, and improving air quality. The proposed industrial development is situated in the Smart Commute Brampton-Caledon division. Smart Commute collaborates with various organizations and employers across 13 regions of the Greater Toronto and Hamilton Area (GTHA) to provide resources and tools to promote alternative transportation modes. Smart Commute offers the following services:

- Evaluate workplaces to determine willingness of employees to change commute patterns and work with places of employment to assess existing active transportation facilities and TDM measures and working on areas of improvement.
- Online tools providing easy access to carpooling opportunities, carpooling locations, and providing information on the benefits of carpooling.
- Online tools to help employees set walking and cycling goals, and access resources such as cycling maps and handbooks.
- Promote flexible work arrangements through adjusting shift times and providing remote work options via Telework, overall reducing gridlock and boosting productivity in situations such as road closures.
- Support transit pass programs and accessibility, as well as providing education on transit options.

Smart Commute Peel will work with various organizations and employers in the region to reduce SOV trips and promote active transportation. As such, collaboration between Smart Commute and the

place(s) of employment situated at the proposed development poses the opportunity to promote alternative modes of transit and reduce automobile dependency. The new Smart Commute trip planning tool is currently undergoing upgrades and currently only operational for Durham Region, City of Hamilton and York Region; however, upon completion of the upgrades the tool will allow future employees to efficiently plan carpool routes and provide alternative commute options.

9.5 Operational Planning

It is recommended that the proponents of the buildings implement off-peak shift changes to reduce automobile traffic demand during the regular weekday a.m. and p.m. peak hours.

9.6 Education/Resources and Wayfinding

Other educational materials and resources may be provided at the site, including way planning and travel planning resources.

Including maps on the employer's website of nearby transit access points will encourage visitors to use public transit to access the site. Similarly, marketing of employment can be highlighted with the TDM measures implemented at the site, such as access to transit, safe cycling and pedestrian facilities, carpooling facilities, and other incentives offered with employment.

Furthermore, these initiatives can be supplemented on site using effective wayfinding signage on site, clearly illustrating directions to walking/cycling pathways, and the directions to transit stop(s) near the site.

10.0 Functional Design Considerations & Truck Turning

10.1 External Intersection Improvements – 60% Functional Design

As requested by the Region, functional designs of the external intersection improvements (Street A at Airport Road and Street B at Mayfield Road) were prepared and included for review. The functional design parameters were based on the following standards and guidelines:

- Transportation Association of Canada's Geometric Design Guide for Canadian Roads (TAC April 2020)
- Ontario Ministry of Transportation – Ontario Provincial Standard Specifications/Drawings (OPSS/OPSD)
- Public Works Design, Specifications & Procedures Manual for the Region Peel (February 2010)
- Ontario Traffic Manuals (OTM): Book 5 (Regulatory Signs) and Book 11 (Pavement, Hazard, and Delineation Markings)
- Town of Caledon Engineering Standards
- Region of Peel Engineering Standards

The functional design was also based on initial discussions with Region staff while considering constraints noted along Mayfield Road as detailed in **Appendix T**. Refer to **Appendix T** for the Design Brief outlining the 60% detailed design of the external intersections with Mayfield Road and Airport Road. The detailed design drawings for both intersections are to be prepared under separate submissions for Town and Region review, only the Design Brief has been included in **Appendix T** for convenience.

10.1.1 60% Detailed Design Truck Turning Templates

As part of the design process for the external intersections, we considered the potential for Long Combination Vehicles (LCVs) being utilized by future tenants of the business park. We understand that

the Ontario Ministry of Transport (MTO) will ultimately approve LCV routes and should a future tenant require LCV as part of their operations separate permits will be required by MTO. To consider this possibility, logical LCV turning movements were reviewed and formed the basis of the swept path analysis for the external intersection improvements. It was assumed that along the Mayfield Road corridor westbound right (Bolton, Hwy 50 and Hwy 427) turns may reasonably occur, and vice versa when leaving the industrial park. Accordingly, the functional design is illustrated to accommodate such maneuvers. Similarly for the Street A at Airport Road intersection, it was assumed that LCVs would make a northbound left maneuver to enter and eastbound right to leave the industrial park, as the most reasonable route. Should no LCVs be required within the industrial park, the current functional design would be considered conservative.

The truck turning templates were prepared to evaluate the functionality for the following design movements and design vehicles:

- Airport Road at Street A: LCV A-Train for EBR and NBL, WB-20 for other movements
- Mayfield Road at Street B: LCV A-Train for WBR and SBL, WB-20 for other movements

The external truck turning templates can be found in **Appendix T.**

10.1.2 60% Detailed Design Pavement Marking & Signage Plan

At the request of the Town, a Pavement Marking and Signage Plan has been prepared for the to be constructed intersections of Airport Road at Street A and Mayfield Road at Street B. The Pavement Marking and Signage plans can be found in **Appendix T.**

10.2 Preliminary Internal Truck Turning Templates

As requested by the Town, truck turning templates were also prepared for the internal intersections of Street "A" at Street "B", and Street "B" at Street "C". These turning templates were prepared using Wb-20 design vehicles for left and right turns at the internal intersections. It should be noted that the swept paths are illustrated on the typical cross section without curb and lane modifications. Accordingly, the truck wheels and overhand in some instances are illustrated to traverse the curb; however, it should be noted that the swept paths were prepared to illustrate that the 26m ROW is adequate and can support the turning requirements associated with the design vehicle (Wb-20).

The detail design of the internal intersections will be completed in a subsequent submission process coinciding with the detail design of the internal roadways. At this stage, the curb radii and intersection details will be refined to satisfy required design criteria. Regardless, no issues are expected as a result of the preliminary swept paths. LCV turning templates were not reviewed for internal roadway intersections as it is assumed that approved routes will minimize turns and associated impacts and would primarily travel northbound/southbound through at the Street A at Street B intersection or eastbound/westbound through as the most direct routes before turning directly into the relevant block. Should a future tenant require LCV route permit for deliveries, they will be required to demonstrate that the intersections through which the trucks traverse can safely accommodate swept paths and recommend improvements if warranted through the permit process with MTO in consultation with the Town and Region. However, at this time Wb-20 maneuvers are considered adequate as the typical design vehicle for the business park.

The internal truck turning templates can be found in **Appendix T.**

11.0 Conclusion and Recommendations

The conclusions of our analysis are summarized below:

- The intersection of Airport Road with Mayfield Road is currently operating at LOS "C" during the weekday a.m. and p.m. peak hours. The intersection's maximum control delay is 24.0 seconds and 31.3 seconds in the weekday a.m. and p.m. peak hours respectively.

- The remaining signalized intersections are operating at a LOS "C" or better during the peak hours.

- The unsignalized intersections of Airport Road at Perdue Court/Davis Lane is currently operating at LOS "F". Based on existing volumes, signalization is warranted at this time based on current volumes, it should be considered due to increased traffic expected on Airport Road.

- A total of 4 background developments have been reviewed and added to the boundary road network. In addition, growth rates were also applied to the base traffic volumes to forecast 2026, 2031 and 2036 future background conditions.

- During the peak hours in the future background traffic conditions for the ultimate 2036 horizon year, all intersections will continue to operate at LOS "D" or better with the exception of Airport Road at Davis Lane/ Perdue Crescent.

- The unsignalized intersection of Airport Road and Perdue Court/Davis Lane is expected to continue operating at LOS "F". However, as previously mentioned to maintain acceptable traffic operations, signalization should be considered.

11.1 Future Background Recommendations

The following capacity improvements are recommended to accommodate expected future background growth total volumes in the ultimate 2036 horizon year:

- **Mayfield Road at Torbram Road (Signalized Intersection)**

    - Westbound left turn lane with 195 m storage (90 m increase from Existing).

    - Northbound left turn lane with 185 m storage (105m increase from Existing).

    - Actuated coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length increases to Mayfield Road at Torbram Road to 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively.

- **Mayfield Road at Block 48-2 Street "C" (Signalized Access)**

    - Eastbound right turn lane with 75 m storage.

    - Northbound left turn lane with 60 m storage.

    - Actuated coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length of 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively, for Mayfield Road at Street "B"/Block 48-2 Street "C".

- **Mayfield Road at Airport Road (Signalized Intersection)**
    - Eastbound left turn lane with 310 storage (110 m increase from Existing).
    - Eastbound right turn lane with 80 m storage (20 m increase from Existing).
    - Northbound left turn lane with 185 m storage (90 m increase from Existing). This can be accommodated within the concrete median.
    - Add westbound left protected permissive phase in signal timing plan.
- **Airport Road at Davis Lane/ Perdue Crescent (Minor Stop-Controlled Intersection)**
    - Monitor traffic volumes and implement signalization to address minor street delays.
    - Westbound left turn lane with 40 m storage (10 m increase from Existing). Note the existing pavement width can accommodate this via pavement markings.

11.2 Site Generated Traffic

- The development is expected to generate approximately 738 and 758 total two-way passenger car trips during the weekday a.m. and p.m. peak hours, respectively, and approximately 185 and 190 total two-way heavy truck trips during the weekday a.m. and p.m. peak hours, respectively.
- In the 2036 Future Total horizon, the signalized intersection of Airport Road and Mayfield Road is expected to operate at a level of service (LOS) "D" during the weekday a.m. and p.m. peak hours. Compared to the future background conditions, site generated traffic is expected to increase the control delay by 5.6 s and 6.0 s during the weekday a.m. and p.m. peak periods, respectively. From an overall perspective, site-generated traffic is not expected to materially impact the main intersection of Mayfield Road and Airport Road. The maximum volume-to-capacity ratios for individual movements are 0.98 (EBL) and 1.01 (NBL) in the weekday a.m. and p.m. peak hours, respectively. These ratios indicate that the intersection is expected to operate at capacity during the weekday a.m. and p.m. peak hours.
- The proposed signalized site access to Airport Road is expected to operate at LOS "A" and "B" in the weekday a.m. and p.m. peak hours, respectively.
- The proposed signalized site access to Mayfield Road is expected to operate at LOS "D" and "B" in the weekday a.m. and p.m. peak hours, respectively.
- The remaining proposed unsignalized site accesses are expected to operate at LOS "B" or better the weekday a.m. and p.m. peak hours. The proposed development can be supported from a traffic operations perspective with the recommended improvements as the site-generated traffic is not expected have a material effect on the operations of the existing roadway network. The internal roadways can facilitate future transit routes, and coordination with transit agencies are recommended to plan and protect for the implementation of future transit services internal to the site.
- Furthermore, the sensitivity analysis indicates that the widening of Torbram Road is not required to support full buildout of the development lands. Specifically, the full buildout of the lands can be supported prior to the widening of Torbram Road, with the recommendations noted in **Section 11.3** for the Airport Road and Torbram Road intersections.

- Based on an overall review, the parking and loading supply proposed at the site will be in surplus of the applicable Town and MZO Zoning By-law requirements. Furthermore, the loading and parking supplies provided at each building will be reviewed in greater detail as part of their individual Site Plan Applications.

- A number of TDM opportunities including transit implementation, provision of priority carpool parking, Smart Commute integration and promotion, and bicycle parking should be explored and further refined through subsequent submissions.

- The Town of Caledon currently does not have minimum bicycle parking requirements. However, the minimum bike parking facilities for industrial use per the Peel Region Health Study Framework is 0.06 units per 100 sq. m. for occupants, and 0.1 for 100 sq. m. for visitors. This therefore would require 338 employee and 563 visitor bike spaces at the proposed development from this perspective. We also understand that the Town is currently preparing an Active Transportation Master Plan, and per the PIC#3 bike parking rate of 1 bike parking space per net 200 m^2 of net floor area of office space is being contemplated. It is recommended that bicycle parking be provided for the subject site to support cycling as primary mode share, particularly for future employees that reside within a reasonable cycling distance from the development (e.g., within Block 48-1 and Block 48-2). However, final cycling supply requirements should be discussed with the Town as the Town as the individual building Site Plans advance in lieu of current Zoning By-law requirements from the Town.

11.3 Future Total Recommendations

As a result of the above operations and site generated traffic several recommended improvements have been made to support the proposed development. It is noted that these improvements are in addition to the background improvements identified and recommended per the Airport Road and Mayfield Road EAs, the Region's Transportation Master Plan and the approved Block 48-2 TIS. The ultimate auxiliary lane storage lengths recommended below are based on the sensitivity analysis prior to completion of Torbram Road widening.

The following additional capacity improvements are recommended to accommodate expected future total volumes in the ultimate 2036 horizon year:

- **Airport Road at Street "A"/ 12333 Airport Road (Signalized Access)**
    - Construct a northbound left turn lane with at least 55m storage.
    - Construct an eastbound left turn lane with at least 55m of storage (TWLTL available)
    - Construct a westbound left turn lane with at least 50m of storage (pavement width currently available and can be implemented via pavement markings)
    - Construct a southbound right turn lane with at least 25 m of storage. (min. required for Wb-20 trucks).
- **Mayfield Road at Street "B" (Signalized Access)**
    - Construct an eastbound left turn lane with at least 100 m of storage.
    - Construct an eastbound right turn lane with at least 70 m of storage.
    - Construct a northbound left turn lane with at least 60 m of storage.

- Construct a westbound right turn lane with at least 45 m of storage (to accommodate potential LCVs).

- **Torbram Road and Street "C" (Unsignalized Access)**

  - Construct a westbound left turn lane with minimum 20m of storage.

- **Mayfield Road at Torbram Road (Signalized Intersection)**

  - In order to accommodate the 95th percentile eastbound left turn queues, 190 m storage (90 m increase from Future Background) would be required. However, a review of the simulation indicates that the increase in queuing is primarily due to eastbound through traffic queues extending past the taper such that vehicles intending to access the auxiliary turn lane would be required to wait until the through queues cleared sufficiently to access the turn lane. Moreover, the increase from 37 to 116 vehicles per hour as a result of the development traffic in the critical a.m. peak hour would not by itself trigger 90 m of additional storage under normal circumstances.

  - Similarly, in order to accommodate 95th percentile eastbound right turn lane queues, an auxiliary lane with 270 m storage (190 m increase from Future Background) would be required. However, based on a review of the simulation the increase in queuing was similarly found to be due to through traffic queues extending past the beginning of the eastbound right-turn lane. Moreover, the proposed development contributes no traffic volumes to this movement.

  - On this basis, it is recommended that traffic along the Mayfield corridor be monitored as surrounding growth advances to avoid overbuilding infrastructure, since a relatively high growth rate of 5% until 2031 was adopted as requested by the Region.

- **Mayfield Road at Airport Road (Signalized Intersection)**

  - Eastbound right turn lane with 80m storage (0m increase from Future Background).

  - Westbound left turn lane with 295 m storage (can be accommodated as part of 2026-2031 road widening).

  - Westbound right turn lane with 170 m storage (can be accommodated as part of 2026-2031 road widening).

  - Northbound left turn lane with 195 m storage (10 m increase from Future Background).

  - Southbound left turn lane with 105 m storage (can be accommodated as part of 2026-2031 road widening)

  - Implement a protected WBL turn phase in both peak hours and optimize the signal timing. This includes reducing the pedestrian walk times to 3 seconds, the pedestrian "do not walk" times remain unchanged from existing. It is recommended that traffic along the Mayfield corridor be monitored over time to confirm traffic growth and signal timing coordination.

- **Airport Road at Davis Lane/ Perdue Crescent (Minor Stop-Controlled Intersection)**
    - Consider signalization of the intersection to reduce minor street delays as recommended for future background conditions. It is noted that the long delays are generally associated with background traffic volumes and not as a result of the site traffic.
    - Increase Westbound left turn lane to 45 m storage (5 m increase from Future Background). Note the existing pavement width can accommodate this via pavement markings.
- **Internal Road Network**
    - 3.0m Multiuse paths are recommended and proposed on both sides of all internal collector roadways.
    - Thought not warranted from a traffic control perspective, All-Way Stop Controls are recommended to provide safe pedestrian crossings at the internal collector road intersections of:
        - Street "B" and Street "A"
        - Street "B" and Street "C"
    - In the future when Street "D" is implemented between Airport Road and Street D, an all-way stop control is recommended to be implemented at the Street "B" and Future Potential Street "D" intersection to provide safe pedestrian crossing opportunities.
    - Subject Development will adopt an urban cross section for all three internal collector roadways, Street "A", Street "B", and Street "C", as well as the future potential Street "D" once implemented. This cross section proposes two 3.5m curb lanes, a 5.0m two-way left turn lane, and 3.0m multiuse pathways (MUPs) on both sides of the roadway. The MUPs will also be separated from the roadway by 3.0m boulevards. This cross section supports all modes of transportation.
- **Mayfield Road Corridor**
    - Implement coordination of the Mayfield Road corridor from Torbram Road to Airport Road including cycle length increases throughout the corridor to 120 seconds and 135 seconds in the a.m. and p.m. peak hours, respectively to match the Airport Road and Mayfield Road intersection. Recommended for Future Background conditions as well.
    - We also note that the speed limit along Mayfield Road within the study area for westbound traffic is 60km/h from Airport Road to approximately 440m west of Airport Road, after which the speed limit transitions to 80km/h speed limit. For eastbound traffic along Mayfield Road, the speed limit is 80km/h between Torbram Road to approximately 450m west of Airport Road. As the subject lands in addition to the Block 48-2 residential community develop, the mobility environment along Mayfield Road is expected to change due to increased pedestrian and cycling activity, as well as new transit stops proposed along Mayfield Road. Accordingly, we recommend the Region consider reductions in posted speed limit to provide a consistent 60 km/h across the site's frontage in the future as the environment is transformed.

- **Torbram Road Corridor**

    - It is understood that the Town has additional considerations for the ultimate buildout of Torbram Road as either a two-lane or four-lane urban cross section. The Town's Official Plan indicates Torbram will be a Town Arterial Road with a 30 m ROW, as such, this study has assumed a two-lane urban cross section to ensure a conservative assessment until additional details are available. The details of the ultimate ROW considerations, and scheduling of this roadway will be subject to the completion of the ongoing Multimodal Transportation Master Plan currently being undertaken by the Town. Relevant excerpts from the Town's Official Plan can be found in **Appendix N.**

- **Active Transportation**

    - The Subject Development will adopt a cross section with Multi-Use Pathways (MUPs) on both sides of the road for all three internal collector roadways, Street "A", Street "B", Street "C", and the Future Street "D". This cross section proposes two 3.5m curb lanes, a 5.0m two-way left turn lane, and 3.0m multiuse pathways (MUPs) on both sides of the roadway. The MUPs will also be separated from the roadway by 3.0m boulevards. This cross section supports all modes of transportation and provides added separation between active transportation and vehicular traffic, which is of increased importance to a development such as the subject proposal that anticipates frequent heavy truck traffic.

    - It is noted that a multiuse trail (MUT) is also proposed through the Greenbelt block, south of Block 2, which will provide an active transportation connection between Torbram Road and Street B.

- **Transit Routes**

    - The site's orientation offers opportunities for a bus loop route internal to the site for existing transit routes (e.g., Brampton Transit Route 30), as is similarly existing with the industrial development east of Airport Road (12333 Airport Road). Further discussions with the transit agencies are recommended to identify and plan for future transit routes within the site.

    - It is also recommended that bus stops adjacent to the internal intersections Street "B" at Street "A" and Street "B" at Street "C" be protected for, to permit installation when transit routes are finalized.

    - In the interim condition a bus stop is recommended southwest corner of the intersection of Airport Road at Street "B" to provide connectivity to the existing Brampton Transit Route 30 without modification the route required as the current route services the properties at 12333 Airport Road and can service the Subject Lands as it turns left onto Airport Road before continuing south.

    - We recommend further coordination with Brampton Transit and the Town to explore opportunities to further extend Route 14 (Torbram Road) to provide service within the lands. The existing Route 14 is already proposed to extend to Mayfield Road once Block 48-2 is built out; and we understand that bus route extensions may require transit supportive development to occur prior to the implementation of new or extended routes. Nonetheless, the 26 m ROW proposed for all internal collectors is adequate to support bus stop facilities within the subject development once future routes are confirmed.

- Any proposed bus stops should be located within 400 m walking distance of principal entrances to each building. As Street "B" is the main north-south spinal road servicing the developments, it should be adequately equipped to provide bus stops within 400 m of all building entrances with mid-block bus stops provided as necessary.

- **Proposed and Recommended Mobility Network**

  - Per discussion with the Town of Caledon, a network of continuous collector roadways is preferred as the Town looks to establish a collector road network. A potential collector roadway network beyond the subject lands is capable of meeting the objectives set out by the Town.

  - It is re-iterated that any visualization of a potential road network beyond the development proposal represents a potential road network that could be established as part of future block plan, secondary plan or LOG work and is not intended to represent a specific proposal of collector road alignments through adjacent lands. A future secondary plan or LOG work would be required to establish a wider transportation network.

  - The development will adopt a 26 m ROW urban cross section for the internal collector roadways including a 3.0 m multi-use path on both sides of the roadway. This cross-section can adequately support future transit along the internal roadways and facilitate safe and connected active transportation network in the area.

- **Transportation Demand Management Strategies**

  - A number of TDM Strategies have been recommended for consideration at the overall development lands and future individual building Site Plan Application level including:

    - Protect for future transit routes along the internal collector network and potential bus stop locations at the internal collector intersections.

  - Encourage bicycle parking during the future development of individual building Site Plans.

  - Encourage off-peak shift changes to reduce automobile traffic demand during the roadway peak hours.

  - Encourage implementation of EV charging during the individual building Site Plan development process.

  - Encourage future tenants to join Smart Commute.

  - Encourage implementation of priority carpool spaces near building entrances etc.

  - Provide direct pedestrian connections from bus stops to adjacent blocks where possible. Provide direct pedestrian connections from the collector road sidewalks where possible.

We trust that this review satisfies any transportation concerns associated with the Site Plan for this development. Please feel free to contact any of the undersigned for any further information required.

Respectfully submitted,

C.F. CROZIER & ASSOCIATES INC.

Theshantha De Silva, EIT
Engineering Intern, Transportation

C.F. CROZIER & ASSOCIATES INC.

Michael A. Linton, MASc., P. Eng.
Associate, Transportation

TDS/ML

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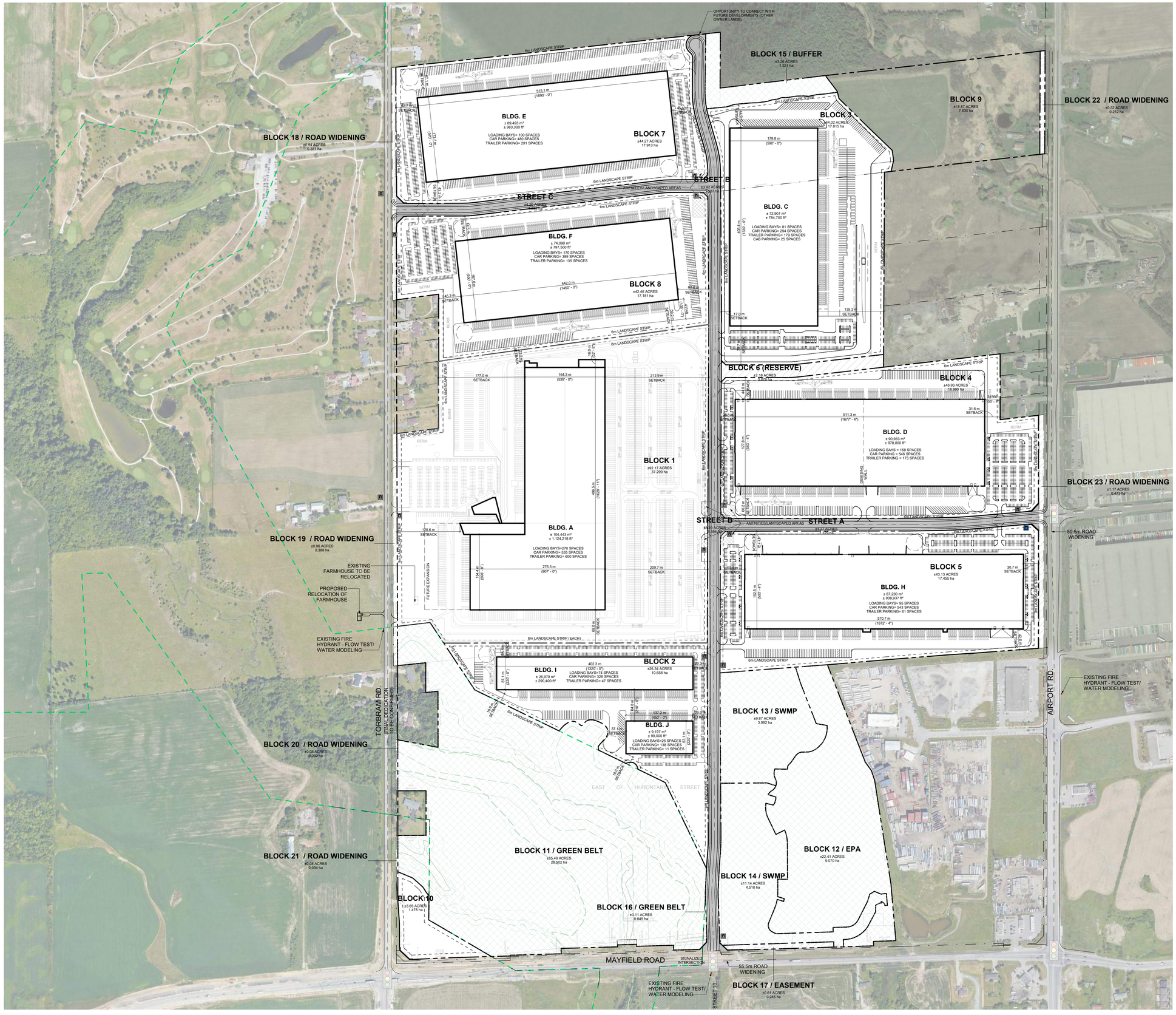
Appendix A

Town and Region Comment Response Matrix

General Advisory Comments - Town of Caledon, Engineering, Public Works and Transportation Department, Transportation Engineering		
#	**Comment**	**Response:**
26	Regarding the response provided to the previous comment # 29: Please note that the table stated to be updated with the background development has not been updated.	Noted and revised in the TIS Update, Section 3.2. Table 6
27	Regarding the response provided to the previous comment #30: Please note the figures 6A, 6B, and 6C referenced were not included in the report.	Noted and revised in the TIS Update. Figures 6a, 6b, 6c, and 6d are Included in "Appendix I – Background Development Information"
28	A Multi-Use Trail to be constructed through the Greenbelt Block, from Street B to Torbram Rd. The draft Active Transportation Master Plan recommends this as a broader connection from Brampton through Mayfield West that is to be construction through the development of SABE lands.	Noted. The proposed MUT is illustrated in the Active Transportation Plan (Figure 20) contained within the TIS Update and the trail design will be coordinated during the detail design stage. Trail Cross Sections are highlighted in Appendix S and discussed in Section 9.1.
29	Appendix F: Functional Design Considerations & Truck Turning Templates. Due to the significant Curb reduction proposed at internal intersections, semi-mountable curb & gutter should be considered, similar to the treatment proposed at Mayfield Road and Street B. Please be aware Town Transportation Engineering could have further comments at detailed Design Stage.	Noted. Semi-mountable curbs and other design treatments will be proposed in coordination with the Town during the detailed design stage of the internal intersections. The detailed designs will be completed under separate cover with additional truck maneuvering assessments. However the preliminary Truck Manoeuvring analysis has been conducted and included per Appendix T of the TIS Update for reference.
30	Applicant will be requested to submit a Pavement Marking and Signage Plan at detailed design.	Acknowledged, a pavement marking and signage plan (PMSP) for the internal road network will be submitted with the detailed design package. PMSP drawings for the external intersections have been included in Appendix T of the TIS Update.
Comments to be Addressed Prior to Draft Plan Approval - Town of Caledon, Engineering, Public Works and Transportation Department, Transportation Engineering		
#	**Comment**	**Response:**
56	Ongoing comment: Section 2.4; Please ensure that the latest turning movement counts, dated 2022, are included in the Appendices. Currently, the data in Table 2 and Figure 4 does not align with the information provided in the appendix. It is important to include the updated data in the appendices of the revised Transportation Impact Study (TIS), especially considering the concerns raised by residents during the public information session on June 13th, 2023, held during the planning and development committee public meeting of the council.	Noted and has been reflected in TIS Update. Appendix E contains 2022 Turning Movement Counts.
57	Ongoing Comment: Section 2.6; Please note some existing Sim Traffic Reports report 95th percentile queues exceeding the available storage length while this is not reflected in the Existing Levels of Service Reported in Table 3. Please ensure conclusions and recommendations are updated as required.	Noted and will be reflected in the TIS Update. The TIS Update reflects all 95th percentile queues exceeding available storage in Section 2.6, Table 5. The conclusions remain unchanged.
58	Ongoing Comment: Section 3.6; report states that for the intersection of Mayfield Road at Torbram Road is projected to have a maximum v/c ratio of 1.05 for the westbound left turn movement, it also states that there is reserve capacity to accommodate future growth. If there are movements operating above the capacity (v/c >1. 0), the intersection does not have reserve capacity. Please correct the verbiage to describe the intersection operations.	Noted. Mayfield Road and Torbram Road operation descriptions in Section 3.6 have been updated to clarify the overall intersection operations versus specific individual movements operating near and slightly above capacity for future background conditions.
59	Figure 12 "Trip Assignment Car"; Spot checks indicate significant deviations (150 vehicles per hour) in the assigned inbound trips in the AM peak hour and outbound trips in the PM peak hour. Specifically at the intersection of Airport Road and Mayfield Road. Town Transportation Staff are concerned that this deviation will misinform future studies for proposed Accesses on Streets B and Street A. Applicant to review and resize as required.	Per discussion with Town staff, this has been addressed as the trip assignment figures match the trip generation figures.
60	Appendix H: The posted speed limit on Torbram Road and Street C is 70 km/hr. Left Turn Lane warrants for Torbram Road, and Street C should be updated accordingly.	Noted. Left Turn Warrants have been updated and reflected in updated report in Appendix H. The conclusion of the Left Turn Warrants as detailed in 5.1.4 remain unchanged.

Appendix B

Site Plan



ZONING

A1 ZONE / AGRICULTURAL		
MP RE-ZONED / PRESTIGE INDUSTRIAL	**REQUIRED**	**PROPOSED**
MINIMUM LOT AREA	935 S.M.	REFER TO STATS
MINIMUM LOT FRONTAGE	30 M.	
MINIMUM BUILDING SETBACK		
FRONT YARD (ABUTTING A RESIDENTIAL ZONE)	20 M.	MIN. 45 M.
FRONT YARD (ABUTTING A PROVINCIAL HIGHWAY)	14 M.	MIN. 18 M.
FRONT YARD (ANY OTHER)	9 M.	MIN. 17 M.
REAR YARD (ABUTTING A RESIDENTIAL ZONE)	15 M.	MIN. 30 M.
REAR YARD (ABUTTING A PROVINCIAL HIGHWAY)	14 M.	MIN. 30 M.
REAR YARD (ANY OTHER)	7.5 M.	MIN. 20 M.
INT. YARD (ABUTTING A RESIDENTIAL ZONE)	15 M.	N/A
INT. YARD (ANY OTHER)	3 M. ONE SIDE AND 6 M. OTHER SIDE	MIN. 20 M.
EXT. YARD (ABUTTING A RESIDENTIAL ZONE)	15 M.	N/A
EXT. YARD (ABUTTING A PROVINCIAL HIGHWAY)	14 M.	N/A
EXT. YARD (ANY OTHER)	7.5 M.	MIN. 40 M.
DRIVEWAY SETBACKS (MIN.)		
ABUTTING A RESIDENTIAL ZONE	4.5 M.	MIN. 6 M.
ANY OTHER	1.5 M.	MIN. 6 M.
PARKING SPACE SETBACKS (MIN.)		
FROM ANY FRONT LOT LINE	6 M.	6 M.
FROM ANY OTHER LOT LINE	3 M.	3 M.
MAX. BUILDING HEIGHT	18 M.	TBD

SITE STATS

	REQUIRED	PROVIDED	
BLOCK 1		±92.17 ACRES	±373,000 S.M.
NET FLOOR AREA			29%
BUILDING A AREA		±1,124,218 S.F.	±104,443 S.M.
LOADING SPACE	14 SPACES	270 SPACES	
TRAILER PARKING		600 SPACES	
CAR PARKING	454 SPACES	535 SPACES	
* 1/230 S.M. OF GFA		48/1,000 S.F.	.51/100 S.M.
BLOCK 2		±26.34 ACRES	±106,595 S.M.
NET FLOOR AREA			34%
BUILDING I AREA		±290,400 S.F.	±26,979 S.M.
LOADING SPACE	6 SPACES	74 SPACES	
TRAILER PARKING		47 SPACES	
CAR PARKING	117 SPACES	326 SPACES	
* 1/230 S.M. OF GFA		1.12/1,000 S.F.	1.21/100 S.M.
BUILDING J AREA		±99,000 S.F.	±9,197 S.M.
LOADING SPACE	4 SPACES	26 SPACES	
TRAILER PARKING		11 SPACES	
CAR PARKING	40 SPACES	138 SPACES	
* 1/230 S.M. OF GFA		1.39/1,000 S.F.	1.5/100 S.M.
BLOCK 3		±44.02 ACRES	±178,143 S.M.
NET FLOOR AREA			41%
BUILDING C AREA		±784,700 S.F.	±72,901 S.M.
LOADING SPACE	11 SPACES	81 SPACES	
TRAILER PARKING		179 SPACES	
CAB PARKING		25 SPACES	
CAR PARKING		294 SPACES	
CAR PARKING (TOTAL)	317 SPACES	319 SPACES	
* 1/230 S.M. OF GFA		.41/1,000 S.F.	.44/100 S.M.
BLOCK 4		±46.93 ACRES	±189,920 S.M.
NET FLOOR AREA			48%
BUILDING D AREA		±978,800 S.F.	±90,933 S.M.
LOADING SPACE	12 SPACES	168 SPACES	
TRAILER PARKING		173 SPACES	
CAR PARKING	395 SPACES	546 SPACES	
* 1/230 S.M. OF GFA		.56/1,000 S.F.	.6/100 S.M.
BLOCK 5		±43.13 ACRES	±174,542 S.M.
NET FLOOR AREA			50%
BUILDING H AREA		±938,937 S.F.	±87,230 S.M.
LOADING SPACE	12 SPACES	95 SPACES	
TRAILER PARKING		61 SPACES	
CAR PARKING	379 SPACES	543 SPACES	
* 1/230 S.M. OF GFA		.58/1,000 S.F.	.62/100 S.M.
BLOCK 6 (RESERVE)		±2.16 ACRES	±8,758 S.M.
BLOCK 7		±44.27 ACRES	±179,155 S.M.
NET FLOOR AREA			50%
BUILDING E AREA		±963,300 S.F.	±89,493 S.M.
LOADING SPACE	12 SPACES	100 SPACES	
TRAILER PARKING		291 SPACES	
CAR PARKING	389 SPACES	480 SPACES	
* 1/230 S.M. OF GFA		.5/1,000 S.F.	.54/100 S.M.
BLOCK 8		±42.46 ACRES	±171,830 S.M.
NET FLOOR AREA			43%
BUILDING F AREA		±797,500 S.F.	±74,090 S.M.
LOADING SPACE	11 SPACES	170 SPACES	
TRAILER PARKING		135 SPACES	
CAR PARKING	322 SPACES	389 SPACES	
* 1/230 S.M. OF GFA		.49/1,000 S.F.	.53/100 S.M.
BLOCK 9		±18.87 ACRES	±76,364 S.M.
BLOCK 10		±3.65 ACRES	±14,771 S.M.
BLOCK 11 / GREEN BELT		±65.49 ACRES	±265,030 S.M.
BLOCK 12 / EPA		±22.41 ACRES	±90,690 S.M.
BLOCK 13 / SWMP		±9.87 ACRES	±39,943 S.M.
BLOCK 14 / SWMP		±11.14 ACRES	±45,082 S.M.
BLOCK 15 / BUFFER		±3.26 ACRES	±13,193 S.M.
BLOCK 16 / GREEN BELT		±0.11 ACRES	±445 S.M.
BLOCK 17 / EASEMENT		±0.61 ACRES	±2,469 S.M.
BLOCK 18 TO 23 / ROAD WIDENING		±3.76 ACRES	±15,199 S.M.
STREET A		±4.27 ACRES	±17,280 S.M.
STREET B		±8.29 ACRES	±33,549 S.M.
STREET B - PHASE 2		±3.92 ACRES	±15,864 S.M.
STREET C		±4.20 ACRES	±16,997 S.M.
RESERVES 0.30m		±0.09 ACRES	±350 S.M.
TOTAL SITE AREA (INDUSTRIAL)			
(BL. 1-5 / 7-9)		**±339.32 ACRES**	**±1,373,185 S.M.**
TOTAL BUILDING AREA		**±5,976,855 S.F.**	**±555,268 S.M.**
TOTAL LOADING SPACE		**994 SPACES**	
TOTAL CAR PARKING		**3276 SPACES**	
TOTAL TRAILER PARKING		**1497 SPACES**	
DRIVE AISLE		MIN 6 M.	
SIZE OF PARKING SPACE		2.75 M. X 6.00 M.	
SIZE OF LOADING SPACE (MIN)		3.50 M. X 14.00 M.	

LEGEND:

- PROPOSED BUS STOP LAYBYS.
- PROPOSED BUS STOP LAYBYS WITHOUT MODIFICATION TO EXISTING ROUTE 30
  NOTE: FINAL BUS ROUTE AND BUS STOP LOCATIONS ARE TO BE DETERMINED IN CONSULTATION WITH THE TOWN OF CALEDON AND BRAMPTON TRANSIT
- SIGNALIZED INTERSECTION

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

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#	DATE	DESCRIPTION	BY
75	2024-03-28	ISSUED FOR COORDINATION (A1-131)	RLA
74	2024-02-23	ISSUED FOR COORDINATION (A1-127)	RLA
73	2024-02-14	ISSUED FOR COORDINATION (A1-125)	RLA
66	2023-10-26	ISSUED FOR COORDINATION (A1-113)	RLA
49	2023-03-24	ISSUED FOR COORDINATION (A1-93)	RLA

RICE GROUP

PROJECT

TULLAMORE LANDS

CALEDON, ON

DRAWING

SITE PLAN

PROJECT NO.	20.302SD
PROJECT DATE	2024-02-20
DRAWN BY	HHO
CHECKED BY	JJK
SCALE	As indicated

DRAWING NO. A100

2024-03-28 5:08:06 PM

Appendix C

Town and Region Terms of Reference Correspondence

REGION TERMS OF REFERENCE

Theshantha De Silva

From: Kol, Rani <rani.kol@peelregion.ca>
Sent: Friday, December 2, 2022 2:15 PM
To: Theshantha De Silva
Cc: Michael Linton; Brandon Bradt; Christina Marzo; Razao, Ricardo; Amaral, Patrick; Hashim Ali Hamdani
Subject: Traffic Development Comments - Terms of Reference - Tullamore Industrial Lands Development - TIS Requirements - 21T-21002C

Theshantha,

We support the below proposed Terms of Reference to be incorporated into the updated TIS for the Tullamore Industrial Lands Development. We look forward to reviewing the TIS and providing feedback.

Regards,

Rani Kol
Specialist
Traffic Development & Permits
Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9

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From: Amaral, Patrick <patrick.amaral@peelregion.ca>
Sent: November 21, 2022 11:57 AM
To: Theshantha De Silva <tdesilva@cfcrozier.ca>; Kol, Rani <rani.kol@peelregion.ca>; Hamdani, Hashim <hashimali.hamdani@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>; Marzo, Christina <christina.marzo@peelregion.ca>; Razao, Ricardo <ricardo.razao@peelregion.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

Good morning Theshantha,

Thanks for connecting with us. I have forwarded your email to Rani Kol who has taken over this file from Rosalie.

@Kol, Rani @Hamdani, Hashim Please see the questions in the email chain below (email from Nov 18) and drawings attached. This is related to Region file 21T-21002C, we have also received a related PARC application that I will circulated to your group shortly.

Thank you,

Patrick Amaral MES(PI)
Principal Planner
Planning and Development Services | Region of Peel
Tel: 905-791-7800 ext. 4093
E-mail: patrick.amaral@peelregion.ca

In response to the emergence of the novel coronavirus, the Region of Peel is implementing various measures to protect our customers, employees and workplaces. Development Services will endeavour to maintain the continuity of our business operations, however delays in service may still be experienced. We appreciate your patience during this time.

From: Razao, Ricardo <ricardo.razao@peelregion.ca>
Sent: November 18, 2022 12:42 PM
To: Theshantha De Silva <tdesilva@cfcrozier.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>; Marzo, Christina <christina.marzo@peelregion.ca>; Amaral, Patrick <patrick.amaral@peelregion.ca>
Subject: FW: Tullamore Industrial Lands Development - TIS Requirements

Hi Theshantha,

Thanks for reaching out. I no longer have carriage of Caledon files but copied Patrick Amaral, who can point you to the right person in Traffic Development and Development Services.

Thanks,
Ricardo Razao
Acting Principal Planner
Policy Development | Planning and Development Services
Region of Peel
10 Peel Centre Drive, 4th Floor, Suite B
(905) 791-7800 ext. 4426

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From: Theshantha De Silva < >
Sent: November 18, 2022 12:05 PM
To: Razao, Ricardo <ricardo.razao@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

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Sending along the attachments as well. My apologies.

Thanks,
Theshantha

Theshantha De Silva, EIT | Engineering Intern
211 Yonge Street, Suite 600 | Toronto, ON M5B 1M4
T: 416.477.3392

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From: Theshantha De Silva
Sent: November 18, 2022 12:03 PM
To: 'ricardo.razao@peelregion.ca' <ricardo.razao@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

Good afternoon Ricardo,

We just had the below Terms of Reference email bounce back from Peel Region, It appears that Rosalie has left Peel Region. We were informed that you may be the Peel Region contact we should be reaching out to regarding our Terms of Reference for the Tullamore Industrial Development. Furthermore, should you not be the appropriate person for correspondence, it would be very appreciated to be directed to the appropriate contact.

Best regards,
Theshantha

From: Theshantha De Silva
Sent: November 18, 2022 10:10 AM
To: Rosalie Shan <rosalie.shan@peelregion.ca>; Jillian.Britto@caledon.ca; arash.olia@caledon.ca
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

Good morning, Jillian, Arash, and Rosalie,

I hope all is well. I'm reaching out regarding an update to the previously submitted TIS for the Tullamore Industrial Development.

Since the previous submission, additional lands have been included to the north within the application, resulting in some revisions to the internal layout. Note the connections to Airport Road and Mayfield Road remain the same, and the proposed connection to Torbram Road is shifted further north. I understand these updated plans have been circulated to the Town and Region already.

You may recall the Town/Region initially had comments pertaining to the estimate of "existing 2021" counts during a pandemic horizon, where growth rates and background traffic assignments had to be applied to 2016-2019 TMCs originally captured prior to the completed Mayfield Road widening. This approach was confirmed in the initial Terms of Reference. As the estimated "existing" volumes were based on a number of forecasts, we took the opportunity to undertake new counts on September 13th, 2022, at all the study intersections requested. We can confirm that these counts were taken after schools have been re-opened and with normal commuter traffic generally returning to the road network. Furthermore, construction was not present near any the study intersections at the time of the counts.

We note that most of the background developments for which trip assignments we added are built and are therefore now assumed to be included in the newly collected counts. For your convenience we've summarized the difference in volumes in **Table 1** below and also illustrated on the figures attached.

We note that based on the comparison in **Table 1**, the new 2022 counts are much lower than the previously estimated 2021 counts with similar drops in both the AM and PM counts. As the Town previously noted the difference between 2019 observed and 2021 estimated counts were significant as construction along Mayfield occurred and 2016 volume had to be forecasted to 2021 to avoid pandemic impacts.

Interestingly, the difference for the intersections along Torbram Road were much less pronounced (15%-20%) compared to all the other intersections along Mayfield and Airport (40%-60%), which is generally due to background volumes not materializing along the Old School, Airport and Mayfield corridors, while Torbram experienced some growth since the 2016 counts as expected. This is further evident given the comparison between the 2016/2019 raw volumes to the 2022 counts shows that nearly all intersections experienced little growth between the original count date to 2022, with the exception of Torbram at Mayfield. Please see **Table 1** below and the attached figures for reference.

Table 1: % 2021 Projected Volumes vs. 2022 Actual Volumes Comparison

Intersection	Original TMC Dates Conducted	Latest TMC Dates Conducted	% Change Original TMC to 2022 Raw Volumes		% Change 2021 Projected to 2022 Raw Volumes	
			AM	PM	AM	PM
Torbram Road at Old School Road	September 7, 2017	September 13, 2022	-17.4%	-6.7%	-21.7%	-14.4%
Mayfield Road at Torbram Road	November 24, 2016	September 13, 2022	+29.7%	+33.8%	-15.6%	-12.1%
Mayfield Road at Airport Road	June 22, 2016	September 13, 2022	-3.4%	-3.5%	-41.1%	-40.0%
Airport Road at Davis Lane/Perdue Crescent	September 25, 2016	September 13, 2022	+10.4%	+2.6%	-40.1%	-39.6%
Airport Road at Street "A"	September 25, 2019	September 13, 2022	+3.5%	-6.5%	-47.9%	-50.9%
Airport Road at Healey Road	October 13, 2019	September 13, 2022	-13.9%	-9.0%	-50.7%	-47.9%
Airport Road at Old School Road	October 13, 2019	September 13, 2022	-15.3%	-15.5%	-54.5%	-52.1%

It would appear that the forecast of "2021 existing" volumes during the pandemic was quite conservative and using the 2022 TMCs would be more appropriate to avoid overestimating volumes and any associated capacity improvements. Could you confirm if using the 2022 TMCs would suffice?

<u>Background Developments Update</u>

Using the 2022 counts will also change the landscape of background developments to be used in the study. Background developments for 2016-2021 that have since been completed would be removed from the analysis given that the 2022 counts now account for them. Furthermore, the percent build-out of developments still in progress will now differ given the 2022 base year of analysis.

Table 2 outlines the new background development assumptions proposed for the TIS Update. Please review and provide any necessary changes to these background development assumptions.

Table 2: Background Developments

No.	Development Address	Planned Buildout Horizon	Source	2022 Built Out Status
1	Block 48-2 Brampton Area 48 Landowners	100% Build-out 2026	Block 48-2 TIS (Cole, 2017)	0% Complete
2	Block 48-1 Countryside Villages	50% by 2021 100% by 2026	Block 48-1 TIS (MMM, 2015)	50% complete
3	Vales North Special Study Area	2020	Block 48-2 TIS (Cole, 2017)	Complete
4	7905 Mayfield Road	50% Build-out 2015 100% Build-out 2020	Block 48-2 TIS (Cole, 2017)	Complete
5	Springdale Neighborhood 702	Completed	Block 48-2 TIS (Cole, 2017)	Complete
6	Countryside Villages Secondary Plan – Employment Centre	50% Build-out 2015 Full Build-out 2020	Block 48-2 TIS (Cole, 2017)	25% Complete
7	SmartCentres Mayfield/ Bramalea	Completed	Block 48-2 TIS (Cole, 2017)	Complete
8	Torbram Road/ Countryside Drive Retail Development	Full Build-out 2020	Block 48-2 TIS (Cole, 2017)	Complete
9	Place of Worship Torbram Road / Countryside Drive	2016	Block 48-2 TIS (Cole, 2017)	Complete
10	Bramalea Road / Countryside Drive	2020	Block 48-2 TIS (Cole, 2017)	Complete

- 2022 “Existing” Study Horizon
  - Using 2022 Counts
  - All background developments completed prior to the 2022 TMC’s will be removed from the study
- 2022 - 2036 Study Horizons
  - Block 48-1 development was assumed to only be built out 50% by 2022. The remaining 50% of this development would be expected to be built out by 2026.
  - As noted in **Table 2**, the Block 48-2 development is expected to be fully built out by 2026.
  - As noted in **Table 2**, the Countryside Villages Secondary Plan – Employment Centre was assumed to only be built out 25% by 2022. The remaining 75% of this development would be expected to be built out by 2026.

<u>Proposed Growth Rates Update</u>

As per comments by the Town of Caledon, an industry standard growth rate of 2.0% per annum will be applied to Town Collector roads (i.e. Torbram Road). Growth is not required to be applied to any local roads or existing driveway connections.

Growth rates established for the previous TIS submission (Crozier 2021) and are replicated in **Table 3** below for use in the updated analysis:

Table 3: Background Growth Rates

Corridor	Growth Rate	
	2022-2031	2031-2036
Airport Road (Regional Road 7)	1%	1%
Mayfield Road (Regional Road 14)	5%	2%
Torbram Road	2%	
Perdue Court/Davis Lane	0%	
Old School Road	2%	

Note: Given the significant amount of background traffic assigned, a 2% growth rate will be applied to Mayfield Road traffic volumes after the 2031 horizon. This will be applied as consistent with the Town collector growth rates requested, since a 5% growth rate compounded over a 15-year horizon would result in an unrealistic estimate of future growth.

Per your previous comments, growth rates will only be applied to through movements only, with the exception of T-intersections where they would be applied to the turning movements as well. Could you confirm this is still preferred?

Please let us know if the above is acceptable, feel free to contact us should you have questions.

Additionally, we were hoping you might be able to provide an update on the Multi-Modal Transportation Master Plan, we were informed it was in progress to be completed by now. It is our intent to include its contents in our TIS Update.

Best regards,
Theshantha De Silva

From: Shan, Rosalie <rosalie.shan@peelregion.ca>
Sent: February 25, 2022 11:43 AM
To: Brandon Bradt <bbradt@cfcrozier.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Nezami, Sona <sona.nezami@peelregion.ca>; Garbos, Olek <olek.garbos@peelregion.ca>; Homagain, Abiral <abiral.homagain@peelregion.ca>; Hashim Ali Hamdani <hashimali.hamdani@peelregion.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

Hi Brandon,

Thank you for reaching out to us.

Please see my answers below in red.

Hope this helps and please let me know if you have any questions or need more information on this.

Regards,
Rosalie Shan, P.Eng., MScE
Technical Analyst
Traffic Development & Permits
Region of Peel
10 Peel Centre Drive Suite B, 4th Floor
Brampton, ON L6T 4B9
905 791-7800 Ext. 7999

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From: Garbos, Olek <olek.garbos@peelregion.ca>
Sent: February 24, 2022 6:14 PM
To: Brandon Bradt <bbradt@cfcrozier.ca>; Shan, Rosalie <rosalie.shan@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Nezami, Sona <sona.nezami@peelregion.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

Hi Brandon,

FYI, Sona Nezami (copied in this email) took over this project and will provide the required information.

Regards

Olek Garbos, C.E.T.
Project Manager, Roads-Design and Construction
Transportation Division
Public Works, Region of Peel
905-791-7800 x – 7827

From: Brandon Bradt <bbradt@cfcrozier.ca>
Sent: February 24, 2022 3:40 PM
To: Shan, Rosalie <rosalie.shan@peelregion.ca>; Garbos, Olek <olek.garbos@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>
Subject: Tullamore Industrial Lands Development - TIS Requirements

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Good Afternoon Rosalie and Olek,

Hope you both are doing well and got to enjoy a relaxing long weekend last weekend.

We are preparing an updated TIS for the Tullamore Industrial lands located north of Mayfield Road, west of Airport Road and east of Torbram Road and wanted to ask if you could offer some feedback on a couple of items prior to us submitting our updated TIS? We note that comments were provided by the Region on the original TIS submission dated November 23, 2021 and I have included them here for your reference. I have attached the original TOR we circulated in July of last year as a general reference as well.

The items we are requesting some feedback on are as follows:

- Could you please provide the latest Airport Road widening design drawings for our records and reference to ensure our modelling agrees with the proposed designs. We'd also like to ensure the site plan is providing sufficient space at the intersections. Of particular interest is the Airport Road and Old School roundabout for which we have been using the EA drawings.

Sona from Capital Group will follow up with you and provide the drawings.

- Caledon has requested that growth rates only be applied to through movements along their roadways. We assume this is a reasonable assumption along the regional roadways as well but would like to confirm this. Of particular note would be the regional road intersection of Mayfield and Airport which would expect may

experience some background growth for turning movements. However, we do note that the 5% growth rate for Mayfield between 2021-2031 is quite high and applying this growth to turning movements at the intersection would likely lead to very conservative results and issues with left-turns at the intersection. If growth rates for turning movements are required for turning movements at the intersection of Airport and Mayfield, we would like to request a lower rate of 1% for all turning movements at the intersection.

Since the growth rate is provided by Transportation planning from a long term version to address population and employment growth. For certain movement, turning volume will reflect the through volume growth. As so, is it possible to include both? With 5% and also 1% as suggested. So we have a better idea how the "worst case scenario" looks like.

It is understood for a right-turn lane, the volume will impact the storage length. However, for left-turn lanes, the Region would like to see the dual – left turn warrants under the worst case scenario. As so, we can protect for the dual-left turn configuration at an early stage.

- We note that the comments are generally high-level about the road widenings, day light triangle, etc and wanted to inquire if we can also expect more detailed comments in the future after we make the second submission or are there still more pending on the first submission?

Please note I can only speak from Traffic Development perspective. The traffic comments are at high-level for the first submission. More detailed comments regarding engineering design will be provided after the submission of the detailed roadway design. Which is also bounded with the Traffic Impact Study. So the TIS will demonstrate the roadway requirement that support the development. Next steps will be the detailed engineering design and review.

I copied our Planner Abiral on the email if you have any questions regarding planning process.

We also note the site plans have provided sufficient dedications for the proposed widenings along Airport Road and Mayfield generally per the November comments.

If any of this is unclear, I am happy to have a call to discuss at your convenience. We are currently looking to submit an updated TIS in mid March so please let me know if there's anything I can do to expedite/aid your response.

Kind Regards,
Brandon

Brandon Bradt | Project Manager
211 Yonge Street, Suite 301 | Toronto, ON M5B 1M4
T: 416.477.3392

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TOWN TERMS OF REFERENCE

Theshantha De Silva

From: Jillian Britto <Jillian.Britto@caledon.ca>
Sent: Friday, December 16, 2022 6:57 PM
To: Theshantha De Silva
Cc: Michael Linton; Brandon Bradt; Arash Olia; Emma Howlett
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements - Town of Caledon

Hi Theshantha,

Happy Friday! Hope you had a good week.

Thank you for providing us an opportunity to review the terms of reference for the revised TIS for the above-noted development. The scope of work noted in the TOR is generally acceptable with the following comments:

- New 2022 counts will suffice for the existing conditions analysis.
- As noted in our comments on the TIS from the 1st submission, please provide details on the site trips from each background development in Appendix G of the previous TIS. The 1st submission only included volumes for Developments 1, 6 and a figure for the Sandringham East Plan Development. Considering the number of background developments, please provide a figure illustrating the locations of the development to help with the review along with volume figures illustrating the traffic volumes from each development.
- Please include the following background development in the analysis:
    - OPA 2021-0008 – 0 Airport Road (TIS can be found here: https://www.caledon.ca/en/town-services/0-airport-road-and-6034-mayfield-road.aspx)
- Please confirm the project status with Brampton for their respective developments.
- The proposed application of corridor growth is acceptable for the roads under the Town's jurisdiction. Please confirm corridor growth rates and application with the Region as well.
- The Town's MMTMP is now expected to go to council in Q3 of 2023, in alignment with the Town's Official Plan. Please note that draft Road Classification and Right-of-Way Schedules can be found on the Town's Have Your Say website (https://haveyoursaycaledon.ca/official-plan-review).
- In addition to the transit recommendations provided in the 1st TIS submission, please include recommendations on appropriate bus stop locations along the new public roads to provide adequate transit coverage for the development.
- Please ensure the revised TIS addresses all the comments from the 1st submission.

Please let us know if you have any questions or require any further information.

Have a great weekend.

Regards,

Jillian Britto, P.Eng., PTOE
Transportation Engineer
Engineering Services

Office: 905.584.2272 x 4108
Email: Jillian.Britto@caledon.ca

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From: Theshantha De Silva <tdesilva@cfcrozier.ca>
Sent: Friday, December 9, 2022 3:07 PM
To: Jillian Britto <Jillian.Britto@caledon.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>; Arash Olia <Arash.Olia@caledon.ca>; Emma Howlett <Emma.Howlett@caledon.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements - Town of Caledon

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Hi Jillian,

Perfect, we look forward to hearing from you next week.

Have a good weekend.

Best regards,
Theshantha

Theshantha De Silva, EIT | Engineering Intern
211 Yonge Street, Suite 600 | Toronto, ON M5B 1M4
T: 416.477.3392

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From: Jillian Britto <Jillian.Britto@caledon.ca>
Sent: Friday, December 9, 2022 3:04 PM
To: Theshantha De Silva <tdesilva@cfcrozier.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>; Arash Olia <Arash.Olia@caledon.ca>; Emma Howlett <Emma.Howlett@caledon.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements - Town of Caledon

Good afternoon Theshantha,

Happy Friday! Hope you had a good week.

We are in the process of reviewing the TOR; yesterday afternoon's discussion provided some more clarity on the application.

We will provide a response by the end of next week.

Have a great weekend.

Regards,

Jillian Britto, P.Eng.
Transportation Engineer
Engineering Services

Office: 905.584.2272 x 4108
Email: Jillian.Britto@caledon.ca

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From: Theshantha De Silva <tdesilva@cfcrozier.ca>
Sent: Friday, December 9, 2022 1:50 PM
To: Jillian Britto <Jillian.Britto@caledon.ca>; Arash Olia <Arash.Olia@caledon.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements - Town of Caledon

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Good afternoon Jillian and Arash,

Happy Friday! It is our understanding that there was a Pre-Application Review Committee (PARC) Meeting yesterday. We're reaching out to see if you had any questions or issues. As always, please don't hesitate to reach out to us.

Best regards,
Theshantha

Theshantha De Silva, EIT | Engineering Intern
211 Yonge Street, Suite 600 | Toronto, ON M5B 1M4
T: 416.477.3392

Crozier Connections:

Read our latest news and announcements here.

From: Theshantha De Silva
Sent: Monday, December 5, 2022 3:59 PM
To: Jillian.Britto@caledon.ca; arash.olia@caledon.ca
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements - Town of Caledon

Good afternoon Jillian and Arash,

We are following up about our Terms of Reference for the Tullamore Industrial Development sent to you on November 18th. Could you please provide an update on when we will be receiving feedback from the Town of Caledon, as we are aiming to submit this TIS Update before the end of the year.

We have just heard back from Peel Region (*see attached email*), they have approved the proposed Terms of Reference.

Best regards,
Theshantha

From: Theshantha De Silva
Sent: November 18, 2022 10:10 AM
To: Rosalie Shan <rosalie.shan@peelregion.ca>; Jillian.Britto@caledon.ca; arash.olia@caledon.ca
Cc: Michael Linton <mlinton@cfcrozier.ca>; Brandon Bradt <bbradt@cfcrozier.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

Good morning, Jillian, Arash, and Rosalie,

I hope all is well. I'm reaching out regarding an update to the previously submitted TIS for the Tullamore Industrial Development.

Since the previous submission, additional lands have been included to the north within the application, resulting in some revisions to the internal layout. Note the connections to Airport Road and Mayfield Road remain the same, and the proposed connection to Torbram Road is shifted further north. I understand these updated plans have been circulated to the Town and Region already.

You may recall the Town/Region initially had comments pertaining to the estimate of "existing 2021" counts during a pandemic horizon, where growth rates and background traffic assignments had to be applied to 2016-2019 TMCs originally captured prior to the completed Mayfield Road widening. This approach was confirmed in the initial Terms of Reference. As the estimated "existing" volumes were based on a number of forecasts, we took the opportunity to undertake new counts on September 13th, 2022, at all the study intersections requested. We can confirm that these counts were taken after schools have been re-opened and with normal commuter traffic generally returning to the road network. Furthermore, construction was not present near any the study intersections at the time of the counts.

We note that most of the background developments for which trip assignments we added are built and are therefore now assumed to be included in the newly collected counts. For your convenience we've summarized the difference in volumes in **Table 1** below and also illustrated on the figures attached.

We note that based on the comparison in **Table 1**, the new 2022 counts are much lower than the previously estimated 2021 counts with similar drops in both the AM and PM counts. As the Town previously noted the difference between 2019 observed and 2021 estimated counts were significant as construction along Mayfield occurred and 2016 volume had to be forecasted to 2021 to avoid pandemic impacts.

Interestingly, the difference for the intersections along Torbram Road were much less pronounced (15%-20%) compared to all the other intersections along Mayfield and Airport (40%-60%), which is generally due to background volumes not materializing along the Old School, Airport and Mayfield corridors, while Torbram experienced some growth since the 2016 counts as expected. This is further evident given the comparison between the 2016/2019 raw volumes to the 2022 counts shows that nearly all intersections experienced little growth between the original count date to 2022, with the exception of Torbram at Mayfield. Please see **Table 1** below and the attached figures for reference.

Table 1: % 2021 Projected Volumes vs. 2022 Actual Volumes Comparison

Intersection	Original TMC Dates Conducted	Latest TMC Dates Conducted	% Change Original TMC to 2022 Raw Volumes		% Change 2021 Projected to 2022 Raw Volumes	
			AM	PM	AM	PM
Torbram Road at Old School Road	September 7, 2017	September 13, 2022	-17.4%	-6.7%	-21.7%	-14.4%
Mayfield Road at Torbram Road	November 24, 2016	September 13, 2022	+29.7%	+33.8%	-15.6%	-12.1%
Mayfield Road at Airport Road	June 22, 2016	September 13, 2022	-3.4%	-3.5%	-41.1%	-40.0%
Airport Road at Davis Lane/Perdue Crescent	September 25, 2016	September 13, 2022	+10.4%	+2.6%	-40.1%	-39.6%
Airport Road at Street "A"	September 25, 2019	September 13, 2022	+3.5%	-6.5%	-47.9%	-50.9%
Airport Road at Healey Road	October 13, 2019	September 13, 2022	-13.9%	-9.0%	-50.7%	-47.9%
Airport Road at Old School Road	October 13, 2019	September 13, 2022	-15.3%	-15.5%	-54.5%	-52.1%

It would appear that the forecast of "2021 existing" volumes during the pandemic was quite conservative and using the 2022 TMCs would be more appropriate to avoid overestimating volumes and any associated capacity improvements. Could you confirm if using the 2022 TMCs would suffice?

Background Developments Update

Using the 2022 counts will also change the landscape of background developments to be used in the study. Background developments for 2016-2021 that have since been completed would be removed from the analysis given that the 2022 counts now account for them. Furthermore, the percent build-out of developments still in progress will now differ given the 2022 base year of analysis.

Table 2 outlines the new background development assumptions proposed for the TIS Update. Please review and provide any necessary changes to these background development assumptions.

Table 2: Background Developments

No.	Development Address	Planned Buildout Horizon	Source	2022 Built Out Status
1	Block 48-2 Brampton Area 48 Landowners	100% Build-out 2026	Block 48-2 TIS (Cole, 2017)	0% Complete
2	Block 48-1 Countryside Villages	50% by 2021 100% by 2026	Block 48-1 TIS (MMM, 2015)	50% complete
3	Vales North Special Study Area	2020	Block 48-2 TIS (Cole, 2017)	Complete
4	7905 Mayfield Road	50% Build-out 2015 100% Build-out 2020	Block 48-2 TIS (Cole, 2017)	Complete
5	Springdale Neighborhood 702	Completed	Block 48-2 TIS (Cole, 2017)	Complete
6	Countryside Villages Secondary Plan – Employment Centre	50% Build-out 2015 Full Build-out 2020	Block 48-2 TIS (Cole, 2017)	25% Complete
7	SmartCentres Mayfield/ Bramalea	Completed	Block 48-2 TIS (Cole, 2017)	Complete

8	Torbram Road/ Countryside Drive Retail Development	Full Build-out 2020	Block 48-2 TIS (Cole, 2017)	Complete
9	Place of Worship Torbram Road / Countryside Drive	2016	Block 48-2 TIS (Cole, 2017)	Complete
10	Bramalea Road / Countryside Drive	2020	Block 48-2 TIS (Cole, 2017)	Complete

- 2022 "Existing" Study Horizon
  - Using 2022 Counts
  - All background developments completed prior to the 2022 TMC's will be removed from the study
- 2022 - 2036 Study Horizons
  - Block 48-1 development was assumed to only be built out 50% by 2022. The remaining 50% of this development would be expected to be built out by 2026.
  - As noted in **Table 2**, the Block 48-2 development is expected to be fully built out by 2026.
  - As noted in **Table 2**, the Countryside Villages Secondary Plan – Employment Centre was assumed to only be built out 25% by 2022. The remaining 75% of this development would be expected to be built out by 2026.

Proposed Growth Rates Update

As per comments by the Town of Caledon, an industry standard growth rate of 2.0% per annum will be applied to Town Collector roads (i.e. Torbram Road). Growth is not required to be applied to any local roads or existing driveway connections.

Growth rates established for the previous TIS submission (Crozier 2021) and are replicated in **Table 3** below for use in the updated analysis:

Table 3: Background Growth Rates

Corridor	Growth Rate	
	2022-2031	2031-2036
Airport Road (Regional Road 7)	1%	1%
Mayfield Road (Regional Road 14)	5%	2%
Torbram Road	2%	
Perdue Court/Davis Lane	0%	
Old School Road	2%	

Note: Given the significant amount of background traffic assigned, a 2% growth rate will be applied to Mayfield Road traffic volumes after the 2031 horizon. This will be applied as consistent with the Town collector growth rates requested, since a 5% growth rate compounded over a 15-year horizon would result in an unrealistic estimate of future growth.

Per your previous comments, growth rates will only be applied to through movements only, with the exception of T-intersections where they would be applied to the turning movements as well. Could you confirm this is still preferred?

Please let us know if the above is acceptable, feel free to contact us should you have questions.

Additionally, we were hoping you might be able to provide an update on the Multi-Modal Transportation Master Plan, we were informed it was in progress to be completed by now. It is our intent to include its contents in our TIS Update.

Best regards,
Theshantha De Silva

From: Shan, Rosalie <rosalie.shan@peelregion.ca>
Sent: February 25, 2022 11:43 AM

To: Brandon Bradt <bbradt@cfcrozier.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Nezami, Sona <sona.nezami@peelregion.ca>; Garbos, Olek <olek.garbos@peelregion.ca>; Homagain, Abiral <abiral.homagain@peelregion.ca>; Hashim Ali Hamdani <hashimali.hamdani@peelregion.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

Hi Brandon,

Thank you for reaching out to us.

Please see my answers below in red.

Hope this helps and please let me know if you have any questions or need more information on this.

Regards,
Rosalie Shan, P.Eng., MScE
Technical Analyst
Traffic Development & Permits
Region of Peel
10 Peel Centre Drive Suite B, 4th Floor
Brampton, ON L6T 4B9
905 791-7800 Ext. 7999

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From: Garbos, Olek <olek.garbos@peelregion.ca>
Sent: February 24, 2022 6:14 PM
To: Brandon Bradt <bbradt@cfcrozier.ca>; Shan, Rosalie <rosalie.shan@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Nezami, Sona <sona.nezami@peelregion.ca>
Subject: RE: Tullamore Industrial Lands Development - TIS Requirements

Hi Brandon,

FYI, Sona Nezami (copied in this email) took over this project and will provide the required information.

Regards

Olek Garbos, C.E.T.
Project Manager, Roads-Design and Construction
Transportation Division
Public Works, Region of Peel
905-791-7800 x – 7827

From: Brandon Bradt <bbradt@cfcrozier.ca>
Sent: February 24, 2022 3:40 PM
To: Shan, Rosalie <rosalie.shan@peelregion.ca>; Garbos, Olek <olek.garbos@peelregion.ca>

Cc: Michael Linton <mlinton@cfcrozier.ca>
Subject: Tullamore Industrial Lands Development - TIS Requirements

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Good Afternoon Rosalie and Olek,

Hope you both are doing well and got to enjoy a relaxing long weekend last weekend.

We are preparing an updated TIS for the Tullamore Industrial lands located north of Mayfield Road, west of Airport Road and east of Torbram Road and wanted to ask if you could offer some feedback on a couple of items prior to us submitting our updated TIS? We note that comments were provided by the Region on the original TIS submission dated November 23, 2021 and I have included them here for your reference. I have attached the original TOR we circulated in July of last year as a general reference as well.

The items we are requesting some feedback on are as follows:

- Could you please provide the latest Airport Road widening design drawings for our records and reference to ensure our modelling agrees with the proposed designs. We'd also like to ensure the site plan is providing sufficient space at the intersections. Of particular interest is the Airport Road and Old School roundabout for which we have been using the EA drawings.

Sona from Capital Group will follow up with you and provide the drawings.

- Caledon has requested that growth rates only be applied to through movements along their roadways. We assume this is a reasonable assumption along the regional roadways as well but would like to confirm this. Of particular note would be the regional road intersection of Mayfield and Airport which would expect may experience some background growth for turning movements. However, we do note that the 5% growth rate for Mayfield between 2021-2031 is quite high and applying this growth to turning movements at the intersection would likely lead to very conservative results and issues with left-turns at the intersection. If growth rates for turning movements are required for turning movements at the intersection of Airport and Mayfield, we would like to request a lower rate of 1% for all turning movements at the intersection.

Since the growth rate is provided by Transportation planning from a long term version to address population and employment growth. For certain movement, turning volume will reflect the through volume growth. As so, is it possible to include both? With 5% and also 1% as suggested. So we have a better idea how the "worst case scenario" looks like.

It is understood for a right-turn lane, the volume will impact the storage length. However, for left-turn lanes, the Region would like to see the dual – left turn warrants under the worst case scenario. As so, we can protect for the dual-left turn configuration at an early stage.

- We note that the comments are generally high-level about the road widenings, day light triangle, etc and wanted to inquire if we can also expect more detailed comments in the future after we make the second submission or are there still more pending on the first submission?

Please note I can only speak from Traffic Development perspective. The traffic comments are at high-level for the first submission. More detailed comments regarding engineering design will be provided after the submission of the detailed roadway design. Which is also bounded with the Traffic Impact Study. So the TIS will demonstrate the roadway requirement that support the development. Next steps will be the detailed engineering design and review.

I copied our Planner Abiral on the email if you have any questions regarding planning process.

We also note the site plans have provided sufficient dedications for the proposed widenings along Airport Road and Mayfield generally per the November comments.

If any of this is unclear, I am happy to have a call to discuss at your convenience. We are currently looking to submit an updated TIS in mid March so please let me know if there's anything I can do to expedite/aid your response.

Kind Regards,
Brandon

Brandon Bradt | Project Manager
211 Yonge Street, Suite 301 | Toronto, ON M5B 1M4
T: 416.477.3392

CROZIER
CONSULTING ENGINEERS

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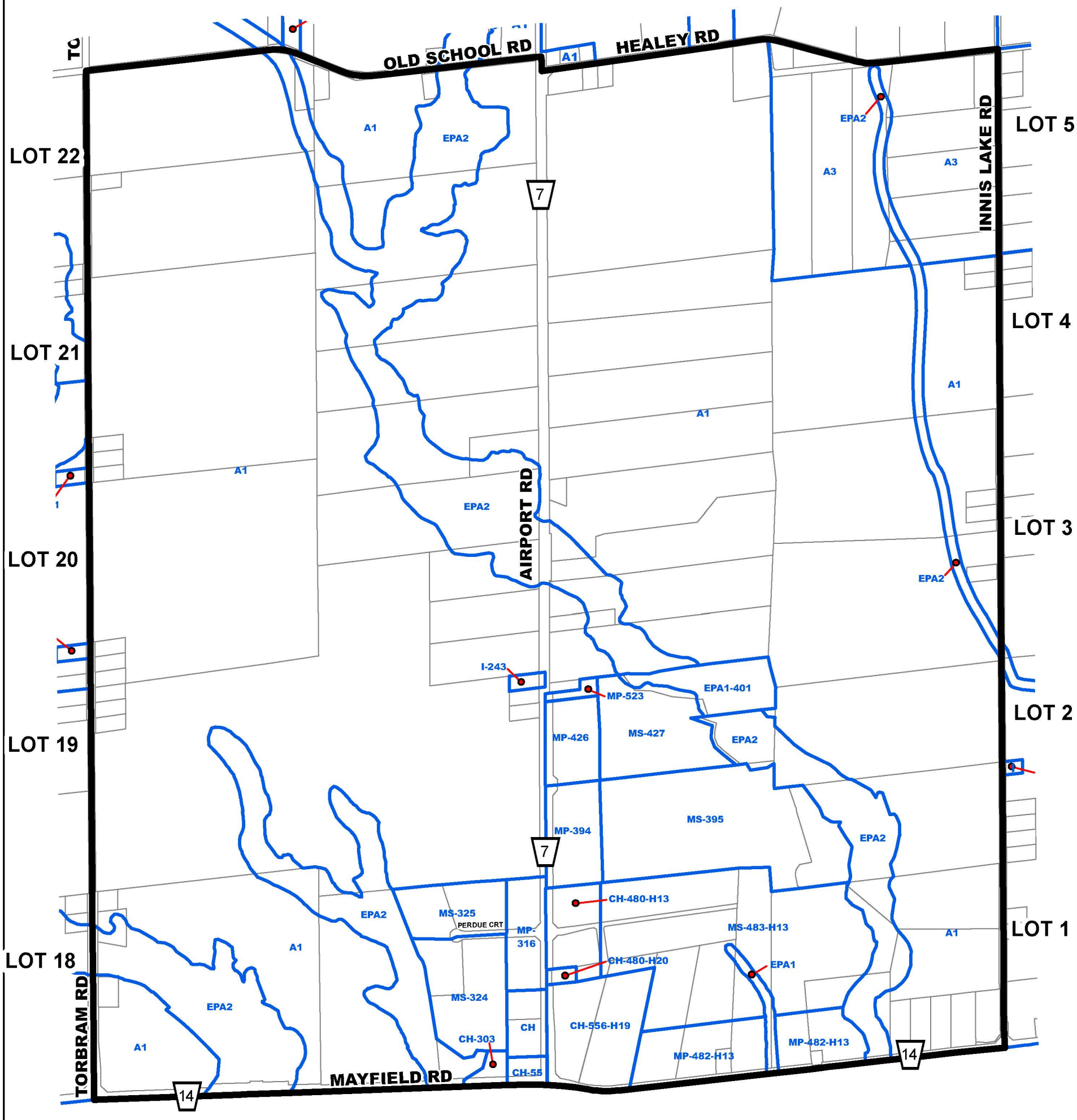
Appendix D

Zoning Maps

CON. 6 E.H.S. (CHING)

CON. 1 (ALB)



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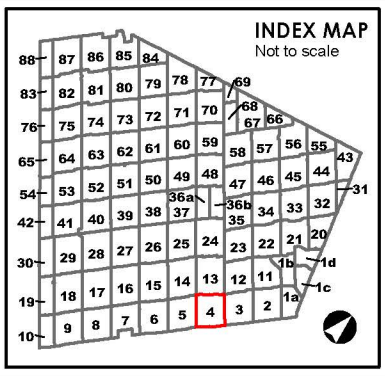
INDEX MAP
Not to scale



A2 ZONE SYMBOL

A2-### ZONE SYMBOL
Note: Number of suffixes represent Exceptions which can be looked up in the Exceptions section of the By-law.

ZONE BOUNDARY

STRUCTURAL ENVELOPE MAP

NIAGARA ESCARPMENT DEVELOPMENT CONTROL AREA
Lands lying within the Development Control area pursuant to the Niagara Planning and Development Act are subject to permit requirements under Ontario Regulations 685/50, as amended.

OAK RIDGES MORAINE CONSERVATION PLAN AREA BOUNDARY

WELLHEAD PROTECTION AREA BOUNDARY
WP-2 WP-5 WP-10 WP-25
Zone Maps amended to indicate the 2, 5, 10, and 25 year Wellhead Protection Areas.

The base data on this map is provided for convenience only. The Town of Caledon is not responsible for any deficiency or inaccuracy in the base data, and will not accept any liability whatsoever therefor. The reporduction of the base data, in whole or in part, by any means is prohibited without the prior written permission of the Town of Caledon.

BY-LAW 2006-50

ZONE MAP 4

SCHEDULE "A"

0 137.5 275 550 m

TOWN OF CALEDON

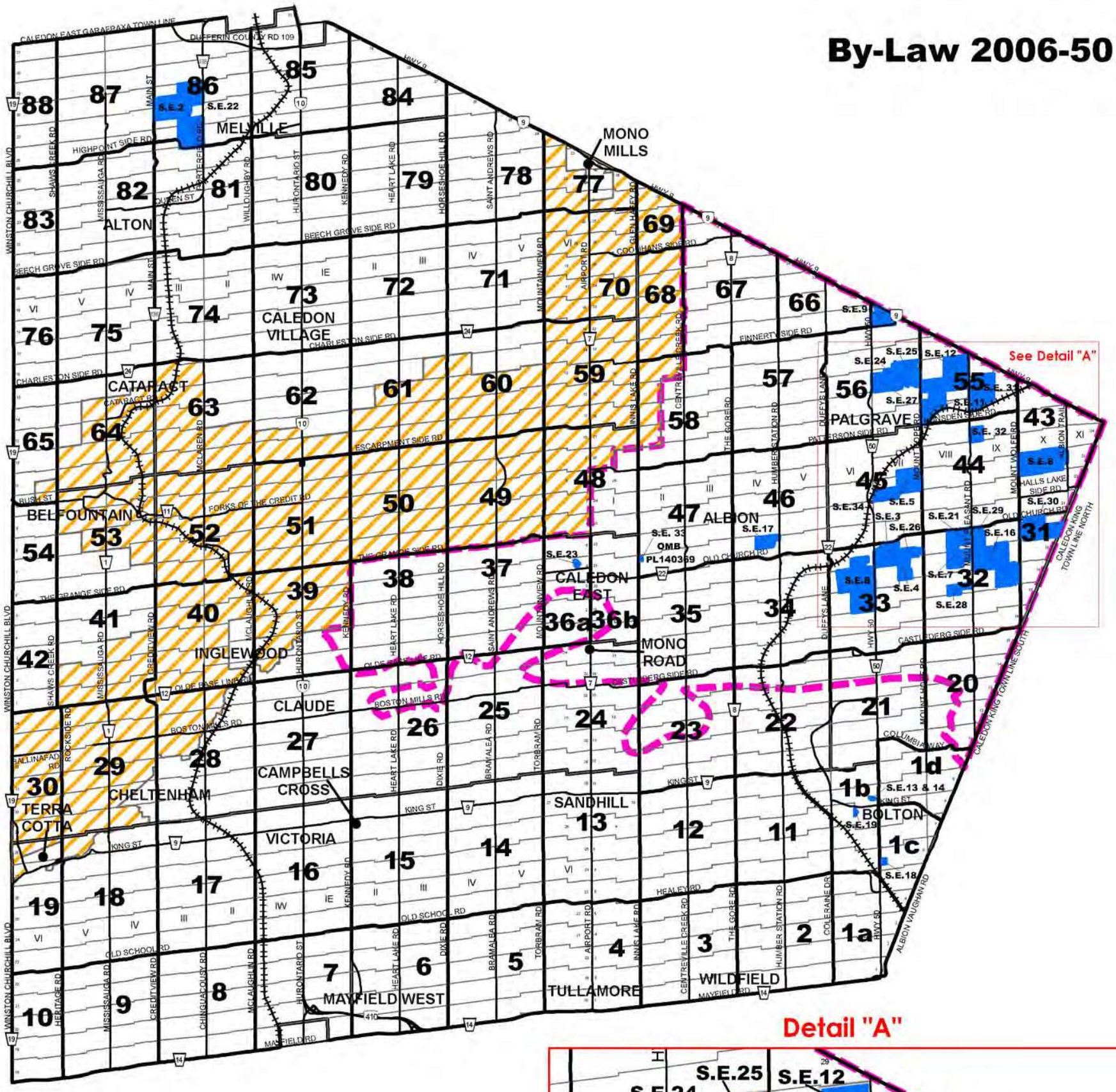
Date: 3 April 2006

Revised: August 2, 2016

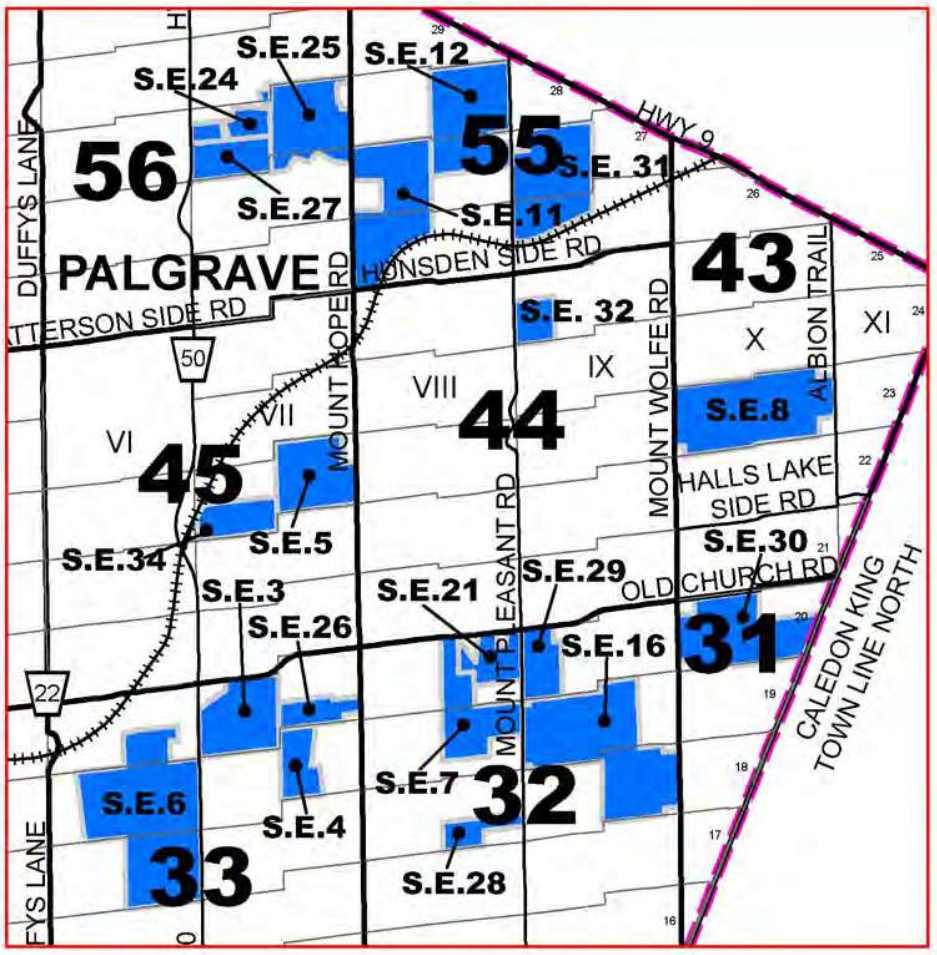
File: S:\POLICY SECTION\GIS\zoning_bylaw\2015_mxd

4

By-Law 2006-50



Detail "A"



Settlement Area Map Coverage

46 & 47 - Albion
81 & 82 - Alton
53 & 54 - Belfountain
1a, 1b, 1c & 1d - Bolton
36a & 36b - Caledon East
62 & 73 - Caledon Village
15 & 16 - Campbell's Cross
64 - Cataract
17, 18, 28 & 29 - Cheltenham
27 - Claude
39 & 40 - Inglewood
6 & 7 - Mayfield West
80, 81, 85 & 86 - Melville
77 - Mono Mills
24, 36a, 36b - Mono Road
45, 56 - Palgrave
13 - Sandhill
19 - Terra Cotta
4 - Tullamore
16 - Victoria
2 & 3 - Wildfield

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INDEX MAP
Not to scale

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BY-LAW 2006-50
ZONE INDEX MAP

0 5 10 20 30 40 km

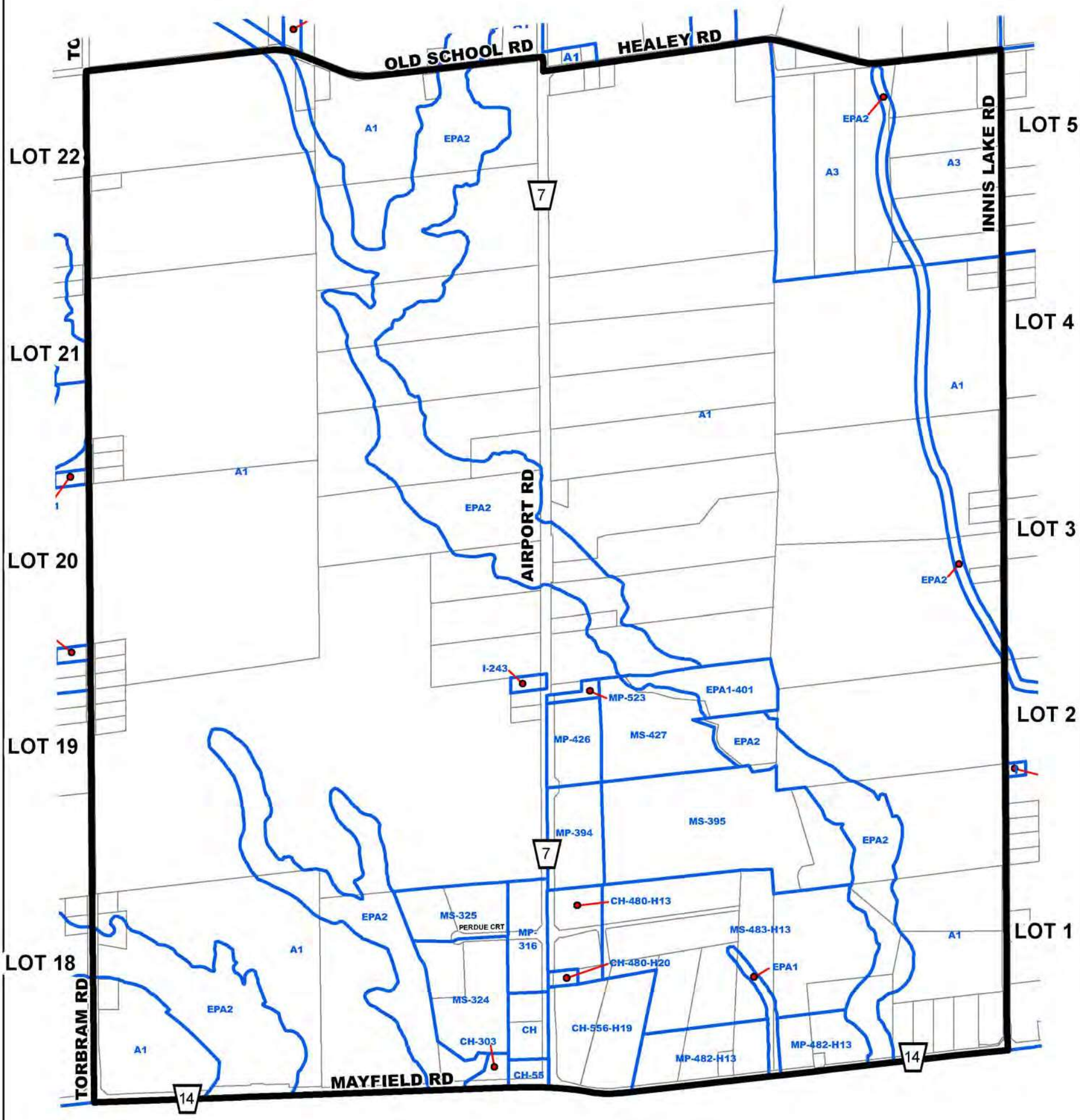
TOWN OF CALEDON

Date: 3 April 2006
Revised: August 2, 2019

File: S:\POLICY SECTION\GIS\zoning_bylaw\mxd\zone_map_template.mxd

CON. 6 E.H.S. (CHING)

CON. 1 (ALB)



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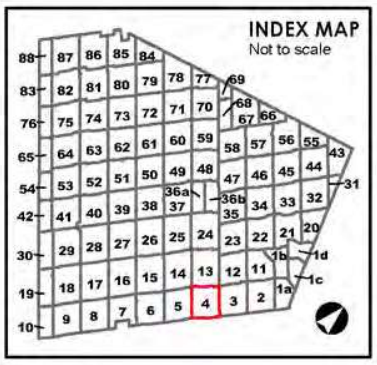
INDEX MAP
Not to scale



A2 ZONE SYMBOL

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BY-LAW 2006-50
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SCHEDULE "A"
0 137.5 275 550 m
TOWN OF CALEDON

Date: 3 April 2006
Revised: August 2, 2016

File: S:\POLICY SECTION\GIS\zoning_bylaw\2015_mxd

4

CON. 4 E.H.S. (CHING)

CON. 5 E.H.S. (CHING)

TO

OLD SCHOOL RD

LOT 22

LOT 21

LOT 20

LOT 19

LOT 18

DIXIE RD

BRAMALEA RD

TORBRAM RD

MAYFIELD RD

4

14

A1 A1-532 A1-115 OS-411 OS-416 OS-416-E OS EPA2

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INDEX MAP
Not to scale

88 87 86 85 84
83 82 81 80 79 78 77 69
76 75 74 73 72 71 70 68 67 66
65 64 63 62 61 60 59 58 57 56 55 43
54 53 52 51 50 49 48 47 46 45 44 31
42 41 40 39 38 36a 37 36b 35 34 33 32
30 29 28 27 26 25 24 23 22 21 20
19 18 17 16 15 14 13 12 11 1b 1d
10 9 8 7 6 5 4 3 2 1a 1c

A2 ZONE SYMBOL

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BY-LAW 2006-50

ZONE MAP 5

SCHEDULE "A"

0 140 280 560 m

TOWN OF CALEDON

Date: 3 April 2006

Revised: August 21, 2015

File: S:\POLICY SECTION\GIS\zoning_pyaw2015_mxd

5

SECTION 10
AGRICULTURAL AND RURAL ZONES

10.1 GENERAL PROHIBITION

No *person* shall, within any **Agricultural** and **Rural** *Zone*, use any land, or erect, *alter*, enlarge, use or maintain any *building* or *structure* for any *use* other than as permitted in **Table 10.1** of Subsection 10.2 and in accordance with the standards contained in **Table 10.2** of Subsection 10.3, the General Provisions contained in Section 4 and the Parking, Loading & Delivery Standards contained in Section 5.

10.2 PERMITTED USES

Uses permitted in an **Agricultural** or **Rural *Zone*** are noted by the symbol '✓' in the column applicable to that *Zone* and corresponding with the row for a specific permitted *use* in **Table 10.1**. A number(s) following the symbol '✓' , *zone* heading or identified permitted *use*, indicates that one or more conditions apply to the *use* noted or, in some cases, to the entire *Zone*. Conditions are listed below the Permitted Use **Table, Table 10.1**.

The **Agricultural** and **Rural *Zones*** established by this By-law are as follows:

A1 **Agricultural**
A2 **Rural**
A3 **Small Agricultural Holdings**
A1-ORM **Agricultural – Oak Ridges Moraine**
A2-ORM **Rural – Oak Ridges Moraine**
A3-ORM **Small Agricultural Holdings – Oak Ridges Moraine**

TABLE 10.1

USE	ZONE A1	ZONE A2	ZONE A3	ZONE A1-ORM	ZONE A2-ORM	ZONE A3-ORM
Agriculture-related Commercial Use	✓**(5)**	✓**(5)**	✓**(5)**			
Agriculture-related Industrial Use	✓**(5)**	✓**(5)**	✓**(5)**			
Agri-Tourism Use	✓**(6)**	✓**(6)**	✓**(6)**			
Apartment, Accessory	✓	✓	✓			
Agricultural Uses (ORM)				✓	✓	✓
Animal Agriculture (ORM)				✓	✓	✓
Bed and Breakfast Establishment				✓**(3)**	✓**(3)**	✓**(3)**
Bunkhouse, Accessory	✓**(2)**	✓**(2)**		✓**(2)**	✓**(2)**	
Dwelling, Accessory	✓	✓				
Dwelling, Accessory (ORM)				✓	✓	
Dwelling, Detached	✓	✓	✓	✓**(4)**	✓**(4)**	✓**(4)**

USE	ZONE A1	ZONE A2	ZONE A3	ZONE A1-ORM	ZONE A2-ORM	ZONE A3-ORM
Environmental Management				✓	✓	✓
Farm	✓	✓				
Farm-based Alcohol Production Facility	✓**(6)**	✓**(6)**	✓**(6)**			
Farm Equipment Storage Building	✓	✓	✓	✓	✓	✓
Farm Produce Outlet, Accessory	✓	✓	✓	✓	✓	✓
Farm Vacation Home (ORM)				✓	✓	✓
Forest Management				✓	✓	✓
Gasoline Pump Island, Accessory	✓	✓		✓	✓	
Hobby Farm			✓			
Home Business (ORM)				✓	✓	✓
Home Industry (ORM)				✓	✓	✓
Home Occupation	✓**(1)**	✓**(1)**	✓**(1)**			
Livestock Facility	✓	✓	✓	✓	✓	✓
Nursery, Horticultural	✓	✓	✓	✓	✓	✓
On Farm Diversified Use	✓**(6)**	✓**(6)**	✓**(6)**			
Open Storage, Accessory	✓	✓	✓	✓	✓	✓
Produce Storage Building	✓	✓	✓	✓	✓	✓
Transportation, Infrastructure & Utilities				✓	✓	✓

Footnotes for Table 10.1

(1) No more than 6 students are permitted in any one lesson for a *home occupation* involving the instruction of a craft or skill.

(2) A bunkhouse shall only be permitted on lots having a minimum lot area of 6 hectares.

(3) Permitted in a detached dwelling only.

(4) Permitted only on a vacant *lot* of record where a single *detached dwelling* would have been permitted as of November 15, 2001 and *accessory uses* thereto.

(5) i) An *agriculture-related commercial* or *agriculture-related industrial use* shall only be permitted as the principle *use* on *lots* having an area not exceeding 4 hectares and receiving site plan approval pursuant to Section 41 of the Planning Act.

ii) An *agriculture-related commercial* or *agriculture-related industrial use* shall also be permitted secondary to an active *farm* subject to the provisions of Section 10.5.

(6) Must comply with the provisions of Section 10.5.

10.3 ZONE STANDARDS

No *person* shall, within any **Agricultural** and **Rural *Zone***, use any *lot* or erect, *alter*, use any *building* or *structure* except in accordance with the following *zone* provisions. A number(s) following the *zone* standard, *zone* heading or description of the standard, indicates an additional *Zone* requirement. These additional standards are listed at the end of **Table 10.2**.

TABLE 10.2

STANDARD	ZONE A1	ZONE A2	ZONE A3	ZONE A1-ORM	ZONE A2-ORM	ZONE A3-ORM
***Lot Area* (Minimum)**	8 ha	6 ha	4 ha	8 ha	6 ha	4 ha
***Lot Frontage* (Minimum)**	120 m	90 m	55 m	120 m	90 m	55 m
***Building Area* (Maximum)**	**(1)(2)**	**(1)(2)**	5%	**(1)(2)**	**(1)(2)**	5%
***Yards*:**						
***Front Yard* (Minima)**	18 m	18 m	18 m	18 m	18 m	18 m
***Exterior Side Yard* (Minimum)**	18 m	18 m	18 m	18 m	18 m	18 m
***Rear Yards* (Minima)**	10 m	10 m		10 m	10 m	
Main building			15 m			15 m
Accessory building			10 m			10 m
***Interior Side Yards* (Minima)**			10 m			10 m
Existing *lots* of less than 8 ha	3 m			3 m		
Existing *lots* of less than 6 ha		3 m			3 m	
Other *lots*	15 m	15 m		15 m	15 m	
***Building Heights* (Maxima)**						
Residential *uses*	10.5 m	10.5 m	10.5 m	10.5 m	10.5 m	10.5 m
Non-Residential *uses*	12.2 m	12.2 m	12.2 m	12.2 m	12.2 m	12.2 m
***Landscaping Area* (Minimum)**	10%	10%	50%	10%	10%	50%
***Accessory Gasoline Pump Island Setback* (Minimum)**	9 m	9 m		9 m	9 m	
Driveway Setback (*Minimum*)	3m	3m	3m	3m	3m	3m
***Parking Space Setback (*Minimum)**						
From any *street line*	3m	3m	3m	3m	3m	3m

Footnotes For Table 10.2

(1) The maximum *building area* shall be the lesser of 5% or 0.8 hectares.

(2) The maximum *building area* shall not apply to *Public Uses* owned and operated by the Town of Caledon.

10.4 Agricultural and Rural *Zones* – Special Provisions and Standards

10.4.1 Application of RR *Zone* Provisions and Standards

Where an *existing lot* within the A1 or A2 or A3 *Zone* fails to comply with either one or both of the minimum *lot area* or minimum *lot frontage* standards of the applicable *zone*, such *lot* may be used as follows:

- For *uses* listed in the RR column of Table 6.1 in accordance with the applicable standards and provisions of Section 6; or

- For non-residential *uses* listed in the applicable A1 or A2 or A3 *Zone* identified in Table 10.1 in accordance with applicable standards and provisions of Section 10.

10.5 ON-farm diversified and agri-tourism special provisions

10.5.1 On-Farm Diversified Use shall comply with the following provisions:

10.5.2 No more than 2% to a maximum of 2000m2 (0.2ha) of the *lot area* shall be used for an *on-farm diversified use* including but not limited to *buildings or structures*, *parking areas* and all components used exclusively for the *use*.

10.5.3 A minimum of 1 *parking space* per 100m2 of total *floor area* is required.

10.5.4 There shall be no advertising on the property, other than a lawful sign, to indicate to persons outside that any part of the lot is being used for an *on-farm diversified use*.

10.5.5 No more than 25% of the area of the *dwelling unit* shall be used for an *on-farm diversified use*.

10.5.6 The *accessory display* and retail sale of on-farm diversified use goods, wares or merchandise is permitted subject to the following provisions:

i) the combined area of all areas devoted to retail sales and display shall not exceed 30% of the total *gross floor area* of the *on-farm diversified use.*

ii) the accessory display and retail sales component of an on-farm diversified use must be conducted by or directly involve the owner/operator of the *farm* operation.

10.5.7 Food concession stand(s) *accessory* to an *agri-tourism use* shall not exceed a combined total floor area of 50m2.

Appendix E

Traffic Data

TURNING MOVEMENT COUNTS

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Turning Movement Count (3 . AIRPORT RD & 12333 AIRPORT RD) CustID: 00718361 MioID:

Start Time	N Approach AIRPORT RD					E Approach STREET A					S Approach 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		
06:00:00	102	2	0	0	104	1	4	0	0	5	9	59	0	0	68	177	
06:15:00	120	1	0	0	121	3	8	0	0	11	7	61	0	0	68	200	
06:30:00	122	8	0	0	130	6	6	0	0	12	13	101	0	0	114	256	
06:45:00	120	7	0	0	127	2	42	0	0	44	29	91	0	0	120	291	924
07:00:00	134	0	0	0	134	2	19	0	1	21	12	89	0	0	101	256	1003
07:15:00	144	2	0	0	146	1	10	0	0	11	7	82	0	0	89	246	1049
07:30:00	157	0	0	0	157	3	4	0	1	7	9	70	0	0	79	243	1036
07:45:00	156	1	0	0	157	0	6	0	0	6	14	75	0	0	89	252	997
08:00:00	144	0	0	0	144	1	5	0	0	6	7	73	0	0	80	230	971
08:15:00	143	1	0	0	144	0	6	0	0	6	4	76	0	0	80	230	955
08:30:00	108	0	0	0	108	0	7	1	0	8	6	58	0	0	64	180	892
08:45:00	95	0	0	0	95	1	8	0	0	9	3	63	0	0	66	170	810
09:00:00	95	0	1	0	96	1	11	0	0	12	6	66	0	0	72	180	760
09:15:00	97	1	0	0	98	1	6	0	0	7	14	55	0	0	69	174	704
09:30:00	87	2	0	0	89	1	6	0	0	7	6	58	0	0	64	160	684
09:45:00	83	0	0	0	83	1	13	0	0	14	22	57	0	0	79	176	690
BREAK																	
15:00:00	68	0	1	0	69	4	11	0	0	15	8	113	0	0	121	205	
15:15:00	86	0	0	0	86	5	11	0	0	16	6	148	0	0	154	256	
15:30:00	65	1	0	0	66	3	15	0	0	18	8	119	0	0	127	211	
15:45:00	94	0	0	0	94	3	4	0	0	7	11	122	3	0	136	237	909
16:00:00	87	0	1	0	88	2	14	0	0	16	5	118	0	0	123	227	931
16:15:00	83	0	0	0	83	0	12	0	0	12	7	149	0	0	156	251	926
16:30:00	90	0	0	0	90	0	10	0	1	10	7	136	0	0	143	243	958
16:45:00	96	1	1	0	98	5	9	0	0	14	4	149	0	0	153	265	986
17:00:00	109	0	0	0	109	0	3	0	0	3	8	144	0	0	152	264	1023
17:15:00	72	2	0	0	74	1	11	0	0	12	8	139	0	0	147	233	1005
17:30:00	98	0	0	0	98	0	9	0	0	9	8	128	1	0	137	244	1006
17:45:00	99	0	0	0	99	0	9	0	0	9	5	127	0	0	132	240	981
18:00:00	80	2	0	0	82	0	4	0	0	4	5	132	0	0	137	223	940
18:15:00	106	0	0	0	106	0	11	0	0	11	7	126	0	1	133	250	957
18:30:00	77	1	0	0	78	0	14	0	0	14	8	89	0	0	97	189	902
18:45:00	67	0	0	0	67	2	5	0	0	7	7	97	0	0	104	178	840

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Grand Total	3284	32	4	0	3320	49	313	1	3	363	280	3170	4	1	3454	**7137**	-
Approach%	98.9%	1%	0.1%		-	13.5%	86.2%	0.3%		-	8.1%	91.8%	0.1%		-	**-**	-
Totals %	46%	0.4%	0.1%		46.5%	0.7%	4.4%	0%		5.1%	3.9%	44.4%	0.1%		48.4%	**-**	-
Heavy	465	7	0		-	13	170	0		-	156	438	0		-	**-**	-
Heavy %	14.2%	21.9%	0%		-	26.5%	54.3%	0%		-	55.7%	13.8%	0%		-	**-**	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	**-**	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	**-**	-

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 06:30 AM - 07:30 AM Weather: Scattered Clouds (12.02 °C)

Start Time	N Approach AIRPORT RD					E Approach STREET A					S Approach AIRPORT RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
06:30:00	122	8	0	0	130	6	6	0	0	12	13	101	0	0	114	256
06:45:00	120	7	0	0	127	2	42	0	0	44	29	91	0	0	120	291
07:00:00	134	0	0	0	134	2	19	0	1	21	12	89	0	0	101	256
07:15:00	144	2	0	0	146	1	10	0	0	11	7	82	0	0	89	246
Grand Total	520	17	0	0	537	11	77	0	1	88	61	363	0	0	424	**1049**
Approach%	96.8%	3.2%	0%		-	12.5%	87.5%	0%		-	14.4%	85.6%	0%		-	**-**
Totals %	49.6%	1.6%	0%		51.2%	1%	7.3%	0%		8.4%	5.8%	34.6%	0%		40.4%	**-**
PHF	0.9	0.53	0		0.92	0.46	0.46	0		0.5	0.53	0.9	0		0.88	**-**
Heavy	74	1	0		75	3	25	0		28	13	59	0		72	**-**
Heavy %	14.2%	5.9%	0%		14%	27.3%	32.5%	0%		31.8%	21.3%	16.3%	0%		17%	**-**
Lights	446	16	0		462	8	52	0		60	48	304	0		352	**-**
Lights %	85.8%	94.1%	0%		86%	72.7%	67.5%	0%		68.2%	78.7%	83.7%	0%		83%	**-**
Single-Unit Trucks	30	0	0		30	2	5	0		7	6	21	0		27	**-**
Single-Unit Trucks %	5.8%	0%	0%		5.6%	18.2%	6.5%	0%		8%	9.8%	5.8%	0%		6.4%	**-**
Buses	4	1	0		5	1	2	0		3	0	18	0		18	**-**
Buses %	0.8%	5.9%	0%		0.9%	9.1%	2.6%	0%		3.4%	0%	5%	0%		4.2%	**-**
Articulated Trucks	40	0	0		40	0	18	0		18	7	20	0		27	**-**
Articulated Trucks %	7.7%	0%	0%		7.4%	0%	23.4%	0%		20.5%	11.5%	5.5%	0%		6.4%	**-**
Bicycles on Road	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%	**-**
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	0%		-	-	-	100%		-	-	-	0%		**-**

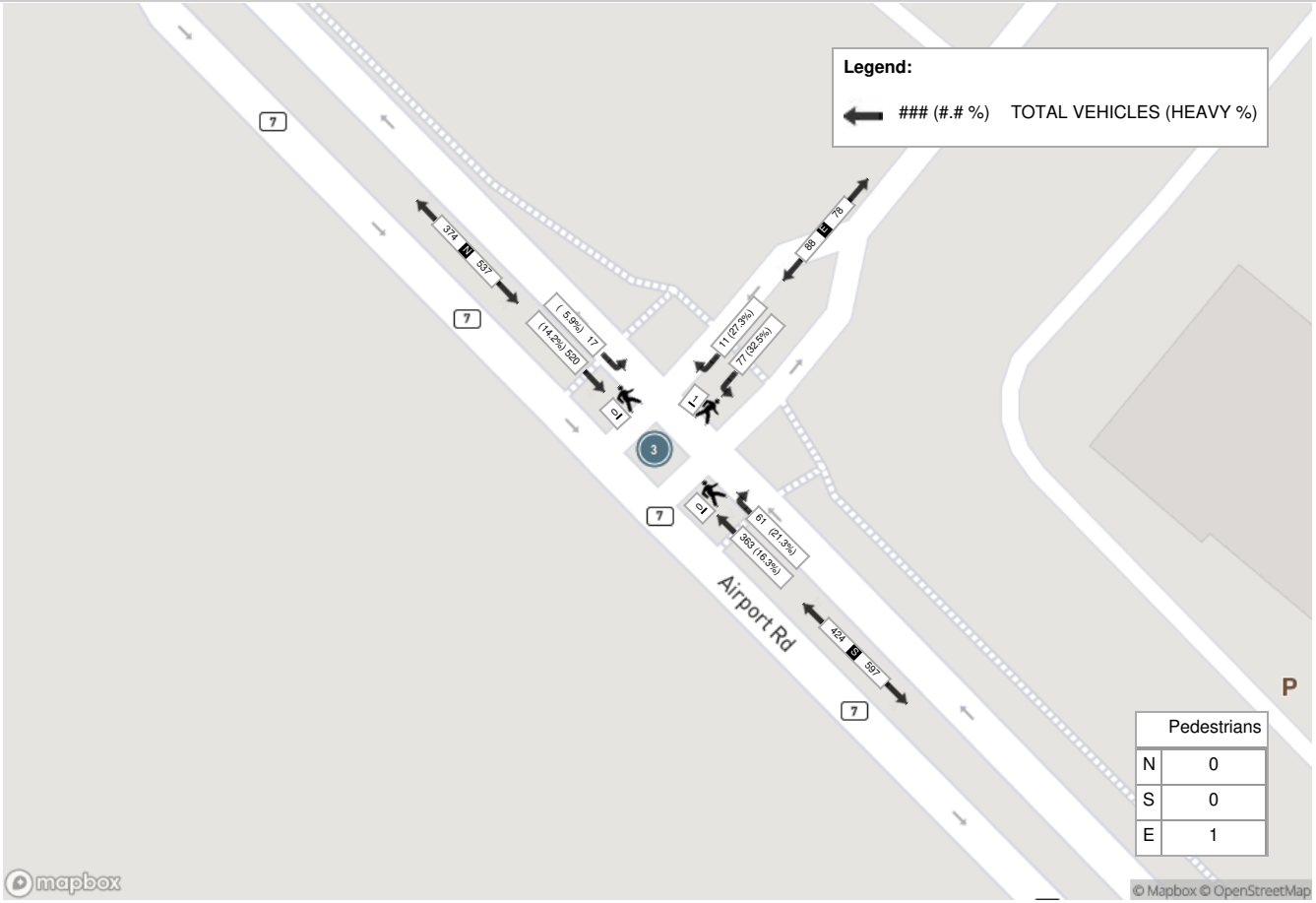
Crozier & Associates
SUITE 301 211 YONGE STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (19.93 °C)

Start Time	N Approach AIRPORT RD					E Approach STREET A					S Approach AIRPORT RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
16:15:00	83	0	0	0	83	0	12	0	0	12	7	149	0	0	156	251
16:30:00	90	0	0	0	90	0	10	0	1	10	7	136	0	0	143	243
16:45:00	96	1	1	0	98	5	9	0	0	14	4	149	0	0	153	265
17:00:00	109	0	0	0	109	0	3	0	0	3	8	144	0	0	152	264
Grand Total	378	1	1	0	380	5	34	0	1	39	26	578	0	0	604	**1023**
Approach%	99.5%	0.3%	0.3%		-	12.8%	87.2%	0%		-	4.3%	95.7%	0%		-	**-**
Totals %	37%	0.1%	0.1%		37.1%	0.5%	3.3%	0%		3.8%	2.5%	56.5%	0%		59%	**-**
PHF	0.87	0.25	0.25		0.87	0.25	0.71	0		0.7	0.81	0.97	0		0.97	**-**
Heavy	61	1	0		62	2	21	0		23	20	75	0		95	**-**
Heavy %	16.1%	100%	0%		16.3%	40%	61.8%	0%		59%	76.9%	13%	0%		15.7%	**-**
Lights	317	0	1		318	3	13	0		16	6	503	0		509	**-**
Lights %	83.9%	0%	100%		83.7%	60%	38.2%	0%		41%	23.1%	87%	0%		84.3%	**-**
Single-Unit Trucks	23	1	0		24	2	11	0		13	6	35	0		41	**-**
Single-Unit Trucks %	6.1%	100%	0%		6.3%	40%	32.4%	0%		33.3%	23.1%	6.1%	0%		6.8%	**-**
Buses	13	0	0		13	0	0	0		0	0	0	0		0	**-**
Buses %	3.4%	0%	0%		3.4%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Articulated Trucks	25	0	0		25	0	10	0		10	14	40	0		54	**-**
Articulated Trucks %	6.6%	0%	0%		6.6%	0%	29.4%	0%		25.6%	53.8%	6.9%	0%		8.9%	**-**
Bicycles on Road	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%	**-**
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	0%		-	-	-	100%		-	-	-	0%		**-**

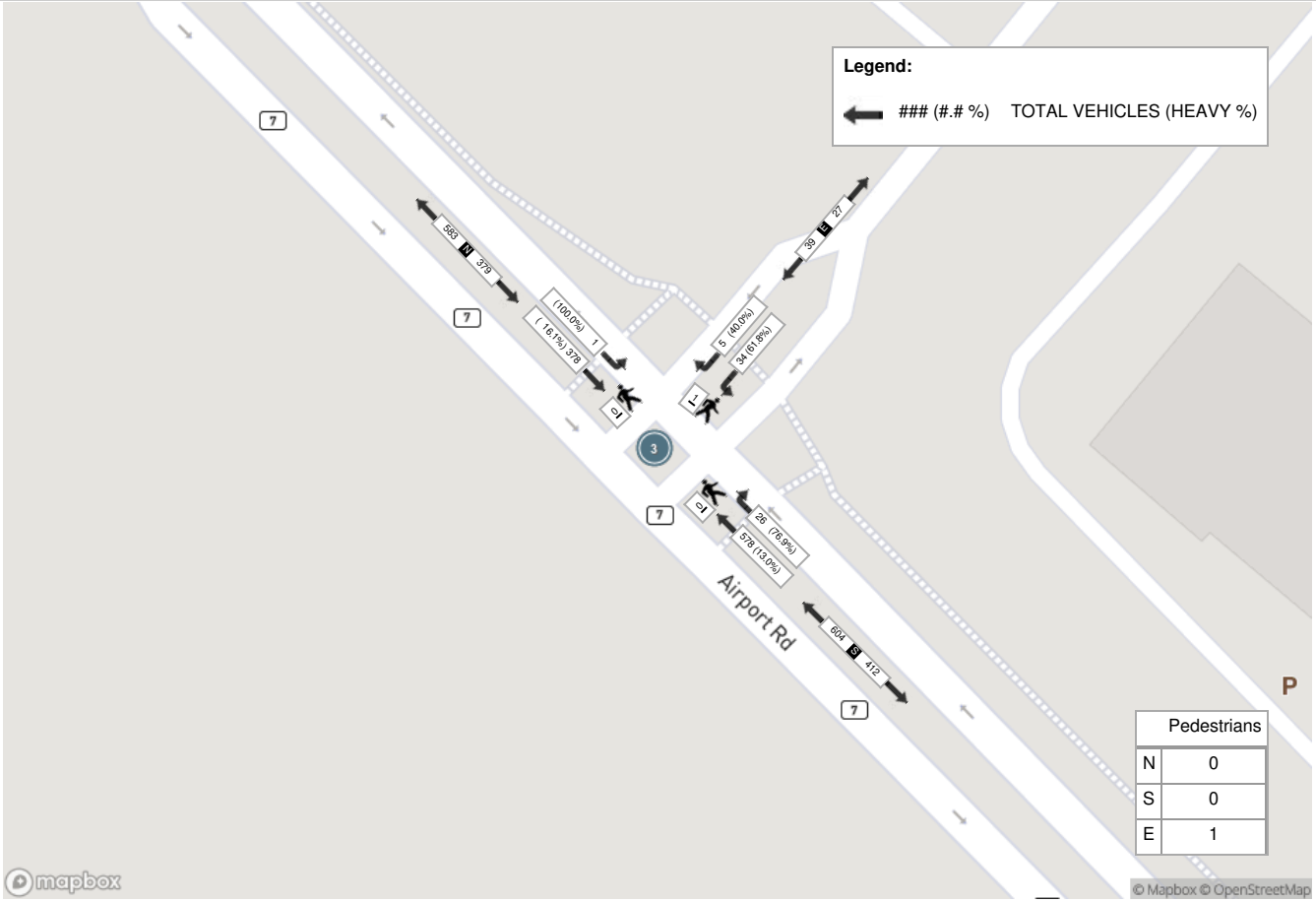
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 06:30 AM - 07:30 AM Weather: Scattered Clouds (12.02 °C)



Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (19.93 °C)



Spectrum

Turning Movement Count
Location Name: AIRPORT RD & PERDUE CRT / DAVIS LN
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Turning Movement Count (4 . AIRPORT RD & PERDUE CRT / DAVIS LN) CustID: 00717933 MioID:

Start Time	N Approach AIRPORT RD						E Approach PERDUE CT						S Approach AIRPORT RD						W Approach PERDUE CT						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		
06:00:00	0	104	3	0	0	107	3	0	16	0	0	19	20	71	14	0	0	105	18	0	0	0	0	18	249	
06:15:00	0	119	1	0	0	120	0	0	16	0	3	16	22	78	11	0	0	111	17	0	0	0	0	17	264	
06:30:00	0	136	0	0	0	136	1	0	22	0	1	23	24	125	12	0	0	161	8	0	2	1	0	11	331	
06:45:00	0	158	0	0	0	158	8	0	18	0	11	26	23	131	10	0	0	164	12	1	1	1	0	15	363	1207
07:00:00	2	144	2	0	0	148	4	0	18	0	2	22	23	101	8	0	0	132	4	0	0	0	0	4	306	1264
07:15:00	1	154	0	0	0	155	4	0	20	0	1	24	13	90	16	0	0	119	9	0	0	0	0	9	307	1307
07:30:00	1	159	0	0	0	160	4	0	22	0	1	26	6	85	14	0	0	105	9	0	0	0	1	9	300	1276
07:45:00	1	151	1	0	0	153	1	0	4	0	3	5	4	86	27	0	0	117	7	0	1	1	1	9	284	1197
08:00:00	2	167	2	0	0	171	0	0	2	0	0	2	7	86	24	0	0	117	15	1	1	1	3	18	308	1199
08:15:00	3	136	2	0	0	141	3	1	9	0	2	13	14	79	25	0	3	118	9	0	2	0	3	11	283	1175
08:30:00	0	116	5	0	0	121	0	0	11	0	1	11	12	62	14	2	0	90	15	2	2	0	0	19	241	1116
08:45:00	3	92	6	0	0	101	1	0	13	0	1	14	26	72	19	0	1	117	14	0	0	0	3	14	246	1078
09:00:00	3	106	4	0	0	113	2	0	24	0	3	26	28	71	11	2	0	112	13	0	0	0	0	13	264	1034
09:15:00	1	87	8	0	0	96	2	0	28	0	1	30	41	73	10	0	0	124	11	0	0	0	0	11	261	1012
09:30:00	2	91	3	0	0	96	5	0	29	1	3	35	25	54	13	0	0	92	9	0	2	0	0	11	234	1005
09:45:00	1	96	5	0	0	102	3	0	20	0	1	23	14	73	19	0	0	106	14	0	4	0	0	18	249	1008
BREAK																										
15:00:00	1	79	0	0	0	80	5	0	11	0	1	16	4	119	16	0	1	139	17	0	0	0	2	17	252	
15:15:00	0	95	0	0	0	95	2	0	5	0	0	7	11	149	12	0	0	172	15	0	2	0	0	17	291	
15:30:00	1	79	0	1	0	81	0	0	10	0	1	10	15	125	20	0	1	160	8	1	1	0	0	10	261	
15:45:00	1	106	2	0	0	109	0	0	14	0	0	14	13	132	24	0	0	169	14	1	2	0	0	17	309	1113
16:00:00	1	98	6	0	0	105	1	0	18	0	2	19	24	123	20	0	0	167	32	0	2	0	0	34	325	1186
16:15:00	1	95	1	0	0	97	1	0	29	0	3	30	26	157	22	1	0	206	20	1	2	0	0	23	356	1251
16:30:00	3	110	6	1	0	120	2	0	34	0	9	36	27	145	15	1	0	188	20	0	2	0	2	22	366	1356
16:45:00	2	104	2	1	0	109	1	0	26	0	0	27	21	164	21	0	0	206	17	0	0	0	0	17	359	1406
17:00:00	0	119	2	4	1	125	0	0	24	0	1	24	16	148	17	1	0	182	19	0	4	0	1	23	354	1435
17:15:00	0	84	1	1	0	86	4	0	17	0	3	21	8	144	8	0	0	160	19	0	2	0	0	21	288	1367
17:30:00	3	107	2	0	0	112	1	0	9	0	0	10	13	132	13	0	0	158	16	0	2	0	1	18	298	1299
17:45:00	1	101	2	0	0	104	0	0	13	0	0	13	11	133	12	0	0	156	13	0	0	0	0	13	286	1226
18:00:00	0	85	0	1	0	86	0	0	13	0	0	13	4	146	10	1	0	161	11	0	0	0	0	11	271	1143
18:15:00	1	111	1	0	0	113	0	0	9	0	1	9	12	127	12	0	0	151	16	0	0	0	0	16	289	1144
18:30:00	2	88	1	0	0	91	2	1	4	0	2	7	7	99	4	0	0	110	13	1	0	0	0	14	222	1068
18:45:00	1	74	0	0	0	75	0	0	12	0	0	12	6	111	10	0	0	127	4	0	1	0	0	5	219	1001
Grand Total	38	3551	68	9	1	3666	60	2	520	1	57	583	520	3491	483	8	6	4502	438	8	35	4	17	485	**9236**	-
Approach%	1%	96.9%	1.9%	0.2%		-	10.3%	0.3%	89.2%	0.2%		-	11.6%	77.5%	10.7%	0.2%		-	90.3%	1.6%	7.2%	0.8%		-	-	-
Totals %	0.4%	38.4%	0.7%	0.1%		39.7%	0.6%	0%	5.6%	0%		6.3%	5.6%	37.8%	5.2%	0.1%		48.7%	4.7%	0.1%	0.4%	0%		5.3%	-	-
Heavy	26	561	53	0		-	43	0	224	1		-	308	552	241	1		-	225	4	22	4		-	-	-
Heavy %	68.4%	15.8%	77.9%	0%		-	71.7%	0%	43.1%	100%		-	59.2%	15.8%	49.9%	12.5%		-	51.4%	50%	62.9%	100%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: AIRPORT RD & PERDUE CRT / DAVIS LN
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 06:30 AM - 07:30 AM **Weather: Scattered Clouds (12.02 °C)**

Start Time	N Approach AIRPORT RD						E Approach PERDUE CT						S Approach AIRPORT RD						W Approach PERDUE CT						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	
06:30:00	0	136	0	0	0	136	1	0	22	0	1	23	24	125	12	0	0	161	8	0	2	1	0	11	331
06:45:00	0	158	0	0	0	158	8	0	18	0	11	26	23	131	10	0	0	164	12	1	1	1	0	15	363
07:00:00	2	144	2	0	0	148	4	0	18	0	2	22	23	101	8	0	0	132	4	0	0	0	0	4	306
07:15:00	1	154	0	0	0	155	4	0	20	0	1	24	13	90	16	0	0	119	9	0	0	0	0	9	307
Grand Total	3	592	2	0	0	597	17	0	78	0	15	95	83	447	46	0	0	576	33	1	3	2	0	39	**1307**
Approach%	0.5%	99.2%	0.3%	0%		-	17.9%	0%	82.1%	0%		-	14.4%	77.6%	8%	0%		-	84.6%	2.6%	7.7%	5.1%		-	**-**
Totals %	0.2%	45.3%	0.2%	0%		45.7%	1.3%	0%	6%	0%		7.3%	6.4%	34.2%	3.5%	0%		44.1%	2.5%	0.1%	0.2%	0.2%		3%	**-**
PHF	0.38	0.94	0.25	0		0.94	0.53	0	0.89	0		0.91	0.86	0.85	0.72	0		0.88	0.69	0.25	0.38	0.5		0.65	**-**
Heavy	3	95	0	0		98	17	0	76	0		93	9	57	14	0		80	28	0	3	2		33	**-**
Heavy %	100%	16%	0%	0%		16.4%	100%	0%	97.4%	0%		97.9%	10.8%	12.8%	30.4%	0%		13.9%	84.8%	0%	100%	100%		84.6%	**-**
Lights	0	497	2	0		499	0	0	2	0		2	74	390	32	0		496	5	1	0	0		6	**-**
Lights %	0%	84%	100%	0%		83.6%	0%	0%	2.6%	0%		2.1%	89.2%	87.2%	69.6%	0%		86.1%	15.2%	100%	0%	0%		15.4%	**-**
Single-Unit Trucks	3	33	0	0		36	1	0	7	0		8	5	28	6	0		39	12	0	1	2		15	**-**
Single-Unit Trucks %	100%	5.6%	0%	0%		6%	5.9%	0%	9%	0%		8.4%	6%	6.3%	13%	0%		6.8%	36.4%	0%	33.3%	100%		38.5%	**-**
Buses	0	6	0	0		6	15	0	54	0		69	3	5	0	0		8	0	0	0	0		0	**-**
Buses %	0%	1%	0%	0%		1%	88.2%	0%	69.2%	0%		72.6%	3.6%	1.1%	0%	0%		1.4%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	56	0	0		56	1	0	15	0		16	1	24	8	0		33	16	0	2	0		18	**-**
Articulated Trucks %	0%	9.5%	0%	0%		9.4%	5.9%	0%	19.2%	0%		16.8%	1.2%	5.4%	17.4%	0%		5.7%	48.5%	0%	66.7%	0%		46.2%	**-**
Bicycles on Road	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%	**-**
Pedestrians	-	-	-	-	0	-	-	-	-	-	15	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	100%		-	-	-	-	0%		-	-	-	-	0%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (19.93 °C)

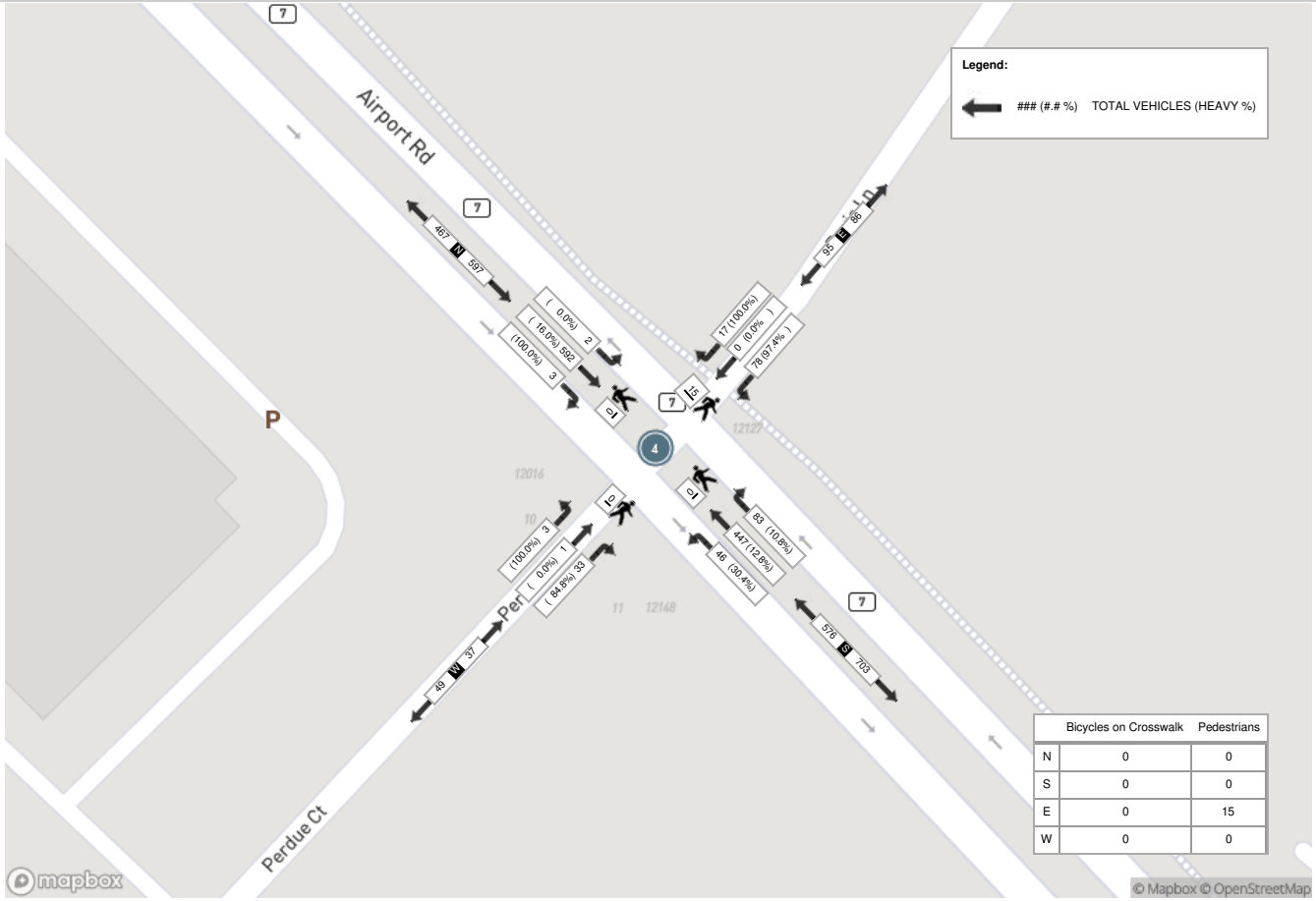
Start Time	N Approach AIRPORT RD						E Approach PERDUE CT						S Approach AIRPORT RD						W Approach PERDUE CT						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:15:00	1	95	1	0	0	97	1	0	29	0	3	30	26	157	22	1	0	206	20	1	2	0	0	23	356
16:30:00	3	110	6	1	0	120	2	0	34	0	9	36	27	145	15	1	0	188	20	0	2	0	2	22	366
16:45:00	2	104	2	1	0	109	1	0	26	0	0	27	21	164	21	0	0	206	17	0	0	0	0	17	359
17:00:00	0	119	2	4	1	125	0	0	24	0	1	24	16	148	17	1	0	182	19	0	4	0	1	23	354
Grand Total	6	428	11	6	1	451	4	0	113	0	13	117	90	614	75	3	0	782	76	1	8	0	3	85	**1435**
Approach%	1.3%	94.9%	2.4%	1.3%		-	3.4%	0%	96.6%	0%		-	11.5%	78.5%	9.6%	0.4%		-	89.4%	1.2%	9.4%	0%		-	**-**
Totals %	0.4%	29.8%	0.8%	0.4%		31.4%	0.3%	0%	7.9%	0%		8.2%	6.3%	42.8%	5.2%	0.2%		54.5%	5.3%	0.1%	0.6%	0%		5.9%	**-**
PHF	0.5	0.9	0.46	0.38		0.9	0.5	0	0.83	0		0.81	0.83	0.94	0.85	0.75		0.95	0.95	0.25	0.5	0		0.92	**-**
Heavy	6	65	11	0		82	0	0	19	0		19	78	99	46	0		223	22	1	3	0		26	**-**
Heavy %	100%	15.2%	100%	0%		18.2%	0%	0%	16.8%	0%		16.2%	86.7%	16.1%	61.3%	0%		28.5%	28.9%	100%	37.5%	0%		30.6%	**-**
Lights	0	363	0	6		369	4	0	94	0		98	12	515	29	3		559	54	0	5	0		59	**-**
Lights %	0%	84.8%	0%	100%		81.8%	100%	0%	83.2%	0%		83.8%	13.3%	83.9%	38.7%	100%		71.5%	71.1%	0%	62.5%	0%		69.4%	**-**
Single-Unit Trucks	3	30	0	0		33	0	0	3	0		3	21	45	15	0		81	12	0	0	0		12	**-**
Single-Unit Trucks %	50%	7%	0%	0%		7.3%	0%	0%	2.7%	0%		2.6%	23.3%	7.3%	20%	0%		10.4%	15.8%	0%	0%	0%		14.1%	**-**
Buses	0	2	11	0		13	0	0	10	0		10	53	0	0	0		53	0	0	0	0		0	**-**
Buses %	0%	0.5%	100%	0%		2.9%	0%	0%	8.8%	0%		8.5%	58.9%	0%	0%	0%		6.8%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	3	33	0	0		36	0	0	6	0		6	4	54	31	0		89	10	1	3	0		14	**-**
Articulated Trucks %	50%	7.7%	0%	0%		8%	0%	0%	5.3%	0%		5.1%	4.4%	8.8%	41.3%	0%		11.4%	13.2%	100%	37.5%	0%		16.5%	**-**
Bicycles on Road	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%	**-**
Pedestrians	-	-	-	-	1	-	-	-	-	-	13	-	-	-	-	-	0	-	-	-	-	-	3	-	**-**
Pedestrians%	-	-	-	-	5.9%		-	-	-	-	76.5%		-	-	-	-	0%		-	-	-	-	17.6%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

Turning Movement Count
Location Name: AIRPORT RD & PERDUE CRT / DAVIS LN
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 06:30 AM - 07:30 AM **Weather: Scattered Clouds (12.02 °C)**



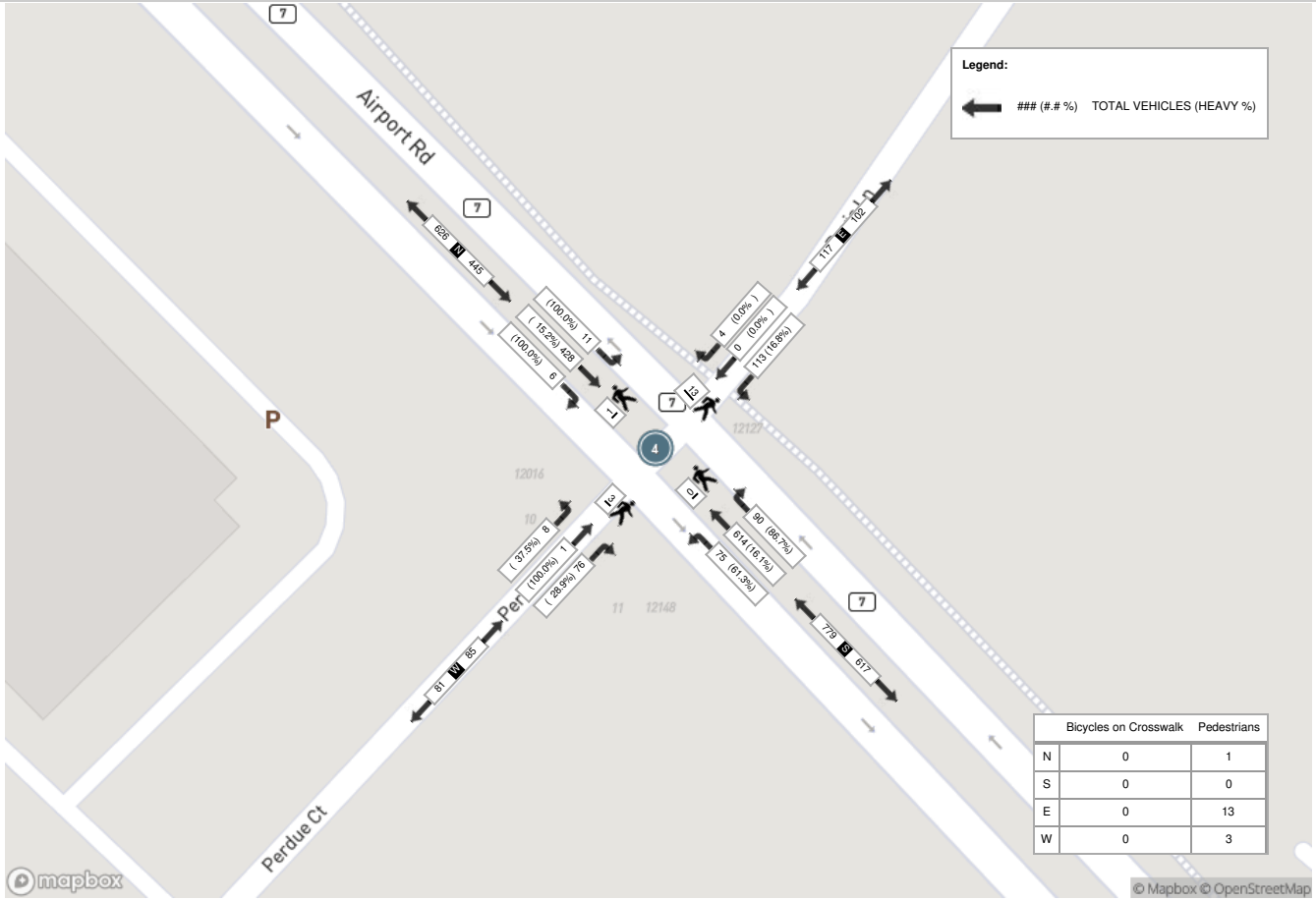
	Bicycles on Crosswalk	Pedestrians
N	0	0
S	0	0
E	0	15
W	0	0

Spectrum

Turning Movement Count
Location Name: AIRPORT RD & PERDUE CRT / DAVIS LN
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (19.93 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	1
S	0	0
E	0	13
W	0	3

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Turning Movement Count (2 . HEALEY RD & AIRPORT RD) CustID: 00720469 MioID:

Start Time	N Approach AIRPORT RD					E Approach HEALEY RD					S Approach 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		
06:00:00	96	15	0	0	111	8	4	0	0	12	16	36	0	0	52	175	
06:15:00	108	24	0	0	132	9	13	0	0	22	32	29	0	0	61	215	
06:30:00	124	50	0	0	174	4	5	0	0	9	55	44	0	0	99	282	
06:45:00	105	39	0	0	144	15	9	0	0	24	41	51	0	0	92	260	932
07:00:00	119	32	0	0	151	15	13	0	0	28	38	46	0	0	84	263	1020
07:15:00	148	34	0	0	182	23	20	0	0	43	44	46	0	0	90	315	1120
07:30:00	138	39	0	0	177	16	18	0	0	34	23	42	0	0	65	276	1114
07:45:00	126	45	0	0	171	29	18	0	0	47	34	45	0	0	79	297	1151
08:00:00	133	37	0	0	170	16	9	0	0	25	23	48	0	0	71	266	1154
08:15:00	117	44	0	0	161	13	13	0	0	26	29	45	0	0	74	261	1100
08:30:00	102	30	0	0	132	15	15	0	0	30	12	45	0	0	57	219	1043
08:45:00	82	37	0	0	119	14	11	0	0	25	12	47	0	0	59	203	949
09:00:00	83	19	0	0	102	11	13	0	0	24	14	56	0	0	70	196	879
09:15:00	78	32	0	0	110	12	12	0	0	24	13	41	0	0	54	188	806
09:30:00	85	16	0	0	101	10	10	0	0	20	13	43	0	0	56	177	764
09:45:00	68	14	0	0	82	8	9	0	0	17	12	43	0	0	55	154	715
BREAK																	
15:00:00	53	24	0	0	77	26	14	0	0	40	24	90	0	0	114	231	
15:15:00	56	30	0	0	86	33	20	0	0	53	28	101	0	0	129	268	
15:30:00	50	17	0	0	67	28	18	0	0	46	21	100	0	0	121	234	
15:45:00	60	19	0	0	79	35	25	0	0	60	15	104	0	0	119	258	991
16:00:00	54	24	0	0	78	52	35	0	0	87	10	105	0	0	115	280	1040
16:15:00	49	21	0	0	70	73	28	0	0	101	12	121	0	0	133	304	1076
16:30:00	64	16	0	0	80	51	24	0	0	75	12	125	0	0	137	292	1134
16:45:00	68	17	0	0	85	53	25	0	0	78	13	128	0	0	141	304	1180
17:00:00	60	15	0	0	75	57	27	0	0	84	14	124	0	0	138	297	1197
17:15:00	50	23	0	0	73	74	22	0	0	96	20	126	0	0	146	315	1208
17:30:00	63	21	0	0	84	54	23	0	0	77	23	92	0	0	115	276	1192
17:45:00	72	29	0	0	101	39	28	0	0	67	17	102	0	0	119	287	1175
18:00:00	46	19	0	0	65	43	29	0	0	72	27	103	0	0	130	267	1145
18:15:00	65	37	0	0	102	41	32	0	0	73	31	93	0	0	124	299	1129
18:30:00	46	14	0	0	60	42	23	0	0	65	24	61	0	0	85	210	1063
18:45:00	60	9	0	0	69	15	9	0	0	24	20	83	0	0	103	196	972

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
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Grand Total	2628	842	0	0	3470	934	574	0	0	1508	722	2365	0	0	3087	**8065**	-
Approach%	75.7%	24.3%	0%		-	61.9%	38.1%	0%		-	23.4%	76.6%	0%		-	**-**	-
Totals %	32.6%	10.4%	0%		43%	11.6%	7.1%	0%		18.7%	9%	29.3%	0%		38.3%	**-**	-
Heavy	399	17	0		-	20	47	0		-	44	322	0		-	**-**	-
Heavy %	15.2%	2%	0%		-	2.1%	8.2%	0%		-	6.1%	13.6%	0%		-	**-**	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	**-**	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	**-**	-

Crozier & Associates
SUITE 301 211 YONGE STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM Weather: Scattered Clouds (12.02 °C)

Start Time	N Approach AIRPORT RD					E Approach HEALEY RD					S Approach AIRPORT RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
07:15:00	148	34	0	0	182	23	20	0	0	43	44	46	0	0	90	315
07:30:00	138	39	0	0	177	16	18	0	0	34	23	42	0	0	65	276
07:45:00	126	45	0	0	171	29	18	0	0	47	34	45	0	0	79	297
08:00:00	133	37	0	0	170	16	9	0	0	25	23	48	0	0	71	266
Grand Total	545	155	0	0	700	84	65	0	0	149	124	181	0	0	305	**1154**
Approach%	77.9%	22.1%	0%		-	56.4%	43.6%	0%		-	40.7%	59.3%	0%		-	**-**
Totals %	47.2%	13.4%	0%		60.7%	7.3%	5.6%	0%		12.9%	10.7%	15.7%	0%		26.4%	**-**
PHF	0.92	0.86	0		0.96	0.72	0.81	0		0.79	0.7	0.94	0		0.85	**-**
Heavy	45	4	0		49	8	9	0		17	6	47	0		53	**-**
Heavy %	8.3%	2.6%	0%		7%	9.5%	13.8%	0%		11.4%	4.8%	26%	0%		17.4%	**-**
Lights	500	151	0		651	76	56	0		132	118	134	0		252	**-**
Lights %	91.7%	97.4%	0%		93%	90.5%	86.2%	0%		88.6%	95.2%	74%	0%		82.6%	**-**
Single-Unit Trucks	21	2	0		23	5	3	0		8	0	21	0		21	**-**
Single-Unit Trucks %	3.9%	1.3%	0%		3.3%	6%	4.6%	0%		5.4%	0%	11.6%	0%		6.9%	**-**
Buses	4	2	0		6	3	0	0		3	5	8	0		13	**-**
Buses %	0.7%	1.3%	0%		0.9%	3.6%	0%	0%		2%	4%	4.4%	0%		4.3%	**-**
Articulated Trucks	20	0	0		20	0	6	0		6	1	18	0		19	**-**
Articulated Trucks %	3.7%	0%	0%		2.9%	0%	9.2%	0%		4%	0.8%	9.9%	0%		6.2%	**-**
Bicycles on Road	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%	**-**

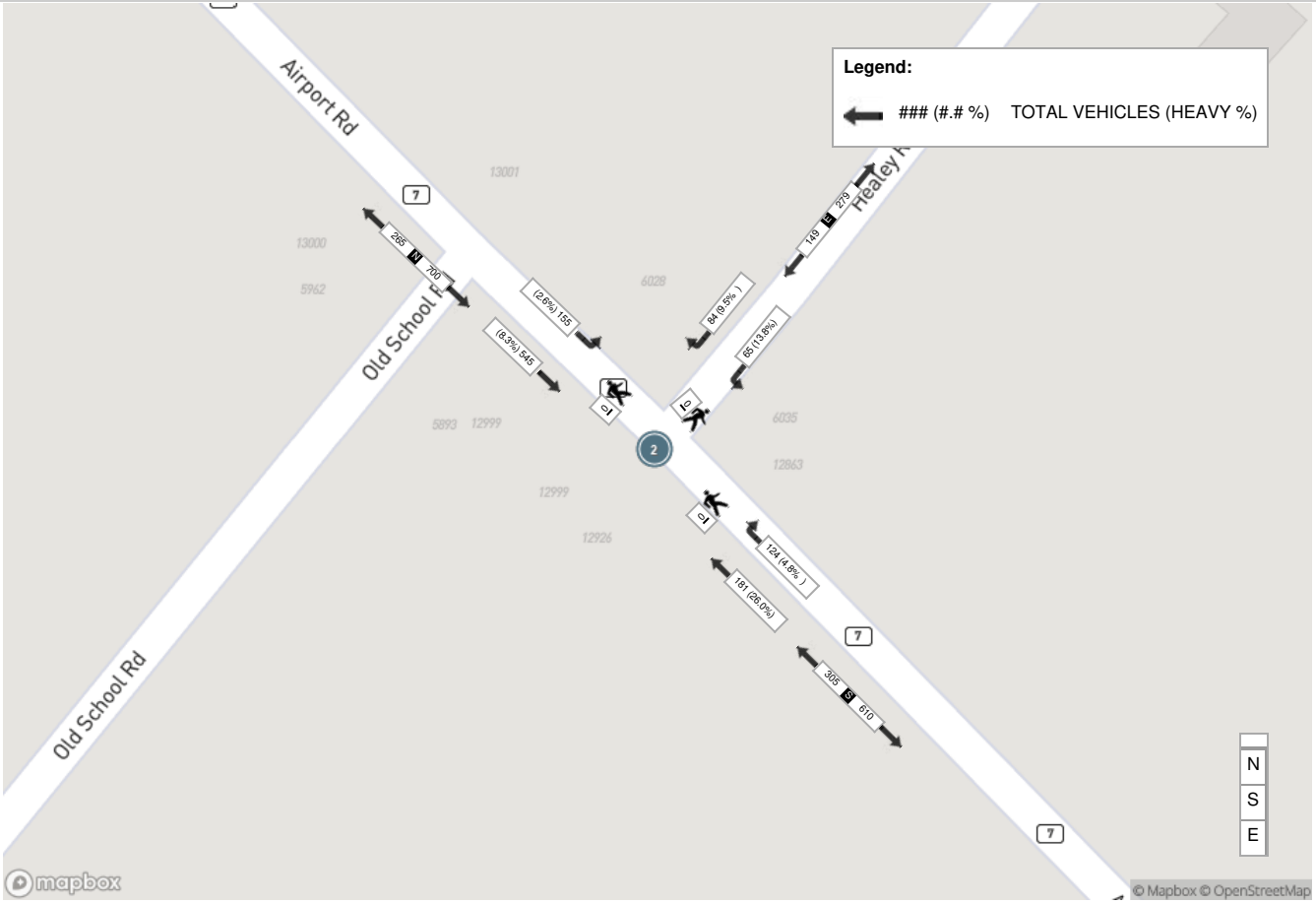
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (19.93 °C)

Start Time	N Approach AIRPORT RD					E Approach HEALEY RD					S Approach AIRPORT RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
16:30:00	64	16	0	0	80	51	24	0	0	75	12	125	0	0	137	292
16:45:00	68	17	0	0	85	53	25	0	0	78	13	128	0	0	141	304
17:00:00	60	15	0	0	75	57	27	0	0	84	14	124	0	0	138	297
17:15:00	50	23	0	0	73	74	22	0	0	96	20	126	0	0	146	315
Grand Total	242	71	0	0	313	235	98	0	0	333	59	503	0	0	562	**1208**
Approach%	77.3%	22.7%	0%		-	70.6%	29.4%	0%		-	10.5%	89.5%	0%		-	**-**
Totals %	20%	5.9%	0%		25.9%	19.5%	8.1%	0%		27.6%	4.9%	41.6%	0%		46.5%	**-**
PHF	0.89	0.77	0		0.92	0.79	0.91	0		0.87	0.74	0.98	0		0.96	**-**
Heavy	52	4	0		56	3	5	0		8	5	43	0		48	**-**
Heavy %	21.5%	5.6%	0%		17.9%	1.3%	5.1%	0%		2.4%	8.5%	8.5%	0%		8.5%	**-**
Lights	190	67	0		257	231	93	0		324	54	460	0		514	**-**
Lights %	78.5%	94.4%	0%		82.1%	98.3%	94.9%	0%		97.3%	91.5%	91.5%	0%		91.5%	**-**
Single-Unit Trucks	17	2	0		19	3	3	0		6	2	25	0		27	**-**
Single-Unit Trucks %	7%	2.8%	0%		6.1%	1.3%	3.1%	0%		1.8%	3.4%	5%	0%		4.8%	**-**
Buses	9	1	0		10	0	2	0		2	0	0	0		0	**-**
Buses %	3.7%	1.4%	0%		3.2%	0%	2%	0%		0.6%	0%	0%	0%		0%	**-**
Articulated Trucks	26	1	0		27	0	0	0		0	3	18	0		21	**-**
Articulated Trucks %	10.7%	1.4%	0%		8.6%	0%	0%	0%		0%	5.1%	3.6%	0%		3.7%	**-**
Bicycles on Road	0	0	0		0	1	0	0		1	0	0	0		0	**-**
Bicycles on Road %	0%	0%	0%		0%	0.4%	0%	0%		0.3%	0%	0%	0%		0%	**-**

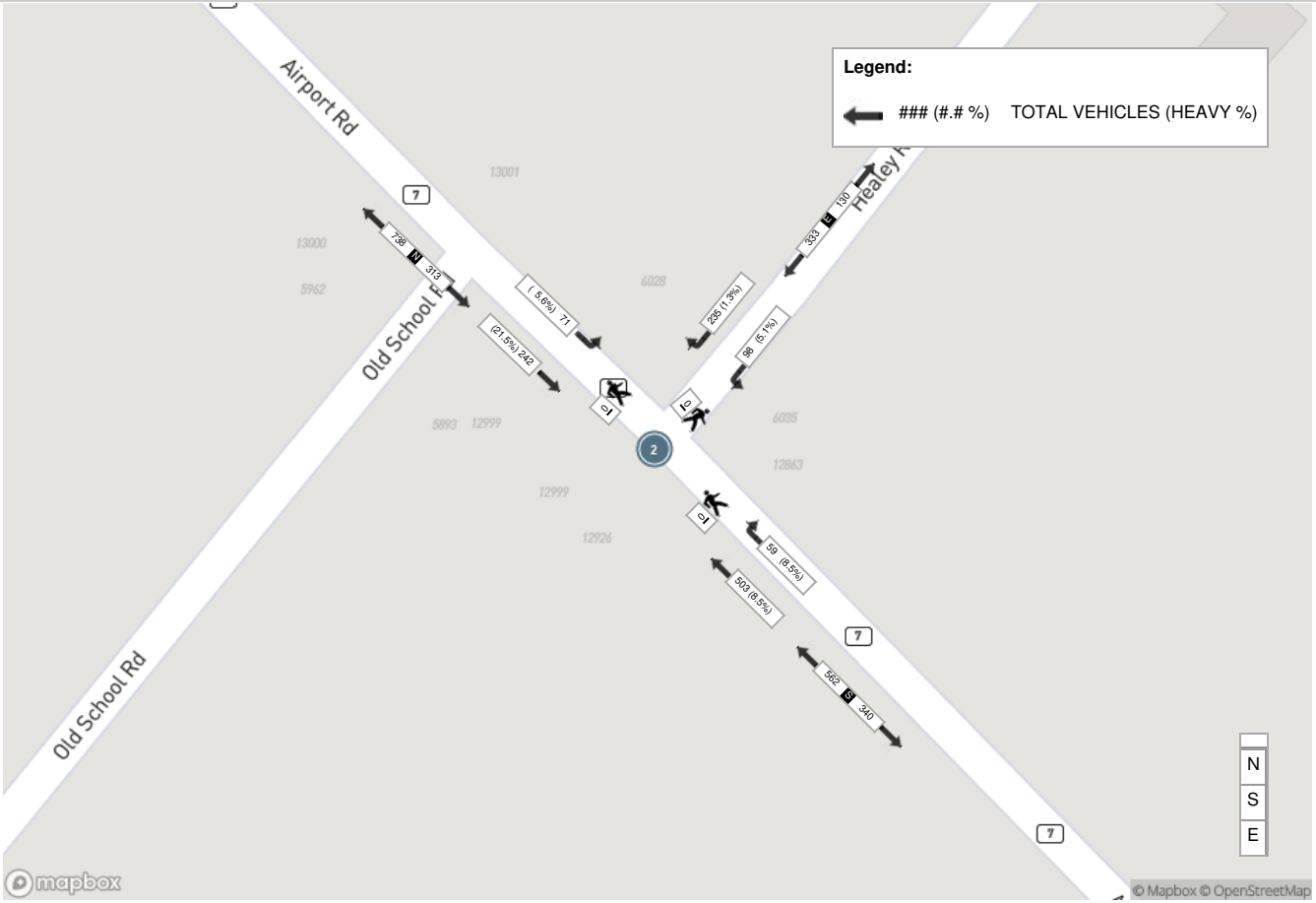
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM Weather: Scattered Clouds (12.02 °C)



Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (19.93 °C)



Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & AIRPORT RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Turning Movement Count (5 . MAYFIELD RD & AIRPORT RD) CustID: 00717433 MioID:

Start Time	N Approach AIRPORT RD						E Approach MAYFIELD RD						S Approach AIRPORT RD						W Approach 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		
06:00:00	30	96	15	2	0	143	4	72	13	0	1	89	14	50	18	0	2	82	34	103	43	0	0	180	494	
06:15:00	43	90	13	0	0	146	9	82	14	0	0	105	19	40	16	0	0	75	51	135	55	0	1	241	567	
06:30:00	36	125	12	2	0	175	11	74	16	0	1	101	23	77	19	0	1	119	64	169	72	0	1	305	700	
06:45:00	34	128	15	0	1	177	13	86	35	0	3	134	7	71	17	0	0	95	60	125	74	0	0	259	665	2426
07:00:00	40	125	13	2	2	180	10	73	37	0	14	120	21	66	24	0	1	111	39	92	58	0	0	189	600	2532
07:15:00	36	125	18	0	0	179	9	127	25	0	0	161	17	55	31	0	0	103	70	156	48	0	1	274	717	2682
07:30:00	35	141	16	0	1	192	9	92	19	0	5	120	26	48	35	0	1	109	51	120	43	0	2	214	635	2617
07:45:00	34	119	12	0	3	165	7	124	25	0	7	156	17	44	40	0	2	101	86	156	64	1	2	307	729	2681
08:00:00	27	156	11	0	0	194	11	107	22	0	1	140	19	50	35	0	1	104	84	130	50	0	1	264	702	2783
08:15:00	27	117	15	0	0	159	13	94	34	0	5	141	22	51	42	0	3	115	72	109	57	0	0	238	653	2719
08:30:00	26	123	16	0	1	165	5	116	32	0	1	153	14	48	42	0	1	104	73	112	35	0	1	220	642	2726
08:45:00	31	75	17	0	2	123	7	108	25	0	11	140	26	63	43	0	3	132	50	135	47	0	1	232	627	2624
09:00:00	29	98	14	2	0	143	10	92	30	1	4	133	18	58	35	0	0	111	46	95	46	0	1	187	574	2496
09:15:00	38	84	23	0	0	145	6	89	16	0	0	111	28	60	28	0	6	116	40	93	46	0	1	179	551	2394
09:30:00	42	79	22	0	0	143	4	104	26	0	3	134	13	41	30	0	1	84	34	120	45	0	0	199	560	2312
09:45:00	39	83	19	1	0	142	13	94	10	0	1	117	15	45	29	0	1	89	40	90	49	0	1	179	527	2212
BREAK																										
15:00:00	48	59	20	1	2	128	15	130	28	0	5	173	23	96	35	0	1	154	35	118	38	0	2	191	646	
15:15:00	47	53	14	0	1	114	16	148	36	0	4	200	22	95	47	0	3	164	28	139	54	0	1	221	699	
15:30:00	30	65	25	2	0	122	19	106	28	0	0	153	27	93	62	0	0	182	31	123	45	0	1	199	656	
15:45:00	49	72	22	1	0	144	15	145	24	0	1	184	30	115	49	0	1	194	33	117	42	0	0	192	714	2715
16:00:00	61	65	20	0	0	146	11	149	23	0	2	183	25	116	57	0	0	198	46	133	40	0	0	219	746	2815
16:15:00	66	74	12	1	2	153	13	131	18	0	4	162	21	149	64	0	1	234	29	127	51	0	0	207	756	2872
16:30:00	69	88	14	1	0	172	19	144	23	0	12	186	19	134	55	0	3	208	35	125	50	1	2	211	777	2993
16:45:00	57	76	19	0	0	152	14	139	26	0	0	179	20	124	55	0	1	199	36	131	54	0	0	221	751	3030
17:00:00	72	79	22	1	1	174	10	159	24	0	1	193	20	133	73	0	0	226	30	102	44	1	3	177	770	3054
17:15:00	52	62	20	0	0	134	15	173	25	0	7	213	26	100	60	0	4	186	41	142	50	0	7	233	766	3064
17:30:00	52	60	7	0	0	119	12	163	19	0	2	194	26	91	50	0	5	167	38	128	48	0	2	214	694	2981
17:45:00	65	71	14	2	0	152	11	156	30	0	0	197	35	104	70	0	6	209	46	144	35	1	4	226	784	3014
18:00:00	49	73	12	1	0	135	10	161	26	0	3	197	29	111	61	0	5	201	48	157	47	0	2	252	785	3029
18:15:00	52	68	11	0	1	131	10	177	19	0	1	206	35	78	69	0	5	182	41	162	59	0	2	262	781	3044
18:30:00	44	61	19	1	2	125	8	161	16	1	3	186	25	67	72	0	4	164	53	132	46	0	1	231	706	3056
18:45:00	27	54	19	1	4	101	14	162	27	0	3	203	25	89	46	1	0	161	41	116	35	1	1	193	658	2930
Grand Total	1387	2844	521	21	23	4773	353	3938	771	2	105	5064	707	2562	1409	1	62	4679	1505	4036	1570	5	41	7116	**21632**	-
Approach%	29.1%	59.6%	10.9%	0.4%		-	7%	77.8%	15.2%	0%		-	15.1%	54.8%	30.1%	0%		-	21.1%	56.7%	22.1%	0.1%		-	-	-
Totals %	6.4%	13.1%	2.4%	0.1%		22.1%	1.6%	18.2%	3.6%	0%		23.4%	3.3%	11.8%	6.5%	0%		21.6%	7%	18.7%	7.3%	0%		32.9%	-	-
Heavy	382	464	150	1		-	169	613	290	0		-	376	450	59	0		-	71	556	472	0		-	-	-
Heavy %	27.5%	16.3%	28.8%	4.8%		-	47.9%	15.6%	37.6%	0%		-	53.2%	17.6%	4.2%	0%		-	4.7%	13.8%	30.1%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & AIRPORT RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM **Weather: Scattered Clouds (12.02 °C)**

Start Time	N Approach AIRPORT RD						E Approach MAYFIELD RD						S Approach AIRPORT RD						W Approach 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	
07:15:00	36	125	18	0	0	179	9	127	25	0	0	161	17	55	31	0	0	103	70	156	48	0	1	274	717
07:30:00	35	141	16	0	1	192	9	92	19	0	5	120	26	48	35	0	1	109	51	120	43	0	2	214	635
07:45:00	34	119	12	0	3	165	7	124	25	0	7	156	17	44	40	0	2	101	86	156	64	1	2	307	729
08:00:00	27	156	11	0	0	194	11	107	22	0	1	140	19	50	35	0	1	104	84	130	50	0	1	264	702
Grand Total	132	541	57	0	4	730	36	450	91	0	13	577	79	197	141	0	4	417	291	562	205	1	6	1059	**2783**
Approach%	18.1%	74.1%	7.8%	0%		-	6.2%	78%	15.8%	0%		-	18.9%	47.2%	33.8%	0%		-	27.5%	53.1%	19.4%	0.1%		-	**-**
Totals %	4.7%	19.4%	2%	0%		26.2%	1.3%	16.2%	3.3%	0%		20.7%	2.8%	7.1%	5.1%	0%		15%	10.5%	20.2%	7.4%	0%		38.1%	**-**
PHF	0.92	0.87	0.79	0		0.94	0.82	0.89	0.91	0		0.9	0.76	0.9	0.88	0		0.96	0.85	0.9	0.8	0.25		0.86	**-**
Heavy	51	72	20	0		143	17	98	36	0		151	41	33	5	0		79	18	64	45	0		127	**-**
Heavy %	38.6%	13.3%	35.1%	0%		19.6%	47.2%	21.8%	39.6%	0%		26.2%	51.9%	16.8%	3.5%	0%		18.9%	6.2%	11.4%	22%	0%		12%	**-**
Lights	81	469	37	0		587	19	352	55	0		426	38	164	136	0		338	273	498	160	1		932	**-**
Lights %	61.4%	86.7%	64.9%	0%		80.4%	52.8%	78.2%	60.4%	0%		73.8%	48.1%	83.2%	96.5%	0%		81.1%	93.8%	88.6%	78%	100%		88%	**-**
Single-Unit Trucks	15	20	7	0		42	7	43	15	0		65	8	18	2	0		28	8	34	19	0		61	**-**
Single-Unit Trucks %	11.4%	3.7%	12.3%	0%		5.8%	19.4%	9.6%	16.5%	0%		11.3%	10.1%	9.1%	1.4%	0%		6.7%	2.7%	6%	9.3%	0%		5.8%	**-**
Buses	12	22	6	0		40	2	7	1	0		10	5	2	1	0		8	6	6	6	0		18	**-**
Buses %	9.1%	4.1%	10.5%	0%		5.5%	5.6%	1.6%	1.1%	0%		1.7%	6.3%	1%	0.7%	0%		1.9%	2.1%	1.1%	2.9%	0%		1.7%	**-**
Articulated Trucks	24	30	7	0		61	8	48	20	0		76	28	13	2	0		43	4	24	20	0		48	**-**
Articulated Trucks %	18.2%	5.5%	12.3%	0%		8.4%	22.2%	10.7%	22%	0%		13.2%	35.4%	6.6%	1.4%	0%		10.3%	1.4%	4.3%	9.8%	0%		4.5%	**-**
Bicycles on Road	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%	**-**
Pedestrians	-	-	-	-	4	-	-	-	-	-	13	-	-	-	-	-	4	-	-	-	-	-	6	-	**-**
Pedestrians%	-	-	-	-	14.8%		-	-	-	-	48.1%		-	-	-	-	14.8%		-	-	-	-	22.2%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & AIRPORT RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

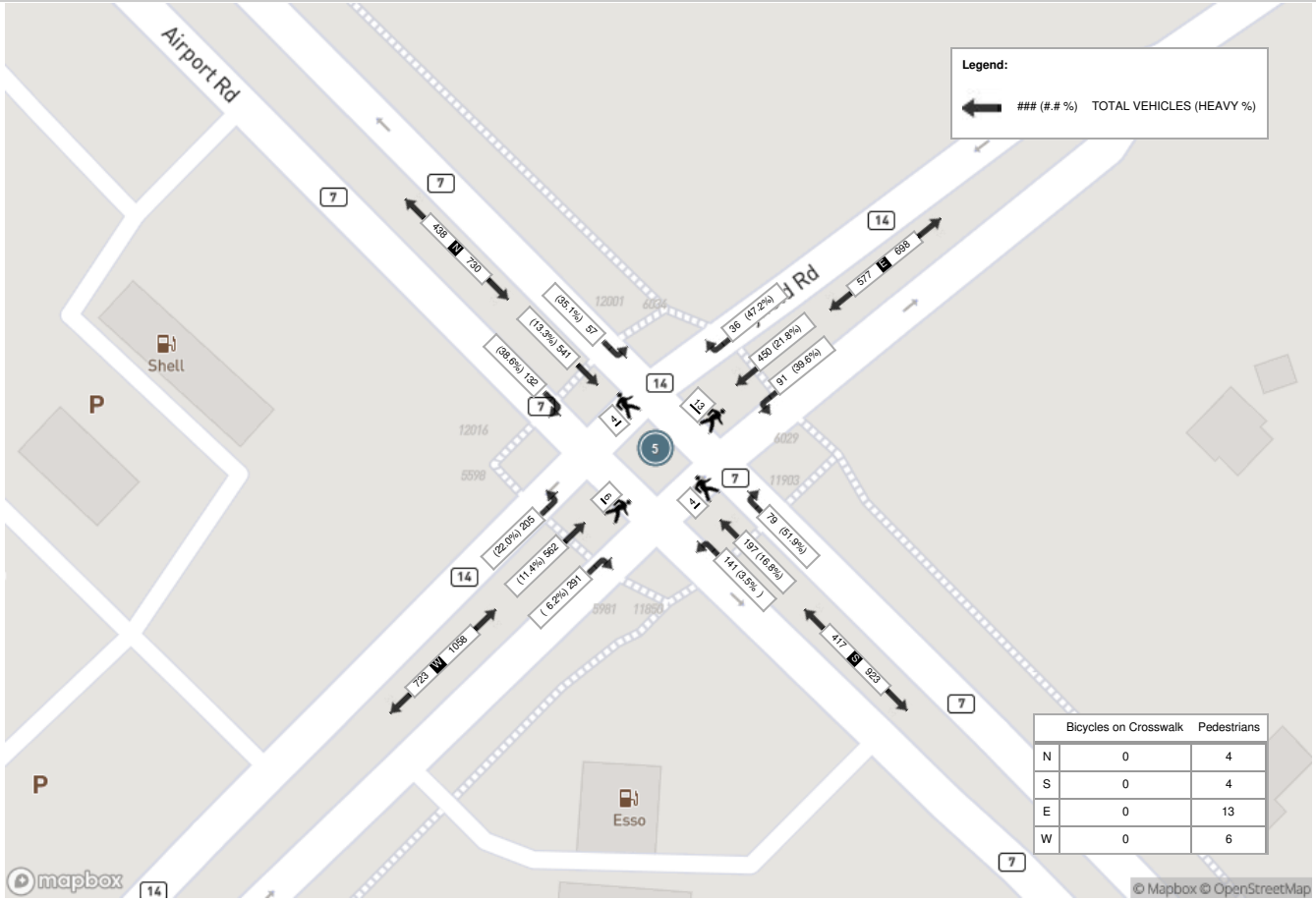
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (19.93 °C)

Start Time	N Approach AIRPORT RD						E Approach MAYFIELD RD						S Approach AIRPORT RD						W Approach 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	
16:30:00	69	88	14	1	0	172	19	144	23	0	12	186	19	134	55	0	3	208	35	125	50	1	2	211	777
16:45:00	57	76	19	0	0	152	14	139	26	0	0	179	20	124	55	0	1	199	36	131	54	0	0	221	751
17:00:00	72	79	22	1	1	174	10	159	24	0	1	193	20	133	73	0	0	226	30	102	44	1	3	177	770
17:15:00	52	62	20	0	0	134	15	173	25	0	7	213	26	100	60	0	4	186	41	142	50	0	7	233	766
Grand Total	250	305	75	2	1	632	58	615	98	0	20	771	85	491	243	0	8	819	142	500	198	2	12	842	**3064**
Approach%	39.6%	48.3%	11.9%	0.3%		-	7.5%	79.8%	12.7%	0%		-	10.4%	60%	29.7%	0%		-	16.9%	59.4%	23.5%	0.2%		-	**-**
Totals %	8.2%	10%	2.4%	0.1%		20.6%	1.9%	20.1%	3.2%	0%		25.2%	2.8%	16%	7.9%	0%		26.7%	4.6%	16.3%	6.5%	0.1%		27.5%	**-**
PHF	0.87	0.87	0.85	0.5		0.91	0.76	0.89	0.94	0		0.9	0.82	0.92	0.83	0		0.91	0.87	0.88	0.92	0.5		0.9	**-**
Heavy	37	32	23	0		92	33	70	26	0		129	45	81	12	0		138	6	69	83	0		158	**-**
Heavy %	14.8%	10.5%	30.7%	0%		14.6%	56.9%	11.4%	26.5%	0%		16.7%	52.9%	16.5%	4.9%	0%		16.8%	4.2%	13.8%	41.9%	0%		18.8%	**-**
Lights	213	273	52	2		540	25	545	72	0		642	40	410	231	0		681	136	431	115	2		684	**-**
Lights %	85.2%	89.5%	69.3%	100%		85.4%	43.1%	88.6%	73.5%	0%		83.3%	47.1%	83.5%	95.1%	0%		83.2%	95.8%	86.2%	58.1%	100%		81.2%	**-**
Single-Unit Trucks	20	12	10	0		42	14	35	9	0		58	15	29	6	0		50	4	29	30	0		63	**-**
Single-Unit Trucks %	8%	3.9%	13.3%	0%		6.6%	24.1%	5.7%	9.2%	0%		7.5%	17.6%	5.9%	2.5%	0%		6.1%	2.8%	5.8%	15.2%	0%		7.5%	**-**
Buses	3	4	0	0		7	6	2	0	0		8	7	12	1	0		20	0	1	18	0		19	**-**
Buses %	1.2%	1.3%	0%	0%		1.1%	10.3%	0.3%	0%	0%		1%	8.2%	2.4%	0.4%	0%		2.4%	0%	0.2%	9.1%	0%		2.3%	**-**
Articulated Trucks	14	16	13	0		43	13	33	17	0		63	23	40	5	0		68	2	39	35	0		76	**-**
Articulated Trucks %	5.6%	5.2%	17.3%	0%		6.8%	22.4%	5.4%	17.3%	0%		8.2%	27.1%	8.1%	2.1%	0%		8.3%	1.4%	7.8%	17.7%	0%		9%	**-**
Bicycles on Road	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%	**-**
Pedestrians	-	-	-	-	1	-	-	-	-	-	20	-	-	-	-	-	7	-	-	-	-	-	12	-	**-**
Pedestrians%	-	-	-	-	2.4%		-	-	-	-	48.8%		-	-	-	-	17.1%		-	-	-	-	29.3%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	2.4%		-	-	-	-	0%		**-**

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM **Weather: Scattered Clouds (12.02 °C)**



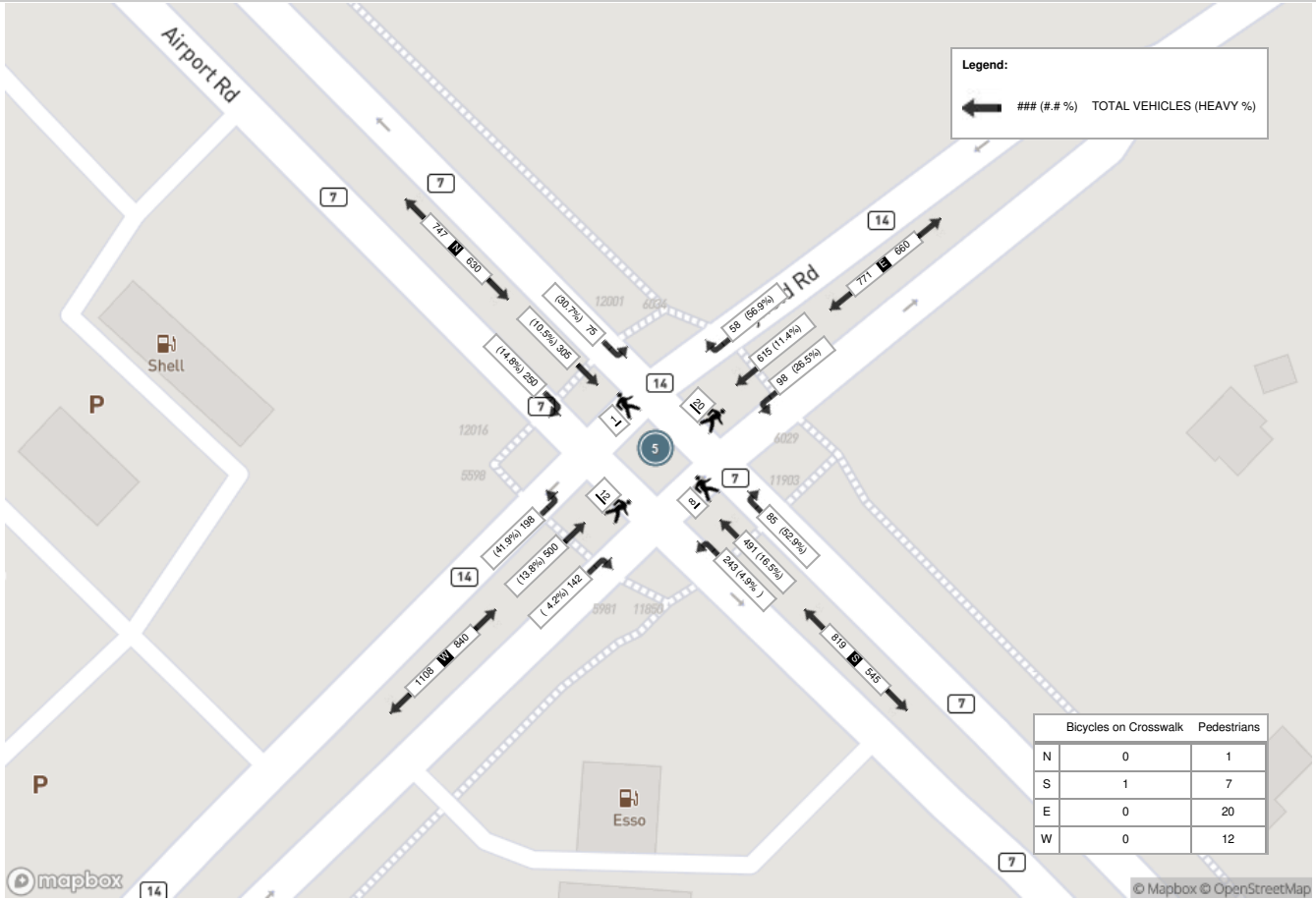
	Bicycles on Crosswalk	Pedestrians
N	0	4
S	0	4
E	0	13
W	0	6

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & AIRPORT RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:30 PM - 05:30 PM **Weather: Overcast Clouds (19.93 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	1
S	1	7
E	0	20
W	0	12

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & TORBRAM RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Turning Movement Count (6 . MAYFIELD RD & TORBRAM RD) CustID: 01409611 MioID:

Start Time	N Approach TORBRAM RD						E Approach MAYFIELD RD						S Approach TORBRAM RD						W Approach 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		
06:00:00	2	9	0	0	0	11	0	116	2	0	0	118	7	6	3	0	0	16	17	181	9	0	0	207	352	
06:15:00	6	20	0	0	0	26	1	137	1	1	0	140	7	9	5	0	0	21	21	230	11	0	0	262	449	
06:30:00	4	19	0	0	0	23	0	119	3	0	0	122	13	5	9	0	0	27	31	332	5	0	0	368	540	
06:45:00	1	20	1	0	0	22	1	134	5	0	0	140	12	14	10	0	0	36	25	210	12	0	0	247	445	1786
07:00:00	7	26	2	0	0	35	0	122	13	0	0	135	15	9	10	0	0	34	29	198	5	0	0	232	436	1870
07:15:00	6	35	1	0	0	42	2	158	14	0	0	174	13	11	9	0	0	33	25	233	12	0	0	270	519	1940
07:30:00	10	55	6	0	0	71	4	151	10	0	0	165	7	10	14	0	1	31	32	234	5	0	0	271	538	1938
07:45:00	9	62	4	0	0	75	2	168	9	0	0	179	11	16	41	0	1	68	64	283	12	0	0	359	681	2174
08:00:00	5	47	1	0	0	53	1	156	13	0	0	170	7	12	17	0	0	36	68	259	7	0	0	334	593	2331
08:15:00	8	37	1	0	0	46	2	135	10	0	0	147	17	10	19	0	0	46	47	213	2	0	0	262	501	2313
08:30:00	2	20	1	0	0	23	2	159	10	0	0	171	14	12	19	0	1	45	39	204	3	0	0	246	485	2260
08:45:00	5	25	2	0	0	32	4	136	14	1	0	155	9	9	12	0	2	30	36	233	9	0	0	278	495	2074
09:00:00	3	15	1	0	0	19	1	137	14	0	0	152	10	10	14	0	2	34	24	154	7	0	0	185	390	1871
09:15:00	4	15	2	0	0	21	1	138	12	0	0	151	7	12	5	0	0	24	26	190	4	0	0	220	416	1786
09:30:00	2	12	1	0	0	15	2	153	14	0	0	169	3	3	8	0	0	14	19	180	0	0	0	199	397	1698
09:45:00	2	9	3	0	0	14	2	125	13	0	0	140	4	3	15	0	0	22	26	169	5	0	0	200	376	1579
BREAK																										
15:00:00	8	10	0	0	0	18	2	179	13	0	0	194	14	35	21	0	1	70	37	187	25	0	0	249	531	
15:15:00	5	11	0	0	0	16	4	207	13	0	0	224	15	45	22	0	0	82	20	197	32	0	0	249	571	
15:30:00	2	10	1	0	0	13	5	195	10	0	0	210	16	40	17	0	0	73	23	181	27	1	0	232	528	
15:45:00	9	23	1	0	0	33	4	206	10	0	0	220	10	39	26	0	0	75	26	163	22	3	0	214	542	2172
16:00:00	4	11	1	0	0	16	4	240	19	1	0	264	9	41	24	0	0	74	20	199	12	1	0	232	586	2227
16:15:00	5	22	0	0	0	27	3	246	18	0	0	267	13	47	40	0	1	100	17	210	28	0	0	255	649	2305
16:30:00	2	15	3	0	0	20	3	235	16	0	0	254	10	38	44	0	1	92	30	191	17	0	0	238	604	2381
16:45:00	1	10	1	0	0	12	3	233	18	0	0	254	5	36	33	0	0	74	35	188	12	0	0	235	575	2414
17:00:00	5	18	0	0	0	23	2	280	26	0	0	308	9	39	41	0	0	89	35	202	15	0	0	252	672	2500
17:15:00	7	23	0	0	0	30	2	216	28	0	0	246	11	23	31	0	0	65	30	214	18	1	0	263	604	2455
17:30:00	9	20	5	0	0	34	4	253	20	0	0	277	14	32	32	0	0	78	37	185	12	1	0	235	624	2475
17:45:00	5	15	0	0	0	20	0	274	24	0	0	298	9	32	39	0	0	80	39	209	13	0	0	261	659	2559
18:00:00	5	8	1	0	0	14	2	239	23	0	0	264	16	30	40	0	0	86	31	221	10	0	0	262	626	2513
18:15:00	9	14	2	0	0	25	2	260	30	1	0	293	15	28	30	0	0	73	24	251	8	0	0	283	674	2583
18:30:00	8	13	0	0	0	21	8	263	23	1	0	295	13	24	30	1	0	68	34	223	10	0	0	267	651	2610
18:45:00	11	23	3	0	1	37	2	199	17	1	0	219	12	23	21	0	1	56	29	153	9	0	0	191	503	2454
Grand Total	171	672	44	0	1	887	75	5969	465	6	0	6515	347	703	701	1	11	1752	996	6677	378	7	0	8058	**17212**	-
Approach%	19.3%	75.8%	5%	0%		-	1.2%	91.6%	7.1%	0.1%		-	19.8%	40.1%	40%	0.1%		-	12.4%	82.9%	4.7%	0.1%		-	-	-
Totals %	1%	3.9%	0.3%	0%		5.2%	0.4%	34.7%	2.7%	0%		37.9%	2%	4.1%	4.1%	0%		10.2%	5.8%	38.8%	2.2%	0%		46.8%	-	-
Heavy	7	14	0	0		-	6	1025	20	0		-	25	14	20	0		-	32	1064	10	0		-	-	-
Heavy %	4.1%	2.1%	0%	0%		-	8%	17.2%	4.3%	0%		-	7.2%	2%	2.9%	0%		-	3.2%	15.9%	2.6%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & TORBRAM RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM **Weather: Scattered Clouds (12.02 °C)**

Start Time	N Approach TORBRAM RD						E Approach MAYFIELD RD						S Approach TORBRAM RD						W Approach 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	
07:15:00	6	35	1	0	0	42	2	158	14	0	0	174	13	11	9	0	0	33	25	233	12	0	0	270	519
07:30:00	10	55	6	0	0	71	4	151	10	0	0	165	7	10	14	0	1	31	32	234	5	0	0	271	538
07:45:00	9	62	4	0	0	75	2	168	9	0	0	179	11	16	41	0	1	68	64	283	12	0	0	359	681
08:00:00	5	47	1	0	0	53	1	156	13	0	0	170	7	12	17	0	0	36	68	259	7	0	0	334	593
Grand Total	30	199	12	0	0	241	9	633	46	0	0	688	38	49	81	0	2	168	189	1009	36	0	0	1234	**2331**
Approach%	12.4%	82.6%	5%	0%		-	1.3%	92%	6.7%	0%		-	22.6%	29.2%	48.2%	0%		-	15.3%	81.8%	2.9%	0%		-	**-**
Totals %	1.3%	8.5%	0.5%	0%		10.3%	0.4%	27.2%	2%	0%		29.5%	1.6%	2.1%	3.5%	0%		7.2%	8.1%	43.3%	1.5%	0%		52.9%	**-**
PHF	0.75	0.8	0.5	0		0.8	0.56	0.94	0.82	0		0.96	0.73	0.77	0.49	0		0.62	0.69	0.89	0.75	0		0.86	**-**
Heavy	3	2	0	0		5	0	155	4	0		159	3	3	2	0		8	5	122	2	0		129	**-**
Heavy %	10%	1%	0%	0%		2.1%	0%	24.5%	8.7%	0%		23.1%	7.9%	6.1%	2.5%	0%		4.8%	2.6%	12.1%	5.6%	0%		10.5%	**-**
Lights	27	197	12	0		236	9	478	42	0		529	35	46	79	0		160	183	887	34	0		1104	**-**
Lights %	90%	99%	100%	0%		97.9%	100%	75.5%	91.3%	0%		76.9%	92.1%	93.9%	97.5%	0%		95.2%	96.8%	87.9%	94.4%	0%		89.5%	**-**
Single-Unit Trucks	0	0	0	0		0	0	60	0	0		60	2	1	0	0		3	1	59	0	0		60	**-**
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	9.5%	0%	0%		8.7%	5.3%	2%	0%	0%		1.8%	0.5%	5.8%	0%	0%		4.9%	**-**
Buses	2	2	0	0		4	0	17	4	0		21	1	2	2	0		5	4	17	2	0		23	**-**
Buses %	6.7%	1%	0%	0%		1.7%	0%	2.7%	8.7%	0%		3.1%	2.6%	4.1%	2.5%	0%		3%	2.1%	1.7%	5.6%	0%		1.9%	**-**
Articulated Trucks	1	0	0	0		1	0	78	0	0		78	0	0	0	0		0	0	46	0	0		46	**-**
Articulated Trucks %	3.3%	0%	0%	0%		0.4%	0%	12.3%	0%	0%		11.3%	0%	0%	0%	0%		0%	0%	4.6%	0%	0%		3.7%	**-**
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	1	0	0	0		1	**-**
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0.5%	0%	0%	0%		0.1%	**-**
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	100%		-	-	-	-	0%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

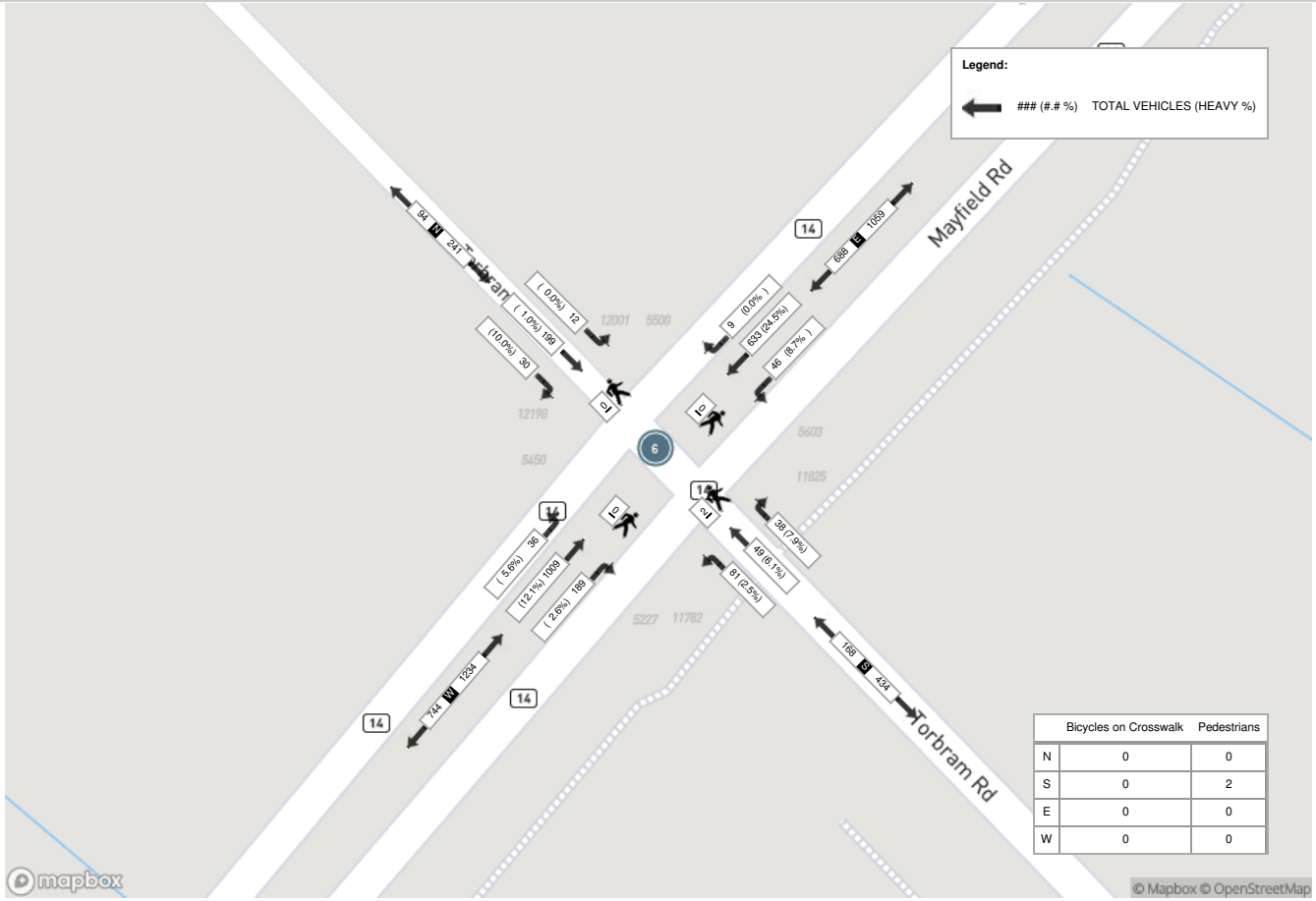
Turning Movement Count
Location Name: MAYFIELD RD & TORBRAM RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 05:45 PM - 06:45 PM Weather: Overcast Clouds (19.93 °C)

Start Time	N Approach TORBRAM RD						E Approach MAYFIELD RD						S Approach TORBRAM RD						W Approach 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	
17:45:00	5	15	0	0	0	20	0	274	24	0	0	298	9	32	39	0	0	80	39	209	13	0	0	261	659
18:00:00	5	8	1	0	0	14	2	239	23	0	0	264	16	30	40	0	0	86	31	221	10	0	0	262	626
18:15:00	9	14	2	0	0	25	2	260	30	1	0	293	15	28	30	0	0	73	24	251	8	0	0	283	674
18:30:00	8	13	0	0	0	21	8	263	23	1	0	295	13	24	30	1	0	68	34	223	10	0	0	267	651
Grand Total	27	50	3	0	0	80	12	1036	100	2	0	1150	53	114	139	1	0	307	128	904	41	0	0	1073	**2610**
Approach%	33.8%	62.5%	3.8%	0%		-	1%	90.1%	8.7%	0.2%		-	17.3%	37.1%	45.3%	0.3%		-	11.9%	84.2%	3.8%	0%		-	**-**
Totals %	1%	1.9%	0.1%	0%		3.1%	0.5%	39.7%	3.8%	0.1%		44.1%	2%	4.4%	5.3%	0%		11.8%	4.9%	34.6%	1.6%	0%		41.1%	**-**
PHF	0.75	0.83	0.38	0		0.8	0.38	0.95	0.83	0.5		0.96	0.83	0.89	0.87	0.25		0.89	0.82	0.9	0.79	0		0.95	**-**
Heavy	0	1	0	0		1	2	75	0	0		77	0	0	4	0		4	4	134	0	0		138	**-**
Heavy %	0%	2%	0%	0%		1.3%	16.7%	7.2%	0%	0%		6.7%	0%	0%	2.9%	0%		1.3%	3.1%	14.8%	0%	0%		12.9%	**-**
Lights	27	49	3	0		79	10	961	100	2		1073	53	114	135	1		303	124	770	41	0		935	**-**
Lights %	100%	98%	100%	0%		98.8%	83.3%	92.8%	100%	100%		93.3%	100%	100%	97.1%	100%		98.7%	96.9%	85.2%	100%	0%		87.1%	**-**
Single-Unit Trucks	0	1	0	0		1	2	34	0	0		36	0	0	3	0		3	4	46	0	0		50	**-**
Single-Unit Trucks %	0%	2%	0%	0%		1.3%	16.7%	3.3%	0%	0%		3.1%	0%	0%	2.2%	0%		1%	3.1%	5.1%	0%	0%		4.7%	**-**
Buses	0	0	0	0		0	0	1	0	0		1	0	0	1	0		1	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0.1%	0%	0%		0.1%	0%	0%	0.7%	0%		0.3%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	40	0	0		40	0	0	0	0		0	0	88	0	0		88	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	3.9%	0%	0%		3.5%	0%	0%	0%	0%		0%	0%	9.7%	0%	0%		8.2%	**-**
Bicycles on Road	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%	**-**
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Peak Hour: 07:15 AM - 08:15 AM **Weather: Scattered Clouds (12.02 °C)**



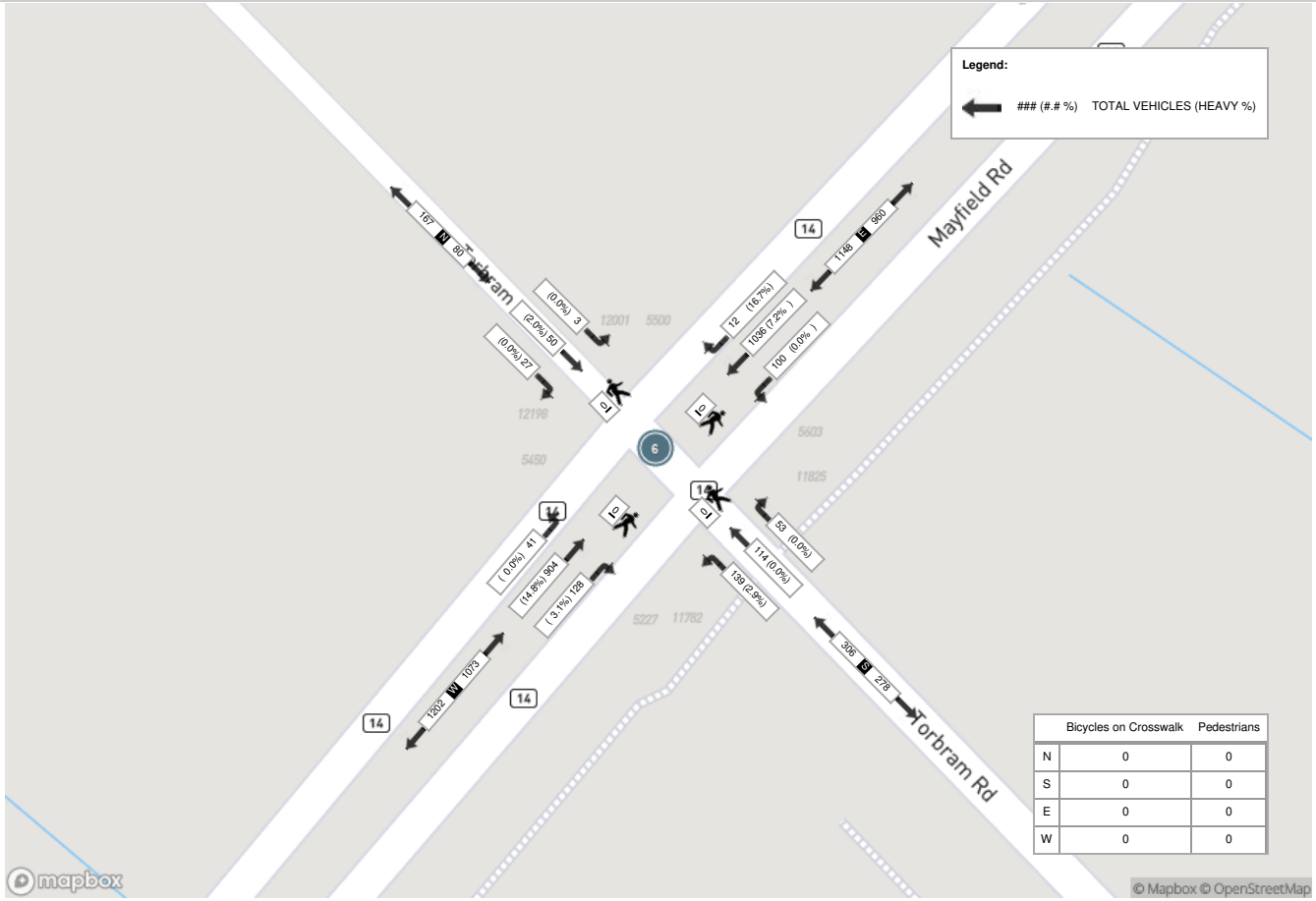
	Bicycles on Crosswalk	Pedestrians
N	0	0
S	0	2
E	0	0
W	0	0

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & TORBRAM RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 05:45 PM - 06:45 PM **Weather: Overcast Clouds (19.93 °C)**



Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

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

Start Time	N Approach AIRPORT RD					S Approach AIRPORT RD					W Approach 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		
06:00:00	0	92	0	0	92	34	9	0	0	43	19	5	0	0	24	159	
06:15:00	4	103	0	0	107	30	9	0	0	39	29	2	0	0	31	177	
06:30:00	0	116	0	0	116	41	7	0	0	48	59	2	0	0	61	225	
06:45:00	0	99	0	0	99	52	14	0	0	66	44	2	0	0	46	211	772
07:00:00	2	122	0	0	124	46	15	0	0	61	29	0	0	0	29	214	827
07:15:00	1	146	0	0	147	45	23	0	0	68	36	3	0	0	39	254	904
07:30:00	3	137	0	0	140	46	13	0	0	59	42	2	0	0	44	243	922
07:45:00	0	126	0	0	126	47	27	0	0	74	43	2	0	0	45	245	956
08:00:00	3	127	0	0	130	45	17	0	0	62	44	4	0	0	48	240	982
08:15:00	3	111	0	0	114	46	14	0	0	60	49	2	0	0	51	225	953
08:30:00	2	99	0	0	101	45	14	0	0	59	33	4	0	0	37	197	907
08:45:00	2	84	0	0	86	49	13	0	0	62	36	5	0	0	41	189	851
09:00:00	1	83	0	0	84	58	8	0	0	66	20	2	0	0	22	172	783
09:15:00	2	81	0	0	83	40	12	0	0	52	28	0	0	0	28	163	721
09:30:00	0	76	0	0	76	44	9	0	0	53	25	2	0	0	27	156	680
09:45:00	0	65	0	0	65	43	8	0	0	51	16	3	0	0	19	135	626
BREAK																	
15:00:00	2	53	0	0	55	89	27	0	0	116	24	2	0	0	26	197	
15:15:00	2	57	0	0	59	99	35	0	0	134	29	3	0	0	32	225	
15:30:00	6	50	0	0	56	102	28	0	0	130	18	6	0	0	24	210	
15:45:00	3	57	0	0	60	102	37	0	0	139	23	4	0	0	27	226	858
16:00:00	7	52	0	0	59	104	52	0	0	156	24	6	0	0	30	245	906
16:15:00	6	46	0	0	52	118	79	0	0	197	24	8	0	0	32	281	962
16:30:00	4	60	0	0	64	125	52	0	0	177	20	5	0	0	25	266	1018
16:45:00	5	66	0	0	71	126	54	0	0	180	19	7	0	0	26	277	1069
17:00:00	6	65	0	0	71	120	62	0	0	182	11	4	0	0	15	268	1092
17:15:00	11	54	0	0	65	121	68	0	0	189	19	3	0	0	22	276	1087
17:30:00	9	63	0	0	72	101	53	0	0	154	21	4	0	0	25	251	1072
17:45:00	3	71	0	0	74	101	42	0	0	143	31	4	0	0	35	252	1047
18:00:00	7	44	0	0	51	105	40	0	0	145	21	2	0	0	23	219	998
18:15:00	2	69	0	0	71	92	41	0	0	133	34	1	0	0	35	239	961
18:30:00	2	46	0	0	48	65	40	0	0	105	13	2	0	0	15	168	878
18:45:00	0	56	0	0	56	78	19	0	0	97	16	5	0	0	21	174	800

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Grand Total	98	2576	0	0	2674	2359	941	0	0	3300	899	106	0	0	1005	**6979**	-
Approach%	3.7%	96.3%	0%		-	71.5%	28.5%	0%		-	89.5%	10.5%	0%		-	**-**	-
Totals %	1.4%	36.9%	0%		38.3%	33.8%	13.5%	0%		47.3%	12.9%	1.5%	0%		14.4%	**-**	-
Heavy	3	388	0		-	319	20	0		-	28	4	0		-	**-**	-
Heavy %	3.1%	15.1%	0%		-	13.5%	2.1%	0%		-	3.1%	3.8%	0%		-	**-**	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	**-**	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	**-**	-

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM Weather: Scattered Clouds (12.02 °C)

Start Time	N Approach AIRPORT RD					S Approach AIRPORT RD					W Approach 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	
07:15:00	1	146	0	0	147	45	23	0	0	68	36	3	0	0	39	254
07:30:00	3	137	0	0	140	46	13	0	0	59	42	2	0	0	44	243
07:45:00	0	126	0	0	126	47	27	0	0	74	43	2	0	0	45	245
08:00:00	3	127	0	0	130	45	17	0	0	62	44	4	0	0	48	240
Grand Total	7	536	0	0	543	183	80	0	0	263	165	11	0	0	176	**982**
Approach%	1.3%	98.7%	0%		-	69.6%	30.4%	0%		-	93.8%	6.3%	0%		-	**-**
Totals %	0.7%	54.6%	0%		55.3%	18.6%	8.1%	0%		26.8%	16.8%	1.1%	0%		17.9%	**-**
PHF	0.58	0.92	0		0.92	0.97	0.74	0		0.89	0.94	0.69	0		0.92	**-**
Heavy	1	45	0		46	51	2	0		53	4	2	0		6	**-**
Heavy %	14.3%	8.4%	0%		8.5%	27.9%	2.5%	0%		20.2%	2.4%	18.2%	0%		3.4%	**-**
Lights	6	491	0		497	132	78	0		210	161	9	0		170	**-**
Lights %	85.7%	91.6%	0%		91.5%	72.1%	97.5%	0%		79.8%	97.6%	81.8%	0%		96.6%	**-**
Single-Unit Trucks	0	20	0		20	23	1	0		24	2	0	0		2	**-**
Single-Unit Trucks %	0%	3.7%	0%		3.7%	12.6%	1.3%	0%		9.1%	1.2%	0%	0%		1.1%	**-**
Buses	1	4	0		5	10	1	0		11	2	2	0		4	**-**
Buses %	14.3%	0.7%	0%		0.9%	5.5%	1.3%	0%		4.2%	1.2%	18.2%	0%		2.3%	**-**
Articulated Trucks	0	21	0		21	18	0	0		18	0	0	0		0	**-**
Articulated Trucks %	0%	3.9%	0%		3.9%	9.8%	0%	0%		6.8%	0%	0%	0%		0%	**-**
Bicycles on Road	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%	**-**

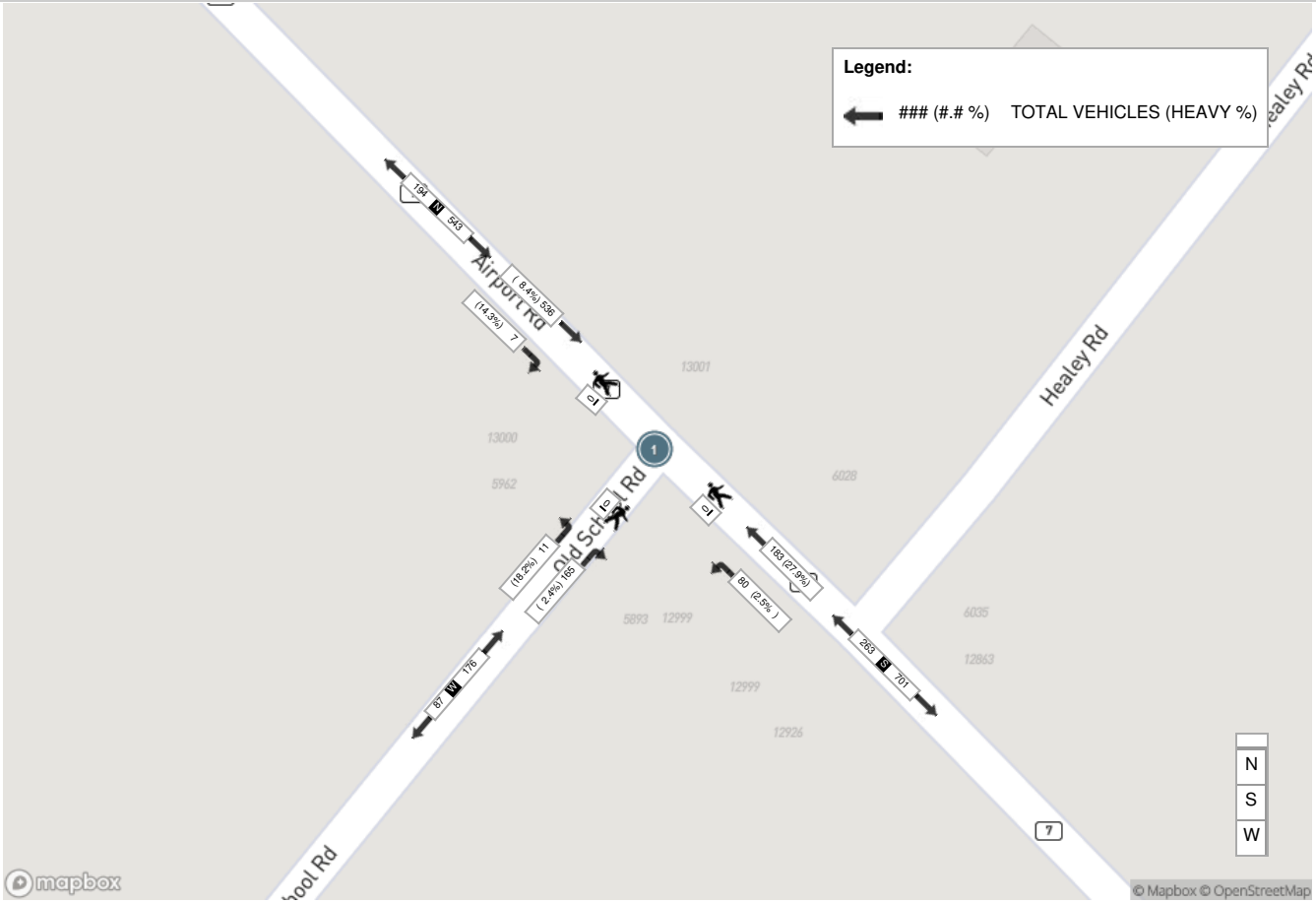
Crozier & Associates
SUITE 301 211 YONGE STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (19.93 °C)

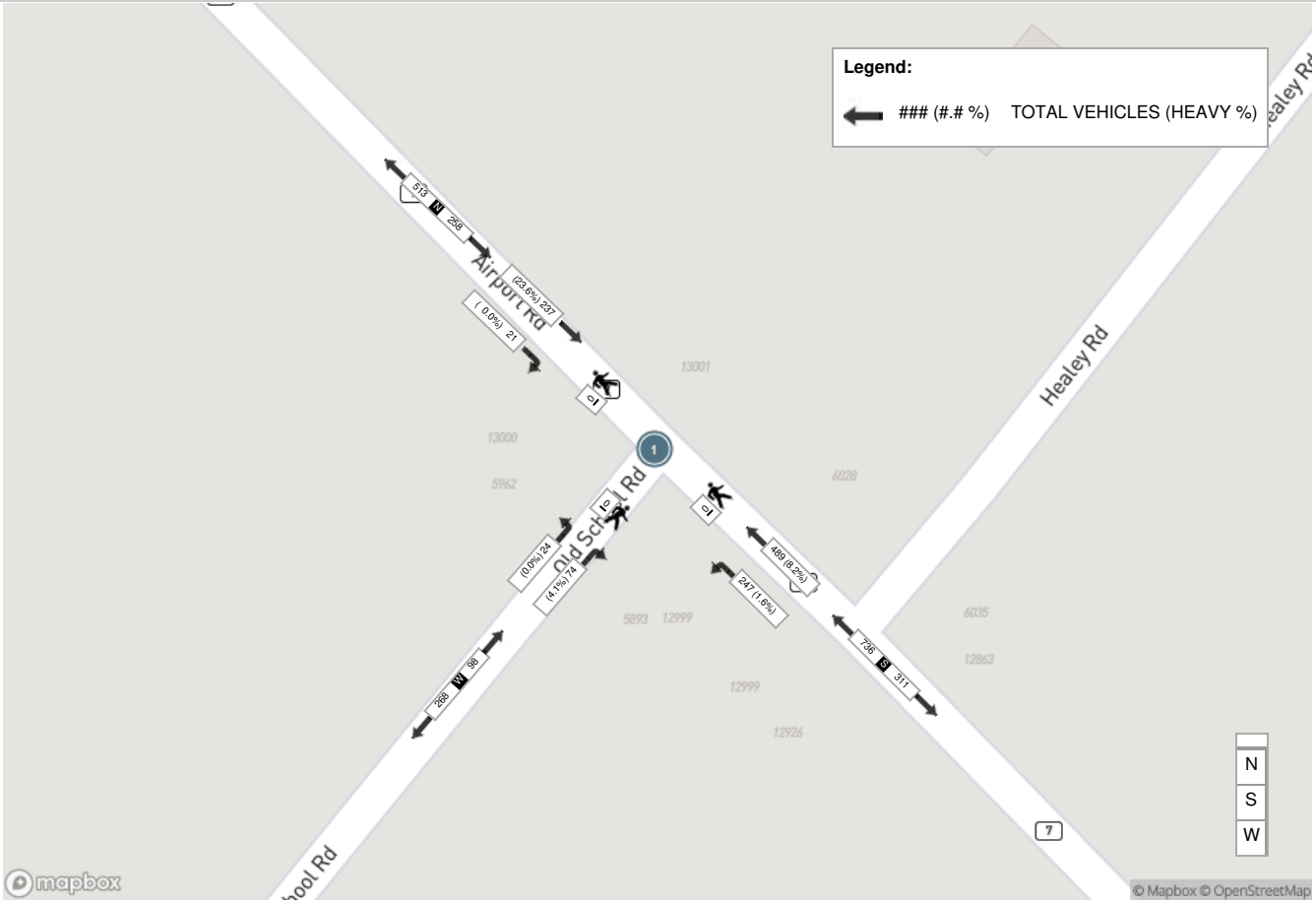
Start Time	N Approach AIRPORT RD					S Approach AIRPORT RD					W Approach OLD SCHOOL RD					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
16:15:00	6	46	0	0	52	118	79	0	0	197	24	8	0	0	32	281
16:30:00	4	60	0	0	64	125	52	0	0	177	20	5	0	0	25	266
16:45:00	5	66	0	0	71	126	54	0	0	180	19	7	0	0	26	277
17:00:00	6	65	0	0	71	120	62	0	0	182	11	4	0	0	15	268
Grand Total	21	237	0	0	258	489	247	0	0	736	74	24	0	0	98	**1092**
Approach%	8.1%	91.9%	0%		-	66.4%	33.6%	0%		-	75.5%	24.5%	0%		-	**-**
Totals %	1.9%	21.7%	0%		23.6%	44.8%	22.6%	0%		67.4%	6.8%	2.2%	0%		9%	**-**
PHF	0.88	0.9	0		0.91	0.97	0.78	0		0.93	0.77	0.75	0		0.77	**-**
Heavy	0	56	0		56	40	4	0		44	3	0	0		3	**-**
Heavy %	0%	23.6%	0%		21.7%	8.2%	1.6%	0%		6%	4.1%	0%	0%		3.1%	**-**
Lights	21	181	0		202	449	242	0		691	71	24	0		95	**-**
Lights %	100%	76.4%	0%		78.3%	91.8%	98%	0%		93.9%	95.9%	100%	0%		96.9%	**-**
Single-Unit Trucks	0	22	0		22	23	3	0		26	0	0	0		0	**-**
Single-Unit Trucks %	0%	9.3%	0%		8.5%	4.7%	1.2%	0%		3.5%	0%	0%	0%		0%	**-**
Buses	0	9	0		9	0	0	0		0	3	0	0		3	**-**
Buses %	0%	3.8%	0%		3.5%	0%	0%	0%		0%	4.1%	0%	0%		3.1%	**-**
Articulated Trucks	0	25	0		25	17	1	0		18	0	0	0		0	**-**
Articulated Trucks %	0%	10.5%	0%		9.7%	3.5%	0.4%	0%		2.4%	0%	0%	0%		0%	**-**
Bicycles on Road	0	0	0		0	0	1	0		1	0	0	0		0	**-**
Bicycles on Road %	0%	0%	0%		0%	0%	0.4%	0%		0.1%	0%	0%	0%		0%	**-**

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM Weather: Scattered Clouds (12.02 °C)



Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (19.93 °C)



Spectrum

Turning Movement Count
Location Name: TORBRAM RD & OLD SCHOOL RD
Date: Tue, Sep 13, 2022 Deployment Lead: Tasos Issaaakidis

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Turning Movement Count (7 . TORBRAM RD & OLD SCHOOL RD)

Start Time	N Approach TORBRAM RD						E Approach OLD SCHOOL RD						S Approach TORBRAM RD						W Approach OLD SCHOOL 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		
06:00:00	1	12	2	0	0	15	0	6	0	0	0	6	5	10	0	0	0	15	2	18	0	0	0	20	56	
06:15:00	1	18	1	0	0	20	0	15	0	0	0	15	3	12	0	0	0	15	0	27	2	0	0	29	79	
06:30:00	1	24	1	0	0	26	1	6	2	0	0	9	6	5	0	0	0	11	3	54	2	0	0	59	105	
06:45:00	0	24	0	0	0	24	0	13	0	0	0	13	6	19	2	0	0	27	1	38	1	0	0	40	104	344
07:00:00	0	26	1	0	0	27	0	15	2	0	0	17	2	11	1	0	0	14	1	29	0	0	0	30	88	376
07:15:00	3	42	1	0	0	46	1	15	7	0	0	23	7	16	2	0	0	25	2	34	1	0	0	37	131	428
07:30:00	3	65	1	0	0	69	0	14	3	0	0	17	4	12	1	0	0	17	5	35	3	0	0	43	146	469
07:45:00	3	57	0	0	0	60	0	18	2	0	0	20	4	22	1	0	0	27	6	40	2	0	0	48	155	520
08:00:00	2	43	2	0	0	47	0	19	4	0	0	23	6	14	1	0	0	21	2	45	0	0	0	47	138	570
08:15:00	0	31	2	0	0	33	0	13	3	0	0	16	2	9	0	0	0	11	2	43	1	0	0	46	106	545
08:30:00	3	19	1	0	0	23	0	15	1	0	0	16	4	12	3	0	0	19	1	32	1	0	0	34	92	491
08:45:00	3	20	0	0	0	23	2	11	4	0	0	17	1	16	2	0	0	19	2	37	0	0	0	39	98	434
09:00:00	4	20	0	0	0	24	3	9	0	0	0	12	5	14	0	0	0	19	0	26	1	0	0	27	82	378
09:15:00	3	19	2	0	0	24	0	12	2	0	0	14	1	17	1	0	0	19	1	17	3	0	0	21	78	350
09:30:00	2	9	2	0	0	13	0	8	0	0	0	8	2	3	0	0	0	5	3	22	0	0	0	25	51	309
09:45:00	1	15	0	0	0	16	1	7	0	0	0	8	2	3	1	0	0	6	3	13	1	0	0	17	47	258
BREAK																										
15:00:00	2	13	1	0	0	16	0	26	3	0	0	29	6	45	6	0	0	57	1	20	7	0	0	28	130	
15:15:00	1	9	0	0	0	10	2	28	2	0	0	32	6	65	5	0	0	76	2	23	2	0	0	27	145	
15:30:00	3	13	2	0	0	18	1	32	4	0	0	37	7	53	3	0	0	63	0	19	3	0	0	22	140	
15:45:00	3	18	1	0	0	22	0	35	5	0	0	40	11	52	4	0	0	67	8	13	3	0	0	24	153	568
16:00:00	1	15	2	0	0	18	0	47	5	0	0	52	5	45	1	0	0	51	3	21	3	0	0	27	148	586
16:15:00	3	14	3	0	0	20	4	77	7	0	0	88	9	55	3	0	0	67	0	23	2	0	0	25	200	641
16:30:00	2	8	2	0	0	12	2	53	0	0	0	55	8	46	6	0	0	60	3	17	5	0	0	25	152	653
16:45:00	1	19	1	0	0	21	0	58	1	0	0	59	4	39	4	0	0	47	2	18	3	0	0	23	150	650
17:00:00	1	15	0	0	0	16	1	63	5	0	0	69	5	45	4	0	0	54	0	14	1	0	0	15	154	656
17:15:00	1	14	0	0	0	15	1	69	7	0	0	77	5	36	4	0	0	45	2	15	3	0	0	20	157	613
17:30:00	3	24	0	0	0	27	2	54	5	0	0	61	5	34	6	0	0	45	3	20	2	0	0	25	158	619
17:45:00	4	11	0	0	0	15	2	42	4	0	0	48	3	39	2	0	0	44	1	28	1	0	0	30	137	606
18:00:00	2	5	0	0	0	7	0	35	5	0	0	40	6	30	2	0	0	38	1	20	0	0	0	21	106	558
18:15:00	1	18	0	0	0	19	0	45	4	0	0	49	4	28	5	0	0	37	2	29	0	0	0	31	136	537
18:30:00	2	10	0	0	0	12	0	40	2	0	0	42	4	24	7	0	0	35	3	13	0	0	0	16	105	484
18:45:00	0	11	0	0	0	11	3	19	2	0	0	24	6	21	5	1	0	33	6	14	1	0	0	21	89	436
Grand Total	60	661	28	0	0	749	26	919	91	0	0	1036	154	852	82	1	0	1089	71	817	54	0	0	942	**3816**	-
Approach%	8%	88.3%	3.7%	0%		-	2.5%	88.7%	8.8%	0%		-	14.1%	78.2%	7.5%	0.1%		-	7.5%	86.7%	5.7%	0%		-	-	-
Totals %	1.6%	17.3%	0.7%	0%		19.6%	0.7%	24.1%	2.4%	0%		27.1%	4%	22.3%	2.1%	0%		28.5%	1.9%	21.4%	1.4%	0%		24.7%	-	-
Heavy	4	18	4	0		-	2	14	1	0		-	5	18	7	0		-	3	19	3	0		-	-	-
Heavy %	6.7%	2.7%	14.3%	0%		-	7.7%	1.5%	1.1%	0%		-	3.2%	2.1%	8.5%	0%		-	4.2%	2.3%	5.6%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM **Weather: Scattered Clouds (12.02 °C)**

Start Time	N Approach TORBRAM RD						E Approach OLD SCHOOL RD						S Approach TORBRAM RD						W Approach OLD SCHOOL 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	
07:15:00	3	42	1	0	0	46	1	15	7	0	0	23	7	16	2	0	0	25	2	34	1	0	0	37	131
07:30:00	3	65	1	0	0	69	0	14	3	0	0	17	4	12	1	0	0	17	5	35	3	0	0	43	146
07:45:00	3	57	0	0	0	60	0	18	2	0	0	20	4	22	1	0	0	27	6	40	2	0	0	48	155
08:00:00	2	43	2	0	0	47	0	19	4	0	0	23	6	14	1	0	0	21	2	45	0	0	0	47	138
Grand Total	11	207	4	0	0	222	1	66	16	0	0	83	21	64	5	0	0	90	15	154	6	0	0	175	**570**
Approach%	5%	93.2%	1.8%	0%		-	1.2%	79.5%	19.3%	0%		-	23.3%	71.1%	5.6%	0%		-	8.6%	88%	3.4%	0%		-	**-**
Totals %	1.9%	36.3%	0.7%	0%		38.9%	0.2%	11.6%	2.8%	0%		14.6%	3.7%	11.2%	0.9%	0%		15.8%	2.6%	27%	1.1%	0%		30.7%	**-**
PHF	0.92	0.8	0.5	0		0.8	0.25	0.87	0.57	0		0.9	0.75	0.73	0.63	0		0.83	0.63	0.86	0.5	0		0.91	**-**
Heavy	2	3	0	0		5	1	1	1	0		3	1	4	1	0		6	1	5	1	0		7	**-**
Heavy %	18.2%	1.4%	0%	0%		2.3%	100%	1.5%	6.3%	0%		3.6%	4.8%	6.3%	20%	0%		6.7%	6.7%	3.2%	16.7%	0%		4%	**-**
Lights	9	204	4	0		217	0	65	15	0		80	20	60	4	0		84	14	149	5	0		168	**-**
Lights %	81.8%	98.6%	100%	0%		97.7%	0%	98.5%	93.8%	0%		96.4%	95.2%	93.8%	80%	0%		93.3%	93.3%	96.8%	83.3%	0%		96%	**-**
Single-Unit Trucks	2	0	0	0		2	0	1	0	0		1	0	0	1	0		1	0	2	0	0		2	**-**
Single-Unit Trucks %	18.2%	0%	0%	0%		0.9%	0%	1.5%	0%	0%		1.2%	0%	0%	20%	0%		1.1%	0%	1.3%	0%	0%		1.1%	**-**
Buses	0	2	0	0		2	1	0	1	0		2	1	4	0	0		5	1	3	1	0		5	**-**
Buses %	0%	1%	0%	0%		0.9%	100%	0%	6.3%	0%		2.4%	4.8%	6.3%	0%	0%		5.6%	6.7%	1.9%	16.7%	0%		2.9%	**-**
Articulated Trucks	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0.5%	0%	0%		0.5%	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	**-**
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**

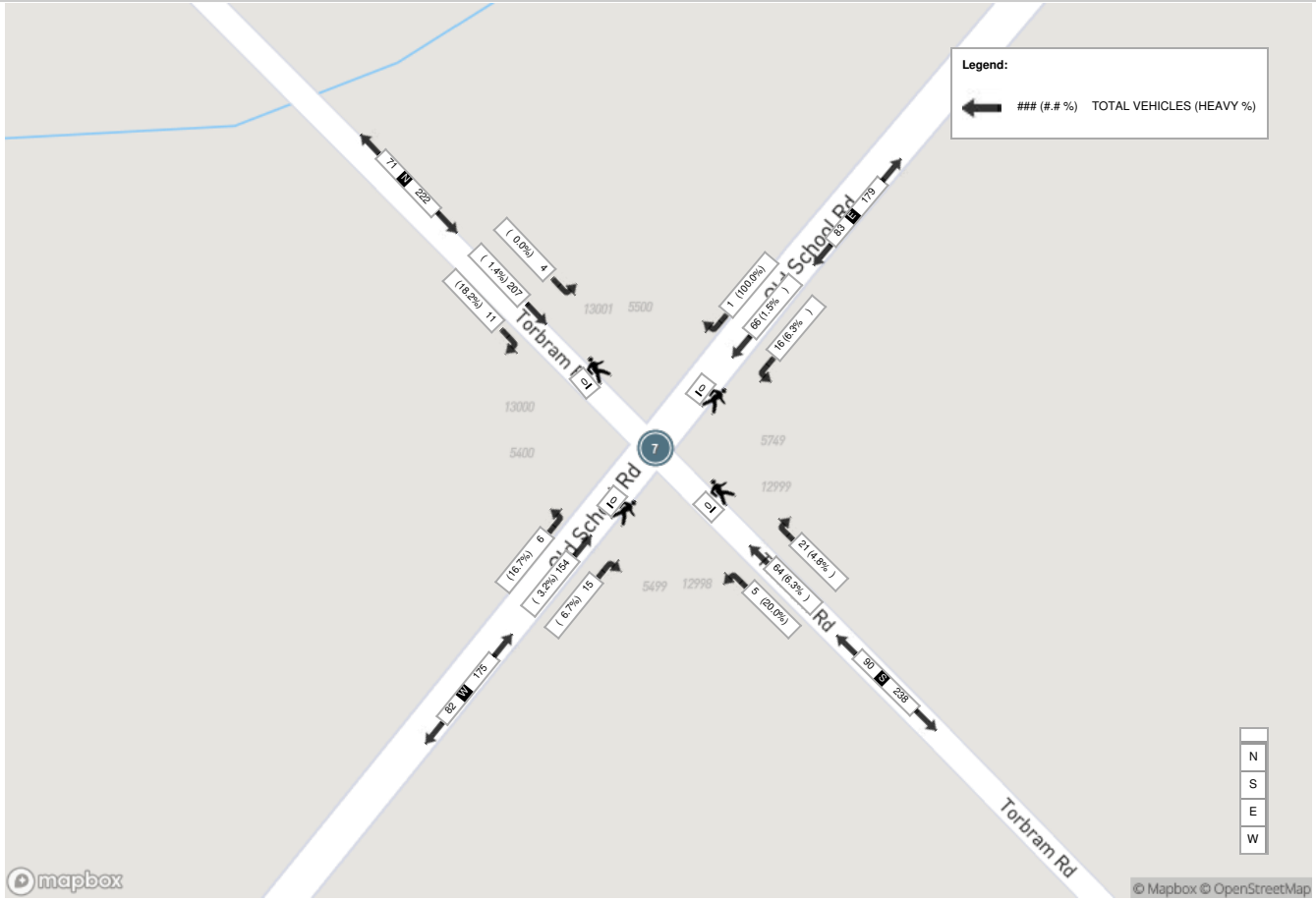
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (19.93 °C)

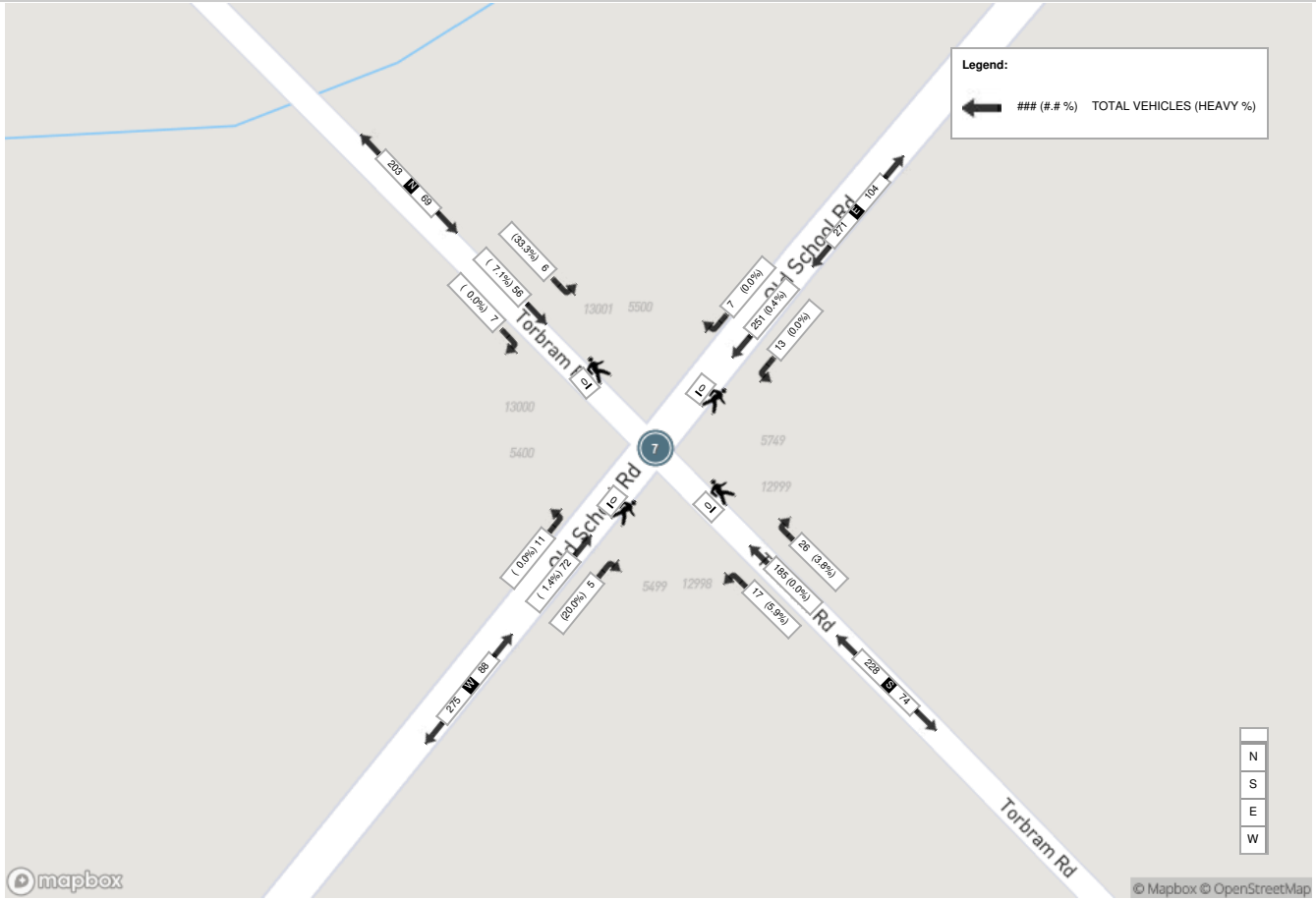
Start Time	N Approach TORBRAM RD						E Approach OLD SCHOOL RD						S Approach TORBRAM RD						W Approach OLD SCHOOL RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:15:00	3	14	3	0	0	20	4	77	7	0	0	88	9	55	3	0	0	67	0	23	2	0	0	25	200
16:30:00	2	8	2	0	0	12	2	53	0	0	0	55	8	46	6	0	0	60	3	17	5	0	0	25	152
16:45:00	1	19	1	0	0	21	0	58	1	0	0	59	4	39	4	0	0	47	2	18	3	0	0	23	150
17:00:00	1	15	0	0	0	16	1	63	5	0	0	69	5	45	4	0	0	54	0	14	1	0	0	15	154
Grand Total	7	56	6	0	0	69	7	251	13	0	0	271	26	185	17	0	0	228	5	72	11	0	0	88	**656**
Approach%	10.1%	81.2%	8.7%	0%		-	2.6%	92.6%	4.8%	0%		-	11.4%	81.1%	7.5%	0%		-	5.7%	81.8%	12.5%	0%		-	**-**
Totals %	1.1%	8.5%	0.9%	0%		10.5%	1.1%	38.3%	2%	0%		41.3%	4%	28.2%	2.6%	0%		34.8%	0.8%	11%	1.7%	0%		13.4%	**-**
PHF	0.58	0.74	0.5	0		0.82	0.44	0.81	0.46	0		0.77	0.72	0.84	0.71	0		0.85	0.42	0.78	0.55	0		0.88	**-**
Heavy	0	4	2	0		6	0	1	0	0		1	1	0	1	0		2	1	1	0	0		2	**-**
Heavy %	0%	7.1%	33.3%	0%		8.7%	0%	0.4%	0%	0%		0.4%	3.8%	0%	5.9%	0%		0.9%	20%	1.4%	0%	0%		2.3%	**-**
Lights	7	52	4	0		63	6	250	13	0		269	25	185	16	0		226	4	71	10	0		85	**-**
Lights %	100%	92.9%	66.7%	0%		91.3%	85.7%	99.6%	100%	0%		99.3%	96.2%	100%	94.1%	0%		99.1%	80%	98.6%	90.9%	0%		96.6%	**-**
Single-Unit Trucks	0	2	0	0		2	0	1	0	0		1	1	0	0	0		1	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	3.6%	0%	0%		2.9%	0%	0.4%	0%	0%		0.4%	3.8%	0%	0%	0%		0.4%	0%	0%	0%	0%		0%	**-**
Buses	0	2	2	0		4	0	0	0	0		0	0	0	1	0		1	1	1	0	0		2	**-**
Buses %	0%	3.6%	33.3%	0%		5.8%	0%	0%	0%	0%		0%	0%	0%	5.9%	0%		0.4%	20%	1.4%	0%	0%		2.3%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	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	1	0	0	0		1	0	0	0	0		0	0	0	1	0		1	**-**
Bicycles on Road %	0%	0%	0%	0%		0%	14.3%	0%	0%	0%		0.4%	0%	0%	0%	0%		0%	0%	0%	9.1%	0%		1.1%	**-**

Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM **Weather: Scattered Clouds (12.02 °C)**



Peak Hour: 04:15 PM - 05:15 PM **Weather: Overcast Clouds (19.93 °C)**



SIGNAL TIMING PLANS

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**June 23, 2021**		**Prepared Date**	**June 23, 2021**
Database Rev	**MaxView**		**Completed By**	**S.J**
Timing Card / Field rev	**-**		**Checked By**	**B.L**

Location	**Airport Road at Mayfield Road**

Phase #	**Street Name - Direction**	**Vehicle Minimum (s)**	**Pedestrian Minimum (s)**		**Amber (s)**	**All Red (s)**	**TIME PERIOD (s) (Green+Amber+All Red)**		
			WALK	**FDWALK**			**AM SPLITS**	**OFF SPLITS**	**PM SPLITS**
1	Airport Road - NBLT Prot. Perm.	5	-	-	3.0	-	12	12	12
2	Airport Road - SB	12	12	23	4.0	2.9	43	43	43
3	Mayfield Road - EBLT Prot. Perm.	5	-	-	3.0	-	15	15	25
4	Mayfield Road - WB	12	12	27	4.0	3.1	50	50	55
5	Airport Road - SBLT Prot. Perm.	5	-	-	3.0	-	12	12	12
6	Airport Road - NB	12	12	23	4.0	2.9	43	43	43
7	Not In Use	-	-	-	-	-	-	-	-
8	Mayfield Road - EB	12	12	27	4.0	3.1	65	65	80

System Control
Yes

Semi-Actuated Mode
Yes

TIME (M-F)	**PEAK**	**CYCLE LENGTH (s)**	**OFFSET (s)**
06:30 - 09:00	AM	120	30
09:00 - 15:00	OFF	120	94
15:00 - 19:30	PM	135	65

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**August 26, 2010**		**Prepared Date**	**June 18, 2021**
Database Rev	**3**		**Completed By**	**S.J**
Timing Card / Field rev	**-**		**Checked By**	**M.Y**

Location — **Airport Road at Private Access**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s) (Green+Amber+All Red)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
1	Not In Use	-	-	-	-	-	-	-	-
2	Airport Road - SB	12	8	21	4.6	2.0	82	62	82
3	Not In Use	-	-	-	-	-	-	-	-
4	Private Access - WB	12	8	20	4.0	4.2	38	38	38
5	Not In Use	-	-	-	-	-	-	-	-
6	Airport Road - NB	12	8	21	4.6	2.0	82	62	82
7	Not In Use	-	-	-	-	-	-	-	-
8	Computer Phase - EB	12	8	20	4.0	4.2	38	38	38

System Control
No

Semi-Actuated Mode
Yes

TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
06:00 - 09:00	AM	120	113
09:00 - 15:00	OFF	100	77
15:00 - 19:00	PM	120	58

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**September 28, 2020**		**Prepared Date**	**June 18, 2021**
Database Rev	**11**		**Completed By**	**S.J**
Timing Card / Field rev	**-**		**Checked By**	**B.L**

Location: **Mayfield Road at Torbram Road**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s) (Green+Amber+All Red)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
1	Mayfield Road - WBLT Prot. Perm.	5	-	-	3.0	-	10	10	10
2	Mayfield Road - EB	16	8	35	4.6	2.7	60	40	75
3	Not In Use	-	-	-	-	-	-	-	-
4	Torbram Road - NB	12	8	28	4.2	2.9	50	50	50
5	Mayfield Road - EBLT Prot. Perm.	5	-	-	3.0	-	10	10	10
6	Mayfield Road - WB	16	8	35	4.6	2.7	60	40	75
7	Not In Use	-	-	-	-	-	-	-	-
8	Torbram Road - SB	12	8	28	4.2	2.9	50	50	50

System Control
No

Semi-Actuated Mode
No

TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
07:00 - 09:00	AM	120	35
09:00 - 15:00	OFF	100	0
15:00 - 18:00	PM	135	43

TRANSIT DATA

Route Frequency Guide

MINIMUM Service frequency in minutes

Effective: Monday October 30, 2023 until further notice

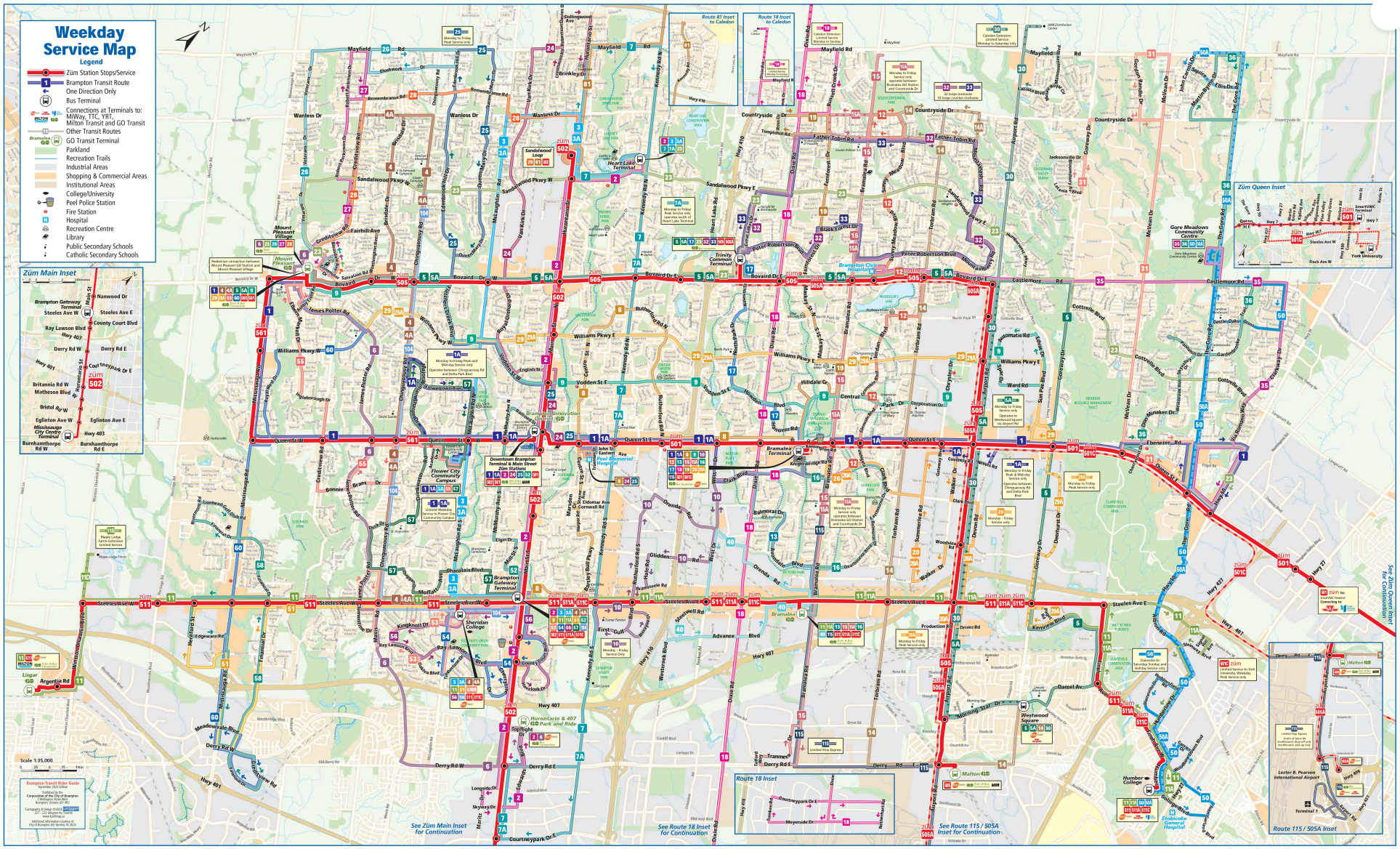
Additional unscheduled trips may operate during peak times

Route Name & Number		Monday-Friday			Saturday		Sunday		Notes
		AM/PM Peak	Midday	Evening After 7 pm	Day	Evening	Day	Evening	
501	zum Queen (To Vaughan Metropolitan Centre via Highway 7)	10/12	12	15/20	15	30	30	30	
501C	zum Queen - York University (Bramalea Terminal To York University via Highway 407)	9	15	—	—	—	—	—	Weekday Service Only AM Peak - 9 minute frequency eastbound, 27 minute frequency westbound PM Peak - 9 minute frequency westbound, 27 minute frequency eastbound
502	zum Main	7/8	10/12	12/15/20	15/10	15/20	15/12	15/20	
505	zum Bovaird	15	20	20	16	—	16	—	
505A	zum Bovaird (Trinity Common to Pearson Airport (Viscount Station)	45	90	—	—	—	—	—	
511/511A	zum Steeles (East of Gateway Terminal)	7.5	10	15/20	15/12	20	20	20	
511C	zum Steeles (To Sheridan College)	15	20	—	—	—	—	—	
511	zum Steeles (West)	15	20	—	—	—	—	—	
561	zum Queen West	20	—	—	—	—	—	—	
1/1A	Queen[1]	10	15	25/30	20/18	30	30	30	
2	Main	20	20	30	30	30	33	33	
3/3A	McLaughlin[1]	12/14	35	30	30	30	35	35	
4/4A	Chinguacousy[1]	10/8.5	12/10	15/20	25/15	20/25	20/15	20/25	
5/5A	Bovaird[1]	15	20	30	30	30	30	30	
6	James Potter	35	45	—	45	—	45	—	
7/7A	Kennedy[1]	7.5	15	20/30	12	25/30	15	30	
8	Centre	50/55	50	50	50	50	45	45	
9	Vodden	40/45	60	—	—	—	—	—	
10	South Industrial	25	50	—	—	—	—	—	
11/11A	Steeles[1] (East)	10/8	20	30	30	30	30	30	
11	Steeles[1] (West)	—	—	60	60	60	60	60	
12	Grenoble	60	60	60	60	—	60	—	
13	Avondale	45	45	—	60	—	—	—	
14/14A	Torbram[1]	8/11	20	30	35	35	35	35	
15/15A	Bramalea[1]	10	30	30	30	30	30	30	
16	Southgate	60	60	60	60	—	60	—	
17	Howden	45	45	—	45	—	45	—	
18	Dixie[4]	7/9	15	20/27	20	30/35	33	33	
19	Fernforest	40	60	—	60	—	60	—	
20/20A	East Industrial[1]	25	50	—	—	—	—	—	
23	Sandalwood	15	30	30	28	30	30/28	28	
24	Van Kirk	30	40	65	45	—	45	—	
25	Edenbrook	30	—	65	—	—	—	—	
26	Mount Pleasant	30	30	30	50	—	—	—	
27	Robert Parkinson	35	35	—	35	—	—	—	
28	Remembrance	45	—	—	—	—	—	—	
29/29A	Williams[1]	15	25	30	35	—	30	—	
30	Airport Road[2]	8/10	18	15/30	30	30	30	30	
31	McVean	35	35	65	65	—	65	—	
32	Father Tobin	34	45	—	45	—	45	—	
33	Peter Robertson	34	45	—	—	—	—	—	
35	Clarkway[1]	35	35	35	45	—	45	—	
36	Gardenbrooke	65	65	—	—	—	—	—	
40	Central Industrial	40	—	—	—	—	—	—	
50/50A	Gore Road	15	20	30/40	30	40	30	40	
51	Hereford	30	60	60	60	—	—	—	
52	McMurchy	50	50	—	50	—	50	—	
53	Ray Lawson	25	30	30	60	—	60	—	
54	County Court	20	40	40	30	—	30	—	
55	Elbern Markell	55	55	—	—	—	—	—	
56	Kingknoll	40	40	40	40	—	40	—	
57	Charolais	25	30	30	60	—	60	—	
58	Financial Drive	40	—	—	—	—	—	—	
60	Mississauga Road	35	70	—	65	—	65	—	
81	Mayfield West[3]	45	—	—	—	—	—	—	
104	Chinguacousy Express	20	—	20	—	—	—	—	
115	Pearson Airport Express	25/30	30	30	30	30	30	30	

NOTE:

1. Split Route or Route Extension/Short Turn. Service Frequencies shown are frequencies for the combined route.
2. Route 30 Limited Service trips extended to Caledon – see schedule for details.
3. Route 81 operates under contract to Town of Caledon.
4. Route 18 Limited Service trips extended to Caledon – see schedule for details.

All service frequencies are subject to change.


Weekday Service Map
Legend
Züm Station Stops/Service
Brampton Transit Route
One Direction Only
Bus Terminal
Connections at Terminals to: MiWay, TTC, YRT, Milton Transit and GO Transit
Other Transit Routes
GO Transit Terminal
Parkland
Recreation Trails
Industrial Areas
Shopping & Commercial Areas
Institutional Areas
College/University
Peel Police Station
Fire Station
Hospital
Recreation Centre
Library
Public Secondary Schools
Catholic Secondary Schools
Züm Main Inset
Route 81 Inset to Caledon
Route 18 Inset to Caledon
Züm Queen Inset
Route 18 Inset
Route 115 / 505A Inset
See Züm Main Inset for Continuation
See Route 18 Inset for Continuation
See Route 115 / 505A Inset for Continuation
See Züm Queen Inset for Continuation
Scale 1:35,000
Brampton Transit Rider Guide
Downtown Brampton Terminal & Main Street Züm Station
Bramalea Terminal
Heart Lake Terminal
Trinity Common Terminal
Gateway Terminal
Sheridan College
Hurontario & 407 Park and Ride
Brampton Civic Hospital
Peel Memorial Hospital
Gore Meadows Community Centre
Westwood Square
Humber College
Malton
Lester B. Pearson International Airport
Etobicoke General Hospital
Mount Pleasant Village
Flower City Community Campus
Mississauga City Centre Terminal
Lisgar
Argentia Rd
Meadowvale Blvd
Derry Rd W
Derry Rd E
Courtneypark Dr E
Steeles Ave W
Steeles Ave E
Queen St W
Queen St E
Bovaird Dr W
Bovaird Dr E
Williams Pkwy W
Williams Pkwy E
Sandalwood Pkwy W
Sandalwood Pkwy E
Countryside Dr
Mayfield Rd
Castlemore Rd
Father Tobin Rd
Hwy 407
Hwy 410
Hwy 427
Hwy 401
Hwy 27

Appendix F

Level of Service Definitions

Level of Service Definitions

Signalized Intersections

Level of Service	Control Delay per Vehicle (seconds)	Interpretation
A	≤ 10	EXCELLENT. Extremely favourable progression with most vehicles arriving during the green phase. Most vehicles do not stop and short cycle lengths may contribute to low delay.
B	> 10 and ≤ 20	VERY GOOD. Very good progression and/or short cycle lengths with slightly more vehicles stopping than LOS "A" causing slightly higher levels of average delay.
C	> 20 and ≤ 35	GOOD. Fair progression and longer cycle lengths lead to a greater number of vehicles stopping than LOS "B".
D	> 35 and ≤ 55	FAIR. Congestion becomes noticeable with higher average delays resulting from a combination of long cycle lengths, high volume-to-capacity ratios and unfavourable progression.
E	> 55 and ≤ 80	POOR. Lengthy delays values are indicative of poor progression, long cycle lengths and high volume-to-capacity ratios. Individual cycle failures are common with individual movement failures also common.
F	> 80	UNSATISFACTORY. Indicative of oversaturated conditions with vehicular demand greater than the capacity of the intersection.

Adapted from Highway Capacity Manual 2000, Transportation Research Board

Level of Service Definitions

Two-Way Stop Controlled Intersections

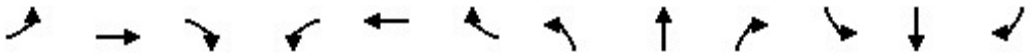
Level of Service	Control Delay per Vehicle (seconds)	Interpretation
A	≤ 10	EXCELLENT. Large and frequent gaps in traffic on the main roadway. Queuing on the minor street is rare.
B	> 10 and ≤ 15	VERY GOOD. Many gaps exist in traffic on the main roadway. Queuing on the minor street is minimal.
C	> 15 and ≤ 25	GOOD. Fewer gaps exist in traffic on the main roadway. Delay on minor approach becomes more noticeable.
D	> 25 and ≤ 35	FAIR. Infrequent and shorter gaps in traffic on the main roadway. Queue lengths develop on the minor street.
E	> 35 and ≤ 50	POOR. Very infrequent gaps in traffic on the main roadway. Queue lengths become noticeable.
F	> 50	UNSATISFACTORY. Very few gaps in traffic on the main roadway. Excessive delay with significant queue lengths on the minor street.

Adapted from Highway Capacity Manual 2000, Transportation Research Board

Appendix G

Synchro and Sim Traffic Results

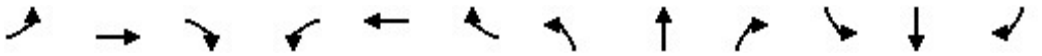
SYNCHRO REPORTS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	154	15	16	66	1	5	64	21	4	207	11
Future Volume (vph)	6	154	15	16	66	1	5	64	21	4	207	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	167	16	17	72	1	5	70	23	4	225	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	190	90	98	241
Volume Left (vph)	7	17	5	4
Volume Right (vph)	16	1	23	12
Hadj (s)	0.03	0.04	-0.06	-0.02
Departure Headway (s)	4.9	5.1	4.9	4.7
Degree Utilization, x	0.26	0.13	0.13	0.32
Capacity (veh/h)	685	650	681	716
Control Delay (s)	9.6	8.8	8.6	9.9
Approach Delay (s)	9.6	8.8	8.6	9.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.4			
Level of Service	A			
Intersection Capacity Utilization	30.4%	ICU Level of Service	A	
Analysis Period (min)	15			

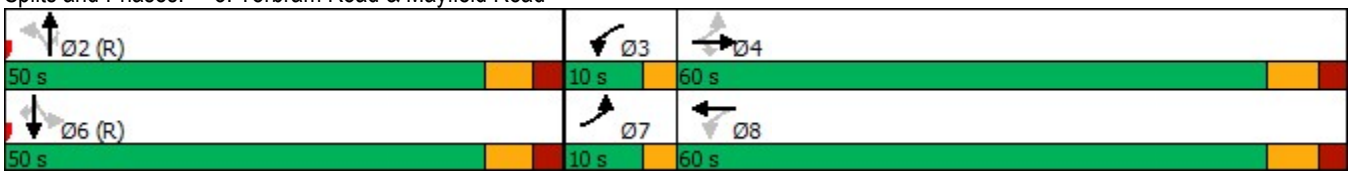


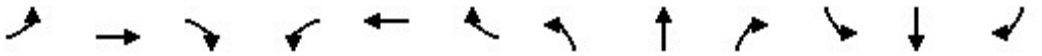
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	1009	189	46	633	9	81	49	38	12	199	30
Future Volume (vph)	36	1009	189	46	633	9	81	49	38	12	199	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4858	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.376			0.220			0.596			0.725		
Satd. Flow (perm)	686	4734	1597	413	4858	0	1120	1942	1587	1362	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			189		2				66			66
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		665.1			1370.8			471.0			3087.9	
Travel Time (s)		29.9			61.7			24.2			158.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	36	1009	189	46	633	9	81	49	38	12	199	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	1009	189	46	642	0	81	49	38	12	199	30
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	10.0	60.0	60.0	10.0	60.0		50.0	50.0	50.0	50.0	50.0	50.0
Total Split (%)	8.3%	50.0%	50.0%	8.3%	50.0%		41.7%	41.7%	41.7%	41.7%	41.7%	41.7%
Maximum Green (s)	7.0	52.7	52.7	7.0	52.7		42.9	42.9	42.9	42.9	42.9	42.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	64.0	52.7	52.7	64.0	52.7		42.9	42.9	42.9	42.9	42.9	42.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.53	0.44	0.44	0.53	0.44		0.36	0.36	0.36	0.36	0.36	0.36
v/c Ratio	0.08	0.49	0.23	0.15	0.30		0.20	0.07	0.06	0.02	0.29	0.05
Control Delay	12.5	25.0	3.6	27.2	40.1		28.5	25.9	2.1	25.3	29.0	0.5
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	12.5	25.0	3.6	27.2	40.1		28.5	25.9	2.1	25.3	29.0	0.5
LOS	B	C	A	C	D		C	C	A	C	C	A
Approach Delay		21.3			39.2			21.8			25.3	
Approach LOS		C			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Pretimed			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 27.0		Intersection LOS: C	
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road



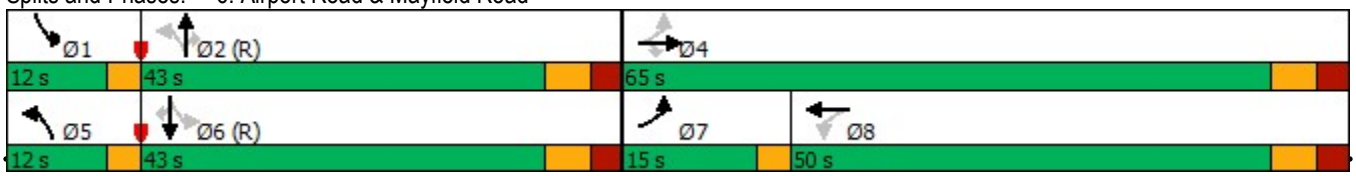


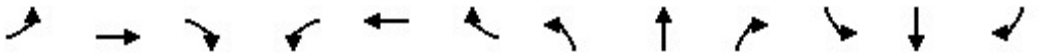
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	562	291	91	450	36	141	197	79	57	541	132
Future Volume (vph)	206	562	291	91	450	36	141	197	79	57	541	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		0.0	50.0		70.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			48.0			80.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00	1.00		1.00					0.98
Frt			0.850		0.989				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	3266	1515	1653	3267	0	1700	3386	1426	1475	3355	1353
Flt Permitted	0.387			0.441			0.321			0.628		
Satd. Flow (perm)	526	3266	1494	767	3267	0	574	3386	1426	975	3355	1333
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			291		8				92			132
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1370.8			111.9			458.9			458.4	
Travel Time (s)		82.2			6.7			27.5			27.5	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	206	562	291	91	450	36	141	197	79	57	541	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	206	562	291	91	486	0	141	197	79	57	541	132
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	10.0	10.0		25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	0.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	0.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0		5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	46.1	46.1	46.1	46.1		8.0	41.9	41.9	9.0	41.9	41.9
Total Split (s)	15.0	65.0	65.0	50.0	50.0		12.0	43.0	43.0	12.0	43.0	43.0
Total Split (%)	12.5%	54.2%	54.2%	41.7%	41.7%		10.0%	35.8%	35.8%	10.0%	35.8%	35.8%
Maximum Green (s)	12.0	57.9	57.9	42.9	42.9		9.0	36.1	36.1	9.0	36.1	36.1
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1		0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
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
Recall Mode	None	Max	Max	Max	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		12.0	12.0	12.0	12.0			12.0	12.0		12.0	12.0
Flash Dont Walk (s)		27.0	27.0	27.0	27.0			23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0	0	0			0	0		0	0
Act Effct Green (s)	62.0	57.9	57.9	43.4	43.4		50.6	39.5	39.5	47.6	36.5	36.5
Actuated g/C Ratio	0.52	0.48	0.48	0.36	0.36		0.42	0.33	0.33	0.40	0.30	0.30
v/c Ratio	0.60	0.36	0.33	0.33	0.41		0.44	0.18	0.15	0.14	0.53	0.27
Control Delay	24.6	15.9	11.7	32.3	29.6		25.8	30.2	5.3	21.1	37.0	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	24.6	15.9	11.7	32.3	29.6		25.8	30.2	5.3	21.1	37.0	6.7
LOS	C	B	B	C	C		C	C	A	C	D	A
Approach Delay		16.4			30.1			24.0			30.3	
Approach LOS		B			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 24.0		Intersection LOS: C	
Intersection Capacity Utilization 100.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Mayfield Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	33	78	0	17	46	447	83	2	592	3
Future Volume (Veh/h)	5	1	33	78	0	17	46	447	83	2	592	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	5	1	33	78	0	17	46	447	86	2	592	3
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	930	1227	297	878	1144	228	596			538		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	930	1227	297	878	1144	228	596			538		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	97	99	95	62	100	98	92			100		
cM capacity (veh/h)	181	164	667	206	184	777	568			615		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	5	34	78	17	46	224	224	86	2	296	296	3
Volume Left	5	0	78	0	46	0	0	0	2	0	0	0
Volume Right	0	33	0	17	0	0	0	86	0	0	0	3
cSH	181	612	206	777	568	1700	1700	1700	615	1700	1700	1700
Volume to Capacity	0.03	0.06	0.38	0.02	0.08	0.13	0.13	0.05	0.00	0.17	0.17	0.00
Queue Length 95th (m)	0.7	1.4	13.3	0.5	2.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	25.4	11.2	32.7	9.7	11.9	0.0	0.0	0.0	10.9	0.0	0.0	0.0
Lane LOS	D	B	D	A	B				B			
Approach Delay (s)	13.0		28.6		0.9				0.0			
Approach LOS	B		D									

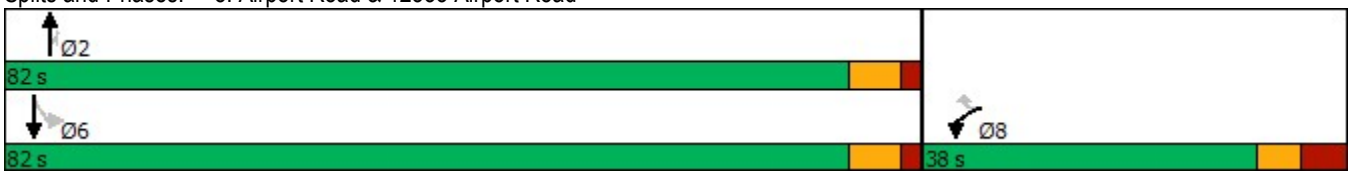
Intersection Summary					
Average Delay	2.9				
Intersection Capacity Utilization	40.7%	ICU Level of Service		A	
Analysis Period (min)	15				

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	77	11	363	61	17	520
Future Volume (vph)	77	11	363	61	17	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8
Storage Length (m)	0.0	0.0		145.0	75.0	
Storage Lanes	1	1		1	1	
Taper Length (m)	7.5				100.0	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1328	1383	3449	992	1116	3101
Flt Permitted	0.950				0.535	
Satd. Flow (perm)	1328	1383	3449	992	628	3101
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		11		61		
Link Speed (k/h)	50		80			80
Link Distance (m)	270.4		438.0			256.3
Travel Time (s)	19.5		19.7			11.5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%
Adj. Flow (vph)	77	11	363	61	17	520
Shared Lane Traffic (%)						
Lane Group Flow (vph)	77	11	363	61	17	520
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	4.0		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97
Turning Speed (k/h)	25	15		15	25	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	Perm	NA

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6
Total Split (s)	38.0	38.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8	75.4	75.4	75.4	75.4
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	13.2	13.2	86.1	86.1	86.1	86.1
Actuated g/C Ratio	0.12	0.12	0.80	0.80	0.80	0.80
v/c Ratio	0.48	0.06	0.13	0.08	0.03	0.21
Control Delay	54.7	20.7	3.8	1.4	4.4	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.7	20.7	3.8	1.4	4.4	4.2
LOS	D	C	A	A	A	A
Approach Delay	50.5		3.5			4.2
Approach LOS	D		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 108.2			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 7.8		Intersection LOS: A	
Intersection Capacity Utilization 36.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & 12333 Airport Road



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	65	84	181	124	155	545
Future Volume (Veh/h)	65	84	181	124	155	545
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)	71	91	197	135	168	592
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	1192	264			332	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1192	264			332	
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	88			86	
cM capacity (veh/h)	177	774			1239	

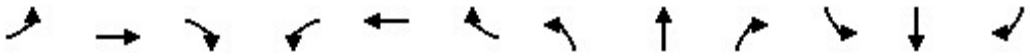
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	162	332	760
Volume Left	71	0	168
Volume Right	91	135	0
cSH	312	1700	1239
Volume to Capacity	0.52	0.20	0.14
Queue Length 95th (m)	22.5	0.0	3.8
Control Delay (s)	28.3	0.0	3.2
Lane LOS	D		A
Approach Delay (s)	28.3	0.0	3.2
Approach LOS	D		

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	165	80	183	536	7
Future Volume (Veh/h)	11	165	80	183	536	7
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	11	165	80	183	536	7
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	879	536	543			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	879	536	543			
tC, single (s)	6.5	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.6	3.3	2.2			
p0 queue free %	96	70	92			
cM capacity (veh/h)	289	545	1036			

Direction, Lane #	EB 1	NB 1	SB 1	SB 2
Volume Total	176	263	536	7
Volume Left	11	80	0	0
Volume Right	165	0	0	7
cSH	516	1036	1700	1700
Volume to Capacity	0.34	0.08	0.32	0.00
Queue Length 95th (m)	12.0	2.0	0.0	0.0
Control Delay (s)	15.5	3.2	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	15.5	3.2	0.0	
Approach LOS	C			

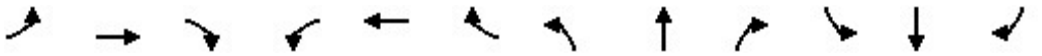
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	72	5	13	251	7	17	185	26	6	56	7
Future Volume (vph)	11	72	5	13	251	7	17	185	26	6	56	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	78	5	14	273	8	18	201	28	7	61	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	95	295	247	76
Volume Left (vph)	12	14	18	7
Volume Right (vph)	5	8	28	8
Hadj (s)	0.08	0.01	0.00	-0.01
Departure Headway (s)	5.2	4.9	5.0	5.3
Degree Utilization, x	0.14	0.40	0.34	0.11
Capacity (veh/h)	622	693	662	613
Control Delay (s)	9.1	11.1	10.6	8.9
Approach Delay (s)	9.1	11.1	10.6	8.9
Approach LOS	A	B	B	A

Intersection Summary				
Delay	10.5			
Level of Service	B			
Intersection Capacity Utilization	38.1%	ICU Level of Service	A	
Analysis Period (min)	15			

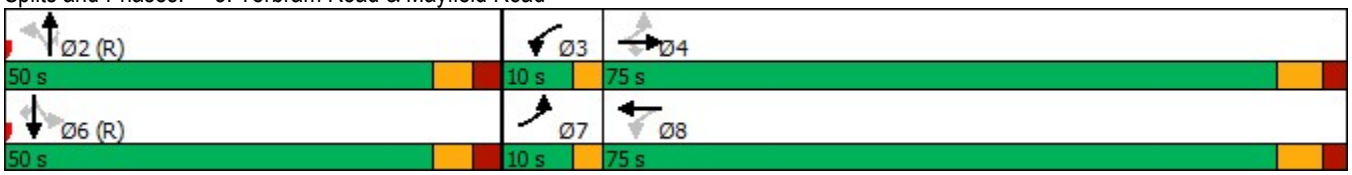


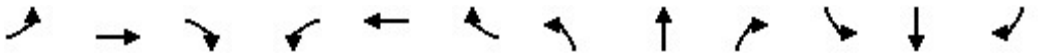
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	904	128	102	1036	12	140	114	53	3	50	27
Future Volume (vph)	41	904	128	102	1036	12	140	114	53	3	50	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4857	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.219			0.268			0.724			0.684		
Satd. Flow (perm)	399	4734	1597	504	4857	0	1360	1942	1587	1285	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			128		2				59			59
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		665.1			1370.8			471.0			3087.9	
Travel Time (s)		29.9			61.7			24.2			158.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	41	904	128	102	1036	12	140	114	53	3	50	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	904	128	102	1048	0	140	114	53	3	50	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	10.0	75.0	75.0	10.0	75.0		50.0	50.0	50.0	50.0	50.0	50.0
Total Split (%)	7.4%	55.6%	55.6%	7.4%	55.6%		37.0%	37.0%	37.0%	37.0%	37.0%	37.0%
Maximum Green (s)	7.0	67.7	67.7	7.0	67.7		42.9	42.9	42.9	42.9	42.9	42.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	79.0	67.7	67.7	79.0	67.7		42.9	42.9	42.9	42.9	42.9	42.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.59	0.50	0.50	0.59	0.50		0.32	0.32	0.32	0.32	0.32	0.32
v/c Ratio	0.14	0.38	0.15	0.28	0.43		0.32	0.18	0.10	0.01	0.08	0.05
Control Delay	11.8	21.3	3.3	20.3	34.8		37.6	34.4	7.2	31.7	32.8	0.6
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	11.8	21.3	3.3	20.3	34.8		37.6	34.4	7.2	31.7	32.8	0.6
LOS	B	C	A	C	C		D	C	A	C	C	A
Approach Delay		18.8			33.5			31.2			21.9	
Approach LOS		B			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Pretimed			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 26.8		Intersection LOS: C	
Intersection Capacity Utilization 58.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road



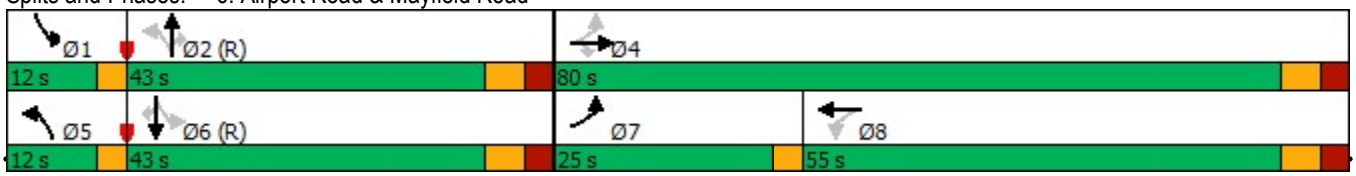


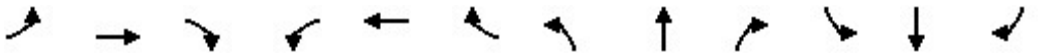
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	500	142	98	615	58	243	491	85	77	305	250
Future Volume (vph)	200	500	142	98	615	58	243	491	85	77	305	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		0.0	50.0		70.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			48.0			80.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00	1.00		1.00					0.98
Frt			0.850		0.987				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	3266	1515	1653	3238	0	1700	3386	1426	1475	3355	1353
Flt Permitted	0.288			0.469			0.508			0.361		
Satd. Flow (perm)	392	3266	1493	815	3238	0	907	3386	1426	561	3355	1333
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142		8				85			250
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1370.8			120.0			458.9			458.4	
Travel Time (s)		82.2			7.2			27.5			27.5	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	200	500	142	98	615	58	243	491	85	77	305	250
Shared Lane Traffic (%)												
Lane Group Flow (vph)	200	500	142	98	673	0	243	491	85	77	305	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	10.0	10.0		25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	0.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	0.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0		5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	46.1	46.1	46.1	46.1		8.0	41.9	41.9	9.0	41.9	41.9
Total Split (s)	25.0	80.0	80.0	55.0	55.0		12.0	43.0	43.0	12.0	43.0	43.0
Total Split (%)	18.5%	59.3%	59.3%	40.7%	40.7%		8.9%	31.9%	31.9%	8.9%	31.9%	31.9%
Maximum Green (s)	22.0	72.9	72.9	47.9	47.9		9.0	36.1	36.1	9.0	36.1	36.1
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1		0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1		3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
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
Recall Mode	None	Max	Max	Max	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		12.0	12.0	12.0	12.0			12.0	12.0		12.0	12.0
Flash Dont Walk (s)		27.0	27.0	27.0	27.0			23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0	0	0			0	0		0	0
Act Effct Green (s)	77.0	72.9	72.9	54.5	54.5		49.9	37.1	37.1	48.0	36.1	36.1
Actuated g/C Ratio	0.57	0.54	0.54	0.40	0.40		0.37	0.27	0.27	0.36	0.27	0.27
v/c Ratio	0.61	0.28	0.16	0.30	0.51		0.63	0.53	0.19	0.30	0.34	0.46
Control Delay	35.1	25.6	15.4	32.0	32.3		40.1	44.3	8.5	30.4	41.1	7.5
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	35.1	25.6	15.4	32.0	32.3		40.1	44.3	8.5	30.4	41.1	7.5
LOS	D	C	B	C	C		D	D	A	C	D	A
Approach Delay		26.1			32.3			39.3			26.5	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 31.3		Intersection LOS: C	
Intersection Capacity Utilization 106.0%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Mayfield Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	614	90	17	428	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	614	90	17	428	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	614	94	17	428	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	930	1332	215	1100	1244	312	435			713		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	930	1332	215	1100	1244	312	435			713		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	95	99	90	11	100	99	89			97		
cM capacity (veh/h)	175	133	756	127	150	687	692			496		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	307	307	94	17	214	214	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	175	713	127	687	692	1700	1700	1700	496	1700	1700	1700
Volume to Capacity	0.05	0.11	0.89	0.01	0.11	0.18	0.18	0.06	0.03	0.13	0.13	0.00
Queue Length 95th (m)	1.1	2.9	45.6	0.1	3.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Control Delay (s)	26.5	10.7	118.2	10.3	10.9	0.0	0.0	0.0	12.5	0.0	0.0	0.0
Lane LOS	D	B	F	B	B				B			
Approach Delay (s)	12.2		114.5		1.1				0.5			
Approach LOS	B		F									

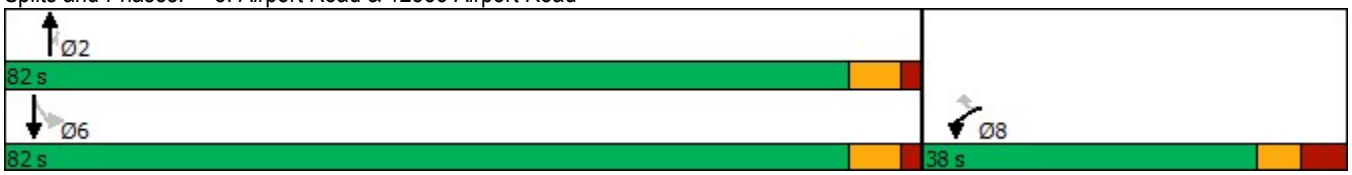
Intersection Summary				
Average Delay	10.8			
Intersection Capacity Utilization	43.2%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	34	5	578	26	2	378
Future Volume (vph)	34	5	578	26	2	378
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8
Storage Length (m)	0.0	0.0		145.0	75.0	
Storage Lanes	1	1		1	1	
Taper Length (m)	7.5				100.0	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1328	1383	3449	992	1116	3101
Flt Permitted	0.950				0.434	
Satd. Flow (perm)	1328	1383	3449	992	510	3101
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		5		26		
Link Speed (k/h)	50		80			80
Link Distance (m)	270.4		438.0			254.9
Travel Time (s)	19.5		19.7			11.5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%
Adj. Flow (vph)	34	5	578	26	2	378
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	5	578	26	2	378
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	4.0		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97
Turning Speed (k/h)	25	15		15	25	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	Perm	NA

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6
Total Split (s)	38.0	38.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8	75.4	75.4	75.4	75.4
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	12.1	12.1	92.8	92.8	92.8	92.8
Actuated g/C Ratio	0.11	0.11	0.86	0.86	0.86	0.86
v/c Ratio	0.23	0.03	0.19	0.03	0.00	0.14
Control Delay	50.6	28.0	2.8	1.3	3.5	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	28.0	2.8	1.3	3.5	2.7
LOS	D	C	A	A	A	A
Approach Delay	47.7		2.8			2.7
Approach LOS	D		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.9			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.23			
Intersection Signal Delay: 4.5		Intersection LOS: A	
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & 12333 Airport Road



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	98	235	503	59	71	242
Future Volume (Veh/h)	98	235	503	59	71	242
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)	107	255	547	64	77	263
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	996	579			611	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	996	579			611	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	57	50			92	
cM capacity (veh/h)	248	515			978	

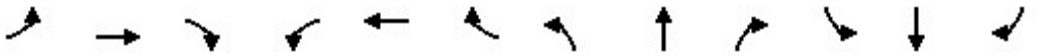
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	362	611	340
Volume Left	107	0	77
Volume Right	255	64	0
cSH	390	1700	978
Volume to Capacity	0.93	0.36	0.08
Queue Length 95th (m)	80.1	0.0	2.0
Control Delay (s)	62.1	0.0	2.7
Lane LOS	F		A
Approach Delay (s)	62.1	0.0	2.7
Approach LOS	F		

Intersection Summary			
Average Delay	17.8		
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	24	74	247	489	237	21
Future Volume (Veh/h)	24	74	247	489	237	21
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	24	74	247	489	237	21
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1220	237	258			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1220	237	258			
tC, single (s)	6.5	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.6	3.3	2.2			
p0 queue free %	85	91	81			
cM capacity (veh/h)	159	802	1318			

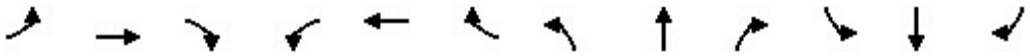
Direction, Lane #	EB 1	NB 1	SB 1	SB 2
Volume Total	98	736	237	21
Volume Left	24	247	0	0
Volume Right	74	0	0	21
cSH	402	1318	1700	1700
Volume to Capacity	0.24	0.19	0.14	0.01
Queue Length 95th (m)	7.5	5.5	0.0	0.0
Control Delay (s)	16.8	4.3	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	16.8	4.3	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	167	15	16	72	1	5	72	21	4	244	11
Future Volume (vph)	6	167	15	16	72	1	5	72	21	4	244	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.999			0.971			0.994	
Flt Protected		0.998			0.991			0.998			0.999	
Satd. Flow (prot)	0	1803	0	0	1866	0	0	1769	0	0	1880	0
Flt Permitted		0.998			0.991			0.998			0.999	
Satd. Flow (perm)	0	1803	0	0	1866	0	0	1769	0	0	1880	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	7	182	16	17	78	1	5	78	23	4	265	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	205	0	0	96	0	0	106	0	0	281	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

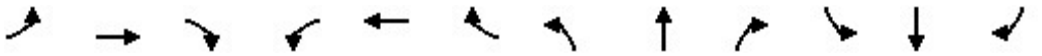
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	167	15	16	72	1	5	72	21	4	244	11
Future Volume (vph)	6	167	15	16	72	1	5	72	21	4	244	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	182	16	17	78	1	5	78	23	4	265	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	205	96	106	281
Volume Left (vph)	7	17	5	4
Volume Right (vph)	16	1	23	12
Hadj (s)	0.03	0.04	-0.05	-0.02
Departure Headway (s)	5.0	5.2	5.0	4.8
Degree Utilization, x	0.29	0.14	0.15	0.38
Capacity (veh/h)	660	623	656	703
Control Delay (s)	10.1	9.1	8.9	10.7
Approach Delay (s)	10.1	9.1	8.9	10.7
Approach LOS	B	A	A	B

Intersection Summary				
Delay	10.0			
Level of Service	B			
Intersection Capacity Utilization	32.9%	ICU Level of Service	A	
Analysis Period (min)	15			

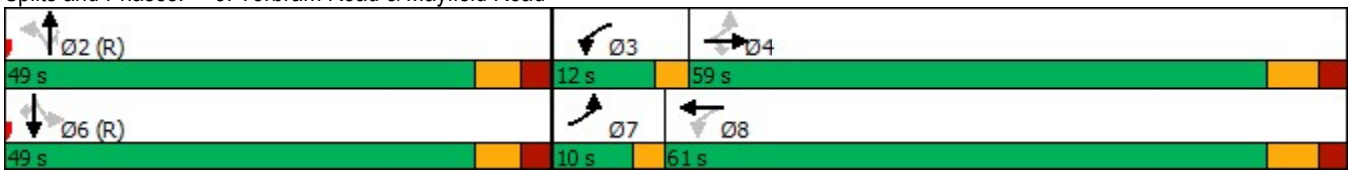


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1509	259	181	1380	9	292	55	117	12	216	49
Future Volume (vph)	37	1509	259	181	1380	9	292	55	117	12	216	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.130			0.078			0.581			0.721		
Satd. Flow (perm)	237	4734	1597	147	4861	0	1092	1942	1587	1355	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259		1				117			66
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	37	1509	259	181	1380	9	292	55	117	12	216	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	1509	259	181	1389	0	292	55	117	12	216	49
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	10.0	59.0	59.0	12.0	61.0		49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	8.3%	49.2%	49.2%	10.0%	50.8%		40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Maximum Green (s)	7.0	51.7	51.7	9.0	53.7		41.9	41.9	41.9	41.9	41.9	41.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	57.3	47.0	47.0	63.0	53.3		46.6	46.6	46.6	46.6	46.6	46.6
Actuated g/C Ratio	0.48	0.39	0.39	0.52	0.44		0.39	0.39	0.39	0.39	0.39	0.39
v/c Ratio	0.20	0.81	0.33	0.91	0.64		0.69	0.07	0.17	0.02	0.29	0.08
Control Delay	14.9	36.4	3.7	88.6	12.9		42.1	25.3	5.4	25.2	27.7	4.0
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	14.9	36.4	3.7	88.6	12.9		42.1	25.3	5.4	25.2	27.7	4.0
LOS	B	D	A	F	B		D	C	A	C	C	A
Approach Delay		31.3			21.6			30.8			23.4	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 27.0		Intersection LOS: C	
Intersection Capacity Utilization 88.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

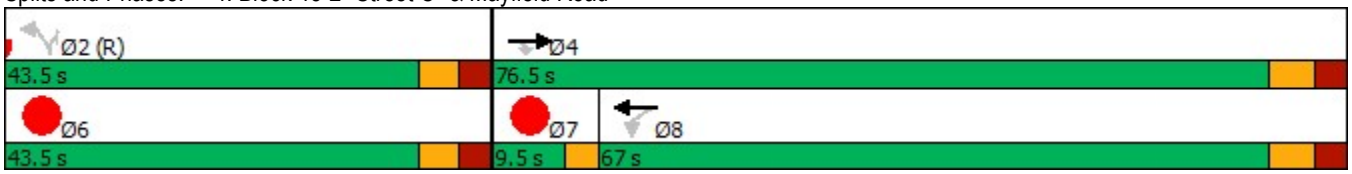


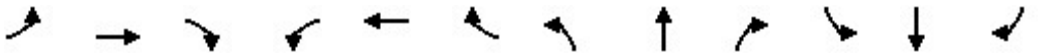
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Lane Configurations								
Traffic Volume (vph)	1559	110	14	1396	231	35		
Future Volume (vph)	1559	110	14	1396	231	35		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (m)	3.8	3.5	3.5	3.8	3.8	3.8		
Storage Length (m)		55.0	75.0		55.0	0.0		
Storage Lanes		1	1		1	1		
Taper Length (m)			7.5		7.5			
Lane Util. Factor	0.91	1.00	1.00	0.91	1.00	1.00		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	4734	1566	1750	4864	1809	1619		
Flt Permitted			0.082		0.950			
Satd. Flow (perm)	4734	1566	151	4864	1809	1619		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		108				28		
Link Speed (k/h)	80			80	50			
Link Distance (m)	716.7			643.7	353.1			
Travel Time (s)	32.3			29.0	25.4			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Heavy Vehicles (%)	12%	2%	2%	9%	2%	2%		
Adj. Flow (vph)	1559	110	14	1396	231	35		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	1559	110	14	1396	231	35		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(m)	3.5			3.5	3.8			
Link Offset(m)	0.0			0.0	0.0			
Crosswalk Width(m)	4.8			4.8	4.8			
Two way Left Turn Lane								
Headway Factor	0.97	1.01	1.01	0.97	0.97	0.97		
Turning Speed (k/h)		15	25		25	15		
Number of Detectors	2	1	1	2	1	1		
Detector Template	Thru	Right	Left	Thru	Left	Right		
Leading Detector (m)	10.0	10.0	25.0	10.0	25.0	10.0		
Trailing Detector (m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Position(m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Size(m)	0.6	10.0	10.0	0.6	10.0	10.0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(m)	9.4			9.4				
Detector 2 Size(m)	0.6			0.6				
Detector 2 Type	Cl+Ex			Cl+Ex				
Detector 2 Channel								
Detector 2 Extend (s)	0.0			0.0				
Turn Type	NA	Perm	Perm	NA	Perm	Perm		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Protected Phases	4			8			6	7
Permitted Phases		4	8		2	2		
Detector Phase	4	4	8	8	2	2		
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	5.0
Minimum Split (s)	25.1	25.1	25.1	25.1	24.6	24.6	24.6	9.5
Total Split (s)	76.5	76.5	67.0	67.0	43.5	43.5	43.5	9.5
Total Split (%)	63.8%	63.8%	55.8%	55.8%	36.3%	36.3%	36%	8%
Maximum Green (s)	69.4	69.4	59.9	59.9	36.9	36.9	36.9	6.5
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.0
All-Red Time (s)	3.1	3.1	3.1	3.1	2.9	2.9	2.9	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.1	7.1	7.1	7.1	6.6	6.6		
Lead/Lag			Lag	Lag				Lead
Lead-Lag Optimize?			Yes	Yes				Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	Max	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	
Act Effct Green (s)	52.5	52.5	52.5	52.5	53.8	53.8		
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.45	0.45		
v/c Ratio	0.75	0.15	0.21	0.66	0.29	0.05		
Control Delay	57.8	22.1	43.1	47.7	23.8	10.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	57.8	22.1	43.1	47.7	23.8	10.1		
LOS	E	C	D	D	C	B		
Approach Delay	55.5			47.7	22.0			
Approach LOS	E			D	C			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 49.5		Intersection LOS: D	
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C" & Mayfield Road



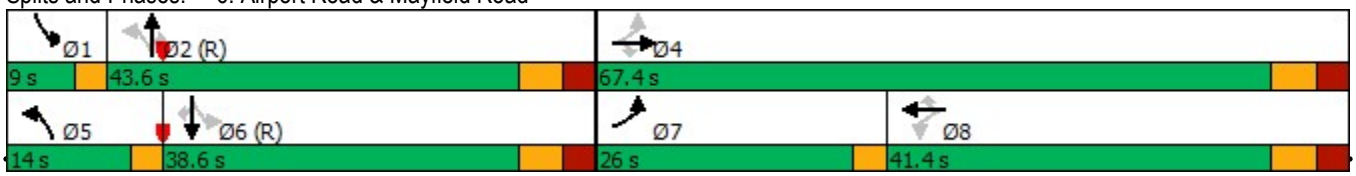


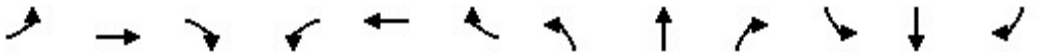
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	889	398	98	963	38	211	206	87	66	572	202
Future Volume (vph)	238	889	398	98	963	38	211	206	87	66	572	202
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	3630	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.098			0.308			0.265			0.623		
Satd. Flow (perm)	133	4939	1493	536	3630	961	474	3386	1426	967	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			266			117			92			202
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	238	889	398	98	963	38	211	206	87	66	572	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	889	398	98	963	38	211	206	87	66	572	202
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	41.1	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	26.0	67.4	67.4	41.4	41.4	41.4	14.0	43.6	43.6	9.0	38.6	38.6
Total Split (%)	21.7%	56.2%	56.2%	34.5%	34.5%	34.5%	11.7%	36.3%	36.3%	7.5%	32.2%	32.2%
Maximum Green (s)	23.0	60.3	60.3	34.3	34.3	34.3	11.0	36.7	36.7	6.0	31.7	31.7
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	Max	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0	27.0	27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0	0	0	0		0	0		0	0
Act Effct Green (s)	64.4	60.3	60.3	37.7	37.7	37.7	49.6	38.5	38.5	41.7	32.0	32.0
Actuated g/C Ratio	0.54	0.50	0.50	0.31	0.31	0.31	0.41	0.32	0.32	0.35	0.27	0.27
v/c Ratio	0.92	0.36	0.45	0.58	0.85	0.10	0.69	0.19	0.17	0.18	0.64	0.40
Control Delay	89.7	29.9	18.8	52.7	47.4	0.5	37.2	30.8	6.4	23.5	42.9	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.7	29.9	18.8	52.7	47.4	0.5	37.2	30.8	6.4	23.5	42.9	7.3
LOS	F	C	B	D	D	A	D	C	A	C	D	A
Approach Delay		36.3			46.2			29.3			32.8	
Approach LOS		D			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 37.4		Intersection LOS: D	
Intersection Capacity Utilization 96.5%		ICU Level of Service F	
Analysis Period (min) 15			

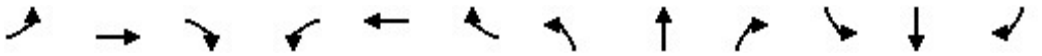
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	33	78	0	17	46	490	83	2	700	3
Future Volume (vph)	5	1	33	78	0	17	46	490	83	2	700	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.854			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	5	1	33	78	0	17	46	490	86	2	700	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	34	0	78	17	0	46	490	86	2	700	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	33	78	0	17	46	490	83	2	700	3
Future Volume (Veh/h)	5	1	33	78	0	17	46	490	83	2	700	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	5	1	33	78	0	17	46	490	86	2	700	3
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1059	1378	351	974	1295	250	704			581		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1059	1378	351	974	1295	250	704			581		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	97	99	95	55	100	98	91			100		
cM capacity (veh/h)	143	131	614	172	147	753	497			584		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	5	34	78	17	46	245	245	86	2	350	350	3
Volume Left	5	0	78	0	46	0	0	0	2	0	0	0
Volume Right	0	33	0	17	0	0	0	86	0	0	0	3
cSH	143	554	172	753	497	1700	1700	1700	584	1700	1700	1700
Volume to Capacity	0.03	0.06	0.45	0.02	0.09	0.14	0.14	0.05	0.00	0.21	0.21	0.00
Queue Length 95th (m)	0.9	1.6	16.9	0.6	2.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	31.1	11.9	42.2	9.9	13.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0
Lane LOS	D	B	E	A	B				B			
Approach Delay (s)	14.4		36.4		1.0				0.0			
Approach LOS	B		E									

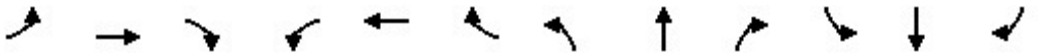
Intersection Summary				
Average Delay	3.2			
Intersection Capacity Utilization	43.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	77	11	402	61	17	625	
Future Volume (vph)	77	11	402	61	17	625	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8	
Storage Length (m)	0.0	0.0		145.0	75.0		
Storage Lanes	1	1		1	1		
Taper Length (m)	7.5				100.0		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1328	1383	3449	992	1116	3101	
Flt Permitted	0.950				0.515		
Satd. Flow (perm)	1328	1383	3449	992	605	3101	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		11		61			
Link Speed (k/h)	50		80			80	
Link Distance (m)	270.4		438.0			348.1	
Travel Time (s)	19.5		19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%	
Adj. Flow (vph)	77	11	402	61	17	625	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	77	11	402	61	17	625	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(m)	4.0		3.5			3.5	
Link Offset(m)	0.0		0.0			0.0	
Crosswalk Width(m)	4.8		4.8			4.8	
Two way Left Turn Lane							
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97	
Turning Speed (k/h)	25	15		15	25		
Number of Detectors	1	1	2	1	1	2	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)			9.4			9.4	
Detector 2 Size(m)			0.6			0.6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases			2			6	4
Permitted Phases	8	8		2	6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6	36.2
Total Split (s)	50.0	50.0	70.0	70.0	70.0	70.0	50.0
Total Split (%)	41.7%	41.7%	58.3%	58.3%	58.3%	58.3%	42%
Maximum Green (s)	41.8	41.8	63.4	63.4	63.4	63.4	41.8
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.0
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0	4.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0
Act Effct Green (s)	12.7	12.7	74.1	74.1	74.1	74.1	
Actuated g/C Ratio	0.13	0.13	0.77	0.77	0.77	0.77	
v/c Ratio	0.44	0.06	0.15	0.08	0.04	0.26	
Control Delay	46.7	18.4	4.2	1.5	4.7	4.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	46.7	18.4	4.2	1.5	4.7	4.7	
LOS	D	B	A	A	A	A	
Approach Delay	43.2		3.9			4.7	
Approach LOS	D		A			A	

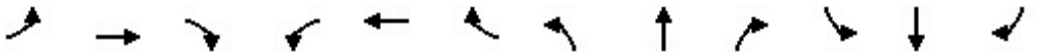
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 95.7			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 39.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & 12333 Airport Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	78	5	13	272	7	17	201	26	6	61	7
Future Volume (vph)	11	78	5	13	272	7	17	201	26	6	61	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.997			0.986			0.987	
Flt Protected		0.994			0.998			0.997			0.996	
Satd. Flow (prot)	0	1786	0	0	1873	0	0	1815	0	0	1828	0
Flt Permitted		0.994			0.998			0.997			0.996	
Satd. Flow (perm)	0	1786	0	0	1873	0	0	1815	0	0	1828	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	12	85	5	14	296	8	18	218	28	7	66	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	102	0	0	318	0	0	264	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

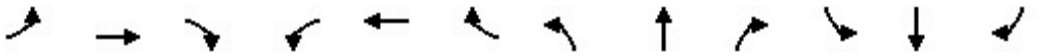
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	78	5	13	272	7	17	201	26	6	61	7
Future Volume (vph)	11	78	5	13	272	7	17	201	26	6	61	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	85	5	14	296	8	18	218	28	7	66	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	102	318	264	81
Volume Left (vph)	12	14	18	7
Volume Right (vph)	5	8	28	8
Hadj (s)	0.08	0.01	0.00	-0.01
Departure Headway (s)	5.4	5.0	5.1	5.4
Degree Utilization, x	0.15	0.44	0.38	0.12
Capacity (veh/h)	605	681	649	593
Control Delay (s)	9.4	11.9	11.2	9.2
Approach Delay (s)	9.4	11.9	11.2	9.2
Approach LOS	A	B	B	A

Intersection Summary				
Delay		11.1		
Level of Service		B		
Intersection Capacity Utilization		40.4%	ICU Level of Service	A
Analysis Period (min)		15		

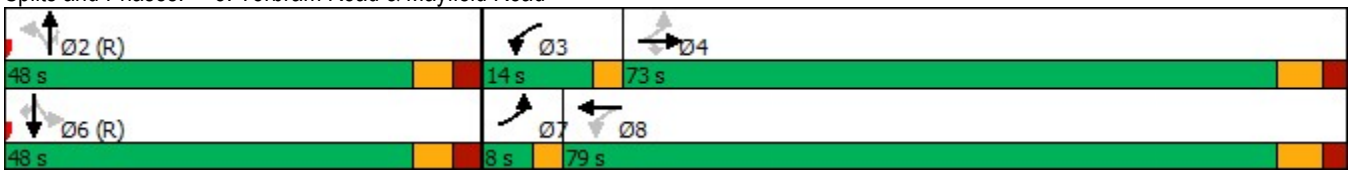


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	1599	243	157	1502	12	305	124	160	3	55	27
Future Volume (vph)	41	1599	243	157	1502	12	305	124	160	3	55	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.110			0.066			0.721			0.677		
Satd. Flow (perm)	201	4734	1597	124	4861	0	1355	1942	1587	1272	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		1				129			83
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	41	1599	243	157	1502	12	305	124	160	3	55	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	1599	243	157	1514	0	305	124	160	3	55	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	73.0	73.0	14.0	79.0		48.0	48.0	48.0	48.0	48.0	48.0
Total Split (%)	5.9%	54.1%	54.1%	10.4%	58.5%		35.6%	35.6%	35.6%	35.6%	35.6%	35.6%
Maximum Green (s)	5.0	65.7	65.7	11.0	71.7		40.9	40.9	40.9	40.9	40.9	40.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	66.2	56.9	56.9	74.6	63.9		50.3	50.3	50.3	50.3	50.3	50.3
Actuated g/C Ratio	0.49	0.42	0.42	0.55	0.47		0.37	0.37	0.37	0.37	0.37	0.37
v/c Ratio	0.26	0.80	0.30	0.80	0.66		0.61	0.17	0.24	0.01	0.08	0.05
Control Delay	16.7	37.3	3.4	86.3	7.1		42.3	31.2	9.4	30.7	30.5	0.1
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	16.7	37.3	3.4	86.3	7.1		42.3	31.2	9.4	30.7	30.5	0.1
LOS	B	D	A	F	A		D	C	A	C	C	A
Approach Delay		32.5			14.5			31.0			20.8	
Approach LOS		C			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 25.0		Intersection LOS: C	
Intersection Capacity Utilization 78.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

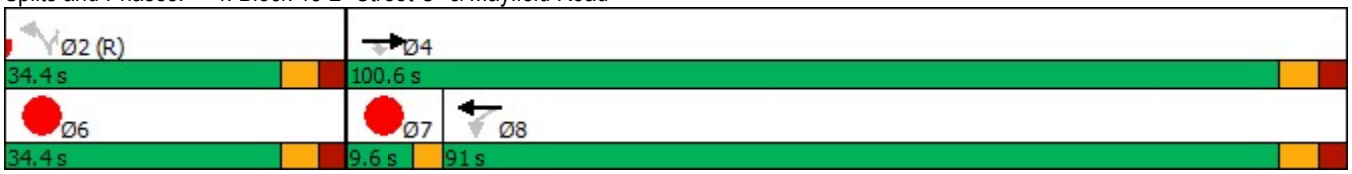


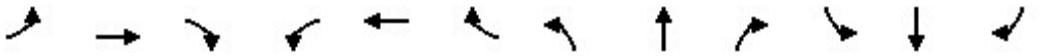
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Lane Configurations								
Traffic Volume (vph)	1667	98	41	1544	104	23		
Future Volume (vph)	1667	98	41	1544	104	23		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (m)	3.8	3.5	3.5	3.8	3.8	3.8		
Storage Length (m)		55.0	75.0		55.0	0.0		
Storage Lanes		1	1		1	1		
Taper Length (m)			7.5		7.5			
Lane Util. Factor	0.91	1.00	1.00	0.91	1.00	1.00		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	4734	1566	1750	4864	1809	1619		
Flt Permitted			0.079		0.950			
Satd. Flow (perm)	4734	1566	146	4864	1809	1619		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		98				23		
Link Speed (k/h)	80			80	50			
Link Distance (m)	716.7			643.7	353.1			
Travel Time (s)	32.3			29.0	25.4			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Heavy Vehicles (%)	12%	2%	2%	9%	2%	2%		
Adj. Flow (vph)	1667	98	41	1544	104	23		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	1667	98	41	1544	104	23		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(m)	3.5			3.5	3.8			
Link Offset(m)	0.0			0.0	0.0			
Crosswalk Width(m)	4.8			4.8	4.8			
Two way Left Turn Lane								
Headway Factor	0.97	1.01	1.01	0.97	0.97	0.97		
Turning Speed (k/h)		15	25		25	15		
Number of Detectors	2	1	1	2	1	1		
Detector Template	Thru	Right	Left	Thru	Left	Right		
Leading Detector (m)	10.0	10.0	25.0	10.0	25.0	10.0		
Trailing Detector (m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Position(m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Size(m)	0.6	10.0	10.0	0.6	10.0	10.0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(m)	9.4			9.4				
Detector 2 Size(m)	0.6			0.6				
Detector 2 Type	Cl+Ex			Cl+Ex				
Detector 2 Channel								
Detector 2 Extend (s)	0.0			0.0				
Turn Type	NA	Perm	Perm	NA	Perm	Perm		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Protected Phases	4			8			6	7
Permitted Phases		4	8		2	2		
Detector Phase	4	4	8	8	2	2		
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	5.0
Minimum Split (s)	25.1	25.1	25.1	25.1	24.6	24.6	24.6	9.5
Total Split (s)	100.6	100.6	91.0	91.0	34.4	34.4	34.4	9.6
Total Split (%)	74.5%	74.5%	67.4%	67.4%	25.5%	25.5%	25%	7%
Maximum Green (s)	93.5	93.5	83.9	83.9	27.8	27.8	27.8	6.6
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.0
All-Red Time (s)	3.1	3.1	3.1	3.1	2.9	2.9	2.9	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.1	7.1	7.1	7.1	6.6	6.6		
Lead/Lag			Lag	Lag				Lead
Lead-Lag Optimize?			Yes	Yes				Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	Max	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	
Act Effct Green (s)	66.9	66.9	66.9	66.9	54.4	54.4		
Actuated g/C Ratio	0.50	0.50	0.50	0.50	0.40	0.40		
v/c Ratio	0.71	0.12	0.57	0.64	0.14	0.03		
Control Delay	54.5	18.3	67.2	48.9	28.9	11.3		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	54.5	18.3	67.2	48.9	28.9	11.3		
LOS	D	B	E	D	C	B		
Approach Delay	52.5			49.4	25.7			
Approach LOS	D			D	C			

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 50.1		Intersection LOS: D	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C" & Mayfield Road



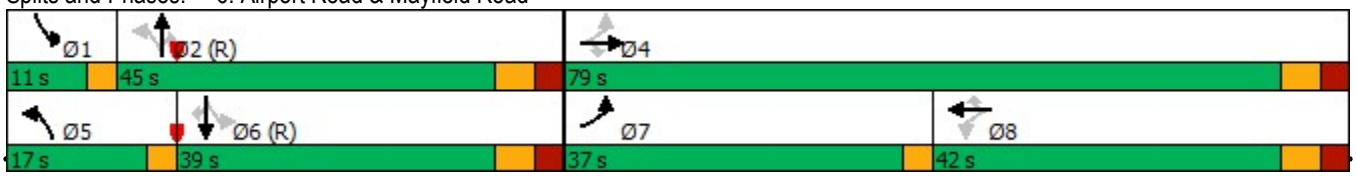


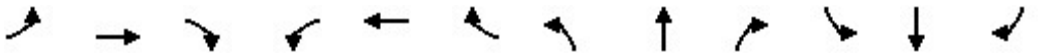
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	922	190	114	923	61	333	519	94	101	344	296
Future Volume (vph)	337	922	190	114	923	61	333	519	94	101	344	296
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	3630	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.100			0.297			0.427			0.402		
Satd. Flow (perm)	136	4939	1493	516	3630	961	762	3386	1426	624	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			190			104			94			296
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	337	922	190	114	923	61	333	519	94	101	344	296
Shared Lane Traffic (%)												
Lane Group Flow (vph)	337	922	190	114	923	61	333	519	94	101	344	296
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	41.1	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	37.0	79.0	79.0	42.0	42.0	42.0	17.0	45.0	45.0	11.0	39.0	39.0
Total Split (%)	27.4%	58.5%	58.5%	31.1%	31.1%	31.1%	12.6%	33.3%	33.3%	8.1%	28.9%	28.9%
Maximum Green (s)	34.0	71.9	71.9	34.9	34.9	34.9	14.0	38.1	38.1	8.0	32.1	32.1
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	Max	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0	27.0	27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0	0	0	0		0	0		0	0
Act Effct Green (s)	76.0	71.9	71.9	37.0	37.0	37.0	53.0	38.4	38.4	43.7	32.1	32.1
Actuated g/C Ratio	0.56	0.53	0.53	0.27	0.27	0.27	0.39	0.28	0.28	0.32	0.24	0.24
v/c Ratio	0.97	0.35	0.22	0.81	0.93	0.18	0.84	0.54	0.20	0.40	0.43	0.55
Control Delay	111.1	9.5	3.3	85.9	63.7	2.3	52.9	43.4	7.9	33.0	45.7	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	111.1	9.5	3.3	85.9	63.7	2.3	52.9	43.4	7.9	33.0	45.7	8.6
LOS	F	A	A	F	E	A	D	D	A	C	D	A
Approach Delay		32.3			62.6			43.2			29.2	
Approach LOS		C			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 42.1		Intersection LOS: D	
Intersection Capacity Utilization 108.8%		ICU Level of Service G	
Analysis Period (min) 15			

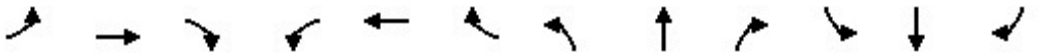
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	76	113	0	4	78	791	90	17	470	6
Future Volume (vph)	8	1	76	113	0	4	78	791	90	17	470	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		30.0	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.852			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	8	1	76	113	0	4	78	791	94	17	470	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	77	0	113	4	0	78	791	94	17	470	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	791	90	17	470	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	791	90	17	470	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	791	94	17	470	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1060	1551	236	1298	1463	400	477			890		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1060	1551	236	1298	1463	400	477			890		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	94	99	90	0	100	99	88			96		
cM capacity (veh/h)	138	96	732	89	109	602	658			399		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	396	396	94	17	235	235	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	138	675	89	602	658	1700	1700	1700	399	1700	1700	1700
Volume to Capacity	0.06	0.11	1.27	0.01	0.12	0.23	0.23	0.06	0.04	0.14	0.14	0.00
Queue Length 95th (m)	1.5	3.1	65.6	0.2	3.2	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Control Delay (s)	32.8	11.0	271.9	11.0	11.2	0.0	0.0	0.0	14.4	0.0	0.0	0.0
Lane LOS	D	B	F	B	B				B			
Approach Delay (s)	13.1		263.0		0.9				0.5			
Approach LOS	B		F									

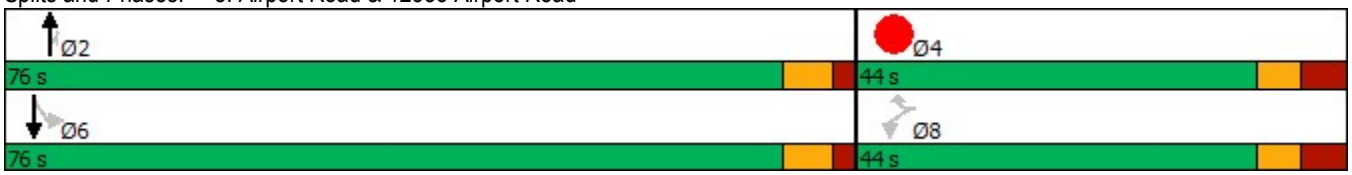
Intersection Summary				
Average Delay	19.9			
Intersection Capacity Utilization	48.1%	ICU Level of Service	A	
Analysis Period (min)	15			

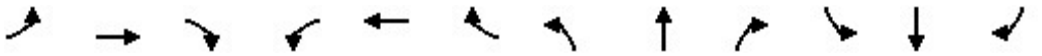
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	34	5	754	26	2	418	
Future Volume (vph)	34	5	754	26	2	418	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8	
Storage Length (m)	0.0	0.0		145.0	75.0		
Storage Lanes	1	1		1	1		
Taper Length (m)	7.5				100.0		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1328	1383	3449	992	1116	3101	
Flt Permitted	0.950				0.366		
Satd. Flow (perm)	1328	1383	3449	992	430	3101	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		5		26			
Link Speed (k/h)	50		80			80	
Link Distance (m)	270.4		438.0			348.1	
Travel Time (s)	19.5		19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%	
Adj. Flow (vph)	34	5	754	26	2	418	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	34	5	754	26	2	418	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(m)	4.0		3.5			3.5	
Link Offset(m)	0.0		0.0			0.0	
Crosswalk Width(m)	4.8		4.8			4.8	
Two way Left Turn Lane							
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97	
Turning Speed (k/h)	25	15		15	25		
Number of Detectors	1	1	2	1	1	2	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)			9.4			9.4	
Detector 2 Size(m)			0.6			0.6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases			2			6	4
Permitted Phases	8	8		2	6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6	36.2
Total Split (s)	44.0	44.0	76.0	76.0	76.0	76.0	44.0
Total Split (%)	36.7%	36.7%	63.3%	63.3%	63.3%	63.3%	37%
Maximum Green (s)	35.8	35.8	69.4	69.4	69.4	69.4	35.8
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.0
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0	4.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0
Act Effct Green (s)	12.1	12.1	86.9	86.9	86.9	86.9	
Actuated g/C Ratio	0.12	0.12	0.85	0.85	0.85	0.85	
v/c Ratio	0.22	0.03	0.26	0.03	0.01	0.16	
Control Delay	47.1	26.4	3.2	1.4	3.5	2.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.1	26.4	3.2	1.4	3.5	2.9	
LOS	D	C	A	A	A	A	
Approach Delay	44.4		3.1			2.9	
Approach LOS	D		A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 101.9			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay: 4.4		Intersection LOS: A	
Intersection Capacity Utilization 43.2%		ICU Level of Service A	
Analysis Period (min) 15			

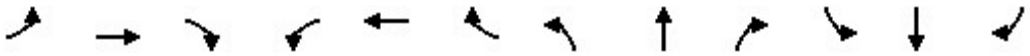
Splits and Phases: 8: Airport Road & 12333 Airport Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	167	15	16	72	1	5	72	21	4	244	11
Future Volume (vph)	6	167	15	16	72	1	5	72	21	4	244	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.999			0.971			0.994	
Flt Protected		0.998			0.991			0.998			0.999	
Satd. Flow (prot)	0	1803	0	0	1866	0	0	1769	0	0	1880	0
Flt Permitted		0.998			0.991			0.998			0.999	
Satd. Flow (perm)	0	1803	0	0	1866	0	0	1769	0	0	1880	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	7	182	16	17	78	1	5	78	23	4	265	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	205	0	0	96	0	0	106	0	0	281	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

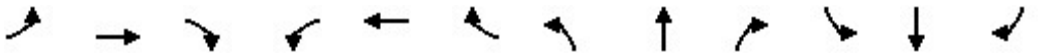
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	167	15	16	72	1	5	72	21	4	244	11
Future Volume (vph)	6	167	15	16	72	1	5	72	21	4	244	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	182	16	17	78	1	5	78	23	4	265	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	205	96	106	281
Volume Left (vph)	7	17	5	4
Volume Right (vph)	16	1	23	12
Hadj (s)	0.03	0.04	-0.05	-0.02
Departure Headway (s)	5.0	5.2	5.0	4.8
Degree Utilization, x	0.29	0.14	0.15	0.38
Capacity (veh/h)	660	623	656	703
Control Delay (s)	10.1	9.1	8.9	10.7
Approach Delay (s)	10.1	9.1	8.9	10.7
Approach LOS	B	A	A	B

Intersection Summary				
Delay	10.0			
Level of Service	B			
Intersection Capacity Utilization	32.9%	ICU Level of Service	A	
Analysis Period (min)	15			

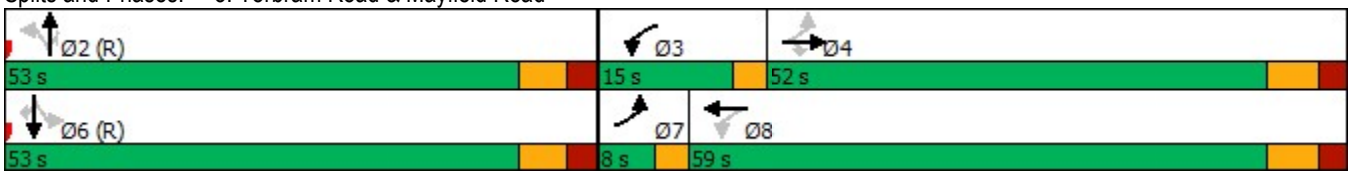


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1509	259	181	1380	9	292	55	117	12	216	49
Future Volume (vph)	37	1509	259	181	1380	9	292	55	117	12	216	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.131			0.084			0.582			0.721		
Satd. Flow (perm)	239	4734	1597	158	4861	0	1094	1942	1587	1355	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259		1				117			94
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	37	1509	259	181	1380	9	292	55	117	12	216	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	1509	259	181	1389	0	292	55	117	12	216	49
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	52.0	52.0	15.0	59.0		53.0	53.0	53.0	53.0	53.0	53.0
Total Split (%)	6.7%	43.3%	43.3%	12.5%	49.2%		44.2%	44.2%	44.2%	44.2%	44.2%	44.2%
Maximum Green (s)	5.0	44.7	44.7	12.0	51.7		45.9	45.9	45.9	45.9	45.9	45.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	54.0	44.7	44.7	64.0	51.7		45.9	45.9	45.9	45.9	45.9	45.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.45	0.37	0.37	0.53	0.43		0.38	0.38	0.38	0.38	0.38	0.38
v/c Ratio	0.22	0.86	0.34	0.74	0.66		0.70	0.07	0.17	0.02	0.29	0.08
Control Delay	17.0	40.6	4.4	64.6	12.7		41.8	24.0	4.9	23.4	27.1	0.6
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	17.0	40.6	4.4	64.6	12.7		41.8	24.0	4.9	23.4	27.1	0.6
LOS	B	D	A	E	B		D	C	A	C	C	A
Approach Delay		34.9			18.7			30.4			22.3	
Approach LOS		C			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 88.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

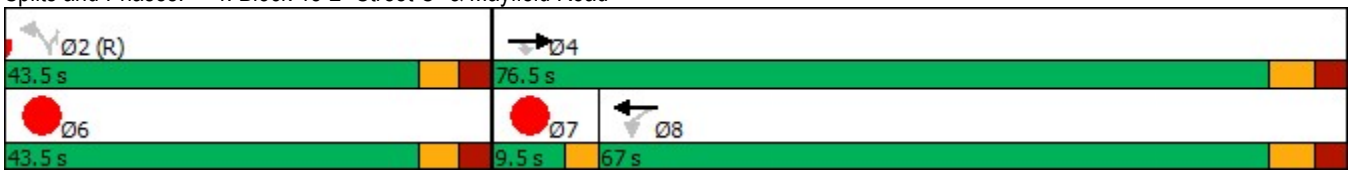


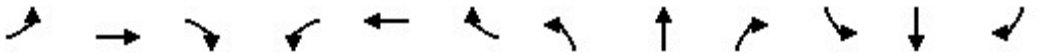
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Lane Configurations								
Traffic Volume (vph)	1559	110	14	1396	231	35		
Future Volume (vph)	1559	110	14	1396	231	35		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (m)	3.8	3.5	3.5	3.8	3.8	3.8		
Storage Length (m)		55.0	75.0		55.0	0.0		
Storage Lanes		1	1		1	1		
Taper Length (m)			7.5		7.5			
Lane Util. Factor	0.91	1.00	1.00	0.91	1.00	1.00		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	4734	1566	1750	4864	1809	1619		
Flt Permitted			0.082		0.950			
Satd. Flow (perm)	4734	1566	151	4864	1809	1619		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		108				28		
Link Speed (k/h)	80			80	50			
Link Distance (m)	716.7			643.7	353.1			
Travel Time (s)	32.3			29.0	25.4			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Heavy Vehicles (%)	12%	2%	2%	9%	2%	2%		
Adj. Flow (vph)	1559	110	14	1396	231	35		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	1559	110	14	1396	231	35		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(m)	3.5			3.5	3.8			
Link Offset(m)	0.0			0.0	0.0			
Crosswalk Width(m)	4.8			4.8	4.8			
Two way Left Turn Lane								
Headway Factor	0.97	1.01	1.01	0.97	0.97	0.97		
Turning Speed (k/h)		15	25		25	15		
Number of Detectors	2	1	1	2	1	1		
Detector Template	Thru	Right	Left	Thru	Left	Right		
Leading Detector (m)	10.0	10.0	25.0	10.0	25.0	10.0		
Trailing Detector (m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Position(m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Size(m)	0.6	10.0	10.0	0.6	10.0	10.0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(m)	9.4			9.4				
Detector 2 Size(m)	0.6			0.6				
Detector 2 Type	Cl+Ex			Cl+Ex				
Detector 2 Channel								
Detector 2 Extend (s)	0.0			0.0				
Turn Type	NA	Perm	Perm	NA	Perm	Perm		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Protected Phases	4			8			6	7
Permitted Phases		4	8		2	2		
Detector Phase	4	4	8	8	2	2		
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	5.0
Minimum Split (s)	25.1	25.1	25.1	25.1	24.6	24.6	24.6	9.5
Total Split (s)	76.5	76.5	67.0	67.0	43.5	43.5	43.5	9.5
Total Split (%)	63.8%	63.8%	55.8%	55.8%	36.3%	36.3%	36%	8%
Maximum Green (s)	69.4	69.4	59.9	59.9	36.9	36.9	36.9	6.5
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.0
All-Red Time (s)	3.1	3.1	3.1	3.1	2.9	2.9	2.9	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.1	7.1	7.1	7.1	6.6	6.6		
Lead/Lag			Lag	Lag				Lead
Lead-Lag Optimize?			Yes	Yes				Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	Max	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	
Act Effct Green (s)	52.5	52.5	52.5	52.5	53.8	53.8		
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.45	0.45		
v/c Ratio	0.75	0.15	0.21	0.66	0.29	0.05		
Control Delay	59.5	24.7	42.5	49.4	23.8	10.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	59.5	24.7	42.5	49.4	23.8	10.1		
LOS	E	C	D	D	C	B		
Approach Delay	57.2			49.3	22.0			
Approach LOS	E			D	C			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 51.1		Intersection LOS: D	
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C" & Mayfield Road



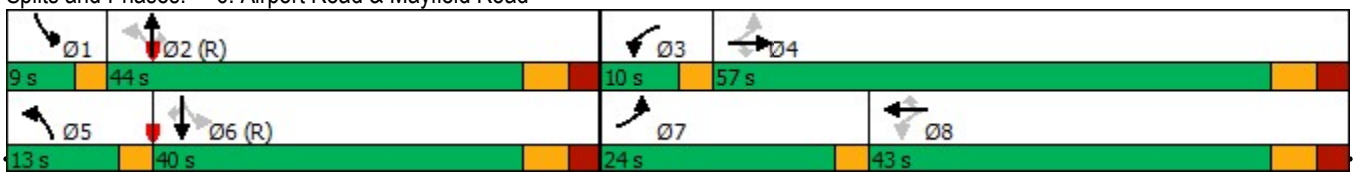


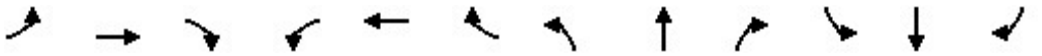
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	889	398	98	963	38	211	206	87	66	572	202
Future Volume (vph)	238	889	398	98	963	38	211	206	87	66	572	202
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	3630	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.098			0.308			0.274			0.623		
Satd. Flow (perm)	133	4939	1493	536	3630	961	490	3386	1426	967	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			285			145			119			202
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	238	889	398	98	963	38	211	206	87	66	572	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	889	398	98	963	38	211	206	87	66	572	202
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	24.0	57.0	57.0	10.0	43.0	43.0	13.0	44.0	44.0	9.0	40.0	40.0
Total Split (%)	20.0%	47.5%	47.5%	8.3%	35.8%	35.8%	10.8%	36.7%	36.7%	7.5%	33.3%	33.3%
Maximum Green (s)	21.0	49.9	49.9	7.0	35.9	35.9	10.0	37.1	37.1	6.0	33.1	33.1
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	64.0	50.2	50.2	48.5	37.7	37.7	50.0	38.9	38.9	42.9	33.2	33.2
Actuated g/C Ratio	0.53	0.42	0.42	0.40	0.31	0.31	0.42	0.32	0.32	0.36	0.28	0.28
v/c Ratio	0.93	0.43	0.50	0.35	0.84	0.09	0.69	0.19	0.16	0.18	0.62	0.39
Control Delay	94.9	35.6	20.1	19.1	47.0	0.5	37.5	30.5	2.9	23.1	41.3	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	0.0
Total Delay	94.9	35.6	20.1	19.1	47.0	0.5	37.5	30.5	2.9	23.1	41.3	7.0
LOS	F	D	C	B	D	A	D	C	A	C	D	A
Approach Delay		40.8			42.9			28.6			31.6	
Approach LOS		D			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 37.9		Intersection LOS: D	
Intersection Capacity Utilization 96.5%		ICU Level of Service F	
Analysis Period (min) 15			

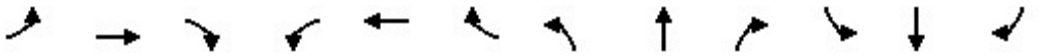
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	33	78	0	17	46	490	83	2	700	3
Future Volume (vph)	5	1	33	78	0	17	46	490	83	2	700	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.854			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	5	1	33	78	0	17	46	490	86	2	700	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	34	0	78	17	0	46	490	86	2	700	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	33	78	0	17	46	490	83	2	700	3
Future Volume (Veh/h)	5	1	33	78	0	17	46	490	83	2	700	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	5	1	33	78	0	17	46	490	86	2	700	3
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1059	1378	351	974	1295	250	704			581		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1059	1378	351	974	1295	250	704			581		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	97	99	95	55	100	98	91			100		
cM capacity (veh/h)	143	131	614	172	147	753	497			584		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	5	34	78	17	46	245	245	86	2	350	350	3
Volume Left	5	0	78	0	46	0	0	0	2	0	0	0
Volume Right	0	33	0	17	0	0	0	86	0	0	0	3
cSH	143	554	172	753	497	1700	1700	1700	584	1700	1700	1700
Volume to Capacity	0.03	0.06	0.45	0.02	0.09	0.14	0.14	0.05	0.00	0.21	0.21	0.00
Queue Length 95th (m)	0.9	1.6	16.9	0.6	2.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	31.1	11.9	42.2	9.9	13.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0
Lane LOS	D	B	E	A	B				B			
Approach Delay (s)	14.4		36.4		1.0				0.0			
Approach LOS	B		E									

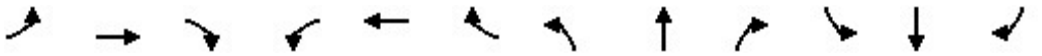
Intersection Summary					
Average Delay	3.2				
Intersection Capacity Utilization	43.7%	ICU Level of Service		A	
Analysis Period (min)	15				

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	77	11	402	61	17	625	
Future Volume (vph)	77	11	402	61	17	625	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8	
Storage Length (m)	0.0	0.0		145.0	75.0		
Storage Lanes	1	1		1	1		
Taper Length (m)	7.5				100.0		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1328	1383	3449	992	1116	3101	
Flt Permitted	0.950				0.515		
Satd. Flow (perm)	1328	1383	3449	992	605	3101	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		11		61			
Link Speed (k/h)	50		80			80	
Link Distance (m)	270.4		438.0			348.1	
Travel Time (s)	19.5		19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%	
Adj. Flow (vph)	77	11	402	61	17	625	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	77	11	402	61	17	625	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(m)	4.0		3.5			3.5	
Link Offset(m)	0.0		0.0			0.0	
Crosswalk Width(m)	4.8		4.8			4.8	
Two way Left Turn Lane							
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97	
Turning Speed (k/h)	25	15		15	25		
Number of Detectors	1	1	2	1	1	2	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)			9.4			9.4	
Detector 2 Size(m)			0.6			0.6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases			2			6	4
Permitted Phases	8	8		2	6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6	36.2
Total Split (s)	50.0	50.0	70.0	70.0	70.0	70.0	50.0
Total Split (%)	41.7%	41.7%	58.3%	58.3%	58.3%	58.3%	42%
Maximum Green (s)	41.8	41.8	63.4	63.4	63.4	63.4	41.8
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.0
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0	4.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0
Act Effct Green (s)	12.7	12.7	74.1	74.1	74.1	74.1	
Actuated g/C Ratio	0.13	0.13	0.77	0.77	0.77	0.77	
v/c Ratio	0.44	0.06	0.15	0.08	0.04	0.26	
Control Delay	46.7	18.4	4.2	1.5	4.7	4.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	46.7	18.4	4.2	1.5	4.7	4.7	
LOS	D	B	A	A	A	A	
Approach Delay	43.2		3.9			4.7	
Approach LOS	D		A			A	

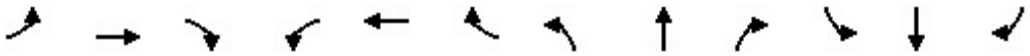
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 95.7			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 39.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & 12333 Airport Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	78	5	13	272	7	17	201	26	6	61	7
Future Volume (vph)	11	78	5	13	272	7	17	201	26	6	61	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.997			0.986			0.987	
Flt Protected		0.994			0.998			0.997			0.996	
Satd. Flow (prot)	0	1786	0	0	1873	0	0	1815	0	0	1828	0
Flt Permitted		0.994			0.998			0.997			0.996	
Satd. Flow (perm)	0	1786	0	0	1873	0	0	1815	0	0	1828	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	12	85	5	14	296	8	18	218	28	7	66	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	102	0	0	318	0	0	264	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

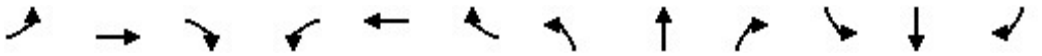
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	78	5	13	272	7	17	201	26	6	61	7
Future Volume (vph)	11	78	5	13	272	7	17	201	26	6	61	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	85	5	14	296	8	18	218	28	7	66	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	102	318	264	81
Volume Left (vph)	12	14	18	7
Volume Right (vph)	5	8	28	8
Hadj (s)	0.08	0.01	0.00	-0.01
Departure Headway (s)	5.4	5.0	5.1	5.4
Degree Utilization, x	0.15	0.44	0.38	0.12
Capacity (veh/h)	605	681	649	593
Control Delay (s)	9.4	11.9	11.2	9.2
Approach Delay (s)	9.4	11.9	11.2	9.2
Approach LOS	A	B	B	A

Intersection Summary				
Delay	11.1			
Level of Service	B			
Intersection Capacity Utilization	40.4%	ICU Level of Service	A	
Analysis Period (min)	15			

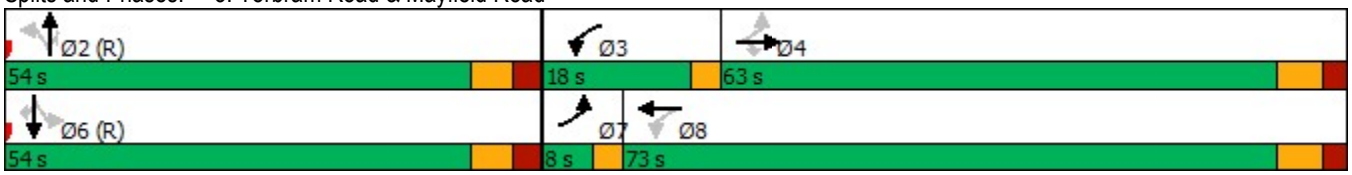


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	1599	243	157	1502	12	305	124	160	3	55	27
Future Volume (vph)	41	1599	243	157	1502	12	305	124	160	3	55	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.121			0.068			0.721			0.677		
Satd. Flow (perm)	221	4734	1597	128	4861	0	1355	1942	1587	1272	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		1				160			83
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	41	1599	243	157	1502	12	305	124	160	3	55	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	1599	243	157	1514	0	305	124	160	3	55	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	63.0	63.0	18.0	73.0		54.0	54.0	54.0	54.0	54.0	54.0
Total Split (%)	5.9%	46.7%	46.7%	13.3%	54.1%		40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
Maximum Green (s)	5.0	55.7	55.7	15.0	65.7		46.9	46.9	46.9	46.9	46.9	46.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	65.0	55.7	55.7	78.0	65.7		46.9	46.9	46.9	46.9	46.9	46.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.48	0.41	0.41	0.58	0.49		0.35	0.35	0.35	0.35	0.35	0.35
v/c Ratio	0.25	0.82	0.30	0.61	0.64		0.65	0.18	0.24	0.01	0.08	0.05
Control Delay	17.0	39.5	3.9	66.0	7.6		44.8	31.7	5.3	29.0	30.1	0.1
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	17.0	39.5	3.9	66.0	7.6		44.8	31.7	5.3	29.0	30.1	0.1
LOS	B	D	A	E	A		D	C	A	C	C	A
Approach Delay		34.4			13.1			31.3			20.6	
Approach LOS		C			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Pretimed			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 25.3		Intersection LOS: C	
Intersection Capacity Utilization 78.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

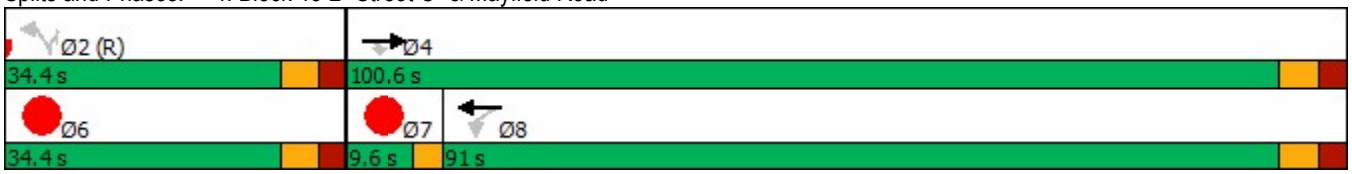


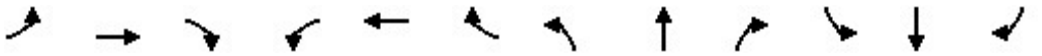
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Lane Configurations								
Traffic Volume (vph)	1667	98	41	1544	104	23		
Future Volume (vph)	1667	98	41	1544	104	23		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (m)	3.8	3.5	3.5	3.8	3.8	3.8		
Storage Length (m)		55.0	75.0		55.0	0.0		
Storage Lanes		1	1		1	1		
Taper Length (m)			7.5		7.5			
Lane Util. Factor	0.91	1.00	1.00	0.91	1.00	1.00		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	4734	1566	1750	4864	1809	1619		
Flt Permitted			0.079		0.950			
Satd. Flow (perm)	4734	1566	146	4864	1809	1619		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		98				23		
Link Speed (k/h)	80			80	50			
Link Distance (m)	716.7			643.7	353.1			
Travel Time (s)	32.3			29.0	25.4			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Heavy Vehicles (%)	12%	2%	2%	9%	2%	2%		
Adj. Flow (vph)	1667	98	41	1544	104	23		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	1667	98	41	1544	104	23		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(m)	3.5			3.5	3.8			
Link Offset(m)	0.0			0.0	0.0			
Crosswalk Width(m)	4.8			4.8	4.8			
Two way Left Turn Lane								
Headway Factor	0.97	1.01	1.01	0.97	0.97	0.97		
Turning Speed (k/h)		15	25		25	15		
Number of Detectors	2	1	1	2	1	1		
Detector Template	Thru	Right	Left	Thru	Left	Right		
Leading Detector (m)	10.0	10.0	25.0	10.0	25.0	10.0		
Trailing Detector (m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Position(m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Size(m)	0.6	10.0	10.0	0.6	10.0	10.0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(m)	9.4			9.4				
Detector 2 Size(m)	0.6			0.6				
Detector 2 Type	Cl+Ex			Cl+Ex				
Detector 2 Channel								
Detector 2 Extend (s)	0.0			0.0				
Turn Type	NA	Perm	Perm	NA	Perm	Perm		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Protected Phases	4			8			6	7
Permitted Phases		4	8		2	2		
Detector Phase	4	4	8	8	2	2		
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	5.0
Minimum Split (s)	25.1	25.1	25.1	25.1	24.6	24.6	24.6	9.5
Total Split (s)	100.6	100.6	91.0	91.0	34.4	34.4	34.4	9.6
Total Split (%)	74.5%	74.5%	67.4%	67.4%	25.5%	25.5%	25%	7%
Maximum Green (s)	93.5	93.5	83.9	83.9	27.8	27.8	27.8	6.6
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.0
All-Red Time (s)	3.1	3.1	3.1	3.1	2.9	2.9	2.9	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.1	7.1	7.1	7.1	6.6	6.6		
Lead/Lag			Lag	Lag				Lead
Lead-Lag Optimize?			Yes	Yes				Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	Max	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	
Act Effct Green (s)	66.9	66.9	66.9	66.9	54.4	54.4		
Actuated g/C Ratio	0.50	0.50	0.50	0.50	0.40	0.40		
v/c Ratio	0.71	0.12	0.57	0.64	0.14	0.03		
Control Delay	58.2	21.8	67.2	48.9	28.9	11.3		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	58.2	21.8	67.2	48.9	28.9	11.3		
LOS	E	C	E	D	C	B		
Approach Delay	56.1			49.4	25.7			
Approach LOS	E			D	C			

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 52.0		Intersection LOS: D	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C" & Mayfield Road



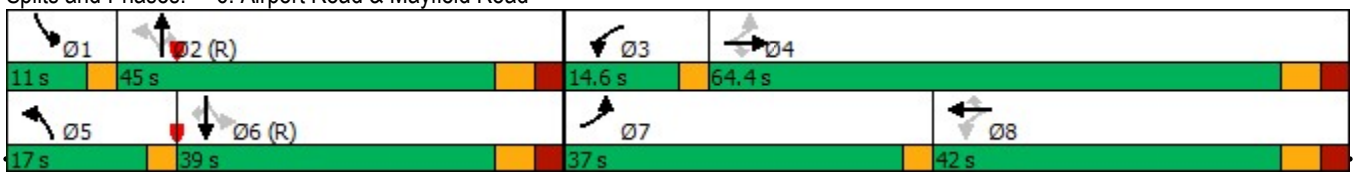


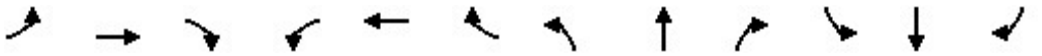
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	922	190	114	923	61	333	519	94	101	344	296
Future Volume (vph)	337	922	190	114	923	61	333	519	94	101	344	296
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	3630	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.100			0.297			0.427			0.402		
Satd. Flow (perm)	136	4939	1493	516	3630	961	762	3386	1426	624	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			190			128			106			296
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	337	922	190	114	923	61	333	519	94	101	344	296
Shared Lane Traffic (%)												
Lane Group Flow (vph)	337	922	190	114	923	61	333	519	94	101	344	296
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	37.0	64.4	64.4	14.6	42.0	42.0	17.0	45.0	45.0	11.0	39.0	39.0
Total Split (%)	27.4%	47.7%	47.7%	10.8%	31.1%	31.1%	12.6%	33.3%	33.3%	8.1%	28.9%	28.9%
Maximum Green (s)	34.0	57.3	57.3	11.6	34.9	34.9	14.0	38.1	38.1	8.0	32.1	32.1
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	76.0	60.0	60.0	50.0	37.0	37.0	53.0	38.4	38.4	43.7	32.1	32.1
Actuated g/C Ratio	0.56	0.44	0.44	0.37	0.27	0.27	0.39	0.28	0.28	0.32	0.24	0.24
v/c Ratio	0.97	0.42	0.25	0.43	0.93	0.17	0.84	0.54	0.20	0.40	0.43	0.55
Control Delay	113.5	14.6	2.7	22.6	63.7	1.0	52.9	43.4	6.0	33.0	45.7	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.5	14.6	2.7	22.6	63.7	1.0	52.9	43.4	6.0	33.0	45.7	8.6
LOS	F	B	A	C	E	A	D	D	A	C	D	A
Approach Delay		36.1			56.0			43.0			29.2	
Approach LOS		D			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 41.6		Intersection LOS: D	
Intersection Capacity Utilization 108.8%		ICU Level of Service G	
Analysis Period (min) 15			

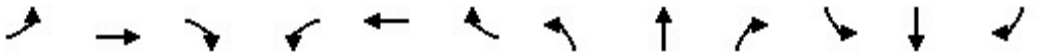
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	76	113	0	4	78	791	90	17	470	6
Future Volume (vph)	8	1	76	113	0	4	78	791	90	17	470	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		30.0	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.852			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	8	1	76	113	0	4	78	791	94	17	470	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	77	0	113	4	0	78	791	94	17	470	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	791	90	17	470	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	791	90	17	470	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	791	94	17	470	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1060	1551	236	1298	1463	400	477			890		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1060	1551	236	1298	1463	400	477			890		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	94	99	90	0	100	99	88			96		
cM capacity (veh/h)	138	96	732	89	109	602	658			399		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	396	396	94	17	235	235	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	138	675	89	602	658	1700	1700	1700	399	1700	1700	1700
Volume to Capacity	0.06	0.11	1.27	0.01	0.12	0.23	0.23	0.06	0.04	0.14	0.14	0.00
Queue Length 95th (m)	1.5	3.1	65.6	0.2	3.2	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Control Delay (s)	32.8	11.0	271.9	11.0	11.2	0.0	0.0	0.0	14.4	0.0	0.0	0.0
Lane LOS	D	B	F	B	B				B			
Approach Delay (s)	13.1		263.0		0.9				0.5			
Approach LOS	B		F									

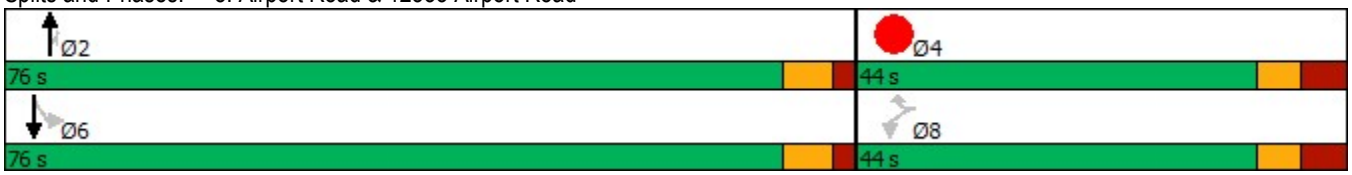
Intersection Summary				
Average Delay	19.9			
Intersection Capacity Utilization	48.1%	ICU Level of Service	A	
Analysis Period (min)	15			

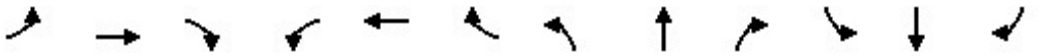
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	34	5	754	26	2	418	
Future Volume (vph)	34	5	754	26	2	418	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8	
Storage Length (m)	0.0	0.0		145.0	75.0		
Storage Lanes	1	1		1	1		
Taper Length (m)	7.5				100.0		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1328	1383	3449	992	1116	3101	
Flt Permitted	0.950				0.366		
Satd. Flow (perm)	1328	1383	3449	992	430	3101	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		5		26			
Link Speed (k/h)	50		80			80	
Link Distance (m)	270.4		438.0			348.1	
Travel Time (s)	19.5		19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%	
Adj. Flow (vph)	34	5	754	26	2	418	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	34	5	754	26	2	418	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(m)	4.0		3.5			3.5	
Link Offset(m)	0.0		0.0			0.0	
Crosswalk Width(m)	4.8		4.8			4.8	
Two way Left Turn Lane							
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97	
Turning Speed (k/h)	25	15		15	25		
Number of Detectors	1	1	2	1	1	2	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)			9.4			9.4	
Detector 2 Size(m)			0.6			0.6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases			2			6	4
Permitted Phases	8	8		2	6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6	36.2
Total Split (s)	44.0	44.0	76.0	76.0	76.0	76.0	44.0
Total Split (%)	36.7%	36.7%	63.3%	63.3%	63.3%	63.3%	37%
Maximum Green (s)	35.8	35.8	69.4	69.4	69.4	69.4	35.8
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.0
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0	4.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0
Act Effct Green (s)	12.1	12.1	86.9	86.9	86.9	86.9	
Actuated g/C Ratio	0.12	0.12	0.85	0.85	0.85	0.85	
v/c Ratio	0.22	0.03	0.26	0.03	0.01	0.16	
Control Delay	47.1	26.4	3.2	1.4	3.5	2.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.1	26.4	3.2	1.4	3.5	2.9	
LOS	D	C	A	A	A	A	
Approach Delay	44.4		3.1			2.9	
Approach LOS	D		A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 101.9			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay: 4.4		Intersection LOS: A	
Intersection Capacity Utilization 43.2%		ICU Level of Service A	
Analysis Period (min) 15			

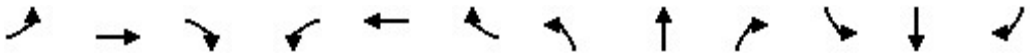
Splits and Phases: 8: Airport Road & 12333 Airport Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	185	15	16	79	1	5	79	21	4	267	11
Future Volume (vph)	6	185	15	16	79	1	5	79	21	4	267	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.999			0.973			0.995	
Flt Protected		0.998			0.992			0.998			0.999	
Satd. Flow (prot)	0	1805	0	0	1867	0	0	1775	0	0	1882	0
Flt Permitted		0.998			0.992			0.998			0.999	
Satd. Flow (perm)	0	1805	0	0	1867	0	0	1775	0	0	1882	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	7	201	16	17	86	1	5	86	23	4	290	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	224	0	0	104	0	0	114	0	0	306	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

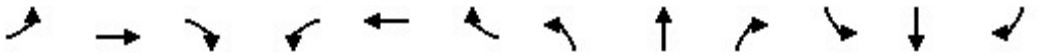
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	185	15	16	79	1	5	79	21	4	267	11
Future Volume (vph)	6	185	15	16	79	1	5	79	21	4	267	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	201	16	17	86	1	5	86	23	4	290	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	224	104	114	306
Volume Left (vph)	7	17	5	4
Volume Right (vph)	16	1	23	12
Hadj (s)	0.03	0.04	-0.05	-0.02
Departure Headway (s)	5.2	5.4	5.2	5.0
Degree Utilization, x	0.32	0.16	0.16	0.42
Capacity (veh/h)	643	601	632	688
Control Delay (s)	10.7	9.4	9.2	11.5
Approach Delay (s)	10.7	9.4	9.2	11.5
Approach LOS	B	A	A	B

Intersection Summary				
Delay	10.6			
Level of Service	B			
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			

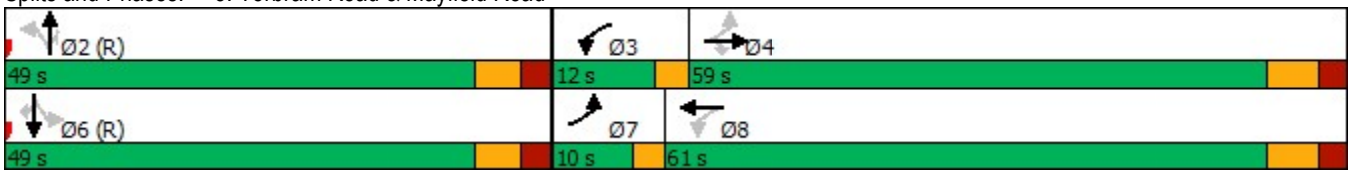


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1848	259	181	1592	9	292	60	117	12	238	49
Future Volume (vph)	37	1848	259	181	1592	9	292	60	117	12	238	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.096			0.072			0.538			0.718		
Satd. Flow (perm)	175	4734	1597	135	4861	0	1011	1942	1587	1349	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259		1				117			66
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	37	1848	259	181	1592	9	292	60	117	12	238	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	1848	259	181	1601	0	292	60	117	12	238	49
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	10.0	59.0	59.0	12.0	61.0		49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	8.3%	49.2%	49.2%	10.0%	50.8%		40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Maximum Green (s)	7.0	51.7	51.7	9.0	53.7		41.9	41.9	41.9	41.9	41.9	41.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	61.4	51.1	51.1	67.1	57.4		42.5	42.5	42.5	42.5	42.5	42.5
Actuated g/C Ratio	0.51	0.43	0.43	0.56	0.48		0.35	0.35	0.35	0.35	0.35	0.35
v/c Ratio	0.22	0.92	0.31	0.91	0.69		0.82	0.09	0.18	0.03	0.35	0.09
Control Delay	14.9	40.8	3.6	81.6	23.3		55.1	26.7	5.5	26.0	30.5	4.0
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	14.9	40.8	3.6	81.6	23.3		55.1	26.7	5.5	26.0	30.5	4.0
LOS	B	D	A	F	C		E	C	A	C	C	A
Approach Delay		35.8			29.2			39.1			26.0	
Approach LOS		D			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 33.0		Intersection LOS: C	
Intersection Capacity Utilization 95.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

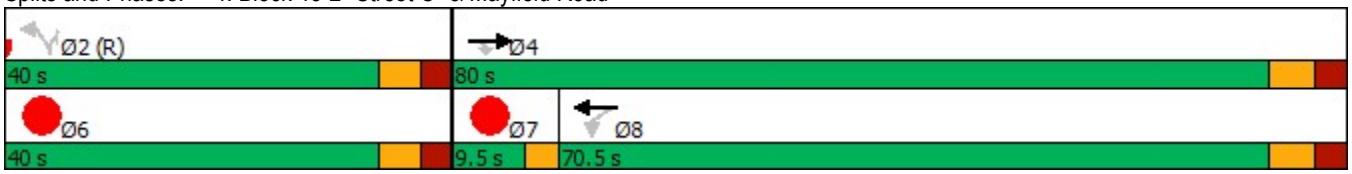


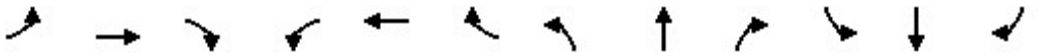
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Lane Configurations								
Traffic Volume (vph)	1914	110	14	1639	231	35		
Future Volume (vph)	1914	110	14	1639	231	35		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (m)	3.8	3.5	3.5	3.8	3.8	3.8		
Storage Length (m)		55.0	75.0		55.0	0.0		
Storage Lanes		1	1		1	1		
Taper Length (m)			7.5		7.5			
Lane Util. Factor	0.91	1.00	1.00	0.91	1.00	1.00		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	4734	1566	1750	4864	1809	1619		
Flt Permitted			0.062		0.950			
Satd. Flow (perm)	4734	1566	114	4864	1809	1619		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		94				15		
Link Speed (k/h)	80			80	50			
Link Distance (m)	716.7			643.7	353.1			
Travel Time (s)	32.3			29.0	25.4			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Heavy Vehicles (%)	12%	2%	2%	9%	2%	2%		
Adj. Flow (vph)	1914	110	14	1639	231	35		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	1914	110	14	1639	231	35		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(m)	3.5			3.5	3.8			
Link Offset(m)	0.0			0.0	0.0			
Crosswalk Width(m)	4.8			4.8	4.8			
Two way Left Turn Lane								
Headway Factor	0.97	1.01	1.01	0.97	0.97	0.97		
Turning Speed (k/h)		15	25		25	15		
Number of Detectors	2	1	1	2	1	1		
Detector Template	Thru	Right	Left	Thru	Left	Right		
Leading Detector (m)	10.0	10.0	25.0	10.0	25.0	10.0		
Trailing Detector (m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Position(m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Size(m)	0.6	10.0	10.0	0.6	10.0	10.0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(m)	9.4			9.4				
Detector 2 Size(m)	0.6			0.6				
Detector 2 Type	Cl+Ex			Cl+Ex				
Detector 2 Channel								
Detector 2 Extend (s)	0.0			0.0				
Turn Type	NA	Perm	Perm	NA	Perm	Perm		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Protected Phases	4			8			6	7
Permitted Phases		4	8		2	2		
Detector Phase	4	4	8	8	2	2		
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	5.0
Minimum Split (s)	25.1	25.1	25.1	25.1	24.6	24.6	24.6	9.5
Total Split (s)	80.0	80.0	70.5	70.5	40.0	40.0	40.0	9.5
Total Split (%)	66.7%	66.7%	58.8%	58.8%	33.3%	33.3%	33%	8%
Maximum Green (s)	72.9	72.9	63.4	63.4	33.4	33.4	33.4	6.5
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.0
All-Red Time (s)	3.1	3.1	3.1	3.1	2.9	2.9	2.9	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.1	7.1	7.1	7.1	6.6	6.6		
Lead/Lag			Lag	Lag				Lead
Lead-Lag Optimize?			Yes	Yes				Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	Max	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	
Act Effct Green (s)	64.1	64.1	64.1	64.1	42.2	42.2		
Actuated g/C Ratio	0.53	0.53	0.53	0.53	0.35	0.35		
v/c Ratio	0.76	0.13	0.23	0.63	0.36	0.06		
Control Delay	42.9	15.2	28.6	29.9	32.7	20.0		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	42.9	15.2	28.6	29.9	32.7	20.0		
LOS	D	B	C	C	C	B		
Approach Delay	41.3			29.9	31.0			
Approach LOS	D			C	C			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 35.8		Intersection LOS: D	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C" & Mayfield Road



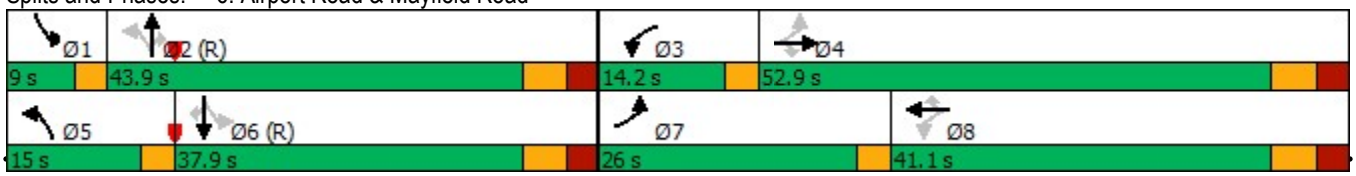


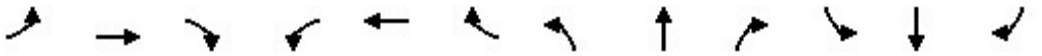
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	249	1077	414	103	1115	40	219	217	91	69	601	209
Future Volume (vph)	249	1077	414	103	1115	40	219	217	91	69	601	209
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.118			0.248			0.240			0.616		
Satd. Flow (perm)	161	4939	1493	431	5216	961	429	3386	1426	957	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			332			145			119			209
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	249	1077	414	103	1115	40	219	217	91	69	601	209
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	1077	414	103	1115	40	219	217	91	69	601	209
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	26.0	52.9	52.9	14.2	41.1	41.1	15.0	43.9	43.9	9.0	37.9	37.9
Total Split (%)	21.7%	44.1%	44.1%	11.8%	34.3%	34.3%	12.5%	36.6%	36.6%	7.5%	31.6%	31.6%
Maximum Green (s)	23.0	45.8	45.8	11.2	34.0	34.0	12.0	37.0	37.0	6.0	31.0	31.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	64.1	48.7	48.7	49.1	36.6	36.6	49.9	38.8	38.8	41.1	31.4	31.4
Actuated g/C Ratio	0.53	0.41	0.41	0.41	0.30	0.30	0.42	0.32	0.32	0.34	0.26	0.26
v/c Ratio	0.90	0.54	0.52	0.39	0.70	0.10	0.73	0.20	0.17	0.20	0.69	0.42
Control Delay	77.7	36.1	16.1	20.0	40.3	0.5	39.4	30.6	3.2	23.7	44.7	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	0.0
Total Delay	77.7	36.1	16.1	20.0	40.3	0.5	39.4	30.6	3.2	23.7	44.7	7.4
LOS	E	D	B	C	D	A	D	C	A	C	D	A
Approach Delay		37.3			37.3			29.5			34.2	
Approach LOS		D			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 35.8		Intersection LOS: D	
Intersection Capacity Utilization 97.6%		ICU Level of Service F	
Analysis Period (min) 15			

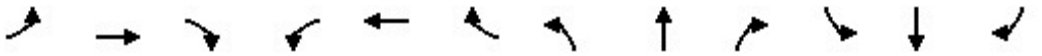
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	33	78	0	17	46	513	83	2	731	3
Future Volume (vph)	5	1	33	78	0	17	46	513	83	2	731	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.854			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	5	1	33	78	0	17	46	513	86	2	731	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	34	0	78	17	0	46	513	86	2	731	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	33	78	0	17	46	513	83	2	731	3
Future Volume (Veh/h)	5	1	33	78	0	17	46	513	83	2	731	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	5	1	33	78	0	17	46	513	86	2	731	3
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1102	1432	366	1013	1349	262	735			604		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1102	1432	366	1013	1349	262	735			604		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	96	99	94	51	100	98	90			100		
cM capacity (veh/h)	132	121	599	160	136	740	479			567		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	5	34	78	17	46	256	256	86	2	366	366	3
Volume Left	5	0	78	0	46	0	0	0	2	0	0	0
Volume Right	0	33	0	17	0	0	0	86	0	0	0	3
cSH	132	537	160	740	479	1700	1700	1700	567	1700	1700	1700
Volume to Capacity	0.04	0.06	0.49	0.02	0.10	0.15	0.15	0.05	0.00	0.21	0.21	0.00
Queue Length 95th (m)	0.9	1.6	18.6	0.6	2.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	33.3	12.2	47.1	10.0	13.3	0.0	0.0	0.0	11.4	0.0	0.0	0.0
Lane LOS	D	B	E	A	B				B			
Approach Delay (s)	14.9		40.4		0.9				0.0			
Approach LOS	B		E									

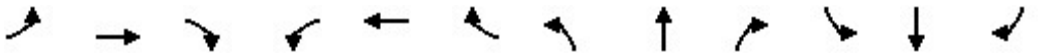
Intersection Summary				
Average Delay	3.3			
Intersection Capacity Utilization	44.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	77	11	422	61	17	652	
Future Volume (vph)	77	11	422	61	17	652	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8	
Storage Length (m)	0.0	0.0		145.0	75.0		
Storage Lanes	1	1		1	1		
Taper Length (m)	7.5				100.0		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1328	1383	3449	992	1116	3101	
Flt Permitted	0.950				0.506		
Satd. Flow (perm)	1328	1383	3449	992	594	3101	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		11		61			
Link Speed (k/h)	50		80			80	
Link Distance (m)	270.4		438.0			348.1	
Travel Time (s)	19.5		19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%	
Adj. Flow (vph)	77	11	422	61	17	652	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	77	11	422	61	17	652	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(m)	4.0		3.5			3.5	
Link Offset(m)	0.0		0.0			0.0	
Crosswalk Width(m)	4.8		4.8			4.8	
Two way Left Turn Lane							
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97	
Turning Speed (k/h)	25	15		15	25		
Number of Detectors	1	1	2	1	1	2	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)			9.4			9.4	
Detector 2 Size(m)			0.6			0.6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases			2			6	4
Permitted Phases	8	8		2	6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6	36.2
Total Split (s)	49.0	49.0	71.0	71.0	71.0	71.0	49.0
Total Split (%)	40.8%	40.8%	59.2%	59.2%	59.2%	59.2%	41%
Maximum Green (s)	40.8	40.8	64.4	64.4	64.4	64.4	40.8
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.0
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0	4.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0
Act Effct Green (s)	12.8	12.8	75.2	75.2	75.2	75.2	
Actuated g/C Ratio	0.13	0.13	0.78	0.78	0.78	0.78	
v/c Ratio	0.44	0.06	0.16	0.08	0.04	0.27	
Control Delay	47.4	18.5	4.2	1.5	4.6	4.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.4	18.5	4.2	1.5	4.6	4.8	
LOS	D	B	A	A	A	A	
Approach Delay	43.8		3.9			4.8	
Approach LOS	D		A			A	

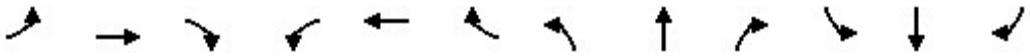
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 96.8			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 40.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & 12333 Airport Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	87	5	13	300	7	17	222	26	6	67	7
Future Volume (vph)	11	87	5	13	300	7	17	222	26	6	67	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.997			0.987			0.988	
Flt Protected		0.995			0.998			0.997			0.996	
Satd. Flow (prot)	0	1792	0	0	1873	0	0	1818	0	0	1833	0
Flt Permitted		0.995			0.998			0.997			0.996	
Satd. Flow (perm)	0	1792	0	0	1873	0	0	1818	0	0	1833	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	12	95	5	14	326	8	18	241	28	7	73	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	112	0	0	348	0	0	287	0	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

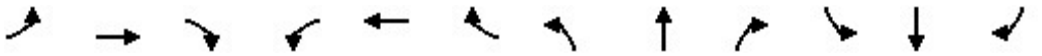
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	87	5	13	300	7	17	222	26	6	67	7
Future Volume (vph)	11	87	5	13	300	7	17	222	26	6	67	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	95	5	14	326	8	18	241	28	7	73	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	112	348	287	88
Volume Left (vph)	12	14	18	7
Volume Right (vph)	5	8	28	8
Hadj (s)	0.08	0.01	0.00	0.00
Departure Headway (s)	5.6	5.1	5.3	5.6
Degree Utilization, x	0.17	0.50	0.42	0.14
Capacity (veh/h)	581	662	629	564
Control Delay (s)	9.8	13.1	12.1	9.5
Approach Delay (s)	9.8	13.1	12.1	9.5
Approach LOS	A	B	B	A

Intersection Summary				
Delay		12.0		
Level of Service		B		
Intersection Capacity Utilization		43.3%	ICU Level of Service	A
Analysis Period (min)		15		

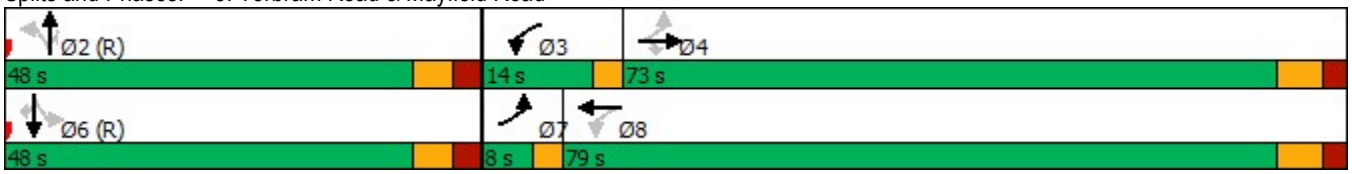


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	1903	243	157	1850	12	305	137	160	3	60	27
Future Volume (vph)	41	1903	243	157	1850	12	305	137	160	3	60	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.066			0.060			0.718			0.663		
Satd. Flow (perm)	120	4734	1597	113	4861	0	1349	1942	1587	1246	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		1				123			83
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	41	1903	243	157	1850	12	305	137	160	3	60	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	1903	243	157	1862	0	305	137	160	3	60	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	73.0	73.0	14.0	79.0		48.0	48.0	48.0	48.0	48.0	48.0
Total Split (%)	5.9%	54.1%	54.1%	10.4%	58.5%		35.6%	35.6%	35.6%	35.6%	35.6%	35.6%
Maximum Green (s)	5.0	65.7	65.7	11.0	71.7		40.9	40.9	40.9	40.9	40.9	40.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	72.4	63.1	63.1	80.9	70.2		44.0	44.0	44.0	44.0	44.0	44.0
Actuated g/C Ratio	0.54	0.47	0.47	0.60	0.52		0.33	0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.33	0.86	0.28	0.80	0.74		0.69	0.22	0.27	0.01	0.09	0.05
Control Delay	18.0	36.6	3.1	80.4	13.5		50.4	35.3	11.2	33.0	33.8	0.2
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	18.0	36.6	3.1	80.4	13.5		50.4	35.3	11.2	33.0	33.8	0.2
LOS	B	D	A	F	B		D	D	B	C	C	A
Approach Delay		32.5			18.7			36.5			23.7	
Approach LOS		C			B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 27.2		Intersection LOS: C	
Intersection Capacity Utilization 84.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

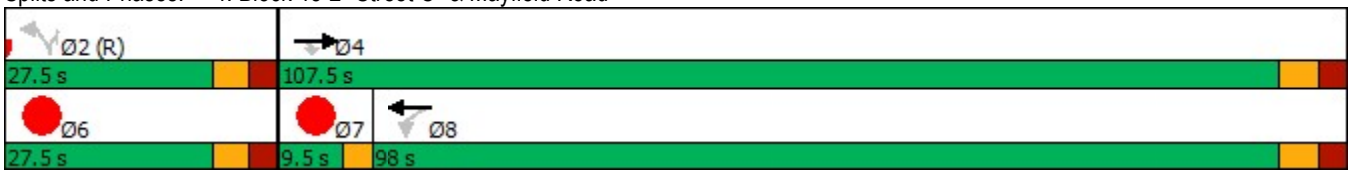


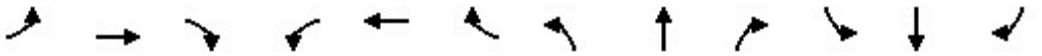
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Lane Configurations								
Traffic Volume (vph)	1990	98	41	1916	104	23		
Future Volume (vph)	1990	98	41	1916	104	23		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (m)	3.8	3.5	3.5	3.8	3.8	3.8		
Storage Length (m)		55.0	75.0		55.0	0.0		
Storage Lanes		1	1		1	1		
Taper Length (m)			7.5		7.5			
Lane Util. Factor	0.91	1.00	1.00	0.91	1.00	1.00		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	4734	1566	1750	4864	1809	1619		
Flt Permitted			0.062		0.950			
Satd. Flow (perm)	4734	1566	114	4864	1809	1619		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		98				23		
Link Speed (k/h)	80			80	50			
Link Distance (m)	716.7			643.7	353.1			
Travel Time (s)	32.3			29.0	25.4			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Heavy Vehicles (%)	12%	2%	2%	9%	2%	2%		
Adj. Flow (vph)	1990	98	41	1916	104	23		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	1990	98	41	1916	104	23		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(m)	3.5			3.5	3.8			
Link Offset(m)	0.0			0.0	0.0			
Crosswalk Width(m)	4.8			4.8	4.8			
Two way Left Turn Lane								
Headway Factor	0.97	1.01	1.01	0.97	0.97	0.97		
Turning Speed (k/h)		15	25		25	15		
Number of Detectors	2	1	1	2	1	1		
Detector Template	Thru	Right	Left	Thru	Left	Right		
Leading Detector (m)	10.0	10.0	25.0	10.0	25.0	10.0		
Trailing Detector (m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Position(m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Size(m)	0.6	10.0	10.0	0.6	10.0	10.0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(m)	9.4			9.4				
Detector 2 Size(m)	0.6			0.6				
Detector 2 Type	Cl+Ex			Cl+Ex				
Detector 2 Channel								
Detector 2 Extend (s)	0.0			0.0				
Turn Type	NA	Perm	Perm	NA	Perm	Perm		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Protected Phases	4			8			6	7
Permitted Phases		4	8		2	2		
Detector Phase	4	4	8	8	2	2		
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	5.0
Minimum Split (s)	25.1	25.1	25.1	25.1	24.6	24.6	24.6	9.5
Total Split (s)	107.5	107.5	98.0	98.0	27.5	27.5	27.5	9.5
Total Split (%)	79.6%	79.6%	72.6%	72.6%	20.4%	20.4%	20%	7%
Maximum Green (s)	100.4	100.4	90.9	90.9	20.9	20.9	20.9	6.5
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.0
All-Red Time (s)	3.1	3.1	3.1	3.1	2.9	2.9	2.9	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.1	7.1	7.1	7.1	6.6	6.6		
Lead/Lag			Lag	Lag				Lead
Lead-Lag Optimize?			Yes	Yes				Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	Max	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	
Act Effct Green (s)	82.0	82.0	82.0	82.0	39.3	39.3		
Actuated g/C Ratio	0.61	0.61	0.61	0.61	0.29	0.29		
v/c Ratio	0.69	0.10	0.59	0.65	0.20	0.05		
Control Delay	37.1	10.3	64.7	39.3	40.3	15.2		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	37.1	10.3	64.7	39.3	40.3	15.2		
LOS	D	B	E	D	D	B		
Approach Delay	35.8			39.8	35.8			
Approach LOS	D			D	D			

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 37.7		Intersection LOS: D	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C" & Mayfield Road



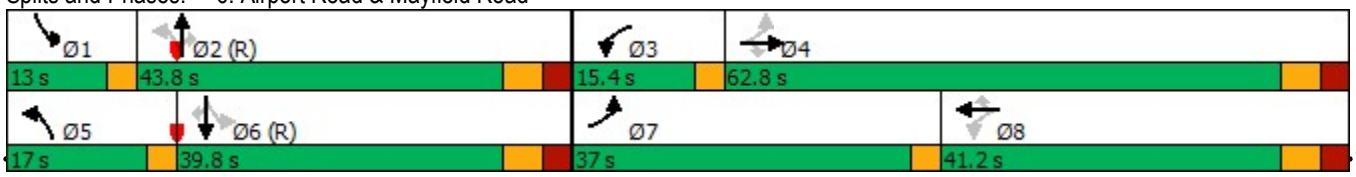


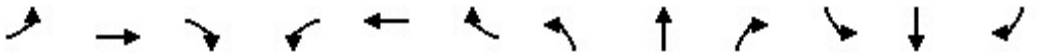
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	1090	198	120	1130	64	346	545	98	105	360	309
Future Volume (vph)	347	1090	198	120	1130	64	346	545	98	105	360	309
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.104			0.250			0.415			0.358		
Satd. Flow (perm)	142	4939	1493	435	5216	961	741	3386	1426	556	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			128			106			309
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	347	1090	198	120	1130	64	346	545	98	105	360	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	1090	198	120	1130	64	346	545	98	105	360	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	37.0	62.8	62.8	15.4	41.2	41.2	17.0	43.8	43.8	13.0	39.8	39.8
Total Split (%)	27.4%	46.5%	46.5%	11.4%	30.5%	30.5%	12.6%	32.4%	32.4%	9.6%	29.5%	29.5%
Maximum Green (s)	34.0	55.7	55.7	12.4	34.1	34.1	14.0	36.9	36.9	10.0	32.9	32.9
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	75.2	58.8	58.8	48.8	35.4	35.4	53.8	37.8	37.8	45.9	32.9	32.9
Actuated g/C Ratio	0.56	0.44	0.44	0.36	0.26	0.26	0.40	0.28	0.28	0.34	0.24	0.24
v/c Ratio	0.97	0.51	0.26	0.50	0.83	0.18	0.88	0.58	0.21	0.42	0.44	0.55
Control Delay	95.7	15.7	5.7	25.6	53.3	1.2	57.2	44.8	6.8	32.2	45.3	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.7	15.7	5.7	25.6	53.3	1.2	57.2	44.8	6.8	32.2	45.3	8.5
LOS	F	B	A	C	D	A	E	D	A	C	D	A
Approach Delay		31.5			48.2			45.4			28.8	
Approach LOS		C			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 38.6		Intersection LOS: D	
Intersection Capacity Utilization 110.1%		ICU Level of Service H	
Analysis Period (min) 15			

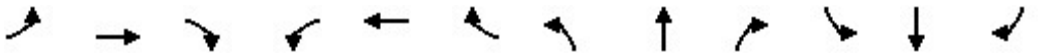
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	76	113	0	4	78	824	90	17	493	6
Future Volume (vph)	8	1	76	113	0	4	78	824	90	17	493	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.852			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	8	1	76	113	0	4	78	824	94	17	493	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	77	0	113	4	0	78	824	94	17	493	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	824	90	17	493	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	824	90	17	493	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	824	94	17	493	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1100	1607	248	1342	1519	417	500			923		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1100	1607	248	1342	1519	417	500			923		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	94	99	89	0	100	99	88			96		
cM capacity (veh/h)	128	89	720	82	100	588	639			383		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	412	412	94	17	246	246	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	128	659	82	588	639	1700	1700	1700	383	1700	1700	1700
Volume to Capacity	0.06	0.12	1.39	0.01	0.12	0.24	0.24	0.06	0.04	0.14	0.14	0.00
Queue Length 95th (m)	1.6	3.2	70.1	0.2	3.3	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Control Delay (s)	35.0	11.2	323.3	11.2	11.4	0.0	0.0	0.0	14.8	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				B			
Approach Delay (s)	13.4		312.6		0.9				0.5			
Approach LOS	B		F									

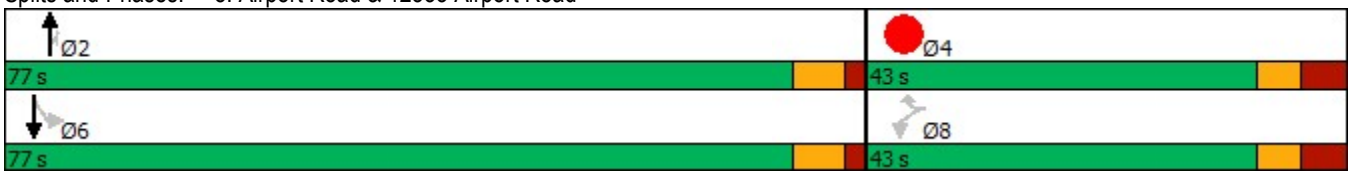
Intersection Summary				
Average Delay	22.7			
Intersection Capacity Utilization	49.0%	ICU Level of Service	A	
Analysis Period (min)	15			

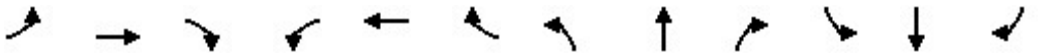
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	34	5	785	26	2	438	
Future Volume (vph)	34	5	785	26	2	438	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8	
Storage Length (m)	0.0	0.0		145.0	75.0		
Storage Lanes	1	1		1	1		
Taper Length (m)	7.5				100.0		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1328	1383	3449	992	1116	3101	
Flt Permitted	0.950				0.355		
Satd. Flow (perm)	1328	1383	3449	992	417	3101	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		5		26			
Link Speed (k/h)	50		80			80	
Link Distance (m)	270.4		438.0			348.1	
Travel Time (s)	19.5		19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%	
Adj. Flow (vph)	34	5	785	26	2	438	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	34	5	785	26	2	438	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(m)	4.0		3.5			3.5	
Link Offset(m)	0.0		0.0			0.0	
Crosswalk Width(m)	4.8		4.8			4.8	
Two way Left Turn Lane							
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97	
Turning Speed (k/h)	25	15		15	25		
Number of Detectors	1	1	2	1	1	2	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)			9.4			9.4	
Detector 2 Size(m)			0.6			0.6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases			2			6	4
Permitted Phases	8	8		2	6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6	36.2
Total Split (s)	43.0	43.0	77.0	77.0	77.0	77.0	43.0
Total Split (%)	35.8%	35.8%	64.2%	64.2%	64.2%	64.2%	36%
Maximum Green (s)	34.8	34.8	70.4	70.4	70.4	70.4	34.8
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.0
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0	4.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0
Act Effct Green (s)	12.1	12.1	87.9	87.9	87.9	87.9	
Actuated g/C Ratio	0.12	0.12	0.85	0.85	0.85	0.85	
v/c Ratio	0.22	0.03	0.27	0.03	0.01	0.17	
Control Delay	47.7	26.8	3.2	1.4	3.5	2.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.7	26.8	3.2	1.4	3.5	2.9	
LOS	D	C	A	A	A	A	
Approach Delay	45.0		3.2			2.9	
Approach LOS	D		A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 102.9			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 4.3		Intersection LOS: A	
Intersection Capacity Utilization 44.0%		ICU Level of Service A	
Analysis Period (min) 15			

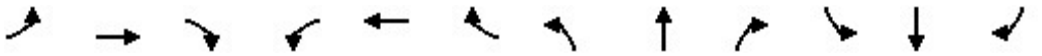
Splits and Phases: 8: Airport Road & 12333 Airport Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	205	15	16	88	1	5	88	21	4	293	11
Future Volume (vph)	6	205	15	16	88	1	5	88	21	4	293	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.999			0.975			0.995	
Flt Protected		0.999			0.993			0.998			0.999	
Satd. Flow (prot)	0	1808	0	0	1869	0	0	1782	0	0	1883	0
Flt Permitted		0.999			0.993			0.998			0.999	
Satd. Flow (perm)	0	1808	0	0	1869	0	0	1782	0	0	1883	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	7	223	16	17	96	1	5	96	23	4	318	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	246	0	0	114	0	0	124	0	0	334	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

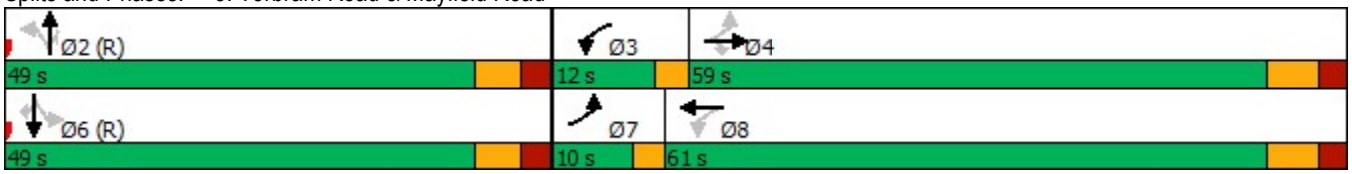


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	2011	259	181	1695	9	292	67	117	12	263	49
Future Volume (vph)	37	2011	259	181	1695	9	292	67	117	12	263	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.080			0.072			0.502			0.713		
Satd. Flow (perm)	146	4734	1597	135	4861	0	943	1942	1587	1340	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259		1				117			66
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	37	2011	259	181	1695	9	292	67	117	12	263	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	2011	259	181	1704	0	292	67	117	12	263	49
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	10.0	59.0	59.0	12.0	61.0		49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	8.3%	49.2%	49.2%	10.0%	50.8%		40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Maximum Green (s)	7.0	51.7	51.7	9.0	53.7		41.9	41.9	41.9	41.9	41.9	41.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	62.0	51.7	51.7	67.7	58.0		41.9	41.9	41.9	41.9	41.9	41.9
Actuated g/C Ratio	0.52	0.43	0.43	0.56	0.48		0.35	0.35	0.35	0.35	0.35	0.35
v/c Ratio	0.24	0.99	0.31	0.91	0.73		0.89	0.10	0.19	0.03	0.39	0.09
Control Delay	15.5	51.0	3.5	78.8	25.5		66.1	26.9	5.5	26.0	31.5	4.0
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	15.5	51.0	3.5	78.8	25.5		66.1	26.9	5.5	26.0	31.5	4.0
LOS	B	D	A	E	C		E	C	A	C	C	A
Approach Delay		45.1			30.6			45.7			27.2	
Approach LOS		D			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 38.5		Intersection LOS: D	
Intersection Capacity Utilization 100.2%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

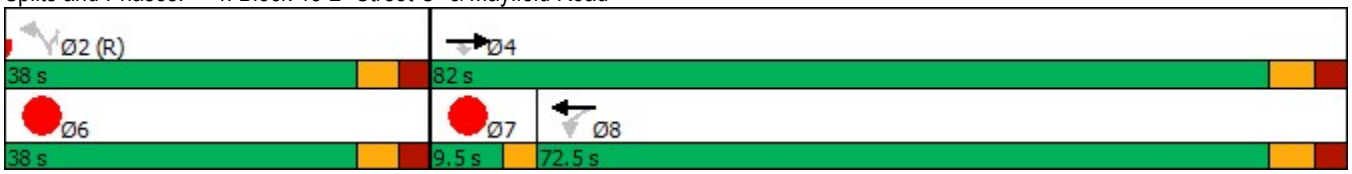


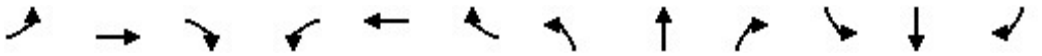
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Lane Configurations								
Traffic Volume (vph)	2086	110	14	1756	231	35		
Future Volume (vph)	2086	110	14	1756	231	35		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (m)	3.8	3.5	3.5	3.8	3.8	3.8		
Storage Length (m)		55.0	75.0		55.0	0.0		
Storage Lanes		1	1		1	1		
Taper Length (m)			7.5		7.5			
Lane Util. Factor	0.91	1.00	1.00	0.91	1.00	1.00		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	4734	1566	1750	4864	1809	1619		
Flt Permitted			0.058		0.950			
Satd. Flow (perm)	4734	1566	107	4864	1809	1619		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		91				11		
Link Speed (k/h)	80			80	50			
Link Distance (m)	716.7			643.7	353.1			
Travel Time (s)	32.3			29.0	25.4			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Heavy Vehicles (%)	12%	2%	2%	9%	2%	2%		
Adj. Flow (vph)	2086	110	14	1756	231	35		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	2086	110	14	1756	231	35		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(m)	3.5			3.5	3.8			
Link Offset(m)	0.0			0.0	0.0			
Crosswalk Width(m)	4.8			4.8	4.8			
Two way Left Turn Lane								
Headway Factor	0.97	1.01	1.01	0.97	0.97	0.97		
Turning Speed (k/h)		15	25		25	15		
Number of Detectors	2	1	1	2	1	1		
Detector Template	Thru	Right	Left	Thru	Left	Right		
Leading Detector (m)	10.0	10.0	25.0	10.0	25.0	10.0		
Trailing Detector (m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Position(m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Size(m)	0.6	10.0	10.0	0.6	10.0	10.0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(m)	9.4			9.4				
Detector 2 Size(m)	0.6			0.6				
Detector 2 Type	Cl+Ex			Cl+Ex				
Detector 2 Channel								
Detector 2 Extend (s)	0.0			0.0				
Turn Type	NA	Perm	Perm	NA	Perm	Perm		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Protected Phases	4			8			6	7
Permitted Phases		4	8		2	2		
Detector Phase	4	4	8	8	2	2		
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	5.0
Minimum Split (s)	25.1	25.1	25.1	25.1	24.6	24.6	24.6	9.5
Total Split (s)	82.0	82.0	72.5	72.5	38.0	38.0	38.0	9.5
Total Split (%)	68.3%	68.3%	60.4%	60.4%	31.7%	31.7%	32%	8%
Maximum Green (s)	74.9	74.9	65.4	65.4	31.4	31.4	31.4	6.5
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.0
All-Red Time (s)	3.1	3.1	3.1	3.1	2.9	2.9	2.9	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.1	7.1	7.1	7.1	6.6	6.6		
Lead/Lag			Lag	Lag				Lead
Lead-Lag Optimize?			Yes	Yes				Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	Max	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	
Act Effct Green (s)	69.1	69.1	69.1	69.1	37.2	37.2		
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.31	0.31		
v/c Ratio	0.77	0.12	0.23	0.63	0.41	0.07		
Control Delay	37.6	12.8	25.6	25.9	37.0	24.8		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	37.6	12.8	25.6	25.9	37.0	24.8		
LOS	D	B	C	C	D	C		
Approach Delay	36.4			25.9	35.4			
Approach LOS	D			C	D			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 31.9		Intersection LOS: C	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C" & Mayfield Road



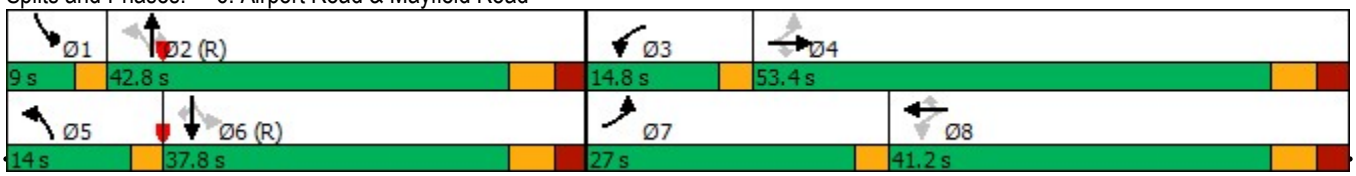


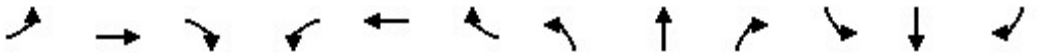
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	1168	431	109	1188	43	227	229	96	73	632	217
Future Volume (vph)	261	1168	431	109	1188	43	227	229	96	73	632	217
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.101			0.217			0.214			0.609		
Satd. Flow (perm)	137	4939	1493	377	5216	961	383	3386	1426	946	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			307			145			119			217
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	261	1168	431	109	1188	43	227	229	96	73	632	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	261	1168	431	109	1188	43	227	229	96	73	632	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	27.0	53.4	53.4	14.8	41.2	41.2	14.0	42.8	42.8	9.0	37.8	37.8
Total Split (%)	22.5%	44.5%	44.5%	12.3%	34.3%	34.3%	11.7%	35.7%	35.7%	7.5%	31.5%	31.5%
Maximum Green (s)	24.0	46.3	46.3	11.8	34.1	34.1	11.0	35.9	35.9	6.0	30.9	30.9
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	65.2	49.6	49.6	49.3	36.8	36.8	48.8	37.7	37.7	40.6	30.9	30.9
Actuated g/C Ratio	0.54	0.41	0.41	0.41	0.31	0.31	0.41	0.31	0.31	0.34	0.26	0.26
v/c Ratio	0.94	0.57	0.54	0.44	0.74	0.11	0.82	0.22	0.18	0.21	0.73	0.43
Control Delay	82.3	33.2	15.6	21.2	41.4	0.6	50.5	31.6	4.0	24.6	46.6	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	33.2	15.6	21.2	41.4	0.6	50.5	31.6	4.0	24.6	46.6	7.5
LOS	F	C	B	C	D	A	D	C	A	C	D	A
Approach Delay		36.0			38.5			34.6			35.7	
Approach LOS		D			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 36.5		Intersection LOS: D	
Intersection Capacity Utilization 98.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	33	78	0	17	46	538	83	2	765	3
Future Volume (vph)	5	1	33	78	0	17	46	538	83	2	765	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.854			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	5	1	33	78	0	17	46	538	86	2	765	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	34	0	78	17	0	46	538	86	2	765	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

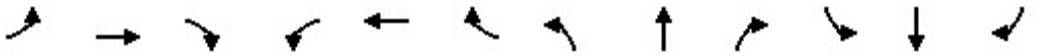
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	77	11	443	61	17	682	
Future Volume (vph)	77	11	443	61	17	682	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8	
Storage Length (m)	0.0	0.0		145.0	75.0		
Storage Lanes	1	1		1	1		
Taper Length (m)	7.5				100.0		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1328	1383	3449	992	1116	3101	
Flt Permitted	0.950				0.495		
Satd. Flow (perm)	1328	1383	3449	992	581	3101	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		11		61			
Link Speed (k/h)	50		80			80	
Link Distance (m)	270.4		438.0			348.1	
Travel Time (s)	19.5		19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%	
Adj. Flow (vph)	77	11	443	61	17	682	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	77	11	443	61	17	682	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(m)	4.0		3.5			3.5	
Link Offset(m)	0.0		0.0			0.0	
Crosswalk Width(m)	4.8		4.8			4.8	
Two way Left Turn Lane							
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97	
Turning Speed (k/h)	25	15		15	25		
Number of Detectors	1	1	2	1	1	2	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)			9.4			9.4	
Detector 2 Size(m)			0.6			0.6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases			2			6	4
Permitted Phases	8	8		2	6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6	36.2
Total Split (s)	48.0	48.0	72.0	72.0	72.0	72.0	48.0
Total Split (%)	40.0%	40.0%	60.0%	60.0%	60.0%	60.0%	40%
Maximum Green (s)	39.8	39.8	65.4	65.4	65.4	65.4	39.8
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.0
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0	4.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0
Act Effct Green (s)	12.8	12.8	76.1	76.1	76.1	76.1	
Actuated g/C Ratio	0.13	0.13	0.78	0.78	0.78	0.78	
v/c Ratio	0.44	0.06	0.17	0.08	0.04	0.28	
Control Delay	48.0	18.8	4.2	1.5	4.6	4.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	48.0	18.8	4.2	1.5	4.6	4.8	
LOS	D	B	A	A	A	A	
Approach Delay	44.4		3.9			4.8	
Approach LOS	D		A			A	

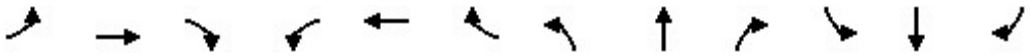
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 97.8			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 7.1		Intersection LOS: A	
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & 12333 Airport Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	97	5	13	332	7	17	246	26	6	74	7
Future Volume (vph)	11	97	5	13	332	7	17	246	26	6	74	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.997			0.988			0.989	
Flt Protected		0.995			0.998			0.997			0.996	
Satd. Flow (prot)	0	1793	0	0	1873	0	0	1821	0	0	1838	0
Flt Permitted		0.995			0.998			0.997			0.996	
Satd. Flow (perm)	0	1793	0	0	1873	0	0	1821	0	0	1838	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	12	105	5	14	361	8	18	267	28	7	80	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	122	0	0	383	0	0	313	0	0	95	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

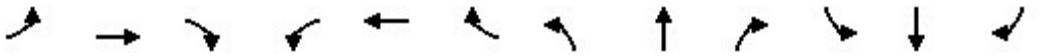
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	97	5	13	332	7	17	246	26	6	74	7
Future Volume (vph)	11	97	5	13	332	7	17	246	26	6	74	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	105	5	14	361	8	18	267	28	7	80	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	122	383	313	95
Volume Left (vph)	12	14	18	7
Volume Right (vph)	5	8	28	8
Hadj (s)	0.08	0.01	0.01	0.00
Departure Headway (s)	5.8	5.3	5.5	5.9
Degree Utilization, x	0.20	0.56	0.48	0.16
Capacity (veh/h)	552	644	609	534
Control Delay (s)	10.2	15.0	13.4	10.0
Approach Delay (s)	10.2	15.0	13.4	10.0
Approach LOS	B	B	B	A

Intersection Summary				
Delay	13.3			
Level of Service	B			
Intersection Capacity Utilization	46.7%	ICU Level of Service	A	
Analysis Period (min)	15			

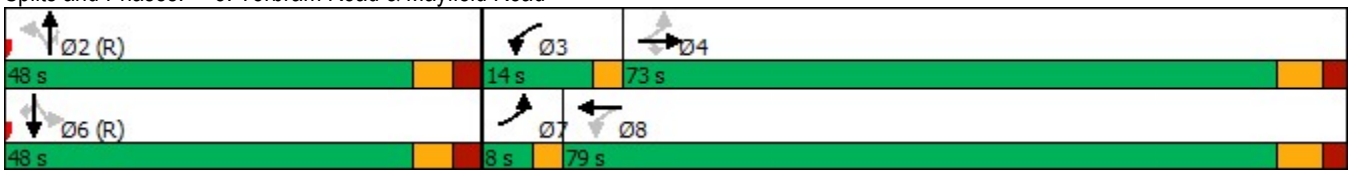


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	2050	243	157	2018	12	305	152	160	3	67	27
Future Volume (vph)	41	2050	243	157	2018	12	305	152	160	3	67	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.061			0.058			0.713			0.637		
Satd. Flow (perm)	111	4734	1597	109	4861	0	1340	1942	1587	1197	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		1				121			83
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	41	2050	243	157	2018	12	305	152	160	3	67	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	2050	243	157	2030	0	305	152	160	3	67	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	73.0	73.0	14.0	79.0		48.0	48.0	48.0	48.0	48.0	48.0
Total Split (%)	5.9%	54.1%	54.1%	10.4%	58.5%		35.6%	35.6%	35.6%	35.6%	35.6%	35.6%
Maximum Green (s)	5.0	65.7	65.7	11.0	71.7		40.9	40.9	40.9	40.9	40.9	40.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	74.0	64.7	64.7	82.4	71.7		42.5	42.5	42.5	42.5	42.5	42.5
Actuated g/C Ratio	0.55	0.48	0.48	0.61	0.53		0.31	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.34	0.90	0.27	0.81	0.79		0.72	0.25	0.27	0.01	0.11	0.05
Control Delay	18.3	38.9	3.0	77.7	19.5		52.9	36.4	11.7	33.0	34.4	0.2
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	18.3	38.9	3.0	77.7	19.5		52.9	36.4	11.7	33.0	34.4	0.2
LOS	B	D	A	E	B		D	D	B	C	C	A
Approach Delay		34.8			23.7			38.2			24.8	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 30.4		Intersection LOS: C	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

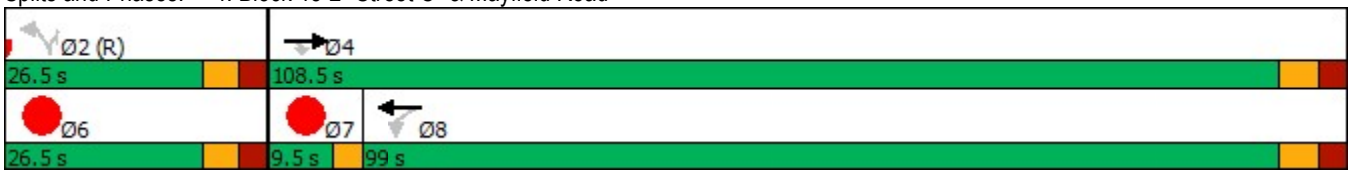


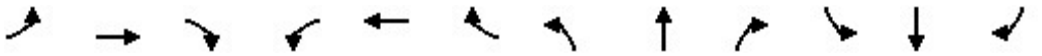
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Lane Configurations								
Traffic Volume (vph)	2146	98	41	2095	104	23		
Future Volume (vph)	2146	98	41	2095	104	23		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (m)	3.8	3.5	3.5	3.8	3.8	3.8		
Storage Length (m)		55.0	75.0		55.0	0.0		
Storage Lanes		1	1		1	1		
Taper Length (m)			7.5		7.5			
Lane Util. Factor	0.91	1.00	1.00	0.91	1.00	1.00		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	4734	1566	1750	4864	1809	1619		
Flt Permitted			0.053		0.950			
Satd. Flow (perm)	4734	1566	98	4864	1809	1619		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		98				22		
Link Speed (k/h)	80			80	50			
Link Distance (m)	716.7			643.7	353.1			
Travel Time (s)	32.3			29.0	25.4			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Heavy Vehicles (%)	12%	2%	2%	9%	2%	2%		
Adj. Flow (vph)	2146	98	41	2095	104	23		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	2146	98	41	2095	104	23		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(m)	3.5			3.5	3.8			
Link Offset(m)	0.0			0.0	0.0			
Crosswalk Width(m)	4.8			4.8	4.8			
Two way Left Turn Lane								
Headway Factor	0.97	1.01	1.01	0.97	0.97	0.97		
Turning Speed (k/h)		15	25		25	15		
Number of Detectors	2	1	1	2	1	1		
Detector Template	Thru	Right	Left	Thru	Left	Right		
Leading Detector (m)	10.0	10.0	25.0	10.0	25.0	10.0		
Trailing Detector (m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Position(m)	0.0	0.0	15.0	0.0	15.0	0.0		
Detector 1 Size(m)	0.6	10.0	10.0	0.6	10.0	10.0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(m)	9.4			9.4				
Detector 2 Size(m)	0.6			0.6				
Detector 2 Type	Cl+Ex			Cl+Ex				
Detector 2 Channel								
Detector 2 Extend (s)	0.0			0.0				
Turn Type	NA	Perm	Perm	NA	Perm	Perm		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø7
Protected Phases	4			8			6	7
Permitted Phases		4	8		2	2		
Detector Phase	4	4	8	8	2	2		
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	5.0
Minimum Split (s)	25.1	25.1	25.1	25.1	24.6	24.6	24.6	9.5
Total Split (s)	108.5	108.5	99.0	99.0	26.5	26.5	26.5	9.5
Total Split (%)	80.4%	80.4%	73.3%	73.3%	19.6%	19.6%	20%	7%
Maximum Green (s)	101.4	101.4	91.9	91.9	19.9	19.9	19.9	6.5
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.0
All-Red Time (s)	3.1	3.1	3.1	3.1	2.9	2.9	2.9	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.1	7.1	7.1	7.1	6.6	6.6		
Lead/Lag			Lag	Lag				Lead
Lead-Lag Optimize?			Yes	Yes				Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	Max	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	
Act Effct Green (s)	87.4	87.4	87.4	87.4	33.9	33.9		
Actuated g/C Ratio	0.65	0.65	0.65	0.65	0.25	0.25		
v/c Ratio	0.70	0.09	0.65	0.67	0.23	0.05		
Control Delay	30.8	8.3	65.6	34.1	44.1	16.7		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	30.8	8.3	65.6	34.1	44.1	16.7		
LOS	C	A	E	C	D	B		
Approach Delay	29.8			34.7	39.1			
Approach LOS	C			C	D			

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 32.4		Intersection LOS: C	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C" & Mayfield Road



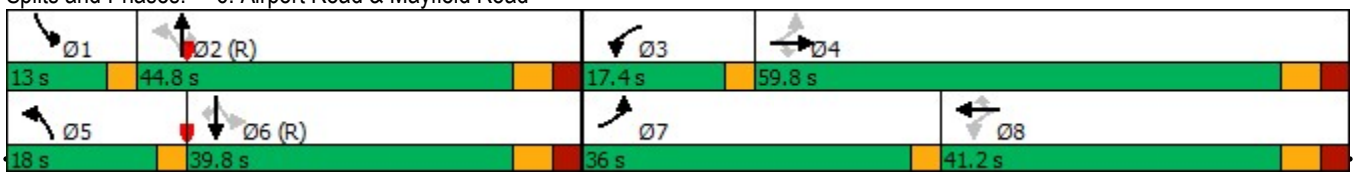


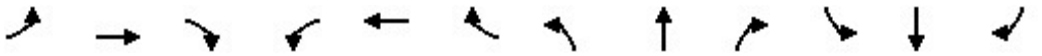
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	359	1171	206	126	1230	68	360	573	103	110	378	323
Future Volume (vph)	359	1171	206	126	1230	68	360	573	103	110	378	323
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.108			0.229			0.398			0.348		
Satd. Flow (perm)	147	4939	1493	398	5216	961	711	3386	1426	540	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			179			128			106			323
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	359	1171	206	126	1230	68	360	573	103	110	378	323
Shared Lane Traffic (%)												
Lane Group Flow (vph)	359	1171	206	126	1230	68	360	573	103	110	378	323
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	36.0	59.8	59.8	17.4	41.2	41.2	18.0	44.8	44.8	13.0	39.8	39.8
Total Split (%)	26.7%	44.3%	44.3%	12.9%	30.5%	30.5%	13.3%	33.2%	33.2%	9.6%	29.5%	29.5%
Maximum Green (s)	33.0	52.7	52.7	14.4	34.1	34.1	15.0	37.9	37.9	10.0	32.9	32.9
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	74.2	57.5	57.5	47.8	34.1	34.1	54.8	38.7	38.7	46.0	32.9	32.9
Actuated g/C Ratio	0.55	0.43	0.43	0.35	0.25	0.25	0.41	0.29	0.29	0.34	0.24	0.24
v/c Ratio	1.00	0.56	0.28	0.55	0.93	0.20	0.90	0.59	0.21	0.45	0.46	0.57
Control Delay	96.9	19.0	7.1	27.9	62.7	1.3	60.2	44.6	7.3	32.4	45.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.9	19.0	7.1	27.9	62.7	1.3	60.2	44.6	7.3	32.4	45.7	8.5
LOS	F	B	A	C	E	A	E	D	A	C	D	A
Approach Delay		33.7			56.7			46.3			29.1	
Approach LOS		C			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 42.1		Intersection LOS: D	
Intersection Capacity Utilization 111.5%		ICU Level of Service H	
Analysis Period (min) 15			

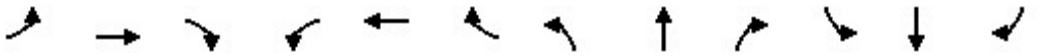
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	76	113	0	4	78	859	90	17	517	6
Future Volume (vph)	8	1	76	113	0	4	78	859	90	17	517	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.852			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	8	1	76	113	0	4	78	859	94	17	517	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	77	0	113	4	0	78	859	94	17	517	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	859	90	17	517	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	859	90	17	517	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	859	94	17	517	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1142	1666	260	1389	1578	434	524			958		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1142	1666	260	1389	1578	434	524			958		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	93	99	89	0	100	99	87			95		
cM capacity (veh/h)	118	81	706	75	92	573	621			367		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	430	430	94	17	258	258	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	118	642	75	573	621	1700	1700	1700	367	1700	1700	1700
Volume to Capacity	0.07	0.12	1.52	0.01	0.13	0.25	0.25	0.06	0.05	0.15	0.15	0.00
Queue Length 95th (m)	1.7	3.3	74.7	0.2	3.4	0.0	0.0	0.0	1.2	0.0	0.0	0.0
Control Delay (s)	37.6	11.4	384.5	11.3	11.6	0.0	0.0	0.0	15.3	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				C			
Approach Delay (s)	13.8		371.7		0.9				0.5			
Approach LOS	B		F									

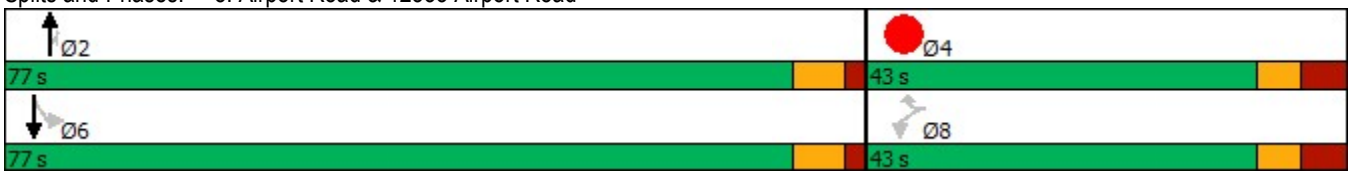
Intersection Summary				
Average Delay	25.9			
Intersection Capacity Utilization	50.0%	ICU Level of Service	A	
Analysis Period (min)	15			

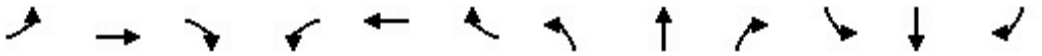
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	34	5	818	26	2	460	
Future Volume (vph)	34	5	818	26	2	460	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (m)	4.0	4.0	3.8	3.5	3.5	3.8	
Storage Length (m)	0.0	0.0		145.0	75.0		
Storage Lanes	1	1		1	1		
Taper Length (m)	7.5				100.0		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1328	1383	3449	992	1116	3101	
Flt Permitted	0.950				0.343		
Satd. Flow (perm)	1328	1383	3449	992	403	3101	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		5		26			
Link Speed (k/h)	50		80			80	
Link Distance (m)	270.4		438.0			348.1	
Travel Time (s)	19.5		19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Heavy Vehicles (%)	42%	22%	7%	61%	60%	19%	
Adj. Flow (vph)	34	5	818	26	2	460	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	34	5	818	26	2	460	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(m)	4.0		3.5			3.5	
Link Offset(m)	0.0		0.0			0.0	
Crosswalk Width(m)	4.8		4.8			4.8	
Two way Left Turn Lane							
Headway Factor	0.94	0.94	0.97	1.01	1.01	0.97	
Turning Speed (k/h)	25	15		15	25		
Number of Detectors	1	1	2	1	1	2	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (m)	10.0	10.0	10.0	10.0	10.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	10.0	10.0	0.6	10.0	10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)			9.4			9.4	
Detector 2 Size(m)			0.6			0.6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases			2			6	4
Permitted Phases	8	8		2	6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2	35.6	35.6	35.6	35.6	36.2
Total Split (s)	43.0	43.0	77.0	77.0	77.0	77.0	43.0
Total Split (%)	35.8%	35.8%	64.2%	64.2%	64.2%	64.2%	36%
Maximum Green (s)	34.8	34.8	70.4	70.4	70.4	70.4	34.8
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.0
All-Red Time (s)	4.2	4.2	2.0	2.0	2.0	2.0	4.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	8.2	8.2	6.6	6.6	6.6	6.6	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0	21.0	21.0	21.0	21.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0
Act Effct Green (s)	12.1	12.1	87.9	87.9	87.9	87.9	
Actuated g/C Ratio	0.12	0.12	0.85	0.85	0.85	0.85	
v/c Ratio	0.22	0.03	0.28	0.03	0.01	0.17	
Control Delay	47.7	26.8	3.3	1.4	3.5	2.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.7	26.8	3.3	1.4	3.5	2.9	
LOS	D	C	A	A	A	A	
Approach Delay	45.0		3.2			2.9	
Approach LOS	D		A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 102.9			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 4.3		Intersection LOS: A	
Intersection Capacity Utilization 44.9%		ICU Level of Service A	
Analysis Period (min) 15			

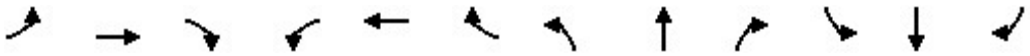
Splits and Phases: 8: Airport Road & 12333 Airport Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	173	19	45	75	1	6	75	29	4	263	11
Future Volume (vph)	6	173	19	45	75	1	6	75	29	4	263	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.999			0.964			0.995	
Flt Protected		0.998			0.982			0.997			0.999	
Satd. Flow (prot)	0	1801	0	0	1852	0	0	1747	0	0	1882	0
Flt Permitted		0.998			0.982			0.997			0.999	
Satd. Flow (perm)	0	1801	0	0	1852	0	0	1747	0	0	1882	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	7	188	21	49	82	1	7	82	32	4	286	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	216	0	0	132	0	0	121	0	0	302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	173	19	45	75	1	6	75	29	4	263	11
Future Volume (vph)	6	173	19	45	75	1	6	75	29	4	263	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	188	21	49	82	1	7	82	32	4	286	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	216	132	121	302
Volume Left (vph)	7	49	7	4
Volume Right (vph)	21	1	32	12
Hadj (s)	0.02	0.08	-0.07	-0.02
Departure Headway (s)	5.3	5.5	5.3	5.0
Degree Utilization, x	0.32	0.20	0.18	0.42
Capacity (veh/h)	633	598	624	675
Control Delay (s)	10.7	9.8	9.4	11.7
Approach Delay (s)	10.7	9.8	9.4	11.7
Approach LOS	B	A	A	B

Intersection Summary				
Delay	10.7			
Level of Service	B			
Intersection Capacity Utilization	42.8%	ICU Level of Service	A	
Analysis Period (min)	15			

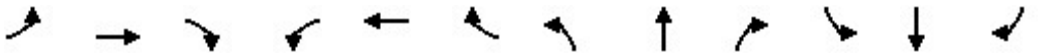
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	65	8	109	112	28	301
Future Volume (vph)	65	8	109	112	28	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	0	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.931			
Flt Protected	0.950					0.996
Satd. Flow (prot)	1770	1583	1734	0	0	1855
Flt Permitted	0.950					0.996
Satd. Flow (perm)	1770	1583	1734	0	0	1855
Link Speed (k/h)	50		70			70
Link Distance (m)	686.5		624.2			1613.1
Travel Time (s)	49.4		32.1			83.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	9	118	122	30	327
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	9	240	0	0	357
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	65	8	109	112	28	301
Future Volume (Veh/h)	65	8	109	112	28	301
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)	71	9	118	122	30	327
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	566	179			240	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	566	179			240	
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	99			98	
cM capacity (veh/h)	475	864			1327	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	71	9	240	357
Volume Left	71	0	0	30
Volume Right	0	9	122	0
cSH	475	864	1700	1327
Volume to Capacity	0.15	0.01	0.14	0.02
Queue Length 95th (m)	4.2	0.3	0.0	0.6
Control Delay (s)	13.9	9.2	0.0	0.9
Lane LOS	B	A		A
Approach Delay (s)	13.4		0.0	0.9
Approach LOS	B			

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	43.6%	ICU Level of Service	A
Analysis Period (min)	15		

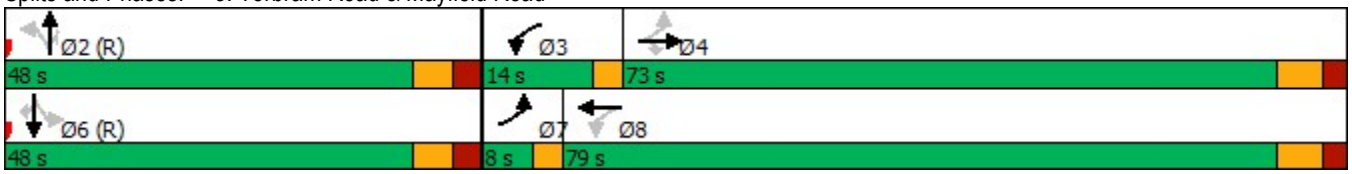


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	1649	259	187	1423	66	292	103	132	55	239	74
Future Volume (vph)	116	1649	259	187	1423	66	292	103	132	55	239	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.993				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4840	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.115			0.065			0.532			0.690		
Satd. Flow (perm)	210	4734	1597	122	4840	0	1000	1942	1587	1296	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259		8				128			83
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	116	1649	259	187	1423	66	292	103	132	55	239	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	1649	259	187	1489	0	292	103	132	55	239	74
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	73.0	73.0	14.0	79.0		48.0	48.0	48.0	48.0	48.0	48.0
Total Split (%)	5.9%	54.1%	54.1%	10.4%	58.5%		35.6%	35.6%	35.6%	35.6%	35.6%	35.6%
Maximum Green (s)	5.0	65.7	65.7	11.0	71.7		40.9	40.9	40.9	40.9	40.9	40.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	67.7	58.4	58.4	76.7	64.4		48.2	48.2	48.2	48.2	48.2	48.2
Actuated g/C Ratio	0.50	0.43	0.43	0.57	0.48		0.36	0.36	0.36	0.36	0.36	0.36
v/c Ratio	0.72	0.81	0.31	0.92	0.64		0.82	0.15	0.20	0.12	0.34	0.13
Control Delay	39.7	36.5	3.3	76.1	27.6		60.2	32.1	6.7	32.5	35.0	6.0
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	36.5	3.3	76.1	27.6		60.2	32.1	6.7	32.5	35.0	6.0
LOS	D	D	A	E	C		E	C	A	C	D	A
Approach Delay		32.5			33.0			41.3			28.8	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 33.4		Intersection LOS: C	
Intersection Capacity Utilization 92.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

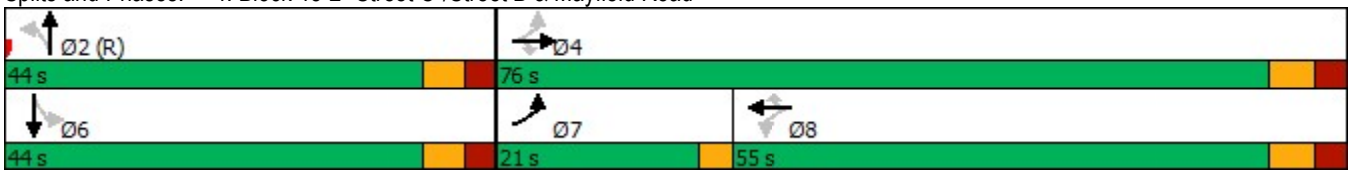


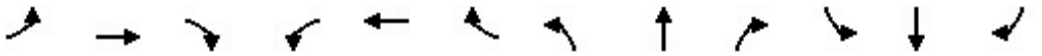
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	1602	110	14	1453	42	231	0	35	22	0	48
Future Volume (vph)	154	1602	110	14	1453	42	231	0	35	22	0	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.5	3.5	3.8	3.6	3.8	3.6	3.8	3.6	3.6	3.6
Storage Length (m)	75.0		55.0	75.0		55.0	55.0		0.0	55.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1517	4734	1566	1750	4864	1170	1809	1583	0	1357	1313	0
Flt Permitted	0.087			0.126			0.726			0.734		
Satd. Flow (perm)	139	4734	1566	232	4864	1170	1382	1583	0	1049	1313	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			104			60		65			303	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		716.7			643.7			353.1			866.6	
Travel Time (s)		32.3			29.0			25.4			62.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	19%	12%	2%	2%	9%	38%	2%	0%	2%	33%	0%	23%
Adj. Flow (vph)	154	1602	110	14	1453	42	231	0	35	22	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	1602	110	14	1453	42	231	35	0	22	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.8			3.8	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	0.97	1.01	1.01	0.97	1.00	0.97	1.00	0.97	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	2.0	25.0	10.0		10.0	10.0	
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	2.0	10.0	0.6		10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		5.0	5.0	
Minimum Split (s)	9.5	25.1	25.1	25.1	25.1	25.1	24.6	24.6		24.6	24.6	
Total Split (s)	21.0	76.0	76.0	55.0	55.0	55.0	44.0	44.0		44.0	44.0	
Total Split (%)	17.5%	63.3%	63.3%	45.8%	45.8%	45.8%	36.7%	36.7%		36.7%	36.7%	
Maximum Green (s)	18.0	68.9	68.9	47.9	47.9	47.9	37.4	37.4		37.4	37.4	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.7	3.7		3.7	3.7	
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	6.6	6.6		6.6	6.6	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	Min	Min	Min	C-Max	C-Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	63.6	59.5	59.5	43.0	43.0	43.0	46.8	46.8		46.8	46.8	
Actuated g/C Ratio	0.53	0.50	0.50	0.36	0.36	0.36	0.39	0.39		0.39	0.39	
v/c Ratio	0.68	0.68	0.13	0.17	0.83	0.09	0.43	0.05		0.05	0.07	
Control Delay	37.0	24.2	3.0	35.7	47.5	8.3	32.3	2.1		27.5	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.0	24.2	3.0	35.7	47.5	8.3	32.3	2.1		27.5	0.2	
LOS	D	C	A	D	D	A	C	A		C	A	
Approach Delay		24.0			46.3			28.3			8.8	
Approach LOS		C			D			C			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 33.1		Intersection LOS: C	
Intersection Capacity Utilization 77.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C"/Street B & Mayfield Road



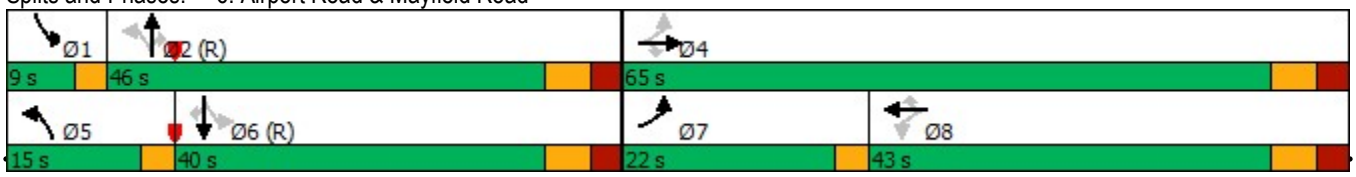


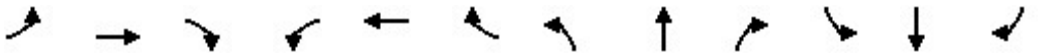
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	923	429	98	1006	56	267	315	87	85	639	202
Future Volume (vph)	238	923	429	98	1006	56	267	315	87	85	639	202
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	3630	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.102			0.297			0.227			0.561		
Satd. Flow (perm)	139	4939	1493	516	3630	961	406	3386	1426	871	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			270			117			92			202
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	238	923	429	98	1006	56	267	315	87	85	639	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	923	429	98	1006	56	267	315	87	85	639	202
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	41.1	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	22.0	65.0	65.0	43.0	43.0	43.0	15.0	46.0	46.0	9.0	40.0	40.0
Total Split (%)	18.3%	54.2%	54.2%	35.8%	35.8%	35.8%	12.5%	38.3%	38.3%	7.5%	33.3%	33.3%
Maximum Green (s)	19.0	57.9	57.9	35.9	35.9	35.9	12.0	39.1	39.1	6.0	33.1	33.1
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	Max	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0	27.0	27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0	0	0	0		0	0		0	0
Act Effct Green (s)	62.0	57.9	57.9	36.4	36.4	36.4	52.0	40.9	40.9	42.9	33.1	33.1
Actuated g/C Ratio	0.52	0.48	0.48	0.30	0.30	0.30	0.43	0.34	0.34	0.36	0.28	0.28
v/c Ratio	0.96	0.39	0.50	0.63	0.91	0.15	0.88	0.27	0.16	0.25	0.69	0.39
Control Delay	96.9	32.5	21.3	56.3	53.8	0.9	53.9	30.1	6.0	23.4	43.5	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	0.0
Total Delay	96.9	32.5	21.3	56.3	53.8	0.9	53.9	30.1	6.0	23.4	43.5	7.0
LOS	F	C	C	E	D	A	D	C	A	C	D	A
Approach Delay		39.1			51.4			36.5			33.7	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 40.9		Intersection LOS: D	
Intersection Capacity Utilization 99.6%		ICU Level of Service F	
Analysis Period (min) 15			

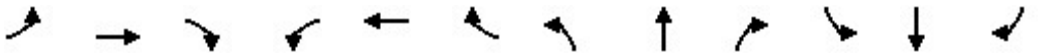
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	33	78	0	17	46	617	83	2	785	3
Future Volume (vph)	5	1	33	78	0	17	46	617	83	2	785	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.854			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	5	1	33	78	0	17	46	617	86	2	785	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	34	0	78	17	0	46	617	86	2	785	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

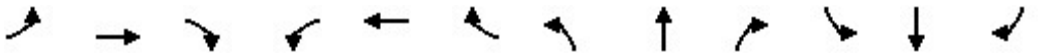
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	33	78	0	17	46	617	83	2	785	3
Future Volume (Veh/h)	5	1	33	78	0	17	46	617	83	2	785	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	5	1	33	78	0	17	46	617	86	2	785	3
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1208	1590	394	1144	1507	314	789			708		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1208	1590	394	1144	1507	314	789			708		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	95	99	94	38	100	98	90			100		
cM capacity (veh/h)	109	97	575	127	109	685	448			500		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	5	34	78	17	46	308	308	86	2	392	392	3
Volume Left	5	0	78	0	46	0	0	0	2	0	0	0
Volume Right	0	33	0	17	0	0	0	86	0	0	0	3
cSH	109	502	127	685	448	1700	1700	1700	500	1700	1700	1700
Volume to Capacity	0.05	0.07	0.62	0.02	0.10	0.18	0.18	0.05	0.00	0.23	0.23	0.00
Queue Length 95th (m)	1.1	1.7	25.3	0.6	2.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	39.7	12.7	70.7	10.4	14.0	0.0	0.0	0.0	12.2	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				B			
Approach Delay (s)	16.2		59.9		0.9				0.0			
Approach LOS	C		F									

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	46.0%	ICU Level of Service		A
Analysis Period (min)	15			

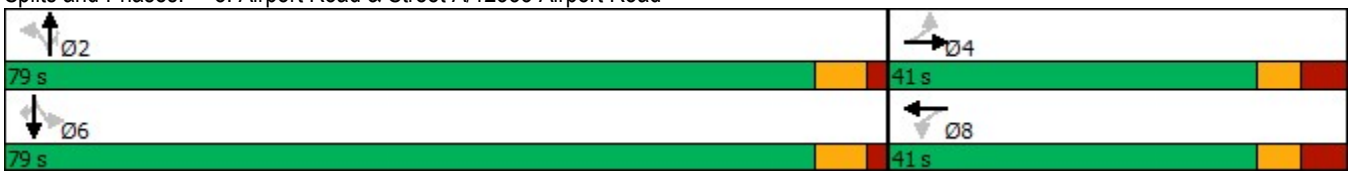


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	0	85	77	0	11	127	402	61	17	625	91
Future Volume (vph)	23	0	85	77	0	11	127	402	61	17	625	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	4.0	3.6	4.0	3.6	3.8	3.5	3.5	3.8	3.6
Storage Length (m)	55.0		0.0	0.0		0.0	0.0		145.0	75.0		55.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1463	1342	0	1328	1324	0	1280	3449	992	1116	3101	1429
Flt Permitted	0.750			0.702			0.415			0.515		
Satd. Flow (perm)	1155	1342	0	981	1324	0	559	3449	992	605	3101	1429
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		284			462				61			91
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		667.0			270.4			438.0			348.1	
Travel Time (s)		48.0			19.5			19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	22%	0%	23%	42%	0%	22%	41%	7%	61%	60%	19%	13%
Adj. Flow (vph)	23	0	85	77	0	11	127	402	61	17	625	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	85	0	77	11	0	127	402	61	17	625	91
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		4.0			4.0			7.1			7.1	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.01	0.97	0.97	0.94	1.00	0.94	1.00	0.97	1.01	1.01	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	10.0	10.0		10.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6		10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2		36.2	36.2		35.6	35.6	35.6	35.6	35.6	35.6
Total Split (s)	41.0	41.0		41.0	41.0		79.0	79.0	79.0	79.0	79.0	79.0
Total Split (%)	34.2%	34.2%		34.2%	34.2%		65.8%	65.8%	65.8%	65.8%	65.8%	65.8%
Maximum Green (s)	32.8	32.8		32.8	32.8		72.4	72.4	72.4	72.4	72.4	72.4
Yellow Time (s)	4.0	4.0		4.0	4.0		4.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2		4.2	4.2		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2		8.2	8.2		6.6	6.6	6.6	6.6	6.6	6.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		21.0	21.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	14.6	14.6		14.6	14.6		78.0	78.0	78.0	78.0	78.0	78.0
Actuated g/C Ratio	0.14	0.14		0.14	0.14		0.77	0.77	0.77	0.77	0.77	0.77
v/c Ratio	0.14	0.19		0.55	0.02		0.30	0.15	0.08	0.04	0.26	0.08
Control Delay	39.7	1.0		55.8	0.1		8.1	4.8	1.7	5.5	5.3	1.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.7	1.0		55.8	0.1		8.1	4.8	1.7	5.5	5.3	1.4
LOS	D	A		E	A		A	A	A	A	A	A
Approach Delay		9.2			48.8			5.2			4.9	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 101.6			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 7.8		Intersection LOS: A	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & Street A/12333 Airport Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	3	252	36	12	354
Future Volume (vph)	12	3	252	36	12	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975		0.983			
Flt Protected	0.961					0.998
Satd. Flow (prot)	1780	0	1836	0	0	1860
Flt Permitted	0.961					0.998
Satd. Flow (perm)	1780	0	1836	0	0	1860
Link Speed (k/h)	50		70			70
Link Distance (m)	379.1		483.3			148.6
Travel Time (s)	27.3		24.9			7.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	13	3	274	39	13	385
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	313	0	0	398
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	3	252	36	12	354
Future Volume (Veh/h)	12	3	252	36	12	354
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)	13	3	274	39	13	385
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	704	294			313	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	704	294			313	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			99	
cM capacity (veh/h)	402	751			1259	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	16	313	398
Volume Left	13	0	13
Volume Right	3	39	0
cSH	440	1700	1259
Volume to Capacity	0.04	0.18	0.01
Queue Length 95th (m)	0.9	0.0	0.3
Control Delay (s)	13.5	0.0	0.4
Lane LOS	B		A
Approach Delay (s)	13.5	0.0	0.4
Approach LOS	B		

Intersection Summary			
Average Delay		0.5	
Intersection Capacity Utilization		38.3%	ICU Level of Service A
Analysis Period (min)		15	

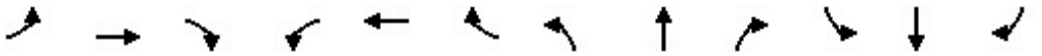
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	3	218	36	12	354
Future Volume (vph)	12	3	218	36	12	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975		0.981			
Flt Protected	0.961					0.998
Satd. Flow (prot)	1780	0	1832	0	0	1860
Flt Permitted	0.961					0.998
Satd. Flow (perm)	1780	0	1832	0	0	1860
Link Speed (k/h)	50		70			70
Link Distance (m)	309.3		148.6			213.3
Travel Time (s)	22.3		7.6			11.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	13	3	237	39	13	385
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	276	0	0	398
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	3	218	36	12	354
Future Volume (Veh/h)	12	3	218	36	12	354
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)	13	3	237	39	13	385
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	668	256			276	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	668	256			276	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			99	
cM capacity (veh/h)	423	787			1299	

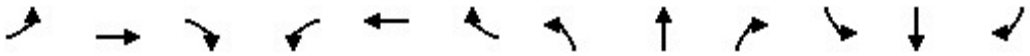
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	16	276	398
Volume Left	13	0	13
Volume Right	3	39	0
cSH	463	1700	1299
Volume to Capacity	0.03	0.16	0.01
Queue Length 95th (m)	0.9	0.0	0.2
Control Delay (s)	13.1	0.0	0.4
Lane LOS	B		A
Approach Delay (s)	13.1	0.0	0.4
Approach LOS	B		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	38.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Future Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	55.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.879			0.927				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	1863	1801	0	1770	1637	0	1770	1727	0	1770	1863	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	1863	1801	0	1770	1637	0	1770	1727	0	1770	1863	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		190.1			667.0			866.6			321.7	
Travel Time (s)		13.7			48.0			62.4			23.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	2	43	16	67	10	70	67	25	26	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	43	83	0	10	137	0	25	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane					Yes			Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Future Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	43	16	67	10	70	67	25	26	0

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	0	9	43	83	10	137	25	26
Volume Left (vph)	0	0	43	0	10	0	25	0
Volume Right (vph)	0	2	0	67	0	67	0	0
Hadj (s)	0.00	-0.12	0.53	-0.53	0.53	-0.31	0.53	0.03
Departure Headway (s)	5.1	5.0	5.5	4.4	5.4	4.6	5.5	5.0
Degree Utilization, x	0.00	0.01	0.07	0.10	0.02	0.17	0.04	0.04
Capacity (veh/h)	685	688	624	773	643	762	630	694
Control Delay (s)	6.9	6.8	7.7	6.7	7.3	7.3	7.5	7.0
Approach Delay (s)	6.8		7.1		7.3		7.2	
Approach LOS	A		A		A		A	

Intersection Summary				
Delay	7.2			
Level of Service	A			
Intersection Capacity Utilization	29.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	19	34	0	0	0
Future Volume (vph)	0	19	34	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0	55.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	1863	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	1863	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	686.5			322.8	112.4	
Travel Time (s)	49.4			23.2	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	21	37	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	21	37	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane	Yes			Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	19	34	0	0	0
Future Volume (vph)	0	19	34	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	21	37	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total (vph)	0	21	37	0	0
Volume Left (vph)	0	0	37	0	0
Volume Right (vph)	0	21	0	0	0
Hadj (s)	0.00	-0.67	0.53	0.00	0.00
Departure Headway (s)	4.6	3.9	5.1	4.5	4.4
Degree Utilization, x	0.00	0.02	0.05	0.00	0.00
Capacity (veh/h)	784	893	696	796	821
Control Delay (s)	6.4	5.8	7.2	6.3	7.4
Approach Delay (s)	5.8		7.2		0.0
Approach LOS	A		A		A

Intersection Summary			
Delay	6.7		
Level of Service	A		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

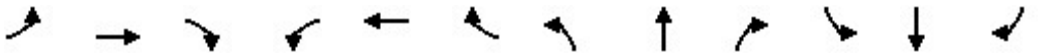
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	27	0	34	91	0	19
Future Volume (vph)	27	0	34	91	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	55.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.902			
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1680	0	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1680	0	1863	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	334.6		321.7			322.8
Travel Time (s)	24.1		23.2			23.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	0	37	99	0	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	136	0	0	21
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.6			3.6
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes		Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	27	0	34	91	0	19
Future Volume (vph)	27	0	34	91	0	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	0	37	99	0	21

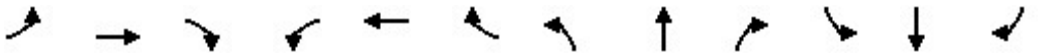
Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total (vph)	29	0	136	0	21
Volume Left (vph)	29	0	0	0	0
Volume Right (vph)	0	0	99	0	0
Hadj (s)	0.53	0.00	-0.40	0.00	0.03
Departure Headway (s)	5.4	4.8	4.0	4.7	4.7
Degree Utilization, x	0.04	0.00	0.15	0.00	0.03
Capacity (veh/h)	648	733	882	772	747
Control Delay (s)	7.4	6.6	7.7	6.5	6.6
Approach Delay (s)	7.4		7.7	6.6	
Approach LOS	A		A	A	

Intersection Summary			
Delay	7.5		
Level of Service	A		
Intersection Capacity Utilization	17.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	80	7	23	279	7	21	228	74	6	67	7
Future Volume (vph)	11	80	7	23	279	7	21	228	74	6	67	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.997			0.969			0.988	
Flt Protected		0.994			0.996			0.997			0.996	
Satd. Flow (prot)	0	1784	0	0	1870	0	0	1762	0	0	1833	0
Flt Permitted		0.994			0.996			0.997			0.996	
Satd. Flow (perm)	0	1784	0	0	1870	0	0	1762	0	0	1833	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	12	87	8	25	303	8	23	248	80	7	73	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	0	0	336	0	0	351	0	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	80	7	23	279	7	21	228	74	6	67	7
Future Volume (vph)	11	80	7	23	279	7	21	228	74	6	67	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	87	8	25	303	8	23	248	80	7	73	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	107	336	351	88
Volume Left (vph)	12	25	23	7
Volume Right (vph)	8	8	80	8
Hadj (s)	0.06	0.02	-0.05	0.00
Departure Headway (s)	5.8	5.3	5.2	5.7
Degree Utilization, x	0.17	0.50	0.51	0.14
Capacity (veh/h)	556	637	644	553
Control Delay (s)	9.9	13.5	13.6	9.7
Approach Delay (s)	9.9	13.5	13.6	9.7
Approach LOS	A	B	B	A

Intersection Summary				
Delay	12.7			
Level of Service	B			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A	
Analysis Period (min)	15			

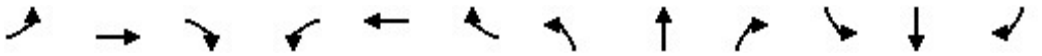
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	109	47	213	51	9	88
Future Volume (vph)	109	47	213	51	9	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	0	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.974			
Flt Protected	0.950					0.995
Satd. Flow (prot)	1770	1583	1814	0	0	1853
Flt Permitted	0.950					0.995
Satd. Flow (perm)	1770	1583	1814	0	0	1853
Link Speed (k/h)	50		70			70
Link Distance (m)	686.5		624.2			1613.1
Travel Time (s)	49.4		32.1			83.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	51	232	55	10	96
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	51	287	0	0	106
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	109	47	213	51	9	88
Future Volume (Veh/h)	109	47	213	51	9	88
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)	118	51	232	55	10	96
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	376	260			287	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	376	260			287	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	81	93			99	
cM capacity (veh/h)	621	779			1275	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	118	51	287	106
Volume Left	118	0	0	10
Volume Right	0	51	55	0
cSH	621	779	1700	1275
Volume to Capacity	0.19	0.07	0.17	0.01
Queue Length 95th (m)	5.6	1.7	0.0	0.2
Control Delay (s)	12.2	9.9	0.0	0.8
Lane LOS	B	A		A
Approach Delay (s)	11.5		0.0	0.8
Approach LOS	B			

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	27.0%	ICU Level of Service	A
Analysis Period (min)	15		

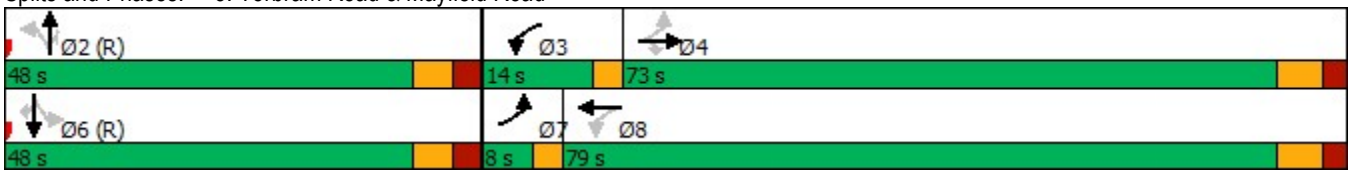


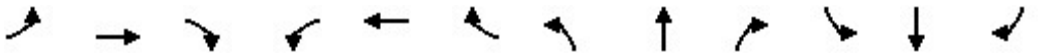
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	1647	243	165	1671	42	305	148	167	49	83	122
Future Volume (vph)	68	1647	243	165	1671	42	305	148	167	49	83	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4850	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.078			0.065			0.703			0.653		
Satd. Flow (perm)	142	4734	1597	122	4850	0	1321	1942	1587	1227	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		4				128			88
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	68	1647	243	165	1671	42	305	148	167	49	83	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	1647	243	165	1713	0	305	148	167	49	83	122
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	73.0	73.0	14.0	79.0		48.0	48.0	48.0	48.0	48.0	48.0
Total Split (%)	5.9%	54.1%	54.1%	10.4%	58.5%		35.6%	35.6%	35.6%	35.6%	35.6%	35.6%
Maximum Green (s)	5.0	65.7	65.7	11.0	71.7		40.9	40.9	40.9	40.9	40.9	40.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	67.5	58.2	58.2	76.2	65.5		48.7	48.7	48.7	48.7	48.7	48.7
Actuated g/C Ratio	0.50	0.43	0.43	0.56	0.49		0.36	0.36	0.36	0.36	0.36	0.36
v/c Ratio	0.53	0.81	0.29	0.82	0.73		0.64	0.21	0.26	0.11	0.12	0.21
Control Delay	27.7	36.7	3.3	84.6	10.5		44.9	32.6	10.6	32.4	31.6	12.1
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	27.7	36.7	3.3	84.6	10.5		44.9	32.6	10.6	32.4	31.6	12.1
LOS	C	D	A	F	B		D	C	B	C	C	B
Approach Delay		32.2			17.0			32.7			22.4	
Approach LOS		C			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 25.7		Intersection LOS: C	
Intersection Capacity Utilization 89.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road



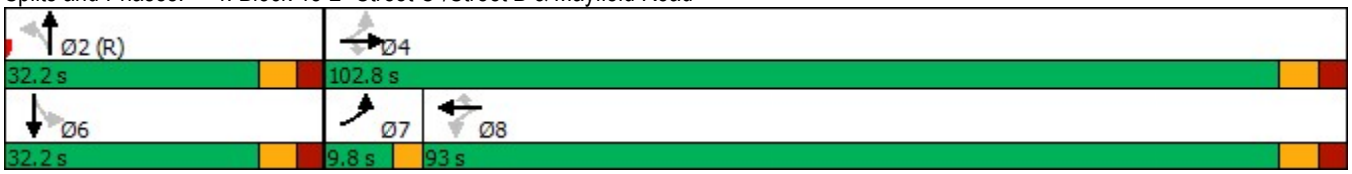


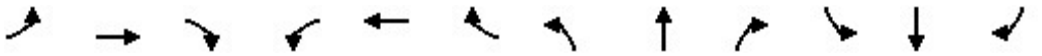
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1713	98	41	1574	21	104	0	23	33	0	176
Future Volume (vph)	55	1713	98	41	1574	21	104	0	23	33	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.5	3.5	3.8	3.6	3.8	3.6	3.8	3.6	3.6	3.6
Storage Length (m)	75.0		55.0	75.0		55.0	55.0		0.0	55.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1517	4734	1566	1750	4864	1170	1809	1583	0	1357	1313	0
Flt Permitted	0.077			0.087			0.617			0.742		
Satd. Flow (perm)	123	4734	1566	160	4864	1170	1175	1583	0	1060	1313	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98			53		57			116	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		716.7			643.7			353.1			866.6	
Travel Time (s)		32.3			29.0			25.4			62.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	19%	12%	2%	2%	9%	38%	2%	0%	2%	33%	0%	23%
Adj. Flow (vph)	55	1713	98	41	1574	21	104	0	23	33	0	176
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	1713	98	41	1574	21	104	23	0	33	176	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.8			3.8	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	0.97	1.01	1.01	0.97	1.00	0.97	1.00	0.97	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	2.0	25.0	10.0		10.0	10.0	
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	2.0	10.0	0.6		10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		5.0	5.0	
Minimum Split (s)	9.5	25.1	25.1	25.1	25.1	25.1	24.6	24.6		24.6	24.6	
Total Split (s)	9.8	102.8	102.8	93.0	93.0	93.0	32.2	32.2		32.2	32.2	
Total Split (%)	7.3%	76.1%	76.1%	68.9%	68.9%	68.9%	23.9%	23.9%		23.9%	23.9%	
Maximum Green (s)	6.8	95.7	95.7	85.9	85.9	85.9	25.6	25.6		25.6	25.6	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.7	3.7		3.7	3.7	
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	6.6	6.6		6.6	6.6	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	Min	Min	Min	C-Max	C-Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	72.7	68.6	68.6	60.8	60.8	60.8	52.7	52.7		52.7	52.7	
Actuated g/C Ratio	0.54	0.51	0.51	0.45	0.45	0.45	0.39	0.39		0.39	0.39	
v/c Ratio	0.42	0.71	0.12	0.57	0.72	0.04	0.23	0.04		0.08	0.30	
Control Delay	40.9	53.1	17.2	68.9	53.7	6.3	31.9	0.1		30.5	13.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	40.9	53.1	17.2	68.9	53.7	6.3	31.9	0.1		30.5	13.2	
LOS	D	D	B	E	D	A	C	A		C	B	
Approach Delay		50.8			53.4			26.2			16.0	
Approach LOS		D			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 49.2		Intersection LOS: D	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C"/Street B & Mayfield Road



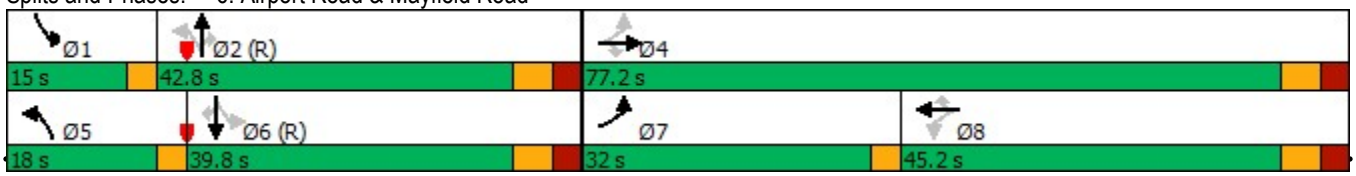


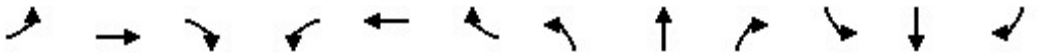
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	966	224	114	944	71	362	578	94	121	412	296
Future Volume (vph)	337	966	224	114	944	71	362	578	94	121	412	296
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	3630	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.097			0.284			0.367			0.323		
Satd. Flow (perm)	132	4939	1493	494	3630	961	655	3386	1426	502	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			224			80			94			296
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	337	966	224	114	944	71	362	578	94	121	412	296
Shared Lane Traffic (%)												
Lane Group Flow (vph)	337	966	224	114	944	71	362	578	94	121	412	296
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	41.1	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	32.0	77.2	77.2	45.2	45.2	45.2	18.0	42.8	42.8	15.0	39.8	39.8
Total Split (%)	23.7%	57.2%	57.2%	33.5%	33.5%	33.5%	13.3%	31.7%	31.7%	11.1%	29.5%	29.5%
Maximum Green (s)	29.0	70.1	70.1	38.1	38.1	38.1	15.0	35.9	35.9	12.0	32.9	32.9
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	Max	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0	27.0	27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0	0	0	0		0	0		0	0
Act Effct Green (s)	74.2	70.1	70.1	38.1	38.1	38.1	54.8	37.4	37.4	47.3	32.9	32.9
Actuated g/C Ratio	0.55	0.52	0.52	0.28	0.28	0.28	0.41	0.28	0.28	0.35	0.24	0.24
v/c Ratio	1.05	0.38	0.25	0.82	0.92	0.22	0.95	0.62	0.20	0.48	0.50	0.54
Control Delay	129.8	10.1	2.8	86.7	61.8	7.8	69.2	46.3	8.2	33.1	46.6	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	10.1	2.8	86.7	61.8	7.8	69.2	46.3	8.2	33.1	46.6	8.4
LOS	F	B	A	F	E	A	E	D	A	C	D	A
Approach Delay		35.4			60.9			50.9			31.0	
Approach LOS		D			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 44.5		Intersection LOS: D	
Intersection Capacity Utilization 110.4%		ICU Level of Service H	
Analysis Period (min) 15			

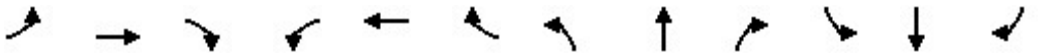
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	76	113	0	4	78	859	90	17	558	6
Future Volume (vph)	8	1	76	113	0	4	78	859	90	17	558	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.852			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	8	1	76	113	0	4	78	859	94	17	558	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	77	0	113	4	0	78	859	94	17	558	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

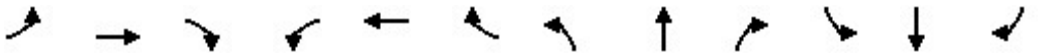
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	859	90	17	558	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	859	90	17	558	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	859	94	17	558	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1182	1707	280	1410	1619	434	565			958		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1182	1707	280	1410	1619	434	565			958		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	93	99	89	0	100	99	87			95		
cM capacity (veh/h)	109	76	685	71	86	573	590			367		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	430	430	94	17	279	279	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	109	620	71	573	590	1700	1700	1700	367	1700	1700	1700
Volume to Capacity	0.07	0.12	1.59	0.01	0.13	0.25	0.25	0.06	0.05	0.16	0.16	0.00
Queue Length 95th (m)	1.9	3.4	77.0	0.2	3.6	0.0	0.0	0.0	1.2	0.0	0.0	0.0
Control Delay (s)	40.5	11.6	418.5	11.3	12.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				C			
Approach Delay (s)	14.3		404.6		0.9				0.4			
Approach LOS	B		F									

Intersection Summary				
Average Delay	27.4			
Intersection Capacity Utilization	50.0%	ICU Level of Service	A	
Analysis Period (min)	15			

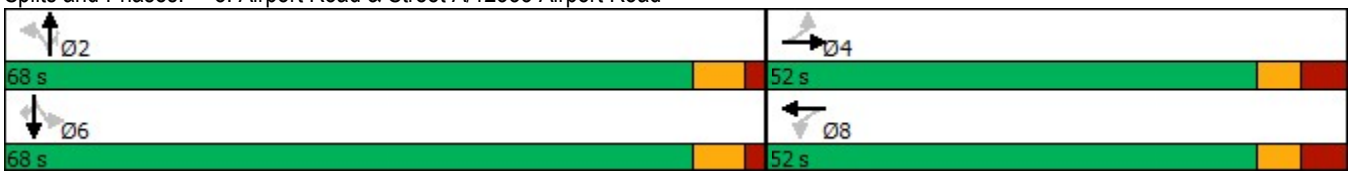


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	0	88	34	0	5	68	754	26	2	418	30
Future Volume (vph)	142	0	88	34	0	5	68	754	26	2	418	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	4.0	3.6	4.0	3.6	3.8	3.5	3.5	3.8	3.6
Storage Length (m)	55.0		0.0	0.0		0.0	0.0		145.0	75.0		55.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1463	1342	0	1328	1324	0	1280	3449	992	1116	3101	1429
Flt Permitted	0.754			0.700			0.507			0.352		
Satd. Flow (perm)	1161	1342	0	978	1324	0	683	3449	992	413	3101	1429
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		380			157				47			47
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		667.0			270.4			438.0			348.1	
Travel Time (s)		48.0			19.5			19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	22%	0%	23%	42%	0%	22%	41%	7%	61%	60%	19%	13%
Adj. Flow (vph)	142	0	88	34	0	5	68	754	26	2	418	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	88	0	34	5	0	68	754	26	2	418	30
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		4.0			4.0			7.1			7.1	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.01	0.97	0.97	0.94	1.00	0.94	1.00	0.97	1.01	1.01	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	10.0	10.0		10.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6		10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2		36.2	36.2		35.6	35.6	35.6	35.6	35.6	35.6
Total Split (s)	52.0	52.0		52.0	52.0		68.0	68.0	68.0	68.0	68.0	68.0
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%	56.7%	56.7%	56.7%	56.7%
Maximum Green (s)	43.8	43.8		43.8	43.8		61.4	61.4	61.4	61.4	61.4	61.4
Yellow Time (s)	4.0	4.0		4.0	4.0		4.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2		4.2	4.2		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2		8.2	8.2		6.6	6.6	6.6	6.6	6.6	6.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		21.0	21.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	17.2	17.2		17.2	17.2		64.2	64.2	64.2	64.2	64.2	64.2
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.67	0.67	0.67	0.67	0.67	0.67
v/c Ratio	0.69	0.16		0.20	0.01		0.15	0.33	0.04	0.01	0.20	0.03
Control Delay	53.3	0.6		34.4	0.0		8.1	7.8	1.1	7.0	7.0	1.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.3	0.6		34.4	0.0		8.1	7.8	1.1	7.0	7.0	1.3
LOS	D	A		C	A		A	A	A	A	A	A
Approach Delay		33.2			30.0			7.7			6.6	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 96.2			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 11.7		Intersection LOS: B	
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & Street A/12333 Airport Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	16	247	15	4	219
Future Volume (vph)	30	16	247	15	4	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.954		0.992			
Flt Protected	0.968					0.999
Satd. Flow (prot)	1755	0	1850	0	0	1861
Flt Permitted	0.968					0.999
Satd. Flow (perm)	1755	0	1850	0	0	1861
Link Speed (k/h)	50		70			70
Link Distance (m)	379.1		483.3			148.6
Travel Time (s)	27.3		24.9			7.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	33	17	268	16	4	238
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	284	0	0	242
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	16	247	15	4	219
Future Volume (Veh/h)	30	16	247	15	4	219
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)	33	17	268	16	4	238
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	522	276			284	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	522	276			284	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			100	
cM capacity (veh/h)	517	768			1290	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	50	284	242
Volume Left	33	0	4
Volume Right	17	16	0
cSH	581	1700	1290
Volume to Capacity	0.09	0.17	0.00
Queue Length 95th (m)	2.2	0.0	0.1
Control Delay (s)	11.8	0.0	0.2
Lane LOS	B		A
Approach Delay (s)	11.8	0.0	0.2
Approach LOS	B		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	24.7%	ICU Level of Service	A
Analysis Period (min)	15		

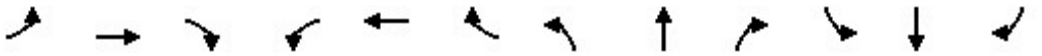
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	16	248	15	4	193
Future Volume (vph)	30	16	248	15	4	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.954		0.992			
Flt Protected	0.968					0.999
Satd. Flow (prot)	1755	0	1850	0	0	1862
Flt Permitted	0.968					0.999
Satd. Flow (perm)	1755	0	1850	0	0	1862
Link Speed (k/h)	50		70			70
Link Distance (m)	309.3		148.6			213.3
Travel Time (s)	22.3		7.6			11.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	33	17	270	16	4	210
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	286	0	0	214
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	16	248	15	4	193
Future Volume (Veh/h)	30	16	248	15	4	193
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)	33	17	270	16	4	210
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	496	278			286	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	496	278			286	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			100	
cM capacity (veh/h)	535	766			1288	

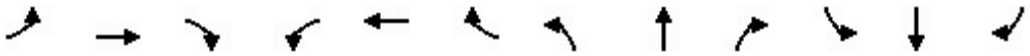
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	50	286	214
Volume Left	33	0	4
Volume Right	17	16	0
cSH	596	1700	1288
Volume to Capacity	0.08	0.17	0.00
Queue Length 95th (m)	2.2	0.0	0.1
Control Delay (s)	11.6	0.0	0.2
Lane LOS	B		A
Approach Delay (s)	11.6	0.0	0.2
Approach LOS	B		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	24.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Future Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	55.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.937			0.883			0.903				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	1863	1745	0	1770	1645	0	1770	1682	0	1770	1863	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	1863	1745	0	1770	1645	0	1770	1682	0	1770	1863	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		190.9			667.0			866.6			326.7	
Travel Time (s)		13.7			48.0			62.4			23.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	15	11	89	8	28	3	27	50	64	74	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	89	36	0	3	77	0	64	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane					Yes			Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Future Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	15	11	89	8	28	3	27	50	64	74	0

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	0	26	89	36	3	77	64	74
Volume Left (vph)	0	0	89	0	3	0	64	0
Volume Right (vph)	0	11	0	28	0	50	0	0
Hadj (s)	0.00	-0.26	0.53	-0.51	0.53	-0.42	0.53	0.03
Departure Headway (s)	5.2	4.9	5.6	4.5	5.6	4.6	5.5	5.0
Degree Utilization, x	0.00	0.04	0.14	0.05	0.00	0.10	0.10	0.10
Capacity (veh/h)	674	696	615	753	621	747	628	693
Control Delay (s)	7.0	6.9	8.3	6.6	7.4	6.9	7.9	7.4
Approach Delay (s)	6.9		7.8		6.9		7.6	
Approach LOS	A		A		A		A	

Intersection Summary				
Delay	7.5			
Level of Service	A			
Intersection Capacity Utilization	27.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	39	16	0	0	0
Future Volume (vph)	0	39	16	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0	55.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	1863	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	1863	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	686.5			317.9	112.4	
Travel Time (s)	49.4			22.9	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	42	17	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	42	17	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane	Yes			Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	39	16	0	0	0
Future Volume (vph)	0	39	16	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	42	17	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total (vph)	0	42	17	0	0
Volume Left (vph)	0	0	17	0	0
Volume Right (vph)	0	42	0	0	0
Hadj (s)	0.00	-0.67	0.53	0.00	0.00
Departure Headway (s)	4.5	3.9	5.1	4.6	4.4
Degree Utilization, x	0.00	0.05	0.02	0.00	0.00
Capacity (veh/h)	796	920	687	785	814
Control Delay (s)	6.3	5.9	7.0	6.4	7.4
Approach Delay (s)	5.9		7.0		0.0
Approach LOS	A		A		A

Intersection Summary			
Delay	6.2		
Level of Service	A		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

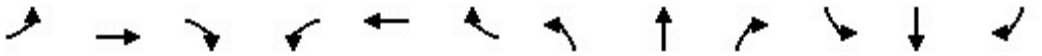
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	87	0	16	34	0	39
Future Volume (vph)	87	0	16	34	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	55.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.907			
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1690	0	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1690	0	1863	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	332.3		326.7			317.9
Travel Time (s)	23.9		23.5			22.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	0	17	37	0	42
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	54	0	0	42
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.6			3.6
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes		Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	87	0	16	34	0	39
Future Volume (vph)	87	0	16	34	0	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	95	0	17	37	0	42

Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total (vph)	95	0	54	0	42
Volume Left (vph)	95	0	0	0	0
Volume Right (vph)	0	0	37	0	0
Hadj (s)	0.53	0.00	-0.38	0.00	0.03
Departure Headway (s)	5.3	4.7	4.2	4.8	4.8
Degree Utilization, x	0.14	0.00	0.06	0.00	0.06
Capacity (veh/h)	670	758	820	743	718
Control Delay (s)	7.9	6.5	7.5	6.6	6.9
Approach Delay (s)	7.9		7.5	6.9	
Approach LOS	A		A	A	

Intersection Summary			
Delay	7.6		
Level of Service	A		
Intersection Capacity Utilization	14.8%	ICU Level of Service	A
Analysis Period (min)	15		

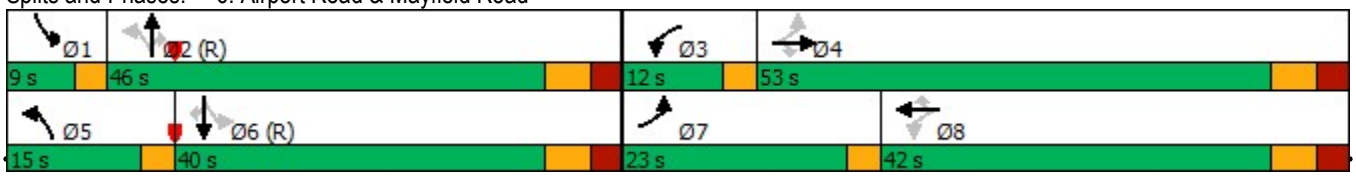


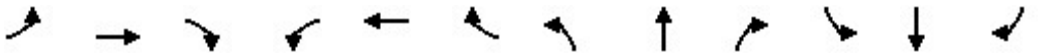
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	923	429	98	1006	56	267	315	87	85	639	202
Future Volume (vph)	238	923	429	98	1006	56	267	315	87	85	639	202
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	3630	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.103			0.297			0.227			0.561		
Satd. Flow (perm)	140	4939	1493	516	3630	961	406	3386	1426	871	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			317			145			119			202
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	238	923	429	98	1006	56	267	315	87	85	639	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	923	429	98	1006	56	267	315	87	85	639	202
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	39.9	39.9	9.0	36.9	36.9
Total Split (s)	23.0	53.0	53.0	12.0	42.0	42.0	15.0	46.0	46.0	9.0	40.0	40.0
Total Split (%)	19.2%	44.2%	44.2%	10.0%	35.0%	35.0%	12.5%	38.3%	38.3%	7.5%	33.3%	33.3%
Maximum Green (s)	20.0	45.9	45.9	9.0	34.9	34.9	12.0	39.1	39.1	6.0	33.1	33.1
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	62.0	47.1	47.1	47.8	36.0	36.0	52.0	40.9	40.9	42.9	33.1	33.1
Actuated g/C Ratio	0.52	0.39	0.39	0.40	0.30	0.30	0.43	0.34	0.34	0.36	0.28	0.28
v/c Ratio	0.94	0.48	0.55	0.35	0.93	0.14	0.88	0.27	0.15	0.25	0.69	0.39
Control Delay	92.2	39.1	20.9	19.7	55.7	0.8	53.9	30.1	2.7	23.4	43.5	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	0.0
Total Delay	92.2	39.1	20.9	19.7	55.7	0.8	53.9	30.1	2.7	23.4	43.5	7.0
LOS	F	D	C	B	E	A	D	C	A	C	D	A
Approach Delay		42.1			50.0			36.1			33.7	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 41.5		Intersection LOS: D	
Intersection Capacity Utilization 99.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Mayfield Road



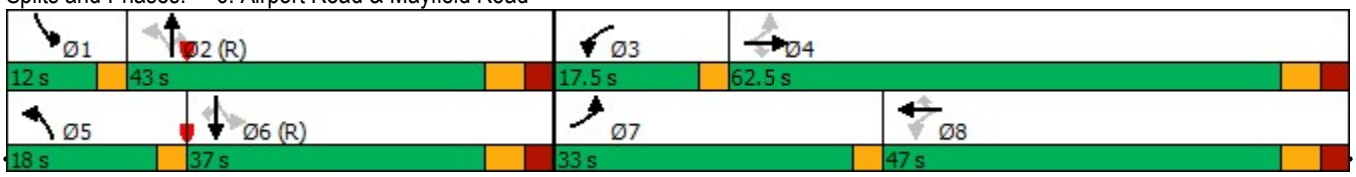


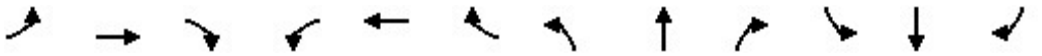
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	966	224	114	944	71	362	578	94	121	412	296
Future Volume (vph)	337	966	224	114	944	71	362	578	94	121	412	296
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	3630	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.093			0.284			0.349			0.335		
Satd. Flow (perm)	127	4939	1493	494	3630	961	623	3386	1426	520	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			224			128			106			296
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	337	966	224	114	944	71	362	578	94	121	412	296
Shared Lane Traffic (%)												
Lane Group Flow (vph)	337	966	224	114	944	71	362	578	94	121	412	296
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	33.0	62.5	62.5	17.5	47.0	47.0	18.0	43.0	43.0	12.0	37.0	37.0
Total Split (%)	24.4%	46.3%	46.3%	13.0%	34.8%	34.8%	13.3%	31.9%	31.9%	8.9%	27.4%	27.4%
Maximum Green (s)	30.0	55.4	55.4	14.5	39.9	39.9	15.0	36.1	36.1	9.0	30.1	30.1
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	77.0	61.0	61.0	52.9	39.9	39.9	52.0	36.4	36.4	42.7	30.1	30.1
Actuated g/C Ratio	0.57	0.45	0.45	0.39	0.30	0.30	0.39	0.27	0.27	0.32	0.22	0.22
v/c Ratio	1.02	0.43	0.28	0.42	0.88	0.19	1.01	0.63	0.20	0.54	0.55	0.56
Control Delay	121.3	12.5	3.1	21.1	55.9	1.1	85.8	47.2	6.3	38.8	49.7	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	121.3	12.5	3.1	21.1	55.9	1.1	85.8	47.2	6.3	38.8	49.7	9.2
LOS	F	B	A	C	E	A	F	D	A	D	D	A
Approach Delay		35.2			49.0			57.0			33.6	
Approach LOS		D			D			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 43.3		Intersection LOS: D	
Intersection Capacity Utilization 110.4%		ICU Level of Service H	
Analysis Period (min) 15			

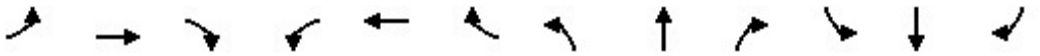
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	191	19	45	82	1	6	82	29	4	286	11
Future Volume (vph)	6	191	19	45	82	1	6	82	29	4	286	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.999			0.966			0.995	
Flt Protected		0.999			0.983			0.997			0.999	
Satd. Flow (prot)	0	1804	0	0	1854	0	0	1753	0	0	1883	0
Flt Permitted		0.999			0.983			0.997			0.999	
Satd. Flow (perm)	0	1804	0	0	1854	0	0	1753	0	0	1883	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	7	208	21	49	89	1	7	89	32	4	311	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	236	0	0	139	0	0	128	0	0	327	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	191	19	45	82	1	6	82	29	4	286	11
Future Volume (vph)	6	191	19	45	82	1	6	82	29	4	286	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	208	21	49	89	1	7	89	32	4	311	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	236	139	128	327
Volume Left (vph)	7	49	7	4
Volume Right (vph)	21	1	32	12
Hadj (s)	0.02	0.08	-0.06	-0.01
Departure Headway (s)	5.4	5.6	5.4	5.2
Degree Utilization, x	0.35	0.22	0.19	0.47
Capacity (veh/h)	617	576	591	658
Control Delay (s)	11.3	10.2	9.7	12.6
Approach Delay (s)	11.3	10.2	9.7	12.6
Approach LOS	B	B	A	B

Intersection Summary				
Delay	11.4			
Level of Service	B			
Intersection Capacity Utilization	45.4%	ICU Level of Service	A	
Analysis Period (min)	15			

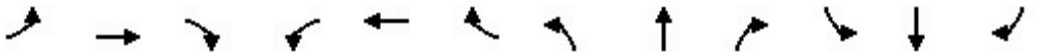
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	65	8	120	112	28	328
Future Volume (vph)	65	8	120	112	28	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	0	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.935			
Flt Protected	0.950					0.996
Satd. Flow (prot)	1770	1583	1742	0	0	1855
Flt Permitted	0.950					0.996
Satd. Flow (perm)	1770	1583	1742	0	0	1855
Link Speed (k/h)	50		70			70
Link Distance (m)	686.5		624.2			1613.1
Travel Time (s)	49.4		32.1			83.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	9	130	122	30	357
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	9	252	0	0	387
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	65	8	120	112	28	328
Future Volume (Veh/h)	65	8	120	112	28	328
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)	71	9	130	122	30	357
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	608	191			252	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	608	191			252	
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			98	
cM capacity (veh/h)	448	851			1313	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	71	9	252	387
Volume Left	71	0	0	30
Volume Right	0	9	122	0
cSH	448	851	1700	1313
Volume to Capacity	0.16	0.01	0.15	0.02
Queue Length 95th (m)	4.5	0.3	0.0	0.6
Control Delay (s)	14.5	9.3	0.0	0.8
Lane LOS	B	A		A
Approach Delay (s)	13.9		0.0	0.8
Approach LOS	B			

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

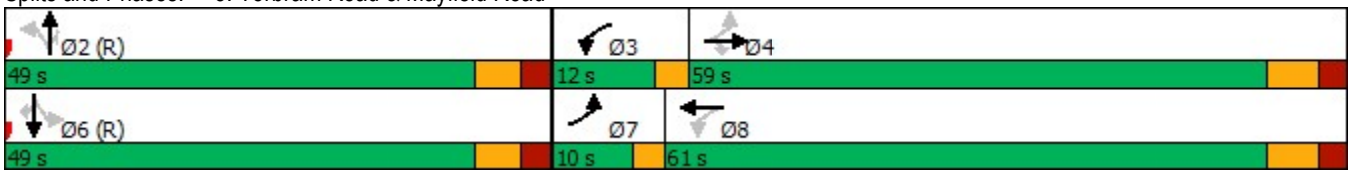


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	1988	259	187	1635	66	292	108	132	55	261	74
Future Volume (vph)	116	1988	259	187	1635	66	292	108	132	55	261	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.994				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4844	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.077			0.074			0.510			0.687		
Satd. Flow (perm)	140	4734	1597	139	4844	0	958	1942	1587	1291	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259		6				132			74
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	116	1988	259	187	1635	66	292	108	132	55	261	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	1988	259	187	1701	0	292	108	132	55	261	74
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	10.0	59.0	59.0	12.0	61.0		49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	8.3%	49.2%	49.2%	10.0%	50.8%		40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Maximum Green (s)	7.0	51.7	51.7	9.0	53.7		41.9	41.9	41.9	41.9	41.9	41.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	62.9	51.7	51.7	67.1	53.8		41.9	41.9	41.9	41.9	41.9	41.9
Actuated g/C Ratio	0.52	0.43	0.43	0.56	0.45		0.35	0.35	0.35	0.35	0.35	0.35
v/c Ratio	0.70	0.97	0.31	0.93	0.78		0.87	0.16	0.21	0.12	0.38	0.13
Control Delay	41.7	48.6	3.5	79.7	29.3		63.7	27.8	5.3	27.6	31.5	6.5
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	41.7	48.6	3.5	79.7	29.3		63.7	27.8	5.3	27.6	31.5	6.5
LOS	D	D	A	E	C		E	C	A	C	C	A
Approach Delay		43.4			34.3			41.9			26.2	
Approach LOS		D			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 38.6		Intersection LOS: D	
Intersection Capacity Utilization 99.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

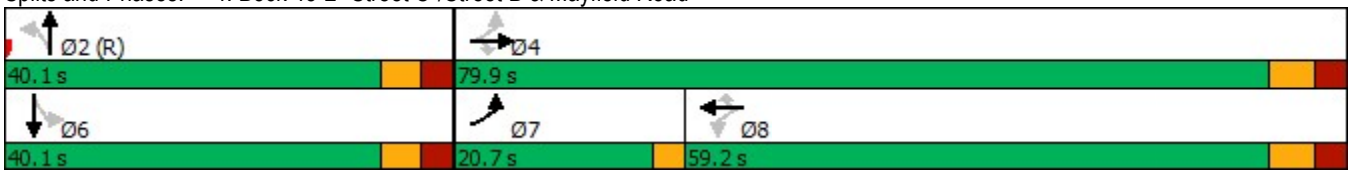


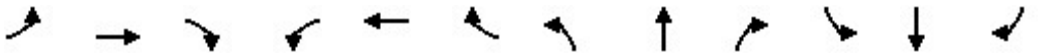
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	1957	110	14	1696	42	231	0	35	22	0	48
Future Volume (vph)	154	1957	110	14	1696	42	231	0	35	22	0	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.5	3.5	3.8	3.6	3.8	3.6	3.8	3.6	3.6	3.6
Storage Length (m)	75.0		55.0	75.0		55.0	55.0		0.0	55.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1517	4734	1566	1750	4864	1170	1809	1583	0	1357	1313	0
Flt Permitted	0.077			0.081			0.726			0.734		
Satd. Flow (perm)	123	4734	1566	149	4864	1170	1382	1583	0	1049	1313	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			92			60		65			280	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		716.7			643.7			353.1			866.6	
Travel Time (s)		32.3			29.0			25.4			62.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	19%	12%	2%	2%	9%	38%	2%	0%	2%	33%	0%	23%
Adj. Flow (vph)	154	1957	110	14	1696	42	231	0	35	22	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	1957	110	14	1696	42	231	35	0	22	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.8			3.8	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	0.97	1.01	1.01	0.97	1.00	0.97	1.00	0.97	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	2.0	25.0	10.0		10.0	10.0	
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	2.0	10.0	0.6		10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		5.0	5.0	
Minimum Split (s)	9.5	25.1	25.1	25.1	25.1	25.1	24.6	24.6		24.6	24.6	
Total Split (s)	20.7	79.9	79.9	59.2	59.2	59.2	40.1	40.1		40.1	40.1	
Total Split (%)	17.3%	66.6%	66.6%	49.3%	49.3%	49.3%	33.4%	33.4%		33.4%	33.4%	
Maximum Green (s)	17.7	72.8	72.8	52.1	52.1	52.1	33.5	33.5		33.5	33.5	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.7	3.7		3.7	3.7	
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	6.6	6.6		6.6	6.6	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	Min	Min	Min	C-Max	C-Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	69.2	65.1	65.1	49.2	49.2	49.2	41.2	41.2		41.2	41.2	
Actuated g/C Ratio	0.58	0.54	0.54	0.41	0.41	0.41	0.34	0.34		0.34	0.34	
v/c Ratio	0.70	0.76	0.12	0.23	0.85	0.08	0.49	0.06		0.06	0.08	
Control Delay	45.8	40.6	13.4	28.9	38.0	3.6	37.7	2.3		31.1	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	45.8	40.6	13.4	28.9	38.0	3.6	37.7	2.3		31.1	0.2	
LOS	D	D	B	C	D	A	D	A		C	A	
Approach Delay		39.7			37.1			33.0			9.9	
Approach LOS		D			D			C			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 37.7		Intersection LOS: D	
Intersection Capacity Utilization 84.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Bock 48-2 "Street C"/Street B & Mayfield Road



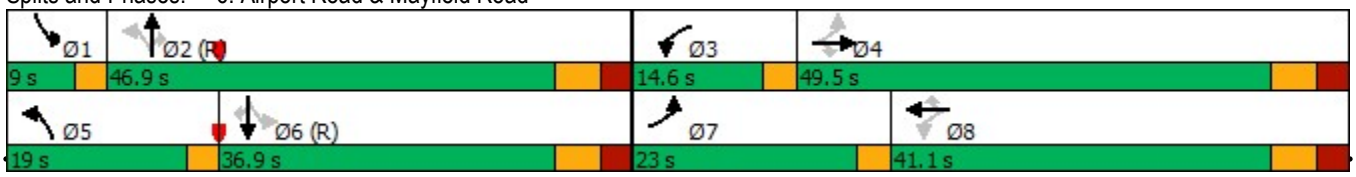


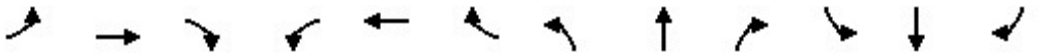
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	249	1111	445	103	1158	58	275	326	91	88	668	209
Future Volume (vph)	249	1111	445	103	1158	58	275	326	91	88	668	209
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.106			0.218			0.187			0.555		
Satd. Flow (perm)	144	4939	1493	379	5216	961	334	3386	1426	862	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			381			145			119			209
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	249	1111	445	103	1158	58	275	326	91	88	668	209
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	1111	445	103	1158	58	275	326	91	88	668	209
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	23.0	49.5	49.5	14.6	41.1	41.1	19.0	46.9	46.9	9.0	36.9	36.9
Total Split (%)	19.2%	41.3%	41.3%	12.2%	34.3%	34.3%	15.8%	39.1%	39.1%	7.5%	30.8%	30.8%
Maximum Green (s)	20.0	42.4	42.4	11.6	34.0	34.0	16.0	40.0	40.0	6.0	30.0	30.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	61.1	45.5	45.5	47.2	34.6	34.6	52.9	40.1	40.1	40.4	30.6	30.6
Actuated g/C Ratio	0.51	0.38	0.38	0.39	0.29	0.29	0.44	0.33	0.33	0.34	0.26	0.26
v/c Ratio	0.96	0.59	0.55	0.43	0.77	0.15	0.85	0.29	0.16	0.28	0.78	0.42
Control Delay	90.6	43.2	18.7	22.3	43.4	0.8	48.0	30.3	3.0	24.0	49.3	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.6	43.2	18.7	22.3	43.4	0.8	48.0	30.3	3.0	24.0	49.3	7.7
LOS	F	D	B	C	D	A	D	C	A	C	D	A
Approach Delay		43.7			39.9			33.8			37.9	
Approach LOS		D			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 40.0		Intersection LOS: D	
Intersection Capacity Utilization 100.7%		ICU Level of Service G	
Analysis Period (min) 15			

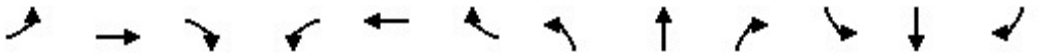
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	33	78	0	17	46	640	83	2	816	3
Future Volume (vph)	5	1	33	78	0	17	46	640	83	2	816	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.854			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	5	1	33	78	0	17	46	640	86	2	816	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	34	0	78	17	0	46	640	86	2	816	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

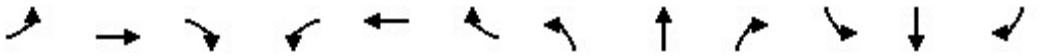
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	33	78	0	17	46	640	83	2	816	3
Future Volume (Veh/h)	5	1	33	78	0	17	46	640	83	2	816	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	5	1	33	78	0	17	46	640	86	2	816	3
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1250	1644	409	1182	1561	325	820			731		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1250	1644	409	1182	1561	325	820			731		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	95	99	94	34	100	97	89			100		
cM capacity (veh/h)	100	89	561	118	100	674	431			486		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	5	34	78	17	46	320	320	86	2	408	408	3
Volume Left	5	0	78	0	46	0	0	0	2	0	0	0
Volume Right	0	33	0	17	0	0	0	86	0	0	0	3
cSH	100	486	118	674	431	1700	1700	1700	486	1700	1700	1700
Volume to Capacity	0.05	0.07	0.66	0.03	0.11	0.19	0.19	0.05	0.00	0.24	0.24	0.00
Queue Length 95th (m)	1.2	1.8	27.7	0.6	2.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	42.7	13.0	81.2	10.5	14.4	0.0	0.0	0.0	12.4	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				B			
Approach Delay (s)	16.8		68.6		0.9				0.0			
Approach LOS	C		F									

Intersection Summary					
Average Delay	4.5				
Intersection Capacity Utilization	46.9%	ICU Level of Service		A	
Analysis Period (min)	15				

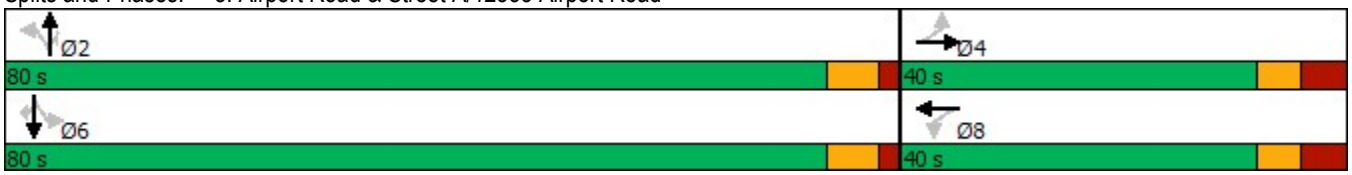


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	0	85	77	0	11	127	422	61	17	652	91
Future Volume (vph)	23	0	85	77	0	11	127	422	61	17	652	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	4.0	3.6	4.0	3.6	3.8	3.5	3.5	3.8	3.6
Storage Length (m)	55.0		0.0	0.0		0.0	0.0		145.0	75.0		55.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1463	1342	0	1328	1324	0	1280	3449	992	1116	3101	1429
Flt Permitted	0.750			0.702			0.404			0.506		
Satd. Flow (perm)	1155	1342	0	981	1324	0	544	3449	992	594	3101	1429
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		273			449				61			91
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		667.0			270.4			438.0			348.1	
Travel Time (s)		48.0			19.5			19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	22%	0%	23%	42%	0%	22%	41%	7%	61%	60%	19%	13%
Adj. Flow (vph)	23	0	85	77	0	11	127	422	61	17	652	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	85	0	77	11	0	127	422	61	17	652	91
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		4.0			4.0			7.1			7.1	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.01	0.97	0.97	0.94	1.00	0.94	1.00	0.97	1.01	1.01	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	10.0	10.0		10.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6		10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2		36.2	36.2		35.6	35.6	35.6	35.6	35.6	35.6
Total Split (s)	40.0	40.0		40.0	40.0		80.0	80.0	80.0	80.0	80.0	80.0
Total Split (%)	33.3%	33.3%		33.3%	33.3%		66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
Maximum Green (s)	31.8	31.8		31.8	31.8		73.4	73.4	73.4	73.4	73.4	73.4
Yellow Time (s)	4.0	4.0		4.0	4.0		4.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2		4.2	4.2		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2		8.2	8.2		6.6	6.6	6.6	6.6	6.6	6.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		21.0	21.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	14.6	14.6		14.6	14.6		78.9	78.9	78.9	78.9	78.9	78.9
Actuated g/C Ratio	0.14	0.14		0.14	0.14		0.77	0.77	0.77	0.77	0.77	0.77
v/c Ratio	0.14	0.20		0.55	0.02		0.30	0.16	0.08	0.04	0.27	0.08
Control Delay	40.2	1.1		56.6	0.1		8.3	4.8	1.7	5.4	5.4	1.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.2	1.1		56.6	0.1		8.3	4.8	1.7	5.4	5.4	1.4
LOS	D	A		E	A		A	A	A	A	A	A
Approach Delay		9.4			49.6			5.2			4.9	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 102.6			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 7.8		Intersection LOS: A	
Intersection Capacity Utilization 56.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & Street A/12333 Airport Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	3	263	36	12	381
Future Volume (vph)	12	3	263	36	12	381
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975		0.984			
Flt Protected	0.961					0.998
Satd. Flow (prot)	1780	0	1837	0	0	1860
Flt Permitted	0.961					0.998
Satd. Flow (perm)	1780	0	1837	0	0	1860
Link Speed (k/h)	50		70			70
Link Distance (m)	379.1		483.3			148.6
Travel Time (s)	27.3		24.9			7.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	13	3	286	39	13	414
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	325	0	0	427
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	3	263	36	12	381
Future Volume (Veh/h)	12	3	263	36	12	381
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)	13	3	286	39	13	414
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	746	306			325	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	746	306			325	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			99	
cM capacity (veh/h)	380	739			1246	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	16	325	427
Volume Left	13	0	13
Volume Right	3	39	0
cSH	418	1700	1246
Volume to Capacity	0.04	0.19	0.01
Queue Length 95th (m)	1.0	0.0	0.3
Control Delay (s)	13.9	0.0	0.3
Lane LOS	B		A
Approach Delay (s)	13.9	0.0	0.3
Approach LOS	B		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		

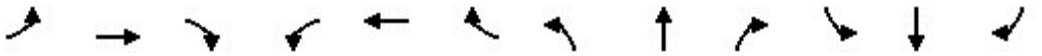
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	3	229	36	12	381
Future Volume (vph)	12	3	229	36	12	381
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975		0.982			
Flt Protected	0.961					0.998
Satd. Flow (prot)	1780	0	1834	0	0	1860
Flt Permitted	0.961					0.998
Satd. Flow (perm)	1780	0	1834	0	0	1860
Link Speed (k/h)	50		70			70
Link Distance (m)	309.3		148.6			213.3
Travel Time (s)	22.3		7.6			11.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	13	3	249	39	13	414
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	288	0	0	427
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	3	229	36	12	381
Future Volume (Veh/h)	12	3	229	36	12	381
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)	13	3	249	39	13	414
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	708	268			288	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	708	268			288	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			99	
cM capacity (veh/h)	400	775			1286	

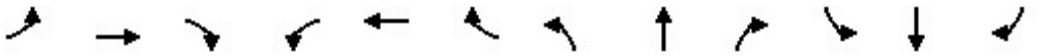
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	16	288	427
Volume Left	13	0	13
Volume Right	3	39	0
cSH	440	1700	1286
Volume to Capacity	0.04	0.17	0.01
Queue Length 95th (m)	0.9	0.0	0.2
Control Delay (s)	13.5	0.0	0.3
Lane LOS	B		A
Approach Delay (s)	13.5	0.0	0.3
Approach LOS	B		

Intersection Summary			
Average Delay		0.5	
Intersection Capacity Utilization		39.7%	ICU Level of Service A
Analysis Period (min)		15	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Future Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	55.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.879			0.927				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	1863	1801	0	1770	1637	0	1770	1727	0	1770	1863	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	1863	1801	0	1770	1637	0	1770	1727	0	1770	1863	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		187.0			667.0			866.6			324.0	
Travel Time (s)		13.5			48.0			62.4			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	2	43	16	67	10	70	67	25	26	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	43	83	0	10	137	0	25	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane					Yes			Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Future Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	43	16	67	10	70	67	25	26	0

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	0	9	43	83	10	137	25	26
Volume Left (vph)	0	0	43	0	10	0	25	0
Volume Right (vph)	0	2	0	67	0	67	0	0
Hadj (s)	0.00	-0.12	0.53	-0.53	0.53	-0.31	0.53	0.03
Departure Headway (s)	5.1	5.0	5.5	4.4	5.4	4.6	5.5	5.0
Degree Utilization, x	0.00	0.01	0.07	0.10	0.02	0.17	0.04	0.04
Capacity (veh/h)	685	688	624	773	643	762	630	694
Control Delay (s)	6.9	6.8	7.7	6.7	7.3	7.3	7.5	7.0
Approach Delay (s)	6.8		7.1		7.3		7.2	
Approach LOS	A		A		A		A	

Intersection Summary				
Delay	7.2			
Level of Service	A			
Intersection Capacity Utilization	29.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	19	34	0	0	0
Future Volume (vph)	0	19	34	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0	55.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	1863	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	1863	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	686.5			320.5	112.4	
Travel Time (s)	49.4			23.1	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	21	37	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	21	37	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane	Yes			Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	19	34	0	0	0
Future Volume (vph)	0	19	34	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	21	37	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total (vph)	0	21	37	0	0
Volume Left (vph)	0	0	37	0	0
Volume Right (vph)	0	21	0	0	0
Hadj (s)	0.00	-0.67	0.53	0.00	0.00
Departure Headway (s)	4.6	3.9	5.1	4.5	4.4
Degree Utilization, x	0.00	0.02	0.05	0.00	0.00
Capacity (veh/h)	784	893	696	796	821
Control Delay (s)	6.4	5.8	7.2	6.3	7.4
Approach Delay (s)	5.8		7.2		0.0
Approach LOS	A		A		A

Intersection Summary			
Delay	6.7		
Level of Service	A		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

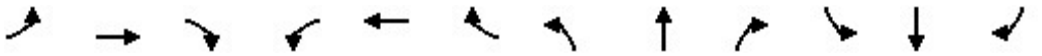
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	27	0	34	91	0	19
Future Volume (vph)	27	0	34	91	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.902			
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1680	0	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1680	0	1863	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	337.3		324.0			320.5
Travel Time (s)	24.3		23.3			23.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	0	37	99	0	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	136	0	0	21
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		7.2			7.2
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes		Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	27	0	34	91	0	19
Future Volume (vph)	27	0	34	91	0	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	0	37	99	0	21

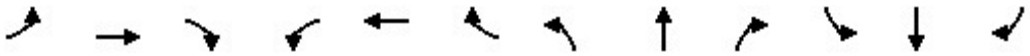
Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total (vph)	29	0	136	0	21
Volume Left (vph)	29	0	0	0	0
Volume Right (vph)	0	0	99	0	0
Hadj (s)	0.53	0.00	-0.40	0.00	0.03
Departure Headway (s)	5.4	4.8	4.0	4.7	4.7
Degree Utilization, x	0.04	0.00	0.15	0.00	0.03
Capacity (veh/h)	648	733	882	772	747
Control Delay (s)	7.4	6.6	7.7	6.5	6.6
Approach Delay (s)	7.4		7.7	6.6	
Approach LOS	A		A	A	

Intersection Summary			
Delay	7.5		
Level of Service	A		
Intersection Capacity Utilization	17.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	89	7	23	307	7	21	249	74	6	73	7
Future Volume (vph)	11	89	7	23	307	7	21	249	74	6	73	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.997			0.971			0.989	
Flt Protected		0.995			0.997			0.997			0.996	
Satd. Flow (prot)	0	1788	0	0	1872	0	0	1768	0	0	1837	0
Flt Permitted		0.995			0.997			0.997			0.996	
Satd. Flow (perm)	0	1788	0	0	1872	0	0	1768	0	0	1837	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	12	97	8	25	334	8	23	271	80	7	79	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	367	0	0	374	0	0	94	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	89	7	23	307	7	21	249	74	6	73	7
Future Volume (vph)	11	89	7	23	307	7	21	249	74	6	73	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	97	8	25	334	8	23	271	80	7	79	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	117	367	374	94
Volume Left (vph)	12	25	23	7
Volume Right (vph)	8	8	80	8
Hadj (s)	0.06	0.02	-0.05	0.00
Departure Headway (s)	6.0	5.5	5.4	6.0
Degree Utilization, x	0.19	0.56	0.56	0.16
Capacity (veh/h)	532	622	625	514
Control Delay (s)	10.4	15.2	15.2	10.1
Approach Delay (s)	10.4	15.2	15.2	10.1
Approach LOS	B	C	C	B

Intersection Summary				
Delay		14.1		
Level of Service		B		
Intersection Capacity Utilization		51.8%	ICU Level of Service	A
Analysis Period (min)		15		

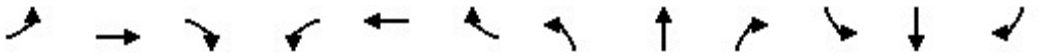
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	109	47	232	51	9	96
Future Volume (vph)	109	47	232	51	9	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	0	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.976			
Flt Protected	0.950					0.996
Satd. Flow (prot)	1770	1583	1818	0	0	1855
Flt Permitted	0.950					0.996
Satd. Flow (perm)	1770	1583	1818	0	0	1855
Link Speed (k/h)	50		70			70
Link Distance (m)	686.5		624.2			1613.1
Travel Time (s)	49.4		32.1			83.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	51	252	55	10	104
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	51	307	0	0	114
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	109	47	232	51	9	96
Future Volume (Veh/h)	109	47	232	51	9	96
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)	118	51	252	55	10	104
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	404	280			307	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	404	280			307	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	80	93			99	
cM capacity (veh/h)	598	759			1254	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	118	51	307	114
Volume Left	118	0	0	10
Volume Right	0	51	55	0
cSH	598	759	1700	1254
Volume to Capacity	0.20	0.07	0.18	0.01
Queue Length 95th (m)	5.8	1.7	0.0	0.2
Control Delay (s)	12.5	10.1	0.0	0.8
Lane LOS	B	B		A
Approach Delay (s)	11.8		0.0	0.8
Approach LOS	B			

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	28.0%	ICU Level of Service	A
Analysis Period (min)	15		

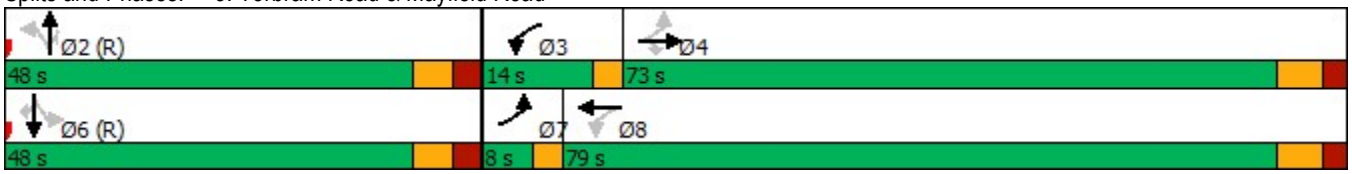


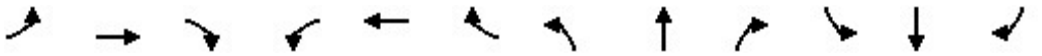
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	1951	243	165	2019	42	305	161	167	49	88	122
Future Volume (vph)	68	1951	243	165	2019	42	305	161	167	49	88	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4854	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.062			0.059			0.700			0.625		
Satd. Flow (perm)	113	4734	1597	111	4854	0	1315	1942	1587	1174	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		3				122			83
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	68	1951	243	165	2019	42	305	161	167	49	88	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	1951	243	165	2061	0	305	161	167	49	88	122
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	73.0	73.0	14.0	79.0		48.0	48.0	48.0	48.0	48.0	48.0
Total Split (%)	5.9%	54.1%	54.1%	10.4%	58.5%		35.6%	35.6%	35.6%	35.6%	35.6%	35.6%
Maximum Green (s)	5.0	65.7	65.7	11.0	71.7		40.9	40.9	40.9	40.9	40.9	40.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	73.1	63.8	63.8	81.7	71.0		43.2	43.2	43.2	43.2	43.2	43.2
Actuated g/C Ratio	0.54	0.47	0.47	0.61	0.53		0.32	0.32	0.32	0.32	0.32	0.32
v/c Ratio	0.57	0.87	0.28	0.83	0.81		0.73	0.26	0.28	0.13	0.14	0.23
Control Delay	33.3	37.1	3.0	75.3	21.6		52.9	36.3	12.4	35.3	34.6	14.1
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	33.3	37.1	3.0	75.3	21.6		52.9	36.3	12.4	35.3	34.6	14.1
LOS	C	D	A	E	C		D	D	B	D	C	B
Approach Delay		33.3			25.5			38.0			25.1	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 30.3		Intersection LOS: C	
Intersection Capacity Utilization 95.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road



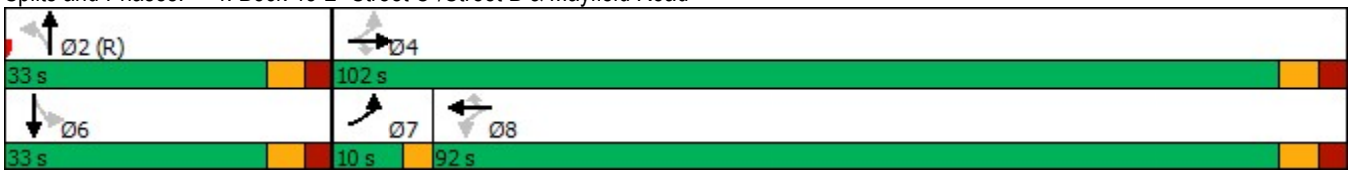


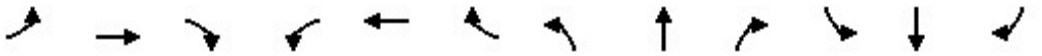
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	2036	98	41	1946	21	104	0	23	33	0	176
Future Volume (vph)	55	2036	98	41	1946	21	104	0	23	33	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.5	3.5	3.8	3.6	3.8	3.6	3.8	3.6	3.6	3.6
Storage Length (m)	75.0		55.0	75.0		55.0	55.0		0.0	55.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1517	4734	1566	1750	4864	1170	1809	1583	0	1357	1313	0
Flt Permitted	0.054			0.065			0.581			0.742		
Satd. Flow (perm)	86	4734	1566	120	4864	1170	1106	1583	0	1060	1313	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			93			53		57			98	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		716.7			643.7			353.1			866.6	
Travel Time (s)		32.3			29.0			25.4			62.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	19%	12%	2%	2%	9%	38%	2%	0%	2%	33%	0%	23%
Adj. Flow (vph)	55	2036	98	41	1946	21	104	0	23	33	0	176
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	2036	98	41	1946	21	104	23	0	33	176	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.8			3.8	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	0.97	1.01	1.01	0.97	1.00	0.97	1.00	0.97	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	2.0	25.0	10.0		10.0	10.0	
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	2.0	10.0	0.6		10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		5.0	5.0	
Minimum Split (s)	9.5	25.1	25.1	25.1	25.1	25.1	24.6	24.6		24.6	24.6	
Total Split (s)	10.0	102.0	102.0	92.0	92.0	92.0	33.0	33.0		33.0	33.0	
Total Split (%)	7.4%	75.6%	75.6%	68.1%	68.1%	68.1%	24.4%	24.4%		24.4%	24.4%	
Maximum Green (s)	7.0	94.9	94.9	84.9	84.9	84.9	26.4	26.4		26.4	26.4	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.7	3.7		3.7	3.7	
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	6.6	6.6		6.6	6.6	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	Min	Min	Min	C-Max	C-Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	86.4	82.3	82.3	74.4	74.4	74.4	39.0	39.0		39.0	39.0	
Actuated g/C Ratio	0.64	0.61	0.61	0.55	0.55	0.55	0.29	0.29		0.29	0.29	
v/c Ratio	0.45	0.71	0.10	0.62	0.73	0.03	0.33	0.05		0.11	0.39	
Control Delay	33.2	32.2	8.7	63.2	38.4	1.3	44.8	0.2		41.5	22.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	33.2	32.2	8.7	63.2	38.4	1.3	44.8	0.2		41.5	22.2	
LOS	C	C	A	E	D	A	D	A		D	C	
Approach Delay		31.2			38.6			36.7			25.3	
Approach LOS		C			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 34.3		Intersection LOS: C	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Bock 48-2 "Street C"/Street B & Mayfield Road



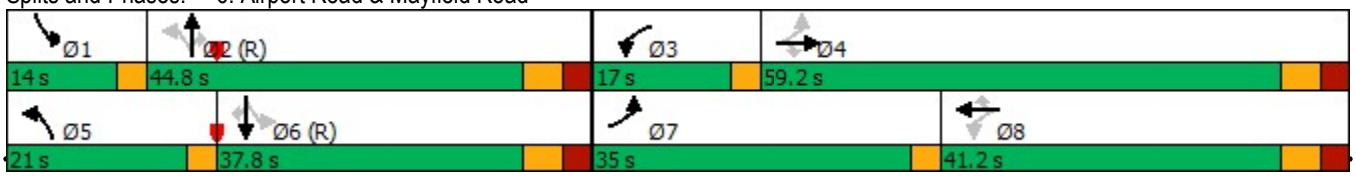


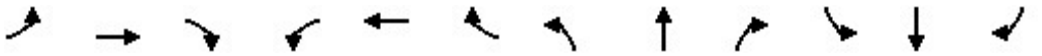
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	1134	232	120	1151	74	375	604	98	125	428	309
Future Volume (vph)	347	1134	232	120	1151	74	375	604	98	125	428	309
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.108			0.239			0.340			0.344		
Satd. Flow (perm)	147	4939	1493	416	5216	961	607	3386	1426	534	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			206			128			106			309
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	347	1134	232	120	1151	74	375	604	98	125	428	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	1134	232	120	1151	74	375	604	98	125	428	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	35.0	59.2	59.2	17.0	41.2	41.2	21.0	44.8	44.8	14.0	37.8	37.8
Total Split (%)	25.9%	43.9%	43.9%	12.6%	30.5%	30.5%	15.6%	33.2%	33.2%	10.4%	28.0%	28.0%
Maximum Green (s)	32.0	52.1	52.1	14.0	34.1	34.1	18.0	37.9	37.9	11.0	30.9	30.9
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	73.2	56.6	56.6	47.7	34.1	34.1	55.8	38.8	38.8	44.9	30.9	30.9
Actuated g/C Ratio	0.54	0.42	0.42	0.35	0.25	0.25	0.41	0.29	0.29	0.33	0.23	0.23
v/c Ratio	0.99	0.55	0.31	0.52	0.87	0.22	0.95	0.62	0.20	0.51	0.56	0.57
Control Delay	103.3	21.6	8.0	26.8	56.9	1.8	66.6	45.3	6.6	34.0	49.3	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.3	21.6	8.0	26.8	56.9	1.8	66.6	45.3	6.6	34.0	49.3	9.0
LOS	F	C	A	C	E	A	E	D	A	C	D	A
Approach Delay		36.3			51.1			49.2			32.6	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 42.4		Intersection LOS: D	
Intersection Capacity Utilization 111.7%		ICU Level of Service H	
Analysis Period (min) 15			

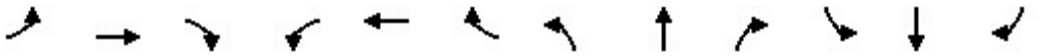
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	76	113	0	4	78	892	90	17	581	6
Future Volume (vph)	8	1	76	113	0	4	78	892	90	17	581	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.852			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	8	1	76	113	0	4	78	892	94	17	581	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	77	0	113	4	0	78	892	94	17	581	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

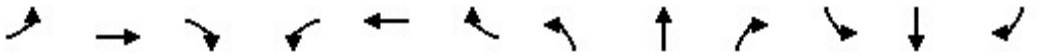
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	892	90	17	581	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	892	90	17	581	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	892	94	17	581	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1222	1763	292	1454	1675	451	588			991		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1222	1763	292	1454	1675	451	588			991		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	92	99	89	0	100	99	86			95		
cM capacity (veh/h)	101	70	673	65	79	559	574			352		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	446	446	94	17	290	290	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	101	605	65	559	574	1700	1700	1700	352	1700	1700	1700
Volume to Capacity	0.08	0.13	1.73	0.01	0.14	0.26	0.26	0.06	0.05	0.17	0.17	0.00
Queue Length 95th (m)	2.0	3.5	81.0	0.2	3.7	0.0	0.0	0.0	1.2	0.0	0.0	0.0
Control Delay (s)	43.5	11.8	487.3	11.5	12.3	0.0	0.0	0.0	15.7	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				C			
Approach Delay (s)	14.8		471.0		0.9				0.4			
Approach LOS	B		F									

Intersection Summary				
Average Delay	30.8			
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			

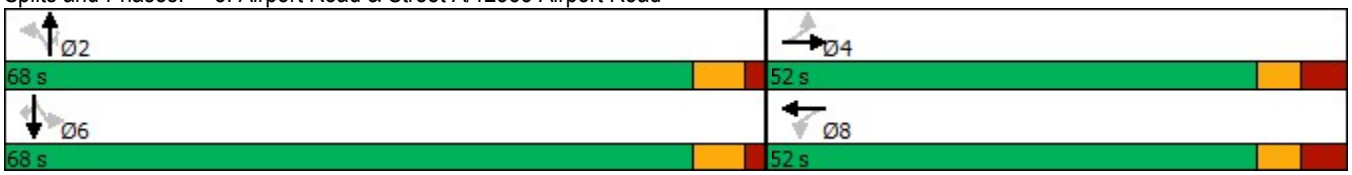


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	0	88	34	0	5	68	785	26	2	438	30
Future Volume (vph)	142	0	88	34	0	5	68	785	26	2	438	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	4.0	3.6	4.0	3.6	3.8	3.5	3.5	3.8	3.6
Storage Length (m)	55.0		0.0	0.0		0.0	0.0		145.0	75.0		55.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1463	1342	0	1328	1324	0	1280	3449	992	1116	3101	1429
Flt Permitted	0.754			0.700			0.498			0.338		
Satd. Flow (perm)	1161	1342	0	978	1324	0	671	3449	992	397	3101	1429
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		360			145				47			47
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		667.0			270.4			438.0			348.1	
Travel Time (s)		48.0			19.5			19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	22%	0%	23%	42%	0%	22%	41%	7%	61%	60%	19%	13%
Adj. Flow (vph)	142	0	88	34	0	5	68	785	26	2	438	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	88	0	34	5	0	68	785	26	2	438	30
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		4.0			4.0			7.1			7.1	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.01	0.97	0.97	0.94	1.00	0.94	1.00	0.97	1.01	1.01	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	10.0	10.0		10.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6		10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2		36.2	36.2		35.6	35.6	35.6	35.6	35.6	35.6
Total Split (s)	52.0	52.0		52.0	52.0		68.0	68.0	68.0	68.0	68.0	68.0
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%	56.7%	56.7%	56.7%	56.7%
Maximum Green (s)	43.8	43.8		43.8	43.8		61.4	61.4	61.4	61.4	61.4	61.4
Yellow Time (s)	4.0	4.0		4.0	4.0		4.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2		4.2	4.2		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2		8.2	8.2		6.6	6.6	6.6	6.6	6.6	6.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		21.0	21.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	17.2	17.2		17.2	17.2		64.2	64.2	64.2	64.2	64.2	64.2
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.67	0.67	0.67	0.67	0.67	0.67
v/c Ratio	0.69	0.16		0.20	0.01		0.15	0.34	0.04	0.01	0.21	0.03
Control Delay	53.3	0.7		34.4	0.0		8.2	7.9	1.1	7.0	7.1	1.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.3	0.7		34.4	0.0		8.2	7.9	1.1	7.0	7.1	1.3
LOS	D	A		C	A		A	A	A	A	A	A
Approach Delay		33.2			30.0			7.8			6.7	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 96.2			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 64.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & Street A/12333 Airport Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	16	266	15	4	227
Future Volume (vph)	30	16	266	15	4	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.954		0.993			
Flt Protected	0.968					0.999
Satd. Flow (prot)	1755	0	1852	0	0	1861
Flt Permitted	0.968					0.999
Satd. Flow (perm)	1755	0	1852	0	0	1861
Link Speed (k/h)	50		70			70
Link Distance (m)	379.1		483.3			148.6
Travel Time (s)	27.3		24.9			7.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	33	17	289	16	4	247
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	305	0	0	251
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	16	266	15	4	227
Future Volume (Veh/h)	30	16	266	15	4	227
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)	33	17	289	16	4	247
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	552	297			305	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	552	297			305	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	98			100	
cM capacity (veh/h)	497	747			1267	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	50	305	251
Volume Left	33	0	4
Volume Right	17	16	0
cSH	561	1700	1267
Volume to Capacity	0.09	0.18	0.00
Queue Length 95th (m)	2.3	0.0	0.1
Control Delay (s)	12.1	0.0	0.2
Lane LOS	B		A
Approach Delay (s)	12.1	0.0	0.2
Approach LOS	B		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	25.2%	ICU Level of Service	A
Analysis Period (min)	15		

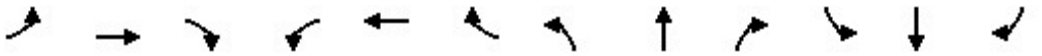
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	16	267	15	4	201
Future Volume (vph)	30	16	267	15	4	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.954		0.993			
Flt Protected	0.968					0.999
Satd. Flow (prot)	1755	0	1852	0	0	1862
Flt Permitted	0.968					0.999
Satd. Flow (perm)	1755	0	1852	0	0	1862
Link Speed (k/h)	50		70			70
Link Distance (m)	309.3		148.6			213.3
Travel Time (s)	22.3		7.6			11.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	33	17	290	16	4	218
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	306	0	0	222
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	16	267	15	4	201
Future Volume (Veh/h)	30	16	267	15	4	201
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)	33	17	290	16	4	218
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	524	298			306	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	524	298			306	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			100	
cM capacity (veh/h)	516	746			1266	

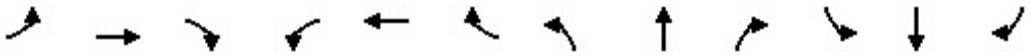
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	50	306	222
Volume Left	33	0	4
Volume Right	17	16	0
cSH	576	1700	1266
Volume to Capacity	0.09	0.18	0.00
Queue Length 95th (m)	2.3	0.0	0.1
Control Delay (s)	11.8	0.0	0.2
Lane LOS	B		A
Approach Delay (s)	11.8	0.0	0.2
Approach LOS	B		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	25.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Future Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	55.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.937			0.883			0.903				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	1863	1745	0	1770	1645	0	1770	1682	0	1770	1863	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	1863	1745	0	1770	1645	0	1770	1682	0	1770	1863	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		189.6			667.0			866.6			322.5	
Travel Time (s)		13.7			48.0			62.4			23.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	15	11	89	8	28	3	27	50	64	74	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	89	36	0	3	77	0	64	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane					Yes			Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Future Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	15	11	89	8	28	3	27	50	64	74	0

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	0	26	89	36	3	77	64	74
Volume Left (vph)	0	0	89	0	3	0	64	0
Volume Right (vph)	0	11	0	28	0	50	0	0
Hadj (s)	0.00	-0.26	0.53	-0.51	0.53	-0.42	0.53	0.03
Departure Headway (s)	5.2	4.9	5.6	4.5	5.6	4.6	5.5	5.0
Degree Utilization, x	0.00	0.04	0.14	0.05	0.00	0.10	0.10	0.10
Capacity (veh/h)	674	696	615	753	621	747	628	693
Control Delay (s)	7.0	6.9	8.3	6.6	7.4	6.9	7.9	7.4
Approach Delay (s)	6.9		7.8		6.9		7.6	
Approach LOS	A		A		A		A	

Intersection Summary				
Delay	7.5			
Level of Service	A			
Intersection Capacity Utilization	27.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	39	16	0	0	0
Future Volume (vph)	0	39	16	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0	55.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	1863	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	1863	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	686.5			322.1	112.4	
Travel Time (s)	49.4			23.2	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	42	17	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	42	17	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane	Yes			Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	39	16	0	0	0
Future Volume (vph)	0	39	16	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	42	17	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total (vph)	0	42	17	0	0
Volume Left (vph)	0	0	17	0	0
Volume Right (vph)	0	42	0	0	0
Hadj (s)	0.00	-0.67	0.53	0.00	0.00
Departure Headway (s)	4.5	3.9	5.1	4.6	4.4
Degree Utilization, x	0.00	0.05	0.02	0.00	0.00
Capacity (veh/h)	796	920	687	785	814
Control Delay (s)	6.3	5.9	7.0	6.4	7.4
Approach Delay (s)	5.9		7.0		0.0
Approach LOS	A		A		A

Intersection Summary			
Delay	6.2		
Level of Service	A		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

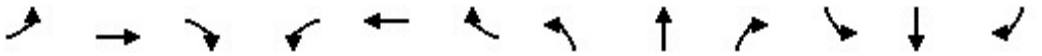
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	87	0	16	34	0	39
Future Volume (vph)	87	0	16	34	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.907			
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1690	0	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1690	0	1863	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	311.7		322.5			322.1
Travel Time (s)	22.4		23.2			23.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	0	17	37	0	42
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	54	0	0	42
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		7.2			7.2
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes		Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 14.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	87	0	16	34	0	39
Future Volume (vph)	87	0	16	34	0	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	95	0	17	37	0	42

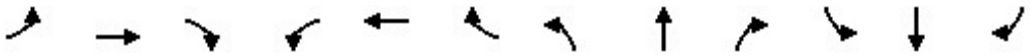
Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total (vph)	95	0	54	0	42
Volume Left (vph)	95	0	0	0	0
Volume Right (vph)	0	0	37	0	0
Hadj (s)	0.53	0.00	-0.38	0.00	0.03
Departure Headway (s)	5.3	4.7	4.2	4.8	4.8
Degree Utilization, x	0.14	0.00	0.06	0.00	0.06
Capacity (veh/h)	670	758	820	743	718
Control Delay (s)	7.9	6.5	7.5	6.6	6.9
Approach Delay (s)	7.9		7.5	6.9	
Approach LOS	A		A	A	

Intersection Summary			
Delay	7.6		
Level of Service	A		
Intersection Capacity Utilization	14.8%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	211	19	45	91	1	6	91	29	4	312	11
Future Volume (vph)	6	211	19	45	91	1	6	91	29	4	312	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.999			0.969			0.995	
Flt Protected		0.999			0.984			0.997			0.999	
Satd. Flow (prot)	0	1806	0	0	1855	0	0	1761	0	0	1883	0
Flt Permitted		0.999			0.984			0.997			0.999	
Satd. Flow (perm)	0	1806	0	0	1855	0	0	1761	0	0	1883	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	7	229	21	49	99	1	7	99	32	4	339	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	257	0	0	149	0	0	138	0	0	355	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	211	19	45	91	1	6	91	29	4	312	11
Future Volume (vph)	6	211	19	45	91	1	6	91	29	4	312	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	229	21	49	99	1	7	99	32	4	339	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	257	149	138	355
Volume Left (vph)	7	49	7	4
Volume Right (vph)	21	1	32	12
Hadj (s)	0.02	0.07	-0.06	-0.01
Departure Headway (s)	5.6	5.8	5.6	5.3
Degree Utilization, x	0.40	0.24	0.22	0.52
Capacity (veh/h)	597	552	564	641
Control Delay (s)	12.2	10.7	10.2	14.0
Approach Delay (s)	12.2	10.7	10.2	14.0
Approach LOS	B	B	B	B

Intersection Summary				
Delay	12.3			
Level of Service	B			
Intersection Capacity Utilization	48.4%	ICU Level of Service	A	
Analysis Period (min)	15			

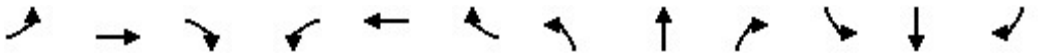
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	65	8	132	112	28	358
Future Volume (vph)	65	8	132	112	28	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	0	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.938			
Flt Protected	0.950					0.996
Satd. Flow (prot)	1770	1583	1747	0	0	1855
Flt Permitted	0.950					0.996
Satd. Flow (perm)	1770	1583	1747	0	0	1855
Link Speed (k/h)	50		70			70
Link Distance (m)	686.5		624.2			1613.1
Travel Time (s)	49.4		32.1			83.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	9	143	122	30	389
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	9	265	0	0	419
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	65	8	132	112	28	358
Future Volume (Veh/h)	65	8	132	112	28	358
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)	71	9	143	122	30	389
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	653	204			265	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	653	204			265	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	83	99			98	
cM capacity (veh/h)	422	837			1299	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	71	9	265	419
Volume Left	71	0	0	30
Volume Right	0	9	122	0
cSH	422	837	1700	1299
Volume to Capacity	0.17	0.01	0.16	0.02
Queue Length 95th (m)	4.8	0.3	0.0	0.6
Control Delay (s)	15.2	9.3	0.0	0.8
Lane LOS	C	A		A
Approach Delay (s)	14.6		0.0	0.8
Approach LOS	B			

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

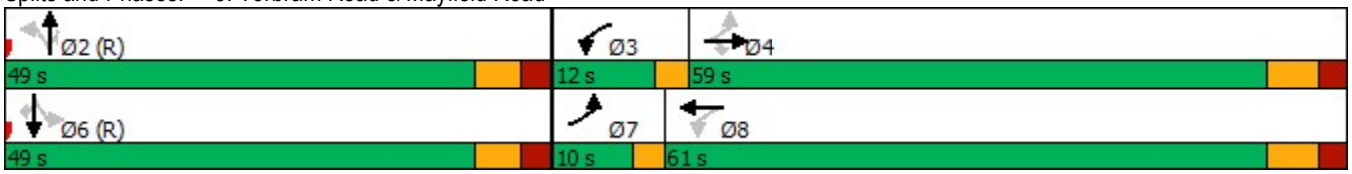


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	2151	259	187	1738	66	292	115	132	55	286	74
Future Volume (vph)	116	2151	259	187	1738	66	292	115	132	55	286	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4848	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.077			0.074			0.478			0.683		
Satd. Flow (perm)	140	4734	1597	139	4848	0	898	1942	1587	1283	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259		6				131			74
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	116	2151	259	187	1738	66	292	115	132	55	286	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	2151	259	187	1804	0	292	115	132	55	286	74
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	10.0	59.0	59.0	12.0	61.0		49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	8.3%	49.2%	49.2%	10.0%	50.8%		40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Maximum Green (s)	7.0	51.7	51.7	9.0	53.7		41.9	41.9	41.9	41.9	41.9	41.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	62.9	51.7	51.7	67.1	53.8		41.9	41.9	41.9	41.9	41.9	41.9
Actuated g/C Ratio	0.52	0.43	0.43	0.56	0.45		0.35	0.35	0.35	0.35	0.35	0.35
v/c Ratio	0.70	1.05	0.31	0.93	0.83		0.93	0.17	0.21	0.12	0.42	0.13
Control Delay	41.7	70.0	3.5	77.0	30.8		75.3	27.9	5.5	27.6	32.2	6.5
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	41.7	70.0	3.5	77.0	30.8		75.3	27.9	5.5	27.6	32.2	6.5
LOS	D	E	A	E	C		E	C	A	C	C	A
Approach Delay		61.9			35.2			48.1			27.0	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 48.1		Intersection LOS: D	
Intersection Capacity Utilization 104.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

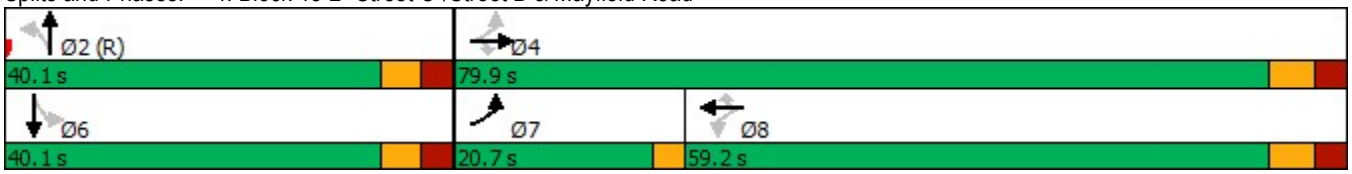


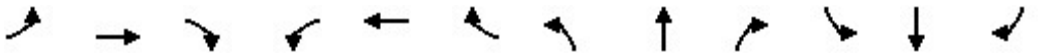
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	2129	110	14	1813	42	231	0	35	22	0	48
Future Volume (vph)	154	2129	110	14	1813	42	231	0	35	22	0	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6
Storage Length (m)	75.0		55.0	75.0		55.0	55.0		0.0	55.0		75.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1517	4734	1583	1770	4864	1170	1770	1619	0	1357	1342	0
Flt Permitted	0.074			0.078			0.726			0.734		
Satd. Flow (perm)	118	4734	1583	145	4864	1170	1352	1619	0	1049	1342	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85			60		65			279	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		716.7			643.7			353.1			866.6	
Travel Time (s)		32.3			29.0			25.4			62.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	19%	12%	2%	2%	9%	38%	2%	0%	2%	33%	0%	23%
Adj. Flow (vph)	154	2129	110	14	1813	42	231	0	35	22	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	2129	110	14	1813	42	231	35	0	22	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	2.0	25.0	10.0		10.0	10.0	
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	2.0	10.0	0.6		10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		5.0	5.0	
Minimum Split (s)	9.5	25.1	25.1	25.1	25.1	25.1	24.6	24.6		24.6	24.6	
Total Split (s)	20.7	79.9	79.9	59.2	59.2	59.2	40.1	40.1		40.1	40.1	
Total Split (%)	17.3%	66.6%	66.6%	49.3%	49.3%	49.3%	33.4%	33.4%		33.4%	33.4%	
Maximum Green (s)	17.7	72.8	72.8	52.1	52.1	52.1	33.5	33.5		33.5	33.5	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.7	3.7		3.7	3.7	
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	6.6	6.6		6.6	6.6	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	Min	Min	Min	C-Max	C-Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	70.7	66.6	66.6	51.1	51.1	51.1	39.7	39.7		39.7	39.7	
Actuated g/C Ratio	0.59	0.56	0.56	0.43	0.43	0.43	0.33	0.33		0.33	0.33	
v/c Ratio	0.71	0.81	0.12	0.23	0.88	0.08	0.52	0.06		0.06	0.08	
Control Delay	43.2	39.8	13.4	28.8	38.5	4.2	39.5	2.3		31.6	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	43.2	39.8	13.4	28.8	38.5	4.2	39.5	2.3		31.6	0.2	
LOS	D	D	B	C	D	A	D	A		C	A	
Approach Delay		38.8			37.7			34.6			10.1	
Approach LOS		D			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 37.7		Intersection LOS: D	
Intersection Capacity Utilization 87.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C"/Street B & Mayfield Road



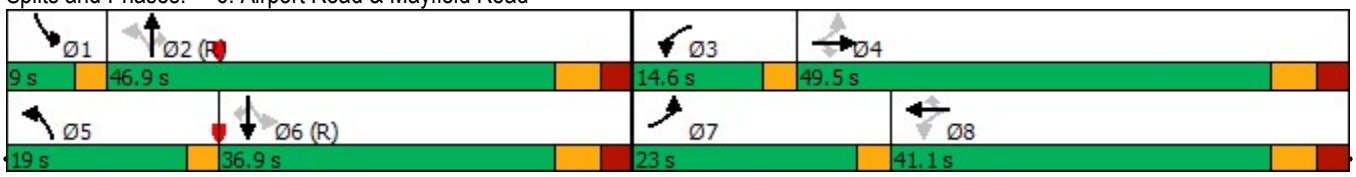


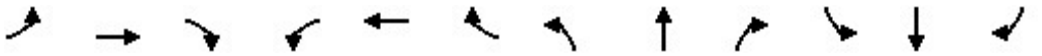
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Future Volume (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.108			0.184			0.164			0.548		
Satd. Flow (perm)	147	4939	1493	320	5216	961	293	3386	1426	851	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			368			145			119			217
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	23.0	49.5	49.5	14.6	41.1	41.1	19.0	46.9	46.9	9.0	36.9	36.9
Total Split (%)	19.2%	41.3%	41.3%	12.2%	34.3%	34.3%	15.8%	39.1%	39.1%	7.5%	30.8%	30.8%
Maximum Green (s)	20.0	42.4	42.4	11.6	34.0	34.0	16.0	40.0	40.0	6.0	30.0	30.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	61.1	45.3	45.3	46.8	34.0	34.0	52.9	40.1	40.1	40.1	30.3	30.3
Actuated g/C Ratio	0.51	0.38	0.38	0.39	0.28	0.28	0.44	0.33	0.33	0.33	0.25	0.25
v/c Ratio	0.98	0.65	0.58	0.49	0.83	0.16	0.90	0.30	0.17	0.29	0.83	0.44
Control Delay	92.1	45.0	21.1	24.6	46.3	0.9	57.7	30.5	3.6	24.3	51.9	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	92.1	45.0	21.1	24.6	46.3	0.9	57.7	30.5	3.6	24.3	51.9	7.6
LOS	F	D	C	C	D	A	E	C	A	C	D	A
Approach Delay		45.6			42.6			37.6			39.9	
Approach LOS		D			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 42.5		Intersection LOS: D	
Intersection Capacity Utilization 101.8%		ICU Level of Service G	
Analysis Period (min) 15			

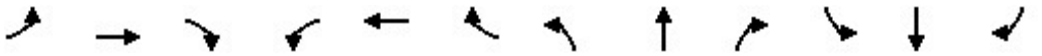
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	33	78	0	17	46	665	83	2	850	3
Future Volume (vph)	5	1	33	78	0	17	46	665	83	2	850	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.854			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	5	1	33	78	0	17	46	665	86	2	850	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	34	0	78	17	0	46	665	86	2	850	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

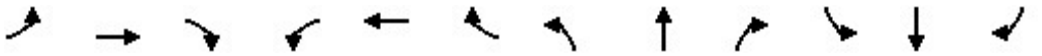
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	33	78	0	17	46	665	83	2	850	3
Future Volume (Veh/h)	5	1	33	78	0	17	46	665	83	2	850	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	5	1	33	78	0	17	46	665	86	2	850	3
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1296	1703	426	1224	1620	338	854			756		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1296	1703	426	1224	1620	338	854			756		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	95	99	94	28	100	97	89			100		
cM capacity (veh/h)	92	82	547	109	92	661	413			471		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	5	34	78	17	46	332	332	86	2	425	425	3
Volume Left	5	0	78	0	46	0	0	0	2	0	0	0
Volume Right	0	33	0	17	0	0	0	86	0	0	0	3
cSH	92	468	109	661	413	1700	1700	1700	471	1700	1700	1700
Volume to Capacity	0.05	0.07	0.72	0.03	0.11	0.20	0.20	0.05	0.00	0.25	0.25	0.00
Queue Length 95th (m)	1.4	1.9	30.4	0.6	3.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	46.3	13.3	95.3	10.6	14.8	0.0	0.0	0.0	12.7	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				B			
Approach Delay (s)	17.5		80.1		0.9				0.0			
Approach LOS	C		F									

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	47.8%	ICU Level of Service		A
Analysis Period (min)	15			

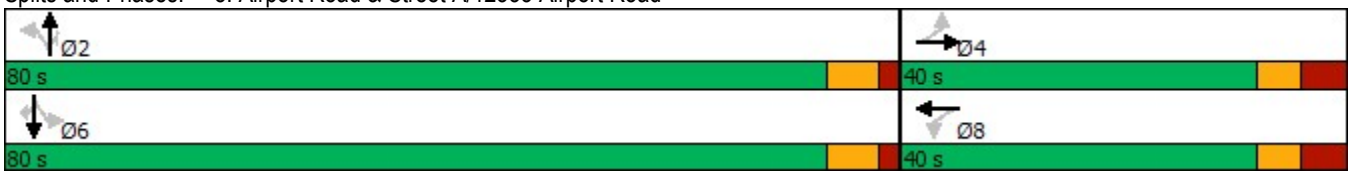


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	0	85	77	0	11	127	443	61	17	682	91
Future Volume (vph)	23	0	85	77	0	11	127	443	61	17	682	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6
Storage Length (m)	55.0		55.0	0.0		0.0	0.0		145.0	75.0		55.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1480	1342	0	1271	1353	0	1280	3449	1003	1128	3101	1429
Flt Permitted	0.750			0.702			0.391			0.495		
Satd. Flow (perm)	1168	1342	0	939	1353	0	527	3449	1003	588	3101	1429
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		255			429				61			91
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		667.0			270.4			438.0			348.1	
Travel Time (s)		48.0			19.5			19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	22%	0%	23%	42%	0%	22%	41%	7%	61%	60%	19%	13%
Adj. Flow (vph)	23	0	85	77	0	11	127	443	61	17	682	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	85	0	77	11	0	127	443	61	17	682	91
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.1			7.1	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	10.0	10.0		10.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6		10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2		36.2	36.2		35.6	35.6	35.6	35.6	35.6	35.6
Total Split (s)	40.0	40.0		40.0	40.0		80.0	80.0	80.0	80.0	80.0	80.0
Total Split (%)	33.3%	33.3%		33.3%	33.3%		66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
Maximum Green (s)	31.8	31.8		31.8	31.8		73.4	73.4	73.4	73.4	73.4	73.4
Yellow Time (s)	4.0	4.0		4.0	4.0		4.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2		4.2	4.2		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2		8.2	8.2		6.6	6.6	6.6	6.6	6.6	6.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		21.0	21.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	15.0	15.0		15.0	15.0		79.0	79.0	79.0	79.0	79.0	79.0
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.77	0.77	0.77	0.77	0.77	0.77
v/c Ratio	0.14	0.21		0.57	0.02		0.31	0.17	0.08	0.04	0.29	0.08
Control Delay	39.9	1.1		57.8	0.1		8.7	4.9	1.8	5.6	5.6	1.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	1.1		57.8	0.1		8.7	4.9	1.8	5.6	5.6	1.4
LOS	D	A		E	A		A	A	A	A	A	A
Approach Delay		9.4			50.6			5.4			5.1	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 103			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 8.0		Intersection LOS: A	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & Street A/12333 Airport Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	3	275	36	12	411
Future Volume (vph)	12	3	275	36	12	411
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975		0.984			
Flt Protected	0.961					0.999
Satd. Flow (prot)	1780	0	1837	0	0	1862
Flt Permitted	0.961					0.999
Satd. Flow (perm)	1780	0	1837	0	0	1862
Link Speed (k/h)	50		70			70
Link Distance (m)	379.1		483.3			148.6
Travel Time (s)	27.3		24.9			7.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	13	3	299	39	13	447
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	338	0	0	460
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	3	275	36	12	411
Future Volume (Veh/h)	12	3	275	36	12	411
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)	13	3	299	39	13	447
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	792	318			338	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	792	318			338	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	96	100			99	
cM capacity (veh/h)	357	727			1232	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	16	338	460
Volume Left	13	0	13
Volume Right	3	39	0
cSH	395	1700	1232
Volume to Capacity	0.04	0.20	0.01
Queue Length 95th (m)	1.0	0.0	0.3
Control Delay (s)	14.5	0.0	0.3
Lane LOS	B		A
Approach Delay (s)	14.5	0.0	0.3
Approach LOS	B		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

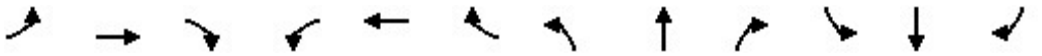
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	3	241	36	12	411
Future Volume (vph)	12	3	241	36	12	411
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975		0.983			
Flt Protected	0.961					0.999
Satd. Flow (prot)	1780	0	1836	0	0	1862
Flt Permitted	0.961					0.999
Satd. Flow (perm)	1780	0	1836	0	0	1862
Link Speed (k/h)	50		70			70
Link Distance (m)	309.3		148.6			213.3
Travel Time (s)	22.3		7.6			11.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	13	3	262	39	13	447
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	301	0	0	460
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	3	241	36	12	411
Future Volume (Veh/h)	12	3	241	36	12	411
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)	13	3	262	39	13	447
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	754	282			301	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	754	282			301	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			99	
cM capacity (veh/h)	376	762			1272	

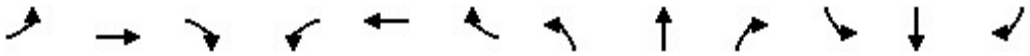
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	16	301	460
Volume Left	13	0	13
Volume Right	3	39	0
cSH	415	1700	1272
Volume to Capacity	0.04	0.18	0.01
Queue Length 95th (m)	1.0	0.0	0.2
Control Delay (s)	14.0	0.0	0.3
Lane LOS	B		A
Approach Delay (s)	14.0	0.0	0.3
Approach LOS	B		

Intersection Summary			
Average Delay		0.5	
Intersection Capacity Utilization		41.3%	ICU Level of Service A
Analysis Period (min)		15	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Future Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	55.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.879			0.927				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	1863	1801	0	1770	1637	0	1770	1727	0	1770	1863	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	1863	1801	0	1770	1637	0	1770	1727	0	1770	1863	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		185.7			667.0			866.6			322.5	
Travel Time (s)		13.4			48.0			62.4			23.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	2	43	16	67	10	70	67	25	26	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	43	83	0	10	137	0	25	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane					Yes			Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Future Volume (vph)	0	6	2	40	15	62	9	64	62	23	24	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	43	16	67	10	70	67	25	26	0

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	0	9	43	83	10	137	25	26
Volume Left (vph)	0	0	43	0	10	0	25	0
Volume Right (vph)	0	2	0	67	0	67	0	0
Hadj (s)	0.00	-0.12	0.53	-0.53	0.53	-0.31	0.53	0.03
Departure Headway (s)	5.1	5.0	5.5	4.4	5.4	4.6	5.5	5.0
Degree Utilization, x	0.00	0.01	0.07	0.10	0.02	0.17	0.04	0.04
Capacity (veh/h)	685	688	624	773	643	762	630	694
Control Delay (s)	6.9	6.8	7.7	6.7	7.3	7.3	7.5	7.0
Approach Delay (s)	6.8		7.1		7.3		7.2	
Approach LOS	A		A		A		A	

Intersection Summary				
Delay	7.2			
Level of Service	A			
Intersection Capacity Utilization	29.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	19	34	0	0	0
Future Volume (vph)	0	19	34	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0	55.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	1863	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	1863	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	686.5			322.1	112.4	
Travel Time (s)	49.4			23.2	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	21	37	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	21	37	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane	Yes			Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	19	34	0	0	0
Future Volume (vph)	0	19	34	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	21	37	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total (vph)	0	21	37	0	0
Volume Left (vph)	0	0	37	0	0
Volume Right (vph)	0	21	0	0	0
Hadj (s)	0.00	-0.67	0.53	0.00	0.00
Departure Headway (s)	4.6	3.9	5.1	4.5	4.4
Degree Utilization, x	0.00	0.02	0.05	0.00	0.00
Capacity (veh/h)	784	893	696	796	821
Control Delay (s)	6.4	5.8	7.2	6.3	7.4
Approach Delay (s)	5.8		7.2		0.0
Approach LOS	A		A		A

Intersection Summary			
Delay	6.7		
Level of Service	A		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

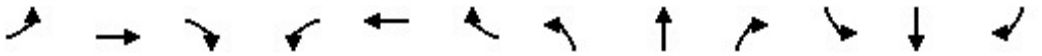
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	27	0	34	91	0	19
Future Volume (vph)	27	0	34	91	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	55.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.902			
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1680	0	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1680	0	1863	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	327.6		322.5			322.1
Travel Time (s)	23.6		23.2			23.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	0	37	99	0	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	136	0	0	21
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.6			3.6
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes		Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	27	0	34	91	0	19
Future Volume (vph)	27	0	34	91	0	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	0	37	99	0	21

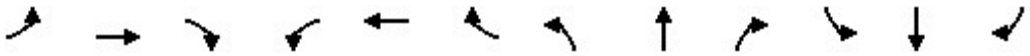
Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total (vph)	29	0	136	0	21
Volume Left (vph)	29	0	0	0	0
Volume Right (vph)	0	0	99	0	0
Hadj (s)	0.53	0.00	-0.40	0.00	0.03
Departure Headway (s)	5.4	4.8	4.0	4.7	4.7
Degree Utilization, x	0.04	0.00	0.15	0.00	0.03
Capacity (veh/h)	648	733	882	772	747
Control Delay (s)	7.4	6.6	7.7	6.5	6.6
Approach Delay (s)	7.4		7.7	6.6	
Approach LOS	A		A	A	

Intersection Summary			
Delay	7.5		
Level of Service	A		
Intersection Capacity Utilization	17.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	99	7	23	339	7	21	273	74	6	80	7
Future Volume (vph)	11	99	7	23	339	7	21	273	74	6	80	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.997			0.973			0.989	
Flt Protected		0.995			0.997			0.997			0.997	
Satd. Flow (prot)	0	1791	0	0	1871	0	0	1774	0	0	1842	0
Flt Permitted		0.995			0.997			0.997			0.997	
Satd. Flow (perm)	0	1791	0	0	1871	0	0	1774	0	0	1842	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	12	108	8	25	368	8	23	297	80	7	87	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	128	0	0	401	0	0	400	0	0	102	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.3%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	99	7	23	339	7	21	273	74	6	80	7
Future Volume (vph)	11	99	7	23	339	7	21	273	74	6	80	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	108	8	25	368	8	23	297	80	7	87	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	128	401	400	102
Volume Left (vph)	12	25	23	7
Volume Right (vph)	8	8	80	8
Hadj (s)	0.06	0.02	-0.04	0.00
Departure Headway (s)	6.2	5.7	5.6	6.3
Degree Utilization, x	0.22	0.63	0.63	0.18
Capacity (veh/h)	503	604	605	486
Control Delay (s)	11.0	17.8	17.6	10.6
Approach Delay (s)	11.0	17.8	17.6	10.6
Approach LOS	B	C	C	B

Intersection Summary				
Delay		16.2		
Level of Service		C		
Intersection Capacity Utilization		55.3%	ICU Level of Service	B
Analysis Period (min)		15		

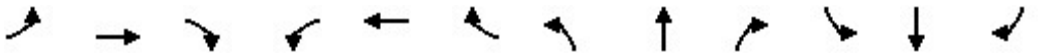
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	109	47	253	51	9	106
Future Volume (vph)	109	47	253	51	9	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	0	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.977			
Flt Protected	0.950					0.996
Satd. Flow (prot)	1770	1583	1820	0	0	1855
Flt Permitted	0.950					0.996
Satd. Flow (perm)	1770	1583	1820	0	0	1855
Link Speed (k/h)	50		70			70
Link Distance (m)	686.5		624.2			1613.1
Travel Time (s)	49.4		32.1			83.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	51	275	55	10	115
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	51	330	0	0	125
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	109	47	253	51	9	106
Future Volume (Veh/h)	109	47	253	51	9	106
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)	118	51	275	55	10	115
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	438	302			330	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	438	302			330	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	79	93			99	
cM capacity (veh/h)	572	737			1229	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	118	51	330	125
Volume Left	118	0	0	10
Volume Right	0	51	55	0
cSH	572	737	1700	1229
Volume to Capacity	0.21	0.07	0.19	0.01
Queue Length 95th (m)	6.2	1.8	0.0	0.2
Control Delay (s)	12.9	10.2	0.0	0.7
Lane LOS	B	B		A
Approach Delay (s)	12.1		0.0	0.7
Approach LOS	B			

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	29.1%	ICU Level of Service	A
Analysis Period (min)	15		

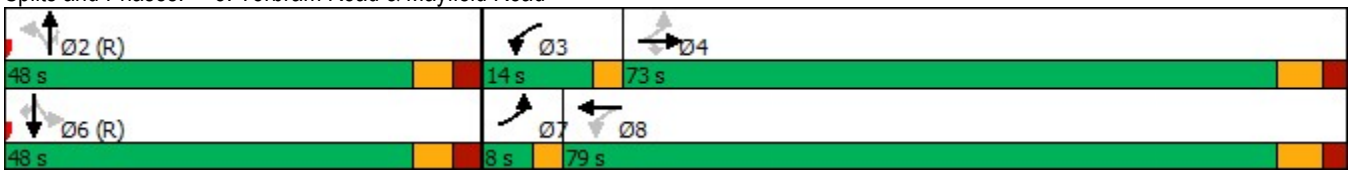


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	2098	243	165	2187	42	305	176	167	49	95	122
Future Volume (vph)	68	2098	243	165	2187	42	305	176	167	49	95	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4854	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.061			0.058			0.695			0.599		
Satd. Flow (perm)	111	4734	1597	109	4854	0	1306	1942	1587	1125	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		3				121			83
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	68	2098	243	165	2187	42	305	176	167	49	95	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	2098	243	165	2229	0	305	176	167	49	95	122
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	73.0	73.0	14.0	79.0		48.0	48.0	48.0	48.0	48.0	48.0
Total Split (%)	5.9%	54.1%	54.1%	10.4%	58.5%		35.6%	35.6%	35.6%	35.6%	35.6%	35.6%
Maximum Green (s)	5.0	65.7	65.7	11.0	71.7		40.9	40.9	40.9	40.9	40.9	40.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	74.4	65.1	65.1	82.9	72.2		42.0	42.0	42.0	42.0	42.0	42.0
Actuated g/C Ratio	0.55	0.48	0.48	0.61	0.53		0.31	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.56	0.92	0.27	0.83	0.86		0.75	0.29	0.29	0.14	0.16	0.24
Control Delay	33.3	40.2	3.0	71.3	26.6		55.4	37.4	12.6	35.7	35.2	14.2
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	33.3	40.2	3.0	71.3	26.6		55.4	37.4	12.6	35.7	35.2	14.2
LOS	C	D	A	E	C		E	D	B	D	D	B
Approach Delay		36.3			29.7			39.5			25.7	
Approach LOS		D			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 33.4		Intersection LOS: C	
Intersection Capacity Utilization 97.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road

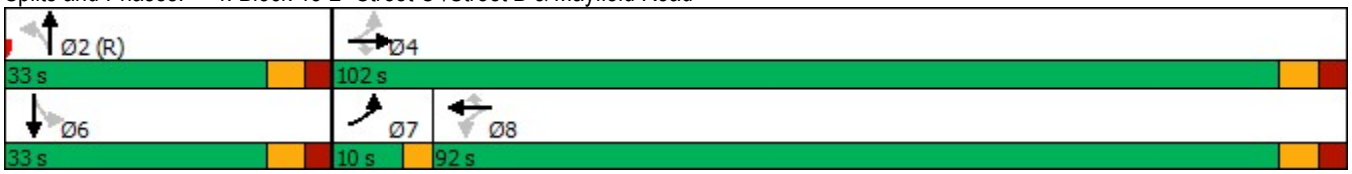


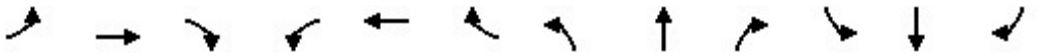
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	2192	98	41	2125	21	104	0	23	33	0	176
Future Volume (vph)	55	2192	98	41	2125	21	104	0	23	33	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6
Storage Length (m)	75.0		55.0	75.0		55.0	55.0		0.0	55.0		75.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1517	4734	1583	1770	4864	1170	1770	1619	0	1357	1342	0
Flt Permitted	0.048			0.055			0.561			0.742		
Satd. Flow (perm)	77	4734	1583	102	4864	1170	1045	1619	0	1060	1342	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86			53		57			93	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		716.7			643.7			353.1			866.6	
Travel Time (s)		32.3			29.0			25.4			62.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	19%	12%	2%	2%	9%	38%	2%	0%	2%	33%	0%	23%
Adj. Flow (vph)	55	2192	98	41	2125	21	104	0	23	33	0	176
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	2192	98	41	2125	21	104	23	0	33	176	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	2.0	25.0	10.0		10.0	10.0	
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	2.0	10.0	0.6		10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		5.0	5.0	
Minimum Split (s)	9.5	25.1	25.1	25.1	25.1	25.1	24.6	24.6		24.6	24.6	
Total Split (s)	10.0	102.0	102.0	92.0	92.0	92.0	33.0	33.0		33.0	33.0	
Total Split (%)	7.4%	75.6%	75.6%	68.1%	68.1%	68.1%	24.4%	24.4%		24.4%	24.4%	
Maximum Green (s)	7.0	94.9	94.9	84.9	84.9	84.9	26.4	26.4		26.4	26.4	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.7	3.7		3.7	3.7	
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	6.6	6.6		6.6	6.6	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	Min	Min	Min	C-Max	C-Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	91.4	87.3	87.3	79.5	79.5	79.5	34.0	34.0		34.0	34.0	
Actuated g/C Ratio	0.68	0.65	0.65	0.59	0.59	0.59	0.25	0.25		0.25	0.25	
v/c Ratio	0.46	0.72	0.09	0.68	0.74	0.03	0.40	0.05		0.12	0.43	
Control Delay	31.2	26.5	7.5	67.1	32.7	1.0	50.5	0.2		44.8	25.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	31.2	26.5	7.5	67.1	32.7	1.0	50.5	0.2		44.8	25.5	
LOS	C	C	A	E	C	A	D	A		D	C	
Approach Delay		25.8			33.1			41.4			28.5	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 29.6		Intersection LOS: C	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C"/Street B & Mayfield Road



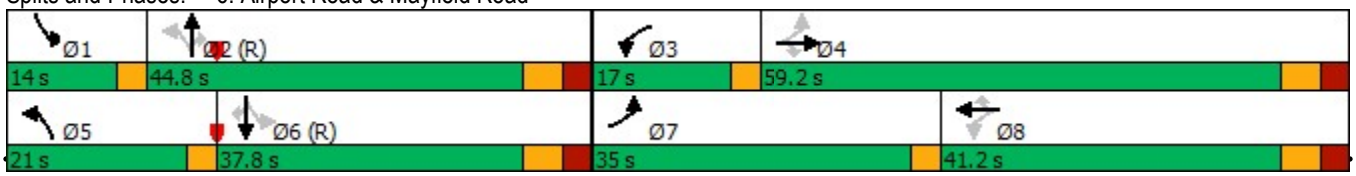


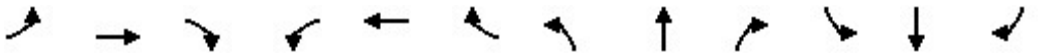
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Future Volume (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.108			0.219			0.323			0.317		
Satd. Flow (perm)	147	4939	1493	381	5216	961	577	3386	1426	492	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			199			128			106			323
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Shared Lane Traffic (%)												
Lane Group Flow (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	35.0	59.2	59.2	17.0	41.2	41.2	21.0	44.8	44.8	14.0	37.8	37.8
Total Split (%)	25.9%	43.9%	43.9%	12.6%	30.5%	30.5%	15.6%	33.2%	33.2%	10.4%	28.0%	28.0%
Maximum Green (s)	32.0	52.1	52.1	14.0	34.1	34.1	18.0	37.9	37.9	11.0	30.9	30.9
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	73.2	56.4	56.4	47.9	34.1	34.1	55.8	38.7	38.7	45.0	30.9	30.9
Actuated g/C Ratio	0.54	0.42	0.42	0.35	0.25	0.25	0.41	0.29	0.29	0.33	0.23	0.23
v/c Ratio	1.02	0.59	0.32	0.56	0.95	0.23	1.00	0.65	0.21	0.55	0.58	0.58
Control Delay	106.4	23.2	9.5	28.6	65.0	2.4	80.0	46.2	7.3	35.8	49.9	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.4	23.2	9.5	28.6	65.0	2.4	80.0	46.2	7.3	35.8	49.9	9.1
LOS	F	C	A	C	E	A	E	D	A	D	D	A
Approach Delay		37.8			58.5			54.3			33.2	
Approach LOS		D			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 46.2		Intersection LOS: D	
Intersection Capacity Utilization 113.1%		ICU Level of Service H	
Analysis Period (min) 15			

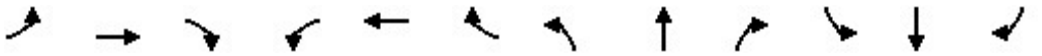
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	76	113	0	4	78	927	90	17	605	6
Future Volume (vph)	8	1	76	113	0	4	78	927	90	17	605	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.852			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	8	1	76	113	0	4	78	927	94	17	605	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	77	0	113	4	0	78	927	94	17	605	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

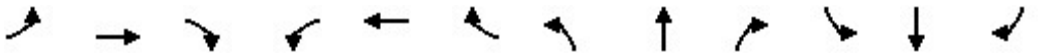
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	927	90	17	605	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	927	90	17	605	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	927	94	17	605	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1264	1822	304	1501	1734	468	612			1026		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1264	1822	304	1501	1734	468	612			1026		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	91	98	88	0	100	99	86			95		
cM capacity (veh/h)	94	64	660	60	72	544	557			337		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	464	464	94	17	302	302	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	94	589	60	544	557	1700	1700	1700	337	1700	1700	1700
Volume to Capacity	0.09	0.13	1.89	0.01	0.14	0.27	0.27	0.06	0.05	0.18	0.18	0.00
Queue Length 95th (m)	2.2	3.6	85.1	0.2	3.9	0.0	0.0	0.0	1.3	0.0	0.0	0.0
Control Delay (s)	47.0	12.0	567.9	11.7	12.5	0.0	0.0	0.0	16.3	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				C			
Approach Delay (s)	15.3		548.9		0.9				0.4			
Approach LOS	C		F									

Intersection Summary				
Average Delay	34.6			
Intersection Capacity Utilization	51.9%	ICU Level of Service	A	
Analysis Period (min)	15			

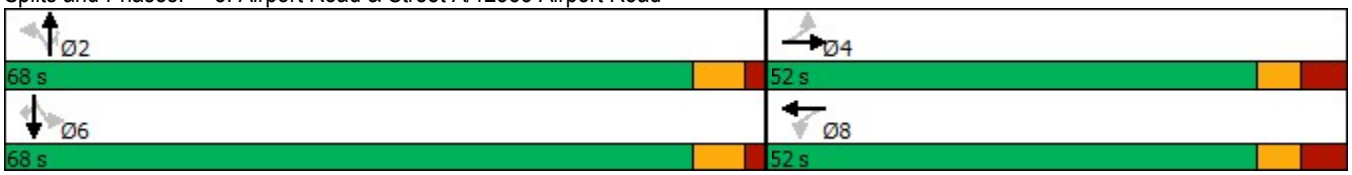


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	0	88	34	0	5	68	818	26	2	460	30
Future Volume (vph)	142	0	88	34	0	5	68	818	26	2	460	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6
Storage Length (m)	55.0		55.0	0.0		0.0	0.0		145.0	75.0		55.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1480	1342	0	1271	1353	0	1280	3449	1003	1128	3101	1429
Flt Permitted	0.754			0.700			0.487			0.325		
Satd. Flow (perm)	1174	1342	0	937	1353	0	656	3449	1003	386	3101	1429
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		340			132				47			47
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		667.0			270.4			438.0			348.1	
Travel Time (s)		48.0			19.5			19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	22%	0%	23%	42%	0%	22%	41%	7%	61%	60%	19%	13%
Adj. Flow (vph)	142	0	88	34	0	5	68	818	26	2	460	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	88	0	34	5	0	68	818	26	2	460	30
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.1			7.1	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	10.0	10.0		10.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6		10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2		36.2	36.2		35.6	35.6	35.6	35.6	35.6	35.6
Total Split (s)	52.0	52.0		52.0	52.0		68.0	68.0	68.0	68.0	68.0	68.0
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%	56.7%	56.7%	56.7%	56.7%
Maximum Green (s)	43.8	43.8		43.8	43.8		61.4	61.4	61.4	61.4	61.4	61.4
Yellow Time (s)	4.0	4.0		4.0	4.0		4.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2		4.2	4.2		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2		8.2	8.2		6.6	6.6	6.6	6.6	6.6	6.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		21.0	21.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	17.0	17.0		17.0	17.0		64.2	64.2	64.2	64.2	64.2	64.2
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.67	0.67	0.67	0.67	0.67	0.67
v/c Ratio	0.69	0.17		0.20	0.01		0.16	0.35	0.04	0.01	0.22	0.03
Control Delay	53.1	0.7		34.8	0.0		8.2	8.0	1.1	7.0	7.1	1.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	0.7		34.8	0.0		8.2	8.0	1.1	7.0	7.1	1.3
LOS	D	A		C	A		A	A	A	A	A	A
Approach Delay		33.1			30.4			7.8			6.7	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 96.1			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 11.5		Intersection LOS: B	
Intersection Capacity Utilization 65.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & Street A/12333 Airport Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	16	287	15	4	236
Future Volume (vph)	30	16	287	15	4	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.954		0.993			
Flt Protected	0.968					0.999
Satd. Flow (prot)	1755	0	1851	0	0	1861
Flt Permitted	0.968					0.999
Satd. Flow (perm)	1755	0	1851	0	0	1861
Link Speed (k/h)	50		70			70
Link Distance (m)	379.1		483.3			148.6
Travel Time (s)	27.3		24.9			7.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	33	17	312	16	4	257
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	328	0	0	261
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	16	287	15	4	236
Future Volume (Veh/h)	30	16	287	15	4	236
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)	33	17	312	16	4	257
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	585	320			328	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	585	320			328	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	98			100	
cM capacity (veh/h)	475	725			1243	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	50	328	261
Volume Left	33	0	4
Volume Right	17	16	0
cSH	538	1700	1243
Volume to Capacity	0.09	0.19	0.00
Queue Length 95th (m)	2.4	0.0	0.1
Control Delay (s)	12.4	0.0	0.2
Lane LOS	B		A
Approach Delay (s)	12.4	0.0	0.2
Approach LOS	B		

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	26.0%	ICU Level of Service	A
Analysis Period (min)	15		

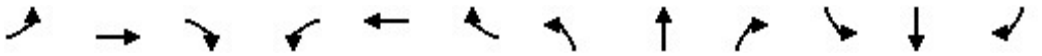
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	16	288	15	4	210
Future Volume (vph)	30	16	288	15	4	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.954		0.993			
Flt Protected	0.968					0.999
Satd. Flow (prot)	1755	0	1851	0	0	1862
Flt Permitted	0.968					0.999
Satd. Flow (perm)	1755	0	1851	0	0	1862
Link Speed (k/h)	50		70			70
Link Distance (m)	309.3		148.6			213.3
Travel Time (s)	22.3		7.6			11.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	33	17	313	16	4	228
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	329	0	0	232
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	16	288	15	4	210
Future Volume (Veh/h)	30	16	288	15	4	210
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)	33	17	313	16	4	228
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	557	321			329	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	557	321			329	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	98			100	
cM capacity (veh/h)	493	724			1242	

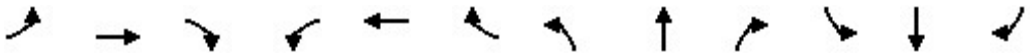
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	50	329	232
Volume Left	33	0	4
Volume Right	17	16	0
cSH	553	1700	1242
Volume to Capacity	0.09	0.19	0.00
Queue Length 95th (m)	2.4	0.0	0.1
Control Delay (s)	12.2	0.0	0.2
Lane LOS	B		A
Approach Delay (s)	12.2	0.0	0.2
Approach LOS	B		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	26.1%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Future Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	55.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.937			0.883			0.903				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	1863	1745	0	1770	1645	0	1770	1682	0	1770	1863	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	1863	1745	0	1770	1645	0	1770	1682	0	1770	1863	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		191.6			667.0			866.6			321.8	
Travel Time (s)		13.8			48.0			62.4			23.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	15	11	89	8	28	3	27	50	64	74	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	89	36	0	3	77	0	64	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane					Yes			Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Future Volume (vph)	0	14	10	82	7	26	3	25	46	59	68	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	15	11	89	8	28	3	27	50	64	74	0

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	0	26	89	36	3	77	64	74
Volume Left (vph)	0	0	89	0	3	0	64	0
Volume Right (vph)	0	11	0	28	0	50	0	0
Hadj (s)	0.00	-0.26	0.53	-0.51	0.53	-0.42	0.53	0.03
Departure Headway (s)	5.2	4.9	5.6	4.5	5.6	4.6	5.5	5.0
Degree Utilization, x	0.00	0.04	0.14	0.05	0.00	0.10	0.10	0.10
Capacity (veh/h)	674	696	615	753	621	747	628	693
Control Delay (s)	7.0	6.9	8.3	6.6	7.4	6.9	7.9	7.4
Approach Delay (s)	6.9		7.8		6.9		7.6	
Approach LOS	A		A		A		A	

Intersection Summary				
Delay	7.5			
Level of Service	A			
Intersection Capacity Utilization	27.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	39	16	0	0	0
Future Volume (vph)	0	39	16	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0	55.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	1863	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	1863	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	686.5			322.8	112.4	
Travel Time (s)	49.4			23.2	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	42	17	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	42	17	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane	Yes			Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	39	16	0	0	0
Future Volume (vph)	0	39	16	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	42	17	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total (vph)	0	42	17	0	0
Volume Left (vph)	0	0	17	0	0
Volume Right (vph)	0	42	0	0	0
Hadj (s)	0.00	-0.67	0.53	0.00	0.00
Departure Headway (s)	4.5	3.9	5.1	4.6	4.4
Degree Utilization, x	0.00	0.05	0.02	0.00	0.00
Capacity (veh/h)	796	920	687	785	814
Control Delay (s)	6.3	5.9	7.0	6.4	7.4
Approach Delay (s)	5.9		7.0		0.0
Approach LOS	A		A		A

Intersection Summary			
Delay	6.2		
Level of Service	A		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

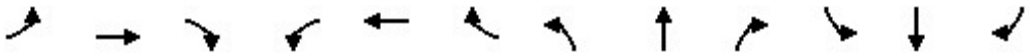
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	87	0	16	34	0	39
Future Volume (vph)	87	0	16	34	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	55.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.907			
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1690	0	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1690	0	1863	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	334.7		321.8			322.8
Travel Time (s)	24.1		23.2			23.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	0	17	37	0	42
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	54	0	0	42
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.6			3.6
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes		Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	87	0	16	34	0	39
Future Volume (vph)	87	0	16	34	0	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	95	0	17	37	0	42

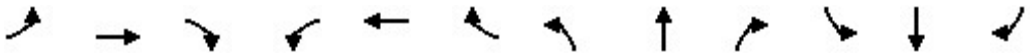
Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total (vph)	95	0	54	0	42
Volume Left (vph)	95	0	0	0	0
Volume Right (vph)	0	0	37	0	0
Hadj (s)	0.53	0.00	-0.38	0.00	0.03
Departure Headway (s)	5.3	4.7	4.2	4.8	4.8
Degree Utilization, x	0.14	0.00	0.06	0.00	0.06
Capacity (veh/h)	670	758	820	743	718
Control Delay (s)	7.9	6.5	7.5	6.6	6.9
Approach Delay (s)	7.9		7.5	6.9	
Approach LOS	A		A	A	

Intersection Summary			
Delay	7.6		
Level of Service	A		
Intersection Capacity Utilization	14.8%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	211	19	17	91	1	6	91	22	4	312	11
Future Volume (vph)	6	211	19	17	91	1	6	91	22	4	312	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.999			0.975			0.995	
Flt Protected		0.999			0.992			0.997			0.999	
Satd. Flow (prot)	0	1806	0	0	1867	0	0	1780	0	0	1883	0
Flt Permitted		0.999			0.992			0.997			0.999	
Satd. Flow (perm)	0	1806	0	0	1867	0	0	1780	0	0	1883	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	7	229	21	18	99	1	7	99	24	4	339	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	257	0	0	118	0	0	130	0	0	355	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	211	19	17	91	1	6	91	22	4	312	11
Future Volume (vph)	6	211	19	17	91	1	6	91	22	4	312	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	229	21	18	99	1	7	99	24	4	339	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	257	118	130	355
Volume Left (vph)	7	18	7	4
Volume Right (vph)	21	1	24	12
Hadj (s)	0.02	0.04	-0.04	-0.01
Departure Headway (s)	5.5	5.7	5.5	5.2
Degree Utilization, x	0.39	0.19	0.20	0.51
Capacity (veh/h)	612	559	582	658
Control Delay (s)	11.9	10.0	9.9	13.4
Approach Delay (s)	11.9	10.0	9.9	13.4
Approach LOS	B	B	A	B

Intersection Summary				
Delay	12.0			
Level of Service	B			
Intersection Capacity Utilization	38.7%	ICU Level of Service	A	
Analysis Period (min)	15			

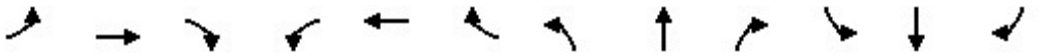
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	132	0	0	358
Future Volume (vph)	0	0	132	0	0	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	0	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	1863	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1863	1863	1863	0	0	1863
Link Speed (k/h)	50		70			70
Link Distance (m)	686.5		624.2			1613.1
Travel Time (s)	49.4		32.1			83.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	143	0	0	389
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	143	0	0	389
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	132	0	0	358
Future Volume (Veh/h)	0	0	132	0	0	358
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)	0	0	143	0	0	389
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	532	143			143	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	532	143			143	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	508	905			1440	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	0	0	143	389
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1440
Volume to Capacity	0.00	0.00	0.08	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS	A	A		
Approach Delay (s)	0.0		0.0	0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	22.2%	ICU Level of Service	A
Analysis Period (min)	15		

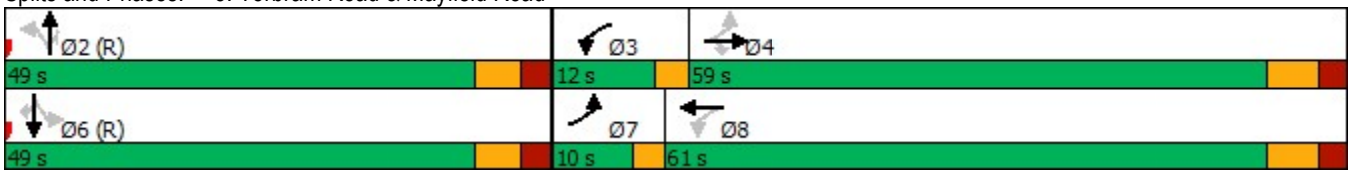


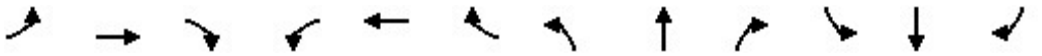
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	2199	259	197	1756	18	292	101	146	18	276	56
Future Volume (vph)	67	2199	259	197	1756	18	292	101	146	18	276	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4857	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.076			0.072			0.488			0.692		
Satd. Flow (perm)	139	4734	1597	135	4857	0	917	1942	1587	1300	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259		2				131			66
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	67	2199	259	197	1756	18	292	101	146	18	276	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	2199	259	197	1774	0	292	101	146	18	276	56
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	10.0	59.0	59.0	12.0	61.0		49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	8.3%	49.2%	49.2%	10.0%	50.8%		40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Maximum Green (s)	7.0	51.7	51.7	9.0	53.7		41.9	41.9	41.9	41.9	41.9	41.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	62.5	51.7	51.7	67.4	55.9		41.9	41.9	41.9	41.9	41.9	41.9
Actuated g/C Ratio	0.52	0.43	0.43	0.56	0.47		0.35	0.35	0.35	0.35	0.35	0.35
v/c Ratio	0.43	1.08	0.31	0.99	0.78		0.91	0.15	0.23	0.04	0.41	0.10
Control Delay	20.6	78.3	3.5	90.3	32.8		70.9	27.6	6.9	26.3	31.9	5.5
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	20.6	78.3	3.5	90.3	32.8		70.9	27.6	6.9	26.3	31.9	5.5
LOS	C	E	A	F	C		E	C	A	C	C	A
Approach Delay		69.1			38.5			45.4			27.4	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 52.8		Intersection LOS: D	
Intersection Capacity Utilization 105.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road



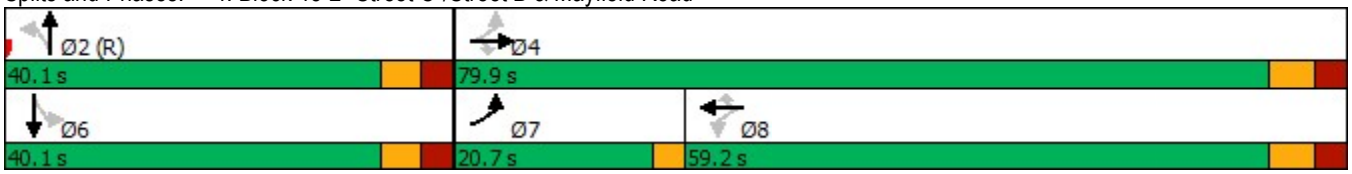


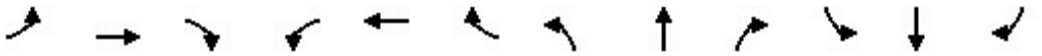
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	217	2092	110	14	1765	90	231	0	35	59	0	76
Future Volume (vph)	217	2092	110	14	1765	90	231	0	35	59	0	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6
Storage Length (m)	75.0		55.0	75.0		55.0	55.0		0.0	55.0		75.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1517	4734	1583	1770	4864	1170	1770	1619	0	1357	1342	0
Flt Permitted	0.075			0.080			0.708			0.734		
Satd. Flow (perm)	120	4734	1583	149	4864	1170	1319	1619	0	1049	1342	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86			60		65			279	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		716.7			643.7			353.1			866.6	
Travel Time (s)		32.3			29.0			25.4			62.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	19%	12%	2%	2%	9%	38%	2%	0%	2%	33%	0%	23%
Adj. Flow (vph)	217	2092	110	14	1765	90	231	0	35	59	0	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	217	2092	110	14	1765	90	231	35	0	59	76	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	2.0	25.0	10.0		10.0	10.0	
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	2.0	10.0	0.6		10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		5.0	5.0	
Minimum Split (s)	9.5	25.1	25.1	25.1	25.1	25.1	24.6	24.6		24.6	24.6	
Total Split (s)	20.7	79.9	79.9	59.2	59.2	59.2	40.1	40.1		40.1	40.1	
Total Split (%)	17.3%	66.6%	66.6%	49.3%	49.3%	49.3%	33.4%	33.4%		33.4%	33.4%	
Maximum Green (s)	17.7	72.8	72.8	52.1	52.1	52.1	33.5	33.5		33.5	33.5	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.7	3.7		3.7	3.7	
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	6.6	6.6		6.6	6.6	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	Min	Min	Min	C-Max	C-Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	73.0	68.9	68.9	50.0	50.0	50.0	37.4	37.4		37.4	37.4	
Actuated g/C Ratio	0.61	0.57	0.57	0.42	0.42	0.42	0.31	0.31		0.31	0.31	
v/c Ratio	0.84	0.77	0.12	0.23	0.87	0.17	0.56	0.06		0.18	0.12	
Control Delay	49.7	35.6	12.5	27.6	33.9	8.7	42.5	2.3		34.4	0.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	49.7	35.6	12.5	27.6	33.9	8.7	42.5	2.3		34.4	0.4	
LOS	D	D	B	C	C	A	D	A		C	A	
Approach Delay		35.8			32.7			37.2			15.3	
Approach LOS		D			C			D			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 34.0		Intersection LOS: C	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C"/Street B & Mayfield Road



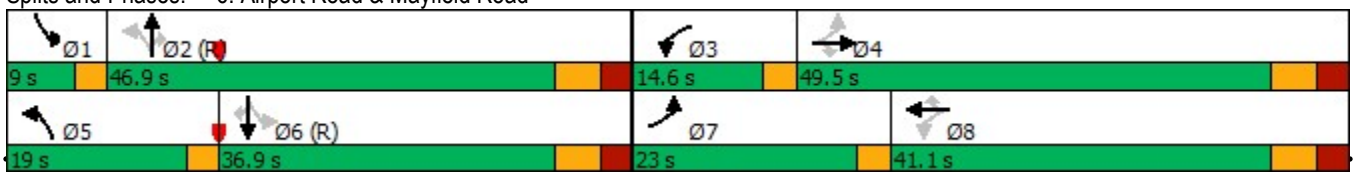


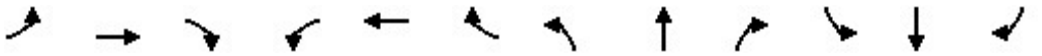
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Future Volume (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.108			0.184			0.164			0.548		
Satd. Flow (perm)	147	4939	1493	320	5216	961	293	3386	1426	851	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			368			145			119			217
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	23.0	49.5	49.5	14.6	41.1	41.1	19.0	46.9	46.9	9.0	36.9	36.9
Total Split (%)	19.2%	41.3%	41.3%	12.2%	34.3%	34.3%	15.8%	39.1%	39.1%	7.5%	30.8%	30.8%
Maximum Green (s)	20.0	42.4	42.4	11.6	34.0	34.0	16.0	40.0	40.0	6.0	30.0	30.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	61.1	45.3	45.3	46.8	34.0	34.0	52.9	40.1	40.1	40.1	30.3	30.3
Actuated g/C Ratio	0.51	0.38	0.38	0.39	0.28	0.28	0.44	0.33	0.33	0.33	0.25	0.25
v/c Ratio	0.98	0.65	0.58	0.49	0.83	0.16	0.90	0.30	0.17	0.29	0.83	0.44
Control Delay	91.2	43.2	19.3	24.6	46.3	0.9	57.7	30.5	3.6	24.3	51.9	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	91.2	43.2	19.3	24.6	46.3	0.9	57.7	30.5	3.6	24.3	51.9	7.6
LOS	F	D	B	C	D	A	E	C	A	C	D	A
Approach Delay		44.0			42.6			37.6			39.9	
Approach LOS		D			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 41.9		Intersection LOS: D	
Intersection Capacity Utilization 101.8%		ICU Level of Service G	
Analysis Period (min) 15			

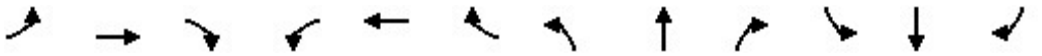
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	33	78	0	17	46	665	83	2	850	3
Future Volume (vph)	5	1	33	78	0	17	46	665	83	2	850	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.854			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1505	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	5	1	33	78	0	17	46	665	86	2	850	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	34	0	78	17	0	46	665	86	2	850	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	33	78	0	17	46	665	83	2	850	3
Future Volume (Veh/h)	5	1	33	78	0	17	46	665	83	2	850	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	5	1	33	78	0	17	46	665	86	2	850	3
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1296	1703	426	1224	1620	338	854			756		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1296	1703	426	1224	1620	338	854			756		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	95	99	94	28	100	97	89			100		
cM capacity (veh/h)	92	82	547	109	92	661	413			471		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	5	34	78	17	46	332	332	86	2	425	425	3
Volume Left	5	0	78	0	46	0	0	0	2	0	0	0
Volume Right	0	33	0	17	0	0	0	86	0	0	0	3
cSH	92	468	109	661	413	1700	1700	1700	471	1700	1700	1700
Volume to Capacity	0.05	0.07	0.72	0.03	0.11	0.20	0.20	0.05	0.00	0.25	0.25	0.00
Queue Length 95th (m)	1.4	1.9	30.4	0.6	3.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	46.3	13.3	95.3	10.6	14.8	0.0	0.0	0.0	12.7	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				B			
Approach Delay (s)	17.5		80.1		0.9				0.0			
Approach LOS	C		F									

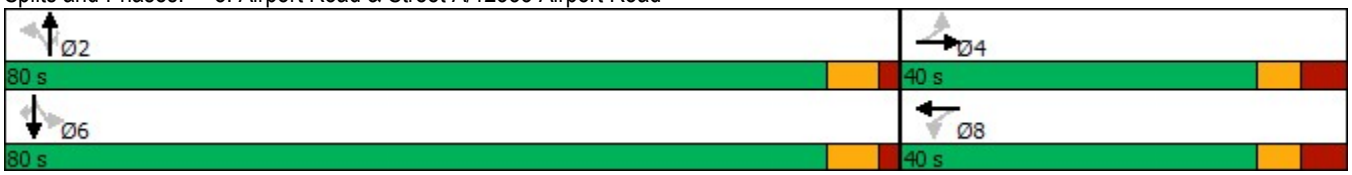
Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	47.8%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	0	85	77	0	11	127	443	61	17	682	119
Future Volume (vph)	31	0	85	77	0	11	127	443	61	17	682	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6
Storage Length (m)	55.0		55.0	0.0		0.0	0.0		145.0	75.0		55.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1480	1342	0	1271	1353	0	1280	3449	1003	1128	3101	1429
Flt Permitted	0.750			0.702			0.391			0.495		
Satd. Flow (perm)	1168	1342	0	939	1353	0	527	3449	1003	588	3101	1429
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		255			429				61			119
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		667.0			270.4			438.0			348.1	
Travel Time (s)		48.0			19.5			19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	22%	0%	23%	42%	0%	22%	41%	7%	61%	60%	19%	13%
Adj. Flow (vph)	31	0	85	77	0	11	127	443	61	17	682	119
Shared Lane Traffic (%)												
Lane Group Flow (vph)	31	85	0	77	11	0	127	443	61	17	682	119
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.1			7.1	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	10.0	10.0		10.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6		10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2		36.2	36.2		35.6	35.6	35.6	35.6	35.6	35.6
Total Split (s)	40.0	40.0		40.0	40.0		80.0	80.0	80.0	80.0	80.0	80.0
Total Split (%)	33.3%	33.3%		33.3%	33.3%		66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
Maximum Green (s)	31.8	31.8		31.8	31.8		73.4	73.4	73.4	73.4	73.4	73.4
Yellow Time (s)	4.0	4.0		4.0	4.0		4.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2		4.2	4.2		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2		8.2	8.2		6.6	6.6	6.6	6.6	6.6	6.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		21.0	21.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	15.0	15.0		15.0	15.0		78.8	78.8	78.8	78.8	78.8	78.8
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.77	0.77	0.77	0.77	0.77	0.77
v/c Ratio	0.18	0.21		0.57	0.02		0.32	0.17	0.08	0.04	0.29	0.11
Control Delay	41.0	1.1		57.7	0.1		8.7	4.9	1.8	5.6	5.6	1.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	1.1		57.7	0.1		8.7	4.9	1.8	5.6	5.6	1.3
LOS	D	A		E	A		A	A	A	A	A	A
Approach Delay		11.8			50.5			5.4			5.0	
Approach LOS		B			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 102.8			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 8.0		Intersection LOS: A	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & Street A/12333 Airport Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	3	163	36	12	346
Future Volume (vph)	12	3	163	36	12	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975		0.976			
Flt Protected	0.961					0.998
Satd. Flow (prot)	1780	0	1824	0	0	1860
Flt Permitted	0.961					0.998
Satd. Flow (perm)	1780	0	1824	0	0	1860
Link Speed (k/h)	50		70			70
Link Distance (m)	379.1		483.3			148.6
Travel Time (s)	27.3		24.9			7.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	13	3	177	39	13	376
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	216	0	0	389
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	3	163	36	12	346
Future Volume (Veh/h)	12	3	163	36	12	346
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)	13	3	177	39	13	376
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	598	196			216	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	598	196			216	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			99	
cM capacity (veh/h)	464	850			1366	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	16	216	389
Volume Left	13	0	13
Volume Right	3	39	0
cSH	507	1700	1366
Volume to Capacity	0.03	0.13	0.01
Queue Length 95th (m)	0.8	0.0	0.2
Control Delay (s)	12.3	0.0	0.3
Lane LOS	B		A
Approach Delay (s)	12.3	0.0	0.3
Approach LOS	B		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	37.9%	ICU Level of Service	A
Analysis Period (min)	15		

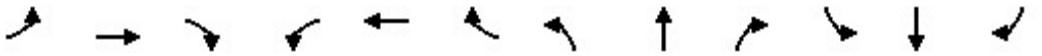
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	3	130	36	12	346
Future Volume (vph)	12	3	130	36	12	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975		0.971			
Flt Protected	0.961					0.998
Satd. Flow (prot)	1780	0	1816	0	0	1860
Flt Permitted	0.961					0.998
Satd. Flow (perm)	1780	0	1816	0	0	1860
Link Speed (k/h)	50		70			70
Link Distance (m)	309.3		148.6			213.3
Travel Time (s)	22.3		7.6			11.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	13	3	141	39	13	376
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	180	0	0	389
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	3	130	36	12	346
Future Volume (Veh/h)	12	3	130	36	12	346
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)	13	3	141	39	13	376
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	562	160			180	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	562	160			180	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			99	
cM capacity (veh/h)	487	890			1408	

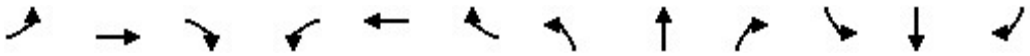
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	16	180	389
Volume Left	13	0	13
Volume Right	3	39	0
cSH	532	1700	1408
Volume to Capacity	0.03	0.11	0.01
Queue Length 95th (m)	0.7	0.0	0.2
Control Delay (s)	12.0	0.0	0.3
Lane LOS	B		A
Approach Delay (s)	12.0	0.0	0.3
Approach LOS	B		

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		37.9%	ICU Level of Service A
Analysis Period (min)		15	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	6	2	40	15	89	9	176	62	30	89	0
Future Volume (vph)	0	6	2	40	15	89	9	176	62	30	89	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	55.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.871			0.961				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	1863	1801	0	1770	1622	0	1770	1790	0	1770	1863	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	1863	1801	0	1770	1622	0	1770	1790	0	1770	1863	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		185.7			667.0			866.6			322.5	
Travel Time (s)		13.4			48.0			62.4			23.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	2	43	16	97	10	191	67	33	97	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	43	113	0	10	258	0	33	97	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane					Yes			Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	6	2	40	15	89	9	176	62	30	89	0
Future Volume (vph)	0	6	2	40	15	89	9	176	62	30	89	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	43	16	97	10	191	67	33	97	0

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	0	9	43	113	10	258	33	97
Volume Left (vph)	0	0	43	0	10	0	33	0
Volume Right (vph)	0	2	0	97	0	67	0	0
Hadj (s)	0.00	-0.12	0.53	-0.57	0.53	-0.15	0.53	0.03
Departure Headway (s)	5.6	5.5	6.0	4.9	5.6	4.9	5.7	5.2
Degree Utilization, x	0.00	0.01	0.07	0.15	0.02	0.35	0.05	0.14
Capacity (veh/h)	599	597	561	685	619	709	602	662
Control Delay (s)	7.4	7.4	8.3	7.6	7.5	9.4	7.8	7.9
Approach Delay (s)	7.4		7.8		9.3		7.9	
Approach LOS	A		A		A		A	

Intersection Summary				
Delay	8.5			
Level of Service	A			
Intersection Capacity Utilization	35.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	91	173	0	0	0
Future Volume (vph)	0	91	173	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0	55.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	1863	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	1863	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	686.5			322.1	112.4	
Travel Time (s)	49.4			23.2	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	99	188	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	99	188	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane	Yes			Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	12.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	91	173	0	0	0
Future Volume (vph)	0	91	173	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	99	188	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total (vph)	0	99	188	0	0
Volume Left (vph)	0	0	188	0	0
Volume Right (vph)	0	99	0	0	0
Hadj (s)	0.00	-0.67	0.53	0.00	0.00
Departure Headway (s)	5.0	4.4	5.3	4.7	4.8
Degree Utilization, x	0.00	0.12	0.28	0.00	0.00
Capacity (veh/h)	703	784	667	757	743
Control Delay (s)	6.8	6.8	9.1	6.5	7.8
Approach Delay (s)	6.8		9.1		0.0
Approach LOS	A		A		A

Intersection Summary			
Delay	8.3		
Level of Service	A		
Intersection Capacity Utilization	12.9%	ICU Level of Service	A
Analysis Period (min)	15		

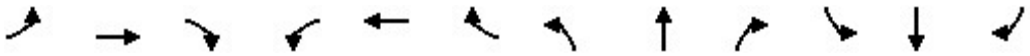
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	27	0	173	91	0	91
Future Volume (vph)	27	0	173	91	0	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	55.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.953			
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1775	0	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1775	0	1863	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	327.6		322.5			322.1
Travel Time (s)	23.6		23.2			23.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	0	188	99	0	99
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	287	0	0	99
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.6			3.6
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes		Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	27	0	173	91	0	91
Future Volume (vph)	27	0	173	91	0	91
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	0	188	99	0	99

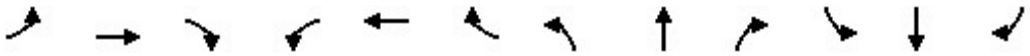
Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total (vph)	29	0	287	0	99
Volume Left (vph)	29	0	0	0	0
Volume Right (vph)	0	0	99	0	0
Hadj (s)	0.53	0.00	-0.17	0.00	0.03
Departure Headway (s)	5.9	5.4	4.3	4.8	4.8
Degree Utilization, x	0.05	0.00	0.35	0.00	0.13
Capacity (veh/h)	562	627	818	752	728
Control Delay (s)	8.0	7.2	9.6	6.6	7.4
Approach Delay (s)	8.0		9.6	7.4	
Approach LOS	A		A	A	

Intersection Summary			
Delay	9.0		
Level of Service	A		
Intersection Capacity Utilization	24.7%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	99	7	14	339	7	21	273	27	6	80	7
Future Volume (vph)	11	99	7	14	339	7	21	273	27	6	80	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.997			0.989			0.989	
Flt Protected		0.995			0.998			0.997			0.997	
Satd. Flow (prot)	0	1791	0	0	1873	0	0	1824	0	0	1842	0
Flt Permitted		0.995			0.998			0.997			0.997	
Satd. Flow (perm)	0	1791	0	0	1873	0	0	1824	0	0	1842	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		520.6			356.0			1613.1			805.6	
Travel Time (s)		26.8			18.3			83.0			41.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	4%	0%	0%	1%	0%	0%	2%	12%	25%	0%	0%
Adj. Flow (vph)	12	108	8	15	368	8	23	297	29	7	87	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	128	0	0	391	0	0	349	0	0	102	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	11	99	7	14	339	7	21	273	27	6	80	7
Future Volume (vph)	11	99	7	14	339	7	21	273	27	6	80	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	108	8	15	368	8	23	297	29	7	87	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	128	391	349	102
Volume Left (vph)	12	15	23	7
Volume Right (vph)	8	8	29	8
Hadj (s)	0.06	0.01	0.01	0.00
Departure Headway (s)	6.0	5.5	5.6	6.1
Degree Utilization, x	0.21	0.60	0.54	0.17
Capacity (veh/h)	530	623	602	505
Control Delay (s)	10.6	16.2	15.1	10.3
Approach Delay (s)	10.6	16.2	15.1	10.3
Approach LOS	B	C	C	B

Intersection Summary				
Delay	14.4			
Level of Service	B			
Intersection Capacity Utilization	50.3%	ICU Level of Service	A	
Analysis Period (min)	15			

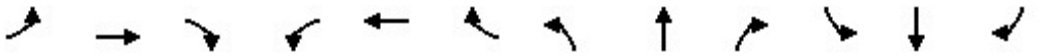
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	253	0	0	106
Future Volume (vph)	0	0	253	0	0	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	0	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	1863	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1863	1863	1863	0	0	1863
Link Speed (k/h)	50		70			70
Link Distance (m)	686.5		624.2			1613.1
Travel Time (s)	49.4		32.1			83.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	275	0	0	115
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	275	0	0	115
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	253	0	0	106
Future Volume (Veh/h)	0	0	253	0	0	106
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)	0	0	275	0	0	115
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	390	275			275	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	390	275			275	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	614	764			1288	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	0	0	275	115
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1288
Volume to Capacity	0.00	0.00	0.16	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS	A	A		
Approach Delay (s)	0.0		0.0	0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	16.6%	ICU Level of Service	A
Analysis Period (min)	15		

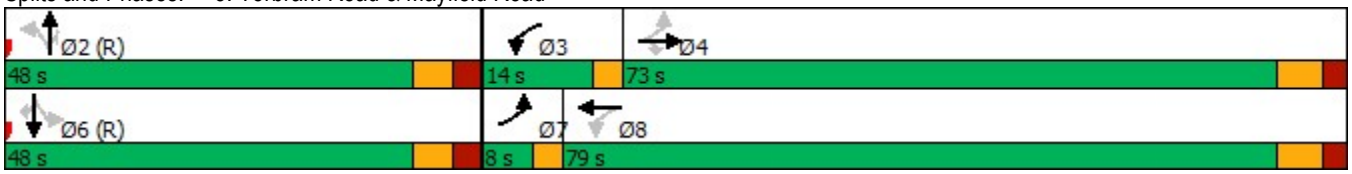


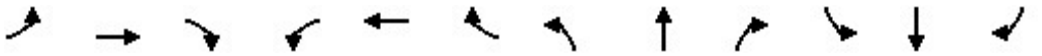
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	2116	243	175	2249	16	305	168	175	12	85	60
Future Volume (vph)	51	2116	243	175	2249	16	305	168	175	12	85	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.5	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5
Storage Length (m)	100.0		125.0	105.0		0.0	80.0		0.0	80.0		80.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	50.0			100.0			70.0			100.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1733	4734	1597	1785	4861	0	1785	1942	1587	1785	1942	1465
Flt Permitted	0.061			0.058			0.702			0.610		
Satd. Flow (perm)	111	4734	1597	109	4861	0	1319	1942	1587	1146	1942	1465
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		1				121			83
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		442.3			716.7			493.9			483.3	
Travel Time (s)		19.9			32.3			25.4			24.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	12%	0%	0%	9%	4%	0%	0%	4%	0%	0%	9%
Adj. Flow (vph)	51	2116	243	175	2249	16	305	168	175	12	85	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	2116	243	175	2265	0	305	168	175	12	85	60
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.97	1.01	1.01	0.97	0.97	1.01	0.97	0.97	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	16.0	16.0	5.0	16.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	8.0	50.3	50.3	8.0	50.3		43.1	43.1	43.1	43.1	43.1	43.1
Total Split (s)	8.0	73.0	73.0	14.0	79.0		48.0	48.0	48.0	48.0	48.0	48.0
Total Split (%)	5.9%	54.1%	54.1%	10.4%	58.5%		35.6%	35.6%	35.6%	35.6%	35.6%	35.6%
Maximum Green (s)	5.0	65.7	65.7	11.0	71.7		40.9	40.9	40.9	40.9	40.9	40.9
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		4.2	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.7	2.7	0.0	2.7		2.9	2.9	2.9	2.9	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.3	7.3	3.0	7.3		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
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
Recall Mode	None	None	None	None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		8.0	8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)		35.0	35.0		35.0		28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	74.4	65.1	65.1	83.2	72.5		41.7	41.7	41.7	41.7	41.7	41.7
Actuated g/C Ratio	0.55	0.48	0.48	0.62	0.54		0.31	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.42	0.93	0.27	0.88	0.87		0.75	0.28	0.30	0.03	0.14	0.12
Control Delay	21.9	40.9	3.0	76.7	27.5		55.2	37.2	13.6	33.7	35.0	3.6
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	21.9	40.9	3.0	76.7	27.5		55.2	37.2	13.6	33.7	35.0	3.6
LOS	C	D	A	E	C		E	D	B	C	D	A
Approach Delay		36.7			31.0			39.3			22.9	
Approach LOS		D			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 34.1		Intersection LOS: C	
Intersection Capacity Utilization 89.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Mayfield Road



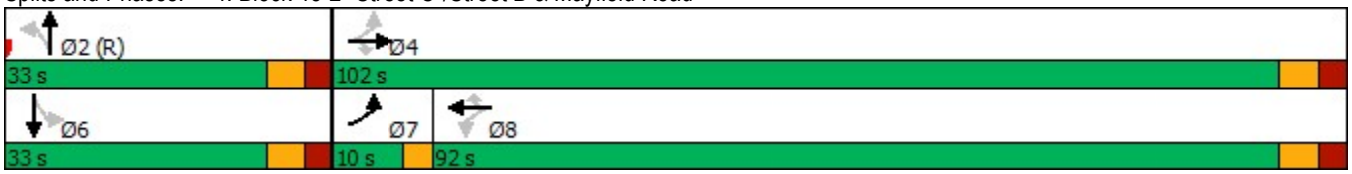


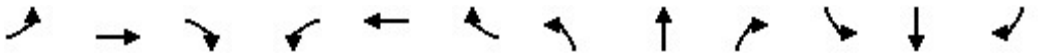
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	2155	98	41	2099	46	104	0	23	70	0	248
Future Volume (vph)	81	2155	98	41	2099	46	104	0	23	70	0	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6
Storage Length (m)	75.0		55.0	75.0		55.0	55.0		0.0	55.0		75.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1517	4734	1583	1770	4864	1170	1770	1619	0	1357	1342	0
Flt Permitted	0.050			0.058			0.439			0.742		
Satd. Flow (perm)	80	4734	1583	108	4864	1170	818	1619	0	1060	1342	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			88			53		57			93	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		716.7			643.7			353.1			866.6	
Travel Time (s)		32.3			29.0			25.4			62.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	19%	12%	2%	2%	9%	38%	2%	0%	2%	33%	0%	23%
Adj. Flow (vph)	81	2155	98	41	2099	46	104	0	23	70	0	248
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	2155	98	41	2099	46	104	23	0	70	248	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	2.0	25.0	10.0		10.0	10.0	
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0		0.0	0.0	
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	2.0	10.0	0.6		10.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		5.0	5.0	
Minimum Split (s)	9.5	25.1	25.1	25.1	25.1	25.1	24.6	24.6		24.6	24.6	
Total Split (s)	10.0	102.0	102.0	92.0	92.0	92.0	33.0	33.0		33.0	33.0	
Total Split (%)	7.4%	75.6%	75.6%	68.1%	68.1%	68.1%	24.4%	24.4%		24.4%	24.4%	
Maximum Green (s)	7.0	94.9	94.9	84.9	84.9	84.9	26.4	26.4		26.4	26.4	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.7	3.7		3.7	3.7	
All-Red Time (s)	0.0	3.1	3.1	3.1	3.1	3.1	2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.1	7.1	7.1	7.1	7.1	6.6	6.6		6.6	6.6	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	Min	Min	Min	C-Max	C-Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	90.9	86.8	86.8	77.0	77.0	77.0	34.5	34.5		34.5	34.5	
Actuated g/C Ratio	0.67	0.64	0.64	0.57	0.57	0.57	0.26	0.26		0.26	0.26	
v/c Ratio	0.65	0.71	0.09	0.67	0.76	0.07	0.50	0.05		0.26	0.60	
Control Delay	44.7	27.1	7.8	64.3	34.4	5.1	55.4	0.2		46.4	35.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	44.7	27.1	7.8	64.3	34.4	5.1	55.4	0.2		46.4	35.8	
LOS	D	C	A	E	C	A	E	A		D	D	
Approach Delay		26.9			34.3			45.4			38.2	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 31.4		Intersection LOS: C	
Intersection Capacity Utilization 99.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Block 48-2 "Street C"/Street B & Mayfield Road



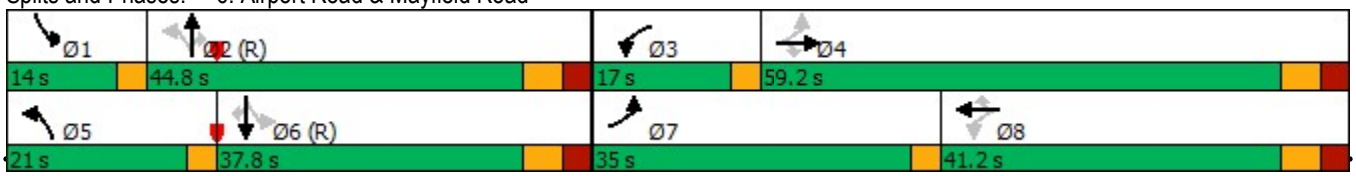


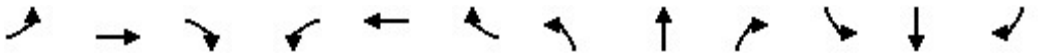
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Future Volume (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.108			0.219			0.323			0.317		
Satd. Flow (perm)	147	4939	1493	381	5216	961	577	3386	1426	492	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			199			128			106			323
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Shared Lane Traffic (%)												
Lane Group Flow (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	41.1	41.1	8.0	41.1	41.1	8.0	36.9	36.9	9.0	36.9	36.9
Total Split (s)	35.0	59.2	59.2	17.0	41.2	41.2	21.0	44.8	44.8	14.0	37.8	37.8
Total Split (%)	25.9%	43.9%	43.9%	12.6%	30.5%	30.5%	15.6%	33.2%	33.2%	10.4%	28.0%	28.0%
Maximum Green (s)	32.0	52.1	52.1	14.0	34.1	34.1	18.0	37.9	37.9	11.0	30.9	30.9
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.1	7.1	3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	73.2	56.4	56.4	47.9	34.1	34.1	55.8	38.7	38.7	45.0	30.9	30.9
Actuated g/C Ratio	0.54	0.42	0.42	0.35	0.25	0.25	0.41	0.29	0.29	0.33	0.23	0.23
v/c Ratio	1.02	0.59	0.32	0.56	0.95	0.23	1.00	0.65	0.21	0.55	0.58	0.58
Control Delay	106.4	22.1	9.3	28.6	65.0	2.4	80.0	46.2	7.3	35.8	49.9	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.4	22.1	9.3	28.6	65.0	2.4	80.0	46.2	7.3	35.8	49.9	9.1
LOS	F	C	A	C	E	A	E	D	A	D	D	A
Approach Delay		37.1			58.5			54.3			33.2	
Approach LOS		D			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 46.0		Intersection LOS: D	
Intersection Capacity Utilization 113.1%		ICU Level of Service H	
Analysis Period (min) 15			

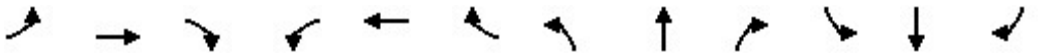
Splits and Phases: 6: Airport Road & Mayfield Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	76	113	0	4	78	927	90	17	605	6
Future Volume (vph)	8	1	76	113	0	4	78	927	90	17	605	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	4.0	4.0	3.6	3.6	3.6	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	0.0		0.0	30.0		7.5	70.0		65.0	70.0		60.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			75.0			65.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt		0.852			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1479	1498	0	1687	1615	0	955	3386	868	965	3181	956
Link Speed (k/h)		50			50			60			80	
Link Distance (m)		119.2			274.1			446.4			438.0	
Travel Time (s)		8.6			19.7			26.8			19.7	
Confl. Peds. (#/hr)							1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Heavy Vehicles (%)	18%	0%	13%	7%	0%	0%	87%	9%	84%	85%	16%	67%
Adj. Flow (vph)	8	1	76	113	0	4	78	927	94	17	605	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	77	0	113	4	0	78	927	94	17	605	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.04	0.94	0.94	1.00	1.00	1.00	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	

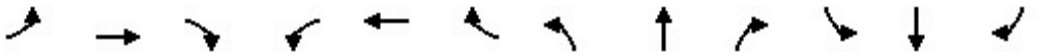
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	76	113	0	4	78	927	90	17	605	6
Future Volume (Veh/h)	8	1	76	113	0	4	78	927	90	17	605	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Hourly flow rate (vph)	8	1	76	113	0	4	78	927	94	17	605	6
Pedestrians		1			5							
Lane Width (m)		3.6			3.6							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1264	1822	304	1501	1734	468	612			1026		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1264	1822	304	1501	1734	468	612			1026		
tC, single (s)	7.9	6.5	7.2	7.6	6.5	6.9	5.8			5.8		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.6	4.0	3.3	3.1			3.1		
p0 queue free %	91	98	88	0	100	99	86			95		
cM capacity (veh/h)	94	64	660	60	72	544	557			337		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	8	77	113	4	78	464	464	94	17	302	302	6
Volume Left	8	0	113	0	78	0	0	0	17	0	0	0
Volume Right	0	76	0	4	0	0	0	94	0	0	0	6
cSH	94	589	60	544	557	1700	1700	1700	337	1700	1700	1700
Volume to Capacity	0.09	0.13	1.89	0.01	0.14	0.27	0.27	0.06	0.05	0.18	0.18	0.00
Queue Length 95th (m)	2.2	3.6	85.1	0.2	3.9	0.0	0.0	0.0	1.3	0.0	0.0	0.0
Control Delay (s)	47.0	12.0	567.9	11.7	12.5	0.0	0.0	0.0	16.3	0.0	0.0	0.0
Lane LOS	E	B	F	B	B				C			
Approach Delay (s)	15.3		548.9		0.9				0.4			
Approach LOS	C		F									

Intersection Summary				
Average Delay	34.6			
Intersection Capacity Utilization	51.9%	ICU Level of Service	A	
Analysis Period (min)	15			

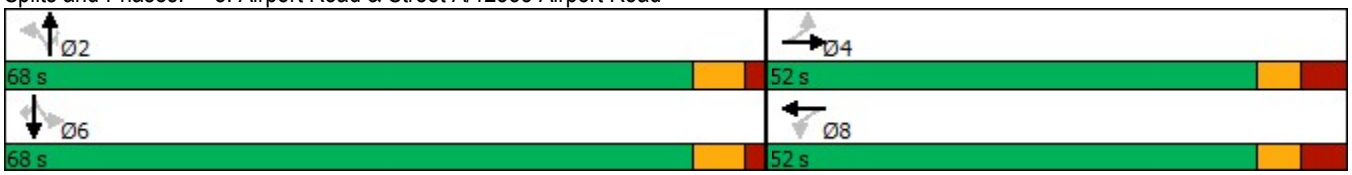


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	188	0	88	34	0	5	68	818	26	2	460	39
Future Volume (vph)	188	0	88	34	0	5	68	818	26	2	460	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6	3.6	3.8	3.6
Storage Length (m)	55.0		55.0	0.0		0.0	0.0		145.0	75.0		55.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1480	1342	0	1271	1353	0	1280	3449	1003	1128	3101	1429
Flt Permitted	0.754			0.700			0.487			0.318		
Satd. Flow (perm)	1174	1342	0	937	1353	0	656	3449	1003	378	3101	1429
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		340			132				47			47
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		667.0			270.4			438.0			348.1	
Travel Time (s)		48.0			19.5			19.7			15.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	22%	0%	23%	42%	0%	22%	41%	7%	61%	60%	19%	13%
Adj. Flow (vph)	188	0	88	34	0	5	68	818	26	2	460	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	188	88	0	34	5	0	68	818	26	2	460	39
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.1			7.1	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	10.0	10.0		10.0	10.0		25.0	10.0	10.0	10.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		15.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6		10.0	0.6		10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	36.2	36.2		36.2	36.2		35.6	35.6	35.6	35.6	35.6	35.6
Total Split (s)	52.0	52.0		52.0	52.0		68.0	68.0	68.0	68.0	68.0	68.0
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%	56.7%	56.7%	56.7%	56.7%
Maximum Green (s)	43.8	43.8		43.8	43.8		61.4	61.4	61.4	61.4	61.4	61.4
Yellow Time (s)	4.0	4.0		4.0	4.0		4.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2		4.2	4.2		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2		8.2	8.2		6.6	6.6	6.6	6.6	6.6	6.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		21.0	21.0	21.0	21.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	20.7	20.7		20.7	20.7		62.6	62.6	62.6	62.6	62.6	62.6
Actuated g/C Ratio	0.21	0.21		0.21	0.21		0.64	0.64	0.64	0.64	0.64	0.64
v/c Ratio	0.76	0.16		0.17	0.01		0.16	0.37	0.04	0.01	0.23	0.04
Control Delay	55.6	0.6		32.2	0.0		10.2	9.9	1.3	9.0	8.8	2.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.6	0.6		32.2	0.0		10.2	9.9	1.3	9.0	8.8	2.4
LOS	E	A		C	A		B	A	A	A	A	A
Approach Delay		38.1			28.1			9.6			8.3	
Approach LOS		D			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 98.1			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 67.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Airport Road & Street A/12333 Airport Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	16	236	15	4	128
Future Volume (vph)	30	16	236	15	4	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.954		0.992			
Flt Protected	0.968					0.999
Satd. Flow (prot)	1755	0	1850	0	0	1862
Flt Permitted	0.968					0.999
Satd. Flow (perm)	1755	0	1850	0	0	1862
Link Speed (k/h)	50		70			70
Link Distance (m)	379.1		483.3			148.6
Travel Time (s)	27.3		24.9			7.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	33	17	257	16	4	139
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	273	0	0	143
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.5			3.5
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	16	236	15	4	128
Future Volume (Veh/h)	30	16	236	15	4	128
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)	33	17	257	16	4	139
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	412	265			273	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	412	265			273	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			100	
cM capacity (veh/h)	598	779			1302	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	50	273	143
Volume Left	33	0	4
Volume Right	17	16	0
cSH	649	1700	1302
Volume to Capacity	0.08	0.16	0.00
Queue Length 95th (m)	2.0	0.0	0.1
Control Delay (s)	11.0	0.0	0.2
Lane LOS	B		A
Approach Delay (s)	11.0	0.0	0.2
Approach LOS	B		

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	23.3%	ICU Level of Service	A
Analysis Period (min)	15		

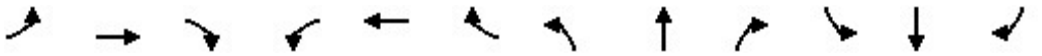
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	16	237	15	4	102
Future Volume (vph)	30	16	237	15	4	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.954		0.992			
Flt Protected	0.968					0.998
Satd. Flow (prot)	1755	0	1850	0	0	1860
Flt Permitted	0.968					0.998
Satd. Flow (perm)	1755	0	1850	0	0	1860
Link Speed (k/h)	50		70			70
Link Distance (m)	309.3		148.6			213.3
Travel Time (s)	22.3		7.6			11.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	33	17	258	16	4	111
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	274	0	0	115
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	16	237	15	4	102
Future Volume (Veh/h)	30	16	237	15	4	102
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)	33	17	258	16	4	111
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	385	266			274	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	385	266			274	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	98			100	
cM capacity (veh/h)	620	778			1301	

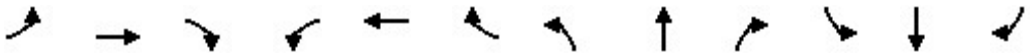
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	50	274	115
Volume Left	33	0	4
Volume Right	17	16	0
cSH	666	1700	1301
Volume to Capacity	0.08	0.16	0.00
Queue Length 95th (m)	1.9	0.0	0.1
Control Delay (s)	10.8	0.0	0.3
Lane LOS	B		A
Approach Delay (s)	10.8	0.0	0.3
Approach LOS	B		

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	23.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	14	10	82	7	35	3	76	46	106	176	0
Future Volume (vph)	0	14	10	82	7	35	3	76	46	106	176	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	55.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.937			0.876			0.944				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	1863	1745	0	1770	1632	0	1770	1758	0	1770	1863	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	1863	1745	0	1770	1632	0	1770	1758	0	1770	1863	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		191.6			667.0			866.6			321.8	
Travel Time (s)		13.8			48.0			62.4			23.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	15	11	89	8	38	3	83	50	115	191	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	89	46	0	3	133	0	115	191	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane					Yes			Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	14	10	82	7	35	3	76	46	106	176	0
Future Volume (vph)	0	14	10	82	7	35	3	76	46	106	176	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	15	11	89	8	38	3	83	50	115	191	0

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	0	26	89	46	3	133	115	191
Volume Left (vph)	0	0	89	0	3	0	115	0
Volume Right (vph)	0	11	0	38	0	50	0	0
Hadj (s)	0.00	-0.26	0.53	-0.54	0.53	-0.23	0.53	0.03
Departure Headway (s)	5.7	5.5	6.1	5.1	5.8	5.1	5.6	5.1
Degree Utilization, x	0.00	0.04	0.15	0.06	0.00	0.19	0.18	0.27
Capacity (veh/h)	591	604	550	662	592	683	616	680
Control Delay (s)	7.5	7.5	9.0	7.2	7.6	8.0	8.7	8.8
Approach Delay (s)	7.5		8.4		8.0		8.8	
Approach LOS	A		A		A		A	

Intersection Summary				
Delay	8.5			
Level of Service	A			
Intersection Capacity Utilization	33.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	194	76	0	0	0
Future Volume (vph)	0	194	76	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0	55.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	1863	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	1863	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	686.5			322.8	112.4	
Travel Time (s)	49.4			23.2	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	211	83	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	211	83	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane	Yes			Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	194	76	0	0	0
Future Volume (vph)	0	194	76	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	211	83	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total (vph)	0	211	83	0	0
Volume Left (vph)	0	0	83	0	0
Volume Right (vph)	0	211	0	0	0
Hadj (s)	0.00	-0.67	0.53	0.00	0.00
Departure Headway (s)	4.7	4.1	5.5	5.0	4.9
Degree Utilization, x	0.00	0.24	0.13	0.00	0.00
Capacity (veh/h)	757	859	626	710	714
Control Delay (s)	6.5	7.2	8.1	6.8	7.9
Approach Delay (s)	7.2		8.1		0.0
Approach LOS	A		A		A

Intersection Summary			
Delay	7.4		
Level of Service	A		
Intersection Capacity Utilization	15.3%	ICU Level of Service	A
Analysis Period (min)	15		

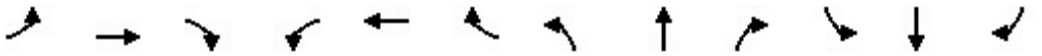
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	87	0	76	34	0	194
Future Volume (vph)	87	0	76	34	0	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.0	0.0		0.0	55.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.958			
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1785	0	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1785	0	1863	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	334.7		321.8			322.8
Travel Time (s)	24.1		23.2			23.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	0	83	37	0	211
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	120	0	0	211
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		3.6			3.6
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane	Yes		Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	87	0	76	34	0	194
Future Volume (vph)	87	0	76	34	0	194
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	95	0	83	37	0	211

Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total (vph)	95	0	120	0	211
Volume Left (vph)	95	0	0	0	0
Volume Right (vph)	0	0	37	0	0
Hadj (s)	0.53	0.00	-0.15	0.00	0.03
Departure Headway (s)	5.9	5.3	4.7	4.9	4.9
Degree Utilization, x	0.15	0.00	0.16	0.00	0.29
Capacity (veh/h)	576	643	738	731	710
Control Delay (s)	8.7	7.1	8.6	6.7	8.7
Approach Delay (s)	8.7		8.6	8.7	
Approach LOS	A		A	A	

Intersection Summary			
Delay	8.7		
Level of Service	A		
Intersection Capacity Utilization	21.7%	ICU Level of Service	A
Analysis Period (min)	15		

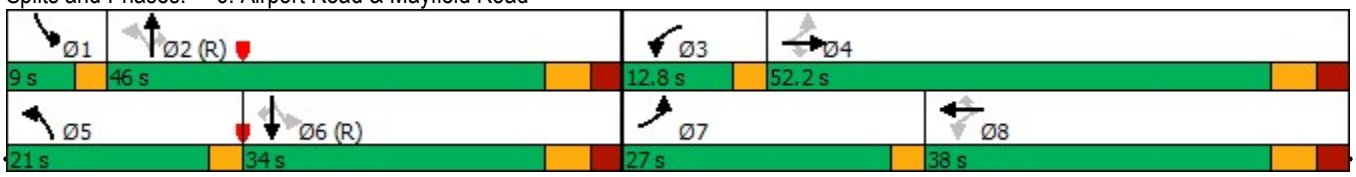


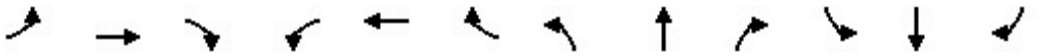
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Future Volume (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.108			0.197			0.171			0.548		
Satd. Flow (perm)	147	4939	1493	343	5216	961	306	3386	1426	851	3355	1332
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			410			145			119			217
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	261	1202	462	109	1231	61	283	338	96	92	699	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	37.1	37.1	8.0	37.1	37.1	8.0	32.9	32.9	9.0	32.9	32.9
Total Split (s)	27.0	52.2	52.2	12.8	38.0	38.0	21.0	46.0	46.0	9.0	34.0	34.0
Total Split (%)	22.5%	43.5%	43.5%	10.7%	31.7%	31.7%	17.5%	38.3%	38.3%	7.5%	28.3%	28.3%
Maximum Green (s)	24.0	45.1	45.1	9.8	30.9	30.9	18.0	39.1	39.1	6.0	27.1	27.1
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	-2.0	0.0	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0
Total Lost Time (s)	1.0	7.1	7.1	1.0	7.1	7.1	1.0	6.9	6.9	1.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	64.0	46.7	46.7	50.4	34.1	34.1	54.0	39.2	39.2	42.5	28.6	28.6
Actuated g/C Ratio	0.53	0.39	0.39	0.42	0.28	0.28	0.45	0.33	0.33	0.35	0.24	0.24
v/c Ratio	0.88	0.63	0.56	0.43	0.83	0.16	0.80	0.31	0.18	0.27	0.87	0.45
Control Delay	69.8	45.7	19.4	20.9	46.8	0.9	42.2	31.2	3.7	22.4	57.4	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.8	45.7	19.4	20.9	46.8	0.9	42.2	31.2	3.7	22.4	57.4	8.2
LOS	E	D	B	C	D	A	D	C	A	C	E	A
Approach Delay		42.7			42.8			31.9			43.6	
Approach LOS		D			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 41.4		Intersection LOS: D	
Intersection Capacity Utilization 95.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Mayfield Road



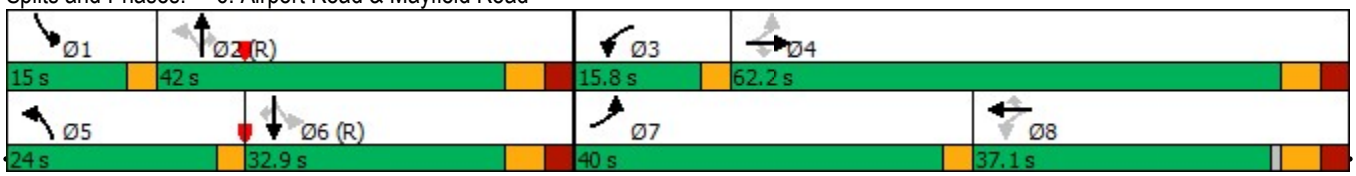


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Future Volume (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.8	3.8	3.5	3.8	3.8	3.5	3.8	3.5	3.5	3.8	3.5
Storage Length (m)	200.0		60.0	165.0		60.0	95.0		60.0	100.0		105.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	70.0			100.0			80.0			65.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00		0.98	1.00					0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1293	4939	1515	1653	5216	977	1700	3386	1426	1475	3355	1353
Flt Permitted	0.107			0.219			0.288			0.312		
Satd. Flow (perm)	146	4939	1492	381	5216	960	514	3386	1426	484	3355	1331
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			212			128			106			323
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		643.7			619.2			458.9			446.4	
Travel Time (s)		38.6			37.2			27.5			26.8	
Confl. Peds. (#/hr)	4		2	2		4	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	38%	13%	9%	8%	7%	69%	5%	9%	12%	21%	10%	18%
Adj. Flow (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Shared Lane Traffic (%)												
Lane Group Flow (vph)	359	1215	240	126	1251	78	389	632	103	130	446	323
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.91	0.97	1.01	0.91	0.97	1.01	0.97	1.01	1.01	0.97	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	10.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0	0.0
Detector 1 Size(m)	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0	10.0	0.6	10.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	37.1	37.1	8.0	37.1	37.1	8.0	32.9	32.9	9.0	32.9	32.9
Total Split (s)	40.0	62.2	62.2	15.8	37.1	37.1	24.0	42.0	42.0	15.0	32.9	32.9
Total Split (%)	29.6%	46.1%	46.1%	11.7%	27.5%	27.5%	17.8%	31.1%	31.1%	11.1%	24.4%	24.4%
Maximum Green (s)	37.0	55.1	55.1	12.8	30.0	30.0	21.0	35.1	35.1	12.0	26.0	26.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	3.1	0.0	2.9	2.9	0.0	2.9	2.9
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	5.1	5.1	1.0	5.1	5.1	1.0	4.9	4.9	1.0	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Flash Dont Walk (s)		27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	77.0	60.5	60.5	51.9	36.5	36.5	56.0	38.3	38.3	44.8	28.1	28.1
Actuated g/C Ratio	0.57	0.45	0.45	0.38	0.27	0.27	0.41	0.28	0.28	0.33	0.21	0.21
v/c Ratio	0.93	0.55	0.31	0.50	0.89	0.22	0.94	0.66	0.21	0.51	0.64	0.61
Control Delay	84.8	21.7	8.3	24.8	56.6	2.2	63.0	46.7	7.4	33.6	53.6	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.8	21.7	8.3	24.8	56.6	2.2	63.0	46.7	7.4	33.6	53.6	10.0
LOS	F	C	A	C	E	A	E	D	A	C	D	A
Approach Delay		32.4			50.9			48.8			35.0	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 41.4		Intersection LOS: D	
Intersection Capacity Utilization 103.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Mayfield Road



SIM TRAFFIC REPORTS

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	26.5	19.3	19.4	25.1
Average Queue (m)	12.6	9.4	9.8	11.4
95th Queue (m)	20.6	15.0	16.8	18.8
Link Distance (m)	581.5	516.2	3059.7	648.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	17.3	92.4	97.2	74.7	23.9	22.4	54.8	63.1	71.8	38.1	30.4	15.2
Average Queue (m)	6.3	59.3	54.2	39.7	11.6	7.5	31.6	36.6	38.5	17.5	9.1	3.0
95th Queue (m)	14.4	82.4	78.5	67.4	20.6	17.8	52.3	56.8	62.8	33.0	21.1	9.0
Link Distance (m)		652.1	652.1	652.1			1339.8	1339.8	1339.8		448.0	448.0
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		0										
Queuing Penalty (veh)		0										

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	12.4	54.1	13.0
Average Queue (m)	2.4	30.3	3.1
95th Queue (m)	8.4	48.3	9.5
Link Distance (m)		3059.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	L	T	T	R	L
Maximum Queue (m)	96.8	41.4	47.6	32.1	55.3	83.2	59.3	48.2	41.2	34.8	39.7	39.4
Average Queue (m)	44.0	19.0	22.0	12.3	17.1	38.9	33.3	23.7	16.4	10.2	9.1	11.4
95th Queue (m)	83.4	36.1	38.0	25.1	36.9	64.1	56.1	40.1	31.4	25.9	23.1	27.2
Link Distance (m)		1339.8	1339.8	1339.8		87.2			440.3	440.3		
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						1						
Storage Bay Dist (m)	200.0				50.0		70.0	95.0			60.0	100.0
Storage Blk Time (%)					0	3					0	
Queuing Penalty (veh)					0	11					0	

Intersection: 6: Airport Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (m)	85.4	81.8	28.1
Average Queue (m)	47.2	49.1	13.3
95th Queue (m)	72.8	74.4	23.9
Link Distance (m)	429.4	429.4	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			105.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T
Maximum Queue (m)	10.0	20.7	34.6	24.7	34.6	1.7	10.2	15.0	1.5
Average Queue (m)	1.1	5.7	12.9	4.8	10.8	0.1	0.6	0.5	0.1
95th Queue (m)	5.9	15.5	27.7	17.6	25.9	0.9	7.5	5.1	0.8
Link Distance (m)	101.7	101.7		122.0		429.4			416.2
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			30.0		70.0		65.0	70.0	
Storage Blk Time (%)			3						
Queuing Penalty (veh)			0						

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	62.7	19.0	22.2	27.4	16.5	18.7	45.4	33.0
Average Queue (m)	24.4	3.3	7.6	9.3	5.1	3.4	14.7	14.4
95th Queue (m)	49.9	11.7	17.9	22.5	15.7	13.8	33.8	28.6
Link Distance (m)	253.1	253.1	416.2	416.2			239.4	239.4
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Airport Road & Healey Road

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	52.8	16.4	34.6
Average Queue (m)	17.7	0.7	16.6
95th Queue (m)	35.7	6.7	33.6
Link Distance (m)	239.3	1864.7	29.2
Upstream Blk Time (%)			1
Queuing Penalty (veh)			9
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Airport Road & Old School Road

Movement	EB	NB	SB
Directions Served	LR	LT	T
Maximum Queue (m)	57.5	28.8	36.6
Average Queue (m)	18.4	11.8	3.1
95th Queue (m)	39.1	25.7	17.9
Link Distance (m)	525.3	29.2	215.9
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		1	
Storage Bay Dist (m)			
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	23.0	34.9	29.2	14.8
Average Queue (m)	10.1	15.3	16.9	7.2
95th Queue (m)	16.4	25.3	27.7	12.4
Link Distance (m)	581.5	516.2	3059.7	648.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	19.2	87.5	77.9	60.6	19.6	37.4	82.6	90.1	102.0	57.0	58.1	20.4
Average Queue (m)	7.3	54.7	48.9	29.0	8.1	16.4	51.1	60.7	64.6	26.1	19.9	5.3
95th Queue (m)	16.0	74.9	71.7	56.8	15.5	31.0	73.6	85.1	90.3	46.7	40.6	13.2
Link Distance (m)		652.1	652.1	652.1			1339.8	1339.8	1339.8		448.0	448.0
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)										0		
Queuing Penalty (veh)										0		

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	7.0	28.8	18.1
Average Queue (m)	0.7	8.8	3.1
95th Queue (m)	3.8	22.0	10.8
Link Distance (m)		3059.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	L	T	T	R	L
Maximum Queue (m)	110.1	78.2	72.3	41.9	66.5	95.8	91.8	143.2	142.4	137.7	23.1	40.2
Average Queue (m)	47.6	40.2	44.2	14.6	21.2	59.4	53.5	76.0	60.2	50.0	9.1	17.3
95th Queue (m)	87.7	67.4	65.8	31.4	47.1	87.8	81.5	145.5	134.4	109.1	20.1	33.9
Link Distance (m)		1339.8	1339.8	1339.8		94.5			440.3	440.3		
Upstream Blk Time (%)						0	0					
Queuing Penalty (veh)						2	0					
Storage Bay Dist (m)	200.0				50.0		70.0	95.0			60.0	100.0
Storage Blk Time (%)					0	13	1	15	0	3		
Queuing Penalty (veh)					0	61	4	36	0	2		

Intersection: 6: Airport Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (m)	53.0	59.6	47.5
Average Queue (m)	27.7	30.7	20.9
95th Queue (m)	45.7	52.1	35.0
Link Distance (m)	429.4	429.4	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			105.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T	T
Maximum Queue (m)	17.7	31.8	37.0	37.3	34.8	4.1	22.2	1.6	5.4
Average Queue (m)	2.7	10.5	18.3	2.9	13.6	0.3	3.7	0.1	0.2
95th Queue (m)	9.9	22.2	33.9	16.3	29.0	3.1	14.8	0.9	2.5
Link Distance (m)	101.7	101.7		122.0				416.2	416.2
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			30.0		70.0	65.0	70.0		
Storage Blk Time (%)			5						
Queuing Penalty (veh)			0						

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	38.9	13.5	36.7	36.5	12.8	5.5	24.6	37.2
Average Queue (m)	9.8	1.3	9.1	10.5	0.9	0.2	6.7	7.7
95th Queue (m)	24.6	7.1	26.0	29.3	6.1	3.0	19.4	23.0
Link Distance (m)	253.1	253.1	416.2	416.2			238.0	238.0
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Airport Road & Healey Road

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	155.3	36.4	31.4
Average Queue (m)	67.3	4.6	13.7
95th Queue (m)	136.2	20.1	31.3
Link Distance (m)	239.3	1865.7	29.2
Upstream Blk Time (%)			2
Queuing Penalty (veh)			6
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Airport Road & Old School Road

Movement	EB	NB	SB
Directions Served	LR	LT	T
Maximum Queue (m)	31.0	33.6	20.0
Average Queue (m)	10.1	16.2	1.9
95th Queue (m)	22.1	31.6	12.1
Link Distance (m)	525.3	29.2	215.9
Upstream Blk Time (%)		1	
Queuing Penalty (veh)		4	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	23.8	20.6	22.3	23.0
Average Queue (m)	12.6	9.1	10.5	12.7
95th Queue (m)	20.2	14.7	19.0	19.8
Link Distance (m)	511.1	346.5	1595.2	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	23.1	131.4	128.3	113.4	45.3	95.4	116.2	122.3	123.2	136.0	132.0	37.8
Average Queue (m)	8.2	100.1	90.3	73.7	20.0	49.9	57.0	63.4	67.3	65.8	24.4	11.9
95th Queue (m)	19.8	129.8	122.1	101.9	36.0	92.6	106.5	113.6	117.7	122.2	91.3	26.6
Link Distance (m)		429.6	429.6	429.6			693.0	693.0	693.0		471.3	471.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		5		0		2	1			15	0	
Queuing Penalty (veh)		2		0		8	1			8	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	11.9	63.0	21.6
Average Queue (m)	2.0	30.5	6.7
95th Queue (m)	8.3	53.1	16.5
Link Distance (m)		456.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C" & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (m)	168.6	267.8	282.4	62.5	69.0	118.1	131.5	132.9	56.2	26.8
Average Queue (m)	131.9	142.5	148.8	27.6	9.8	87.8	95.9	99.8	26.8	4.2
95th Queue (m)	166.9	236.8	230.1	71.3	41.1	119.0	126.2	126.2	48.1	15.8
Link Distance (m)	693.0	693.0	693.0			616.3	616.3	616.3		331.6
Upstream Blk Time (%)			0							
Queuing Penalty (veh)			0							
Storage Bay Dist (m)				55.0	75.0				55.0	
Storage Blk Time (%)			36	0	0	19			1	
Queuing Penalty (veh)			40	0	0	3			0	

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	R	L	T	T
Maximum Queue (m)	145.2	115.4	126.5	158.8	67.5	90.4	214.8	211.4	129.9	130.6	97.9	80.3
Average Queue (m)	75.6	50.6	55.9	73.0	57.1	24.1	117.1	118.5	13.8	62.5	23.9	18.9
95th Queue (m)	135.1	97.9	104.6	138.7	82.7	93.1	211.8	211.9	75.3	118.6	69.4	58.2
Link Distance (m)		616.3	616.3	616.3			591.7	591.7			432.1	432.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				60.0	165.0			60.0	95.0		
Storage Blk Time (%)				6	12		8	37		10		0
Queuing Penalty (veh)				22	36		7	14		10		0

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	27.7	39.8	87.8	103.0	47.7
Average Queue (m)	11.1	15.2	52.7	55.5	19.2
95th Queue (m)	21.7	32.1	81.2	87.1	35.0
Link Distance (m)			417.7	417.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T	T
Maximum Queue (m)	12.6	16.9	33.3	9.6	35.0	3.3	10.9	6.0	5.9
Average Queue (m)	1.1	5.8	13.0	3.4	9.3	0.1	0.4	0.2	0.2
95th Queue (m)	6.2	14.5	25.2	9.7	25.2	2.3	5.0	3.3	3.2
Link Distance (m)	101.7	101.7		257.1				416.3	416.3
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			30.0		70.0	65.0	70.0		
Storage Blk Time (%)			1						
Queuing Penalty (veh)			0						

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	64.1	14.5	31.3	34.2	21.8	20.1	44.2	38.6
Average Queue (m)	22.4	2.4	10.6	10.2	4.3	4.0	17.1	12.6
95th Queue (m)	47.5	9.5	24.9	25.5	15.2	13.9	35.9	30.6
Link Distance (m)	253.1	253.1	416.3	416.3			336.1	336.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 152

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	19.0	26.2	41.2	17.6
Average Queue (m)	9.9	14.5	19.1	8.5
95th Queue (m)	15.8	22.9	32.6	13.8
Link Distance (m)	511.1	346.5	1595.2	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	25.8	150.1	146.3	133.7	31.0	72.6	126.0	138.5	267.1	103.6	62.6	44.9
Average Queue (m)	9.4	100.1	91.7	71.9	14.3	42.2	30.6	35.5	39.7	53.7	23.6	17.2
95th Queue (m)	20.7	139.3	129.8	111.2	25.1	69.0	86.7	95.7	149.6	87.2	48.1	34.2
Link Distance (m)		429.6	429.6	429.6			693.0	693.0	693.0		471.3	471.3
Upstream Blk Time (%)									0			
Queuing Penalty (veh)									0			
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		7		0			1			3	0	
Queuing Penalty (veh)		3		0			1			3	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	8.8	30.9	20.2
Average Queue (m)	0.7	10.7	4.2
95th Queue (m)	4.5	24.6	12.9
Link Distance (m)		456.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Block 48-2 "Street C" & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (m)	205.3	196.4	198.8	62.5	82.3	143.6	146.6	152.6	34.7	10.3
Average Queue (m)	141.0	135.6	138.2	27.0	17.3	94.8	101.1	105.0	15.5	2.3
95th Queue (m)	218.2	209.1	212.8	71.1	53.1	136.2	142.9	149.8	31.3	7.9
Link Distance (m)	693.0	693.0	693.0			616.3	616.3	616.3		331.6
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)				55.0	75.0				55.0	
Storage Blk Time (%)			33	0		17				
Queuing Penalty (veh)			32	0		7				

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	R	L	T	T
Maximum Queue (m)	217.7	134.8	149.7	111.0	67.4	204.1	205.4	200.9	130.0	175.0	400.4	388.9
Average Queue (m)	127.5	41.7	44.2	40.5	22.4	111.2	123.6	122.3	18.9	151.9	253.9	231.1
95th Queue (m)	203.1	102.7	112.1	91.0	57.1	209.5	203.3	199.4	85.1	213.6	513.0	508.0
Link Distance (m)		616.3	616.3	616.3			591.7	591.7			432.1	432.1
Upstream Blk Time (%)											27	16
Queuing Penalty (veh)											0	0
Storage Bay Dist (m)	200.0				60.0	165.0			60.0	95.0		
Storage Blk Time (%)	2			5	0	16	3	44	0	79	3	10
Queuing Penalty (veh)	7			10	0	76	3	27	0	204	9	9

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	66.1	55.1	62.2	66.4	72.6
Average Queue (m)	13.4	26.1	36.8	37.6	33.3
95th Queue (m)	44.7	47.6	55.6	57.0	61.3
Link Distance (m)			417.7	417.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T
Maximum Queue (m)	8.0	29.4	36.4	44.8	33.1	5.7	4.4	4.7	20.7	1.0	1.8
Average Queue (m)	1.5	10.8	21.1	4.6	13.7	0.3	0.2	0.2	3.4	0.0	0.1
95th Queue (m)	6.4	21.2	37.3	28.9	28.3	4.7	3.4	2.8	14.0	0.7	1.1
Link Distance (m)	101.7	101.7		257.1		417.7	417.7			416.3	416.3
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)			30.0		70.0			65.0	70.0		
Storage Blk Time (%)			10	0							
Queuing Penalty (veh)			0	0							

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	33.8	15.4	43.0	47.8	15.4	5.6	31.0	33.2
Average Queue (m)	9.9	1.7	11.4	14.1	1.5	0.2	8.8	8.2
95th Queue (m)	24.4	8.8	32.9	38.3	8.5	2.7	23.8	24.6
Link Distance (m)	253.1	253.1	416.3	416.3			336.1	336.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 393

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	21.4	16.6	20.9	22.0
Average Queue (m)	12.2	8.6	10.9	12.7
95th Queue (m)	19.2	13.4	19.8	19.9
Link Distance (m)	511.1	346.5	1595.2	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	46.5	157.4	142.7	125.8	44.8	60.2	108.7	112.4	225.7	137.1	114.2	32.3
Average Queue (m)	8.7	106.4	97.6	81.3	19.8	35.1	51.0	55.0	62.1	74.3	19.3	11.5
95th Queue (m)	29.9	144.7	132.2	115.3	35.3	57.3	91.2	95.0	157.0	130.3	79.6	25.7
Link Distance (m)		429.6	429.6	429.6			693.0	693.0	693.0		471.3	471.3
Upstream Blk Time (%)									0			
Queuing Penalty (veh)									0			
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		10		0			1			19	0	
Queuing Penalty (veh)		4		1			1			10	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	10.7	67.6	21.2
Average Queue (m)	2.4	30.7	6.4
95th Queue (m)	8.9	57.8	16.6
Link Distance (m)		456.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C" & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (m)	269.0	353.5	175.3	62.5	69.8	124.1	122.8	131.5	58.8	29.6
Average Queue (m)	132.4	135.9	139.3	36.9	8.7	91.9	99.1	103.2	28.7	3.9
95th Queue (m)	212.3	236.8	169.7	82.5	40.2	120.5	123.2	128.6	50.9	16.1
Link Distance (m)	693.0	693.0	693.0			616.3	616.3	616.3		331.6
Upstream Blk Time (%)		0								
Queuing Penalty (veh)		0								
Storage Bay Dist (m)				55.0	75.0				55.0	
Storage Blk Time (%)			32	0	0	21			1	
Queuing Penalty (veh)			35	1	0	3			0	

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	R	L	T	T
Maximum Queue (m)	124.8	79.8	185.0	123.3	67.5	30.3	146.7	155.6	128.8	139.8	124.1	86.4
Average Queue (m)	69.1	46.9	54.8	67.5	59.8	12.4	91.0	91.4	7.1	75.4	33.7	24.1
95th Queue (m)	116.1	71.7	134.6	110.6	80.9	25.6	135.1	138.6	48.7	147.2	119.0	92.1
Link Distance (m)		616.3	616.3	616.3			591.7	591.7			432.1	432.1
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (m)	200.0				60.0	165.0			60.0	95.0		
Storage Blk Time (%)				8	13		0	26		25		
Queuing Penalty (veh)				30	38		0	10		25		

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	27.2	41.0	90.2	91.2	57.0
Average Queue (m)	11.1	14.0	51.7	54.0	20.7
95th Queue (m)	21.1	30.5	77.2	81.8	39.8
Link Distance (m)			417.7	417.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)			0	0	
Queuing Penalty (veh)			0	0	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T	T
Maximum Queue (m)	9.0	23.7	34.7	17.2	34.2	8.4	5.0	1.0	0.8
Average Queue (m)	1.0	6.5	14.3	3.4	9.8	0.3	0.2	0.0	0.0
95th Queue (m)	5.5	15.9	28.0	12.5	26.0	4.6	3.1	0.7	0.5
Link Distance (m)	101.7	101.7		257.1				416.3	416.3
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			30.0		70.0	65.0	70.0		
Storage Blk Time (%)			2						
Queuing Penalty (veh)			0						

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	52.3	19.6	25.0	25.7	21.8	19.6	43.3	43.5
Average Queue (m)	22.5	2.6	9.2	10.4	4.4	3.7	17.9	14.6
95th Queue (m)	44.4	10.5	20.2	23.1	15.9	14.2	36.0	34.5
Link Distance (m)	253.1	253.1	416.3	416.3			336.1	336.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 158

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	20.5	31.2	42.0	16.2
Average Queue (m)	9.5	14.5	18.6	8.3
95th Queue (m)	15.4	24.3	33.3	14.0
Link Distance (m)	511.1	346.5	1595.2	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	74.6	160.3	155.4	136.4	31.2	62.1	36.8	49.5	45.0	103.3	68.3	41.9
Average Queue (m)	12.0	110.9	101.3	80.7	13.8	35.4	12.5	13.9	12.5	59.8	21.5	17.6
95th Queue (m)	40.3	146.1	138.3	115.0	24.7	57.5	27.0	33.6	32.4	95.5	47.8	35.0
Link Distance (m)		429.6	429.6	429.6			693.0	693.0	693.0		471.3	471.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)	0	12		0						4	0	
Queuing Penalty (veh)	0	5		1						5	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	8.7	25.6	16.5
Average Queue (m)	0.9	8.7	3.8
95th Queue (m)	5.1	20.4	12.5
Link Distance (m)		456.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Block 48-2 "Street C" & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (m)	192.9	189.2	190.9	62.5	72.8	137.7	142.6	147.1	35.3	7.6
Average Queue (m)	155.0	147.9	149.4	30.3	18.8	100.9	107.8	113.2	13.9	1.8
95th Queue (m)	185.2	177.4	180.6	76.2	58.4	127.2	131.7	136.7	28.0	6.5
Link Distance (m)	693.0	693.0	693.0			616.3	616.3	616.3		331.6
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)				55.0	75.0				55.0	
Storage Blk Time (%)			30	0		20				
Queuing Penalty (veh)			29	0		8				

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	R	L	T	T
Maximum Queue (m)	223.1	110.1	89.5	67.2	43.1	177.1	247.0	251.6	130.0	175.0	434.8	426.8
Average Queue (m)	130.9	29.5	34.4	36.2	17.6	30.0	145.0	146.2	34.9	164.6	295.5	275.4
95th Queue (m)	200.8	66.8	64.2	58.4	39.3	104.0	249.0	250.6	123.3	207.4	526.3	520.8
Link Distance (m)		616.3	616.3	616.3			591.7	591.7			432.1	432.1
Upstream Blk Time (%)											27	14
Queuing Penalty (veh)											0	0
Storage Bay Dist (m)	200.0				60.0	165.0			60.0	95.0		
Storage Blk Time (%)	2			1	0		16	50		88	0	7
Queuing Penalty (veh)	6			3	0		18	31		229	0	7

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	69.1	63.5	65.9	73.6	76.4
Average Queue (m)	12.9	27.9	36.9	37.8	30.7
95th Queue (m)	37.0	52.5	57.7	59.7	54.8
Link Distance (m)			417.7	417.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (m)	9.1	28.8	37.4	74.7	46.4	0.8	4.4	18.4	0.9	4.5
Average Queue (m)	1.4	10.9	23.0	11.4	13.6	0.0	0.1	3.2	0.1	0.2
95th Queue (m)	6.4	21.1	39.9	50.2	34.1	0.5	2.2	12.9	0.9	3.2
Link Distance (m)	101.7	101.7		257.1		417.7			416.3	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			30.0		70.0		65.0	70.0		60.0
Storage Blk Time (%)			15	0	0					
Queuing Penalty (veh)			1	0	0					

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	25.7	12.4	39.8	48.8	12.9	2.6	28.5	26.1
Average Queue (m)	9.5	0.8	9.9	13.5	1.1	0.1	8.1	5.9
95th Queue (m)	22.6	5.6	29.0	37.7	6.9	1.9	22.5	18.4
Link Distance (m)	253.1	253.1	416.3	416.3			336.1	336.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 342

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	28.3	15.5	23.4	27.0
Average Queue (m)	13.4	9.3	11.7	13.7
95th Queue (m)	21.8	14.3	20.6	21.8
Link Distance (m)	511.1	346.5	1595.2	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	99.8	178.5	166.1	134.5	36.8	91.1	111.7	235.7	123.8	150.0	304.9	41.7
Average Queue (m)	13.1	123.9	114.5	97.3	18.8	44.7	63.1	75.2	73.3	131.7	156.7	14.2
95th Queue (m)	47.3	166.3	153.2	133.4	32.1	79.5	110.4	172.2	121.2	183.4	348.8	30.8
Link Distance (m)		429.6	429.6	429.6			693.0	693.0	693.0		471.3	471.3
Upstream Blk Time (%)								0				
Queuing Penalty (veh)								0				
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		17		1		0	1			79	0	
Queuing Penalty (veh)		6		3		2	2			48	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	9.1	81.5	24.0
Average Queue (m)	1.7	34.6	7.2
95th Queue (m)	6.9	63.5	18.0
Link Distance (m)		456.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C" & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (m)	292.5	388.1	191.9	62.5	56.9	135.3	146.9	147.2	59.2	46.5
Average Queue (m)	152.2	160.1	163.2	33.2	8.3	94.1	100.5	103.9	32.8	5.8
95th Queue (m)	231.6	265.9	191.8	79.5	33.2	137.8	144.6	147.6	55.3	25.7
Link Distance (m)	693.0	693.0	693.0			616.3	616.3	616.3		331.6
Upstream Blk Time (%)		0								
Queuing Penalty (veh)		0								
Storage Bay Dist (m)				55.0	75.0				55.0	
Storage Blk Time (%)			33	0		19			1	
Queuing Penalty (veh)			37	1		3			0	

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	178.8	116.4	124.0	163.1	67.5	36.6	101.9	102.7	89.9	15.6	123.8	91.4
Average Queue (m)	85.7	65.9	72.7	96.7	60.2	13.7	69.2	66.8	53.6	1.6	73.4	35.6
95th Queue (m)	161.8	107.7	113.0	154.3	83.6	29.0	94.1	94.2	82.1	8.2	153.4	119.9
Link Distance (m)		616.3	616.3	616.3			591.7	591.7	591.7			432.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	0			14	10				3		23	0
Queuing Penalty (veh)	1			59	36				1		25	1

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	79.5	29.9	40.2	98.0	106.0	46.2
Average Queue (m)	24.2	11.2	15.0	57.4	61.0	20.0
95th Queue (m)	82.7	23.0	32.3	85.8	91.4	37.3
Link Distance (m)	432.1			415.9	415.9	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	0			0	0	
Queuing Penalty (veh)	0			0	1	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T
Maximum Queue (m)	9.3	18.1	29.8	8.3	31.7	4.7	3.6	1.0
Average Queue (m)	1.1	5.0	13.1	3.2	9.9	0.2	0.3	0.0
95th Queue (m)	5.9	12.9	23.7	9.5	25.1	2.4	3.9	0.7
Link Distance (m)	101.7	101.7		257.1				416.3
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			30.0		70.0	65.0	70.0	
Storage Blk Time (%)			1					
Queuing Penalty (veh)			0					

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	52.6	15.1	26.7	34.4	27.3	22.9	45.3	37.1
Average Queue (m)	21.2	2.6	9.6	12.7	6.0	4.4	18.3	12.8
95th Queue (m)	43.9	9.8	21.8	28.2	19.0	16.1	36.7	29.8
Link Distance (m)	253.1	253.1	416.3	416.3			336.1	336.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 227

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	18.5	35.1	50.2	18.2
Average Queue (m)	9.8	16.5	21.6	8.7
95th Queue (m)	16.1	28.0	39.2	13.8
Link Distance (m)	511.1	346.5	1595.2	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	53.5	173.9	161.6	142.7	41.9	78.0	115.8	118.6	118.8	103.1	82.7	49.6
Average Queue (m)	12.0	115.0	105.8	82.0	15.2	41.6	30.9	34.7	37.4	60.0	30.4	19.2
95th Queue (m)	34.8	162.0	151.3	128.9	29.5	72.3	84.4	89.3	94.3	95.5	63.8	37.2
Link Distance (m)		429.6	429.6	429.6			693.0	693.0	693.0		471.3	471.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		13		1			1			5	0	
Queuing Penalty (veh)		5		2			2			7	1	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	7.4	28.2	19.2
Average Queue (m)	1.0	10.8	3.9
95th Queue (m)	4.9	23.2	12.4
Link Distance (m)		456.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Block 48-2 "Street C" & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (m)	223.7	213.0	219.0	62.5	82.3	249.3	255.5	172.9	39.1	15.1
Average Queue (m)	161.9	156.9	159.6	26.6	20.5	115.1	121.0	119.7	14.9	2.5
95th Queue (m)	234.2	228.6	228.0	70.9	61.7	200.2	206.3	173.2	32.6	9.3
Link Distance (m)	693.0	693.0	693.0			616.3	616.3	616.3		331.6
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)				55.0	75.0				55.0	
Storage Blk Time (%)			29	0	0	18				
Queuing Penalty (veh)			29	1	0	7				

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	243.3	206.8	169.1	149.6	67.4	56.0	132.6	124.9	107.6	26.6	175.0	448.9
Average Queue (m)	144.1	58.3	54.3	50.7	25.1	23.5	83.2	81.5	67.3	5.0	170.8	363.1
95th Queue (m)	233.6	160.4	135.1	111.9	64.6	44.0	119.5	118.0	102.7	18.2	196.0	544.5
Link Distance (m)		616.3	616.3	616.3			591.7	591.7	591.7			432.1
Upstream Blk Time (%)												42
Queuing Penalty (veh)												0
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	8	1		8	0		0		11		94	3
Queuing Penalty (veh)	29	3		17	1		0		7		256	11

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	441.0	101.2	65.4	57.4	66.2	73.6
Average Queue (m)	342.4	20.1	29.1	35.8	36.8	35.4
95th Queue (m)	555.9	70.4	54.6	53.5	57.2	61.7
Link Distance (m)	432.1			415.9	415.9	
Upstream Blk Time (%)	24					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	13					
Queuing Penalty (veh)	13					

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T
Maximum Queue (m)	10.5	27.7	36.4	56.0	44.8	2.1	1.6	6.9	20.8	6.2	1.8
Average Queue (m)	2.5	10.4	23.2	6.7	14.9	0.1	0.1	0.3	3.1	0.3	0.1
95th Queue (m)	8.5	21.5	40.6	36.5	33.7	1.5	0.8	3.4	13.5	2.7	0.9
Link Distance (m)	101.7	101.7		257.1		415.9	415.9			416.3	416.3
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)			30.0		70.0			65.0	70.0		
Storage Blk Time (%)			16	0							
Queuing Penalty (veh)			1	0							

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	38.5	12.7	51.0	52.5	16.9	5.7	27.2	28.3
Average Queue (m)	11.4	1.9	11.7	14.7	2.1	0.2	8.7	8.1
95th Queue (m)	27.4	7.9	34.7	39.0	10.2	2.7	21.7	22.2
Link Distance (m)	253.1	253.1	416.3	416.3			336.1	336.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 388

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	28.5	17.3	27.1	25.9
Average Queue (m)	14.2	9.3	11.3	14.8
95th Queue (m)	24.0	14.7	21.2	23.0
Link Distance (m)	511.1	346.5	1595.2	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	143.1	338.0	333.5	331.0	195.0	128.3	149.1	147.7	131.2	150.0	372.9	151.5
Average Queue (m)	22.5	211.8	202.8	184.0	66.6	76.2	71.6	77.0	77.6	126.9	200.4	29.4
95th Queue (m)	90.1	369.7	360.7	342.5	192.8	152.2	135.7	127.4	120.5	184.7	465.2	166.2
Link Distance (m)		429.6	429.6	429.6			693.0	693.0	693.0		471.3	471.3
Upstream Blk Time (%)		3	2	2							2	1
Queuing Penalty (veh)		0	0	0							0	0
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		43		25		19	1			74	1	
Queuing Penalty (veh)		16		64		105	2			50	2	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	11.5	77.8	25.8
Average Queue (m)	1.7	39.0	7.4
95th Queue (m)	7.4	67.3	19.8
Link Distance (m)		456.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C" & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (m)	314.6	487.3	315.1	62.5	68.9	144.3	146.6	147.9	61.9	69.3
Average Queue (m)	159.4	172.2	176.2	26.0	8.8	99.6	106.8	110.3	33.6	7.0
95th Queue (m)	240.6	299.3	247.5	69.6	40.4	145.3	148.2	151.4	57.7	31.7
Link Distance (m)	693.0	693.0	693.0			616.3	616.3	616.3		331.6
Upstream Blk Time (%)	0	0								
Queuing Penalty (veh)	0	0								
Storage Bay Dist (m)				55.0	75.0				55.0	
Storage Blk Time (%)			30	0	0	20			2	
Queuing Penalty (veh)			33	0	0	3			1	

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	163.4	114.5	230.2	142.0	67.5	43.9	108.8	114.2	103.7	16.1	135.9	119.1
Average Queue (m)	76.4	68.0	78.8	89.8	62.1	16.2	75.2	72.4	61.0	2.1	84.1	29.0
95th Queue (m)	131.6	106.2	163.5	137.2	81.6	33.4	99.7	100.7	90.7	9.1	146.4	87.4
Link Distance (m)		616.3	616.3	616.3			591.7	591.7	591.7			432.1
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)				14	12				5		25	0
Queuing Penalty (veh)				61	45				2		29	0

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	77.0	25.3	42.8	96.7	99.1	57.2
Average Queue (m)	23.1	11.3	16.7	60.5	63.6	23.6
95th Queue (m)	69.6	21.4	35.0	86.3	91.2	44.6
Link Distance (m)	432.1			415.9	415.9	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	0			0	0	
Queuing Penalty (veh)	0			0	0	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T	T
Maximum Queue (m)	11.5	21.2	28.7	9.6	35.3	1.3	13.3	1.0	5.7
Average Queue (m)	1.4	6.3	13.3	3.2	10.9	0.0	0.6	0.0	0.2
95th Queue (m)	7.3	15.3	25.0	9.6	27.5	0.9	6.0	0.7	2.6
Link Distance (m)	101.7	101.7		257.1				416.3	416.3
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			30.0		70.0	65.0	70.0		
Storage Blk Time (%)			1						
Queuing Penalty (veh)			0						

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	50.2	14.6	31.2	34.6	22.2	21.6	43.8	40.5
Average Queue (m)	22.4	2.5	9.6	10.5	4.6	4.5	19.3	13.7
95th Queue (m)	43.4	9.3	24.0	26.3	16.1	15.9	39.3	32.6
Link Distance (m)	253.1	253.1	416.3	416.3			336.1	336.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 415

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	21.1	34.3	50.5	17.2
Average Queue (m)	10.2	17.9	22.8	8.5
95th Queue (m)	17.1	28.8	39.7	14.4
Link Distance (m)	511.1	346.5	1595.2	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	101.1	180.4	171.0	161.9	35.3	83.0	117.7	126.6	223.5	129.0	95.4	52.8
Average Queue (m)	15.1	122.6	113.0	95.2	14.0	44.7	37.3	43.8	47.2	68.3	34.0	22.3
95th Queue (m)	53.8	168.2	160.0	141.0	26.0	84.2	94.0	102.4	148.2	113.0	71.2	41.3
Link Distance (m)		429.6	429.6	429.6			693.0	693.0	693.0		471.3	471.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		16		1		2	1			9	0	
Queuing Penalty (veh)		7		1		15	1			14	1	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	7.4	31.2	21.6
Average Queue (m)	0.6	12.7	3.6
95th Queue (m)	4.2	26.2	12.2
Link Distance (m)		456.7	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Block 48-2 "Street C" & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (m)	322.1	569.7	223.3	62.5	75.0	176.1	182.6	183.1	41.4	21.3
Average Queue (m)	162.3	172.9	156.5	27.3	19.5	110.8	119.8	124.0	16.7	3.6
95th Queue (m)	266.9	331.1	232.6	73.6	49.0	168.4	177.6	181.7	33.8	12.7
Link Distance (m)	693.0	693.0	693.0			616.3	616.3	616.3		331.6
Upstream Blk Time (%)	0									
Queuing Penalty (veh)	0									
Storage Bay Dist (m)				55.0	75.0				55.0	
Storage Blk Time (%)			26	0		15			0	
Queuing Penalty (veh)			25	1		6			0	

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	254.0	393.9	364.4	324.7	67.5	58.2	170.9	167.4	157.9	79.7	175.0	450.0
Average Queue (m)	204.6	183.2	153.6	98.8	33.5	26.3	114.4	111.4	100.0	11.2	172.9	387.8
95th Queue (m)	309.9	436.1	378.5	262.3	76.8	50.3	170.1	165.6	156.0	55.2	187.1	553.1
Link Distance (m)		616.3	616.3	616.3			591.7	591.7	591.7			432.1
Upstream Blk Time (%)												62
Queuing Penalty (veh)												0
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	44	12		17	0		2		34	0	96	10
Queuing Penalty (veh)	170	43		34	2		3		23	0	274	34

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	447.8	102.7	69.4	76.8	71.8	93.2
Average Queue (m)	373.2	22.5	32.0	39.6	39.9	42.0
95th Queue (m)	565.2	73.8	60.8	63.8	63.7	76.5
Link Distance (m)	432.1			415.9	415.9	
Upstream Blk Time (%)	36					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	19	0		0		0
Queuing Penalty (veh)	19	1		0		0

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	R
Maximum Queue (m)	10.5	31.0	37.2	60.4	46.2	0.9	1.8	4.2	27.0	1.8	3.0
Average Queue (m)	1.4	11.0	21.7	7.1	14.1	0.0	0.1	0.1	4.5	0.1	0.1
95th Queue (m)	6.5	21.7	39.0	37.3	33.2	0.6	0.9	2.1	18.2	0.9	2.1
Link Distance (m)	101.7	101.7		257.1		415.9	415.9			416.3	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)			30.0		70.0			65.0	70.0		60.0
Storage Blk Time (%)			14	0							
Queuing Penalty (veh)			1	0							

Intersection: 8: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (m)	30.6	13.8	51.2	49.4	15.4	1.4	34.2	31.6
Average Queue (m)	10.2	1.4	11.9	14.7	1.4	0.1	9.2	7.8
95th Queue (m)	24.2	7.3	33.4	39.0	7.9	1.1	25.1	22.9
Link Distance (m)	253.1	253.1	416.3	416.3			336.1	336.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 675

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	27.3	19.0	22.7	23.0
Average Queue (m)	12.7	9.7	10.1	13.8
95th Queue (m)	21.0	14.9	17.4	21.2
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	19.5	8.9	16.7
Average Queue (m)	9.5	1.8	1.8
95th Queue (m)	16.2	7.5	9.2
Link Distance (m)		666.2	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	84.8	146.7	141.5	124.2	46.9	110.5	138.5	135.7	137.7	150.0	477.0	477.7
Average Queue (m)	24.6	98.1	89.6	73.2	21.0	66.3	57.5	63.6	68.6	145.6	348.6	203.3
95th Queue (m)	55.7	133.0	126.8	108.9	37.5	127.7	114.1	119.9	124.4	172.9	593.5	566.7
Link Distance (m)		429.6	429.6	429.6			692.7	692.7	692.7		471.2	471.2
Upstream Blk Time (%)											34	15
Queuing Penalty (veh)											0	0
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)	0	6		0		13	1			91		
Queuing Penalty (veh)	0	7		0		63	2			94		

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	35.6	78.0	28.2
Average Queue (m)	12.2	41.2	9.0
95th Queue (m)	26.6	69.4	20.0
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.4	183.7	180.2	191.8	62.5	81.7	127.6	130.4	132.3	62.5	61.4	53.1
Average Queue (m)	42.3	82.7	85.6	94.8	20.0	8.1	91.3	95.7	103.5	18.7	32.5	5.2
95th Queue (m)	82.3	179.4	178.0	189.4	60.3	36.5	119.4	124.2	131.0	59.9	56.8	23.3
Link Distance (m)		692.7	692.7	692.7			615.8	615.8	615.8			331.5
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	0	12		20	0	0	19		37	0	2	
Queuing Penalty (veh)	3	18		22	0	0	3		15	1	1	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	17.1	25.8
Average Queue (m)	3.6	7.3
95th Queue (m)	12.5	19.6
Link Distance (m)		833.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	R	L	T	T
Maximum Queue (m)	191.9	183.2	191.9	163.8	67.5	184.4	227.2	232.4	129.2	175.0	350.1	330.7
Average Queue (m)	128.6	105.3	87.4	86.9	55.5	39.5	133.2	136.0	19.8	142.0	162.6	145.0
95th Queue (m)	249.2	306.3	228.1	153.0	86.4	145.0	233.9	235.6	89.4	216.1	392.9	364.9
Link Distance (m)		615.8	615.8	615.8			591.7	591.7			432.1	432.1
Upstream Blk Time (%)											0	0
Queuing Penalty (veh)											0	0
Storage Bay Dist (m)	200.0				60.0	165.0			60.0	95.0		
Storage Blk Time (%)	16	1		8	13	0	10	48		71		0
Queuing Penalty (veh)	48	1		36	40	0	9	27		111		0

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	32.2	53.5	99.4	102.2	45.8
Average Queue (m)	11.4	20.0	60.5	64.7	20.8
95th Queue (m)	24.7	39.9	87.3	91.2	36.6
Link Distance (m)			417.7	417.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)			0	0	
Queuing Penalty (veh)			0	1	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T
Maximum Queue (m)	11.6	19.7	34.5	46.0	34.3	1.0	0.9	7.5	9.5	0.8
Average Queue (m)	1.4	6.7	17.6	7.4	11.8	0.0	0.0	0.2	0.7	0.0
95th Queue (m)	6.7	15.5	33.1	38.6	27.7	0.7	0.6	4.0	6.0	0.6
Link Distance (m)	101.7	101.7		254.7		417.7	417.7			413.3
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			30.0		70.0			65.0	70.0	
Storage Blk Time (%)			6	0						
Queuing Penalty (veh)			1	0						

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	27.4	26.6	59.2	16.3	64.1	24.9	33.9	19.2	17.2	51.0	41.3	14.8
Average Queue (m)	8.0	11.7	24.2	2.0	24.0	7.8	10.3	3.6	3.8	20.2	13.6	3.6
95th Queue (m)	21.9	22.3	47.2	8.7	48.5	18.7	26.0	13.3	13.1	40.3	32.5	10.7
Link Distance (m)		637.0	251.2	251.2	413.3	413.3	413.3			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	10.6	18.1
Average Queue (m)	3.9	1.3
95th Queue (m)	11.3	7.9
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	10.3	10.9
Average Queue (m)	3.7	0.5
95th Queue (m)	10.8	4.8
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	9.1	15.5	18.7	8.9	25.0	10.1	9.9
Average Queue (m)	2.4	6.4	9.2	1.6	13.4	4.1	5.2
95th Queue (m)	8.8	14.1	15.7	7.2	21.4	11.4	12.0
Link Distance (m)	179.3		637.0		833.6		301.1
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	11.7	15.0
Average Queue (m)	3.5	6.4
95th Queue (m)	10.6	13.9
Link Distance (m)	666.2	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	16.6	19.3	10.6
Average Queue (m)	5.6	9.9	3.8
95th Queue (m)	13.6	14.9	11.3
Link Distance (m)		301.1	300.9
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 505

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	22.5	26.4	41.8	17.2
Average Queue (m)	10.5	14.5	20.7	8.3
95th Queue (m)	17.1	22.6	33.5	13.6
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	23.2	17.7	8.0
Average Queue (m)	10.8	7.7	0.3
95th Queue (m)	18.5	15.3	3.1
Link Distance (m)		666.2	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	90.0	170.3	160.2	121.6	32.0	75.1	116.9	125.1	123.0	116.4	81.0	46.4
Average Queue (m)	19.5	103.9	94.2	73.2	15.3	39.7	38.5	43.5	46.7	65.7	26.8	18.5
95th Queue (m)	47.6	153.3	141.1	112.1	27.2	64.9	95.1	98.1	101.6	105.1	56.3	35.5
Link Distance (m)		429.6	429.6	429.6			692.7	692.7	692.7		471.2	471.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)	0	8		0			1			7	0	
Queuing Penalty (veh)	0	6		0			2			10	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	25.5	40.4	37.3
Average Queue (m)	9.3	14.7	16.0
95th Queue (m)	21.6	33.5	32.7
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.4	216.3	205.4	296.8	62.5	82.3	136.2	141.3	143.3	62.4	41.2	12.0
Average Queue (m)	27.8	152.2	146.9	151.2	26.9	20.0	98.6	106.4	111.5	8.3	16.2	2.4
95th Queue (m)	72.0	220.6	209.2	241.2	70.7	63.3	137.8	142.0	147.3	39.0	33.7	8.6
Link Distance (m)		692.7	692.7	692.7			615.8	615.8	615.8			331.5
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	0	28		34	0	0	19		30	0	0	
Queuing Penalty (veh)	0	16		33	0	0	8		6	0	0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	38.1	128.6
Average Queue (m)	6.9	25.6
95th Queue (m)	23.5	83.2
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	R	L	T	T
Maximum Queue (m)	246.0	329.2	307.0	218.6	67.5	246.2	445.2	437.1	130.0	175.0	447.8	444.2
Average Queue (m)	181.0	143.1	111.0	66.6	26.6	173.5	242.7	231.8	34.1	168.2	361.3	344.3
95th Queue (m)	296.9	439.2	363.8	222.8	61.6	310.6	513.4	500.0	118.7	210.6	559.2	558.5
Link Distance (m)		615.8	615.8	615.8			591.7	591.7			432.1	432.1
Upstream Blk Time (%)							5	3			45	15
Queuing Penalty (veh)							0	0			0	0
Storage Bay Dist (m)	200.0				60.0	165.0			60.0	95.0		
Storage Blk Time (%)	29	0		6	1	51	8	49		90	0	13
Queuing Penalty (veh)	95	1		13	3	238	9	35		261	0	12

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	33.2	62.9	76.1	78.6	60.4
Average Queue (m)	11.9	29.9	44.0	44.8	27.9
95th Queue (m)	25.1	54.2	68.4	70.6	48.2
Link Distance (m)			417.7	417.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T
Maximum Queue (m)	11.3	22.7	37.4	75.2	39.1	0.8	1.6	7.1	23.9	4.1	1.6
Average Queue (m)	2.0	10.0	23.6	11.1	13.8	0.0	0.1	0.2	5.0	0.1	0.1
95th Queue (m)	8.0	19.3	41.8	49.5	31.9	0.6	0.8	3.6	17.3	2.4	0.8
Link Distance (m)	101.7	101.7		254.7		417.7	417.7			413.3	413.3
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)			30.0		70.0			65.0	70.0		
Storage Blk Time (%)			22	0							
Queuing Penalty (veh)			1	0							

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	58.2	54.8	28.2	11.6	35.9	50.0	58.3	19.0	5.5	39.0	32.2	12.6
Average Queue (m)	31.7	12.6	8.8	1.1	11.2	17.7	23.4	2.8	0.3	14.4	9.8	1.5
95th Queue (m)	54.2	35.4	22.1	6.3	26.5	39.8	48.8	11.6	3.3	29.4	24.7	6.4
Link Distance (m)		636.8	251.2	251.2	413.3	413.3	413.3			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)	1	0									0	
Queuing Penalty (veh)	1	0									0	

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	16.2	6.7
Average Queue (m)	7.4	0.4
95th Queue (m)	14.4	3.4
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	15.8	3.2
Average Queue (m)	7.3	0.1
95th Queue (m)	14.1	1.6
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	9.2	16.4	17.6	8.9	17.8	16.8	14.8
Average Queue (m)	4.4	9.2	6.2	1.1	9.6	7.5	7.5
95th Queue (m)	11.7	14.6	14.3	5.8	17.5	13.9	13.0
Link Distance (m)	180.3		636.8		833.8		306.0
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	14.6	9.2
Average Queue (m)	5.9	3.3
95th Queue (m)	13.4	10.5
Link Distance (m)	666.2	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	17.9	11.4	13.3
Average Queue (m)	8.6	7.1	5.9
95th Queue (m)	14.6	13.6	13.7
Link Distance (m)		306.0	296.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 751

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	23.1	16.8	21.4	26.0
Average Queue (m)	12.9	9.4	10.4	13.9
95th Queue (m)	20.6	13.1	17.9	21.7
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	18.2	8.8	14.1
Average Queue (m)	8.6	2.2	2.0
95th Queue (m)	15.2	8.3	8.8
Link Distance (m)		666.2	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	81.8	170.3	160.7	136.6	50.6	112.5	240.8	256.9	254.7	150.0	376.8	251.9
Average Queue (m)	22.9	108.9	97.0	79.8	20.5	58.2	84.9	94.5	98.4	136.0	217.2	45.3
95th Queue (m)	51.1	152.3	138.8	115.7	39.1	107.7	175.4	186.2	187.8	181.1	467.8	232.9
Link Distance (m)		429.6	429.6	429.6			692.7	692.7	692.7		471.2	471.2
Upstream Blk Time (%)											4	0
Queuing Penalty (veh)											0	0
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		10		0		4	2			81	0	
Queuing Penalty (veh)		11		1		21	4			84	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	26.3	81.4	32.6
Average Queue (m)	9.6	35.5	9.4
95th Queue (m)	21.7	65.5	22.0
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.4	282.5	280.7	183.8	62.5	68.9	123.8	132.5	134.8	62.5	60.2	17.1
Average Queue (m)	52.4	137.2	137.1	143.5	33.4	7.9	96.6	101.6	106.7	16.9	33.0	4.0
95th Queue (m)	96.5	220.1	222.3	179.6	78.6	34.2	119.5	124.6	130.6	55.6	57.2	12.0
Link Distance (m)		692.7	692.7	692.7			615.8	615.8	615.8			331.5
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	1	22		33	0		23		39	0	1	
Queuing Penalty (veh)	3	33		36	0		3		16	1	0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	23.0	21.6
Average Queue (m)	3.4	5.7
95th Queue (m)	13.1	15.6
Link Distance (m)		833.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	R	L	T	T
Maximum Queue (m)	173.9	158.4	161.1	154.6	67.5	148.1	212.3	215.1	130.0	174.9	278.4	264.1
Average Queue (m)	96.5	66.3	69.2	92.2	61.1	23.0	128.8	129.5	24.6	130.7	122.8	104.4
95th Queue (m)	186.9	134.2	127.7	147.2	83.3	90.2	216.4	221.4	102.7	214.9	306.1	278.5
Link Distance (m)		615.8	615.8	615.8			591.7	591.7			432.1	432.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				60.0	165.0			60.0	95.0		
Storage Blk Time (%)	4	0		9	17	0	10	45		65	0	0
Queuing Penalty (veh)	11	0		38	51	0	9	25		102	0	0

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	27.7	46.7	97.6	101.5	41.4
Average Queue (m)	9.9	19.1	57.9	62.3	19.8
95th Queue (m)	21.4	38.4	87.0	93.2	35.9
Link Distance (m)			417.7	417.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)			0	1	
Queuing Penalty (veh)			0	1	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T	T	R
Maximum Queue (m)	11.6	19.2	35.1	26.2	41.0	3.2	13.3	3.7	3.6	2.4
Average Queue (m)	1.7	6.3	14.8	4.7	12.3	0.1	0.5	0.2	0.2	0.1
95th Queue (m)	7.8	15.7	29.5	16.9	31.1	1.8	4.8	1.5	1.9	1.7
Link Distance (m)	101.7	101.7		254.7				413.3	413.3	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			30.0		70.0	65.0	70.0			60.0
Storage Blk Time (%)			4							
Queuing Penalty (veh)			1							

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	26.2	29.9	54.3	10.7	64.2	28.3	36.7	19.1	17.1	41.7	37.3	17.2
Average Queue (m)	5.4	11.2	23.3	2.2	23.8	8.0	10.0	4.3	2.9	17.8	11.8	4.2
95th Queue (m)	17.6	22.5	47.4	7.9	50.4	20.2	25.7	14.3	11.6	36.7	28.1	12.1
Link Distance (m)		637.0	251.2	251.2	413.3	413.3	413.3			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	9.3	19.4
Average Queue (m)	3.6	1.6
95th Queue (m)	10.6	9.1
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	9.1	14.8
Average Queue (m)	3.9	1.2
95th Queue (m)	11.0	8.3
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	9.1	13.2	15.9	11.6	26.2	8.8	8.6
Average Queue (m)	1.4	6.9	8.7	1.7	12.4	4.6	4.7
95th Queue (m)	6.8	13.3	14.5	7.8	20.9	11.7	11.6
Link Distance (m)	179.3		637.0		833.6		301.1
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	10.3	10.5
Average Queue (m)	4.1	5.6
95th Queue (m)	11.2	12.9
Link Distance (m)	666.2	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	13.6	15.6	9.4
Average Queue (m)	5.7	9.3	4.4
95th Queue (m)	13.2	12.5	11.9
Link Distance (m)		301.1	300.9
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 453

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	21.2	31.5	45.8	18.0
Average Queue (m)	10.3	15.5	21.3	8.6
95th Queue (m)	17.1	24.8	36.3	15.0
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	23.9	20.6	8.2
Average Queue (m)	11.3	7.6	0.6
95th Queue (m)	19.2	15.3	4.4
Link Distance (m)		666.2	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	119.2	160.0	151.2	133.8	33.5	70.4	138.0	153.2	160.2	127.2	92.9	46.1
Average Queue (m)	24.3	104.4	94.9	70.7	15.2	37.5	44.7	52.8	54.8	67.6	27.9	17.4
95th Queue (m)	67.9	149.2	138.5	112.9	27.6	62.6	108.2	119.7	122.4	110.8	65.4	35.1
Link Distance (m)		429.6	429.6	429.6			692.7	692.7	692.7		471.2	471.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)	0	9		0			2			9	0	
Queuing Penalty (veh)	0	6		0			4			13	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	26.7	39.9	41.5
Average Queue (m)	10.4	15.0	15.8
95th Queue (m)	22.8	33.3	33.8
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.3	217.3	305.2	300.5	62.5	81.8	141.4	143.6	145.8	62.5	41.2	14.1
Average Queue (m)	24.3	146.3	142.2	143.8	25.2	20.8	95.4	103.4	107.0	8.9	16.2	2.6
95th Queue (m)	66.3	226.6	250.3	246.8	68.6	60.7	138.7	145.4	150.7	40.1	33.4	9.1
Link Distance (m)		692.7	692.7	692.7			615.8	615.8	615.8			331.5
Upstream Blk Time (%)			0	0								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	0	26		31	0	0	18		29	0	0	
Queuing Penalty (veh)	1	14		30	1	0	7		6	0	0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	24.5	51.3
Average Queue (m)	5.8	21.5
95th Queue (m)	18.2	44.9
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	R	L	T	T
Maximum Queue (m)	260.7	311.4	256.3	128.2	67.5	39.1	174.4	186.9	129.8	175.0	449.3	447.2
Average Queue (m)	174.5	81.3	59.9	47.1	27.6	16.4	116.7	118.6	25.8	174.8	413.1	399.3
95th Queue (m)	280.9	254.4	176.6	105.1	67.2	33.5	174.7	183.4	101.9	176.4	510.0	527.2
Link Distance (m)		615.8	615.8	615.8			591.7	591.7			432.1	432.1
Upstream Blk Time (%)											69	24
Queuing Penalty (veh)											0	0
Storage Bay Dist (m)	200.0				60.0	165.0			60.0	95.0		
Storage Blk Time (%)	22	1		6	1		2	42		96	0	11
Queuing Penalty (veh)	71	2		14	3		2	30		278	0	10

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	41.8	84.6	96.9	74.1	57.2
Average Queue (m)	13.9	34.9	45.4	46.2	29.5
95th Queue (m)	30.9	79.9	79.5	69.1	47.4
Link Distance (m)			417.7	417.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)		3	0		
Queuing Penalty (veh)		5	0		

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	T	R
Maximum Queue (m)	10.2	26.8	37.3	83.7	37.3	5.5	7.0	20.3	0.9	2.8	5.6
Average Queue (m)	1.6	9.7	23.0	13.3	14.5	0.2	0.3	3.2	0.0	0.1	0.2
95th Queue (m)	7.3	19.4	40.1	60.1	32.2	2.5	3.0	12.9	0.6	1.5	3.9
Link Distance (m)	101.7	101.7		254.7		417.7			413.3	413.3	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)			30.0		70.0		65.0	70.0			60.0
Storage Blk Time (%)			19	0							
Queuing Penalty (veh)			1	0							

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	57.0	42.2	23.9	17.6	35.0	52.4	57.0	13.7	1.4	41.8	42.0	10.1
Average Queue (m)	30.7	12.5	9.7	1.6	11.9	15.2	17.8	1.5	0.0	13.8	10.6	1.5
95th Queue (m)	54.6	29.9	22.9	8.6	28.4	37.3	41.3	7.9	1.0	31.3	28.2	6.5
Link Distance (m)		636.8	251.2	251.2	413.3	413.3	413.3			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)	2										0	
Queuing Penalty (veh)	1										0	

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	14.5	9.1
Average Queue (m)	7.4	0.5
95th Queue (m)	14.5	4.4
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	15.5	4.6
Average Queue (m)	7.2	0.2
95th Queue (m)	13.9	2.3
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	10.4	18.5	16.5	8.9	19.0	8.9	18.9
Average Queue (m)	4.6	8.6	6.5	1.1	10.2	7.5	8.5
95th Queue (m)	11.9	14.5	14.1	5.8	17.1	12.4	14.4
Link Distance (m)	180.3		636.8		833.8		306.0
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	15.5	9.2
Average Queue (m)	7.2	4.1
95th Queue (m)	14.4	11.4
Link Distance (m)	666.2	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	18.3	10.4	14.2
Average Queue (m)	9.0	7.7	7.5
95th Queue (m)	14.4	13.0	14.3
Link Distance (m)		306.0	296.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 503

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	29.4	23.3	25.4	35.6
Average Queue (m)	14.5	10.0	10.9	15.6
95th Queue (m)	24.0	16.3	19.3	26.2
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	17.0	9.0	23.4
Average Queue (m)	8.9	1.6	2.8
95th Queue (m)	15.0	7.1	13.0
Link Distance (m)		662.1	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	149.8	303.1	292.8	273.9	140.0	90.9	141.5	151.6	153.3	150.0	390.3	217.0
Average Queue (m)	63.7	194.5	182.3	161.9	59.5	52.0	98.5	109.5	113.4	142.5	268.5	78.9
95th Queue (m)	156.3	342.7	325.4	300.3	174.6	86.8	136.6	150.3	152.8	173.4	513.7	335.5
Link Distance (m)		429.6	429.6	429.6			692.7	692.7	692.7		471.2	471.2
Upstream Blk Time (%)		1	0								10	4
Queuing Penalty (veh)		0	0								0	0
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)	0	37		18		0	4			88	0	
Queuing Penalty (veh)	0	43		47		0	8			96	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	29.1	78.6	32.0
Average Queue (m)	10.5	40.3	9.2
95th Queue (m)	24.6	67.6	21.8
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Bock 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.4	288.6	393.7	193.7	62.5	54.2	146.4	158.3	159.8	62.5	61.9	68.3
Average Queue (m)	54.7	151.9	156.8	160.3	25.8	7.2	115.0	121.1	125.4	14.0	34.9	7.1
95th Queue (m)	99.4	236.0	266.3	191.7	71.1	35.5	144.1	152.0	158.1	49.8	58.2	30.8
Link Distance (m)		692.7	692.7	692.7			615.8	615.8	615.8			331.5
Upstream Blk Time (%)		0	0									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	0	20		30	0		28		41	0	2	
Queuing Penalty (veh)	3	31		33	0		4		17	0	1	

Intersection: 4: Bock 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	25.8	29.9
Average Queue (m)	5.4	6.7
95th Queue (m)	18.1	19.0
Link Distance (m)		834.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	222.4	240.1	223.6	164.6	67.5	45.1	120.5	115.8	105.5	19.2	157.8	143.2
Average Queue (m)	127.0	106.4	100.0	105.1	63.9	15.5	75.8	75.7	63.9	3.0	100.6	63.3
95th Queue (m)	246.3	243.5	204.8	155.7	79.6	33.8	105.8	106.7	93.5	11.6	182.0	206.8
Link Distance (m)		615.8	615.8	615.8			591.7	591.7	591.7			432.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	16	1		19	14				8		37	0
Queuing Penalty (veh)	59	2		84	50				5		60	0

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	105.4	28.2	49.6	119.7	128.8	80.5
Average Queue (m)	56.7	11.6	18.6	71.9	74.4	23.4
95th Queue (m)	182.8	23.4	36.9	112.3	116.9	50.4
Link Distance (m)	432.1			415.9	415.9	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	0			2	3	
Queuing Penalty (veh)	0			2	7	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T	T
Maximum Queue (m)	9.0	23.5	35.5	38.5	30.0	2.2	5.8	3.8	1.5
Average Queue (m)	1.0	6.4	16.3	8.0	9.7	0.1	0.2	0.1	0.0
95th Queue (m)	5.5	16.4	32.3	38.5	24.7	1.5	3.0	2.7	0.8
Link Distance (m)	101.7	101.7		254.7				413.3	413.3
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			30.0		70.0	65.0	70.0		
Storage Blk Time (%)			9						
Queuing Penalty (veh)			2						

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	27.1	26.9	47.7	13.8	71.9	28.7	31.9	17.2	17.9	44.4	36.8	18.2
Average Queue (m)	6.3	10.7	20.8	2.3	25.7	8.7	10.2	3.2	3.3	17.9	12.1	4.5
95th Queue (m)	19.3	22.6	40.9	8.7	54.0	21.0	24.7	11.9	12.5	35.5	29.7	13.0
Link Distance (m)		637.0	251.2	251.2	413.3	413.3	413.3			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	10.5	14.8
Average Queue (m)	3.1	1.3
95th Queue (m)	10.3	8.7
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	11.7	15.3
Average Queue (m)	3.2	1.2
95th Queue (m)	10.5	7.0
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	9.2	14.5	16.3	10.6	24.3	9.0	8.8
Average Queue (m)	1.6	6.6	9.1	2.3	13.1	4.2	4.9
95th Queue (m)	7.2	13.7	14.8	9.0	21.4	11.3	11.9
Link Distance (m)	176.6		637.0		834.0		303.6
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	8.4	13.4
Average Queue (m)	3.2	6.3
95th Queue (m)	9.4	13.7
Link Distance (m)	662.1	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	17.3	19.3	9.3
Average Queue (m)	5.2	10.3	3.5
95th Queue (m)	13.4	15.5	10.8
Link Distance (m)	324.4	303.6	298.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 552

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	22.5	35.2	47.1	18.5
Average Queue (m)	10.2	16.6	22.5	9.0
95th Queue (m)	17.2	27.4	37.9	14.9
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	19.9	17.3	12.2
Average Queue (m)	10.3	7.7	0.8
95th Queue (m)	16.8	15.2	5.6
Link Distance (m)		662.3	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	125.8	200.6	193.5	151.3	35.8	82.5	169.0	384.2	282.9	136.7	133.4	53.8
Average Queue (m)	22.9	120.6	110.1	87.6	14.3	42.3	58.3	76.3	75.4	74.2	40.2	21.7
95th Queue (m)	68.7	172.6	162.8	133.3	26.5	75.2	128.7	214.1	186.3	123.2	98.2	42.4
Link Distance (m)		429.6	429.6	429.6			692.7	692.7	692.7		471.2	471.2
Upstream Blk Time (%)								0	0			
Queuing Penalty (veh)								0	0			
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)	0	15		1		0	3			15	0	
Queuing Penalty (veh)	0	10		1		1	5			24	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	29.0	42.4	36.9
Average Queue (m)	12.2	16.5	16.6
95th Queue (m)	26.5	34.9	31.1
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Bock 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.3	235.8	330.8	313.3	62.5	82.3	183.1	187.6	196.2	62.5	45.9	19.9
Average Queue (m)	26.5	158.2	157.9	161.3	28.1	18.3	119.7	125.6	128.7	9.0	17.2	3.5
95th Queue (m)	68.2	242.7	267.5	285.3	73.2	53.0	175.1	179.7	181.2	40.6	35.2	11.6
Link Distance (m)		692.7	692.7	692.7			615.8	615.8	615.8			331.5
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	0	24		28	0		20		29	0	0	
Queuing Penalty (veh)	0	13		28	0		8		6	0	0	

Intersection: 4: Bock 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	54.7	81.1
Average Queue (m)	9.4	27.4
95th Queue (m)	29.5	58.9
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		2
Queuing Penalty (veh)		1

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	269.7	329.8	253.0	192.4	67.5	59.9	183.9	176.9	155.2	110.8	175.0	446.4
Average Queue (m)	191.6	117.8	94.4	76.8	36.7	24.1	114.9	112.5	101.9	22.2	170.6	367.6
95th Queue (m)	293.2	283.3	210.2	157.0	79.9	49.3	175.1	172.9	159.9	91.0	197.0	564.8
Link Distance (m)		615.8	615.8	615.8			591.7	591.7	591.7			432.1
Upstream Blk Time (%)												55
Queuing Penalty (veh)												0
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	30	2		17	0		3		35		91	0
Queuing Penalty (veh)	112	6		39	1		4		26		275	2

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	445.8	54.0	79.5	82.1	84.8	85.4
Average Queue (m)	357.9	13.5	37.0	45.7	47.0	38.6
95th Queue (m)	562.0	33.8	66.7	70.5	72.8	73.5
Link Distance (m)	432.1			415.9	415.9	
Upstream Blk Time (%)	21					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	15		0	0		0
Queuing Penalty (veh)	15		0	0		0

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	T
Maximum Queue (m)	9.1	26.2	37.4	111.8	42.1	1.7	3.9	22.5	1.8	8.4
Average Queue (m)	1.8	11.2	28.3	36.7	15.9	0.1	0.1	4.3	0.1	0.3
95th Queue (m)	7.3	22.5	45.4	113.1	32.9	0.9	2.0	15.6	0.9	3.7
Link Distance (m)	101.7	101.7		254.7		415.9			413.3	413.3
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			30.0		70.0		65.0	70.0		
Storage Blk Time (%)			44	2						
Queuing Penalty (veh)			2	2						

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	61.1	64.6	36.6	12.8	33.3	51.5	54.4	15.0	5.0	46.0	34.8	9.9
Average Queue (m)	30.3	15.4	10.7	0.8	12.3	19.2	22.3	2.1	0.2	14.4	9.3	1.4
95th Queue (m)	54.8	42.9	26.9	5.5	28.7	42.1	46.9	9.5	2.6	32.5	24.1	6.1
Link Distance (m)		636.8	251.2	251.2	413.3	413.3	413.3			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)	2	0									0	
Queuing Penalty (veh)	1	0									0	

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	14.7	4.9
Average Queue (m)	7.1	0.2
95th Queue (m)	14.7	2.3
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	13.9	4.8
Average Queue (m)	7.2	0.2
95th Queue (m)	13.3	2.3
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	10.4	16.2	14.0	9.0	21.2	14.9	14.2
Average Queue (m)	5.5	9.1	5.7	1.0	9.9	7.8	8.1
95th Queue (m)	12.7	14.2	13.2	5.5	18.2	13.1	12.6
Link Distance (m)	179.0		636.8		833.8		302.1
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	15.2	9.3
Average Queue (m)	6.6	3.3
95th Queue (m)	13.8	10.5
Link Distance (m)	662.3	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	16.6	11.9	16.4
Average Queue (m)	8.7	7.8	7.5
95th Queue (m)	14.1	13.4	15.0
Link Distance (m)	298.9	302.1	300.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 582

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	30.6	17.2	20.2	30.0
Average Queue (m)	15.3	10.2	10.8	15.9
95th Queue (m)	25.0	15.4	17.5	25.0
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	LT
Maximum Queue (m)	17.2	8.9	1.4	20.2
Average Queue (m)	8.7	2.0	0.0	1.8
95th Queue (m)	15.0	8.0	1.0	9.6
Link Distance (m)		666.1	605.9	1592.6
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	55.0			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	150.0	444.4	439.3	441.0	195.0	106.8	251.8	260.8	149.0	150.0	481.1	477.0
Average Queue (m)	86.5	335.3	323.7	298.7	136.0	50.1	108.8	116.5	113.6	148.1	417.3	307.6
95th Queue (m)	190.8	489.7	478.6	460.8	268.3	96.3	197.4	205.4	154.4	162.6	614.7	657.4
Link Distance (m)		429.6	429.6	429.6			692.6	692.6	692.6		471.2	471.2
Upstream Blk Time (%)		9	7	7			0	0			62	20
Queuing Penalty (veh)		0	0	0			0	0			0	0
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		54		50		2	7			95		
Queuing Penalty (veh)		63		131		12	13			109		

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	29.2	77.8	28.9
Average Queue (m)	10.2	40.9	10.4
95th Queue (m)	23.3	69.1	22.5
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.4	368.0	472.6	391.7	62.5	68.8	249.7	258.2	163.1	62.5	61.2	59.4
Average Queue (m)	53.1	153.7	164.8	171.3	25.9	9.0	122.1	128.8	128.9	17.6	35.3	7.8
95th Queue (m)	98.5	255.1	300.1	294.4	71.2	42.0	196.4	202.9	160.4	57.6	58.4	35.2
Link Distance (m)		692.6	692.6	692.6			615.9	615.9	615.9			331.4
Upstream Blk Time (%)		0		0			0	0				
Queuing Penalty (veh)		0		0			0	0				
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	1	19		30	0	0	30		40	0	3	
Queuing Penalty (veh)	7	30		33	0	0	4		17	1	1	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	19.9	29.2
Average Queue (m)	4.3	7.5
95th Queue (m)	14.0	20.7
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	191.1	175.0	172.2	162.1	67.5	68.8	134.7	134.0	116.3	44.2	161.7	221.7
Average Queue (m)	113.6	92.3	93.2	106.8	63.5	16.7	90.0	88.1	76.9	4.7	116.5	84.0
95th Queue (m)	211.8	191.4	171.6	155.9	80.4	39.9	126.2	125.4	115.3	24.9	189.1	287.3
Link Distance (m)		615.9	615.9	615.9			591.6	591.6	591.6			432.0
Upstream Blk Time (%)												6
Queuing Penalty (veh)												0
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	8	0		22	12		0		16		50	
Queuing Penalty (veh)	32	0		100	49		0		10		84	

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	204.3	28.6	91.9	147.1	152.9	77.3
Average Queue (m)	74.2	12.6	23.9	91.1	96.9	27.7
95th Queue (m)	268.7	25.8	66.6	145.5	153.2	67.0
Link Distance (m)	432.0			415.8	415.8	
Upstream Blk Time (%)	2					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	0			13	14	
Queuing Penalty (veh)	0			12	31	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T
Maximum Queue (m)	11.5	22.3	36.9	53.9	34.2	2.8	10.2	6.2
Average Queue (m)	1.1	6.9	18.9	10.0	9.4	0.1	0.5	0.2
95th Queue (m)	6.3	15.7	36.4	40.6	25.2	2.0	4.5	2.7
Link Distance (m)	101.7	101.7		254.7				413.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			30.0		70.0	65.0	70.0	
Storage Blk Time (%)			12	0				
Queuing Penalty (veh)			2	0				

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	21.8	25.6	69.6	15.1	65.0	33.3	40.7	28.4	18.0	47.9	43.8	20.9
Average Queue (m)	5.2	11.2	22.9	2.2	26.2	9.8	10.8	4.8	3.7	20.5	13.1	4.3
95th Queue (m)	15.4	22.4	52.1	9.1	54.3	25.2	29.1	17.1	13.3	40.3	31.2	13.7
Link Distance (m)		637.0	251.1	251.1	413.6	413.6	413.6			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)										0	0	
Queuing Penalty (veh)										0	0	

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	11.7	12.1
Average Queue (m)	3.6	1.2
95th Queue (m)	11.1	7.2
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	9.0	16.7
Average Queue (m)	3.5	1.2
95th Queue (m)	10.5	8.5
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	9.1	13.0	17.4	10.5	26.4	8.9	8.7
Average Queue (m)	1.8	5.8	9.2	2.2	12.1	4.0	3.9
95th Queue (m)	7.6	13.0	15.9	8.7	21.6	11.2	10.9
Link Distance (m)	174.9		637.0		833.8		302.0
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	9.0	13.3
Average Queue (m)	3.1	6.5
95th Queue (m)	9.8	13.9
Link Distance (m)	666.1	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	14.1	17.6	9.2
Average Queue (m)	5.4	9.7	3.3
95th Queue (m)	13.1	14.3	10.5
Link Distance (m)		302.0	300.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 742

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	25.4	36.7	59.9	18.8
Average Queue (m)	11.1	18.0	24.7	9.3
95th Queue (m)	18.6	30.1	44.0	14.6
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	23.9	17.3	3.2
Average Queue (m)	11.0	7.6	0.2
95th Queue (m)	18.3	14.2	2.3
Link Distance (m)		666.2	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	126.8	203.0	196.4	170.0	40.6	74.9	232.6	146.6	145.7	138.4	144.4	57.5
Average Queue (m)	31.6	133.5	122.1	98.1	15.2	40.1	63.2	68.5	71.1	84.1	48.6	23.2
95th Queue (m)	92.8	192.0	179.2	146.4	29.3	67.9	164.1	132.1	135.6	135.0	109.8	45.1
Link Distance (m)		429.6	429.6	429.6			692.6	692.6	692.6		471.2	471.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)	0	19		2			2			23	0	
Queuing Penalty (veh)	0	13		5			3			41	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	28.8	43.0	42.6
Average Queue (m)	10.7	18.1	20.0
95th Queue (m)	24.0	34.8	37.3
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.3	400.6	324.6	314.4	62.5	82.3	166.5	172.6	172.4	62.5	41.6	16.4
Average Queue (m)	24.7	171.2	170.3	162.9	25.3	21.0	117.5	122.8	126.4	8.6	17.5	2.9
95th Queue (m)	66.4	290.5	310.8	263.0	69.4	59.1	168.6	172.1	178.1	39.2	35.9	9.9
Link Distance (m)		692.6	692.6	692.6			615.9	615.9	615.9			331.4
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	0	23		28	0	0	18		27	0	0	
Queuing Penalty (veh)	0	13		27	1	0	7		6	0	0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	37.2	61.8
Average Queue (m)	8.3	24.2
95th Queue (m)	24.9	49.5
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		1
Queuing Penalty (veh)		0

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	266.0	416.9	403.6	340.5	67.5	222.4	332.3	316.8	297.8	130.0	175.0	450.6
Average Queue (m)	225.2	205.5	147.9	97.9	40.8	59.8	190.4	186.6	175.9	46.9	172.8	397.6
95th Queue (m)	309.4	483.8	378.4	247.1	83.6	200.0	352.8	342.6	329.5	141.3	191.1	541.4
Link Distance (m)		615.9	615.9	615.9			591.6	591.6	591.6			432.0
Upstream Blk Time (%)												66
Queuing Penalty (veh)												0
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	50	3		20	1		28		61		92	1
Queuing Penalty (veh)	202	10		48	2		36		48		292	3

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	447.0	91.6	95.0	102.2	77.2	83.1
Average Queue (m)	387.7	17.6	44.1	48.2	47.0	38.9
95th Queue (m)	548.1	55.3	95.3	86.3	70.5	69.5
Link Distance (m)	432.0			415.8	415.8	
Upstream Blk Time (%)	30					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	19	0	5	0		
Queuing Penalty (veh)	20	0	11	0		

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	T
Maximum Queue (m)	11.6	28.8	37.4	88.6	36.6	0.9	3.7	27.8	19.9	1.6
Average Queue (m)	2.3	10.4	27.4	23.9	14.8	0.1	0.1	5.2	0.7	0.1
95th Queue (m)	8.6	21.5	44.9	78.9	32.7	0.9	2.6	18.6	8.5	0.8
Link Distance (m)	101.7	101.7		254.7		415.8			413.6	413.6
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			30.0		70.0		65.0	70.0		
Storage Blk Time (%)			37	0						
Queuing Penalty (veh)			1	0						

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	57.6	76.2	32.4	9.9	35.4	52.4	58.6	19.2	10.3	38.3	37.3	12.2
Average Queue (m)	30.6	15.2	9.7	1.0	9.9	18.7	23.2	2.7	0.4	14.2	10.8	1.8
95th Queue (m)	54.6	45.0	25.3	6.0	25.0	42.6	47.8	11.6	4.1	31.4	26.8	7.7
Link Distance (m)		637.0	251.1	251.1	413.6	413.6	413.6			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)	1											
Queuing Penalty (veh)	1											

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	18.1	6.4
Average Queue (m)	7.6	0.3
95th Queue (m)	14.8	2.9
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	15.8	4.8
Average Queue (m)	7.6	0.2
95th Queue (m)	14.6	2.0
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	10.6	16.9	13.1	7.1	21.4	14.6	13.5
Average Queue (m)	4.6	8.9	6.0	0.5	9.1	7.8	8.1
95th Queue (m)	12.1	14.1	13.3	3.9	17.6	13.8	13.0
Link Distance (m)	180.8		637.0		833.8		301.2
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	15.5	9.3
Average Queue (m)	6.7	3.8
95th Queue (m)	14.1	11.1
Link Distance (m)	666.2	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	16.1	10.6	15.8
Average Queue (m)	8.7	7.3	7.4
95th Queue (m)	12.9	13.3	14.8
Link Distance (m)		301.2	300.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 790

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	25.8	18.3	20.4	32.5
Average Queue (m)	14.3	9.4	10.2	15.8
95th Queue (m)	22.4	14.5	17.7	25.6
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	149.9	447.5	448.1	447.5	195.0	104.9	135.2	145.9	257.1	150.0	357.9	223.5
Average Queue (m)	57.7	394.6	389.8	375.0	164.9	58.8	101.3	112.6	117.7	127.7	213.3	99.2
95th Queue (m)	165.3	516.4	518.5	528.8	270.6	106.3	139.1	147.6	202.5	181.7	503.6	382.3
Link Distance (m)		429.6	429.6	429.6			692.6	692.6	692.6		471.2	471.2
Upstream Blk Time (%)		33	26	33					0		17	6
Queuing Penalty (veh)		0	0	0					0		0	0
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		58		56		3	5			74	0	
Queuing Penalty (veh)		39		145		20	11			75	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	16.2	84.7	23.2
Average Queue (m)	3.4	43.5	7.3
95th Queue (m)	11.2	74.8	18.3
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		1	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.4	379.8	483.0	384.9	62.5	55.5	157.1	159.9	174.4	62.5	60.4	34.1
Average Queue (m)	67.5	147.9	156.7	157.8	24.5	8.4	117.7	123.6	127.9	27.6	35.2	5.0
95th Queue (m)	100.6	279.2	321.1	265.5	68.3	34.4	154.0	156.6	163.0	71.0	59.1	22.6
Link Distance (m)		692.6	692.6	692.6			615.9	615.9	615.9			331.4
Upstream Blk Time (%)			0	0								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	3	16		28	0		31		42	0	2	
Queuing Penalty (veh)	20	34		31	0		4		38	1	1	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	38.1	47.6
Average Queue (m)	12.2	11.4
95th Queue (m)	29.4	29.6
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	179.6	115.6	218.8	158.4	67.5	60.6	125.8	124.4	115.0	24.7	174.8	335.5
Average Queue (m)	99.8	73.8	86.5	100.3	64.4	18.8	85.8	84.7	75.0	4.0	134.3	154.6
95th Queue (m)	174.0	107.0	163.5	147.8	81.1	41.4	117.1	116.9	108.7	15.1	217.4	402.8
Link Distance (m)		615.9	615.9	615.9			591.6	591.6	591.6			432.0
Upstream Blk Time (%)												2
Queuing Penalty (veh)												0
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	0			21	13				15		65	0
Queuing Penalty (veh)	1			98	52				9		110	0

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	301.3	33.7	69.4	144.9	156.4	104.3
Average Queue (m)	133.0	12.4	20.9	91.4	96.1	34.3
95th Queue (m)	371.3	26.1	47.6	148.2	155.6	90.6
Link Distance (m)	432.0			415.8	415.8	
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	1			12	13	
Queuing Penalty (veh)	1			11	28	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	R	L	T	T
Maximum Queue (m)	9.0	19.1	36.0	38.4	34.3	5.0	5.0	2.1	2.0
Average Queue (m)	1.3	6.1	18.2	5.8	10.4	0.2	0.4	0.1	0.1
95th Queue (m)	6.4	15.2	34.9	24.9	25.6	3.7	4.0	1.5	1.4
Link Distance (m)	101.7	101.7		254.7				413.6	413.6
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			30.0		70.0	65.0	70.0		
Storage Blk Time (%)			10	0					
Queuing Penalty (veh)			2	0					

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	28.8	28.3	55.5	14.6	56.2	28.1	32.4	18.8	22.9	47.4	35.1	17.4
Average Queue (m)	8.3	10.9	23.5	2.3	24.6	9.5	10.9	3.9	4.7	20.7	12.2	4.7
95th Queue (m)	22.2	22.4	45.7	9.6	47.1	22.8	26.4	13.8	16.9	39.5	29.2	12.2
Link Distance (m)		637.0	251.1	251.1	413.6	413.6	413.6			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	9.3	22.0
Average Queue (m)	3.8	1.5
95th Queue (m)	11.1	9.7
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	11.8	9.2
Average Queue (m)	3.7	0.3
95th Queue (m)	11.3	3.5
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	10.3	18.3	20.1	10.2	37.5	17.3	21.2
Average Queue (m)	2.1	6.8	10.1	2.3	17.8	6.0	9.3
95th Queue (m)	8.5	14.7	16.7	8.9	28.3	14.2	15.0
Link Distance (m)	174.9		637.0		833.8		302.0
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)					0		
Queuing Penalty (veh)					0		

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	17.6	15.7
Average Queue (m)	9.5	9.6
95th Queue (m)	15.0	13.0
Link Distance (m)		
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	19.4	18.5	17.8
Average Queue (m)	5.3	12.1	9.5
95th Queue (m)	13.6	17.8	14.7
Link Distance (m)		302.0	300.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 730

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	23.8	35.6	53.4	17.9
Average Queue (m)	10.7	16.6	23.4	8.7
95th Queue (m)	18.1	27.5	40.6	14.6
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	102.3	204.1	201.7	171.0	28.8	85.7	255.9	379.3	157.4	128.1	112.9	60.9
Average Queue (m)	22.5	137.8	126.7	105.5	14.3	41.7	67.1	80.8	76.1	76.2	39.3	25.5
95th Queue (m)	74.5	193.5	179.8	151.8	25.6	72.1	172.1	214.6	137.2	122.6	97.4	49.8
Link Distance (m)		429.6	429.6	429.6			692.6	692.6	692.6		471.2	471.2
Upstream Blk Time (%)							0	0				
Queuing Penalty (veh)							0	0				
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		21		2			2			15	0	
Queuing Penalty (veh)		11		5			4			25	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	15.4	33.8	29.6
Average Queue (m)	2.7	14.2	9.1
95th Queue (m)	10.0	29.4	22.8
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.3	238.4	321.4	318.2	62.5	82.3	169.2	170.6	255.6	62.5	38.7	13.8
Average Queue (m)	37.2	167.0	168.9	167.3	30.8	24.1	123.3	128.5	134.5	14.3	17.3	3.2
95th Queue (m)	80.1	241.2	292.9	288.5	76.3	66.0	174.4	178.5	211.8	50.9	34.4	10.1
Link Distance (m)		692.6	692.6	692.6			615.9	615.9	615.9			331.4
Upstream Blk Time (%)			0	0								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	0	24		29	0	0	21		28	0	0	
Queuing Penalty (veh)	3	19		28	1	0	9		13	1	0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	62.3	94.2
Average Queue (m)	20.1	42.3
95th Queue (m)	49.1	77.9
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)	1	5
Queuing Penalty (veh)	2	3

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	245.7	314.4	276.2	236.6	67.5	173.0	292.5	292.1	273.5	130.0	175.0	450.6
Average Queue (m)	196.1	130.2	108.6	85.9	40.1	58.8	190.3	187.1	175.0	50.2	173.1	388.3
95th Queue (m)	295.9	334.4	266.2	185.9	82.4	196.2	367.9	358.7	339.2	147.3	187.9	553.5
Link Distance (m)		615.9	615.9	615.9			591.6	591.6	591.6			432.0
Upstream Blk Time (%)												66
Queuing Penalty (veh)												0
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	34	2		21	0		27		58	0	92	1
Queuing Penalty (veh)	136	6		49	1		33		45	2	291	4

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	445.9	88.2	106.3	90.3	78.7	99.9
Average Queue (m)	376.8	20.1	43.2	45.0	46.0	43.5
95th Queue (m)	560.0	58.3	89.7	70.8	67.7	78.3
Link Distance (m)	432.0			415.8	415.8	
Upstream Blk Time (%)	25					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	18	0	3			0
Queuing Penalty (veh)	18	0	7			0

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (m)	12.6	24.6	37.3	82.5	44.1	1.6	4.3	21.5	1.6	3.4
Average Queue (m)	1.8	10.2	24.7	14.5	13.8	0.1	0.4	4.0	0.1	0.1
95th Queue (m)	8.6	19.8	41.9	61.2	32.3	0.8	4.1	14.9	0.8	2.4
Link Distance (m)	101.7	101.7		254.7		415.8			413.6	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			30.0		70.0		65.0	70.0		60.0
Storage Blk Time (%)			23	0						
Queuing Penalty (veh)			1	0						

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	60.8	91.6	31.7	13.1	35.2	53.5	57.3	17.8	2.4	42.6	40.0	18.0
Average Queue (m)	41.1	17.9	9.7	1.2	11.4	20.0	25.0	2.4	0.1	16.2	13.2	2.2
95th Queue (m)	63.5	54.0	25.6	7.2	26.1	42.9	50.3	10.8	1.2	34.1	30.4	9.2
Link Distance (m)		637.0	251.1	251.1	413.6	413.6	413.6			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)	4	0									0	
Queuing Penalty (veh)	4	0									0	

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	14.3	5.5
Average Queue (m)	7.2	0.2
95th Queue (m)	14.0	2.6
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	14.6	9.5
Average Queue (m)	7.3	0.5
95th Queue (m)	13.8	4.4
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	9.2	18.5	16.4	7.1	25.3	18.5	19.2
Average Queue (m)	5.4	10.0	6.2	0.5	12.6	9.7	10.1
95th Queue (m)	12.5	15.5	14.2	3.7	20.7	14.1	15.6
Link Distance (m)	180.8		637.0		833.8		301.2
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	19.7	14.9
Average Queue (m)	11.7	8.2
95th Queue (m)	18.0	13.9
Link Distance (m)		
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	16.9	19.8	20.0
Average Queue (m)	9.3	9.5	11.3
95th Queue (m)	14.6	14.7	16.8
Link Distance (m)		301.2	300.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 721

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	24.4	40.6	47.0	18.0
Average Queue (m)	11.2	18.7	24.3	9.2
95th Queue (m)	18.5	30.5	39.6	15.7
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	22.7	16.1	11.1
Average Queue (m)	10.3	7.3	0.9
95th Queue (m)	17.7	14.0	5.6
Link Distance (m)		666.2	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	130.4	206.4	199.8	172.4	65.9	92.9	277.5	283.5	182.7	134.2	125.4	59.0
Average Queue (m)	30.2	132.5	120.5	101.1	16.2	38.4	75.8	82.8	77.8	74.3	39.2	23.9
95th Queue (m)	90.6	186.4	178.0	152.8	42.9	77.5	212.0	218.3	152.8	120.5	85.6	46.2
Link Distance (m)		429.6	429.6	429.6			692.6	692.6	692.6		471.2	471.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		19		3			3			13	0	
Queuing Penalty (veh)		13		6			5			23	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	27.6	40.3	56.8
Average Queue (m)	11.0	16.3	19.3
95th Queue (m)	23.5	33.8	39.7
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.3	225.5	476.4	285.1	62.5	82.3	350.6	352.3	184.6	62.4	40.9	14.1
Average Queue (m)	22.5	161.4	165.9	160.9	22.4	25.4	127.5	133.7	127.6	7.6	16.8	3.5
95th Queue (m)	64.1	233.8	300.4	246.1	64.7	68.1	252.1	256.9	181.7	36.3	32.8	11.1
Link Distance (m)		692.6	692.6	692.6			615.9	615.9	615.9			331.4
Upstream Blk Time (%)			0				0	0				
Queuing Penalty (veh)			0				0	0				
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	0	23		27	0	0	19		28	0	0	
Queuing Penalty (veh)	0	13		27	0	0	8		6	0	0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	47.2	81.8
Average Queue (m)	7.7	28.3
95th Queue (m)	26.7	61.1
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)	0	2
Queuing Penalty (veh)	0	1

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	254.0	243.3	214.6	184.0	67.5	228.1	480.0	477.2	464.0	130.0	175.0	450.6
Average Queue (m)	160.7	90.2	87.8	87.5	41.6	145.8	317.5	309.5	292.1	67.5	171.2	364.8
95th Queue (m)	254.4	191.8	170.1	162.9	83.7	342.5	579.4	565.6	535.1	169.3	198.3	556.2
Link Distance (m)		615.9	615.9	615.9			591.6	591.6	591.6			432.0
Upstream Blk Time (%)							4	1	0			51
Queuing Penalty (veh)							0	0	0			0
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)	12	0		19	0		57		71	1	88	1
Queuing Penalty (veh)	51	1		47	2		71		55	3	279	5

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	447.3	89.4	83.9	81.1	82.5	89.4
Average Queue (m)	352.7	18.2	35.8	50.7	53.6	39.4
95th Queue (m)	557.4	53.7	66.6	74.5	78.6	71.8
Link Distance (m)	432.0			415.8	415.8	
Upstream Blk Time (%)	19					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	23	0	0	0		
Queuing Penalty (veh)	23	0	0	0		

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T
Maximum Queue (m)	12.3	22.3	37.4	91.0	45.1	3.3	6.4	4.5	23.8	0.9	3.9
Average Queue (m)	1.8	10.0	26.3	22.4	13.1	0.1	0.3	0.3	4.7	0.0	0.2
95th Queue (m)	7.7	19.7	43.0	83.1	31.0	2.3	3.1	3.2	16.5	0.7	2.0
Link Distance (m)	101.7	101.7		254.7		415.8	415.8			413.6	413.6
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)			30.0		70.0			65.0	70.0		
Storage Blk Time (%)			32	0							
Queuing Penalty (veh)			1	0							

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	57.9	52.1	35.7	10.9	30.3	57.1	57.3	15.7	8.7	40.2	32.8	12.9
Average Queue (m)	30.2	13.6	10.7	0.9	10.9	20.4	25.3	1.9	0.4	14.4	9.3	1.5
95th Queue (m)	52.6	34.9	28.1	5.3	25.1	44.5	51.4	8.9	3.9	31.5	24.8	6.7
Link Distance (m)		637.0	251.1	251.1	413.6	413.6	413.6			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)	1											
Queuing Penalty (veh)	1											

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	15.8	3.3
Average Queue (m)	8.5	0.1
95th Queue (m)	14.6	1.7
Link Distance (m)	368.9	131.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	14.2	6.0
Average Queue (m)	7.2	0.3
95th Queue (m)	13.8	3.2
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	10.7	20.9	18.2	7.2	19.9	12.5	14.1
Average Queue (m)	5.0	9.8	6.1	0.5	8.5	8.1	8.2
95th Queue (m)	12.3	16.3	14.1	4.0	17.4	12.6	12.7
Link Distance (m)	180.8		637.0		833.8		301.2
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	13.9	9.3
Average Queue (m)	7.4	3.5
95th Queue (m)	13.6	10.7
Link Distance (m)	666.2	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	18.6	10.5	14.1
Average Queue (m)	9.1	6.9	8.2
95th Queue (m)	14.2	13.3	13.9
Link Distance (m)		301.2	300.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 643

Intersection: 1: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	30.2	17.9	23.2	24.8
Average Queue (m)	14.7	10.3	10.8	15.5
95th Queue (m)	24.1	15.3	18.4	23.1
Link Distance (m)	511.1	346.5	1592.6	796.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Torbram Road & Street C

Movement	WB	WB	SB
Directions Served	L	R	LT
Maximum Queue (m)	17.4	9.0	15.0
Average Queue (m)	8.6	2.1	2.0
95th Queue (m)	14.9	8.1	9.4
Link Distance (m)		666.1	1592.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	TR	L	T	R
Maximum Queue (m)	149.9	417.5	413.5	403.5	195.0	76.9	144.1	145.3	150.9	150.0	475.8	476.5
Average Queue (m)	90.2	315.3	309.4	285.4	136.9	42.3	103.4	112.2	114.6	146.8	348.7	206.6
95th Queue (m)	194.5	471.7	466.0	457.1	270.3	72.2	145.7	151.9	154.5	164.1	593.8	569.8
Link Distance (m)		429.6	429.6	429.6			692.6	692.6	692.6		471.2	471.2
Upstream Blk Time (%)		10	7	10							37	13
Queuing Penalty (veh)		0	0	0							0	0
Storage Bay Dist (m)	100.0				125.0	105.0				80.0		
Storage Blk Time (%)		54		49		0	7			93	0	
Queuing Penalty (veh)		63		127		0	14			107	0	

Intersection: 3: Torbram Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	26.4	76.4	30.0
Average Queue (m)	9.0	39.5	9.4
95th Queue (m)	21.3	66.4	22.7
Link Distance (m)		455.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	80.0		80.0
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	TR
Maximum Queue (m)	82.4	291.2	389.6	297.4	62.5	44.5	152.8	154.9	154.0	62.5	58.9	43.8
Average Queue (m)	53.7	151.5	161.9	166.9	28.6	8.4	113.5	119.7	123.5	11.8	33.5	6.5
95th Queue (m)	99.4	235.0	287.5	243.8	74.9	34.7	150.9	153.7	154.4	44.0	56.9	25.3
Link Distance (m)		692.6	692.6	692.6			615.9	615.9	615.9			331.4
Upstream Blk Time (%)				0	0							
Queuing Penalty (veh)				0	0							
Storage Bay Dist (m)	75.0				55.0	75.0				55.0	55.0	
Storage Blk Time (%)	1	19		30	0	0	29		40	0	1	
Queuing Penalty (veh)	6	29		33	1	0	4		17	0	0	

Intersection: 4: Block 48-2 "Street C"/Street B & Mayfield Road

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (m)	19.9	26.8
Average Queue (m)	4.4	7.8
95th Queue (m)	15.6	20.1
Link Distance (m)		833.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	55.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (m)	135.5	123.5	144.0	178.1	67.5	60.4	143.6	137.3	129.8	44.3	142.4	116.2
Average Queue (m)	72.8	84.8	92.0	117.6	65.4	19.2	88.4	86.3	74.6	4.8	84.2	30.8
95th Queue (m)	119.9	120.6	132.9	166.0	78.2	44.8	125.5	124.8	114.7	30.6	145.4	73.1
Link Distance (m)		615.9	615.9	615.9			591.6	591.6	591.6			432.0
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				60.0	165.0				60.0	95.0	
Storage Blk Time (%)				25	12		0		15		21	0
Queuing Penalty (veh)				116	47		0		9		36	0

Intersection: 6: Airport Road & Mayfield Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (m)	73.0	37.1	121.4	227.5	242.4	119.7
Average Queue (m)	32.1	13.5	37.9	137.8	143.6	54.3
95th Queue (m)	57.7	27.8	114.8	294.4	302.6	149.6
Link Distance (m)	432.0			415.8	415.8	
Upstream Blk Time (%)				0	1	
Queuing Penalty (veh)				1	4	
Storage Bay Dist (m)		60.0	100.0			105.0
Storage Blk Time (%)	0			31	32	
Queuing Penalty (veh)	0			28	70	

Intersection: 7: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	T
Maximum Queue (m)	11.6	21.9	35.9	42.6	41.6	0.9	2.4	10.8	14.3	15.9
Average Queue (m)	1.2	6.5	17.2	7.1	9.8	0.0	0.1	0.4	0.7	0.8
95th Queue (m)	6.5	16.0	33.8	31.4	27.7	0.6	1.7	5.0	10.7	10.2
Link Distance (m)	101.7	101.7		254.7		415.8			413.6	413.6
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			30.0		70.0		65.0	70.0		
Storage Blk Time (%)			7						0	0
Queuing Penalty (veh)			1						0	0

Intersection: 8: Airport Road & Street A/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	T	R
Maximum Queue (m)	27.1	30.2	62.7	15.0	65.8	27.2	31.8	17.1	24.0	58.1	52.7	12.7
Average Queue (m)	5.4	12.1	24.4	2.4	23.8	9.8	10.6	3.6	4.9	21.1	14.5	3.3
95th Queue (m)	18.3	24.8	50.4	9.5	48.0	21.7	25.5	12.7	17.1	43.1	36.9	9.4
Link Distance (m)		637.0	251.1	251.1	413.6	413.6	413.6			336.4	336.4	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0							145.0	75.0			55.0
Storage Blk Time (%)		0								0	0	
Queuing Penalty (veh)		0								0	0	

Intersection: 12: Torbram Road & Site Access "1"

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	10.5	1.3	18.3
Average Queue (m)	3.5	0.0	1.5
95th Queue (m)	10.8	0.9	8.4
Link Distance (m)	368.9	455.0	131.9
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: Torbram Road & Site Access "2"

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	10.4	16.6
Average Queue (m)	2.9	0.9
95th Queue (m)	9.8	6.9
Link Distance (m)	300.4	197.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Street B & BLDG A/Street A

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	9.2	13.5	13.6	11.7	23.2	8.9	8.8
Average Queue (m)	2.3	6.1	9.2	1.7	12.3	4.7	5.0
95th Queue (m)	8.6	13.5	14.2	7.7	20.4	11.8	11.9
Link Distance (m)	174.9		637.0		833.8		302.0
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)		55.0		55.0		55.0	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: Street B & Street C

Movement	EB	NB
Directions Served	R	L
Maximum Queue (m)	10.5	12.6
Average Queue (m)	4.4	5.9
95th Queue (m)	11.5	13.6
Link Distance (m)	666.1	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		55.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Street B & Potential/Future Street D/Block 3 Access

Movement	WB	NB	SB
Directions Served	L	TR	T
Maximum Queue (m)	13.4	17.5	9.3
Average Queue (m)	5.0	9.7	4.7
95th Queue (m)	12.5	13.8	12.2
Link Distance (m)		302.0	300.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	55.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 715

Appendix H

Signal Warrant and Auxiliary Turn-Lane Warrant Analysis Excerpts

2022-5842
Tullamore

Right Turn Warrants

Storage Calculator S=(NV/30) S=storage length (n N=volumes (v/h) V=vehicle length (m)
PTAC Vehicle Length (m) 7.5
Volumes used are the greater of A.M. and P.M. peak volumes

2026 Future Total / Approach	NBR			SBR		
Intersection	**(N) Volumes**	**Volume>60?**	**(S) Storage Length**	**(N) Volumes**	**Volume>60?**	**(S) Storage Length**
Torbram at Street C	52	No	N/A			
Torbram at Site Access 1	15	No	N/A			
Torbram at Site Access 2	15	No	N/A			

2026 Future Total / Approach	NBR			SBR		
Intersection	**(N) Volumes**	**Volume>60?**	**(S) Storage Length**	**(N) Volumes**	**Volume>60?**	**(S) Storage Length**
Torbram at Street C	52	No	N/A			
Torbram at Site Access 1	15	No	N/A			
Torbram at Site Access 2	15	No	N/A			

2022-5842
Tullamore

Left Turn Warrants

Storage Calculator S=(NV/30) S=storage length (m N=volumes (v/h) V=vehicle length (m)
PTAC Vehicle Length (m) 7.5
Volumes used are the greater of A.M. and P.M. peak volumes

AM

2026 Future Total / Approach	Data				
Intersection	**VA**	**VAL**	**VAL %**	**VO**	**Storage Lane Warranted**
Torbram at Street C	329	28	9%	109	NONE
Torbram at Site Access 1	367	12	3%	252	NONE
Torbram at Site Access 2	367	12	3%	218	NONE

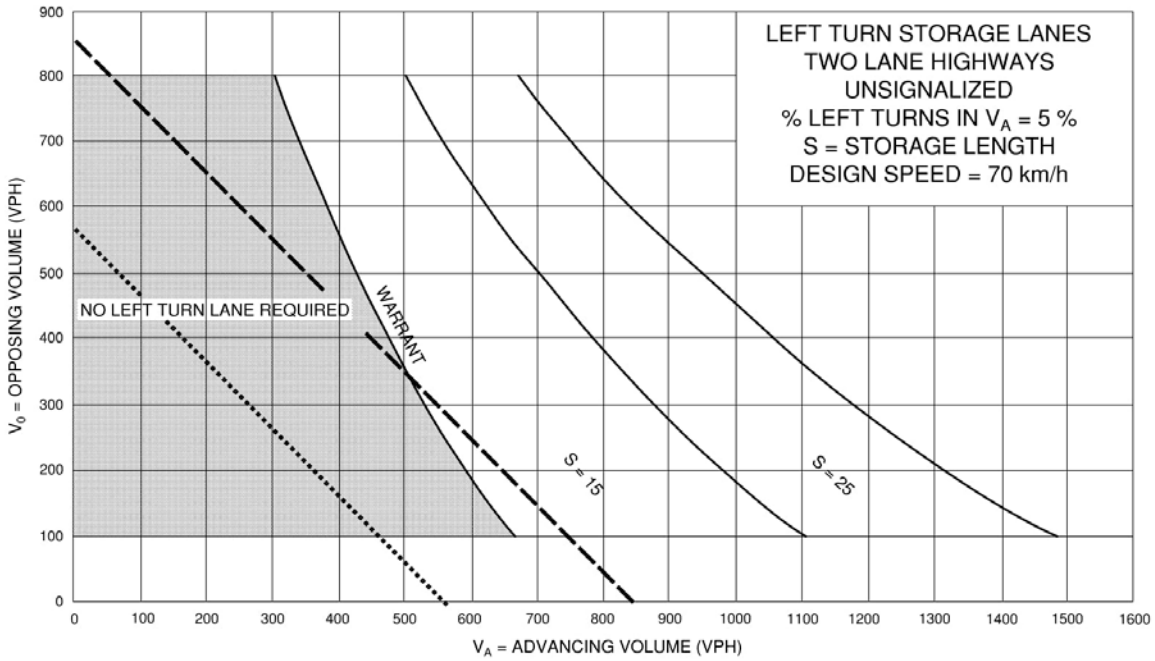
2036 Future Total / Approach	Data				
Intersection	**VA**	**VAL**	**VAL %**	**VO**	**Storage Lane Warranted**
Torbram at Street C	386	28	7%	132	NONE
Torbram at Site Access 1	424	12	3%	275	NONE
Torbram at Site Access 2	424	12	3%	241	NONE

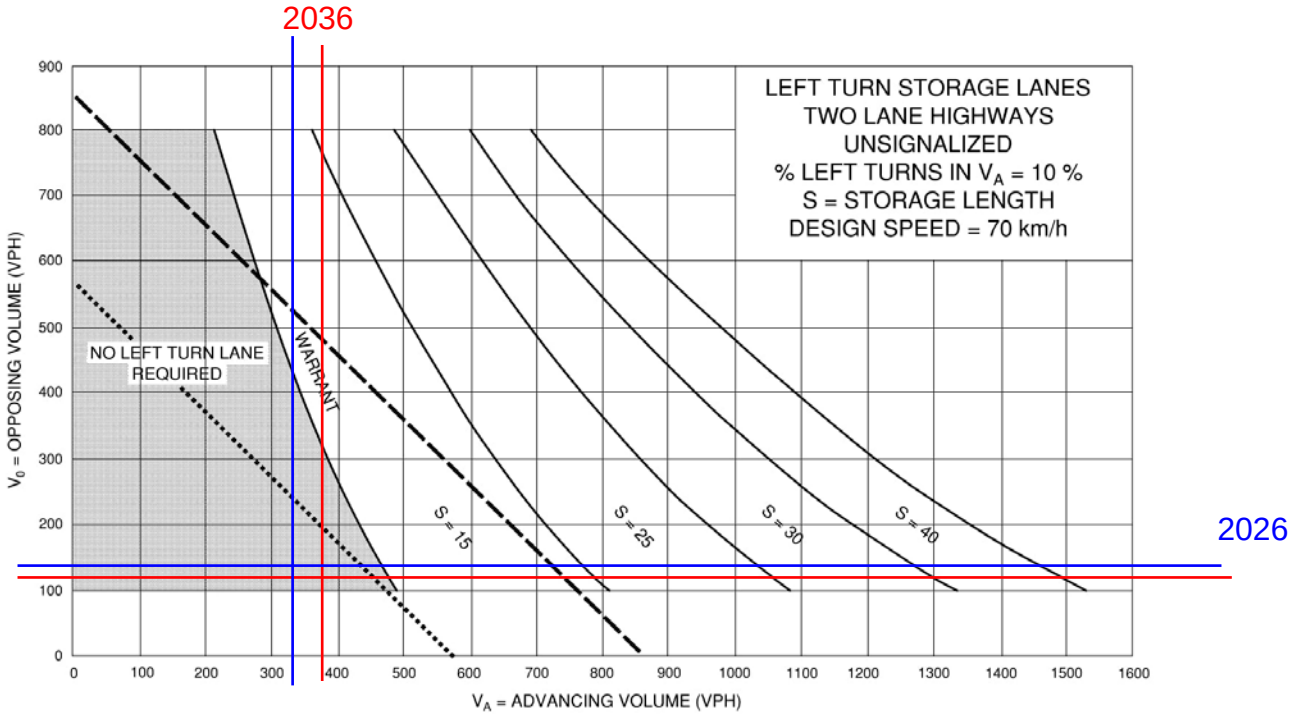
PM

2026 Future Total / Approach	Data				
Intersection	**VA**	**VAL**	**VAL %**	**VO**	**Storage Lane Warranted**
Torbram at Street C	98	10	10%	213	NONE
Torbram at Site Access 1	224	4	2%	248	NONE
Torbram at Site Access 2	198	4	2%	249	NONE

2036 Future Total / Approach	Data				
Intersection	**VA**	**VAL**	**VAL %**	**VO**	**Storage Lane Warranted**
Torbram at Street C	116	10	9%	253	NONE
Torbram at Site Access 1	241	4	2%	288	NONE
Torbram at Site Access 2	215	4	2%	289	NONE

Exhibit 9A-11





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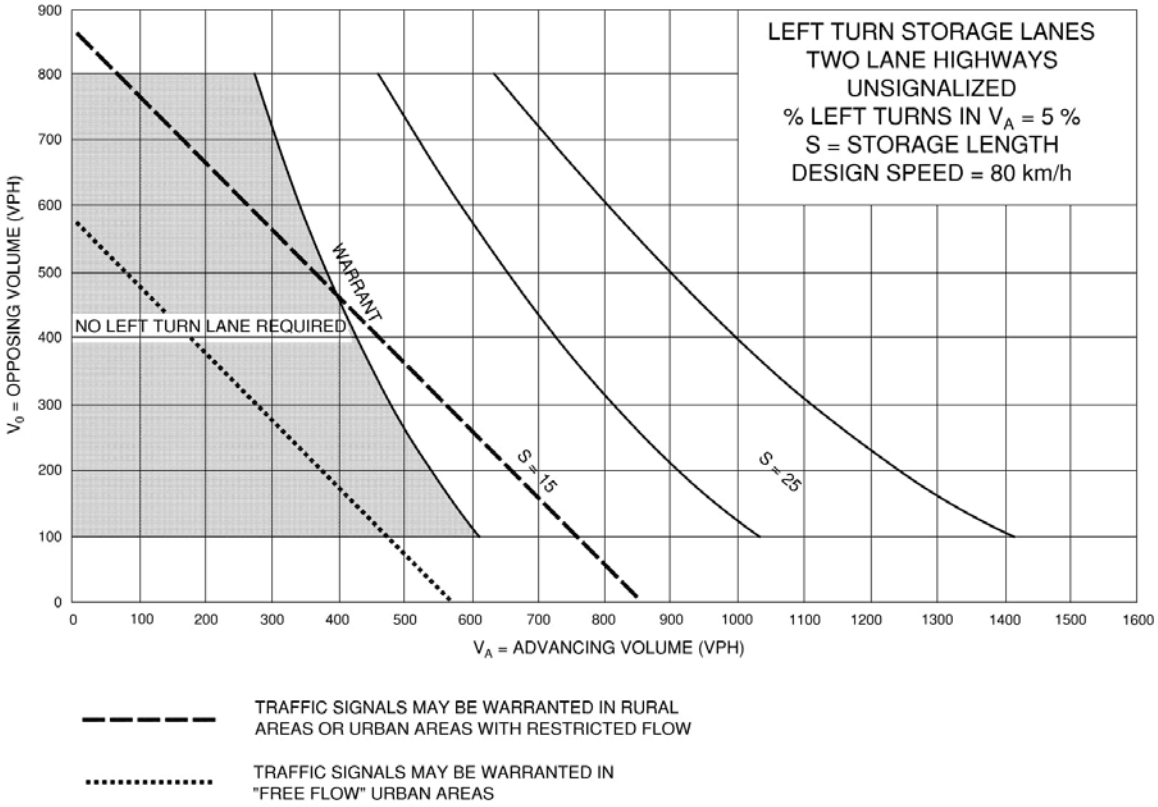


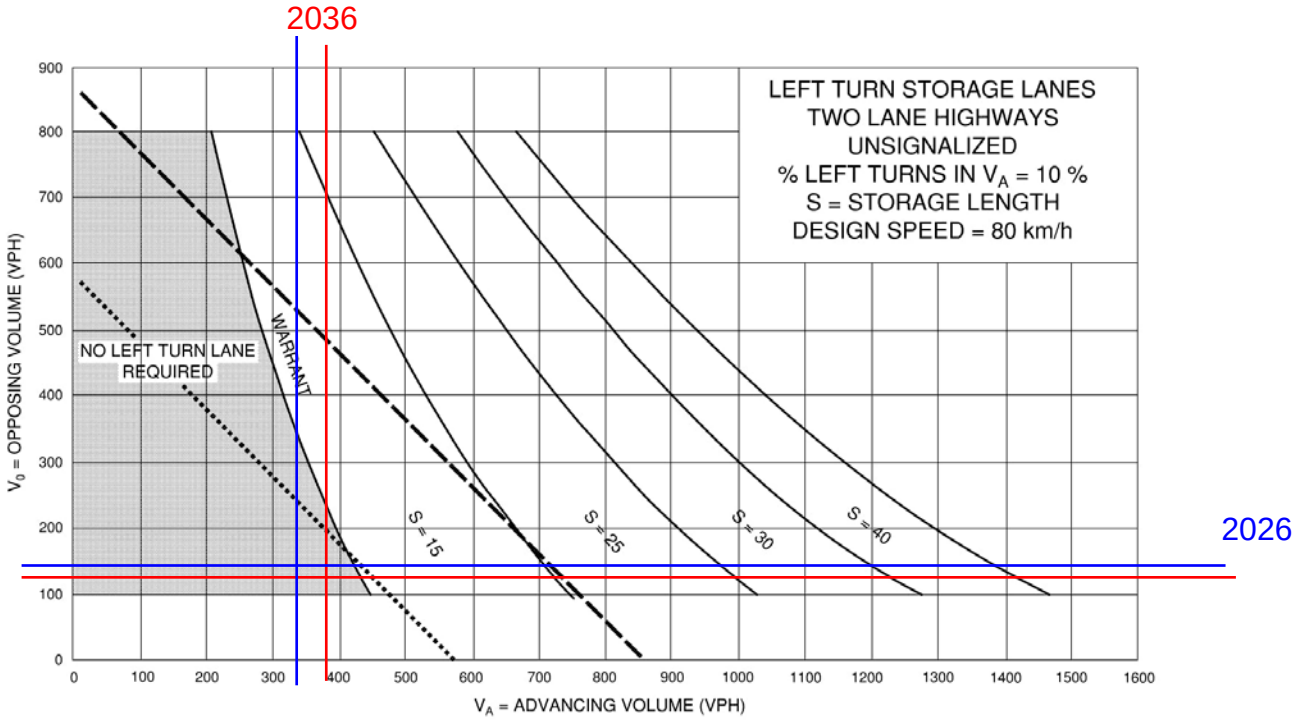
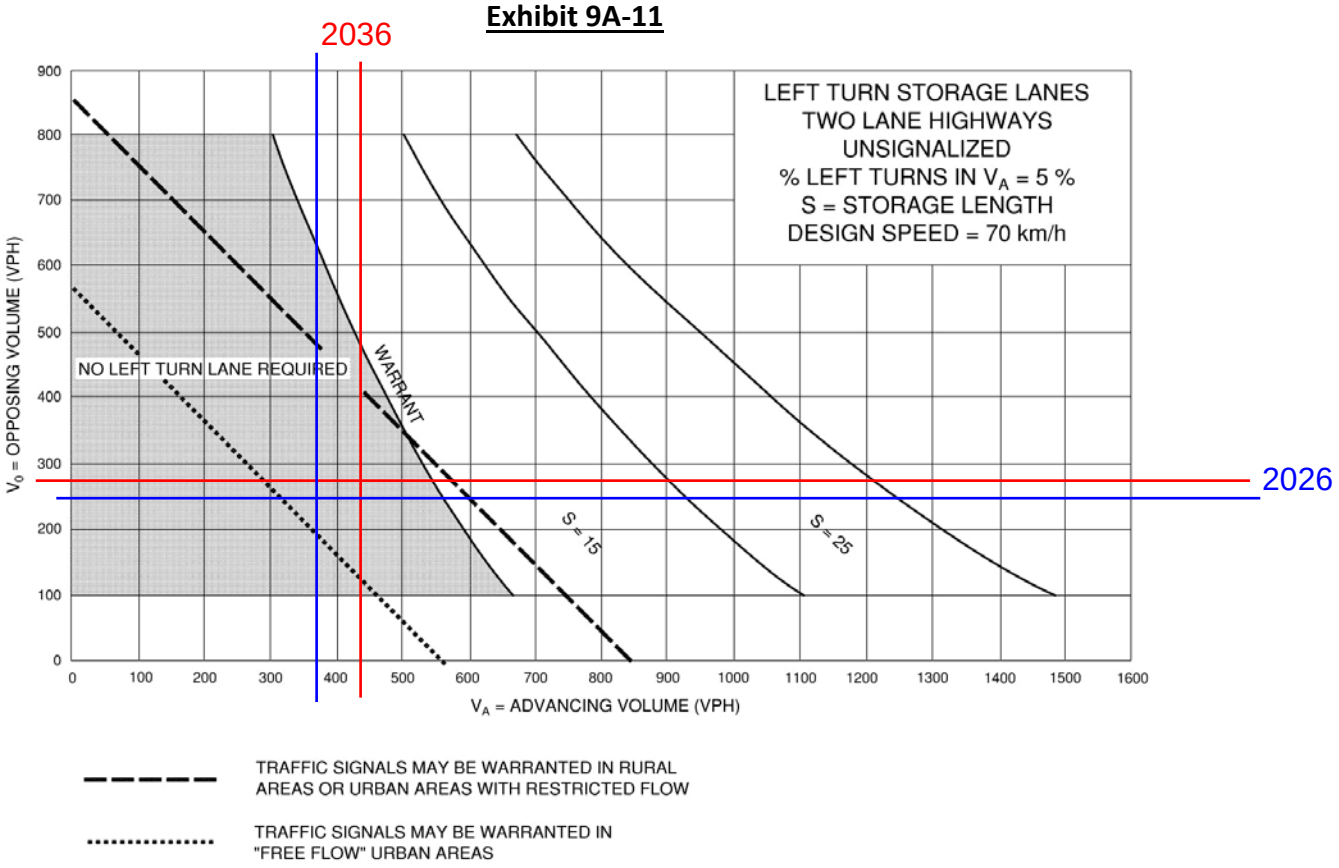


Exhibit 9A-11



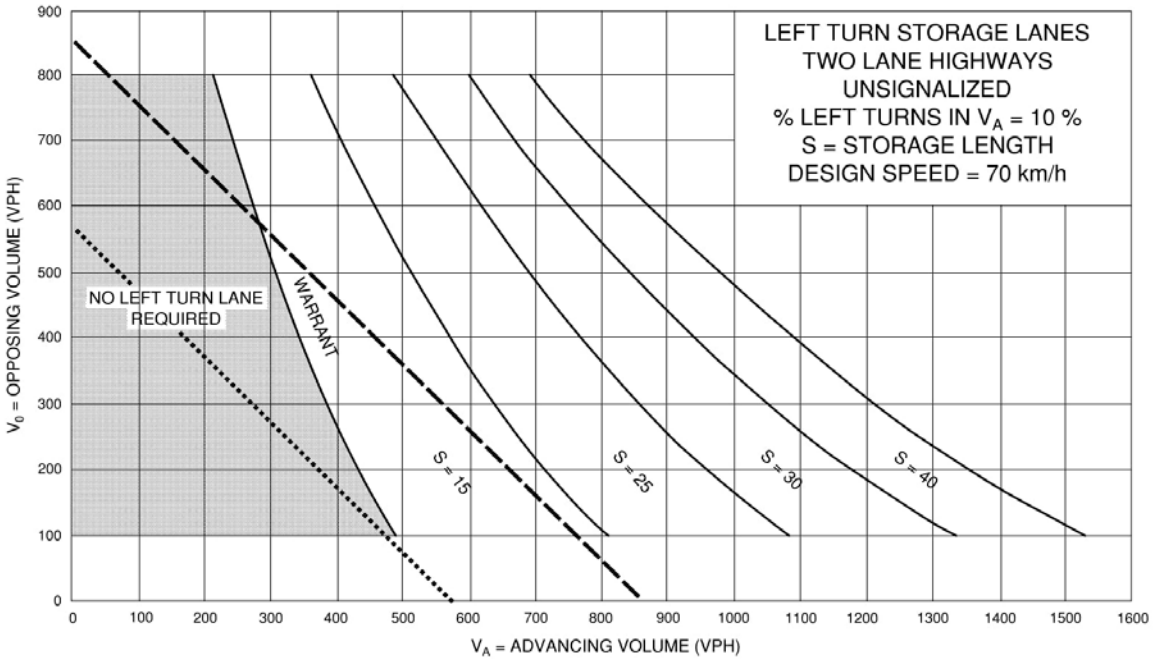
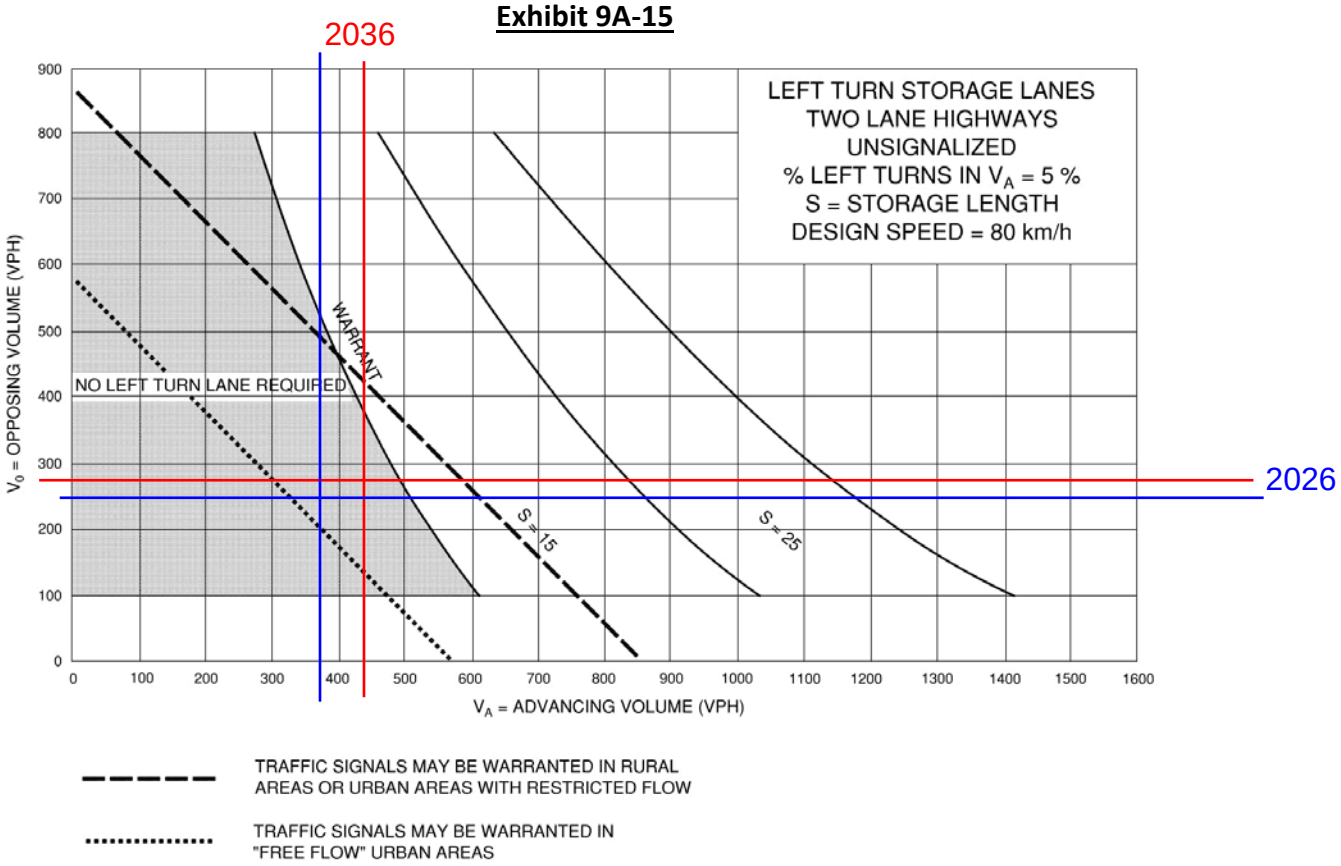
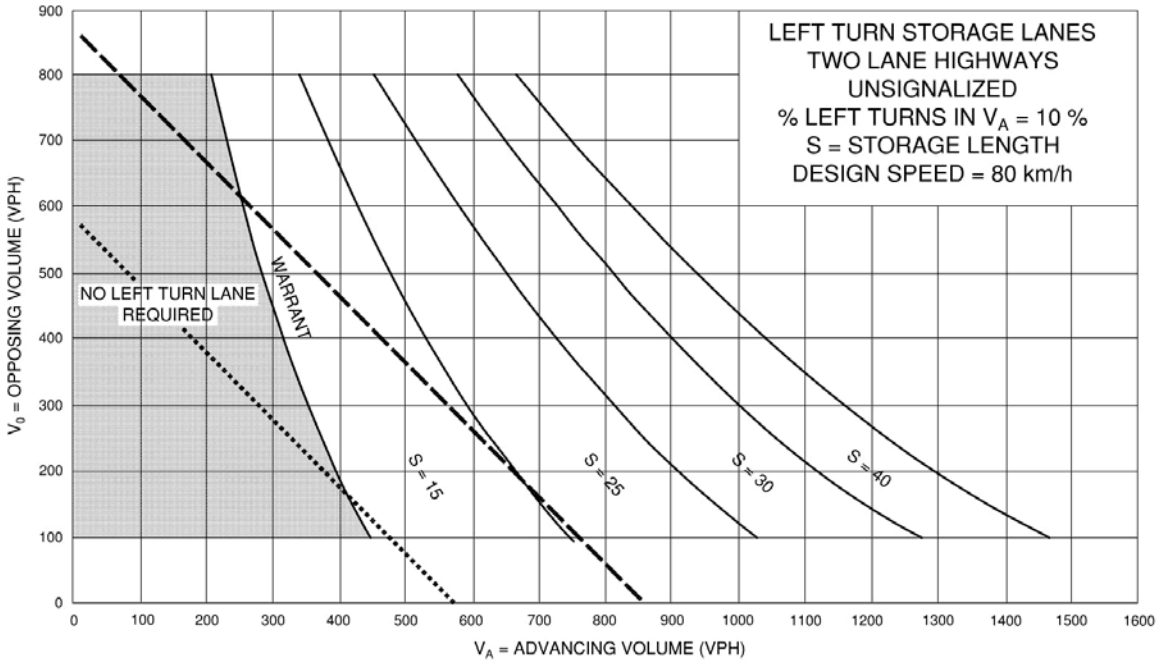


Exhibit 9A-15





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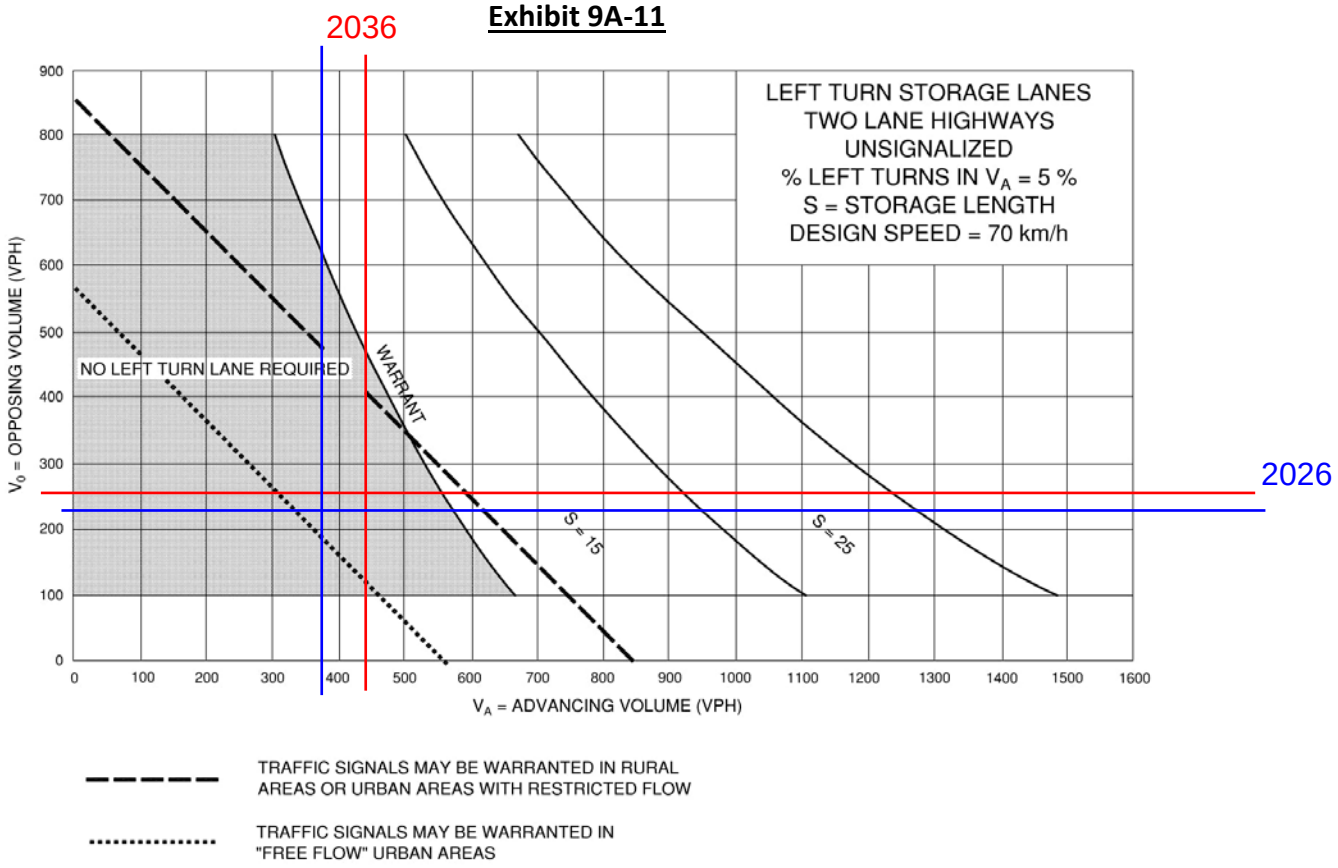

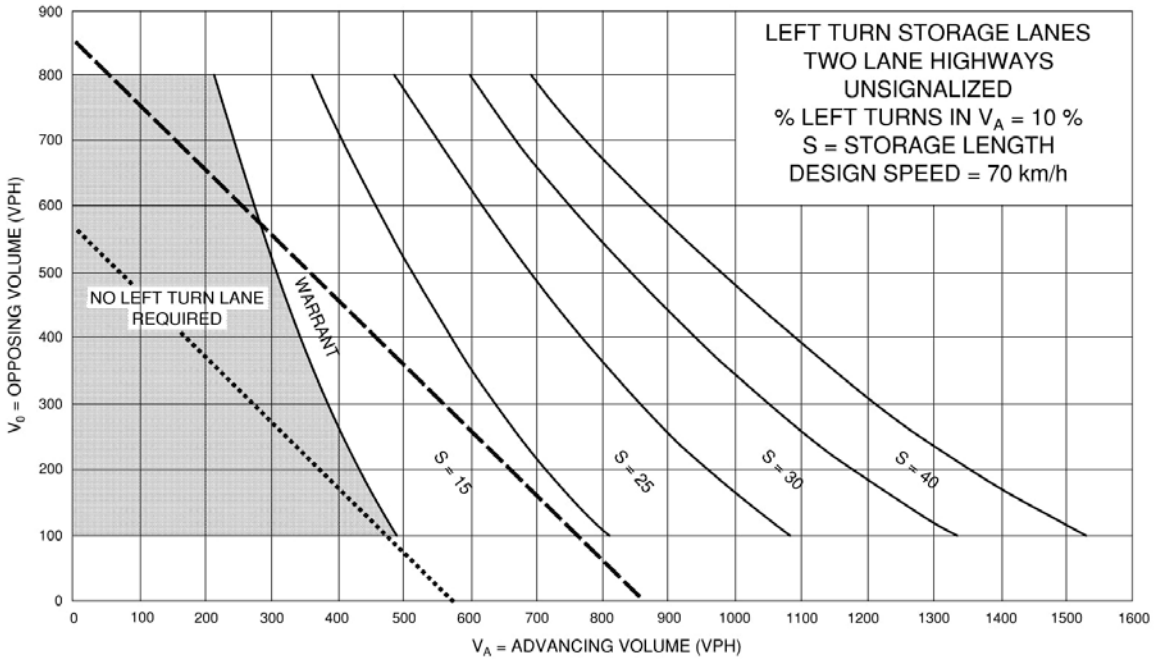

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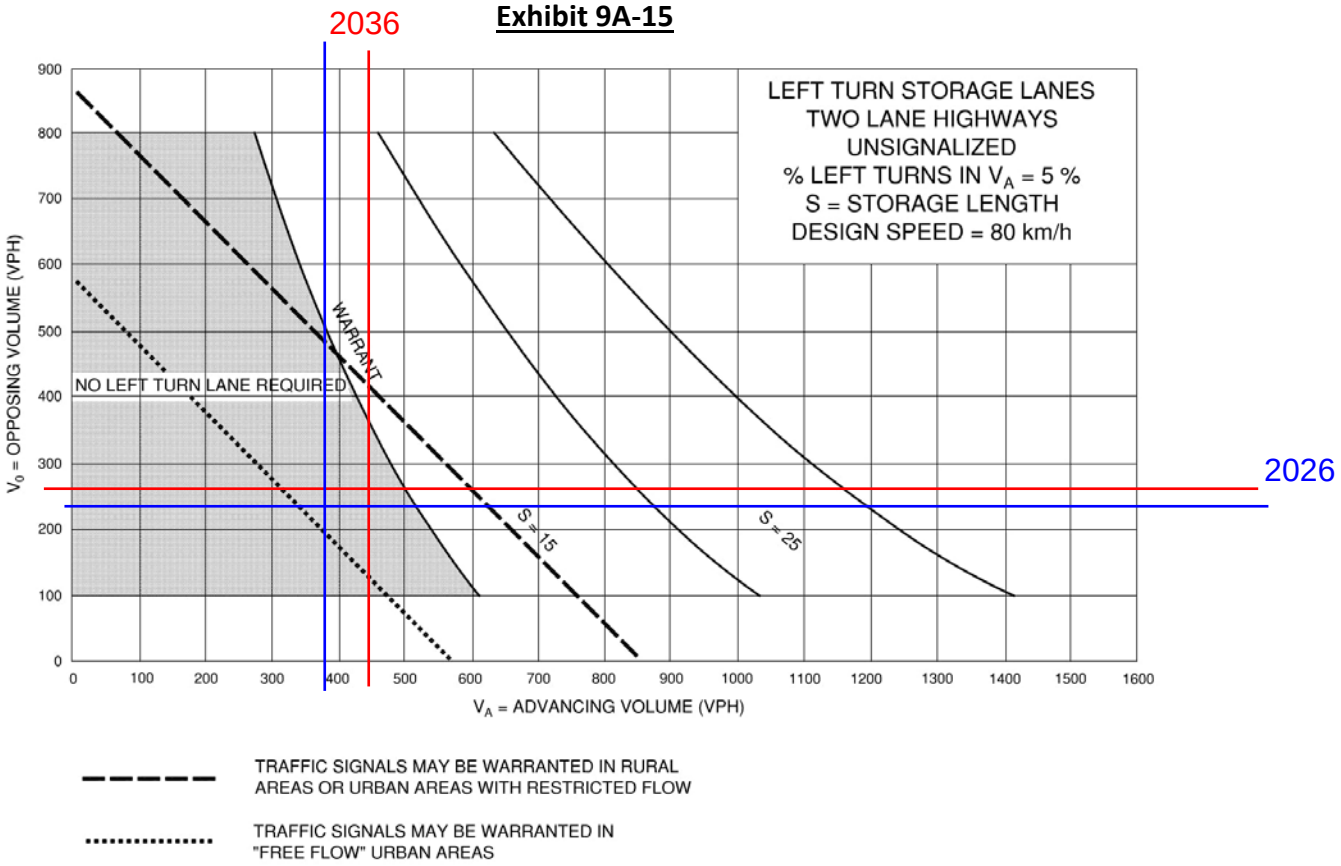
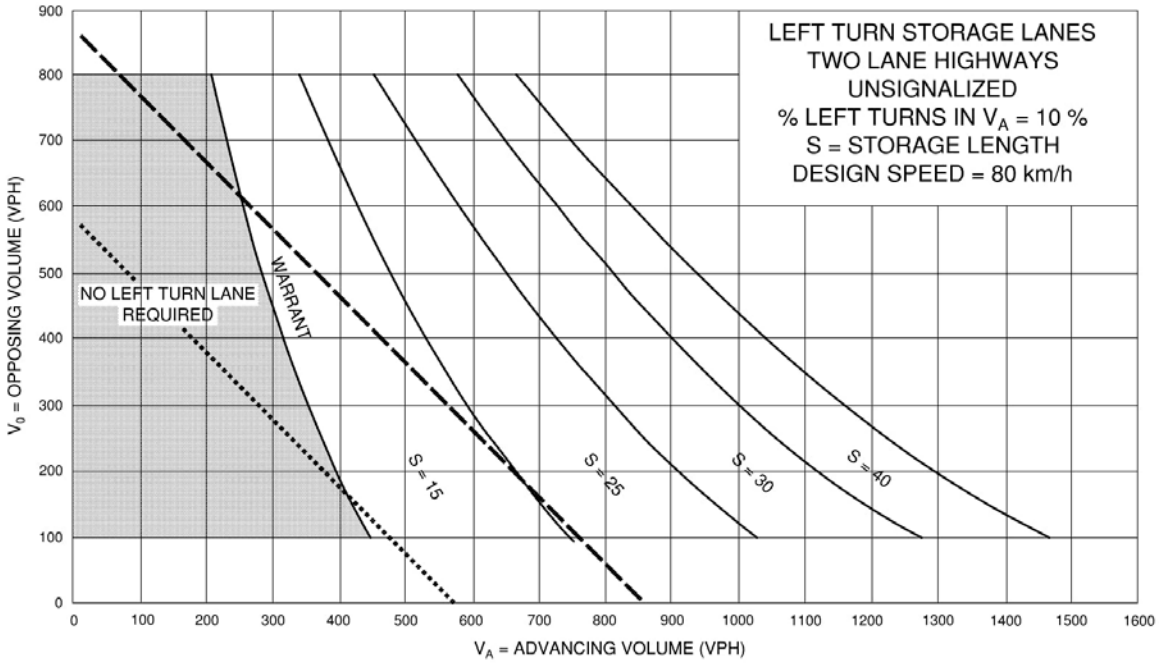




TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)

PER OTM BOOK 12 (TABLE 21)

2036 Future Total Traffic Volumes

Project and Scenario Summary

Project	Tullamore Industrial Subdivision	**Project Number**	2022-5842
		Date	2024-04-18
Horizon	2036 FT	**Analyst**	KH

Study Intersection Summary

Major Street	Airport Road	**Direction**	North/South
Minor Street	Perdue Court/Davis Lane	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Restricted Flow (Urban)	**Number of Lanes**	2+
T-Intersection?	No	**Intersection Type**	Existing

Notes: Free Flow (Rural) is used when the operating speed is greater than or equal to 70km/h. Restricted Flow (Urban) is used otherwise.
The Number of Lanes greater than 1 only needs to be for one direction along the major road.
An intersection is considered New if at least 1-leg is added to an existing intersection.

Input Volumes and Average Hourly Volume Determination

Peak Hour	Major: Airport Road						Minor: Perdue Court/Davis Lane						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	46	665	83	2	850	3	5	1	33	78	0	17	0
PM	78	927	90	17	605	6	8	1	76	113	0	4	0
AHV	31	398	43	5	364	2	3	1	27	48	0	5	0

The AHV is determined by the availability of the peak hour estimates. If both Peak 1 and Peak 2 Peak Hour Volume estimates are available then AHV = (Peak1phv + Peak2phv)/4. In only the case that one estimate is available then AHV = Peak1phv/2 **or** Peak2phv/2.

Justification 7 - OTM Book 12 (Table 21)

JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENT 1 LANE HIGHWAYS		MINIMUM REQUIREMENT 2 OR MORE LANE HIGHWAYS		COMPLIANCE		
						Sectional		Entire Percentage
		Free Flow	Restricted Flow	Free Flow	Restricted Flow	Numerical	Percentage	
1. Minimum Vehicular Volume	A. Vehicle Volume, All Approaches (Avg. Hour)	480	720	600	900	927	103.0%	49.4%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	120	170	120	170	84	49.4%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	843	93.7%	69.3%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	52	69.3%	
Applicable Threshold					X			

Note: Per OTM Book 12 Table 21, for "T" intersections, these values should be increased by 50%
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Signal Justification 7 Met: [ ] **Yes** [X] **No**

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)

PER OTM BOOK 12 (TABLE 21)

2036 Future Total Traffic Volumes

Project and Scenario Summary

Project	Tullamore Industrial Subdivision	**Project Number**	2022-5842
		Date	2024-04-18
Horizon	2036 FT	**Analyst**	KH

Study Intersection Summary

Major Street	Street A	**Direction**	East/West
Minor Street	Street B	**Direction**	North/South

Intersection Details for Warrant Parameters

Flow Conditions	Restricted Flow (Urban)	**Number of Lanes**	1
T-Intersection?	Yes	**Intersection Type**	New

Notes: Free Flow (Rural) is used when the operating speed is greater than or equal to 70km/h. Restricted Flow (Urban) is used otherwise.
The Number of Lanes greater than 1 only needs to be for one direction along the major road.
An intersection is considered New if at least 1-leg is added to an existing intersection.

Input Volumes and Average Hourly Volume Determination

Peak Hour	Major: Street A						Minor: Street B						Pedestrians Crossing Major Street
	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
AM	0	6	2	40	15	62	9	64	62	23	24	0	0
PM	0	14	10	82	7	26	3	25	46	59	68	0	0
AHV	0	5	3	31	6	22	3	22	27	21	23	0	0

The AHV is determined by the availability of the peak hour estimates. If both Peak 1 and Peak 2 Peak Hour Volume estimates are available then AHV = (Peak1phv + Peak2phv)/4. In only the case that one estimate is available then AHV = Peak1phv/2 **or** Peak2phv/2.

Justification 7 - OTM Book 12 (Table 21)

JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENT 1 LANE HIGHWAYS		MINIMUM REQUIREMENT 2 OR MORE LANE HIGHWAYS		COMPLIANCE		
						Sectional		Entire Percentage
		Free Flow	Restricted Flow	Free Flow	Restricted Flow	Numerical	Percentage	
1. Minimum Vehicular Volume	A. Vehicle Volume, All Approaches (Avg. Hour)	480	720	600	900	163	22.6%	22.6%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	96	37.6%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	67	9.3%	9.3%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	47	62.7%	
Applicable Threshold			X					

Note: Per OTM Book 12 Table 21, for "T" intersections, these values should be increased by 50%
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Signal Justification 7 Met: [ ] **Yes** [X] **No**

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)

PER OTM BOOK 12 (TABLE 21)

2036 Future Total Traffic Volumes

Project and Scenario Summary

Project	Tullamore Industrial Subdivision	**Project Number**	2022-5842
		Date	2024-04-18
Horizon	2036 FT	**Analyst**	KH

Study Intersection Summary

Major Street	Street B	**Direction**	North/South
Minor Street	Street C	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Restricted Flow (Urban)	**Number of Lanes**	1
T-Intersection?	Yes	**Intersection Type**	New

Notes: Free Flow (Rural) is used when the operating speed is greater than or equal to 70km/h. Restricted Flow (Urban) is used otherwise.
The Number of Lanes greater than 1 only needs to be for one direction along the major road.
An intersection is considered New if at least 1-leg is added to an existing intersection.

Input Volumes and Average Hourly Volume Determination

Peak Hour	Major: Street B						Minor: Street C						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	0	34	91	0	19	0	0	0	0	27	0	0	0
PM	0	16	34	0	39	0	0	0	0	87	0	0	0
AHV	0	13	31	0	15	0	0	0	0	29	0	0	0

The AHV is determined by the availability of the peak hour estimates. If both Peak 1 and Peak 2 Peak Hour Volume estimates are available then AHV = (Peak1phv + Peak2phv)/4. In only the case that one estimate is available then AHV = Peak1phv/2 **or** Peak2phv/2.

Justification 7 - OTM Book 12 (Table 21)

JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENT 1 LANE HIGHWAYS		MINIMUM REQUIREMENT 2 OR MORE LANE HIGHWAYS		COMPLIANCE		
						Sectional		Entire Percentage
		Free Flow	Restricted Flow	Free Flow	Restricted Flow	Numerical	Percentage	
1. Minimum Vehicular Volume	A. Vehicle Volume, All Approaches (Avg. Hour)	480	720	600	900	88	12.2%	11.4%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	29	11.4%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	59	8.2%	8.2%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	29	38.7%	
Applicable Threshold			X					

Note: Per OTM Book 12 Table 21, for "T" intersections, these values should be increased by 50%
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Signal Justification 7 Met: [ ] **Yes** [X] **No**

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)

PER OTM BOOK 12 (TABLE 21)

2036 Future Total Traffic Volumes

Project and Scenario Summary

Project	Tullamore Industrial Subdivision	**Project Number**	2022-5842
		Date	2024-04-18
Horizon	2036 FT	**Analyst**	KH

Study Intersection Summary

Major Street	Street B	**Direction**	North/South
Minor Street	Street D	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Restricted Flow (Urban)	**Number of Lanes**	1
T-Intersection?	Yes	**Intersection Type**	New

Notes: Free Flow (Rural) is used when the operating speed is greater than or equal to 70km/h. Restricted Flow (Urban) is used otherwise.
The Number of Lanes greater than 1 only needs to be for one direction along the major road.
An intersection is considered New if at least 1-leg is added to an existing intersection.

Input Volumes and Average Hourly Volume Determination

Peak Hour	Major: Street B						Minor: Street D						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	34	0	0	0	0	0	0	0	19	0	0	0	0
PM	16	0	0	0	0	0	0	0	39	0	0	0	0
AHV	13	0	0	0	0	0	0	0	15	0	0	0	0

The AHV is determined by the availability of the peak hour estimates. If both Peak 1 and Peak 2 Peak Hour Volume estimates are available then AHV = (Peak1phv + Peak2phv)/4. In only the case that one estimate is available then AHV = Peak1phv/2 **or** Peak2phv/2.

Justification 7 - OTM Book 12 (Table 21)

JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENT 1 LANE HIGHWAYS		MINIMUM REQUIREMENT 2 OR MORE LANE HIGHWAYS		COMPLIANCE		
						Sectional		Entire Percentage
		Free Flow	Restricted Flow	Free Flow	Restricted Flow	Numerical	Percentage	
1. Minimum Vehicular Volume	A. Vehicle Volume, All Approaches (Avg. Hour)	480	720	600	900	28	3.9%	3.9%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	15	5.9%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	13	1.8%	0.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	0	0.0%	
Applicable Threshold			X					

Note: Per OTM Book 12 Table 21, for "T" intersections, these values should be increased by 50%
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Signal Justification 7 Met: [ ] **Yes** [X] **No**

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)

PER OTM BOOK 12 (TABLE 21)

2036 Future Total Traffic Volumes

Project and Scenario Summary

Project	Tullamore Industrial Subdivision	**Project Number**	2022-5842
		Date	2024-04-18
Horizon	2036 FT	**Analyst**	KH

Study Intersection Summary

Major Street	Torbram Road	**Direction**	North/South
Minor Street	Street "C"	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Free Flow (Rural)	**Number of Lanes**	1
T-Intersection?	Yes	**Intersection Type**	New

Notes: Free Flow (Rural) is used when the operating speed is greater than or equal to 70km/h. Restricted Flow (Urban) is used otherwise.
The Number of Lanes greater than 1 only needs to be for one direction along the major road.
An intersection is considered New if at least 1-leg is added to an existing intersection.

Input Volumes and Average Hourly Volume Determination

Peak Hour	Major: Torbram Road						Minor: Street "C"						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	0	132	112	28	358	0	0	0	0	65	0	8	0
PM	0	253	51	9	106	0	0	0	0	109	0	47	0
AHV	0	96	41	9	116	0	0	0	0	44	0	14	0

The AHV is determined by the availability of the peak hour estimates. If both Peak 1 and Peak 2 Peak Hour Volume estimates are available then AHV = (Peak1phv + Peak2phv)/4. In only the case that one estimate is available then AHV = Peak1phv/2 **or** Peak2phv/2.

Justification 7 - OTM Book 12 (Table 21)

JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENT 1 LANE HIGHWAYS		MINIMUM REQUIREMENT 2 OR MORE LANE HIGHWAYS		COMPLIANCE		
						Sectional		Entire Percentage
		Free Flow	Restricted Flow	Free Flow	Restricted Flow	Numerical	Percentage	
1. Minimum Vehicular Volume	A. Vehicle Volume, All Approaches (Avg. Hour)	480	720	600	900	320	66.7%	32.2%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	58	32.2%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	262	54.6%	54.6%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	44	88.0%	
Applicable Threshold		**X**						

Note: Per OTM Book 12 Table 21, for "T" intersections, these values should be increased by 50%
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Signal Justification 7 Met: [ ] **Yes** [X] **No**

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Airport Road at Davis Lane/Perdue Crescent Count Date: 2022 Existing Conditions

Justification 1: Minimum Vehicle Volumes

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 Lanes		2 or More Lanes		Hour Ending									
Flow Condition	FREE FLOW ☐	RESTR. FLOW ☐	FREE FLOW ☑	RESTR. FLOW ☐	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
1A	480	720	600	900	685	685	685	685	685	685	685	685		
	COMPLIANCE %				100	100	100	100	100	100	100	100	800	100
1B	120	170	120	170	84	84	84	84	84	84	84	84		
	COMPLIANCE %				70	70	70	70	70	70	70	70	560	70
Free Flow Signal Justification 1:					Both 1A and 1B 100% Fullfilled each of 8 hours								Yes ☐	No ☑
					Lesser of 1A or 1B at least 80% fulfilled each of 8 hours								Yes ☐	No ☑

Justification 2: Delay to Cross Traffic

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 lanes		2 or More lanes		Hour Ending									
Flow Condition	FREE FLOW ☐	RESTR. FLOW ☐	FREE FLOW ☑	RESTR. FLOW ☐	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
2A	480	720	600	900	601	601	601	601	601	601	601	601		
	COMPLIANCE %				100	100	100	100	100	100	100	100	800	100
2B	50	75	50	75	52	52	52	52	52	52	52	52		
	COMPLIANCE %				100	100	100	100	100	100	100	100	800	100
Free Flow Signal Justification 2:					Both 2A and 2B 100% Fullfilled each of 8 hours								Yes ☑	No ☐
					Lesser of 2A or 2B at least 80% fulfilled each of 8 hours								Yes ☑	No ☐

Justification 3: Combination

Combination Justification 1 and 2

	Justification Satisfied 80% or More			Two Justifications Satisfied 80% or More	
Justification 1	Minimun Vehicular Volume	YES	NO ☑	YES ☐	NO ☑
Justification 2	Delay Cross Traffic	YES	NO ☐		NOT JUSTIFIED

Justification 4: Four Hour Volume

Justification	Time Period	Total Volume of Both Approaches (Main) X	Heaviest Minor Approach Y (actual)	Required Value Y (warrant threshold)	Average % Compliance	Overall % Compliance
Justification 4	7:00	601	53	387	14 %	14 %
	8:00	601	53	387	14 %	
	9:00	601	53	387	14 %	
	10:00	601	53	387	14 %	

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Airport Road at Davis Lane/Perdue Crescent

Count Date: 2022 Existing Conditions

Justification 5: Collision Experience

Justification	Preceding Months	% Fulfillment	Overall % Compliance
Justification 5	1-12	0 %	0 %
	13-24	0 %	
	25-36	0 %	

Justification 6: Pedestrian Volume

Pedestrian Volume Analysis

8 Hour Vehicular Volume V_8		Net 8 Hour Pedestrian Volume				
		< 200	200 - 275	276 - 475	476 - 1000	>1000
Justification 6A	< 1440					
	1440 - 2600	Not Justified				
	2601 - 7000					
	> 7000					

Pedestrian Delay Analysis

Net Total 8 Hour Volume of Total Pedestrians		Net Total 8 Hour Volume of Delayed Pedestrians		
		< 75	75 - 130	> 130
Justification 6B	< 200	Not Justified		
	200 - 300			
	> 300			

Input Data Sheet

Analysis Sheet | Results Sheet | Proposed Collision

GO TO Justification:

What are the intersecting roadways? Airport Road at Davis Lane/Perdue Crescent

What is the direction of the Main Road street? North-South

When was the data collected? 2022 Existing Conditions

Justification 1 - 4: Volume Warrants

a.- Number of lanes on the Main Road? 2 or more

b.- Number of lanes on the Minor Road? 1

c.- How many approaches? 4

d.- What is the operating environment? Rural Population < 10,000 AND Speed >= 70 km/hr

e.- What is the eight hour vehicle volume at the intersection? (Please fill in table below)

Hour Ending	Main Northbound Approach			Minor Eastbound Approach			Main Southbound Approach			Minor Westbound Approach			Pedestrians Crossing Main Road
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
7:00	31	265	43	3	1	27	5	255	2	48	0	5	0
8:00	31	265	43	3	1	27	5	255	2	48	0	5	0
9:00	31	265	43	3	1	27	5	255	2	48	0	5	0
10:00	31	265	43	3	1	27	5	255	2	48	0	5	0
16:00	31	265	43	3	1	27	5	255	2	48	0	5	0
17:00	31	265	43	3	1	27	5	255	2	48	0	5	0
18:00	31	265	43	3	1	27	5	255	2	48	0	5	0
19:00	31	265	43	3	1	27	5	255	2	48	0	5	0
Total	**248**	**2,120**	**344**	**24**	**8**	**216**	**40**	**2,040**	**16**	**384**	**0**	**40**	**0**

Justification 5: Collision Experience

Preceding Months	Number of Collisions*
1-12	0
13-24	0
25-36	0

* Include only collisions that are susceptable to correction through the installation of traffic signal control

Justification 6: Pedestrian Volume

a.- Please fill in table below summarizing total pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume									
Factored 8 hour pedestrian volume	0		0		0		0		
% Assigned to crossing rate	23%		34%		30%		100%		
Net 8 Hour Pedestrian Volume at Crossing									0
Net 8 Hour Vehicular Volume on Street Being Crossed									2,000

b.- Please fill in table below summarizing delay to pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume	0	0	0	0	0	0	0	0	
Total 8 hour pedestrians delayed greater than 10 seconds	0	0	0	0	0	0	0	0	
Factored volume of total pedestrians	0		0		0		0		
Factored volume of delayed pedestrians	0		0		0		0		
% Assigned to Crossing Rate	23%		34%		30%		100%		
Net 8 Hour Volume of Total Pedestrians									0
Net 8 Hour Volume of Delayed Pedestrians									0

Results Sheet

Input Sheet | Analysis Sheet | Proposed Collision

Intersection: Airport Road at Davis Lane/Perdue Crescent Count Date: 2022 Existing Conditions

Summary Results

Justification			Compliance		Signal Justified? YES	Signal Justified? NO
1. Minimum Vehicular Volume	A	Total Volume	100	%	☐	☑
	B	Crossing Volume	70	%		
2. Delay to Cross Traffic	A	Main Road	100	%	☑	☐
	B	Crossing Road	100	%		
3. Combination	A	Justificaton 1	70	%	☐	☑
	B	Justification 2	100	%		
4. 4-Hr Volume			14	%	☐	☑
5. Collision Experience			0	%	☐	☑
6. Pedestrians	A	Volume	Justification not met		☐	☑
	B	Delay	Justification not met			

Input Sheet | Analysis Sheet | Proposed Collision

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Street A at Street B

Count Date: 2036 Future Total

Justification 1: Minimum Vehicle Volumes

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 Lanes		2 or More Lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
	☑	☐	☐	☐										
1A	480	720	600	900	163	163	163	163	163	163	163	163		
	COMPLIANCE %				34	34	34	34	34	34	34	34	272	34
1B	120	170	120	170	67	67	67	67	67	67	67	67		
	COMPLIANCE %				56	56	56	56	56	56	56	56	447	56
Free Flow Signal Justification 1:					**Both 1A and 1B 100% Fullfilled each of 8 hours**					**Yes** ☐		**No** ☑		
					Lesser of 1A or 1B at least 80% fulfilled each of 8 hours					**Yes** ☐		**No** ☑		

Justification 2: Delay to Cross Traffic

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 lanes		2 or More lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
	☑	☐	☐	☐										
2A	480	720	600	900	96	96	96	96	96	96	96	96		
	COMPLIANCE %				20	20	20	20	20	20	20	20	160	20
2B	50	75	50	75	37	37	37	37	37	37	37	37		
	COMPLIANCE %				74	74	74	74	74	74	74	74	592	74
Free Flow Signal Justification 2:					**Both 2A and 2B 100% Fullfilled each of 8 hours**					**Yes** ☐		**No** ☑		
					Lesser of 2A or 2B at least 80% fulfilled each of 8 hours					**Yes** ☐		**No** ☑		

Justification 3: Combination

Combination Justification 1 and 2

Justification Satisfied 80% or More				Two Justifications Satisfied 80% or More	
Justification 1	Minimun Vehicular Volume	☐	☑	YES ☐	NO ☑
Justification 2	Delay Cross Traffic	☐	☑		**NOT JUSTIFIED**

Justification 4: Four Hour Volume

Justification	Time Period	Total Volume of Both Approaches (Main) X	Heaviest Minor Approach Y (actual)	Required Value Y (warrant threshold)	Average % Compliance	Overall % Compliance
Justification 4	7:00	96	59	513	12 %	12 %
	8:00	96	59	513	12 %	
	9:00	96	59	513	12 %	
	10:00	96	59	513	12 %	

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Street A at Street B

Count Date: 2036 Future Total

Justification 5: Collision Experience

Justification	Preceding Months	% Fulfillment	Overall % Compliance
Justification 5	1-12	0 %	0 %
	13-24	0 %	
	25-36	0 %	

Justification 6: Pedestrian Volume

Pedestrian Volume Analysis

8 Hour Vehicular Volume V_8		Net 8 Hour Pedestrian Volume				
		< 200	200 - 275	276 - 475	476 - 1000	>1000
Justification 6A	< 1440					
	1440 - 2600	Not Justified				
	2601 - 7000					
	> 7000					

Pedestrian Delay Analysis

Net Total 8 Hour Volume of Total Pedestrians		Net Total 8 Hour Volume of Delayed Pedestrians		
		< 75	75 - 130	> 130
Justification 6B	< 200	Not Justified		
	200 - 300			
	> 300			

Input Data Sheet

Analysis Sheet | Results Sheet | Proposed Collision

GO TO Justification:

What are the intersecting roadways? Street A at Street B

What is the direction of the Main Road street? North-South

When was the data collected? 2036 Future Total

Justification 1 - 4: Volume Warrants

a.- Number of lanes on the Main Road? 1

b.- Number of lanes on the Minor Road? 1

c.- How many approaches? 4

d.- What is the operating environment? Rural Population < 10,000 AND Speed >= 70 km/hr

e.- What is the eight hour vehicle volume at the intersection? (Please fill in table below)

Hour Ending	Main Northbound Approach			Minor Eastbound Approach			Main Southbound Approach			Minor Westbound Approach			Pedestrians Crossing Main Road
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
7:00	3	22	27	0	5	3	21	23	0	31	6	22	0
8:00	3	22	27	0	5	3	21	23	0	31	6	22	0
9:00	3	22	27	0	5	3	21	23	0	31	6	22	0
10:00	3	22	27	0	5	3	21	23	0	31	6	22	0
16:00	3	22	27	0	5	3	21	23	0	31	6	22	0
17:00	3	22	27	0	5	3	21	23	0	31	6	22	0
18:00	3	22	27	0	5	3	21	23	0	31	6	22	0
19:00	3	22	27	0	5	3	21	23	0	31	6	22	0
Total	**24**	**176**	**216**	**0**	**40**	**24**	**168**	**184**	**0**	**248**	**48**	**176**	**0**

Justification 5: Collision Experience

Preceding Months	Number of Collisions*
1-12	0
13-24	0
25-36	0

* Include only collisions that are susceptable to correction through the installation of traffic signal control

Justification 6: Pedestrian Volume

a.- Please fill in table below summarizing total pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume									
Factored 8 hour pedestrian volume	0		0		0		0		
% Assigned to crossing rate	23%		34%		30%		100%		
Net 8 Hour Pedestrian Volume at Crossing									0
Net 8 Hour Vehicular Volume on Street Being Crossed									2,000

b.- Please fill in table below summarizing delay to pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume	0	0	0	0	0	0	0	0	
Total 8 hour pedestrians delayed greater than 10 seconds	0	0	0	0	0	0	0	0	
Factored volume of total pedestrians	0		0		0		0		
Factored volume of delayed pedestrians	0		0		0		0		
% Assigned to Crossing Rate	23%		34%		30%		100%		
Net 8 Hour Volume of Total Pedestrians									0
Net 8 Hour Volume of Delayed Pedestrians									0

Results Sheet

Input Sheet | Analysis Sheet | Proposed Collision

Intersection: Street A at Street B

Count Date: 2036 Future Total

Summary Results

Justification			Compliance		Signal Justified? YES	Signal Justified? NO
1. Minimum Vehicular Volume	A	Total Volume	34	%		
	B	Crossing Volume	56	%		☑
2. Delay to Cross Traffic	A	Main Road	20	%		
	B	Crossing Road	74	%		☑
3. Combination	A	Justificaton 1	34	%		
	B	Justification 2	20	%		☑
4. 4-Hr Volume			12	%		☑
5. Collision Experience			0	%		☑
6. Pedestrians	A	Volume	Justification not met			
	B	Delay	Justification not met			☑

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Street B at Mayfield Road

Count Date: 2036 Future Total

Justification 1: Minimum Vehicle Volumes

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 Lanes		2 or More Lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
1A	480	720	600	900	2,396	2,396	2,396	2,396	2,396	2,396	2,396	2,396		
	COMPLIANCE %				100	100	100	100	100	100	100	100	800	100
1B	120	170	120	170	176	176	176	176	176	176	176	176		
	COMPLIANCE %				100	100	100	100	100	100	100	100	800	100
Free Flow Signal Justification 1:					Both 1A and 1B 100% Fullfilled each of 8 hours						Yes		No	
					Lesser of 1A or 1B at least 80% fulfilled each of 8 hours						Yes	☑	No	☐

Justification 2: Delay to Cross Traffic

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 lanes		2 or More lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
2A	480	720	600	900	2,220	2,220	2,220	2,220	2,220	2,220	2,220	2,220		
	COMPLIANCE %				100	100	100	100	100	100	100	100	800	100
2B	50	75	50	75	102	102	102	102	102	102	102	102		
	COMPLIANCE %				100	100	100	100	100	100	100	100	800	100
Free Flow Signal Justification 2:					Both 2A and 2B 100% Fullfilled each of 8 hours						Yes		No	
					Lesser of 2A or 2B at least 80% fulfilled each of 8 hours						Yes	☑	No	☐

Justification 3: Combination

Combination Justification 1 and 2

	Justification Satisfied 80% or More		Two Justifications Satisfied 80% or More	
Justification 1	Minimun Vehicular Volume	YES ☑ NO ☐	YES ☑	NO ☐
Justification 2	Delay Cross Traffic	YES ☑ NO ☐	JUSTIFIED	

Justification 4: Four Hour Volume

Justification	Time Period	Total Volume of Both Approaches (Main) X	Heaviest Minor Approach Y (actual)	Required Value Y (warrant threshold)	Average % Compliance	Overall % Compliance
Justification 4	7:00	2,220	99	115	86 %	86 %
	8:00	2,220	99	115	86 %	
	9:00	2,220	99	115	86 %	
	10:00	2,220	99	115	86 %	

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Street B at Mayfield Road

Count Date: 2036 Future Total

Justification 5: Collision Experience

Justification	Preceding Months	% Fulfillment	Overall % Compliance
Justification 5	1-12	0 %	0 %
	13-24	0 %	
	25-36	0 %	

Justification 6: Pedestrian Volume

Pedestrian Volume Analysis

8 Hour Vehicular Volume V_8		Net 8 Hour Pedestrian Volume				
		< 200	200 - 275	276 - 475	476 - 1000	>1000
Justification 6A	< 1440					
	1440 - 2600	Not Justified				
	2601 - 7000					
	> 7000					

Pedestrian Delay Analysis

Net Total 8 Hour Volume of Total Pedestrians		Net Total 8 Hour Volume of Delayed Pedestrians		
		< 75	75 - 130	> 130
Justification 6B	< 200	Not Justified		
	200 - 300			
	> 300			

Input Data Sheet

Analysis Sheet | Results Sheet | Proposed Collision

GO TO Justification:

What are the intersecting roadways? Street B at Mayfield Road

What is the direction of the Main Road street? East-West

When was the data collected? 2036 Future Total

Justification 1 - 4: Volume Warrants

a.- Number of lanes on the Main Road? 2 or more

b.- Number of lanes on the Minor Road? 1

c.- How many approaches? 4

d.- What is the operating environment? Rural Population < 10,000 AND Speed >= 70 km/hr

e.- What is the eight hour vehicle volume at the intersection? (Please fill in table below)

Hour Ending	Main Eastbound Approach			Minor Northbound Approach			Main Westbound Approach			Minor Southbound Approach			Pedestrians Crossing Main Road
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
7:00	56	1080	52	84	0	15	14	985	33	18	0	59	0
8:00	56	1080	52	84	0	15	14	985	33	18	0	59	0
9:00	56	1080	52	84	0	15	14	985	33	18	0	59	0
10:00	56	1080	52	84	0	15	14	985	33	18	0	59	0
16:00	56	1080	52	84	0	15	14	985	33	18	0	59	0
17:00	56	1080	52	84	0	15	14	985	33	18	0	59	0
18:00	56	1080	52	84	0	15	14	985	33	18	0	59	0
19:00	56	1080	52	84	0	15	14	985	33	18	0	59	0
Total	**448**	**8,640**	**416**	**672**	**0**	**120**	**112**	**7,880**	**264**	**144**	**0**	**472**	**0**

Justification 5: Collision Experience

Preceding Months	Number of Collisions*
1-12	0
13-24	0
25-36	0

* Include only collisions that are susceptable to correction through the installation of traffic signal control

Justification 6: Pedestrian Volume

a.- Please fill in table below summarizing total pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume									
Factored 8 hour pedestrian volume	0		0		0		0		
% Assigned to crossing rate	23%		34%		30%		100%		
Net 8 Hour Pedestrian Volume at Crossing									0
Net 8 Hour Vehicular Volume on Street Being Crossed									2,000

b.- Please fill in table below summarizing delay to pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume	0	0	0	0	0	0	0	0	
Total 8 hour pedestrians delayed greater than 10 seconds	0	0	0	0	0	0	0	0	
Factored volume of total pedestrians	0		0		0		0		
Factored volume of delayed pedestrians	0		0		0		0		
% Assigned to Crossing Rate	23%		34%		30%		100%		
Net 8 Hour Volume of Total Pedestrians									0
Net 8 Hour Volume of Delayed Pedestrians									0

Results Sheet

Input Sheet | Analysis Sheet | Proposed Collision

Intersection: Street B at Mayfield Road

Count Date: 2036 Future Total

Summary Results

Justification			Compliance		Signal Justified? YES	Signal Justified? NO
1. Minimum Vehicular Volume	A	Total Volume	100	%		
	B	Crossing Volume	100	%	☑	☐
2. Delay to Cross Traffic	A	Main Road	100	%		
	B	Crossing Road	100	%	☑	☐
3. Combination	A	Justificaton 1	100	%		
	B	Justification 2	100	%	☑	☐
4. 4-Hr Volume			86	%	☐	☑
5. Collision Experience			0	%	☐	☑
6. Pedestrians	A	Volume	Justification not met			
	B	Delay	Justification not met		☐	☑

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Streeet C at Street B

Count Date: 2036 Future Total

Justification 1: Minimum Vehicle Volumes

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 Lanes		2 or More Lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
	☑	☐	☐	☐										
1A	480	720	600	900	28	28	28	28	28	28	28	28		
	COMPLIANCE %				6	6	6	6	6	6	6	6	47	6
1B	180	255	180	255	13	13	13	13	13	13	13	13		
	COMPLIANCE %				7	7	7	7	7	7	7	7	58	7
Free Flow Signal Justification 1:	**Both 1A and 1B 100% Fullfilled each of 8 hours**									**Yes** ☐		**No** ☑		
	Lesser of 1A or 1B at least 80% fulfilled each of 8 hours									**Yes** ☐		**No** ☑		

Justification 2: Delay to Cross Traffic

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 lanes		2 or More lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
	☑	☐	☐	☐										
2A	480	720	600	900	15	15	15	15	15	15	15	15		
	COMPLIANCE %				3	3	3	3	3	3	3	3	25	3
2B	50	75	50	75	13	13	13	13	13	13	13	13		
	COMPLIANCE %				26	26	26	26	26	26	26	26	208	26
Free Flow Signal Justification 2:	**Both 2A and 2B 100% Fullfilled each of 8 hours**									**Yes** ☐		**No** ☑		
	Lesser of 2A or 2B at least 80% fulfilled each of 8 hours									**Yes** ☐		**No** ☑		

Justification 3: Combination

Combination Justification 1 and 2

	Justification Satisfied 80% or More			Two Justifications Satisfied 80% or More	
Justification 1	Minimun Vehicular Volume	☐	☑	YES	NO
Justification 2	Delay Cross Traffic	☐	☑		NOT JUSTIFIED ☑

Justification 4: Four Hour Volume

Justification	Time Period	Total Volume of Both Approaches (Main) X	Heaviest Minor Approach Y (actual)	Required Value Y (warrant threshold)	Average % Compliance	Overall % Compliance
Justification 4	7:00	15	13	567	2 %	2 %
	8:00	15	13	567	2 %	
	9:00	15	13	567	2 %	
	10:00	15	13	567	2 %	

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Streeet C at Street B

Count Date: 2036 Future Total

Justification 5: Collision Experience

Justification	Preceding Months	% Fulfillment	Overall % Compliance
Justification 5	1-12	0 %	0 %
	13-24	0 %	
	25-36	0 %	

Justification 6: Pedestrian Volume

Pedestrian Volume Analysis

8 Hour Vehicular Volume V_8		Net 8 Hour Pedestrian Volume				
		< 200	200 - 275	276 - 475	476 - 1000	>1000
Justification 6A	< 1440					
	1440 - 2600	Not Justified				
	2601 - 7000					
	> 7000					

Pedestrian Delay Analysis

Net Total 8 Hour Volume of Total Pedestrians		Net Total 8 Hour Volume of Delayed Pedestrians		
		< 75	75 - 130	> 130
Justification 6B	< 200	Not Justified		
	200 - 300			
	> 300			

Input Data Sheet

Analysis Sheet | Results Sheet | Proposed Collision

GO TO Justification:

What are the intersecting roadways? Streeet C at Street B

What is the direction of the Main Road street? North-South

When was the data collected? 2036 Future Total

Justification 1 - 4: Volume Warrants

a.- Number of lanes on the Main Road? 1

b.- Number of lanes on the Minor Road? 1

c.- How many approaches? 3

d.- What is the operating environment? Rural Population < 10,000 AND Speed >= 70 km/hr

e.- What is the eight hour vehicle volume at the intersection? (Please fill in table below)

Hour Ending	Main Northbound Approach			Minor Eastbound Approach			Main Southbound Approach			Minor Westbound Approach			Pedestrians Crossing Main Road
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
7:00	0	0	15	13	0	0	0	0	0	0	0	0	0
8:00	0	0	15	13	0	0	0	0	0	0	0	0	0
9:00	0	0	15	13	0	0	0	0	0	0	0	0	0
10:00	0	0	15	13	0	0	0	0	0	0	0	0	0
16:00	0	0	15	13	0	0	0	0	0	0	0	0	0
17:00	0	0	15	13	0	0	0	0	0	0	0	0	0
18:00	0	0	15	13	0	0	0	0	0	0	0	0	0
19:00	0	0	15	13	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**120**	**104**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Justification 5: Collision Experience

Preceding Months	Number of Collisions*
1-12	0
13-24	0
25-36	0

* Include only collisions that are susceptable to correction through the installation of traffic signal control

Justification 6: Pedestrian Volume

a.- Please fill in table below summarizing total pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume									
Factored 8 hour pedestrian volume	0		0		0		0		
% Assigned to crossing rate	23%		34%		30%		100%		
Net 8 Hour Pedestrian Volume at Crossing									0
Net 8 Hour Vehicular Volume on Street Being Crossed									2,000

b.- Please fill in table below summarizing delay to pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume	0	0	0	0	0	0	0	0	
Total 8 hour pedestrians delayed greater than 10 seconds	0	0	0	0	0	0	0	0	
Factored volume of total pedestrians	0		0		0		0		
Factored volume of delayed pedestrians	0		0		0		0		
% Assigned to Crossing Rate	23%		34%		30%		100%		
Net 8 Hour Volume of Total Pedestrians									0
Net 8 Hour Volume of Delayed Pedestrians									0

Results Sheet

Input Sheet | Analysis Sheet | Proposed Collision

Intersection: Streeet C at Street B

Count Date: 2036 Future Total

Summary Results

Justification			Compliance		Signal Justified? YES	Signal Justified? NO
1. Minimum Vehicular Volume	A	Total Volume	6	%		
	B	Crossing Volume	7	%		☑
2. Delay to Cross Traffic	A	Main Road	3	%		
	B	Crossing Road	26	%		☑
3. Combination	A	Justificaton 1	6	%		
	B	Justification 2	3	%		☑
4. 4-Hr Volume			2	%		
5. Collision Experience			0	%		☑
6. Pedestrians	A	Volume	Justification not met			
	B	Delay	Justification not met			☑

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Streeet C at Torbram

Count Date: 2036 Future Total

Justification 1: Minimum Vehicle Volumes

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 Lanes		2 or More Lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
	☑	☐	☐	☐										
1A	480	720	600	900	321	321	321	321	321	321	321	321		
	COMPLIANCE %				67	67	67	67	67	67	67	67	535	67
1B	180	255	180	255	58	58	58	58	58	58	58	58		
	COMPLIANCE %				32	32	32	32	32	32	32	32	258	32
Free Flow Signal Justification 1:					**Both 1A and 1B 100% Fullfilled each of 8 hours** Yes ☐ No ☑ **Lesser of 1A or 1B at least 80% fulfilled each of 8 hours** Yes ☐ No ☑									

Justification 2: Delay to Cross Traffic

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 lanes		2 or More lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
	☑	☐	☐	☐										
2A	480	720	600	900	263	263	263	263	263	263	263	263		
	COMPLIANCE %				55	55	55	55	55	55	55	55	438	55
2B	50	75	50	75	44	44	44	44	44	44	44	44		
	COMPLIANCE %				88	88	88	88	88	88	88	88	704	88
Free Flow Signal Justification 2:					**Both 2A and 2B 100% Fullfilled each of 8 hours** Yes ☐ No ☑ **Lesser of 2A or 2B at least 80% fulfilled each of 8 hours** Yes ☐ No ☑									

Justification 3: Combination

Combination Justification 1 and 2

	Justification Satisfied 80% or More		Two Justifications Satisfied 80% or More	
Justification 1	Minimun Vehicular Volume	☐ NO ☑	YES	NO
Justification 2	Delay Cross Traffic	☐ NO ☑	☑	☑ NOT JUSTIFIED

Justification 4: Four Hour Volume

Justification	Time Period	Total Volume of Both Approaches (Main) X	Heaviest Minor Approach Y (actual)	Required Value Y (warrant threshold)	Average % Compliance	Overall % Compliance
Justification 4	7:00	263	58	411	14 %	14 %
	8:00	263	58	411	14 %	
	9:00	263	58	411	14 %	
	10:00	263	58	411	14 %	

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Streeet C at Torbram

Count Date: 2036 Future Total

Justification 5: Collision Experience

Justification	Preceding Months	% Fulfillment	Overall % Compliance
Justification 5	1-12	0 %	0 %
	13-24	0 %	
	25-36	0 %	

Justification 6: Pedestrian Volume

Pedestrian Volume Analysis

8 Hour Vehicular Volume V_8		Net 8 Hour Pedestrian Volume				
		< 200	200 - 275	276 - 475	476 - 1000	>1000
Justification 6A	< 1440					
	1440 - 2600	Not Justified				
	2601 - 7000					
	> 7000					

Pedestrian Delay Analysis

Net Total 8 Hour Volume of Total Pedestrians		Net Total 8 Hour Volume of Delayed Pedestrians		
		< 75	75 - 130	> 130
Justification 6B	< 200	Not Justified		
	200 - 300			
	> 300			

Input Data Sheet

Analysis Sheet | Results Sheet | Proposed Collision

GO TO Justification:

What are the intersecting roadways? Streeet C at Torbram

What is the direction of the Main Road street? North-South

When was the data collected? 2036 Future Total

Justification 1 - 4: Volume Warrants

a.- Number of lanes on the Main Road? 1

b.- Number of lanes on the Minor Road? 1

c.- How many approaches? 3

d.- What is the operating environment? Rural Population < 10,000 AND Speed >= 70 km/hr

e.- What is the eight hour vehicle volume at the intersection? (Please fill in table below)

Hour Ending	Main Northbound Approach			Minor Eastbound Approach			Main Southbound Approach			Minor Westbound Approach			Pedestrians Crossing Main Road
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
7:00	0	96	41	0	0	0	10	116	0	44	0	14	0
8:00	0	96	41	0	0	0	10	116	0	44	0	14	0
9:00	0	96	41	0	0	0	10	116	0	44	0	14	0
10:00	0	96	41	0	0	0	10	116	0	44	0	14	0
16:00	0	96	41	0	0	0	10	116	0	44	0	14	0
17:00	0	96	41	0	0	0	10	116	0	44	0	14	0
18:00	0	96	41	0	0	0	10	116	0	44	0	14	0
19:00	0	96	41	0	0	0	10	116	0	44	0	14	0
Total	**0**	**768**	**328**	**0**	**0**	**0**	**80**	**928**	**0**	**352**	**0**	**112**	**0**

Justification 5: Collision Experience

Preceding Months	Number of Collisions*
1-12	0
13-24	0
25-36	0

* Include only collisions that are susceptable to correction through the installation of traffic signal control

Justification 6: Pedestrian Volume

a.- Please fill in table below summarizing total pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume									
Factored 8 hour pedestrian volume	0		0		0		0		
% Assigned to crossing rate	23%		34%		30%		100%		
Net 8 Hour Pedestrian Volume at Crossing									0
Net 8 Hour Vehicular Volume on Street Being Crossed									2,000

b.- Please fill in table below summarizing delay to pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume	0	0	0	0	0	0	0	0	
Total 8 hour pedestrians delayed greater than 10 seconds	0	0	0	0	0	0	0	0	
Factored volume of total pedestrians	0		0		0		0		
Factored volume of delayed pedestrians	0		0		0		0		
% Assigned to Crossing Rate	23%		34%		30%		100%		
Net 8 Hour Volume of Total Pedestrians									0
Net 8 Hour Volume of Delayed Pedestrians									0

Results Sheet

Input Sheet | Analysis Sheet | Proposed Collision

Intersection: Streeet C at Torbram

Count Date: 2036 Future Total

Summary Results

Justification			Compliance		Signal Justified? YES	Signal Justified? NO
1. Minimum Vehicular Volume	A	Total Volume	67	%		
	B	Crossing Volume	32	%	☐	☑
2. Delay to Cross Traffic	A	Main Road	55	%		
	B	Crossing Road	88	%	☐	☑
3. Combination	A	Justificaton 1	32	%		
	B	Justification 2	55	%	☐	☑
4. 4-Hr Volume			14	%	☐	☑
5. Collision Experience			0	%	☐	☑
6. Pedestrians	A	Volume	Justification not met			
	B	Delay	Justification not met		☐	☑

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Streeet D at Street B

Count Date: 2036 Future Total

Justification 1: Minimum Vehicle Volumes

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 Lanes		2 or More Lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
	☑	☐	☐	☐										
1A	480	720	600	900	88	88	88	88	88	88	88	88		
	COMPLIANCE %				18	18	18	18	18	18	18	18	147	18
1B	180	255	180	255	29	29	29	29	29	29	29	29		
	COMPLIANCE %				16	16	16	16	16	16	16	16	129	16
Free Flow Signal Justification 1:					Both 1A and 1B 100% Fullfilled each of 8 hours						Yes ☐		No ☑	
					Lesser of 1A or 1B at least 80% fulfilled each of 8 hours						Yes ☐		No ☑	

Justification 2: Delay to Cross Traffic

Free Flow Rural Conditions

Justification	Guidance Approach Lanes				Percentage Warrant								Total Across	Section Percent
	1 lanes		2 or More lanes		Hour Ending									
Flow Condition	FREE FLOW	RESTR. FLOW	FREE FLOW	RESTR. FLOW	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00		
	☑	☐	☐	☐										
2A	480	720	600	900	59	59	59	59	59	59	59	59		
	COMPLIANCE %				12	12	12	12	12	12	12	12	98	12
2B	50	75	50	75	29	29	29	29	29	29	29	29		
	COMPLIANCE %				58	58	58	58	58	58	58	58	464	58
Free Flow Signal Justification 2:					Both 2A and 2B 100% Fullfilled each of 8 hours						Yes ☐		No ☑	
					Lesser of 2A or 2B at least 80% fulfilled each of 8 hours						Yes ☐		No ☑	

Justification 3: Combination

Combination Justification 1 and 2

	Justification Satisfied 80% or More		Two Justifications Satisfied 80% or More	
Justification 1	Minimun Vehicular Volume	☐	YES ☐	NO ☑
Justification 2	Delay Cross Traffic	☑		NOT JUSTIFIED
		☑		

Justification 4: Four Hour Volume

Justification	Time Period	Total Volume of Both Approaches (Main) X	Heaviest Minor Approach Y (actual)	Required Value Y (warrant threshold)	Average % Compliance	Overall % Compliance
Justification 4	7:00	59	29	537	5 %	5 %
	8:00	59	29	537	5 %	
	9:00	59	29	537	5 %	
	10:00	59	29	537	5 %	

Analysis Sheet

Input Sheet | Results Sheet | Proposed Collision

GO TO Justification:

Intersection: Streeet D at Street B

Count Date: 2036 Future Total

Justification 5: Collision Experience

Justification	Preceding Months	% Fulfillment	Overall % Compliance
Justification 5	1-12	0 %	0 %
	13-24	0 %	
	25-36	0 %	

Justification 6: Pedestrian Volume

Pedestrian Volume Analysis

8 Hour Vehicular Volume V_8		Net 8 Hour Pedestrian Volume				
		< 200	200 - 275	276 - 475	476 - 1000	>1000
Justification 6A	< 1440					
	1440 - 2600	Not Justified				
	2601 - 7000					
	> 7000					

Pedestrian Delay Analysis

Net Total 8 Hour Volume of Total Pedestrians		Net Total 8 Hour Volume of Delayed Pedestrians		
		< 75	75 - 130	> 130
Justification 6B	< 200	Not Justified		
	200 - 300			
	> 300			

Input Data Sheet

Analysis Sheet | Results Sheet | Proposed Collision

GO TO Justification:

What are the intersecting roadways? Streeet D at Street B

What is the direction of the Main Road street? North-South

When was the data collected? 2036 Future Total

Justification 1 - 4: Volume Warrants

a.- Number of lanes on the Main Road? 1

b.- Number of lanes on the Minor Road? 1

c.- How many approaches? 3

d.- What is the operating environment? Rural Population < 10,000 AND Speed >= 70 km/hr

e.- What is the eight hour vehicle volume at the intersection? (Please fill in table below)

Hour Ending	Main Northbound Approach			Minor Eastbound Approach			Main Southbound Approach			Minor Westbound Approach			Pedestrians Crossing Main Road
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
7:00	0	13	31	0	0	0	0	15	0	29	0	0	0
8:00	0	13	31	0	0	0	0	15	0	29	0	0	0
9:00	0	13	31	0	0	0	0	15	0	29	0	0	0
10:00	0	13	31	0	0	0	0	15	0	29	0	0	0
16:00	0	13	31	0	0	0	0	15	0	29	0	0	0
17:00	0	13	31	0	0	0	0	15	0	29	0	0	0
18:00	0	13	31	0	0	0	0	15	0	29	0	0	0
19:00	0	13	31	0	0	0	0	15	0	29	0	0	0
Total	**0**	**104**	**248**	**0**	**0**	**0**	**0**	**120**	**0**	**232**	**0**	**0**	**0**

Justification 5: Collision Experience

Preceding Months	Number of Collisions*
1-12	0
13-24	0
25-36	0

* Include only collisions that are susceptable to correction through the installation of traffic signal control

Justification 6: Pedestrian Volume

a.- Please fill in table below summarizing total pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume									
Factored 8 hour pedestrian volume	0		0		0		0		
% Assigned to crossing rate	23%		34%		30%		100%		
Net 8 Hour Pedestrian Volume at Crossing									0
Net 8 Hour Vehicular Volume on Street Being Crossed									2,000

b.- Please fill in table below summarizing delay to pedestrians crossing major roadway at the intersection or in proximity to the intersection (zones). Please reference Section 4.8 of the Manual for further explanation and graphical representation.

	Zone 1		Zone 2		Zone 3 (if needed)		Zone 4 (if needed)		Total
	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	Assisted	Unassisted	
Total 8 hour pedestrian volume	0	0	0	0	0	0	0	0	
Total 8 hour pedestrians delayed greater than 10 seconds	0	0	0	0	0	0	0	0	
Factored volume of total pedestrians	0		0		0		0		
Factored volume of delayed pedestrians	0		0		0		0		
% Assigned to Crossing Rate	23%		34%		30%		100%		
Net 8 Hour Volume of Total Pedestrians									0
Net 8 Hour Volume of Delayed Pedestrians									0

Results Sheet

Input Sheet | Analysis Sheet | Proposed Collision

Intersection: Streeet D at Street B

Count Date: 2036 Future Total

Summary Results

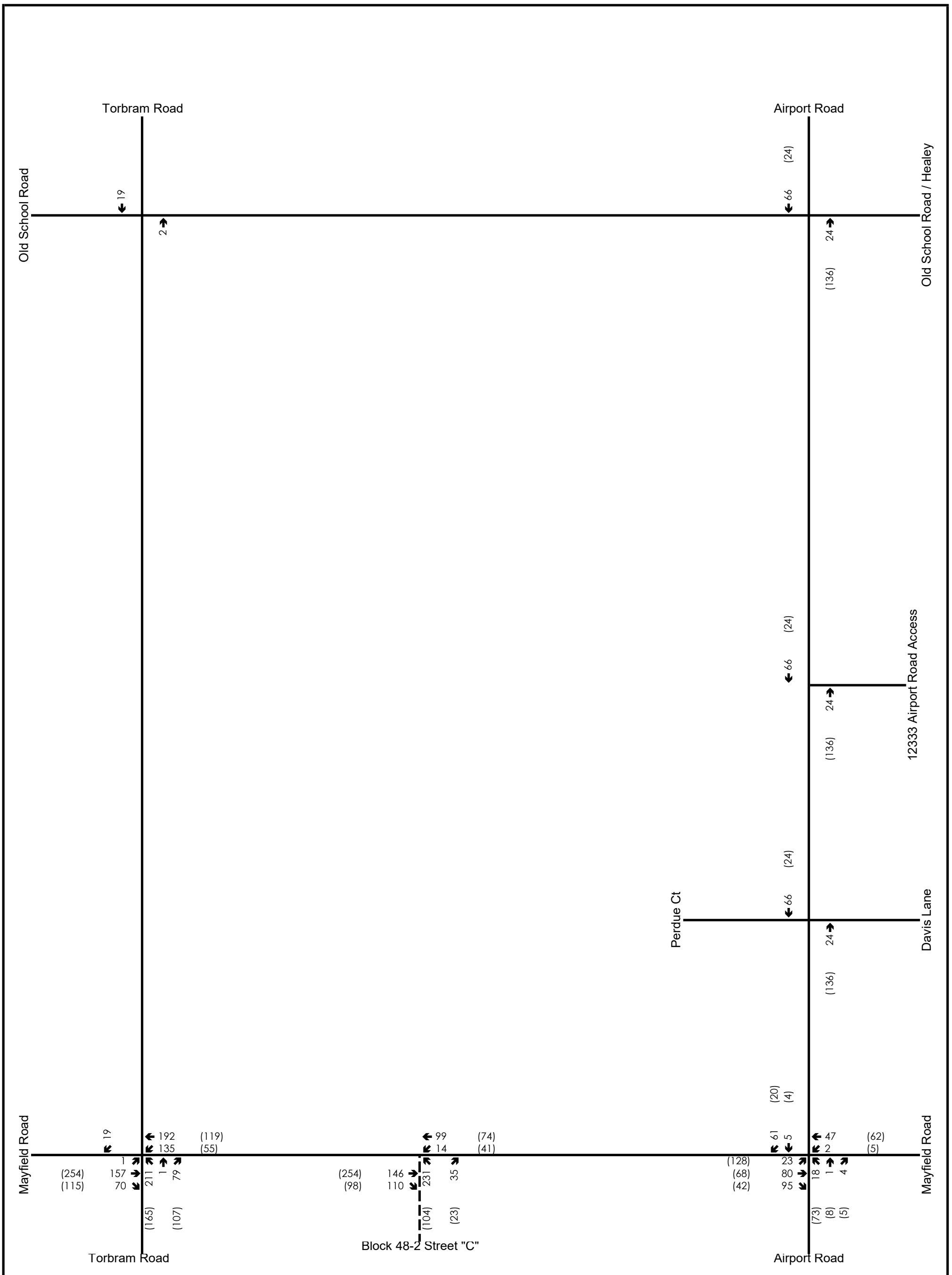
Justification			Compliance	Signal Justified? YES	Signal Justified? NO
1. Minimum Vehicular Volume	A	Total Volume	18 %		
	B	Crossing Volume	16 %		☑
2. Delay to Cross Traffic	A	Main Road	12 %		
	B	Crossing Road	58 %		☑
3. Combination	A	Justificaton 1	16 %		
	B	Justification 2	12 %		☑
4. 4-Hr Volume			5 %		☑
5. Collision Experience			0 %		☑
6. Pedestrians	A	Volume	Justification not met		
	B	Delay	Justification not met		☑

Appendix I

Background Development Information

Individual Background Development Trip Assignment

Figures 6a, 6b. 6c. 6d



Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

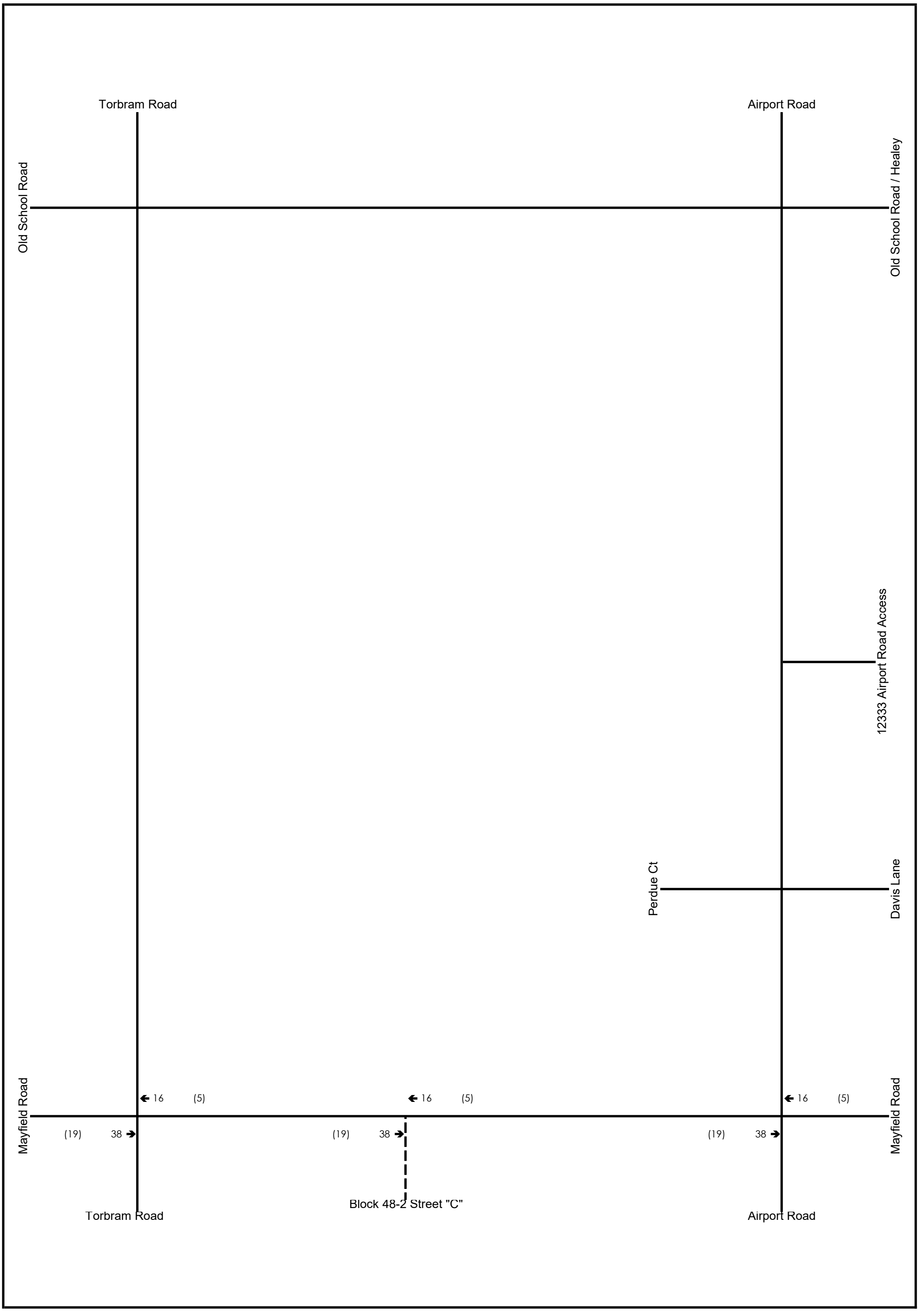
Tullamore Industrial

BGD1 Volumes - Block 48-2

CROZIER CONSULTING ENGINEERS

Figure 6a

Project No. 2022-5842
Date. 2023.10.20
Analyst. TDS



Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

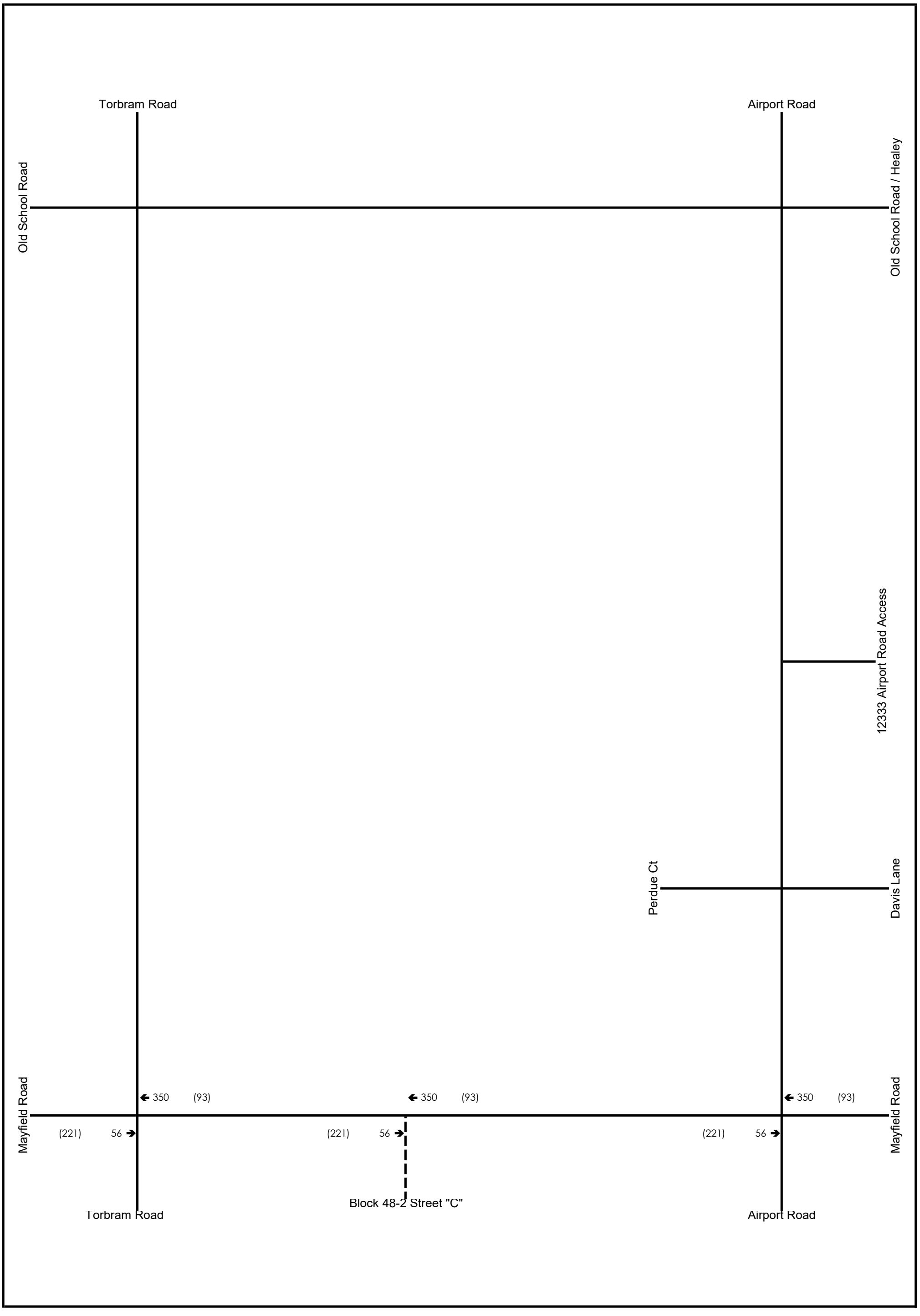
Tullamore Industrial

ckground Development BGD2 Volumes - Block 48

CROZIER CONSULTING ENGINEERS

Figure 6b

Project No. 2022-5842
Date. 2023.10.20
Analyst. TDS



Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

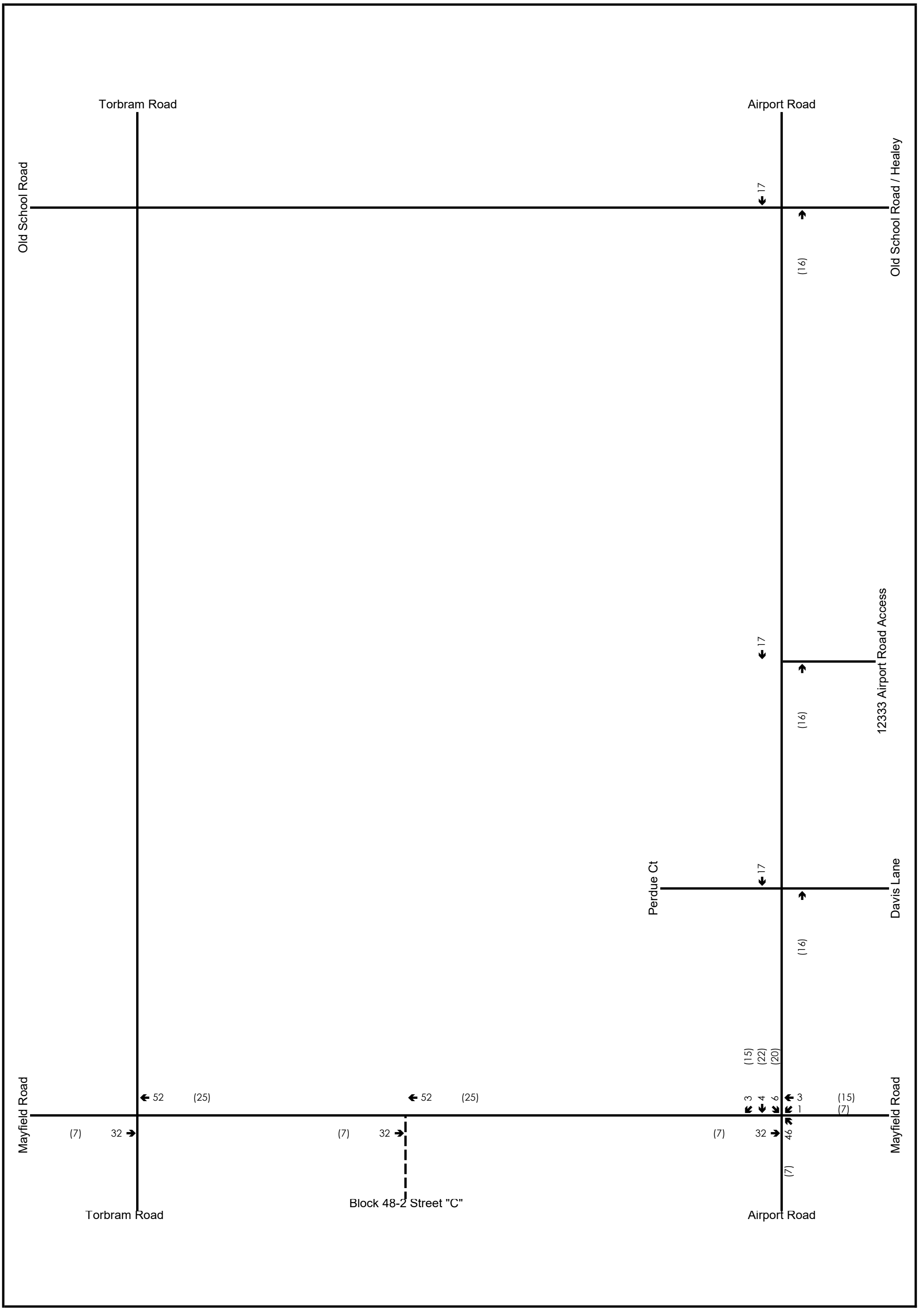
Tullamore Industrial

BGD3 Volumes - Countryside Villages

CROZIER CONSULTING ENGINEERS

Figure 6c

Project No. 2022-5842
Date. 2023.10.20
Analyst. TDS



Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Tullamore Industrial

BGD4 Volumes - 6034 Mayfield Road

CROZIER CONSULTING ENGINEERS

Figure 6d

Project No. 2022-5842
Date. 2023.10.20
Analyst. TDS

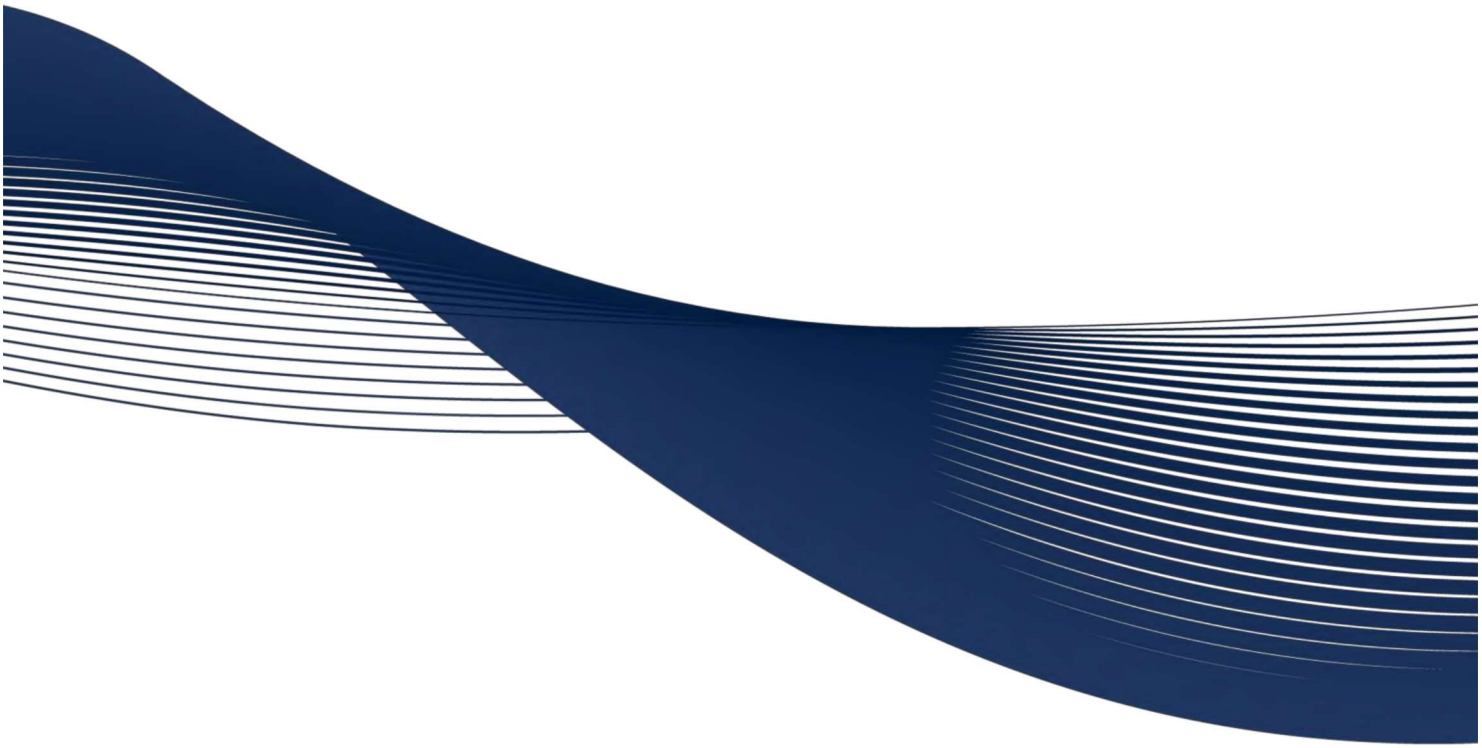
Background Developments
Relevant Studies

BRAMPTON AREA LANDOWERS GROUP INC.

REVISED TRAFFIC IMPACT STUDY

Block 48-2 Proposed Mixed-Use Development, City of Brampton

Project No.: T11-646

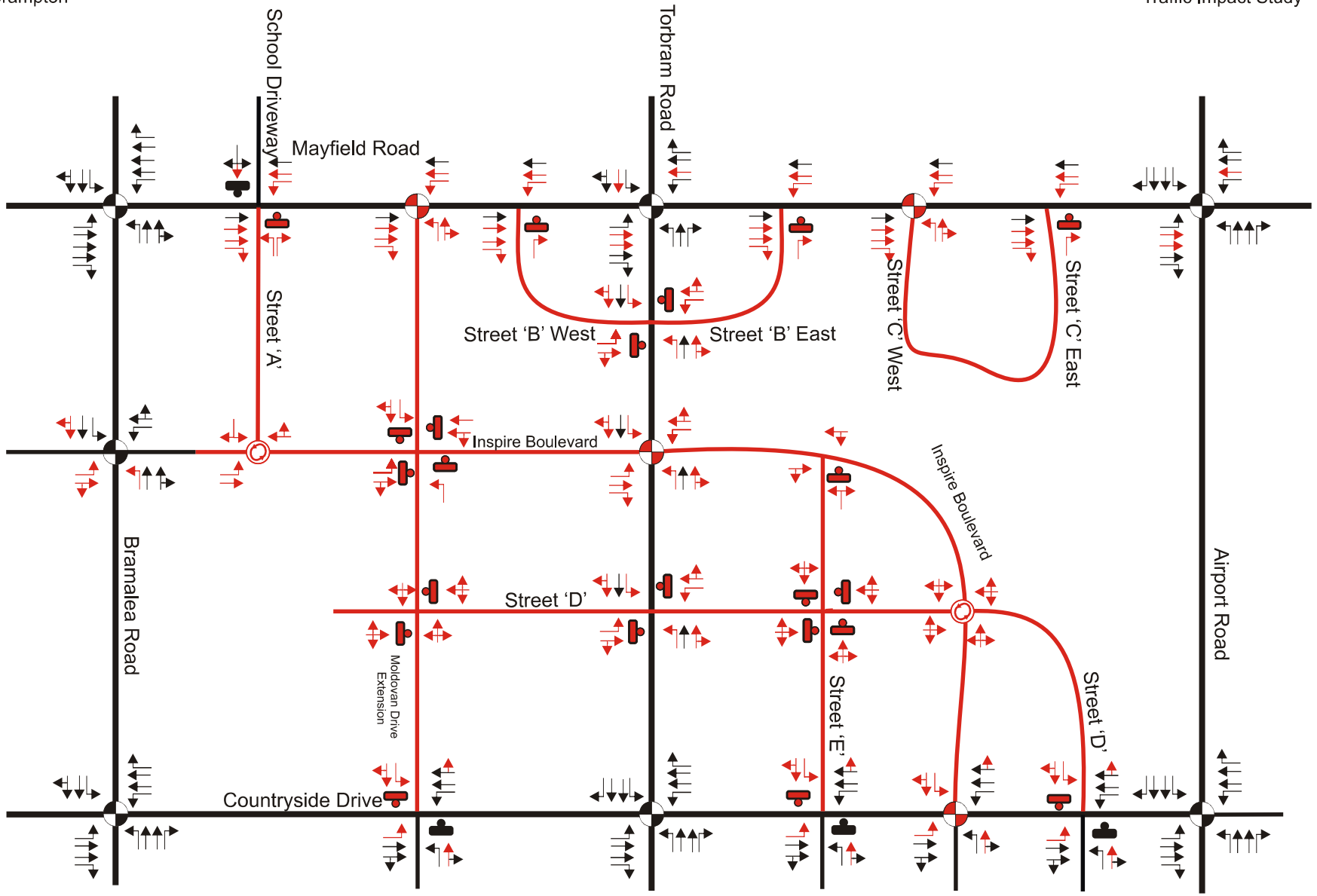


MAY 2017

COLE ENGINEERING GROUP LTD.

HEAD OFFICE
70 Valleywood Drive
Markham, ON CANADA L3R 4T5
T. 905.940.6161 | 416.987.6161
F. 905.940.2064 | www.ColeEngineering.ca

GTA WEST OFFICE
151 Superior Boulevard, Units 1 & 2
Mississauga, ON CANADA L5T 2L1
T. 905.364.6161
F. 905.364.6162



Legend

- Existing Traffic Signals
- New Traffic Signals
- New Stop Signs
- New Road
- Existing Lane Configurations
- Objects in Red Represent 2021 Lane Additions to the Existing Road Network

N.T.S

Figure 5-3
2021 Road Network

Figure 5-4
2031 Total Traffic Volumes

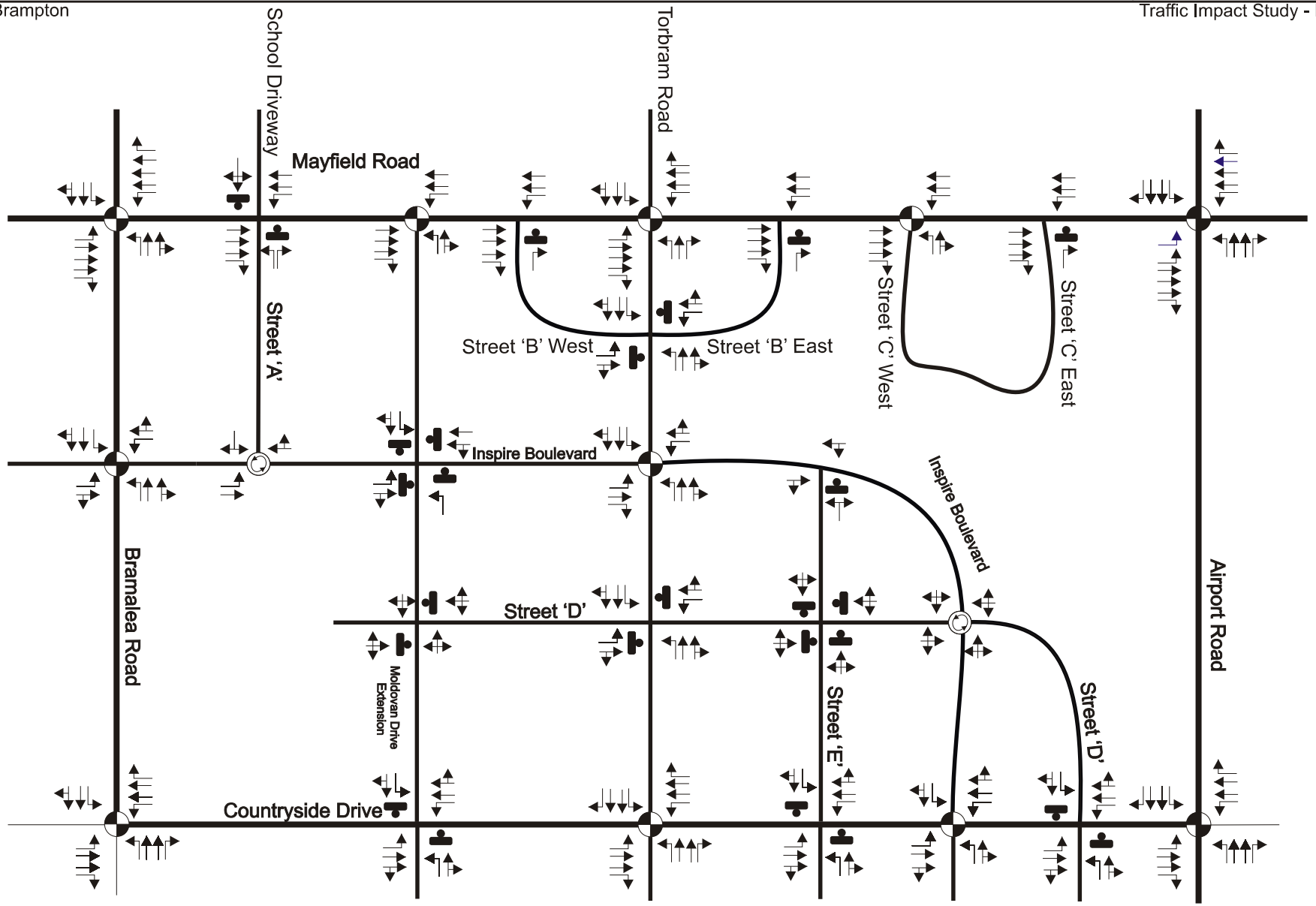
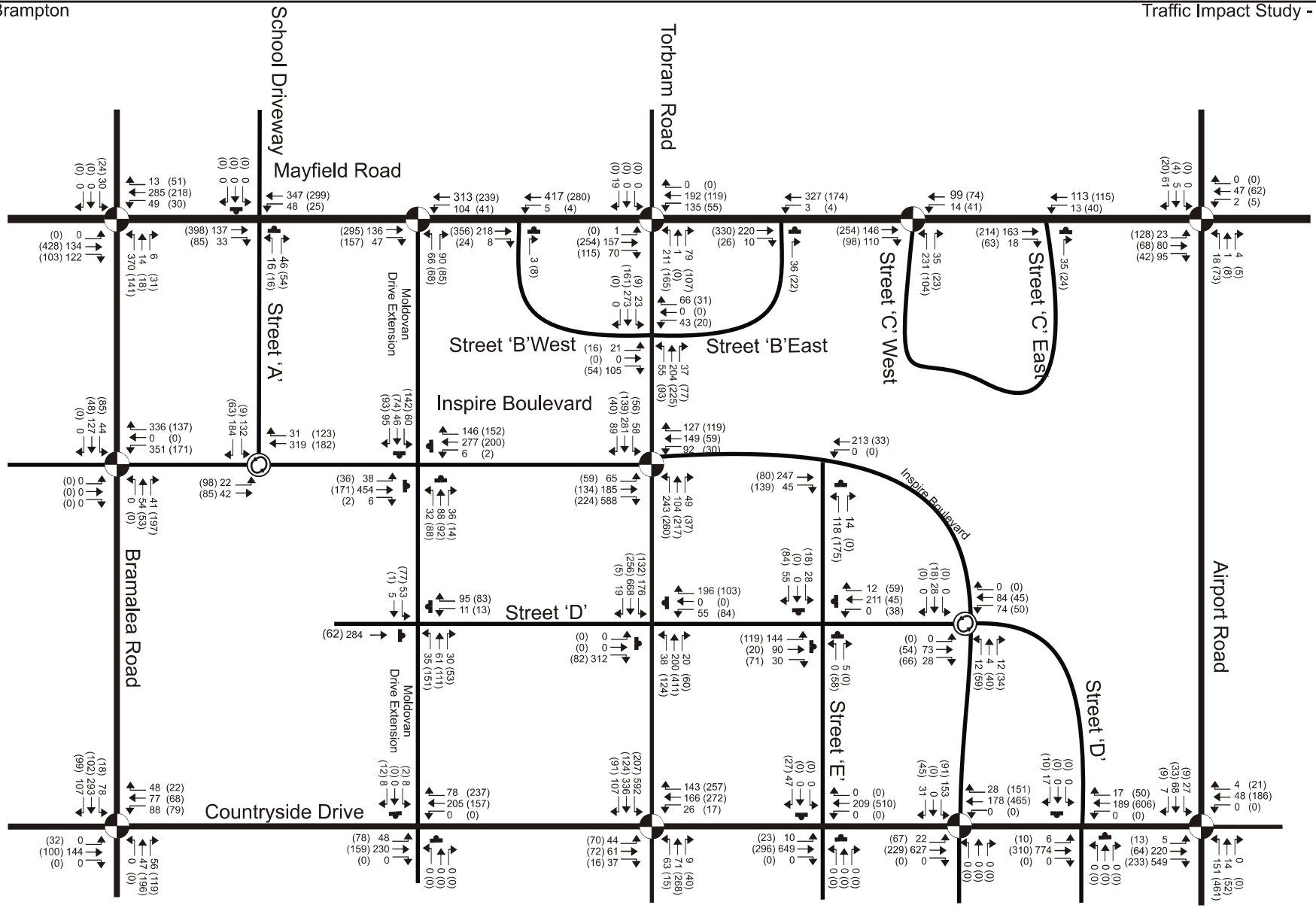


Figure 5-5
2031 Road Network



Legend

- Right Turn Movement
- Through Movement
- Left Turn Movement
- 99 (99) Weekday AM (Weekday PM) Peak Hour Traffic Volumes

N.T.S

Figure 3-10
Total Site Traffic Volumes

COLE ENGINEERING

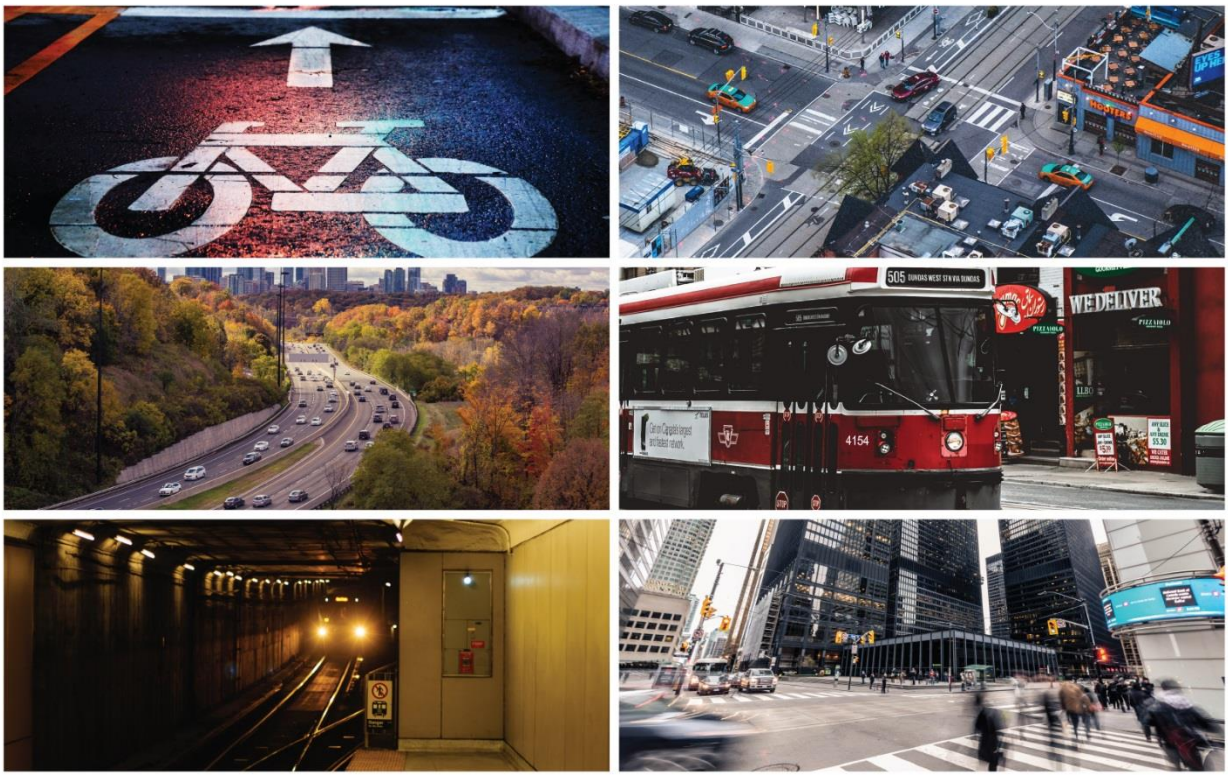
TOWN OF CALEDON
PLANNING
RECEIVED
July 30, 2021

AIRFIELD DEVELOPMENTS INC. & AIRFIELD II DEVELOPMENTS INC.

6034 MAYFIELD ROAD

TRANSPORTATION IMPACT STUDY AND DEMAND MANAGEMENT PLAN

JULY 29, 2021



4.2 TRIP GENERATION

The trips generated by the proposed development during the weekday a.m. and p.m. peak hours were estimated using the trip generation equations outlined in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition*. As both warehouse and general industrial uses are currently being contemplated for the development, trip generation estimates using the ITE Land Use Codes 150 (Warehousing) and 110 (General Light Industrial) are compared in **Table 4.1**. Since, as shown in the table, general industrial uses are expected to generate a greater number of peak hour trips, the trip generation estimate for this use was conservatively adopted for this study.

It should be noted that these equations include both vehicle and truck trips to the development; truck trips were assumed to account for 13% of total peak hour trips based on truck trip generation information available from the ITE.

Based on Transportation Tomorrow Survey (TTS) 2016 data for employment trips to/from zones 3014, 3015, 3441, and 3442, it was determined that there was very minimal use of non-auto modes of travel. As such, no mode share adjustments were applied to the ITE-derived trips.

Table 4.1: Site Generated Trips

ITE Land Use (Code)		Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		In	Out	Total	In	Out	Total
Warehousing (150)	Equation (X=1000 ft²)	T = 0.12 X + 25.32			T = 0.12 X + 27.82		
	Directional Splits	77%	23%	100%	27%	73%	100%
	Trips (479,375 ft²)	**64**	**19**	**83**	**23**	**62**	**85**
General Light Industrial (110)	Equation (X=1000 ft²)	Ln(T) = 0.74 Ln(X) + 0.39			Ln(T) = 0.69 Ln(X) + 0.43		
	Directional Splits	88%	12%	100%	13%	87%	100%
	Trips (479,375 ft²)	**125**	**17**	**142**	**14**	**95**	**109**
	Vehicle Trips (87%)	109	15	124	12	83	95
	Truck Trips (13%)	16	2	18	2	12	14

As presented above, the proposed development is forecasted to generate **142 and 109 total trips** during the a.m. and p.m. peak hours, respectively.

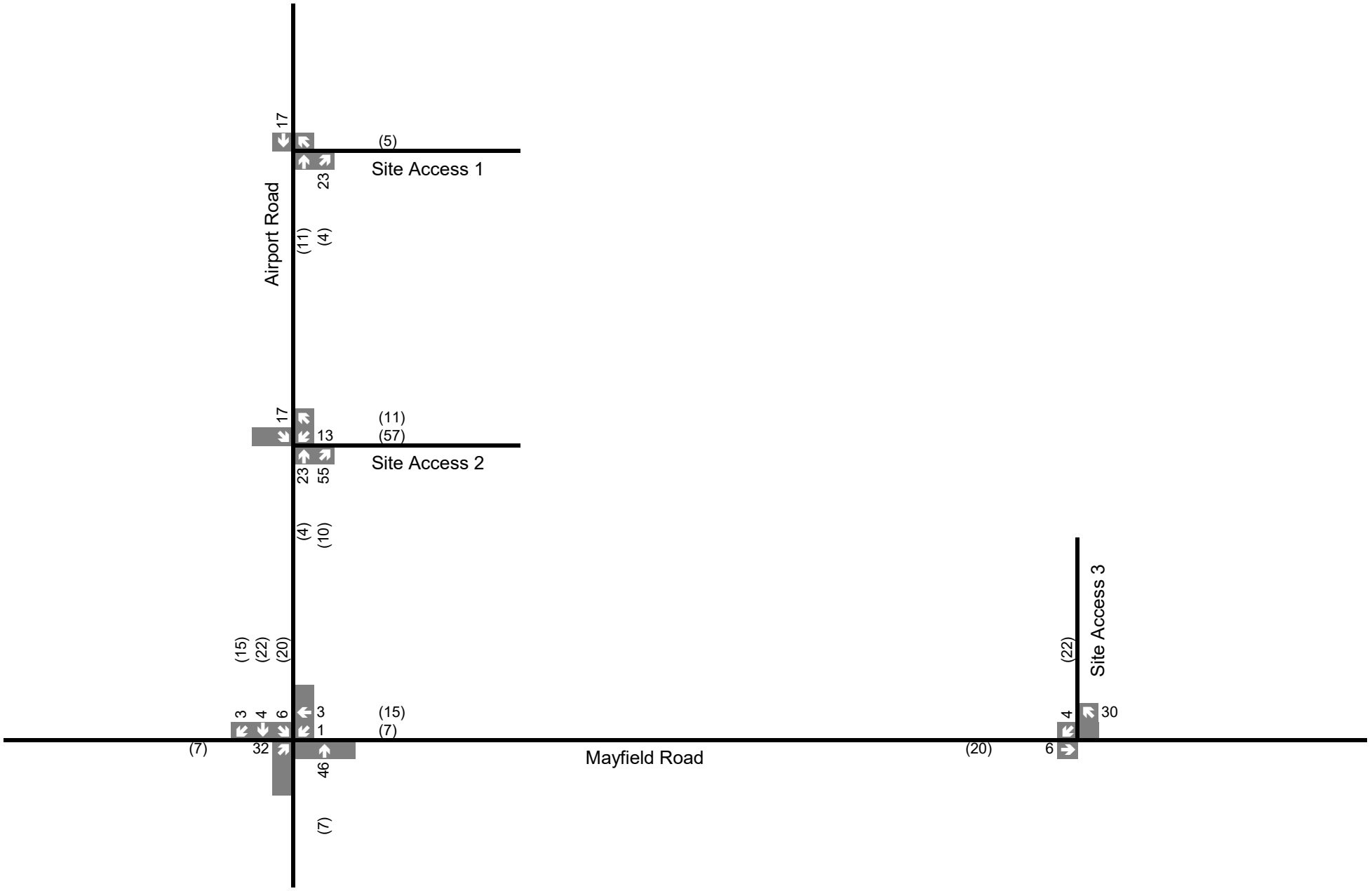
4.3 TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution and assignment of the site-generated trips was derived from the TTS data and assigned to the gateways based on local road network and land use considerations. The overall trip distribution is shown in **Table 4.2.**

Table 4.2: Trip Distribution

Gateway Direction	AM Inbound	AM Outbound	PM Inbound	PM Outbound
North	14%	0%	0%	17%
West	26%	34%	50%	31%
South	37%	34%	50%	31%
East	24%	32%	0%	20%

Figure 4.2 illustrates the resulting site traffic volumes for future horizon years.



Legend

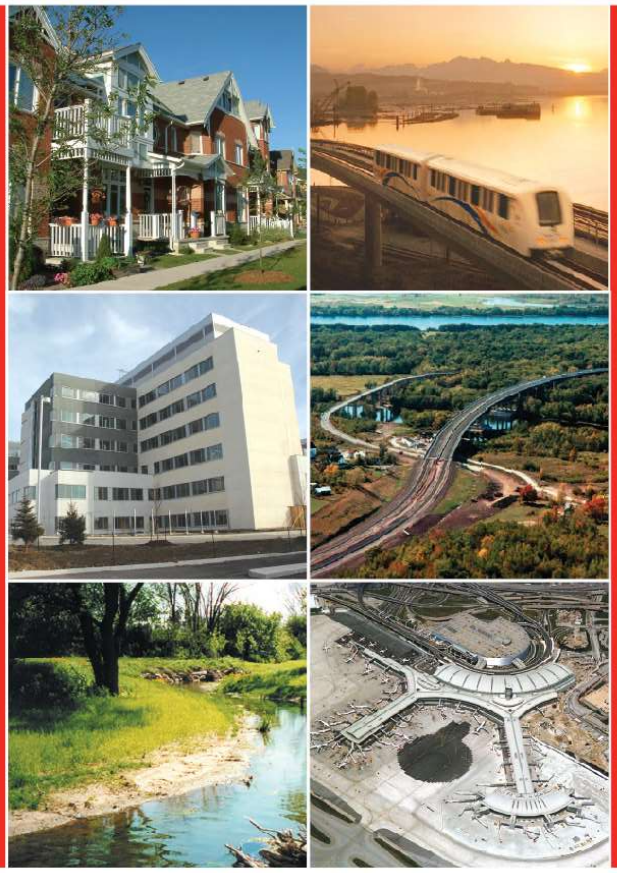
xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 4.2

Site Generated Traffic Volumes

MMM Group Limited



Updated Traffic Impact Study
Proposed Block Plan 48-1
Countryside Villages

City of Brampton

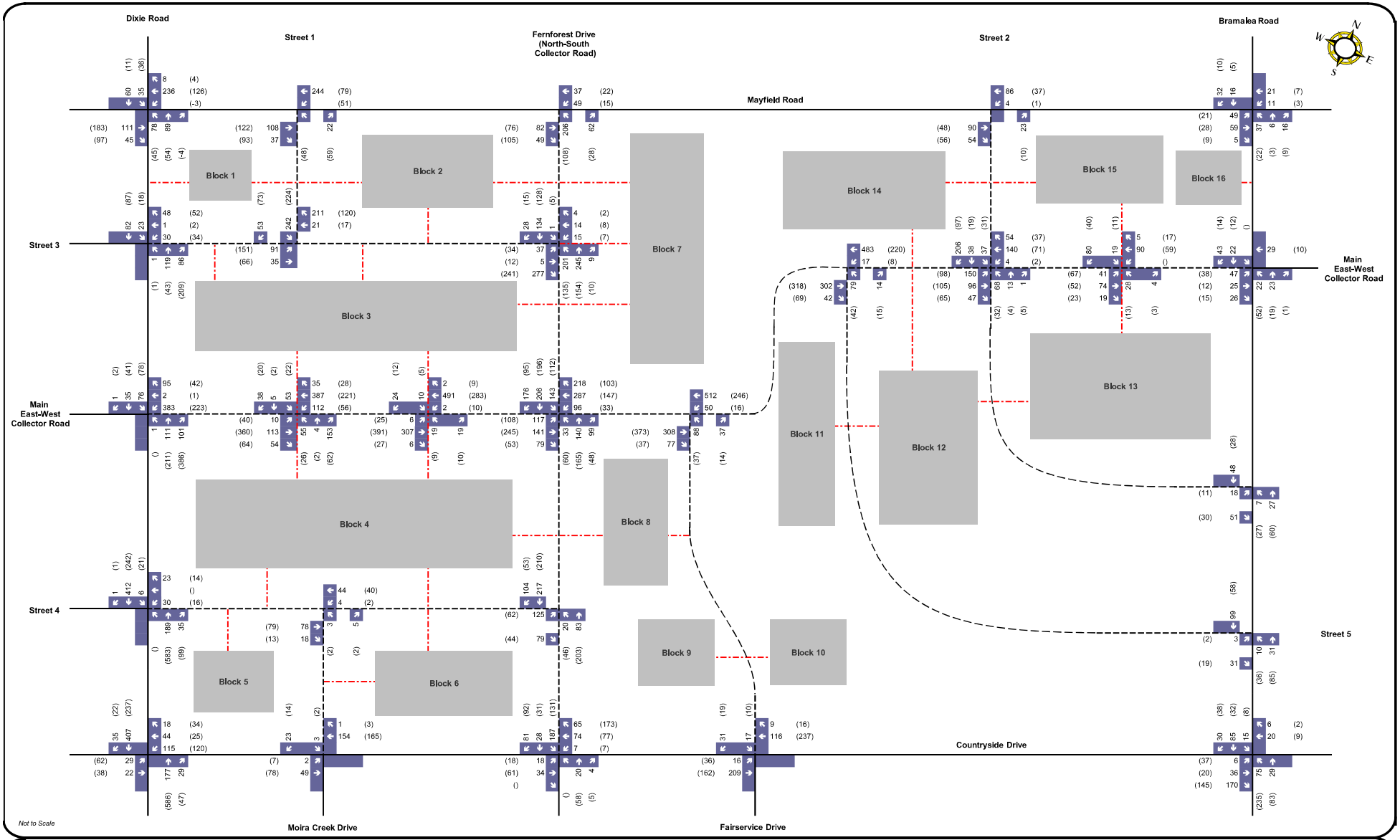
Prepared for:

Brampton Area 48 Landowners Group Inc.

COMMUNITIES
TRANSPORTATION
BUILDINGS
INFRASTRUCTURE

MMM GROUP

January 2012 | 16-10012-001-T02



LEGEND

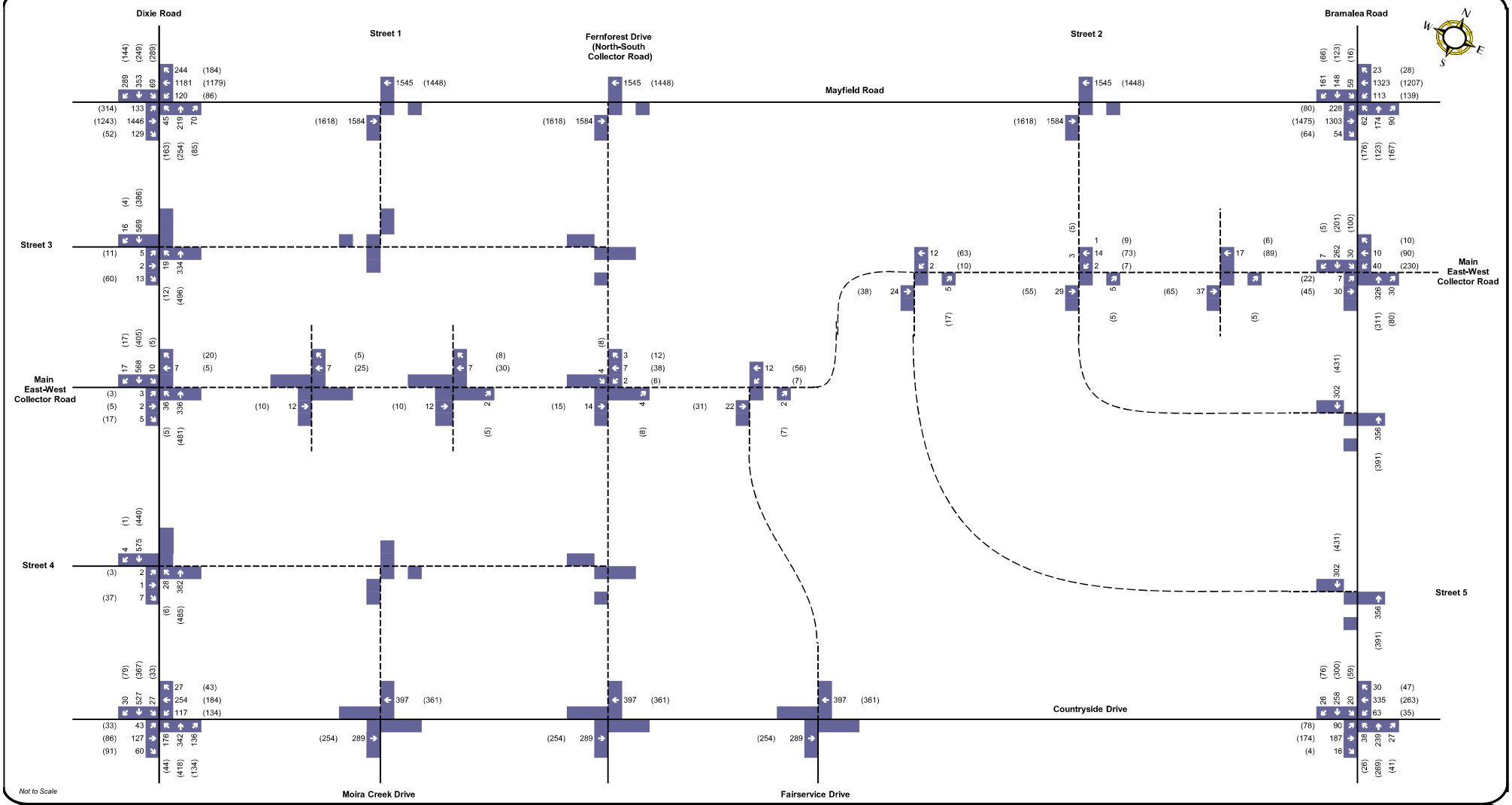
XX AM Peak Hour Volumes
(XX) PM Peak Hour Volumes

Assumed Access Locations*
Proposed Internal Spine Road Network

** Site traffic has been assigned to the assumed access locations. The assignment used for the specific access locations has not been illustrated.*

MMM GROUP

FIGURE 3.8
Horizon 2020
Site Traffic Assignment



LEGEND

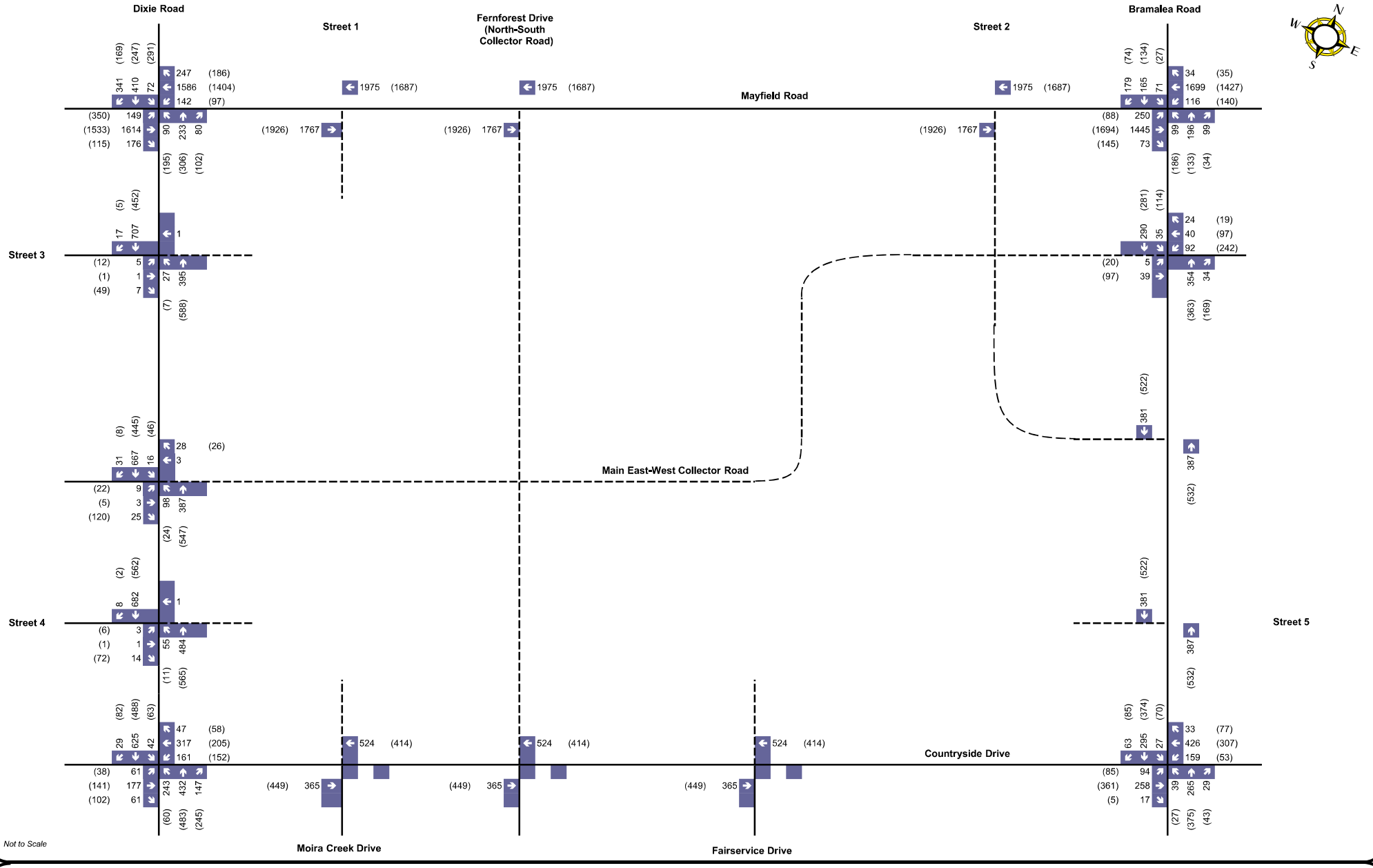
XX AM Peak Hour Volumes
(XX) PM Peak Hour Volumes

Proposed Internal Spine Road Network

MMM GROUP

FIGURE 4.7

Horizon 2015
Overall Background Traffic Volumes



LEGEND

XX AM Peak Hour Volumes
(XX) PM Peak Hour Volumes
Proposed Internal Spine Road Network

MMM GROUP

FIGURE 4.8

Horizon 2020
Overall Background Traffic Volumes

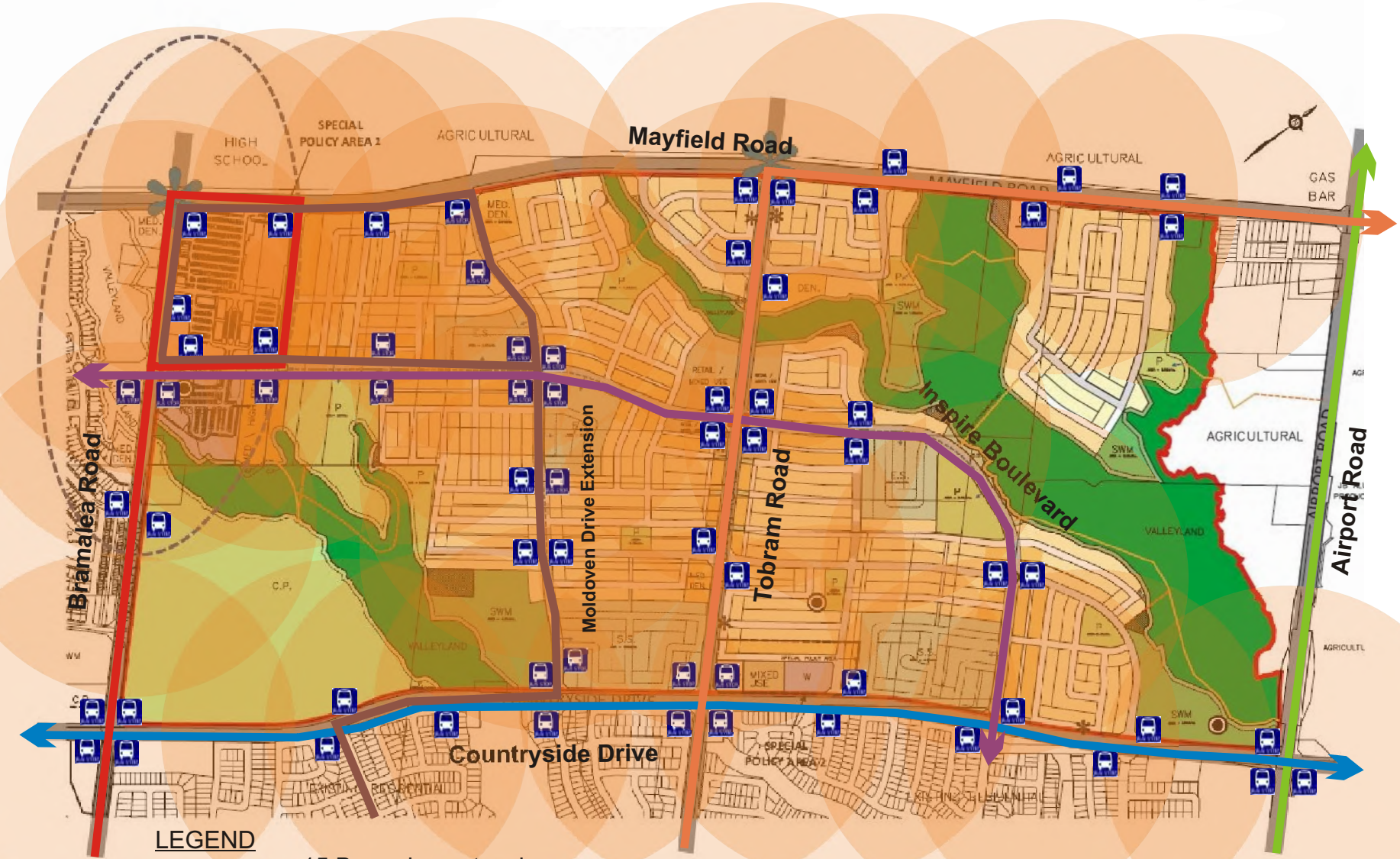


Figure 3-8
Conceptual Transit Routes

Appendix J

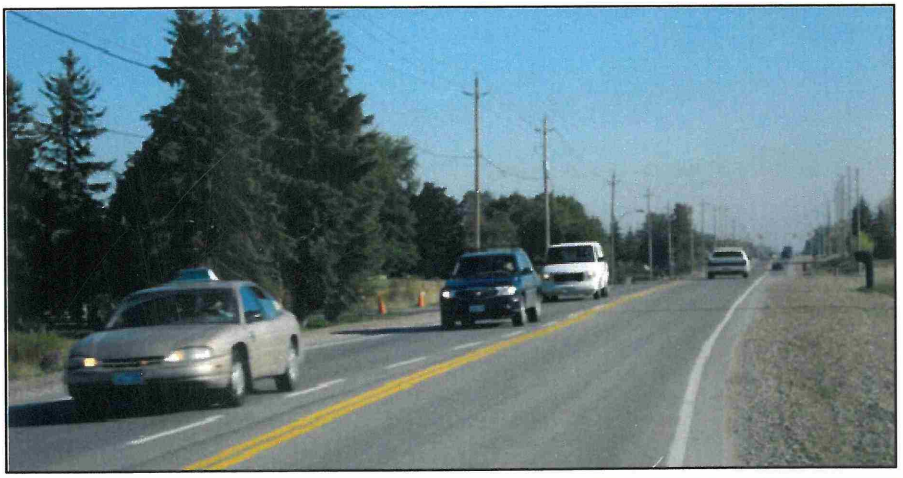
Background Roadway Improvements

Project Number:
2007-317P

April/2013

Mayfield Road Improvements

Airport Road to Coleraine Drive – Class Environmental Assessment



ENVIRONMENTAL STUDY REPORT

Volume 1 of 5
Environmental Study Report

April 5, 2013

Stantec

Region of Peel
Working for you

The Recommended Design Concept is illustrated in the foldout plans included accompanying this section and is described in more detail as follows:

6.1.1 Mayfield Road – Airport Road to Maisonneuve Boulevard

Details of this section include:

Current rural cross section of two lanes plus turn lanes is upgraded to four lanes plus turn lanes with a continuous 6.0 m wide two-way left turn lane (TWTL) in the interim phase (prior to 2017) and further upgraded in the ultimate phase (prior to 2032) to six (6) lanes with turning lanes, continuous two way left turn lane. This may also include the recommended replacement of the TWTL with raised median based on adjacent area development progression. Within this section is one culvert crossing TRCA ID No. 1 and a SWM facility on the north side at Sta. 11+600 and pedestrian facilities at both sides (1.5 m concrete sidewalk on north side and 3.0 m asphalt multi-use trail on the south side). The potential for a multi-use trail on the north side will also be investigated during the detailed design phase which is recommended in the Region's 2012 Active Transportation Plan.

External roadside drainage at crossing No. 1 is captured and conveyed within a closed storm sewer system connecting to the south side and outlet directly to the watercourse on the east side Maisonneuve Boulevard.

The preliminary design for this section of Mayfield Road is represented on drawings No. P1A through P2B and a typical cross section is provided as Figure CS1-1.

Ultimate Intersection Configuration:

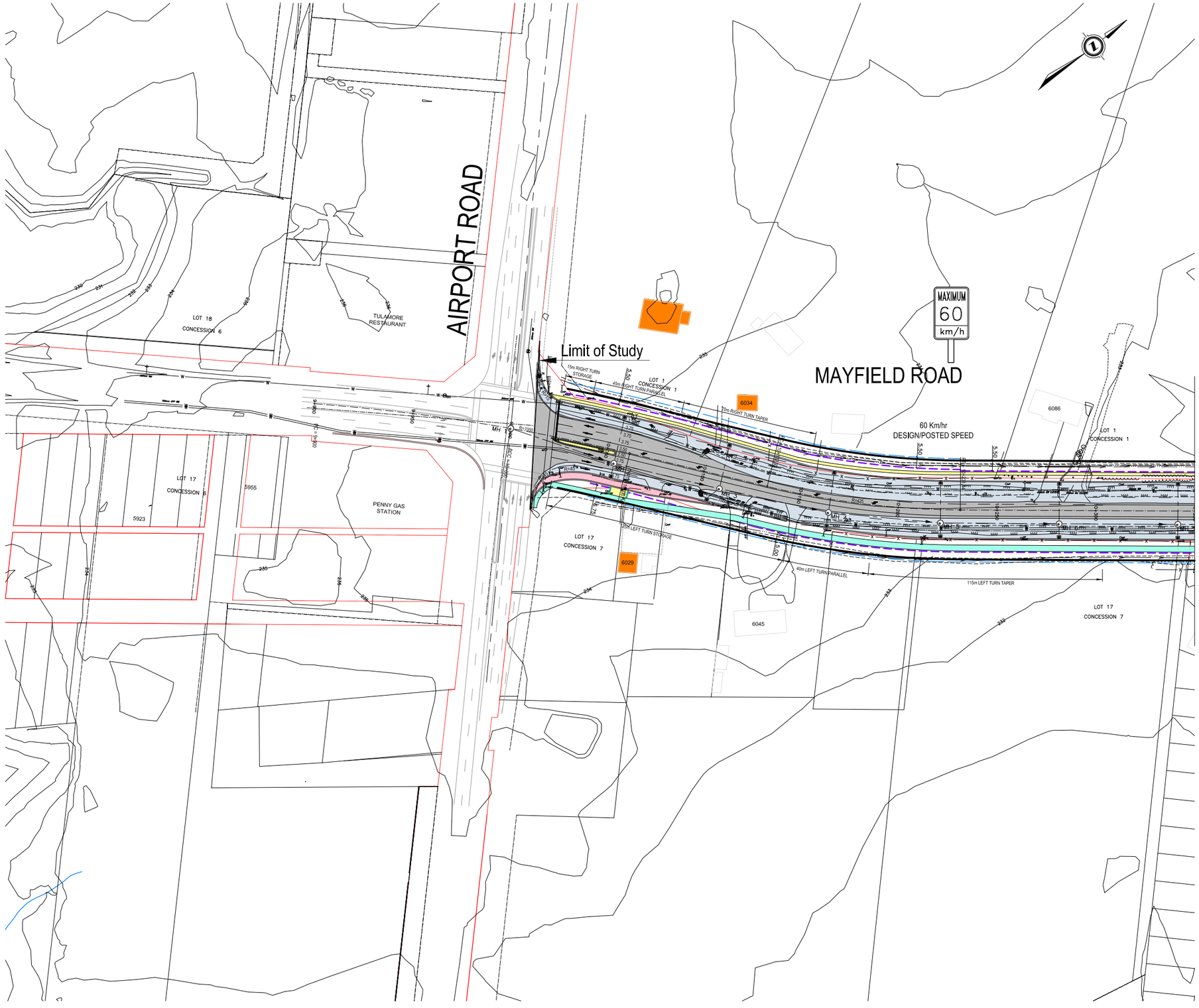
Airport Road:

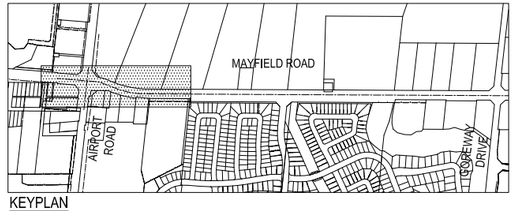
Eastbound – three through lanes
Westbound – three through lanes
Westbound Left Turn Lane - 125 m storage/parallel lane
Westbound Right Turn Lane - 60 m storage/parallel lane

Maisonneuve Boulevard:

Eastbound – three through lanes
Westbound – three through lanes
Westbound Left Turn Lane – 50/40 m storage/parallel lane
Eastbound Right Turn Lane - 30/45 m storage/parallel lane

Initial construction of the four lane section will be skewed to the south with a full urban cross section on the south side and a semi-rural section retained on the north side. Deferral of the north side sidewalk may be considered subject to confirmation with the Town of Caledon.





KEYPLAN

LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- APPROXIMATE GRADING LIMIT
- CALCULATED CLEAR ZONE INDICATING MINIMUM DISTANCE FROM EDGE OF PAVEMENT FOR HYDRO POLE LOCATION.
- MINIMUM OFFSET FOR GUYING EASEMENT BASED ON POLES LOCATED A MINIMUM CLEAR ZONE OFFSET FROM EDGE OF PAVEMENT. (5.0m "HYDRO ONE BRAMPTON" - SOUTHSIDE, 5.5m "HYDRO ONE NETWORKS" - NORTH SIDE.)
- 3 TRCA WATERCOURSE DESIGNATION
- OVERLAND FLOW DIRECTION
- POTENTIAL PROPERTY LINE 3.5m FROM CLEAR ZONE REQUIREMENTS
- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- PROPOSED CONCRETE MEDIANS, SIDEWALKS & BUS PADS
- PROPOSED 3.0m MULTI-USE PATHWAY
- PROPOSED CONC. BUS BAY
- PROPOSED PROPERTY ACQUISITION OUTSIDE OF RIGHT OF WAY
- BUILT HERITAGE FEATURE
- FUTURE SIGNALIZED INTERSECTION

Scale

20m 0 20 40 60m HORIZONTAL SCALE

2m 0 2 4 6m VERTICAL SCALE

Stantec

Client

Region of Peel
Working for you

Drawing Title

MAYFIELD ROAD
AIRPORT ROAD TO COLERAINE DRIVE
CLASS EA STUDY REPORT
RECOMMENDED DESIGN ALTERNATIVE
PLAN
STA. 10+000 TO STA. 10+350

Drawn By	Checked By	Drawing Number
W.R.W.	J.C.B.	P1A
Date	Project No.	
2012-10-17	160210480	

V:\01602\Active\160210480\design\drawings\class_ea\report\esr_dwgs\opt4B_mayfield_rd_esr_rprt
2012/10/17 5:54 PM by:white, bill (kitchener)

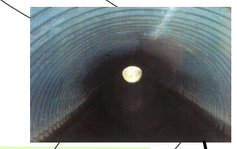
MATCHLINE STA. 10+350
SEE DRAWING P1A

FUTURE 6.0m
CONTINUOUS
RAISED MEDIAN

EX. 1200mm DIA. CSP
REPLACE WITH
675mm CONC. STM

FUTURE LEFT TURN LANE
TO BE CONFIRMED DURING
PLANNING PROCESS

SWMF 1
STORM WATER
MANAGEMENT
FACILITY REQUIRED
(+/- 0.65ha)



RE-ALIGN CREEK TO SUIT
CULVERT EXTENSION

EX. 1800mm x 2500mm
ELLIPTICAL CSP CULVERT
REPLACE WITH 1800mm DIA. CSP

FUTURE RIGHT TURN LANE
REQUIRED. UTILITIES TO BE
DESIGNED ACCORDINGLY

MAXIMUM
60
km/h

60 Km/hr
DESIGN/POSTED SPEED

LOCATION OF
POTENTIAL FUTURE
DEVELOPMENT ACCESS

MAYFIELD ROAD

LOT 1
CONCESSION 1

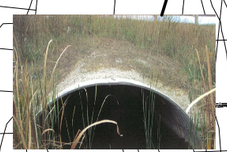
LOT 17
CONCESSION 7

MAISSONEUVE BLVD

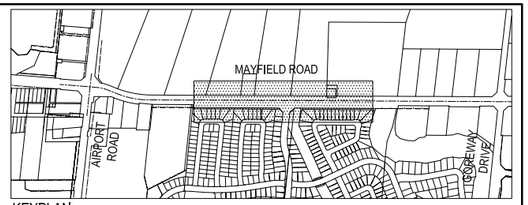
RE-ALIGN CREEK TO SUIT
CULVERT EXTENSION

INSTALL RIP RAP AS
REQUIRED (TYP.)

INSTALL HEADWALL
AS REQUIRED



MATCHLINE STA. 14+350
SEE DRAWING P3A



KEYPLAN

LEGEND

- EXISTING RIGHT OF WAY
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- OVERLAND FLOW DIRECTION
- POTENTIAL PROPERTY LINE 3.5m FROM CLEAR ZONE REQUIREMENTS
- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- PROPOSED CONCRETE MEDIANS, SIDEWALKS & BUS PADS
- PROPOSED 3.0m MULTI-USE PATHWAY
- PROPOSED CONC. BUS BAY
- PROPOSED PROPERTY ACQUISITION OUTSIDE OF RIGHT OF WAY
- BUILT HERITAGE FEATURE
- FUTURE SIGNALIZED INTERSECTION

Scale

20m 0 20 40 60m HORIZONTAL SCALE

2m 0 2 4 6m VERTICAL SCALE

Stantec

Client

Region of Peel
Working for you

Drawing Title

MAYFIELD ROAD
AIRPORT ROAD TO COLERAINE DRIVE
CLASS EA STUDY REPORT
RECOMMENDED DESIGN ALTERNATIVE
PLAN
STA. 10+350 TO STA. 14+350

Drawn By	Checked By	Drawing Number
W.R.W.	J.C.B.	P2A
Date	Project No.	
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2012/10/17 5:56 PM by:white, bill (kitchener)

BY 2031

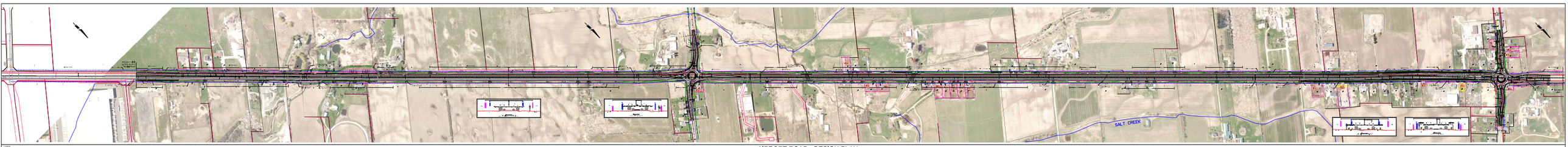
Road	Details of Improvement	EA Status	Part of 2019 Approved Budget?
Airport Road	2 to 5 lane widening from 1.0 km north of Mayfield Road to King Street	Completed	Y
	Corridor Improvements from King Street to Hunstmill Drive	Works in Progress	Y
	4 to 6 lane widening from Braydon Boulevard to Countryside Drive	Works in Progress	Y
Bovaird Drive	2 to 4 lane widening from Mississauga Road to 1.5 km West of Heritage Road	Completed	Y
	4 to 6 lane widening from James Potter/Creditview to Mississauga Road	Completed	Y
	4 to 6 lane widening from Mississauga Road to North/South Freeway (1 km W of Mississauga Road)	Completed	Y
Cawthra Road	Corridor and Intersection Improvements from Eastgate Parkway to Queen Elizabeth Way	Works in Progress	Y
Coleraine Drive	2 to 4 lane widening from Highway 50 to Mayfield Road	–	N
Dixie Road	4 to 6 lane widening from Queen Street East to Bovaird Drive	Completed	Y
	2 to 4 lane widening from Countryside Drive to Mayfield Road	Completed	Y
	2 to 5 lane widening from Mayfield Road to 2 km northerly	Completed	Y
	4 to 6 lane widening from Bovaird Drive to Countryside Drive	Completed	Y
Highway 50	5 to 7 lane widening from Castlemore Road to Mayfield Road	Completed	Y
Mavis Road	4 to 6 lane widening of Mavis Road, Region's portion, including the structure over Highway 407	Completed	Y
Mayfield Road	2 to 5 lane widening from Airport Road to The Gore Road	Completed	Y
	2 to 4 lane widening from Coleraine Drive to Hwy 50	Completed	Y
	2 to 6 lane widening from Hurontario Street to Chinguacousy Road	Completed	Y
	2 to 4 lane widening from The Gore Road to Coleraine Drive	Completed	Y
	2 to 5 lane widening from Chinguacousy Road to Mississauga Road	Completed	Y
	5 to 6 lane widening from Dixie Road to Bramalea Road	Completed	Y
	2 to 4 lane widening from Mississauga Road to Winston Churchill Boulevard	Completed	Y
	4 to 6 lane widening from Heart Lake Road to Hurontario Street	Completed	Y
	North Side Boulevard Widening - Bramalea Rd to Airport Rd	Completed	Y
	4 to 6 lane widening from Airport Rd to Clarkway Dr	Completed	Y
Mississauga Road	2 to 4 lane widening from Bovaird Drive to Mayfield Rd	Completed	Y
	4 to 6 lane widening from Financial Drive to Queen Street	Works in Progress	Y
	4 to 6 lane widening from Queen Street to Bovaird Drive	Works in Progress	Y
	4 to 6 lane widening from Bovaird Drive to Sandalwood Pkwy	Completed	Y
North/South Arterial Road	6 lane road from Future BramWest Pkwy to Bovaird Drive	–	Y
	6 lane road from Bovaird Drive to Future Sandalwood Pkwy	–	Y

Steeles Avenue West	4 to 6 lane widening from Chinguacousy Road to Mississauga Road	Completed	Y
	4 to 6 lane widening from Mississauga Road to Winston Churchill Boulevard	Completed	Y
The Gore Road	2 to 4 widening from Squire Ellis Drive to Mayfield Road and	Completed	Y
	Corridor Improvements from Queen Street East to Castlemore Road	Completed	Y
	*4 to 6 lane widening from Castlemore Road to Countryside Drive	–	Y*
Winston Churchill Boulevard	2 to 4 lane widening from 2.0 km South of Embleton Road to Embleton Road	Works in Progress	Y
	4 to 6 lane widening from Highway 401 to Steeles Avenue	Works in Progress	Y
	5 to 7 lane widening from Steeles Avenue to 2 km South of Embleton Road	Works in Progress	Y
	4 to 6 lane widening from 2 km South of Embleton Road to Embleton Road	Works in Progress	Y
	4 to 6 lane widening from North Sheridan Way to Dundas Street	–	Y

BY 2041

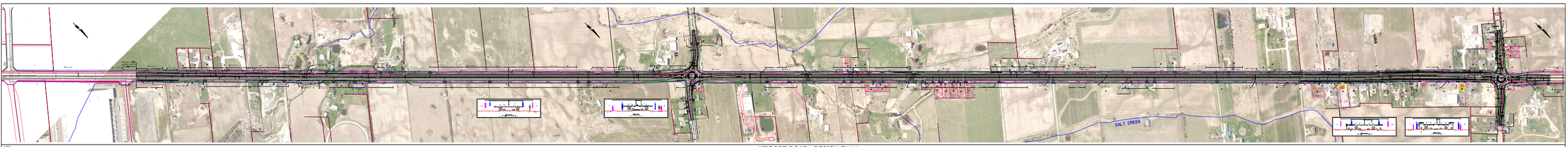
Road	Details of Improvement	EA Status	Part of 2019 Approved Budget?
Mayfield Road	5 to 6 lane widening from Chinguacousy Road to West of Mississauga Road	Completed	Y
	4 to 6 lane widening from Clarkway Drive to Coleraine Drive	-	N
Mississauga Road	2 to 4 lane widening from Mayfield Road to Old School Road	-	N
The Gore Road	2 to 4 lane widening from Mayfield Road to Healey Road	-	N
A2	6 lane road from Mayfield Road to Highway 50	Work in Progress	N

* The 2012 LRTP recommended the widening of The Gore Road between Queen Street and Countryside Drive. An Environmental Assessment (EA) was completed for The Gore Road between Queen Street and Castlemore Road. The results recommended corridor improvements versus road widening. In this regard, the portion of The Gore Road between Castlemore Road and Countryside Drive is no longer required to be widened to 6 lanes.



AIRPORT ROAD - DESIGN PLAN

BETWEEN MAYFIELD ROAD AND KING STREET

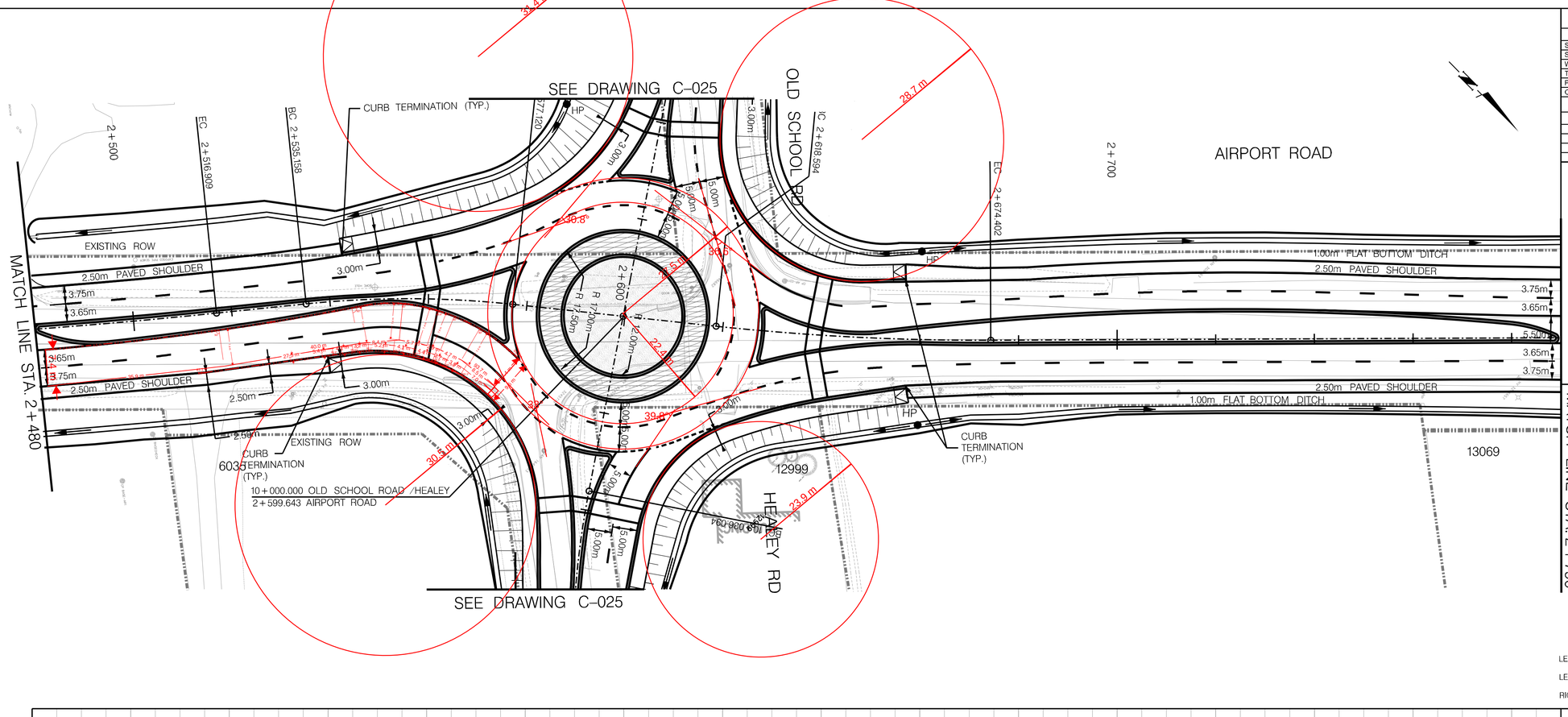


AIRPORT ROAD - DESIGN PLAN

BETWEEN MAYFIELD ROAD AND KING STREET

Appendix K

Relevant Excerpts from Airport Road EA

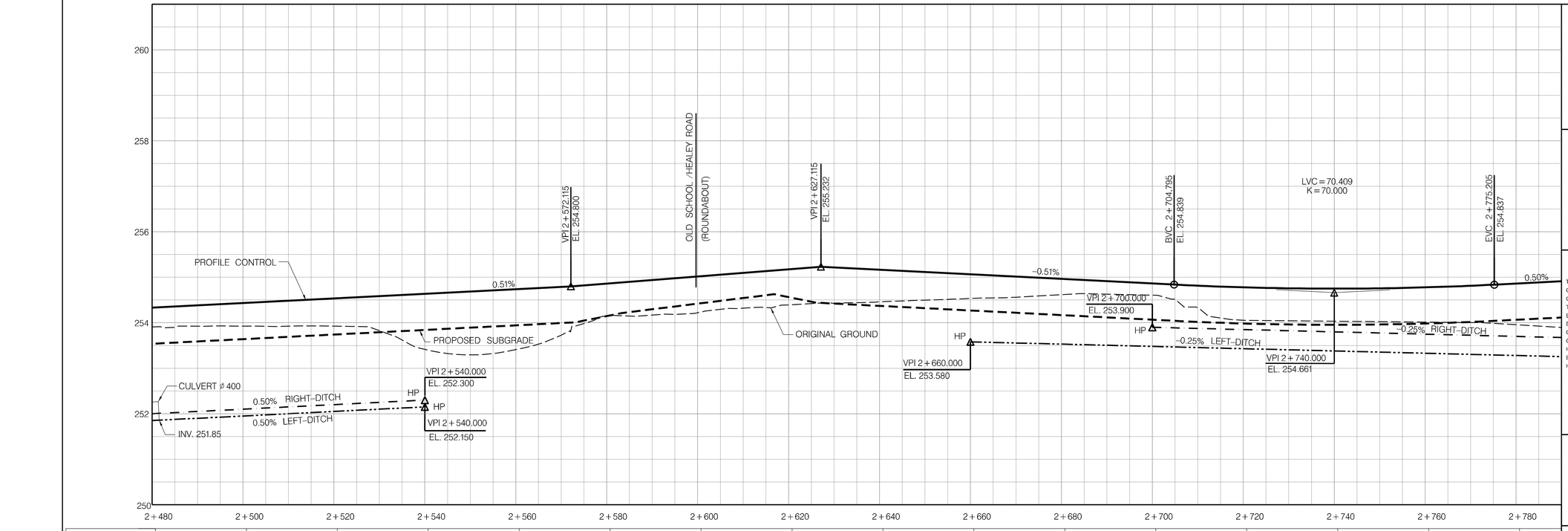


SERVICE DATA

SERVICE	DATE	INIT.	SERVICE	DATE	INIT.
SAN SEWERS	MAY 00, 2014	X.X.	GAS MAINS	MAY 00, 2014	X.X.
STORM SEWERS	MAY 00, 2014	X.X.	BELL U/G CABLE	MAY 00, 2014	X.X.
WATERMAINS	MAY 00, 2014	X.X.	HYDRO U/G CABLE	MAY 00, 2014	X.X.
TRANSIT	MAY 00, 2014	X.X.	HYDRO ONE	MAY 00, 2014	X.X.
PARKS & REC.	MAY 00, 2014	X.X.	CTV	MAY 00, 2014	X.X.
ONT. CLEAN WATER	MAY 00, 2014	X.X.	COMMUNIC. CABLES	MAY 00, 2014	X.X.

REVISIONS

DATE	DETAILS	INIT.
JULY 2018	ISSUED FOR 30% DESIGN REVIEW	T.P.
JAN 2019	ISSUED FOR 60% DESIGN REVIEW	T.P.



	2+480	2+500	2+520	2+540	2+560	2+580	2+600	2+620	2+640	2+660	2+680	2+700	2+720	2+740	2+760	2+780
PROPOSED	254.334	254.435	254.536	254.638	254.739	254.862	255.019	255.176	255.167	255.066	254.964	254.863	254.779	254.750	254.777	254.861
EXISTING	253.907	253.927	253.925	253.414	253.412	254.150	254.222	254.393	254.460	254.534	254.617	254.607	254.055	254.033	254.013	253.955

General Notes

All Driveways Are ASPHALT Unless Otherwise Noted

All Water And Sanitary Service Locations Are Approximate And Must Be Located Accurately In The Field

All Horizontal And Vertical Bends Are In Degrees

All Pipes Size In mm

20C Existing Water Service, Size In mm

WS20 Proposed Water Service, Size In mm

B.M. No. Description Location — Elev.

The Contractor Is Responsible For Locating And Protecting All Existing Utilities Prior To And During Construction. Location Of Existing Utilities Approximate Only, To Be Verified In Field By Contractor.

Designed by — Chkd. — Approved by

NOTICE TO CONTRACTOR

48 HOURS PRIOR TO COMMENCING WORK NOTIFY THE FOLLOWING

THE REGIONAL MUNICIPALITY OF PEEL
CITY OF MISSISSAUGA WORKS DEPT.
CITY OF BRAMPTON WORKS DEPT.
TOWN OF CALEDON WORKS DEPT.
BELL CANADA
ENBRIDGE INCORPORATED-GAS DISTRIBUTION
ONTARIO MINISTRY OF TRANSPORTATION
ONTARIO CLEAN WATER AGENCY
HYDRO ONE NETWORKS
ENERSOURCE, HYDRO MISSISSAUGA
HYDRO ONE BRAMPTON

CABLE TELEVISION/FIBREOPTIC PROVIDERS:
BELL CANADA
ENERSOURCE TELECOM
HYDRO ONE TELECOM
ROGERS CABLE
ALLSTREAM
PSN (PUBLIC SECTOR NETWORK)
FUTUREWAY (FCI BROADBAND)

10m 0 10 20 30m — HORIZONTAL SCALE

1m 0 1 2 3m — VERTICAL SCALE

Region of Peel
Working for you

AIRPORT ROAD
PLAN AND PROFILE

(FROM STA. 2+480 TO STA. 2+790)

CAD Area	X-XX	Area	X-XX
Checked by		Drawn by	G.P.
Date	JULY 2018	Sheet	X of X

Project No. 14-4030

Plan No. **NC-009**

Appendix L

TTS Data Results

Tue Jun 15 2021 12:39:01 GMT-0400 (Eastern Daylight Time) - Run Time: 3327ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of origin - pd_orig
Column: Primary travel mode of trip - mode_prime
Table: 2006 GTA zone of destination - gta06_dest

Filters:
(2006 GTA zone of destination - gta06_dest In 3014 3015
and
Start time of trip - start_time In 700-900
and
Primary travel mode of trip - mode_prime In D)

Trip 2016
Table: 3014

	Auto driver
PD 3 of Toronto	19
PD 7 of Toronto	17
Aurora	17
Vaughan	29
Caledon	158
Brampton	278
Halton Hills	66

Trip 2016
Table: 3015

	Auto driver
PD 8 of Toronto	29
Brampton	56
Orangeville	23
Mono	21

Tue Jun 15 2021 12:39:41 GMT-0400 (Eastern Daylight Time) - Run Time: 2380ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of origin - pd_orig
Column: Primary travel mode of trip - mode_prime

Filters:
(Planning district of destination - pd_dest In 34

and
Start time of trip - start_time In 700-900
and
Primary travel mode of trip - mode_prime In D)

Trip 2016
Table:

	Auto driver
PD 1 of Toronto	68
PD 2 of Toronto	37
PD 3 of Toronto	85
PD 4 of Toronto	35
PD 6 of Toronto	60
PD 7 of Toronto	38
PD 8 of Toronto	157
PD 9 of Toronto	69
PD 10 of Toronto	135
PD 11 of Toronto	80
PD 12 of Toronto	20
PD 13 of Toronto	15
PD 14 of Toronto	14
PD 15 of Toronto	16
Oshawa	21
East Gwillimbury	5
Newmarket	64
Aurora	47
Richmond Hill	143
Markham	174
King	242
Vaughan	689
Caledon	5780
Brampton	3104
Mississauga	459
Halton Hills	499
Milton	103
Oakville	25
Burlington	91
Hamilton	57
City of Guelph	98
Guelph/Eramosa	49
Centre Wellington	42
Erin	85
Orangeville	423
Barrie	21
Innisfil	34
Bradford-West Gwillimbury	10

New Tecumseth	355
Adjala-Tosorontio	225
Essa	7
Springwater	13
Oro-Medonte	22
Mulmur	9
Shelburne	12
Mono	187
East Garafraxa	35

Tue Jun 15 2021 12:46:33 GMT-0400 (Eastern Daylight Time) - Run Time: 3041ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of destination - pd_dest
Column: Primary travel mode of trip - mode_prime
Table: 2006 GTA zone of origin - gta06_orig

Filters:
(2006 GTA zone of origin - gta06_orig In 3014 3015
and
Start time of trip - start_time In 700-900
and
Primary travel mode of trip - mode_prime In D)

Trip 2016
Table: 3014

	Auto driver
PD 8 of Toronto	36
Vaughan	15
Caledon	10
Brampton	193

Trip 2016
Table: 3015

	Auto driver
PD 10 of Toronto	35
Vaughan	26
Brampton	74
Mississauga	64

Tue Jun 15 2021 12:45:40 GMT-0400 (Eastern Daylight Time) - Run Time: 2535ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of destination - pd_dest
Column: Primary travel mode of trip - mode_prime

Filters:
(Planning district of origin - pd_orig In 34
and
Start time of trip - start_time In 700-900
and

Primary travel mode of trip - mode_prime In D)

Trip 2016
Table:

	Auto driver
PD 1 of Toronto	401
PD 2 of Toronto	50
PD 3 of Toronto	25
PD 4 of Toronto	185
PD 5 of Toronto	90
PD 7 of Toronto	158
PD 8 of Toronto	485
PD 9 of Toronto	1042
PD 10 of Toronto	332
PD 11 of Toronto	113
PD 12 of Toronto	83
PD 13 of Toronto	64
PD 16 of Toronto	30
Oshawa	22
Clarington	12
East Gwillimbury	41
Newmarket	185
Aurora	107
Richmond Hill	103
Whitchurch-Stouffville	34
Markham	361
King	398
Vaughan	1740
Caledon	5780
Brampton	4706
Mississauga	2348
Halton Hills	224
Milton	41
Oakville	154
Burlington	39
Flamborough	6
Hamilton	89
Welland	50
Cambridge	27
Woolwich	13
City of Guelph	96
Erin	239
Orangeville	520
Barrie	72
Innisfil	7
Bradford-West Gwillimbury	59

New Tecumseth	142
Adjala-Tosorontio	69
Springwater	9
Grey	8
Collingwood	82
Oro-Medonte	9
Mono	236
East Garafraxa	9
External	14

Tue Jun 15 2021 12:41:27 GMT-0400 (Eastern Daylight Time) - Run Time: 3374ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of origin - pd_orig
Column: Primary travel mode of trip - mode_prime
Table: 2006 GTA zone of destination - gta06_dest

Filters:
(2006 GTA zone of destination - gta06_dest In 3014 3015
and
Start time of trip - start_time In 1600-1800
and
Primary travel mode of trip - mode_prime In D)

Trip 2016
Table: 3014

	Auto driver
Caledon	54
Brampton	54

Trip 2016
Table: 3015

	Auto driver
PD 1 of Toronto	35
PD 9 of Toronto	50
Caledon	31
Brampton	66

Tue Jun 15 2021 12:42:24 GMT-0400 (Eastern Daylight Time) - Run Time: 2250ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of origin - pd_orig
Column: Primary travel mode of trip - mode_prime

Filters:
(Planning district of destination - pd_dest In 34
and
Start time of trip - start_time In 1600-1800
and
Primary travel mode of trip - mode_prime In D)

Trip 2016
Table:

	Auto driver
PD 1 of Toronto	538
PD 2 of Toronto	68
PD 3 of Toronto	72
PD 4 of Toronto	228
PD 5 of Toronto	125
PD 6 of Toronto	7
PD 7 of Toronto	180
PD 8 of Toronto	519
PD 9 of Toronto	845
PD 10 of Toronto	675
PD 11 of Toronto	45
PD 12 of Toronto	29
PD 13 of Toronto	74
PD 16 of Toronto	15
Oshawa	64
East Gwillimbury	119
Newmarket	208
Aurora	122
Richmond Hill	99
Whitchurch-Stouffville	49
Markham	340
King	255
Vaughan	1941
Caledon	5006
Brampton	4079
Mississauga	2409
Halton Hills	450
Milton	10
Oakville	179
Burlington	79
Flamborough	6
St. Catharines	21
Welland	50
Kitchener	51
Woolwich	47
City of Guelph	103
Erin	126
Orangeville	397
Barrie	79
Bradford-West Gwillimbury	59
New Tecumseth	140
Adjala-Tosorontio	83
Essa	7

Collingwood	90
Penetanguishene	63
Oro-Medonte	9
Amaranth	57
Mono	165
East Garafraxa	17

Tue Jun 15 2021 12:44:08 GMT-0400 (Eastern Daylight Time) - Run Time: 3147ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of destination - pd_dest
Column: Primary travel mode of trip - mode_prime
Table: 2006 GTA zone of origin - gta06_orig

Filters:
(2006 GTA zone of origin - gta06_orig In 3014 3015
and
Start time of trip - start_time In 1600-1800
and
Primary travel mode of trip - mode_prime In D)

Trip 2016
Table: 3014

	Auto driver
PD 7 of Toronto	17
Aurora	17
Caledon	131
Brampton	97
Mississauga	9
Halton Hills	58
Shelburne	11

Trip 2016
Table: 3015

	Auto driver
Caledon	51
Brampton	151
Milton	27
Burlington	47
Mono	21

Tue Jun 15 2021 12:45:07 GMT-0400 (Eastern Daylight Time) - Run Time: 2385ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of destination - pd_dest
Column: Primary travel mode of trip - mode_prime

Filters:

(Planning district of origin - pd_orig In 34
and
Start time of trip - start_time In 1600-1800
and
Primary travel mode of trip - mode_prime In D)

Trip 2016
Table:

	Auto driver
PD 1 of Toronto	162
PD 2 of Toronto	23
PD 3 of Toronto	105
PD 4 of Toronto	17
PD 5 of Toronto	74
PD 6 of Toronto	33
PD 7 of Toronto	138
PD 8 of Toronto	122
PD 9 of Toronto	264
PD 10 of Toronto	67
PD 11 of Toronto	80
PD 12 of Toronto	14
PD 13 of Toronto	25
PD 14 of Toronto	33
PD 16 of Toronto	49
Ajax	17
Oshawa	57
East Gwillimbury	55
Newmarket	73
Aurora	47
Richmond Hill	138
Markham	192
King	203
Vaughan	857
Caledon	5006
Brampton	3025
Mississauga	673
Halton Hills	408
Milton	154
Oakville	78
Burlington	80
Glanbrook	105
Stoney Creek	16
Hamilton	13
Grimsby	42
St. Catharines	46
Welland	24

Kitchener	29
City of Guelph	119
Guelph/Eramosa	62
Centre Wellington	58
Erin	91
Orangeville	751
Barrie	14
Innisfil	43
Bradford-West Gwillimbury	26
New Tecumseth	576
Adjala-Tosorontio	167
Essa	22
Clearview	28
Springwater	69
Grey	14
Oro-Medonte	22
Shelburne	118
Mono	333
East Garafraxa	38

Tue Jun 15 2021 12:23:41 GMT-0400 (Eastern Daylight Time) - Run Time: 2225ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of household - pd_hhld
Column: Primary travel mode of trip - mode_prime

Filters:
(Planning district of household - pd_hhld In 34
and
Start time of 1500-1900
and
Age of person - age In 18-99)

Trip 2016
Table:

	Transit excluding GO rail	Cycle	Auto driver	GO rail only	Joint GO rail and local transit
Caledon	605	28	56246	295	114

Auto passenger	School bus	Taxi passenger	Paid rideshare	Walk
3946	64	41	37	312

Appendix M

Detailed Trip Distribution Worksheets

Table 16: Passenger Car Trip Generation

Zone	Building(s)	Size (SF GFA)	A.M. Peak Trip Generation 80% Total Vehicle Traffic In	A.M. Out	A.M. Total	P.M. Peak Trip Generation 80% Total Vehicle Traffic In	P.M. Out	P.M. Total
1	Building A	1,083,946	95	28	123	35	90	125
Zone 1 Total			**95**	**28**	**123**	**35**	**90**	**125**
2	Building D	1,009,216	89	27	116	33	85	118
	Building H	975,874	59	54	113	32	83	115
Zone 2 Total			**148**	**81**	**228**	**65**	**168**	**233**
3	Building C	784,700	73	22	94	27	69	97
Zone 3 Total			**73**	**22**	**94**	**27**	**69**	**97**
4	Building I	360,760	42	12	54	16	40	56
	Building J	99,000	22	6	28	9	22	31
Zone 4 Total			**63**	**18**	**82**	**25**	**62**	**87**
5	Building E	1,008,900	89	27	116	33	85	118
	Building F	797,500	50	46	95	27	70	98
Zone 5 Total			**139**	**72**	**211**	**60**	**155**	**216**
Total		**4,313,496**	**518**	**221**	**738**	**212**	**544**	**758**

Network Boundary Check	518	(221)	212	(544)
Site Entrances Check	518	(221)	212	(544)

Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Tullamore Industrial

Trip Assignment (Car) - Spot Checks

CROZIER CONSULTING ENGINEERS

Figure 12 Spot Check

Project No. 2022-5842
Date. 2024.03.28
Analyst. TDS

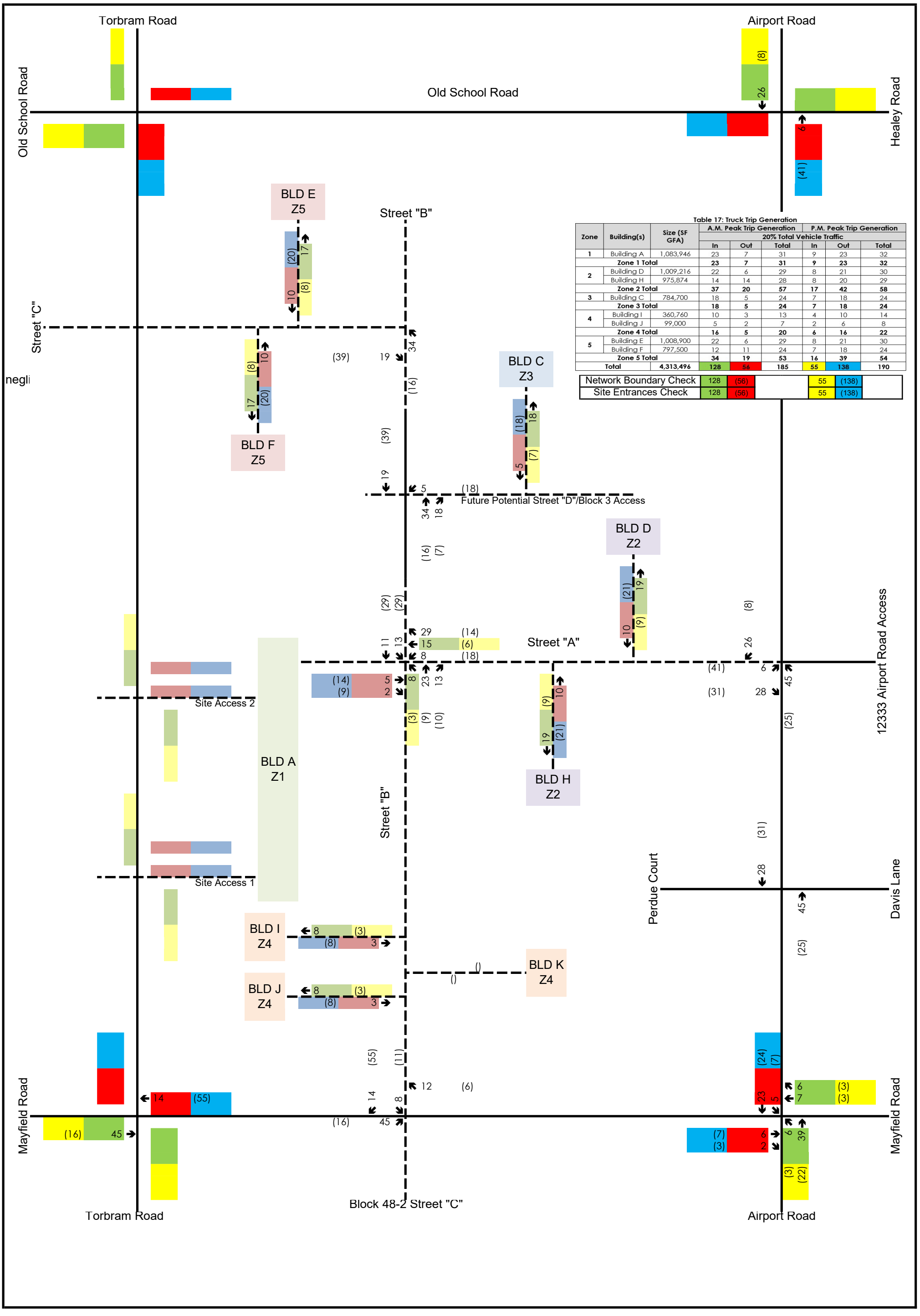


Table 17: Truck Trip Generation

Zone	Building(s)	Size (SF GFA)	A.M. Peak Trip Generation 20% Total Vehicle Traffic			P.M. Peak Trip Generation 20% Total Vehicle Traffic		
			In	Out	Total	In	Out	Total
1	Building A	1,083,946	23	7	31	9	23	32
Zone 1 Total			**23**	**7**	**31**	**9**	**23**	**32**
2	Building D	1,009,216	22	6	29	8	21	30
	Building H	975,874	14	14	28	8	20	29
Zone 2 Total			**37**	**20**	**57**	**17**	**42**	**58**
3	Building C	784,700	18	5	24	7	18	24
Zone 3 Total			**18**	**5**	**24**	**7**	**18**	**24**
4	Building I	360,760	10	3	13	4	10	14
	Building J	99,000	5	2	7	2	6	8
Zone 4 Total			**16**	**5**	**20**	**6**	**16**	**22**
5	Building E	1,008,900	22	6	29	8	21	30
	Building F	797,500	12	11	24	7	18	24
Zone 5 Total			**34**	**19**	**53**	**16**	**39**	**54**
Total		**4,313,496**	**128**	**56**	**185**	**55**	**138**	**190**
Network Boundary Check			128	(56)		55	(138)	
Site Entrances Check			128	(56)		55	(138)	

Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Tullamore Industrial

Trip Assignment (Trucks) - Spot Checks

CROZIER CONSULTING ENGINEERS

Figure 13 Spot Check

Project No. 2022-5842
Date. 2024.03.28
Analyst. TDS

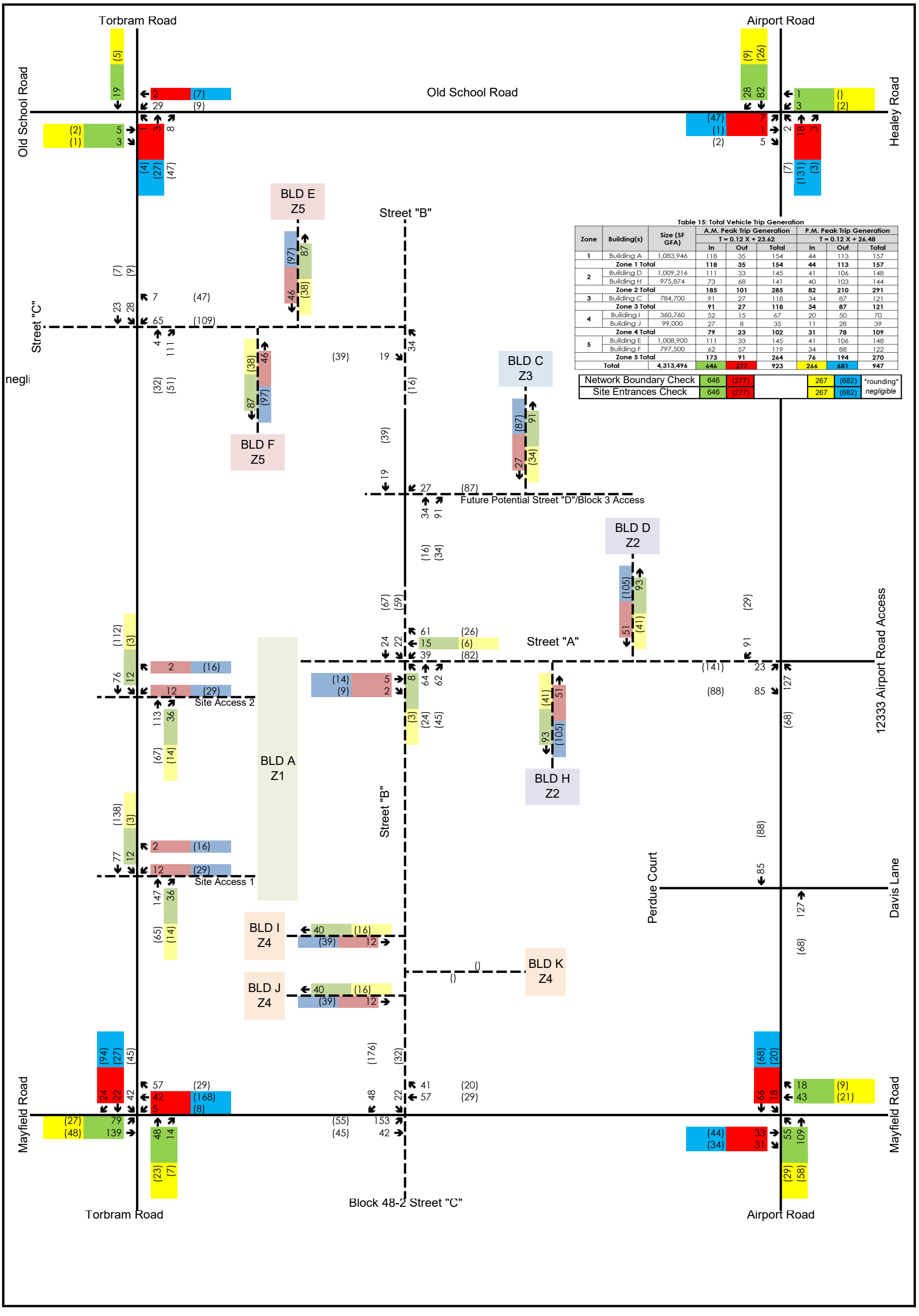


Table 15: Total Vehicle Trip Generation

Zone	Building(s)	Size (SF GFA)	A.M. Peak Trip Generation T = 0.12 X + 23.62			P.M. Peak Trip Generation T = 0.12 X + 26.48		
			In	Out	Total	In	Out	Total
1	Building A	1,083,946	118	35	154	44	113	157
Zone 1 Total			**118**	**35**	**154**	**44**	**113**	**157**
2	Building D	1,009,216	111	33	145	41	106	148
	Building H	975,874	73	68	141	40	103	144
Zone 2 Total			**185**	**101**	**285**	**82**	**210**	**291**
3	Building C	784,700	91	27	118	34	87	121
Zone 3 Total			**91**	**27**	**118**	**34**	**87**	**121**
4	Building I	360,760	52	15	67	20	50	70
	Building J	99,000	27	8	35	11	28	39
Zone 4 Total			**79**	**23**	**102**	**31**	**78**	**109**
5	Building E	1,008,900	111	33	145	41	106	148
	Building F	797,500	62	57	119	34	88	122
Zone 5 Total			**173**	**91**	**264**	**76**	**194**	**270**
Total		**4,313,496**	**646**	**277**	**923**	**266**	**681**	**947**

Network Boundary Check	646	(277)		267	(682)	*rounding*
Site Entrances Check	646	(277)		267	(682)	*negligible*

Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Tullamore Industrial

Trip Assignment (Total) - Spot Checks

CROZIER CONSULTING ENGINEERS

Figure 14 Spot Check

Project No. 2022-5842
Date. 2024.03.28
Analyst. TDS

Project Name	Tullamore Industrial
Project Number	2022-5842
Current Table:	Trip Distribution Z1 Trip Dist

TRIP DISTRIBUTION AND ASSIGNMENT

AM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				90%				100%
2	West via Old School				10%				
3	East Via Mayfield		90%				100%		
4	East via Healey		10%						
5	South Via Torbram			100%					
6	South Via Airport							100%	
7	North Via Torbram	100%							
8	North Via Airport					100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

PM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				90%				100%
2	West via Old School				10%				
3	East Via Mayfield		90%				100%		
4	East via Healey		10%						
5	South Via Torbram			100%					
6	South Via Airport							100%	
7	North Via Torbram	100%							
8	North Via Airport					100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Time Period	CARS				Total	TRUCKS				Total
	N	E	S	W		N	E	S	W	
AM (IN)	20.0%	10.0%	35.0%	35.0%	100.0%	20.0%	10.0%	35.0%	35.0%	100.0%
AM (OUT)	10.0%	20.0%	45.0%	25.0%	100.0%	10.0%	20.0%	45.0%	25.0%	100.0%
PM (IN)	15.0%	12.0%	44.0%	29.0%	100.0%	15.0%	12.0%	44.0%	29.0%	100.0%
PM (OUT)	30.0%	10.0%	20.0%	40.0%	100.0%	30.0%	10.0%	20.0%	40.0%	100.0%

Project Name	Tullamore Industrial
Project Number	2022-5842
Current Table:	Trip Distribution Z2 Trip Dist

TRIP DISTRIBUTION AND ASSIGNMENT

AM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				90%				100%
2	West via Old School				10%				
3	East Via Mayfield		80%				100%		
4	East via Healey		20%						
5	South Via Torbram								
6	South Via Airport			100%				100%	
7	North Via Torbram								
8	North Via Airport	100%				100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

PM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				90%				100%
2	West via Old School				10%				
3	East Via Mayfield		80%				100%		
4	East via Healey		20%						
5	South Via Torbram								
6	South Via Airport			100%				100%	
7	North Via Torbram								
8	North Via Airport	100%				100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Time Period	CARS				Total	TRUCKS				Total
	N	E	S	W		N	E	S	W	
AM (IN)	20.0%	10.0%	35.0%	35.0%	100.0%	20.0%	10.0%	35.0%	35.0%	100.0%
AM (OUT)	10.0%	20.0%	45.0%	25.0%	100.0%	10.0%	20.0%	45.0%	25.0%	100.0%
PM (IN)	15.0%	12.0%	44.0%	29.0%	100.0%	15.0%	12.0%	44.0%	29.0%	100.0%
PM (OUT)	30.0%	10.0%	20.0%	40.0%	100.0%	30.0%	10.0%	20.0%	40.0%	100.0%

Project Name	Tullamore Industrial
Project Number	2022-5842
Current Table:	Trip Distribution Z3 Trip Dist

TRIP DISTRIBUTION AND ASSIGNMENT

AM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				100%				100%
2	West via Old School								
3	East Via Mayfield		100%				100%		
4	East via Healey								
5	South Via Torbram			30%					
6	South Via Airport			70%				100%	
7	North Via Torbram								
8	North Via Airport	100%				100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

PM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				100%				100%
2	West via Old School								
3	East Via Mayfield		100%				100%		
4	East via Healey								
5	South Via Torbram			30%					
6	South Via Airport			70%				100%	
7	North Via Torbram								
8	North Via Airport	100%				100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Time Period	CARS				Total	TRUCKS				Total
	N	E	S	W		N	E	S	W	
AM (IN)	20.0%	10.0%	35.0%	35.0%	100.0%	20.0%	10.0%	35.0%	35.0%	100.0%
AM (OUT)	10.0%	20.0%	45.0%	25.0%	100.0%	10.0%	20.0%	45.0%	25.0%	100.0%
PM (IN)	15.0%	12.0%	44.0%	29.0%	100.0%	15.0%	12.0%	44.0%	29.0%	100.0%
PM (OUT)	30.0%	10.0%	20.0%	40.0%	100.0%	30.0%	10.0%	20.0%	40.0%	100.0%

Project Name	Tullamore Industrial
Project Number	2022-5842
Current Table:	Trip Distribution Z4 Trip Dist

TRIP DISTRIBUTION AND ASSIGNMENT

AM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				100%				100%
2	West via Old School								
3	East Via Mayfield		100%				100%		
4	East via Healey								
5	South Via Torbram			30%					
6	South Via Airport			70%				100%	
7	North Via Torbram								
8	North Via Airport	100%				100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

PM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				100%				100%
2	West via Old School								
3	East Via Mayfield		100%				100%		
4	East via Healey								
5	South Via Torbram			30%					
6	South Via Airport			70%				100%	
7	North Via Torbram								
8	North Via Airport	100%				100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Time Period	CARS				Total	TRUCKS				Total
	N	E	S	W		N	E	S	W	
AM (IN)	20.0%	10.0%	35.0%	35.0%	100.0%	20.0%	10.0%	35.0%	35.0%	100.0%
AM (OUT)	10.0%	20.0%	45.0%	25.0%	100.0%	10.0%	20.0%	45.0%	25.0%	100.0%
PM (IN)	15.0%	12.0%	44.0%	29.0%	100.0%	15.0%	12.0%	44.0%	29.0%	100.0%
PM (OUT)	30.0%	10.0%	20.0%	40.0%	100.0%	30.0%	10.0%	20.0%	40.0%	100.0%

Project Name	Tullamore Industrial
Project Number	2022-5842
Current Table:	Trip Distribution Z5 Trip Dist

TRIP DISTRIBUTION AND ASSIGNMENT

AM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				100%				100%
2	West via Old School								
3	East Via Mayfield		100%				100%		
4	East via Healey								
5	South Via Torbram			30%					
6	South Via Airport			70%				100%	
7	North Via Torbram								
8	North Via Airport	100%				100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

PM

Gateway Number	Location	CARS				TRUCKS			
		N	E	S	W	N	E	S	W
1	West via Mayfield				100%				100%
2	West via Old School								
3	East Via Mayfield		100%				100%		
4	East via Healey								
5	South Via Torbram			30%					
6	South Via Airport			70%				100%	
7	North Via Torbram								
8	North Via Airport	100%				100%			
9									
10									
11									
12									
13									
14									
15									
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Time Period	CARS				Total	TRUCKS				Total
	N	E	S	W		N	E	S	W	
AM (IN)	20.0%	10.0%	35.0%	35.0%	100.0%	20.0%	10.0%	35.0%	35.0%	100.0%
AM (OUT)	10.0%	20.0%	45.0%	25.0%	100.0%	10.0%	20.0%	45.0%	25.0%	100.0%
PM (IN)	15.0%	12.0%	44.0%	29.0%	100.0%	15.0%	12.0%	44.0%	29.0%	100.0%
PM (OUT)	30.0%	10.0%	20.0%	40.0%	100.0%	30.0%	10.0%	20.0%	40.0%	100.0%

Appendix N

Town of Caledon Official Plan Relevant Excerpts

Other Heritage Matters

Rehabilitation of Mineral Resource Extraction Areas of Cultural Heritage Interest.

4.4.67 The Town is characterized by a number of historic mineral resource extraction areas of cultural heritage interest and value that include former nineteenth and early twentieth century quarries, brick works and lime kilns. The Town will encourage the identification, designation and conservation of historic mineral resource extraction areas.

Adaptive Re-Use in Prime Agricultural Areas and Rural Lands.

4.4.68 Where appropriate in Prime Agricultural Areas and Rural Lands, and in accordance with the provisions of this Plan and any other relevant legislation, regulations, policy or by-law, the retention and conservation of non-residential built heritage resources, such as barns, will be encouraged through their conservation and sympathetic adaptive re-use.

Density Bonuses

4.4.69 Through the use of bonusing, and in the context of development applications, the Town may permit increases to the density limits applicable to a proposed development in order to conserve cultural heritage resources in a manner satisfactory to the Town. Such bonusing will ensure retention of existing cultural heritage resources on the Subject Lands and avoid adverse impact to adjacent or nearby cultural heritage resources.

4.5 Our Mobility Plan to Connect Caledon

Vision

The Town of Caledon has developed transportation policies to ensure that both people and goods can safely and efficiently move across the Town and across the region. The Town will have a multimodal transportation system that is safe, equitable, convenient, economical, efficient, low-carbon and sustainable for the movement of people and goods and is well-integrated with the envisioned land

use designations and development within the Town and adjacent municipalities.

In order to achieve more sustainable transportation practices in the future, the Town has devised policies to provide an integrated, diverse transportation system for all residents and businesses that is safe, convenient, affordable, efficient, minimizes environmental impacts, and manages future demand and congestion. A low-carbon transportation system is a crucial element toward the objective of net-zero emissions, recognizing that over half of the Town's greenhouse gas emissions are attributed to transportation, including commuters, commercial vehicles, and trucks.

To reach sustainability targets and net-zero emissions, the Town intends to reduce single-occupant vehicle dependency by supporting and promoting sustainable modes through efficient inter and intra-regional transit connections, the introduction and periodic update of an Active Transportation Master Plan, complete streets design principles, parking strategies that balance modal choice objectives with operational needs, and the support of carpooling/carsharing and bike infrastructure. The Town will also promote and support the use of zero-emission vehicles through the implementation of more electrical vehicle charging infrastructure.

Objectives

4.5.1 Through this Official Plan, the Town will endeavour to:

a) Develop an environmentally sustainable transportation system that allows for safe, convenient, economical, equitable, and efficient movement of people (including persons with disabilities), goods and services.

b) Develop a transportation system that supports connections to the Region of Peel and the rest of the Greater Toronto and Hamilton.

c) Encourage and support sustainable mobility options such as public transit, active transportation, and car-sharing through further investment into facilities and by ensuring seamless integration with other modes of transportation.

d) Increase active transportation mode shares, through the development of a safe and well-connected active transportation network that prioritizes a high level of protection for cycling and pedestrian facilities and is well-integrated with active transportation networks in adjacent municipalities.

e) Create and regularly update an Active Transportation Master Planfor the Town that seeks to create a safer community through the provision of new pedestrian and cycling facilities, trail networks and complete streets

f) Establish a connected and continuous grid system for the street network to support convenient and efficient travel by all modes of transportation.

g) Embrace a transportation system that prioritizes transportation equity by recognizing that auto-mobile based transportation systems disproportionately affect vulnerable residents. This includes impacts to low-income residents, children, seniors, and persons with disabilities, and others who are restricted in movement caused by auto-mobile dependency. Freedom of mobility is a fundamental human right, therefore a transportation system needs to accommodate this vision.

h) Collaborate and coordinate with the Province, the Region of Peel, Metrolinx and neighbouring municipalities to encourage these authorities to maintain, connect and improve roads and services under their jurisdiction within the Town, as appropriate, and ensure that the Caledon transportation system is well-integrated with the surrounding region and protects for future transportation facilities.

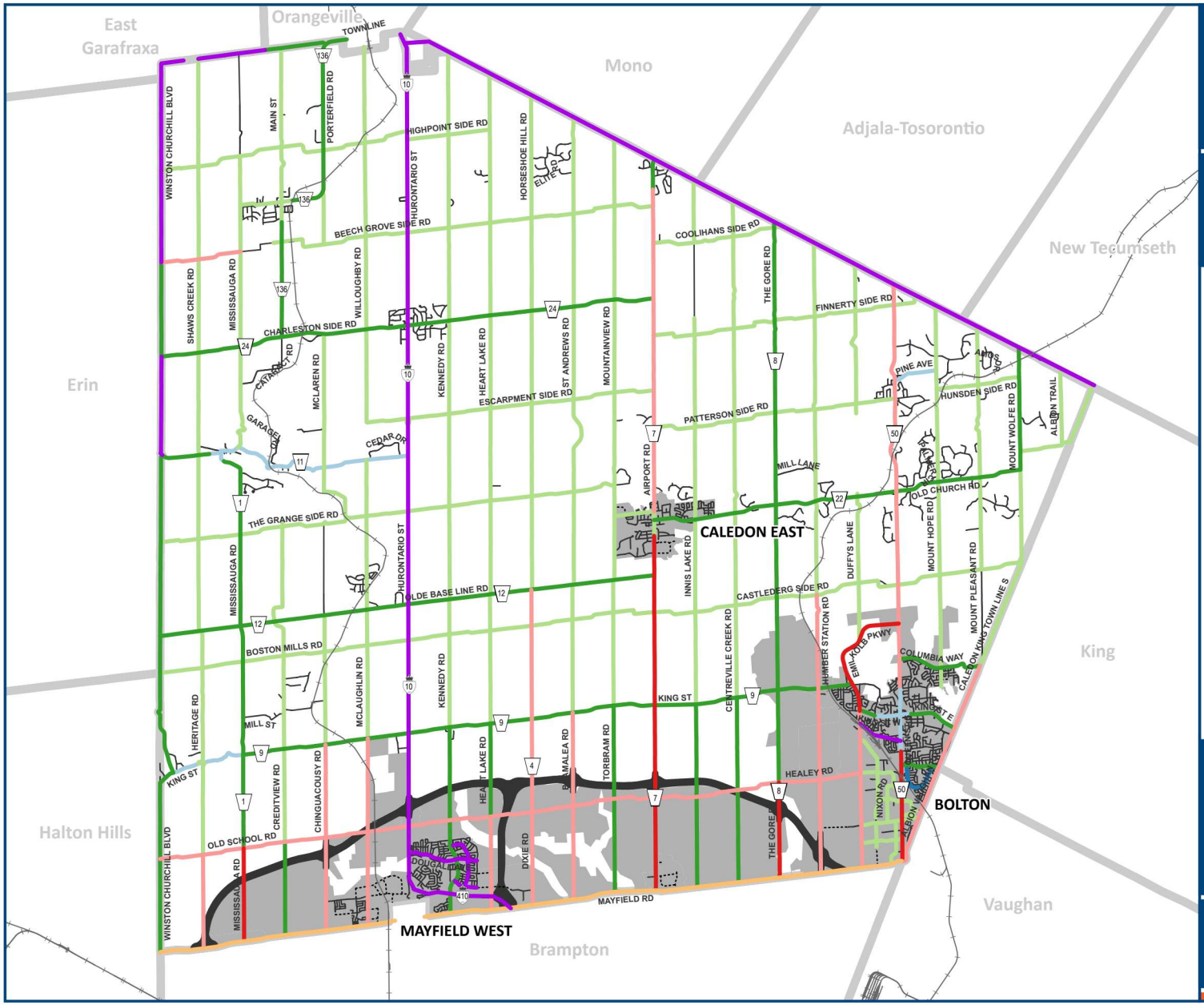
i) Support the Climate Change objectives and policies of this Plan by developing a transportation system that targets net-zero emissions through the prioritization of transit and active transportation facilities and the development of a community-wide zero-emission vehicle strategy, including expansion of public vehicle charging infrastructure.

j) Prioritize transit investments within Centres and Corridors by maximizing the use of existing and planned transit infrastructure in accordance with the policies of this Plan, with consideration of the existing and planned level of transit service and potential impacts on nearby neighbourhoods.

General Policies

4.5.2 The Town will adopt complete streets design principles to prioritize travel of all modes and ensure safety of all ages and abilities within the existing and new built form.

4.5.3 The Town will prioritize transit and active transportation in all transportation network updates and expansion, and



Draft Schedule "G4"
Road Right-of-Way Widths

Town of Caledon Official Plan

- Municipal Boundary
- Urban Area
- Protected Transportation Corridor
- 20 Metre ROW
- 22 Metre ROW
- 26 Metre ROW
- 30 Metre ROW
- 36 Metre ROW
- 45 Metre ROW
- 50 Metre ROW
- 99 Metre ROW
- Local Road
- Planned Future Roads
- Rail

Sources: Town of Caledon
Projection: UTM NAD83 Zone 17

This map is illustrative only. Do not rely on it as being a precise indicator of routes, locations of features, not as a guide to navigation. The Town of Caledon shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

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TOWN OF CALEDON

Appendix O

Relevant Town and MZO Zoning By-Law Excerpts

SECTION 5
PARKING, LOADING AND DELIVERY STANDARDS

5.1 APPLICABILITY OF THIS SECTION

a) The *parking, loading* and *delivery space* requirements of this section of the By-law shall not apply to any *building* in existence at the date of passing of this By-law so long as the *floor area*, as it existed at such date, is not increased or if the *building* or *structure* is used for a purpose that requires more *parking spaces*.

b) If an addition is made to the *building* that increases the *floor area*, additional *parking*, *loading* and *delivery spaces* shall be provided for the additional *floor area* only, as required by the regulations of this By-law.

5.2 PARKING

5.2.1 Restriction On *Use* Of Land, *Buildings* And *Structures*

No *person* shall use any land, *building* or *structure* in any *Zone* for any purpose permitted by this By-law, unless *parking spaces* are provided in accordance with the provisions of this Section of the By-law.

5.2.2 Residential *Parking* Requirements

The number of *parking spaces* required for residential *uses* shall be calculated in accordance with the standards set out in **Table 5.1**:

TABLE 5.1

Type or Nature of *Use*	**Minimum Off-Street *Parking* Requirements**
Apartment, Accessory	1 *parking space* per each 70m^2 or portion thereof to a maximum of 2 *parking spaces*
Bed & Breakfast Establishment	1 *parking space* per *guest room,* in addition to the minimum *parking* requirement for a *detached dwelling*
Building, Apartment	1.5 *parking spaces* per *dwelling unit* + 0.25 *parking spaces* per unit for visitor parking in a designated visitor *parking area*
Country Inn	1 *parking space* per *guest room,* in addition to the minimum *parking* requirement for a *detached dwelling*
Day Care, Private Home	No requirement
Dwelling, Back-to-Back Townhouse	2 *parking spaces* per *dwelling unit* plus 0.25 visitor *parking spaces* for each *dwelling unit*. Such visitor *parking spaces* shall not be located on exclusive use lands
Dwelling, Detached	2 *parking spaces* per *dwelling unit*
Dwelling, Duplex	2 *parking spaces* per *dwelling unit*

Dwelling, Linked	2 *parking spaces* per *dwelling unit*
Dwelling, Semi-Detached	2 *parking spaces* per *dwelling unit*
Dwelling, Townhouse	2 *parking spaces* per *dwelling unit* + 0.25 *parking spaces* per unit for visitors on a *lot* with four or more *dwelling units*
Dwelling Unit, Accessory	1 *parking space* per each 70m^2 or portion thereof to a maximum of 2 *parking spaces*
Home Business (ORM)	*Parking spaces* in addition to the required parking for the residential *use* shall be provided in accordance with the following: • 0-10m^2 - no additional *parking spaces* • >10m^2 - 1 *parking space*
Home Industry (ORM)	*Parking spaces* in addition to the required parking for the residential *use* shall be provided in accordance with the following: • 0-10m^2 - no additional *parking spaces* • >10m^2 - 1 *parking space*
Home Occupation	*Parking spaces* in addition to the required parking for the residential *use* shall be provided in accordance with the following: • 0-10m^2 - no additional *parking spaces* • >10m^2 - 1 *parking space*
Seniors Retirement Facility	1.5 *parking spaces* per *dwelling unit* + 0.25 *parking spaces* per unit for visitor parking in a designated visitor *parking area*

5.2.3 Non-Residential *Parking* Requirements

The number of *parking spaces* required for non-residential *uses* shall be calculated in accordance with the standards set out in **Table 5.2**:

TABLE 5.2

Type or Nature of *Use*	**Minimum Off-Street *Parking* Requirements**
Adult Day Centre	1 *parking space* per staff member + 1 *parking space* per 30 m^2 of *net floor area* or portion thereof
Animal Hospital	1 *parking space* per 16.5 m^2 *of net floor area* or portion thereof
Art Gallery	1 *parking space* per 100 m^2 of *net floor area* or portion thereof where no retail; 1 per 60 m^2 or portion thereof where retail component
Artisan Operation	1 *parking space* per 100 m^2 of *net floor area* or portion thereof where no retail; 1 per 60 m^2 or portion thereof where retail component

Artist Studio & Gallery	1 *parking space* per 100 m^2 of *net floor area* or portion thereof where no retail; 1 per 60 m^2 or portion thereof where retail component
Bakery	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Business Office	1 *parking space* per 30 m^2 of *net floor area* or portion thereof
Cannabis-Related Use – Indoor	1 *parking space* per 100 m^2 of *gross floor area* or portion thereof
Clinic	1 *parking space* per 16.5 m^2 *of net floor area* or portion thereof
Club	1 *parking space* per 15 m^2 of *net floor area* or portion thereof
Community Centre	1 *parking space* per 15 m^2 of *net floor area* or portion thereof
Day Nursery	1 *parking space* per staff member + 1 *parking space* per 30 m^2 of *net floor area* or portion thereof
Dry Cleaning or Laundry Plant	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Dry Cleaning or Laundry Outlet	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Factory Outlet	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Financial Institution	1 *parking space* per 25 m^2 of *net floor area* or portion thereof
Fitness Centre	1 *parking space* per 15 m^2 of *net floor area* or portion thereof
Funeral Home	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Golf Course	12 *parking spaces* per hole
Hospital	1.5 *parking spaces* per bed
Hotel	1 *parking space* per *guest room*, plus 1 *parking space* per 10 m^2 or portion thereof of *net floor area* devoted to meeting, dining and banquet facilities.
Industrial Hemp-Related Use - Indoor	1 *parking space* per 100m^2 of *gross floor area* or portion thereof
Industrial Use	a) If accessory office and retail *net floor area*s are 15% or less of the total *net floor area*: • Up to 5,000 m^2 – 1 *parking space* per 60 m^2 *net floor area* or portion thereof • 5,000 to 10,000 m^2 – 83 *parking spaces*, plus 1 *parking space* per 90 m^2 of *net floor area* or portion thereof over 5,000 m^2 • Over 10,000 m^2 – 139 *parking spaces*, plus 1 *parking space* per 170 m^2 or portion thereof of *net floor area* or portion thereof over 10,000 m^2

	b) If associated office and retail *net floor areas* are more than 15% of the total *net floor area*: In addition to the standards contained above in (a), the applicable *net floor areas* exceeding 15% shall be subject to the applicable office or retail parking requirements
Laundromat	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Library	1 *parking space* per 30 m^2 of *net floor area* or portion thereof
Light Equipment Rental Establishment	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Long Term Care Facility	0.5 *parking spaces* per bed
Medical Centre	1 *parking space* per 16.5 m^2 *of net floor area* or portion thereof
Medical Laboratory	1 *parking space* per 16.5 m^2 *of net floor area* or portion thereof
Merchandise Service Shop	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Motel	1 *parking space* per *guest room*, plus 1 *parking space* per 10 m^2 or portion thereof of *net floor area* devoted to meeting, dining and banquet facilities.
Motor Vehicle Body Shop	3 *parking spaces* per service bay plus 1 *parking space* per 20 m^2 or portion thereof of *net floor area* for the office and any retail *use*
Motor Vehicle Gas Bar	1 *parking space* per 20 m^2 or portion thereof of *net floor area* exclusive of fuel dispensing spaces
Motor Vehicle Repair Facility	3 *parking spaces* per service bay plus 1 *parking space* per 20 m^2 or portion thereof of *net floor area* for the office and any retail *use*
Motor Vehicle Service Centre	3 *parking spaces* per service bay plus 1 *parking space* per 20 m^2 or portion thereof of *net floor area* for the office and any retail *use*
Motor Vehicle uses not otherwise listed	1 *parking space* per 20 m^2 or portion thereof of *net floor area* exclusive of display and storage parking
Museum	1 *parking space* per 100 m^2 of *net floor area* or portion thereof where no retail; 1 per 60 m^2 or portion thereof where retail component
On-farm Diversified Use	1 *parking space* per 100 m^2 of *gross floor area* or portion thereof
Park	5 *parking spaces* per hectare or portion thereof
Personal Service Shop	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Place of Assembly	1 *parking space* per 15 m^2 of *net floor area* or portion thereof
Place of Entertainment	the greater of 1 *parking space* per 6 seats capacity or 1 *parking space* per 10m^2 of *net floor area* or portion thereof

Place of Worship	the greater of 1 *parking space* per 6 persons design capacity of the worship area or 1 *parking space* for 10 m^2 of *net floor area* or portion thereof of the worship areas and any *accessory use* areas, excluding residential *uses*.
Printing & Processing Service Shop	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Recreational *Use*	30 *parking spaces* per ball field 30 *parking spaces* per soccer field 4 *parking spaces* per tennis court
Research Establishment	1 *parking space* per 30 m^2 of *net floor area* or portion thereof
Restaurant	1 *parking space* per 15 m^2 of *net floor area* or portion thereof
Retail Store	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
Sales Service and Repair Shop	1 *parking space* per 20 m^2 of *net floor area* or portion thereof
School	Elementary – 1 *parking space* per 100 m^2 of *gross floor area* or portion thereof and 1 *parking space* per portable Secondary – 1.5 *parking spaces* per 100 m^2 of *gross floor area* or portion thereof and 1 *parking space* per portable classroom
Studio	1 *parking space* per 100 m^2 of *net floor area* or portion thereof
Sports Arena	1 *parking space* per 15 m^2 of *net floor area* or portion thereof
Training Facility	1 *parking space* per 30 m^2 of *net floor area* or portion thereof
Transportation Depot	a) If associated office or retail *net floor areas* are 15% or less of the total *net floor area*: • Up to 7,000 m^2 – 1 *parking space* per 90 m^2 *net floor area* or portion thereof7,000 to 20,000 m^2 – 78 *parking spaces*, plus 1 *parking space* per 145 m^2 of *net floor area* or portion thereof over 7000 m^2 • Over 20,000 m^2 – 168 *parking spaces*, plus 1 *parking space* per 170 m^2 of *net floor area* or portion thereof over 20,000 m^2 b) If associated office or retail *net floor areas* are more than 15% of the total *net floor area*: In addition to the standards contained above in (a), the applicable *net floor areas* exceeding 15% shall be subject to the applicable office or retail parking requirements
Warehouse	a) If associated office or retail *net floor areas* are 15% or less of the total *net floor area*: • Up to 7,000 m^2 – 1 *parking space* per 90 m^2 *net floor area* or portion thereof 7,000 to 20,000 m^2 –

	78 *parking spaces*, plus 1 *parking space* per 145 m^2 of *net floor area* or portion thereof over 7000 m^2 • Over 20,000 m^2 – 168 *parking spaces*, plus 1 *parking space* per 170 m^2 of *net floor area* or portion thereof over 20,000 m^2 b) If associated office or retail *net floor areas* are more than 15% of the total *net floor area*: In addition to the standards contained above in (a), the applicable *net floor areas* exceeding 15% shall be subject to the applicable office or retail parking requirements
Warehouse, Public Self-Storage	1 *parking space* per 30 m^2 of *net floor area* or portion thereof within the office; plus 1 *parking space* per 100 m^2 of *net floor area* or portion thereof of the *building*
Warehouse, Retail	1 *parking space* per 30 m^2 *of net floor area* or portion thereof
Warehouse, Wholesale	1 space per 80 m^2 *of net floor area* or portion thereof
Wellness Centre	1 *parking space* per 15 m^2 of *net floor area* or portion thereof
Veterinary Hospital	1 *parking space* per 16.5 m^2 *of net floor area* or portion thereof
Uses permitted by this By-law other than those listed in this Table	1 *parking space* per 45 m^2 of total *floor area* or portion thereof

Where the minimum parking requirement in an Exception *Zone* is different from the above requirements, the applicable minimum *parking* provisions of the Exception *Zone* shall apply.

5.2.4 Calculation Of *Parking, Loading* and *Delivery* Requirements

Where the minimum number of *parking, loading* or *delivery spaces* is calculated on the basis of a rate or ratio, the required number of *parking, loading or delivery spaces* shall be rounded to the next higher whole number.

5.2.5 More Than One *Use* On A *Lot*

The parking requirements for more than one *use* on a single *lot* or for a *building* containing more than one *use*, shall be the sum total of the parking requirements for each of the component *uses*, unless otherwise noted.

5.2.6 Barrier-Free *Parking*

Barrier-free *parking spaces* shall be provided in accordance with the provisions of the barrier-free access requirements in Town of Caledon By-law 2015-058, as may be amended from time to time.

5.2.7 Exclusive Use Of A *Parking, Loading* or *Delivery Space*

Any required *parking, loading* or *delivery space* shall be unobstructed and available for parking, delivery or loading purposes and used exclusively for that purpose at all times, unless otherwise specified in this By-law.

5.2.8 Location Of Required *Parking, Loading* and *Delivery Spaces*

Required *parking, loading* and *delivery spaces* shall be located on the same *lot* as the *use* that requires the *parking, loading* or *delivery space*. Notwithstanding the above, required *parking, loading* and *delivery spaces* for any commercial *use* permitted within the **CC** and **CV** *Zones* may be located on another *lot* within 150 metres of the *lot* on which *parking, loading* or *delivery spaces* would be required for a *use*, provided the off-site *parking, loading* or *delivery spaces* are located on a *lot* in a Commercial *zone* and subject to the applicant/proponent executing an Off-Site Parking, Loading and/or Delivery Agreement with the Town.

5.2.9 *Parking* Required For *Outdoor Patios*

Parking spaces are not required for any *outdoor patio* that is less than 40% of the *net floor area* of the *restaurant* it serves. The standard *restaurant* ratio shall apply to any area over 40%.

5.2.10 Location Of Parking On A *Lot* Used For Residential Purposes

The parking of *motor vehicles* associated with a residential *use* is permitted only within a *parking garage*, *private garage*, *carport* or on a *driveway* accessing an individual *dwelling unit*, a *private garage* or a *carport*.

5.2.11 Size Of *Parking Spaces*

a) Where *parking spaces* are provided in a surface *parking area*, each *parking space* shall have width of not less than 2.75 metres and length of not less than 6.0 metres, with the exception of a barrier-free *parking space* which shall have a width and a length which complies with the Town's barrier-free parking requirements

b) Where *parking space*s are provided in an enclosed or underground *parking garage*, such *parking spaces* shall have width of not less than 2.6 metres and length of not less than 5.8 metres.

c) The width and length of a parking space shall be measured exclusive of the width or length of any painted lines marking such parking space.

5.2.12 Width Of *Aisles*

The minimum width of an *aisle* providing access to a *parking space* within a *parking area* shall be 6.0 metres, except in the case of angled off-street parking accessed by a one-way *aisle*, which shall be a minimum width of 4.5 metres.

5.2.13 Width Of Access Ramps And D*riveways*

Access ramps and *driveways* accessing a *parking area* or *parking lot* shall be a minimum of 4.5 metres in width for one-way traffic and a minimum of 6.0 metres in width

for two-way traffic. For a *Commercial* or *Municipal Parking Lot,* a minimum of 9.0 metres in width shall be required.

5.2.14 *Driveway* Provisions for Residential *Dwellings*

a) Notwithstanding any other provision of this By-law, in no case shall the width of an individual *driveway* accessing a single *detached, semi-detached, linked or townhouse dwelling* exceed the following at its widest point:

   i) 6.0 metres for a *lot* having a *lot frontage* of 12.0 metres or less;

   ii) Equal to 50% of the *lot frontage* on a *lot* having greater than 12.0 metres and less than 18.0 metres of *lot frontage*;

   iii) 10.0 metres for a *lot* having a *lot frontage* equal to or greater than 18.0 metres

b) The maximum *driveway width* provisions in this section apply to a *driveway* accessing any residential *use*

c) The calculation of *driveway width* shall apply along the entire length of the *driveway*, perpendicular to the path of travel. The measurement shall be calculated including any continuous hard surface area, measured along the entire length of the *driveway* perpendicular from one edge to the other edge of the continuous hard surface area

d) Circular *driveways* are permitted, subject to the following standards:

   i) The maximum coverage of a *driveway*, including the circular portion of the *driveway*, shall be 50% of the area of the *yard* in which the *driveway* is located

   ii) The *front lot line* or *exterior side lot line* containing the *entrance* is equal to or greater than 36 metres in width

   iii) Notwithstanding Section 4.3.5 Access Regulations, the maximum cumulative *entrance widths*, measured at the point of crossing the *front lot line* and/or the *exterior side yard lot line*, shall be 10.0 metres

   iv) The widest point beyond circular portion of the *driveway* shall not exceed a maximum width of 10.0 metres.

   v) The open space between access points complies with the minimum *entrance separation* provisions in Section 4.3.4 of this By-law

e) Hammerhead *driveways* are permitted, subject to the following standards:

   i) The hammerhead may be used for the parking of *motor vehicles*

   ii) The hammerhead must be located in a *front yard* or *exterior side yard*

iii) The maximum length of the hammerhead extending perpendicularly from the *driveway* shall be 2.0 metres

iv) The maximum width of the hammerhead that is parallel to the *driveway* shall be 3.0 metres

v) A hammerhead *driveway* must meet the required *driveway setback* of the applicable *zone*

5.2.15 Surface Treatment

All required *parking spaces* and *parking area*s and all *driveways* to any *parking area* or *parking lot* shall be maintained with a stable surface which may include asphalt, concrete, concrete pavers, gravel or similar material which is treated so as to prevent the raising of dust or loose particles.

5.2.16 *Parking Garages*

Parking garages shall comply with the *Zone* provisions for the *main building* for the *Zone* in which it is located in accordance with this By-law. No *setbacks* or *yards* shall be required for any portion of a *parking garage* constructed completely below the established grade. This exemption shall also apply to ventilation shafts and housings, stairways and other similar facilities associated with below grade parking garages that extend from below established grade.

5.2.17 *Parking Area* Location On A Non-Residential *Lot*

Notwithstanding any other provisions of this By-law, *parking areas* shall be set back a minimum of 2.0 metres from any *building* or *structure*.

5.2.18 Illumination

Where *parking areas* are illuminated, the lighting fixtures shall be provided in accordance with the following provisions:

a) No part of the lighting fixture shall be more than 9 metres above grade and no closer than 4.5m to any *lot line*; and,

b) Lighting fixtures shall be installed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the fixture is projected below the lamp and onto the *lot* the lighting is intended to serve.

5.2.19 Parking of *Commercial Motor Vehicles*

5.2.19.1 The parking or storage of one *commercial motor vehicle* per *dwelling* on a *lot* is permitted on any *lot* subject to the Environmental Policy Area Zone, Residential Zone or Agricultural and Rural Zone provisions, provided the *commercial motor vehicle* has a registered gross vehicle weight of 4,500 kilograms or less and provided that all other *zone* standards including, but not limited to, *driveway* width and minimum parking requirements are met. If the *commercial motor vehicle* is a school bus, it may exceed a weight of 4,500 kilograms.

5.2.19.2 The parking or storage of a *commercial motor vehicle* with a registered gross vehicle weight of more than 4,500 kilograms on any *lot* that is subject to Residential Zone, Environmental Policy Area Zone or Agricultural and Rural Zone provisions is prohibited.

5.2.20 Parking and Storage of *Tractor Trailers*

5.2.20.1 The parking or storage of a *tractor trailer* on any *lot* that is subject to Residential Zone, Environmental Policy Area Zone or Agricultural and Rural Zone provisions is prohibited.

5.2.20.2 The parking or storage of a *tractor trailer* on any *lot* shall be screened by a *building,* a solid board fence or chain link fence with opaque fencing material which is a minimum of 2.0 metres high.

5.3 LOADING

5.3.1 Restriction On Use Of Land, *Buildings* And *Structures*

No *person* shall use any land, *building* or *structure* in any Commercial or Industrial *Zone* for any purpose permitted by this By-law, unless *loading spaces* are provided in accordance with the provisions of this Section of the By-law.

5.3.2 *Loading Space* Requirements

The minimum number of *loading spaces* required for the *uses* identified in Table **5.3.1** shall be calculated in accordance with the standards set out in **Table 5.3.2**:

TABLE 5.3.1

Uses
Airport
Building Supply Outlet
Bulk Storage Facility
Cannabis-Related Use - Indoor
Contractor's Facility
Dry Cleaning or Laundry Plant

Equipment Storage Building
Home Improvement Centre
Industrial Cannabis-Related Use – Outdoor
Industrial Hemp-Related Use – Indoor
Industrial Hemp-Related Use – Outdoor
Industrial Use
Light Equipment Rental Establishment
Maintenance Garage, Accessory
Motor Vehicle Body Shop
Motor Vehicle Repair Facility
Gravel Pit
Quarry
Research Establishment
Sanitary Landfill Site
Sewage Treatment Facility
Supermarket
Transportation Depot
Warehouse
Warehouse, Public Self-Storage
Warehouse, Wholesale
Waste Transfer Facility
Waste Processing Plant

TABLE 5.3.2

For that portion of the *Net Floor Area* of a *use* in Table 5.3.1 that is:	***Loading Space* Requirements (1)**
300 m^2 or less	Nil
301 m^2 to 2,325 m^2	1 *loading space*
2,326 m^2 to 7,440 m^2	*2 loading spaces*

7,441 m^2 or greater	3 *loading spaces* plus 1 additional *loading space* for each additional 9,300 m^2 or portion thereof in excess of 7,441 m^2

Footnote to Table 5.3.2:

(1) A *public use* with a *floor area* greater than 301m^2, owned and operated by the Town, shall require a maximum of one l*oading space.*

5.3.3 Size

Each *loading space* shall be at least 14 metres long, 3.5 metres wide and have a vertical clearance of at least 3.35 metres.

5.3.4 More Than One *Use* On A Lot

The minimum *loading space* requirements for more than one *use* on a *lot* or for a *building* containing more than one *use*, shall be the sum total of the *loading space* requirements for each of the component *uses*, unless otherwise noted.

5.3.5 Exclusive *Use* Of A *Loading Space*

Any required *loading space* shall be unobstructed and available for loading purposes and used exclusively for that purpose at all times, unless otherwise specified in this By-law.

5.3.6 Location Of Required *Loading Spaces*

Required *loading spaces* shall:

a) not be permitted in the *front yard* or *exterior side yard*;

b) not be located closer than 20 metres from any *street line* or Residential *Zone* boundary, but may be permitted within this area if the *loading space* is located entirely within a *structure* on a floor above the *first storey* or below established grade.

5.3.7 Surface Treatment

All required *loading spaces* and all *driveways* to any *loading space* shall be maintained with a stable surface which may include asphalt, concrete, concrete pavers, gravel or similar material which is treated so as to prevent the raising of dust or loose particles.

5.4 DELIVERY

5.4.1 Restriction on Use of Land, *Buildings* and *Structures*

No *person* shall use any land, *building* or *structure* in any Non-Residential *Zone* for any purpose permitted by this By-law, unless *delivery spaces* are provided in accordance with the provisions of this Section of the By-law.

5.4.2 *Delivery Space* Requirements

The minimum number of *delivery spaces* for the *uses* shown shall be calculated in accordance with the standards set out in **Table 5.4**:

TABLE 5.4

Uses	***Delivery Space* Requirements**
Adult Day Centre	1 per *building* per *lot*
Animal Hospital	1 per *building* per *lot*
Business Office	1 per *building* per *lot*
Community Centre	1 per *building* per *lot*
Clinic	1 per *building* per *lot*
Convenience Store	1 per *building* per *lot*
Crisis Care Facility	1 per *building* per *lot*
Day Care Facility	1 per *building* per *lot*
Day Nursery	1 per *building* per *lot*
Drive-Through Service Facility	1 per *building* per *lot*
Financial Institution	1 per *building* per *lot*
Fitness Centre	1 per *building* per *lot*
Funeral Home	2 per *lot*
Grocery Store	1 per *building* per *lot*
Hospital	2 per *lot*
Hotel	1 for each 20 guest rooms or portion thereof
Library	1 per *building* per *lot*
Long-Term Care Facility	1 per *building* per *lot*
Merchandise Service Shop	1 per *building* per *lot*
Motel	1 for each 20 guest rooms or portion thereof
Museum	1 per *building* per *lot*
Place of Assembly	1 per *building* per *lot*
Place of Entertainment	1 per *building* per *lot*
Place of Worship	1 per *building* per *lot*

Private Club	1 per *building* per *lot*
Restaurant	1 per *building* per *lot*
Retail Store	1 per *building* per *lot*
School	2 per *lot*
Sports Arena	1 per *building* per *lot*
Tourist Camp	1 for each accessory management office, plus 1 for each recreation building
Training Facility	1 per *building* per *lot*
Wellness Centre	1 per *building* per *lot*

5.4.3 Size

Each *delivery space* shall be at least 9 metres long, 3.5 metres wide and have a vertical clearance of at least 3 metres.

5.4.4 More Than One *Use* on a *Lot*

The minimum *delivery space* requirements for more than one *use* on a single *lot* or for a building containing more than one *use*, shall be the sum total of the *delivery space* requirements for each of the component *uses,* unless otherwise noted.

5.4.5 Exclusive *Use* of a *Delivery Space*

Any required *delivery space* shall be unobstructed and available for delivery purposes and used exclusively for that purpose at all times, unless otherwise specified in this By-law.

5.4.6 Location of Required *Delivery Spaces*

Required *delivery spaces* shall be located a minimum of 3 metres from any *street line* and a minimum of 6 metres from any Residential *zone* boundary.

5.4.7 Surface Treatment

All required *delivery spaces* and all *driveways* to any *delivery space* shall be maintained with a stable surface which may include asphalt, concrete, concrete pavers, gravel or similar material which is treated so as to prevent the raising of dust or loose particles.

Filed with the Registrar of Regulations
Déposé auprès du registrateur des règlements

SEP 09 2022

Number (O. Reg.)
Numéro (Règl. de l'Ont.) → 483/22

ONTARIO REGULATION

made under the

PLANNING ACT

ZONING ORDER - TOWN OF CALEDON, REGIONAL MUNICIPALITY OF PEEL

Definition

1. In this Order,

"Zoning By-law" means Zoning By-Law No. 2006-50 of the Town of Caledon.

Application

2. (1) This Order applies to lands in the Town of Caledon, in the Regional Municipality of Peel, in the Province of Ontario, being the lands outlined in red on a map numbered 314 and filed at the Toronto office of the Ministry of Municipal Affairs and Housing located at 777 Bay Street.

(2) For the purposes of this Order, the side yard of any building abutting a property line adjacent to a public road shall be considered an exterior side yard.

Prestige Industrial Zone

3. (1) This section applies to the lands located in the area shown as the Prestige Industrial Zone on the map referred to in subsection 2 (1).

(2) Every use of land and every erection, location or use of any building or structure is prohibited on the lands referred to in subsection (1), except for,

(a) the uses permitted in the Prestige Industrial (MP) Zone in the Zoning By-law;

(b) cold storage warehouses;

(c) accessory open storage areas;

iv. any portion of an interior side lot line that abuts a residential use, and

v. each lot line of an interior side yard.

15. The landscaped area may include a surfaced walk, a surfaced patio, a stormwater management pond and a naturalized area, but must not include any driveway or vehicular access ramp, curb, retaining wall, parking area, delivery space or loading space.

16. The minimum parking space setback is 6 metres from any front lot line and 3 metres from any other lot line.

17. The maximum net floor area of a factory outlet is 20 per cent of the net floor area of the industrial facility to which it is accessory.

18. The maximum net floor area of a sales display area associated with a wholesale warehouse is 33 per cent of the total net floor area.

19. For the purposes of calculating the lot area,

i. the lands described in subsection 2 (1) shall be considered a single lot, and

ii. public roads and public lands shall not be included in the lot area calculation.

20. For the purposes of calculating the building area, the gross floor area is to be divided by the lot area, excluding any rooftop mechanical structures.

21. The maximum entrance width is 25 metres.

22. Despite the requirements set out in section 5.2.3 of the Zoning By-law, the parking requirements for a warehouse use are one space per 230 square metres of gross floor area.

23. Section 5.2.19 of the Zoning By-law does not apply to the lands described in subsection 2 (1).

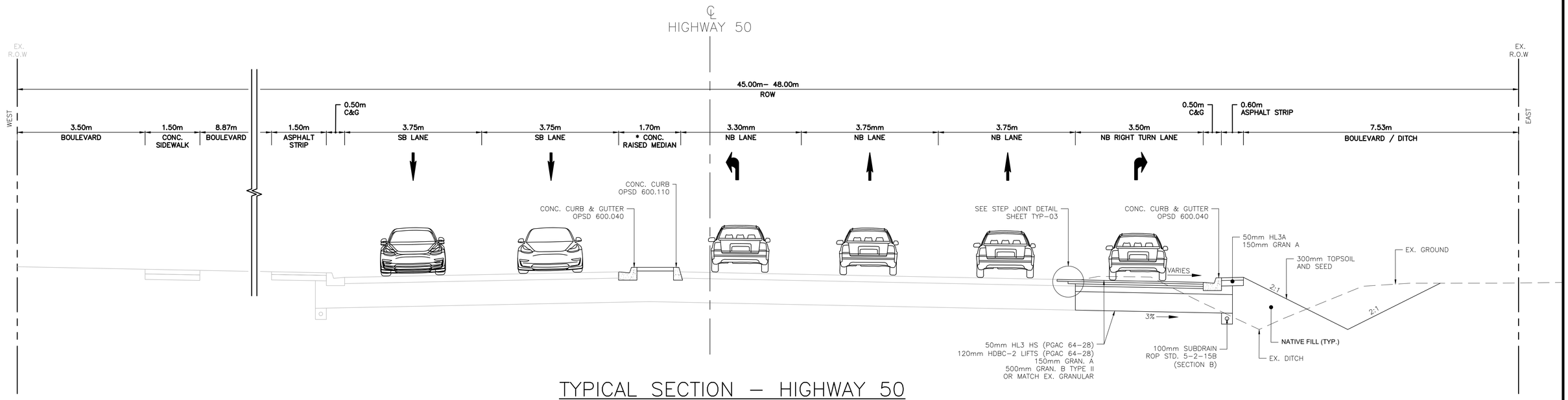
24. Despite paragraph 23, where loading and delivery parking areas are illuminated, no part of the lighting fixture shall be more than 14 metres above grade.

(2) The zoning requirements for the open storage of goods and materials are as follows:

1. The storage of goods and materials must not exceed 25 per cent of the lot area.

Appendix P

Proposed Cross-Section - George Bolton - Hwy 50 Cross Section

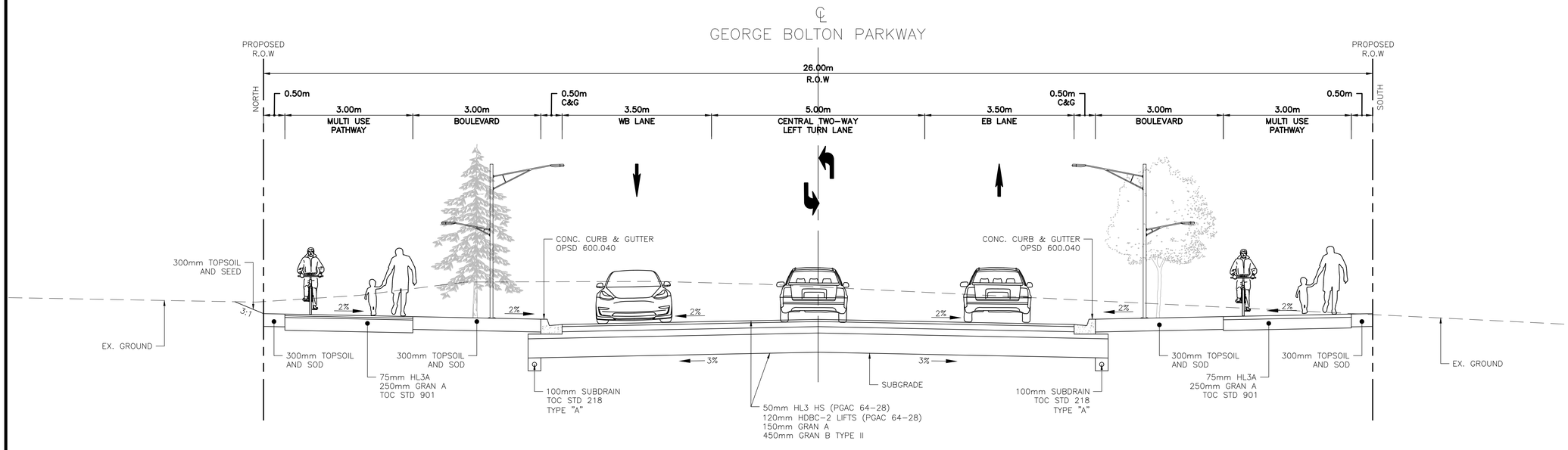


TYPICAL SECTION – HIGHWAY 50

STA. 9+821.457 TO STA. 10+067.327

* SOUTH = STA. 9+947.938 TO STA. 9+978.688

* NORTH = STA. 10+020.177 TO STA. 10+067.327



TYPICAL SECTION – GEORGE BOLTON PARKWAY

STA. 1+026.81 TO STA. 1+541.60

NOTE: ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.

NO.	BY	DATE	REVISION	CONS. CHECKED	TOWN APPR'D
1	A.I.	22/04/22	60% DESIGN REVIEW SUBMISSION		

APPROVED FOR CONSTRUCTION

THIS APPROVAL CONSTITUTES A GENERAL REVIEW AND DOES NOT CERTIFY DIMENSIONAL ACCURACY.

THIS APPROVAL IS SUBJECT TO THE FURTHER CERTIFICATION OF THE "AS RECORDED" WORKS BY A REGISTERED PROFESSIONAL ENGINEER OF THE PROVINCE OF ONTARIO.

DATE :_____ APPROVED BY:_____
MANAGER OF ENGINEERING SERVICES

BENCH MARK:

ENGINEER'S STAMP

PROJECT NAME
GEORGE BOLTON PARKWAY EXTENSION

CONSULTANT
BURNSIDE
R.J. Burnside & Associates Limited
6990 Creditview Road, Unit 2
Mississauga, Ontario, L5N 8R9
telephone (905) 821-1800
fax (905) 821-1809
web www.rjburnside.com

REGION OF PEEL

TOWN OF CALEDON

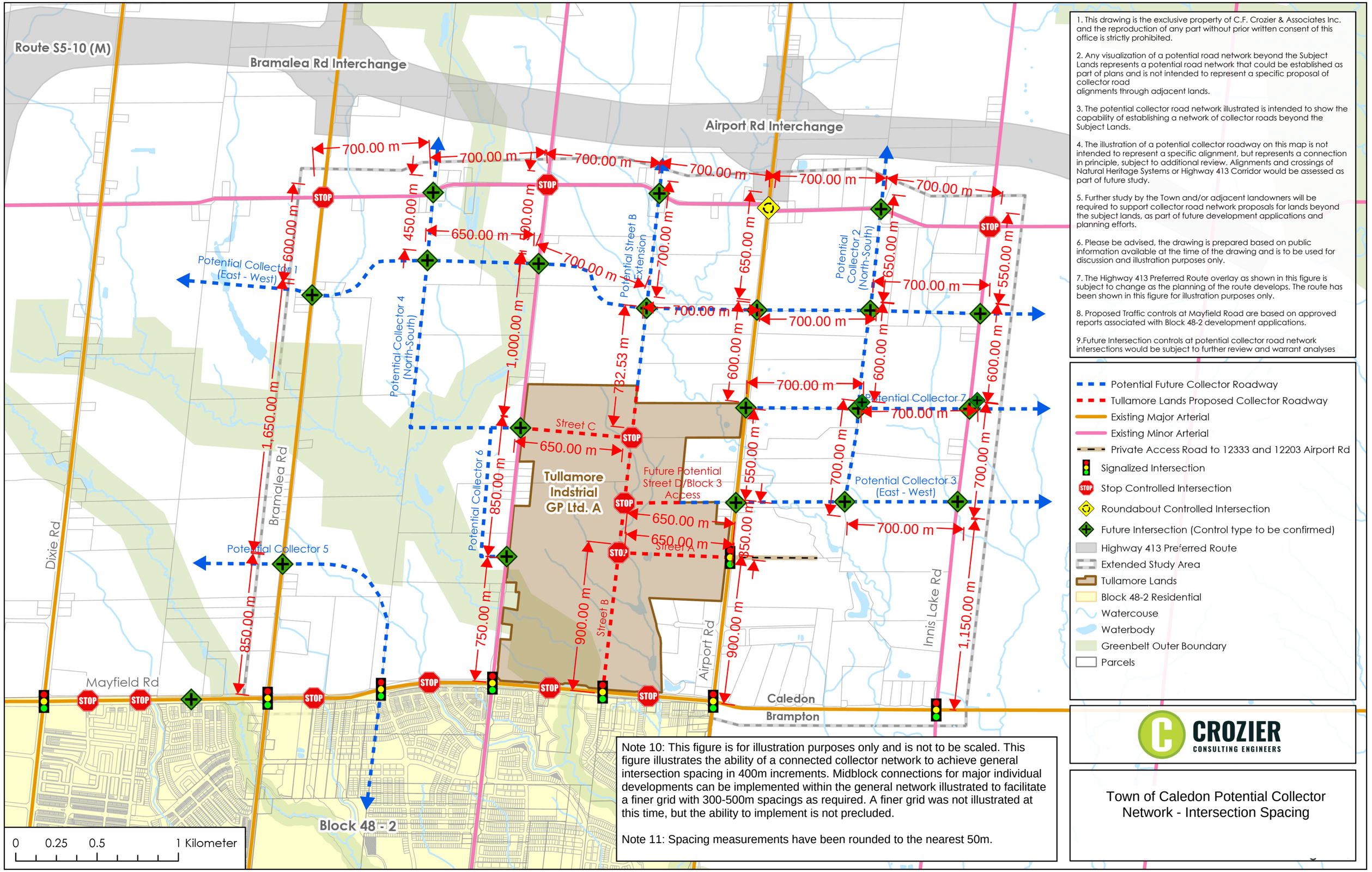
GEORGE BOLTON PARKWAY / HIGHWAY 50
TYPICAL CROSS SECTIONS

SCALE: N.T.S.			PROJECT No. 300052765
DESIGNED BY: R.B.	DRAWN BY: R.B.		DRAWING No. TYP–01
CHECKED BY: A.I.	DATE: 2021/05/19		SHEET No. 46 OF 94

Plotted – April 21, 2022 File: \\Vmonty\Shared Work Areas\052765 George Bolton Ext\03_Production\Dwg\10–052765–Typical_Cross_Sections.dwg

Appendix Q

Town of Caledon Official Plan Conformance to Collector Network



1. This drawing is the exclusive property of C.F. Crozier & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. Any visualization of a potential road network beyond the Subject Lands represents a potential road network that could be established as part of plans and is not intended to represent a specific proposal of collector road alignments through adjacent lands.

3. The potential collector road network illustrated is intended to show the capability of establishing a network of collector roads beyond the Subject Lands.

4. The illustration of a potential collector roadway on this map is not intended to represent a specific alignment, but represents a connection in principle, subject to additional review. Alignments and crossings of Natural Heritage Systems or Highway 413 Corridor would be assessed as part of future study.

5. Further study by the Town and/or adjacent landowners will be required to support collector road network proposals for lands beyond the subject lands, as part of future development applications and planning efforts.

6. Please be advised, the drawing is prepared based on public information available at the time of the drawing and is to be used for discussion and illustration purposes only.

7. The Highway 413 Preferred Route overlay as shown in this figure is subject to change as the planning of the route develops. The route has been shown in this figure for illustration purposes only.

8. Proposed Traffic controls at Mayfield Road are based on approved reports associated with Block 48-2 development applications.

9.Future Intersection controls at potential collector road network intersections would be subject to further review and warrant analyses

- Potential Future Collector Roadway
- Tullamore Lands Proposed Collector Roadway
- Existing Major Arterial
- Existing Minor Arterial
- Private Access Road to 12333 and 12203 Airport Rd
- Signalized Intersection
- Stop Controlled Intersection
- Roundabout Controlled Intersection
- Future Intersection (Control type to be confirmed)
- Highway 413 Preferred Route
- Extended Study Area
- Tullamore Lands
- Block 48-2 Residential
- Watercouse
- Waterbody
- Greenbelt Outer Boundary
- Parcels

Note 10: This figure is for illustration purposes only and is not to be scaled. This figure illustrates the ability of a connected collector network to achieve general intersection spacing in 400m increments. Midblock connections for major individual developments can be implemented within the general network illustrated to facilitate a finer grid with 300-500m spacings as required. A finer grid was not illustrated at this time, but the ability to implement is not precluded.

Note 11: Spacing measurements have been rounded to the nearest 50m.

CROZIER CONSULTING ENGINEERS

Town of Caledon Potential Collector Network - Intersection Spacing

Crozier Project No. 2022-5842

Official Plan Conformance: The Town of Caledon Draft Official Plan (2022) issues a series of mobility objectives per Section 4.5 (Our Mobility Plan to Connect Caledon). The ability of the proposed development's collector network (Street's A, B and C) and its conformance with these policy objectives are summarized in the Table below. In addition, potential collector road network opportunities beyond the subject lands were also reviewed to confirm that the proposed development does not preclude the establishment of a future collector network beyond the subject lands that satisfy the Town's policy objectives.

Section 4.5 – Our Mobility Plan to Connect Caledon		
Draft OP Section	**Objective**	**Conformance with Objective**
4.5.1	Through this Official Plan, the Town will endeavour to: a) Develop an environmentally sustainable transportation system that allows for safe, convenient, economical, equitable, and efficient movement of people (including persons with disabilities), goods and services. b) Develop a transportation system that supports connections to the Region of Peel and the rest of the Greater Toronto and Hamilton. c) Encourage and support sustainable mobility options such as public transit, active transportation, and car-sharing through further investment into facilities and by ensuring seamless integration with other modes of transportation. d) Increase active transportation mode shares, through the development of a safe and well-connected active transportation network that prioritizes a high level of protection for cycling and pedestrian facilities and is wellintegrated with active transportation networks in adjacent municipalities. e) Create and regularly update an Active Transportation Master Plan for the Town that seeks to create a safer community through the provision of new pedestrian and cycling facilities, trail networks and complete streets f) Establish a connected and continuous grid system for the street network to support convenient and efficient travel by all modes of transportation. g) Embrace a transportation system that prioritizes transportation equity by recognizing that auto-mobile based transportation systems disproportionately affect vulnerable residents. This includes impacts to low-income residents, children, seniors, and persons with disabilities, and others who are restricted in movement caused by auto-mobile dependency. Freedom of mobility is a	**Subject Lands** The subject lands propose collector roadways that connect with existing and planned intersections. The cross sections proposed have 3.0m multi use paths on both sides of the roadways which provide physical separation for active transportation from automobile paths of travel within the development. Street B connects to Block 48-2 roadways south of Mayfield Road, facilitating a well-connected active transportation network with existing MUP on the south side of Mayfield and planned sidewalks and MUPs within Block 48-2. Transit opportunities within the proposed development are currently being explored with Brampton Transit to modify adjacent routes (Route 30) to serve the development; with potential bus stops located at internal intersections. **Potential Collector Network** The potential collector road network opportunities beyond the subject development can support a modified grid network that allows for north-south and east-west connectivity to support mobility options for future development. Potential collector links will have opportunity to connect future development with the Regional network (Airport Road and Mayfield Road) and will also have opportunities for proximal connections near the future

	fundamental human right, therefore a transportation system needs to accommodate this vision. h) Collaborate and coordinate with the Province, the Region of Peel, Metrolinx and neighbouring municipalities to encourage these authorities to maintain, connect and improve roads and services under their jurisdiction within the Town, as appropriate, and ensure that the Caledon transportation system is well-integrated with the surrounding region and protects for future transportation facilities. i) Support the Climate Change objectives and policies of this Plan by developing a transportation system that targets net-zero emissions through the prioritization of transit and active transportation facilities and the development of a communitywide zero-emission vehicle strategy, including expansion of public vehicle charging infrastructure. j) Prioritize transit investments within Centres and Corridors by maximizing the use of existing and planned transit infrastructure in accordance with the policies of this Plan, with consideration of the existing and planned level of transit service and potential impacts on nearby neighbourhoods	Highway 413 route for increased convenience if desired. It is expected that a future collector road network will also have adequate ROW to support active transportation infrastructure on both sides of the roadway, with the ability to accommodate future transit service when warranted.
4.5.2	The Town will adopt complete streets design principles to prioritize travel of all modes and ensure safety of all ages and abilities within the existing and new built form	**Subject Lands** All internal collector roadways have been designed with 3.0m MUP on both sides providing pedestrian and cyclist connectivity to the external roadway network, with physical separation from automobile paths of travel. Transit service is also supportable within the proposed street design, and opportunities to provide internal transit service via modification of adjacent routes are currently being discussed with Brampton Transit and Town of Caledon. The pavement width will also be able to accommodate automobile traffic including truck traffic associated with the industrial nature of the proposed development. **Potential Collector Network Opportunities** The potential network opportunities beyond the subject site is expected to support all modes of travel with physical separation of active transportation facilities from vehicle paths of travel where possible, subject to any constraints that me be identified during more detailed review. The potential for a modified grid
4.5.3	The Town will prioritize transit and active transportation in all transportation network updates and expansion, and consider lower minimum parking requirements in appropriate areas to encourage transit usage.	

		system will also support active transportation connectivity and opportunities for transit route expansion with direct pedestrian connections to future bus stops.
4.5.45	The Town will examine the need for a public transit service, as warranted by economic feasibility and service demand, and will incorporate the transit function in the planning and development process by: a) Establishing a grid system for roads as development occurs, to enable effective transit use for community services, the efficient movement of traffic and emergency vehicle access; b) Including future public transit facilities in the formulation of secondary plans; c) Providing future transit facilities in staging settlement expansions and future development; d) Including future public transit facilities in the approval process for subdivision plans, site plans and other development proposals; e) Locating high density residential or commercial developments on anticipated transit routes or within 400 metres of those routes; f) Locating retirement homes and community facilities on anticipated transit routes or within 200 to 300 metres of those routes; and, g) Encouraging the use of park 'n' ride automobile facilities and ride sharing centres, to access inter-regional and municipal transit services connecting the Town with urban centres	**Subject Lands** A modified grid system is proposed within the subject development. Public transit facilities including potential bus stop locations are identified as part of the internal collector network, with bus stop locations within 400m. Discussions with Brampton Transit are ongoing with regards to providing service within the proposed development via modifying adjacent transit routes. **Potential Collector Network Opportunities** The opportunities for a potential collector network beyond the proposed development have the ability to support a modified grid pattern that can support future transit service as demand warrants. Such a network can also support future development within 400m of potential transit routes with shorter connections if required depending on the future land uses envisioned.
4.5.53	The Town will strive to achieve a significant increase in vehicle occupancy rates on an overall basis by continuing to work with the Region of Peel to encourage employers/employees to choose sustainable modes of transportation for their daily commutes	**Subject Lands** TDM opportunities have been identified to support increased mode share within the proposed development, which include planning for expanded transit service, carpool priority parking spaces, encouraging future tenants to join Travel Management Associations such as Smart Commute to assist with trip planning and provision of bike facilities on-site. Specific TDM measures for each block will be confirmed through future Site Plan Applications. **Potential Collector Network Opportunities** The opportunities for a potential collector network beyond the proposed development have the ability to support increase

		active transportation mode share, and future transit routes. It is expected that future developments will develop TDM plans to support increased sustainable mode share and reduce SOV trips.
4.5.54	In new developments in the designated greenfield areas, the Town will require the creation of street configurations, densities and urban form that prioritize walking, cycling and that can accommodate the early integration and sustained viability of transit services.	**Subject Lands** A modified grid system is proposed within the subject development. MUPs are proposed on both sides of the internal street network that prioritize walking and cycling. Public transit facilities including potential bus stop locations are identified as part of the internal collector network and discussions with Brampton Transit are ongoing with regards to providing service within the proposed development via modifying adjacent transit routes. **Potential Collector Network Opportunities** The opportunities for a potential collector network beyond the proposed development have the ability to prioritize active transportation modes by providing dedicated facilities and connectivity via a modified grid pattern. Similarly, future transit service is supportable and will have the potential to be implemented when demand warrants.
4.5.68	The Town will promote active transportation modes in collaboration with relevant jurisdictions and agencies by implementing infrastructure elements and requiring active transportation systems for new developments that include but are not limited to: a) Provisioning for safe and convenient active transportation facilities such as sidewalks, multi-use paths, trails, cycling infrastructure, and bicycle parking for all development applications; b) Establishing Site Plan control requirements to improve pedestrian and cycling connectivity at and between a site; c) Building safe active transportation facilities that make connections between settlement areas and rural settlement areas; d) Designing sidewalks and cycling facilities to remain consistent with Accessibility for Ontarians with Disabilities Act standards to achieve a barrier-free network accessible for all ages and abilities;	**Subject Lands** All internal collector roadways have been designed with 3.0m MUP on both sides providing pedestrian and cyclist connectivity to the external roadway network, with physical separation from automobile paths of travel. As cycling and bike facilities will be on both sides of the roadway, pedestrian and cycling facilities will be located within the vicinity of all future transits stops. Bicycle parking provisions are encouraged for individual blocks and should be confirmed as part of future Site Plan applications. During detailed design, adequate signage and design of AT facilities will also be required. **Potential Collector Network Opportunities**

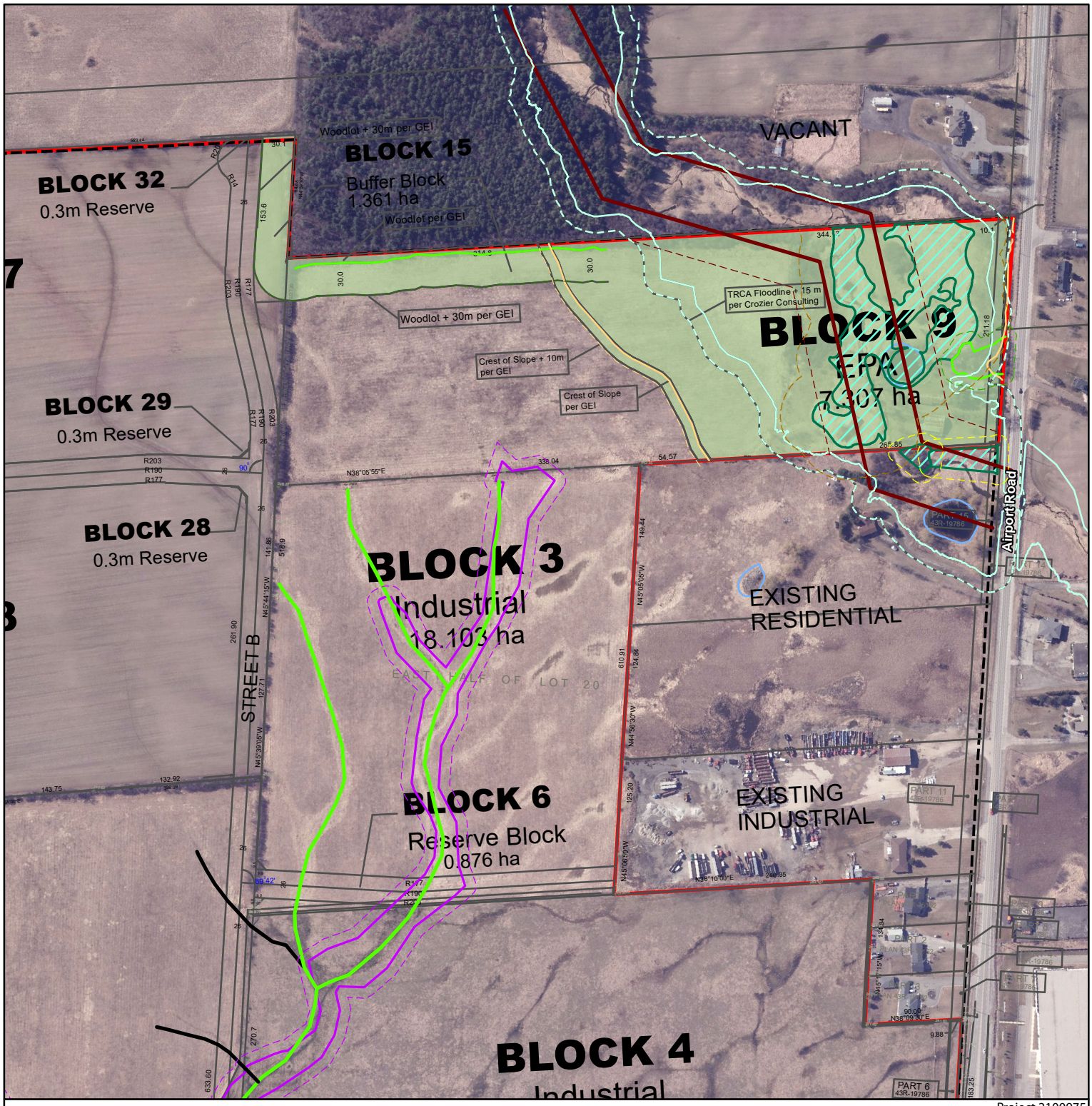
	e) Providing a degree of separation for bicycle facilities where applicable; f) Providing bike parking and storage facilities at transit terminals and MTSAs g) Providing safe pedestrian and cycling facilities in the vicinity of transit stops and stations; h) Provisioning for pedestrian facilities on all existing, new and reconstructed roads during the review of development applications and as part of road construction and reconstruction projects, while also considering the impact to the character of the community and surrounding land uses and design; i) Adopting requirements for minimum bicycle parking spaces, bicycle storage facilities and other active transportation amenities, such as showers and change rooms, in conjunction with all high/medium density residential developments, employment nodes and other appropriate locations; j) Integrating active transportation facilities where possible when designing and constructing/reconstructing roads, bridges, and intersections; and k) Ensuring that all active transportation facilities meet or exceed industry safety standards, and are supported through appropriate design, signage and consistent safety enforcement	The potential network opportunities beyond the subject site is expected to support all modes of travel with physical separation of active transportation facilities from vehicle paths of travel where possible, subject to any constraints that me be identified during more detailed review. Future development is also expected to provide active transportation supportive infrastructure as well as the establishment of site-specific TDM plans. A future collector system beyond the subject lands will have the ability to prioritize active transportation infrastructure as required.
4.5.72	The Town will encourage the development of a system of bicycle and pedestrian facilities to link major public open spaces, activity centres, public washrooms, and the transportation network in a manner that enhances the quality of life for residents, businesses and visitors.	**Subject Lands** All internal collector roadways have been designed with 3.0m MUP on both sides providing pedestrian and cyclist connectivity to the external roadway network, with physical separation from automobile paths of travel and direct linkages to major open spaces such as the potential park southwest of the subject lands, and planned open spaces within Block 48-2. Transit service is also supportable within the proposed street design, and opportunities to provide internal transit service via modification of adjacent routes are currently being discussed with Brampton Transit and Town of Caledon. The pavement width will also be able to accommodate automobile traffic including truck traffic associated with the industrial nature of the proposed development. **Potential Collector Network Opportunities**

		The potential network opportunities beyond the subject site is expected to support all modes of travel with physical separation of active transportation facilities from vehicle paths of travel where possible, subject to any constraints that me be identified during more detailed review. The potential for a modified grid system will also support active transportation connectivity and opportunities for transit route expansion with direct pedestrian connections to future bus stops.
4.5.73	Consideration will be given in all new subdivision and development proposals to provisions for multi-use links with transportation networks.	**Subject Lands** All internal collector roadways have been designed with 3.0m MUP on both sides providing pedestrian and cyclist connectivity to the external roadway network, with physical separation from automobile paths of travel. Transit service is also supportable within the proposed street design, and opportunities to provide internal transit service via modification of adjacent routes are currently being discussed with Brampton Transit and Town of Caledon. The pavement width will also be able to accommodate automobile traffic including truck traffic associated with the industrial nature of the proposed development. **Potential Collector Network Opportunities** The potential network opportunities beyond the subject site is expected to support all modes of travel with physical separation of active transportation facilities from vehicle paths of travel where possible, subject to any constraints that me be identified during more detailed review. The potential for a modified grid system will also support active transportation connectivity and opportunities for transit route expansion with direct pedestrian connections to future bus stops.
4.5.74	To provide for the safe efficient movement of trucks through and within the Town and minimize the impact of heavy trucks on residential areas, the Town: a) Will generally encourage the primary through truck traffic onto high-capacity arterial roadways, where road pavement structure is deemed structurally	**Subject Lands** The subject site abuts the Regional Roads of Airport Road and Mayfield Road and proposes collector connections to these roadways. Heavy Truck Traffic generated by the subject site will

	adequate. The Town will endeavour to keep the arterial roads open to truck traffic throughout the year; b) Will permit truck use of medium capacity arterials and collector roadways only as connectors to service high-capacity arterial routes, pending structural suitability; c) Will prohibit truck traffic on all local roadways, except in cases of local delivery and only in the absence of alternative acceptable routing; d) May restrict heavy truck usage on part or all thereof of any municipal right-of-way through passage of a "No Heavy Truck" by-law; and, e) May endeavour to impose seasonal load restrictions on arterial and collector roadways for reasons of structural inadequacy. Primary route closures due to seasonal load restrictions will be discouraged and every effort will be made to re-route truck traffic onto acceptable routes for the term of the restriction	not require use of local roadways to access the site, beyond the new collectors proposed as part of the development proposal. **Potential Collector Network Opportunities** For future development beyond the subject lands, a potential collector road network in the future has the potential to connect with Airport Road and Mayfield Road to serve Heavy Truck Traffic as warranted, which would facilitate future access to the Regional road network. It is expected that future developments that may require Heavy Truck usage would evaluate truck routes to comply with Town by-law requirements on truck restrictions; or make appropriate arrangements with the Town to ensure any alternate routes will be on roadways with structural adequacy.

Appendix R

CEISMP Excerpts



Project 2100975

NOTES:

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023; Toronto Region Conservation Authority, 2023.
3. Orthoimagery © First Base Solutions, 2021. Imagery taken in 2019.
4. Concept Plan: 10208 Draft Plan D6_2023-10-24.

** Contributing Redside Dace Habitats would also include wetlands and their associated setbacks*

Legend

- Subject Lands
- Study Area
- Draft Plan (2023-10-24)
- Waterbody (LIO)
- Wetland
- ELC Wetlands (Ground-Truthed, Not Staked)
- Regional Floodline (Croziers, 2022)
- Dripline (GEI, Jan 2023)
- Meander Belt

HDF Management Recommendation

- Mitigation
- No Management Required
- Crest of Slope (TRCA)
- Meander Belt +30m
- Regional Floodline +10m
- Wetland +10m
- Wetland +30m
- Woodland +10m
- Woodland +30m
- Crest of Slope +10m
- Salt Creek Floodline (Crozier)
- Salt Creek Floodline +15m (Crozier)
- Natural Heritage System

Comprehensive Environmental Impact Study and Management Plan, Tullamore Employment Lands
Tullamore Industrial LP

Figure 12A
Conceptual Plan and Natural Heritage System (Salt Creek Area)

0 100 m

1:5,000

GEI Consultants

Path: \\toe-pzcc-1\Data_Storage\Working\RICE GROUP\2100975 Tullamore Employment Lands\05_GIS\figures\report_figures\2023 01 17 eis\2100975_rpt_fig12A_concept_plan_and_NHS_salt_creek_area.mxd Date Saved: Friday, October 27, 2023

Appendix S

Town of Caledon Active Transportation Plan Excerpts and MUT Cross-Section

Network Recommendations

Town of Caledon Active Transportation Master Plan

Network Recommendations

- Multi-use Trail
- Multi-use Path
- Paved Shoulder
- Painted Bike Lane
- Shared Cycling Facility

Existing/Planned Facilities

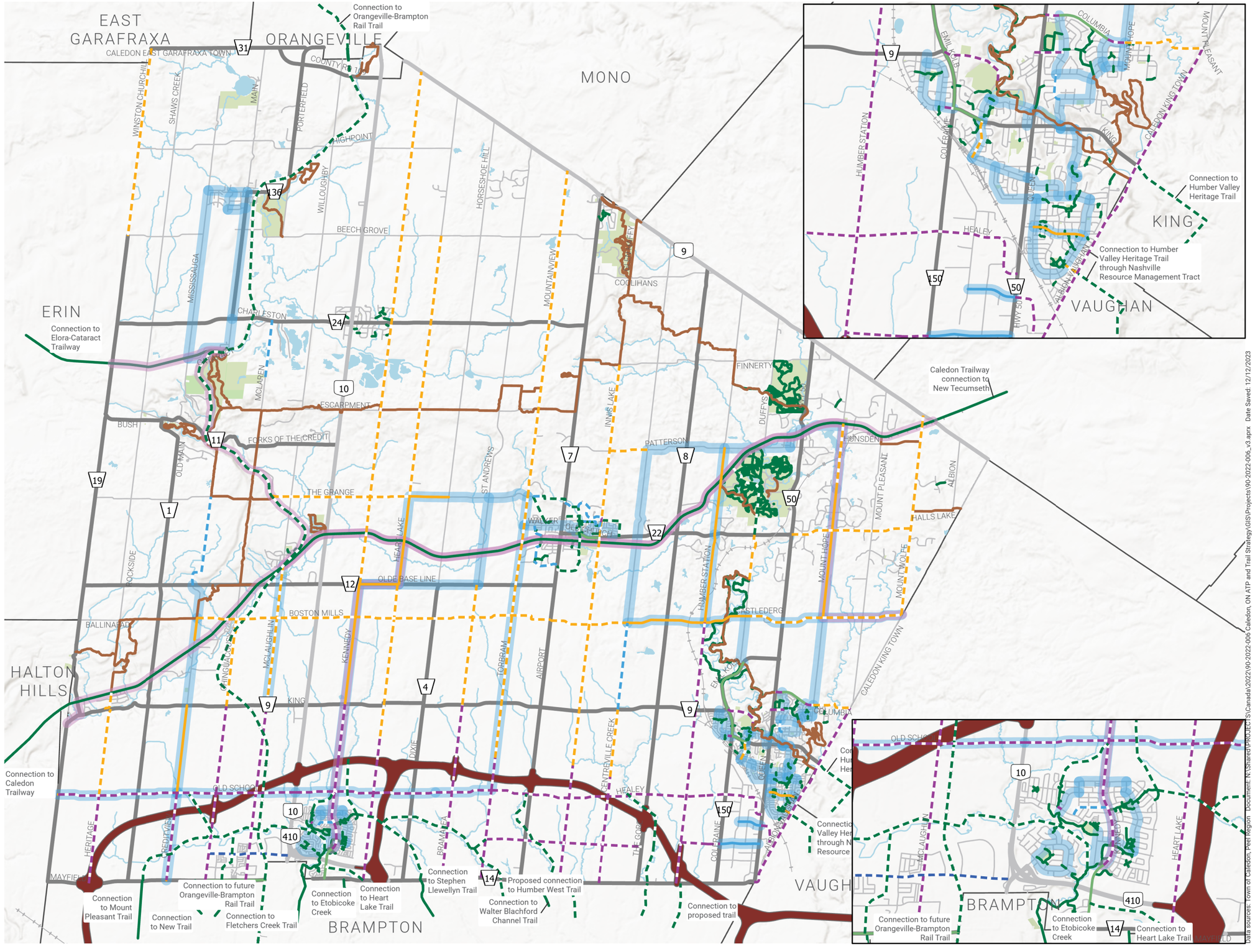
- Multi-use Trail
- Hiking Trail
- Designated Trail
- Multi-use Path
- Painted Bike Lane
- Paved Shoulder
- Signed Cycling Routes

Other Features

- GTA West Preferred Route
- Regional Road
- Railway
- Park
- Provincial Park
- Municipal Boundaries

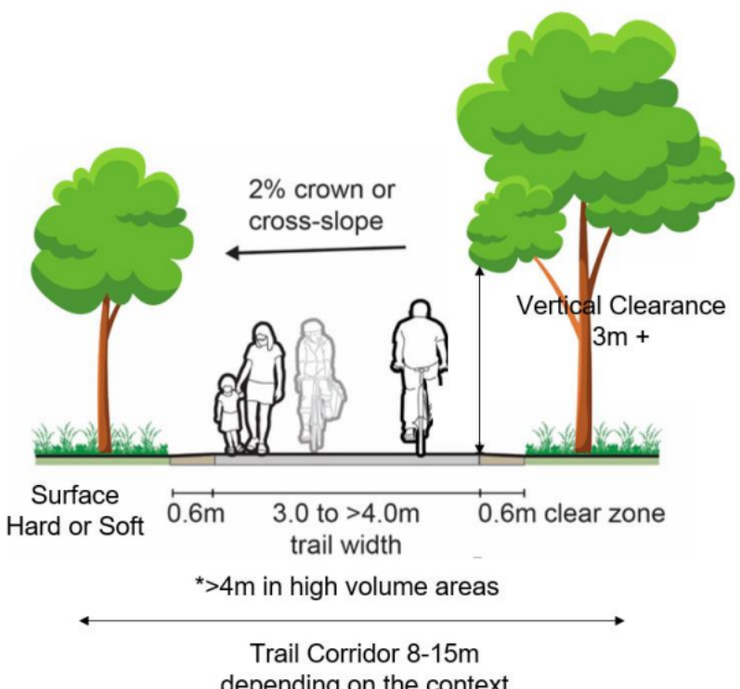
0 2 4 KILOMETRES

alta

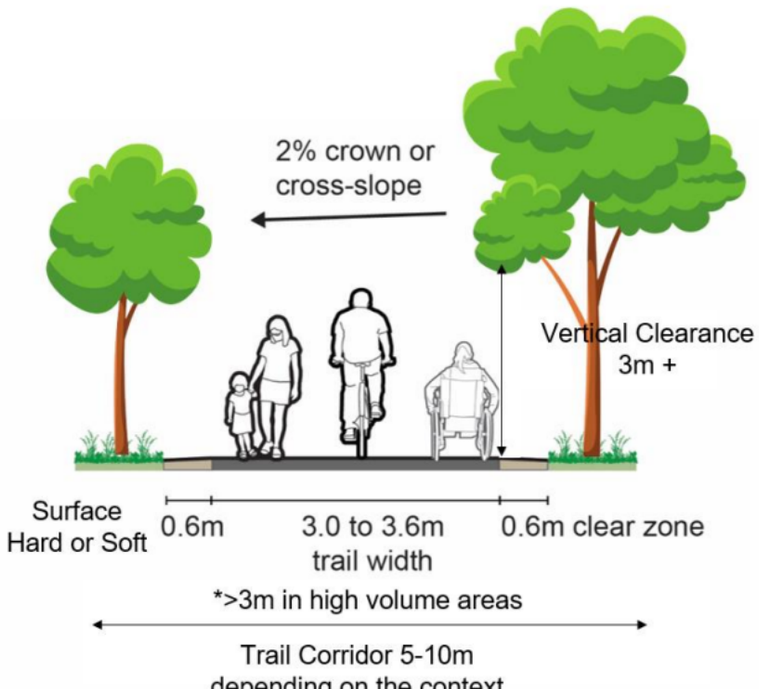


Trails Classifications and Design

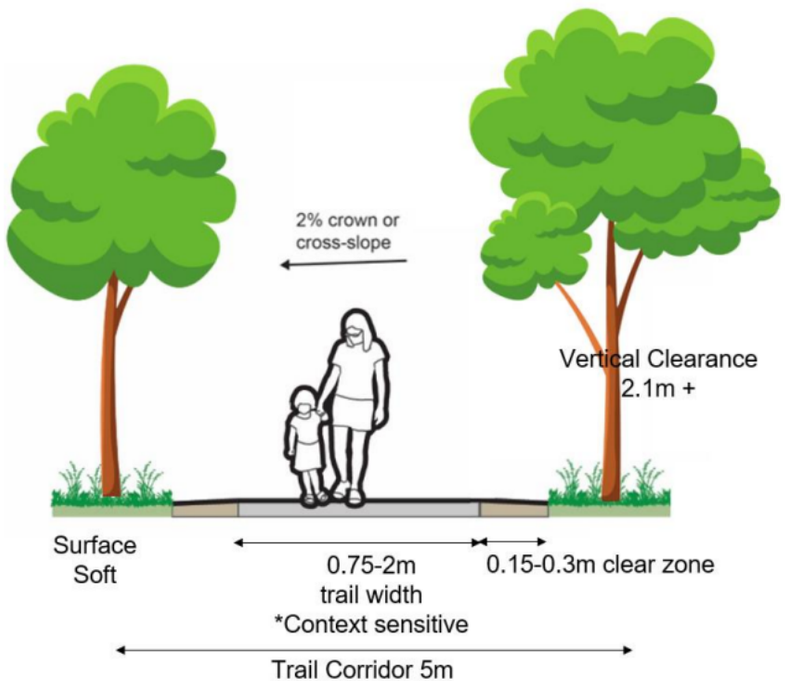
Primary Trails



Neighbourhood Connector Trails



Walking Trails



Appendix T

Functional Design Considerations, Truck Turning, and PMSP

Functional Design Brief

2800 High Point Drive, Suite 100
Milton, ON
L9T 6P4

T. 905.875.0026
cfcrozier.ca

MEMO

DATE April 18, 2024 **PROJECT NO. 2022-5842**

RE Updated Design Brief
Tullamore Lands, 0 & 12245 Torbram Road
Town of Caledon, Region of Peel

TO Catherine Barnes
Specialist, Transportation Development – Region of Peel

Hashim Hamdani
Supervisor, Traffic Development & Permits – Region of Peel

FROM Stephen Shaw, P.Eng.
Project Manager – C.F. Crozier & Associates.

CC Patrick Amaral, MES(PI)
Principal Planner, Planning and Development Services – Region of Peel

Rani Kol
Specialist, Transportation Development – Region of Peel

Dear Catherine and Hashim,

C.F. Crozier & Associates Inc. (Crozier) was retained by Tullamore Industrial GP Limited to undertake the conceptual design and subsequent detailed design of the proposed external road improvements to support the industrial development located in the Tullamore Lands, 0 & 12245 Torbram Road (Site) in the Town of Caledon (Town), Region of Peel (Region).

This memorandum was prepared to highlight the rationale behind updated proposed intersection layouts of Airport Road at "Street A" and Mayfield Road at "Street B", based on the Region's comments dated February 1, 2024, and follow-up virtual meeting dated March 18, 2024.

1.0 Background

The development site encompasses an approximate area of 502 acres (203 ha) and consists primarily of greenfield lands. The site is bounded by Airport Road to the east, Mayfield Road to the south, Torbram Road to the west, and vegetated undeveloped land to the north.

In our previous Design Brief, dated 2023 October 27, there was a request to reduce the posted speed along Mayfield Road in the vicinity of our proposed traffic signal-controlled intersection. In the Region's comments it was highlighted that the speed reduction will be taken into consideration, however the roadway should be designed in keeping with a design speed of posted speed + 10 km/h.

The material in this memo reflects best judgment in light of the information available at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. C.F. Crozier & Associates Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

2.0 Proposed Intersection Improvements

The following standards and documents were consulted in preparation of the accompanying functional design:

- Transportation Association of Canada's Geometric Design Guide for Canadian Roads – MTO Design Supplement (TAC MTO April 2020).
- Transportation Association of Canada's Geometric Design Guide for Canadian Roads (TAC June 2017).
- Ontario Ministry of Transportation – Ontario Provincial Standard Specifications/Drawings (OPSS/OPSD).
- Region of Peel, Public Works Design Criteria Manual – Roads and Traffic (February 2010) and Standard Drawings.
- Road Characterization Study for the Region of Peel (RCS) (May 2013).
- Town of Caledon, Development Standards Manual (2019) and Standard Drawings.
- Ontario Traffic Manuals (OTM): Book 5 (Regulatory Signs), Book 11 (Pavement, Hazard, and Delineation Markings), and Book 18 (Cycling Facilities).
- Transportation Impact Study (TIS) (Crozier, April 2024).

2.1 Design Criteria

Currently the posted speed limit along both Airport Road and Mayfield Road in the vicinity of the proposed intersections with Streets A and B, respectively, is 80km/h. Therefore, in keeping with the Region's comments the proposed design speed proposed is 90km/h. The proposed geometry for the auxiliary lanes along Mayfield Road has been revised and are based on Exhibits 9-J and 9-R per TAC MTO April 2020 Supplement.

Table 1: Design Criteria

Design Element	Airport Road at Street 'A'		Mayfield Road at Street 'B'	
	Airport Road	**Street 'A'**	**Mayfield Road**	**Street 'B'**
Jurisdiction	Region of Peel[1]	Town of Caledon	Region of Peel[1]	Town of Caledon
Region Code	7[1]	-	14[1]	-
Road Classification	Urban Arterial (Divided)	Industrial Collector	Urban Arterial (Divided)	Industrial Collector
R.O.W. Width	45 m[2]	26 m[3,5]	50 m[2]	26 m[3,5]
Property Line Buffer/Rounding	0.3 m[2]	-	0.3 m[2]	0.3 m[4]
Pavement Width	Exist. 21 m **Prop. 25 m**	**Prop. 12.0 m[5]**	Exist. 28 m **Prop. 31.5 m**	**Prop. 12.0 m[5]**
Maximum Posted Speed	80 km/h (north of Davis Ln.) 60 km/h (south of Davis Ln.)	50 km/h	80 km/h (WB: 460 m west of Airport Rd. & EB: east of Torbram Rd.) 60 km/h	50 km/h

Design Element	Airport Road at Street 'A'		Mayfield Road at Street 'B'	
	Airport Road	**Street 'A'**	**Mayfield Road**	**Street 'B'**
			(WB: west of Airport Rd. & EB: 460 m west of Airport Rd.)	
Design Speed	90 km/h (north of Davis Ln.) 70 km/h (south of Davis Ln.)	60 km/h	90 km/h (WB: 460 m west of Airport Rd. & EB: east of Torbram Rd.) 70 km/h (WB: west of Airport Rd. & EB: 460 m west of Airport Rd.)	60 km/h
Lane Configuration (Interim)	**1 NBL**, 2 NBT, 1 NBR, **1 SBR,** 2 SBT, 1 SBL,	**1 EBTR, 1 EBL**	3 EBT, **1 EBL**, 3 WBT, **1 WBR**	**1 SBTR, 1 SBL**
Lane Configuration (Ultimate)	**1 NBL**, 2 NBT, 1 NBR, **1 SBR**, 2 SBT, 1 SBL	**1 EBR, 1 EBT, 1 EBL**	3 EBT, **1 EBL**, **1 EBR**, 3 WBT, **1 WBL**, **1 WBR**	**1 SBT, 1 SBL, 1 SBR, 1 NBTR, 1 NBL**
Lane Widths (Interim)	NBT: 3.50 m NBR: 3.50 m **NBL: 3.50 m**[6] SBT: 3.50 m SBL: 3.50 m **SBR: 3.50 m**[6]	**EBTR: 3.50 m**[5] **EBL: 3.75 m**[5]	EBT: 3.75 m **EBL: 3.50 m**[6] WBT: 3.50-3.75 m **WBR: 3.50 m**[6]	**SBTR: 3.50 m**[5] **SBL: 3.75 m**[5]
Lane Widths (Ultimate)	NBT: 3.50 m NBR: 3.50 m **NBL: 3.50 m**[6] SBT: 3.50 m SBL: 3.50 m **SBR: 3.50 m**[6]	**EBR: 3.50 m**[5] **EBT: 3.50 m**[5] **EBL: 3.75 m**[5]	EBT: 3.75 m **EBL: 3.50 m**[6] **EBR: 3.50 m**[6] WBT: 3.50-3.75 m **WBL: 3.50 m**[6] **WBR: 3.50 m**[6]	**SBT: 3.50 m**[5] **SBL: 3.75 m**[5] **SBR: 4.00 m**[5] **NBTR: 3.50 m**[5] **NBL: 5.00 m**[5]
Equivalent Minimum "K" Factor	At DS 90 Crest: 39[7] Sag: 15 to 20[8] At DS 70 Crest: 17[7] Sag: 10 to 12[8]	Crest: 25[9] Sag: 25[9]	At DS 90 Crest: 39[7] Sag: 15 to 20[8] At DS 70 Crest: 17[7] Sag: 10 to 12[8]	Crest: 25[9] Sag: 25[9]
Road Grades Range	Rolling: 3%[10] Mountainous: 5%[10]	0.75% to 6.0%[9]	Rolling: 3%[10] Mountainous: 5%[10]	0.75% to 6.0%[9]
Maximum Grade Breaks at Intersection	0.5% to 2%[11]	1.50%[9]	0.5% to 2%[11]	1.50%[9]
Maximum Grade at Intersection	-	2.0%[9]	-	2.0%[9]
Intersection Angle	85 to 90 deg.[12]			
Minimum Tangent Length at Intersection	20 m[13]			

Design Element	Airport Road at Street 'A'		Mayfield Road at Street 'B'	
	Airport Road	Street 'A'	Mayfield Road	Street 'B'
Asphalt Splash Pad	1.0 m wide[14]	-	1.0 m wide[14]	-
Minimum Boulevard Width	1.0 m wide[18]	-	1.0 m wide18	-
Intersection Curb Radius	15.0 m[6]	15.0 m[9]	15.0 m[6]	15.0 m[9]
Curb and Gutter Width	500 mm[15,16]	500 mm[9,16]	500 mm[15,16]	500 mm[9,16]
Multi-Use Path Width	-	3.0 m[5]	-	3.0 m[5]
Sidewalk Width	-	-	1.80 m[18]	-

References:

1. *Region of Peel, Regional Road Map (November 2021)*
2. *Region of Peel Comments (July 2023)*
3. *Transportation Impact Study (Crozier, October 2023)*
4. *Town of Caledon Comments (September 2023)*
5. *Transportation Impact Study (Crozier, April 2024)*
6. *Region of Peel, Public Works Standard Drawing 5-1-6*
7. *TAC GDGCR Table 3.3.2*
8. *TAC GDGCR Table 3.3.5*
9. *Town of Caledon Development Standards Manual (2019)*
10. *TAC GDGCR Table 3.3.1*
11. *TAC GDGCR Section 9.7.3.3*
12. *Town of Caledon Comments (July 2023)*
13. *TAC GDGCR Section 9.7.2*
14. *Region of Peel, Public Works Standard Drawing 5-1-3*
15. *Region of Peel, Public Works Standard Drawing 5-1-1*
16. *OPSD 600.040*
17. *Road Characterization Study for the Region of Peel (RCS) (May 2013)*
18. *Region of Peel Comments (February 2024)*

2.2 Specific Geometric Parameters for Intersections

2.2.1 Airport Roat at Street 'A' Intersection

The improvements on Airport Road at the proposed site access (Street 'A') is proposed with the outlined geometry in **Table 2**.

Table 2: Airport Road at Street 'A' Recommended Intersection Improvements

Intersection	Proposed Lane Configurations	Proposed Auxiliary Geometry		
		Storage Length	Parallel Lane Length	Taper Length
Airport Road at Street 'A'	NBL	60.0 m	60.0 m	145.0 m
	SBR	30.0 m	70.0 m	75.0 m
	EBL	Reference TIS (April 2024)		
	EBTR	Reference TIS (April 2024)		

2.2.2 Mayfield Roat at Street 'B' Intersection

The improvements on Mayfield Road at the proposed site access (Street 'B') is proposed with the outlined geometry in **Table 3**.

Table 3: Mayfield Road at Street 'B' Recommended Intersection Improvements

Intersection	Condition	Proposed Lane Configurations	Proposed Auxiliary Geometry		
			Storage Length	Parallel Lane Length	Taper Length
Mayfield Road at Street 'B'	Interim	EBL	100.0 m	60.0 m	145.0 m
		WBR	60.0 m	70.0 m	75.0 m
		SBL	Reference TIS (April 2024)		
		SBTR	Reference TIS (April 2024)		
	Ultimate	EBL	100.0 m	60.0 m	145.0 m
		EBR	70.0 m	70.0 m	75.0 m
		WBL	45.0 m	60.0 m	145.0 m
		WBR	60.0 m	70.0 m	75.0 m
		SBT	Reference TIS (April 2024)		
		SBL	Reference TIS (April 2024)		
		SBR	Reference TIS (April 2024)		

3.0 Conclusion

We trust that this design brief has provided enough detail and context to facilitate a review of the 60% detailed design. Any questions regarding this submission may be addressed to the undersigned.

Sincerely,

C.F. CROZIER & ASSOCIATES INC.

Natalie Farag, E.I.T
Engineering Intern

C.F. CROZIER & ASSOCIATES INC.

Stephen Shaw, P.Eng.
Manager (Design), Transportation

SS/nf/im/la

I:\2000\2022 - Rice Group\5842 - Tullamore Lands\Memos\2024.04.17 - Updated Design Brief\2024.04.18_Tullamore Lands Updated Design Brief.docx

External Intersections Truck Turning

SIGNAGE LEGEND

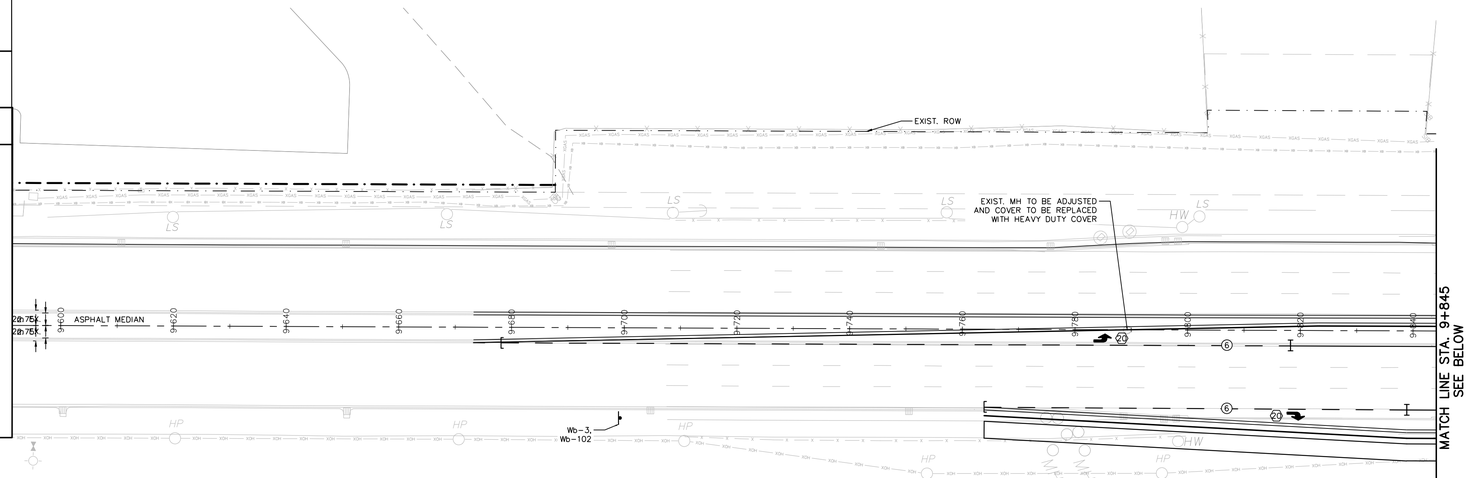
SIGN NAME	SIGN NUMBER	SIZE (cm)	OTM BOOK	SECTION
TURNING VEHICLES YIELD TO BICYCLES	Ra-18	60x75	5	5
NEW	Wb-3	90x90	6	6
TRAFFIC SIGNALS AHEAD	Wb-102	75x75	6	6

PAVEMENT MARKINGS LEGEND

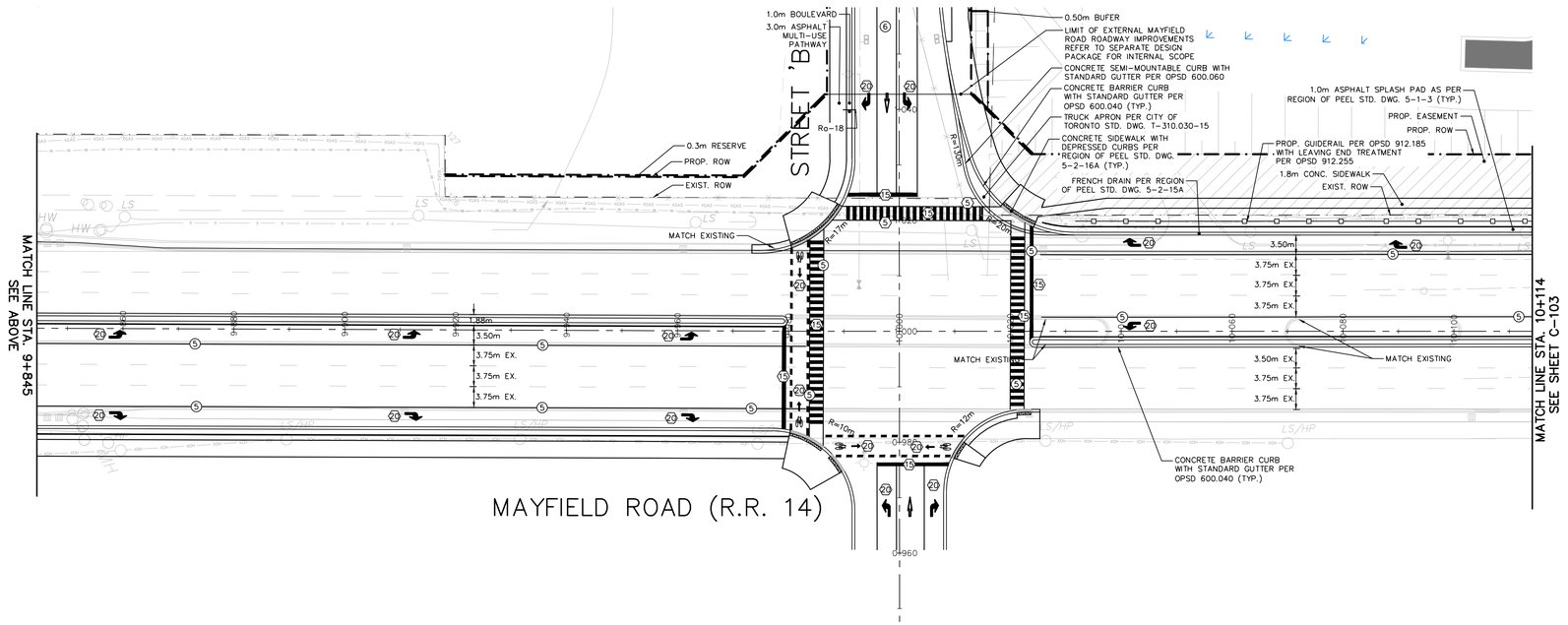
1	SOLID YELLOW, 10cm
5	SOLID WHITE, 10cm
6	333 BROKEN WHITE, 10cm
7	363 BROKEN WHITE, 10cm
15	SOLID WHITE, 60cm
20	SYMBOLS
][	LIMITS OF MARKINGS

NOTES:
1. 111, 333, 363, DENOTES PAVEMENT MARKING SPACING. (ie., 3m LINE, 3m GAP, 3m LINE)

1. USE ① TO DENOTE DURABLE PAVEMENT MARKING
2. USE ⓘ TO DENOTE PAVEMENT MARKING



MAYFIELD ROAD (R.R. 14)



MAYFIELD ROAD (R.R. 14)

10 0m 10 20 30 40
SCALE: 1:500

LEGEND

- EXISTING ROW
- PROPOSED ROW
- PROPOSED TRAFFIC SIGN

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Engineer | Engineer

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Project

TULLAMORE INDUSTRIAL GP LTD.
MAYFIELD ROAD & STREET 'B' INTERSECTION

Drawing

ULTIMATE FUNCTIONAL DESIGN LAYOUT

Region of Peel
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CONSULTING ENGINEERS

CAD Area	Area	Project No. 2022-5842
Checked by S.R.S./N.F.	Drawn by J.W./N.F.	Plan No. C-115
Date APR 18, 2024	Sheet 1 of 3	

SIGNAGE LEGEND

SIGN NAME	SIGN NUMBER	SIZE (cm)	OTM BOOK	SECTION
NEW	Wb-3	90x90	6	6
TRAFFIC SIGNALS AHEAD	Wb-102	75x75	6	6

PAVEMENT MARKINGS LEGEND

1	SOLID YELLOW, 10cm
5	SOLID WHITE, 10cm
6	333 BROKEN WHITE, 10cm
7	363 BROKEN WHITE, 10cm
15	SOLID WHITE, 60cm
20	SYMBOLS
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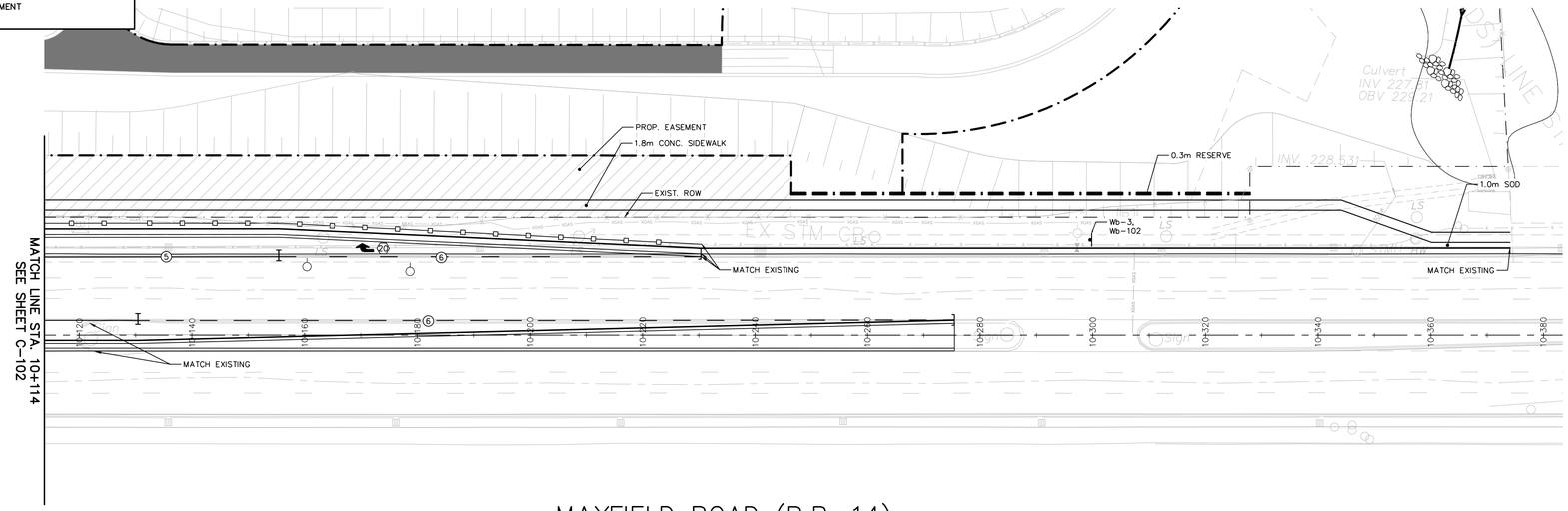

MAYFIELD ROAD (R.R. 14)

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SCALE: 1:500

LEGEND

- EXISTING ROW
- PROPOSED ROW
- PROPOSED TRAFFIC SIGN

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Project

TULLAMORE INDUSTRIAL GP LTD.
MAYFIELD ROAD & STREET 'B' INTERSECTION

Drawing

ULTIMATE FUNCTIONAL DESIGN LAYOUT

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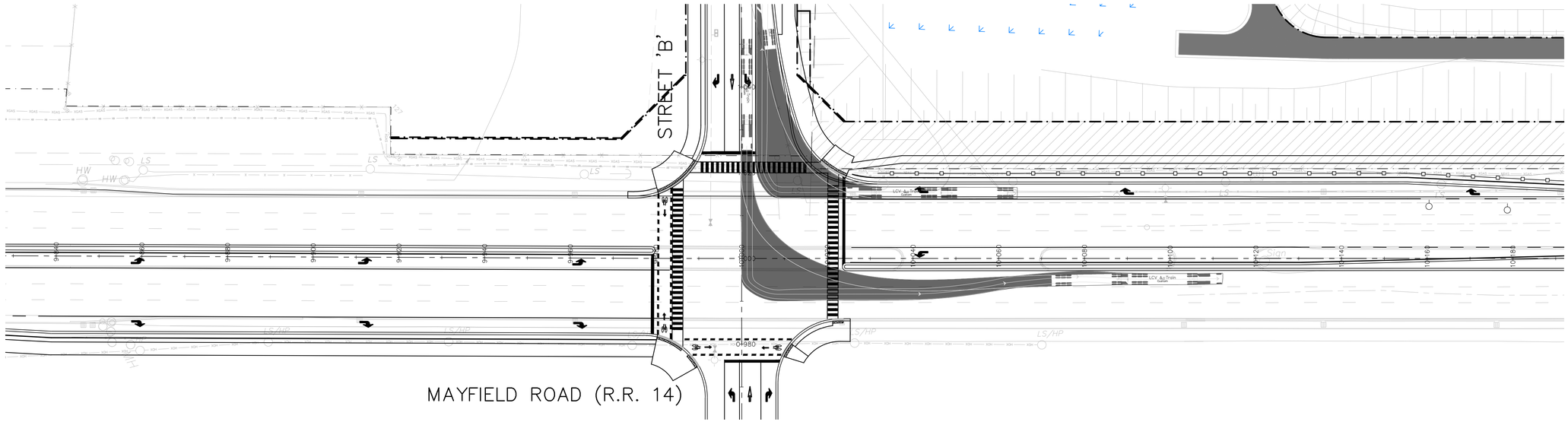
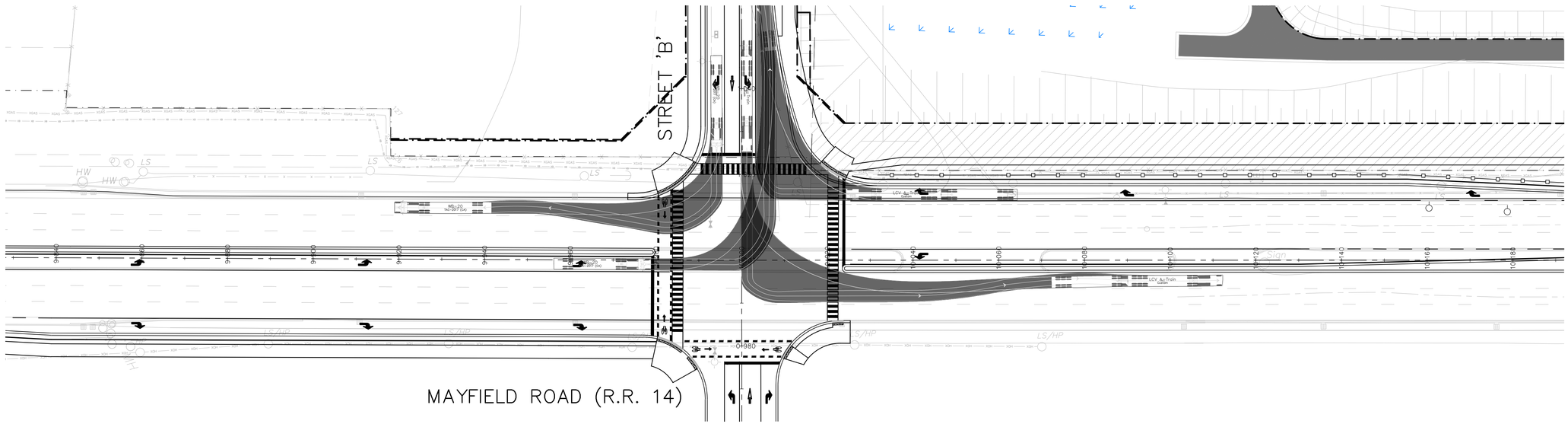
Date APR 18, 2024	Sheet 2 of 3	





10 0m 10 20 30 40
SCALE: 1:500

KEY PLAN
SCALE: N.T.S.

LEGEND

EXISTING ROW

PROPOSED ROW

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Engineer

Engineer

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Project

TULLAMORE INDUSTRIAL GP LTD.
MAYFIELD ROAD & STREET 'B' INTERSECTION

Drawing

VEHICLE MANOEUVRING ASSESSMENT

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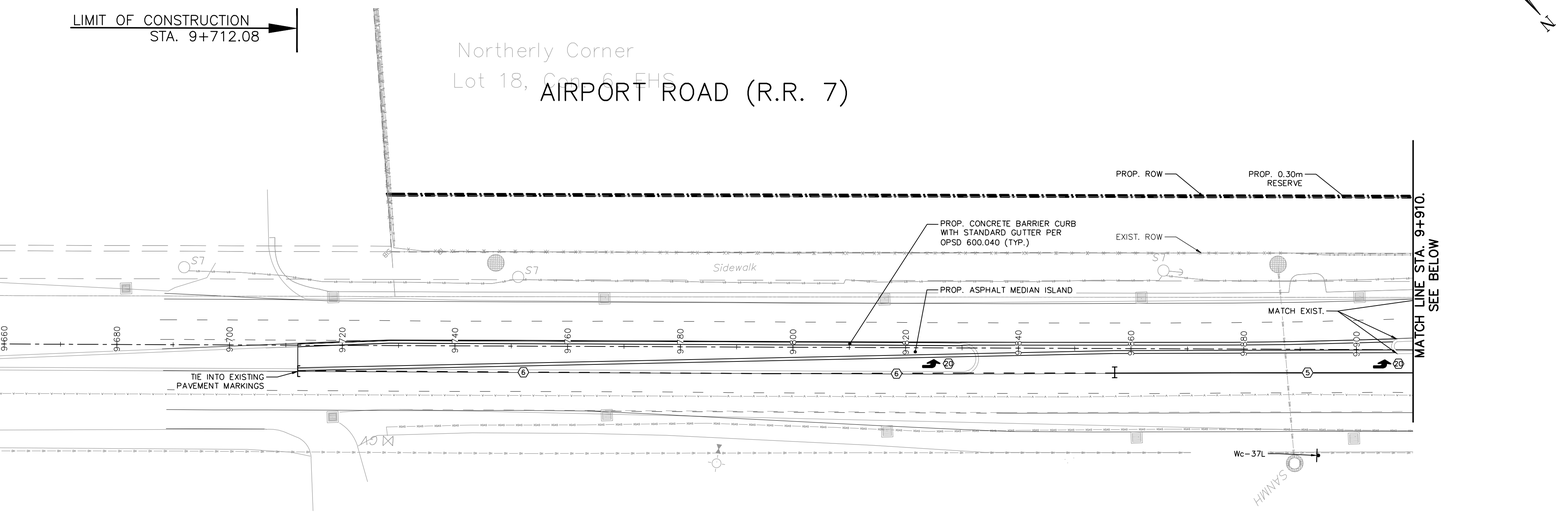
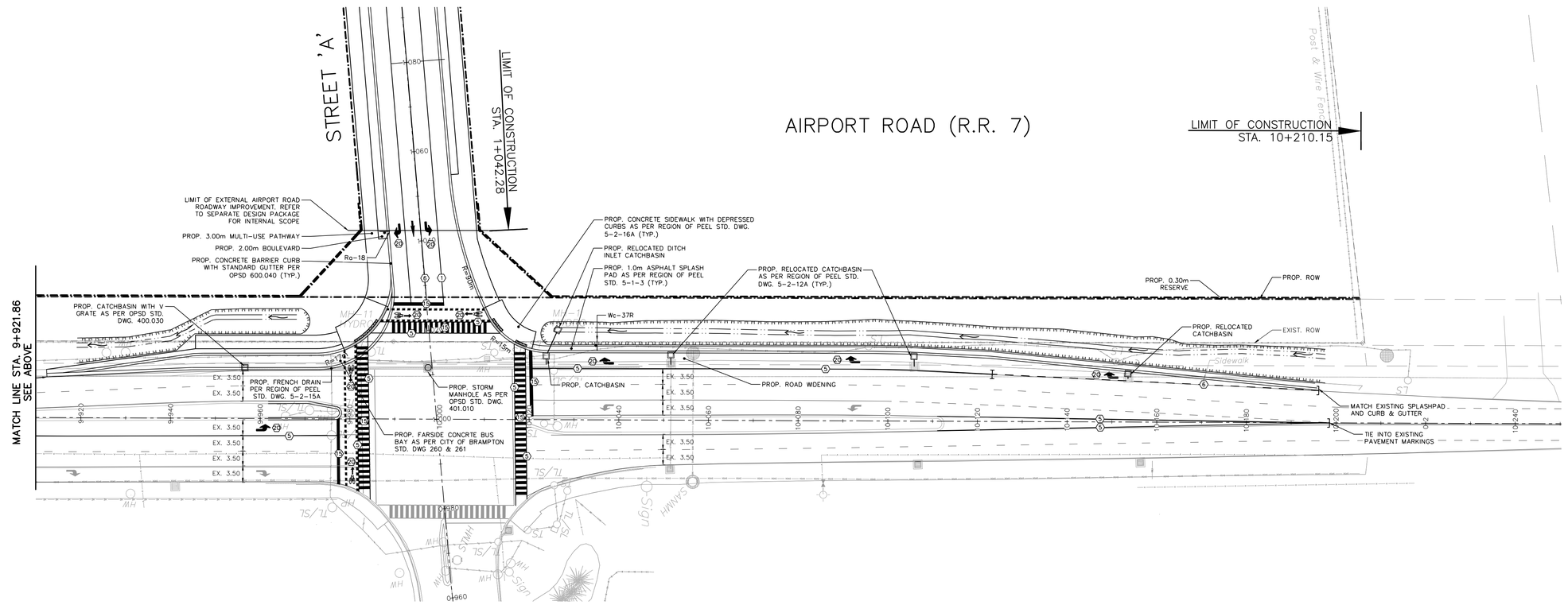
CAD Area	Area	Project No.
Checked by S.R.S./N.F.	Drawn by J.W./N.F.	2022-5842
Date APR 18, 2024	Sheet 3 of 3	Plan No. C-117

LEGEND

- PROPOSED ROW
- EXISTING ROW
- PROPOSED TRAFFIC SIGN





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SCALE: 1:500

SIGNAGE LEGEND

SIGN NAME	SIGN NUMBER	SIZE (cm)	OTM BOOK	SECTION
TURNING VEHICLES YIELD TO BICYCLES	Ra-18	60x75	5	5
BICYCLE TRAIL/PATH CROSSING SIDE STREET	Wc-37 (L/R)	60x60	18	6

PAVEMENT MARKINGS LEGEND

1	SOLID YELLOW, 10cm
5	SOLID WHITE, 10cm
6	333 BROKEN WHITE, 10cm
15	SOLID WHITE, 60cm
20	SYMBOLS
][	LIMITS OF MARKINGS

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Project

TULLAMORE INDUSTRIAL GP LTD.
AIRPORT ROAD & STREET 'A' INTERSECTION

Drawing

ULTIMATE FUNCTIONAL DESIGN LAYOUT

Region of Peel
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CAD Area
Checked by S.R.S./N.F.
Date APR 18, 2024

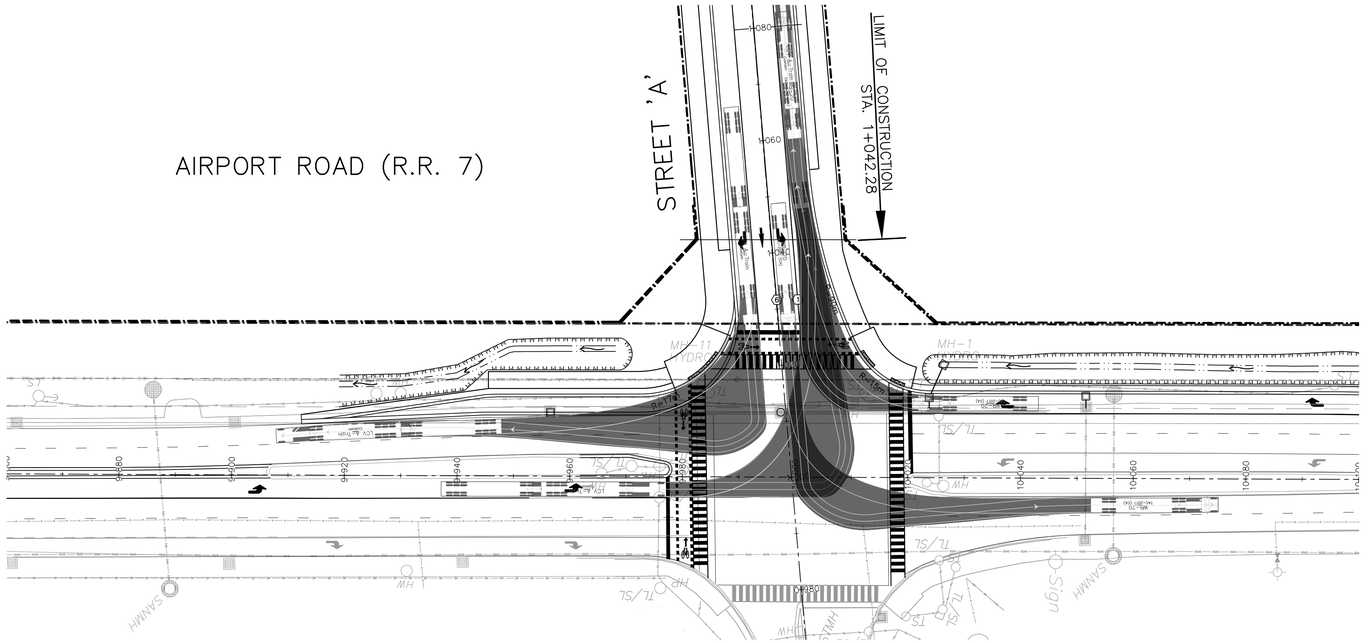
Area
Drawn by J.W./I.M.
Sheet 1 of 2

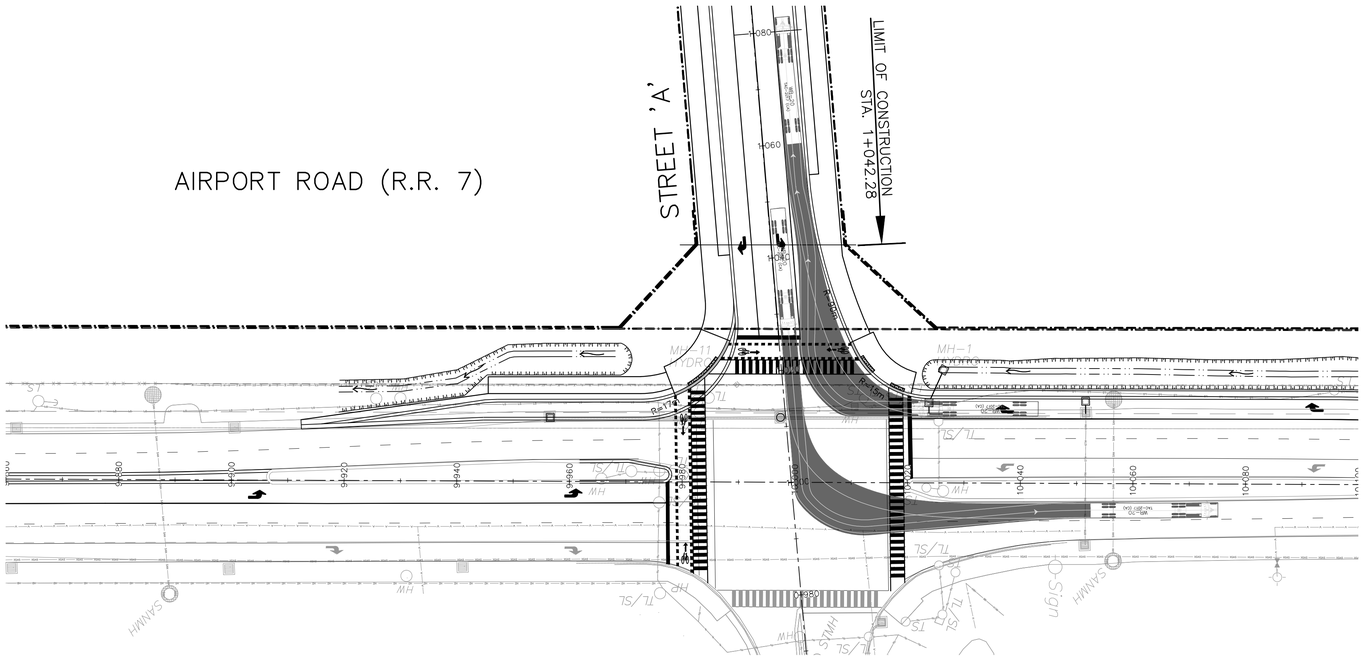
Project No. 2022-5842
Plan No. C-115

LEGEND

EXISTING ROW

PROPOSED ROW





10 0m 10 20 30 40

SCALE: 1:500

KEY PLAN
SCALE: N.T.S.

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Engineer

Engineer

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No.	ISSUE	DATE: YYYY/MM/DD
1	ISSUED FOR 1st SUBMISSION	2023/10/25
2	ISSUED FOR 60% DETAILED SUBMISSION	2024/04/18

Project

TULLAMORE INDUSTRIAL GP LTD.
AIRPORT ROAD & STREET 'A' INTERSECTION

Drawing

VEHICLE MANOEUVRING ASSESSMENT

Region of Peel
Working for you

CROZIER
CONSULTING ENGINEERS

CAD Area
Checked by S.R.S./N.F.
Date APR 18, 2024

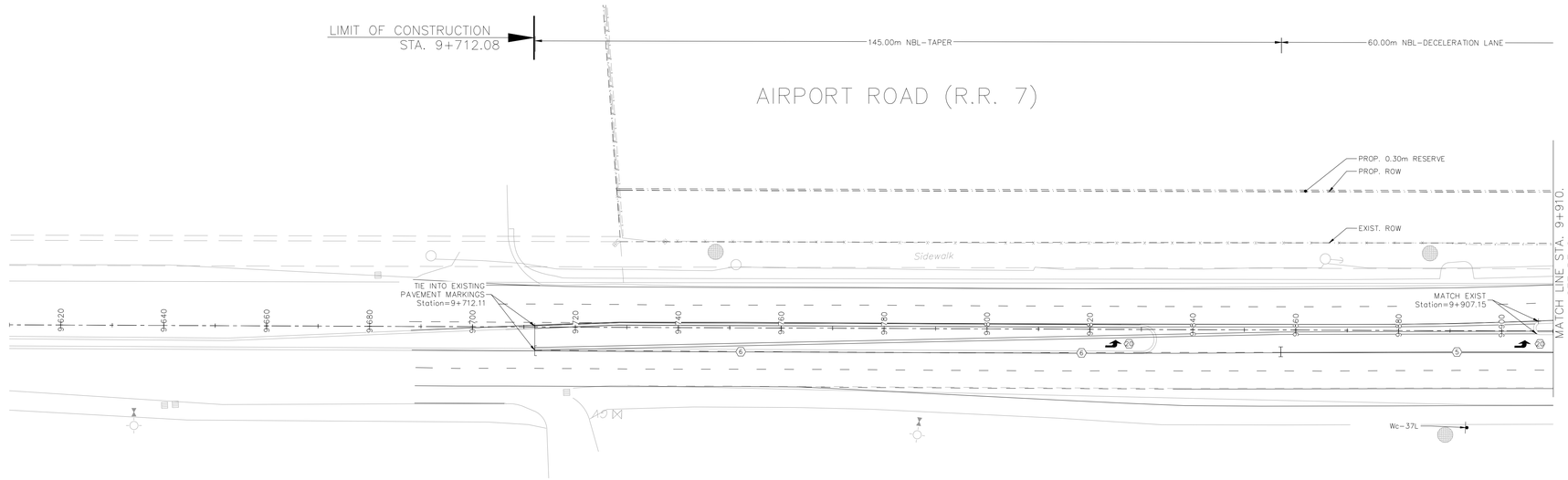
Area
Drawn by J.W./I.M.
Sheet 2 of 2

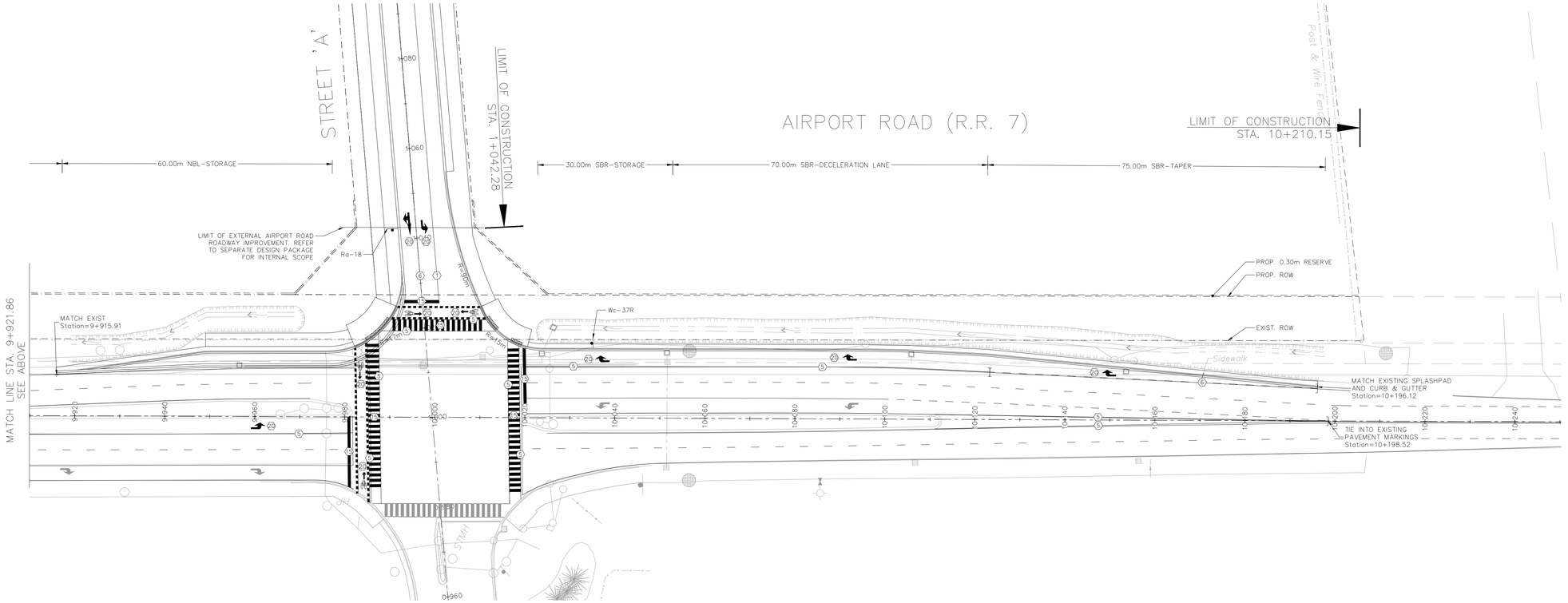
Project No. 2022-5842
Plan No. C-116

Pavement Marking and Signage Plan

LEGEND

- PROPOSED ROW
- EXISTING ROW
- PROPOSED TRAFFIC SIGN





10 0m 10 20 30 40
SCALE: 1:500

SIGNAGE LEGEND

SIGN NAME	SIGN NUMBER	SIZE (cm)	OTM BOOK	SECTION
TURNING VEHICLES YIELD TO BICYCLES	Ra-18	60x75	5	5
BICYCLE TRAIL/PATH CROSSING SIDE STREET	Wc-37 (L/R)	60x60	18	6

PAVEMENT MARKINGS LEGEND

1	SOLID YELLOW, 10cm
5	SOLID WHITE, 10cm
6	333 BROKEN WHITE, 10cm
15	SOLID WHITE, 60cm
20	SYMBOLS
][	LIMITS OF MARKINGS

NOTES:
1. 111, 333, 363, DENOTES PAVEMENT MARKING SPACING. (ie., 3m LINE, 3m GAP, 3m LINE)
1. USE ① TO DENOTE DURABLE PAVEMENT MARKING
2. USE Ⓣ TO DENOTE PAVEMENT MARKING

GENERAL NOTES:

1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART OF IT WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.
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4. DO NOT SCALE THIS DRAWING.
5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

SURVEY NOTES:

1. SURVEY COMPLETED BY MAURO GROUP INC. ONTARIO LAND SURVEYORS ON THE 14TH DAY OF FEBRUARY 2024. REFERENCE No. 21-B7601-10
2. ELEVATION HEREON ARE GEODETIC IN ORIGIN AND WERE DERIVED FROM GPS OBSERVATIONS USING HE "TOPNET" GPS NETWORK AND ARE REFERRED TO THE CGVD-1928: 1978 DATUM.

Engineer

Engineer

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

No.	ISSUE	DATE: YYYY/MM/DD
1	ISSUED FOR 1st SUBMISSION	2023/10/25
2	ISSUED FOR 60% DETAILED SUBMISSION	2024/04/18

Project

TULLAMORE INDUSTRIAL GP LTD. – TULLAMORE LANDS AIRPORT ROAD & STREET 'A' INTERSECTION

Drawing

PAVEMENT MARKING AND SIGNAGE PLAN

Region of Peel
Working for you

CROZIER
CONSULTING ENGINEERS

CAD Area	Area	Project No. 2022-5842
Checked by S.R.S./N.F.	Drawn by J.W./I.M.	Plan No. C-103
Date APR 18, 2024	Sheet 5 of 9	

SIGNAGE LEGEND

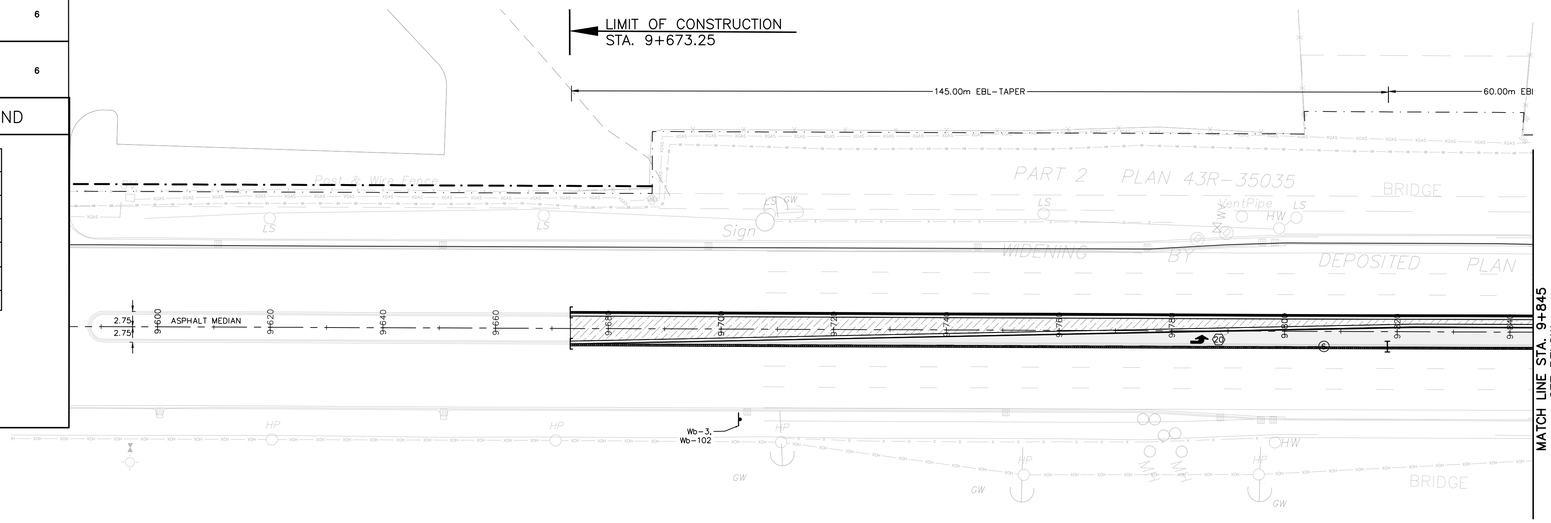
SIGN NAME	SIGN NUMBER	SIZE (cm)	OTM BOOK	SECTION
TURNING VEHICLES YIELD TO BICYCLES	Ra-18	60x75	5	5
NEW	Wb-3	90x90	6	6
TRAFFIC SIGNALS AHEAD	Wb-102	75x75	6	6

PAVEMENT MARKINGS LEGEND

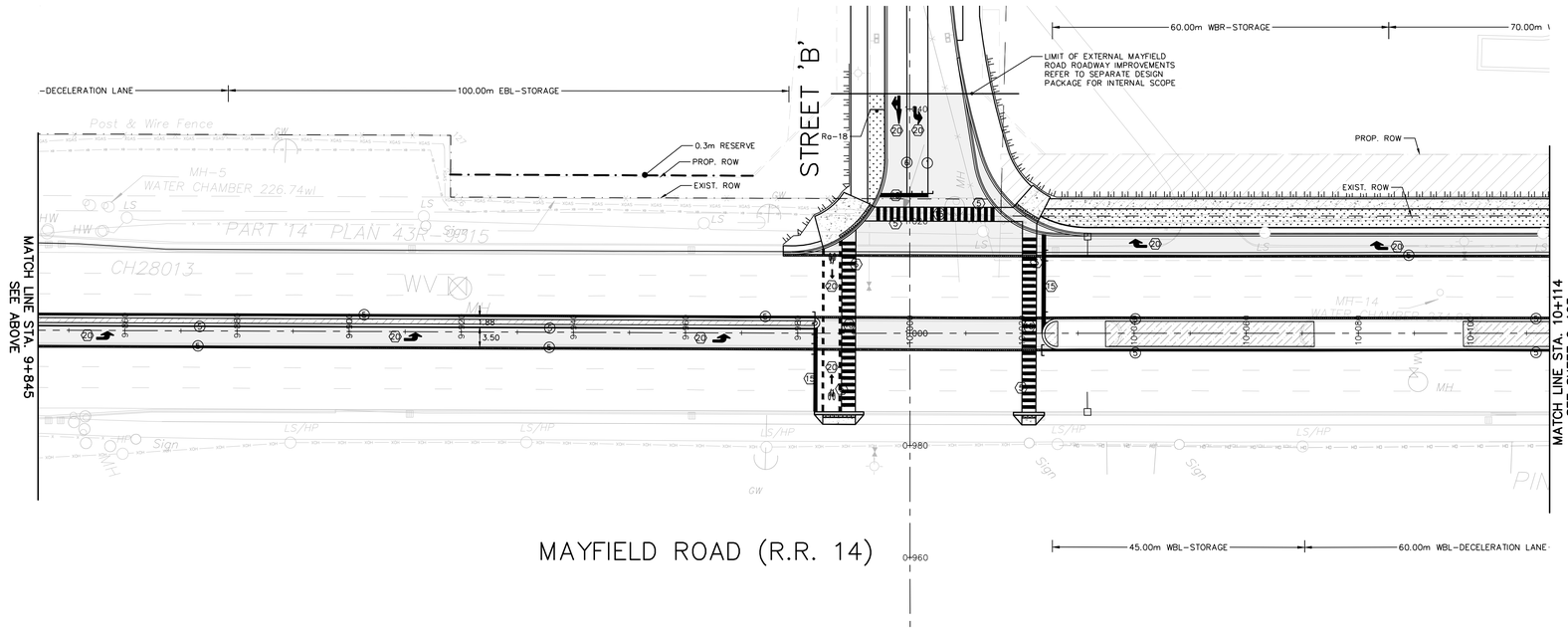
1	SOLID YELLOW, 10cm
5	SOLID WHITE, 10cm
6	333 BROKEN WHITE, 10cm
7	363 BROKEN WHITE, 10cm
15	SOLID WHITE, 60cm
20	SYMBOLS
][	LIMITS OF MARKINGS

NOTES:
1. 111, 333, 363, DENOTES PAVEMENT MARKING SPACING. (ie., 3m LINE, 3m GAP, 3m LINE)

1. USE ① TO DENOTE DURABLE PAVEMENT MARKING
2. USE ⓘ TO DENOTE PAVEMENT MARKING



MAYFIELD ROAD (R.R. 14)

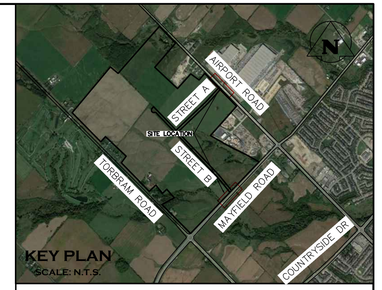


MAYFIELD ROAD (R.R. 14)

SCALE: 1:500

DRAWING NOTES:

1. PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE ONTARIO TRAFFIC MANUAL (OTM) BOOK 11 (PAVEMENT, HAZARD DELINEATION MARKINGS) BOOK 18 (CYCLING FACILITIES) AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA (MUTCDC).
2. SIGNAGE SHALL BE IN ACCORDANCE WITH THE ONTARIO TRAFFIC MANUAL (OTM): BOOK 5 (REGULATORY SIGNS).
3. PAVEMENT MARKINGS TO ADHERE TO ONTARIO PROVINCIAL STANDARDS SPECIFICATION (OPSS) 710.



LEGEND

- EXISTING ROW
- PROPOSED ROW
- PROPOSED TRAFFIC SIGN

GENERAL NOTES:

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SURVEY NOTES:

1. SURVEY COMPLETED BY MAURO GROUP INC. ONTARIO LAND SURVEYORS ON THE 14TH DAY OF FEBRUARY 2024. REFERENCE No. 21-87601-10
2. ELEVATION HEREON ARE GEODETIC IN ORIGIN AND WERE DERIVED FROM GPS OBSERVATIONS USING HE "TOPNET" GPS NETWORK AND ARE REFERRED TO THE COVD-1928: 1978 DATUM.

Engineer

Engineer

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

No.	ISSUE	DATE: YYYY/MM/DD
1	ISSUED FOR 1st SUBMISSION	2023/10/25
2	ISSUED FOR 60% DETAILED SUBMISSION	2024/04/18

Project

TULLAMORE INDUSTRIAL GP LTD.
MAYFIELD ROAD & STREET 'B' INTERSECTION

Drawing

PAVEMENT MARKING AND SIGNAGE PLAN

Region of Peel
Working for you

CROZIER
CONSULTING ENGINEERS

CAD Area	Area	Project No. 2022-5842
Checked by S.R.S./N.F.	Drawn by J.W./N.F.	Plan No. C-106
Date APR 18, 2024	Sheet 7 of 14	

SIGNAGE LEGEND

SIGN NAME	SIGN NUMBER	SIZE (cm)	OTM BOOK	SECTION
TURNING VEHICLES YIELD TO BICYCLES	Ra-18	60x75	5	5
NEW	Wb-3	90x90	6	6
TRAFFIC SIGNALS AHEAD	Wb-102	75x75	6	6

PAVEMENT MARKINGS LEGEND

1	SOLID YELLOW, 10cm
5	SOLID WHITE, 10cm
6	333 BROKEN WHITE, 10cm
7	363 BROKEN WHITE, 10cm
15	SOLID WHITE, 60cm
20	SYMBOLS
][	LIMITS OF MARKINGS

NOTES:
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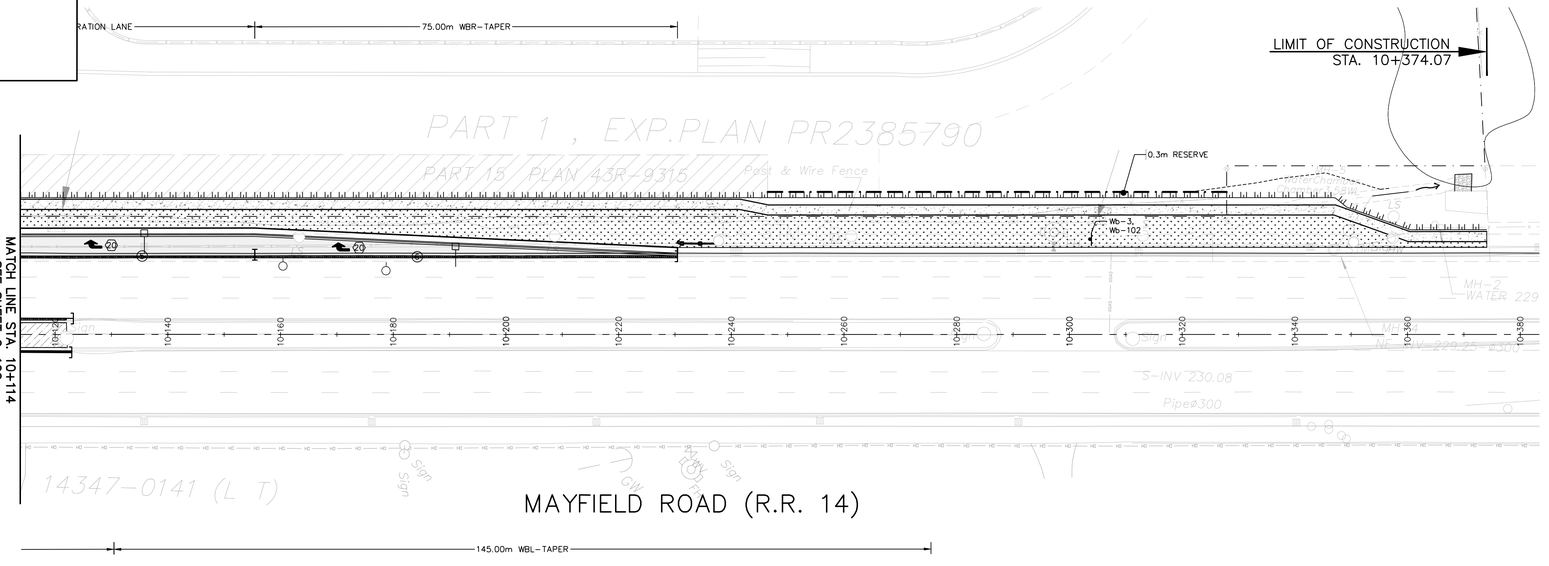
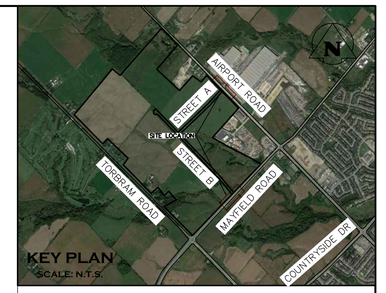
2. USE ⓘ TO DENOTE PAVEMENT MARKING





LEGEND

- EXISTING ROW
- PROPOSED ROW
- PROPOSED TRAFFIC SIGN

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3. PAVEMENT MARKINGS TO ADHERE TO ONTARIO PROVINCIAL STANDARDS SPECIFICATION (OPSS) 710.

Engineer

Engineer

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

No.	ISSUE	DATE: YYYY/MM/DD
1	ISSUED FOR 1st SUBMISSION	2023/10/25
2	ISSUED FOR 60% DETAILED SUBMISSION	2024/04/18

Project

TULLAMORE INDUSTRIAL GP LTD.
MAYFIELD ROAD & STREET 'B' INTERSECTION

Drawing

PAVEMENT MARKING AND SIGNAGE PLAN

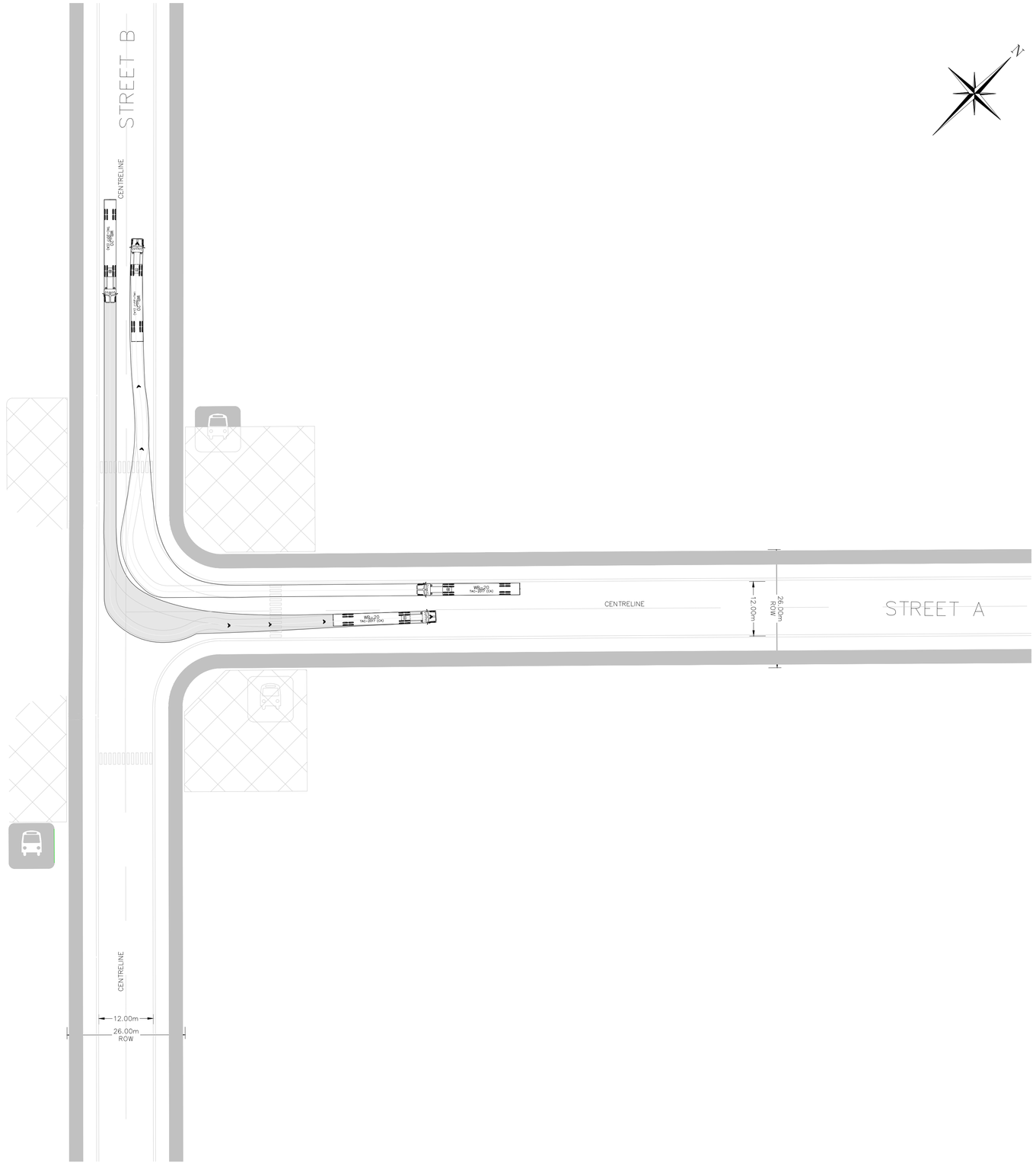
Region of Peel
Working for you

CROZIER
CONSULTING ENGINEERS

CAD Area	Area	Project No. 2022-5842
Checked by S.R.S./N.F.	Drawn by J.W./N.F.	Plan No. C-107
Date APR 18, 2024	Sheet 8 of 14	

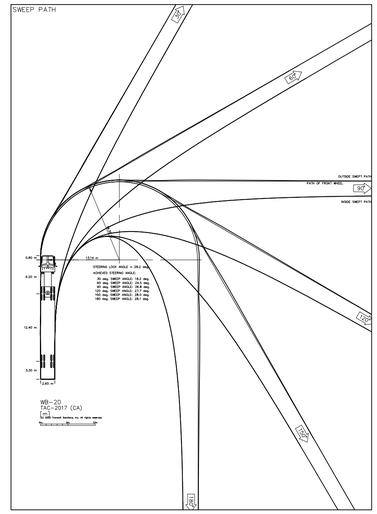
10 0m 10 20 30 40
SCALE: 1:500

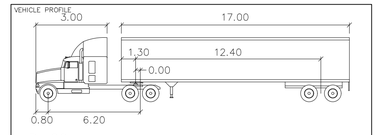
Internal Intersections Truck Turning



FOR REVIEW

NOT TO BE USED FOR CONSTRUCTION





WB-20

meters

Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 28.2
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 1ST SUBMISSION	10/27/2023
2	ISSUED FOR 2ND SUBMISSION	04/12/2024

Project

TULLAMORE LANDS
CITY OF BRAMPTON

Drawing

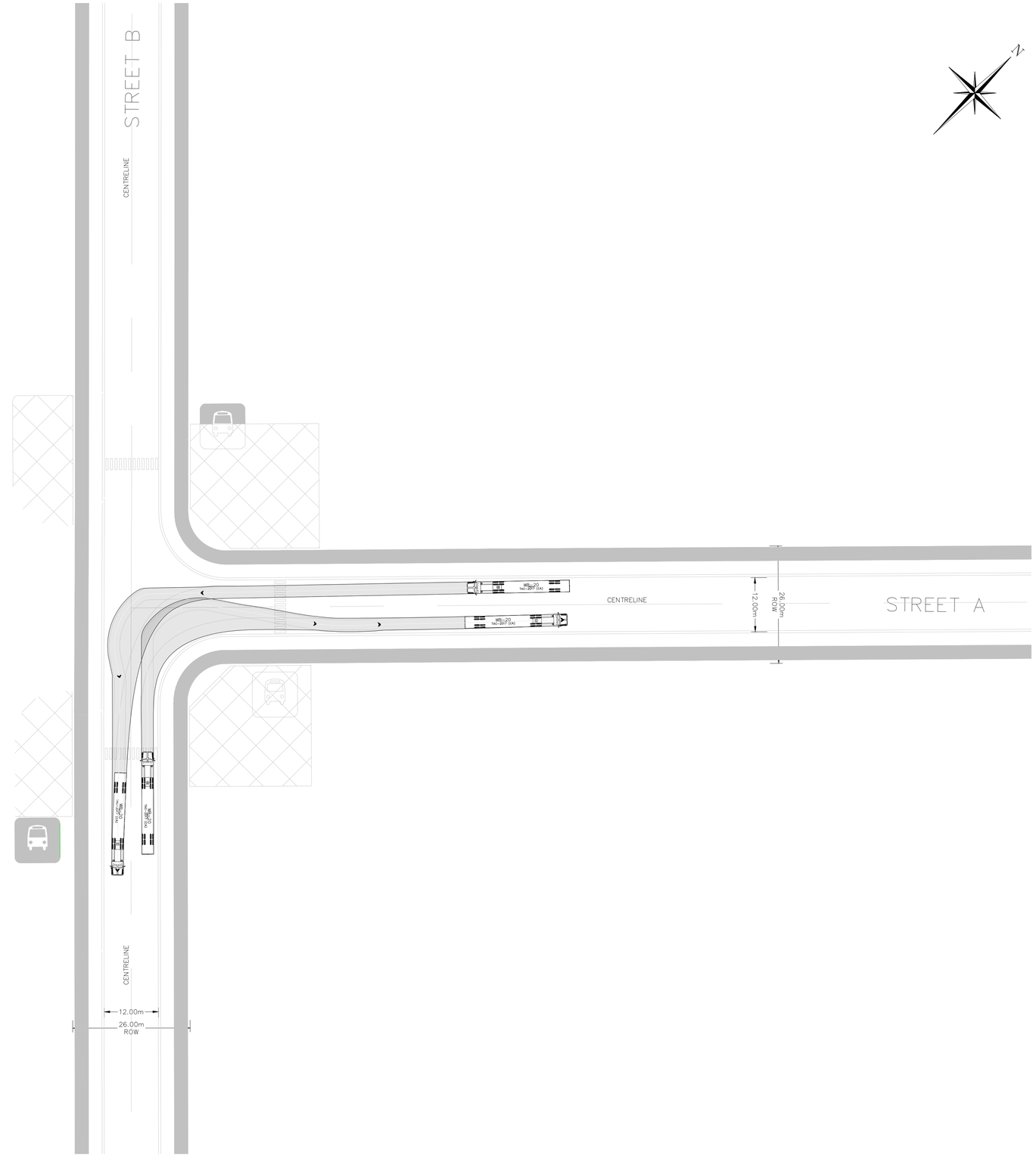
WB-20
VEHICLE MANEUVERING ANALYSIS
STREET A & STREET B INTERSECTION

CROZIER
CONSULTING ENGINEERS

211 YONGE STREET
SUITE 600
TORONTO, ON, M5B 1M4
416-477-3392 T
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

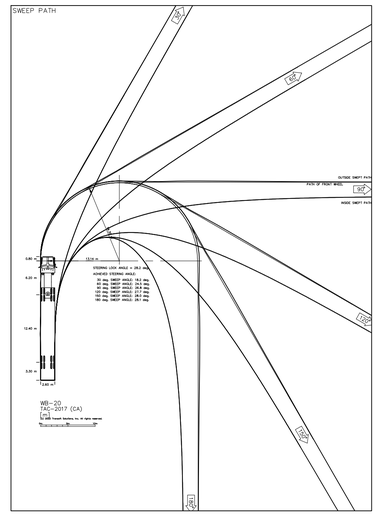
Drawn By T.D.S.	Design By	Project	2022-5842
Check By M.L.	Check By	Scale 1:500	Drawing T300

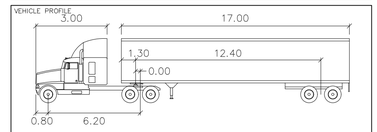
10 0m 10 20 30 40
SCALE: 1:500



FOR REVIEW

NOT TO BE USED FOR CONSTRUCTION





WB–20

meters

Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 28.2
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 1ST SUBMISSION	10/27/2023
2	ISSUED FOR 2ND SUBMISSION	04/12/2024

Project

TULLAMORE LANDS
CITY OF BRAMPTON

Drawing

WB–20
VEHICLE MANEUVERING ANALYSIS
STREET A & STREET B INTERSECTION

CROZIER
CONSULTING ENGINEERS

211 YONGE STREET
SUITE 600
TORONTO, ON, M5B 1M4
416-477-3392 T
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INFO@CFCROZIER.CA

Drawn By	Design By	Project	
T.D.S.			2022–5842
Check By	Check By	Scale	Drawing
M.L.		1:500	T301

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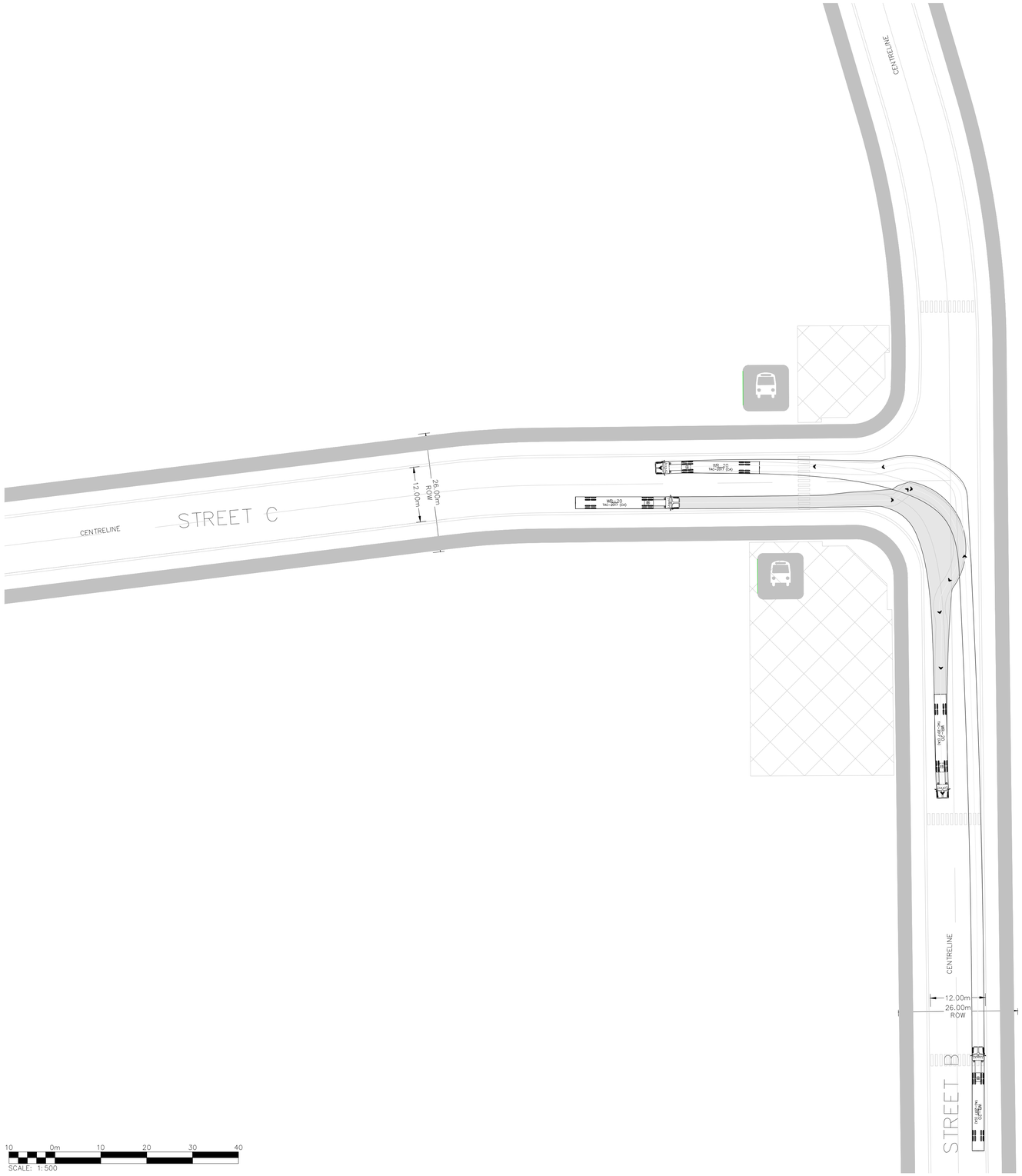
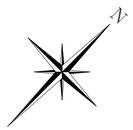
SCALE: 1:500

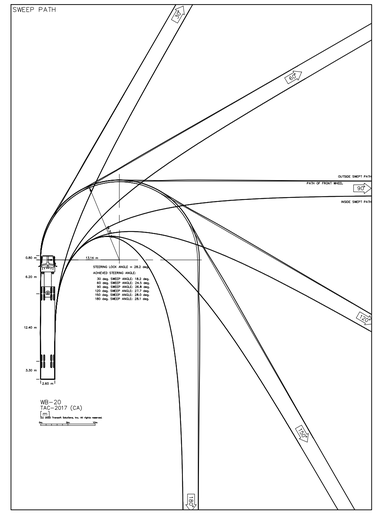


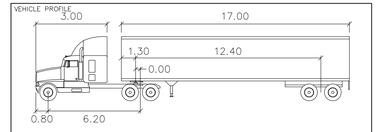


BLDG

± 72,901
± 784,70(

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION





No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 1ST SUBMISSION	10/27/2023
2	ISSUED FOR 2ND SUBMISSION	04/12/2024

Project

TULLAMORE LANDS
CITY OF BRAMPTON

Drawing

WB-20
VEHICLE MANEUVERING ANALYSIS
STREET B & STREET C INTERSECTION

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211 YONGE STREET
SUITE 600
TORONTO, ON, M5B 1M4
416.477.3392 T
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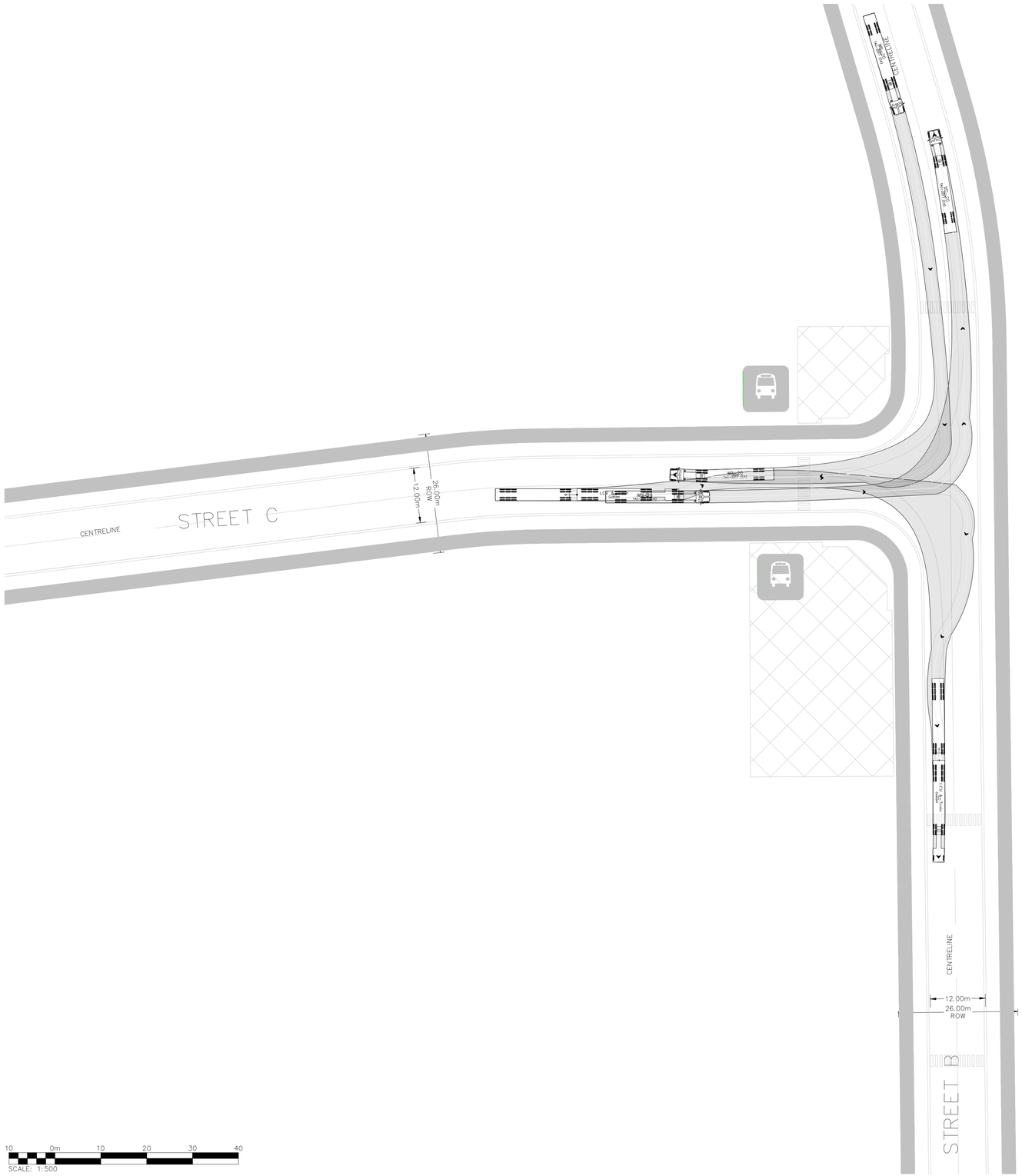
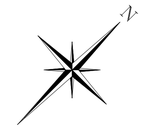
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
T.D.S.			2022-5842
Check By	Check By	Scale	Drawing
M.L.		1:500	T302

10 0m 10 20 30 40
SCALE: 1:500

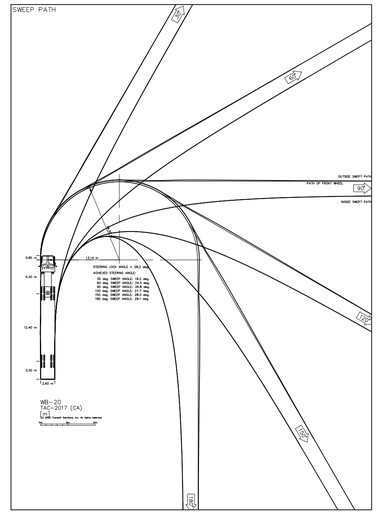


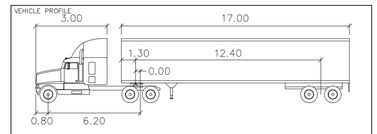


BLDG

± 72,901
± 784,70(

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION





meters

Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 28.2
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 1ST SUBMISSION	10/27/2023
2	ISSUED FOR 2ND SUBMISSION	04/12/2024

Project

TULLAMORE LANDS
CITY OF BRAMPTON

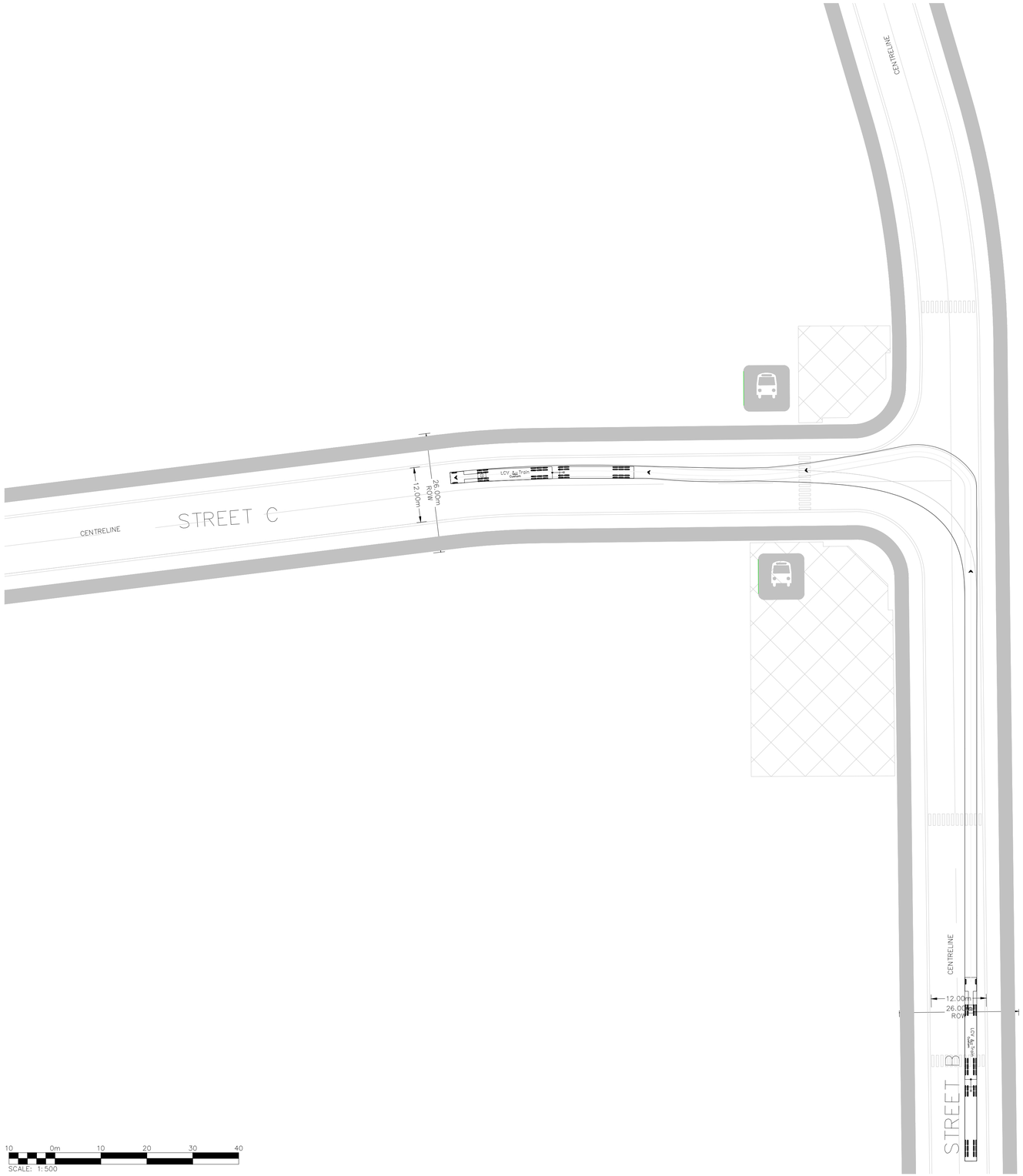
Drawing

WB-20
VEHICLE MANEUVERING ANALYSIS
STREET B & STREET C INTERSECTION

CROZIER
CONSULTING ENGINEERS
211 YONGE STREET
SUITE 600
TORONTO, ON, M5B 1M4
416.477.3392 T
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By: T.D.S.	Design By:	Project:	2022-5842
Check By: M.L.	Check By:	Scale: 1:500	Drawing: T303

10 0m 10 20 30 40
SCALE: 1:500

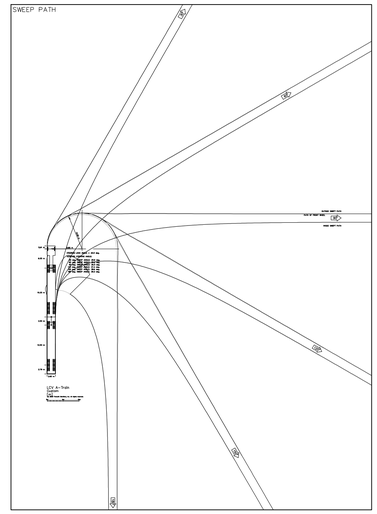


BLDG

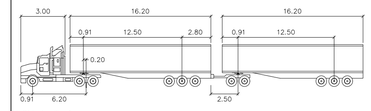
± 72,901
± 784,70(

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

SWEEP PATH



VEHICLE PROFILE



LCV A-Train

meters

Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 40.0
Tractor Track	: 2.60	Articulating Angle	: 90.0
Trailer Track	: 2.60		

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 1ST SUBMISSION	10/27/2023
2	ISSUED FOR 2ND SUBMISSION	04/12/2024

Project

TULLAMORE LANDS
CITY OF BRAMPTON

Drawing

LCV A-TRAIN
VEHICLE MANEUVERING ANALYSIS
STREET B & STREET C INTERSECTION

CROZIER
CONSULTING ENGINEERS

211 YONGE STREET
SUITE 600
TORONTO, ON, M5B 1M4
416-477-3392T
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
T.D.S.			2022-5842
Check By	Check By	Scale	Drawing
M.L.		1:500	T304