TOWN OF CALEDON
PLANNING
RECEIVED
May 6, 2026

TRANSPORTATION IMPACT STUDY

BROCCOLINI AIRPORT ROAD INDUSTRIAL DEVELOPMENT

TOWN OF CALEDON
REGION OF PEEL

PREPARED FOR:

BROCCOLINI AIRPORT ROAD LP

PREPARED BY:

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FIRST SUBMISSION: NOVEMBER 2025
SECOND SUBMISSION: MAY 2026

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CROZIER

Revision Number	Date	Comments
Rev.0	November 2025	Internal Review
Rev.1	November 2025	Issued for First Submission
Rev.2	May 2026	Issued for Second Submission

Executive Summary

Broccolini Airport Road LP (Broccolini) retained C.F. Crozier & Associates (Crozier) to prepare a Transportation Impact Study in support the Site Plan Application for the proposed industrial warehouse development fronting Airport Road in the Town of Caledon, Region of Peel. The Proposed Development is located within the Tullamore Northwest Employment Area Secondary Plan.

The Subject Lands cover an area of 24.24 ha and currently consist of agricultural fields, forested areas, and natural heritage areas. The Subject Lands are bound by undeveloped greenfield lands to the north, south and west, and Airport Road to the east and Torbram Road to the west.

The Proposed Development is comprised of an industrial warehouse building, with a gross floor area of 23,117 m^2 and 2 site accesses off Airport Road. It is noted that a future industrial building is proposed on the southern portion of the Subject lands, to be built as part of a future phase (Phase 2). The future industrial building proposed as Phase 2 is not considered part of the Proposed Development and corresponding development application herein. Nevertheless, for completeness, the warehouse use has been considered as part of the site generated traffic in the traffic operations analysis.

<u>Existing Conditions</u>

- The study road network is operating at a LOS "E" or better with lower to moderate control delays and volume-to-capacity (v/c) ratios. As such, these metrics indicate that the intersections are operating efficiently with reserve capacity for future growth.

- There are no major queueing concerns that are expected to cause significant impacts within the study area.

<u>Future Background Conditions</u>

- Future background traffic volumes were forecasted by application of corridor growth rates and inclusion of background development trip assignments as confirmed with the Region and Town during the terms of reference.

- While a traffic signal is not warranted for Airport Road & Perdue Court/Davis Lane, it is recommended that the intersection be signalized to support future background traffic operations.

- Under 2028 future background conditions, the signalized intersection of Airport Road & Old School Road/Healy Road is expected to operate at LOS "E" or better during the weekday peak hours with a maximum control delay and v/c ratio of 77 s and 1.13, respectively. The split signal timing plan contributes to the operational concerns expected, however, this split phasing increases the intersection safety due to the offset east and west approaches.

    - If auxiliary eastbound and westbound left-turn lanes are provided at Airport Road & Old School Road/Healy Road, the intersection is anticipated to operate at an improved LOS "D" with a maximum v/c ratio of 0.92.

- The remaining study intersections, under 2028 future background conditions, are expected to operate at a LOS "D" or better with low to moderate control delays and v/c

ratios.

- Under 2033 and 2038 future background conditions, the study intersections are expected to operate acceptably at a LOS "D" or better during weekday peak periods, with low to moderate control delays and v/c ratios.

- The queues for the following movements are expected to exceed the planned or assumed effective storage length:

    - Mayfield Road & Airport Road (NBL)

    - Airport Road & Old School Road/Healy Road (EBL, WBL)

Future Total Conditions

- The Proposed Development is expected to generate 112 and 118 two-way mode split adjusted vehicle trips during the weekday a.m. and p.m. peak hours, respectively for the 2028 horizon year.

    - These trips consist of 27 two-way truck trips during the weekday a.m. and p.m. peak hours, as well as 85 and 91 two-way mode split adjusted passenger car trips during the weekday a.m. and p.m. peak hours, respectively.

- The Proposed Development is expected to generate 100 and 106 two-way mode split adjusted vehicle trips during the weekday a.m. and p.m. peak hours, respectively for the 2033 and 2038 horizon years.

    - These trips consist of 27 two-way truck trips during the weekday a.m. and p.m. peak hours, as well as 73 and 79 two-way mode split adjusted passenger car trips during the weekday a.m. and p.m. peak hours, respectively.

- The proposed site accesses are expected to operate efficiently at a LOS "C" or better under 2028, 2033 and 2038 future background conditions, with low control delays and v/c ratios.

- The remaining study intersections are expected to continue operating acceptably at a LOS "D" or better with acceptable control delays and v/c ratios for the 2028, 2033 and 2038 horizon years. These metrics indicated that the intersections are operating with reserve capacity to accommodate future traffic growth.

- There are no major queueing concerns that are expected to cause significant impacts within the study area.

- Overall, the site generated traffic is not expected to significantly impact the study road network, and the Proposed Development is supportable from a transportation operations and queueing perspective.

2051 Sensitivity Analysis – Site Accesses

- Under 2051 future total conditions, the proposed site accesses off Airport Road as well as Airport Road & E-W Collector Road are expected to operate at a LOS "E" or better during the weekday peak hours, with acceptable control delays and v/c ratios. Accordingly, the intersections are operating efficiently with reserve capacity to

accommodate future traffic growth, and the Proposed Development is supportable from this perspective.

- There are no queueing concerns expected under 2051 future total conditions. Along Airport Road, there are no queueing issues anticipated associated with back-to-back left-turns along Airport Road, especially with regards to the intersection with E-W Collector Road.

Site Access Review

- To support the Subject Development, the following auxiliary turn lanes at the proposed site accesses should be implement, subject to confirmation with the Region:
    - Airport Road & North RIRO Access (SBR)
    - Airport Road & Full Moves Access (EBL, NBL, SBR)
- The proposed site accesses off Airport Road meets the applicable sight distance requirements.
- The proposed intersection spacing along Airport Road for the proposed accesses are acceptable.

Corridor Access Management Review

- The available intersection spacing along Airport Road can support a full moves access between the Subject Lands and Old School Road. Restricted access(es) may also be supported along this frontage.
    - Several of these parcels have developable area west of the natural heritage system and Salt Creek, which allows for access opportunities via the potential future extension of Ionic Drive.
    - There may also be access opportunities along Old School Road for the lands with frontage to Old School Road.
- The lands south of the Proposed Development will have direct full moves access opportunities to the future E-W Collector Road.
- Overall, the proposed site accesses do not preclude access to the neighbouring lands along Airport Road once redevelopment is pursued.

Site Circulation Review

- The Site Plan proposes pedestrian facilities that support safe pedestrian circulation throughout the Subject Site, providing access to the building entrances, vehicle parking and outdoor amenity areas, and the bicycle parking spaces.
- The Vehicle Turning Diagrams demonstrate that there are no vehicle maneuverability constraints expected within the Subject Development for heavy vehicles, emergency vehicles, and passenger vehicles.

Parking and Loading

- The Site Plan proposes 116 vehicle parking spaces, which is deficient to the Town of Caledon's vehicle parking requirements.
    - Approved vehicle parking rates for industrial developments with similar transportation contexts in the Town of Caledon propose an average parking supply rate of 0.43 space/unit. Thus, the proposed parking rate of 0.50 space/unit is supportable when considering the parking rates proposed at similar sites.
- The Proposed Development meets the accessible parking, bicycle parking and loading requirements.

Transportation Demand Management Strategies

- Transportation Demand Management strategies were identified and recommended to support the Subject Development.

Recommendations

Table E1 summarizes the recommended improvements.

Table E1: Recommended Improvements

Location	Improvement
2028 Future Background	
Mayfield Road & Airport Road	Extend existing NBL auxiliary turn lane (165 m).
	Monitor traffic operations and queues to determine if additional improvements are warranted, prior to Mayfield Road widening.
Airport Road & Old School Road/Healy Road	Implement the following auxiliary turn lanes: • EBL: 50 m • WBL: 60 m
	Monitor traffic operations and queues to determine if additional improvements are warranted, prior to implementation of a roundabout.
Airport Road & Perdue Court/Davis Lane	Implement signal control.
2033 Future Background	
Mayfield Road	Maintain schedule for planned road widening and associated improvements between Airport Road and Coleraine Drive.
Airport Road	Maintain schedule for planned road widening and associated improvements between Mayfield Road and King Street.
Torbram Road	Maintain schedule for planned road widening and urbanization between Mayfield Road and Old School Road.

Location	Improvement
Highway 413	Maintain schedule for planned highway between Highway 401 to Highway 400.
Mayfield Road & Airport Road	Extend existing NBL auxiliary turn lane (215 m).
Airport Road & Old School Road/Healy Road	Maintain schedule for planned roundabout.
2038 Future Background	
Torbram Road & Old School Road	Implement signal control.
2028 Future Total	
Mayfield Road & Airport Road	Continue to monitor traffic operations and queues to determine if additional improvements are warranted, prior to Mayfield Road widening.
Airport Road & Old School Road/Healy Road	Continue to monitor traffic operations to determine if additional improvements are warranted.
Airport Road & North RIRO Access	Implement SBR auxiliary turn lane (30 m, minimum per Region Standard 5-1-4)
Airport Road & Full Moves Access	Implement the following auxiliary turn lanes: • EBL: 30 m • NBL: 50 m (within two-way left-turn lane) • SBR: 30 m (minimum per Region Standard 5-1-4)
2033 Future Total	
Airport Road & North RIRO Access[1]	Implement SBR auxiliary turn lane (30 m, minimum per Region Standard 5-1-4)
Airport Road & Full Moves Access[1]	Implement the following auxiliary turn lanes: • EBL: 30 m • NBL: 65 m (within two-way left-turn lane) • SBR: 30 m (minimum per Region Standard 5-1-4)
Other Site-Specific Recommendations	
Transportation Demand Management (TDM) Measures	Implement the following site-specific transportation demand management measures recommended: • TDM Information Package • Off-Peak Shift Changes • Pre-Loaded PRESTO Cards • Secure and Excess Bicycle Parking Spaces • Shower and Change Room Facilities • Electric Vehicle Parking Spaces • Smart Commute

Note 1: Recommended to support 2051 future total conditions, however, to be implemented by the 2033 future total horizon as part of the Airport Road widening works.

Summary

The Proposed Development is supportable from the transportation operation, safety, site circulation, parking and loading perspectives. The analysis undertaken herein was prepared

using the most recent Site Plan. Any minor changes to the Site Plan will not materially affect the conclusions contained within this report.

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1.0 Introduction (UPDATED)

Broccolini Airport Road LP (Broccolini) retained C.F. Crozier & Associates (Crozier) to prepare a Transportation Impact Study in support the Zoning By-Law Amendment and Site Plan Application for the proposed industrial warehouse development fronting Airport Road in the Town of Caledon, Region of Peel. The Proposed Development is located within the Tullamore Northwest Employment Area Secondary Plan.

A Transportation Impact Study (Crozier, November 2025) was previously prepared in support of the Proposed Development. The Transportation Study Update herein addresses the Region and Town comments, dated March 10, 2026, and September 19, 2025, respectively. **Appendix A** includes the comment response matrix.

1.1 Development Lands

The Subject Lands cover an area of 24.24 ha and currently consist of agricultural fields, forested areas, and natural heritage areas. The Subject Lands are bound by undeveloped greenfield lands to the north, south and west, and Airport Road to the east and Torbram Road to the west.

Figure 1 illustrates the Subject Lands.

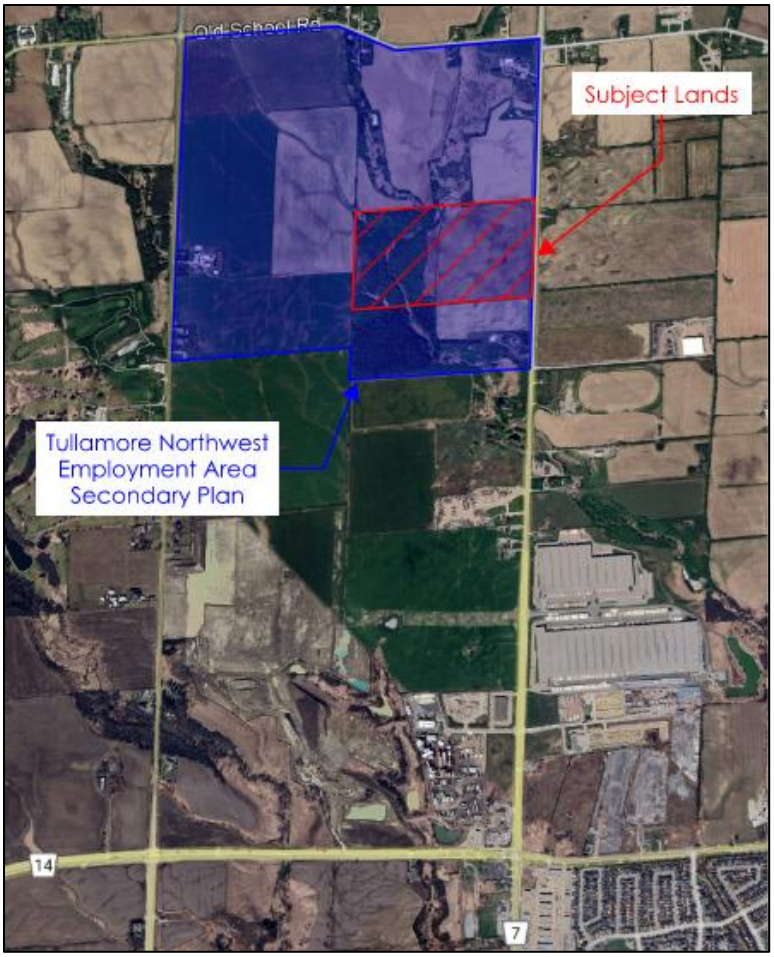


Figure 1: Subject Lands

1.2 Development Proposal

The most recent Site Plan prepared by Powers Brown Architecture proposes an industrial warehouse building, with a gross floor area of 23,117 m^2. To facilitate the development, 2 site accesses off Airport Road are proposed. The north access is proposed to be right-in/right-out (RIRO) passenger car access, with the south site access being a full moves access used by trucks and left-turning passenger cars.

It is also noted that a future industrial building is proposed on the southern portion of the Subject Site, to be built as part of a future phase (Phase 2). The future industrial building proposed as Phase 2 is not considered part of the Proposed Development and corresponding development application herein. Nevertheless, for completeness, the warehouse use has been considered as part of the site generated traffic in the traffic operations analysis. A second RIRO site access is also assumed to support Phase 2, located further south of the full moves access. Further details regarding the future Phase 2 building, including parking, site circulation and transportation demand management, will be reviewed at a later stage.

Table 1 outlines the proposed development statistics.

Table 1: Development Proposal

Phase	Land Use	Statistic
Phase 1 (Building A)	Warehouse	23,117 m^2
Phase 2 (Building B)		40,467 m^2
	Parking & Loading	
Phase 1 (Building A)	Vehicle Parking	116 spaces
	Loading	43 spaces

Table 2 outlines the proposed access configuration.

Table 2: Airport Road Access Configuration

Phase	Access Location	Access Type	Expected Vehicles
Phase 1 (Building A)	North	RIRO	Passenger Cars, Emergency Vehicles
	Central	Full Moves[1]	Heavy Vehicles, Passenger Cars, Emergency Vehicles
Phase 2 (Building B)	South	RIRO	Passenger Cars, Emergency Vehicles

Note 1: To service both Phase 1 and Phase 2.

Figure 2 includes the Site Plan.

SITE PLAN AND BUILDING STATISTICS

CURRENT ZONING: AGRICULTURAL
PARENT ZONING: SERVICE INDUSTRIAL (MS)

BY-LAW 2006-50: SECTION 8 OF THE TOWN OF CALEDON BY-LAW;
REVISED: NOVEMBER, 04, 2024

SITE STATISTICS

ORIGINAL LOT AREA:	+/- 242,482.1 M²
ENVIRONMENTAL ZONE AREA:	+/- 107,292.96 M²

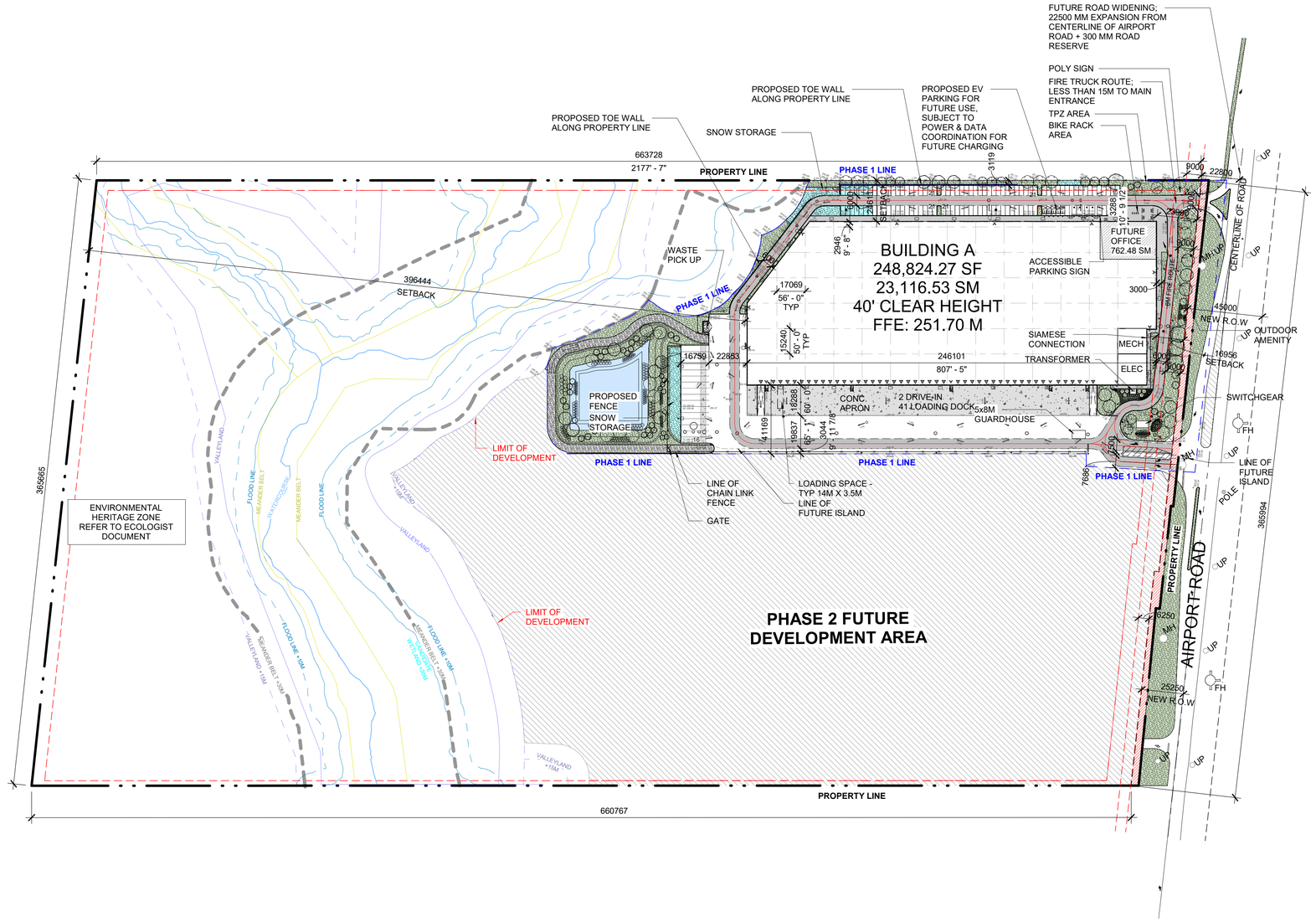
SITE STATISTICS EXCLUDING ENVIRONMENTAL ZONE:

BUILDING A LOT AREA *(BEFORE EASEMENTS)*:	+/- 53,246.99 M²
BUILDING A DEVELOPABLE AREA:	+/- 52,443.12 M²
BUILDING A GFA:	248,824.27 FT² / 23,116.53 M²
LOT FRONTAGE:	(MIN. 30 M)

BUILDING HEIGHT & SETBACKS	**REQUIRED**	**PROPOSED**
SETBACKS		
NOTE: ALL SETBACKS ARE MEASURED FROM THE NEW PROPERTY LINE AFTER ROAD WIDENING.		
FRONT YARD		
BUILDING SETBACK: BUILDING A	15 M	16.96 M
PARKING SETBACK BUILDING A	6 M	44.49 M
SIDE YARD		
EXT. BUILDING SETBACK BUILDING A	7.5 M	N/A
INT. BUILDING SETBACK BUILDING A	6 M & 3 M	24.6 M
PARKING SETBACK BUILDING A	3 M	3 M
REAR YARD BUILDING A	7.5 M	11.2 M
DRIVEWAY SETBACK	1.5 M	9.08 M (NORTH)
DRIVEWAY SETBACK (POND)	1 M	24.03 M
MAX PERMITTED BLDG HEIGHT BUILDING A	25/ 45 M (**)	13.72 M
MAX PERMITTED BLDG AREA	50%	+/- 45%
PARKING SPACE SIZES		
STANDARD SIZE	2.75 X 6.0 M	2.75 X 6.0 M
AISLE WIDTH	6.0 M	6.0 M
FIRE TRUCK ENTRANCE WIDTH	9.0 M	9.0 M
PARKING REQUIREMENTS *REQUIRED PER PROPOSED SITE SPECIFIC STANDARDS OF 1 SPACE PER 230 SM GFA*		
BUILDING A	101 SPACES	116 SPACES
BARRIER FREE PARKING BUILDING A	4 SPACES	5 SPACES
EV PARKING BUILDING A	5 SPACES	5 SPACES
LOADING REQUIREMENTS *ACCORDING TO 5.2.3 NON-RESIDENTIAL PARKING REQUIREMENTS, TOWN OF CALEDON ZONING BY-LAW; TABLE 5.3.2; 3 LOADING SPACES PLUS 1 ADDITIONAL LOADING SPACE FOR EACH ADDITIONAL 9,300 M2 OR PORTION THEREOF IN EXCESS OF 7,441 M2*		
BUILDING A	5 SPACES	43 SPACES
TRAILER PARKING BUILDING A		16 SPACES
BIKE PARKING REQUIREMENTS BUILDING A	0	4 SPACES

LANDSCAPE	**REQUIRED**	**PROPOSED**
LANDSCAPE AREA (INCLUDING POND)	10%	+/- 21.5%
PLANTING STRIP WIDTH ABUTTING ARTERIAL ROAD & PROVINCIAL HIGHWAY	9M	9M
PLANTING STRIP EPA	1M	2.32M
PLANTING STRIP (INT. SIDE YARD WITH MUTUAL DRIVEWAY)	1.5M	3.04M
PLANTING STRIP (POND)	1M	3.89M

(**) PARAGRAPH 8: ANY BUILDING CONTAINING A COLD STORAGE WAREHOUSE MAY HAVE A MAX. HEIGHT OF 45 M



OVERALL SITE PLAN

SCALE: **1 : 1500**

powers brown architecture

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www.powersbrown.com

PROJECT TITLE

BROCCOLINI AIRPORT ROAD

0 AIRPORT ROAD, CALEDON

A PROJECT FOR

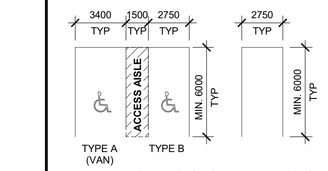
BROCCOLINI AIRPORT ROAD LP

GENERAL NOTES

- DESIGNATED FIRE ACCESS LANE - MINIMUM 6M
- NOT IN SCOPE
- SNOW STORAGE
- LANDSCAPE
- ROAD WIDENING
- SIDEWALK
- SIGN REFER TO TRAFFIC DRAWING
- CONCRETE
- PAVEMENT MARKING REFER TRAFFIC DRAWING
- UTILITY POLE (UP)
- MANHOLE (MH)
- EXIST. FIRE HYDRANT (FH)
- PROP. FIRE HYDRANT
- R.O.W RIGHT-OF-WAY
- OVH DOOR
- PROPERTY LINE
- MAIN ENTRANCE
- SETBACK
- PHASE LINE

A PROVIDE FIRE LANE STRIPING PER LOCAL JURISDICTION

B FIRE LANE RADII TO BE 12 m @ CENTERLINE



BARRIER FREE PARKING STANDARD PARKING

△	DATE	REVISION
1	2025-10-30	ISSUE FOR COORDINATION
2	2025-11-14	ISSUE FOR SPA
3	2026-04-30	ISSUE FOR COORDINATION

PROJECT NO: 255025
DRAWN BY: NM
CHECKED BY: LD

SHEET NAME

OVERALL SITE PLAN - OPTION 3

SEAL

SHEET NUMBER

AS101

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1.3 Study Purpose and Scope

The purpose of the study is to evaluate the transportation-related impacts of the Proposed Development on the study road network and to recommend or confirm any required mitigation measures, if warranted.

The study has been completed in accordance with the agreed upon Terms of Reference with the Town of Caledon and Region of Peel staff as well as the following municipal guidelines:

- Region of Peel's Transportation Impact Study Guidelines (n.d.)
- Region of Peel's Synchro 9 Guidelines (December 2016)

The study horizons to be assessed as part of the network review will include an evaluation of the 2025 (existing), 2028 (buildout), 2033 (5-years post buildout), and 2038 (10-years post buildout) horizons, as confirmed with Town and Region staff. It is noted that a sensitivity analysis of the proposed site accesses under the ultimate 2051 future total conditions is also included herein, per the Region and Town's request. The ultimate horizon is consistent with the horizon year identified for the Tullamore Northwest Employment Area Secondary Plan Transportation Study Update (Crozier, February 2026).

As confirmed in the Terms of Reference, the Transportation Impact Study considers the following existing study intersections:

- Mayfield Road & Airport Road
- Torbram Road & Old School Road
- Airport Road & Old School Road/Healy Road
- Airport Road & 12333 Airport Road Access
- Airport Road & Perdue Court/Davis Lane

Appendix A outlines the Terms of Reference correspondence.

2.0 Existing Transportation Context

This section outlines the current conditions of the transportation network in the vicinity of the site. Details of the study road network, including traffic controls, lane configurations, speed limits, transit routes and stops, active transportation infrastructure and other relevant transportation elements are identified. The existing traffic operations are also summarized.

2.1 Study Road Network (UPDATED)

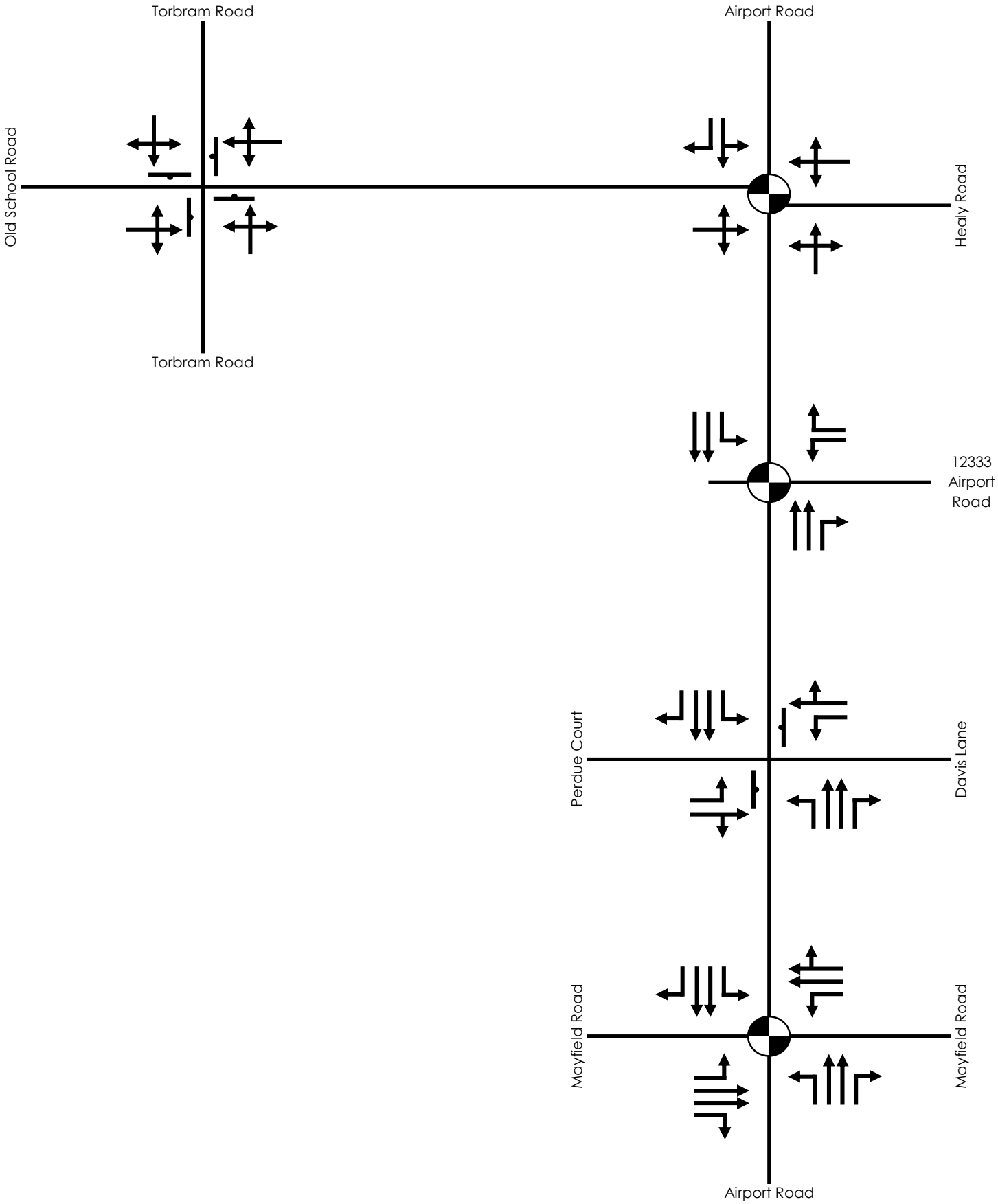
The study road network consists of the existing road network near the site, which includes the study intersections and the adjoining roadway segments. **Table 3** summarizes the study roadways, including road and active transportation network features.

Table 3: Study Road Network

Feature	Airport Road	Old School Road/ Healy Road	Perdue Court/Davis Lane
Direction	Two-Way (North-South)	Two-Way (East-West)	Two-Way (East-West)
Span	North Region Boundary to Hwy 427	Winston Churchill Blvd to Queen St S	N/A
Classification	Arterial	Arterial	Local
Jurisdiction	Region	Town	Town
Speed Limit	60-80 km/h[2] (Posted)	60 km/h (Posted)	50 km/h (Assumed)
Number of Travel Lanes	4 Lanes	2 Lanes	2 Lanes
Median Type	None[5]	None	None
Pedestrian Facilities	None[5]	None	Sidewalk (South Side)
Cycling Facilities	None[5]	None	None

Note 1: Mayfield Road has a posted speed limit of 60 km/h for eastbound traffic beginning approximately 460 m west of Airport Road, and 60 km/h posted speed limit for westbound traffic ending approximately 450 m west of Airport road. 80 km/h posted speed limit elsewhere on the boundary road network.
Note 2: Airport Road has a speed limit of 60 km/h both directions, south of Purdue Court/Davis Lane, 80 km/h elsewhere
Note 3: Mayfield Road has four travel lanes, east of Airport Road and 6 travel lanes, west of Torbram Road.
Note 4: Torbram Road has four travel lanes and a multi-use path on the west side and sidewalk on the east side, south of Mayfield Road.
Note 5: Airport Road, south of 12333 Airport Road Access, has a concrete median and multi-use path on the east side.

Figure 3 illustrates the existing study road network.



Legend	Broccolini Airport Road		Figure 3
Signal Control Stop Control Roundabout Control	Existing Study Road Network	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY

2.2 Transit Network

The Town does not currently have its own transit system, but areas that abut Mayfield Road, the border between Caledon and Brampton, currently benefit from extensions of Brampton Transit routes through service agreements between the Town and Brampton Transit.

Table 4 outlines the existing transit routes, direction, days of operation, peak hour headways, and the location of bus stops in the study area as of August 2025.

Table 4: Existing Transit Services

Route	Direction	Limits	Days of Operation	Peak Hour Headway[1]	Transit Stops in Study Area
30 Airport	Two-Way (North-South)	Mayfield Rd/12333 Airport Rd to Westwood Mall	Monday to Sunday[2]	8-10 min[2]	12203 Airport Rd

Note 1: Frequency and operations may have changed due to change in travel demands.
Note 2: Brampton Transit extension into Caledon is limited service from Monday to Saturday with longer headways.

Brampton Transit only operates one bus route within the study area. The closest transit stop at 12203 Airport Road is located approximately 1.2 km from the Subject Development. It is noted that that the extension into the Town of Caledon along Brampton Transit Route 30 is limited service from Monday to Saturday with longer headways.

The existing bus stops along Airport Road, north of Mayfield Road provides limited access to the Subject Lands, with transit users required to walk to and from the existing bus stops and the Proposed Development. Furthermore, with limited service in the Town of Caledon, there is the opportunity to improve transit frequency as the study area is developed.

3.0 Existing Transportation Network Review

3.1 Transportation Data

The turning movement counts (TMCs) utilized in the Tullamore Northwest Employment Area Secondary Plan Transportation Study was also used herein. The TMCs were conducted by Spectrum Traffic on Wednesday November 20, 2024, between 6:00 a.m. to 10:00 a.m., and 3:00 p.m. to 7:00 p.m. to reflect typical commuter peak hours.

Table 5 summarizes the TMCs and signal timing plans. **Appendix B** contains the relevant traffic count and signal timing plan data.

Table 5: Traffic Data

Intersection	TMCs		Signal Timing Plans	
	Date	Source	Date	Source
Airport Road & Old School Road/Healey Road	November 20, 2024	Spectrum	November 7, 2024	Region
Airport Road & 12333 Airport Road Access			October 16, 2024	Region
Airport Road & Perdue Court/Davis Lane			N/A	N/A

3.2 Existing Traffic Volumes

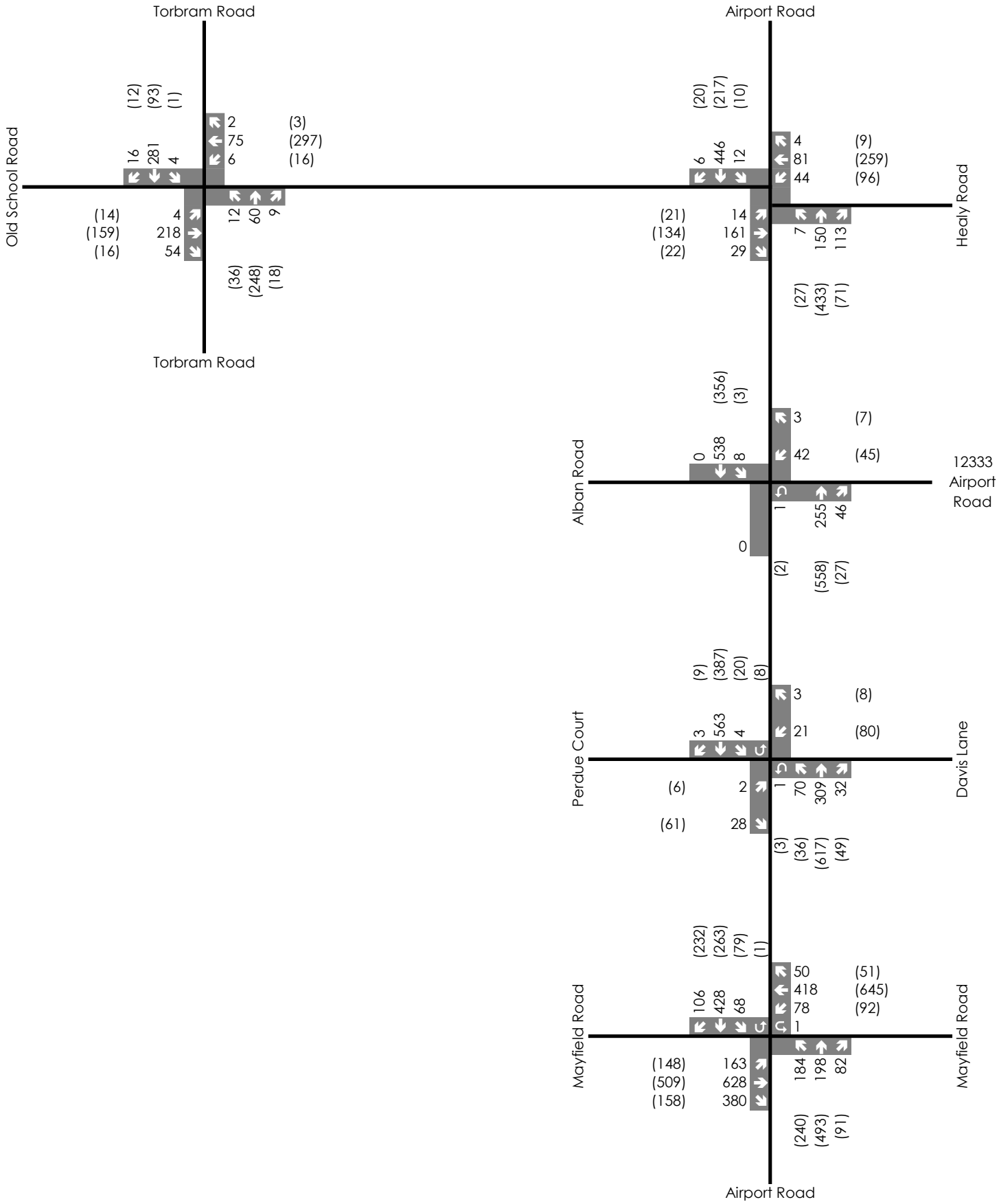
The 2024 traffic volumes were grown to 2025 volumes based on the corridor growth rates established in the Tullamore Northwest Employment Area Secondary Plan Transportation Study (Crozier, May 2025). **Appendix C** includes the Tullamore Northwest Employment Area Secondary Plan Transportation Study excerpts.

Table 6 summarizes the growth rates applied to the study roadways.

Table 6: Applied Annual Growth Rates (2024 to 2025)

Roadway	2024 to 2025
Mayfield Road	1.0%
Airport Road	1.5%
Torbram Road	2.0%
Old School Road/Healy Road	2.0%
Perdue Court/Davis Lane	0.0%

Figure 4 outlines the forecasted 2025 existing traffic volumes used in assessing the existing conditions.



Legend	Broccolini Airport Road		Figure 4
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	Forecasted 2025 Existing Traffic Volumes	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY

3.3 Traffic Modelling and Assumptions

The intersection operations were modelled in conformance with the Region of Peel's Traffic Impact Study guidelines (n.d.). For parameters where guidelines were not provided, default values were used for the modelling of existing conditions.

Consistent with the Region's guidelines, a peak hour factor of 1.00 was used as well as a lane width of 3.5 m for exclusive movements, and 3.7 m for through and shared movements.

The signal timing plans identified in **Section 3.1** were incorporated into the model for the signalized study intersections, while stop control was applied in the model to the remaining study intersections. For the signalized intersections, no lost time adjustments were applied, consistent with the Region's guidelines.

The assessment of the study intersections was conducted using Synchro methodology for signalized intersections, Highway Capacity Manual (HCM) 2000 for two-way stop controlled intersections and HCM 2010 for all-way stop controlled intersections. **Appendix D** outlines the LOS definitions.

Finally, queuing was analyzed using SimTraffic software. The SimTraffic modelling was run using 3 simulations with 15 min seeding and 60 min recording periods.

3.4 Intersection Operations

The section herein reviews the intersection operations under 2025 existing conditions. This assessment includes key metrics including level of service (LOS), control delay and volume-to-capacity (v/c) ratio. **Appendix E** contains the detailed capacity analysis worksheets.

Signalized Intersections

Table 7 details the 2025 existing traffic operations for the signalized study intersections.

Table 7: 2025 Existing Traffic Operations – Signalized Intersections

Intersection	Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Mayfield Road & Airport Road	**Overall**	**C**	**C**	**25**	**31**	**0.74**	**0.79**
	EBL	B	B	11	13	0.32	0.40
	EBT	B	B	18	19	0.35	0.30
	EBR	A	A	3	3	0.40	0.18
	WBL	B	B	11	11	0.21	0.19
	WBTR	B	C	20	22	0.31	0.40
	NBL	D	E	51	58	0.74	0.77
	NBT	D	E	43	61	0.31	0.79
	NBR	A	B	9	11	0.28	0.32
	SBL	C	D	33	42	0.23	0.47
	SBT	E	D	55	50	0.74	0.42
	SBR	B	A	18	10	0.36	0.53
Airport Road & Old School Road/Healy Road	**Overall**	**C**	**D**	**30**	**40**	**0.77**	**0.84**
	EBLTR	E	E	65	63	0.77	0.70
	WBLTR	E	E	59	60	0.61	0.84
	NBLT	B	C	14	29	0.19	0.58
	NBR	A	A	1	2	0.10	0.06
	SBLT	B	C	18	24	0.49	0.33
	SBR	A	A	0	2	0.01	0.02
Airport Road & 12333 Airport Road Access	**Overall**	**A**	**A**	**6**	**6**	**0.35**	**0.34**
	NBT	E	E	58	58	0.35	0.34
	NBR	C	C	31	27	0.02	0.04
	SBL	A	A	2	4	0.11	0.21
	SBT	A	A	1	1	0.05	0.03
	WBL	A	A	4	3	0.01	0.01
	WBR	A	A	4	3	0.20	0.14

Note 1: The overall LOS and control delay of a signalized intersection is based on the average control delay per vehicle (Synchro).

Note 2: The overall v/c ratio for signalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

The signalized study intersections are currently operating at a LOS "D" or better with low to moderate control delays and v/c ratios. As such, these intersections are operating efficiently with reserve capacity for future growth.

Unsignalized Intersections

Table 8 details the 2025 existing traffic operations for the unsignalized study intersections.

Table 8: 2025 Existing Traffic Operations – Unsignalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Torbram Road & Old School Road	All-Way Stop	**Overall**	**B**	**B**	**11**	**13**	**0.45**	**0.48**
		EBLTR	B	B	11	11	0.38	0.30
		WBLTR	A	B	9	14	0.12	0.48
		NBLTR	A	B	9	13	0.13	0.47
		SBLTR	B	B	13	13	0.45	0.22
Airport Road & Perdue Court/Davis Lane	Two-Way Stop	**Overall**	**D**	**E**	**27**	**44**	**0.17**	**0.50**
		EBL	E	C	35	20	0.02	0.02
		EBTR	B	A	12	10	0.05	0.08
		WBL	D	E	29	48	0.12	0.50
		WBTR	B	B	11	11	0.00	0.01
		NBL	A	A	10	10	0.08	0.04
		NBT	A	A	0	0	0.09	0.18
		NBR	A	A	0	0	0.02	0.03
		SBL	A	B	9	13	0.00	0.04
		SBT	A	A	0	0	0.17	0.11
		SBR	A	A	0	0	0.00	0.01

Note 1: The overall LOS and control delay of a two-way stop-controlled intersection is based on the delay associated with the critical minor road approach (HCM 2000). The overall LOS and control delay of an all-way stop-controlled intersection is based on the overall delay for the intersection (HCM 2010).

Note 2: The overall v/c ratio for unsignalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

The unsignalized study intersections are currently operating at a LOS "E" or better with moderate control delays and v/c ratios. As such, these intersections are operating efficiently with reserve capacity for future growth.

3.5 Queueing Assessment

SimTraffic was used to assess the queues within the study road network. The 95th percentile queues were compared against the available storage length to determine if any queues are expected to extend beyond the auxiliary turn lanes. **Appendix F** contains the detailed queueing analysis worksheets.

Table 9 outlines the results of the 2025 existing queueing assessment.

Table 9: 2025 Existing Queuing Assessment

Intersection		Movement	95th Percentile Queue (m)[1]		Auxiliary Lane Storage (m)
			A.M.	P.M.	
Mayfield Road & Airport Road	Signal	EBL	55	55	200
		WBL	40	45	50
		WBTR	55	80	70
		NBL	70	125	95
		NBR	25	25	60
		SBL	45	45	100
		SBR	35	45	105
Airport Road & Old School Road/Healy Road	Signal	NBR	20	30	15
		SBR	5	10	50
Airport Road & 12333 Airport Road Access	Signal	WBR	10	10	100
		NBR	10	10	145
		SBL	10	5	75
Airport Road & Perdue Court/Davis Lane	Two-Way Stop	WBL	25	25	30
		NBL	25	15	70
		NBR	-	-	65
		SBL	5	25	70
		SBR	-	5	60

Note 1: Rounded up to the nearest 5 m.

The queues for some movements are expected to extend beyond the storage length. However, these queues for the following movements and intersections can be accommodated within the provided taper length or two-way left-turn lane, accordingly:

- Mayfield Road & Airport Road (WBTR, NBL)
- Airport Road & Old School Road/Healy Road (NBR)

No other queueing concerns are observed at the study intersections. Overall, queuing is not expected to result in notable operational impacts within the study road network.

4.0 Future Transportation Context

The study area is expected to experience significant changes from a transportation perspective with the development of existing greenfield lands. The following documents, including relevant environmental assessments (EA) are reviewed in the subsequent sections:

Completed and Ongoing Planning Studies

- Region of Peel 2051 Transportation Master Plan (2019)
- Town of Caledon Official Plan (March 2024)
- Town of Caledon Multi-Modal Transportation Master Plan (June 2024)
- Town of Caledon Active Transportation Master Plan (June 2024)

Planned Mobility Infrastructure

- Airport Road EA

- Highway 413 Individual EA

Secondary Plan Areas

- Tullamore Northwest Employment Area

4.1 Completed and Ongoing Planning Studies

4.1.1 Region of Peel 2051 Transportation Master Plan

The Region is currently undertaking an update to their Transportation Master Plan, a key aspect of which will be the target of 50% sustainable mode share by 2041 Region-wide. This is envisioned by taking a balanced approach to put strategic investment in active transportation and transit infrastructure.

A key approach to this target is that new developments will have to surpass this target to counteract the lower sustainable mode shares associated with existing developments. Therefore, new developments have to be designed to be more walkable, transit oriented complete communities, that help to balance peak hour trip demand via more sustainable modes.

The Region of Peel's Long Range Transportation Plan (LRTP) (2019) outlined mode share targets for the entire Region of Peel as well as each individual municipality. **Table 10** outlines the Region of Peel's mode share targets for both the entire Region as well as the Town of Caledon.

Table 10: 2041 Region of Peel Mode Share Targets

Mode	Region of Peel	Town of Caledon
Automobile Driver	50%	68%
Automobile Passenger (Carpool)	18%	10%
Transit	17%	3%
Walk	9%	4%
Cycle	2%	1%
Other[1]	4%	15%
Total	**100%**	**100%**
Sustainable Transportation	*50%*	*32%*

Note 1: Includes school buses, taxis, and motorcycles.

The Region's mode share targets outlined herein are appropriate for the study area given the planned transit route extensions as well as the proximity to the future transit station at the Highway 413 Airport Road interchange and Highway 413 transit corridor.

Appendix G includes Region of Peel LRTP excerpts.

4.1.2 Town of Caledon Multi-Modal Transportation Master Plan (UPDATED)

The Town of Caledon's Multi-Modal Transportation Master Plan (MMTMP) (June 2024) was adopted by Town Council on June 25, 2024. The MMTMP outlines the future transportation infrastructure, services and policies to support the Town's growth.

The MMTMP also outlines road improvements to be completed by the 2031, 2041 and 2051 horizon years. Future active transportation and transit networks were also proposed with the implementation left for further studies.

Given the significant growth expected within the Town, the Town has initiated an addendum to the MMTMP to identify a preferred collector road network alignment with the focus on improving east-west connectivity. The MMTMP Addendum (January 2026) is currently in the process of being adopted by Town Council.

The MMTMP Addendum includes an update to the conceptual collector road network outlined in the initial MMTMP. This updated Town-wide collector road network identifies a preferred major collector road alignment. The improvements pertinent to the Subject Lands, as outlined in the MMTMP as well as the MMTMP Addendum, are discussed further in **Section 4.2**

In the effort to transition to more sustainable modes of transportation, the MMTMP also outlines future mode share targets within the Town. **Table 11** outlines the Town of Caledon's mode share targets for the 2041 and 2051 horizon years per the MMTMP.

Table 11: Town of Caledon Mode Share Targets

Mode	2041 Vision[1]	2051 Vision
Automobile Driver	68%	60%
Automobile Passenger (Carpool)	10%	13%
Transit	3%	6%
Walk	4%	6%
Cycle	1%	1%
Other[2]	15%	14%
Total	**100%**	**100%**
Sustainable Mode Share	*32%*	*40%*

Note 1: Consistent with the Region of Peel's LRTP (2019).
Note 2: Other includes motorcycle and school bus.

Appendix G includes the relevant Town of Caledon MMTMP excerpts.

4.1.3 Town of Caledon Active Transportation Master Plan

The Town of Caledon recently completed the Active Transportation Master Plan (ATMP) (June 2024), which supplements the Town's MMTMP by providing more details and policies objectives concerning sidewalks, dedicated cycling facilities and trails. Notably, the plan identifies a recommended Active Transportation Network for on-road and off-road facilities. In addition, a sidewalk policy, identifying sidewalk framework for when sidewalks should be implemented on one or both sides of roadways, has also been developed as part of this report.

Appendix G contains relevant Town of Caledon ATMP.

4.2 Planned Mobility Infrastructure

The section herein outlines the planned mobility infrastructure within the study area and horizon.

4.2.1 Mayfield Road

Mayfield Road is planned to be widened to 6 lanes between Airport Road and Coleraine Drive. Auxiliary turn lanes/centre turn lanes are also proposed at major intersections. The widening will occur in stages, with the entire widening to be built out by 2031. The Region has completed the EA, and the project is in the Detailed Design & Construction phase.

As identified in the EA, a reduction in the speed limit along Mayfield Road to 60 km/h is proposed. A sidewalk and multi-use trail are also proposed on the north and south sides of Mayfield Road, respectively.

Figure 5 highlights the proposed six-lane cross-section for Mayfield Road, east of Airport Road.

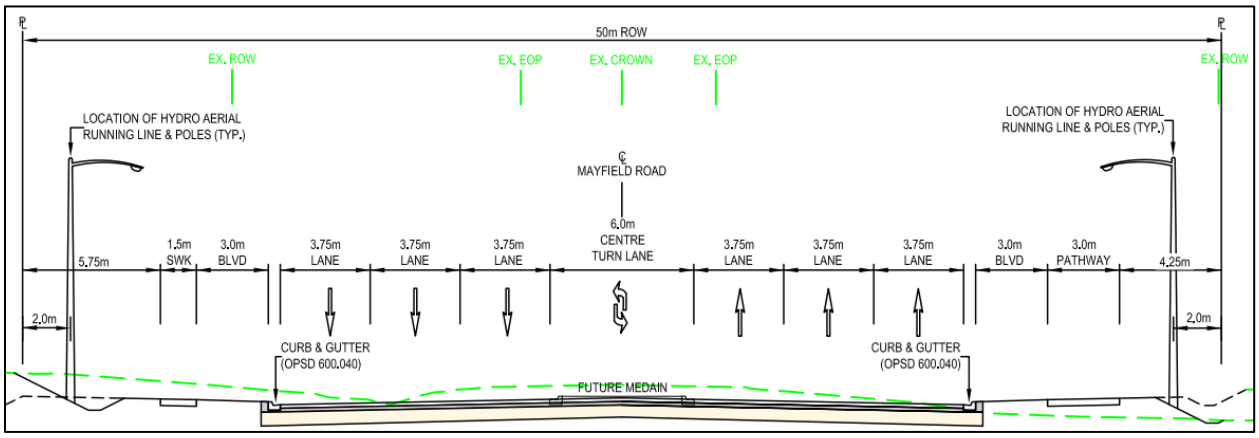


Figure 5: Proposed Mayfield Road Six-Lane Cross-Section (Region of Peel)

Appendix H includes the relevant Mayfield Road improvement excerpts.

4.2.2 Airport Road

Airport Road is planned to be widened to four lanes from approximately 1000 m north of Mayfield Road to 600 m north of King Street. Auxiliary turn lanes/centre turn lanes are also proposed at major intersections. The widening is expected to be built out by 2031. The Region has completed the EA, and the project is in the Detailed Design & Construction phase.

Figure 6 highlights the proposed four-lane cross-section for Airport Road.

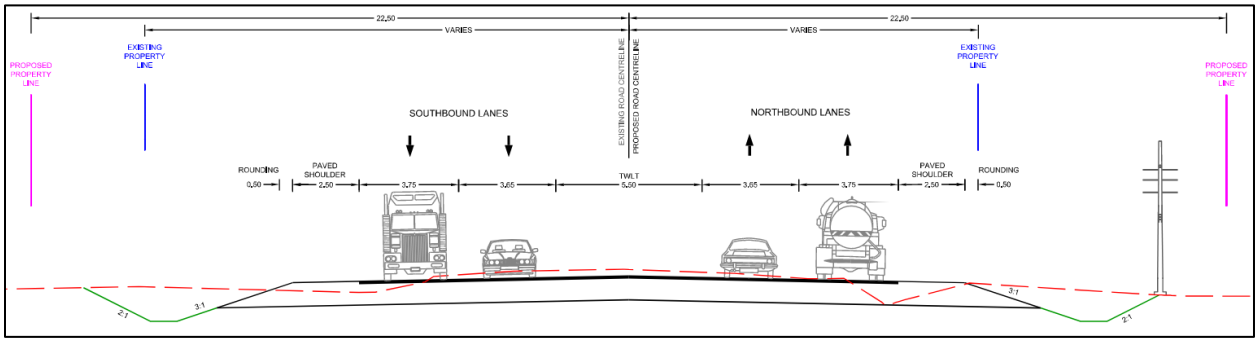


Figure 6: Proposed Airport Road Four-Lane Cross-Section (Region of Peel)

It is noted that the EA identifies Airport Road between Mayfield Road & Airport Road as a rural cross-section without any active transportation elements. Airport Road, between approximately 100 m north of Mayfield Road and 610 m south of King Street, is identified as a rural segment. As such, the posted speed limit of 80 km/h north of Airport Road & Perdue Court/Davis Lane is expected to remain unchanged.

As part of the capital improvements along Airport Road, the intersection of Airport Road & Old School Road/Healy Road will be converted to a two-lane roundabout.

Figure 7 outlines the proposed Airport Road cross section approaching the proposed roundabout.

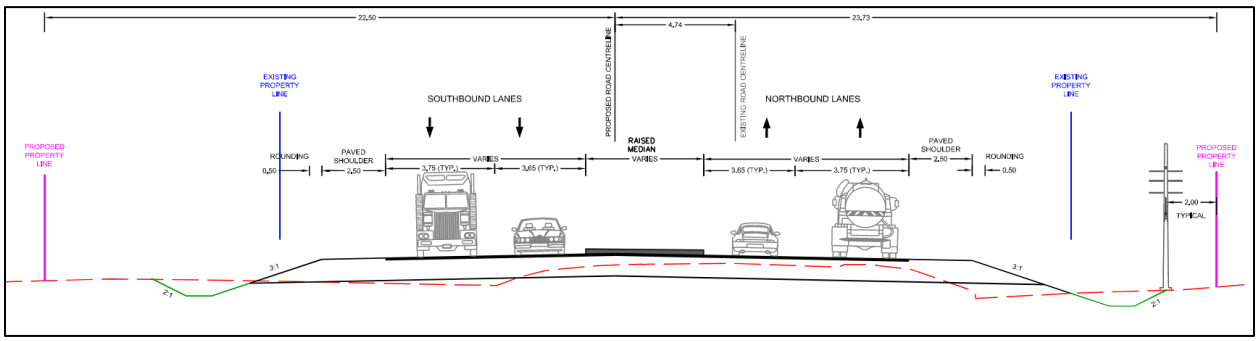


Figure 7: Proposed Airport Road Roundabout Approach Cross-Section (Region of Peel)

Appendix H includes the relevant Airport Road improvement excerpts.

4.2.3 Torbram Road

As outlined in the Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) (June 2024), Torbram Road is planned to be widened to four travel lanes by 2031. The road widening will span from Mayfield Road to Old School Road, and the roadway will also be urbanized.

At the time of writing, no design of Torbram Road has been prepared, and the full cross-section details will be determined at a later date. Nevertheless, the Town's MMTMP outlines a planned right-of-way of 36 m. The recommended 36 m cross-section per the MMTMP for urban four-lane arterials includes a 4.0 m multi-use path on both sides as well as auxiliary turn lanes/centre turn lanes.

Figure 8 highlights the Town's recommended cross-section for urban four-lane arterials, as outlined in the Town's MMTMP.

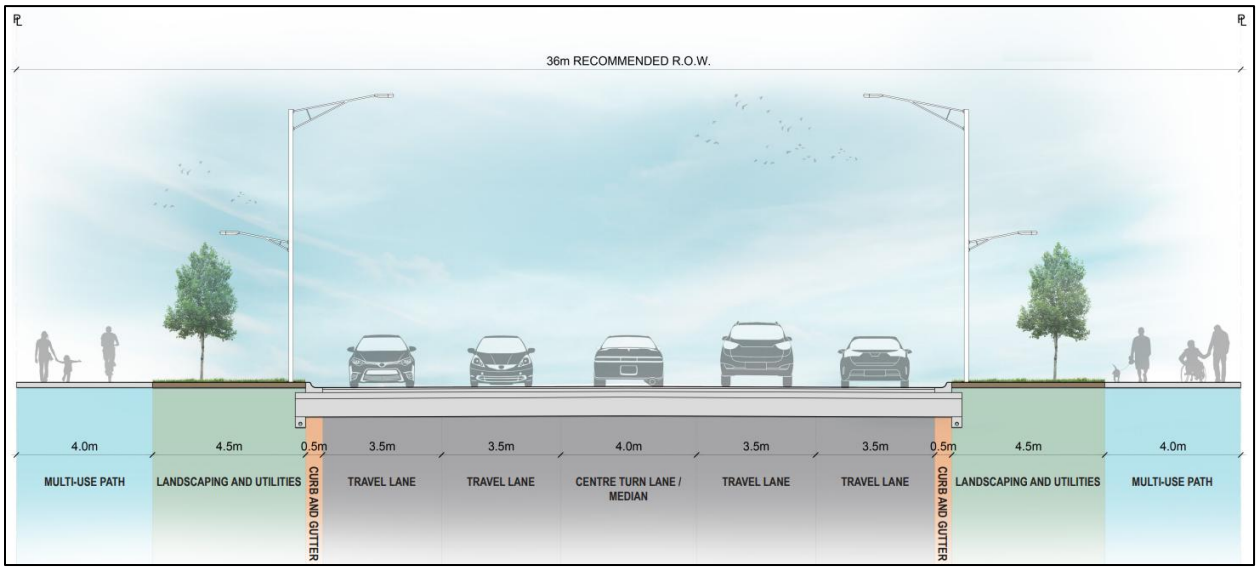


Figure 8: Urban Four-Lane Arterial Cross-Section (Town of Caledon)

Appendix G includes the relevant Town of Caledon MMTMP excerpts.

4.2.4 Highway 413 (UPDATED)

Highway 413 is a planned 400-series highway under MTO's jurisdiction along a 52-kilometre corridor in the Greater Toronto Area. In addition to the highway, a transitway is also proposed which will be a separate corridor alongside the highway which will be for exclusive public transit use via bus rapid transit or light rail transit. The corridor will span from a southern terminus at the Highway 401 and Highway 401 interchange in Halton Hills to an eastern terminus at Highway 400 between of Kirby Road and King-Vaughan Road in the City of Vaughan. As a new significant corridor, Highway 413 will connect Halton Region, Peel Region, and York Region.

At the time of writing of this report, the Draft Environmental Assessment Report (EAIR) (MTO, December 2025), which includes the preliminary design plans, was released for comment, with the final report being released later in 2026.

The preliminary design plans included in the draft EIAR outlines that a partial cloverleaf interchange is planned at Airport Road, north of the Airport Road & Old School Road/Healey Road intersection. A transitway station is also proposed at the Airport Road interchange. It is noted that the draft preliminary design for Highway 413 has been prepared, however, no design drawings, beyond the interactive map outlined online, are publicly available at the time of writing.

Appendix H includes the relevant Highway 413 excerpts. **Figure 9** outlines the proposed Highway 413 corridor.

TULLAMORE NORTHWEST EMPLOYMENT AREA

PROPOSED HIGHWAY 413 ROUTE

CALEDON
BOLTON
GEORGETOWN
BRAMPTON
MISSISSAUGA
VAUGHAN
TORONTO

4TH LINE
KING ST
CHINGUACOUSY RD
AIRPORT RD
KING ST E
LLOYDTOWN AURORA RD
SIDERD 22
OLD SCHOOL RD
QUEEN ST S
ALBION VAUGHAN RD
MAIN ST
KING RD
RIVER DR
SIDERD 17
MAPLE AVE
MISSISSAUGA RD
TORBRAM RD
MAYFIELD RD
THE GORE RD
COLERAINE DR
SIDERD 15
GUELPH ST
WANLESS DR
COUNTRYSIDE DR
HWY 50
NASHVILLE RD
HERITAGE RD
SANDALWOOD PKY W
CREDITVIEW RD
HEART LAKE RD
SANDALWOOD PKY E
CLARKWAY DR
MCVEAN DR
SIDERD 10
BOVAIRD DR W
BOVAIRD DR E
CASTLEMORE RD
HWY 27
JAMES POTTER RD
MCLAUGHLIN RD N
KENNEDY RD N
MAIN ST N
HURONTARIO ST
GOREWAY DR
WILLIAMS PKY
COTTRELLE BLVD
MAJOR MACKENZIE DR W
WESTON RD
TRAFALGAR RD
EMBLETON RD
QUEEN ST W
QUEEN ST E
KEELE ST
HORNBY RD
FINANCIAL DR
MCLAUGHLIN RD S
MAIN ST S
KENNEDY RD S
RUTHERFORD RD S
Highway 410
CLARK BLVD
BRAMALEA RD
RUTHERFORD RD
STEELES AVE
WEST DR
STEELES AVE E
ISLINGTON AVE
LANGSTAFF RD
Highway 400
MAVIS RD
KENNEDY RD
TOMKEN RD
DIXIE RD
FINCH AVE
ALBION RD
Highway 427
Highway 407
PINE VALLEY DR
WINSTON CHURCHILL BLVD
DERRY RD
DERRY RD W
DERRY RD E
COURTNEYPARK DR E
XDALE BLVD
HWY 27 S
MARTIN GROVE RD
FENMAR DR
JANE ST
HWY 7
BRITANNIA RD
BRITANNIA RD W
AIRPORT RD
HWY 27 N
KIPLING AVE
SIGNET DR
NORFINCH DR
STEELES AVE W
ERIN MILLS PKY
CARLINGVIEW DR
THE POND RD
Highway 401
FINCH AVE W
LOWER BASELINE E
EGLINTON AVE W
EGLINTON AVE E
DIXON RD
WALSH AVE
BARTOR RD
OAKDALE RD
SHEPPARD AVE W
AINESS ST
9TH LINE
5TH LINE
HWY 407
Highway 403
EASTGATE PKY
RENFORTH DR
THE WESTWAY
BATHURST ST
BURNHAMTHORPE RD E
CAWTHRA RD
THE WEST MALL
THE EAST MALL
RATHBURN RD
ROYAL YORK RD
SCARLETT RD
WILSON AVE
ALLEN EXPY
WILMINGTON AVE
DREWRY AVE
LAWRENCE AVE W
SENLAC RD

0 2 4 8 Kilometres

Figure Notes:

Highway 413 area and alignment as per 50% Preliminary Highway Design (Highway 413 Interactive Map, 2024)

LEGEND

- ARTERIAL / MUNICIPAL HIGHWAY
- FREEWAY
- HIGHWAY 413 FOCUSED ANALYSIS AREA (FAA)
- PRELIMINARY HIGHWAY (EDGE OF PAVEMENT)
- TULLAMORE NORTHWEST EMPLOYMENT AREA

CROZIER

BROCCOLINI
AIRPORT ROAD
PROPOSED HIGHWAY
413 CORRIDOR

4.2.5 Future East-West Collector Road (UPDATED)

The Town of Caledon Multi-Modal Transportation Master Plan Addendum (Town of Caledon, January 2026) identifies an east-west collector road (herein referred to as E-W Collector Road), south of the Subject Lands. This roadway is anticipated to be generally continuous throughout the Town, with a 26 m cross-section. The MMTMP Addendum's proposed collector road network outlines that the E-W Collector Road will span from Mississauga Road to east of Centreville Creek Road.

Based on discussions with Town staff, the E-W Collector Road is planned to abut the Subject Lands to the south, with an intersection at Airport Road.

Appendix G includes the Town of Caledon MMTMP Addendum excerpts. **Appendix I** includes the conceptual design of the E-W Collector Road.

4.2.6 Summary (UPDATED)

Table 12 summarizes the planned mobility improvements within the study area and study horizon.

Table 12: Planned Mobility Improvements

Roadway	Segment	Improvement	Year
Mayfield Road	Airport Road to Coleraine Drive	Widening from 2 to 6 Lanes	2031
Airport Road	Mayfield Road to King Street	Widening from 2 to 4 Lanes	2031
Airport Road & Old School Road/Healy Road		Roundabout	2031
Torbram Road	Mayfield Road to Old School Road	Widening from 2 to 4 Lanes	2031
Highway 413	Highway 401 to Highway 400	New 400-Series Highway	By 2031[1]
E-W Collector Road	Mississauga Road to Centreville Creek Road	New Collector Roadway	By 2051[2]

Note 1: Construction is scheduled to start in 2026. Assumed to be built out by the 2031 horizon year.
Note 2: The E-W Collector Road does not currently have an anticipated buildout timeline. Nevertheless, it is assumed that the roadway will be built out by the 2051 horizon year.

It is noted that all other mobility improvements within the study area, beyond those identified in **Table 12**, are assumed to be built out beyond the 2038 horizon and are not included in the transportation review outlined herein.

4.3 Secondary Plan Areas

4.3.1 Tullamore Northwest Employment Area (UPDATED)

The Proposed Development is located within the proposed Tullamore Northwest Employment Area, which is bound by Old School Road to the north, the Tullamore Industrial Business Park to the south, Airport Road to the east and Torbram Road to the west. As part of the Secondary Plan works, a potential internal collector road network with connections to the external boundary

network, including to Airport Road, were identified. This collector road network is generally consistent with that identified in the Town's Multi-Modal Transportation Master Plan Addendum (January 2026), and includes the E-W Collector Road, as discussed in **Section 4.2.5**. The E-W Collector Road is currently planned to connect to Airport Road, south of the Subject Site.

It is understood that the Proposed Development will be built out prior to the remainder of the Tullamore Northwest Employment Area, including any roadways connections. As such, no collector roads that may be implemented as part of the fulsome Tullamore Northwest Employment Area are not included in the future transportation review herein.

5.0 Future Background Transportation Network Review

This section summarizes the future background conditions of the study road network and provides details relating to growth rates and background developments within the study area. As outlined in **Section 1.3**, the study herein considers the 2028, 2033 and 2038 horizon years for future analysis.

5.1 Corridor Growth Rates (UPDATED)

Region of Peel staff provided growth rates for regional roads between 2025 and 2033. These growth rates were applied to through movements along the regional study roadways.

An industry standard annual 2.0% corridor growth rate was applied to through movements along Town collector roads, consistent with the Tullamore Industrial Business Park Transportation Impact Study Update (Crozier, April 2024). Furthermore, as reviewed in the Tullamore Northwest Employment Area Secondary Plan Transportation Study Update (Crozier, February 2026), the 2% growth rate applied is appropriate as the forecasted 2051 traffic volumes exceed the projections identified in the Town's Multi-Modal Transportation Master Plan. **Appendix C** includes the Tullamore Northwest Employment Area Secondary Plan excerpts.

No growth was applied along the local roadways planned as part of future developments. Based on the configuration of these roadways, any corridor traffic growth would be attributed to the planned buildout of future developments and associated trip assignments. Moreover, future traffic growth on these roadways is expected to be captured by the background development traffic assignment, as applicable.

Table 13 summarizes the growth rates applied to the study roadways.

Table 13: Applied Annual Growth Rates

Corridor	2025 to 2031	2031 to 2038
Mayfield Road	1.0%	0.5%
Airport Road	1.5%	0.5%
Torbram Road	2.0%	2.0%
Old School Road/Healy Road	2.0%	2.0%
Perdue Court/Davis Lane	0.0%	0.0%

5.2 Background Developments (UPDATED)

Table 14 outlines the noted developments proposed near the Subject Site and are included as background developments.

Table 14: Background Developments

Development	Land Use	Statistic	Report
Tullamore Industrial Business Park	Industrial Warehouse	568,557 m^2	Transportation Review Letter (Crozier, October 2025)
6034 Mayfield Road	Industrial	44,535 m^2	Transportation Impact Study (WSP, July 2021)
Countryside Villages Block 48-2	Residential	3,391 units	Revised Transportation Impact Study (Cole Engineering, May 2017)
	Mixed Use & Commercial	12,715 m^2	
	Retail	9.34 ha	
	School	5 schools	
	Place of Worship	2 places	
13846 & 13940 Airport Road	Commercial	19,741 m^2	Transportation Impact Study (Trans-Plan, January 2022)
Mayfield-Tullamore Secondary Plan	Residential	7,806 units	Transportation Study (BA Group, August 2024)
	School	4 schools	
	Retail	~40,000 m^2	

Figure 10 illustrates the background development locations. **Appendix J** includes the relevant background development excerpts.

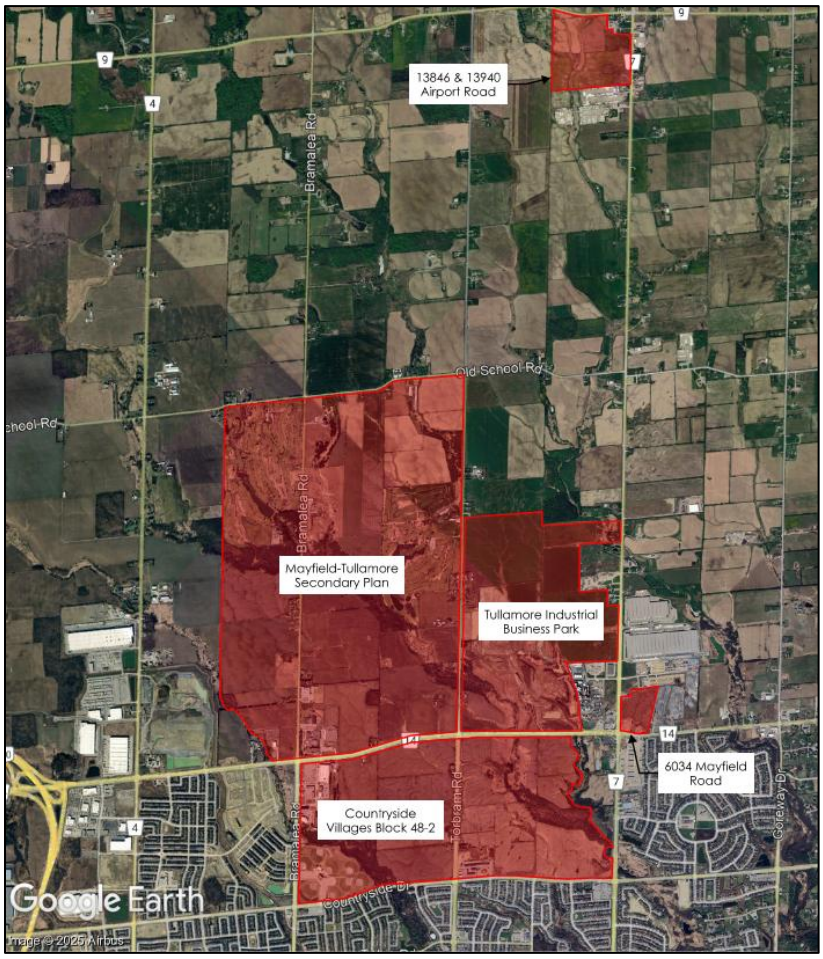


Figure 10: Background Developments Map

Tullamore Industrial Business Park

The Tullamore Industrial Business Park, located at 0 & 12245 Torbram Road, proposes an industrial park with 8 buildings comprised of a combined industrial warehouse gross floor area (GFA) of 568,557 m^2.

As outlined in the Transportation Review Letter (Crozier, October 2025), the background development is expected to generate 923 and 947 two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively.

It is noted that the Tullamore Industrial Business Park also proposes an internal collector road network. An east-west collector road, Alban Road, is proposed, forming the west approach of the existing Airport Road & 12333 Airport Road Access study intersection. Alban Road will span from Airport Road to Ionic Drive, a proposed north-south collector road.

6304 Mayfield Road

The background development at 6304 Mayfield Road proposes 2 industrial buildings with a combined GFA of 44,535 m^2.

The Transportation Impact Study (WSP, July 2021) outlines that the background development is expected to generate 142 and 109 two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively.

The Transportation Impact Study did not assign trips north of the proposed accesses, located south of Airport Road & Perdue Court/Davis Lane. As such, it is assumed that all trips travelling to/from the north along Airport Road will continue as through movements.

Countryside Villages Block 48-2

The Countryside Villages Block 48-2 proposes a new community with 3,391 residential units, 12,715 m^2 of mixed use and commercial GFA, and 5 schools as well as a 9.34 ha retail district and 2 places of worship.

The Revised Transportation Impact Study (Cole Engineering, May 2017) outlines that the proposed community is expected to generate 4,452 and 3,880 two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively.

Since Cole Engineering's report did not assign trips north of Mayfield Road, it is assumed that all trips to/from the north will continue as through movements along Airport Road.

The Revised Transportation Impact Study identified a full buildout horizon of 2021; however, based on current conditions, beyond the special policy areas, construction has not started on the development. Given the size of Countryside Villages Block 48-2, it is assumed that only one-third (33%) of the development yield will be built out by the 2028 horizon year and full build out will be by the 2033 horizon year. Accordingly, for the 2028 horizon year, an adjustment was made to the site generated traffic volumes outlined in the Revised Transportation Impact Study.

13846 & 13940 Airport Road

The background development at 13846 & 13940 Airport Road proposes a commercial development comprised of 8 buildings with a combined commercial GFA of 19,741 m^2. It is noted that the exact land use for each building is not yet determined.

Based on the Transportation Impact Study (Trans-Plan, January 2022), the development is expected to generate 258 and 627 two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively.

Trans-Plan's report did not assign trips south of Old School Road/Healy Road nor west of Airport Road. It is assumed that all trips travelling to/from the south of Airport Road & Old School Road/Healy Road will continue as through movements along Airport Road. Similarly, it is assumed that all trips travelling to/from the west of Airport Road & Old School Road/Healy Road will continue as through movements along Old School Road.

Mayfield-Tullamore Secondary Plan

The proposed Mayfield-Tullamore Secondary Plan proposes a community consisting of 7,806 units with supporting institutional, recreational and non-residential uses.

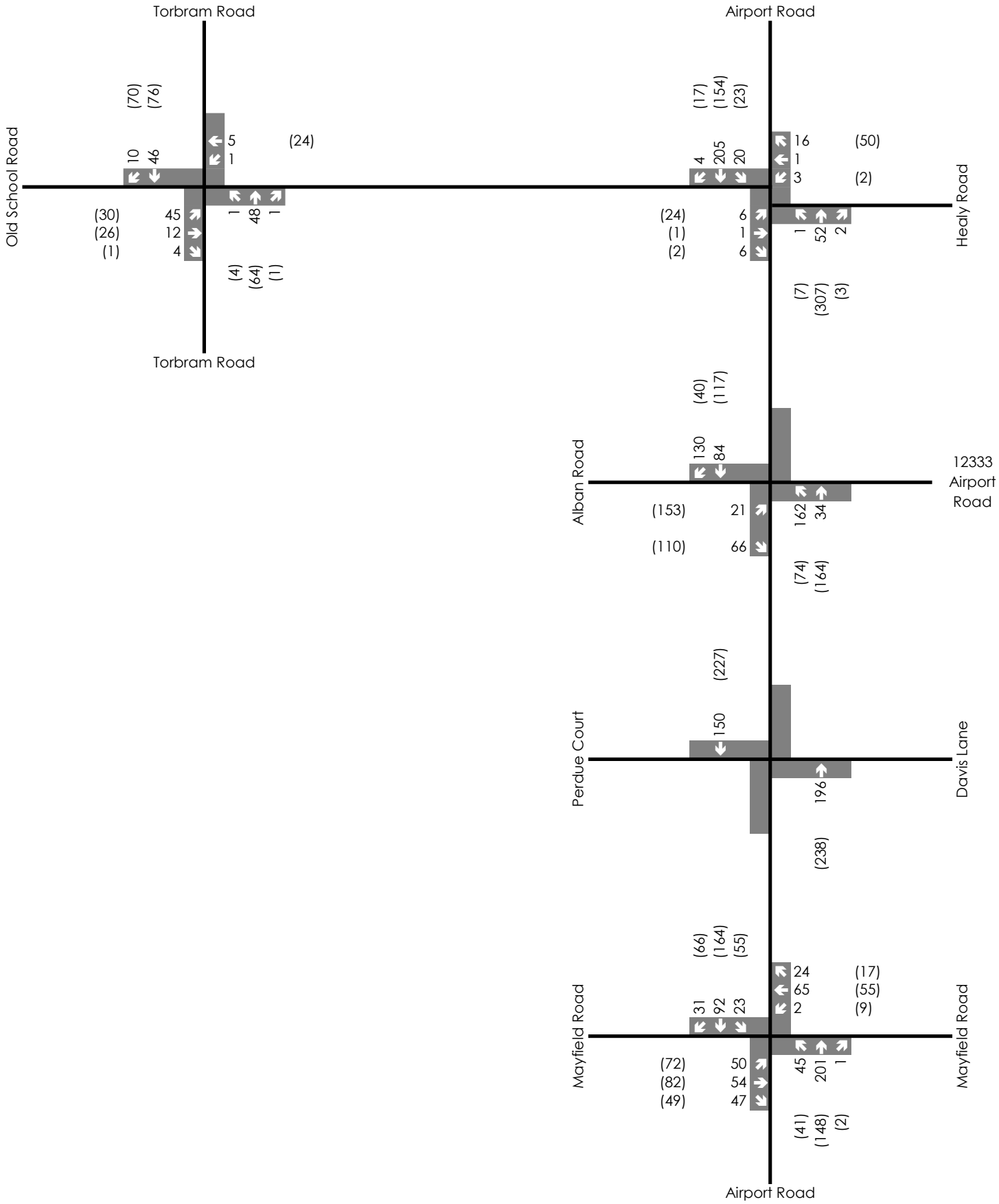
As the Transportation Study Addendum (BA Group, February 2026) did not review the expected transportation operations in support of the Secondary Plan, the transportation operations and associated Mayfield-Tullamore Secondary Plan generated volumes outlined in the Transportation Study (August 2024) were used herein.

BA Group's Transportation Study (August 2024) outlines that the background development is expected to generate 4,050 and 5,025 two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively.

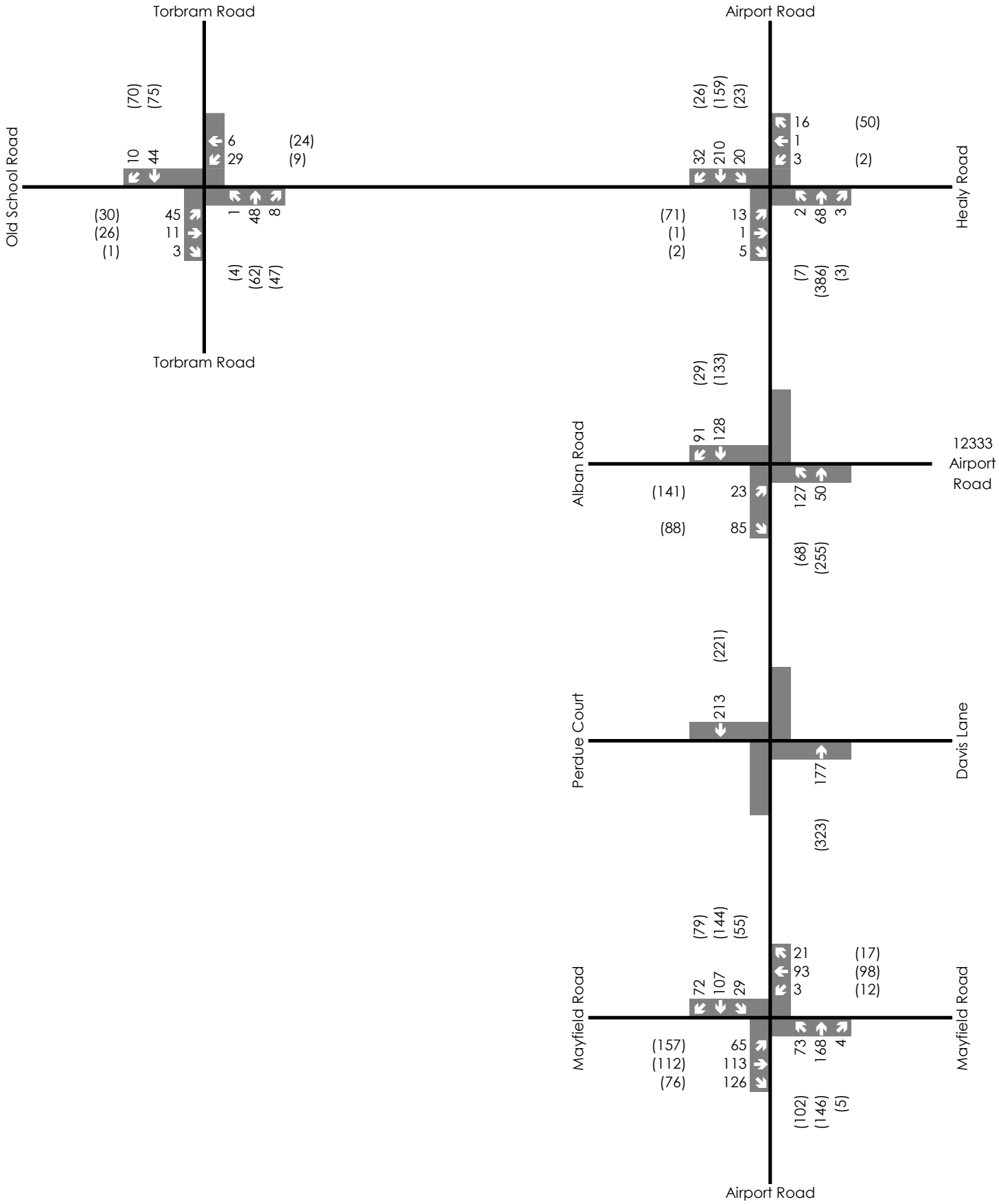
It is noted that the entirety of the site generated trips were included as part of background traffic, despite the transportation study having an ultimate 2051 horizon year. While the Mayfield-Tullamore Secondary Plan may not actually be fully built out by the initial 2028 horizon year, for conservative analysis, it is assumed the entire development is built out.

Summary

Figure 11 and **Figure 12** illustrates the 2028 and 2033 & 2038 future background development traffic volumes, respectively.



Legend	Broccolini Airport Road		Figure 11
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2028 Background Development Traffic Volumes	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY



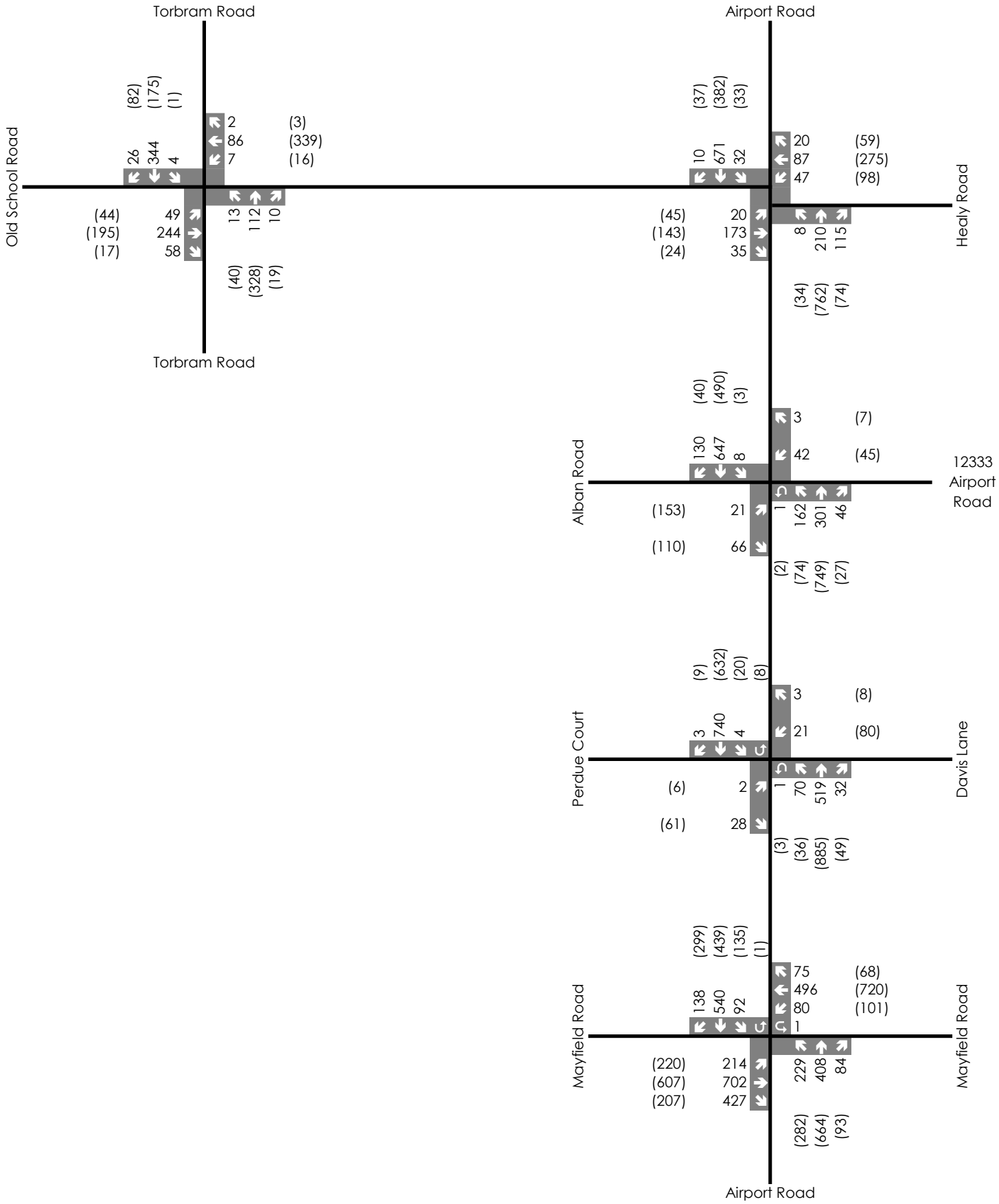
Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 12
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2033 & 2038 Background Development Traffic Volumes		Project No. 2278-7228 Date: 05/05/26 Analyst: MY

5.3 Future Background Traffic Volumes

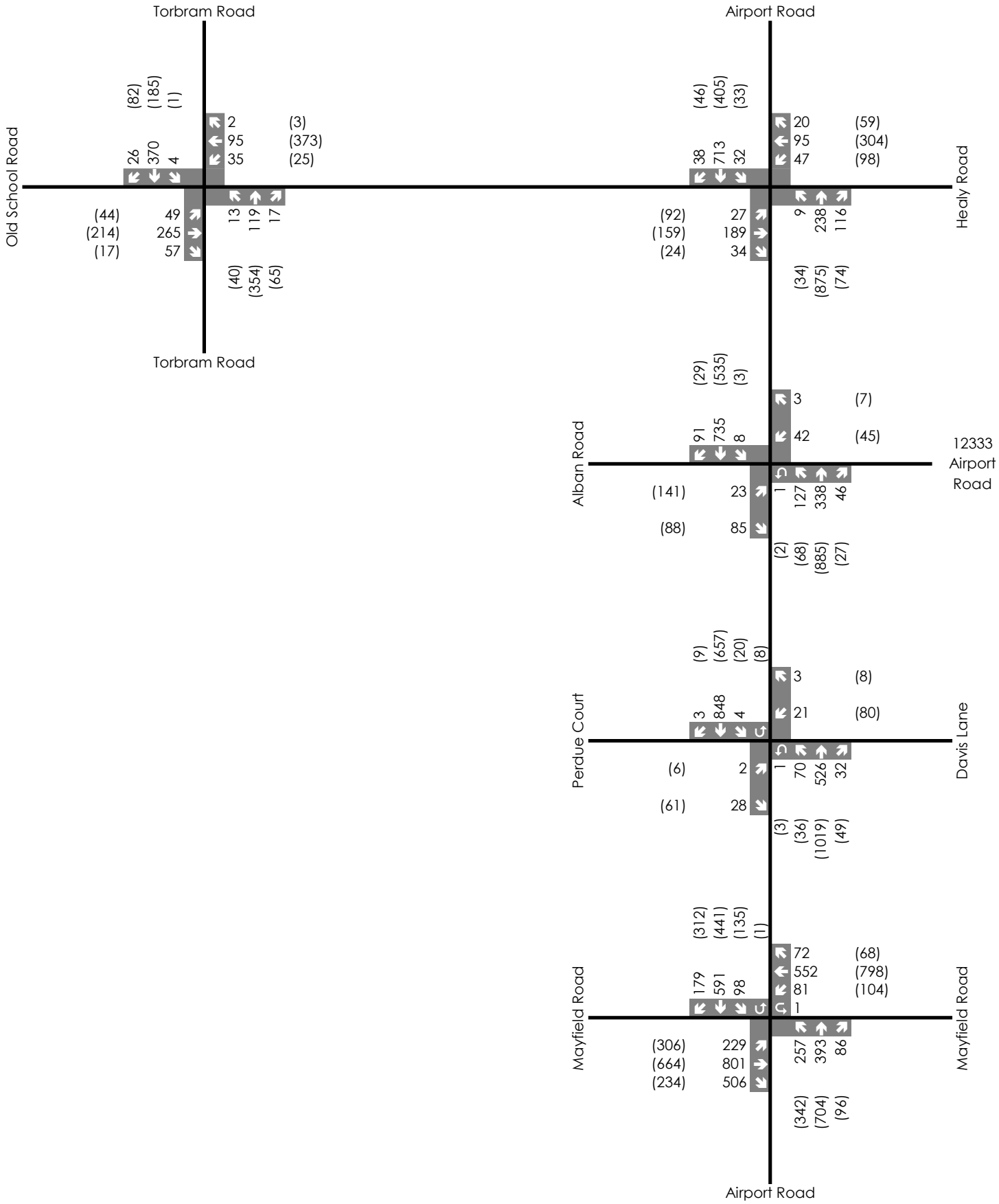
The future total traffic volumes for the horizon years consist of the following components:

- Grown Traffic Volumes
- Background Development Traffic Volumes

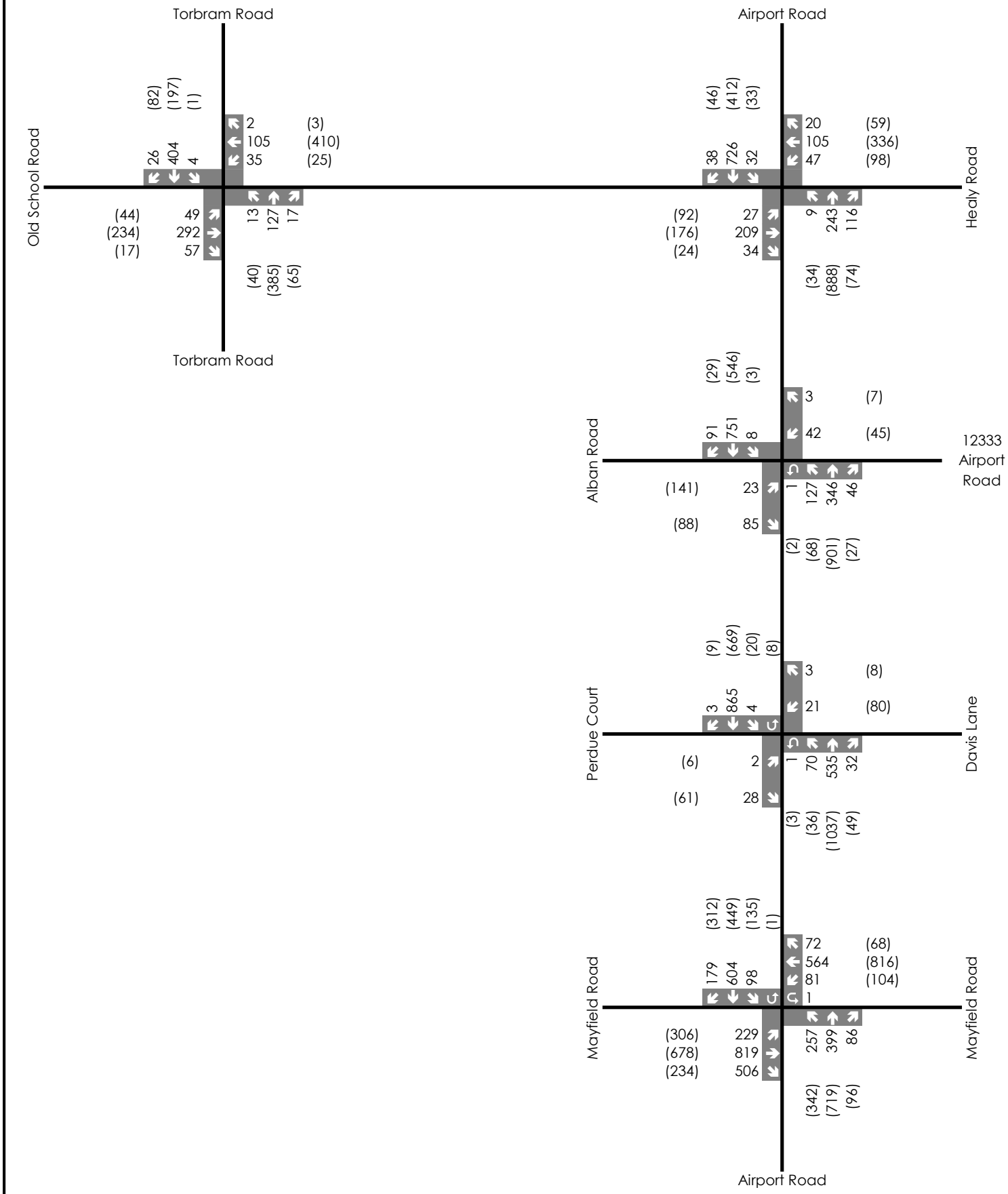
Figure 13, **Figure 14** and **Figure 15** illustrates the resulting 2028, 2033 and 2038 future background traffic volumes, respectively.



Legend	Broccolini Airport Road		Figure 13
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2028 Future Background Traffic Volumes	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY



Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 14
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2033 Future Background Traffic Volumes		Project No. 2278-7228 Date: 05/05/26 Analyst: MY



Legend	Broccolini Airport Road		Figure 15
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2038 Future Background Traffic Volumes	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY

5.4 Warrants Assessment (UPDATED)

Signal warrants were assessed for the unsignalized study intersections under 2028, 2033 and 2038 future background conditions.

The analysis was conducted based on Chapter 4 of the Ontario Traffic Manual Book 12: Traffic Signals (MTO, July 2024). As only peak hour volumes were available, Justification 7: Projected Volumes was selected as the most appropriate warrant to assess the unsignalized study intersections.

The average hour volume was determined using the following formula from Ontario Traffic Manual Book 12:

$$AHV = (amPHV + pmPHV) / 4$$

Where:

AHV = average hour volume
amPHV = a.m. peak hour volume
pmPHV = p.m. peak hour volume

For roadways with operational speeds of 60 km/h or lower, restricted flow was used. Conversely, unrestricted flow was used for roadways with operating speeds above 60 km/h.

Table 15 summarizes the future background signal warrant analysis.

Table 15: Future Background Signal Warrant Analysis

Intersection	Horizon Year	Flow Condition	Lanes on Major Road	Signal Warranted?
Torbram Road & Old School Road	2028	Free	1 Lane	**May Be[1]**
	2033		2+ Lanes	**May Be[1]**
	2038			**May Be[1]**
Airport Road & Perdue Court/Davis Lane	2028	Free	2+ Lanes	No
	2033			No
	2038			No

Note 1: Signal warrant falls between 100% and 200% of applicable threshold, therefore signal control may be warranted.

Signal control may be warranted at Torbram & Old School Road for all horizon years under future background conditions.

Appendix K includes the warrants assessment reports.

5.5 Traffic Modelling and Assumptions

The section herein outlines the traffic modelling assumptions used in evaluating future background conditions.

5.5.1 Road Geometry

2028 Horizon Year

The intersection proposed along Airport Road as part of the Tullamore Industrial Business Park was modelled based on the 60% detailed design drawings submitted.

An east-west collector road, Alban Road, is proposed as part of the Tullamore Industrial Business Park. Alban Road is proposed to form the fourth leg of the existing Airport Road & 12333 Airport Road Access intersection. Based on the pavement marking and signage plan for Airport Road & Alban Road/12333 Airport Road Access, the following auxiliary turn lanes were modelled:

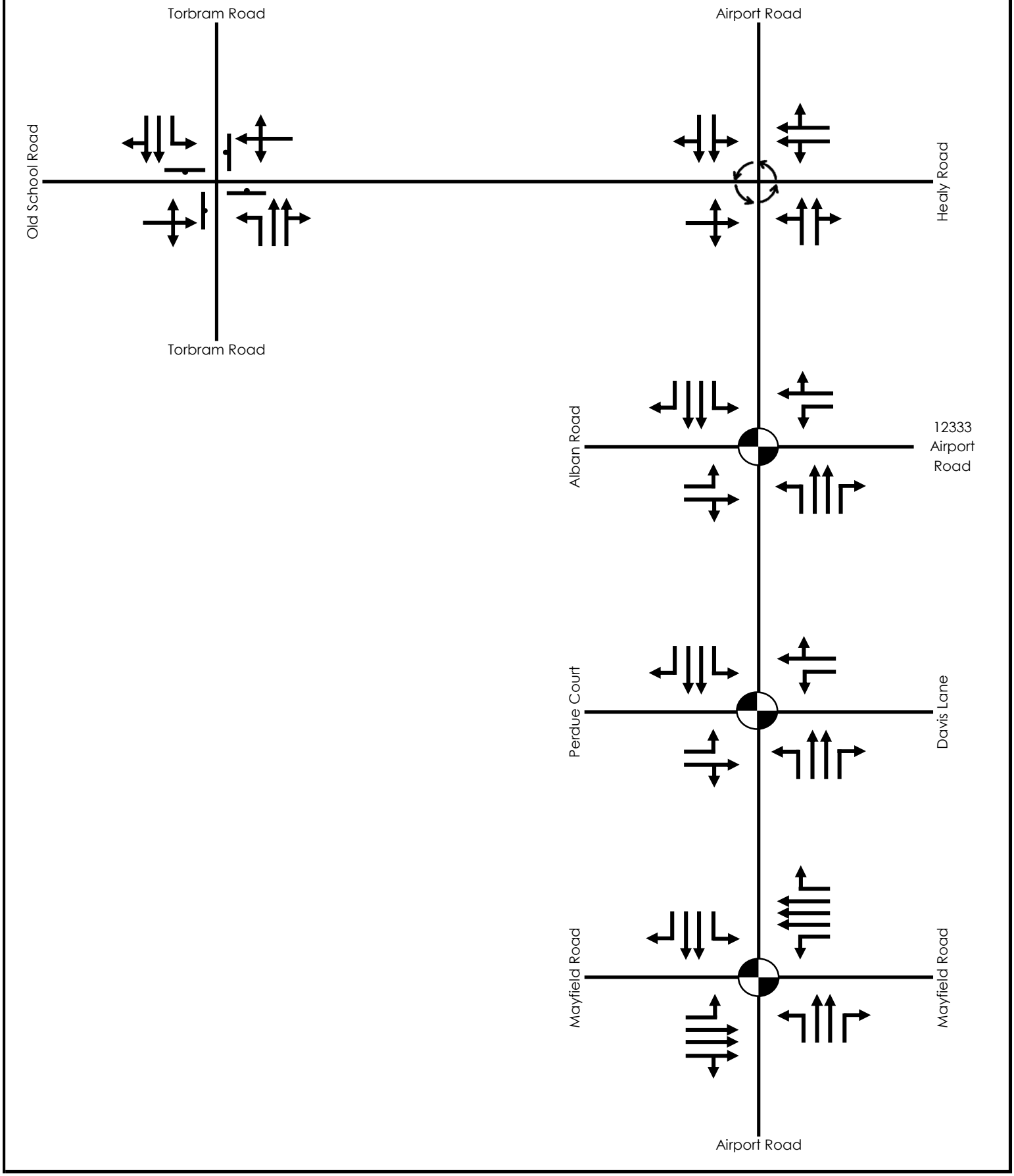
- EBL: 55 m (parallel), 20 m (taper)
- NBL: 120 m (parallel), 145 m (taper)
- SBR: 100 m (parallel), 105 m (taper)

It is noted that taper lengths greater than 100 m were modelled as 100 m, due to the taper length restrictions associated with Synchro 12.0 software.

2033 Horizon Year

The Synchro model was updated to reflect the planned widening of Airport Road within the study area by 2031. Airport Road was modelled based on the geometry outlined in the most recent detailed design drawings prepared as part of the Airport Road Environmental Assessment. As identified in the Airport Road improvements, Airport Road & Old School Road/Healy Road was modelled as a roundabout.

Figure 16 outlines the 2033 future background study road network.



Legend	Broccolini Airport Road		Figure 16
Signal Control Stop Control Roundbout Control	2033 Future Background Study Road Network	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY

5.5.2 Modelling Parameters

Consistent with existing conditions, PHFs of 1.00 were kept unchanged for all Town and Region roads, per the Region's guidelines.

The heavy vehicle percentages were updated in the model for each horizon year to reflect the increased heavy vehicle traffic expected as part of the industrial background developments.

2028 Horizon Year

Despite not being warranted, signal control was modelled at Airport Road & Perdue Court/Davis Lane to support future background traffic operations. Consistent with the signal timing plan at Airport Road & Alban Road/12333 Airport Road Access, the proposed signal at Airport Road & Perdue Court/Davis Lane was modelled as actuated-coordinated with a 120 s cycle length during the weekday a.m. and p.m. peak hours. This is consistent with the assumptions outlined in the Tullamore Northwest Employment Area Secondary Plan Transportation Study (Crozier, May 2025).

As signal control may be warranted under 2028 future background conditions at Torbram Road & Old School Road, for conservative analysis, the intersection of Torbram Road & Old School Road was modelled as all-way stop controlled, consistent with existing conditions.

The signal timing plans at the signalized study intersections were optimized (Opt. #1), given the planned transportation network improvements and background developments.

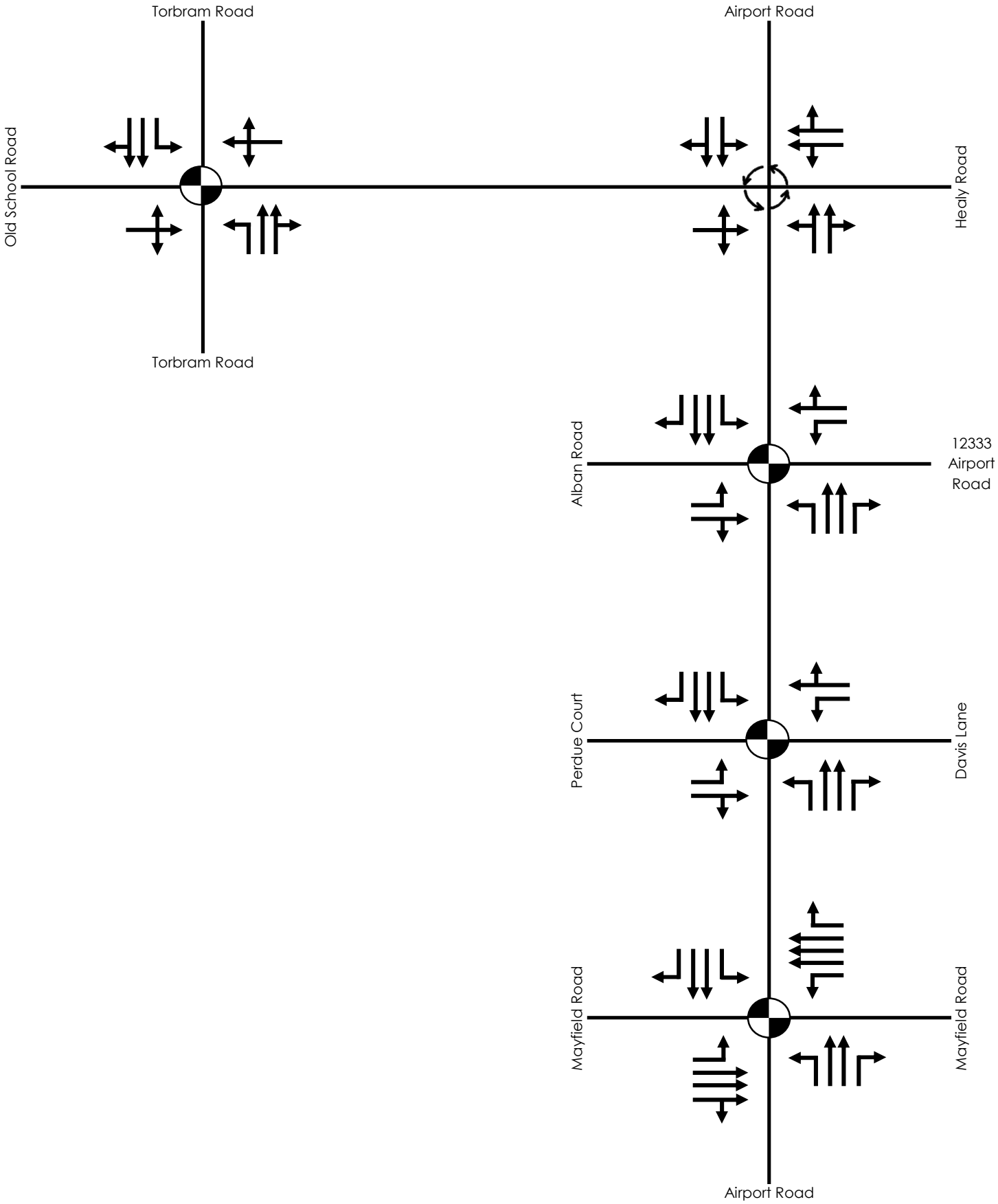
2033 Horizon Year

Given the planned road widening along Airport Road, the signal timing plan splits for all signalized study intersections were optimized (Opt. #2).

2038 Horizon Year

Despite not be warranted, the intersection of Torbram Road & Old School Road was modelled as a signalized intersection for the 2038 horizon year to support future background traffic volumes. The intersection was modelled as semi-actuated uncoordinated with a 100 s cycle length, consistent with the Mayfield-Tullamore Secondary Plan Transportation Study (BA Group, August 2024).

Figure 17 outlines the 2038 future background study road network.



Legend	Broccolini Airport Road		Figure 17
Signal Control Stop Control Roundbout Control	2038 Future Background Study Road Network	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY

5.5.3 Roundabout Analysis

2033 Horizon Year

As outlined in the Airport Road Environmental Assessment, the signalized intersection of Airport Road & Old School Road/Healy Road is also planned to be converted to a roundabout by 2031. Roundabout analysis was completed for Airport Road & Old School Road/Healy Road intersections using ARACDY Junctions 8 software.

The roundabout geometry was modelled based on the 60% design drawings of Airport Road. It is noted that the 60% design drawings outline 1 eastbound travel lane along Old School Road/Healy Road, with a northbound right-turn by-pass. Since the preparation of these design drawings, the Town has identified that Old School Road and Healy Road will be widened to four lanes by 2041. Given the planned improvements, 2 eastbound travel lanes are assumed along Old School Road/Healy Road, consistent with the future 4-lane cross-section for Old School Road and Healy Road.

Table 16 outlines the roundabout geometry used in the modelling.

Table 16: Airport Road & Old School Road/Healy Road Roundabout Geometry

Parameter	Airport Road	Airport Road	Healy Road	Old School Road
Approach	North	South	East	West
Approach Road Half-Width	7.4 m	7.4 m	7.4 m	7.4 m
Entry Width	10.0 m	9.8 m	10.0 m	10.0 m
Effective Flare Length	30 m	30 m	30 m	30 m
Entry Radius	28 m	32 m	28 m	38 m
Inscribed Circle Diameter	55 m	55 m	55 m	55 m
Conflict (Entry) Angle	12 degrees	8 degrees	26 degrees	11 degrees

In addition, a y-intercept value of 90% was used, consistent with the analysis outlined in the Airport Road Environmental Assessment, Tullamore Industrial Business Park Transportation Impact Study Update (Crozier, March 2023), and the Tullamore Northwest Employment Area Secondary Plan Transportation Study (Crozier, May 2025). This accounts for motorist unfamiliarity with roundabouts in the Greater Toronto Area compared to in the United Kingdom.

Appendix H outlines the relevant Airport Road Environmental Assessment excerpts.

5.6 Intersection Operations (UPDATED)

The section herein reviews the intersection operations under 2028 and 2033 future background conditions. This assessment includes key metrics including level of service (LOS), control delay and volume-to-capacity (v/c) ratio.

Appendix E contains the detailed capacity analysis worksheets.

5.6.1 2028 Horizon Year

Signalized Intersections

Table 17 details the 2028 future background traffic operations for the signalized study intersections.

Table 17: 2028 Future Background Traffic Operations – Signalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Mayfield Road & Airport Road	Signal Opt. #1	**Overall**	**C**	**D**	**31**	**36**	**0.86**	**0.84**
		EBL	B	C	17	26	0.50	0.67
		EBT	C	C	24	26	0.44	0.40
		EBR	A	A	8	4	0.49	0.26
		WBL	B	B	15	18	0.25	0.27
		WBTR	C	D	27	35	0.45	0.59
		NBL	E	D	58	51	0.86	0.83
		NBT	D	E	41	59	0.54	0.84
		NBR	A	A	4	7	0.23	0.27
		SBL	D	D	38	41	0.35	0.64
		SBT	E	D	59	52	0.78	0.62
		SBR	B	A	20	9	0.36	0.57
Airport Road & Old School Road/ Healy Road	Signal Opt. #1	**Overall**	**C**	**E**	**35**	**77**	**0.80**	**1.13**
		EBLTR	E	F	65	94	0.79	0.94
		WBLTR	E	F	59	133	0.66	1.13
		NBLT	B	E	16	55	0.26	0.96
		NBR	A	A	1	3	0.10	0.06
		SBLT	C	E	31	68	0.80	0.96
		SBR	A	A	1	2	0.01	0.04
	Updated Geometry	**Overall**	N/A	**D**	N/A	**48**	N/A	**0.92**
		EBL		E		56		0.42
		EBTR		E		69		0.72
		WBL		D		47		0.30
		WBTR		F		81		0.92
		NBLT		D		42		0.89
		NBR		A		3		0.06
		SBLT		D		36		0.76
		SBR		A		2		0.04

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & Alban Road/12333 Airport Road Access	**Signal Opt. #1**	**Overall**	**A**	**B**	**6**	**18**	**0.43**	**0.73**
		EBL	D	E	50	67	0.16	0.73
		EBTR	A	A	1	1	0.17	0.19
		WBL	E	D	63	44	0.43	0.27
		WBTR	A	A	0	0	0.00	0.02
		NBL	A	B	6	17	0.34	0.15
		NBT	A	B	3	17	0.12	0.31
		NBR	A	A	1	8	0.05	0.04
		SBL	A	A	4	8	0.01	0.01
		SBT	A	A	4	7	0.24	0.21
		SBR	A	A	1	1	0.12	0.03
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #1**	**Overall**	**A**	**A**	**3**	**8**	**0.27**	**0.54**
		EBL	D	D	48	45	0.03	0.04
		EBTR	A	A	1	1	0.09	0.15
		WBL	D	E	55	63	0.23	0.54
		WBTR	A	A	0	0	0.01	0.03
		NBL	A	A	2	5	0.14	0.10
		NBT	A	A	1	5	0.20	0.33
		NBR	A	A	0	2	0.03	0.07
		SBL	A	A	3	7	0.01	0.10
		SBT	A	A	2	6	0.27	0.24
		SBR	A	A	0	1	0.00	0.01

Note 1: The overall LOS and control delay of a signalized intersection is based on the average control delay per vehicle (Synchro).

Note 2: The overall v/c ratio for signalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

Airport Road & Old School Road/Healy Road

The intersection of Airport Road & Old School Road/Healy Road is expected to operate at a LOS "E" or better during the weekday peak hours with a maximum control delay and v/c ratio of 77 s and 1.13, respectively. The split signal timing plan, where the eastbound and westbound traffic operate one after another, contributes to the high control delays and v/c ratios; however, given the offset east and west approaches, this split phasing is required to increase safety at the intersection. The intersection will be converted to a roundabout as part of the Airport Road widening, scheduled by 2031, which will address the anticipated operational concerns as well as mitigate the impact of the offset approaches. Nevertheless, in the interim, the Town and Region can consider implementing auxiliary eastbound left-turn and westbound left-turn lanes.
With auxiliary eastbound and westbound left-turn lanes at Airport Road & Old School Road/Healy Road, the intersection is expected to operate with an improved LOS "D" and a maximum v/c ratio of 0.92. While the maximum v/c ratio is above the critical threshold, all movements is still operating under capacity, and the intersection is anticipated to operate acceptably.

Remaining Study Intersections

The remaining signalized study intersections are expected to operate at a LOS "D" or better, with low to moderate control delays and v/c ratios, under 2028 future background conditions. These metrics indicate that the study road network is operating efficiently with acceptable delays and reserve capacity to accommodate future increases in traffic volumes.

Unsignalized Intersections

Table 18 details the 2028 future background traffic operations for the unsignalized study intersections.

Table 18: 2028 Future Background Traffic Operations – Unsignalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[2]		v/c ratio[3]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Torbram Road & Old School Road	All-Way Stop	**Overall**	**B**	**D**	**15**	**34**	**0.61**	**0.88**
		EBLTR	B	C	15	22	0.54	0.58
		WBLTR	B	D	10	33	0.16	0.78
		NBLTR	B	E	11	44	0.23	0.88
		SBLTR	C	D	18	30	0.61	0.67

Note 1: The overall LOS and control delay of an all-way stop-controlled intersection is based on the overall delay for the intersection (HCM 2010).
Note 2: The overall v/c ratio for unsignalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

The unsignalized study intersection is expected to operate at a LOS "D" or better with low to moderate control delays and v/c ratios. Therefore, the intersection is expected to operate efficiently, with reserve capacity to accommodate future traffic growth.

5.6.2 2033 Horizon Year

Signalized Intersections

Table 19 details the 2033 future background traffic operations for the signalized study intersections.

Table 19: 2033 Future Background Traffic Operations – Signalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Mayfield Road & Airport Road	**Signal Opt. #2**	**Overall**	**C**	**D**	**33**	**37**	**0.88**	**0.93**
		EBL	C	C	21	33	0.53	0.78
		EBTR	C	C	25	25	0.62	0.44
		WBL	C	C	24	20	0.47	0.37
		WBT	C	D	27	35	0.30	0.44
		WBR	A	A	2	1	0.14	0.15
		NBL	E	E	56	64	0.88	0.93
		NBT	D	E	37	55	0.46	0.82
		NBR	A	A	7	7	0.23	0.26
		SBL	D	D	38	44	0.33	0.67
		SBT	E	D	61	54	0.79	0.67
		SBR	C	A	21	9	0.41	0.59
Airport Road & Alban Road/12333 Airport Road Access	**Signal Opt. #2**	**Overall**	**A**	**B**	**6**	**13**	**0.44**	**0.74**
		EBL	D	E	50	68	0.17	0.74
		EBTR	A	A	2	1	0.24	0.19
		WBL	E	D	64	45	0.44	0.28
		WBTR	A	A	0	0	0.00	0.02
		NBL	A	A	6	8	0.32	0.16
		NBT	A	A	3	8	0.13	0.36
		NBR	A	A	1	1	0.05	0.04
		SBL	A	A	4	8	0.01	0.01
		SBT	A	A	4	7	0.27	0.23
		SBR	A	A	1	1	0.09	0.03
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #2**	**Overall**	**A**	**A**	**3**	**6**	**0.31**	**0.54**
		EBL	D	D	48	45	0.03	0.04
		EBTR	A	A	1	1	0.10	0.14
		WBL	D	E	55	63	0.23	0.54
		WBTR	A	A	0	0	0.01	0.03
		NBL	A	A	2	5	0.16	0.10
		NBT	A	A	1	5	0.20	0.38
		NBR	A	A	0	2	0.03	0.07
		SBL	A	A	3	3	0.01	0.12
		SBT	A	A	2	2	0.31	0.25
		SBR	A	A	0	0	0.00	0.01

Note 1: The overall LOS and control delay of a signalized intersection is based on the average control delay per vehicle (Synchro).

Note 2: The overall v/c ratio for signalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

The signalized study intersections are operating efficiently at a LOS "D" or better during the weekday a.m. and p.m. peak hours. These intersections are expected to have low to moderate control delays and v/c ratios, with no notable operational concerns anticipated.

Unsignalized Intersections

Table 20 details the 2033 future background traffic operations for the unsignalized study intersections.

Table 20: 2033 Future Background Traffic Operations – Unsignalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[2]		v/c ratio[3]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Torbram Road & Old School Road	All-Way Stop	**Overall**	**B**	**C**	**15**	**25**	**0.65**	**0.84**
		EBLTR	C	C	20	23	0.65	0.61
		WBLTR	B	E	12	41	0.25	0.84
		NBL	B	B	11	12	0.03	0.09
		NBT	B	C	11	19	0.15	0.52
		NBR	B	C	10	15	0.11	0.39
		SBL	B	B	10	14	0.01	0.00
		SBT	B	B	14	15	0.45	0.29
		SBR	B	B	11	14	0.26	0.32

Note 1: The overall LOS and control delay of a two-way stop-controlled intersection is based on the delay associated with the critical minor road approach (HCM 2000). The overall LOS and control delay of an all-way stop-controlled intersection is based on the overall delay for the intersection (HCM 2010).

Note 2: The overall v/c ratio for unsignalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

Under 2033 future background conditions, the unsignalized Torbram Road & Old School Road intersection is expected to operate at a LOS "C" or better with low to moderate control delays and v/c ratios. These metrics indicate that the intersection is operating with reserve capacity to accommodate future traffic growth.

Roundabout Intersections

Table 21 details the 2033 future background traffic operations for the roundabout study intersections.

Table 21: 2033 Future Background Traffic Operations – Roundabout Intersections

Intersection	Approach	LOS[1]		Delay (s)		v/c ratio[1]		95th %ile Queue[2]	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & Old School Road/Healy Road	**Overall**	**A**	**A**	**2**	**2**	**0.34**	**0.42**	**-**	**-**
	EB	A	A	2	2	0.13	0.13	~1	~1
	WB	A	A	2	3	0.07	0.27	~1	~1
	NB	A	A	2	3	0.16	0.42	~1	~1
	SB	A	A	2	2	0.34	0.23	~1	~1

Note 1: Ratio of flow to capacity (RFC). The overall RFC for roundabout intersections is the maximum approach RFC. All RFCs greater than 0.85 are outlined in red.

Note 2: 95th percentile queues are recorded in passenger car equivalents. Rounded to the nearest vehicle.

Under 2033 future background conditions, the Airport Road & Old School Road/Healy Road intersection is expected to operate at a LOS "A". The roundabout is anticipated to operate with low control delays and moderate v/c ratios, indicating the intersection is efficiently with reserve capacity for future growth.

5.6.3 2038 Horizon Year

Signalized Intersections

Table 22 details the 2038 future background traffic operations for the signalized study intersections.

Table 22: 2038 Future Background Traffic Operations – Signalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Mayfield Road & Airport Road	Signal Opt. #2	**Overall**	**C**	**D**	**33**	**38**	**0.88**	**0.93**
		EBL	C	C	21	34	0.54	0.79
		EBTR	C	C	26	26	0.63	0.45
		WBL	C	C	25	21	0.48	0.37
		WBT	C	D	27	36	0.31	0.46
		WBR	A	A	2	1	0.14	0.15
		NBL	E	E	56	64	0.88	0.93
		NBT	D	E	36	56	0.46	0.83
		NBR	A	A	7	7	0.23	0.26
		SBL	D	D	38	44	0.33	0.68
		SBT	E	D	61	54	0.80	0.67
		SBR	C	A	21	9	0.41	0.58
Torbram Road & Old School Road	Signal Opt. #2	**Overall**	**B**	**B**	**19**	**19**	**0.77**	**0.77**
		EBLTR	C	C	31	24	0.77	0.60
		WBLTR	B	C	19	30	0.31	0.77
		NBL	B	B	11	12	0.03	0.08
		NBTR	A	B	9	11	0.08	0.26
		SBL	B	B	11	12	0.01	0.00
		SBTR	B	A	11	9	0.24	0.17
Airport Road & Alban Road/12333 Airport Road Access	Signal Opt. #2	**Overall**	**A**	**B**	**6**	**13**	**0.44**	**0.74**
		EBL	D	E	50	68	0.17	0.74
		EBTR	A	A	2	1	0.24	0.20
		WBL	E	D	64	45	0.44	0.28
		WBTR	A	A	0	0	0.00	0.02
		NBL	A	A	6	8	0.32	0.16
		NBT	A	A	3	8	0.14	0.37
		NBR	A	A	1	1	0.05	0.04
		SBL	A	A	4	8	0.01	0.01
		SBT	A	A	4	7	0.28	0.24
		SBR	A	A	1	1	0.09	0.03

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #2**	**Overall**	**A**	**A**	**3**	**6**	**0.31**	**0.54**
		EBL	D	D	48	45	0.03	0.04
		EBTR	A	A	1	1	0.10	0.14
		WBL	D	E	55	63	0.23	0.54
		WBTR	A	A	0	0	0.01	0.03
		NBL	A	A	2	5	0.17	0.10
		NBT	A	A	1	5	0.21	0.39
		NBR	A	A	0	2	0.03	0.07
		SBL	A	A	3	3	0.01	0.12
		SBT	A	A	2	2	0.31	0.26
		SBR	A	A	0	0	0.00	0.01

Note 1: The overall LOS and control delay of a signalized intersection is based on the average control delay per vehicle (Synchro).
Note 2: The overall v/c ratio for signalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

Under 2038 future background conditions, the signalized study intersections are expected to operate at a LOS "D" or better with low to moderate control delays and v/c ratios. These metrics indicate that the intersection is operating acceptably with reserve capacity to accommodate future traffic growth.

Roundabout Intersections

Table 23 details the 2038 future background traffic operations for the roundabout study intersections.

Table 23: 2038 Future Background Traffic Operations – Roundabout Intersections

Intersection	Approach	LOS[1]		Delay (s)		v/c ratio[1]		95th %ile Queue[2]	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & Old School Road/Healy Road	**Overall**	**A**	**A**	**2**	**3**	**0.34**	**0.43**	**-**	**-**
	EB	A	A	2	2	0.14	0.13	~1	~1
	WB	A	A	2	3	0.08	0.29	~1	~1
	NB	A	A	2	3	0.17	0.43	~1	~1
	SB	A	A	2	2	0.34	0.24	~1	~1

Note 1: Ratio of flow to capacity (RFC). The overall RFC for roundabout intersections is the maximum approach RFC. All RFCs greater than 0.85 are outlined in red.
Note 2: 95th percentile queues are recorded in passenger car equivalents. Rounded to the nearest vehicle.

The roundabout at Airport Road & Old School Road/Healy Road is expected to operate at a LOS "A" with low control delays and v/c ratios under 2038 future background conditions. Accordingly, the intersection is anticipated to operate efficiently with reserve capacity to accommodate future traffic growth.

5.7 Queueing Assessment (UPDATED)

Consistent with existing conditions, SimTraffic was used to assess the queues within the study road network. The 95th percentile queues were compared against the available storage length to determine if any queues are expected to extend beyond the auxiliary turn lanes. **Appendix F** contains the detailed queueing analysis worksheets.

5.7.1 2028 Horizon Year

Table 24 outlines the results of the 2028 future background queueing assessment.

Table 24: 2028 Future Background Queueing Assessment

Intersection		Movement	95th Percentile Queue (m)[1]		Auxiliary Lane Storage (m)
			A.M.	P.M.	
Mayfield Road & Airport Road	Signal Opt. #1	EBL	85	75	200
		WBL	55	70	50
		WBTR	80	95	70
		NBL	105	165	95
		NBR	25	45	60
		SBL	45	70	100
		SBR	35	70	105
Airport Road & Old School Road/Healy Road	Signal Opt. #1 (Updated Geometry)	EBL	-	50	30[2]
		EBR	-	60	30[2]
		NBR	25	25	15
		SBR	30	105	50
Airport Road & Alban Road/12333 Airport Road Access	Signal Opt. #1	EBL	15	65	55[3]
		WBTR	10	10	100
		NBL	55	30	120
		NBR	10	10	145
		SBL	10	5	80[3]
		SBR	15	10	100
Airport Road & Perdue Court/Davis Lane	Signal Opt. #1	WBL	30	35	30
		NBL	30	30	70
		NBR	5	20	65
		SBL	10	25	70
		SBR	5	10	60

Note 1: Rounded up to the nearest 5 m.
Note 2: Assumed.
Note 3: Two-way left-turn lane.

The queues for some movements are expected to extend beyond the storage length. However, these queues for the following movements and intersections can be accommodated within the provided taper length, two-way left-turn lane or pavement median, accordingly:

- Mayfield Road & Airport Road (WBL)
- Airport Road & Old School Road/Healy Road (NBR)
- Airport Road & Alban Road/12333 Airport Road Access (EBL)
- Airport Road & Perdue Court/Davis Lane (WBL)

The westbound through/right-turn lane at Mayfield Road & Airport Road is expected to extend beyond the provided storage length and taper. Nevertheless, the queue is not expected to significantly impact the study road network and does not extend to the upstream intersection. It is recommended the Region monitors the queues to determine if interim improvements are warranted, prior to the Mayfield Road widening.

The northbound left-turn queues at Mayfield Road & Airport Road are expected to exceed the effective storage length, and it is recommended that the storage length should be extended to 165 m accommodate the expected queues. This storage length extension can be accommodated within the study road network by adjusting the concrete median and are not expected to impact downstream intersections.

As part of the interim improvements recommended for Airport Road & Old School Road/Healy Road, the following auxiliary turn lane storage lengths are recommended:

- Airport Road & Old School Road/Healy Road (EBL): 50 m
- Airport Road & Old School Road/Healy Road (WBL): 60 m

Furthermore, the southbound right-turn lane at Airport Road & Old School Road/Healy Road is expected to extend beyond the provided storage length and taper. Given the planned roundabout by 2031, it is recommended the Region monitors the queues to determine if interim improvements are warranted.

5.7.2 2033 Horizon Year

Table 25 outlines the results of the 2033 future background queueing assessment.

Table 25: 2033 Future Background Queueing Assessment

Intersection		Movement	95th Percentile Queue (m)[1]		Auxiliary Lane Storage (m)
			A.M.	P.M.	
Mayfield Road & Airport Road	**Signal Opt. #2**	EBL	95	270	200
		WBL	40	40	165
		WBR	20	25	60
		NBL	120	215	95
		NBR	35	60	60
		SBL	40	65	100
		SBR	35	60	105
Torbram Road & Old School Road	**All-Way Stop**	NBL	15	15	55[2]
		SBL	5	5	55
Airport Road & Alban Road/12333 Airport Road Access	**Signal Opt. #2**	EBL	20	65	55[3]
		WBTR	10	10	100
		NBL	50	30	120
		NBR	10	10	145
		SBL	10	10	75[3]
		SBR	15	10	100
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #2**	WBL	25	35	30
		NBL	30	30	70
		NBR	10	30	65
		SBL	10	20	70
		SBR	5	10	60

Note 1: Rounded up to the nearest 5 m.
Note 2: Assumed as no design drawings are currently available.
Note 3: Two-way left-turn lane.

The westbound left-turn movement at Airport Road & Perdue Court/Davis Lane is expected to extend beyond the provided storage length. However, the queue can be accommodated within the provided taper length.

As outlined for 2028 future background conditions, the northbound left-turn queues at Mayfield Road & Airport Road are expected to exceed the effective storage length. It is recommended that the storage length should be extended further to 215 m to accommodate the expected queues. This storage length extension can be accommodated within the study road network by adjusting the concrete median and are not expected to impact downstream intersections.

5.7.3 2038 Horizon Year

Table 26 outlines the results of the 2038 future background queueing assessment.

Table 26: 2038 Future Background Queueing Assessment

Intersection		Movement	95th Percentile Queue (m)[1]		Auxiliary Lane Storage (m)
			A.M.	P.M.	
Mayfield Road & Airport Road	**Signal Opt. #2**	EBL	90	160	200
		WBL	40	40	165
		WBR	25	25	60
		NBL	125	210	95
		NBR	30	70	60
		SBL	50	80	100
		SBR	35	55	105
Torbram Road & Old School Road	**Signal Opt. #2**	NBL	10	20	55[2]
		SBL	5	-	55
Airport Road & Alban Road/12333 Airport Road Access	**Signal Opt. #2**	EBL	20	65	55[3]
		WBTR	10	10	100
		NBL	50	30	120
		NBR	10	10	145
		SBL	10	5	80[3]
		SBR	15	10	100
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #2**	WBL	25	35	30
		NBL	30	25	70
		NBR	5	15	65
		SBL	10	30	70
		SBR	5	5	60

Note 1: Rounded up to the nearest 5 m.
Note 2: Assumed as no design drawings are currently available.
Note 3: Two-way left-turn lane.

The queues for some movements are expected to extend beyond the storage length. However, these queues for the following movements and intersections can be accommodated within the provided taper length, two-way left-turn lane or available pavement, accordingly:

- Mayfield Road & Airport Road (NBR)
- Airport Road & Alban Road/12333 Airport Road (EBL)
- Airport Road & Perdue Court/Davis Lane (WBL)

Consistent with 2028 and 2033 future background conditions, the northbound left-turn queues at Mayfield Road & Airport Road are expected to extend beyond the effective storage length. However, the queue can be accommodated within the 215 m storage length recommended to support 2033 future background conditions.

5.7.4 Summary

Table 27 outlines the recommended auxiliary turn lane geometry based on the results of the queuing analysis above.

Table 27: Future Background Recommended Auxiliary Turn Lane Geometry

Intersection	Movement	Horizon Year	Storage Length		Improvement Type
			Planned	Recommended	
Mayfield Road & Airport Road	NBL	2028	95 m	165 m (+70 m)	Concrete Median Revision[1]
		2033		215 m (+120 m)	
Airport Road & Old School Road/Healy Road	EBL	2028	N/A[2]	50 m	New Auxiliary Turn Lane
	WBL	2028	N/A[2]	60 m	New Auxiliary Turn Lane

Note 1: Potential implementation as part of Mayfield Road widening project east of Airport Road.
Note 2: Auxiliary turn lane not currently provided nor planned.

5.8 Recommendations Summary (UPDATED)

Table 28 summarizes the recommended future background improvements.

Table 28: Future Background Recommended Improvements

Location	Improvement
2028 Future Background	
Mayfield Road & Airport Road	Extend existing NBL auxiliary turn lane (165 m).
	Monitor traffic operations and queues to determine if additional improvements are warranted, prior to Mayfield Road widening.
Airport Road & Old School Road/Healy Road	Implement the following auxiliary turn lanes: • EBL: 50 m • WBL: 60 m
	Monitor traffic operations and queues to determine if additional improvements are warranted, prior to implementation of a roundabout.
Airport Road & Perdue Court/Davis Lane	Implement signal control.
2033 Future Background	
Mayfield Road	Maintain schedule for planned road widening and associated improvements between Airport Road and Coleraine Drive.
Airport Road	Maintain schedule for planned road widening and associated improvements between Mayfield Road and King Street.
Torbram Road	Maintain schedule for planned road widening and urbanization between Mayfield Road and Old School Road.
Highway 413	Maintain schedule for planned highway between Highway 401 to Highway 400.
Mayfield Road & Airport Road	Extend existing NBL auxiliary turn lane (215 m).
Airport Road & Old School Road/Healy Road	Maintain schedule for planned roundabout.
2038 Future Background	
Torbram Road & Old School Road	Implement signal control.

6.0 Site Generated Traffic

This section reviews the trip generation of the Proposed Development and the distribution of these trips on the transportation network.

In addition to the proposed industrial building (Phase 1), an additional industrial warehouse building (Phase 2) is planned for the southern portion of the Subject Lands, as part of a future development application. Nevertheless, the industrial warehouse building is included and analyzed as part of the site generated traffic herein. The additional industrial warehouse building (Phase 2) component is assumed to have a gross floor area of 40,467 m^2.

6.1 Trip Generation (UPDATED)

The Proposed Development will result in additional vehicles on the boundary road network that would otherwise not exist, as well as additional turning movements at the study intersections.

Trip generation for the Proposed Residential Development was determined using the following methodology:

- The baseline vehicle trip generation was generated based on the rates outlined in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (September 2021) for the land use category (LUC) 150 "Warehouse".
    - Fitted curve estimates and average rates in a general urban/suburban setting are provided in the ITE Trip Generation Manual, 11th Edition. Fitted curve estimates were used if available, and deemed accurate (i.e., more than 20 data points and coefficient of determination R2 > 0.75).
    - Given the industrial nature of the Proposed Developments, both the vehicle and truck trip generation was forecasted. It is noted that the vehicle trip generation consists of both passenger car and truck trips.
- As requested by Town staff, the baseline truck trip generation was calculated using the ITE Trip Generation Manual, 11th Edition rate of LUC 130 "Industrial Park".
- A mode split adjustment was applied to the baseline trip generation, as the inherent mode split of the ITE trip generation rates may differ from the applicable mode split targets. As such, an adjustment factor was included to account for the sustainable mode share targets identified in the Region's Transportation Master Plan (December 2017).
    - Only the passenger car trips were adjusted for mode split as heavy truck trips are not generally impacted by corresponding initiatives to reduce vehicle use.

Appendix L includes the ITE Trip Generation Manual, 11th Edition excerpts.

6.1.1 Baseline Trip Generation

Table 29 outlines the baseline vehicle trip generation for the Proposed Development.

Table 29: Baseline Vehicle Trip Generation

Land Use	Statistic	Trip Type	Peak Hour	Equation	Trips[1]		
					In	Out	Total
Warehouse	684,411 ft²	Total Vehicle	A.M.	0.17/1000 ft²	89	27	116
			P.M.	0.18/1000 ft²	34	89	123
		Truck[2]	A.M.	0.02/1000 ft²	12	15	27
			P.M.	0.03/1000 ft²	10	17	27
		Passenger Car[3]	A.M.	N/A[2]	77	12	89
			P.M.		24	72	96

Note 1: Rounding may cause the appearance of discrepancies.
Note 2: As requested by Town staff, truck trip generation calculated based on LUC 130 "Industrial Park".
Note 3: Difference between vehicle trips and truck trips.

The Proposed Development is expected to generate 116 and 123 two-way baseline vehicle trips during the weekday a.m. and p.m. peak hours, respectively. These vehicle trips are comprised of 27 trips during the weekday a.m. and p.m. peak hours as well as 89 and 96 passenger car trips during the weekday a.m. and p.m. peak hours, respectively.

6.1.2 Mode Split Adjustment

As outlined in Institute of Transportation Engineers (ITE) Trip Generation Handbook, 3rd Edition (September 2017), the trip generation rates for suburban context included an automobile split of 95% or higher. For the site generated trips, a target vehicle mode split of 78% was used per the Region's Transportation Master Plan. As such, a mode split adjustment factor of 0.82 was applied to passenger car trips for the 2033 and 2038 horizon years.

As requested by Town staff, a reduced mode split adjustment factor of 0.95 was applied to passenger car trips for the 2028 horizon year, to account for the reduced sustainable transportation infrastructure anticipated for the earlier horizon.

Table 30 outlines the mode split adjusted passenger car trip generation.

Table 30: 2033 & 2038 Mode Split Adjusted Passenger Car Trip Generation

Land Use	Statistic	Trip Type	Peak Hour	Equation	Trips[1]		
					In	Out	Total
2028 Horizon Year							
Warehouse	768,380 ft²	Passenger Car	A.M.	0.95 mode split adjustment factor	73	11	85
			P.M.		23	68	91
2033 & 2038 Horizon Year							
Warehouse	768,380 ft²	Passenger Car	A.M.	0.82 mode split adjustment factor	63	10	73
			P.M.		20	59	79

Note 1: Rounding may cause the appearance of discrepancies.

Under the 2028 horizon year, the Proposed Development is expected to generate 85 and 91 two-way mode split adjusted passenger car trips for the weekday a.m. and p.m. peak hours, respectively. Furthermore, for the 2033 and 2038 horizon years the Subject Development is expected to generate 73 and 79 two-way mode split adjusted passenger car trips during the weekday a.m. and p.m. peak hours, respectively.

6.1.3 Summary

Table 31 summarizes the Proposed Development's forecasted vehicle trip generation for the 2028 horizon year.

Table 31: 2028 Vehicle Trip Generation

Land Use	Statistic	Type	Peak Hour	Equation	Trips[1]		
					In	Out	Total
Warehouse	768,380 ft²	Vehicle	A.M.	N/A	85	26	112
			P.M.		33	85	118
		Truck[2]	A.M.	0.02/1000 ft²	12	15	27
			P.M.	0.03/1000 ft²	10	17	27
		Passenger Car[3]	A.M.	N/A[2]	73	11	85
			P.M.		23	68	91

Note 1: Rounding may cause the appearance of discrepancies.
Note 2: As requested by Town staff, truck trip generation calculated based on LUC 130 "Industrial Park".
Note 3: Difference between vehicle trips and truck trips.

For the 2028 horizon year, the Proposed Development is expected to generate a total of 112 and 118 two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively.

Table 32 summarizes the Proposed Development's forecasted vehicle trip generation for the 2033 and 2038 horizon years.

Table 32: 2033 & 2038 Vehicle Trip Generation

Land Use	Statistic	Type	Peak Hour	Equation	Trips[1]		
					In	Out	Total
LUC 150 "Warehouse"	768,380 ft²	Vehicle	A.M.	N/A	75	25	100
			P.M.		30	76	106
		Truck[2]	A.M.	0.02/1000 ft²	12	15	27
			P.M.	0.03/1000 ft²	10	17	27
		Passenger Car[3]	A.M.	N/A[2]	63	10	73
			P.M.		20	59	79

Note 1: Rounding may cause the appearance of discrepancies.
Note 2: As requested by Town staff, truck trip generation calculated based on LUC 130 "Industrial Park".
Note 3: Difference between vehicle trips and truck trips.

Under the 2033 and 2038 horizon years, the Proposed Development is expected to generate a total of 100 and 106 two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively.

6.2 Trip Distribution

The passenger car and truck trips were distributed separately to capture the differing travel patterns between passenger cars and heavy vehicles, especially given the heavy vehicle restrictions within the study area.

Furthermore, due to the planned Highway 413, assumed to be built out by 2031 as well as the varied mode split adjustment factor applied, the site generated trips were distributed separately for the 2028 horizon year, and the 2033 and 2038 horizon years. Changes in travel patterns are expected due to the buildout of Highway 413, capturing the more convenient routing options, especially pertaining to heavy vehicle traffic.

6.2.1 Passenger Car Trips

The site generated passenger car trips were distributed to the study road network based on 2022 Transportation Tomorrow Survey (TTS) data. TTS is a comprehensive survey consisting of transportation patterns for households in the Greater Toronto and Hamilton Area and surrounding area.

The Subject Property is located in 2006 Greater Toronto Area (GTA) Zone 3014, which primarily consists of greenfield lands and some existing industrial buildings. To increase the sample size of the query, proxy zones were also included. 2006 GTA Zone 3015, 2006 GTA Zone 3440 and 2006 GTA Zone 3441 were used as proxy zones. These zones are adjacent to the subject zone and includes industrial developments, thus these zones are expected to have similar travel patterns to the Subject Lands.

The TTS data was filtered to trips entering and existing the subject and proxy zones for work purposes during the weekday a.m. and p.m. peak hours, respectively, which reflect the peak commuter directions.

As Highway 413 is expected to be built out by the 2031, separate trip distributions were applied for the 2028 and 2033 horizon years. It is noted that the 2033 passenger car trip distribution is consistent with the trip distribution applied for the Tullamore Northwest Employment Area, as outlined in the Transportation Study (Crozier, May 2025).

Table 33 summarizes the trip distribution for employment passenger car trips for the 2028, and 2033 and 2038 horizon years.

Table 33: Passenger Car Trip Distribution

Direction	2028 Horizon Year		2033 & 2038 Horizon Years		External Network Gateway
	Inbound	Outbound	Inbound	Outbound	
North	27%	30%	29%	18%	Airport Road
South	14%	25%	13%	25%	Airport Road
East	7%	0%	6%	7%	Mayfield Road, Healy Road
West	51%	45%	29%	24%	Mayfield Road, Old School Road
Highway 413 (via North)	-	-	23%	26%	Airport Road
Total	**100%**	**100%**	**100%**	**100%**	**-**

Appendix M includes the TTS data.

6.2.2 Truck Trips

2028 Horizon Year

Based on existing truck routing options and truck restrictions, heavy traffic primarily relies on Airport Road and Mayfield Road. The truck trips were distributed based on the existing truck travel patterns observed at the Airport Road & 12333 Airport Road Access and Mayfield Road & Airport Road intersections.

2033 Horizon Year

For the 2033 horizon year, the site generated truck trips were distributed to the study road network based on the expected travel routes for heavy vehicle traffic and roadways where heavy trucks are permitted. This is consistent with the methodology outlined in the Tullamore Northwest Employment Area Secondary Plan Transportation Study (Crozier, May 2025).

Heavy trucks will primarily rely on Highway 413 as well as Airport Road and Mayfield Road. The remaining study roadways are not expected to support heavy vehicle traffic under 2033 future conditions.

Due to the proposed Highway 413, a portion of current heavy vehicle traffic along Mayfield Road is expected to instead use Highway 413. As there are currently no details regarding the shift in heavy vehicle distribution, it is assumed that two-thirds of all truck traffic will use Highway 413, with the remaining one-third will use Mayfield Road. It is assumed that heavy vehicle traffic will access the Highway 413 via the planned Airport Road interchange.

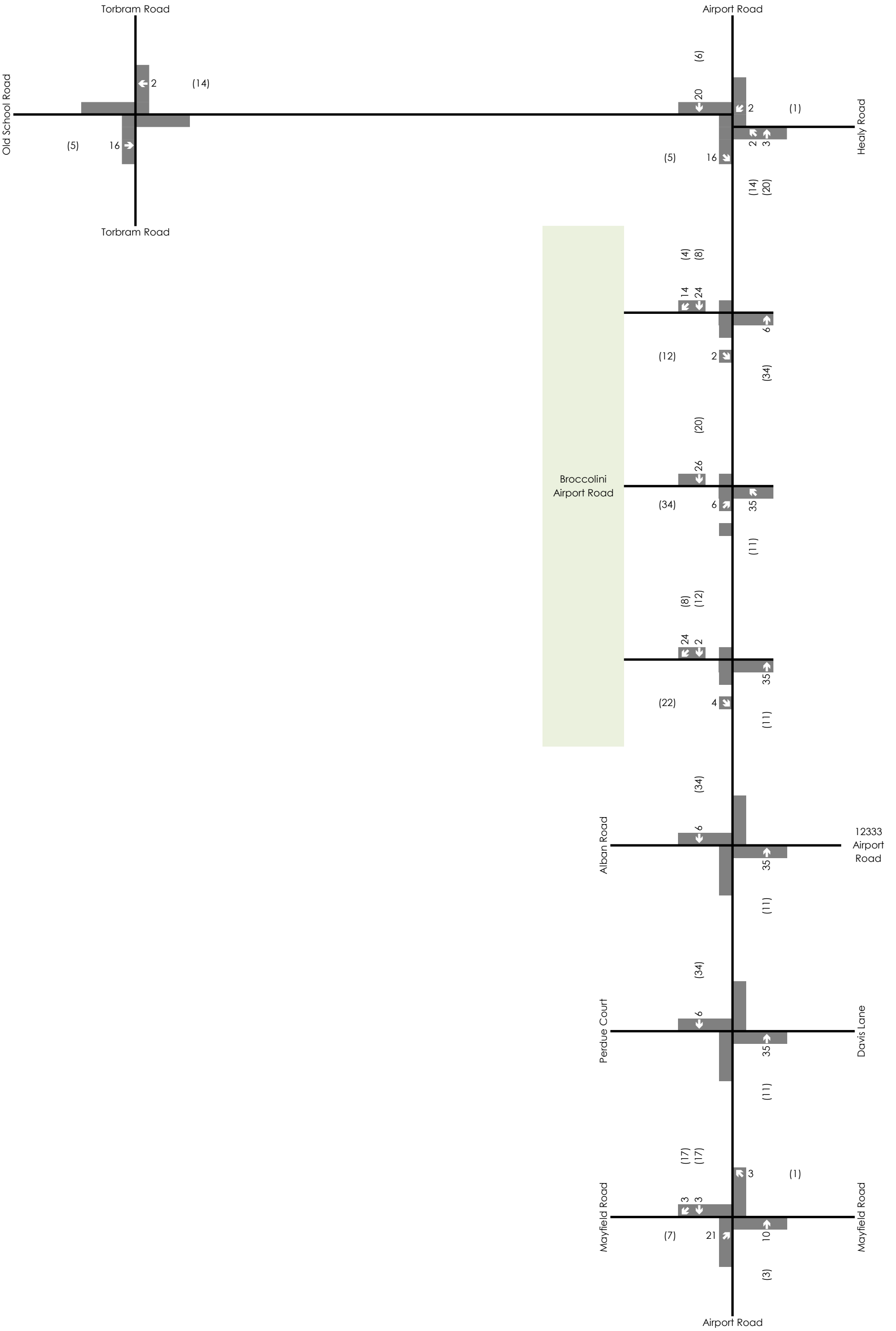
The remaining one-third is expected to travel to/from the south of Airport Road to access Mayfield Road. All traffic along Mayfield was then distributed based on the eastbound and westbound travel patterns.

This estimated shift in truck traffic distribution was based on Mayfield Road being the current primary truck corridor, partly because Highway 410 terminates just north of Mayfield and Highway 427 terminates on McKenzie Drive, approximately 3.4 km south of Mayfield Road. The implementation of Highway 413 will provide more convenient and direct routes to the surrounding highways, with the Airport Road interchange being located approximately 1.0 km north of the Subject Lands.

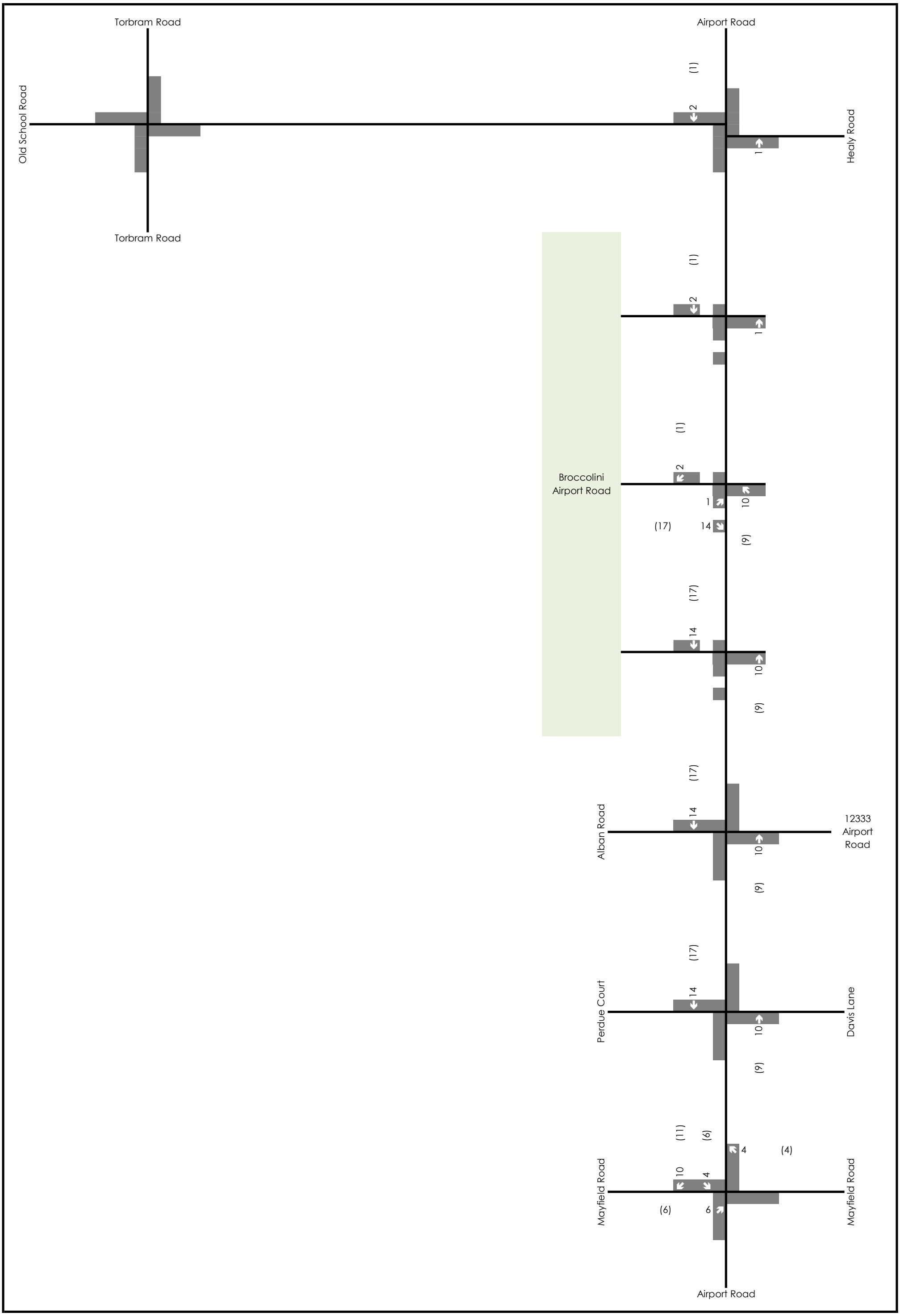
6.3 Trip Assignment

The site generated trips were distributed throughout the external study road network based on the trip distribution outlined in **Section 6.2**. To support the future industrial building (Phase 2), a second right-in/right-out (RIRO) site access off Airport Road is assumed, located further south of the full moves access off Airport Road.

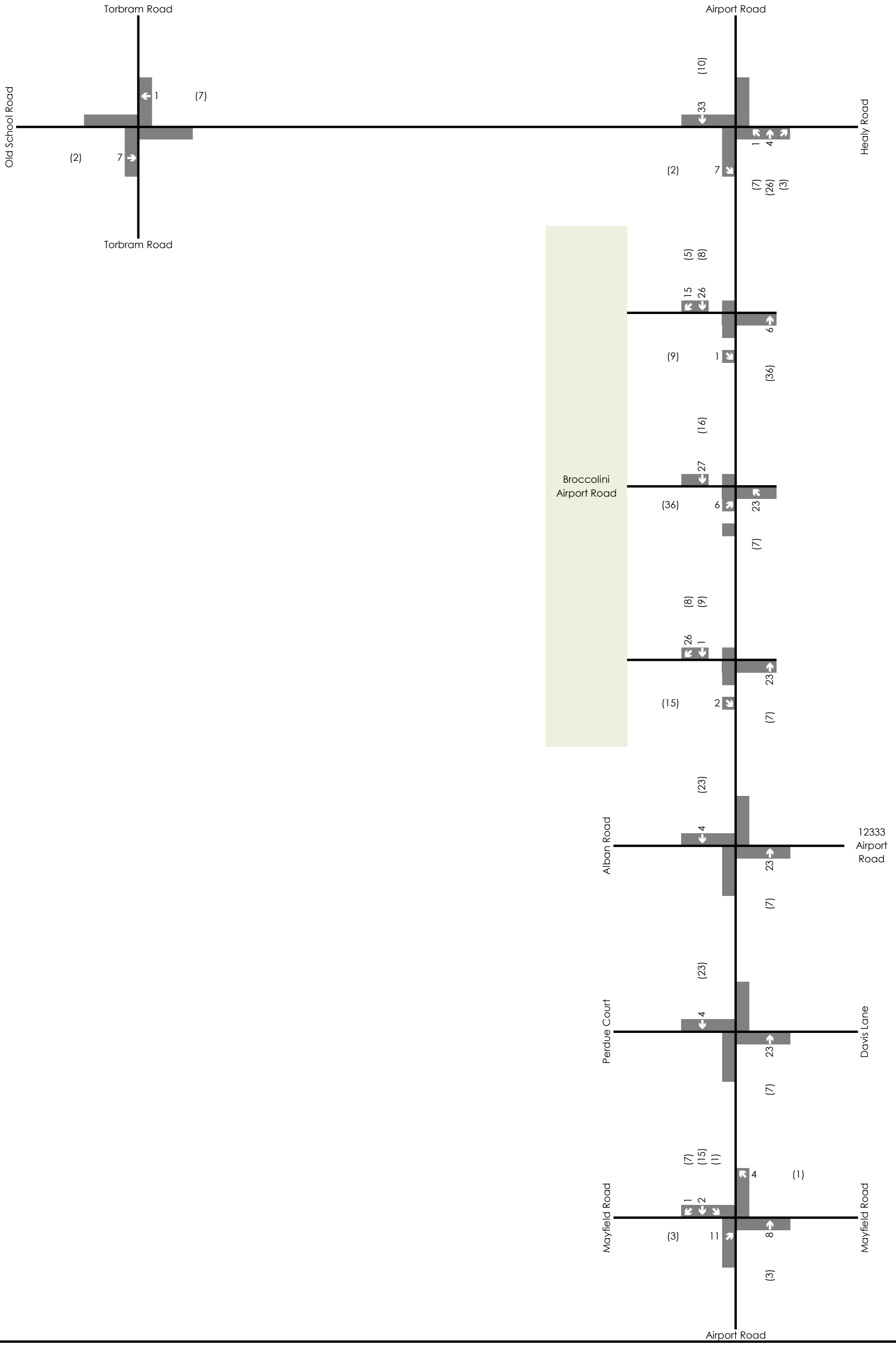
Figure 18, and **Figure 19** outlines the 2028 passenger car and truck site traffic volumes, respectively. **Figure 20** and **Figure 21** outlines the 2033 & 2038 passenger car and truck site traffic volumes, respectively.



Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 18
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2028 Passenger Car Site Traffic Volumes		Project No. 2278-7228 Date: 05/05/26 Analyst. MY



Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 19
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2028 Heavy Truck Site Traffic Volumes		Project No. 2278-7228 Date: 05/05/26 Analyst. MY



Legend

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

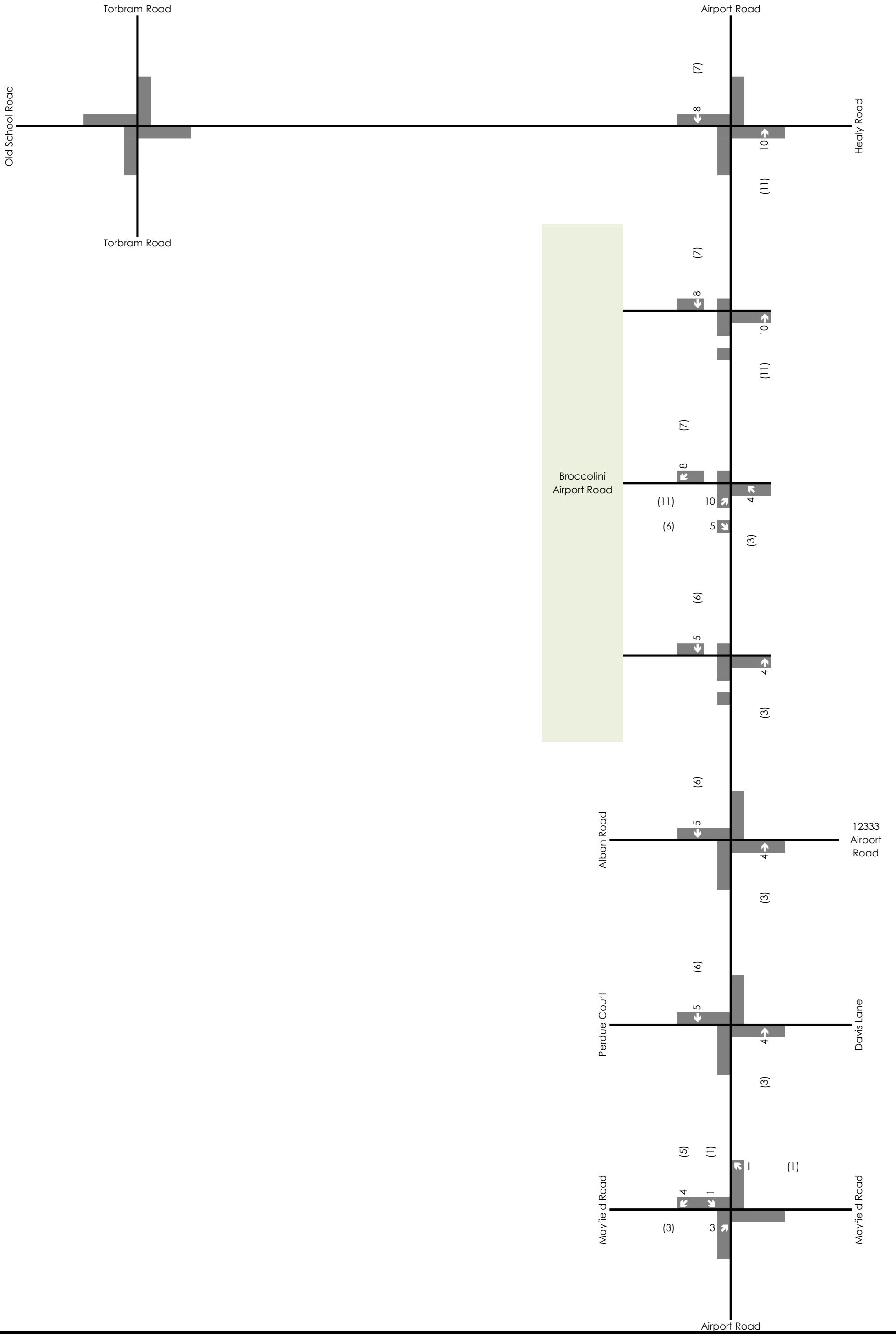
Broccolini Airport Road

2033 & 2038 Passenger Car Site Traffic Volumes

CROZIER CONSULTING ENGINEERS

Figure 20

Project No. 2278-7228
Date: 05/05/26
Analyst. MY



Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 21
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2033 & 2038 Heavy Truck Site Traffic Volumes		Project No. 2278-7228 Date: 05/05/26 Analyst. MY

7.0 Future Total Transportation Network Review

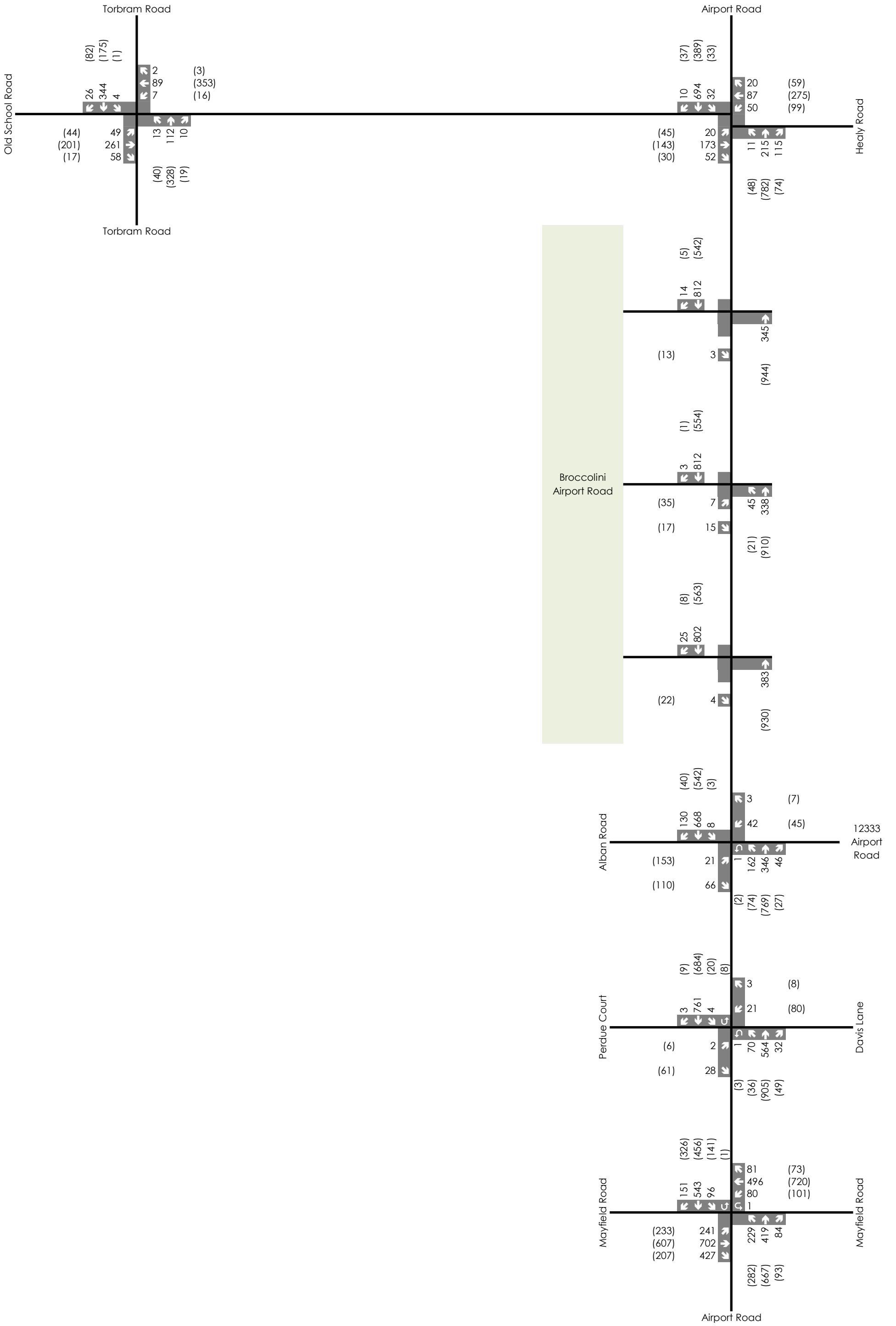
The section herein reviews the future total conditions of the study road network for the 2028, 2033 and 2038 horizon years.

7.1 Future Total Traffic Volumes

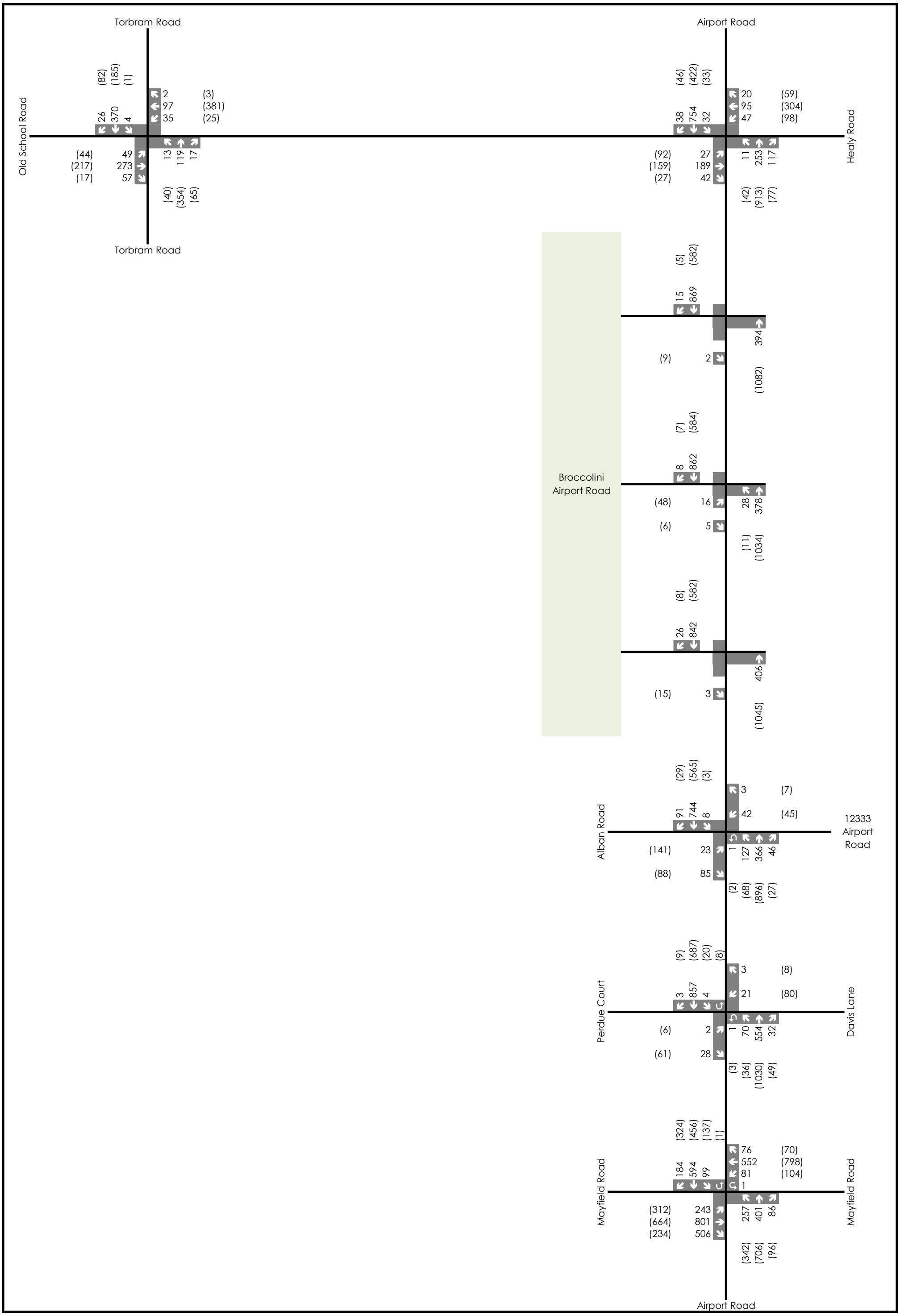
The future total traffic volumes consist of the following components:

- Future Background Traffic Volumes
- Site Traffic Volumes

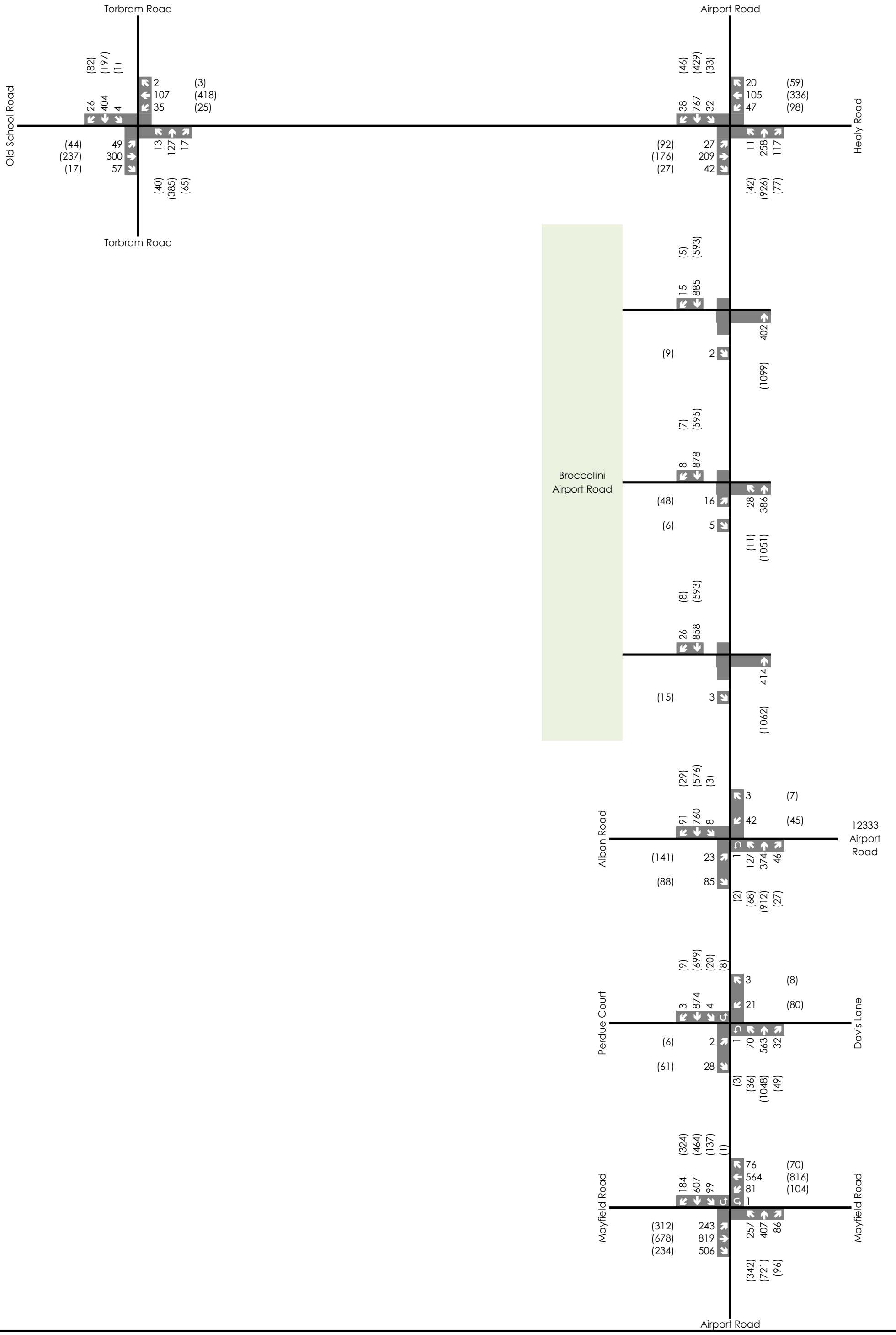
Figure 22, **Figure 23** and **Figure 24** illustrates the 2028, 2033 and 2038 future total traffic volumes, respectively.



Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 22
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2028 Future Total Traffic Volumes		Project No. 2278-7228 Date: 05/05/26 Analyst. MY



Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 23
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2033 Future Total Traffic Volumes		Project No. 2278-7228 Date: 05/05/26 Analyst. MY



Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 24
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2038 Future Total Traffic Volumes		Project No. 2278-7228 Date: 05/05/26 Analyst. MY

7.2 Warrants Assessment

Signal warrants were assessed for the full moves site access off Airport Road for future total conditions. As previously outlined in **Section 5.3**, the warrants were evaluated based on Justification 7: Projected Volumes per Chapter 4 of the Ontario Traffic Manual Book 12: Traffic Signals (MTO, July 2024).

Table 34 summarizes the future total signal warrant analysis.

Table 34: Future Total Signal Warrant Analysis

Intersection	Horizon Year	Flow Condition	Lanes on Major Road	Signal Warranted?
Airport Road & Full Moves Access	2028 Future Total	Free	1 Lane	No
	2033 Future Total		2+ Lanes	No
	2038 Future Total			No

As outlined in **Table 34**, signal control is not warranted at the proposed full moves access off Airport Road.

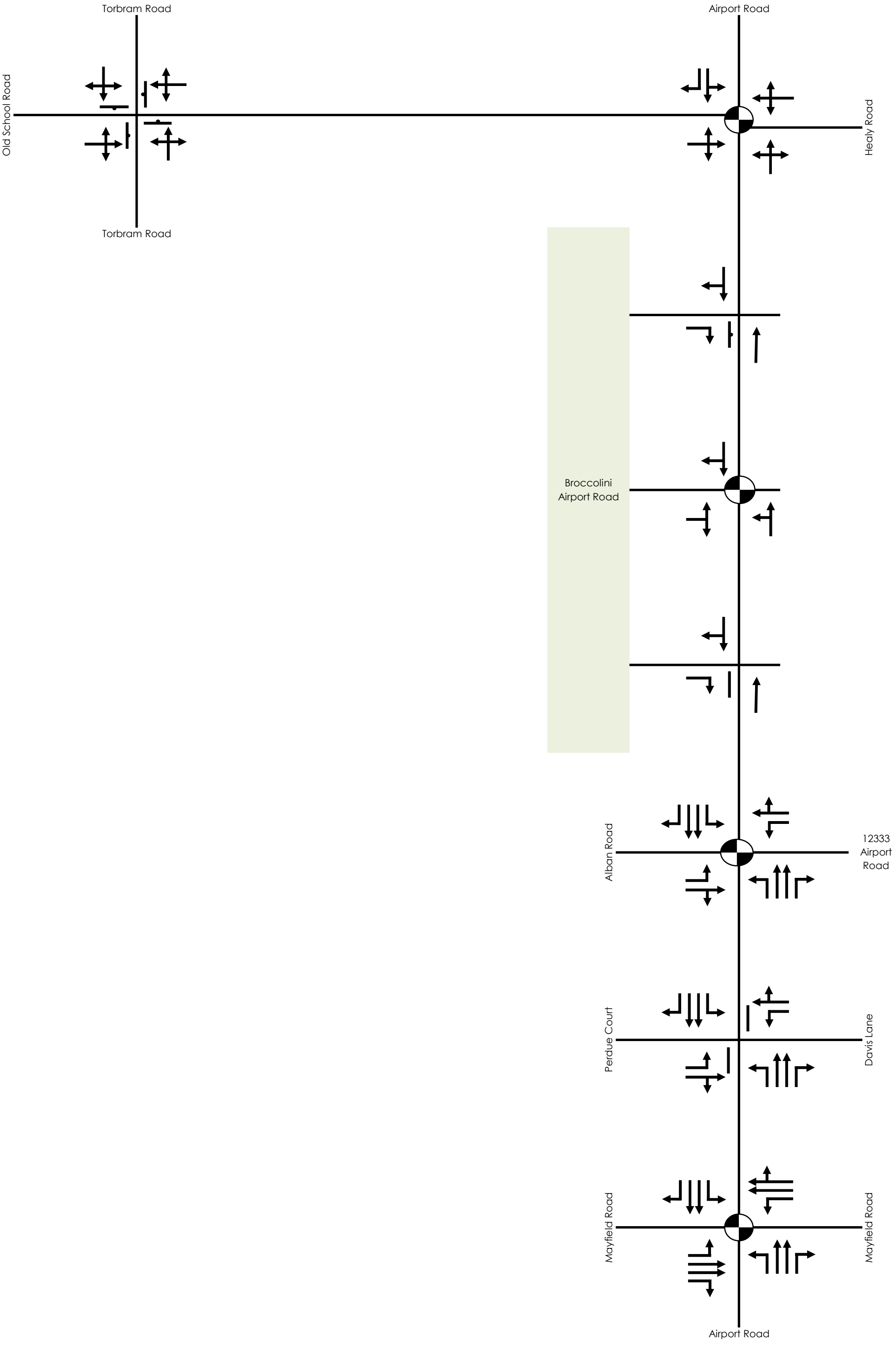
Appendix K includes the warrants assessment reports.

7.3 Traffic Modelling and Assumptions

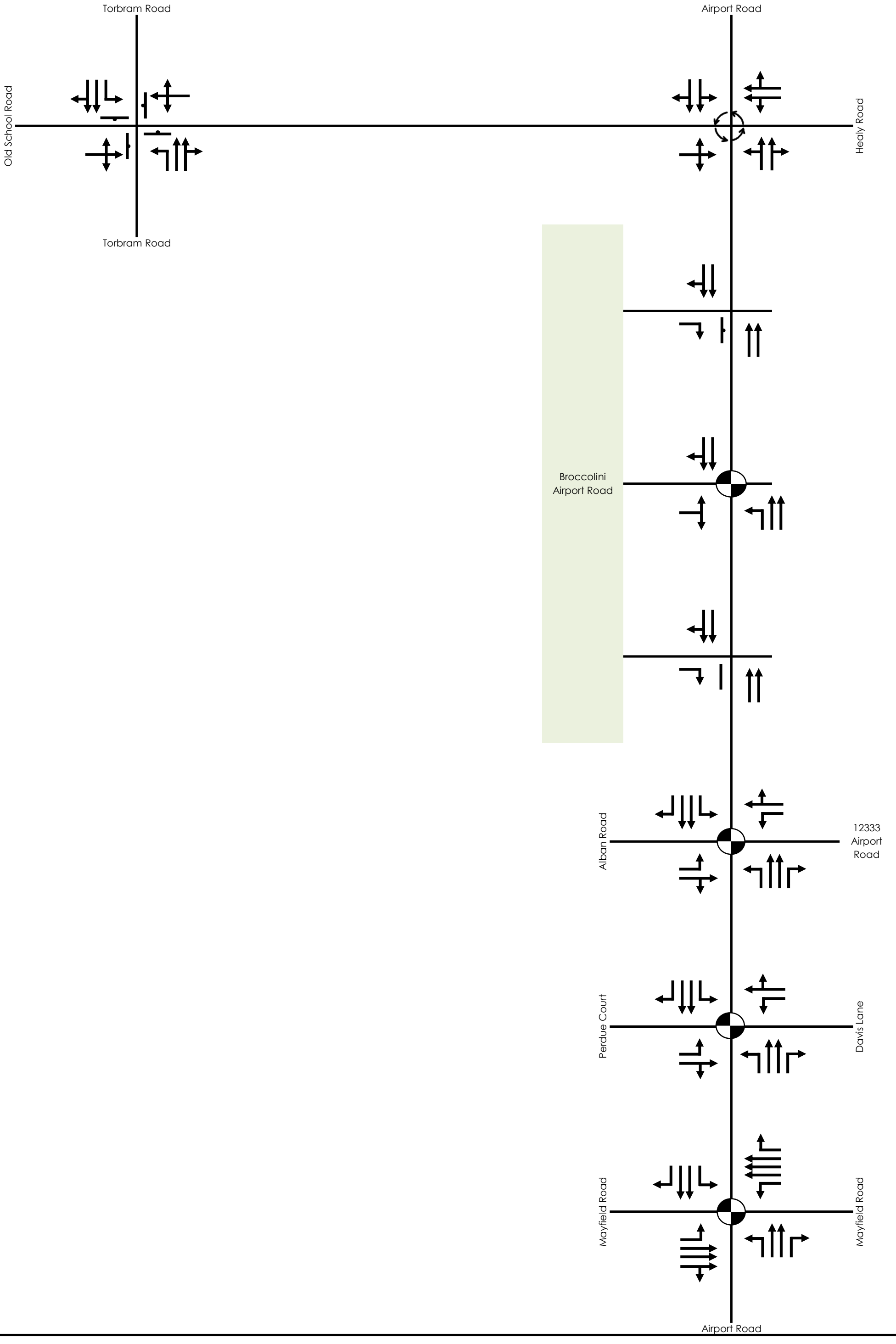
7.3.1 Roadway Geometry

It is understood that auxiliary turn-lanes are requested by Region staff to support the proposed site accesses. Nevertheless, for a conservative analysis, auxiliary turn lanes, beyond the two-way left-turn lane identified in the Airport Road design drawings, were not modelled herein. A review of the recommended auxiliary turn lanes is included below in **Section 0**.

Figure 25, Figure 26 and **Figure 27** illustrates the 2028, 2033 and 2038 future total study road network, respectively.



Legend	Broccolini Airport Road	CROZIER CONSULTING ENGINEERS	Figure 25
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes	2028 Future Total Study Road Network		Project No. 2278-7228 Date: 05/05/26 Analyst. MY



Legend

- Signal Control
- Stop Control
- Roundabout Control

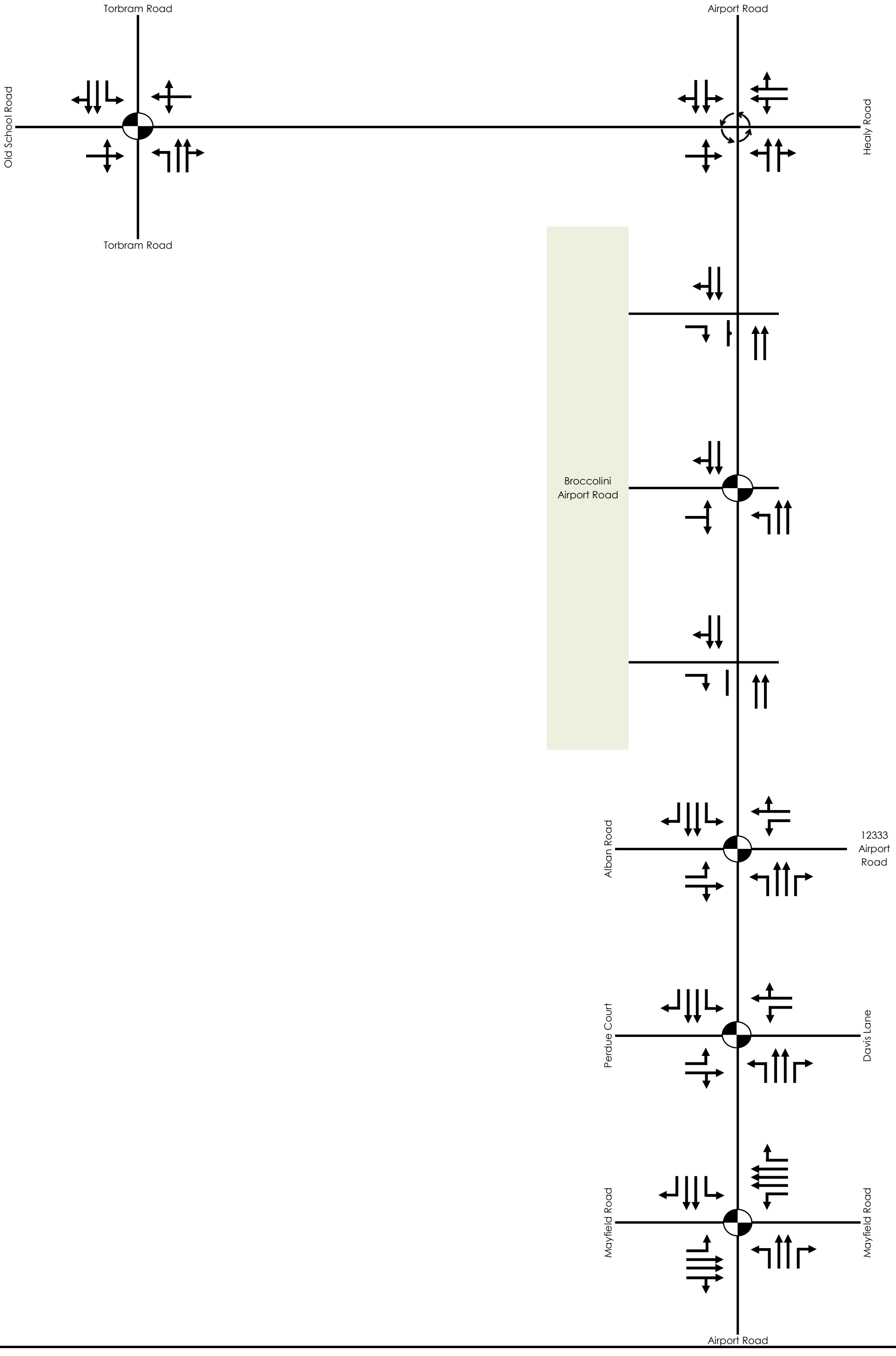
Broccolini Airport Road

2033 Future Total Study Road Network

CROZIER CONSULTING ENGINEERS

Figure 26

Project No. 2278-7228
Date: 05/05/26
Analyst. MY



Legend

xx Signal Control
(xx) Stop Control
{xx} Roundabout Control

Broccolini Airport Road

2038 Future Total Study Road Network

CROZIER CONSULTING ENGINEERS

Figure 27

Project No. 2278-7228
Date: 05/05/26
Analyst. MY

7.3.2 Modelling Parameters

The section herein outlines the traffic modelling and assumptions used in evaluating future total conditions. Unless otherwise noted, future background traffic modelling and assumptions were maintained for future total conditions.

For comparative purposes, the signal timing plans were also kept consistent with future background conditions.

Consistent with future background conditions, the modelling includes updated heavy vehicle percentages that reflect the increased heavy vehicle traffic associated with the Subject Development.

7.4 Intersection Operations (UPDATED)

The section herein reviews the intersection operations under 2028 and 2033 future total conditions. This assessment includes key metrics including level of service (LOS), control delay and volume-to-capacity (v/c) ratio.

Appendix E contains the detailed capacity analysis worksheets.

7.4.1 2028 Horizon Year

Signalized Intersections

Table 35 details the 2028 future total traffic operations for the signalized study intersections.

Table 35: 2028 Future Total Traffic Operations – Signalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Mayfield Road & Airport Road	**Signal Opt. #1**	**Overall**	**C**	**D**	**31**	**37**	**0.85**	**0.84**
		EBL	B	C	19	29	0.56	0.72
		EBT	C	C	24	27	0.44	0.41
		EBR	A	A	8	4	0.49	0.26
		WBL	B	B	15	19	0.26	0.28
		WBTR	C	D	28	37	0.46	0.61
		NBL	E	D	57	52	0.85	0.83
		NBT	D	E	41	59	0.54	0.84
		NBR	A	A	4	7	0.23	0.26
		SBL	D	D	39	45	0.37	0.69
		SBT	E	D	59	53	0.78	0.66
		SBR	C	A	21	9	0.40	0.60

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & Old School Road/Healy Road	**Signal Opt. #1 (Updated Geometry)**	**Overall**	**C**	**D**	**32**	**54**	**0.80**	**0.95**
		EBL	D	D	41	51	0.08	0.21
		EBTR	E	E	60	69	0.77	0.73
		WBL	D	D	50	48	0.28	0.31
		WBTR	D	F	53	86	0.54	0.94
		NBLT	B	D	15	49	0.27	0.95
		NBR	A	A	1	3	0.10	0.06
		SBLT	C	D	29	46	0.80	0.86
		SBR	A	A	0	2	0.01	0.03
Airport Road & Alban Road/12333 Airport Road Access	**Signal Opt. #1**	**Overall**	**A**	**B**	**6**	**18**	**0.43**	**0.75**
		EBL	D	E	50	67	0.16	0.75
		EBTR	A	A	1	1	0.17	0.25
		WBL	E	D	63	43	0.43	0.27
		WBTR	A	A	0	0	0.00	0.02
		NBL	A	B	6	18	0.35	0.17
		NBT	A	B	3	17	0.14	0.32
		NBR	A	A	1	8	0.05	0.04
		SBL	A	A	4	8	0.01	0.01
		SBT	A	A	4	8	0.25	0.24
		SBR	A	A	1	2	0.12	0.04
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #1**	**Overall**	**A**	**A**	**3**	**8**	**0.28**	**0.54**
		EBL	D	D	48	45	0.03	0.04
		EBTR	A	A	1	1	0.09	0.16
		WBL	D	E	55	63	0.23	0.54
		WBTR	A	A	0	0	0.01	0.03
		NBL	A	A	2	5	0.15	0.11
		NBT	A	A	1	5	0.22	0.34
		NBR	A	A	0	2	0.03	0.07
		SBL	A	A	3	8	0.01	0.10
		SBT	A	A	2	6	0.28	0.27
		SBR	A	A	0	1	0.00	0.01

Note 1: The overall LOS and control delay of a signalized intersection is based on the average control delay per vehicle (Synchro).

Note 2: The overall v/c ratio for signalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

Airport Road & Old School Road/Healy Road

Airport Road & Old School Road/Healy Road is expected to operate at an unchanged LOS "D" or better under 2028 future total conditions, with a maximum increase in control delay and v/c ratio of 6 s and 0.03, respectively. As previously outlined, these operations are impacted by the split phasing to address safety concerns associated with the offset east and west approaches. This intersection is planned to be converted to a roundabout by 2031, which will address the operational and safety concerns. As discussed for future background conditions, it is

recommended that the Town and Region consider implementing an auxiliary eastbound left-turn lane and westbound left-turn lane to address the anticipated operational issues associated with the existing intersection geometry.

Remaining Study Intersections

Under 2028 future total conditions, the remaining signalized study intersections are expected to operate at an unchanged LOS "D" or better with low to moderate control delays and v/c ratios, in comparison to 2028 future background operations. The intersections are expected to operate efficiently with not operational concerns expected.

Unsignalized Intersections

Table 36 details the 2028 future total traffic operations for the signalized study intersections.

Table 36: 2028 Future Total Traffic Operations – Unsignalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Torbram Road & Old School Road	**All-Way Stop**	**Overall**	**C**	**D**	**15**	**29**	**0.63**	**0.79**
		EBLTR	C	C	16	21	0.57	0.57
		WBLTR	B	D	11	32	0.17	0.77
		NBLTR	B	D	11	33	0.24	0.79
		SBLTR	C	D	18	28	0.61	0.66
Airport Road & North RIRO Access	**One-Way Stop**	**Overall**	**B**	**B**	**15**	**12**	**0.49**	**0.56**
		EBR	B	B	15	12	0.01	0.02
		NBT	A	A	0	0	0.20	0.56
		SBTR	A	A	0	0	0.49	0.32
Airport Road & Full Moves Access	**One-Way Stop**	**Overall**	**C**	**D**	**22**	**33**	**0.48**	**0.33**
		EBL	D	E	26	42	0.04	0.27
		EBR	C	B	19	15	0.06	0.04
		NBLT	A	A	2	1	0.06	0.03
		SBTR	A	A	0	0	0.48	0.33
Airport Road & South RIRO Access	**One-Way Stop**	**Overall**	**B**	**B**	**15**	**12**	**0.49**	**0.55**
		EBR	B	B	15	12	0.01	0.04
		NBT	A	A	0	0	0.23	0.55
		SBTR	A	A	0	0	0.49	0.34

Note 1: The overall LOS and control delay of a two-way stop-controlled intersection is based on the delay associated with the critical minor road approach (HCM 2000). The overall LOS and control delay of an all-way stop-controlled intersection is based on the overall delay for the intersection (HCM 2010).

Note 2: The overall v/c ratio for unsignalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

Proposed Site Accesses

The proposed site accesses off Airport Road are expected to operate efficiently at a LOS "D" during the weekday a.m. and p.m. peak hours, with low to moderate control delays and v/c ratios.

Remaining Study Intersections

The remaining unsignalized study intersection is expected to operate at an unchanged LOS "D" or better with low to moderate control delays and v/c ratios, in comparison to future background conditions. No notable operational constraints are expected at these intersections, and there is reserve capacity to accommodate future traffic growth.

7.4.2 2033 Horizon Year

Signalized Intersections

Table 37 details the 2033 future total traffic operations for the signalized study intersections.

Table 37: 2033 Future Total Traffic Operations – Signalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Mayfield Road & Torbram Road	**Signal Opt. #2**	**Overall**	**C**	**D**	**33**	**38**	**0.88**	**0.94**
		EBL	C	C	22	34	0.55	0.79
		EBTR	C	C	25	26	0.62	0.44
		WBL	C	C	24	21	0.47	0.37
		WBT	C	D	27	36	0.31	0.45
		WBR	A	A	2	1	0.15	0.15
		NBL	E	E	56	67	0.88	0.94
		NBT	D	E	37	56	0.47	0.82
		NBR	A	A	7	7	0.23	0.26
		SBL	D	D	38	44	0.34	0.68
		SBT	E	D	61	55	0.79	0.69
		SBR	C	B	21	10	0.42	0.61
Airport Road & Alban Road/12333 Airport Road Access	**Signal Opt. #2**	**Overall**	**A**	**B**	**6**	**13**	**0.44**	**0.74**
		EBL	D	E	50	68	0.17	0.74
		EBTR	A	A	2	1	0.24	0.20
		WBL	E	D	64	45	0.44	0.28
		WBTR	A	A	0	0	0.01	0.02
		NBL	A	A	6	8	0.32	0.16
		NBT	A	A	3	8	0.14	0.37
		NBR	A	A	1	1	0.05	0.04
		SBL	A	A	4	8	0.01	0.01
		SBT	A	A	4	8	0.28	0.25
		SBR	A	A	1	1	0.09	0.03
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #2**	**Overall**	**A**	**A**	**3**	**6**	**0.31**	**0.54**
		EBL	D	D	48	45	0.03	0.04
		EBTR	A	A	1	1	0.10	0.15
		WBL	D	E	55	63	0.23	0.54
		WBTR	A	A	0	0	0.01	0.03
		NBL	A	A	2	5	0.17	0.11
		NBT	A	A	2	5	0.21	0.38
		NBR	A	A	0	2	0.03	0.07
		SBL	A	A	3	3	0.01	0.12
		SBT	A	A	2	2	0.31	0.27
		SBR	A	A	0	0	0.00	0.01

Note 1: The overall LOS and control delay of a signalized intersection is based on the average control delay per vehicle (Synchro).

Note 2: The overall v/c ratio for signalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

In comparison to 2033 future background conditions, the signalized study intersections are expected to continue operating efficiently at an unchanged LOS "D" or better with low-to-

moderate control delays and v/c ratios. Accordingly, these metrics outline that the signalized intersections are not significantly impacted by the Proposed Development.

Unsignalized Intersections

Table 37 details the 2033 future total traffic operations for the signalized study intersections.

Table 38: 2033 Future Total Traffic Operations – Signalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Torbram Road & Old School Road	**All-Way Stop**	**Overall**	**C**	**D**	**15**	**26**	**0.66**	**0.86**
		EBLTR	C	C	20	23	0.66	0.62
		WBLTR	B	E	12	44	0.26	0.86
		NBL	B	B	11	12	0.03	0.10
		NBT	B	C	11	19	0.15	0.52
		NBR	B	C	10	16	0.11	0.40
		SBL	B	B	10	14	0.01	0.00
		SBT	B	B	15	15	0.45	0.29
		SBR	B	B	11	15	0.26	0.32
Airport Road & North RIRO Access	**One-Way Stop**	**Overall**	**B**	**B**	**11**	**10**	**0.34**	**0.32**
		EBR	B	B	11	10	0.00	0.01
		NBT	A	A	0	0	0.12	0.32
		SBTR	A	A	0	0	0.34	0.23
Airport Road & Full Moves Access	**One-Way Stop**	**Overall**	**C**	**C**	**20**	**16**	**0.34**	**0.30**
		EBL	C	C	21	17	0.07	0.13
		EBR	B	B	15	13	0.01	0.01
		NBL	B	A	10	10	0.04	0.01
		NBT	A	A	0	0	0.11	0.30
		SBTR	A	A	0	0	0.34	0.23
Airport Road & South RIRO Access	**One-Way Stop**	**Overall**	**B**	**A**	**11**	**10**	**0.33**	**0.31**
		EBR	B	A	11	10	0.01	0.02
		NBT	A	A	0	0	0.12	0.31
		SBTR	A	A	0	0	0.33	0.23

Note 1: The overall LOS and control delay of a two-way stop-controlled intersection is based on the delay associated with the critical minor road approach (HCM 2000). The overall LOS and control delay of an all-way stop-controlled intersection is based on the overall delay for the intersection (HCM 2010).

Note 2: The overall v/c ratio for unsignalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

Proposed Site Accesses

The proposed site accesses off Airport Road are expected to continue operating efficiently at a LOS "C" during the weekday a.m. and p.m. peak hours, with low control delays and v/c ratios under 2033 future total conditions.

Remaining Study Intersections

The remaining unsignalized study intersection is expected to operate at a LOS "D" or better with low to moderate control delays and v/c ratios, consistent with future background conditions. No notable operational constraints are expected at these intersections, and there is reserve capacity to accommodate future traffic growth.

Roundabout Intersections

Table 39 details the 2033 future total traffic operations for the roundabout study intersections.

Table 39: 2033 Future Total Traffic Operations – Roundabout Intersection

Intersection	Approach	LOS		Delay (s)		v/c ratio[1]		95th %ile Queue[2]	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & Old School Road/Healy Road	**Overall**	**A**	**A**	**2**	**3**	**0.35**	**0.44**	**-**	**-**
	EB	A	A	2	2	0.13	0.13	~1	~1
	WB	A	A	2	3	0.07	0.27	~1	~1
	NB	A	A	2	3	0.18	0.44	~1	~1
	SB	A	A	2	2	0.35	0.24	~1	~1

Note 1: Ratio of flow to capacity (RFC). The overall RFC for roundabout intersections is the maximum approach RFC. All RFCs greater than 0.85 are outlined in red.
Note 2: 95th percentile queues are recorded in passenger car equivalents. Rounded to the nearest vehicle.

The Airport Road & Old School Road/Healy Road intersection is expected to operate at an unchanged LOS "A" with low control delays and v/c ratios in comparison to 2033 future background conditions. These metrics indicated that the intersection is anticipated to operate with low control delays and moderate v/c ratios, indicating the intersection is efficiently with reserve capacity for future growth.

7.4.3 2038 Horizon Year

Signalized Intersections

Table 40 details the 2038 future total traffic operations for the signalized study intersections.

Table 40: 2038 Future Total Traffic Operations – Signalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Mayfield Road & Torbram Road	Signal Opt. #2	**Overall**	**C**	**D**	**34**	**38**	**0.88**	**0.94**
		EBL	C	D	22	36	0.57	0.80
		EBTR	C	C	26	26	0.63	0.45
		WBL	C	C	25	21	0.48	0.38
		WBT	C	D	27	36	0.31	0.47
		WBR	A	A	2	1	0.15	0.15
		NBL	E	E	56	66	0.88	0.94
		NBT	D	E	37	56	0.47	0.83
		NBR	A	A	7	7	0.23	0.26
		SBL	D	D	38	45	0.34	0.69
		SBT	E	D	61	55	0.80	0.69
		SBR	C	B	21	10	0.42	0.61
Torbram Road & Old School Road	Signal Opt. #2	**Overall**	**B**	**B**	**19**	**19**	**0.77**	**0.78**
		EBLTR	C	C	31	24	0.77	0.60
		WBLTR	B	C	19	30	0.31	0.78
		NBL	B	B	11	12	0.03	0.08
		NBTR	A	B	10	11	0.08	0.27
		SBL	B	B	11	12	0.01	0.00
		SBTR	B	A	11	9	0.24	0.17
Airport Road & Alban Road/12333 Airport Road Access	Signal Opt. #2	**Overall**	**A**	**B**	**6**	**13**	**0.44**	**0.74**
		EBL	D	E	50	68	0.17	0.74
		EBTR	A	A	2	1	0.25	0.20
		WBL	E	D	64	45	0.44	0.28
		WBTR	A	A	0	0	0.01	0.02
		NBL	A	A	6	8	0.33	0.16
		NBT	A	A	3	8	0.15	0.38
		NBR	A	A	1	1	0.05	0.04
		SBL	A	A	4	8	0.01	0.01
		SBT	A	A	4	8	0.28	0.25
		SBR	A	A	1	1	0.09	0.03

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #2**	**Overall**	**A**	**A**	**3**	**6**	**0.32**	**0.54**
		EBL	D	D	48	45	0.03	0.04
		EBTR	A	A	1	1	0.11	0.15
		WBL	D	E	55	63	0.23	0.54
		WBTR	A	A	0	0	0.01	0.03
		NBL	A	A	3	5	0.17	0.11
		NBT	A	A	2	5	0.22	0.39
		NBR	A	A	0	2	0.03	0.07
		SBL	A	A	3	3	0.01	0.12
		SBT	A	A	2	2	0.32	0.27
		SBR	A	A	0	0	0.00	0.01

Note 1: The overall LOS and control delay of a signalized intersection is based on the average control delay per vehicle (Synchro).

Note 2: The overall v/c ratio for signalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

In comparison to 2038 future background conditions, the signalized study intersections are expected to continue operating efficiently at an unchanged LOS "D" or better with low-to-moderate control delays and v/c ratios. Accordingly, these metrics outline that the signalized intersections are not significantly impacted by the Proposed Development.

Unsignalized Intersections

Table 41 details the 2038 future total traffic operations for the unsignalized study intersections.

Table 41: 2038 Future Total Traffic Operations – Unsignalized Intersections

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & North RIRO Access	**One-Way Stop**	**Overall**	**B**	**B**	**11**	**10**	**0.35**	**0.32**
		EBR	B	B	11	10	0.00	0.01
		NBT	A	A	0	0	0.12	0.32
		SBTR	A	A	0	0	0.35	0.23
Airport Road & Full Moves Access	**One-Way Stop**	**Overall**	**C**	**C**	**20**	**16**	**0.34**	**0.31**
		EBL	C	C	22	17	0.07	0.13
		EBR	C	B	15	13	0.01	0.01
		NBL	B	A	11	10	0.04	0.01
		NBT	A	A	0	0	0.11	0.31
		SBTR	A	A	0	0	0.34	0.23
Airport Road & South RIRO Access	**One-Way Stop**	**Overall**	**B**	**B**	**10**	**10**	**0.34**	**0.31**
		EBR	B	A	10	10	0.01	0.03
		NBT	A	A	0	0	0.12	0.31
		SBTR	A	A	0	0	0.34	0.23

Note 1: The overall LOS and control delay of a two-way stop-controlled intersection is based on the delay associated with the critical minor road approach (HCM 2000).
Note 2: The overall v/c ratio for unsignalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

The proposed right-in/right-out (RIRO) site accesses off Airport Road are expected to continue operating efficiently at a LOS "C" during the weekday a.m. and p.m. peak hours, with low control delays and v/c ratios for the 2038 future total horizon.

Roundabout Intersections

Table 42 details the 2038 future total traffic operations for the roundabout study intersections.

Table 42: 2038 Future Total Traffic Operations – Roundabout Intersections

Intersection	Approach	LOS[1]		Delay (s)		v/c ratio[1]		95th %ile Queue[2]	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & Old School Road/Healy Road	**Overall**	**A**	**A**	**2**	**3**	**0.36**	**0.45**	**-**	**-**
	EB	A	A	2	2	0.15	0.14	~1	~1
	WB	A	A	2	3	0.08	0.29	~1	~1
	NB	A	A	2	3	0.18	0.45	~1	~1
	SB	A	A	2	2	0.36	0.25	~1	~1

Note 1: Ratio of flow to capacity (RFC). The overall RFC for roundabout intersections is the maximum approach RFC. All RFCs greater than 0.85 are outlined in red.
Note 2: 95th percentile queues are recorded in passenger car equivalents. Rounded to the nearest vehicle.

The roundabout study intersection is expected to continue operating at an unchanged LOS "A" with low control delays and v/c ratios, in comparison to 2038 future background conditions. These metrics demonstrate that the intersection is anticipated to operate efficiently with reserve capacity to accommodate future growth.

7.4.4 Summary

Overall, these metrics indicate that the site generated traffic is not expected to significantly impact the study road network. With the recommended improvements and signal optimizations, the proposed future intersections are expected to operate acceptably. Accordingly, the study road network can support the Proposed Development, with the above noted recommendations.

7.5 Queueing Assessment (UPDATED)

Consistent with existing conditions, SimTraffic was used to assess the queues within the study road network. The 95th percentile queues were compared against the available storage length to determine if any queues are expected to extend beyond the auxiliary turn lanes. **Appendix F** contains the detailed queueing analysis worksheets.

7.5.1 2028 Horizon Year

Table 43 outlines the results of the 2028 future total queueing assessment.

Table 43: 2028 Future Total Queueing Assessment

Intersection		Movement	95th Percentile Queue (m)[1]		Auxiliary Lane Storage (m)
			A.M.	P.M.	
Mayfield Road & Airport Road	**Signal Opt. #1**	EBL	90	125	200
		WBL	60	75	50
		WBTR	80	95	70
		NBL	100	125	95
		NBR	25	25	60
		SBL	50	65	100
		SBR	45	70	105
Old School Road & Healy Road	**Signal Opt. #1**	EBL	30	45	30[2]
		WBL	30	60	30[2]
		NBR	30	25	15
		SBR	45	95	50
Airport Road & Alban Road/12333 Airport Road Access	**Signal Opt. #1**	EBL	15	75	55[3]
		WBR	5	5	100
		NBL	55	35	120
		NBR	15	15	145
		SBL	10	5	80[3]
		SBR	20	10	100
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #1**	WBL	25	35	30
		NBL	25	30	70
		NBR	10	20	65
		SBL	5	20	70
		SBR	5	10	60
Airport Road & Full Moves Access	**One-Way Stop**	EBL	10	20	15[4]

Note 1: Rounded up to the nearest 5 m.
Note 2: Assumed.
Note 3: Two-way left-turn lane.
Note 4: Assumed 15 m storage length for modelling purposes. Approximately 30 m available within the site.

The following queues are expected to extend beyond the provided storage, however, the exceedance can be accommodated within the provided or recommended effective storage length, two-way left-turn lane, painted median or available pavement, as applicable:

- Mayfield Road & Airport Road (WBL)
- Airport Road & Old School Road/Healy Road (NBR)
- Airport Road & Alban Road/12333 Airport Road Access (EBL)
- Airport Road & Perdue Court/Davis Lane (WBL)

Consistent with 2028 future background conditions, the westbound through/right-turn queue is forecasted to extend beyond the available storage length. It is recommended that the Region continues to monitor the queues to determine if interim improvements are warranted, prior to the planned Mayfield Road widening.

The following extended queues can be accommodated within the storage lengths recommended to support 2028 future background conditions:

- Mayfield Road & Airport Road (NBL)
- Airport Road & Old School Road/Healy Road (EBL, WBL)

The southbound right-turn lane at Airport Road & Old School Road/Healy Road is expected to extend beyond the provided storage length and taper, which is consistent with 2028 future background conditions. It is recommended that the Region continues to monitor the queues to determine if interim improvements are warranted, prior to the implementation for the planned roundabout.

The eastbound left-turn queue at Airport Road & Full Moves Access can be accommodated within the 30 m available for the left-turn movement within the Subject Site.

7.5.2 2033 Horizon Year

Table 44 outlines the results of the 2033 future total queueing assessment.

Table 44: 2033 Future Total Queueing Assessment

Intersection		Movement	95th Percentile Queue (m)[1]		Auxiliary Lane Storage (m)
			A.M.	P.M.	
Mayfield Road & Airport Road	**Signal Opt. #2**	EBL	120	215	200
		WBL	40	40	165
		WBR	20	30	60
		NBL	180	220	95
		NBR	30	45	60
		SBL	50	85	100
		SBR	35	55	105
Torbram Road & Old School Road	**Signal Opt. #2**	NBL	15	15	55[2]
		SBL	10	-	55
Airport Road & Alban Road/12333 Airport Road Access	**Signal Opt. #2**	EBL	20	65	55[3]
		WBTR	10	10	100
		NBL	45	30	120
		NBR	10	10	145
		SBL	10	10	80[3]
		SBR	15	10	100
Airport Road & Perdue Court/Davis Lane	**Signal Opt. #2**	WBL	30	35	30
		NBL	30	30	70
		NBR	10	20	65
		SBL	10	25	70
		SBR	5	10	60
Airport Road & Full Moves Access	**One-Way Stop**	EBL	20	20	15[4]
		NBL	15	10	55[3]

Note 1: Rounded up to the nearest 5 m.
Note 2: Assumed as no design drawings are currently available.
Note 3: Two-way left-turn lane.
Note 4: Assumed 15 m storage length for modelling purposes. Approximately 30 m available within the site.

The queues for some movements are expected to extend beyond the storage length. However, these queues for the following movements and intersections can be accommodated within the provided taper length or two-way left-turn lane, accordingly:

- Mayfield Road & Airport Road (EBL)
- Airport Road & Perdue Court/Davis Lane (WBL)

Despite the extended queue for the northbound left-turn movement at Mayfield Road & Airport Road, the queue can be accommodated within the increased storage length recommended to support future background conditions.

The eastbound left-turn queue at Airport Road & Full Moves Access can be accommodated within the 30 m available for the left-turn movement within the Subject Site.

7.5.3 2038 Horizon Year

Table 45 outlines the results of the 2038 future total queueing assessment.

Table 45: 2038 Future Total Queueing Assessment

Intersection		Movement	95th Percentile Queue (m)[1]		Auxiliary Lane Storage (m)
			A.M.	P.M.	
Mayfield Road & Airport Road	Signal Opt. #2	EBL	95	210	200
		WBL	35	40	165
		WBR	25	20	60
		NBL	95	180	95
		NBR	30	55	60
		SBL	50	65	100
		SBR	35	70	105
Torbram Road & Old School Road	Signal Opt. #2	NBL	10	20	55[2]
		SBL	10	5	55
Airport Road & Alban Road/12333 Airport Road Access	Signal Opt. #2	EBL	20	65	55[3]
		WBTR	10	10	100
		NBL	45	35	120
		NBR	10	15	145
		SBL	5	5	80[3]
		SBR	20	10	100
Airport Road & Perdue Court/Davis Lane	Signal Opt. #2	WBL	25	35	30
		NBL	35	35	70
		NBR	10	20	65
		SBL	5	30	70
		SBR	5	5	60
Airport Road & Full Moves Access	Signal Opt. #2	EBL	20	25	15[4]
		NBL	15	10	55[3]

Note 1: Rounded up to the nearest 5 m.
Note 2: Assumed as no design drawings are currently available.
Note 3: Two-way left-turn lane.
Note 4: Assumed 15 m storage length for modelling purposes. Approximately 30 m available within the site.

The queues for some movements are expected to extend beyond the storage length. However, these queues for the following movements and intersections can be accommodated within the provided taper length or two-way left-turn lane, accordingly:

- Mayfield Road & Airport Road (EBL)
- Airport Road & Alban Road/12333 Airport Road (EBL)
- Airport Road & Perdue Court/Davis Lane (WBL)

While the extended queue for the northbound left-turn movement at Mayfield Road & Airport Road, the queue can be accommodated within the increased storage length recommended to support future background conditions.

The eastbound left-turn queue at Airport Road & Full Moves Access can be accommodated within the 30 m available for the left-turn movement within the Subject Site.

7.5.4 Summary

As outlined above, no auxiliary turn lane storage length extensions, beyond those identified to support future background conditions, are required to support future total conditions.

7.6 Recommendations Summary (UPDATED)

Table 46 summarizes the recommended future total improvements, which should be implemented in addition to the future background improvements outlined in **Table 28.**

Table 46: Future Total Recommended Improvements

Location	Improvements
2028 Future Total	
Mayfield Road & Airport Road	Continue to monitor traffic operations and queues to determine if additional improvements are warranted, prior to Mayfield Road widening.
Airport Road & Old School Road/Healy Road	Continue to monitor traffic operations to determine if additional improvements are warranted.

8.0 Site Accesses Sensitivity Analysis – 2051 Future Total (UPDATED)

As requested by Town and Region staff, a sensitivity analysis was conducted for the ultimate 2051 horizon year to understand the operation of the proposed site accesses as well as any impact to the planned East-West Collector Road (herein referred to as E-W Collector Road), identified in the Town's Multi-Modal Transportation Master Plan (MMTMP) Addendum (January 2026). Furthermore, it is assumed that the E-W Road will be built out by the 2041 horizon year at the earliest, in line with the Town and Region's major planning horizon as well as other capital improvements in the area. The ultimate 2051 horizon year was reviewed herein, consistent with the horizon identified for the Tullamore Northwest Employment Area Secondary Plan Transportation Study Update (Crozier, February 2026).

Accordingly, the following intersections were reviewed as part of the sensitivity analysis for the 2051 future total horizon:

- Airport Road & North Right-In/Right-Out (RIRO) Site Access
- Airport Road & Full Moves Site Access
- Airport Road & South RIRO Site Access
- Airport Road & E-W Collector Road

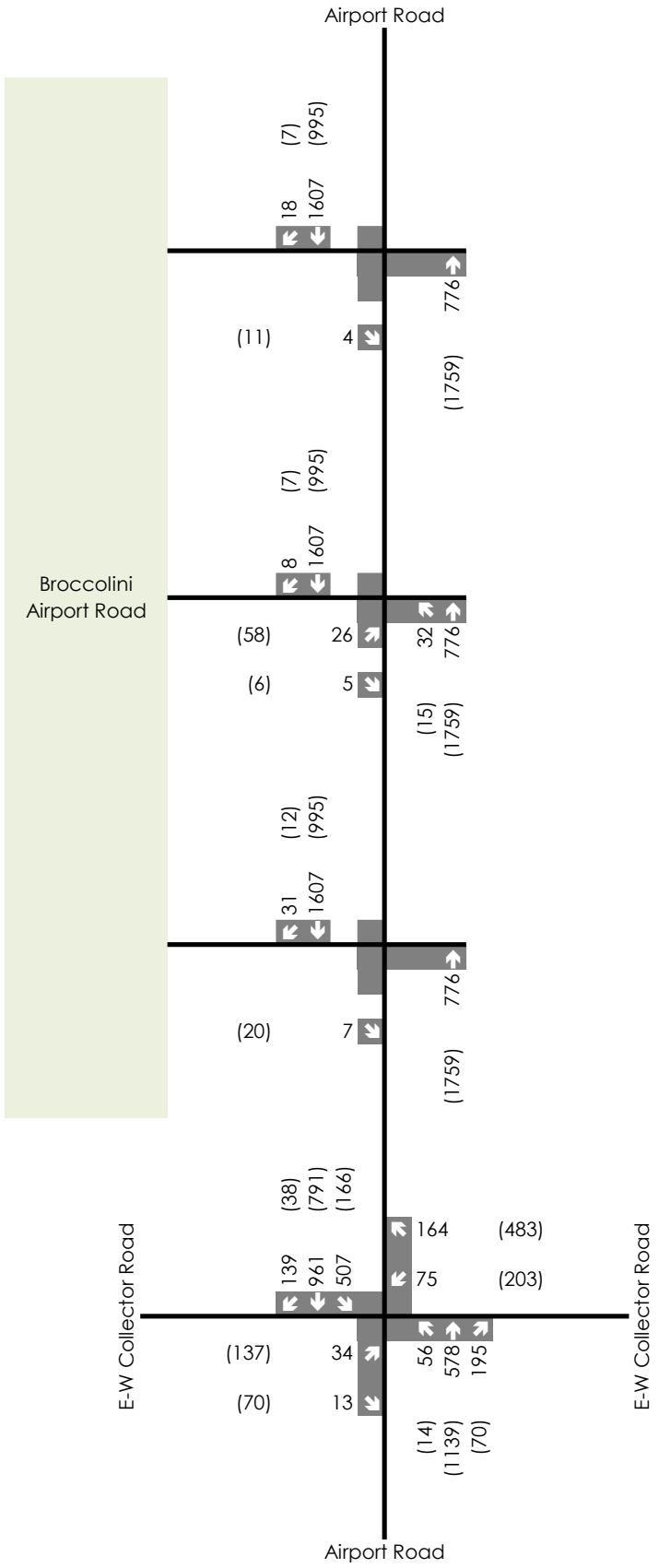
8.1 2051 Future Total Traffic Volumes

For consistency, the 2051 future total traffic volumes outlined in the Tullamore Northwest Employment Area Secondary Plan Transportation Study Update (Crozier, February 2026) for the Airport Road & E-W Collector Road intersection was used herein

The resulting volumes north of Airport Road & E-W Collector Road were carried through the proposed site accesses as through volumes. We note that the 2051 future total volumes outlined in the Secondary Plan Transportation Study included traffic volumes associated with the entirety of the Tullamore Northwest Employment Area. For simplicity, these volumes were not removed

when determining the through traffic volumes at the site accesses, despite the site generated traffic also being included in the turning movements. As a result, the 2051 future total traffic volumes at the proposed site accesses can be considered conservative.

Figure 28 illustrates the 2051 future total sensitivity traffic volumes.



Legend	Broccolini Airport Road		Figure 28
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes {xx} Weekend Peak Hour Traffic Volumes	**2051 Future Total Traffic Volumes (Sensitivity)**	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY

8.2 Warrants Assessment (NEW)

Signal warrants were assessed for the full moves site access off Airport Road for the 2051 future total conditions. As previously outlined in **Section 5.3** and **Section 7.2**, the warrants were evaluated based on Justification 7: Projected Volumes per Chapter 4 of the Ontario Traffic Manual Book 12: Traffic Signals (MTO, July 2024).

Table 47 summarizes the future total signal warrant analysis.

Table 47: 2051 Future Total Signal Warrant Analysis

Intersection	Horizon Year	Flow Condition	Lanes on Major Road	Signal Warranted?
Airport Road & Full Moves Access	2051 Future Total	Free	2+ Lane	No

Signal control is not warranted at the proposed full moves access off Airport Road under 2051 future total conditions.

Appendix K includes the warrants assessment reports.

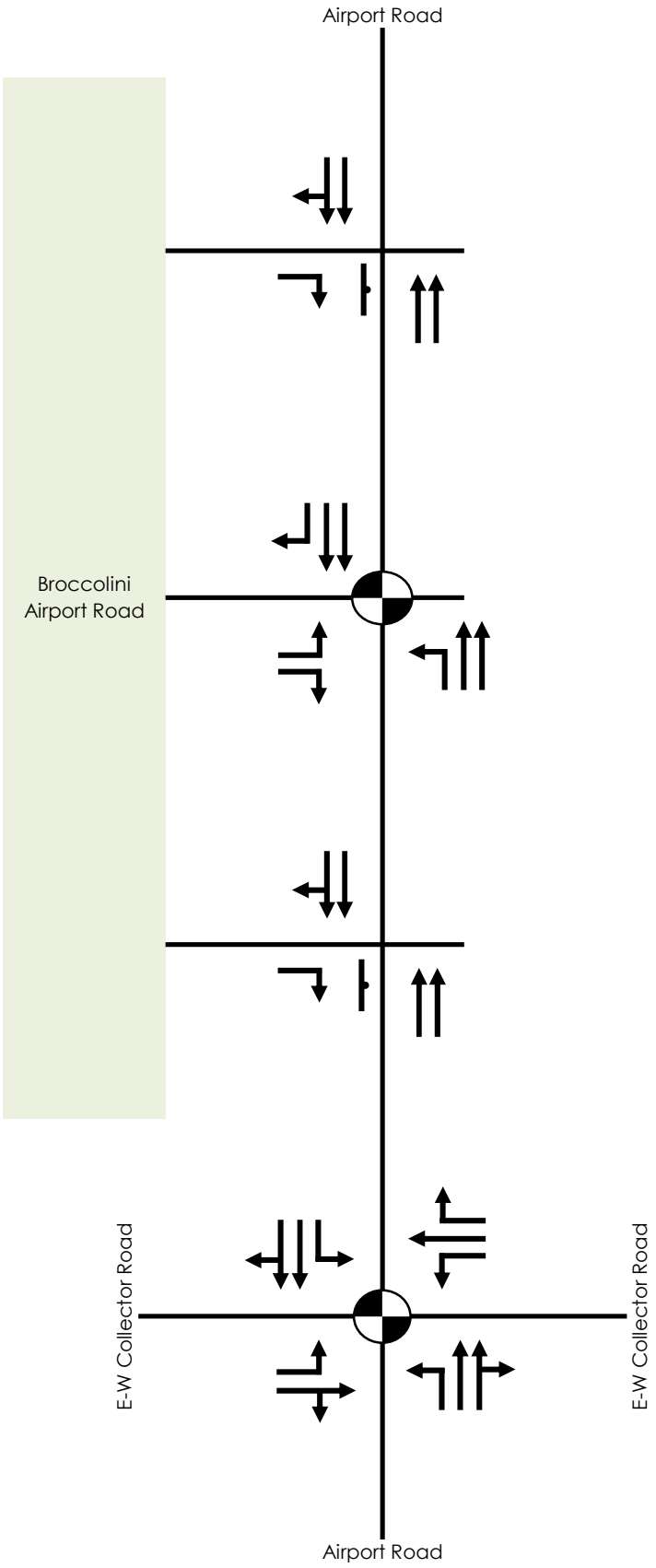
8.3 Traffic Modelling and Assumptions

The section herein outlines the traffic modelling and assumptions used in evaluating future total conditions. Unless otherwise noted, the future total traffic modelling and assumptions were maintained for the sensitivity analysis herein.

The signal timing plans were optimized for the 2051 horizon year (Signal Opt. #3), given the anticipated growth in background traffic.

The modelling includes updated heavy vehicle percentages that reflect the increased heavy vehicle traffic associated with the Subject Development.

As outlined in **Section 7.3.1**, auxiliary turn lanes were not modelled at Airport Road & Full Moves Access for the baseline future total conditions. Nevertheless, as discussed with Region staff, auxiliary turn lanes were modelled for the ultimate 2051 future total sensitivity conditions, to understand the requirements for auxiliary turn lane(s) in the long-term future. **Figure 29** illustrates the 2051 future total sensitivity study road network.



Legend	Broccolini Airport Road		Figure 29
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes {xx} Weekend Peak Hour Traffic Volumes	**2051 Future Total Study Road Network (Sensitivity)**	CROZIER CONSULTING ENGINEERS	Project No. 2278-7228 Date: 05/05/26 Analyst: MY

8.4 Intersection Operations

Signalized Intersections

Table 48 details the 2051 future total sensitivity traffic operations for the signalized study intersections.

Table 48: 2051 Future Total Traffic Operations – Signalized Intersections (Sensitivity)

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & E-W Road	Signal Opt. #3	**Overall**	**B**	**D**	**19**	**41**	**0.83**	**0.98**
		EBL	D	C	46	27	0.22	0.33
		EBTR	A	A	0	1	0.04	0.14
		WBL	D	C	55	28	0.49	0.52
		WBT	A	A	0	0	0.00	0.00
		WBR	A	E	1	58	0.26	0.98
		NBL	C	C	34	27	0.28	0.06
		NBTR	C	D	29	49	0.55	0.92
		SBL	C	E	27	67	0.83	0.88
		SBTR	A	C	7	23	0.44	0.49

Note 1: The overall LOS and control delay of a signalized intersection is based on the average control delay per vehicle (Synchro).

Note 2: The overall v/c ratio for signalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

Airport Road & E-W Road is anticipated to operate at a LOS "C" or better under 2051 future total conditions, with low to moderate control delays and acceptable v/c ratios. These metrics indicate that the intersection is operating efficiently with reserve capacity to accommodate future traffic growth.

Unsignalized Intersections

Table 49 details the 2051 future total sensitivity traffic operations for the unsignalized study intersections.

Table 49: 2051 Future Total Sensitivity Traffic Operations – Unsignalized Intersections (Sensitivity)

Intersection		Movement	LOS[1]		Delay (s)[1]		v/c ratio[2]	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Airport Road & North RIRO Access	**One-Way Stop**	**Overall**	**C**	**B**	**16**	**12**	**0.63**	**0.52**
		EBR	C	B	16	12	0.01	0.02
		NBT	A	A	0	0	0.23	0.52
		SBTR	A	A	0	0	0.63	0.39
Airport Road & Full Moves Access	**One-Way Stop**	**Overall**	**E**	**C**	**40**	**23**	**0.47**	**0.52**
		EBL	E	C	43	23	0.22	0.23
		EBR	D	C	25	16	0.03	0.02
		NBL	C	B	18	12	0.10	0.03
		NBT	A	A	0	0	0.23	0.52
		SBT	A	A	0	0	0.47	0.29
		SBR	A	A	0	0	0.00	0.00
Airport Road & South RIRO Access	**One-Way Stop**	**Overall**	**C**	**B**	**16**	**12**	**0.63**	**0.52**
		EBR	C	B	16	12	0.02	0.04
		NBT	A	A	0	0	0.23	0.52
		SBTR	A	A	0	0	0.63	0.39

Note 1: The overall LOS and control delay of a two-way stop-controlled intersection is based on the delay associated with the critical minor road approach (HCM 2000).

Note 2: The overall v/c ratio for unsignalized intersections is the maximum movement v/c ratio. All v/c ratios above 0.90 for through and shared through/turning movements as well as v/c ratios above 1.00 for exclusive movements are outlined in red text.

Under 2051 future total conditions, the proposed site accesses off Airport Road are expected to operate acceptably at a LOS "E" or better with low to moderate control delays and v/c ratios under the weekday peak hours.

Summary

Overall, under 251 future total conditions, the proposed site accesses off Airport Road as well as the Airport Road & E-W Collector Road intersection are operating efficiently with reserve capacity to accommodate future traffic growth. Accordingly, the Proposed Development is supportable from a transportation operations perspective.

8.5 Queueing Assessment

The intersection operations and queuing, included in **Section 7.0**, outlines that the proposed full moves access off Airport Road can operate acceptably without auxiliary southbound right-turn eastbound left-turn lanes. Nevertheless, for operational purposes it is understood that auxiliary southbound right-turn and eastbound left-turn lanes may be implemented given the high truck volumes expected. To confirm the required auxiliary turn lane storage lengths, an additional southbound right-turn lane at Airport Road & Full Moves Access was modelled for 2051 future total sensitivity conditions.

Table 50 outlines the results of the 2051 future total sensitivity queueing assessment.

Table 50: 2051 Future Total Queueing Assessment (Sensitivity)

Intersection		Movement	95th Percentile Queue (m)[1]		Auxiliary Lane Storage (m)
			A.M.	P.M.	
Airport Road & E-W Collector Road	Signal Opt. #3	EBL	35	80	55[2]
		WBL	60	65	55[3]
		WBR	50	70	55
		NBL	25	65	80[2]
		SBL	65	65	80[2]
Airport Road & Full Moves Access	One-Way Stop	EBL	25	30	15[4,5]
		NBL	30	20	55[2]
		SBR	-	-	30[4]

Note 1: Rounded up to the nearest 5 m.
Note 2: Two-way left-turn lane.
Note 3: Assumed as no details are currently available.
Note 4: Assumed to confirm storage length required.
Note 5: Assumed 15 m storage length for modelling purposes. Approximately 30 m available within the site.

The following queues are expected to extend beyond the modelled storage length; however, the queue can be accommodated within the proposed two-way left turn lane:

- Airport Road & E-W Collector Road (EBL, WBL)

Based on the expected queues, storage lengths of 70 m for the westbound right-turn movement at Airport Road & E-W Collector Road, respectively. The auxiliary turn lane requirements for the east approach of Airport Road & E-W Collector Road should be confirmed by the Town during the Detailed Design stage.

The eastbound left-turn queue at Airport Road & Full Moves Access can be accommodated within the 30 m available for the left-turn movement within the Subject Site.

The northbound left-turn lane queues at Airport Road & Full Moves Access are not expected to impact the upstream Airport Road & E-W Collector Road intersection. Similarly, the queues expected for the southbound left-turn at Airport Road & E-W Collector Road are not expected to extend to the Airport Road & Full Move Access intersection. Moreover, the combined 95th percentile queue lengths between these intersections are 95 m, and with a proposed intersection spacing of 200 m, the future queues can be accommodated within the two-way left-turn lane. Accordingly, there are no queueing concerns associated with back-to-back left-turn lanes along the Subject Site's Airport Road frontage.

Overall, there are no major queueing concerns associated with the proposed site accesses under the 2051 future total horizon. Thus, the Proposed Development is supportable from this perspective.

9.0 Site Access Review (UPDATED)

This section herein reviews the auxiliary turn lane requirements for the proposed site accesses as well as from an intersection sight distance and intersection spacing perspectives.

9.1 Auxiliary Turn-Lane Recommendations

Auxiliary turn-lane recommendations at the proposed site accesses off Airport Road were reviewed herein for pre- and post-Airport Road widening.

9.1.1 Ultimate 2051 Horizon

The auxiliary left-turn lane requirements were evaluated based on the left-turn lane warrant for 4 lane highways, outlined in the MTO Design Supplement for the Transportation Association of Canada Geometric Design Guide for Canadian Roads (October 2023), as well as the results of the SimTraffic queueing assessment, outlined in **Section 8.5**. **Table 51** outlines the auxiliary left-turn lane recommendations for ultimate conditions.

Table 51: Ultimate 2051 Future Total Auxiliary Left-Turn Lane Storage Length Recommendations

Intersection	Movement	Storage Warranted	SimTraffic Queue	Recommended Storage Length
Airport Road & Full Moves Access	EBL	None	30 m	30 m
	NBL	65 m	30 m	N/A[1]

Note 1: Included in planned two-way left-turn lane.

At the proposed site accesses, southbound auxiliary right-turn lanes were not warranted based on the anticipated right-turn volumes and thus were not modelled herein. Furthermore, the intersections were found to operate acceptably without these auxiliary lanes. As requested by the Region, the provision of auxiliary right-turn lanes at the site accesses for the following movements and storage lengths are recommended:

- Airport Road & North RIRO Access (SBR): (minimum per Region Standard 5-1-4)
- Airport Road & Full Moves Access (SBR): 30 m (minimum per Region Standard 5-1-4)

9.1.2 Interim 2028 Horizon

With the Airport Road widening planned by 2031, interim auxiliary turn lanes requirements for the 2028 horizon year were reviewed herein, despite the intersections operating acceptably without the provision of auxiliary turn lanes.

The auxiliary left-turn lane requirements were evaluated based on left-turn lane warrant for 2 lane highways, outlined in the MTO Design Supplement for the Transportation Association of Canada Geometric Design Guide for Canadian Roads (October 2023), as well as the results of the SimTraffic queueing assessment, outlined in **Section 7.5.1**. **Table 52** outlines the auxiliary left-turn lane recommendations for interim conditions.

Table 52: Interim 2028 Future Total Auxiliary Left-Turn Lane Storage Length Recommendations

Intersection	Movement	Storage Warranted	SimTraffic Queue	Recommended Storage Length
Airport Road & Full Moves Access	EBL	None	20 m	30 m[1]
	NBL	50 m	N/A[2]	50 m

Note 1: Consistent with recommended storage length to support 2051 future total conditions, to avoid rework.
Note 2: Auxiliary left-turn lane not modelled for 2028 future total conditions.

Consistent with post-Airport Road widening conditions, the following auxiliary turn lane storage lengths are recommended, as requested by the Region:

- Airport Road & North RIRO Access (SBR): 30 m (minimum per Region Standard 5-1-4)
- Airport Road & Full Moves Access (SBR): 30 m (minimum per Region Standard 5-1-4)

Appendix N includes the auxiliary turn lane storage requirement excerpts.

9.1.3 Summary

Table 46 summarizes the recommended site access improvements.

Table 53: Site Access Recommended Improvements

Location	Improvements
2028 Future Total	
Airport Road & North RIRO Access	Implement SBR auxiliary turn lane (30 m, minimum per Region Standard 5-1-4)
Airport Road & Full Moves Access	Implement the following auxiliary turn lanes: • EBL: 30 m • NBL: 50 m (within two-way left-turn lane) • SBR: 30 m (minimum per Region Standard 5-1-4)
2033 Future Total	
Airport Road & North RIRO Access[1]	Implement SBR auxiliary turn lane (30 m, minimum per Region Standard 5-1-4)
Airport Road & Full Moves Access[1]	Implement the following auxiliary turn lanes: • EBL: 30 m • NBL: 65 m (within two-way left-turn lane) • SBR: 30 m (minimum per Region Standard 5-1-4)

Note 1: Recommended to support 2051 future total conditions, however, to be implemented by the 2033 future total horizon as part of the Airport Road widening works.

A Conceptual Design of the site accesses under interim and ultimate conditions was prepared and submitted under separate cover. Overall, the Conceptual Design demonstrates that the recommended storage lengths at the proposed site accesses can be accommodated both pre- and post-Airport Road widening.

9.2 Intersection Sight Distance

The available sightlines at the proposed site accesses were measured and compared to the standards set out in the TAC GDGCR (June 2017).

Sight distances were measured from the proposed site accesses using the following assumptions:

- A standard driver eye height of 1.08 m for a passenger car.
- A standard driver eye height of 2.30 m for a tractor trailer (Wb-20).
- An object height of 0.60 m.
- A 4.4 to 5.4 m setback from the approximate extension of the outer curb to represent a vehicle waiting to exit the site.

The design speed of a roadway is typically 10 to 20 km/h greater than the posted speed limit. The posted speed limit along Airport Road is 80 km/h; therefore, a design speed of 100 km/h was assumed for the sight distance analysis.

Appendix N includes the intersection sight distance requirement excerpts.

For the Case B: Intersections with Stop Control on the Minor Road, intersection sight distance is calculated using Equation 9.9.1 per TAC GDGCR (June 2017) as outlined below:

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

Where:

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

9.2.1 Right-In/Right-Out Accesses

The North and South right-in/right-out (RIRO) Accesses will only be utilized by passenger vehicles on a daily basis; thus, the sight distance analysis was conducted using the base time gaps for a passenger vehicle.

Table 54 outlines the sight distance assessment for the right-in/right-out site accesses.

Table 54: Sight Distance Assessment – Right-In/Right-Out Accesses

Access	North RIRO Access	South RIRO Access
Maneuver	**Right-Turn**	**Right-Turn**
Access Type	Right-In/Right-Out	Right-In/Right-Out
Intersection Control	Case B: Stop on Minor Road	Case B: Stop on Minor Road
Posted Speed Limit	80 km/h	80 km/h
Assumed Design Speed	100 km/h	100 km/h
Grade	Less than 3%	Less than 3%
Horizontal Alignment	Straight	Straight
Base Time Gap	6.5 s	6.5 s
Additional Time Gap	None	None
Sight Distance Required	185 m	185 m
Measured Sight Distance	185+ m	185+ m
Minimum Sight Distance Satisfied	Yes	Yes

For the proposed RIRO Accesses off Airport Road, the minimum sight distance requirements are satisfied.

9.2.2 Full Moves Access

The Full Moves Access will accommodate both passenger cars and heavy trucks. Accordingly, the sight distance analysis was conducted using the base time gap for a tractor trailer (Wb-20). For conservative analysis, the sight distance for the left-turn maneuver was evaluated for the 2033 horizon year, post the Airport Road widening. Accordingly, an additional time gap was applied to account for the additional opposing travel lane along Airport Road.

Table 55 outlines the sight distance assessment of the signalized access.

Table 55: Sight Distance Assessment – Full Moves Access

Access	Full Moves Access	
Maneuver	**Left-Turn**	**Right-Turn**
Access Type	Full Moves	
Intersection Control	Case B: Stop on Minor Road	
Posted Speed Limit	80 km/h	
Assumed Design Speed	100 km/h	
Grade	Less than 3%	
Horizontal Alignment	Straight	
Base Time Gap	11.5 s	10.5 s
Additional Time Gap	0.7 s	None
Sight Distance Required	340 m	295 m
Measured Sight Distance	340+ m	295+ m
Minimum Sight Distance Satisfied	Yes	Yes

For the proposed signalized access off Airport Road, the minimum sight distance requirements are satisfied.

9.2.3 Summary

In summary, the Proposed Development is supportable from a sight distance perspective, as the minimum requirements are satisfied at the 3 site accesses proposed off Airport Road.

9.3 Intersection Spacing

As part of the Subject Development, the site accesses are proposed off Airport Road. As a regional road, the intersection spacing requirements outlined in the Region of Peel's Road Characterization Study (May 2013) applies.

Airport Road, within the study area, is a suburban connector, which corresponds to the following minimum spacing requirements:

- Full Moves to Full Moves: 300 m
- Full Moves to Right-In/Right-Out: 75 m

Table 56 summarizes the access spacing review.

Table 56: Access Spacing Review

Site Access	Direction	Required	Provided	Satisfied?
North RIRO Access	North	75 m	603 m[1]	Yes
	South		140 m	Yes
Full Moves Access	North			
	South	300 m	200 m[2]	No

Note 1: Access spacing provided with adjacent intersection, Airport Road & Old School Road/Healy Road.
Note 2: Access spacing provided with future adjacent intersection, Airport Road & E-W Collector Road.

The proposed accesses off Airport Road meet the minimum spacing requirements noted above, except for between the Full Moves Access and the future Airport Road & E-W Collector Road intersection. Given the reduced spacing of 200 m, a review of the back-to-back left-turn queues were reviewed under the ultimate 2051 future toto conditions to confirm no queueing concerns are anticipated. **Table 57** summaries the 95th percentile queues, as outlined in **Section 8.5**.

Table 57: Airport Road Back-To-Back Left-Turn Queue (Full Moves Access + E-W Collector Road)

Intersection	Movement	95th Percentile Queue (m)	
		Weekday A.M.	Weekday P.M.
Airport Road & Full Moves Access	NBL	30 m	20 m
Airport Road & E-W Collector Road	SBL	65 m	65 m
Back-To-Back Left-Turn Queue		**95 m**	**75 m**

As outlined above, the provided 200 m intersection spacing can accommodate the 95th percentile back-to-back left-turn queue. Therefore, the proposed intersection spacing is acceptable from this perspective. Furthermore, as a continuous two-way left-turn lane is planned along Airport Road, there are no concerns regarding back-to-back left-turn lane tapers.

Overall, there are no spacing concerns expected for any of the proposed site accesses off Airport Road, and the Proposed Development is supportable from this perspective.

Appendix N includes the intersection spacing requirement excerpts. **Appendix O** includes the Proposed Access Spacing Diagrams.

10.0 Corridor Access Management Review

As requested by Region staff, access opportunities for adjacent parcels were reviewed to confirm that the Proposed Development would not preclude the future development of neighbouring parcels.

As discussed in **Section 9.3**, the Airport Road corridor is classified as a suburban connecter per the Region's Road Characterization Study. Accordingly, along Airport Road, accesses have minimum spacing requirements of 300 m for full moves intersections and 75 m for right-in/right-out intersections, measured from curb extension to curb extension.

The Corridor Access Management Diagram illustrates the potential access management opportunities for the properties north and south of the Subject Lands under future redevelopment scenarios, given the applicable spacing requirements. We note that the scope of this review was limited to lands that have frontage along Airport Road, between Old School Road and the future E-W Collector Road.

Given the available spacing, an additional full moves intersection is possible, between the Subject Lands and Airport Road & Old School Road/Healy Road. There is also the opportunity for multiple restricted movement accesses (e.g. right-in/right-out, left-in/right-in/right-out). It is noted that some of the lands north of the Subject Property have developable area west of the natural heritage area as well as Salt Creek. Accordingly, there may be access opportunities off a future Ionic Drive extension, should the roadway extend to Old School Road. Furthermore, lands with frontage to Old School Road may also pursue access(es) off Old School Road, spacing permitted.

The properties south of the Subject Development will have full moves access opportunities to the future E-W Collector Road.

Overall, the Subject Development's proposed accesses do not preclude access to the neighbouring lands along Airport Road in the future as the lands redevelop.

Figure 30 illustrates the Corridor Access Management Diagram.

FULL MOVES ACCESS OPPORTUNITIES VIA OLD SCHOOL ROAD, SUBJECT TO NHS CONSTRAINTS

RIGHT - IN / RIGHT - OUT ACCESS OPPORTUNITIES VIA AIRPORT ROAD

FULL MOVES ACCESS OPPORTUNITIES VIA AIRPORT ROAD

RIGHT - IN / RIGHT - OUT ACCESS OPPORTUNITIES VIA AIRPORT ROAD

150 m

75 m

300 m

FUTURE ROAD ALIGNMENT WEST OF TORBRAM ROAD

E - W COLLECTOR ROAD

FUTURE EXTENSION EAST OF AIRPORT ROAD

FULL MOVES ACCESS OPPORTUNITIES VIA FUTURE E - W COLLECTOR ROAD, SUBJECT TO NHS CONSTRAINTS

RIGHT - IN / RIGHT - OUT ACCESS OPPORTUNITIES VIA AIRPORT ROAD

100 0m 100 200

SCALE: 1: 3000

LEGEND

- Road
- Watercourse (Fish Habitat)

Natural Features and Natural Hazards

- Occupied Redside Dace Habitat (Meander Belt +30m)
- Candidate Significant Wetland, NRSI
- Candidate Significant Wetland, GEI
- Unevaluated Wetland, NRSI
- Unevaluated Wetland, GEI
- Significant Valleyland (TRCA)
- Significant Valleyland (TRCA, MTE, GEI)
- Significant Woodland
- Non-Significant Woodland
- Flood Hazard (TRCA 2024)
- Meander Belt (Geo Morphix)
- Meander Belt (TRCA)
- Long Term Stable Top of Slope (MTE)

Natural Feature Buffers and Natural Hazard Setbacks

- Fish Habitat (Watercourse +15m)
- Unevaluated Wetland +15m
- Candidate Significant Wetland +30m
- Significant Valleyland +15m
- Woodland +10m
- Floodline +10m
- Meander Belt +10m

Proposed Natural Hazards and Setbacks

- Natural Heritage Features and Hazards
- Natural Heritage Features and Hazard Setbacks

NOTES:

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6. **THE E-W COLLECTOR ROAD ALIGNMENT OUTLINED HEREIN IS CONCEPTUAL AND SUBJECT TO CHANGE AS PART OF FUTURE DEVELOPMENT APPLICATIONS AND/OR DETAILED DESIGN BY THE TOWN OF CALEDON.**
7. ENVIRONMENTAL CONSTRAINTS PER 8-9 OF THE BROCCOLINI AIRPORT ROAD MESR.

No.	ISSUE	DATE: MM/DD/YYYY
0	**ISSUED FOR 1st SUBMISSION**	**11/14/2025**
1	**ISSUED FOR 2nd SUBMISSION**	04/29/2026

Engineer

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

Engineer

Project

0 AIRPORT ROAD
TOWN OF CALEDON

Drawing

ACCESS MANAGEMENT DIAGRAM

CROZIER CONSULTING ENGINEERS

Drawn By	Design By	Project
R.L.		2278-7228
Check By	Check By	Drawing
M.Y.	M.L.	FIG 30

11.0 Site Circulation Review

11.1 Active Transportation Circulation (NEW)

Pedestrian facilities are provided along all building frontages with entrances, providing connection to the proposed passenger car parking area. Bicycle parking spaces are also provided on the northeast corner of the Subject Site, near the office building entrance.

It is noted that pedestrian and transit facilities are not currently provided nor planned along Airport Road within the vicinity of the Subject Lands. As such, connections to the external active transportation network are not feasible at this time.

Figure 31 illustrates the Active Transportation Circulation Plan.

LEGEND

Sidewalk

Bicycle Parking

FUTURE ROAD WIDENING; 22500 MM EXPANSION FROM CENTERLINE OF AIRPORT ROAD + 300 MM ROAD RESERVE

POLY SIGN

FIRE TRUCK ROUTE; LESS THAN 15M TO MAIN ENTRANCE

TPZ AREA

BIKE RACK AREA

PROPOSED TOE WALL ALONG PROPERTY LINE

PROPOSED TOE WALL ALONG PROPERTY LINE

SNOW STORAGE

PROPOSED EV PARKING FOR FUTURE USE, SUBJECT TO POWER & DATA COORDINATION FOR FUTURE CHARGING

663728

2177' - 7"

PROPERTY LINE

PHASE 1 LINE

3119

9000

22800

UP

2946 9' - 8"

600

2261

SETBACK

21

3288 10' - 9 1/2"

3990

9000

FUTURE OFFICE 762.48 SM

CENTERLINE OF ROAD

WASTE PICK UP

BUILDING A
248,824.27 SF
23,116.53 SM
40' CLEAR HEIGHT
FFE: 251.70 M

ACCESSIBLE PARKING SIGN

3000

6M FIRE ROUTE

MH

UP

396444

SETBACK

PHASE 1 LINE

17069

56' - 0" TYP

15240

50' - 0" TYP

45000

NEW R.O.W

SIAMESE CONNECTION

MECH

UP OUTDOOR AMENITY

16759

22853

246101

807' - 5"

TRANSFORMER

ELEC

3000

16956

SETBACK

PROPOSED FENCE

SNOW STORAGE

CONC. APRON

2 DRIVE-IN 41 LOADING DOCK

5x8M GUARDHOUSE

18288

60' - 0"

41169

19837

65' - 7"

3044

9' - 11 7/8"

7500

SWITCHGEAR

FH

UP

MH

LINE OF FUTURE ISLAND

7686

PHASE 1 LINE

LIMIT OF DEVELOPMENT

PHASE 1 LINE

PHASE 1 LINE

LINE OF CHAIN LINK FENCE

GATE

LOADING SPACE - TYP 14M X 3.5M

LINE OF FUTURE ISLAND

POLE

365665

365994

ENVIRONMENTAL HERITAGE ZONE REFER TO ECOLOGIST DOCUMENT

VALLEYLAND

FLOOD LINE

MEANDER BELT

WATERCOURSE

MEANDER BELT

FLOOD LINE

VALLEYLAND +15M

VALLEYLAND

VALLEYLAND +15M

MEANDER BELT +30M

FLOOD LINE +10M

MEANDER BELT +30M

CANDIDATE WETLAND +30M

FLOOD LINE +10M

VALLEYLAND +15M

LIMIT OF DEVELOPMENT

PHASE 2 FUTURE DEVELOPMENT AREA

PROPERTY LINE

AIRPORT ROAD

6250

MH

25250

NEW R.O.W

FH

660767

11.2 Vehicle Maneuverability

This section considers the internal vehicle maneuverability of the Subject Site to confirm vehicles can safely operate without conflicts or constraints. Vehicle Turning Diagrams were prepared using AutoTURN software.

The following design vehicles are expected to operate on site and are reviewed herein:

- Wb-20 Tractor Trailer Truck
- Region of Peel Fire Truck
- TAC p-car

Appendix Q includes the Vehicle Turning Diagrams.

11.2.1 Heavy Vehicles (UPDATED)

The Full Moves Access off Airport Road will service the heavy vehicle traffic. Analysis of vehicle turning movements indicate that there is sufficient space for a standard Wb-20 truck to maneuver in and out of the proposed Full Moves Access as well as in and out of the proposed loading spaces. Furthermore, with the desired security measures for the Subject Development, Wb-20 trucks can safely maneuver around the proposed guard house and through the attached gate.

11.2.2 Emergency Vehicles

The Region of Peel Fire Truck can maneuver throughout the identified fire route as well as the proposed site accesses without issues.

11.2.3 Passenger Vehicles

Passenger vehicles can safely enter and exit the proposed site accesses without any conflicts. Furthermore, passenger vehicles can safely maneuver around the provided vehicle parking areas.

11.2.4 Summary

Overall, the Proposed Development is supportable from a vehicle maneuverability perspective.

12.0 Parking Review (UPDATED)

The section herein reviews the parking requirements applicable to the Proposed Development, including the Town of Caledon's Zoning By-Law 2006-50 and Traffic By-Law 048-2024.

Appendix R includes the relevant parking requirement excerpts.

12.1 Vehicle Parking

Table 58 outlines the minimum parking requirements based on the Town of Caledon's Zoning By-Law 2006-50.

Table 58: Town of Caledon Zoning By-Law 2006-50 Minimum Vehicle Parking Requirements

Building	Land Use	Statistic	Rate	Required	Proposed
Building A	Warehouse	23,117 m²	139 + 1/170 m² (>10,000 m²)	217 spaces	116 spaces (-101 spaces)
Total				**217 spaces**	**116 spaces (-101 spaces)**

The Proposed Development is required to provide 217 parking spaces. The most recent Site Plan proposes 116 parking spaces; as such, a deficit of parking spaces is proposed.

12.1.1 Vehicle Parking Justification

A review of proposed development applications for industrial developments in the Town of Caledon was conducted to evaluate the adequacy of the proposed parking supply.

Table 59 summarizes the proposed parking rates for industrial developments in the Town, Institute of Transportation Engineer's Parking Generation Manual, as well as a comparison to the proposed parking supply.

Table 59: Industrial Warehouse Parking Approval Trends in the Town of Caledon

Site Location/Source	Statistic	Rate	Status
Tullamore Lands (0 & 12245 Torbram Road), Town of Caledon	562,381 m²	0.43 space/100 m²	Approved (MZO – O.Reg. 483/22)[1]
0 & 12035 Dixie Road, Town of Caledon	204,387 m²	0.43 space/100 m²	Approved (MZO – O.Reg. 157/22)[1]
12480 Coleraine Drive, Town of Caledon	118,983 m²	0.33 space/100 m²	By-Law No. 2021-20
Summary			
Average	-	0.40 space/100 m²	n/a
ITE Parking Generation Manual (LUC 150 Warehousing)	-	0.40 spaces/100 m²	n/a
Broccolini Airport Road (Subject Lands)	23,117 m²	0.50 space/100 m²	Subject Development

Note 1: The Minister's Zoning Order (MZO) outlined a vehicle parking rate of 1 space/230 m² (0.43 space/100 m²). It is noted that the Proposed Development may exceed the minimum parking requirement identified.

The approved parking rates for industrial developments with similar transportation contexts in the Region of Peel results in an average parking rate of 0.40 space/unit. We also note that ITE's Parking Generation Manual identifies a peak parking demand of 0.37 spaces per 1,000 ft² (0.40 spaces per 100 m²). This further Illustrates that the proposed rate of Thus, the proposed parking rate of 0.50 space/unit is supportable when considering the parking rates proposed and approved for similar industrial sites in the Town of Caledon.
Appendix S includes the parking approval and proposal trend excerpts.

12.2 Accessible Parking

The Town of Caledon Traffic By-Law 048-2024 identifies that accessible parking spaces shall be provided in accordance with Integrated Accessibility Standards O.Reg. 191/11. The accessible parking rates outlined are based on the vehicle parking proposed on site.

Table 60 outlines the minimum accessible parking requirements.

Table 60: Integrated Accessibility Standards O.Reg. 191/11 Accessible Parking Requirements

Building	Statistic	Rate[1]	Required	Proposed
Building A	116 spaces	1 + 3% of vehicle parking provided	5 spaces	5 spaces (+0 space)
Total			**5 spaces**	**5 spaces (+0 spaces)**

As outlined above, the most recent Site Plan meets the accessible parking requirements outlined in the Integrated Accessibility Standards O.Reg. 191/11 for both industrial buildings proposed.

12.3 Bicycle Parking

The Town of Caledon Zoning By-Law 2006-50 does not include bicycle parking requirements; however, a bicycle parking policy is outlined within the Town of Caledon's Active Transportation Master Plan (June 2024). As no warehouse or industrial requirements were outlined, the bicycle parking requirements were only reviewed for the proposed office space.

Table 61 outlines the minimum bicycle parking requirements per the Town of Caledon's Active Transportation Master Plan.

Table 61: Town of Caledon Active Transportation Master Plan Bicycle Parking Requirements

Building	Land Use	Statistic	Rate	Required	Proposed
Building A	Office[1]	762 m^2	1 space/200 m^2	4 spaces	4 spaces (+0 spaces)
Total				**4 spaces**	**4 spaces (+1 spaces)**

Note 1: Office component of the Industrial Warehouse used to calculate bicycle parking requirements.

The Subject Development proposes 4 bicycle parking spaces, which meets the requirements outlined in the Town of Caledon's Active Transportation Master Plan for the office component.

13.0 Loading Review (UPDATED)

The Town's of Caledon's minimum loading requirements were reviewed to determine the adequacy of the proposed loading supply.

Table 62 outlines the Town's Zoning By-Law 2006-50 minimum loading requirements.

Table 62: Town of Caledon Zoning By-Law 2006-50 Minimum Loading Requirements

Building	Land Use	Statistic	Loading Rate	Loading Required	Loading Proposed
Building A	Warehouse	23,117 m^2	3 + 1/9,300 m^2 (>7,441 m^2)	5 spaces	43 spaces (+38 spaces)
Total				**5 spaces**	**43 spaces (+38 spaces)**

As outlined in **Table 62**, the Town's Zoning By-Law 2006-50 requires the Proposed Development to provide 5 loading spaces. The most recent Site Plan proposes 43 loading spaces, which exceeds the Town's requirements.

Appendix R includes the relevant loading requirement excerpts.

14.0 Transportation Demand Management Strategies

There are several opportunities for the development to promote TDM measures in support of reduced single-occupant vehicle (SOV) use. These site specific TDM measures are only recommended at this time and should be finalized upon occupancy of the buildings since some components will require coordination by the tenant. **Table 63** outlines recommendations that are expected to reduce SOV trips and increase sustainable mode share.

Table 63: Site Specific Transportation Demand Management Measures

Recommended TDM Measure	Implementation Summary	Responsibility
TDM Information Package	Upon and prior to employment, a TDM information package should be provided to new and future employees. Promotional material should also be readily available (and continuously updated) in area(s) central to all employees, such as a lunchroom or lobby to increase awareness of available alternate travel modes and reduce the barriers to adopting more sustainable travel behaviour. Such marketing allows employees to be aware of sustainable travel options, as well as updates in the transit and cycling infrastructures improvements of the area. The TDM Information Package can comprise of: • Active transportation network maps • Transit maps and schedules • Site specific TDM measures Information on the future transit projects could be provided to increase awareness of pending mass transit opportunities, which can encourage employees to utilize alternative transportation methods.	Developer/ Tenant

Recommended TDM Measure	Implementation Summary	Responsibility
Off-Peak Shift Changes	The future tenants are encouraged to have shift changes and primary vehicle-oriented activity to occur outside of peak hours, subject to operational requirements of the tenants. Deliveries, tractor trailer schedules, and shift changes occurring outside of peak periods will reduce the impact on peak hour congestion and travel time reliability, providing a benefit to the site's employees, site operations, and background traffic in the area.	Tenant to Consider
Secure and Excess Bicycle Parking Spaces	Safe and secure bicycle parking is proposed for the development. Access to safe and secure bicycle parking will increase confidence and reliability for prospective cyclists to cycle as their primary mode of transportation. The provision of secure and excess bicycle parking spaces encourages bicycle use and provides employees with convenient and safe storage for frequent bicycle use.	Developer
Shower and Change Room Facilities	Amenities such as showers and change rooms are recommended to allow employees who use active transportation the ability to comfortably prepare for the workday.	Tenant to Consider
Electric Vehicle Ready Parking Spaces	5 electric vehicle ready parking spaces are proposed in the most recent Site Plan. These parking spaces will be easily identifiable. In providing electric vehicle parking spaces, employees and visitors who have an electric vehicle have the ability to charge their vehicles on-site.	Developer
Smart Commute	The future tenants are encouraged to join Smart Commute to support sustainable travel initiatives for employees. Smart Commute works with employers to provide resources and tools that encourage commuters to utilize transportation alternatives. Smart Commute can assist in facilitating TDM strategies, including but not limited to: • Carpool Ride-Matching Programs • Emergency Ride Home Programs • Discounted Transit Incentive Programs • Walking and Cycling Programs • Campaigns, Events and Promotions Smart Commute presents a collaborative opportunity to reduce the proposed development's SOV trips and automobile dependency through various initiatives, infrastructure, and programs.	Tenant to Consider

15.0 Conclusions & Recommendations (UPDATED)

Broccolini Airport Road LP (Broccolini) retained C.F. Crozier & Associates (Crozier) to prepare a Transportation Impact Study in support the Site Plan Application for the proposed industrial warehouse development fronting Airport in the Town of Caledon, Region of Peel. The Site Plan proposes an industrial warehouse building, with a gross floor area of 23,117 m^2 and 2 site accesses off Airport Road. It is noted that a future industrial building is proposed on the southern portion of the Subject lands, to be built as part of a future phase (Phase 2). The future industrial building proposed as Phase 2 is not considered part of the Proposed Development and corresponding development application herein. Nevertheless, for completeness, the warehouse use has been considered as part of the site generated traffic in the traffic operations analysis. The Subject Lands are located within the Tullamore Northwest Employment Area Secondary Plan.

The purpose of the study is to evaluate the transportation-related impacts of the Proposed Development on the boundary road network and to recommend any required mitigation measures, if warranted. The analysis contained within this study has resulted in the key findings and recommendations outlined below.

15.1 Conclusions

The analyses contained within this report has resulted in the following key findings:

Existing Conditions

- The study road network is operating at a LOS "E" or better with lower to moderate control delays and volume-to-capacity (v/c) ratios. As such, these metrics indicate that the intersections are operating efficiently with reserve capacity for future growth.

- There are no major queueing concerns that are expected to cause significant impacts within the study area.

Future Background Conditions

- Future background traffic volumes were forecasted by application of corridor growth rates and inclusion of background development trip assignments as confirmed with the Region and Town during the terms of reference.

- While a traffic signal is not warranted for Airport Road & Perdue Court/Davis Lane, it is recommended that the intersection be signalized to support future background traffic operations.

- Under 2028 future background conditions, the signalized intersection of Airport Road & Old School Road/Healy Road is expected to operate at LOS "E" or better during the weekday peak hours with a maximum control delay and v/c ratio of 77 s and 1.13, respectively. The split signal timing plan contributes to the operational concerns expected, however, this split phasing increases the intersection safety due to the offset east and west approaches.

    - If auxiliary eastbound and westbound left-turn lanes are provided at Airport Road & Old School Road/Healy Road, the intersection is anticipated to operate at an improved LOS "D" with a maximum v/c ratio of 0.92.

- The remaining study intersections, under 2028 future background conditions, are expected to operate at a LOS "D" or better with low to moderate control delays and v/c ratios.

- Under 2033 and 2038 future background conditions, the study intersections are expected to operate acceptably at a LOS "D" or better during weekday peak periods, with low to moderate control delays and v/c ratios.

- The queues for the following movements are expected to exceed the planned or assumed effective storage length:

    - Mayfield Road & Airport Road (NBL)

    - Airport Road & Old School Road/Healy Road (EBL, WBL)

Future Total Conditions

- The Proposed Development is expected to generate 112 and 118 two-way mode split adjusted vehicle trips during the weekday a.m. and p.m. peak hours, respectively for the 2028 horizon year.

    - These trips consist of 27 two-way truck trips during the weekday a.m. and p.m. peak hours, as well as 85 and 91 two-way mode split adjusted passenger car trips during the weekday a.m. and p.m. peak hours, respectively.

- The Proposed Development is expected to generate 100 and 106 two-way mode split adjusted vehicle trips during the weekday a.m. and p.m. peak hours, respectively for the 2033 and 2038 horizon years.

    - These trips consist of 27 two-way truck trips during the weekday a.m. and p.m. peak hours, as well as 73 and 79 two-way mode split adjusted passenger car trips during the weekday a.m. and p.m. peak hours, respectively.

- The proposed site accesses are expected to operate efficiently at a LOS "C" or better under 2028, 2033 and 2038 future background conditions, with low control delays and v/c ratios.

- The remaining study intersections are expected to continue operating acceptably at a LOS "D" or better with acceptable control delays and v/c ratios for the 2028, 2033 and 2038 horizon years. These metrics indicated that the intersections are operating with reserve capacity to accommodate future traffic growth.

- There are no major queueing concerns that are expected to cause significant impacts within the study area.

- Overall, the site generated traffic is not expected to significantly impact the study road network, and the Proposed Development is supportable from a transportation operations and queueing perspective.

2051 Sensitivity Analysis – Site Accesses

- Under 2051 future total conditions, the proposed site accesses off Airport Road as well as Airport Road & E-W Collector Road are expected to operate at a LOS "E" or better

during the weekday peak hours, with acceptable control delays and v/c ratios. Accordingly, the intersections are operating efficiently with reserve capacity to accommodate future traffic growth, and the Proposed Development is supportable from this perspective.

- There are no queueing concerns expected under 2051 future total conditions. Along Airport Road, there are no queueing issues anticipated associated with back-to-back left-turns along Airport Road, especially with regards to the intersection with E-W Collector Road.

Site Access Review

- To support the Subject Development, the following auxiliary turn lanes at the proposed site accesses should be implement, subject to confirmation with the Region:
    - Airport Road & North RIRO Access (SBR)
    - Airport Road & Full Moves Access (EBL, NBL, SBR)
- The proposed site accesses off Airport Road meets the applicable sight distance requirements.
- The proposed intersection spacing along Airport Road for the proposed accesses are acceptable.

Corridor Access Management Review

- The available intersection spacing along Airport Road can support a full moves access between the Subject Lands and Old School Road. Restricted access(es) may also be supported along this frontage.
    - Several of these parcels have developable area west of the natural heritage system and Salt Creek, which allows for access opportunities via the potential future extension of Ionic Drive.
    - There may also be access opportunities along Old School Road for the lands with frontage to Old School Road.
- The lands south of the Proposed Development will have direct full moves access opportunities to the future E-W Collector Road.
- Overall, the proposed site accesses do not preclude access to the neighbouring lands along Airport Road once redevelopment is pursued.

Site Circulation Review

- The Site Plan proposes pedestrian facilities that support safe pedestrian circulation throughout the Subject Site, providing access to the building entrances, vehicle parking and outdoor amenity areas, and the bicycle parking spaces.
- The Vehicle Turning Diagrams demonstrate that there are no vehicle maneuverability constraints expected within the Subject Development for heavy vehicles, emergency vehicles, and passenger vehicles.

Parking and Loading

- The Site Plan proposes 116 vehicle parking spaces, which is deficient to the Town of Caledon's vehicle parking requirements.
    - Approved vehicle parking rates for industrial developments with similar transportation contexts in the Town of Caledon propose an average parking supply rate of 0.43 space/unit. Thus, the proposed parking rate of 0.50 space/unit is supportable when considering the parking rates proposed at similar sites.
- The Proposed Development meets the accessible parking, bicycle parking and loading requirements.

Transportation Demand Management Strategies

- Transportation Demand Management strategies were identified and recommended to support the Subject Development.

15.2 Recommendations

Table C1 summarizes the recommended improvements.

Table C1: Recommended Improvements

Location	Improvement
2028 Future Background	
Mayfield Road & Airport Road	Extend existing NBL auxiliary turn lane (165 m).
	Monitor traffic operations and queues to determine if additional improvements are warranted, prior to Mayfield Road widening.
Airport Road & Old School Road/Healy Road	Implement the following auxiliary turn lanes: • EBL: 50 m • WBL: 60 m
	Monitor traffic operations and queues to determine if additional improvements are warranted, prior to implementation of a roundabout.
Airport Road & Perdue Court/Davis Lane	Implement signal control.
2033 Future Background	
Mayfield Road	Maintain schedule for planned road widening and associated improvements between Airport Road and Coleraine Drive.
Airport Road	Maintain schedule for planned road widening and associated improvements between Mayfield Road and King Street.
Torbram Road	Maintain schedule for planned road widening and urbanization between Mayfield Road and Old School Road.

Location	Improvement
Highway 413	Maintain schedule for planned highway between Highway 401 to Highway 400.
Mayfield Road & Airport Road	Extend existing NBL auxiliary turn lane (215 m).
Airport Road & Old School Road/Healy Road	Maintain schedule for planned roundabout.
2038 Future Background	
Torbram Road & Old School Road	Implement signal control.
2028 Future Total	
Mayfield Road & Airport Road	Continue to monitor traffic operations and queues to determine if additional improvements are warranted, prior to Mayfield Road widening.
Airport Road & Old School Road/Healy Road	Continue to monitor traffic operations to determine if additional improvements are warranted.
Airport Road & North RIRO Access	Implement SBR auxiliary turn lane (30 m, minimum per Region Standard 5-1-4)
Airport Road & Full Moves Access	Implement the following auxiliary turn lanes: • EBL: 30 m • NBL: 50 m (within two-way left-turn lane) • SBR: 30 m (minimum per Region Standard 5-1-4)
2033 Future Total	
Airport Road & North RIRO Access[1]	Implement SBR auxiliary turn lane (30 m, minimum per Region Standard 5-1-4)
Airport Road & Full Moves Access[1]	Implement the following auxiliary turn lanes: • EBL: 30 m • NBL: 65 m (within two-way left-turn lane) • SBR: 30 m (minimum per Region Standard 5-1-4)
Other Site-Specific Recommendations	
Transportation Demand Management (TDM) Measures	Implement the following site-specific transportation demand management measures recommended: • TDM Information Package • Off-Peak Shift Changes • Pre-Loaded PRESTO Cards • Secure and Excess Bicycle Parking Spaces • Shower and Change Room Facilities • Electric Vehicle Parking Spaces • Smart Commute

Note 1: Recommended to support 2051 future total conditions, however, to be implemented by the 2033 future total horizon as part of the Airport Road widening works.

In conclusion, the Proposed Development is supportable from the transportation operation, safety, site circulation, parking and loading perspectives. The analysis undertaken herein was prepared using the most recent Site Plan. Any minor changes to the Plan will not materially affect the conclusions contained within this report.

We trust that this review addresses any transportation-related concerns with the project. Should you have any questions or require any further information, please do not hesitate to contact the undersigned.

Respectfully submitted by,

C.F. CROZIER & ASSOCIATES INC.

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APPENDIX A:

Correspondence

1st SUBMISSION COMMENT RESPONSE MATRIX
0 Airport Road, Caledon
City File: RZ 2025-0024 and SPA 2025-0067 (Related Files: POPA 2025-0012, PRE 2025-0137)
GSAI File: 1517-001
February, 2026

AGENCY/ DEPT	REVIEWER	COMMENTS/CONDITIONS	CONSULTANT	RESPONSE
Engineering Public Works & Transportation Department Town of Caledon	**Matthew Ma, EIT. Transportation Project Coordinator Engineering Public Works & Transportation Department**	**Key Comments** 1. Identify and convey any additional lands that may need to be conservatively dedicated to the Town for future Right-of-Way (ROW) purposes at the southwestern corner.	**Crozier (Traffic) / Broccolini**	As discussed wtih Town staff, the current alignment of the E-W Collector Road is located outside of the development limits of the Subject Site. Thus, additional conveyances is not required at this time.
		2. Illustrate the preliminary design of the future E-W Major Collector Road on the Site Plan, identifying a protected 26.0m ROW in accordance with the Town's Multi-Modal Transportation Master Plan (MMTMP) Addendum	**Powers Brown**	As discussed with Town staff, the current alignment of the E-W Collector Road is located outside of the development limits of the Subject Site. Thus, the preliminary design of the future E-W Collector Road is not included on the Site Plan herein.
		3. Provide a Functional Concept Plan illustrating the full extent of the E-W Major Collector Road alignment from Airport Road to Torbram Road. This concept should demonstrate coordination with the ongoing Secondary Plan and confirm alignment buy-in from neighbouring landowners. Provide assessment on how the alignment may vary through the subject lands as it impacts land conveyances and site plan design	**Crozier (Traffic)**	Noted. As discussed with Town staff, the current alignment of the E-W Collector Road is located outside of the development limits of the Subject Site. An updated Conceptual Design is included in **Appendix I**.
		4. The Site Plan should be designed to protect for future access onto the E-W Major Collector Road once constructed. The long-term access strategy (reviewed under the 2044 Sensitivity Analysis) should consider site traffic onto the future E-W road to the extent possible.	**Crozier (Traffic)**	A potential right-in/right-out access off the E-W Collector Road, once constructed, is associated with the future Phase 2 lands. As such, this will be reviewed, as required, during the Phase 2 Site Plan Application process.
		6. Update the turning template plan for the Full Moves Access intersection, as the current submission shows the WB-20 design vehicle cannot perform an Eastbound Right (Exit) movement without encroaching on curbs.	**Crozier (Traffic)**	Noted. The updated Vehicle Turning Diagrams, included in **Appendix Q**, demonstrate that WB-20s can safely make the eastbound right-turn movement without encroaching on curbs.
		7. To effectively prohibit truck turns at the RIRO accesses, include an Rb-62 (No Heavy Trucks) sign equipped with a Right Arrow tab, located upstream of the access	**Crozier (Traffic)**	Noted. The Pavement Marking and Signage Plan has been updated accordingly.
		8. Include a standalone Rb-62 sign positioned directly at the throat of the RIRO access to visually confirm the restriction for drivers attempting to enter.	**Crozier (Traffic)**	Noted. The Pavement Marking and Signage Plan has been updated accordingly.
		9. Ensure that the Rb-62 and Rb-12 (No Left Turn) signs facing southbound traffic are positioned on the right-hand side of the roadway to maximize visibility for approaching drivers.	**Crozier (Traffic)**	Noted. The Pavement Marking and Signage Plan has been updated accordingly.
		10. The proposed 5-leg internal intersection near the Full Moves Access creates conflict points and right-of-way confusion. Revise the Site Plan to consolidate the two Eastbound truck accesses into a single driveway throat, or clearly label ROW priority (Yield vs. Stop) to resolve the conflict. Also, please demonstrate that the Westbound queue storage at this internal intersection is sufficient to prevent traffic from spilling back onto Airport Road, accounting for potential delays caused by both internal vehicular congestion and pedestrian/cyclist conflicts to ensure arterial through-flow is not impeded.	**Crozier (Traffic)**	As discussed with Town staff, the updated Development Proposal only comprises one industrial building at the time. Nevertheless, the Pavement Marking and Signage Plan includes relevant signage to indicate that all traffic will yield to inbound traffic from the full moves site access to avoid spillback onto Airport Road.
		11. Provide an **Active Transportation Circulation Plan** illustrating continuous pedestrian walkways and crossings that connect internally from the Airport Road right-of-way and existing transit stops directly to the main building entrances. This plan should inform where internal walkways and crossings are built onto the site.	**Crozier (Traffic) / Powers Brown**	It is noted that pedestrian facilities as well as transit stops are not currently provided nor planned along Airport Road within the immediate vinicity of the Subject Lands. Nevertheless, an Active Transportation Circulation Plan was prepared and included as **Figure 31**.

		Engineering Cost Estimate 12. Ensure the Engineering Cost Estimate includes all costs associated with updated pavement markings, signage, and any intersection improvements identified for the Full Moves Access	**Crozier (Traffic)**	Noted. The Engineering Cost Estimate has been submitted under separate cover.
		Transportation Study: 13. It is noted that the analysis indicates traffic signals are not technically warranted at the Full Moves Access. Provide a detailed technical justification for installing a full signal despite the unmet warrants. Alternatively, please revise the operational analysis to reflect an unsignalized condition.	**Crozier (Traffic)**	Noted. The Transportation Impact Study Update reflects stop control at the full moves access.
		14. The use of LUC 150 (Warehousing) generates notably low truck volumes (15 AM / 23 PM) for a 768,830 sq. ft. Prestige Industrial site. Please perform the analysis using LUC 130 (Industrial Park) to better estimate potential trip generation, or provide specific tenant shift schedules to justify the lower rates.	**Crozier (Traffic)**	Noted. As discussed with Town staff, the truck trip generation per LUC 130 "Industrial Park" was applied. Further details are outlined in **Section 6.1**.
		15. The analysis shows Airport Road and Old School Road operating at a v/c ratio > 1.1 in 2028, which represents physical failure. Please identify interim physical mitigation measures (e.g., signal timing optimization, temporary auxiliary lanes) to manage this capacity prior to the ultimate roundabout construction, as monitoring is insufficient for v/c > 1.0.	**Crozier (Traffic)**	Noted. As outlined in **Section 5.6.1**, auxiliary eastbound and westbound left-turn lanes are recommended to support future background conditions, prior to the implementation of the planned roundabout in 2031.
		16. The utilized 0.82 mode split factor (18% reduction) is too aggressive for the 2028 horizon given the greenfield context and lack of transit (closest stop 1.3km away). Please revise the analysis to use a conservative 0.95 factor, consistent with the ITE Trip Generation Manual, or provide hard infrastructure commitments to justify the reduction.	**Crozier (Traffic)**	Noted. The updated trip generation for the 2028 horizon year, with a 0.95 mode split adjustment factor, is outlined in **Section 6.1**.
		17. Include left-turn and right-turn lane warrants in accordance with the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads and MTO Design Supplement Guidelines.	**Crozier (Traffic)**	Noted. The auxiliary left-turn and right-turn warrants for the proposed site accesses are included in **Section 7.2**.
		18. Update the 2044 Sensitivity Analysis (or provide a new scenario) where the direct Airport Road Full Moves Access is restricted/removed, and site-generated traffic is rerouted to the Airport Road / East-West Collector intersection. This is required to confirm that the future intersection geometry (e.g., dual lefts) can accommodate the rerouted traffic.	**Crozier (Traffic)**	As discussed with Town staff, the Phase 1 lands do not have frontage to the planned E-W Collector Road network. Therefore reconfiguring the Subject Site to provide access off the E-W Collector Road is not feasible at this time. Furthermore, a full moves access is vital for the Subject Site. Given that the future Highway 413 is planned to be a significant trucking corridor, restricting left-turning truck traffic out of the Subject Site would result in outbound truck traffic having to detour along Mayfield to access the Highway 413.
		19. For the Intersection Sight Distance review, utilize a Design Speed of 100 km/h (Posted 80 km/h + 20 km/h) to reflect the rural cross-section and operating speeds of Airport Road	**Crozier (Traffic)**	Noted. The Intersection Sight Distance has been updated accordingly. Even with the increased design speed, no sight distance concerns are anticipated.
		20. MZO 483/22, referenced in the justification for the parking reduction, is specific to the Rice Group industrial lands located south of the subject property and is not applicable here. Please support the proposed reduction with a **Parking Utilization Survey** based on appropriate proxy sites (similar in land use, GFA, and neighborhood context).	**Crozier (Traffic)**	As discussed with Town staff, it is understood that the MZO 483/22 is only in effect for the Tullamore Lands. Nevertheless, given the similar transportation context and development proposal, the proposed parking rate of 0.47/100 m2 is
		Report Corrections & Figures: 21. Correct the list of appendices; referencing appears incorrect (e.g., Appendix B should be Appendix A).	**Crozier (Traffic)**	Noted. The list of appendices has been updated accordingly.
		22. Table 3: Remove the reference to the MUP on Airport Road or explicitly indicate it is approx. 1.7km away to avoid misleading context regarding walkability.	**Crozier (Traffic)**	Noted. The table has been updated accordingly.
		23. Table 3: Correct the posted speed limit for Old School Road / Healy Road to 60 km/h	**Crozier (Traffic)**	Noted. The table has been updated accordingly.
		24. Figure 3: Update the figure to accurately reflect that Old School Road and Healy Road are not aligned; the east and west legs are currently offset by approximately 40m.	**Crozier (Traffic)**	Noted. The figure has been updated accordingly.
		25. Figure 4: Remove "Weekend Peak Hour Traffic Volumes" from the legend as they are not used in the analysis	**Crozier (Traffic)**	Noted. The figure has been updated accordingly.
		26. Figure 25: Update the figure title to "2033 Future Total Study Road Network.".	**Crozier (Traffic)**	Noted. The figure has been updated accordingly.
		27. Figure 42: Update the figure to include the queuing assessment for the proposed Full Moves Access intersection.	**Crozier (Traffic)**	Noted. The figure has been updated accordingly.

		28. Table 45: Include the Northbound Left (NBL) storage length recommendation in this and subsequent tables, consistent with the future background analysis.	**Crozier (Traffic)**	The northbound left-turn storage length recommendation at Airport Road & Mayfield Road is recommended to support future background conditions. As such, the recommendation was not included in Table 45 of the previous submission, which only outlines recommendations required to support future total conditions. Nevertheless, a northbound left-turn storage extension at Airport Road & Mayfield Road is no longer recommended, as outlined in the Transportation Impact Study Update.
		29. Include a new figure illustrating the 2038 lane configuration and intersection control assumptions.	**Crozier (Traffic)**	Noted. The 2038 Future Background and 2038 Future Total Study Road Network is provided in **Figure 17** and **Figure 27**, respectively.
		While we can't fully assess the impact without the final site plan details, please note that changing the use from a standard Warehouse to a High Cube Cold Storage Warehouse will alter the trip generation characteristics based on the ITE Manual. Additionally, the size of the retail component will significantly influence whether the original traffic assumptions are still valid. We will need to review the specific site plan modifications before confirming the impact, but please anticipate that we may require an updated TIS to account for these operational changes.	**Crozier (Traffic)**	As outlined in the Institue of Transportation Engineers Trip Generation Manual, 11th Edition (September 2021), LUC 157 "High Cube Cold Storage Warehouse" has a smaller trip generation rate during the weekday peak hours (0.11 and 0.12 for the weekday a.m and p.m. peak hours, respectively) in comparison to LUC 150 "Warehousing" (0.17 and 0.18 for the weekday a.m. and p.m. peak hours, respectively), which was applied in the Transportation Impact Study Update. Accordingly, should the Proposed Development comprise a High Cube Cold Storage Warehouse, the trip generation and corresponding transportation analysis outlined in the Transportation Impact Study Update can be considered conservative.
Region of Peel	**Patrick Amaral** **Principal Planner,** **905-791-7800 ext. 4093, or by email at: patrick.amaral@peelregion.ca**	**Development Services** • The subject application has been submitted in advance of an approved Secondary Plan (POPA 2025-0012). The materials for this application are to remain consistent with those submitted for the higher-order planning applications. Any updates or changes to the higher-order applications must be properly reflected in the subdivision submission materials.	**GSAI**	Information Only
		Traffic Development <u>Access/Study Requirements</u> A Traffic Impact Study (TIS) has been received by the region as a part of the first submission, dated January 20, 2026. Following our review we offer the below comments:	**Crozier (Traffic)**	
		o The Region in theory will be in support of three proposed site accesses along Airport Road: • Single Northerly RIRO access • Single Central Full-moves access • Single Southerly RIRO access	**Crozier (Traffic)**	Noted.
		o The Region requires the three proposed site accesses to be equipped with auxiliary turn lanes. • Auxiliary Right-turn lane for a Northerly RI/RO access and a Southerly RI/RO access • Auxiliary Right-turn and Left-turn lanes for the full-moves access	**Crozier (Traffic)**	Noted.
		o The Region acknowledges that the traffic control signal for the proposed full-moves access is not warranted at this time, and the signal warrant analysis will be re-evaluated in the future.	**Crozier (Traffic)**	Noted.
		• The Region requests that a functional design for the proposed accesses be included as part of the re-submission which addresses the storage and taper lengths of the auxiliary turn lanes and geometrics for the Region's review and comment. o The restricted RI/RO accesses need to be equipped with directional islands; updated truck turning templates to be provided	**Crozier (Traffic)**	Noted. A Conceptual Design has been prepared for the proposed accesses off Airport Road, which is submitted under separate cover.
		• The Region requests a shared access between the site and the adjacent properties to the north and the south at such time a development application is made for the northern and/or southern properties.	**Crozier (Traffic)**	As discussed with Region staff, a shared access between the site and adjacent properties is not feasible given the secure nature of industrial sites. Nevertheless, as outlined in **Figure 30**, access for the adacent parcels can be accomodated off Airport Road and the future E-W Collector Road, as applicable.

		• The Region requests that provisions be put in place by way of easements for interconnectivity between the subject site and the property to the north and the south; please reach out to the properties to the north and south to initiate discussions.	**Crozier (Traffic)**	As discussed with Region staff, a shared access between the site and adjacent properties is not feasible given the secure nature of industrial sites. Nevertheless, as outlined in **Figure 30**, access for the adacent parcels can be accomodated off Airport Road and the future E-W Collector Road, as applicable.
		• Please note that the applicant is required to provide signal securities and maintenance fees for the future potential traffic signalization of the full-moves access.	**Crozier (Traffic)**	Noted.
		• Please be advised that there is a planned Capital Project #14-4030 is taking place along Airport Road for road widening from Mayfield Road to King Street. The Project Manager for this project is Jerry Tan (jerry.tan@peelregion.ca). Please reach out to the project manager to obtain additional information on the capital project and detailed designs. o Additional property requirements may be required to facilitate the Capital Project	**Crozier (Traffic)**	Noted.
		Traffic Development • All works within the Region's right-of-way will require a permit prior to any construction taking place. <u>Property Dedication</u> • The Region requests the gratuitous dedication of lands to meet the Regional Official Plan requirement for Regional Road 7 (Airport Road) which has a right of way of: o 45 metres, 22.5 metres from the centreline of the road allowance. • The Region will require the gratuitous dedication of a 0.3 metre reserve along the frontage Regional Road 7 (Airport Road) behind the property line and easements, except at any approved access point. • The Region will require the gratuitous dedication of 15 x 15 meter daylight triangle is required at the proposed full-moves access. • The applicant is required to gratuitously dedicate these lands to the Region, free and clear of all encumbrances. All costs associated with the transfer are the responsibility of the applicant. The applicant must provide the Region with the necessary title documents and reference plan(s) to confirm the Regions right-of-way. • A draft reference plan will be required for our review and approval prior to the plans being deposited. All costs associated with preparation of plans and the transfer of the lands will be solely at the expense of the applicant. • The applicant is required to gratuitously dedicate these lands to the Region, free and clear of all encumbrances. All costs associated with the transfer are the responsibility of the applicant. The applicant must provide the Region with the necessary title documents and reference plan(s) to	**Crozier (Traffic) / Surveyor / GSAI / Broccolini**	Noted.
		<u>Pavement Marking Plan</u> • Please ensure that all design elements related to pavement marking and signage conform to the Regional standards. • Additional detailed comments/requirements may be required after the receipt and review of the future submission.	**Crozier (Traffic)**	Noted.
		Traffic Development • A detailed engineering submission of road and access works will be required for our review and comment, designed, stamped and signed by a Licensed Ontario Professional Engineer. The engineering submission must include the removals, new construction and grading, typical sections and pavement markings and signing drawings. All works within Region of Peel's right of way must be designed in accordance with the Public Works, "Design Criteria and Development Procedures Manual" and "Material Specifications and Standard Drawings Manual"; • The Owner shall submit to the Region a detailed cost estimate, stamped and signed by a Licensed Ontario Professional Engineer, of the proposed road and access works within the Regional right of way; • Securities shall be submitted in the form of either a letter of credit or certified cheque, in the amount of 100% of the approved estimated cost of road and access works along Regional Road 7 (Airport Road); • A 10.8% engineering and inspection fee shall be paid to the Region based on the approved estimated cost of road and access works (minimum $1,724.41); • The Owner will be required to submit the following prior to commencement of works within the Region's right-of-way: o Completed Road Occupancy Permit and fee, as per the Region's User Fees and Charges By-law; o Completed Notice to Commence Work; o Provide proof of insurance with the Region of Peel added to the Certificate of Insurance as an additional insured with $5 million minimum from the Contractor; • Please note that any proposed construction within the Region of Peel's right of way is pending PUCC approval (minimum six week process). Please note that PUCC circulation requirements have recently changed. We require PDF version of the full drawing set it is to be sent via email, and cannot exceed 10MB per email. o Please be advised that any concerns or issues identified by the utility company will be the responsibility of the Owner/Applicant to address and resolve directly with the utility company. • All costs associated with the design and construction of road and access works will be 100% paid by the Owner	**Crozier (Traffic)**	Noted.

MEMORANDUM

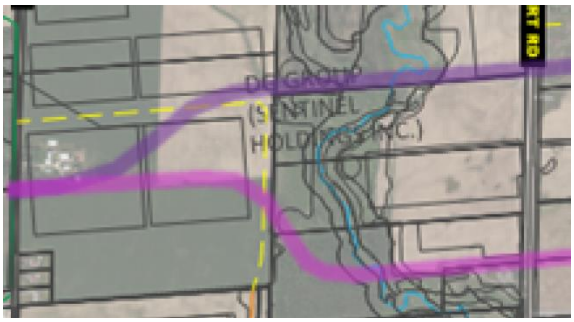
Transportation Engineering
Public Works & Transportation Department

Date: October 6, 2025
To: Simone Foire, Senior Planner
Planning Development, Planning and Development
From: Emma Howlett, P.Eng., Transportation Coordinator
Engineering, Public Works, & Transportation Department
Subject: Terms of Reference – 0 Airport Road PRE 2025-0137

Transportation Engineering Staff have reviewed the submitted files. At a minimum, and in addition to the PARC comments provided by Town transportation staff, the applicant must adhere to the following requirements when preparing the Transportation Study:

1. **Applicable Guidelines**
   - Town of Caledon Multi-Modal Transportation Master Plan
   - Town of Caledon Active Transportation Master Plan
   - The TIS must follow the Region of Peel transportation Impact Study (TIS) Guidelines and Town of Caledon TIS Guidelines
   - Town of Caledon TIS Guidelines (available upon request)
2. **Traffic Data:**
   - Traffic Volumes: Turning movement counts should be dated no more than two (2) years from the time of study. If historical traffic volumes are to be considered, they must first be confirmed with the Town.
   - The applicant may contact trafficcalming@caledon.ca to confirm whether additional traffic data is available for use.
3. **General:**
   - The Town of Caledon defers to the Ministry of Transportation Ontario, and the Region of Peel with regard to roadways under their jurisdiction. Circulate the terms of reference to all applicable road authorities.
   - The study shall be signed and dated by a qualified Transportation Professional, such as Professional Engineers and Registered Professional Planners.
   - The study shall be completed in coordination with adjacent developments to ensure connectivity and continuity. Please note the Town is developing rapidly; therefore, it is essential to regularly check the Town of Caledon Development Applications webpage for updates.
4. **Study Area**: The Town requires that the minimum study area extend to the point where less than 5% of site-generated traffic is attributable to the proposed development. In addition to the currently proposed study intersections review:
   - Old School Road and Torbram Road
   - Internal intersections within Tullamore North Secondary Plan – September 2025 update - Official Plan Amendment 2025-0012:
     - Future collector road and Old School Road
     - Future collector road and Airport Road
     - Future collector road and Torbram Road

5. **Existing Conditions**: Provide a study area description including road network, traffic volumes, transit service, bicycle and pedestrian facilities, and traffic intersection operations.
6. **Existing Conditions Model Calibration**: Required if volume-to-capacity ratio exceeds 1.0 under existing conditions (e.g., saturation flow survey, gap survey, lost time adjustment survey). Calibration must not be used as a mitigation measure for future conditions.
7. **Network Context**: Include information on all nearby municipal, regional, and provincial roadways that will be impacted, including intersections and access points for adjacent developments.
8. **Study Assumptions**: Clearly identify the horizon years, analysis periods, traffic data collections, Synchro parameters, and development phasing.
9. **Horizon Years**: Confirm when and how phasing of the broader area shall be assessed. This impacts the horizon years required in the study. At a minimum an ultimate 15-year horizon year is required because the surrounding development full build out conditions will be significantly different than that of the 5-year horizon.
10. **Growth rates** shall be reviewed and updated to ensure that, when combined with background development traffic, the resulting volumes align closely with the MMTMP (Multi-Modal Transportation Master Plan) ultimate volumes outlined in the Appendix. Since developments east of Airport Road lack formal applications, their anticipated traffic contributions shall be incorporated into the assumed growth rates. Review, justify and adopt a more aggressive growth rate than the previously assumed 2% to reflect this.
11. **Background Developments**:
    The Mayfield-Tullamore Secondary Plan Transportation Study shall be included, this reflects the ultimate horizon year. Check the Town's website for updates as required Current Applications - Town of Caledon
12. **Roadway Improvements**:
    - Please see the MMTMP and Official Plan for Roadway Improvements to be considered in the final horizon. Further some development applications are proposed near the current development, it is possible that improvements have been identified within these studies review recommendations.
    - The Town of Caledon has retained HDR to complete a Multi-Modal Transportation Master Plan (MMTMP) update to review the need for continuous east-west collector roadways (for additional connectivity) within the study area. The Secondary Plan and Site Plan are to have regard for the findings of this process with respect to east-west collector roads.
    - In order to conform with overarching policy objectives, including the Town's Official Plan and the Multi-Modal Transportation Master Plan (MMTMP) and its Addendum, the Town requires the provision of additional collector roads to achieve a finer-grained road network and enhanced connectivity, notwithstanding the existing collector road framework. Specifically, an east- west collector road shall be provided in alignment with what is identified in the MMTMP as shown below by the light purple alignment.



See Also:

- Public Notice: Study Commencement and Public Consultation Centre - Addendum to the MMTMP
- Multi-Modal Transportation Master Plan Addendum | Have Your Say Town of Caledon
    - Preference is for the proposed development to access via a collector road, rather than directly from the arterial road.
    - Roadways proposed as part of the Secondary Plan should be incorporated into the development proposal. As noted in the Town's comments on the September 2025 Land Use Plan, clarification is on the alignment of proposed collector roadways is needed.

13. **Trip Generation Calculations**: May be based on ITE trip rates, proxy site surveys, etc.
    - Proxy sites must be similar in terms of land use, size, and neighborhoods characteristics, and must be confirmed with the **Town** prior to acceptance.
14. **Existing Site Trip Removal**: Should be based on surveyed traffic counts, previous traffic studies, or estimated trip generation.
15. **Trip Distribution:** Ensure impacts of the development of the surrounding area are considered (consider Emme Modeling). Trip Distribution must be justified (e.g., Transportation Tomorrow Survey (TTS) data for residential/commercial, marketing survey for specialty retail, or school catchment areas). Due to the ongoing development of the surrounding greenfield areas, the trip assignments for the initial and ultimate horizon years are expected to differ. Therefore, it is necessary to either justify the use of the most conservative trip distribution or develop separate distributions for each horizon year.
16. **Future Total Conditions with Development**:
    - **Traffic Control Warrants**: Conduct at study intersections in accordance with Ontario Traffic Manual (OTM) guidelines (e.g., traffic signal warrants, all-way stop warrants).
    - **Auxiliary Lane Warrants**: Conduct left-turn and right-turn lane warrants in accordance with the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads and MTO Design Supplement Guidelines.
    - **Analysis**: Include vehicular trip generation, trip distribution, intersection operations, queuing analysis, and sightline analysis.
    - **Scenario Testing**: Where applicable, assess development phasing, and phasing of transportation infrastructure.

17. **Impacts and Mitigation Measures**
    - For any operations analysis showing critical volume-to-capacity ratios or queueing, provide appropriate mitigation measures.
    - For any queueing analysis showing queues extending beyond existing storage lengths (e.g., turn lanes) or spilling into upstream intersections, provide mitigation measures.
    - Assess the **site traffic impacts** of the proposed development on the surrounding road network.
    - Identify **mitigation measures** to address all transportation impacts.
18. **Multi-Modal Transportation Planning**
    - Connectivity: Ensure a high level of internal network connectivity and provide multiple route options for all transportation modes. Recommend improvements where necessary to enhance circulation and accessibility.
    - Transit Support: Plan for the integration of transit services, including improved first/last mile connections, to facilitate access between residential areas, employment areas, and key destinations.
    - Transit Implementation: Illustrate how the proposed development supports the implementation of transit services to meet mode share targets outlined in the Multi-Modal Transportation Master Plan and the Official Plan. This should include planning for specific transit routes and stop locations that serve the development effectively.
        - Existing Transit Services: For information on current transit routes, refer to Transit - Town of Caledon
        - Consider the applicability of private shuttle service to the nearest major transit stop, even as an interim measure.
19. **Pedestrian and Cyclist Circulation**
    - Mapping: Provide a comprehensive future active transportation network map as a standalone file to facilitate multidisciplinary review and coordination.
    - Connectivity: Identify all existing and planned pedestrian, cycling, and community facilities within the vicinity of the site. Demonstrate how the proposed development will connect to these facilities through active transportation infrastructure.
    - Trail Integration: Collaborate with the Town and relevant agencies to implement planned trails as identified in the Active Transportation Master Plan (ATMP). Further through this application, supplement the ATMP's 'Network Through this application, further supplement the ATMP's Network Recommendations by identifying opportunities for a local trail network within the development area, where appropriate and feasible. Ensure that proposed local trails are connected to the broader ATMP trail network where possible.
    - Right-of-Way Standards: All proposed public roadways must comply with the Town's standard Right-of-Way (ROW) infrastructure requirements, including provisions for off-road cycling facilities on collector and arterial roads. Reference the Town's Official Plan, Multi-Modal Transportation Master Plan, Active Transportation Master Plan, and Development Standards Manual for detailed guidance.

- Conflict Analysis and Intersection Design: Assess potential conflict points among vehicles, pedestrians, and cyclists based on anticipated desire lines, user volumes, and travel patterns. Consider the implementation of protected crossings.

20. Reporting

- Include Comprehensive Performance Metrics: Report queues, storage lengths, and volume-to-capacity ratios in tabular format by lane group, in addition to delay metrics.
- Apply Standardized Methodology: Follow the Highway Capacity Manual (HCM) guidelines for calculating and reporting Level of Service (LOS) and delay.
- Attach Terms of Reference (TOR): Append the TOR and all corresponding responses for reference.
- Provide Complete Supporting Documentation: Ensure all necessary materials are included in the appendix to allow full replication of results. This should include, but is not limited to:
    - Trip assignment figures for each background development
    - TTS data
    - Transportation Analysis Zones (if applicable)
    - Synchro lane volumes and timing sheets

21. Pavement Markings and Signage Plan

- A Pavement Markings and Signage Plan is required. Standard requirements include:
    - All traffic signage is to be installed as per the Ontario Traffic Manual and on streetlight posts where possible.
    - The plan should show all roadways, property lines driveways, fire hydrants, sidewalks, street lighting, traffic signage (including all regulatory, warning and information signs), street trees, tactile surfaces, and pavement markings.
    - The signage is to be aligned with the Town's Traffic By-Law, AODA, and HTA. Refer to Town's traffic by-law schedule P for fire Route Signage, and the relevant provincial legislation, including but not limited to, the Highway Traffic Act for accessible parking signage requirement.
    - The pavement markings and signage plan should be made note of in the Site Plan or Details.
    - PMSP to be submitted as separate stand-alone file.

Note that any Town approved Terms of Reference (ToR) shall remain valid until such time as the surrounding **transportation context changes**, at which point specific sections of the TIS may need to be updated in consultation with the Town and other relevant Transportation Agencies.

My-Linh Yee

From: Shen, Yifan <yifan.shen@peelregion.ca>
Sent: October 6, 2025 2:10 PM
To: Mark Condello
Cc: My-Linh Yee; Emma Howlett; Xiao, Kaiwen; Michael Linton; Jessica Kwan; Tong Wang; Hamdani, Hashim; Ethan Bohnert; Michael Beach
Subject: RE: 0 Airport Road - Transportation Terms of Reference
Attachments: DE22032 - Industrial Development - Airport Rd - Option 3 - 20250721.pdf

Hi Mark,

Good afternoon, thank you for your email. Please be advised that Kaiwen if currently on vacation. During his absence, I will be handling this file until he is back. As such, please find my comments for the submitted Terms of Reference below:

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

- Regional Road 7 (Airport Road) – Suburban Connector

Access Type	Minimum Spacing Requirement
Full to Full	300 m
Full to RI/RO	75 m
RI/RO to RI/RO	75 m

- Please review the Controlled Access By-law 62-2013, which speaks to the Road Characterization Study (RCS). The RCS defines our various road classifications as well as the minimum access spacing distances that are associated with them.
- AUTOturn analysis/turning templates for the largest vehicle type will be required for the proposed accesses onto Airport Road.
- Signal Warrant analyses may be required.
- Analysis Period - Acceptable.
- Intersections – Please include the intersection of Mayfield Road and Airport Road.
- Horizon Years - Please include a 10-year horizon period in addition to the 5- year horizon.
- Proxy Site - Minimum one proxy site should be considered and used in the TIS.
- Please see the following contacts to obtain data for your analysis:
    - Please contact transportationplanningdata@peelregion.ca to confirm growth rates along the subject Regional road(s).
    - Please contact Damian Jamroz (damian.jamroz@peelregion.ca) Supervisor of Traffic Operations to obtain the most recent TMCs and/or average annual daily traffic (AADT).
    - Please contact Samantha Bennett (samantha.bennett@peelregion.ca) Supervisor of Traffic Signals and Streetlighting, to obtain traffic signal timing parameters and ensure that the information includes the appropriate walk/don't walk splits, recall modes and offsets.

- Please contact your Local Municipality Planning Department to obtain details on surrounding developments in the area that would affect traffic capacity in the planning horizon year(s).

In regards to the requested meeting, please find my availability for this week below:

- Wednesday October 8th – 10am to 12pm / 2:30pm to 3:30pm
- Thursday October 9th – 10am to 12pm
- Friday October 10th – 9:30am to 12pm

Should you have any questions or concerns, please do not hesitate to let me know.

Warm regards,

Yifan Shen
Specialist, Transportation Development
Transportation Development
Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9

Region of Peel
working with you

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From: Mark Condello <MarkC@gsai.ca>
Sent: October 6, 2025 10:37 AM
To: My-Linh Yee <myee@cfcrozier.ca>; Emma Howlett <Emma.Howlett@caledon.ca>; Xiao, Kaiwen <kaiwen.xiao@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Jessica Kwan <jessica.kwan@broccolini.com>; Tong Wang <Tong.Wang@caledon.ca>; Hamdani, Hashim <Hashim.Hamdani@peelregion.ca>; Ethan Bohnert <ethanb@gsai.ca>; Michael Beach <michael.beach@broccolini.com>
Subject: RE: 0 Airport Road - Transportation Terms of Reference
Importance: High

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GSAI File No. 1517-001

Good Morning Emma and Kaiwen,

I trust you both have been keeping well.

I'm following up on My-Linh's email on the Terms of Reference (TOR) for 0 Airport Road (Town File No. PRE-2025-

0137). We are proceeding with advancing an application and would like to have this item addressed as soon as possible.

It may be helpful to bring all parties onto a call to discuss the TOR. Can we schedule a quick Teams call for this week? Please let me know which date and time work best for your schedule.

Thank you and talk soon.

Mark

Mark Condello, MCIP, RPP | Senior Associate
700 - 10 Kingsbridge Garden Circle
Mississauga, ON L5R 3K6
T: 905-568-8888 x265 | **F:** 905-568-8894
C: 905-746-6275
www.gsai.ca

GSAI
Glen Schnarr & Associates Inc.
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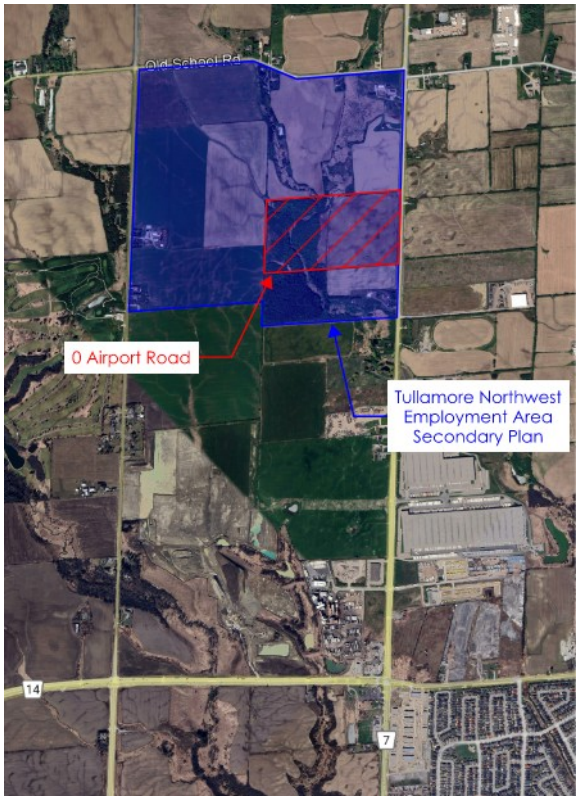
Please do not feel obliged to reply to this email outside of your normal working hours.

From: My-Linh Yee <myee@cfcrozier.ca>
Sent: September 11, 2025 3:16 PM
To: Emma Howlett <Emma.Howlett@caledon.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Jessica Kwan <jessica.kwan@broccolini.com>; Tong Wang <Tong.Wang@caledon.ca>; Hamdani, Hashim <Hashim.Hamdani@peelregion.ca>; Xiao, Kaiwen <kaiwen.xiao@peelregion.ca>; Mark Condello <markc@gsai.ca>; Ethan Bohnert <ethanb@gsai.ca>
Subject: RE: 0 Airport Road - Transportation Terms of Reference

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

Hi Emma,

The file number is PRE 2025-0137 (and the lead planner is Simone Fiore). I have also attached the most recent Site Plan and included the location map below. Please let us know if you need any further information or have any questions.



Cheers,
My-Linh *[me/lin]*

My-Linh Yee, EIT
Engineering Intern, Transportation
Office: 905.876.7159
Collingwood | Milton | Toronto | Bradford | Guelph

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CROZIER

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From: Emma Howlett <Emma.Howlett@caledon.ca>
Sent: September 11, 2025 2:56 PM
To: My-Linh Yee <myee@cfcrozier.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Jessica Kwan <jessica.kwan@broccolini.com>; Tong Wang <Tong.Wang@caledon.ca>; Hamdani, Hashim <hashim.hamdani@peelregion.ca>
Subject: RE: 0 Airport Road - Transportation Terms of Reference

Hi My-Linh,

Does this application have a PRE number related to a PARC Application ? (your lead planner should have this)

In order for me to complete the review of the TOR, provide an updated site plan and location map.

Best Regards,

Emma Howlett, P.Eng.
Transportation Coordinator
Engineering, Public Works, & Transportation Department
Office: 905.584.2272 | Email: Emma.Howlett@caledon.ca

From: My-Linh Yee <myee@cfcrozier.ca>
Sent: Thursday, September 11, 2025 2:39 PM
To: Emma Howlett <Emma.Howlett@caledon.ca>; Barnes, Catherine <catherine.barnes@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Jessica Kwan <jessica.kwan@broccolini.com>
Subject: 0 Airport Road - Transportation Terms of Reference

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

Hi Emma, Catherine,

I hope you are doing well. Crozier has been retained to prepare a Transportation Impact Study in support of the Zoning By-Law Amendment and Site Plan Amendment applications for the proposed industrial development located at 0 Airport Road. It is noted that the Subject Site is located within the proposed Tullamore Northwest Employment Area Secondary Plan.

The Proposed Development includes 2 industrial buildings totalling approximately 70,000 m^2 (750,00 ft^2) and is expected to generate 128 and 136 two-way baseline vehicle trips during the weekday a.m. and p.m. peak hours trips, respectively. Accordingly, we proposed the following terms of reference:

Study Intersections

- Airport Road & Old School Road/Healy Road
- Airport Road & Perdue Court/Davis Lane
- Airport Road & 12333 Airport Road/Alban Road (Currently Under Construction)
- Proposed Access(es) off Airport Road

We note that Alban Road is currently under construction, therefore the intersection of Airport Road & 12333 Airport Road/Alban Road will be analyzed as a 3-legged intersection under existing conditions and 4-legged under future conditions.

Existing Traffic Data

- We proposed the use of existing TMCs conducted as part of the Secondary Plan Transportation Study on Wednesday, November 20, 2024.

- The existing traffic data will be grown to 2025 volumes using the agreed upon growth rates utilized in the Secondary Plan Transportation Study, which is as follows:
    - Airport Road: 1.5%
    - Old School Road: 2.0%
    - Healy Road: 2.0%
    - Perdue Court: 0.0%
    - Davis Lane: 0.0%

Existing Conditions

- The existing automobile traffic conditions will be analyzed based on new peak hour traffic counts using Synchro software and assessed level of service, control delay, and volume-to-capacity ratios (HCM 2000). Queue will also be assessed using SimTraffic.
- Weekday a.m. and p.m. peak periods (7:00 a.m. to 10:00 a.m. and 4:00 p.m. to 7:00 p.m.) will be assessed, reflective of peak commuter periods.

Study Horizon

- The study will review the existing (2025), anticipated buildout (2028) and five years post buildout (2033) study horizons. The study horizons are broadly consistent with Region of Peel requirements.

Growth Rates

- The corridor growth rates established in consultation with the Town and Region for the Secondary Plan Transportation Study will be applied to through movements only. The assumed growth rates are:
    - Airport Road: 1.0% (2025 to 2031), 0.5% (2031 to 2033)
    - Old School Road: 2.0% (2025 to 2033)
    - Healy Road: 2.0% (2025 to 2033)
    - Perdue Court: 0.0% (2025 to 2033)
    - Davis Lane: 0.0% (2025 to 2033)

Background Developments

- The following background developments are proposed:
    - Tullamore Industrial Business Park
    - 6034 Mayfield Road
    - Countryside Villages Block 48-2
        - Given that this Secondary Plan area is not built and previously was assumed to be built out by 2021, we have assumed that one-third (33%) of the development will be built out by 2028, and full buildout will occur by 2033 for the purpose of analysis.
    - 13846 & 13940 Airport Road
- We note that the Mayfield-Tullamore Secondary Plan Transportation Study (BA Group, August 2024) did not assign site-generated traffic volumes east of Airport Road. As such, the development is not expected to impact the proposed study area and will not be included as a background development.
- Currently, there are no active plans to develop the remaining lands within the Tullamore Northwest Employment Area Secondary Plan as well as the Town of Caledon Secondary Plan Area F2. Accordingly, these developments are not expected to be built out within the study horizon and are not included as background developments for trip assignment purposes.
- We also understand that a potential east-west collector through the Tullamore Northwest Employment Area Secondary Plan is proposed which will form an intersection with Airport Road north or south of the subject lands (final alignment to be determined). As the Subject Lands are the only lands proposed for development within the Secondary Plan area for the foreseeable future, it is assumed that this east-west

collector and its future intersection with Airport Road will be constructed beyond the study horizons. Operations as this future intersection have been and will continue to be addressed separately as part of the more comprehensive Tullamore Northwest Employment Area Secondary Plan Transportation Study.

Future Conditions

- The following infrastructure improvements are assumed for modelling purposes by the horizons noted:
    - Airport Road: Widening from 2 Lanes to 5 Lanes (4 travel lanes and a two-way left-turn lane) (by 2031)
    - Airport Road & Healy Road: Intersection Realignment and Roundabout (by 2031)
    - Highway 413: New Highway (by 2031, consistent with background planning studies)
- Trip Generation will be based on ITE Trip Generation Manual, 11th edition.
- Trip Distribution will be based on Transportation Tomorrow Survey data and/or existing travel patterns from similar developments (e.g. 12333 Airport Road), modified as required to account for new routes associated with the future Highway 413 interchange.
- Future background and future total conditions will be compared to identify if capacity and queuing issues are forecasted to occur and if mitigation measures are required at the existing or future intersections.
- Roundabout analysis will be conducted using ARCADY software.

Traffic Safety

- The available site distance at the proposed site access will be compared to standards set out by the Transportation Associates of Canada (TAC) Geometric Design Guide for Canadian Roads.
- The site accesses will also be reviewed to confirm it conforms to TAC and Region standards, as applicable.
- The supportability of site access locations and restrictions will be reviewed based on traffic operations and expected queue lengths, as well as applicable access spacing guidelines.

Site Circulation

- Vehicle Turning Diagrams will be provided for the following design vehicles:
    - Wb-20 Truck
    - TAC p-car
    - Caledon Fire Truck (Region of Peel Fire Truck maneuvering assumed to suffice)

Parking and Loading

- The vehicle parking and loading requirements will be evaluated based on the Town of Caledon Zoning By-Law 2006-50 and Traffic By-Law 2024-048, as applicable.
- Should a reduced vehicle parking supply be proposed, the parking supply will be justified using a review of recent approval and proposal trends for similar industrial warehouse developments within the Town of Caledon.
- The bicycle parking requirements will be evaluated for the office component of the Proposed Development based on the recommended rates outlined in the Town of Caledon Active Transportation Master Plan (June 2024).

TDM

- Transportation Demand Management (TDM) opportunities will be assessed, and site-specific measures for the development will be recommended to reduce single-occupancy vehicle (SOV) trips and promote sustainable transportation in line with the Town and Region's mode share targets. Opportunities to provide transit-supportive infrastructure will also be reviewed.

Cheers,
My-Linh *[me/lin]*

My-Linh Yee, EIT
Engineering Intern, Transportation
Office: 905.876.7159
Collingwood | Milton | Toronto | Bradford | Guelph

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My-Linh Yee

From: My-Linh Yee
Sent: October 28, 2025 10:52 AM
To: Xiao, Kaiwen; Hamdani, Hashim; Emma Howlett; Tong Wang
Cc: Michael Linton; Mark Condello; Ethan Bohnert; Simone Fiore
Subject: RE: 0 Airport Road - Transportation Terms of Reference

Hi Emma, Tong, Hashim, and Kaiwen,

Thanks for taking the time to meet with us last week. I have included a summary of our discussion and the agreed upon approach for this Site-Specific Transportation Impact Study for the Broccolini Airport Road lands (0 Airport Road). We will:

- Review the 2038 future background and future total horizon (10-years post buildout) for the study road network.
    - Buildout of future background improvements and developments will be maintained, consistent with previous correspondence.
- Estimate the site generated trips using ITE Trip Generation Manual.
- Review the 2044 future total horizon (16-years post buildout, in line with the Secondary Plan Transportation Study) as a sensitivity analysis, which will only review the proposed site accesses off Airport Road as well as Airport Road & Future E-W Collector (located south of the Proposed Development).
    - This review will confirm turn lane geometry as well as confirm no back-to-back queueing concerns are present.
- Review access opportunities along Airport Road for other parcels in the Tullamore Northwest Employment Area, as a result of the proposed site accesses. We note that this will also be illustrated in the forthcoming Secondary Plan Transportation Study resubmission.

The following items will be reviewed, subject to confirmation by Emma/Tong:

- Based on the traffic volumes outlined in the previously submitted Secondary Plan Transportation Study, the applied 2% corridor growth rate (plus the applied background developments, including the Mayfield-Tullamore Secondary Plan and Secondary Plan Area F2) would result in 2051 traffic volumes above those noted in the Town of Caledon's 2051 EMME Model Volumes. Accordingly, the justification for the 2% growth rate will be included as part of the Secondary Plan Transportation Study resubmission.

As a reminder, the following items were included in the Secondary Plan Transportation Study (which will be updated as required as part of a resubmission) and will not be included in the Site-Specific Transportation Impact Study:

- Analysis of the Airport Road & Future E-W Road, Torbram Road & Future E-W Road, and Old School Road & Future N-S Road.
- Comprehensive review of the future active transportation network, including potential implementation opportunities for transit, pedestrian and cycling facilities.

Cheers,
My-Linh *[me/lin]*

My-Linh Yee, EIT
Engineering Intern, Transportation

Office: 905.876.7159
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From: Xiao, Kaiwen <kaiwen.xiao@peelregion.ca>
Sent: October 17, 2025 10:54 AM
To: My-Linh Yee <myee@cfcrozier.ca>; Shen, Yifan <yifan.shen@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Mark Condello <markc@gsai.ca>; Tong Wang <Tong.Wang@caledon.ca>; Hamdani, Hashim <Hashim.Hamdani@peelregion.ca>; Ethan Bohnert <ethanb@gsai.ca>; Simone Fiore <Simone.Fiore@caledon.ca>; Emma Howlett <Emma.Howlett@caledon.ca>
Subject: Re: 0 Airport Road - Transportation Terms of Reference

Good morning My-Linh,

Thank you for your assistance with the coordination

Our team would prefer to schedule the meeting for next Friday, October 24.

Thans again.

Best regards,
Kaiwen Xiao

Specialist, Transportation Development

Region of Peel working with you

Transportation Division, Public Works

10 Peel Centre Drive Suite B, 4th Floor

Brampton, ON L6T 4B9

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From: My-Linh Yee <myee@cfcrozier.ca>
Sent: Thursday, October 16, 2025 4:31 PM
To: Shen, Yifan <yifan.shen@peelregion.ca>
Cc: Michael Linton <mlinton@cfcrozier.ca>; Mark Condello <markc@gsai.ca>; Tong Wang <Tong.Wang@caledon.ca>; Hamdani, Hashim <Hashim.Hamdani@peelregion.ca>; Ethan Bohnert

APPENDIX B:

Traffic Data

Spectrum

Turning Movement Count
Location Name: AIRPORT ROAD & PERDUE COURT / DAVIS LANE
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Turning Movement Count (6 . AIRPORT ROAD & PERDUE COURT / DAVIS LANE) CustID: 00717933 MioID: 1250811

Start Time	N Approach AIRPORT ROAD						E Approach DAVIS LANE						S Approach AIRPORT ROAD						W Approach PERDUE COURT						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
2024-11-20 07:00:00	1	94	0	0	0	95	8	0	12	0	1	20	13	81	9	0	0	103	6	0	0	0	0	6	224	
2024-11-20 07:15:00	1	135	0	0	0	136	3	0	20	0	2	23	10	70	7	0	0	87	9	1	1	0	0	11	257	
2024-11-20 07:30:00	1	173	0	0	0	174	1	0	6	0	6	7	9	65	8	0	0	82	5	0	1	0	0	6	269	
2024-11-20 07:45:00	1	122	1	0	0	124	1	0	6	0	4	7	5	97	18	1	0	121	5	0	0	0	0	5	257	1007
2024-11-20 08:00:00	0	120	1	0	0	121	1	0	4	0	2	5	5	73	19	0	1	97	7	0	1	0	2	8	231	1014
2024-11-20 08:15:00	1	140	2	0	0	143	0	0	5	0	0	5	13	69	25	0	0	107	11	0	0	0	0	11	266	1023
2024-11-20 08:30:00	1	132	4	0	0	137	2	0	8	0	1	10	9	66	21	0	0	96	6	0	4	0	0	10	253	1007
2024-11-20 08:45:00	2	113	3	0	0	118	3	0	10	0	0	13	19	61	13	0	0	93	8	0	0	0	1	8	232	982
2024-11-20 09:00:00	4	118	8	0	0	130	1	0	17	0	0	18	29	66	14	0	0	109	4	0	2	2	0	8	265	1016
2024-11-20 09:15:00	0	102	7	0	0	109	1	0	26	0	0	27	31	35	8	0	0	74	6	0	2	0	1	8	218	968
2024-11-20 09:30:00	0	83	1	0	0	84	1	0	29	0	2	30	18	36	6	0	0	60	9	0	1	0	2	10	184	899
2024-11-20 09:45:00	2	74	1	0	0	77	2	0	16	0	0	18	9	58	11	0	0	78	7	0	0	0	0	7	180	847
BREAK																										
2024-11-20 16:00:00	1	90	2	2	0	95	1	0	12	0	0	13	17	114	11	0	0	142	11	0	2	0	0	13	263	
2024-11-20 16:15:00	1	100	4	0	0	105	3	0	19	0	1	22	16	169	7	0	0	192	15	0	3	0	0	18	337	
2024-11-20 16:30:00	1	116	5	1	0	123	1	0	23	0	4	24	16	139	5	2	0	162	13	0	1	0	0	14	323	
2024-11-20 16:45:00	1	98	5	1	0	105	4	0	16	0	5	20	10	166	12	0	0	188	14	0	1	0	0	15	328	1251
2024-11-20 17:00:00	6	67	6	6	0	85	0	0	22	0	2	22	7	134	12	1	0	154	19	0	1	0	0	20	281	1269
2024-11-20 17:15:00	0	113	0	1	0	114	5	0	10	0	0	15	7	119	9	0	0	135	16	0	0	0	0	16	280	1212
2024-11-20 17:30:00	1	90	2	2	1	95	0	0	8	0	2	8	5	130	11	0	0	146	16	0	0	0	0	16	265	1154
2024-11-20 17:45:00	1	104	0	0	0	105	0	0	10	0	0	10	4	94	13	0	0	111	8	0	1	0	0	9	235	1061
2024-11-20 18:00:00	2	95	1	1	0	99	0	0	4	0	0	4	1	104	4	0	1	109	10	0	0	0	2	10	222	1002
2024-11-20 18:15:00	0	71	0	0	0	71	0	0	4	0	0	4	5	98	9	1	0	113	7	0	1	0	0	8	196	918
2024-11-20 18:30:00	0	81	0	0	0	81	1	0	4	0	0	5	3	108	8	1	0	120	9	0	0	0	0	9	215	868
2024-11-20 18:45:00	1	64	0	0	0	65	0	0	3	0	1	3	1	82	7	0	0	90	11	0	0	0	0	11	169	802
Grand Total	29	2495	53	14	1	2591	39	0	294	0	33	333	262	2234	267	6	2	2769	232	1	22	2	8	257	**5950**	-
Approach%	1.1%	96.3%	2%	0.5%		-	11.7%	0%	88.3%	0%		-	9.5%	80.7%	9.6%	0.2%		-	90.3%	0.4%	8.6%	0.8%		-	-	-
Totals %	0.5%	41.9%	0.9%	0.2%		43.5%	0.7%	0%	4.9%	0%		5.6%	4.4%	37.5%	4.5%	0.1%		46.5%	3.9%	0%	0.4%	0%		4.3%	-	-
Heavy	16	341	43	0		-	23	0	88	0		-	181	279	97	0		-	70	0	7	2		-	-	-
Heavy %	55.2%	13.7%	81.1%	0%		-	59%	0%	29.9%	0%		-	69.1%	12.5%	36.3%	0%		-	30.2%	0%	31.8%	100%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

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

Peak Hour: 07:30 AM - 08:30 AM **Weather: Overcast Clouds (7.52 °C)**

Start Time	N Approach AIRPORT ROAD						E Approach DAVIS LANE						S Approach AIRPORT ROAD						W Approach PERDUE COURT						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 07:30:00	1	173	0	0	0	174	1	0	6	0	6	7	9	65	8	0	0	82	5	0	1	0	0	6	269
2024-11-20 07:45:00	1	122	1	0	0	124	1	0	6	0	4	7	5	97	18	1	0	121	5	0	0	0	0	5	257
2024-11-20 08:00:00	0	120	1	0	0	121	1	0	4	0	2	5	5	73	19	0	1	97	7	0	1	0	2	8	231
2024-11-20 08:15:00	1	140	2	0	0	143	0	0	5	0	0	5	13	69	25	0	0	107	11	0	0	0	0	11	266
Grand Total	3	555	4	0	0	562	3	0	21	0	12	24	32	304	70	1	1	407	28	0	2	0	2	30	**1023**
Approach%	0.5%	98.8%	0.7%	0%		-	12.5%	0%	87.5%	0%		-	7.9%	74.7%	17.2%	0.2%		-	93.3%	0%	6.7%	0%		-	**-**
Totals %	0.3%	54.3%	0.4%	0%		54.9%	0.3%	0%	2.1%	0%		2.3%	3.1%	29.7%	6.8%	0.1%		39.8%	2.7%	0%	0.2%	0%		2.9%	**-**
PHF	0.75	0.8	0.5	0		0.81	0.75	0	0.88	0		0.86	0.62	0.78	0.7	0.25		0.84	0.64	0	0.5	0		0.68	0.95
Heavy	0	70	2	0		72	3	0	14	0		17	11	46	15	0		72	21	0	2	0		23	184
Heavy %	0%	12.6%	50%	0%		12.8%	100%	0%	66.7%	0%		70.8%	34.4%	15.1%	21.4%	0%		17.7%	75%	0%	100%	0%		76.7%	18%
Lights	3	485	2	0		490	0	0	7	0		7	21	258	55	1		335	7	0	0	0		7	839
Lights %	100%	87.4%	50%	0%		87.2%	0%	0%	33.3%	0%		29.2%	65.6%	84.9%	78.6%	100%		82.3%	25%	0%	0%	0%		23.3%	82%
Single-Unit Trucks	0	32	1	0		33	0	0	0	0		0	0	18	12	0		30	11	0	2	0		13	76
Single-Unit Trucks %	0%	5.8%	25%	0%		5.9%	0%	0%	0%	0%		0%	0%	5.9%	17.1%	0%		7.4%	39.3%	0%	100%	0%		43.3%	7.4%
Buses	0	3	1	0		4	2	0	10	0		12	11	7	0	0		18	0	0	0	0		0	34
Buses %	0%	0.5%	25%	0%		0.7%	66.7%	0%	47.6%	0%		50%	34.4%	2.3%	0%	0%		4.4%	0%	0%	0%	0%		0%	3.3%
Articulated Trucks	0	35	0	0		35	1	0	4	0		5	0	21	3	0		24	10	0	0	0		10	74
Articulated Trucks %	0%	6.3%	0%	0%		6.2%	33.3%	0%	19%	0%		20.8%	0%	6.9%	4.3%	0%		5.9%	35.7%	0%	0%	0%		33.3%	7.2%
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%
Pedestrians	-	-	-	-	0	-	-	-	-	-	12	-	-	-	-	-	1	-	-	-	-	-	2	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	80%		-	-	-	-	6.7%		-	-	-	-	13.3%		**-**

Spectrum

Turning Movement Count
Location Name: AIRPORT ROAD & PERDUE COURT / DAVIS LANE
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

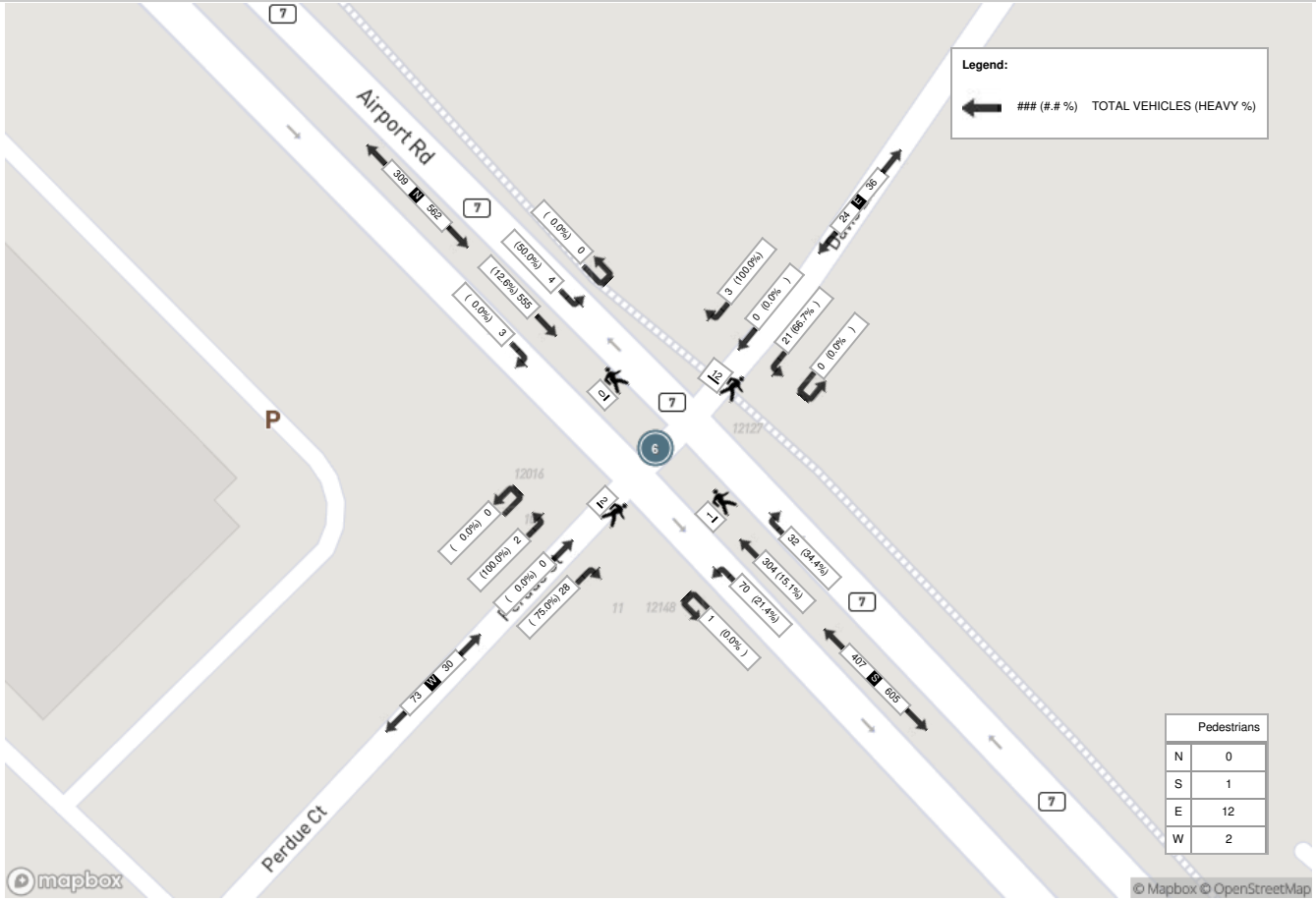
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Mist (8.21 °C)

Start Time	N Approach AIRPORT ROAD						E Approach DAVIS LANE						S Approach AIRPORT ROAD						W Approach PERDUE COURT						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 16:15:00	1	100	4	0	0	105	3	0	19	0	1	22	16	169	7	0	0	192	15	0	3	0	0	18	337
2024-11-20 16:30:00	1	116	5	1	0	123	1	0	23	0	4	24	16	139	5	2	0	162	13	0	1	0	0	14	323
2024-11-20 16:45:00	1	98	5	1	0	105	4	0	16	0	5	20	10	166	12	0	0	188	14	0	1	0	0	15	328
2024-11-20 17:00:00	6	67	6	6	0	85	0	0	22	0	2	22	7	134	12	1	0	154	19	0	1	0	0	20	281
Grand Total	9	381	20	8	0	418	8	0	80	0	12	88	49	608	36	3	0	696	61	0	6	0	0	67	**1269**
Approach%	2.2%	91.1%	4.8%	1.9%		-	9.1%	0%	90.9%	0%		-	7%	87.4%	5.2%	0.4%		-	91%	0%	9%	0%		-	**-**
Totals %	0.7%	30%	1.6%	0.6%		32.9%	0.6%	0%	6.3%	0%		6.9%	3.9%	47.9%	2.8%	0.2%		54.8%	4.8%	0%	0.5%	0%		5.3%	**-**
PHF	0.38	0.82	0.83	0.33		0.85	0.5	0	0.87	0		0.92	0.77	0.9	0.75	0.38		0.91	0.8	0	0.5	0		0.84	0.94
Heavy	8	41	18	0		67	1	0	7	0		8	41	53	23	0		117	7	0	0	0		7	199
Heavy %	88.9%	10.8%	90%	0%		16%	12.5%	0%	8.8%	0%		9.1%	83.7%	8.7%	63.9%	0%		16.8%	11.5%	0%	0%	0%		10.4%	15.7%
Lights	1	340	2	8		351	7	0	73	0		80	8	555	13	3		579	54	0	6	0		60	1070
Lights %	11.1%	89.2%	10%	100%		84%	87.5%	0%	91.3%	0%		90.9%	16.3%	91.3%	36.1%	100%		83.2%	88.5%	0%	100%	0%		89.6%	84.3%
Single-Unit Trucks	3	23	2	0		28	0	0	2	0		2	0	17	5	0		22	2	0	0	0		2	54
Single-Unit Trucks %	33.3%	6%	10%	0%		6.7%	0%	0%	2.5%	0%		2.3%	0%	2.8%	13.9%	0%		3.2%	3.3%	0%	0%	0%		3%	4.3%
Buses	0	1	16	0		17	1	0	3	0		4	39	0	0	0		39	0	0	0	0		0	60
Buses %	0%	0.3%	80%	0%		4.1%	12.5%	0%	3.8%	0%		4.5%	79.6%	0%	0%	0%		5.6%	0%	0%	0%	0%		0%	4.7%
Articulated Trucks	5	17	0	0		22	0	0	2	0		2	2	36	18	0		56	5	0	0	0		5	85
Articulated Trucks %	55.6%	4.5%	0%	0%		5.3%	0%	0%	2.5%	0%		2.3%	4.1%	5.9%	50%	0%		8%	8.2%	0%	0%	0%		7.5%	6.7%
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%
Pedestrians	-	-	-	-	0	-	-	-	-	-	12	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	100%		-	-	-	-	0%		-	-	-	-	0%		**-**

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

Peak Hour: 07:30 AM - 08:30 AM **Weather: Overcast Clouds (7.52 °C)**

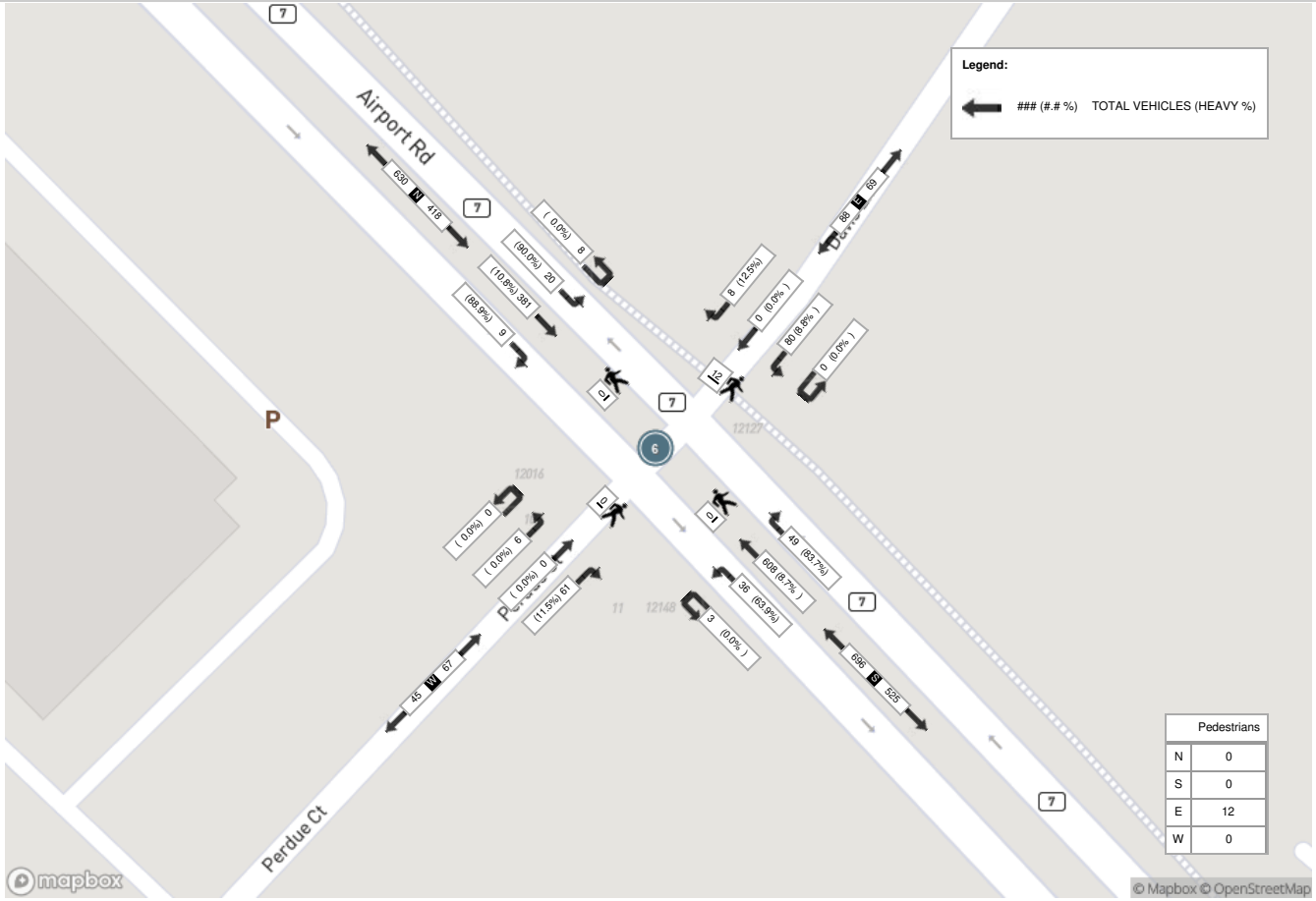


Spectrum

Turning Movement Count
Location Name: AIRPORT ROAD & PERDUE COURT / DAVIS LANE
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Peak Hour: 04:15 PM - 05:15 PM **Weather: Mist (8.21 °C)**



Spectrum

Turning Movement Count
Location Name: MAYFIELD & AIRPORT ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Turning Movement Count (1 . MAYFIELD & AIRPORT ROAD) CustID: 00717433 MioID: 1250745

Start Time	N Approach AIRPORT ROAD						E Approach MAYFIELD RD						S Approach AIRPORT ROAD						W Approach MAYFIELD RD						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
2024-11-20 07:00:00	34	67	8	0	0	109	8	98	17	0	1	123	16	42	28	0	0	86	103	143	46	0	0	292	610	
2024-11-20 07:15:00	27	130	13	1	4	171	6	105	24	0	3	135	15	40	38	0	0	93	84	144	37	0	0	265	664	
2024-11-20 07:30:00	27	139	11	0	4	177	5	86	21	0	8	112	13	50	41	0	1	104	79	164	30	0	1	273	666	
2024-11-20 07:45:00	23	120	12	0	1	155	12	90	10	1	2	113	17	57	55	0	0	129	101	151	51	0	0	303	700	2640
2024-11-20 08:00:00	34	73	19	0	1	126	9	94	23	0	5	126	17	41	41	0	2	99	101	168	41	0	2	310	661	2691
2024-11-20 08:15:00	23	129	12	0	2	164	17	121	21	0	4	159	25	52	46	0	3	123	84	142	43	0	1	269	715	2742
2024-11-20 08:30:00	26	100	25	0	1	151	12	109	24	0	1	145	23	45	42	0	4	110	94	161	28	0	2	283	689	2765
2024-11-20 08:45:00	21	93	14	0	0	128	9	108	20	0	1	137	19	44	37	1	4	101	76	148	44	0	3	268	634	2699
2024-11-20 09:00:00	34	102	18	2	0	156	9	108	13	0	0	130	20	56	33	0	1	109	56	125	38	0	0	219	614	2652
2024-11-20 09:15:00	33	89	18	0	1	140	11	97	16	0	2	124	17	19	29	0	4	65	50	110	32	0	2	192	521	2458
2024-11-20 09:30:00	28	77	17	0	2	122	5	108	20	0	4	133	9	28	24	0	0	61	46	103	31	0	4	180	496	2265
2024-11-20 09:45:00	30	56	15	0	0	101	11	100	20	0	0	131	9	31	26	0	1	66	47	124	32	0	3	203	501	2132
BREAK																										
2024-11-20 16:00:00	56	62	19	0	0	137	15	157	27	0	1	199	23	108	60	0	1	191	41	127	33	0	0	201	728	
2024-11-20 16:15:00	56	62	17	0	0	135	8	180	19	0	5	207	16	124	52	0	5	192	55	133	35	0	4	223	757	
2024-11-20 16:30:00	67	69	23	0	4	159	15	146	22	0	9	183	25	111	55	0	3	191	47	136	41	0	3	224	757	
2024-11-20 16:45:00	53	66	20	1	0	140	13	156	24	0	9	193	27	143	73	0	2	243	15	108	39	0	0	162	738	2980
2024-11-20 17:00:00	42	63	27	0	2	132	7	154	17	0	4	178	29	106	48	0	0	183	28	135	36	0	0	199	692	2944
2024-11-20 17:15:00	54	67	8	1	1	130	5	155	16	0	2	176	20	90	59	0	4	169	53	177	44	0	3	274	749	2936
2024-11-20 17:30:00	46	73	15	0	1	134	9	178	20	0	2	207	17	110	66	0	0	193	49	151	31	0	0	231	765	2944
2024-11-20 17:45:00	49	67	12	0	0	128	10	170	20	0	0	200	14	74	70	0	1	158	52	164	32	0	4	248	734	2940
2024-11-20 18:00:00	43	66	11	0	0	120	6	144	18	0	5	168	36	73	65	0	0	174	54	140	26	0	2	220	682	2930
2024-11-20 18:15:00	40	48	10	0	0	98	2	130	17	0	0	149	20	91	95	0	0	206	49	154	33	0	0	236	689	2870
2024-11-20 18:30:00	40	43	9	2	2	94	6	158	25	0	2	189	17	81	70	0	0	168	45	115	30	0	0	190	641	2746
2024-11-20 18:45:00	37	49	9	0	0	95	6	122	22	0	1	150	31	60	69	0	0	160	41	113	25	0	0	179	584	2596
Grand Total	923	1910	362	7	26	3202	216	3074	476	1	71	3767	475	1676	1222	1	36	3374	1450	3336	858	0	34	5644	**15987**	-
Approach%	28.8%	59.7%	11.3%	0.2%		-	5.7%	81.6%	12.6%	0%		-	14.1%	49.7%	36.2%	0%		-	25.7%	59.1%	15.2%	0%		-	-	-
Totals %	5.8%	11.9%	2.3%	0%		20%	1.4%	19.2%	3%	0%		23.6%	3%	10.5%	7.6%	0%		21.1%	9.1%	20.9%	5.4%	0%		35.3%	-	-
Heavy	199	211	91	0		-	100	316	122	0		-	178	231	85	0		-	83	343	233	0		-	-	-
Heavy %	21.6%	11%	25.1%	0%		-	46.3%	10.3%	25.6%	0%		-	37.5%	13.8%	7%	0%		-	5.7%	10.3%	27.2%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: MAYFIELD & AIRPORT ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Peak Hour: 07:45 AM - 08:45 AM **Weather: Overcast Clouds (7.52 °C)**

Start Time	N Approach AIRPORT ROAD						E Approach MAYFIELD RD						S Approach AIRPORT ROAD						W Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 07:45:00	23	120	12	0	1	155	12	90	10	1	2	113	17	57	55	0	0	129	101	151	51	0	0	303	700
2024-11-20 08:00:00	34	73	19	0	1	126	9	94	23	0	5	126	17	41	41	0	2	99	101	168	41	0	2	310	661
2024-11-20 08:15:00	23	129	12	0	2	164	17	121	21	0	4	159	25	52	46	0	3	123	84	142	43	0	1	269	715
2024-11-20 08:30:00	26	100	25	0	1	151	12	109	24	0	1	145	23	45	42	0	4	110	94	161	28	0	2	283	689
Grand Total	106	422	68	0	5	596	50	414	78	1	12	543	82	195	184	0	9	461	380	622	163	0	5	1165	**2765**
Approach%	17.8%	70.8%	11.4%	0%		-	9.2%	76.2%	14.4%	0.2%		-	17.8%	42.3%	39.9%	0%		-	32.6%	53.4%	14%	0%		-	**-**
Totals %	3.8%	15.3%	2.5%	0%		21.6%	1.8%	15%	2.8%	0%		19.6%	3%	7.1%	6.7%	0%		16.7%	13.7%	22.5%	5.9%	0%		42.1%	**-**
PHF	0.78	0.82	0.68	0		0.91	0.74	0.86	0.81	0.25		0.85	0.82	0.86	0.84	0		0.89	0.94	0.93	0.8	0		0.94	0.97
Heavy	36	48	16	0		100	20	59	25	0		104	36	33	7	0		76	23	44	33	0		100	380
Heavy %	34%	11.4%	23.5%	0%		16.8%	40%	14.3%	32.1%	0%		19.2%	43.9%	16.9%	3.8%	0%		16.5%	6.1%	7.1%	20.2%	0%		8.6%	13.7%
Lights	70	374	52	0		496	30	355	53	1		439	46	162	177	0		385	357	578	130	0		1065	2385
Lights %	66%	88.6%	76.5%	0%		83.2%	60%	85.7%	67.9%	100%		80.8%	56.1%	83.1%	96.2%	0%		83.5%	93.9%	92.9%	79.8%	0%		91.4%	86.3%
Single-Unit Trucks	11	23	6	0		40	8	23	9	0		40	3	13	2	0		18	8	14	12	0		34	132
Single-Unit Trucks %	10.4%	5.5%	8.8%	0%		6.7%	16%	5.6%	11.5%	0%		7.4%	3.7%	6.7%	1.1%	0%		3.9%	2.1%	2.3%	7.4%	0%		2.9%	4.8%
Buses	6	3	4	0		13	7	3	2	0		12	7	8	3	0		18	7	5	14	0		26	69
Buses %	5.7%	0.7%	5.9%	0%		2.2%	14%	0.7%	2.6%	0%		2.2%	8.5%	4.1%	1.6%	0%		3.9%	1.8%	0.8%	8.6%	0%		2.2%	2.5%
Articulated Trucks	19	22	6	0		47	5	33	14	0		52	26	12	2	0		40	8	25	7	0		40	179
Articulated Trucks %	17.9%	5.2%	8.8%	0%		7.9%	10%	8%	17.9%	0%		9.6%	31.7%	6.2%	1.1%	0%		8.7%	2.1%	4%	4.3%	0%		3.4%	6.5%
Pedestrians	-	-	-	-	5	-	-	-	-	-	12	-	-	-	-	-	9	-	-	-	-	-	5	-	**-**
Pedestrians%	-	-	-	-	16.1%		-	-	-	-	38.7%		-	-	-	-	29%		-	-	-	-	16.1%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

Turning Movement Count
Location Name: MAYFIELD & AIRPORT ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

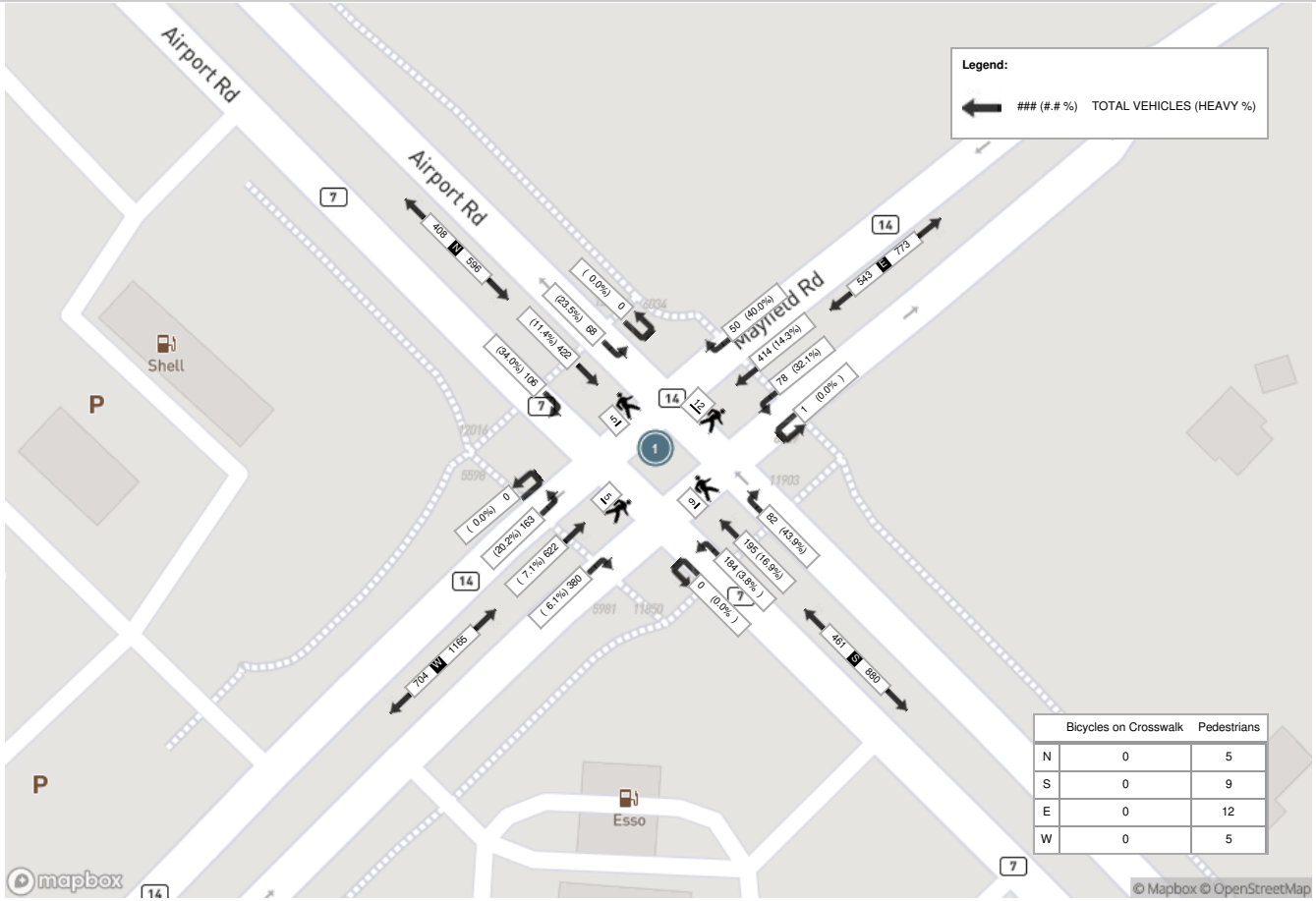
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:00 PM - 05:00 PM Weather: Mist (8.21 °C)

Start Time	N Approach AIRPORT ROAD						E Approach MAYFIELD RD						S Approach AIRPORT ROAD						W Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 16:00:00	56	62	19	0	0	137	15	157	27	0	1	199	23	108	60	0	1	191	41	127	33	0	0	201	728
2024-11-20 16:15:00	56	62	17	0	0	135	8	180	19	0	5	207	16	124	52	0	5	192	55	133	35	0	4	223	757
2024-11-20 16:30:00	67	69	23	0	4	159	15	146	22	0	9	183	25	111	55	0	3	191	47	136	41	0	3	224	757
2024-11-20 16:45:00	53	66	20	1	0	140	13	156	24	0	9	193	27	143	73	0	2	243	15	108	39	0	0	162	738
Grand Total	232	259	79	1	4	571	51	639	92	0	24	782	91	486	240	0	11	817	158	504	148	0	7	810	**2980**
Approach%	40.6%	45.4%	13.8%	0.2%		-	6.5%	81.7%	11.8%	0%		-	11.1%	59.5%	29.4%	0%		-	19.5%	62.2%	18.3%	0%		-	**-**
Totals %	7.8%	8.7%	2.7%	0%		19.2%	1.7%	21.4%	3.1%	0%		26.2%	3.1%	16.3%	8.1%	0%		27.4%	5.3%	16.9%	5%	0%		27.2%	**-**
PHF	0.87	0.94	0.86	0.25		0.9	0.85	0.89	0.85	0		0.94	0.84	0.85	0.82	0		0.84	0.72	0.93	0.9	0		0.9	0.98
Heavy	33	23	20	0		76	29	37	19	0		85	33	48	15	0		96	8	75	44	0		127	384
Heavy %	14.2%	8.9%	25.3%	0%		13.3%	56.9%	5.8%	20.7%	0%		10.9%	36.3%	9.9%	6.3%	0%		11.8%	5.1%	14.9%	29.7%	0%		15.7%	12.9%
Lights	199	236	59	1		495	22	602	73	0		697	58	438	225	0		721	150	429	104	0		683	2596
Lights %	85.8%	91.1%	74.7%	100%		86.7%	43.1%	94.2%	79.3%	0%		89.1%	63.7%	90.1%	93.8%	0%		88.2%	94.9%	85.1%	70.3%	0%		84.3%	87.1%
Single-Unit Trucks	13	13	9	0		35	6	15	7	0		28	6	13	10	0		29	6	32	4	0		42	134
Single-Unit Trucks %	5.6%	5%	11.4%	0%		6.1%	11.8%	2.3%	7.6%	0%		3.6%	6.6%	2.7%	4.2%	0%		3.5%	3.8%	6.3%	2.7%	0%		5.2%	4.5%
Buses	3	2	1	0		6	8	3	2	0		13	6	21	0	0		27	1	1	17	0		19	65
Buses %	1.3%	0.8%	1.3%	0%		1.1%	15.7%	0.5%	2.2%	0%		1.7%	6.6%	4.3%	0%	0%		3.3%	0.6%	0.2%	11.5%	0%		2.3%	2.2%
Articulated Trucks	17	8	10	0		35	15	19	10	0		44	21	14	5	0		40	1	42	23	0		66	185
Articulated Trucks %	7.3%	3.1%	12.7%	0%		6.1%	29.4%	3%	10.9%	0%		5.6%	23.1%	2.9%	2.1%	0%		4.9%	0.6%	8.3%	15.5%	0%		8.1%	6.2%
Pedestrians	-	-	-	-	4	-	-	-	-	-	24	-	-	-	-	-	11	-	-	-	-	-	7	-	**-**
Pedestrians%	-	-	-	-	8.7%		-	-	-	-	52.2%		-	-	-	-	23.9%		-	-	-	-	15.2%		**-**
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

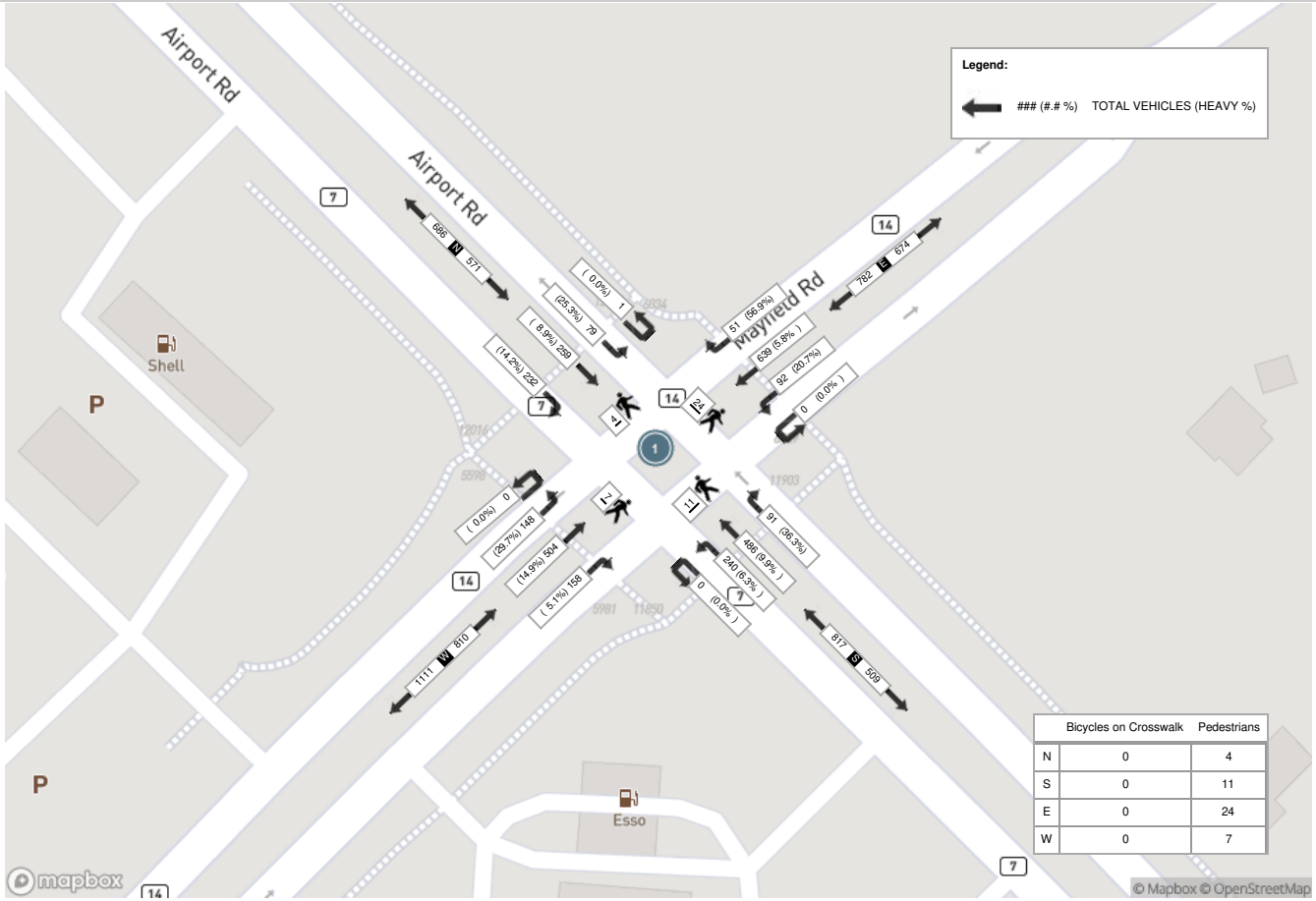
Peak Hour: 07:45 AM - 08:45 AM **Weather: Overcast Clouds (7.52 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	5
S	0	9
E	0	12
W	0	5

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

Peak Hour: 04:00 PM - 05:00 PM Weather: Mist (8.21 °C)



Spectrum

Turning Movement Count
Location Name: MAYFIELD ROAD & TORBRAM ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Turning Movement Count (2 . MAYFIELD ROAD & TORBRAM ROAD) CustID: 01409611 MioID: 1250773

Start Time	N Approach TORBRAM ROAD						E Approach MAYFIELD ROAD						S Approach TORBRAM ROAD						W Approach MAYFIELD ROAD						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
2024-11-20 07:00:00	4	41	6	0	0	51	0	151	11	0	0	162	12	9	7	0	0	28	28	234	5	0	0	267	508	
2024-11-20 07:15:00	6	49	8	0	0	63	4	144	12	0	0	160	10	8	16	0	0	34	39	248	6	0	0	293	550	
2024-11-20 07:30:00	8	74	2	0	0	84	1	141	15	0	0	157	17	14	11	0	0	42	41	250	7	0	0	298	581	
2024-11-20 07:45:00	6	85	12	0	0	103	3	143	15	0	0	161	16	10	26	0	0	52	54	257	1	0	0	312	628	2267
2024-11-20 08:00:00	3	66	11	0	0	80	3	138	15	0	0	156	15	10	30	0	0	55	54	280	4	0	0	338	629	2388
2024-11-20 08:15:00	6	63	5	0	0	74	9	146	16	0	0	171	15	16	14	0	0	45	53	256	7	0	0	316	606	2444
2024-11-20 08:30:00	5	43	8	0	0	56	3	155	8	0	0	166	14	15	19	0	0	48	47	256	4	0	0	307	577	2440
2024-11-20 08:45:00	6	40	4	0	0	50	1	136	11	0	0	148	17	17	12	0	0	46	49	252	7	1	0	309	553	2365
2024-11-20 09:00:00	3	25	2	0	0	30	3	130	8	0	0	141	8	7	14	0	0	29	39	220	9	0	0	268	468	2204
2024-11-20 09:15:00	8	33	2	0	0	43	3	152	10	0	0	165	7	10	9	0	0	26	37	202	6	0	0	245	479	2077
2024-11-20 09:30:00	2	24	3	0	0	29	4	135	15	0	0	154	6	8	5	0	0	19	32	188	5	0	0	225	427	1927
2024-11-20 09:45:00	2	28	0	0	0	30	1	136	5	0	0	142	19	10	7	0	0	36	22	160	3	0	0	185	393	1767
BREAK																										
2024-11-20 16:00:00	5	24	1	0	0	30	8	228	21	0	0	257	12	47	24	0	1	83	44	183	14	0	0	241	611	
2024-11-20 16:15:00	6	28	2	0	0	36	1	241	21	1	0	264	19	67	28	0	0	114	37	201	14	0	0	252	666	
2024-11-20 16:30:00	3	22	4	0	0	29	3	258	20	1	0	282	26	49	33	0	0	108	36	174	9	1	0	220	639	
2024-11-20 16:45:00	9	26	2	0	0	37	6	245	20	0	0	271	19	75	38	0	0	132	36	180	14	0	0	230	670	2586
2024-11-20 17:00:00	6	26	0	0	0	32	3	207	27	0	0	237	14	57	33	0	0	104	37	183	22	1	0	243	616	2591
2024-11-20 17:15:00	5	16	3	0	0	24	5	224	27	0	0	256	27	54	44	0	0	125	34	241	13	1	0	289	694	2619
2024-11-20 17:30:00	5	33	3	0	0	41	5	261	23	0	0	289	14	49	51	0	0	114	29	200	12	1	0	242	686	2666
2024-11-20 17:45:00	4	22	0	0	0	26	6	244	18	0	0	268	23	38	33	0	0	94	59	218	13	0	0	290	678	2674
2024-11-20 18:00:00	2	21	1	0	0	24	3	244	32	0	0	279	14	25	31	0	0	70	36	215	13	2	0	266	639	2697
2024-11-20 18:15:00	4	20	2	0	0	26	11	222	23	0	0	256	17	24	43	0	0	84	37	218	6	0	0	261	627	2630
2024-11-20 18:30:00	9	20	0	0	0	29	0	221	33	0	0	254	7	20	27	0	0	54	38	177	8	2	0	225	562	2506
2024-11-20 18:45:00	4	15	1	0	0	20	4	237	17	1	0	259	11	13	22	0	0	46	48	175	8	0	0	231	556	2384
Grand Total	121	844	82	0	0	1047	90	4539	423	3	0	5055	359	652	577	0	1	1588	966	5168	210	9	0	6353	**14043**	-
Approach%	11.6%	80.6%	7.8%	0%		-	1.8%	89.8%	8.4%	0.1%		-	22.6%	41.1%	36.3%	0%		-	15.2%	81.3%	3.3%	0.1%		-	-	-
Totals %	0.9%	6%	0.6%	0%		7.5%	0.6%	32.3%	3%	0%		36%	2.6%	4.6%	4.1%	0%		11.3%	6.9%	36.8%	1.5%	0.1%		45.2%	-	-
Heavy	3	14	1	0		-	2	582	18	1		-	14	5	23	0		-	27	632	5	0		-	-	-
Heavy %	2.5%	1.7%	1.2%	0%		-	2.2%	12.8%	4.3%	33.3%		-	3.9%	0.8%	4%	0%		-	2.8%	12.2%	2.4%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: MAYFIELD ROAD & TORBRAM ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Peak Hour: 07:30 AM - 08:30 AM **Weather: Overcast Clouds (7.52 °C)**

Start Time	N Approach TORBRAM ROAD						E Approach MAYFIELD ROAD						S Approach TORBRAM ROAD						W Approach MAYFIELD ROAD						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 07:30:00	8	74	2	0	0	84	1	141	15	0	0	157	17	14	11	0	0	42	41	250	7	0	0	298	581
2024-11-20 07:45:00	6	85	12	0	0	103	3	143	15	0	0	161	16	10	26	0	0	52	54	257	1	0	0	312	628
2024-11-20 08:00:00	3	66	11	0	0	80	3	138	15	0	0	156	15	10	30	0	0	55	54	280	4	0	0	338	629
2024-11-20 08:15:00	6	63	5	0	0	74	9	146	16	0	0	171	15	16	14	0	0	45	53	256	7	0	0	316	606
Grand Total	23	288	30	0	0	341	16	568	61	0	0	645	63	50	81	0	0	194	202	1043	19	0	0	1264	**2444**
Approach%	6.7%	84.5%	8.8%	0%		-	2.5%	88.1%	9.5%	0%		-	32.5%	25.8%	41.8%	0%		-	16%	82.5%	1.5%	0%		-	**-**
Totals %	0.9%	11.8%	1.2%	0%		14%	0.7%	23.2%	2.5%	0%		26.4%	2.6%	2%	3.3%	0%		7.9%	8.3%	42.7%	0.8%	0%		51.7%	**-**
PHF	0.72	0.85	0.63	0		0.83	0.44	0.97	0.95	0		0.94	0.93	0.78	0.68	0		0.88	0.94	0.93	0.68	0		0.93	0.97
Heavy	2	2	0	0		4	1	97	2	0		100	6	2	4	0		12	12	92	1	0		105	221
Heavy %	8.7%	0.7%	0%	0%		1.2%	6.3%	17.1%	3.3%	0%		15.5%	9.5%	4%	4.9%	0%		6.2%	5.9%	8.8%	5.3%	0%		8.3%	9%
Lights	21	286	30	0		337	15	471	59	0		545	57	48	77	0		182	190	951	18	0		1159	2223
Lights %	91.3%	99.3%	100%	0%		98.8%	93.8%	82.9%	96.7%	0%		84.5%	90.5%	96%	95.1%	0%		93.8%	94.1%	91.2%	94.7%	0%		91.7%	91%
Single-Unit Trucks	0	0	0	0		0	0	31	1	0		32	3	0	1	0		4	6	32	0	0		38	74
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	5.5%	1.6%	0%		5%	4.8%	0%	1.2%	0%		2.1%	3%	3.1%	0%	0%		3%	3%
Buses	2	1	0	0		3	1	10	1	0		12	2	2	3	0		7	5	24	1	0		30	52
Buses %	8.7%	0.3%	0%	0%		0.9%	6.3%	1.8%	1.6%	0%		1.9%	3.2%	4%	3.7%	0%		3.6%	2.5%	2.3%	5.3%	0%		2.4%	2.1%
Articulated Trucks	0	1	0	0		1	0	56	0	0		56	1	0	0	0		1	1	36	0	0		37	95
Articulated Trucks %	0%	0.3%	0%	0%		0.3%	0%	9.9%	0%	0%		8.7%	1.6%	0%	0%	0%		0.5%	0.5%	3.5%	0%	0%		2.9%	3.9%
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

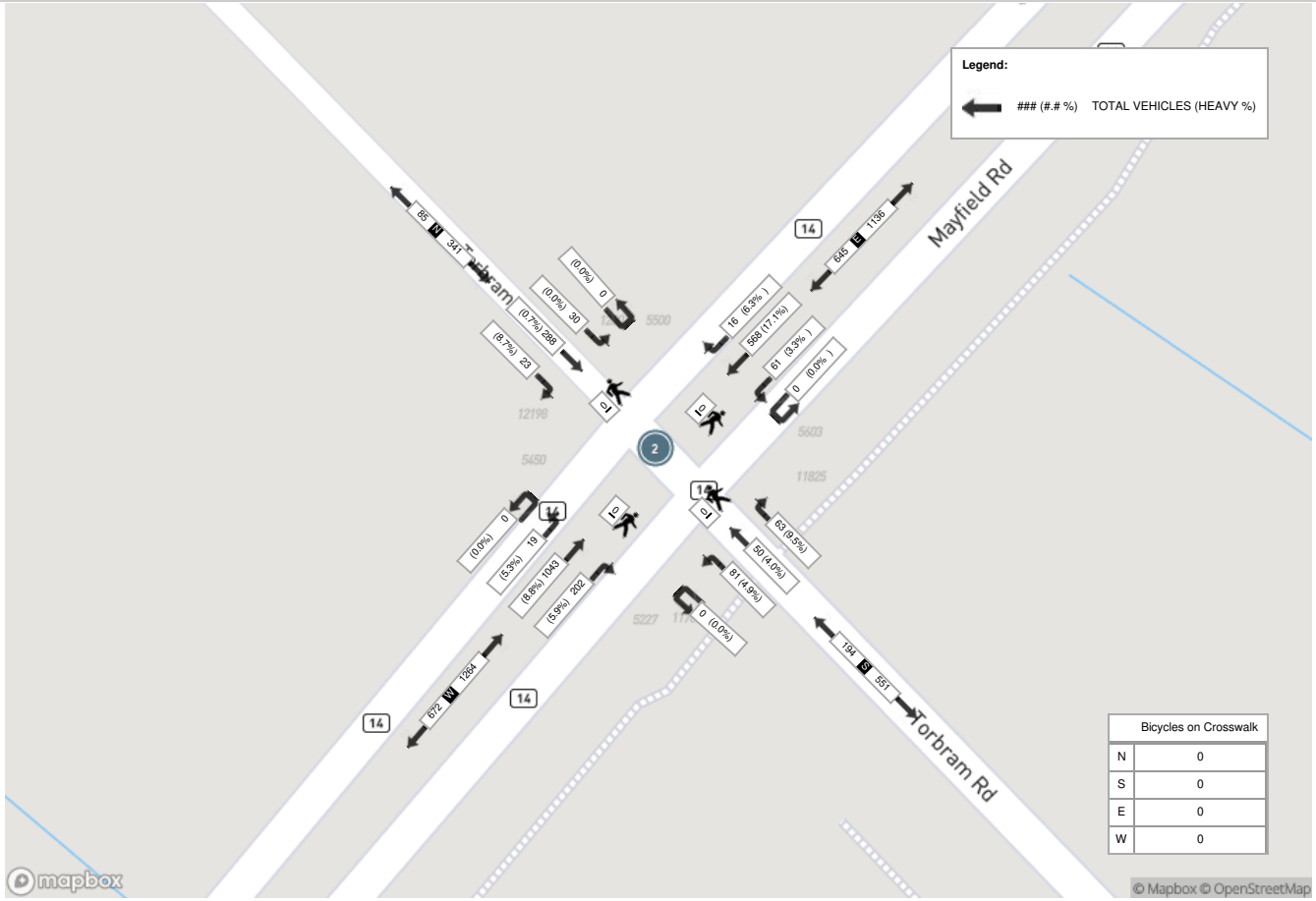
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 05:15 PM - 06:15 PM Weather: Mist (8.21 °C)

Start Time	N Approach TORBRAM ROAD						E Approach MAYFIELD ROAD						S Approach TORBRAM ROAD						W Approach MAYFIELD ROAD						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 17:15:00	5	16	3	0	0	24	5	224	27	0	0	256	27	54	44	0	0	125	34	241	13	1	0	289	694
2024-11-20 17:30:00	5	33	3	0	0	41	5	261	23	0	0	289	14	49	51	0	0	114	29	200	12	1	0	242	686
2024-11-20 17:45:00	4	22	0	0	0	26	6	244	18	0	0	268	23	38	33	0	0	94	59	218	13	0	0	290	678
2024-11-20 18:00:00	2	21	1	0	0	24	3	244	32	0	0	279	14	25	31	0	0	70	36	215	13	2	0	266	639
Grand Total	16	92	7	0	0	115	19	973	100	0	0	1092	78	166	159	0	0	403	158	874	51	4	0	1087	**2697**
Approach%	13.9%	80%	6.1%	0%		-	1.7%	89.1%	9.2%	0%		-	19.4%	41.2%	39.5%	0%		-	14.5%	80.4%	4.7%	0.4%		-	**-**
Totals %	0.6%	3.4%	0.3%	0%		4.3%	0.7%	36.1%	3.7%	0%		40.5%	2.9%	6.2%	5.9%	0%		14.9%	5.9%	32.4%	1.9%	0.1%		40.3%	**-**
PHF	0.8	0.7	0.58	0		0.7	0.79	0.93	0.78	0		0.94	0.72	0.77	0.78	0		0.81	0.67	0.91	0.98	0.5		0.94	0.97
Heavy	0	0	0	0		0	0	79	4	0		83	1	0	6	0		7	1	93	0	0		94	184
Heavy %	0%	0%	0%	0%		0%	0%	8.1%	4%	0%		7.6%	1.3%	0%	3.8%	0%		1.7%	0.6%	10.6%	0%	0%		8.6%	6.8%
Lights	16	92	7	0		115	19	894	96	0		1009	77	166	153	0		396	157	781	51	4		993	2513
Lights %	100%	100%	100%	0%		100%	100%	91.9%	96%	0%		92.4%	98.7%	100%	96.2%	0%		98.3%	99.4%	89.4%	100%	100%		91.4%	93.2%
Single-Unit Trucks	0	0	0	0		0	0	36	2	0		38	0	0	5	0		5	1	38	0	0		39	82
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	3.7%	2%	0%		3.5%	0%	0%	3.1%	0%		1.2%	0.6%	4.3%	0%	0%		3.6%	3%
Buses	0	0	0	0		0	0	3	2	0		5	1	0	1	0		2	0	1	0	0		1	8
Buses %	0%	0%	0%	0%		0%	0%	0.3%	2%	0%		0.5%	1.3%	0%	0.6%	0%		0.5%	0%	0.1%	0%	0%		0.1%	0.3%
Articulated Trucks	0	0	0	0		0	0	40	0	0		40	0	0	0	0		0	0	54	0	0		54	94
Articulated Trucks %	0%	0%	0%	0%		0%	0%	4.1%	0%	0%		3.7%	0%	0%	0%	0%		0%	0%	6.2%	0%	0%		5%	3.5%
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

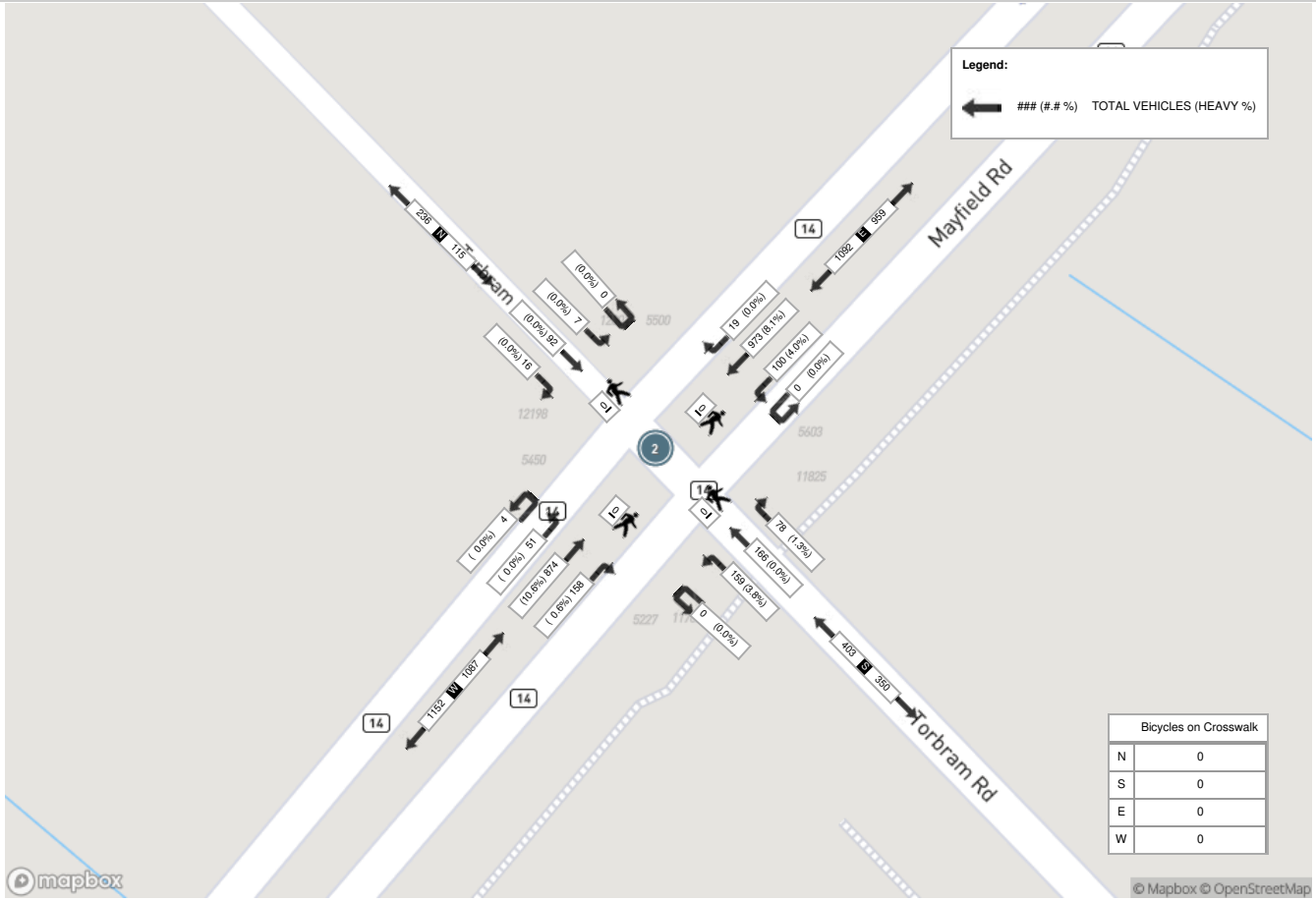
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:30 AM - 08:30 AM **Weather: Overcast Clouds (7.52 °C)**



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

Peak Hour: 05:15 PM - 06:15 PM Weather: Mist (8.21 °C)



Spectrum

Turning Movement Count
Location Name: TORBRAM ROAD & OLD SCHOOL ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Turning Movement Count (3 . TORBRAM ROAD & OLD SCHOOL ROAD) MioID: 1250776

Start Time	N Approach TORBRAM ROAD						E Approach OLD SCHOOL ROAD						S Approach TORBRAM ROAD						W Approach OLD SCHOOL ROAD						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
2024-11-20 07:00:00	2	40	0	0	0	42	0	15	2	0	0	17	4	6	1	0	0	11	8	36	1	0	0	45	115	
2024-11-20 07:15:00	1	45	1	0	0	47	0	28	0	0	0	28	3	11	3	0	0	17	8	50	1	0	0	59	151	
2024-11-20 07:30:00	3	77	0	0	0	80	0	18	1	0	0	19	0	16	3	0	0	19	15	53	0	0	0	68	186	
2024-11-20 07:45:00	7	76	0	0	0	83	1	23	0	0	0	24	3	12	2	0	0	17	16	59	1	0	0	76	200	652
2024-11-20 08:00:00	4	59	1	0	0	64	1	13	3	0	0	17	1	14	1	0	0	16	13	49	2	0	0	64	161	698
2024-11-20 08:15:00	2	63	3	0	0	68	0	20	2	0	0	22	5	17	6	0	0	28	10	53	1	0	0	64	182	729
2024-11-20 08:30:00	3	38	2	0	0	43	0	13	0	0	0	13	5	14	2	0	0	21	12	47	3	0	0	62	139	682
2024-11-20 08:45:00	2	27	0	0	0	29	0	16	0	0	0	16	2	18	3	0	0	23	10	57	3	0	0	70	138	620
2024-11-20 09:00:00	0	35	2	0	0	37	0	11	1	0	0	12	3	17	1	0	0	21	1	30	0	0	0	31	101	560
2024-11-20 09:15:00	2	30	1	0	0	33	0	16	2	0	0	18	0	13	3	0	0	16	3	22	2	0	0	27	94	472
2024-11-20 09:30:00	0	25	2	0	0	27	0	13	1	0	0	14	3	11	2	0	0	16	5	31	1	0	0	37	94	427
2024-11-20 09:45:00	0	20	2	0	0	22	0	15	2	0	0	17	3	9	2	0	0	14	2	24	2	0	0	28	81	370
BREAK																										
2024-11-20 16:00:00	1	18	1	0	0	20	1	64	6	0	0	71	2	61	9	0	0	72	3	30	3	0	0	36	199	
2024-11-20 16:15:00	4	20	1	0	0	25	0	71	2	0	0	73	1	60	8	0	0	69	5	29	6	0	0	40	207	
2024-11-20 16:30:00	1	22	0	0	0	23	0	82	5	0	0	87	7	60	6	0	0	73	4	41	2	0	0	47	230	
2024-11-20 16:45:00	3	28	0	0	0	31	3	64	5	0	0	72	4	72	9	0	0	85	3	41	3	0	0	47	235	871
2024-11-20 17:00:00	4	21	0	0	0	25	0	74	4	0	0	78	6	51	13	0	0	70	4	45	3	0	0	52	225	897
2024-11-20 17:15:00	1	21	0	0	0	22	1	64	2	0	0	67	6	54	15	0	0	75	1	18	2	0	0	21	185	875
2024-11-20 17:30:00	0	22	0	0	0	22	1	81	2	0	0	84	1	48	13	0	0	62	6	35	2	0	0	43	211	856
2024-11-20 17:45:00	1	15	1	0	0	17	1	58	2	0	0	61	3	41	11	0	0	55	6	24	3	0	0	33	166	787
2024-11-20 18:00:00	1	19	0	0	0	20	0	69	0	0	0	69	2	33	11	0	0	46	4	31	2	0	0	37	172	734
2024-11-20 18:15:00	0	17	1	0	0	18	2	66	5	0	0	73	0	28	11	0	0	39	2	33	3	0	0	38	168	717
2024-11-20 18:30:00	2	20	1	0	0	23	0	63	2	0	0	65	0	14	7	0	0	21	2	18	2	0	0	22	131	637
2024-11-20 18:45:00	1	9	0	0	0	10	0	44	2	0	0	46	1	22	4	0	0	27	4	18	0	0	0	22	105	576
Grand Total	45	767	19	0	0	831	11	1001	51	0	0	1063	65	702	146	0	0	913	147	874	48	0	0	1069	**3876**	-
Approach%	5.4%	92.3%	2.3%	0%		-	1%	94.2%	4.8%	0%		-	7.1%	76.9%	16%	0%		-	13.8%	81.8%	4.5%	0%		-	-	-
Totals %	1.2%	19.8%	0.5%	0%		21.4%	0.3%	25.8%	1.3%	0%		27.4%	1.7%	18.1%	3.8%	0%		23.6%	3.8%	22.5%	1.2%	0%		27.6%	-	-
Heavy	1	13	3	0		-	1	18	0	0		-	2	5	4	0		-	5	23	1	0		-	-	-
Heavy %	2.2%	1.7%	15.8%	0%		-	9.1%	1.8%	0%	0%		-	3.1%	0.7%	2.7%	0%		-	3.4%	2.6%	2.1%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: TORBRAM ROAD & OLD SCHOOL ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Peak Hour: 07:30 AM - 08:30 AM **Weather: Overcast Clouds (7.52 °C)**

Start Time	N Approach TORBRAM ROAD						E Approach OLD SCHOOL ROAD						S Approach TORBRAM ROAD						W Approach OLD SCHOOL ROAD						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 07:30:00	3	77	0	0	0	80	0	18	1	0	0	19	0	16	3	0	0	19	15	53	0	0	0	68	186
2024-11-20 07:45:00	7	76	0	0	0	83	1	23	0	0	0	24	3	12	2	0	0	17	16	59	1	0	0	76	200
2024-11-20 08:00:00	4	59	1	0	0	64	1	13	3	0	0	17	1	14	1	0	0	16	13	49	2	0	0	64	161
2024-11-20 08:15:00	2	63	3	0	0	68	0	20	2	0	0	22	5	17	6	0	0	28	10	53	1	0	0	64	182
Grand Total	16	275	4	0	0	295	2	74	6	0	0	82	9	59	12	0	0	80	54	214	4	0	0	272	**729**
Approach%	5.4%	93.2%	1.4%	0%		-	2.4%	90.2%	7.3%	0%		-	11.3%	73.8%	15%	0%		-	19.9%	78.7%	1.5%	0%		-	**-**
Totals %	2.2%	37.7%	0.5%	0%		40.5%	0.3%	10.2%	0.8%	0%		11.2%	1.2%	8.1%	1.6%	0%		11%	7.4%	29.4%	0.5%	0%		37.3%	**-**
PHF	0.57	0.89	0.33	0		0.89	0.5	0.8	0.5	0		0.85	0.45	0.87	0.5	0		0.71	0.84	0.91	0.5	0		0.89	0.91
Heavy	0	1	1	0		2	0	1	0	0		1	1	1	2	0		4	4	4	0	0		8	15
Heavy %	0%	0.4%	25%	0%		0.7%	0%	1.4%	0%	0%		1.2%	11.1%	1.7%	16.7%	0%		5%	7.4%	1.9%	0%	0%		2.9%	2.1%
Lights	16	274	3	0		293	2	73	6	0		81	8	58	10	0		76	50	210	4	0		264	714
Lights %	100%	99.6%	75%	0%		99.3%	100%	98.6%	100%	0%		98.8%	88.9%	98.3%	83.3%	0%		95%	92.6%	98.1%	100%	0%		97.1%	97.9%
Single-Unit Trucks	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	1	1	0	0		2	3
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	1.4%	0%	0%		1.2%	0%	0%	0%	0%		0%	1.9%	0.5%	0%	0%		0.7%	0.4%
Buses	0	1	1	0		2	0	0	0	0		0	1	1	2	0		4	2	2	0	0		4	10
Buses %	0%	0.4%	25%	0%		0.7%	0%	0%	0%	0%		0%	11.1%	1.7%	16.7%	0%		5%	3.7%	0.9%	0%	0%		1.5%	1.4%
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	1	1	0	0		2	2
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	1.9%	0.5%	0%	0%		0.7%	0.3%

Spectrum

Turning Movement Count
Location Name: TORBRAM ROAD & OLD SCHOOL ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Peak Hour: 04:15 PM - 05:15 PM Weather: Mist (8.21 °C)

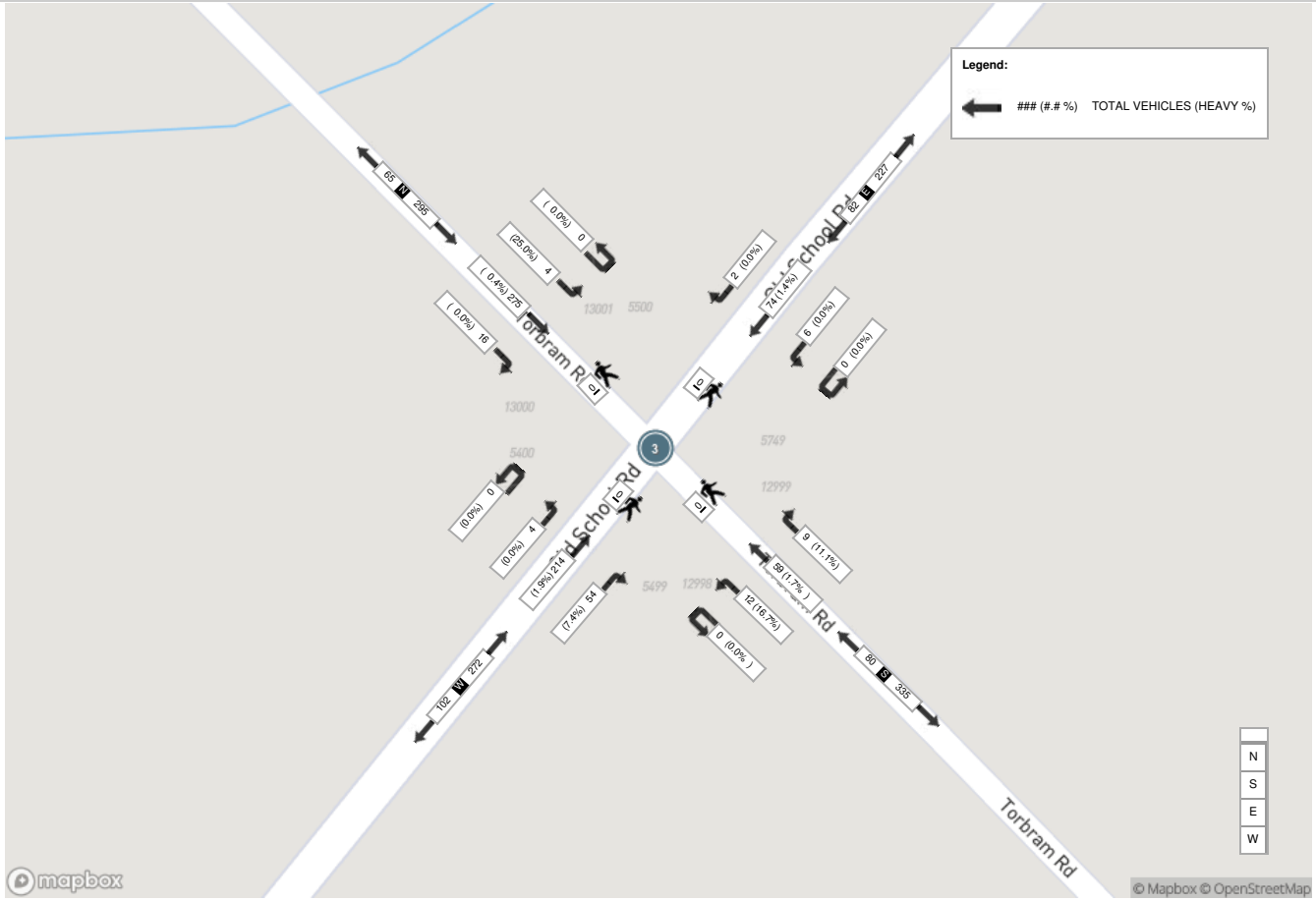
Start Time	N Approach TORBRAM ROAD						E Approach OLD SCHOOL ROAD						S Approach TORBRAM ROAD						W Approach OLD SCHOOL ROAD						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 16:15:00	4	20	1	0	0	25	0	71	2	0	0	73	1	60	8	0	0	69	5	29	6	0	0	40	207
2024-11-20 16:30:00	1	22	0	0	0	23	0	82	5	0	0	87	7	60	6	0	0	73	4	41	2	0	0	47	230
2024-11-20 16:45:00	3	28	0	0	0	31	3	64	5	0	0	72	4	72	9	0	0	85	3	41	3	0	0	47	235
2024-11-20 17:00:00	4	21	0	0	0	25	0	74	4	0	0	78	6	51	13	0	0	70	4	45	3	0	0	52	225
Grand Total	12	91	1	0	0	104	3	291	16	0	0	310	18	243	36	0	0	297	16	156	14	0	0	186	**897**
Approach%	11.5%	87.5%	1%	0%		-	1%	93.9%	5.2%	0%		-	6.1%	81.8%	12.1%	0%		-	8.6%	83.9%	7.5%	0%		-	**-**
Totals %	1.3%	10.1%	0.1%	0%		11.6%	0.3%	32.4%	1.8%	0%		34.6%	2%	27.1%	4%	0%		33.1%	1.8%	17.4%	1.6%	0%		20.7%	**-**
PHF	0.75	0.81	0.25	0		0.84	0.25	0.89	0.8	0		0.89	0.64	0.84	0.69	0		0.87	0.8	0.87	0.58	0		0.89	0.95
Heavy	0	3	1	0		4	0	4	0	0		4	1	0	0	0		1	0	5	0	0		5	14
Heavy %	0%	3.3%	100%	0%		3.8%	0%	1.4%	0%	0%		1.3%	5.6%	0%	0%	0%		0.3%	0%	3.2%	0%	0%		2.7%	1.6%
Lights	12	88	0	0		100	3	287	16	0		306	17	243	36	0		296	16	151	14	0		181	883
Lights %	100%	96.7%	0%	0%		96.2%	100%	98.6%	100%	0%		98.7%	94.4%	100%	100%	0%		99.7%	100%	96.8%	100%	0%		97.3%	98.4%
Single-Unit Trucks	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	0	2	0	0		2	4
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	0.7%	0%	0%		0.6%	0%	0%	0%	0%		0%	0%	1.3%	0%	0%		1.1%	0.4%
Buses	0	3	1	0		4	0	2	0	0		2	1	0	0	0		1	0	3	0	0		3	10
Buses %	0%	3.3%	100%	0%		3.8%	0%	0.7%	0%	0%		0.6%	5.6%	0%	0%	0%		0.3%	0%	1.9%	0%	0%		1.6%	1.1%
Articulated Trucks	0	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%	0%

Spectrum

Turning Movement Count
Location Name: TORBRAM ROAD & OLD SCHOOL ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Peak Hour: 07:30 AM - 08:30 AM **Weather: Overcast Clouds (7.52 °C)**

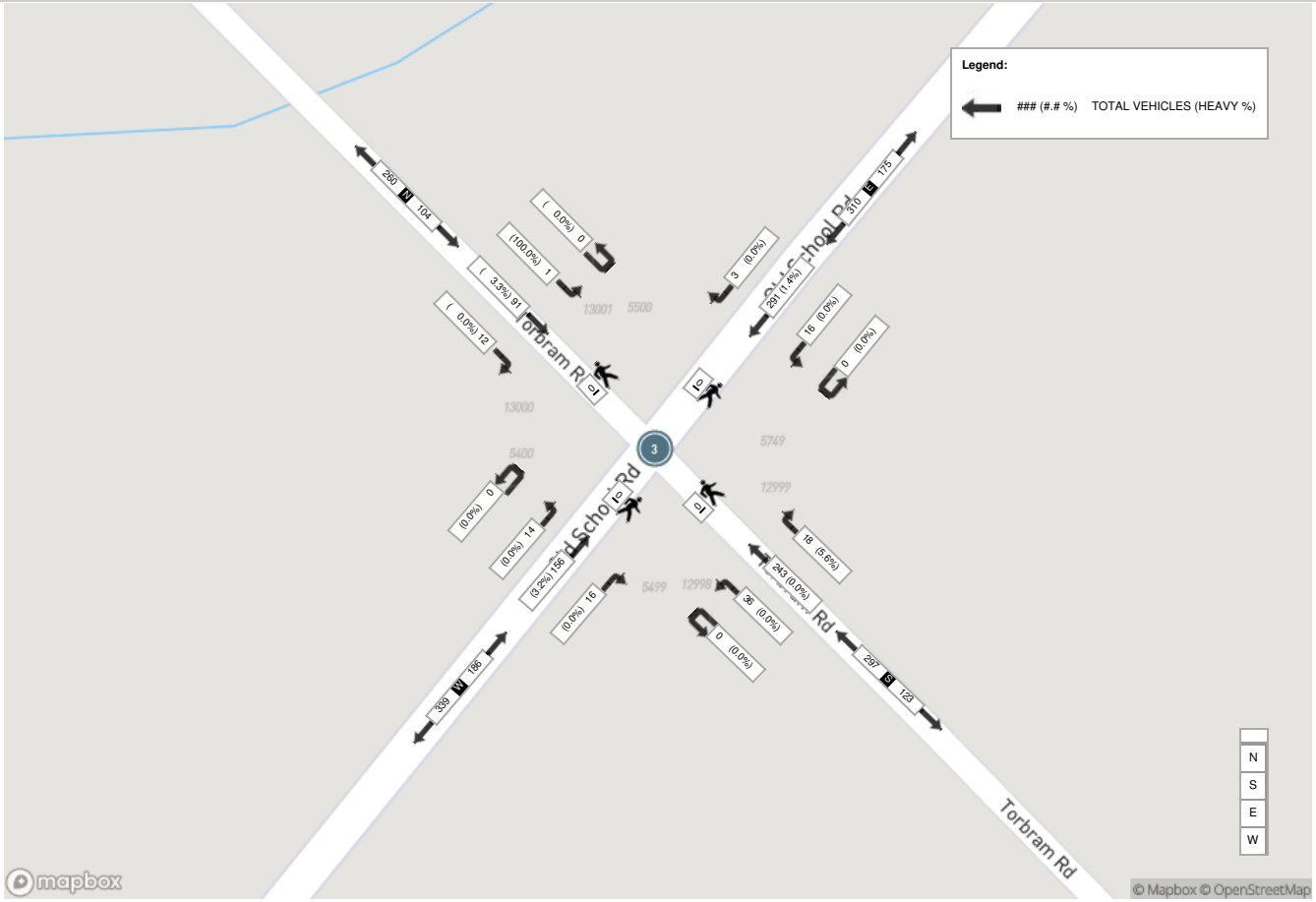


Spectrum

Turning Movement Count
Location Name: TORBRAM ROAD & OLD SCHOOL ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Peak Hour: 04:15 PM - 05:15 PM Weather: Mist (8.21 °C)



Spectrum

Turning Movement Count
Location Name: AIRPORT ROAD & 12333 AIRPORT ROAD SITE ACCESS
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Turning Movement Count (5 . AIRPORT ROAD & 12333 AIRPORT ROAD SITE ACCESS) CustID: 00718361 MioID: 1250791

Start Time	N Approach AIRPORT ROAD						E Approach 12333 AIRPORT ROAD SITE ACCESS						S Approach AIRPORT ROAD						W Approach 12333 AIRPORT ROAD SITE ACCESS						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
2024-11-20 07:00:00	0	84	2	0	0	86	1	0	11	0	1	12	8	70	0	2	0	80	0	0	0	0	0	0	178	
2024-11-20 07:15:00	0	126	1	0	0	127	1	0	8	0	1	9	8	65	0	0	0	73	0	0	0	0	0	0	209	
2024-11-20 07:30:00	0	167	2	0	0	169	0	0	6	0	5	6	5	58	0	1	0	64	0	0	0	0	0	0	239	
2024-11-20 07:45:00	0	122	4	0	0	126	0	0	9	0	2	9	15	75	0	0	0	90	0	0	0	0	0	0	225	851
2024-11-20 08:00:00	0	115	1	0	0	116	2	0	19	0	1	21	18	53	0	0	0	71	0	0	0	0	0	0	208	881
2024-11-20 08:15:00	0	130	0	0	0	130	0	0	10	0	0	10	12	56	0	0	0	68	0	0	0	0	0	0	208	880
2024-11-20 08:30:00	0	137	0	0	0	137	2	0	8	0	1	10	12	56	2	0	1	70	0	0	0	0	1	0	217	858
2024-11-20 08:45:00	0	102	0	0	0	102	0	0	10	0	0	10	7	54	0	0	0	61	0	0	0	0	0	0	173	806
2024-11-20 09:00:00	0	126	1	0	0	127	2	0	4	0	0	6	12	63	0	0	0	75	1	0	0	0	0	1	209	807
2024-11-20 09:15:00	0	105	0	0	0	105	0	0	6	0	0	6	8	27	0	0	0	35	0	0	0	1	0	1	147	746
2024-11-20 09:30:00	0	81	0	0	0	81	1	0	5	0	0	6	6	30	0	0	0	36	0	0	0	0	0	0	123	652
2024-11-20 09:45:00	0	69	0	0	0	69	0	0	4	0	0	4	10	48	0	2	0	60	0	0	0	0	0	0	133	612
BREAK																										
2024-11-20 16:00:00	0	89	1	0	0	90	0	0	11	0	0	11	2	126	0	0	0	128	0	0	0	0	1	0	229	
2024-11-20 16:15:00	0	88	0	0	0	88	1	0	9	0	1	10	8	153	0	0	0	161	0	0	0	0	0	0	259	
2024-11-20 16:30:00	0	90	1	0	0	91	4	0	18	0	0	22	8	117	0	1	0	126	0	0	0	0	0	0	239	
2024-11-20 16:45:00	0	84	1	0	0	85	2	0	7	0	2	9	9	154	0	1	0	164	0	0	0	0	0	0	258	985
2024-11-20 17:00:00	0	75	0	0	0	75	0	0	3	0	0	3	5	133	0	0	0	138	0	0	0	0	0	0	216	972
2024-11-20 17:15:00	0	94	0	0	0	94	0	0	15	0	0	15	3	117	0	0	0	120	0	0	0	0	0	0	229	942
2024-11-20 17:30:00	0	82	1	0	0	83	1	0	8	0	0	9	6	137	0	0	0	143	0	0	0	0	0	0	235	938
2024-11-20 17:45:00	0	95	2	0	0	97	0	0	12	0	0	12	1	87	0	0	0	88	0	0	0	0	0	0	197	877
2024-11-20 18:00:00	0	95	1	0	0	96	2	0	4	0	0	6	3	95	0	2	0	100	0	0	0	0	0	0	202	863
2024-11-20 18:15:00	0	64	0	0	0	64	0	0	7	0	0	7	1	99	0	0	0	100	0	0	0	0	0	0	171	805
2024-11-20 18:30:00	0	69	0	0	0	69	0	0	5	0	0	5	6	103	0	0	0	109	0	0	0	0	0	0	183	753
2024-11-20 18:45:00	0	50	0	0	0	50	1	0	4	0	0	5	6	77	0	1	0	84	0	0	0	0	0	0	139	695
Grand Total	0	2339	18	0	0	2357	20	0	203	0	14	223	179	2053	2	10	1	2244	1	0	0	1	2	2	**4826**	-
Approach%	0%	99.2%	0.8%	0%		-	9%	0%	91%	0%		-	8%	91.5%	0.1%	0.4%		-	50%	0%	0%	50%		-	-	-
Totals %	0%	48.5%	0.4%	0%		48.8%	0.4%	0%	4.2%	0%		4.6%	3.7%	42.5%	0%	0.2%		46.5%	0%	0%	0%	0%		0%	-	-
Heavy	0	301	8	0		-	6	0	95	0		-	81	221	2	0		-	1	0	0	0		-	-	-
Heavy %	0%	12.9%	44.4%	0%		-	30%	0%	46.8%	0%		-	45.3%	10.8%	100%	0%		-	100%	0%	0%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

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

Peak Hour: 07:15 AM - 08:15 AM Weather: Overcast Clouds (7.52 °C)

Start Time	N Approach AIRPORT ROAD						E Approach 12333 AIRPORT ROAD SITE ACCESS						S Approach AIRPORT ROAD						W Approach 12333 AIRPORT ROAD SITE ACCESS						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 07:15:00	0	126	1	0	0	127	1	0	8	0	1	9	8	65	0	0	0	73	0	0	0	0	0	0	209
2024-11-20 07:30:00	0	167	2	0	0	169	0	0	6	0	5	6	5	58	0	1	0	64	0	0	0	0	0	0	239
2024-11-20 07:45:00	0	122	4	0	0	126	0	0	9	0	2	9	15	75	0	0	0	90	0	0	0	0	0	0	225
2024-11-20 08:00:00	0	115	1	0	0	116	2	0	19	0	1	21	18	53	0	0	0	71	0	0	0	0	0	0	208
Grand Total	0	530	8	0	0	538	3	0	42	0	9	45	46	251	0	1	0	298	0	0	0	0	0	0	**881**
Approach%	0%	98.5%	1.5%	0%		-	6.7%	0%	93.3%	0%		-	15.4%	84.2%	0%	0.3%		-	0%	0%	0%	0%		-	**-**
Totals %	0%	60.2%	0.9%	0%		61.1%	0.3%	0%	4.8%	0%		5.1%	5.2%	28.5%	0%	0.1%		33.8%	0%	0%	0%	0%		0%	**-**
PHF	0	0.79	0.5	0		0.8	0.38	0	0.55	0		0.54	0.64	0.84	0	0.25		0.83	0	0	0	0		0	0.92
Heavy	0	58	3	0		61	1	0	23	0		24	12	43	0	0		55	0	0	0	0		0	140
Heavy %	0%	10.9%	37.5%	0%		11.3%	33.3%	0%	54.8%	0%		53.3%	26.1%	17.1%	0%	0%		18.5%	0%	0%	0%	0%		0%	15.9%
Lights	0	472	5	0		477	2	0	19	0		21	34	208	0	1		243	0	0	0	0		0	741
Lights %	0%	89.1%	62.5%	0%		88.7%	66.7%	0%	45.2%	0%		46.7%	73.9%	82.9%	0%	100%		81.5%	0%	0%	0%	0%		0%	84.1%
Single-Unit Trucks	0	23	2	0		25	0	0	10	0		10	6	14	0	0		20	0	0	0	0		0	55
Single-Unit Trucks %	0%	4.3%	25%	0%		4.6%	0%	0%	23.8%	0%		22.2%	13%	5.6%	0%	0%		6.7%	0%	0%	0%	0%		0%	6.2%
Buses	0	6	0	0		6	0	0	1	0		1	0	11	0	0		11	0	0	0	0		0	18
Buses %	0%	1.1%	0%	0%		1.1%	0%	0%	2.4%	0%		2.2%	0%	4.4%	0%	0%		3.7%	0%	0%	0%	0%		0%	2%
Articulated Trucks	0	29	1	0		30	1	0	12	0		13	6	18	0	0		24	0	0	0	0		0	67
Articulated Trucks %	0%	5.5%	12.5%	0%		5.6%	33.3%	0%	28.6%	0%		28.9%	13%	7.2%	0%	0%		8.1%	0%	0%	0%	0%		0%	7.6%
Pedestrians	-	-	-	-	0	-	-	-	-	-	9	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	100%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

Turning Movement Count
Location Name: AIRPORT ROAD & 12333 AIRPORT ROAD SITE ACCESS
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

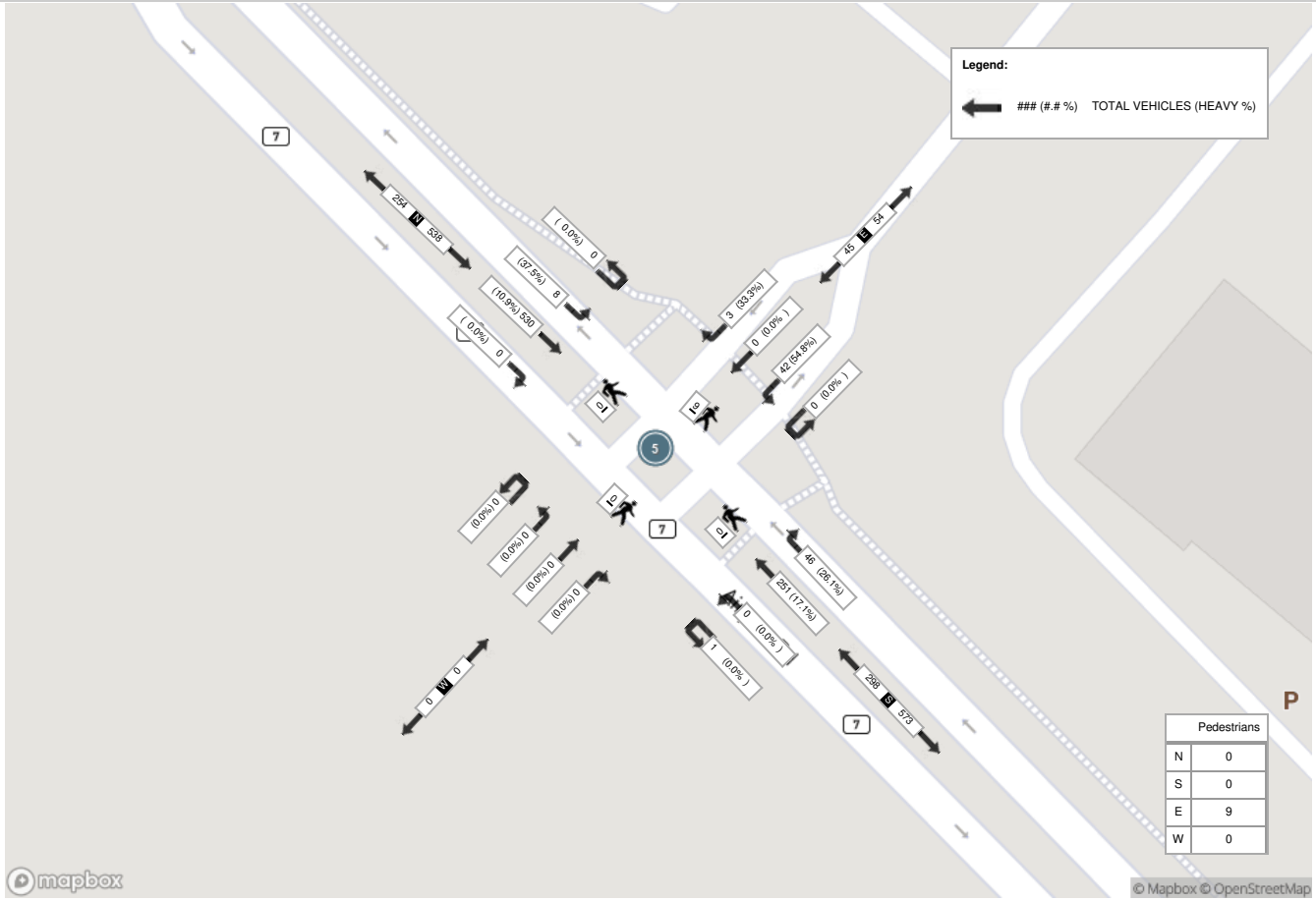
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 04:00 PM - 05:00 PM Weather: Mist (8.21 °C)

Start Time	N Approach AIRPORT ROAD						E Approach 12333 AIRPORT ROAD SITE ACCESS						S Approach AIRPORT ROAD						W Approach 12333 AIRPORT ROAD SITE ACCESS						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 16:00:00	0	89	1	0	0	90	0	0	11	0	0	11	2	126	0	0	0	128	0	0	0	0	1	0	229
2024-11-20 16:15:00	0	88	0	0	0	88	1	0	9	0	1	10	8	153	0	0	0	161	0	0	0	0	0	0	259
2024-11-20 16:30:00	0	90	1	0	0	91	4	0	18	0	0	22	8	117	0	1	0	126	0	0	0	0	0	0	239
2024-11-20 16:45:00	0	84	1	0	0	85	2	0	7	0	2	9	9	154	0	1	0	164	0	0	0	0	0	0	258
Grand Total	0	351	3	0	0	354	7	0	45	0	3	52	27	550	0	2	0	579	0	0	0	0	1	0	**985**
Approach%	0%	99.2%	0.8%	0%		-	13.5%	0%	86.5%	0%		-	4.7%	95%	0%	0.3%		-	0%	0%	0%	0%		-	**-**
Totals %	0%	35.6%	0.3%	0%		35.9%	0.7%	0%	4.6%	0%		5.3%	2.7%	55.8%	0%	0.2%		58.8%	0%	0%	0%	0%		0%	**-**
PHF	0	0.98	0.75	0		0.97	0.44	0	0.63	0		0.59	0.75	0.89	0	0.5		0.88	0	0	0	0		0	0.95
Heavy	0	52	1	0		53	0	0	18	0		18	13	37	0	0		50	0	0	0	0		0	121
Heavy %	0%	14.8%	33.3%	0%		15%	0%	0%	40%	0%		34.6%	48.1%	6.7%	0%	0%		8.6%	0%	0%	0%	0%		0%	12.3%
Lights	0	299	2	0		301	7	0	27	0		34	14	513	0	2		529	0	0	0	0		0	864
Lights %	0%	85.2%	66.7%	0%		85%	100%	0%	60%	0%		65.4%	51.9%	93.3%	0%	100%		91.4%	0%	0%	0%	0%		0%	87.7%
Single-Unit Trucks	0	17	1	0		18	0	0	8	0		8	4	12	0	0		16	0	0	0	0		0	42
Single-Unit Trucks %	0%	4.8%	33.3%	0%		5.1%	0%	0%	17.8%	0%		15.4%	14.8%	2.2%	0%	0%		2.8%	0%	0%	0%	0%		0%	4.3%
Buses	0	18	0	0		18	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	19
Buses %	0%	5.1%	0%	0%		5.1%	0%	0%	0%	0%		0%	0%	0.2%	0%	0%		0.2%	0%	0%	0%	0%		0%	1.9%
Articulated Trucks	0	17	0	0		17	0	0	10	0		10	9	24	0	0		33	0	0	0	0		0	60
Articulated Trucks %	0%	4.8%	0%	0%		4.8%	0%	0%	22.2%	0%		19.2%	33.3%	4.4%	0%	0%		5.7%	0%	0%	0%	0%		0%	6.1%
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	75%		-	-	-	-	0%		-	-	-	-	25%		**-**

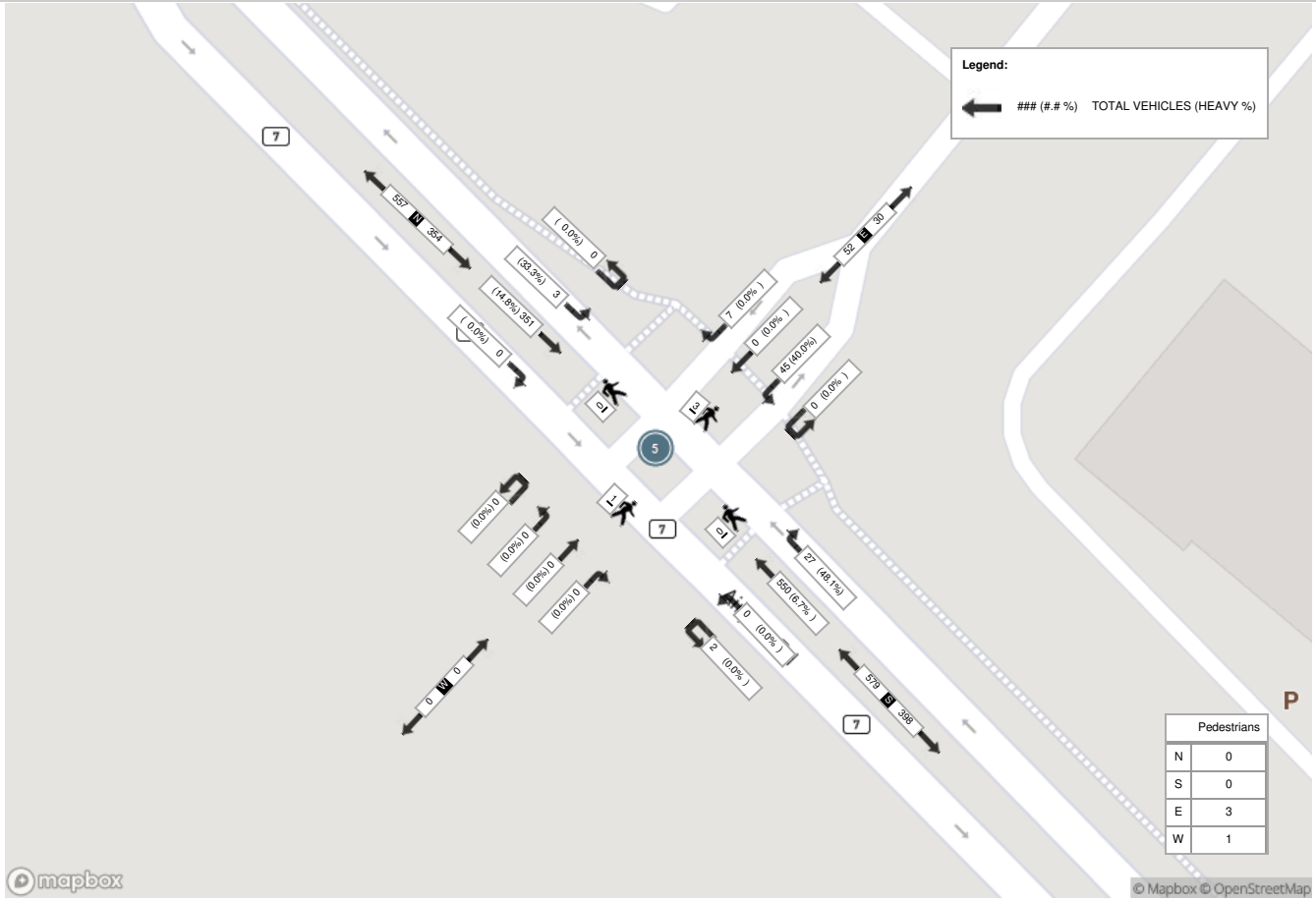
Crozier & Associates
SUITE 301 211 YONGE
STREET
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:15 AM - 08:15 AM **Weather: Overcast Clouds (7.52 °C)**



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

Peak Hour: 04:00 PM - 05:00 PM **Weather: Mist (8.21 °C)**



Spectrum

Turning Movement Count
Location Name: AIRPORT ROAD & OLD SCHOOL ROAD / HEALY ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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

Turning Movement Count (4 . AIRPORT ROAD & OLD SCHOOL ROAD / HEALY ROAD) MioID: 1250780

Start Time	N Approach AIRPORT ROAD						E Approach HEALY ROAD						S Approach AIRPORT ROAD						W Approach OLD SCHOOL ROAD						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
2024-11-20 07:00:00	1	92	1	0	0	94	1	16	7	0	0	24	33	37	2	0	0	72	1	31	6	0	0	38	228	
2024-11-20 07:15:00	3	129	3	0	0	135	1	25	11	0	0	37	27	33	1	0	0	61	7	32	2	0	0	41	274	
2024-11-20 07:30:00	1	118	5	0	0	124	1	18	13	0	0	32	31	30	1	0	0	62	12	50	1	0	0	63	281	
2024-11-20 07:45:00	1	100	3	0	0	104	1	20	13	0	0	34	22	48	3	0	0	73	9	45	5	0	0	59	270	1053
2024-11-20 08:00:00	6	90	1	0	0	97	0	16	13	0	0	29	19	25	3	0	0	47	11	40	2	0	0	53	226	1051
2024-11-20 08:15:00	2	118	2	0	0	122	3	15	11	0	0	29	13	37	0	0	0	50	8	38	6	0	0	52	253	1030
2024-11-20 08:30:00	1	99	4	0	0	104	1	13	16	0	0	30	11	48	2	0	0	61	11	47	4	0	0	62	257	1006
2024-11-20 08:45:00	0	75	4	0	0	79	1	11	12	0	0	24	13	36	0	0	0	49	10	38	2	0	0	50	202	938
2024-11-20 09:00:00	4	90	1	0	0	95	2	14	19	0	0	35	18	36	0	0	0	54	12	30	3	0	0	45	229	941
2024-11-20 09:15:00	7	78	2	0	0	87	1	7	12	0	0	20	4	33	1	0	0	38	4	20	2	0	0	26	171	859
2024-11-20 09:30:00	3	80	0	0	0	83	1	9	9	0	0	19	9	14	2	0	0	25	3	28	4	0	0	35	162	764
2024-11-20 09:45:00	4	49	1	0	0	54	0	8	11	0	0	19	10	35	3	0	0	48	6	18	3	0	0	27	148	710
BREAK																										
2024-11-20 16:00:00	6	50	0	0	0	56	4	62	30	0	0	96	21	99	5	0	0	125	5	32	5	0	0	42	319	
2024-11-20 16:15:00	5	52	3	0	0	60	2	64	28	0	0	94	16	108	7	0	0	131	4	20	3	0	0	27	312	
2024-11-20 16:30:00	4	57	3	0	0	64	1	69	23	0	0	93	16	102	4	0	0	122	6	38	8	0	0	52	331	
2024-11-20 16:45:00	6	58	2	0	0	66	4	56	27	0	0	87	22	112	9	0	0	143	6	32	4	0	0	42	338	1300
2024-11-20 17:00:00	5	47	2	0	0	54	2	65	20	0	0	87	17	105	7	0	0	129	6	41	6	0	0	53	323	1304
2024-11-20 17:15:00	7	51	2	0	0	60	2	56	28	0	0	86	11	104	4	0	0	119	2	16	9	0	0	27	292	1284
2024-11-20 17:30:00	5	49	1	0	0	55	4	73	31	0	0	108	20	114	11	0	0	145	2	32	1	0	0	35	343	1296
2024-11-20 17:45:00	7	57	1	0	0	65	3	54	33	0	0	90	13	69	4	0	0	86	3	26	3	0	0	32	273	1231
2024-11-20 18:00:00	4	53	0	0	0	57	0	56	24	0	0	80	21	94	3	0	0	118	3	24	1	0	0	28	283	1191
2024-11-20 18:15:00	5	30	1	0	0	36	2	65	27	0	0	94	16	65	3	0	0	84	3	31	2	0	0	36	250	1149
2024-11-20 18:30:00	2	42	3	0	0	47	10	53	23	0	0	86	21	79	4	0	0	104	2	13	0	0	0	15	252	1058
2024-11-20 18:45:00	8	33	2	0	0	43	0	34	19	0	0	53	6	72	4	0	0	82	4	15	1	0	0	20	198	983
Grand Total	97	1697	47	0	0	1841	47	879	460	0	0	1386	410	1535	83	0	0	2028	140	737	83	0	0	960	**6215**	-
Approach%	5.3%	92.2%	2.6%	0%		-	3.4%	63.4%	33.2%	0%		-	20.2%	75.7%	4.1%	0%		-	14.6%	76.8%	8.6%	0%		-	**-**	-
Totals %	1.6%	27.3%	0.8%	0%		29.6%	0.8%	14.1%	7.4%	0%		22.3%	6.6%	24.7%	1.3%	0%		32.6%	2.3%	11.9%	1.3%	0%		15.4%	**-**	-
Heavy	2	262	9	0		-	6	15	35	0		-	29	158	7	0		-	10	11	7	0		-	**-**	-
Heavy %	2.1%	15.4%	19.1%	0%		-	12.8%	1.7%	7.6%	0%		-	7.1%	10.3%	8.4%	0%		-	7.1%	1.5%	8.4%	0%		-	**-**	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-

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

Peak Hour: 07:00 AM - 08:00 AM Weather: Overcast Clouds (7.52 °C)

Start Time	N Approach AIRPORT ROAD						E Approach HEALY ROAD						S Approach AIRPORT ROAD						W Approach OLD SCHOOL ROAD						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 07:00:00	1	92	1	0	0	94	1	16	7	0	0	24	33	37	2	0	0	72	1	31	6	0	0	38	228
2024-11-20 07:15:00	3	129	3	0	0	135	1	25	11	0	0	37	27	33	1	0	0	61	7	32	2	0	0	41	274
2024-11-20 07:30:00	1	118	5	0	0	124	1	18	13	0	0	32	31	30	1	0	0	62	12	50	1	0	0	63	281
2024-11-20 07:45:00	1	100	3	0	0	104	1	20	13	0	0	34	22	48	3	0	0	73	9	45	5	0	0	59	270
Grand Total	6	439	12	0	0	457	4	79	44	0	0	127	113	148	7	0	0	268	29	158	14	0	0	201	**1053**
Approach%	1.3%	96.1%	2.6%	0%		-	3.1%	62.2%	34.6%	0%		-	42.2%	55.2%	2.6%	0%		-	14.4%	78.6%	7%	0%		-	**-**
Totals %	0.6%	41.7%	1.1%	0%		43.4%	0.4%	7.5%	4.2%	0%		12.1%	10.7%	14.1%	0.7%	0%		25.5%	2.8%	15%	1.3%	0%		19.1%	**-**
PHF	0.5	0.85	0.6	0		0.85	1	0.79	0.85	0		0.86	0.86	0.77	0.58	0		0.92	0.6	0.79	0.58	0		0.8	0.94
Heavy	1	53	2	0		56	0	3	3	0		6	7	37	1	0		45	1	2	3	0		6	113
Heavy %	16.7%	12.1%	16.7%	0%		12.3%	0%	3.8%	6.8%	0%		4.7%	6.2%	25%	14.3%	0%		16.8%	3.4%	1.3%	21.4%	0%		3%	10.7%
Lights	5	386	10	0		401	4	76	41	0		121	106	111	6	0		223	28	156	11	0		195	940
Lights %	83.3%	87.9%	83.3%	0%		87.7%	100%	96.2%	93.2%	0%		95.3%	93.8%	75%	85.7%	0%		83.2%	96.6%	98.7%	78.6%	0%		97%	89.3%
Single-Unit Trucks	1	20	0	0		21	0	2	2	0		4	2	16	0	0		18	1	2	1	0		4	47
Single-Unit Trucks %	16.7%	4.6%	0%	0%		4.6%	0%	2.5%	4.5%	0%		3.1%	1.8%	10.8%	0%	0%		6.7%	3.4%	1.3%	7.1%	0%		2%	4.5%
Buses	0	3	2	0		5	0	0	0	0		0	5	10	1	0		16	0	0	2	0		2	23
Buses %	0%	0.7%	16.7%	0%		1.1%	0%	0%	0%	0%		0%	4.4%	6.8%	14.3%	0%		6%	0%	0%	14.3%	0%		1%	2.2%
Articulated Trucks	0	30	0	0		30	0	1	1	0		2	0	11	0	0		11	0	0	0	0		0	43
Articulated Trucks %	0%	6.8%	0%	0%		6.6%	0%	1.3%	2.3%	0%		1.6%	0%	7.4%	0%	0%		4.1%	0%	0%	0%	0%		0%	4.1%

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

Peak Hour: 04:15 PM - 05:15 PM Weather: Mist (8.21 °C)

Start Time	N Approach AIRPORT ROAD						E Approach HEALY ROAD						S Approach AIRPORT ROAD						W Approach OLD SCHOOL ROAD						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2024-11-20 16:15:00	5	52	3	0	0	60	2	64	28	0	0	94	16	108	7	0	0	131	4	20	3	0	0	27	312
2024-11-20 16:30:00	4	57	3	0	0	64	1	69	23	0	0	93	16	102	4	0	0	122	6	38	8	0	0	52	331
2024-11-20 16:45:00	6	58	2	0	0	66	4	56	27	0	0	87	22	112	9	0	0	143	6	32	4	0	0	42	338
2024-11-20 17:00:00	5	47	2	0	0	54	2	65	20	0	0	87	17	105	7	0	0	129	6	41	6	0	0	53	323
Grand Total	20	214	10	0	0	244	9	254	98	0	0	361	71	427	27	0	0	525	22	131	21	0	0	174	**1304**
Approach%	8.2%	87.7%	4.1%	0%		-	2.5%	70.4%	27.1%	0%		-	13.5%	81.3%	5.1%	0%		-	12.6%	75.3%	12.1%	0%		-	**-**
Totals %	1.5%	16.4%	0.8%	0%		18.7%	0.7%	19.5%	7.5%	0%		27.7%	5.4%	32.7%	2.1%	0%		40.3%	1.7%	10%	1.6%	0%		13.3%	**-**
PHF	0.83	0.92	0.83	0		0.92	0.56	0.92	0.88	0		0.96	0.81	0.95	0.75	0		0.92	0.92	0.8	0.66	0		0.82	0.96
Heavy	1	48	1	0		50	1	2	4	0		7	3	22	2	0		27	3	3	2	0		8	92
Heavy %	5%	22.4%	10%	0%		20.5%	11.1%	0.8%	4.1%	0%		1.9%	4.2%	5.2%	7.4%	0%		5.1%	13.6%	2.3%	9.5%	0%		4.6%	7.1%
Lights	19	166	9	0		194	8	252	94	0		354	68	405	25	0		498	19	128	19	0		166	1212
Lights %	95%	77.6%	90%	0%		79.5%	88.9%	99.2%	95.9%	0%		98.1%	95.8%	94.8%	92.6%	0%		94.9%	86.4%	97.7%	90.5%	0%		95.4%	92.9%
Single-Unit Trucks	1	21	1	0		23	1	0	1	0		2	1	12	2	0		15	0	2	1	0		3	43
Single-Unit Trucks %	5%	9.8%	10%	0%		9.4%	11.1%	0%	1%	0%		0.6%	1.4%	2.8%	7.4%	0%		2.9%	0%	1.5%	4.8%	0%		1.7%	3.3%
Buses	0	9	0	0		9	0	2	3	0		5	1	0	0	0		1	3	1	1	0		5	20
Buses %	0%	4.2%	0%	0%		3.7%	0%	0.8%	3.1%	0%		1.4%	1.4%	0%	0%	0%		0.2%	13.6%	0.8%	4.8%	0%		2.9%	1.5%
Articulated Trucks	0	18	0	0		18	0	0	0	0		0	1	10	0	0		11	0	0	0	0		0	29
Articulated Trucks %	0%	8.4%	0%	0%		7.4%	0%	0%	0%	0%		0%	1.4%	2.3%	0%	0%		2.1%	0%	0%	0%	0%		0%	2.2%

Spectrum

Turning Movement Count
Location Name: AIRPORT ROAD & OLD SCHOOL ROAD / HEALY ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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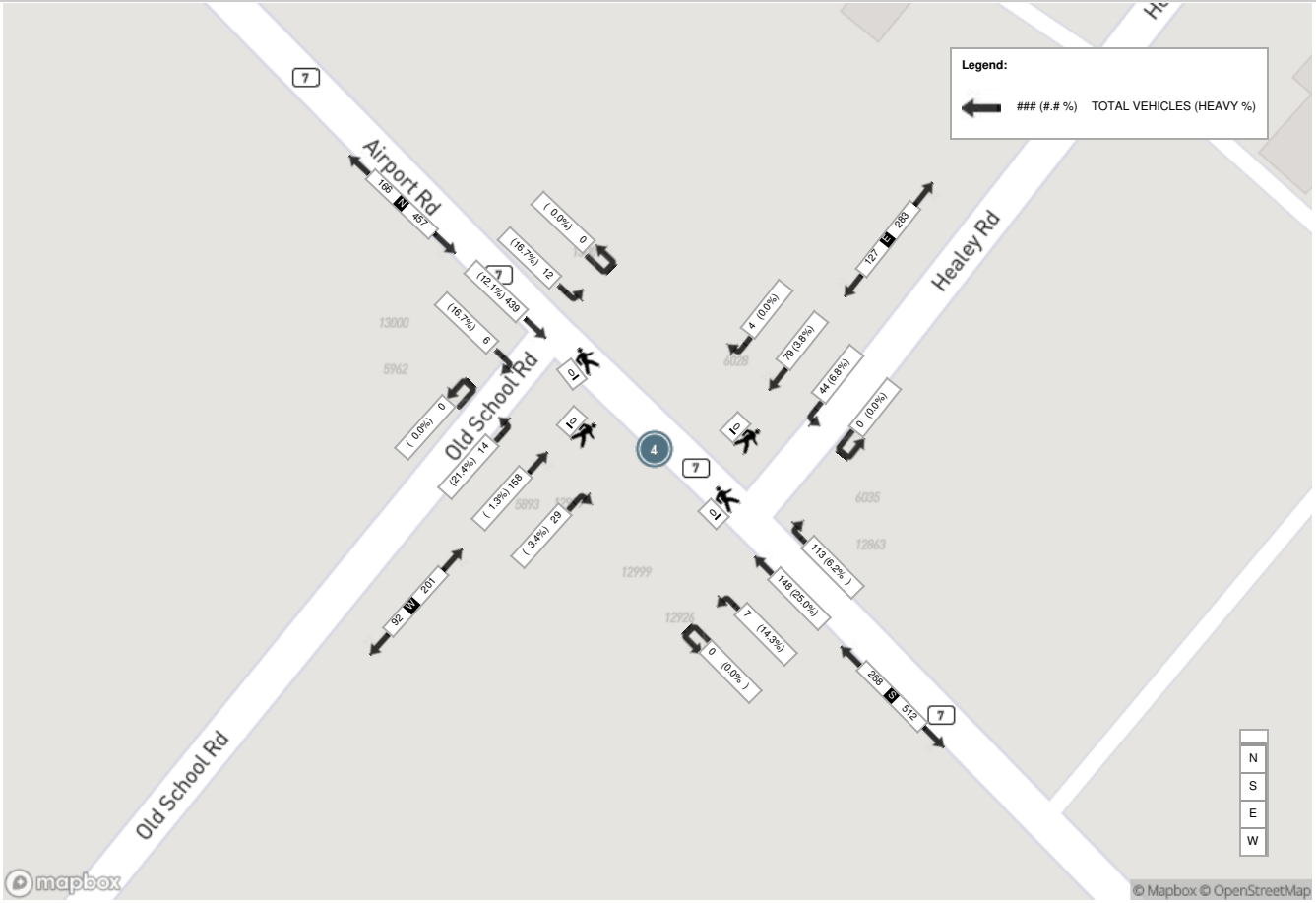
TORONTO ONTARIO, M5B 1M4
CANADA

Peak Hour: 07:00 AM - 08:00 AM **Weather: Overcast Clouds (7.52 °C)**



Spectrum

Turning Movement Count
Location Name: AIRPORT ROAD & OLD SCHOOL ROAD / HEALY ROAD
Date: Wed, Nov 20, 2024 Deployment Lead: Rey Fernandez

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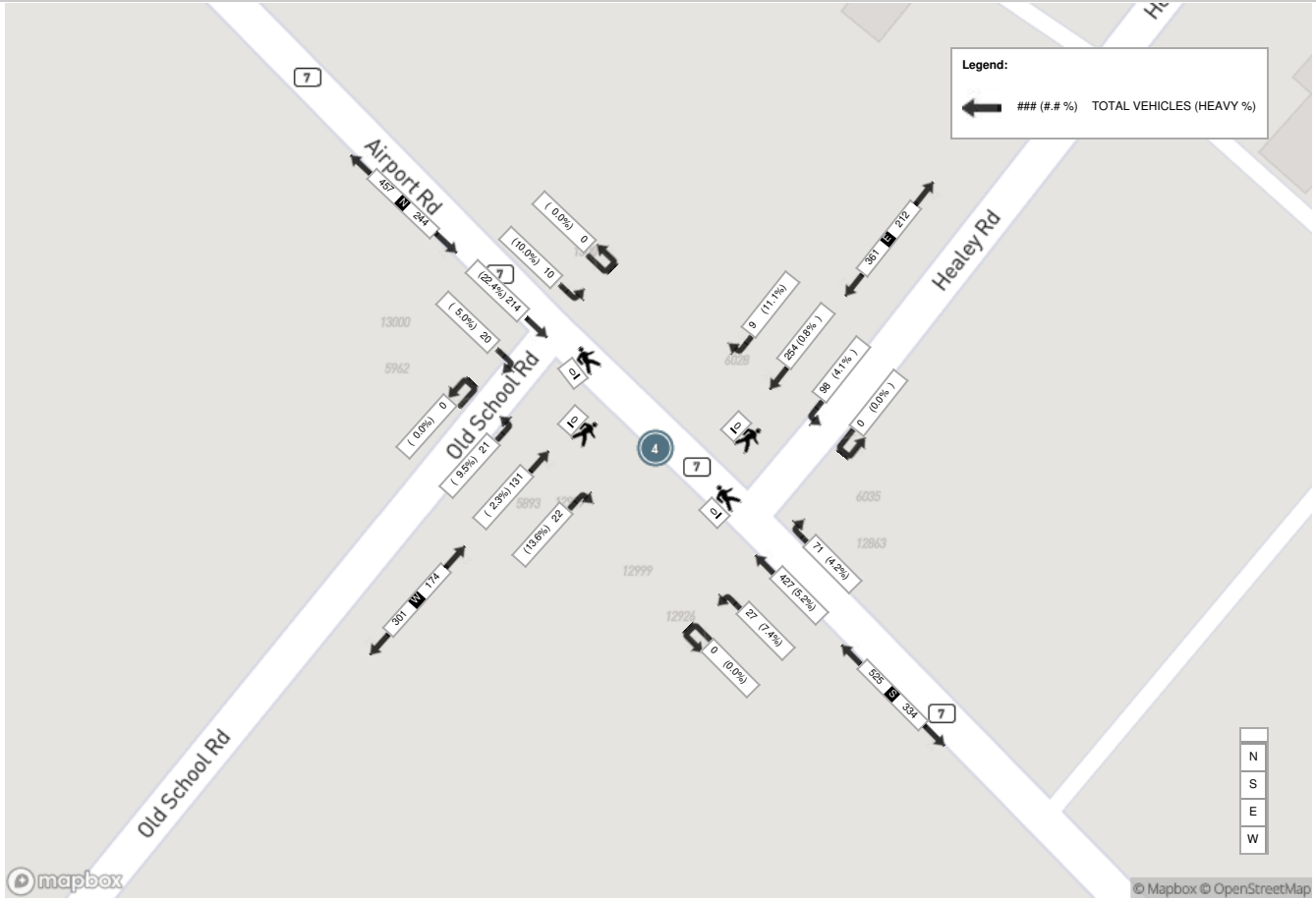
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Mist (8.21 °C)



REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**Oct. 08, 2024**		**Prepared Date**	**Oct. 08, 2024**
Database Rev	**MaxView**		**Completed By**	**A.P**
Timing Card / Field rev	**N/A**		**Checked By**	**S.A**

Location — **Airport Road @ Mayfield Road**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
1	Airport Road - NB P.P. LT.	5.0	0.0	0.0	3.0	0.0	12.0	12.0	12.0
2	Airport Road - SB	12.0	12.0	23.0	4.0	2.9	43.0	43.0	43.0
3	Mayfield Road - EB P.P. LT.	5.0	0.0	0.0	3.0	0.0	15.0	15.0	25.0
4	Mayfield Road - WB	12.0	12.0	27.0	4.0	3.1	50.0	50.0	55.0
5	Airport Road - SB P.P.LT.	5.0	0.0	0.0	3.0	0.0	12.0	12.0	12.0
6	Airport Road - NB	12.0	12.0	23.0	4.0	2.9	43.0	43.0	43.0
7	Mayfield Road - WB P.P. LT.	5.0	0.0	0.0	3.0	0.0	15.0	15.0	25.0
8	Mayfield Road - EB	12.0	12.0	27.0	4.0	3.1	50.0	50.0	55.0

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	**Oct. 08, 2024**	**Prepared Date**	**Oct. 08, 2024**
Database Rev	**MaxView**	**Completed By**	**A.P**
Timing Card / Field rev	**N/A**	**Checked By**	**S.A**

Location: **Mayfield Road @ Torbram Road**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
1	Mayfield Road - WB P.P. LT.	5.0	0.0	0.0	3.0	0.0	10.0	10.0	10.0
2	Mayfield Road - EB	16.0	8.0	35.0	4.6	2.7	60.0	40.0	75.0
3	Not in Use	-	-	-	-	-	-	-	-
4	Torbram Road - NB	12.0	8.0	28.0	4.2	2.9	50.0	50.0	50.0
5	Mayfield Road - EB P.P. LT.	5.0	0.0	0.0	3.0	0.0	10.0	10.0	10.0
6	Mayfield Road - WB	16.0	8.0	35.0	4.6	2.7	60.0	40.0	75.0
7	Not in Use	-	-	-	-	-	-	-	-
8	Torbram Road - SB	12.0	8.0	28.0	4.2	2.9	50.0	50.0	50.0

System Control
Yes

Semi-Actuated Mode
Yes

TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
06:00 - 09:00	AM	120	35
09:00 - 15:00	OFF	100	0
15:00 - 19:00	PM	135	43

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**Oct. 16, 2024**		**Prepared Date**	**Oct. 16, 2024**
Database Rev	**MaxView**		**Completed By**	**A.P**
Timing Card / Field rev	**N/A**		**Checked By**	**S.A**

Location	**Airport Road @ Street "A"**

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	82	62	82
3	Not in Use	-	-	-	-	-	-	-	-
4	Street "A"	12	8	20	4	4.2	38	38	38
5	Not in Use	-	-	-	-	-	-	-	-
6	Airport Road - NB	12	8	21	4.6	2	82	62	82
7	Not in Use	-	-	-	-	-	-	-	-
8	Computer Phase	12	8	20	4	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	**Nov. 07, 2024**		**Prepared Date**	**Nov. 07, 2024**
Database Rev	**Rev. 2**		**Completed By**	**A.P**
Timing Card / Field rev	**N/A**		**Checked By**	**M.H**

Location — **Airport Road @ Old School Road/ Healey Road**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
1	Not in Use	-	-	-	-	-	-	-	-
2	Airport Road - SB	12.0	10.0	5.0	4.6	3.1	70.0	40.0	60.0
3	Old School Road - EB + OL SB RT	8.0	10.0	10.0	4.2	2.0	25.0	15.0	28.0
4	Healey Road - WB + OL NB RT	8.0	10.0	10.0	4.2	2.0	25.0	25.0	42.0
5	Not in Use	-	-	-	-	-	-	-	-
6	Airport Road - NB	12.0	10.0	5.0	4.6	3.1	70.0	40.0	60.0
7	Not in Use	-	-	-	-	-	-	-	-
8	Computer Phase	8.0	10.0	10.0	4.2	2.0	50.0	40.0	70.0

System Control
No

Semi-Actuated Mode
Yes

TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
06:00 - 09:00	AM	120	0
09:00 - 15:00	OFF	80	0
15:00 - 19:00	PM	130	0

APPENDIX C:

Tullamore Northwest Employment Area Secondary Plan Transportation Study Excerpts

TRANSPORTATION STUDY UPDATE

TULLAMORE NORTHWEST EMPLOYMENT AREA SECONDARY PLAN

TOWN OF CALEDON
REGION OF PEEL

PREPARED FOR:

BROCCOLINI AIRPORT ROAD LP

PREPARED BY:

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

FIRST SUBMISSION: MAY 2025
SECOND SUBMISSION: FEBRUARY 2026

CFCA FILE NO. 2778-7228

The material in this report 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.

CROZIER

6.0 Tullamore Northwest Employment Area Transportation Context

6.1 Proposed Collector Road Network (NEW)

Within the Tullamore Northwest Employment Area Secondary Plan, a preliminary internal collector road network is proposed to support connectivity to the external study road network. As the Secondary Plan application is being submitted to allow for the site-specific application(s) for the Broccolini property to be advanced, a preliminary collector road network has been prepared. However, this preliminary layout is subject to change as part of the future Draft Plan and Detail Design applications.

Currently, 2 collector roadways are proposed, an east-west collector road and a north-south collector road. These collector roadways are anticipated to have a 26 m right-of-way.

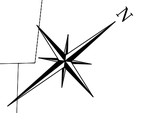
The east-west collector road (herein referred to as E-W Collector Road) is proposed to form part of the continuous east-west collector road envisioned by the Town, as outlined in **Section 4.2.6**, and will span between Airport Road and Torbram Road within the Secondary Plan limits. Segments beyond Airport Road and Torbram Road will be built out as part of redevelopment of adjacent Secondary Plan areas.

The north-south collector road is the proposed extension of Ionic Drive, spanning from the southern limits of the Tullamore Northwest Employment Area Secondary Plan to Old School Road.

Due to the skew of the E-W Collector Road, it is anticipated that a roundabout be proposed at the intersection of E-W Collector Road & Ionic Drive. It is noted that the need for a roundabout will be reviewed as part of a future Draft Plan or Detailed Design application and the intersection control is subject to change. Nevertheless, the intersection was modelled as a roundabout for the purpose of operations analysis herein.

The Conceptual Collector Road Layout was prepared to illustrate that a continuous north-south and east-west collector road network can be established within the Secondary Plan area and can respond to environmental constraints while providing multi-modal connectivity. The final alignment will be finalized as part of future site-specific applications. While some constraints were considered, such as the Natural Heritage System and property boundaries, these constraints should be reviewed and confirmed as part of subsequent site-specific works.

Figure 15 illustrates the Conceptual Collector Road Network.



OLD SCHOOL ROAD

HEALY ROAD

TORBRAM ROAD

IONIC DRIVE

AIRPORT ROAD

E-W COLLECTOR ROAD

POTENTIAL ROUNDABOUT

E-W COLLECTOR ROAD

100 0m 100 200

SCALE: 1:3000

LEGEND

- Road
- Watercourse (Fish Habitat)

Natural Features and Natural Hazards

- Occupied Redside Dace Habitat (Meander Belt +30m)
- Candidate Significant Wetland, NRSI
- Candidate Significant Wetland, GEI
- Unevaluated Wetland, NRSI
- Unevaluated Wetland, GEI
- Significant Valleyland (TRCA)
- Significant Valleyland (TRCA, MTE, GEI)
- Significant Woodland
- Non-Significant Woodland
- Flood Hazard (TRCA 2024)
- Meander Belt (Geo Morphix)
- Meander Belt (TRCA)
- Long Term Stable Top of Slope (MTE)

Natural Feature Buffers and Natural Hazard Setbacks

- Fish Habitat (Watercourse +15m)
- Unevaluated Wetland +15m
- Candidate Significant Wetland +30m
- Significant Valleyland +15m
- Woodland +10m
- Floodline +10m
- Meander Belt +10m

Proposed Natural Hazards and Setbacks

- Natural Heritage Features and Hazards
- Hatural Heritage Features and Hazard Setbacks

NOTES:

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6. THE CONCEPTUAL COLLECTOR ROAD NETWORK WILL BE REVIEWED AND CONFIRMED AS PART OF FUTURE SITE-SPECIFIC DEVELOPMENT APPLICATIONS. AS SUCH, DETAILS ARE SUBJECT TO CHANGE.
7. ENVIRONMENTAL CONSTRAINTS PER 8-9 OF THE BROCCOLINI AIRPORT ROAD MESR.

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 2nd SUBMISSION	02/27/2026

Engineer

Engineer

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

Project
TULLAMORE NORTHWEST SECONDARY PLAN
TOWN OF CALEDON

Drawing
CONCEPTUAL COLLECTOR ROAD NETWORK

CROZIER
CONSULTING ENGINEERS

Drawn By	I.M./R.L./I.A.	Design By		Project	2278-7228
Check By	M.L./M.Y.	Check By	S.S.	Drawing	FIG 15

Given the proposed connection to the Tullamore Industrial Business Park via the Ionic Drive extension, it is expected that internal collector road network would provide continuity with the approved cross-section. **Figure 16** illustrates the proposed 26 m cross-section for Ionic Drive, as outlined in the Tullamore Industrial Business Park Transportation Impact Study Update (Crozier, April 2025).

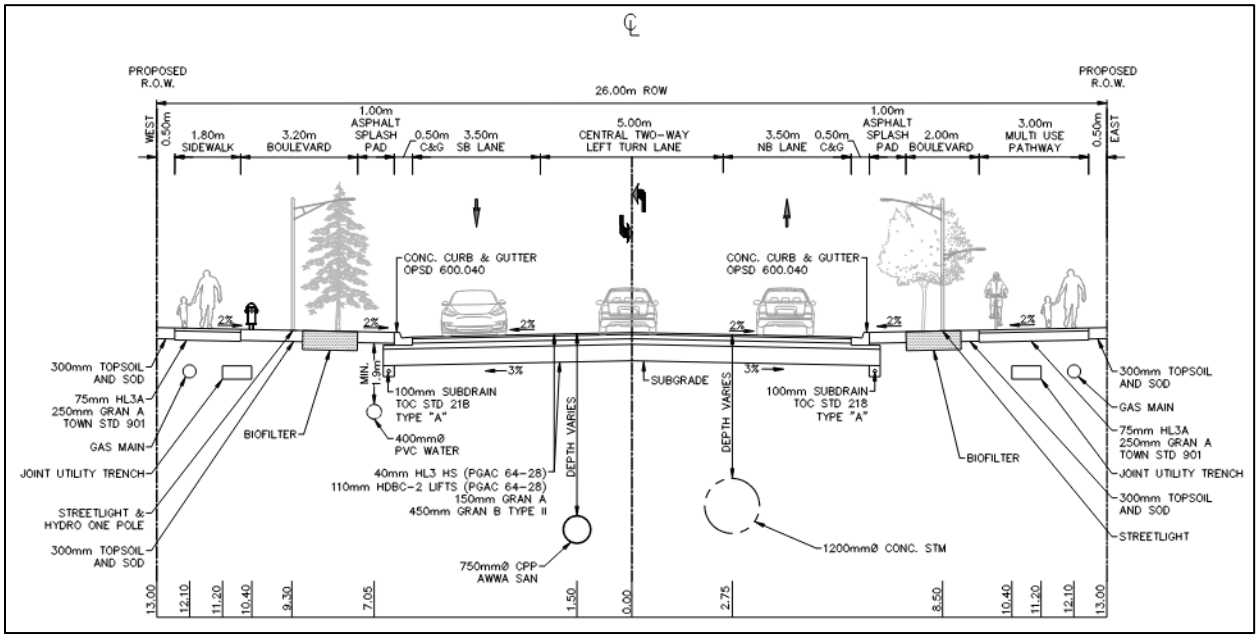


Figure 16: Proposed Ionic Drive Cross-Section

6.2 Potential Phasing Plan (NEW)

As requested by Town staff, a Conceptual Collector Road Phasing Plan was prepared. This phasing plan identified 3 potential phases for the buildout of the internal collector road network. The phasing limits were determined based on property limits, parcel ownership and an assumed logical buildout sequence of infrastructure.

It is noted that the conceptual collector road network is located within the lands owned by the non-participating landowners. As such, the actual internal collector road network phasing is subject to change as site-specific development applications advance, since it is expected that the majority of the future collector road network may be delivered as part of future development applications.

Figure 17 illustrates the Potential Conceptual Collector Road Phasing Plan.

7.3 Trip Distribution

Given the travel pattern differences between passenger cars and heavy vehicles, separate trip distributions for passenger car and heavy vehicle trips were determined and applied herein.

7.3.1 Passenger Car Trips

The site generated passenger car trips were distributed to the study road network based on 2022 Transportation Tomorrow Survey (TTS) data. TTS is a comprehensive survey consisting of transportation patterns for households in the Greater Toronto and Hamilton Area and surrounding area.

The Subject Property is located in 2006 Greater Toronto Area (GTA) Zone 3014, which primarily consists of greenfield lands and some existing industrial buildings. To increase the sample size of the query, proxy zones were also included. 2006 GTA Zone 3015, 2006 GTA Zone 3440 and 2006 GTA Zone 3441 were used as proxy zones. These zones are adjacent to the subject zone and includes industrial developments, thus these zones are expected to have similar travel patterns to the Subject Lands.

The TTS data was filtered to trips entering and existing the subject and proxy zones for work purposes during the weekday a.m. and p.m. peak hours, respectively, which reflect the peak commuter directions.

Table 31 summarizes the trip distribution for employment passenger car trips.

Table 31: Passenger Car Trip Distribution

Direction	Inbound	Outbound	External Network Gateway
North	29%	18%	Airport Road, Torbram Road
South	13%	25%	Airport Road, Torbram Road
East	6%	7%	Mayfield Road, Healy Road
West	29%	24%	Mayfield Road, Old School Road
Highway 413 (via North)	23%	26%	Airport Road
Total	**100%**	**100%**	**-**

It is noted that the trip distribution was adjusted to capture the more convenient routing options, as a result of the future Highway 413, especially pertaining to heavy truck traffic.

Appendix C includes the TTS data.

7.3.2 Heavy Truck Trips

The site generated heavy truck trips were distributed to the study road network based on the expected travel routes for heavy vehicle traffic and roadways where heavy trucks are permitted. Heavy trucks will primarily rely on Highway 413 as well as Airport Road, Mayfield Road and the proposed collector road network within the Tullamore Northwest Employment Area and Tullamore Industrial Business Park. The remaining study roadways are not expected to support heavy vehicle traffic under future conditions.

Due to the proposed Highway 413, a portion of current heavy vehicle traffic along Mayfield Road is expected to instead use Highway 413. As there are currently no details regarding the shift in heavy vehicle distribution, it is assumed that two-thirds of all truck traffic will use Highway 413, with the remaining one-third will use Mayfield Road. It is assumed that heavy vehicle traffic will access the Highway 413 via the planned Airport Road interchange.

All traffic along Mayfield was then distributed based on existing eastbound and westbound travel patterns observed in the existing turning movement counts.

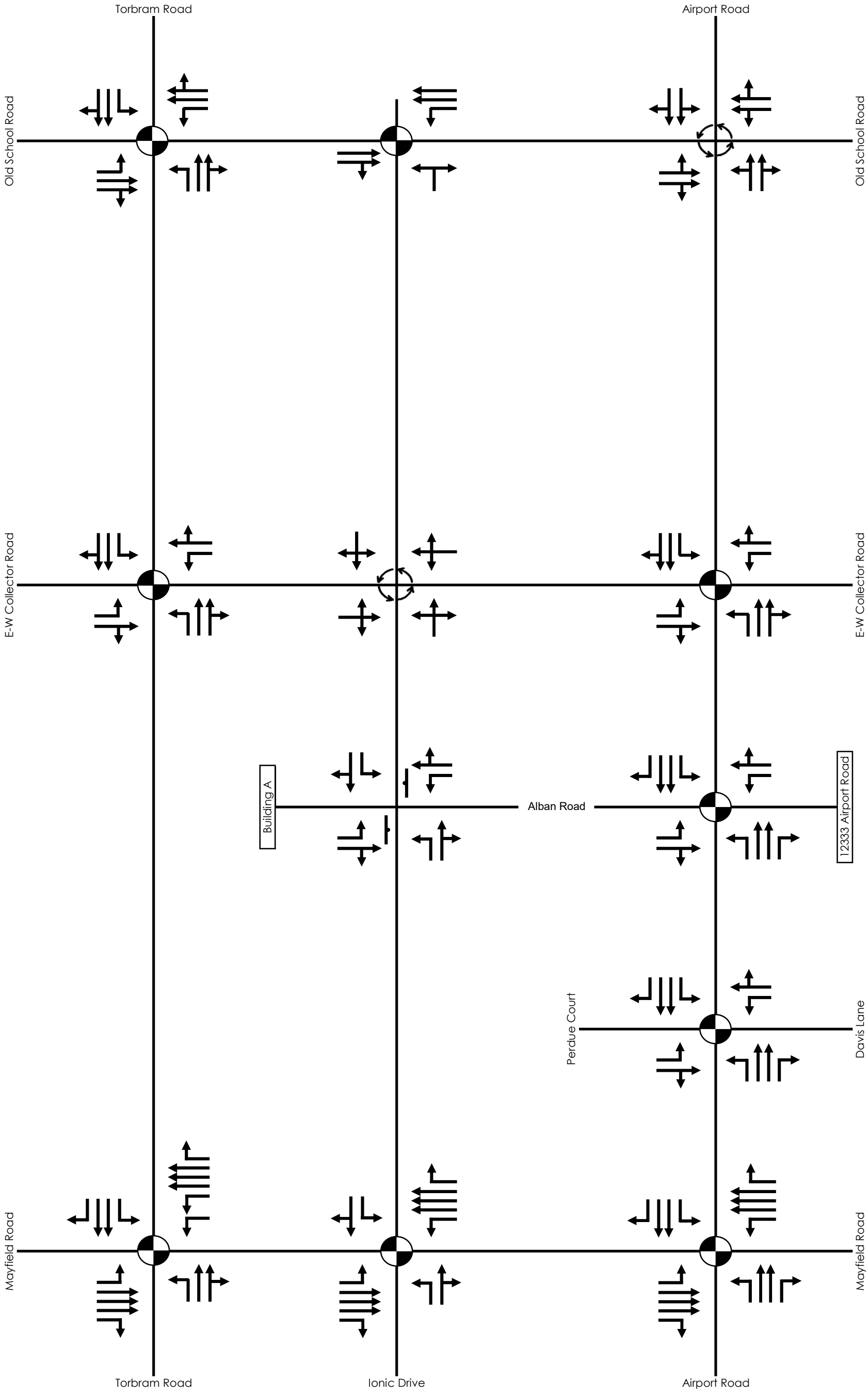
This estimated shift in truck traffic distribution was based on Mayfield Road being the current primary truck corridor, partly because Highway 410 terminates just north of Mayfield and Highway 427 terminates on McKenzie Drive, approximately 3.4 km south of Mayfield Road. The implementation of Highway 413 will provide more convenient and direct routes to the surrounding highways, with the Airport Road interchange being located 500 m from the Subject Lands.

7.4 Trip Assignment (UPDATED)

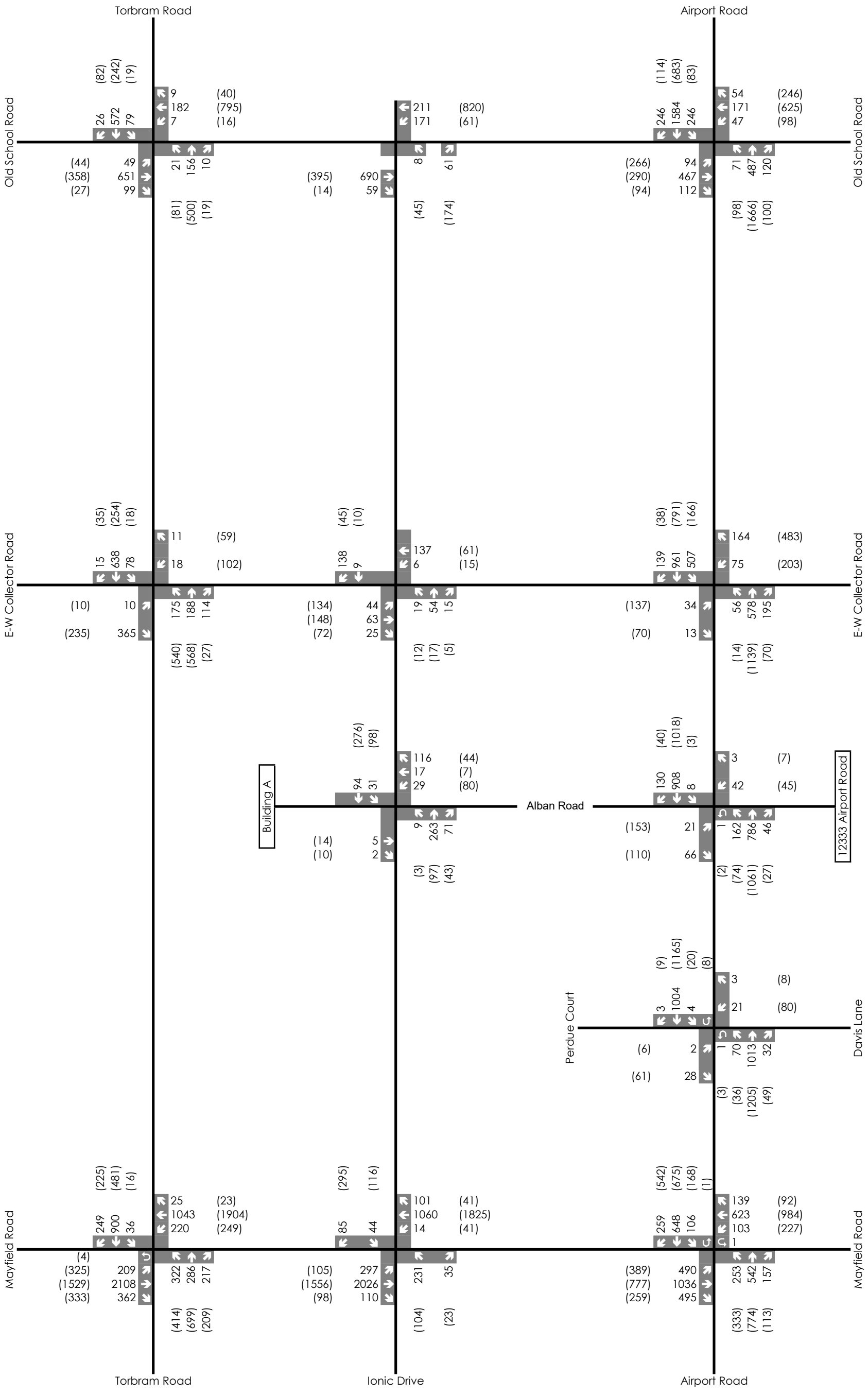
The site generated trips were distributed throughout the study road network based on the trip distribution outlined above.

Given the size of the Tullamore Northwest Employment Area, the Subject Lands were divided into zones to better assign the site generated traffic volumes. The zones are generally bound by the external arterial roads, internal collector roads and Secondary Plan area limits. **Appendix L** includes further details regarding the assumed zones and associated trip assignment.

Figure 18, **Figure 19** and **Figure 20** outlines the passenger car, heavy truck and total site generated volumes, respectively.



Legend	Tullamore North Employment Area Secondary Plan	CROZIER CONSULTING ENGINEERS	Figure 21
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes {xx} Weekend Peak Hour Traffic Volumes	2051 Future Total Study Road Network		Project No. 2278-7228 Date: 02/25/26 Analyst. MY



Legend	Tullamore North Employment Area Secondary Plan	CROZIER CONSULTING ENGINEERS	Figure 22
xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes {xx} Weekend Peak Hour Traffic Volumes	2051 Future Total Traffic Volumes		Project No. 2278-7228 Date: 02/25/26 Analyst. MY

8.2.1 Applicability of Applied Growth Rates (NEW)

As outlined in **Section 5.2.2**, the 2051 future total volumes were compared to the Town's Multi-Modal Transportation Master Plan (MMTMP) (June 2024) 2051 traffic volume projections to confirm the applicability of the growth rates applied to Town roads. The 2051 MMTMP volumes were retrieved from the Mayfield-Tullamore Secondary Plan Transportation Study (BA Group, August 2024). It is noted that this review was completed for the weekday a.m. peak hour, as the MMTMP only outlined the morning peak hour volumes.

Table 32 summarizes the comparison of the 2051 future total and MMTMP volumes.

Table 32: Applicability of Growth Rates – 2051 Volume Comparison

Roadway	Segment	2051 MMTMP Volumes[1]	2051 Future Total Volumes[1,2]	Percent Difference
Torbram Road	E-W Collector Road to Old School Road	703	940	34%
Old School Road	Torbram Road to Airport Road	1060	1161	10%
Healy Road	Airport Road to Innis Lake Road	738	1105	50%

Note 1: Two-way screenline volumes for the weekday a.m. peak hour.
*Note 2: Based on the volumes outlined in **Figure 22**.*

The 2051 future total volumes forecasted herein exceeds the volume projections outlined in the Town's MMTMP by at least 10%. Accordingly, the 2.0% growth rate applied to Town roads herein, as detailed in **Section 5.2.3**, are appropriate.

8.3 Warrants Assessment (UPDATED)

Signal control and all-way stop control warrants were assessed for future total conditions, where applicable.

8.3.1 Signal Control

Signal warrants were assessed for the unsignalized study intersections. As previously outlined in **Section 5.5.1**, the warrants were evaluated based on Justification 7: Projected Volumes per Chapter 4 of the Ontario Traffic Manual Book 12: Traffic Signals (MTO, March 2012).

Table 33 summarizes the future total signal warrant analysis.

APPENDIX D:

Level of Service Definitions

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

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

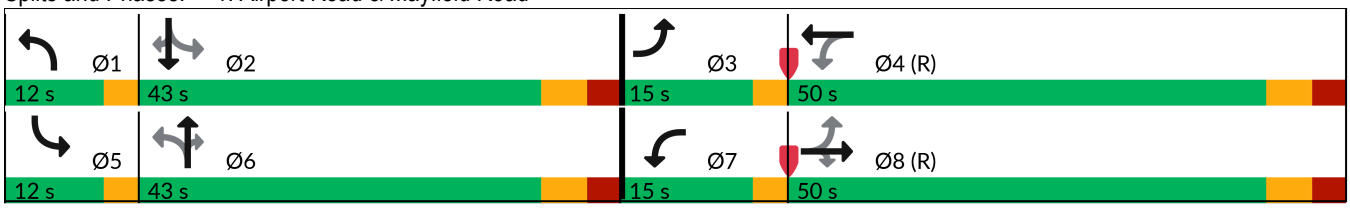
APPENDIX E:

Detailed Capacity Analyses

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	163	628	380	78	418	184	197	82	68	428	106
Future Volume (vph)	163	628	380	78	418	184	197	82	68	428	106
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4	1	6		5	2	
Permitted Phases	8		8	4		6		6	2		2
Detector Phase	3	8	8	7	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	8.0	46.1	46.1	8.0	46.1	8.0	41.9	41.9	8.0	41.9	41.9
Total Split (s)	15.0	50.0	50.0	15.0	50.0	12.0	43.0	43.0	12.0	43.0	43.0
Total Split (%)	12.5%	41.7%	41.7%	12.5%	41.7%	10.0%	35.8%	35.8%	10.0%	35.8%	35.8%
Yellow Time (s)	3.0	4.0	4.0	3.0	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	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	3.0	7.1	3.0	6.9	6.9	3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	76.5	63.8	63.8	70.9	59.4	35.3	24.2	24.2	33.1	21.3	21.3
Actuated g/C Ratio	0.64	0.53	0.53	0.59	0.50	0.29	0.20	0.20	0.28	0.18	0.18
v/c Ratio	0.32	0.35	0.40	0.21	0.31	0.74	0.31	0.28	0.23	0.74	0.36
Control Delay (s/veh)	11.4	18.2	3.2	10.8	19.5	50.8	42.5	8.9	33.2	55.2	17.7
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 (s/veh)	11.4	18.2	3.2	10.8	19.5	50.8	42.5	8.9	33.2	55.2	17.7
LOS	B	B	A	B	B	D	D	A	C	E	B
Approach Delay (s/veh)		12.4			18.3		39.8			46.1	
Approach LOS		B			B		D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 30 (25%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 25.4	Intersection LOS: C
Intersection Capacity Utilization 84.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Airport Road & Mayfield Road



Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	218	54	6	75	2	12	60	9	4	280	16
Future Vol, veh/h	4	218	54	6	75	2	12	60	9	4	280	16
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, %	0	2	8	0	2	0	17	2	12	25	1	0
Mvmt Flow	4	218	54	6	75	2	12	60	9	4	280	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

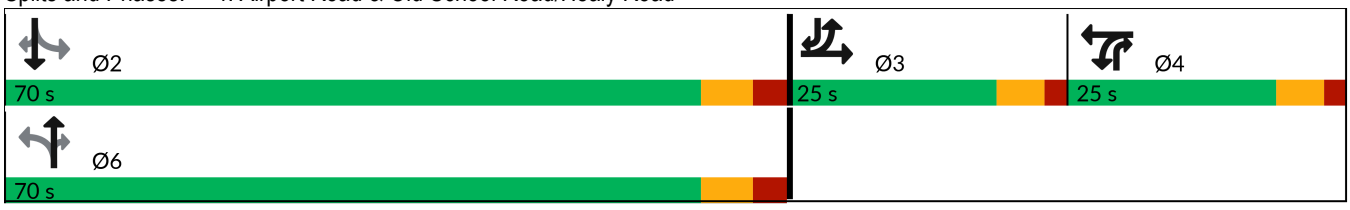
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11	9.2	9.4	12.6
HCM LOS	B	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	1%	7%	1%
Vol Thru, %	74%	79%	90%	93%
Vol Right, %	11%	20%	2%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	81	276	83	300
LT Vol	12	4	6	4
Through Vol	60	218	75	280
RT Vol	9	54	2	16
Lane Flow Rate	81	276	83	300
Geometry Grp	1	1	1	1
Degree of Util (X)	0.126	0.376	0.124	0.441
Departure Headway (Hd)	5.582	4.91	5.393	5.289
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	646	723	668	672
Service Time	3.586	2.998	3.399	3.385
HCM Lane V/C Ratio	0.125	0.382	0.124	0.446
HCM Control Delay, s/veh	9.4	11	9.2	12.6
HCM Lane LOS	A	B	A	B
HCM 95th-tile Q	0.4	1.8	0.4	2.3

Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	161	80	7	150	113	12	445	6
Future Volume (vph)	161	80	7	150	113	12	445	6
Turn Type	NA	NA	Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	4		6	4		2	3
Permitted Phases			6		6	2		2
Detector Phase	3	4	6	6	4	2	2	3
Switch Phase								
Minimum Initial (s)	8.0	8.0	12.0	12.0	8.0	12.0	12.0	8.0
Minimum Split (s)	26.2	26.2	22.7	22.7	26.2	22.7	22.7	26.2
Total Split (s)	25.0	25.0	70.0	70.0	25.0	70.0	70.0	25.0
Total Split (%)	20.8%	20.8%	58.3%	58.3%	20.8%	58.3%	58.3%	20.8%
Yellow Time (s)	4.2	4.2	4.6	4.6	4.2	4.6	4.6	4.2
All-Red Time (s)	2.0	2.0	3.1	3.1	2.0	3.1	3.1	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2		7.7	6.2		7.7	6.2
Lead/Lag	Lead	Lag			Lag			Lead
Lead-Lag Optimize?	Yes	Yes			Yes			Yes
Recall Mode	None	None	Max	Max	None	Max	Max	None
Act Effct Green (s)	16.2	13.2		62.5	83.4		62.5	86.4
Actuated g/C Ratio	0.14	0.12		0.56	0.74		0.56	0.77
v/c Ratio	0.77	0.61		0.19	0.10		0.49	0.01
Control Delay (s/veh)	64.5	59.3		14.2	1.0		18.4	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	64.5	59.3		14.2	1.0		18.4	0.0
LOS	E	E		B	A		B	A
Approach Delay (s/veh)	64.5	59.3		8.7			18.1	
Approach LOS	E	E		A			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 112	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay (s/veh): 29.6	Intersection LOS: C
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

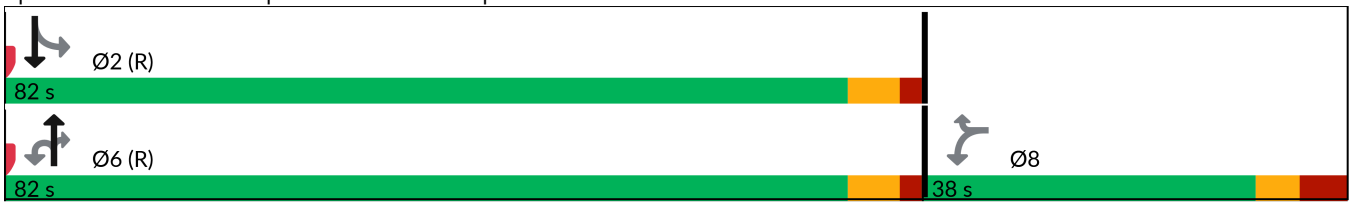
Splits and Phases: 4: Airport Road & Old School Road/Healy Road



Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	3	1	254	46	8	537
Future Volume (vph)	42	3	1	254	46	8	537
Turn Type	Perm	Perm	Perm	NA	Perm	Perm	NA
Protected Phases				6			2
Permitted Phases	8	8	6		6	2	
Detector Phase	8	8	6	6	6	2	2
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	35.6
Total Split (s)	38.0	38.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%	68.3%	68.3%	68.3%	68.3%	68.3%
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2	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
Total Lost Time (s)	8.2	8.2		6.6	6.6	6.6	6.6
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	12.5	12.5		98.1	98.1	98.1	98.1
Actuated g/C Ratio	0.10	0.10		0.82	0.82	0.82	0.82
v/c Ratio	0.35	0.02		0.11	0.05	0.01	0.20
Control Delay (s/veh)	58.4	31.3		2.4	0.8	3.5	3.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.4	31.3		2.4	0.8	3.5	3.5
LOS	E	C		A	A	A	A
Approach Delay (s/veh)	56.6			2.1			3.5
Approach LOS	E			A			A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTU, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay (s/veh): 5.7	Intersection LOS: A
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: Airport Road & 12333 Airport Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	2	0	28	21	0	3	1	70	308	32	4	563
Future Volume (Veh/h)	2	0	28	21	0	3	1	70	308	32	4	563
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	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	0	28	21	0	3	0	70	308	32	4	563
Pedestrians		2			12				1			
Lane Width (m)		3.6			3.6				3.6			
Walking Speed (m/s)		1.2			1.2				1.2			
Percent Blockage		0			1				0			
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked							0.00					
vC, conflicting volume	870	1065	285	779	1036	166	0	568			352	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	870	1065	285	779	1036	166	0	568			352	
tC, single (s)	9.5	6.5	8.4	8.8	6.5	8.9	0.0	4.5			5.1	
tC, 2 stage (s)												
tF (s)	4.5	4.0	4.0	4.2	4.0	4.3	0.0	2.4			2.7	
p0 queue free %	98	100	95	88	100	100	0	92			100	
cM capacity (veh/h)	122	200	533	168	208	606	0	873			912	

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	2	28	21	3	70	154	154	32	4	282	282	3
Volume Left	2	0	21	0	70	0	0	0	4	0	0	0
Volume Right	0	28	0	3	0	0	0	32	0	0	0	3
cSH	122	533	168	606	873	1700	1700	1700	912	1700	1700	1700
Volume to Capacity	0.02	0.05	0.12	0.00	0.08	0.09	0.09	0.02	0.00	0.17	0.17	0.00
Queue Length 95th (m)	0.4	1.3	3.3	0.1	2.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Control Delay (s/veh)	35.1	12.1	29.4	11.0	9.5	0.0	0.0	0.0	9.0	0.0	0.0	0.0
Lane LOS	E	B	D	B	A				A			
Approach Delay (s/veh)	13.7		27.1		1.6				0.1			
Approach LOS	B		D									

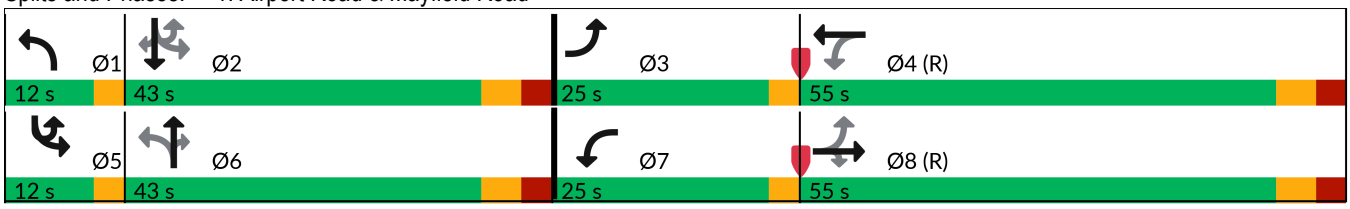
Intersection Summary					
Average Delay	1.7				
Intersection Capacity Utilization	37.3%	ICU Level of Service		A	
Analysis Period (min)	15				

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	3
Future Volume (Veh/h)	3
Sign Control	
Grade	
Peak Hour Factor	1.00
Hourly flow rate (vph)	3
Pedestrians	
Lane Width (m)	
Walking Speed (m/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (m)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	509	158	92	645	240	493	91	1	79	262	232
Future Volume (vph)	148	509	158	92	645	240	493	91	1	79	262	232
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm
Protected Phases	3	8		7	4	1	6		5	5	2	
Permitted Phases	8		8	4		6		6	2	2		2
Detector Phase	3	8	8	7	4	1	6	6	5	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	5.0	12.0	12.0	5.0	5.0	12.0	12.0
Minimum Split (s)	8.0	46.1	46.1	8.0	46.1	8.0	41.9	41.9	8.0	8.0	41.9	41.9
Total Split (s)	25.0	55.0	55.0	25.0	55.0	12.0	43.0	43.0	12.0	12.0	43.0	43.0
Total Split (%)	18.5%	40.7%	40.7%	18.5%	40.7%	8.9%	31.9%	31.9%	8.9%	8.9%	31.9%	31.9%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1	0.0	2.9	2.9	0.0	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	3.0	7.1	3.0	6.9	6.9		3.0	6.9	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None
Act Effct Green (s)	87.5	73.2	73.2	82.5	70.5	38.4	25.5	25.5		37.3	24.9	24.9
Actuated g/C Ratio	0.65	0.54	0.54	0.61	0.52	0.28	0.19	0.19		0.28	0.18	0.18
v/c Ratio	0.40	0.30	0.18	0.19	0.40	0.77	0.79	0.32		0.47	0.42	0.53
Control Delay (s/veh)	13.4	18.6	3.3	10.9	21.6	57.7	61.3	11.2		42.4	49.9	9.8
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 (s/veh)	13.4	18.6	3.3	10.9	21.6	57.7	61.3	11.2		42.4	49.9	9.8
LOS	B	B	A	B	C	E	E	B		D	D	A
Approach Delay (s/veh)		14.7			20.3		54.7				32.6	
Approach LOS		B			C		D				C	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 65 (48%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 30.6	Intersection LOS: C
Intersection Capacity Utilization 86.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Airport Road & Mayfield Road



Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	159	16	16	296	3	36	247	18	1	92	12
Future Vol, veh/h	14	159	16	16	296	3	36	247	18	1	92	12
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, %	0	4	0	0	2	0	0	0	6	100	4	0
Mvmt Flow	14	159	16	16	296	3	36	247	18	1	92	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

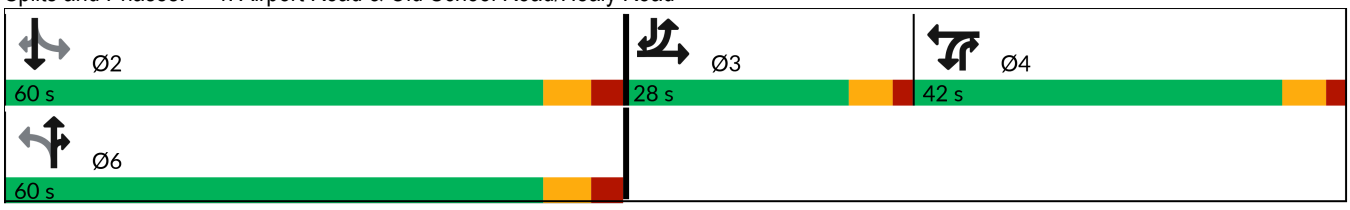
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.1	13.5	13.4	12.7
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	7%	5%	1%
Vol Thru, %	82%	84%	94%	88%
Vol Right, %	6%	8%	1%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	301	189	315	105
LT Vol	36	14	16	1
Through Vol	247	159	296	92
RT Vol	18	16	3	12
Lane Flow Rate	301	189	315	105
Geometry Grp	1	1	1	1
Degree of Util (X)	0.464	0.297	0.48	0.22
Departure Headway (Hd)	5.546	5.66	5.484	7.526
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	647	631	655	476
Service Time	3.6	3.724	3.54	5.596
HCM Lane V/C Ratio	0.465	0.3	0.481	0.221
HCM Control Delay, s/veh	13.4	11.1	13.5	12.7
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	2.5	1.2	2.6	0.8

Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	133	259	27	433	71	10	217	20
Future Volume (vph)	133	259	27	433	71	10	217	20
Turn Type	NA	NA	Perm	NA	pt+ov	Perm	NA	pm+ov
Protected Phases	3	4		6	6 4		2	3
Permitted Phases			6			2		2
Detector Phase	3	4	6	6	6 4	2	2	3
Switch Phase								
Minimum Initial (s)	8.0	8.0	12.0	12.0		12.0	12.0	8.0
Minimum Split (s)	26.2	26.2	22.7	22.7		22.7	22.7	26.2
Total Split (s)	28.0	42.0	60.0	60.0		60.0	60.0	28.0
Total Split (%)	21.5%	32.3%	46.2%	46.2%		46.2%	46.2%	21.5%
Yellow Time (s)	4.2	4.2	4.6	4.6		4.6	4.6	4.2
All-Red Time (s)	2.0	2.0	3.1	3.1		3.1	3.1	2.0
Lost Time Adjust (s)	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.2	6.2		7.7			7.7	6.2
Lead/Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes						Yes
Recall Mode	None	None	Max	Max		Max	Max	None
Act Effct Green (s)	16.1	27.3		52.8	86.3		52.8	76.6
Actuated g/C Ratio	0.14	0.23		0.45	0.74		0.45	0.66
v/c Ratio	0.70	0.84		0.58	0.06		0.33	0.02
Control Delay (s/veh)	62.9	60.4		29.4	2.3		24.4	2.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	62.9	60.4		29.4	2.3		24.4	2.4
LOS	E	E		C	A		C	A
Approach Delay (s/veh)	62.9	60.4		25.8			22.6	
Approach LOS	E	E		C			C	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 116.4	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 39.7	Intersection LOS: D
Intersection Capacity Utilization 88.4%	ICU Level of Service E
Analysis Period (min) 15	

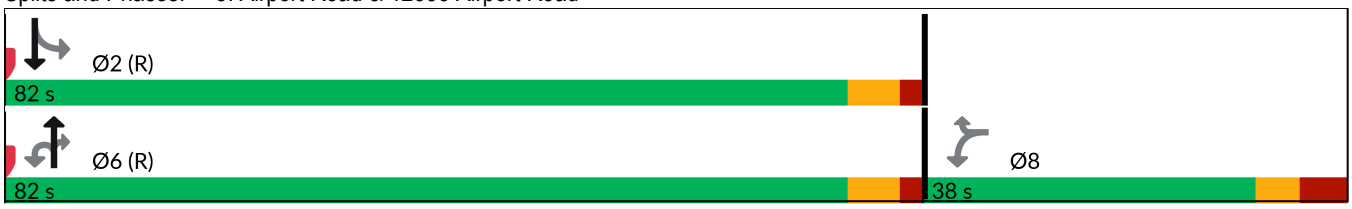
Splits and Phases: 4: Airport Road & Old School Road/Healy Road



Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	45	7	2	558	27	3	356
Future Volume (vph)	45	7	2	558	27	3	356
Turn Type	Perm	Perm	Perm	NA	Perm	Perm	NA
Protected Phases				6			2
Permitted Phases	8	8	6		6	2	
Detector Phase	8	8	6	6	6	2	2
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	35.6
Total Split (s)	38.0	38.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%	68.3%	68.3%	68.3%	68.3%	68.3%
Yellow Time (s)	4.0	4.0	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	4.2	4.2	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
Total Lost Time (s)	8.2	8.2		6.6	6.6	6.6	6.6
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	12.4	12.4		98.2	98.2	98.2	98.2
Actuated g/C Ratio	0.10	0.10		0.82	0.82	0.82	0.82
v/c Ratio	0.34	0.04		0.21	0.03	0.01	0.14
Control Delay (s/veh)	57.5	27.3		3.5	1.3	3.3	3.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.5	27.3		3.5	1.3	3.3	3.3
LOS	E	C		A	A	A	A
Approach Delay (s/veh)	53.5			3.4			3.3
Approach LOS	D			A			A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 58 (48%), Referenced to phase 2:SBTL and 6:NBTU, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay (s/veh): 6.0	Intersection LOS: A
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: Airport Road & 12333 Airport Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	6	0	61	80	0	8	3	36	617	49	8	20
Future Volume (Veh/h)	6	0	61	80	0	8	3	36	617	49	8	20
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
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
Hourly flow rate (vph)	6	0	61	80	0	8	0	36	617	49	0	20
Pedestrians					12							
Lane Width (m)					3.6							
Walking Speed (m/s)					1.2							
Percent Blockage					1							
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked							0.00				0.00	
vC, conflicting volume	815	1176	193	995	1136	321	0	395			0	678
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	815	1176	193	995	1136	321	0	395			0	678
tC, single (s)	7.5	6.5	7.1	7.7	6.5	7.2	0.0	5.4			0.0	5.9
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	3.6	4.0	3.4	0.0	2.8			0.0	3.1
p0 queue free %	98	100	92	50	100	99	0	96			0	96
cM capacity (veh/h)	251	173	786	161	182	637	0	818			0	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	6	61	80	8	36	309	309	49	20	193	193	9
Volume Left	6	0	80	0	36	0	0	0	20	0	0	0
Volume Right	0	61	0	8	0	0	0	49	0	0	0	9
cSH	251	786	161	637	818	1700	1700	1700	500	1700	1700	1700
Volume to Capacity	0.02	0.08	0.50	0.01	0.04	0.18	0.18	0.03	0.04	0.11	0.11	0.01
Queue Length 95th (m)	0.6	2.0	19.2	0.3	1.1	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Control Delay (s/veh)	19.7	10.0	47.7	10.7	9.6	0.0	0.0	0.0	12.5	0.0	0.0	0.0
Lane LOS	C	A	E	B	A				B			
Approach Delay (s/veh)	10.8		44.4		0.5				0.6			
Approach LOS	B		E									

Intersection Summary					
Average Delay	4.1				
Intersection Capacity Utilization	41.5%	ICU Level of Service		A	
Analysis Period (min)	15				

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	386	9
Future Volume (Veh/h)	386	9
Sign Control	Free	
Grade	0%	
Peak Hour Factor	1.00	1.00
Hourly flow rate (vph)	386	9
Pedestrians		
Lane Width (m)		
Walking Speed (m/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (m)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

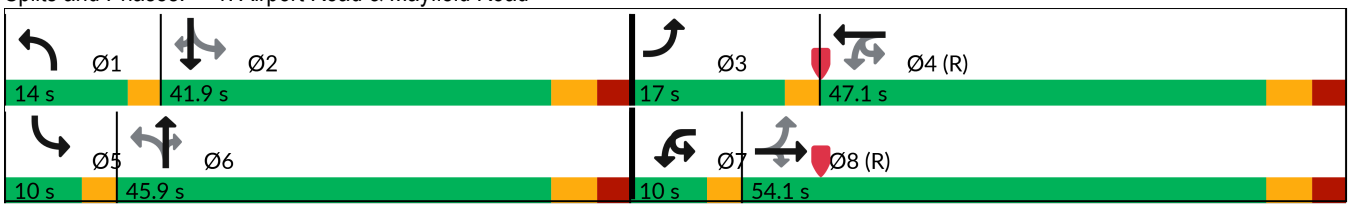
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	214	702	427	1	80	496	75	229	408	84	92	540
Future Volume (vph)	214	702	427	1	80	496	75	229	408	84	92	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	200.0		0.0		50.0		70.0	95.0		60.0	100.0	
Storage Lanes	1		1		1		1	1		1	1	
Taper Length (m)	100.0				50.0			80.0			50.0	
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00		0.98		1.00	1.00		1.00		0.96	0.99	
Frt			0.850			0.980				0.850		
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1513	3380	1493	0	1346	3031	0	1684	3042	1117	1451	3202
Flt Permitted	0.357				0.361			0.235			0.491	
Satd. Flow (perm)	568	3380	1460	0	510	3031	0	415	3042	1076	740	3202
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			327			15				119		
Link Speed (k/h)		60				60			60			60
Link Distance (m)		685.4				111.4			460.7			459.1
Travel Time (s)		41.1				6.7			27.6			27.5
Confl. Peds. (#/hr)	4		11		11		4	7		24	24	
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 (%)	18%	8%	7%	0%	33%	15%	36%	6%	20%	43%	23%	14%
Adj. Flow (vph)	214	702	427	1	80	496	75	229	408	84	92	540
Shared Lane Traffic (%)												
Lane Group Flow (vph)	214	702	427	0	81	571	0	229	408	84	92	540
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
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	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	15	25		15	25		15	25	
Number of Detectors	1	1	1	1	1	1		1	1	1	1	1
Detector Template			Right	Left						Right		
Leading Detector (m)	25.0	10.0	10.0	2.0	25.0	10.0		25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0	10.0	2.0	10.0	10.0		10.0	10.0	10.0	10.0	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
Turn Type	pm+pt	NA	Perm	pm+pt	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	8		7	7	4		1	6		5	2
Permitted Phases	8		8	4	4			6		6	2	
Detector Phase	3	8	8	7	7	4		1	6	6	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	138
Future Volume (vph)	138
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1258
Flt Permitted	
Satd. Flow (perm)	1234
Right Turn on Red	Yes
Satd. Flow (RTOR)	146
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	27%
Adj. Flow (vph)	138
Shared Lane Traffic (%)	
Lane Group Flow (vph)	138
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0	12.0		5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	8.0	46.1	46.1	8.0	8.0	46.1		8.0	41.9	41.9	8.0	41.9
Total Split (s)	17.0	54.1	54.1	10.0	10.0	47.1		14.0	45.9	45.9	10.0	41.9
Total Split (%)	14.2%	45.1%	45.1%	8.3%	8.3%	39.3%		11.7%	38.3%	38.3%	8.3%	34.9%
Maximum Green (s)	14.0	47.0	47.0	7.0	7.0	40.0		11.0	39.0	39.0	7.0	35.0
Yellow Time (s)	3.0	4.0	4.0	3.0	3.0	4.0		3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	0.0	3.1		0.0	2.9	2.9	0.0	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		3.0	7.1		3.0	6.9	6.9	3.0	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max	C-Max	None	None	C-Max		None	None	None	None	None
Walk Time (s)		12.0	12.0			12.0			12.0	12.0		12.0
Flash Don't Walk (s)		27.0	27.0			27.0			23.0	23.0		23.0
Pedestrian Calls (#/hr)		0	0			0			0	0		0
Act Effct Green (s)	70.3	57.1	57.1		62.2	50.5		43.7	30.0	30.0	36.5	25.8
Actuated g/C Ratio	0.59	0.48	0.48		0.52	0.42		0.36	0.25	0.25	0.30	0.22
v/c Ratio	0.50	0.44	0.49		0.25	0.45		0.86	0.54	0.23	0.35	0.78
Control Delay (s/veh)	17.2	23.5	8.2		14.7	27.0		58.0	41.1	3.6	37.9	59.0
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.2	23.5	8.2		14.7	27.0		58.0	41.1	3.6	37.9	59.0
LOS	B	C	A		B	C		E	D	A	D	E
Approach Delay (s/veh)		17.6				25.5			42.1			49.4
Approach LOS		B				C			D			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 30 (25%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 31.2		Intersection LOS: C	
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	34.9%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	25.8
Actuated g/C Ratio	0.22
v/c Ratio	0.36
Control Delay (s/veh)	19.6
Queue Delay	0.0
Total Delay (s/veh)	19.6
LOS	B
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	244	58	7	86	2	13	112	10	4	344	26
Future Vol, veh/h	49	244	58	7	86	2	13	112	10	4	344	26
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, %	0	2	8	0	2	0	16	2	11	25	1	0
Mvmt Flow	49	244	58	7	86	2	13	112	10	4	344	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	14.9	10.3	11	17.5
HCM LOS	B	B	B	C

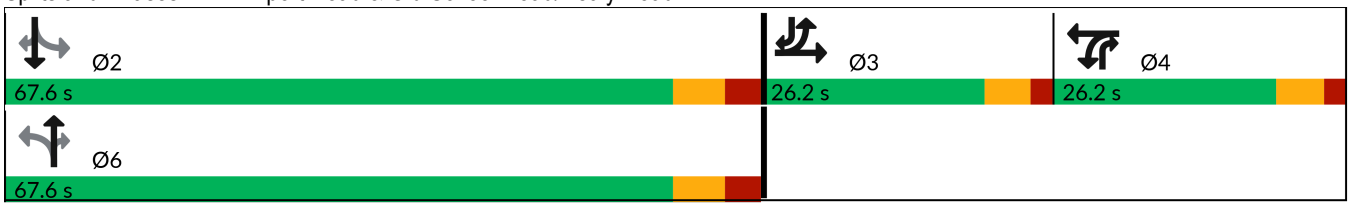
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	14%	7%	1%
Vol Thru, %	83%	70%	91%	92%
Vol Right, %	7%	17%	2%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	135	351	95	374
LT Vol	13	49	7	4
Through Vol	112	244	86	344
RT Vol	10	58	2	26
Lane Flow Rate	135	351	95	374
Geometry Grp	1	1	1	1
Degree of Util (X)	0.23	0.538	0.16	0.606
Departure Headway (Hd)	6.13	5.523	6.081	5.829
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	583	649	586	617
Service Time	4.2	3.583	4.161	3.88
HCM Lane V/C Ratio	0.232	0.541	0.162	0.606
HCM Control Delay, s/veh	11	14.9	10.3	17.5
HCM Lane LOS	B	B	B	C
HCM 95th-tile Q	0.9	3.2	0.6	4.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	173	35	47	87	20	8	210	115	32	671	10
Future Volume (vph)	20	173	35	47	87	20	8	210	115	32	671	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		15.0	0.0		50.0
Storage Lanes	0		0	0		0	0		1	0		1
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		0.979			0.982				0.850			0.850
Flt Protected		0.996			0.985			0.998			0.998	
Satd. Flow (prot)	0	1809	0	0	1780	0	0	1588	1493	0	1687	1439
Flt Permitted		0.996			0.985			0.973			0.977	
Satd. Flow (perm)	0	1809	0	0	1780	0	0	1548	1493	0	1651	1439
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			5				115			29
Link Speed (k/h)		70			70			80			80	
Link Distance (m)		1395.8			247.3			628.9			225.4	
Travel Time (s)		71.8			12.7			28.3			10.1	
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 (%)	16%	2%	4%	7%	4%	0%	14%	21%	7%	7%	14%	11%
Adj. Flow (vph)	20	173	35	47	87	20	8	210	115	32	671	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	228	0	0	154	0	0	218	115	0	703	10
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			-30.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template	Left			Left			Left		Right	Left		
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		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	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	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
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Detector Phase	3	3		4	4		6	6	4	2	2	3
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		12.0	12.0	8.0	12.0	12.0	8.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	26.2	26.2		26.2	26.2		22.7	22.7	26.2	22.7	22.7	26.2
Total Split (s)	26.2	26.2		26.2	26.2		67.6	67.6	26.2	67.6	67.6	26.2
Total Split (%)	21.8%	21.8%		21.8%	21.8%		56.3%	56.3%	21.8%	56.3%	56.3%	21.8%
Maximum Green (s)	20.0	20.0		20.0	20.0		59.9	59.9	20.0	59.9	59.9	20.0
Yellow Time (s)	4.2	4.2		4.2	4.2		4.6	4.6	4.2	4.6	4.6	4.2
All-Red Time (s)	2.0	2.0		2.0	2.0		3.1	3.1	2.0	3.1	3.1	2.0
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lead/Lag	Lead	Lead		Lag	Lag				Lag			Lead
Lead-Lag Optimize?	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
Recall Mode	None	None		None	None		Max	Max	None	Max	Max	None
Walk Time (s)	10.0	10.0		10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		5.0	5.0	10.0	5.0	5.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		17.5			14.5			60.1	82.3		60.1	85.4
Actuated g/C Ratio		0.16			0.13			0.54	0.73		0.54	0.76
v/c Ratio		0.79			0.66			0.26	0.10		0.80	0.01
Control Delay (s/veh)		65.0			59.2			16.4	1.0		30.9	0.2
Queue Delay		0.0			0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)		65.0			59.2			16.4	1.0		30.9	0.2
LOS		E			E			B	A		C	A
Approach Delay (s/veh)		65.0			59.2			11.1			30.5	
Approach LOS		E			E			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 112.3			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 34.6		Intersection LOS: C	
Intersection Capacity Utilization 86.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Airport Road & Old School Road/Healy Road



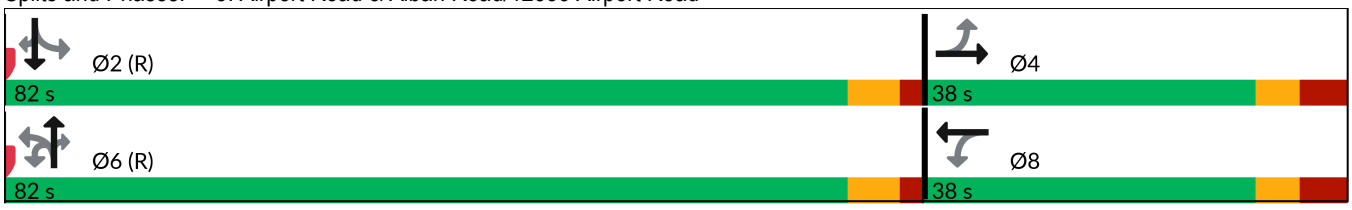
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	21	0	66	42	0	3	1	162	301	46	8	647
Future Volume (vph)	21	0	66	42	0	3	1	162	301	46	8	647
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1504	1223	0	1152	1205	0	0	1369	3147	1258	1293	3318
Flt Permitted	0.756			0.714				0.406			0.568	
Satd. Flow (perm)	1197	1223	0	866	1205	0	0	585	3147	1225	770	3318
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		285			583					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			255.2
Travel Time (s)		10.6			17.5				19.7			11.5
Confl. Peds. (#/hr)										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 (%)	20%	2%	32%	55%	2%	34%	0%	32%	16%	27%	38%	10%
Adj. Flow (vph)	21	0	66	42	0	3	1	162	301	46	8	647
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	66	0	42	3	0	0	163	301	46	8	647
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	130
Future Volume (vph)	130
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1324
Flt Permitted	
Satd. Flow (perm)	1324
Right Turn on Red	Yes
Satd. Flow (RTOR)	130
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	22%
Adj. Flow (vph)	130
Shared Lane Traffic (%)	
Lane Group Flow (vph)	130
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	38.0	38.0		38.0	38.0		82.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%		31.7%	31.7%		68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8		29.8	29.8		75.4	75.4	75.4	75.4	75.4	75.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	13.5	13.5		13.5	13.5			97.1	97.1	97.1	97.1	97.1
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.81	0.81	0.81	0.81	0.81
v/c Ratio	0.16	0.17		0.43	0.00			0.34	0.12	0.05	0.01	0.24
Control Delay (s/veh)	49.9	0.9		63.4	0.0			6.0	2.5	0.7	4.0	4.0
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.9	0.9		63.4	0.0			6.0	2.5	0.7	4.0	4.0
LOS	D	A		E	A			A	A	A	A	A
Approach Delay (s/veh)		12.8			59.2				3.5			3.5
Approach LOS		B			E				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 5.8		Intersection LOS: A	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	82.0
Total Split (%)	68.3%
Maximum Green (s)	75.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	97.1
Actuated g/C Ratio	0.81
v/c Ratio	0.12
Control Delay (s/veh)	1.0
Queue Delay	0.0
Total Delay (s/veh)	1.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

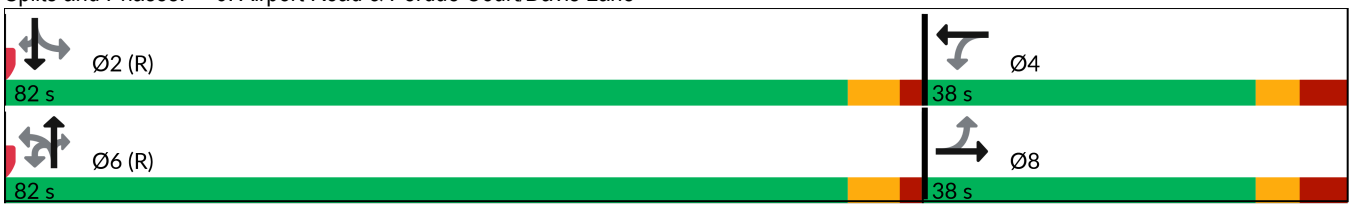
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	28	21	0	3	1	70	519	32	4	740
Future Volume (vph)	2	0	28	21	0	3	1	70	519	32	4	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0	70.0	
Storage Lanes	1		0	1		0		1		1	1	
Taper Length (m)	7.5			7.5				70.0			65.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.93	0.98	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	892	933	0	1069	816	0	0	1467	3042	1183	1190	3202
Flt Permitted	0.756			0.739				0.371			0.460	
Satd. Flow (perm)	710	933	0	831	816	0	0	573	3042	1104	563	3202
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		234			357					47		
Link Speed (k/h)		50			50				60			80
Link Distance (m)		111.7			131.0				459.1			438.5
Travel Time (s)		8.0			9.4				27.5			19.7
Confl. Peds. (#/hr)										12	12	
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 (%)	100%	2%	75%	67%	2%	100%	0%	22%	20%	35%	50%	14%
Adj. Flow (vph)	2	0	28	21	0	3	1	70	519	32	4	740
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	28	0	21	3	0	0	71	519	32	4	740
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(m)		3.5			3.5				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												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		8			4				6			2
Permitted Phases	8			4			6	6		6	2	
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	3
Future Volume (vph)	3
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	60.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1597
Flt Permitted	
Satd. Flow (perm)	1597
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	0%
Adj. Flow (vph)	3
Shared Lane Traffic (%)	
Lane Group Flow (vph)	3
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	38.0	38.0		38.0	38.0		82.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%		31.7%	31.7%		68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8		29.8	29.8		75.4	75.4	75.4	75.4	75.4	75.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	13.2	13.2		13.2	13.2			102.7	102.7	102.7	102.7	102.7
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.86	0.86	0.86	0.86	0.86
v/c Ratio	0.03	0.09		0.23	0.01			0.14	0.20	0.03	0.01	0.27
Control Delay (s/veh)	47.5	0.6		54.7	0.0			2.1	1.3	0.1	2.8	2.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	0.6		54.7	0.0			2.1	1.3	0.1	2.8	2.3
LOS	D	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		3.7			47.8				1.4			2.3
Approach LOS		A			D				A			A

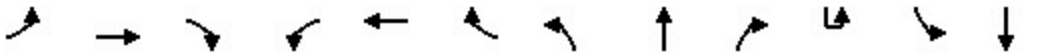
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 58.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	24.6
Total Split (s)	82.0
Total Split (%)	68.3%
Maximum Green (s)	75.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	7.0
Flash Don't Walk (s)	8.0
Pedestrian Calls (#/hr)	20
Act Effct Green (s)	102.7
Actuated g/C Ratio	0.86
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary



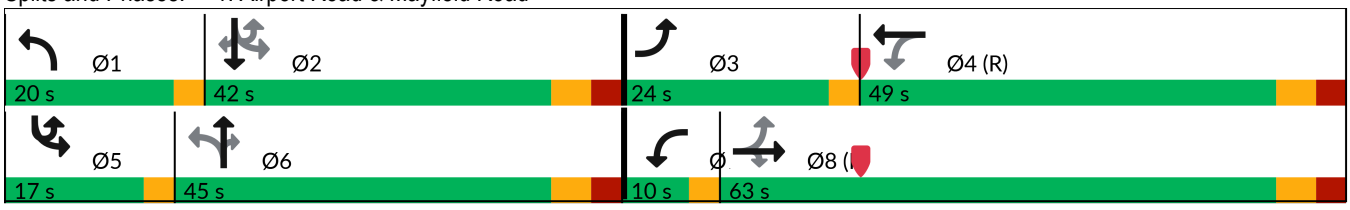
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	220	592	206	101	722	68	294	657	93	1	135	416
Future Volume (vph)	220	592	206	101	722	68	294	657	93	1	135	416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7
Storage Length (m)	200.0		0.0	50.0		70.0	95.0		60.0		100.0	
Storage Lanes	1		1	1		1	1		1		1	
Taper Length (m)	100.0			50.0			80.0				50.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98	0.99	1.00		1.00		0.96		0.99	
Frt			0.850		0.987				0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1475	3174	1493	1487	3282	0	1668	3259	1166	0	1477	3259
Flt Permitted	0.232			0.423			0.329				0.217	
Satd. Flow (perm)	360	3174	1458	659	3282	0	575	3259	1120	0	334	3259
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			206		8				106			
Link Speed (k/h)		60			60			60				60
Link Distance (m)		685.4			111.4			460.7				459.1
Travel Time (s)		41.1			6.7			27.6				27.5
Confl. Peds. (#/hr)	4		11	11		4	7		24		24	
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 (%)	21%	15%	7%	20%	6%	48%	7%	12%	37%	0%	21%	12%
Adj. Flow (vph)	220	592	206	101	722	68	294	657	93	1	135	416
Shared Lane Traffic (%)												
Lane Group Flow (vph)	220	592	206	101	790	0	294	657	93	0	136	416
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	R NA	Left	Left
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	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	25		15	15	25	
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template			Right						Right	Left		
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	2.0	25.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	2.0	10.0	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
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	pm+pt	NA
Protected Phases	3	8		7	4		1	6		5	5	2
Permitted Phases	8		8	4			6		6	2	2	
Detector Phase	3	8	8	7	4		1	6	6	5	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	299
Future Volume (vph)	299
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1426
Flt Permitted	
Satd. Flow (perm)	1398
Right Turn on Red	Yes
Satd. Flow (RTOR)	299
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	12%
Adj. Flow (vph)	299
Shared Lane Traffic (%)	
Lane Group Flow (vph)	299
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0		5.0	12.0	12.0	5.0	5.0	12.0
Minimum Split (s)	8.0	46.1	46.1	8.0	46.1		8.0	41.9	41.9	8.0	8.0	41.9
Total Split (s)	24.0	63.0	63.0	10.0	49.0		20.0	45.0	45.0	17.0	17.0	42.0
Total Split (%)	17.8%	46.7%	46.7%	7.4%	36.3%		14.8%	33.3%	33.3%	12.6%	12.6%	31.1%
Maximum Green (s)	21.0	55.9	55.9	7.0	41.9		17.0	38.1	38.1	14.0	14.0	35.1
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1		0.0	2.9	2.9	0.0	0.0	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	3.0	7.1		3.0	6.9	6.9		3.0	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		12.0	12.0		12.0			12.0	12.0			12.0
Flash Don't Walk (s)		27.0	27.0		27.0			23.0	23.0			23.0
Pedestrian Calls (#/hr)		0	0		0			0	0			0
Act Effct Green (s)	77.3	62.6	62.6	66.9	55.2		51.7	32.5	32.5		44.1	27.9
Actuated g/C Ratio	0.57	0.46	0.46	0.50	0.41		0.38	0.24	0.24		0.33	0.21
v/c Ratio	0.67	0.40	0.26	0.27	0.59		0.83	0.84	0.27		0.64	0.62
Control Delay (s/veh)	26.3	26.2	4.0	18.1	35.2		50.8	58.8	6.9		41.2	52.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	26.3	26.2	4.0	18.1	35.2		50.8	58.8	6.9		41.2	52.0
LOS	C	C	A	B	D		D	E	A		D	D
Approach Delay (s/veh)		21.7			33.2			51.9				35.1
Approach LOS		C			C			D				D

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 65 (48%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay (s/veh): 35.7		Intersection LOS: D	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	42.0
Total Split (%)	31.1%
Maximum Green (s)	35.1
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	27.9
Actuated g/C Ratio	0.21
v/c Ratio	0.57
Control Delay (s/veh)	8.8
Queue Delay	0.0
Total Delay (s/veh)	8.8
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Intersection	
Intersection Delay, s/veh	33.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	195	17	25	339	3	40	326	65	1	174	82
Future Vol, veh/h	44	195	17	25	339	3	40	326	65	1	174	82
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, %	0	4	0	0	2	0	0	0	2	100	3	0
Mvmt Flow	44	195	17	25	339	3	40	326	65	1	174	82
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	21.6	33.3	44.1	29.6
HCM LOS	C	D	E	D

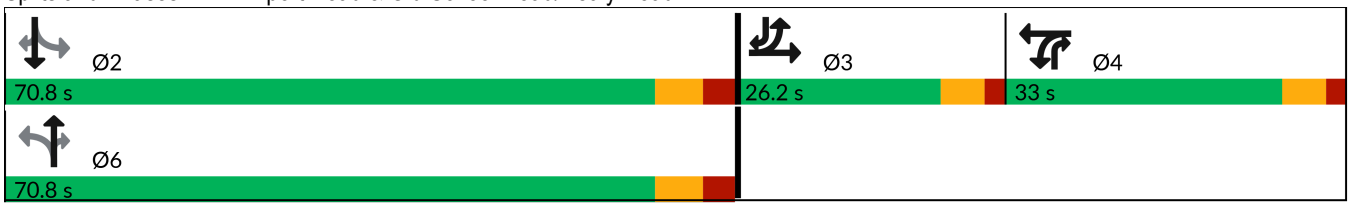
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	17%	7%	0%
Vol Thru, %	76%	76%	92%	68%
Vol Right, %	15%	7%	1%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	431	256	367	257
LT Vol	40	44	25	1
Through Vol	326	195	339	174
RT Vol	65	17	3	82
Lane Flow Rate	431	256	367	257
Geometry Grp	1	1	1	1
Degree of Util (X)	0.881	0.574	0.782	0.669
Departure Headway (Hd)	7.357	8.077	7.672	9.375
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	491	445	470	385
Service Time	5.414	6.147	5.73	7.444
HCM Lane V/C Ratio	0.878	0.575	0.781	0.668
HCM Control Delay, s/veh	44.1	21.6	33.3	29.6
HCM Lane LOS	E	C	D	D
HCM 95th-tile Q	9.6	3.5	7	4.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	143	24	98	275	59	34	750	74	33	371	46
Future Volume (vph)	92	143	24	98	275	59	34	750	74	33	371	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		15.0	0.0		50.0
Storage Lanes	0		0	0		0	0		1	0		1
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		0.987			0.982				0.850			0.850
Flt Protected		0.983			0.989			0.998			0.996	
Satd. Flow (prot)	0	1793	0	0	1828	0	0	1745	1521	0	1650	1551
Flt Permitted		0.983			0.989			0.966			0.523	
Satd. Flow (perm)	0	1793	0	0	1828	0	0	1689	1521	0	867	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			6				30			46
Link Speed (k/h)		70			70			80			80	
Link Distance (m)		1395.8			247.3			628.9			225.4	
Travel Time (s)		71.8			12.7			28.3			10.1	
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%	3%	13%	5%	1%	2%	7%	10%	5%	4%	17%	3%
Adj. Flow (vph)	92	143	24	98	275	59	34	750	74	33	371	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	259	0	0	432	0	0	784	74	0	404	46
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			-30.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template	Left			Left			Left		Right	Left		
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		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	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	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
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Detector Phase	3	3		4	4		6	6	4	2	2	3
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		12.0	12.0	8.0	12.0	12.0	8.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	26.2	26.2		26.2	26.2		22.7	22.7	26.2	22.7	22.7	26.2
Total Split (s)	26.2	26.2		33.0	33.0		70.8	70.8	33.0	70.8	70.8	26.2
Total Split (%)	20.2%	20.2%		25.4%	25.4%		54.5%	54.5%	25.4%	54.5%	54.5%	20.2%
Maximum Green (s)	20.0	20.0		26.8	26.8		63.1	63.1	26.8	63.1	63.1	20.0
Yellow Time (s)	4.2	4.2		4.2	4.2		4.6	4.6	4.2	4.6	4.6	4.2
All-Red Time (s)	2.0	2.0		2.0	2.0		3.1	3.1	2.0	3.1	3.1	2.0
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)		6.2			6.2			7.7	6.2		7.7	6.2
Lead/Lag	Lead	Lead		Lag	Lag				Lag			Lead
Lead-Lag Optimize?	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
Recall Mode	None	None		None	None		Max	Max	None	Max	Max	None
Walk Time (s)	10.0	10.0		10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		5.0	5.0	10.0	5.0	5.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		19.9			26.8			63.1	97.6		63.1	90.7
Actuated g/C Ratio		0.15			0.21			0.49	0.75		0.49	0.70
v/c Ratio		0.94			1.13			0.96	0.06		0.96	0.04
Control Delay (s/veh)		93.9			132.9			55.1	2.8		68.3	1.8
Queue Delay		0.0			0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)		93.9			132.9			55.1	2.8		68.3	1.8
LOS		F			F			E	A		E	A
Approach Delay (s/veh)		93.9			132.9			50.6			61.5	
Approach LOS		F			F			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 129.9			
Natural Cycle: 140			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay (s/veh): 76.5		Intersection LOS: E	
Intersection Capacity Utilization 105.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Airport Road & Old School Road/Healy Road



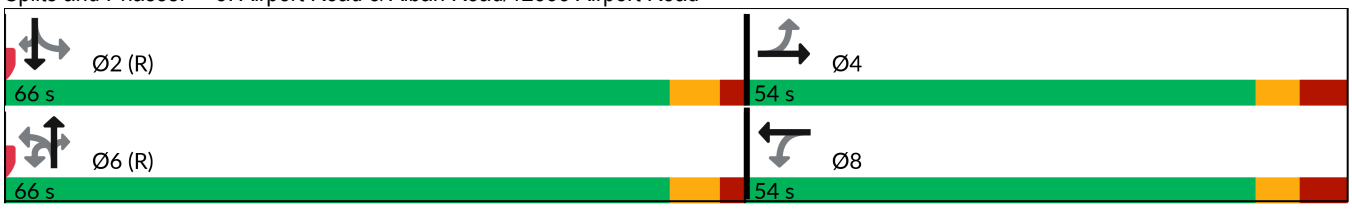
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	141	0	88	45	0	7	2	68	749	27	3	490
Future Volume (vph)	141	0	88	45	0	7	2	68	749	27	3	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1388	1188	0	1275	1615	0	0	1328	3444	1072	1332	3259
Flt Permitted	0.753			0.700				0.473			0.352	
Satd. Flow (perm)	1101	1188	0	939	1615	0	0	661	3444	1044	493	3259
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		300			146					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			255.2
Travel Time (s)		10.6			17.5				19.7			11.5
Confl. Peds. (#/hr)										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 (%)	30%	2%	36%	40%	2%	0%	0%	37%	6%	49%	34%	12%
Adj. Flow (vph)	141	0	88	45	0	7	2	68	749	27	3	490
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	88	0	45	7	0	0	70	749	27	3	490
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1262
Flt Permitted	
Satd. Flow (perm)	1262
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	28%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	29
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	54.0	54.0		54.0	54.0		66.0	66.0	66.0	66.0	66.0	66.0
Total Split (%)	45.0%	45.0%		45.0%	45.0%		55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Maximum Green (s)	45.8	45.8		45.8	45.8		59.4	59.4	59.4	59.4	59.4	59.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	21.1	21.1		21.1	21.1			84.1	84.1	84.1	84.1	84.1
Actuated g/C Ratio	0.18	0.18		0.18	0.18			0.70	0.70	0.70	0.70	0.70
v/c Ratio	0.73	0.19		0.27	0.02			0.15	0.31	0.04	0.01	0.21
Control Delay (s/veh)	67.0	0.9		44.2	0.1			17.2	16.5	7.7	7.7	7.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.0	0.9		44.2	0.1			17.2	16.5	7.7	7.7	7.4
LOS	E	A		D	A			B	B	A	A	A
Approach Delay (s/veh)		41.6			38.3				16.3			7.0
Approach LOS		D			D				B			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 58 (48%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 17.6		Intersection LOS: B	
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	66.0
Total Split (%)	55.0%
Maximum Green (s)	59.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	84.1
Actuated g/C Ratio	0.70
v/c Ratio	0.03
Control Delay (s/veh)	1.2
Queue Delay	0.0
Total Delay (s/veh)	1.2
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

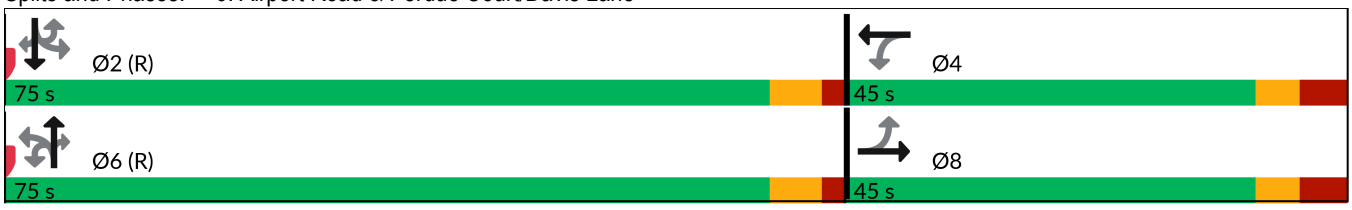
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	0	61	80	0	8	3	36	879	49	8	20
Future Volume (vph)	6	0	61	80	0	8	3	36	879	49	8	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.5
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0		70.0
Storage Lanes	1		0	1		0		1		1		1
Taper Length (m)	7.5			7.5				70.0				65.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Ped Bike Factor										0.95		0.99
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1785	1458	0	1638	1445	0	0	1122	3318	868	0	1086
Flt Permitted	0.752			0.717				0.421				0.314
Satd. Flow (perm)	1413	1458	0	1236	1445	0	0	497	3318	829	0	357
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		269			125					49		
Link Speed (k/h)		50			50				60			
Link Distance (m)		111.7			131.0				459.1			
Travel Time (s)		8.0			9.4				27.5			
Confl. Peds. (#/hr)										12		12
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 (%)	0%	2%	12%	9%	2%	13%	0%	64%	10%	84%	0%	90%
Adj. Flow (vph)	6	0	61	80	0	8	3	36	879	49	8	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	61	0	80	8	0	0	39	879	49	0	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(m)		3.5			3.5				3.6			
Link Offset(m)		0.0			0.0				0.0			
Crosswalk Width(m)		4.8			4.8				4.8			
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	15	25		15	15	25
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left				Left	
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	2.0	25.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	2.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		8			4				6			
Permitted Phases	8			4			6	6		6	2	2
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	610	9
Future Volume (vph)	610	9
Ideal Flow (vphpl)	1900	1900
Lane Width (m)	3.7	3.5
Storage Length (m)		60.0
Storage Lanes		1
Taper Length (m)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3230	845
Flt Permitted		
Satd. Flow (perm)	3230	845
Right Turn on Red		Yes
Satd. Flow (RTOR)		47
Link Speed (k/h)	80	
Link Distance (m)	438.5	
Travel Time (s)	19.7	
Confl. Peds. (#/hr)		
Peak Hour Factor	1.00	1.00
Heavy Vehicles (%)	13%	89%
Adj. Flow (vph)	610	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	610	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(m)	3.6	
Link Offset(m)	0.0	
Crosswalk Width(m)	4.8	
Two way Left Turn Lane		
Headway Factor	0.99	1.01
Turning Speed (k/h)		15
Number of Detectors	1	1
Detector Template		
Leading Detector (m)	10.0	10.0
Trailing Detector (m)	0.0	0.0
Detector 1 Position(m)	0.0	0.0
Detector 1 Size(m)	10.0	10.0
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Turn Type	NA	Perm
Protected Phases	2	
Permitted Phases		2
Detector Phase	2	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
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)	37.2	37.2		37.2	37.2		34.6	34.6	34.6	34.6	34.6	34.6
Total Split (s)	45.0	45.0		45.0	45.0		75.0	75.0	75.0	75.0	75.0	75.0
Total Split (%)	37.5%	37.5%		37.5%	37.5%		62.5%	62.5%	62.5%	62.5%	62.5%	62.5%
Maximum Green (s)	36.8	36.8		36.8	36.8		68.4	68.4	68.4	68.4	68.4	68.4
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
Total Lost Time (s)	8.2	8.2		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	3.0	3.0	3.0
Recall Mode	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	8.0
Flash Don't Walk (s)	21.0	21.0		21.0	21.0		20.0	20.0	20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	14.4	14.4		14.4	14.4			96.1	96.1	96.1		96.1
Actuated g/C Ratio	0.12	0.12		0.12	0.12			0.80	0.80	0.80		0.80
v/c Ratio	0.04	0.15		0.54	0.03			0.10	0.33	0.07		0.10
Control Delay (s/veh)	44.8	0.8		62.8	0.1			5.2	4.9	1.6		7.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay (s/veh)	44.8	0.8		62.8	0.1			5.2	4.9	1.6		7.4
LOS	D	A		E	A			A	A	A		A
Approach Delay (s/veh)		4.7			57.1				4.7			
Approach LOS		A			E				A			

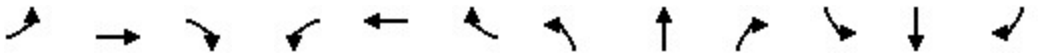
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 7.6		Intersection LOS: A	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	12.0
Minimum Split (s)	34.6	34.6
Total Split (s)	75.0	75.0
Total Split (%)	62.5%	62.5%
Maximum Green (s)	68.4	68.4
Yellow Time (s)	4.6	4.6
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.6	6.6
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Max	C-Max
Walk Time (s)	8.0	8.0
Flash Don't Walk (s)	20.0	20.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)	96.1	96.1
Actuated g/C Ratio	0.80	0.80
v/c Ratio	0.24	0.01
Control Delay (s/veh)	5.5	0.7
Queue Delay	0.0	0.0
Total Delay (s/veh)	5.5	0.7
LOS	A	A
Approach Delay (s/veh)	5.5	
Approach LOS	A	

Intersection Summary

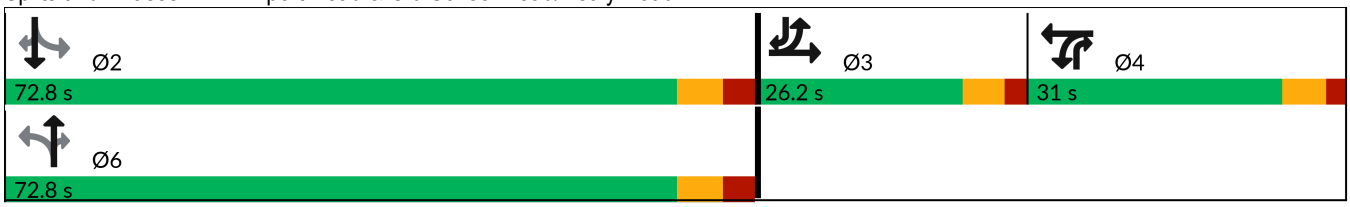


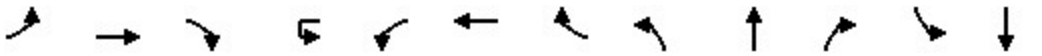
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	143	24	98	275	59	34	750	74	33	371	46
Future Volume (vph)	92	143	24	98	275	59	34	750	74	33	371	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		15.0	0.0		50.0
Storage Lanes	1		0	1		0	0		1	0		1
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		0.978			0.974				0.850			0.850
Flt Protected	0.950			0.950				0.998			0.996	
Satd. Flow (prot)	1733	1799	0	1700	1849	0	0	1745	1521	0	1650	1551
Flt Permitted	0.950			0.950				0.967			0.621	
Satd. Flow (perm)	1733	1799	0	1700	1849	0	0	1691	1521	0	1029	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			7				30			46
Link Speed (k/h)		70			70			80			80	
Link Distance (m)		1395.8			247.3			628.9			225.4	
Travel Time (s)		71.8			12.7			28.3			10.1	
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%	3%	13%	5%	1%	2%	7%	10%	5%	4%	17%	3%
Adj. Flow (vph)	92	143	24	98	275	59	34	750	74	33	371	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	167	0	98	334	0	0	784	74	0	404	46
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			0.0			0.0	
Link Offset(m)		0.0			-30.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template	Left			Left			Left		Right	Left		
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		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	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	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
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Detector Phase	3	3		4	4		6	6	4	2	2	3
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		12.0	12.0	8.0	12.0	12.0	8.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	26.2	26.2		26.2	26.2		22.7	22.7	26.2	22.7	22.7	26.2
Total Split (s)	26.2	26.2		31.0	31.0		72.8	72.8	31.0	72.8	72.8	26.2
Total Split (%)	20.2%	20.2%		23.8%	23.8%		56.0%	56.0%	23.8%	56.0%	56.0%	20.2%
Maximum Green (s)	20.0	20.0		24.8	24.8		65.1	65.1	24.8	65.1	65.1	20.0
Yellow Time (s)	4.2	4.2		4.2	4.2		4.6	4.6	4.2	4.6	4.6	4.2
All-Red Time (s)	2.0	2.0		2.0	2.0		3.1	3.1	2.0	3.1	3.1	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2		6.2	6.2			7.7	6.2		7.7	6.2
Lead/Lag	Lead	Lead		Lag	Lag				Lag			Lead
Lead-Lag Optimize?	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
Recall Mode	None	None		None	None		Max	Max	None	Max	Max	None
Walk Time (s)	10.0	10.0		10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		5.0	5.0	10.0	5.0	5.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	15.9	15.9		24.2	24.2			65.2	97.1		65.2	88.8
Actuated g/C Ratio	0.13	0.13		0.19	0.19			0.52	0.77		0.52	0.71
v/c Ratio	0.42	0.72		0.30	0.92			0.89	0.06		0.76	0.04
Control Delay (s/veh)	56.4	68.6		47.1	80.8			42.0	2.6		35.8	1.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)	56.4	68.6		47.1	80.8			42.0	2.6		35.8	1.6
LOS	E	E		D	F			D	A		D	A
Approach Delay (s/veh)		64.3			73.1			38.6			32.3	
Approach LOS		E			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 125.4			
Natural Cycle: 110			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 48.0		Intersection LOS: D	
Intersection Capacity Utilization 108.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Airport Road & Old School Road/Healy Road





Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	229	801	506	1	81	552	72	257	393	86	98	591
Future Volume (vph)	229	801	506	1	81	552	72	257	393	86	98	591
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	200.0		0.0		165.0		60.0	95.0		60.0	100.0	
Storage Lanes	1		0		1		1	1		1	1	
Taper Length (m)	100.0				100.0			80.0			50.0	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	0.99			1.00		0.98	1.00		0.96	0.99	
Frt		0.942					0.850			0.850		
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1526	4568	0	0	1356	4601	1157	1700	3017	1125	1475	3230
Flt Permitted	0.391				0.149			0.215			0.520	
Satd. Flow (perm)	627	4568	0	0	212	4601	1139	384	3017	1084	796	3230
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		152					117			92		
Link Speed (k/h)		60				60			60			60
Link Distance (m)		685.4				419.2			460.7			459.1
Travel Time (s)		41.1				25.2			27.6			27.5
Confl. Peds. (#/hr)	4		11		11		4	7		24	24	
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 (%)	17%	8%	6%	0%	32%	14%	38%	5%	21%	42%	21%	13%
Adj. Flow (vph)	229	801	506	1	81	552	72	257	393	86	98	591
Shared Lane Traffic (%)												
Lane Group Flow (vph)	229	1307	0	0	82	552	72	257	393	86	98	591
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
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	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	15	25		15	25		15	25	
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template				Left			Right			Right		
Leading Detector (m)	25.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	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
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
Detector 1 Size(m)	10.0	10.0		2.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	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
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	8		7	7	4		1	6		5	2
Permitted Phases	8			4	4		4	6		6	2	
Detector Phase	3	8		7	7	4	4	1	6	6	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	179
Future Volume (vph)	179
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1320
Flt Permitted	
Satd. Flow (perm)	1295
Right Turn on Red	Yes
Satd. Flow (RTOR)	179
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	21%
Adj. Flow (vph)	179
Shared Lane Traffic (%)	
Lane Group Flow (vph)	179
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	8.0	46.1		8.0	8.0	46.1	46.1	8.0	41.9	41.9	8.0	41.9
Total Split (s)	13.0	52.1		10.0	10.0	49.1	49.1	16.0	47.9	47.9	10.0	41.9
Total Split (%)	10.8%	43.4%		8.3%	8.3%	40.9%	40.9%	13.3%	39.9%	39.9%	8.3%	34.9%
Maximum Green (s)	10.0	45.0		7.0	7.0	42.0	42.0	13.0	41.0	41.0	7.0	35.0
Yellow Time (s)	3.0	4.0		3.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	3.1		0.0	0.0	3.1	3.1	0.0	2.9	2.9	0.0	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			3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max		None	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		12.0				12.0	12.0		12.0	12.0		12.0
Flash Don't Walk (s)		27.0				27.0	27.0		23.0	23.0		23.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	66.4	53.5			59.0	47.5	47.5	47.6	33.9	33.9	38.5	27.8
Actuated g/C Ratio	0.55	0.45			0.49	0.40	0.40	0.40	0.28	0.28	0.32	0.23
v/c Ratio	0.53	0.62			0.47	0.30	0.14	0.88	0.46	0.23	0.33	0.79
Control Delay (s/veh)	20.5	25.0			23.7	26.5	1.6	55.7	36.7	6.7	37.8	60.9
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.5	25.0			23.7	26.5	1.6	55.7	36.7	6.7	37.8	60.9
LOS	C	C			C	C	A	E	D	A	D	E
Approach Delay (s/veh)		24.4				23.7			39.9			50.0
Approach LOS		C				C			D			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 30 (25%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 33.0		Intersection LOS: C	
Intersection Capacity Utilization 96.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road

Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	34.9%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	27.8
Actuated g/C Ratio	0.23
v/c Ratio	0.41
Control Delay (s/veh)	21.0
Queue Delay	0.0
Total Delay (s/veh)	21.0
LOS	C
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	265	57	35	95	2	13	119	17	4	370	26
Future Vol, veh/h	49	265	57	35	95	2	13	119	17	4	370	26
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, %	0	2	8	0	2	0	16	2	7	25	1	0
Mvmt Flow	49	265	57	35	95	2	13	119	17	4	370	26
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	1
HCM Control Delay, s/veh	19.6	11.9	10.7	13.2
HCM LOS	C	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	13%	27%	100%	0%	0%
Vol Thru, %	0%	100%	70%	71%	72%	0%	100%	83%
Vol Right, %	0%	0%	30%	15%	2%	0%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	79	57	371	132	4	247	149
LT Vol	13	0	0	49	35	4	0	0
Through Vol	0	79	40	265	95	0	247	123
RT Vol	0	0	17	57	2	0	0	26
Lane Flow Rate	13	79	57	371	132	4	247	149
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.028	0.152	0.107	0.643	0.251	0.008	0.443	0.262
Departure Headway (Hd)	7.671	6.91	6.782	6.237	6.839	7.395	6.464	6.322
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	464	515	525	575	521	482	555	564
Service Time	5.465	4.704	4.575	4.002	4.626	5.172	4.24	4.098
HCM Lane V/C Ratio	0.028	0.153	0.109	0.645	0.253	0.008	0.445	0.264
HCM Control Delay, s/veh	10.7	11	10.4	19.6	11.9	10.2	14.3	11.4
HCM Lane LOS	B	B	B	C	B	B	B	B
HCM 95th-tile Q	0.1	0.5	0.4	4.6	1	0	2.3	1

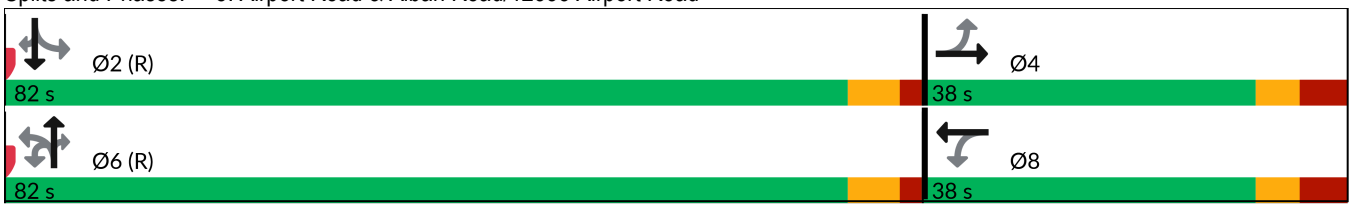
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	23	0	85	42	0	3	1	127	338	46	8	735
Future Volume (vph)	23	0	85	42	0	3	1	127	338	46	8	735
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1530	1292	0	1152	1205	0	0	1283	3147	1258	1293	3318
Flt Permitted	0.756			0.702				0.371			0.548	
Satd. Flow (perm)	1217	1292	0	851	1205	0	0	501	3147	1225	743	3318
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		236			540					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			1203.8
Travel Time (s)		10.6			17.5				19.7			54.2
Confl. Peds. (#/hr)										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 (%)	18%	2%	25%	55%	2%	34%	0%	41%	16%	27%	38%	10%
Adj. Flow (vph)	23	0	85	42	0	3	1	127	338	46	8	735
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	85	0	42	3	0	0	128	338	46	8	735
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	91
Future Volume (vph)	91
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1233
Flt Permitted	
Satd. Flow (perm)	1233
Right Turn on Red	Yes
Satd. Flow (RTOR)	91
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	31%
Adj. Flow (vph)	91
Shared Lane Traffic (%)	
Lane Group Flow (vph)	91
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	38.0	38.0		38.0	38.0		82.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%		31.7%	31.7%		68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8		29.8	29.8		75.4	75.4	75.4	75.4	75.4	75.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	13.5	13.5		13.5	13.5			97.0	97.0	97.0	97.0	97.0
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.81	0.81	0.81	0.81	0.81
v/c Ratio	0.17	0.24		0.44	0.00			0.32	0.13	0.05	0.01	0.27
Control Delay (s/veh)	50.1	1.6		63.8	0.0			6.1	2.7	1.2	4.0	4.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.1	1.6		63.8	0.0			6.1	2.7	1.2	4.0	4.2
LOS	D	A		E	A			A	A	A	A	A
Approach Delay (s/veh)		11.9			59.5				3.4			3.9
Approach LOS		B			E				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 6.0		Intersection LOS: A	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	82.0
Total Split (%)	68.3%
Maximum Green (s)	75.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	97.0
Actuated g/C Ratio	0.81
v/c Ratio	0.09
Control Delay (s/veh)	1.1
Queue Delay	0.0
Total Delay (s/veh)	1.1
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

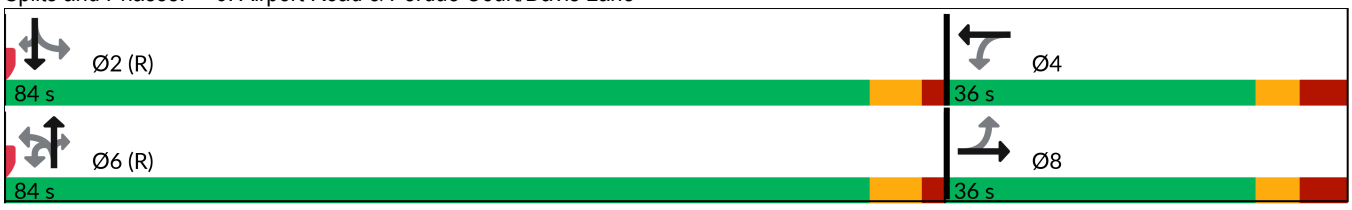
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	28	21	0	3	1	70	526	32	4	848
Future Volume (vph)	2	0	28	21	0	3	1	70	526	32	4	848
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0	70.0	
Storage Lanes	1		0	1		0		1		1	1	
Taper Length (m)	7.5			7.5				70.0			65.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.93	0.98	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	892	933	0	1069	816	0	0	1467	3017	1183	1190	3230
Flt Permitted	0.756			0.739				0.330			0.457	
Satd. Flow (perm)	710	933	0	831	816	0	0	510	3017	1104	560	3230
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		194			361					47		
Link Speed (k/h)		50			50				60			80
Link Distance (m)		111.7			131.0				459.1			438.5
Travel Time (s)		8.0			9.4				27.5			19.7
Confl. Peds. (#/hr)										12	12	
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 (%)	100%	2%	75%	67%	2%	100%	0%	22%	21%	35%	50%	13%
Adj. Flow (vph)	2	0	28	21	0	3	1	70	526	32	4	848
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	28	0	21	3	0	0	71	526	32	4	848
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(m)		3.5			3.5				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												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		8			4				6			2
Permitted Phases	8			4			6	6		6	2	
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	3
Future Volume (vph)	3
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	60.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1597
Flt Permitted	
Satd. Flow (perm)	1597
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	0%
Adj. Flow (vph)	3
Shared Lane Traffic (%)	
Lane Group Flow (vph)	3
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Maximum Green (s)	27.8	27.8		27.8	27.8		77.4	77.4	77.4	77.4	77.4	77.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	13.2	13.2		13.2	13.2			102.7	102.7	102.7	102.7	102.7
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.86	0.86	0.86	0.86	0.86
v/c Ratio	0.03	0.10		0.23	0.01			0.16	0.20	0.03	0.01	0.31
Control Delay (s/veh)	47.5	0.8		54.7	0.0			2.2	1.4	0.1	2.8	2.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	0.8		54.7	0.0			2.2	1.4	0.1	2.8	2.2
LOS	D	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		3.9			47.8				1.4			2.2
Approach LOS		A			D				A			A

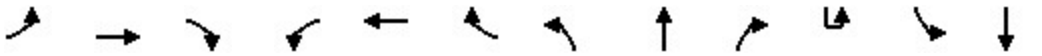
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 2.6		Intersection LOS: A	
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	24.6
Total Split (s)	84.0
Total Split (%)	70.0%
Maximum Green (s)	77.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	7.0
Flash Don't Walk (s)	8.0
Pedestrian Calls (#/hr)	20
Act Effct Green (s)	102.7
Actuated g/C Ratio	0.86
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary



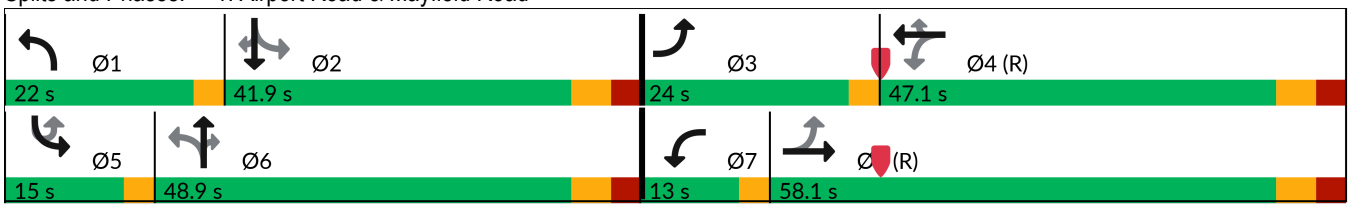
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	306	664	234	104	798	68	342	704	96	1	135	441
Future Volume (vph)	306	664	234	104	798	68	342	704	96	1	135	441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7
Storage Length (m)	200.0		0.0	165.0		60.0	95.0		60.0		100.0	
Storage Lanes	1		0	1		1	1		1		1	
Taper Length (m)	100.0			100.0			80.0				50.0	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00	0.99		1.00		0.98	1.00		0.96		0.99	
Frt		0.961				0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1526	4517	0	1500	4948	1079	1684	3288	1174	0	1477	3259
Flt Permitted	0.257			0.305			0.298				0.227	
Satd. Flow (perm)	412	4517	0	480	4948	1062	526	3288	1128	0	350	3259
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		76				128			106			
Link Speed (k/h)		60			60			60				60
Link Distance (m)		685.4			419.2			460.7				459.1
Travel Time (s)		41.1			25.2			27.6				27.5
Confl. Peds. (#/hr)	4		11	11		4	7		24		24	
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 (%)	17%	13%	5%	19%	6%	48%	6%	11%	36%	0%	21%	12%
Adj. Flow (vph)	306	664	234	104	798	68	342	704	96	1	135	441
Shared Lane Traffic (%)												
Lane Group Flow (vph)	306	898	0	104	798	68	342	704	96	0	136	441
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	R NA	Left	Left
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	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	25		15	15	25	
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template						Right			Right	Left		
Leading Detector (m)	25.0	10.0		25.0	10.0	10.0	25.0	10.0	10.0	2.0	25.0	10.0
Trailing Detector (m)	15.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	15.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	2.0	10.0	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
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt	NA
Protected Phases	3	8		7	4		1	6			5	2
Permitted Phases	8			4		4	6		6	5	2	
Detector Phase	3	8		7	4	4	1	6	6	5	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	312
Future Volume (vph)	312
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1426
Flt Permitted	
Satd. Flow (perm)	1398
Right Turn on Red	Yes
Satd. Flow (RTOR)	312
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	12%
Adj. Flow (vph)	312
Shared Lane Traffic (%)	
Lane Group Flow (vph)	312
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	5.0	12.0	12.0	5.0	5.0	12.0
Minimum Split (s)	8.0	46.1		8.0	46.1	46.1	8.0	41.9	41.9	8.0	8.0	41.9
Total Split (s)	24.0	58.1		13.0	47.1	47.1	22.0	48.9	48.9	15.0	15.0	41.9
Total Split (%)	17.8%	43.0%		9.6%	34.9%	34.9%	16.3%	36.2%	36.2%	11.1%	11.1%	31.0%
Maximum Green (s)	21.0	51.0		10.0	40.0	40.0	19.0	42.0	42.0	12.0	12.0	35.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	0.0	3.1		0.0	3.1	3.1	0.0	2.9	2.9	0.0	0.0	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		3.0	7.1	7.1	3.0	6.9	6.9		3.0	6.9
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		12.0			12.0	12.0		12.0	12.0			12.0
Flash Don't Walk (s)		27.0			27.0	27.0		23.0	23.0			23.0
Pedestrian Calls (#/hr)		0			0	0		0	0			0
Act Effct Green (s)	75.9	60.2		61.8	49.1	49.1	53.1	35.1	35.1		42.2	27.2
Actuated g/C Ratio	0.56	0.45		0.46	0.36	0.36	0.39	0.26	0.26		0.31	0.20
v/c Ratio	0.78	0.44		0.37	0.44	0.15	0.93	0.82	0.26		0.67	0.67
Control Delay (s/veh)	32.7	25.3		20.3	35.2	0.7	63.7	55.4	6.8		43.8	54.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	32.7	25.3		20.3	35.2	0.7	63.7	55.4	6.8		43.8	54.3
LOS	C	C		C	D	A	E	E	A		D	D
Approach Delay (s/veh)		27.2			31.2			53.8				36.9
Approach LOS		C			C			D				D

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 37.4		Intersection LOS: D	
Intersection Capacity Utilization 102.5%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	31.0%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	27.2
Actuated g/C Ratio	0.20
v/c Ratio	0.59
Control Delay (s/veh)	9.1
Queue Delay	0.0
Total Delay (s/veh)	9.1
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Intersection	
Intersection Delay, s/veh	24.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	214	17	25	373	3	40	354	65	1	185	82
Future Vol, veh/h	44	214	17	25	373	3	40	354	65	1	185	82
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, %	0	4	0	0	2	0	0	0	2	100	3	0
Mvmt Flow	44	214	17	25	373	3	40	354	65	1	185	82
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	1
HCM Control Delay, s/veh	22.5	41	17	14.5
HCM LOS	C	E	C	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	16%	6%	100%	0%	0%
Vol Thru, %	0%	100%	64%	78%	93%	0%	100%	43%
Vol Right, %	0%	0%	36%	6%	1%	0%	0%	57%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	236	183	275	401	1	123	144
LT Vol	40	0	0	44	25	1	0	0
Through Vol	0	236	118	214	373	0	123	62
RT Vol	0	0	65	17	3	0	0	82
Lane Flow Rate	40	236	183	275	401	1	123	144
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.094	0.52	0.392	0.61	0.854	0.003	0.288	0.317
Departure Headway (Hd)	8.457	7.935	7.711	7.986	7.667	10.663	8.407	7.934
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	424	453	467	451	477	336	427	453
Service Time	6.212	5.689	5.464	5.735	5.367	8.421	6.164	5.69
HCM Lane V/C Ratio	0.094	0.521	0.392	0.61	0.841	0.003	0.288	0.318
HCM Control Delay, s/veh	12.1	19	15.4	22.5	41	13.5	14.6	14.4
HCM Lane LOS	B	C	C	C	E	B	B	B
HCM 95th-tile Q	0.3	2.9	1.8	4	8.7	0	1.2	1.3

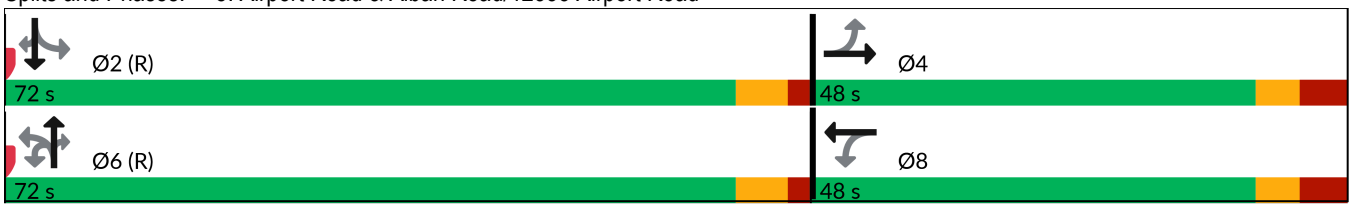
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	141	0	88	45	0	7	2	68	885	27	3	535
Future Volume (vph)	141	0	88	45	0	7	2	68	885	27	3	535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1388	1188	0	1275	1615	0	0	1337	3476	1072	1332	3259
Flt Permitted	0.753			0.700				0.453			0.299	
Satd. Flow (perm)	1101	1188	0	939	1615	0	0	638	3476	1044	419	3259
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		303			126					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			1203.8
Travel Time (s)		10.6			17.5				19.7			54.2
Confl. Peds. (#/hr)										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 (%)	30%	2%	36%	40%	2%	0%	0%	36%	5%	49%	34%	12%
Adj. Flow (vph)	141	0	88	45	0	7	2	68	885	27	3	535
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	88	0	45	7	0	0	70	885	27	3	535
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1262
Flt Permitted	
Satd. Flow (perm)	1262
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	28%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	29
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	48.0	48.0		48.0	48.0		72.0	72.0	72.0	72.0	72.0	72.0
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Maximum Green (s)	39.8	39.8		39.8	39.8		65.4	65.4	65.4	65.4	65.4	65.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	20.9	20.9		20.9	20.9			84.3	84.3	84.3	84.3	84.3
Actuated g/C Ratio	0.17	0.17		0.17	0.17			0.70	0.70	0.70	0.70	0.70
v/c Ratio	0.74	0.19		0.28	0.02			0.16	0.36	0.04	0.01	0.23
Control Delay (s/veh)	67.9	0.9		44.5	0.1			8.1	7.6	1.0	7.7	7.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.9	0.9		44.5	0.1			8.1	7.6	1.0	7.7	7.4
LOS	E	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		42.2			38.6				7.5			7.1
Approach LOS		D			D				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 12.6		Intersection LOS: B	
Intersection Capacity Utilization 66.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	72.0
Total Split (%)	60.0%
Maximum Green (s)	65.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	84.3
Actuated g/C Ratio	0.70
v/c Ratio	0.03
Control Delay (s/veh)	1.2
Queue Delay	0.0
Total Delay (s/veh)	1.2
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

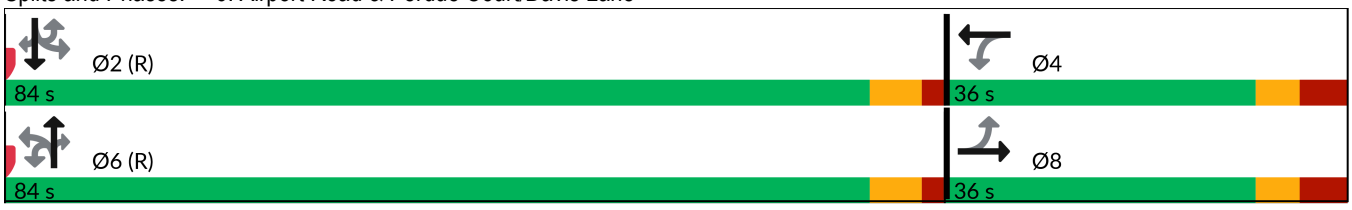
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	0	61	80	0	8	3	36	1019	49	8	20
Future Volume (vph)	6	0	61	80	0	8	3	36	1019	49	8	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.5
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0		70.0
Storage Lanes	1		0	1		0		1		1		1
Taper Length (m)	7.5			7.5				70.0				65.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Ped Bike Factor										0.93		0.99
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1785	1458	0	1638	1445	0	0	1122	3349	868	0	1086
Flt Permitted	0.752			0.717				0.402				0.267
Satd. Flow (perm)	1413	1458	0	1236	1445	0	0	475	3349	810	0	303
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		288			120					49		
Link Speed (k/h)		50			50				60			
Link Distance (m)		111.7			131.0				459.1			
Travel Time (s)		8.0			9.4				27.5			
Confl. Peds. (#/hr)										12		12
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 (%)	0%	2%	12%	9%	2%	13%	0%	64%	9%	84%	0%	90%
Adj. Flow (vph)	6	0	61	80	0	8	3	36	1019	49	8	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	61	0	80	8	0	0	39	1019	49	0	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(m)		3.5			3.5				3.6			
Link Offset(m)		0.0			0.0				0.0			
Crosswalk Width(m)		4.8			4.8				4.8			
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	15	25		15	15	25
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left				Left	
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	2.0	25.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	2.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		8			4				6			
Permitted Phases	8			4			6	6		6	2	2
Detector Phase	8	8		4	4		6	6	6	6	2	2

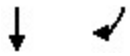
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	657	9
Future Volume (vph)	657	9
Ideal Flow (vphpl)	1900	1900
Lane Width (m)	3.7	3.5
Storage Length (m)		60.0
Storage Lanes		1
Taper Length (m)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3230	845
Flt Permitted		
Satd. Flow (perm)	3230	845
Right Turn on Red		Yes
Satd. Flow (RTOR)		47
Link Speed (k/h)	80	
Link Distance (m)	438.5	
Travel Time (s)	19.7	
Confl. Peds. (#/hr)		
Peak Hour Factor	1.00	1.00
Heavy Vehicles (%)	13%	89%
Adj. Flow (vph)	657	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	657	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(m)	3.6	
Link Offset(m)	0.0	
Crosswalk Width(m)	4.8	
Two way Left Turn Lane		
Headway Factor	0.99	1.01
Turning Speed (k/h)		15
Number of Detectors	1	1
Detector Template		
Leading Detector (m)	10.0	10.0
Trailing Detector (m)	0.0	0.0
Detector 1 Position(m)	0.0	0.0
Detector 1 Size(m)	10.0	10.0
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Turn Type	NA	Perm
Protected Phases	2	
Permitted Phases		2
Detector Phase	2	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Maximum Green (s)	27.8	27.8		27.8	27.8		77.4	77.4	77.4	77.4	77.4	77.4
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
Total Lost Time (s)	8.2	8.2		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	3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	14.3	14.3		14.3	14.3			96.2	96.2	96.2		96.2
Actuated g/C Ratio	0.12	0.12		0.12	0.12			0.80	0.80	0.80		0.80
v/c Ratio	0.04	0.14		0.54	0.03			0.10	0.38	0.07		0.12
Control Delay (s/veh)	45.0	0.7		63.2	0.3			5.2	5.2	1.6		3.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay (s/veh)	45.0	0.7		63.2	0.3			5.2	5.2	1.6		3.1
LOS	D	A		E	A			A	A	A		A
Approach Delay (s/veh)		4.7			57.4				5.0			
Approach LOS		A			E				A			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 55.8%		ICU Level of Service B	
Analysis Period (min) 15			

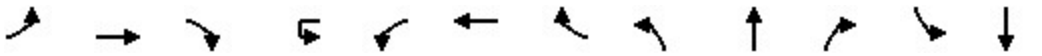
Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane





Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	12.0
Minimum Split (s)	24.6	24.6
Total Split (s)	84.0	84.0
Total Split (%)	70.0%	70.0%
Maximum Green (s)	77.4	77.4
Yellow Time (s)	4.6	4.6
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.6	6.6
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Max	C-Max
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	8.0	8.0
Pedestrian Calls (#/hr)	20	20
Act Effct Green (s)	96.2	96.2
Actuated g/C Ratio	0.80	0.80
v/c Ratio	0.25	0.01
Control Delay (s/veh)	2.0	0.0
Queue Delay	0.0	0.0
Total Delay (s/veh)	2.0	0.0
LOS	A	A
Approach Delay (s/veh)	2.0	
Approach LOS	A	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	229	819	506	1	81	564	72	257	399	86	98	604
Future Volume (vph)	229	819	506	1	81	564	72	257	399	86	98	604
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	200.0		0.0		165.0		60.0	95.0		60.0	100.0	
Storage Lanes	1		0		1		1	1		1	1	
Taper Length (m)	100.0				100.0			80.0			50.0	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	0.99			1.00		0.98	1.00		0.96	0.99	
Frt		0.943					0.850			0.850		
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1526	4573	0	0	1356	4601	1157	1700	3017	1125	1475	3230
Flt Permitted	0.384				0.144			0.209			0.517	
Satd. Flow (perm)	616	4573	0	0	205	4601	1139	373	3017	1084	791	3230
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		149					117			92		
Link Speed (k/h)		60				60			60			60
Link Distance (m)		685.4				419.2			460.7			459.1
Travel Time (s)		41.1				25.2			27.6			27.5
Confl. Peds. (#/hr)	4		11		11		4	7		24	24	
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 (%)	17%	8%	6%	0%	32%	14%	38%	5%	21%	42%	21%	13%
Adj. Flow (vph)	229	819	506	1	81	564	72	257	399	86	98	604
Shared Lane Traffic (%)												
Lane Group Flow (vph)	229	1325	0	0	82	564	72	257	399	86	98	604
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
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	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	15	25		15	25		15	25	
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template				Left			Right			Right		
Leading Detector (m)	25.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	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
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
Detector 1 Size(m)	10.0	10.0		2.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	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
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	8		7	7	4		1	6		5	2
Permitted Phases	8			4	4		4	6		6	2	
Detector Phase	3	8		7	7	4	4	1	6	6	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	179
Future Volume (vph)	179
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1320
Flt Permitted	
Satd. Flow (perm)	1295
Right Turn on Red	Yes
Satd. Flow (RTOR)	179
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	21%
Adj. Flow (vph)	179
Shared Lane Traffic (%)	
Lane Group Flow (vph)	179
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

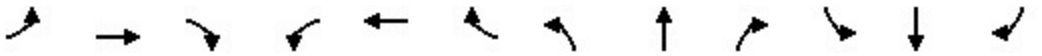
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	8.0	46.1		8.0	8.0	46.1	46.1	8.0	41.9	41.9	8.0	41.9
Total Split (s)	13.0	52.1		10.0	10.0	49.1	49.1	16.0	47.9	47.9	10.0	41.9
Total Split (%)	10.8%	43.4%		8.3%	8.3%	40.9%	40.9%	13.3%	39.9%	39.9%	8.3%	34.9%
Maximum Green (s)	10.0	45.0		7.0	7.0	42.0	42.0	13.0	41.0	41.0	7.0	35.0
Yellow Time (s)	3.0	4.0		3.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	3.1		0.0	0.0	3.1	3.1	0.0	2.9	2.9	0.0	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			3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max		None	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		12.0				12.0	12.0		12.0	12.0		12.0
Flash Don't Walk (s)		27.0				27.0	27.0		23.0	23.0		23.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	65.9	53.1			58.6	47.1	47.1	48.1	34.3	34.3	38.9	28.2
Actuated g/C Ratio	0.55	0.44			0.49	0.39	0.39	0.40	0.29	0.29	0.32	0.24
v/c Ratio	0.54	0.63			0.48	0.31	0.14	0.88	0.46	0.23	0.33	0.80
Control Delay (s/veh)	21.2	25.6			24.7	26.8	1.6	56.3	36.4	6.6	37.6	61.0
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.2	25.6			24.7	26.8	1.6	56.3	36.4	6.6	37.6	61.0
LOS	C	C			C	C	A	E	D	A	D	E
Approach Delay (s/veh)		25.0				24.0			39.8			50.3
Approach LOS		C				C			D			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 30 (25%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 33.4		Intersection LOS: C	
Intersection Capacity Utilization 97.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road

Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	34.9%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	28.2
Actuated g/C Ratio	0.24
v/c Ratio	0.41
Control Delay (s/veh)	20.8
Queue Delay	0.0
Total Delay (s/veh)	20.8
LOS	C
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

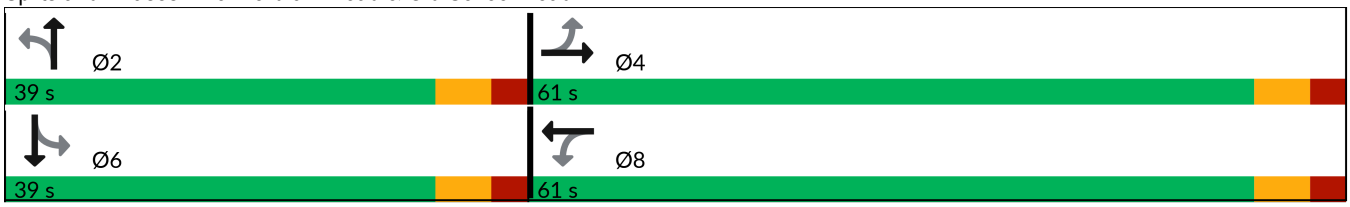


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	292	57	35	105	2	13	127	17	4	404	26
Future Volume (vph)	49	292	57	35	105	2	13	127	17	4	404	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	0.0		0.0	0.0		0.0	55.0		0.0	55.0		55.0
Storage Lanes	0		0	0		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	0.95	0.95	1.00	0.95	0.95
Frt		0.981			0.998			0.982			0.991	
Flt Protected		0.994			0.988		0.950			0.950		
Satd. Flow (prot)	0	1826	0	0	1867	0	1539	3494	0	1428	3584	0
Flt Permitted		0.938			0.815		0.502			0.661		
Satd. Flow (perm)	0	1723	0	0	1540	0	813	3494	0	994	3584	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			1			15			7	
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		550.3			548.3			480.6			445.5	
Travel Time (s)		28.3			28.2			24.7			22.9	
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 (%)	0%	2%	8%	0%	2%	0%	16%	2%	7%	25%	1%	0%
Adj. Flow (vph)	49	292	57	35	105	2	13	127	17	4	404	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	398	0	0	142	0	13	144	0	4	430	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			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								Yes				
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template	Left			Left								
Leading Detector (m)	2.0	10.0		2.0	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		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	10.0		2.0	10.0		10.0	10.0		10.0	10.0	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		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	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	24.9	24.9		24.9	24.9		24.9	24.9		24.9	24.9	
Total Split (s)	61.0	61.0		61.0	61.0		39.0	39.0		39.0	39.0	
Total Split (%)	61.0%	61.0%		61.0%	61.0%		39.0%	39.0%		39.0%	39.0%	
Maximum Green (s)	54.1	54.1		54.1	54.1		32.1	32.1		32.1	32.1	
Yellow Time (s)	4.2	4.2		4.2	4.2		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.7	2.7		2.7	2.7		2.7	2.7		2.7	2.7	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9			6.9		6.9	6.9		6.9	6.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	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	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	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	
Act Effct Green (s)		19.5			19.5		32.3	32.3		32.3	32.3	
Actuated g/C Ratio		0.30			0.30		0.49	0.49		0.49	0.49	
v/c Ratio		0.77			0.31		0.03	0.08		0.01	0.24	
Control Delay (s/veh)		30.5			19.1		11.1	9.3		10.8	10.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		30.5			19.1		11.1	9.3		10.8	10.8	
LOS		C			B		B	A		B	B	
Approach Delay (s/veh)		30.5			19.1			9.5			10.8	
Approach LOS		C			B			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 65.6			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 18.6		Intersection LOS: B	
Intersection Capacity Utilization 47.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Old School Road



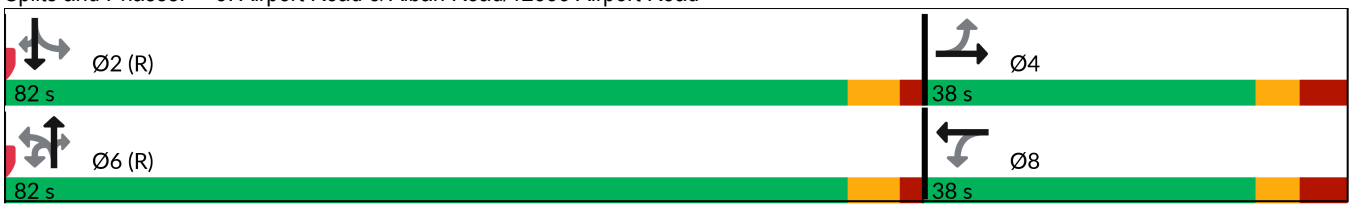
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	23	0	85	42	0	3	1	127	346	46	8	751
Future Volume (vph)	23	0	85	42	0	3	1	127	346	46	8	751
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1530	1292	0	1152	1205	0	0	1283	3147	1258	1293	3318
Flt Permitted	0.756			0.702				0.364			0.544	
Satd. Flow (perm)	1217	1292	0	851	1205	0	0	492	3147	1225	738	3318
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		228			531					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			1203.8
Travel Time (s)		10.6			17.5				19.7			54.2
Confl. Peds. (#/hr)										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 (%)	18%	2%	25%	55%	2%	34%	0%	41%	16%	27%	38%	10%
Adj. Flow (vph)	23	0	85	42	0	3	1	127	346	46	8	751
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	85	0	42	3	0	0	128	346	46	8	751
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	91
Future Volume (vph)	91
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1233
Flt Permitted	
Satd. Flow (perm)	1233
Right Turn on Red	Yes
Satd. Flow (RTOR)	91
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	31%
Adj. Flow (vph)	91
Shared Lane Traffic (%)	
Lane Group Flow (vph)	91
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	38.0	38.0		38.0	38.0		82.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%		31.7%	31.7%		68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8		29.8	29.8		75.4	75.4	75.4	75.4	75.4	75.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	13.5	13.5		13.5	13.5			97.0	97.0	97.0	97.0	97.0
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.81	0.81	0.81	0.81	0.81
v/c Ratio	0.17	0.24		0.44	0.00			0.32	0.14	0.05	0.01	0.28
Control Delay (s/veh)	50.1	1.7		63.8	0.0			6.3	2.7	1.2	4.0	4.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.1	1.7		63.8	0.0			6.3	2.7	1.2	4.0	4.3
LOS	D	A		E	A			A	A	A	A	A
Approach Delay (s/veh)		12.0			59.5				3.4			3.9
Approach LOS		B			E				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 6.0		Intersection LOS: A	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	82.0
Total Split (%)	68.3%
Maximum Green (s)	75.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	97.0
Actuated g/C Ratio	0.81
v/c Ratio	0.09
Control Delay (s/veh)	1.1
Queue Delay	0.0
Total Delay (s/veh)	1.1
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

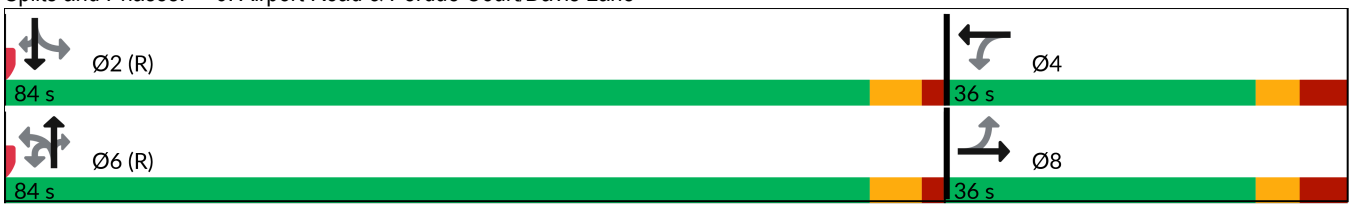
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	28	21	0	3	1	70	535	32	4	865
Future Volume (vph)	2	0	28	21	0	3	1	70	535	32	4	865
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0	70.0	
Storage Lanes	1		0	1		0		1		1	1	
Taper Length (m)	7.5			7.5				70.0			65.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.93	0.98	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	892	933	0	1069	816	0	0	1467	3017	1183	1190	3230
Flt Permitted	0.756			0.739				0.323			0.453	
Satd. Flow (perm)	710	933	0	831	816	0	0	499	3017	1104	555	3230
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		188			355					47		
Link Speed (k/h)		50			50				60			80
Link Distance (m)		111.7			131.0				459.1			438.5
Travel Time (s)		8.0			9.4				27.5			19.7
Confl. Peds. (#/hr)										12	12	
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 (%)	100%	2%	75%	67%	2%	100%	0%	22%	21%	35%	50%	13%
Adj. Flow (vph)	2	0	28	21	0	3	1	70	535	32	4	865
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	28	0	21	3	0	0	71	535	32	4	865
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(m)		3.5			3.5				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												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		8			4				6			2
Permitted Phases	8			4			6	6		6	2	
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	3
Future Volume (vph)	3
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	60.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1597
Flt Permitted	
Satd. Flow (perm)	1597
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	0%
Adj. Flow (vph)	3
Shared Lane Traffic (%)	
Lane Group Flow (vph)	3
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Maximum Green (s)	27.8	27.8		27.8	27.8		77.4	77.4	77.4	77.4	77.4	77.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	13.2	13.2		13.2	13.2			102.7	102.7	102.7	102.7	102.7
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.86	0.86	0.86	0.86	0.86
v/c Ratio	0.03	0.10		0.23	0.01			0.17	0.21	0.03	0.01	0.31
Control Delay (s/veh)	47.5	0.8		54.7	0.0			2.3	1.4	0.1	2.8	2.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	0.8		54.7	0.0			2.3	1.4	0.1	2.8	2.3
LOS	D	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		3.9			47.8				1.4			2.2
Approach LOS		A			D				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 2.6		Intersection LOS: A	
Intersection Capacity Utilization 61.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	24.6
Total Split (s)	84.0
Total Split (%)	70.0%
Maximum Green (s)	77.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	7.0
Flash Don't Walk (s)	8.0
Pedestrian Calls (#/hr)	20
Act Effct Green (s)	102.7
Actuated g/C Ratio	0.86
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

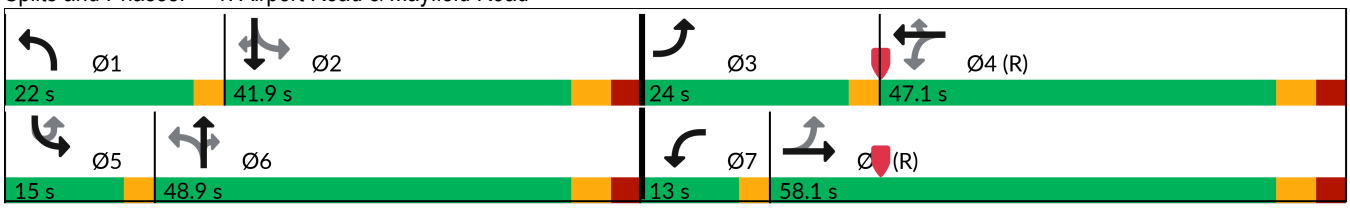
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	306	678	234	104	816	68	342	719	96	1	135	449
Future Volume (vph)	306	678	234	104	816	68	342	719	96	1	135	449
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7
Storage Length (m)	200.0		0.0	165.0		60.0	95.0		60.0		100.0	
Storage Lanes	1		0	1		1	1		1		1	
Taper Length (m)	100.0			100.0			80.0				50.0	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00	0.99		1.00		0.98	1.00		0.96		0.99	
Frt		0.962				0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1526	4520	0	1500	4948	1079	1684	3288	1174	0	1477	3259
Flt Permitted	0.248			0.301			0.294				0.218	
Satd. Flow (perm)	398	4520	0	474	4948	1062	519	3288	1128	0	336	3259
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		74				128			106			
Link Speed (k/h)		60			60			60				60
Link Distance (m)		685.4			419.2			460.7				459.1
Travel Time (s)		41.1			25.2			27.6				27.5
Confl. Peds. (#/hr)	4		11	11		4	7		24		24	
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 (%)	17%	13%	5%	19%	6%	48%	6%	11%	36%	0%	21%	12%
Adj. Flow (vph)	306	678	234	104	816	68	342	719	96	1	135	449
Shared Lane Traffic (%)												
Lane Group Flow (vph)	306	912	0	104	816	68	342	719	96	0	136	449
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	R NA	Left	Left
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	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	25		15	15	25	
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template						Right			Right	Left		
Leading Detector (m)	25.0	10.0		25.0	10.0	10.0	25.0	10.0	10.0	2.0	25.0	10.0
Trailing Detector (m)	15.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	15.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	2.0	10.0	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
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt	NA
Protected Phases	3	8		7	4		1	6			5	2
Permitted Phases	8			4		4	6		6	5	2	
Detector Phase	3	8		7	4	4	1	6	6	5	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	312
Future Volume (vph)	312
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1426
Flt Permitted	
Satd. Flow (perm)	1398
Right Turn on Red	Yes
Satd. Flow (RTOR)	312
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	12%
Adj. Flow (vph)	312
Shared Lane Traffic (%)	
Lane Group Flow (vph)	312
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	5.0	12.0	12.0	5.0	5.0	12.0
Minimum Split (s)	8.0	46.1		8.0	46.1	46.1	8.0	41.9	41.9	8.0	8.0	41.9
Total Split (s)	24.0	58.1		13.0	47.1	47.1	22.0	48.9	48.9	15.0	15.0	41.9
Total Split (%)	17.8%	43.0%		9.6%	34.9%	34.9%	16.3%	36.2%	36.2%	11.1%	11.1%	31.0%
Maximum Green (s)	21.0	51.0		10.0	40.0	40.0	19.0	42.0	42.0	12.0	12.0	35.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	0.0	3.1		0.0	3.1	3.1	0.0	2.9	2.9	0.0	0.0	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		3.0	7.1	7.1	3.0	6.9	6.9		3.0	6.9
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		12.0			12.0	12.0		12.0	12.0			12.0
Flash Don't Walk (s)		27.0			27.0	27.0		23.0	23.0			23.0
Pedestrian Calls (#/hr)		0			0	0		0	0			0
Act Effct Green (s)	75.5	59.7		61.3	48.5	48.5	53.5	35.5	35.5		42.6	27.6
Actuated g/C Ratio	0.56	0.44		0.45	0.36	0.36	0.40	0.26	0.26		0.32	0.20
v/c Ratio	0.79	0.45		0.37	0.46	0.15	0.93	0.83	0.26		0.68	0.67
Control Delay (s/veh)	34.0	25.8		20.6	35.8	0.7	63.5	55.7	6.8		44.2	54.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	34.0	25.8		20.6	35.8	0.7	63.5	55.7	6.8		44.2	54.1
LOS	C	C		C	D	A	E	E	A		D	D
Approach Delay (s/veh)		27.8			31.8			53.9				36.9
Approach LOS		C			C			D				D

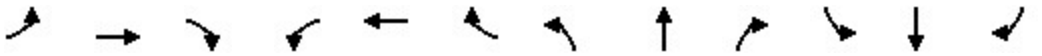
Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 37.7		Intersection LOS: D	
Intersection Capacity Utilization 102.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	31.0%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	27.6
Actuated g/C Ratio	0.20
v/c Ratio	0.58
Control Delay (s/veh)	9.0
Queue Delay	0.0
Total Delay (s/veh)	9.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

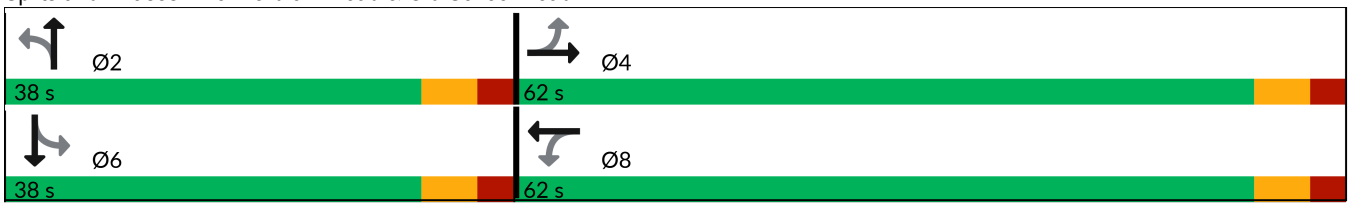


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	234	17	25	410	3	40	385	65	1	197	82
Future Volume (vph)	44	234	17	25	410	3	40	385	65	1	197	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	0.0		0.0	0.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	0		0	0		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	0.95	0.95	1.00	0.95	0.95
Frt		0.992			0.999			0.978			0.956	
Flt Protected		0.993			0.997		0.950			0.950		
Satd. Flow (prot)	0	1834	0	0	1878	0	1785	3560	0	892	3417	0
Flt Permitted		0.846			0.965		0.580			0.492		
Satd. Flow (perm)	0	1563	0	0	1818	0	1090	3560	0	462	3417	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1			20			66	
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		550.3			548.3			480.6			445.5	
Travel Time (s)		28.3			28.2			24.7			22.9	
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 (%)	0%	4%	0%	0%	2%	0%	0%	0%	2%	100%	3%	0%
Adj. Flow (vph)	44	234	17	25	410	3	40	385	65	1	197	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	295	0	0	438	0	40	450	0	1	279	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			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								Yes				
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template	Left			Left								
Leading Detector (m)	2.0	10.0		2.0	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		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	10.0		2.0	10.0		10.0	10.0		10.0	10.0	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		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	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	24.9	24.9		24.9	24.9		24.9	24.9		24.9	24.9	
Total Split (s)	62.0	62.0		62.0	62.0		38.0	38.0		38.0	38.0	
Total Split (%)	62.0%	62.0%		62.0%	62.0%		38.0%	38.0%		38.0%	38.0%	
Maximum Green (s)	55.1	55.1		55.1	55.1		31.1	31.1		31.1	31.1	
Yellow Time (s)	4.2	4.2		4.2	4.2		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.7	2.7		2.7	2.7		2.7	2.7		2.7	2.7	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9			6.9		6.9	6.9		6.9	6.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	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	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	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	
Act Effct Green (s)		20.5			20.5		31.3	31.3		31.3	31.3	
Actuated g/C Ratio		0.31			0.31		0.48	0.48		0.48	0.48	
v/c Ratio		0.60			0.77		0.08	0.26		0.00	0.17	
Control Delay (s/veh)		24.1			30.2		11.8	11.2		12.0	8.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		24.1			30.2		11.8	11.2		12.0	8.6	
LOS		C			C		B	B		B	A	
Approach Delay (s/veh)		24.1			30.2			11.2			8.6	
Approach LOS		C			C			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 65.6			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 18.8		Intersection LOS: B	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Old School Road



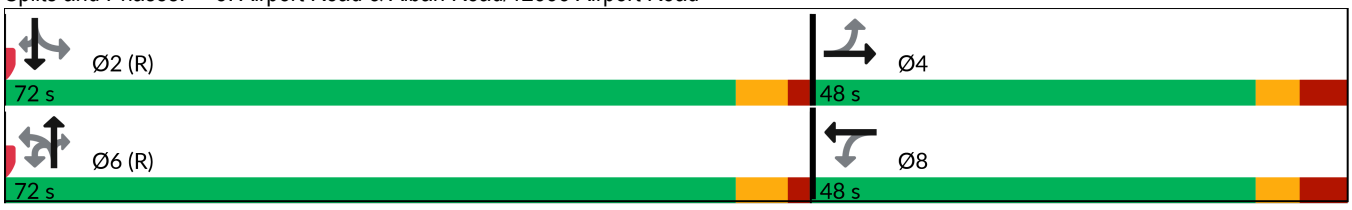
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	141	0	88	45	0	7	2	68	901	27	3	546
Future Volume (vph)	141	0	88	45	0	7	2	68	901	27	3	546
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1388	1188	0	1275	1615	0	0	1337	3444	1072	1332	3259
Flt Permitted	0.753			0.700				0.447			0.293	
Satd. Flow (perm)	1101	1188	0	939	1615	0	0	629	3444	1044	410	3259
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		295			121					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			1203.8
Travel Time (s)		10.6			17.5				19.7			54.2
Confl. Peds. (#/hr)										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 (%)	30%	2%	36%	40%	2%	0%	0%	36%	6%	49%	34%	12%
Adj. Flow (vph)	141	0	88	45	0	7	2	68	901	27	3	546
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	88	0	45	7	0	0	70	901	27	3	546
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1262
Flt Permitted	
Satd. Flow (perm)	1262
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	28%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	29
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	48.0	48.0		48.0	48.0		72.0	72.0	72.0	72.0	72.0	72.0
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Maximum Green (s)	39.8	39.8		39.8	39.8		65.4	65.4	65.4	65.4	65.4	65.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	20.9	20.9		20.9	20.9			84.3	84.3	84.3	84.3	84.3
Actuated g/C Ratio	0.17	0.17		0.17	0.17			0.70	0.70	0.70	0.70	0.70
v/c Ratio	0.74	0.20		0.28	0.02			0.16	0.37	0.04	0.01	0.24
Control Delay (s/veh)	67.9	1.0		44.5	0.1			8.1	7.7	1.0	7.7	7.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.9	1.0		44.5	0.1			8.1	7.7	1.0	7.7	7.4
LOS	E	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		42.2			38.6				7.6			7.1
Approach LOS		D			D				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 12.6		Intersection LOS: B	
Intersection Capacity Utilization 67.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	72.0
Total Split (%)	60.0%
Maximum Green (s)	65.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	84.3
Actuated g/C Ratio	0.70
v/c Ratio	0.03
Control Delay (s/veh)	1.2
Queue Delay	0.0
Total Delay (s/veh)	1.2
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

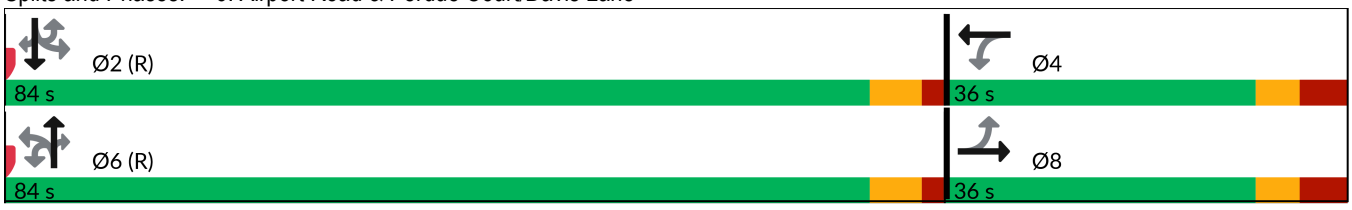
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	0	61	80	0	8	3	36	1037	49	8	20
Future Volume (vph)	6	0	61	80	0	8	3	36	1037	49	8	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.5
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0		70.0
Storage Lanes	1		0	1		0		1		1		1
Taper Length (m)	7.5			7.5				70.0				65.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Ped Bike Factor										0.93		0.99
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1785	1458	0	1638	1445	0	0	1122	3349	868	0	1086
Flt Permitted	0.752			0.717				0.397				0.261
Satd. Flow (perm)	1413	1458	0	1236	1445	0	0	469	3349	810	0	296
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		281			116					49		
Link Speed (k/h)		50			50				60			
Link Distance (m)		111.7			131.0				459.1			
Travel Time (s)		8.0			9.4				27.5			
Confl. Peds. (#/hr)										12		12
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 (%)	0%	2%	12%	9%	2%	13%	0%	64%	9%	84%	0%	90%
Adj. Flow (vph)	6	0	61	80	0	8	3	36	1037	49	8	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	61	0	80	8	0	0	39	1037	49	0	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(m)		3.5			3.5				3.6			
Link Offset(m)		0.0			0.0				0.0			
Crosswalk Width(m)		4.8			4.8				4.8			
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	15	25		15	15	25
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left				Left	
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	2.0	25.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	2.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		8			4				6			
Permitted Phases	8			4			6	6		6	2	2
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	669	9
Future Volume (vph)	669	9
Ideal Flow (vphpl)	1900	1900
Lane Width (m)	3.7	3.5
Storage Length (m)		60.0
Storage Lanes		1
Taper Length (m)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3259	845
Flt Permitted		
Satd. Flow (perm)	3259	845
Right Turn on Red		Yes
Satd. Flow (RTOR)		47
Link Speed (k/h)	80	
Link Distance (m)	438.5	
Travel Time (s)	19.7	
Confl. Peds. (#/hr)		
Peak Hour Factor	1.00	1.00
Heavy Vehicles (%)	12%	89%
Adj. Flow (vph)	669	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	669	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(m)	3.6	
Link Offset(m)	0.0	
Crosswalk Width(m)	4.8	
Two way Left Turn Lane		
Headway Factor	0.99	1.01
Turning Speed (k/h)		15
Number of Detectors	1	1
Detector Template		
Leading Detector (m)	10.0	10.0
Trailing Detector (m)	0.0	0.0
Detector 1 Position(m)	0.0	0.0
Detector 1 Size(m)	10.0	10.0
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Turn Type	NA	Perm
Protected Phases	2	
Permitted Phases		2
Detector Phase	2	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Maximum Green (s)	27.8	27.8		27.8	27.8		77.4	77.4	77.4	77.4	77.4	77.4
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
Total Lost Time (s)	8.2	8.2		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	3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	14.3	14.3		14.3	14.3			96.2	96.2	96.2		96.2
Actuated g/C Ratio	0.12	0.12		0.12	0.12			0.80	0.80	0.80		0.80
v/c Ratio	0.04	0.14		0.54	0.03			0.10	0.39	0.07		0.12
Control Delay (s/veh)	45.0	0.7		63.2	0.3			5.2	5.2	1.6		3.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay (s/veh)	45.0	0.7		63.2	0.3			5.2	5.2	1.6		3.1
LOS	D	A		E	A			A	A	A		A
Approach Delay (s/veh)		4.7			57.4				5.1			
Approach LOS		A			E				A			

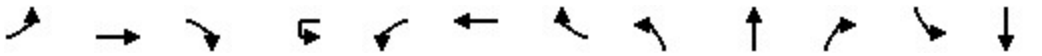
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 55.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	12.0
Minimum Split (s)	24.6	24.6
Total Split (s)	84.0	84.0
Total Split (%)	70.0%	70.0%
Maximum Green (s)	77.4	77.4
Yellow Time (s)	4.6	4.6
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.6	6.6
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Max	C-Max
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	8.0	8.0
Pedestrian Calls (#/hr)	20	20
Act Effct Green (s)	96.2	96.2
Actuated g/C Ratio	0.80	0.80
v/c Ratio	0.26	0.01
Control Delay (s/veh)	2.0	0.0
Queue Delay	0.0	0.0
Total Delay (s/veh)	2.0	0.0
LOS	A	A
Approach Delay (s/veh)	2.0	
Approach LOS	A	

Intersection Summary



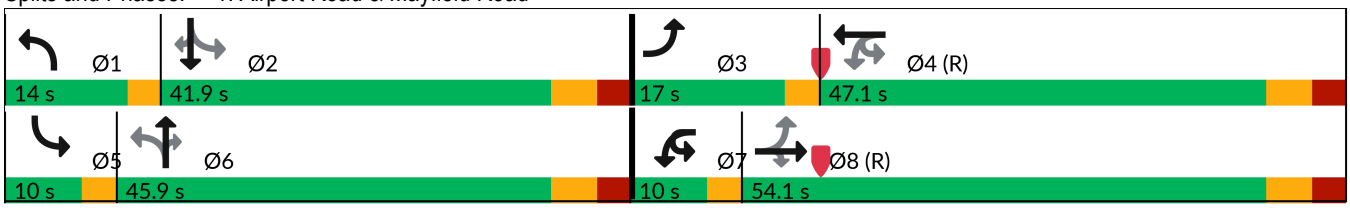
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	241	702	427	1	80	496	81	229	419	84	96	543
Future Volume (vph)	241	702	427	1	80	496	81	229	419	84	96	543
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	200.0		0.0		50.0		70.0	95.0		60.0	100.0	
Storage Lanes	1		1		1		1	1		1	1	
Taper Length (m)	100.0				50.0			80.0			50.0	
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00		0.98		1.00	1.00		1.00		0.96	0.99	
Frt			0.850			0.979				0.850		
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1500	3380	1493	0	1346	3016	0	1684	3067	1117	1417	3202
Flt Permitted	0.350				0.366			0.236			0.479	
Satd. Flow (perm)	552	3380	1460	0	517	3016	0	417	3067	1076	704	3202
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			326			16				119		
Link Speed (k/h)		60				60			60			60
Link Distance (m)		685.4				111.4			460.7			459.1
Travel Time (s)		41.1				6.7			27.6			27.5
Confl. Peds. (#/hr)	4		11		11		4	7		24	24	
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%	8%	7%	0%	33%	15%	38%	6%	19%	43%	26%	14%
Adj. Flow (vph)	241	702	427	1	80	496	81	229	419	84	96	543
Shared Lane Traffic (%)												
Lane Group Flow (vph)	241	702	427	0	81	577	0	229	419	84	96	543
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
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	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	15	25		15	25		15	25	
Number of Detectors	1	1	1	1	1	1		1	1	1	1	1
Detector Template			Right	Left						Right		
Leading Detector (m)	25.0	10.0	10.0	2.0	25.0	10.0		25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0	10.0	2.0	10.0	10.0		10.0	10.0	10.0	10.0	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
Turn Type	pm+pt	NA	Perm	pm+pt	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	8		7	7	4		1	6		5	2
Permitted Phases	8		8	4	4			6		6	2	
Detector Phase	3	8	8	7	7	4		1	6	6	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	151
Future Volume (vph)	151
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1219
Flt Permitted	
Satd. Flow (perm)	1196
Right Turn on Red	Yes
Satd. Flow (RTOR)	151
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	31%
Adj. Flow (vph)	151
Shared Lane Traffic (%)	
Lane Group Flow (vph)	151
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0	12.0		5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	8.0	46.1	46.1	8.0	8.0	46.1		8.0	41.9	41.9	8.0	41.9
Total Split (s)	17.0	54.1	54.1	10.0	10.0	47.1		14.0	45.9	45.9	10.0	41.9
Total Split (%)	14.2%	45.1%	45.1%	8.3%	8.3%	39.3%		11.7%	38.3%	38.3%	8.3%	34.9%
Maximum Green (s)	14.0	47.0	47.0	7.0	7.0	40.0		11.0	39.0	39.0	7.0	35.0
Yellow Time (s)	3.0	4.0	4.0	3.0	3.0	4.0		3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	0.0	3.1		0.0	2.9	2.9	0.0	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		3.0	7.1		3.0	6.9	6.9	3.0	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max	C-Max	None	None	C-Max		None	None	None	None	None
Walk Time (s)		12.0	12.0			12.0			12.0	12.0		12.0
Flash Don't Walk (s)		27.0	27.0			27.0			23.0	23.0		23.0
Pedestrian Calls (#/hr)		0	0			0			0	0		0
Act Effct Green (s)	70.0	56.9	56.9		61.0	49.3		44.0	30.3	30.3	36.8	26.1
Actuated g/C Ratio	0.58	0.47	0.47		0.51	0.41		0.37	0.25	0.25	0.31	0.22
v/c Ratio	0.56	0.44	0.49		0.26	0.46		0.85	0.54	0.23	0.37	0.78
Control Delay (s/veh)	18.8	23.7	8.3		15.0	28.0		57.0	41.1	3.6	38.8	58.7
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	23.7	8.3		15.0	28.0		57.0	41.1	3.6	38.8	58.7
LOS	B	C	A		B	C		E	D	A	D	E
Approach Delay (s/veh)		18.0				26.4			41.8			49.1
Approach LOS		B				C			D			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 30 (25%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 31.4		Intersection LOS: C	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	34.9%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	26.1
Actuated g/C Ratio	0.22
v/c Ratio	0.40
Control Delay (s/veh)	21.0
Queue Delay	0.0
Total Delay (s/veh)	21.0
LOS	C
Approach Delay (s/veh)	
Approach LOS	

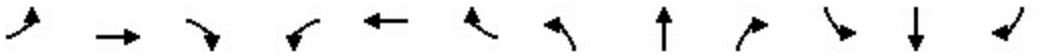
Intersection Summary

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	261	58	7	89	2	13	112	10	4	344	26
Future Vol, veh/h	49	261	58	7	89	2	13	112	10	4	344	26
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, %	0	2	8	0	2	0	16	2	11	25	1	0
Mvmt Flow	49	261	58	7	89	2	13	112	10	4	344	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	15.7	10.5	11.2	17.9
HCM LOS	C	B	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	13%	7%	1%
Vol Thru, %	83%	71%	91%	92%
Vol Right, %	7%	16%	2%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	135	368	98	374
LT Vol	13	49	7	4
Through Vol	112	261	89	344
RT Vol	10	58	2	26
Lane Flow Rate	135	368	98	374
Geometry Grp	1	1	1	1
Degree of Util (X)	0.233	0.567	0.167	0.613
Departure Headway (Hd)	6.21	5.551	6.136	5.897
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	575	648	580	610
Service Time	4.288	3.614	4.221	3.955
HCM Lane V/C Ratio	0.235	0.568	0.169	0.613
HCM Control Delay, s/veh	11.2	15.7	10.5	17.9
HCM Lane LOS	B	C	B	C
HCM 95th-tile Q	0.9	3.6	0.6	4.2

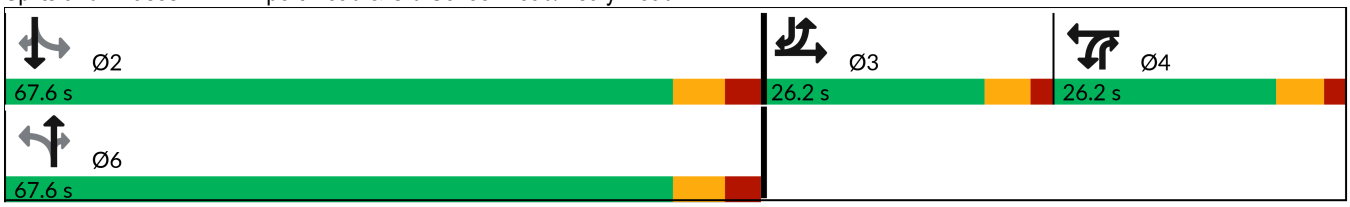


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	173	52	50	87	20	11	215	115	32	694	10
Future Volume (vph)	20	173	52	50	87	20	11	215	115	32	694	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	30.0		0.0	30.0		0.0	0.0		15.0	0.0		50.0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (m)	15.0			15.0			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		0.965			0.972				0.850			0.850
Flt Protected	0.950			0.950				0.998			0.998	
Satd. Flow (prot)	1539	1813	0	1668	1809	0	0	1592	1493	0	1686	1439
Flt Permitted	0.950			0.950				0.960			0.978	
Satd. Flow (perm)	1539	1813	0	1668	1809	0	0	1531	1493	0	1653	1439
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			8				115			29
Link Speed (k/h)		70			70			80			80	
Link Distance (m)		1395.8			247.3			628.9			225.4	
Travel Time (s)		71.8			12.7			28.3			10.1	
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 (%)	16%	2%	3%	7%	4%	0%	10%	21%	7%	7%	14%	11%
Adj. Flow (vph)	20	173	52	50	87	20	11	215	115	32	694	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	225	0	50	107	0	0	226	115	0	726	10
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			0.0			0.0	
Link Offset(m)		0.0			-30.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template	Left			Left			Left		Right	Left		
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		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	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	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
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Detector Phase	3	3		4	4		6	6	4	2	2	3
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		12.0	12.0	8.0	12.0	12.0	8.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	26.2	26.2		26.2	26.2		22.7	22.7	26.2	22.7	22.7	26.2
Total Split (s)	26.2	26.2		26.2	26.2		67.6	67.6	26.2	67.6	67.6	26.2
Total Split (%)	21.8%	21.8%		21.8%	21.8%		56.3%	56.3%	21.8%	56.3%	56.3%	21.8%
Maximum Green (s)	20.0	20.0		20.0	20.0		59.9	59.9	20.0	59.9	59.9	20.0
Yellow Time (s)	4.2	4.2		4.2	4.2		4.6	4.6	4.2	4.6	4.6	4.2
All-Red Time (s)	2.0	2.0		2.0	2.0		3.1	3.1	2.0	3.1	3.1	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2		6.2	6.2			7.7	6.2		7.7	6.2
Lead/Lag	Lead	Lead		Lag	Lag				Lag			Lead
Lead-Lag Optimize?	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
Recall Mode	None	None		None	None		Max	Max	None	Max	Max	None
Walk Time (s)	10.0	10.0		10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		5.0	5.0	10.0	5.0	5.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	17.0	17.0		11.6	11.6			60.1	79.4		60.1	84.8
Actuated g/C Ratio	0.16	0.16		0.11	0.11			0.55	0.73		0.55	0.78
v/c Ratio	0.08	0.77		0.28	0.54			0.27	0.10		0.80	0.01
Control Delay (s/veh)	40.7	60.4		49.5	53.3			14.9	1.1		28.9	0.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)	40.7	60.4		49.5	53.3			14.9	1.1		28.9	0.2
LOS	D	E		D	D			B	A		C	A
Approach Delay (s/veh)		58.8			52.1			10.3			28.5	
Approach LOS		E			D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 108.8			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 31.8		Intersection LOS: C	
Intersection Capacity Utilization 92.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Airport Road & Old School Road/Healy Road



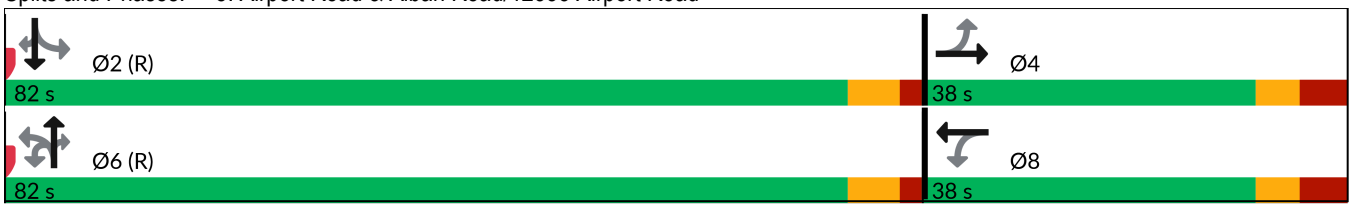
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	21	0	66	42	0	3	1	162	346	46	8	668
Future Volume (vph)	21	0	66	42	0	3	1	162	346	46	8	668
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1504	1223	0	1152	1205	0	0	1369	3120	1258	1293	3259
Flt Permitted	0.756			0.714				0.398			0.544	
Satd. Flow (perm)	1197	1223	0	866	1205	0	0	574	3120	1225	738	3259
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		273			531					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			255.2
Travel Time (s)		10.6			17.5				19.7			11.5
Confl. Peds. (#/hr)										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 (%)	20%	2%	32%	55%	2%	34%	0%	32%	17%	27%	38%	12%
Adj. Flow (vph)	21	0	66	42	0	3	1	162	346	46	8	668
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	66	0	42	3	0	0	163	346	46	8	668
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	130
Future Volume (vph)	130
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1324
Flt Permitted	
Satd. Flow (perm)	1324
Right Turn on Red	Yes
Satd. Flow (RTOR)	130
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	22%
Adj. Flow (vph)	130
Shared Lane Traffic (%)	
Lane Group Flow (vph)	130
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	38.0	38.0		38.0	38.0		82.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%		31.7%	31.7%		68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8		29.8	29.8		75.4	75.4	75.4	75.4	75.4	75.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	13.5	13.5		13.5	13.5			97.1	97.1	97.1	97.1	97.1
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.81	0.81	0.81	0.81	0.81
v/c Ratio	0.16	0.17		0.43	0.00			0.35	0.14	0.05	0.01	0.25
Control Delay (s/veh)	49.9	1.0		63.4	0.0			6.3	2.8	0.9	4.0	4.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.9	1.0		63.4	0.0			6.3	2.8	0.9	4.0	4.1
LOS	D	A		E	A			A	A	A	A	A
Approach Delay (s/veh)		12.8			59.2				3.6			3.6
Approach LOS		B			E				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 5.8		Intersection LOS: A	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	82.0
Total Split (%)	68.3%
Maximum Green (s)	75.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	97.1
Actuated g/C Ratio	0.81
v/c Ratio	0.12
Control Delay (s/veh)	1.0
Queue Delay	0.0
Total Delay (s/veh)	1.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

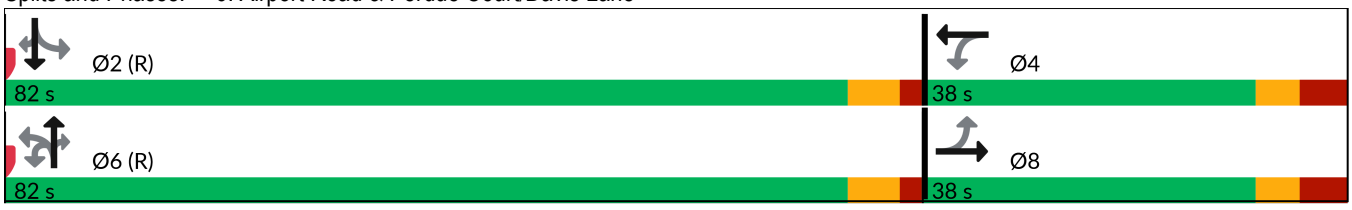
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	28	21	0	3	1	70	564	32	4	761
Future Volume (vph)	2	0	28	21	0	3	1	70	564	32	4	761
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0	70.0	
Storage Lanes	1		0	1		0		1		1	1	
Taper Length (m)	7.5			7.5				70.0			65.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.93	0.98	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	892	933	0	1069	816	0	0	1467	3042	1183	1190	3174
Flt Permitted	0.756			0.739				0.363			0.440	
Satd. Flow (perm)	710	933	0	831	816	0	0	560	3042	1104	540	3174
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		224			324					47		
Link Speed (k/h)		50			50				60			80
Link Distance (m)		111.7			131.0				459.1			438.5
Travel Time (s)		8.0			9.4				27.5			19.7
Confl. Peds. (#/hr)										12	12	
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 (%)	100%	2%	75%	67%	2%	100%	0%	22%	20%	35%	50%	15%
Adj. Flow (vph)	2	0	28	21	0	3	1	70	564	32	4	761
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	28	0	21	3	0	0	71	564	32	4	761
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(m)		3.5			3.5				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												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		8			4				6			2
Permitted Phases	8			4			6	6		6	2	
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	3
Future Volume (vph)	3
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	60.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1597
Flt Permitted	
Satd. Flow (perm)	1597
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	0%
Adj. Flow (vph)	3
Shared Lane Traffic (%)	
Lane Group Flow (vph)	3
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	38.0	38.0		38.0	38.0		82.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%		31.7%	31.7%		68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8		29.8	29.8		75.4	75.4	75.4	75.4	75.4	75.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	13.2	13.2		13.2	13.2			102.7	102.7	102.7	102.7	102.7
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.86	0.86	0.86	0.86	0.86
v/c Ratio	0.03	0.09		0.23	0.01			0.15	0.22	0.03	0.01	0.28
Control Delay (s/veh)	47.5	0.6		54.7	0.0			2.2	1.4	0.1	3.0	2.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	0.6		54.7	0.0			2.2	1.4	0.1	3.0	2.4
LOS	D	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		3.7			47.8				1.4			2.3
Approach LOS		A			D				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	24.6
Total Split (s)	82.0
Total Split (%)	68.3%
Maximum Green (s)	75.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	7.0
Flash Don't Walk (s)	8.0
Pedestrian Calls (#/hr)	20
Act Effct Green (s)	102.7
Actuated g/C Ratio	0.86
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3	0	345	812	14
Future Volume (Veh/h)	0	3	0	345	812	14
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)	0	3	0	345	812	14
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	1164	819	826			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1164	819	826			
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	99	100			
cM capacity (veh/h)	215	379	805			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	3	345	826
Volume Left	0	0	0
Volume Right	3	0	14
cSH	379	1700	1700
Volume to Capacity	0.01	0.20	0.49
Queue Length 95th (m)	0.2	0.0	0.0
Control Delay (s/veh)	14.6	0.0	0.0
Lane LOS	B		
Approach Delay (s/veh)	14.6	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay		0.0	
Intersection Capacity Utilization		53.6%	ICU Level of Service
Analysis Period (min)		15	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	15	45	338	812	3
Future Volume (Veh/h)	7	15	45	338	812	3
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)	7	15	45	338	812	3
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	1242	814	815			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1242	814	815			
tC, single (s)	6.5	7.2	4.3			
tC, 2 stage (s)						
tF (s)	3.6	4.2	2.4			
p0 queue free %	96	94	94			
cM capacity (veh/h)	175	265	732			

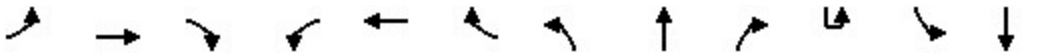
Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	7	15	383	815
Volume Left	7	0	45	0
Volume Right	0	15	0	3
cSH	175	265	732	1700
Volume to Capacity	0.04	0.06	0.06	0.48
Queue Length 95th (m)	1.0	1.4	1.6	0.0
Control Delay (s/veh)	26.4	19.4	1.9	0.0
Lane LOS	D	C	A	
Approach Delay (s/veh)	21.6		1.9	0.0
Approach LOS	C			

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		

0RYHPHQW	(%/	(%5	1%/	1%7	6%7	6%5
/DQH &RQILJXUDWLRQV						
7UDIILF 9ROXPH YHK K						
)XWXUH 9ROXPH 9HK K						
6LJQ &RQWURO 6WRS				)UHH	)UHH	
*UDGH						
3HDN +RXU)DFWRU						
+RXUO\ IORZ UDWH YSK						
3HGHVWULDQV						
/DQH :LGWK P						
:DONLQJ 6SHHG P V						
3HUFHQW %ORFNDJH						
5LJKW WXUQ IODUH YHK						
0HGLDQ W\SH				1RQH	1RQH	
0HGLDQ VWRUDJH YHK						
8SVWUHDP VLJQDO P						
S; SODWRRQ XQEORFNHG						
Y& FRQIOLFWLQJ YROXPH						
Y& VWDJH FRQI YRO						
Y& VWDJH FRQI YRO						
Y&X XQEORFNHG YRO						
W& VLQJOH V						
W& VWDJH V						
W) V						
S TXHXH IUHH						
F0 FDSDFLW\ YHK K						

'LUHFWLRQ /DQH#	%	1%	6%
9ROXPH 7RWDO			
9ROXPH /HIW			
9ROXPH 5LJKW			
F6+			
9ROXPH WR &DSDFLW\			
4XHXH /HQJWK WK P			
&RQWURO 'HOD\ V YHK			
/DQH /26	%		
$SSURDFK 'HOD\ V YHK			
$SSURDFK /26	%		

,QWHUVHFWLRQ 6XPPDU\
$YHUDJH 'HOD\
,QWHUVHFWLRQ &DSDFLW\ 8WLOL]DWLRQ RI 6HUYLFH$
$QDO\VLV 3HULRG PLQ



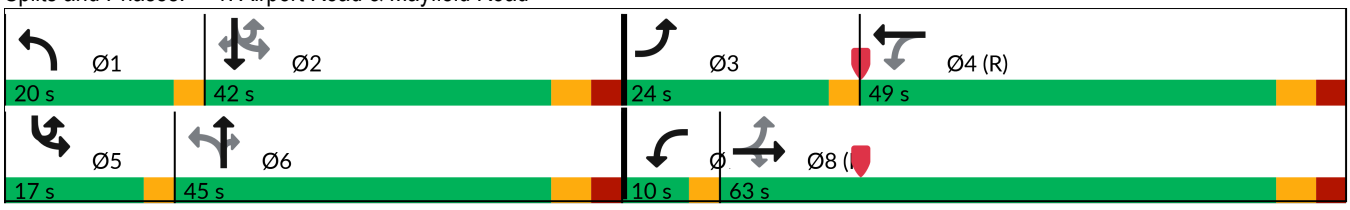
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	233	607	207	101	720	73	282	667	93	1	141	456
Future Volume (vph)	233	607	207	101	720	73	282	667	93	1	141	456
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7
Storage Length (m)	200.0		0.0	50.0		70.0	95.0		60.0		100.0	
Storage Lanes	1		1	1		1	1		1		1	
Taper Length (m)	100.0			50.0			80.0				50.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98	1.00	1.00		1.00		0.96		0.99	
Frt			0.850		0.986				0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1428	3202	1521	1487	3268	0	1653	3288	1166	0	1430	3288
Flt Permitted	0.222			0.422			0.295				0.207	
Satd. Flow (perm)	333	3202	1486	657	3268	0	511	3288	1120	0	309	3288
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			207		8				106			
Link Speed (k/h)		60			60			60				60
Link Distance (m)		685.4			111.4			460.7				459.1
Travel Time (s)		41.1			6.7			27.6				27.5
Confl. Peds. (#/hr)	4		11	11		4	7		24		24	
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 (%)	25%	14%	5%	20%	6%	49%	8%	11%	37%	0%	25%	11%
Adj. Flow (vph)	233	607	207	101	720	73	282	667	93	1	141	456
Shared Lane Traffic (%)												
Lane Group Flow (vph)	233	607	207	101	793	0	282	667	93	0	142	456
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	R NA	Left	Left
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	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	25		15	15	25	
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template			Right						Right	Left		
Leading Detector (m)	25.0	10.0	10.0	25.0	10.0		25.0	10.0	10.0	2.0	25.0	10.0
Trailing Detector (m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	15.0	0.0	0.0	15.0	0.0		15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	2.0	10.0	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
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	pm+pt	NA
Protected Phases	3	8		7	4		1	6		5	5	2
Permitted Phases	8		8	4			6		6	2	2	
Detector Phase	3	8	8	7	4		1	6	6	5	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	326
Future Volume (vph)	326
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1401
Flt Permitted	
Satd. Flow (perm)	1373
Right Turn on Red	Yes
Satd. Flow (RTOR)	326
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	14%
Adj. Flow (vph)	326
Shared Lane Traffic (%)	
Lane Group Flow (vph)	326
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0		5.0	12.0	12.0	5.0	5.0	12.0
Minimum Split (s)	8.0	46.1	46.1	8.0	46.1		8.0	41.9	41.9	8.0	8.0	41.9
Total Split (s)	24.0	63.0	63.0	10.0	49.0		20.0	45.0	45.0	17.0	17.0	42.0
Total Split (%)	17.8%	46.7%	46.7%	7.4%	36.3%		14.8%	33.3%	33.3%	12.6%	12.6%	31.1%
Maximum Green (s)	21.0	55.9	55.9	7.0	41.9		17.0	38.1	38.1	14.0	14.0	35.1
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	0.0	3.1	3.1	0.0	3.1		0.0	2.9	2.9	0.0	0.0	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	3.0	7.1		3.0	6.9	6.9		3.0	6.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		12.0	12.0		12.0			12.0	12.0			12.0
Flash Don't Walk (s)		27.0	27.0		27.0			23.0	23.0			23.0
Pedestrian Calls (#/hr)		0	0		0			0	0			0
Act Effct Green (s)	76.9	62.2	62.2	64.9	53.1		52.1	32.6	32.6		44.9	28.5
Actuated g/C Ratio	0.57	0.46	0.46	0.48	0.39		0.39	0.24	0.24		0.33	0.21
v/c Ratio	0.72	0.41	0.26	0.28	0.61		0.83	0.84	0.26		0.69	0.66
Control Delay (s/veh)	29.4	26.5	4.0	18.5	37.1		51.8	58.7	6.9		44.5	52.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	29.4	26.5	4.0	18.5	37.1		51.8	58.7	6.9		44.5	52.9
LOS	C	C	A	B	D		D	E	A		D	D
Approach Delay (s/veh)		22.7			35.0			52.2				36.1
Approach LOS		C			D			D				D

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 65 (48%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay (s/veh): 36.6		Intersection LOS: D	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	42.0
Total Split (%)	31.1%
Maximum Green (s)	35.1
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	28.5
Actuated g/C Ratio	0.21
v/c Ratio	0.60
Control Delay (s/veh)	9.0
Queue Delay	0.0
Total Delay (s/veh)	9.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

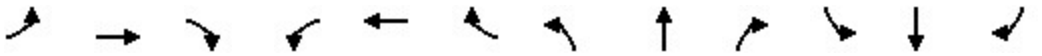
Intersection Summary

Intersection	
Intersection Delay, s/veh	29.3
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	201	17	16	353	3	40	328	19	1	175	82
Future Vol, veh/h	44	201	17	16	353	3	40	328	19	1	175	82
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, %	0	4	0	0	2	0	0	0	6	100	3	0
Mvmt Flow	44	201	17	16	353	3	40	328	19	1	175	82
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	20.9	31.6	33.4	28.4
HCM LOS	C	D	D	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	17%	4%	0%
Vol Thru, %	85%	77%	95%	68%
Vol Right, %	5%	6%	1%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	387	262	372	258
LT Vol	40	44	16	1
Through Vol	328	201	353	175
RT Vol	19	17	3	82
Lane Flow Rate	387	262	372	258
Geometry Grp	1	1	1	1
Degree of Util (X)	0.794	0.571	0.772	0.658
Departure Headway (Hd)	7.388	7.851	7.473	9.185
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	491	459	484	392
Service Time	5.43	5.898	5.512	7.251
HCM Lane V/C Ratio	0.788	0.571	0.769	0.658
HCM Control Delay, s/veh	33.4	20.9	31.6	28.4
HCM Lane LOS	D	C	D	D
HCM 95th-tile Q	7.3	3.5	6.8	4.5

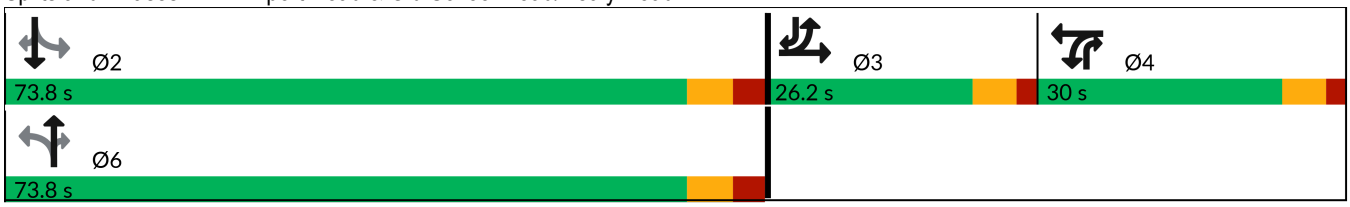


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	143	30	99	275	59	48	782	74	33	389	37
Future Volume (vph)	45	143	30	99	275	59	48	782	74	33	389	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	30.0		0.0	30.0		0.0	0.0		15.0	0.0		50.0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (m)	15.0			15.0			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		0.974			0.974				0.850			0.850
Flt Protected	0.950			0.950				0.997			0.996	
Satd. Flow (prot)	1700	1793	0	1700	1849	0	0	1761	1521	0	1663	1551
Flt Permitted	0.950			0.950				0.950			0.563	
Satd. Flow (perm)	1700	1793	0	1700	1849	0	0	1678	1521	0	940	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			7				28			37
Link Speed (k/h)		70			70			80			80	
Link Distance (m)		1395.8			247.3			628.9			225.4	
Travel Time (s)		71.8			12.7			28.3			10.1	
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 (%)	5%	3%	11%	5%	1%	2%	5%	9%	5%	4%	16%	3%
Adj. Flow (vph)	45	143	30	99	275	59	48	782	74	33	389	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	173	0	99	334	0	0	830	74	0	422	37
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			0.0			0.0	
Link Offset(m)		0.0			-30.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template	Left			Left			Left		Right	Left		
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		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	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	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
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	3	3		4	4			6	4		2	3
Permitted Phases							6		6	2		2
Detector Phase	3	3		4	4		6	6	4	2	2	3
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		12.0	12.0	8.0	12.0	12.0	8.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	26.2	26.2		26.2	26.2		22.7	22.7	26.2	22.7	22.7	26.2
Total Split (s)	26.2	26.2		30.0	30.0		73.8	73.8	30.0	73.8	73.8	26.2
Total Split (%)	20.2%	20.2%		23.1%	23.1%		56.8%	56.8%	23.1%	56.8%	56.8%	20.2%
Maximum Green (s)	20.0	20.0		23.8	23.8		66.1	66.1	23.8	66.1	66.1	20.0
Yellow Time (s)	4.2	4.2		4.2	4.2		4.6	4.6	4.2	4.6	4.6	4.2
All-Red Time (s)	2.0	2.0		2.0	2.0		3.1	3.1	2.0	3.1	3.1	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2		6.2	6.2			7.7	6.2		7.7	6.2
Lead/Lag	Lead	Lead		Lag	Lag				Lag			Lead
Lead-Lag Optimize?	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
Recall Mode	None	None		None	None		Max	Max	None	Max	Max	None
Walk Time (s)	10.0	10.0		10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		5.0	5.0	10.0	5.0	5.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	16.2	16.2		23.8	23.8			66.1	97.7		66.1	90.1
Actuated g/C Ratio	0.13	0.13		0.19	0.19			0.52	0.77		0.52	0.71
v/c Ratio	0.21	0.73		0.31	0.94			0.95	0.06		0.86	0.03
Control Delay (s/veh)	51.0	69.1		48.2	85.7			49.3	2.7		45.8	1.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)	51.0	69.1		48.2	85.7			49.3	2.7		45.8	1.6
LOS	D	E		D	F			D	A		D	A
Approach Delay (s/veh)		65.3			77.1			45.5			42.2	
Approach LOS		E			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 126.3			
Natural Cycle: 120			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 53.7		Intersection LOS: D	
Intersection Capacity Utilization 114.0%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 4: Airport Road & Old School Road/Healy Road



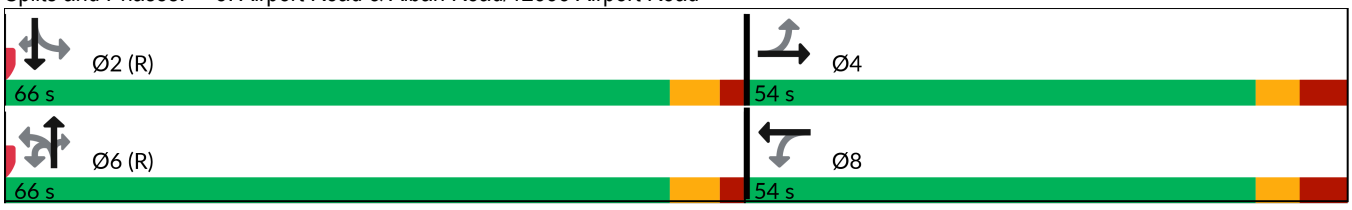
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	153	0	110	45	0	7	2	74	769	27	3	542
Future Volume (vph)	153	0	110	45	0	7	2	74	769	27	3	542
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1421	1252	0	1275	1615	0	0	1366	3411	1072	1332	3202
Flt Permitted	0.753			0.686				0.448			0.343	
Satd. Flow (perm)	1127	1252	0	921	1615	0	0	644	3411	1044	480	3202
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		260			139					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			255.2
Travel Time (s)		10.6			17.5				19.7			11.5
Confl. Peds. (#/hr)										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 (%)	27%	2%	29%	40%	2%	0%	0%	33%	7%	49%	34%	14%
Adj. Flow (vph)	153	0	110	45	0	7	2	74	769	27	3	542
Shared Lane Traffic (%)												
Lane Group Flow (vph)	153	110	0	45	7	0	0	76	769	27	3	542
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	40
Future Volume (vph)	40
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1346
Flt Permitted	
Satd. Flow (perm)	1346
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	20%
Adj. Flow (vph)	40
Shared Lane Traffic (%)	
Lane Group Flow (vph)	40
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	54.0	54.0		54.0	54.0		66.0	66.0	66.0	66.0	66.0	66.0
Total Split (%)	45.0%	45.0%		45.0%	45.0%		55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Maximum Green (s)	45.8	45.8		45.8	45.8		59.4	59.4	59.4	59.4	59.4	59.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	21.9	21.9		21.9	21.9			83.3	83.3	83.3	83.3	83.3
Actuated g/C Ratio	0.18	0.18		0.18	0.18			0.69	0.69	0.69	0.69	0.69
v/c Ratio	0.75	0.25		0.27	0.02			0.17	0.32	0.04	0.01	0.24
Control Delay (s/veh)	66.6	1.4		43.2	0.1			18.2	17.4	7.8	8.0	7.9
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.6	1.4		43.2	0.1			18.2	17.4	7.8	8.0	7.9
LOS	E	A		D	A			B	B	A	A	A
Approach Delay (s/veh)		39.3			37.4				17.2			7.5
Approach LOS		D			D				B			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 58 (48%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 67.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	66.0
Total Split (%)	55.0%
Maximum Green (s)	59.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	83.3
Actuated g/C Ratio	0.69
v/c Ratio	0.04
Control Delay (s/veh)	2.1
Queue Delay	0.0
Total Delay (s/veh)	2.1
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

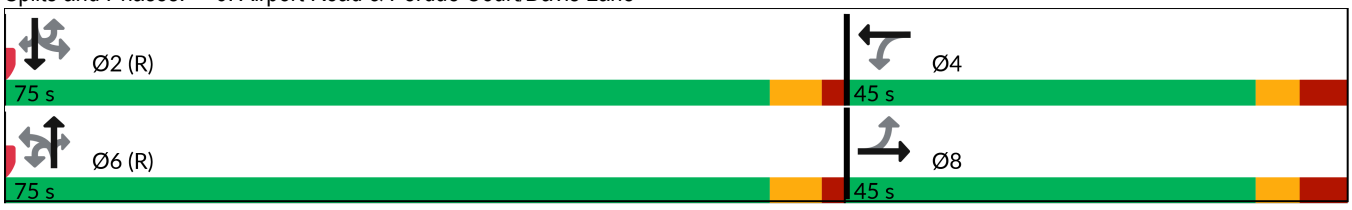
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	0	61	80	0	8	3	36	905	49	8	20
Future Volume (vph)	6	0	61	80	0	8	3	36	905	49	8	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.5
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0		70.0
Storage Lanes	1		0	1		0		1		1		1
Taper Length (m)	7.5			7.5				70.0				65.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Ped Bike Factor										0.95		0.99
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1785	1458	0	1638	1445	0	0	1122	3288	868	0	1086
Flt Permitted	0.752			0.717				0.391				0.305
Satd. Flow (perm)	1413	1458	0	1236	1445	0	0	462	3288	829	0	347
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		226			117					49		
Link Speed (k/h)		50			50				60			
Link Distance (m)		111.7			131.0				459.1			
Travel Time (s)		8.0			9.4				27.5			
Confl. Peds. (#/hr)										12		12
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 (%)	0%	2%	12%	9%	2%	13%	0%	64%	11%	84%	0%	90%
Adj. Flow (vph)	6	0	61	80	0	8	3	36	905	49	8	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	61	0	80	8	0	0	39	905	49	0	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(m)		3.5			3.5				3.6			
Link Offset(m)		0.0			0.0				0.0			
Crosswalk Width(m)		4.8			4.8				4.8			
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	15	25		15	15	25
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left				Left	
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	2.0	25.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	2.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		8			4				6			
Permitted Phases	8			4			6	6		6	2	2
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	684	9
Future Volume (vph)	684	9
Ideal Flow (vphpl)	1900	1900
Lane Width (m)	3.7	3.5
Storage Length (m)		60.0
Storage Lanes		1
Taper Length (m)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3202	845
Flt Permitted		
Satd. Flow (perm)	3202	845
Right Turn on Red		Yes
Satd. Flow (RTOR)		47
Link Speed (k/h)	80	
Link Distance (m)	438.5	
Travel Time (s)	19.7	
Confl. Peds. (#/hr)		
Peak Hour Factor	1.00	1.00
Heavy Vehicles (%)	14%	89%
Adj. Flow (vph)	684	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	684	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(m)	3.6	
Link Offset(m)	0.0	
Crosswalk Width(m)	4.8	
Two way Left Turn Lane		
Headway Factor	0.99	1.01
Turning Speed (k/h)		15
Number of Detectors	1	1
Detector Template		
Leading Detector (m)	10.0	10.0
Trailing Detector (m)	0.0	0.0
Detector 1 Position(m)	0.0	0.0
Detector 1 Size(m)	10.0	10.0
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Turn Type	NA	Perm
Protected Phases	2	
Permitted Phases		2
Detector Phase	2	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
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)	37.2	37.2		37.2	37.2		34.6	34.6	34.6	34.6	34.6	34.6
Total Split (s)	45.0	45.0		45.0	45.0		75.0	75.0	75.0	75.0	75.0	75.0
Total Split (%)	37.5%	37.5%		37.5%	37.5%		62.5%	62.5%	62.5%	62.5%	62.5%	62.5%
Maximum Green (s)	36.8	36.8		36.8	36.8		68.4	68.4	68.4	68.4	68.4	68.4
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
Total Lost Time (s)	8.2	8.2		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	3.0	3.0	3.0
Recall Mode	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	8.0
Flash Don't Walk (s)	21.0	21.0		21.0	21.0		20.0	20.0	20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)	14.4	14.4		14.4	14.4			96.1	96.1	96.1		96.1
Actuated g/C Ratio	0.12	0.12		0.12	0.12			0.80	0.80	0.80		0.80
v/c Ratio	0.04	0.16		0.54	0.03			0.11	0.34	0.07		0.10
Control Delay (s/veh)	44.8	0.9		62.8	0.3			5.3	5.0	1.6		8.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay (s/veh)	44.8	0.9		62.8	0.3			5.3	5.0	1.6		8.4
LOS	D	A		E	A			A	A	A		A
Approach Delay (s/veh)		4.9			57.1				4.8			
Approach LOS		A			E				A			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 7.9		Intersection LOS: A	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	12.0
Minimum Split (s)	34.6	34.6
Total Split (s)	75.0	75.0
Total Split (%)	62.5%	62.5%
Maximum Green (s)	68.4	68.4
Yellow Time (s)	4.6	4.6
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.6	6.6
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Max	C-Max
Walk Time (s)	8.0	8.0
Flash Don't Walk (s)	20.0	20.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)	96.1	96.1
Actuated g/C Ratio	0.80	0.80
v/c Ratio	0.27	0.01
Control Delay (s/veh)	6.3	1.3
Queue Delay	0.0	0.0
Total Delay (s/veh)	6.3	1.3
LOS	A	A
Approach Delay (s/veh)	6.3	
Approach LOS	A	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	13	0	944	542	5
Future Volume (Veh/h)	0	13	0	944	542	5
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)	0	13	0	944	542	5
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	1489	545	547			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1489	545	547			
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	98	100			
cM capacity (veh/h)	137	543	1022			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	13	944	547
Volume Left	0	0	0
Volume Right	13	0	5
cSH	543	1700	1700
Volume to Capacity	0.02	0.56	0.32
Queue Length 95th (m)	0.6	0.0	0.0
Control Delay (s/veh)	11.8	0.0	0.0
Lane LOS	B		
Approach Delay (s/veh)	11.8	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	17	21	910	554	1
Future Volume (Veh/h)	35	17	21	910	554	1
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)	35	17	21	910	554	1
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	1507	555	555			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1507	555	555			
tC, single (s)	6.4	7.2	4.6			
tC, 2 stage (s)						
tF (s)	3.5	4.2	2.6			
p0 queue free %	73	96	97			
cM capacity (veh/h)	131	384	832			

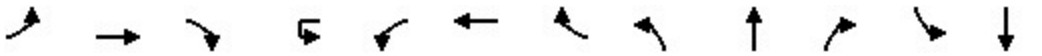
Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	35	17	931	555
Volume Left	35	0	21	0
Volume Right	0	17	0	1
cSH	131	384	832	1700
Volume to Capacity	0.27	0.04	0.03	0.33
Queue Length 95th (m)	8.1	1.1	0.6	0.0
Control Delay (s/veh)	42.1	14.8	0.7	0.0
Lane LOS	E	B	A	
Approach Delay (s/veh)	33.2		0.7	0.0
Approach LOS	D			

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	22	0	930	563	8
Future Volume (Veh/h)	0	22	0	930	563	8
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)	0	22	0	930	563	8
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	1497	567	571			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1497	567	571			
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	96	100			
cM capacity (veh/h)	135	527	1002			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	22	930	571
Volume Left	0	0	0
Volume Right	22	0	8
cSH	527	1700	1700
Volume to Capacity	0.04	0.55	0.34
Queue Length 95th (m)	1.0	0.0	0.0
Control Delay (s/veh)	12.1	0.0	0.0
Lane LOS	B		
Approach Delay (s/veh)	12.1	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	243	801	506	1	81	552	76	257	401	86	99	594
Future Volume (vph)	243	801	506	1	81	552	76	257	401	86	99	594
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	200.0		0.0		165.0		60.0	95.0		60.0	100.0	
Storage Lanes	1		0		1		1	1		1	1	
Taper Length (m)	100.0				100.0			80.0			50.0	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	0.99			1.00		0.98	1.00		0.96	0.99	
Frt		0.942					0.850			0.850		
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1526	4568	0	0	1356	4601	1166	1700	3017	1125	1463	3230
Flt Permitted	0.391				0.151			0.214			0.516	
Satd. Flow (perm)	627	4568	0	0	215	4601	1148	382	3017	1084	783	3230
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		152					117			92		
Link Speed (k/h)		60				60			60			60
Link Distance (m)		685.4				419.2			460.7			459.1
Travel Time (s)		41.1				25.2			27.6			27.5
Confl. Peds. (#/hr)	4		11		11		4	7		24	24	
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 (%)	17%	8%	6%	0%	32%	14%	37%	5%	21%	42%	22%	13%
Adj. Flow (vph)	243	801	506	1	81	552	76	257	401	86	99	594
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	1307	0	0	82	552	76	257	401	86	99	594
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
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	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	15	25		15	25		15	25	
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template				Left			Right			Right		
Leading Detector (m)	25.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	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
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
Detector 1 Size(m)	10.0	10.0		2.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	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
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	8		7	7	4		1	6		5	2
Permitted Phases	8			4	4		4	6		6	2	
Detector Phase	3	8		7	7	4	4	1	6	6	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	184
Future Volume (vph)	184
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1309
Flt Permitted	
Satd. Flow (perm)	1284
Right Turn on Red	Yes
Satd. Flow (RTOR)	184
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	22%
Adj. Flow (vph)	184
Shared Lane Traffic (%)	
Lane Group Flow (vph)	184
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	8.0	46.1		8.0	8.0	46.1	46.1	8.0	41.9	41.9	8.0	41.9
Total Split (s)	13.0	52.1		10.0	10.0	49.1	49.1	16.0	47.9	47.9	10.0	41.9
Total Split (%)	10.8%	43.4%		8.3%	8.3%	40.9%	40.9%	13.3%	39.9%	39.9%	8.3%	34.9%
Maximum Green (s)	10.0	45.0		7.0	7.0	42.0	42.0	13.0	41.0	41.0	7.0	35.0
Yellow Time (s)	3.0	4.0		3.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	3.1		0.0	0.0	3.1	3.1	0.0	2.9	2.9	0.0	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			3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max		None	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		12.0				12.0	12.0		12.0	12.0		12.0
Flash Don't Walk (s)		27.0				27.0	27.0		23.0	23.0		23.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	66.3	53.5			58.6	47.1	47.1	47.7	34.0	34.0	38.6	27.9
Actuated g/C Ratio	0.55	0.45			0.49	0.39	0.39	0.40	0.28	0.28	0.32	0.23
v/c Ratio	0.56	0.62			0.47	0.31	0.15	0.88	0.47	0.23	0.34	0.79
Control Delay (s/veh)	21.5	25.1			23.8	26.8	1.9	55.8	36.8	6.7	38.1	60.9
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.5	25.1			23.8	26.8	1.9	55.8	36.8	6.7	38.1	60.9
LOS	C	C			C	C	A	E	D	A	D	E
Approach Delay (s/veh)		24.5				23.8			39.9			49.9
Approach LOS		C				C			D			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 30 (25%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 33.1		Intersection LOS: C	
Intersection Capacity Utilization 97.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road

Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	34.9%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	27.9
Actuated g/C Ratio	0.23
v/c Ratio	0.42
Control Delay (s/veh)	21.0
Queue Delay	0.0
Total Delay (s/veh)	21.0
LOS	C
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Intersection	
Intersection Delay, s/veh	15.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	273	57	35	97	2	13	119	17	4	370	26
Future Vol, veh/h	49	273	57	35	97	2	13	119	17	4	370	26
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, %	0	2	8	0	2	0	16	2	7	25	1	0
Mvmt Flow	49	273	57	35	97	2	13	119	17	4	370	26
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	1
HCM Control Delay, s/veh	20.3	12	10.7	13.3
HCM LOS	C	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	13%	26%	100%	0%	0%
Vol Thru, %	0%	100%	70%	72%	72%	0%	100%	83%
Vol Right, %	0%	0%	30%	15%	1%	0%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	79	57	379	134	4	247	149
LT Vol	13	0	0	49	35	4	0	0
Through Vol	0	79	40	273	97	0	247	123
RT Vol	0	0	17	57	2	0	0	26
Lane Flow Rate	13	79	57	379	134	4	247	149
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.028	0.153	0.107	0.658	0.255	0.008	0.446	0.264
Departure Headway (Hd)	7.713	6.953	6.824	6.249	6.862	7.433	6.502	6.36
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	461	512	521	576	520	479	550	561
Service Time	5.512	4.751	4.622	4.016	4.651	5.211	4.279	4.136
HCM Lane V/C Ratio	0.028	0.154	0.109	0.658	0.258	0.008	0.449	0.266
HCM Control Delay, s/veh	10.7	11	10.4	20.3	12	10.3	14.5	11.4
HCM Lane LOS	B	B	B	C	B	B	B	B
HCM 95th-tile Q	0.1	0.5	0.4	4.8	1	0	2.3	1.1

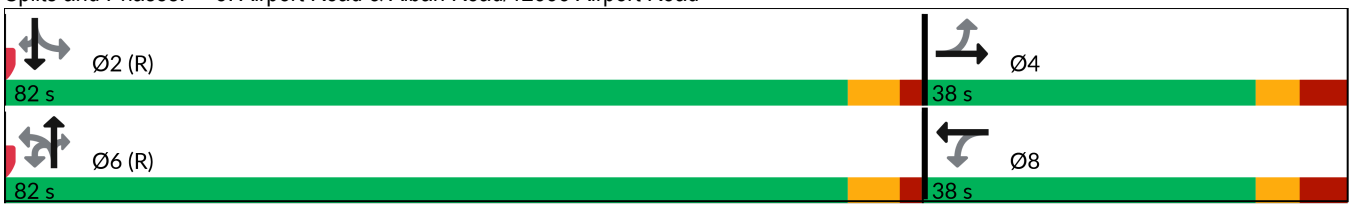
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	23	0	85	42	0	3	1	127	366	46	8	744
Future Volume (vph)	23	0	85	42	0	3	1	127	366	46	8	744
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1530	1292	0	1152	1205	0	0	1283	3147	1258	1293	3318
Flt Permitted	0.756			0.702				0.367			0.534	
Satd. Flow (perm)	1217	1292	0	851	1205	0	0	496	3147	1225	724	3318
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		232			509					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			1203.8
Travel Time (s)		10.6			17.5				19.7			54.2
Confl. Peds. (#/hr)										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 (%)	18%	2%	25%	55%	2%	34%	0%	41%	16%	27%	38%	10%
Adj. Flow (vph)	23	0	85	42	0	3	1	127	366	46	8	744
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	85	0	42	3	0	0	128	366	46	8	744
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	91
Future Volume (vph)	91
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1233
Flt Permitted	
Satd. Flow (perm)	1233
Right Turn on Red	Yes
Satd. Flow (RTOR)	91
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	31%
Adj. Flow (vph)	91
Shared Lane Traffic (%)	
Lane Group Flow (vph)	91
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	38.0	38.0		38.0	38.0		82.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%		31.7%	31.7%		68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8		29.8	29.8		75.4	75.4	75.4	75.4	75.4	75.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	13.5	13.5		13.5	13.5			97.0	97.0	97.0	97.0	97.0
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.81	0.81	0.81	0.81	0.81
v/c Ratio	0.17	0.24		0.44	0.01			0.32	0.14	0.05	0.01	0.28
Control Delay (s/veh)	50.1	1.6		63.8	0.0			6.1	2.7	1.2	4.0	4.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.1	1.6		63.8	0.0			6.1	2.7	1.2	4.0	4.2
LOS	D	A		E	A			A	A	A	A	A
Approach Delay (s/veh)		11.9			59.5				3.4			3.9
Approach LOS		B			E				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	82.0
Total Split (%)	68.3%
Maximum Green (s)	75.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	97.0
Actuated g/C Ratio	0.81
v/c Ratio	0.09
Control Delay (s/veh)	1.1
Queue Delay	0.0
Total Delay (s/veh)	1.1
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

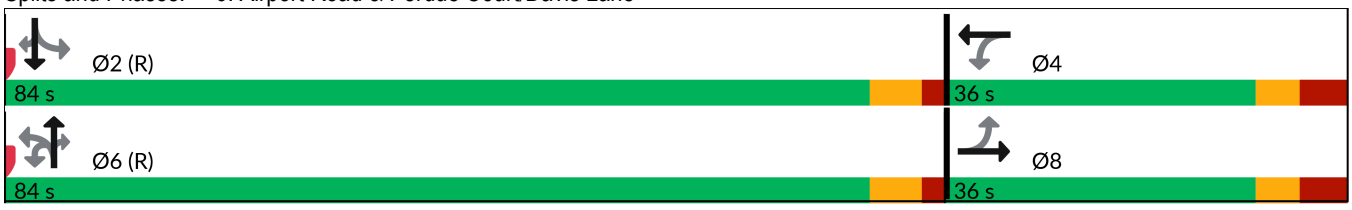
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	28	21	0	3	1	70	554	32	4	857
Future Volume (vph)	2	0	28	21	0	3	1	70	554	32	4	857
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0	70.0	
Storage Lanes	1		0	1		0		1		1	1	
Taper Length (m)	7.5			7.5				70.0			65.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.93	0.98	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	892	933	0	1069	816	0	0	1467	3017	1183	1190	3230
Flt Permitted	0.756			0.739				0.326			0.445	
Satd. Flow (perm)	710	933	0	831	816	0	0	503	3017	1104	546	3230
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		191			341					47		
Link Speed (k/h)		50			50				60			80
Link Distance (m)		111.7			131.0				459.1			438.5
Travel Time (s)		8.0			9.4				27.5			19.7
Confl. Peds. (#/hr)										12	12	
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 (%)	100%	2%	75%	67%	2%	100%	0%	22%	21%	35%	50%	13%
Adj. Flow (vph)	2	0	28	21	0	3	1	70	554	32	4	857
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	28	0	21	3	0	0	71	554	32	4	857
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(m)		3.5			3.5				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												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		8			4				6			2
Permitted Phases	8			4			6	6		6	2	
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	3
Future Volume (vph)	3
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	60.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1597
Flt Permitted	
Satd. Flow (perm)	1597
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	0%
Adj. Flow (vph)	3
Shared Lane Traffic (%)	
Lane Group Flow (vph)	3
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Maximum Green (s)	27.8	27.8		27.8	27.8		77.4	77.4	77.4	77.4	77.4	77.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	13.2	13.2		13.2	13.2			102.7	102.7	102.7	102.7	102.7
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.86	0.86	0.86	0.86	0.86
v/c Ratio	0.03	0.10		0.23	0.01			0.17	0.21	0.03	0.01	0.31
Control Delay (s/veh)	47.5	0.8		54.7	0.0			2.4	1.5	0.1	2.8	2.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	0.8		54.7	0.0			2.4	1.5	0.1	2.8	2.2
LOS	D	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		3.9			47.8				1.5			2.2
Approach LOS		A			D				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 61.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	24.6
Total Split (s)	84.0
Total Split (%)	70.0%
Maximum Green (s)	77.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	7.0
Flash Don't Walk (s)	8.0
Pedestrian Calls (#/hr)	20
Act Effct Green (s)	102.7
Actuated g/C Ratio	0.86
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2	0	394	869	15
Future Volume (Veh/h)	0	2	0	394	869	15
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)	0	2	0	394	869	15
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	1074	442	884			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1074	442	884			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	215	569	761			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	197	197	579	305
Volume Left	0	0	0	0	0
Volume Right	2	0	0	0	15
cSH	569	1700	1700	1700	1700
Volume to Capacity	0.00	0.12	0.12	0.34	0.18
Queue Length 95th (m)	0.1	0.0	0.0	0.0	0.0
Control Delay (s/veh)	11.4	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	11.4	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	5	28	378	862	8
Future Volume (Veh/h)	16	5	28	378	862	8
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)	16	5	28	378	862	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	None	
Median storage veh)				2		
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1111	435	870			
vC1, stage 1 conf vol	866					
vC2, stage 2 conf vol	245					
vCu, unblocked vol	1111	435	870			
tC, single (s)	8.1	8.9	4.4			
tC, 2 stage (s)	7.1					
tF (s)	4.1	4.3	2.4			
p0 queue free %	93	99	96			
cM capacity (veh/h)	239	366	693			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	16	5	28	189	189	575	295
Volume Left	16	0	28	0	0	0	0
Volume Right	0	5	0	0	0	0	8
cSH	239	366	693	1700	1700	1700	1700
Volume to Capacity	0.07	0.01	0.04	0.11	0.11	0.34	0.17
Queue Length 95th (m)	1.7	0.3	1.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	21.2	15.0	10.4	0.0	0.0	0.0	0.0
Lane LOS	C	B	B				
Approach Delay (s/veh)	19.7		0.7			0.0	
Approach LOS	C						

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	34.1%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3	0	406	842	26
Future Volume (Veh/h)	0	3	0	406	842	26
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)	0	3	0	406	842	26
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1058	434	868			
vC1, stage 1 conf vol	855					
vC2, stage 2 conf vol	203					
vCu, unblocked vol	1058	434	868			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	360	576	772			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	3	203	203	561	307
Volume Left	0	0	0	0	0
Volume Right	3	0	0	0	26
cSH	576	1700	1700	1700	1700
Volume to Capacity	0.01	0.12	0.12	0.33	0.18
Queue Length 95th (m)	0.1	0.0	0.0	0.0	0.0
Control Delay (s/veh)	11.3	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	11.3	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		

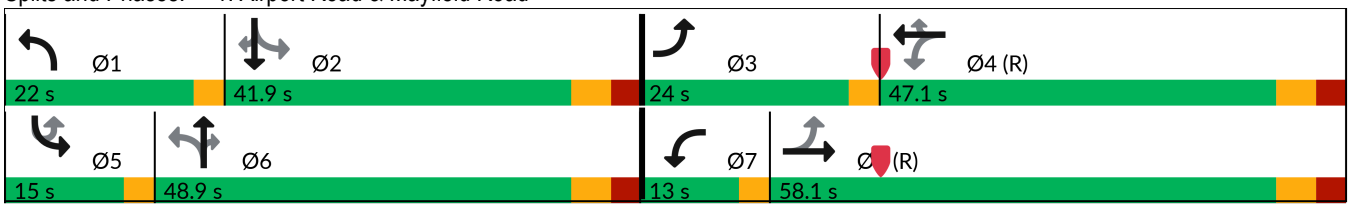
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	312	664	234	104	798	70	342	706	96	1	137	456
Future Volume (vph)	312	664	234	104	798	70	342	706	96	1	137	456
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7
Storage Length (m)	200.0		0.0	165.0		60.0	95.0		60.0		100.0	
Storage Lanes	1		0	1		1	1		1		1	
Taper Length (m)	100.0			100.0			80.0				50.0	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00	0.99		1.00		0.98	1.00		0.96		0.99	
Frt		0.961				0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1513	4517	0	1500	4948	1086	1684	3288	1174	0	1477	3259
Flt Permitted	0.254			0.305			0.286				0.227	
Satd. Flow (perm)	404	4517	0	480	4948	1069	505	3288	1128	0	350	3259
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		76				128			106			
Link Speed (k/h)		60			60			60				60
Link Distance (m)		685.4			419.2			460.7				459.1
Travel Time (s)		41.1			25.2			27.6				27.5
Confl. Peds. (#/hr)	4		11	11		4	7		24		24	
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 (%)	18%	13%	5%	19%	6%	47%	6%	11%	36%	0%	21%	12%
Adj. Flow (vph)	312	664	234	104	798	70	342	706	96	1	137	456
Shared Lane Traffic (%)												
Lane Group Flow (vph)	312	898	0	104	798	70	342	706	96	0	138	456
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	R NA	Left	Left
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	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	25		15	15	25	
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template						Right			Right	Left		
Leading Detector (m)	25.0	10.0		25.0	10.0	10.0	25.0	10.0	10.0	2.0	25.0	10.0
Trailing Detector (m)	15.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	15.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	2.0	10.0	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
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt	NA
Protected Phases	3	8		7	4		1	6			5	2
Permitted Phases	8			4		4	6		6	5	2	
Detector Phase	3	8		7	4	4	1	6	6	5	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	324
Future Volume (vph)	324
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1413
Flt Permitted	
Satd. Flow (perm)	1385
Right Turn on Red	Yes
Satd. Flow (RTOR)	315
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	13%
Adj. Flow (vph)	324
Shared Lane Traffic (%)	
Lane Group Flow (vph)	324
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	5.0	12.0	12.0	5.0	5.0	12.0
Minimum Split (s)	8.0	46.1		8.0	46.1	46.1	8.0	41.9	41.9	8.0	8.0	41.9
Total Split (s)	24.0	58.1		13.0	47.1	47.1	22.0	48.9	48.9	15.0	15.0	41.9
Total Split (%)	17.8%	43.0%		9.6%	34.9%	34.9%	16.3%	36.2%	36.2%	11.1%	11.1%	31.0%
Maximum Green (s)	21.0	51.0		10.0	40.0	40.0	19.0	42.0	42.0	12.0	12.0	35.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	0.0	3.1		0.0	3.1	3.1	0.0	2.9	2.9	0.0	0.0	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		3.0	7.1	7.1	3.0	6.9	6.9		3.0	6.9
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		12.0			12.0	12.0		12.0	12.0			12.0
Flash Don't Walk (s)		27.0			27.0	27.0		23.0	23.0			23.0
Pedestrian Calls (#/hr)		0			0	0		0	0			0
Act Effct Green (s)	75.7	60.0		60.9	48.2	48.2	53.3	35.3	35.3		42.4	27.4
Actuated g/C Ratio	0.56	0.44		0.45	0.36	0.36	0.39	0.26	0.26		0.31	0.20
v/c Ratio	0.79	0.44		0.37	0.45	0.15	0.94	0.82	0.26		0.68	0.69
Control Delay (s/veh)	34.1	25.4		20.5	35.8	0.7	66.2	55.3	6.8		44.3	54.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	34.1	25.4		20.5	35.8	0.7	66.2	55.3	6.8		44.3	54.9
LOS	C	C		C	D	A	E	E	A		D	D
Approach Delay (s/veh)		27.6			31.7			54.5				37.5
Approach LOS		C			C			D				D

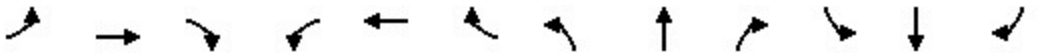
Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 37.9		Intersection LOS: D	
Intersection Capacity Utilization 103.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	31.0%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	27.4
Actuated g/C Ratio	0.20
v/c Ratio	0.61
Control Delay (s/veh)	10.2
Queue Delay	0.0
Total Delay (s/veh)	10.2
LOS	B
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	217	17	25	381	3	40	354	65	1	185	82
Future Volume (vph)	44	217	17	25	381	3	40	354	65	1	185	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	0.0		0.0	0.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	0		0	0		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	0.95	0.95	1.00	0.95	0.95
Frt		0.992			0.999			0.977			0.954	
Flt Protected		0.992			0.997		0.950			0.950		
Satd. Flow (prot)	0	1833	0	0	1878	0	1785	3555	0	892	3411	0
Flt Permitted		0.992			0.997		0.950			0.950		
Satd. Flow (perm)	0	1833	0	0	1878	0	1785	3555	0	892	3411	0
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		550.3			548.3			480.6			445.5	
Travel Time (s)		28.3			28.2			24.7			22.9	
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 (%)	0%	4%	0%	0%	2%	0%	0%	0%	2%	100%	3%	0%
Adj. Flow (vph)	44	217	17	25	381	3	40	354	65	1	185	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	278	0	0	409	0	40	419	0	1	267	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			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								Yes				
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
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 52.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Intersection	
Intersection Delay, s/veh	25.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	217	17	25	381	3	40	354	65	1	185	82
Future Vol, veh/h	44	217	17	25	381	3	40	354	65	1	185	82
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, %	0	4	0	0	2	0	0	0	2	100	3	0
Mvmt Flow	44	217	17	25	381	3	40	354	65	1	185	82
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	1
HCM Control Delay, s/veh	23.1	43.9	17.2	14.6
HCM LOS	C	E	C	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	16%	6%	100%	0%	0%
Vol Thru, %	0%	100%	64%	78%	93%	0%	100%	43%
Vol Right, %	0%	0%	36%	6%	1%	0%	0%	57%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	236	183	278	409	1	123	144
LT Vol	40	0	0	44	25	1	0	0
Through Vol	0	236	118	217	381	0	123	62
RT Vol	0	0	65	17	3	0	0	82
Lane Flow Rate	40	236	183	278	409	1	123	144
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.095	0.524	0.395	0.62	0.874	0.003	0.29	0.319
Departure Headway (Hd)	8.522	7.999	7.775	8.031	7.697	10.734	8.475	8.002
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	420	451	463	450	474	334	424	448
Service Time	6.276	5.752	5.528	5.78	5.397	8.493	6.233	5.759
HCM Lane V/C Ratio	0.095	0.523	0.395	0.618	0.863	0.003	0.29	0.321
HCM Control Delay, s/veh	12.2	19.3	15.5	23.1	43.9	13.5	14.7	14.5
HCM Lane LOS	B	C	C	C	E	B	B	B
HCM 95th-tile Q	0.3	3	1.9	4.1	9.2	0	1.2	1.4

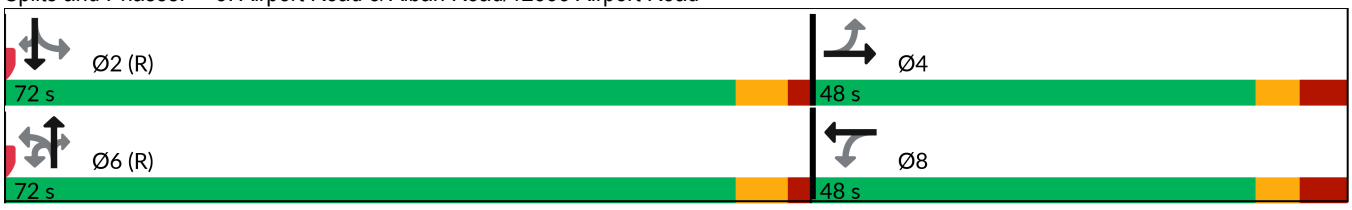
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	141	0	88	45	0	7	2	68	896	27	3	565
Future Volume (vph)	141	0	88	45	0	7	2	68	896	27	3	565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1388	1188	0	1275	1615	0	0	1337	3444	1072	1332	3259
Flt Permitted	0.753			0.700				0.437			0.295	
Satd. Flow (perm)	1101	1188	0	939	1615	0	0	615	3444	1044	413	3259
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		282			122					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			1203.8
Travel Time (s)		10.6			17.5				19.7			54.2
Confl. Peds. (#/hr)										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 (%)	30%	2%	36%	40%	2%	0%	0%	36%	6%	49%	34%	12%
Adj. Flow (vph)	141	0	88	45	0	7	2	68	896	27	3	565
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	88	0	45	7	0	0	70	896	27	3	565
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1262
Flt Permitted	
Satd. Flow (perm)	1262
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	28%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	29
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	48.0	48.0		48.0	48.0		72.0	72.0	72.0	72.0	72.0	72.0
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Maximum Green (s)	39.8	39.8		39.8	39.8		65.4	65.4	65.4	65.4	65.4	65.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	20.9	20.9		20.9	20.9			84.3	84.3	84.3	84.3	84.3
Actuated g/C Ratio	0.17	0.17		0.17	0.17			0.70	0.70	0.70	0.70	0.70
v/c Ratio	0.74	0.20		0.28	0.02			0.16	0.37	0.04	0.01	0.25
Control Delay (s/veh)	67.9	1.0		44.5	0.1			8.2	7.7	1.0	7.7	7.5
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.9	1.0		44.5	0.1			8.2	7.7	1.0	7.7	7.5
LOS	E	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		42.2			38.6				7.5			7.2
Approach LOS		D			D				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 67.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	72.0
Total Split (%)	60.0%
Maximum Green (s)	65.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	84.3
Actuated g/C Ratio	0.70
v/c Ratio	0.03
Control Delay (s/veh)	1.2
Queue Delay	0.0
Total Delay (s/veh)	1.2
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

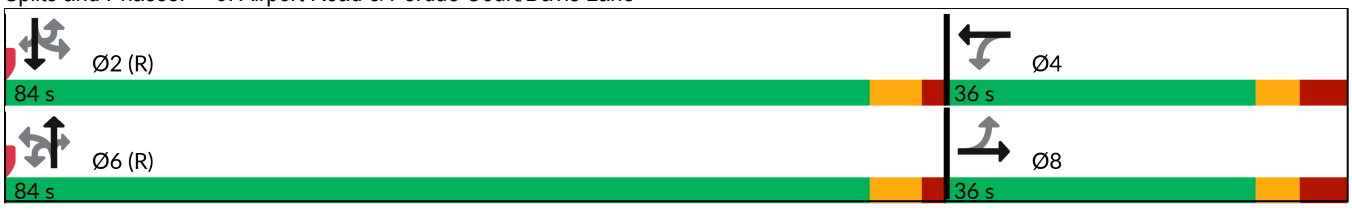
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	0	61	80	0	8	3	36	1030	49	8	20
Future Volume (vph)	6	0	61	80	0	8	3	36	1030	49	8	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.5
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0		70.0
Storage Lanes	1		0	1		0		1		1		1
Taper Length (m)	7.5			7.5				70.0				65.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Ped Bike Factor										0.93		0.99
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1785	1458	0	1638	1445	0	0	1122	3349	868	0	1086
Flt Permitted	0.752			0.717				0.390				0.264
Satd. Flow (perm)	1413	1458	0	1236	1445	0	0	461	3349	810	0	300
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		271			118					49		
Link Speed (k/h)		50			50				60			
Link Distance (m)		111.7			131.0				459.1			
Travel Time (s)		8.0			9.4				27.5			
Confl. Peds. (#/hr)										12		12
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 (%)	0%	2%	12%	9%	2%	13%	0%	64%	9%	84%	0%	90%
Adj. Flow (vph)	6	0	61	80	0	8	3	36	1030	49	8	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	61	0	80	8	0	0	39	1030	49	0	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(m)		3.5			3.5				3.6			
Link Offset(m)		0.0			0.0				0.0			
Crosswalk Width(m)		4.8			4.8				4.8			
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	15	25		15	15	25
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left				Left	
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	2.0	25.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	2.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		8			4				6			
Permitted Phases	8			4			6	6		6	2	2
Detector Phase	8	8		4	4		6	6	6	6	2	2

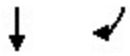
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	687	9
Future Volume (vph)	687	9
Ideal Flow (vphpl)	1900	1900
Lane Width (m)	3.7	3.5
Storage Length (m)		60.0
Storage Lanes		1
Taper Length (m)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3230	845
Flt Permitted		
Satd. Flow (perm)	3230	845
Right Turn on Red		Yes
Satd. Flow (RTOR)		47
Link Speed (k/h)	80	
Link Distance (m)	438.5	
Travel Time (s)	19.7	
Confl. Peds. (#/hr)		
Peak Hour Factor	1.00	1.00
Heavy Vehicles (%)	13%	89%
Adj. Flow (vph)	687	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	687	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(m)	3.6	
Link Offset(m)	0.0	
Crosswalk Width(m)	4.8	
Two way Left Turn Lane		
Headway Factor	0.99	1.01
Turning Speed (k/h)		15
Number of Detectors	1	1
Detector Template		
Leading Detector (m)	10.0	10.0
Trailing Detector (m)	0.0	0.0
Detector 1 Position(m)	0.0	0.0
Detector 1 Size(m)	10.0	10.0
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Turn Type	NA	Perm
Protected Phases	2	
Permitted Phases		2
Detector Phase	2	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Maximum Green (s)	27.8	27.8		27.8	27.8		77.4	77.4	77.4	77.4	77.4	77.4
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
Total Lost Time (s)	8.2	8.2		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	3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	14.3	14.3		14.3	14.3			96.2	96.2	96.2		96.2
Actuated g/C Ratio	0.12	0.12		0.12	0.12			0.80	0.80	0.80		0.80
v/c Ratio	0.04	0.15		0.54	0.03			0.11	0.38	0.07		0.12
Control Delay (s/veh)	45.0	0.8		63.2	0.3			5.3	5.2	1.6		3.0
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay (s/veh)	45.0	0.8		63.2	0.3			5.3	5.2	1.6		3.0
LOS	D	A		E	A			A	A	A		A
Approach Delay (s/veh)		4.7			57.4				5.1			
Approach LOS		A			E				A			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 55.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane





Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	12.0
Minimum Split (s)	24.6	24.6
Total Split (s)	84.0	84.0
Total Split (%)	70.0%	70.0%
Maximum Green (s)	77.4	77.4
Yellow Time (s)	4.6	4.6
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.6	6.6
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Max	C-Max
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	8.0	8.0
Pedestrian Calls (#/hr)	20	20
Act Effct Green (s)	96.2	96.2
Actuated g/C Ratio	0.80	0.80
v/c Ratio	0.27	0.01
Control Delay (s/veh)	2.0	0.0
Queue Delay	0.0	0.0
Total Delay (s/veh)	2.0	0.0
LOS	A	A
Approach Delay (s/veh)	2.0	
Approach LOS	A	

Intersection Summary

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	9	0	1082	582	5
Future Volume (vph)	0	9	0	1082	582	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.865			0.999	
Flt Protected						
Satd. Flow (prot)	0	1479	0	3008	2875	0
Flt Permitted						
Satd. Flow (perm)	0	1479	0	3008	2875	0
Link Speed (k/h)	50			80	80	
Link Distance (m)	98.0			170.1	314.5	
Travel Time (s)	7.1			7.7	14.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	0%	2%	8%	13%	0%
Adj. Flow (vph)	0	9	0	1082	582	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	9	0	1082	587	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			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	1.14	1.14	1.14	1.14	1.14	1.14
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	CBD		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	9	0	1082	582	5
Future Volume (Veh/h)	0	9	0	1082	582	5
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)	0	9	0	1082	582	5
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	1126	294	587			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1126	294	587			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	199	709	984			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	9	541	541	388	199
Volume Left	0	0	0	0	0
Volume Right	9	0	0	0	5
cSH	709	1700	1700	1700	1700
Volume to Capacity	0.01	0.32	0.32	0.23	0.12
Queue Length 95th (m)	0.3	0.0	0.0	0.0	0.0
Control Delay (s/veh)	10.1	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	10.1	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	48	6	11	1034	584	7
Future Volume (vph)	48	6	11	1034	584	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	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	0.95	0.95	0.95
Frt		0.850			0.998	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1456	828	1378	3343	3188	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1456	828	1378	3343	3188	0
Link Speed (k/h)	50			80	80	
Link Distance (m)	105.8			175.0	170.1	
Travel Time (s)	7.6			7.9	7.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	24%	95%	31%	8%	12%	96%
Adj. Flow (vph)	48	6	11	1034	584	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	6	11	1034	591	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		
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			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	48	6	11	1034	584	7
Future Volume (Veh/h)	48	6	11	1034	584	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)	48	6	11	1034	584	7
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	None	
Median storage veh)				2		
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1127	296	591			
vC1, stage 1 conf vol	588					
vC2, stage 2 conf vol	539					
vCu, unblocked vol	1127	296	591			
tC, single (s)	7.3	8.8	4.7			
tC, 2 stage (s)	6.3					
tF (s)	3.7	4.2	2.5			
p0 queue free %	87	99	99			
cM capacity (veh/h)	361	487	806			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	48	6	11	517	517	389	202
Volume Left	48	0	11	0	0	0	0
Volume Right	0	6	0	0	0	0	7
cSH	361	487	806	1700	1700	1700	1700
Volume to Capacity	0.13	0.01	0.01	0.30	0.30	0.23	0.12
Queue Length 95th (m)	3.6	0.3	0.3	0.0	0.0	0.0	0.0
Control Delay (s/veh)	16.5	12.5	9.5	0.0	0.0	0.0	0.0
Lane LOS	C	B	A				
Approach Delay (s/veh)	16.0		0.1			0.0	
Approach LOS	C						

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	38.6%	ICU Level of Service		A
Analysis Period (min)	15			

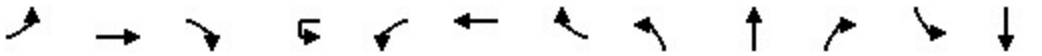
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	15	0	1045	582	8
Future Volume (vph)	0	15	0	1045	582	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.865			0.998	
Flt Protected						
Satd. Flow (prot)	0	1644	0	3343	3193	0
Flt Permitted						
Satd. Flow (perm)	0	1644	0	3343	3193	0
Link Speed (k/h)	50			80	80	
Link Distance (m)	105.5			1203.8	175.0	
Travel Time (s)	7.6			54.2	7.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	0%	2%	8%	13%	0%
Adj. Flow (vph)	0	15	0	1045	582	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	15	0	1045	590	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			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	
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			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	15	0	1045	582	8
Future Volume (Veh/h)	0	15	0	1045	582	8
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)	0	15	0	1045	582	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1109	295	590			
vC1, stage 1 conf vol	586					
vC2, stage 2 conf vol	523					
vCu, unblocked vol	1109	295	590			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	416	707	982			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	15	523	523	388	202
Volume Left	0	0	0	0	0
Volume Right	15	0	0	0	8
cSH	707	1700	1700	1700	1700
Volume to Capacity	0.02	0.31	0.31	0.23	0.12
Queue Length 95th (m)	0.5	0.0	0.0	0.0	0.0
Control Delay (s/veh)	10.2	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	10.2	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	32.2%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	243	819	506	1	81	564	76	257	407	86	99	607
Future Volume (vph)	243	819	506	1	81	564	76	257	407	86	99	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	200.0		0.0		165.0		60.0	95.0		60.0	100.0	
Storage Lanes	1		0		1		1	1		1	1	
Taper Length (m)	100.0				100.0			80.0			50.0	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	0.99			1.00		0.98	1.00		0.96	0.99	
Frt		0.943					0.850			0.850		
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1526	4573	0	0	1356	4601	1166	1700	3017	1125	1463	3230
Flt Permitted	0.383				0.145			0.208			0.513	
Satd. Flow (perm)	614	4573	0	0	207	4601	1148	371	3017	1084	779	3230
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		149					117			92		
Link Speed (k/h)		60				60			60			60
Link Distance (m)		685.4				419.2			460.7			459.1
Travel Time (s)		41.1				25.2			27.6			27.5
Confl. Peds. (#/hr)	4		11		11		4	7		24	24	
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 (%)	17%	8%	6%	0%	32%	14%	37%	5%	21%	42%	22%	13%
Adj. Flow (vph)	243	819	506	1	81	564	76	257	407	86	99	607
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	1325	0	0	82	564	76	257	407	86	99	607
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
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	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	15	25		15	25		15	25	
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template				Left			Right			Right		
Leading Detector (m)	25.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0	10.0	25.0	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
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
Detector 1 Size(m)	10.0	10.0		2.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	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
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	3	8		7	7	4		1	6		5	2
Permitted Phases	8			4	4		4	6		6	2	
Detector Phase	3	8		7	7	4	4	1	6	6	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	184
Future Volume (vph)	184
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1309
Flt Permitted	
Satd. Flow (perm)	1284
Right Turn on Red	Yes
Satd. Flow (RTOR)	184
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	22%
Adj. Flow (vph)	184
Shared Lane Traffic (%)	
Lane Group Flow (vph)	184
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

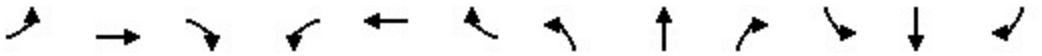
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	8.0	46.1		8.0	8.0	46.1	46.1	8.0	41.9	41.9	8.0	41.9
Total Split (s)	13.0	52.1		10.0	10.0	49.1	49.1	16.0	47.9	47.9	10.0	41.9
Total Split (%)	10.8%	43.4%		8.3%	8.3%	40.9%	40.9%	13.3%	39.9%	39.9%	8.3%	34.9%
Maximum Green (s)	10.0	45.0		7.0	7.0	42.0	42.0	13.0	41.0	41.0	7.0	35.0
Yellow Time (s)	3.0	4.0		3.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	3.1		0.0	0.0	3.1	3.1	0.0	2.9	2.9	0.0	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			3.0	7.1	7.1	3.0	6.9	6.9	3.0	6.9
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max		None	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		12.0				12.0	12.0		12.0	12.0		12.0
Flash Don't Walk (s)		27.0				27.0	27.0		23.0	23.0		23.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	65.9	53.0			58.2	46.7	46.7	48.1	34.4	34.4	39.0	28.3
Actuated g/C Ratio	0.55	0.44			0.49	0.39	0.39	0.40	0.29	0.29	0.33	0.24
v/c Ratio	0.57	0.63			0.48	0.31	0.15	0.88	0.47	0.23	0.34	0.80
Control Delay (s/veh)	22.2	25.7			24.7	27.1	2.0	56.4	36.5	6.6	37.8	61.1
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.2	25.7			24.7	27.1	2.0	56.4	36.5	6.6	37.8	61.1
LOS	C	C			C	C	A	E	D	A	D	E
Approach Delay (s/veh)		25.1				24.1			39.9			50.2
Approach LOS		C				C			D			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 30 (25%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 33.5		Intersection LOS: C	
Intersection Capacity Utilization 97.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road

Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	34.9%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	28.3
Actuated g/C Ratio	0.24
v/c Ratio	0.42
Control Delay (s/veh)	20.9
Queue Delay	0.0
Total Delay (s/veh)	20.9
LOS	C
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

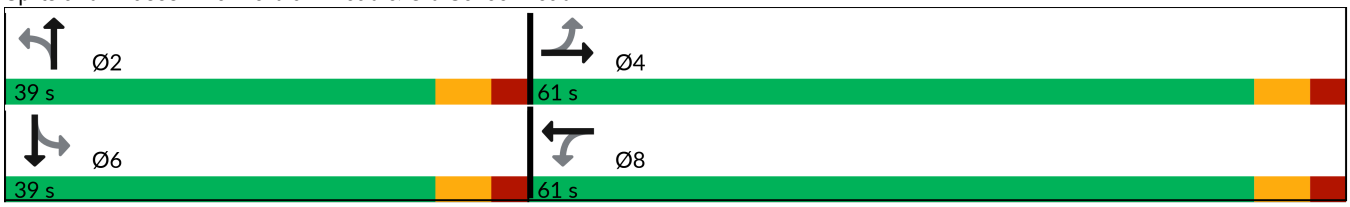


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	300	57	35	107	2	13	127	17	4	404	26
Future Volume (vph)	49	300	57	35	107	2	13	127	17	4	404	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	0.0		0.0	0.0		0.0	55.0		0.0	55.0		55.0
Storage Lanes	0		0	0		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	0.95	0.95	1.00	0.95	0.95
Frt		0.981			0.998			0.982			0.991	
Flt Protected		0.994			0.988		0.950			0.950		
Satd. Flow (prot)	0	1826	0	0	1867	0	1539	3494	0	1428	3584	0
Flt Permitted		0.939			0.817		0.502			0.661		
Satd. Flow (perm)	0	1725	0	0	1543	0	813	3494	0	994	3584	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			1			15			7	
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		550.3			548.3			480.6			445.5	
Travel Time (s)		28.3			28.2			24.7			22.9	
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 (%)	0%	2%	8%	0%	2%	0%	16%	2%	7%	25%	1%	0%
Adj. Flow (vph)	49	300	57	35	107	2	13	127	17	4	404	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	406	0	0	144	0	13	144	0	4	430	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			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								Yes				
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template	Left			Left								
Leading Detector (m)	2.0	10.0		2.0	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		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	10.0		2.0	10.0		10.0	10.0		10.0	10.0	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		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	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	24.9	24.9		24.9	24.9		24.9	24.9		24.9	24.9	
Total Split (s)	61.0	61.0		61.0	61.0		39.0	39.0		39.0	39.0	
Total Split (%)	61.0%	61.0%		61.0%	61.0%		39.0%	39.0%		39.0%	39.0%	
Maximum Green (s)	54.1	54.1		54.1	54.1		32.1	32.1		32.1	32.1	
Yellow Time (s)	4.2	4.2		4.2	4.2		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.7	2.7		2.7	2.7		2.7	2.7		2.7	2.7	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9			6.9		6.9	6.9		6.9	6.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	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	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	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	
Act Effct Green (s)		19.8			19.8		32.3	32.3		32.3	32.3	
Actuated g/C Ratio		0.30			0.30		0.49	0.49		0.49	0.49	
v/c Ratio		0.77			0.31		0.03	0.08		0.01	0.24	
Control Delay (s/veh)		30.6			19.0		11.3	9.5		11.0	11.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		30.6			19.0		11.3	9.5		11.0	11.0	
LOS		C			B		B	A		B	B	
Approach Delay (s/veh)		30.6			19.0			9.6			11.0	
Approach LOS		C			B			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 66			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 18.8		Intersection LOS: B	
Intersection Capacity Utilization 48.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Old School Road



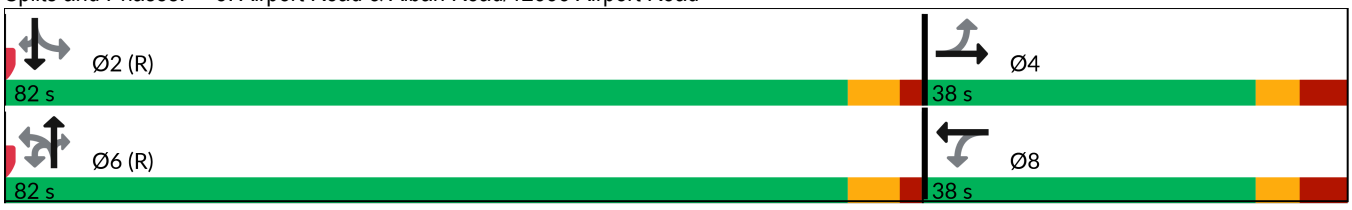
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	23	0	85	42	0	3	1	127	374	46	8	760
Future Volume (vph)	23	0	85	42	0	3	1	127	374	46	8	760
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1530	1292	0	1152	1205	0	0	1283	3147	1258	1293	3318
Flt Permitted	0.756			0.702				0.360			0.530	
Satd. Flow (perm)	1217	1292	0	851	1205	0	0	486	3147	1225	719	3318
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		224			501					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			1203.8
Travel Time (s)		10.6			17.5				19.7			54.2
Confl. Peds. (#/hr)										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 (%)	18%	2%	25%	55%	2%	34%	0%	41%	16%	27%	38%	10%
Adj. Flow (vph)	23	0	85	42	0	3	1	127	374	46	8	760
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	85	0	42	3	0	0	128	374	46	8	760
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	91
Future Volume (vph)	91
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1233
Flt Permitted	
Satd. Flow (perm)	1233
Right Turn on Red	Yes
Satd. Flow (RTOR)	91
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	31%
Adj. Flow (vph)	91
Shared Lane Traffic (%)	
Lane Group Flow (vph)	91
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	38.0	38.0		38.0	38.0		82.0	82.0	82.0	82.0	82.0	82.0
Total Split (%)	31.7%	31.7%		31.7%	31.7%		68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Maximum Green (s)	29.8	29.8		29.8	29.8		75.4	75.4	75.4	75.4	75.4	75.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	13.5	13.5		13.5	13.5			97.0	97.0	97.0	97.0	97.0
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.81	0.81	0.81	0.81	0.81
v/c Ratio	0.17	0.25		0.44	0.01			0.33	0.15	0.05	0.01	0.28
Control Delay (s/veh)	50.1	1.7		63.8	0.0			6.3	2.7	1.2	4.0	4.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.1	1.7		63.8	0.0			6.3	2.7	1.2	4.0	4.3
LOS	D	A		E	A			A	A	A	A	A
Approach Delay (s/veh)		12.0			59.5				3.5			3.9
Approach LOS		B			E				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	82.0
Total Split (%)	68.3%
Maximum Green (s)	75.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	97.0
Actuated g/C Ratio	0.81
v/c Ratio	0.09
Control Delay (s/veh)	1.1
Queue Delay	0.0
Total Delay (s/veh)	1.1
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

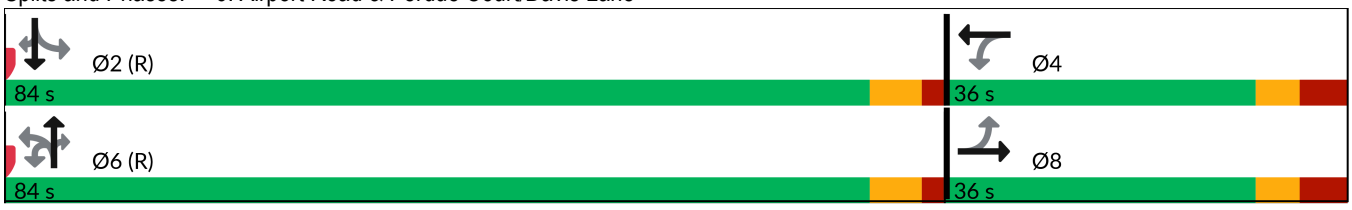
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	28	21	0	3	1	70	563	32	4	874
Future Volume (vph)	2	0	28	21	0	3	1	70	563	32	4	874
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.7
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0	70.0	
Storage Lanes	1		0	1		0		1		1	1	
Taper Length (m)	7.5			7.5				70.0			65.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.93	0.98	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	892	933	0	1069	816	0	0	1467	3042	1183	1190	3230
Flt Permitted	0.756			0.739				0.320			0.441	
Satd. Flow (perm)	710	933	0	831	816	0	0	494	3042	1104	541	3230
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		184			335					47		
Link Speed (k/h)		50			50				60			80
Link Distance (m)		111.7			131.0				459.1			438.5
Travel Time (s)		8.0			9.4				27.5			19.7
Confl. Peds. (#/hr)										12	12	
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 (%)	100%	2%	75%	67%	2%	100%	0%	22%	20%	35%	50%	13%
Adj. Flow (vph)	2	0	28	21	0	3	1	70	563	32	4	874
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	28	0	21	3	0	0	71	563	32	4	874
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(m)		3.5			3.5				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												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		8			4				6			2
Permitted Phases	8			4			6	6		6	2	
Detector Phase	8	8		4	4		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	3
Future Volume (vph)	3
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	60.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1597
Flt Permitted	
Satd. Flow (perm)	1597
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	0%
Adj. Flow (vph)	3
Shared Lane Traffic (%)	
Lane Group Flow (vph)	3
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Maximum Green (s)	27.8	27.8		27.8	27.8		77.4	77.4	77.4	77.4	77.4	77.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	13.2	13.2		13.2	13.2			102.7	102.7	102.7	102.7	102.7
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.86	0.86	0.86	0.86	0.86
v/c Ratio	0.03	0.11		0.23	0.01			0.17	0.22	0.03	0.01	0.32
Control Delay (s/veh)	47.5	0.8		54.7	0.0			2.5	1.5	0.1	2.8	2.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	0.8		54.7	0.0			2.5	1.5	0.1	2.8	2.3
LOS	D	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		3.9			47.8				1.5			2.2
Approach LOS		A			D				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	24.6
Total Split (s)	84.0
Total Split (%)	70.0%
Maximum Green (s)	77.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	7.0
Flash Don't Walk (s)	8.0
Pedestrian Calls (#/hr)	20
Act Effct Green (s)	102.7
Actuated g/C Ratio	0.86
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2	0	402	885	15
Future Volume (Veh/h)	0	2	0	402	885	15
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)	0	2	0	402	885	15
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	1094	450	900			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1094	450	900			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	209	562	751			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	201	201	590	310
Volume Left	0	0	0	0	0
Volume Right	2	0	0	0	15
cSH	562	1700	1700	1700	1700
Volume to Capacity	0.00	0.12	0.12	0.35	0.18
Queue Length 95th (m)	0.1	0.0	0.0	0.0	0.0
Control Delay (s/veh)	11.4	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	11.4	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	5	28	386	878	8
Future Volume (Veh/h)	16	5	28	386	878	8
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)	16	5	28	386	878	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	None	
Median storage veh)				2		
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1131	443	886			
vC1, stage 1 conf vol	882					
vC2, stage 2 conf vol	249					
vCu, unblocked vol	1131	443	886			
tC, single (s)	8.1	8.9	4.4			
tC, 2 stage (s)	7.1					
tF (s)	4.1	4.3	2.4			
p0 queue free %	93	99	96			
cM capacity (veh/h)	233	361	683			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	16	5	28	193	193	585	301
Volume Left	16	0	28	0	0	0	0
Volume Right	0	5	0	0	0	0	8
cSH	233	361	683	1700	1700	1700	1700
Volume to Capacity	0.07	0.01	0.04	0.11	0.11	0.34	0.18
Queue Length 95th (m)	1.8	0.3	1.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	21.6	15.1	10.5	0.0	0.0	0.0	0.0
Lane LOS	C	C	B				
Approach Delay (s/veh)	20.0		0.7			0.0	
Approach LOS	C						

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3	0	414	858	26
Future Volume (Veh/h)	0	3	0	414	858	26
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)	0	3	0	414	858	26
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1078	442	884			
vC1, stage 1 conf vol	871					
vC2, stage 2 conf vol	207					
vCu, unblocked vol	1078	442	884			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	353	569	761			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	3	207	207	572	312
Volume Left	0	0	0	0	0
Volume Right	3	0	0	0	26
cSH	569	1700	1700	1700	1700
Volume to Capacity	0.01	0.12	0.12	0.34	0.18
Queue Length 95th (m)	0.1	0.0	0.0	0.0	0.0
Control Delay (s/veh)	11.4	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	11.4	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		

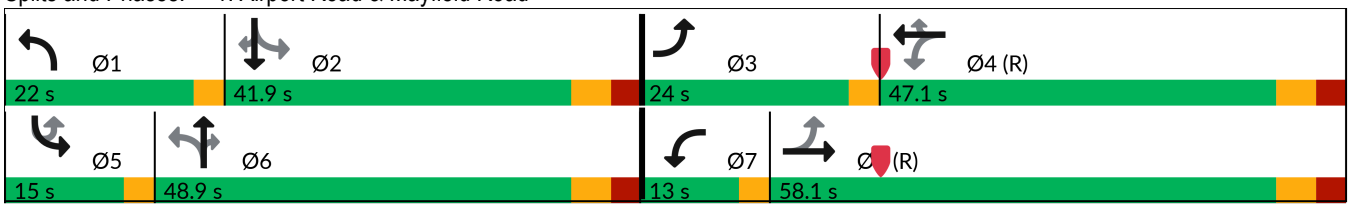
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	312	678	234	104	816	70	342	721	96	1	137	464
Future Volume (vph)	312	678	234	104	816	70	342	721	96	1	137	464
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7
Storage Length (m)	200.0		0.0	165.0		60.0	95.0		60.0		100.0	
Storage Lanes	1		0	1		1	1		1		1	
Taper Length (m)	100.0			100.0			80.0				50.0	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00	0.99		1.00		0.98	1.00		0.96		0.99	
Frt		0.962				0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1513	4520	0	1500	4948	1086	1684	3288	1174	0	1477	3259
Flt Permitted	0.245			0.301			0.282				0.218	
Satd. Flow (perm)	390	4520	0	474	4948	1069	498	3288	1128	0	336	3259
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		74				128			106			
Link Speed (k/h)		60			60			60				60
Link Distance (m)		685.4			419.2			460.7				459.1
Travel Time (s)		41.1			25.2			27.6				27.5
Confl. Peds. (#/hr)	4		11	11		4	7		24		24	
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 (%)	18%	13%	5%	19%	6%	47%	6%	11%	36%	0%	21%	12%
Adj. Flow (vph)	312	678	234	104	816	70	342	721	96	1	137	464
Shared Lane Traffic (%)												
Lane Group Flow (vph)	312	912	0	104	816	70	342	721	96	0	138	464
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	R NA	Left	Left
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	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	25		15	15	25	
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template						Right			Right	Left		
Leading Detector (m)	25.0	10.0		25.0	10.0	10.0	25.0	10.0	10.0	2.0	25.0	10.0
Trailing Detector (m)	15.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	15.0	0.0		15.0	0.0	0.0	15.0	0.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	2.0	10.0	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
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt	NA
Protected Phases	3	8		7	4		1	6			5	2
Permitted Phases	8			4		4	6		6	5	2	
Detector Phase	3	8		7	4	4	1	6	6	5	5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	324
Future Volume (vph)	324
Ideal Flow (vphpl)	1900
Lane Width (m)	3.5
Storage Length (m)	105.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1413
Flt Permitted	
Satd. Flow (perm)	1385
Right Turn on Red	Yes
Satd. Flow (RTOR)	313
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Peak Hour Factor	1.00
Heavy Vehicles (%)	13%
Adj. Flow (vph)	324
Shared Lane Traffic (%)	
Lane Group Flow (vph)	324
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.01
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	Right
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	5.0	12.0	12.0	5.0	5.0	12.0
Minimum Split (s)	8.0	46.1		8.0	46.1	46.1	8.0	41.9	41.9	8.0	8.0	41.9
Total Split (s)	24.0	58.1		13.0	47.1	47.1	22.0	48.9	48.9	15.0	15.0	41.9
Total Split (%)	17.8%	43.0%		9.6%	34.9%	34.9%	16.3%	36.2%	36.2%	11.1%	11.1%	31.0%
Maximum Green (s)	21.0	51.0		10.0	40.0	40.0	19.0	42.0	42.0	12.0	12.0	35.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	0.0	3.1		0.0	3.1	3.1	0.0	2.9	2.9	0.0	0.0	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		3.0	7.1	7.1	3.0	6.9	6.9		3.0	6.9
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		12.0			12.0	12.0		12.0	12.0			12.0
Flash Don't Walk (s)		27.0			27.0	27.0		23.0	23.0			23.0
Pedestrian Calls (#/hr)		0			0	0		0	0			0
Act Effct Green (s)	75.3	59.5		60.4	47.6	47.6	53.7	35.7	35.7		42.9	27.8
Actuated g/C Ratio	0.56	0.44		0.45	0.35	0.35	0.40	0.26	0.26		0.32	0.21
v/c Ratio	0.80	0.45		0.38	0.47	0.15	0.94	0.83	0.26		0.69	0.69
Control Delay (s/veh)	35.4	25.9		20.8	36.4	0.7	65.9	55.5	6.8		44.7	54.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	35.4	25.9		20.8	36.4	0.7	65.9	55.5	6.8		44.7	54.7
LOS	D	C		C	D	A	E	E	A		D	D
Approach Delay (s/veh)		28.3			32.2			54.5				37.7
Approach LOS		C			C			D				D

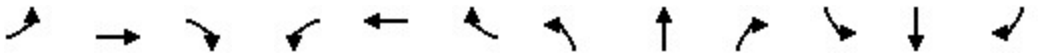
Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 38.3		Intersection LOS: D	
Intersection Capacity Utilization 103.3%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Airport Road & Mayfield Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	41.9
Total Split (s)	41.9
Total Split (%)	31.0%
Maximum Green (s)	35.0
Yellow Time (s)	4.0
All-Red Time (s)	2.9
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.9
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	12.0
Flash Don't Walk (s)	23.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	27.8
Actuated g/C Ratio	0.21
v/c Ratio	0.61
Control Delay (s/veh)	10.3
Queue Delay	0.0
Total Delay (s/veh)	10.3
LOS	B
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

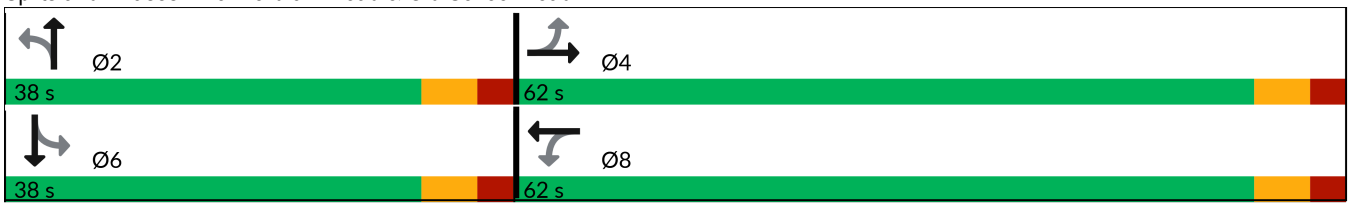


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	237	17	25	418	3	40	385	65	1	197	82
Future Volume (vph)	44	237	17	25	418	3	40	385	65	1	197	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Storage Length (m)	0.0		0.0	0.0		0.0	55.0		0.0	55.0		0.0
Storage Lanes	0		0	0		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	0.95	0.95	1.00	0.95	0.95
Frt		0.992			0.999			0.978			0.956	
Flt Protected		0.993			0.997		0.950			0.950		
Satd. Flow (prot)	0	1834	0	0	1878	0	1785	3560	0	892	3417	0
Flt Permitted		0.845			0.965		0.580			0.492		
Satd. Flow (perm)	0	1561	0	0	1818	0	1090	3560	0	462	3417	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1			20			66	
Link Speed (k/h)		70			70			70			70	
Link Distance (m)		550.3			548.3			480.6			445.5	
Travel Time (s)		28.3			28.2			24.7			22.9	
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 (%)	0%	4%	0%	0%	2%	0%	0%	0%	2%	100%	3%	0%
Adj. Flow (vph)	44	237	17	25	418	3	40	385	65	1	197	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	298	0	0	446	0	40	450	0	1	279	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			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								Yes				
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01	1.01	0.99	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template	Left			Left								
Leading Detector (m)	2.0	10.0		2.0	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		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	10.0		2.0	10.0		10.0	10.0		10.0	10.0	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		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	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	24.9	24.9		24.9	24.9		24.9	24.9		24.9	24.9	
Total Split (s)	62.0	62.0		62.0	62.0		38.0	38.0		38.0	38.0	
Total Split (%)	62.0%	62.0%		62.0%	62.0%		38.0%	38.0%		38.0%	38.0%	
Maximum Green (s)	55.1	55.1		55.1	55.1		31.1	31.1		31.1	31.1	
Yellow Time (s)	4.2	4.2		4.2	4.2		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.7	2.7		2.7	2.7		2.7	2.7		2.7	2.7	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9			6.9		6.9	6.9		6.9	6.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	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	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	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	
Act Effct Green (s)		20.8			20.8		31.3	31.3		31.3	31.3	
Actuated g/C Ratio		0.32			0.32		0.47	0.47		0.47	0.47	
v/c Ratio		0.60			0.78		0.08	0.27		0.00	0.17	
Control Delay (s/veh)		23.9			30.3		12.0	11.4		12.0	8.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		23.9			30.3		12.0	11.4		12.0	8.7	
LOS		C			C		B	B		B	A	
Approach Delay (s/veh)		23.9			30.3			11.4			8.8	
Approach LOS		C			C			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 66			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 19.0		Intersection LOS: B	
Intersection Capacity Utilization 68.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Torbram Road & Old School Road



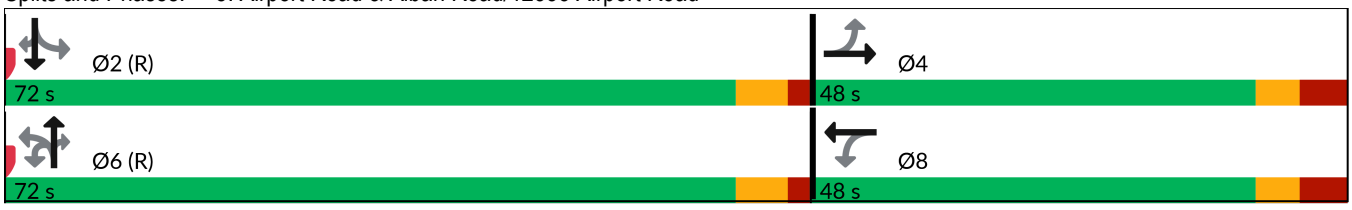
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	141	0	88	45	0	7	2	68	912	27	3	576
Future Volume (vph)	141	0	88	45	0	7	2	68	912	27	3	576
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.7
Storage Length (m)	55.0		0.0	0.0		100.0		120.0		145.0	75.0	
Storage Lanes	1		0	1		1		1		1	1	
Taper Length (m)	20.0			7.5				100.0			100.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor										0.97	1.00	
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1388	1188	0	1275	1615	0	0	1337	3444	1072	1332	3259
Flt Permitted	0.753			0.700				0.432			0.289	
Satd. Flow (perm)	1101	1188	0	939	1615	0	0	608	3444	1044	405	3259
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		274			117					47		
Link Speed (k/h)		50			50				80			80
Link Distance (m)		147.9			242.5				438.5			1203.8
Travel Time (s)		10.6			17.5				19.7			54.2
Confl. Peds. (#/hr)										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 (%)	30%	2%	36%	40%	2%	0%	0%	36%	6%	49%	34%	12%
Adj. Flow (vph)	141	0	88	45	0	7	2	68	912	27	3	576
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	88	0	45	7	0	0	70	912	27	3	576
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
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	1.00	1.00	1.01	1.00	1.01	1.01	1.00	0.99	1.01	1.01	0.99
Turning Speed (k/h)	25		15	25		15	15	25		15	25	
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	25.0	10.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	15.0	0.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	10.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				6			2
Permitted Phases	4			8			6	6		6	2	
Detector Phase	4	4		8	8		6	6	6	6	2	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Lane Width (m)	3.6
Storage Length (m)	100.0
Storage Lanes	1
Taper Length (m)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1262
Flt Permitted	
Satd. Flow (perm)	1262
Right Turn on Red	Yes
Satd. Flow (RTOR)	47
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	1.00
Heavy Vehicles (%)	28%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	29
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (k/h)	15
Number of Detectors	1
Detector Template	
Leading Detector (m)	10.0
Trailing Detector (m)	0.0
Detector 1 Position(m)	0.0
Detector 1 Size(m)	10.0
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Detector Phase	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
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)	48.0	48.0		48.0	48.0		72.0	72.0	72.0	72.0	72.0	72.0
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Maximum Green (s)	39.8	39.8		39.8	39.8		65.4	65.4	65.4	65.4	65.4	65.4
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
Total Lost Time (s)	8.2	8.2		8.2	8.2			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		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	8.0
Flash Don't 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)	20.9	20.9		20.9	20.9			84.3	84.3	84.3	84.3	84.3
Actuated g/C Ratio	0.17	0.17		0.17	0.17			0.70	0.70	0.70	0.70	0.70
v/c Ratio	0.74	0.20		0.28	0.02			0.16	0.38	0.04	0.01	0.25
Control Delay (s/veh)	67.9	1.1		44.5	0.1			8.2	7.7	1.0	7.7	7.5
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.9	1.1		44.5	0.1			8.2	7.7	1.0	7.7	7.5
LOS	E	A		D	A			A	A	A	A	A
Approach Delay (s/veh)		42.2			38.6				7.6			7.2
Approach LOS		D			D				A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 67.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Airport Road & Alban Road/12333 Airport Road



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	35.6
Total Split (s)	72.0
Total Split (%)	60.0%
Maximum Green (s)	65.4
Yellow Time (s)	4.6
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.6
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	C-Max
Walk Time (s)	8.0
Flash Don't Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	84.3
Actuated g/C Ratio	0.70
v/c Ratio	0.03
Control Delay (s/veh)	1.2
Queue Delay	0.0
Total Delay (s/veh)	1.2
LOS	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

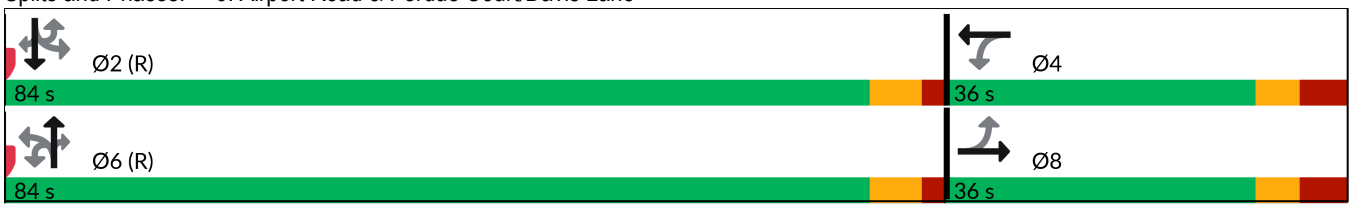
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	0	61	80	0	8	3	36	1048	49	8	20
Future Volume (vph)	6	0	61	80	0	8	3	36	1048	49	8	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.5
Storage Length (m)	0.0		0.0	30.0		0.0		70.0		65.0		70.0
Storage Lanes	1		0	1		0		1		1		1
Taper Length (m)	7.5			7.5				70.0				65.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Ped Bike Factor										0.93		0.99
Frt		0.850			0.850					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1785	1458	0	1638	1445	0	0	1122	3349	868	0	1086
Flt Permitted	0.752			0.717				0.385				0.258
Satd. Flow (perm)	1413	1458	0	1236	1445	0	0	455	3349	810	0	293
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		264			113					49		
Link Speed (k/h)		50			50				60			
Link Distance (m)		111.7			131.0				459.1			
Travel Time (s)		8.0			9.4				27.5			
Confl. Peds. (#/hr)										12		12
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 (%)	0%	2%	12%	9%	2%	13%	0%	64%	9%	84%	0%	90%
Adj. Flow (vph)	6	0	61	80	0	8	3	36	1048	49	8	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	61	0	80	8	0	0	39	1048	49	0	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(m)		3.5			3.5				3.6			
Link Offset(m)		0.0			0.0				0.0			
Crosswalk Width(m)		4.8			4.8				4.8			
Two way Left Turn Lane												
Headway Factor	1.01	0.99	1.01	1.01	0.99	1.01	1.01	1.01	0.99	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	15	25		15	15	25
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template							Left				Left	
Leading Detector (m)	10.0	10.0		10.0	10.0		2.0	25.0	10.0	10.0	2.0	25.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	15.0	0.0	0.0	0.0	15.0
Detector 1 Size(m)	10.0	10.0		10.0	10.0		2.0	10.0	10.0	10.0	2.0	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
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		8			4				6			
Permitted Phases	8			4			6	6		6	2	2
Detector Phase	8	8		4	4		6	6	6	6	2	2

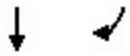
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	699	9
Future Volume (vph)	699	9
Ideal Flow (vphpl)	1900	1900
Lane Width (m)	3.7	3.5
Storage Length (m)		60.0
Storage Lanes		1
Taper Length (m)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3230	845
Flt Permitted		
Satd. Flow (perm)	3230	845
Right Turn on Red		Yes
Satd. Flow (RTOR)		47
Link Speed (k/h)	80	
Link Distance (m)	438.5	
Travel Time (s)	19.7	
Confl. Peds. (#/hr)		
Peak Hour Factor	1.00	1.00
Heavy Vehicles (%)	13%	89%
Adj. Flow (vph)	699	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	699	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(m)	3.6	
Link Offset(m)	0.0	
Crosswalk Width(m)	4.8	
Two way Left Turn Lane		
Headway Factor	0.99	1.01
Turning Speed (k/h)		15
Number of Detectors	1	1
Detector Template		
Leading Detector (m)	10.0	10.0
Trailing Detector (m)	0.0	0.0
Detector 1 Position(m)	0.0	0.0
Detector 1 Size(m)	10.0	10.0
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Turn Type	NA	Perm
Protected Phases	2	
Permitted Phases		2
Detector Phase	2	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
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)	26.2	26.2		26.2	26.2		24.6	24.6	24.6	24.6	24.6	24.6
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Maximum Green (s)	27.8	27.8		27.8	27.8		77.4	77.4	77.4	77.4	77.4	77.4
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
Total Lost Time (s)	8.2	8.2		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	3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	C-Max	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	7.0
Flash Don't Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	21	21		21	21		20	20	20	20	20	20
Act Effct Green (s)	14.3	14.3		14.3	14.3			96.2	96.2	96.2		96.2
Actuated g/C Ratio	0.12	0.12		0.12	0.12			0.80	0.80	0.80		0.80
v/c Ratio	0.04	0.15		0.54	0.03			0.11	0.39	0.07		0.12
Control Delay (s/veh)	45.0	0.8		63.2	0.3			5.3	5.3	1.6		3.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay (s/veh)	45.0	0.8		63.2	0.3			5.3	5.3	1.6		3.1
LOS	D	A		E	A			A	A	A		A
Approach Delay (s/veh)		4.7			57.4				5.1			
Approach LOS		A			E				A			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 55.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Airport Road & Perdue Court/Davis Lane





Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	12.0
Minimum Split (s)	24.6	24.6
Total Split (s)	84.0	84.0
Total Split (%)	70.0%	70.0%
Maximum Green (s)	77.4	77.4
Yellow Time (s)	4.6	4.6
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.6	6.6
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Max	C-Max
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	8.0	8.0
Pedestrian Calls (#/hr)	20	20
Act Effct Green (s)	96.2	96.2
Actuated g/C Ratio	0.80	0.80
v/c Ratio	0.27	0.01
Control Delay (s/veh)	2.0	0.0
Queue Delay	0.0	0.0
Total Delay (s/veh)	2.0	0.0
LOS	A	A
Approach Delay (s/veh)	2.0	
Approach LOS	A	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	9	0	1099	593	5
Future Volume (Veh/h)	0	9	0	1099	593	5
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)	0	9	0	1099	593	5
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	1145	299	598			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1145	299	598			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	193	703	975			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	9	550	550	395	203
Volume Left	0	0	0	0	0
Volume Right	9	0	0	0	5
cSH	703	1700	1700	1700	1700
Volume to Capacity	0.01	0.32	0.32	0.23	0.12
Queue Length 95th (m)	0.3	0.0	0.0	0.0	0.0
Control Delay (s/veh)	10.2	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	10.2	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	48	6	11	1051	595	7
Future Volume (Veh/h)	48	6	11	1051	595	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)	48	6	11	1051	595	7
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	None	
Median storage veh)				2		
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1146	301	602			
vC1, stage 1 conf vol	599					
vC2, stage 2 conf vol	548					
vCu, unblocked vol	1146	301	602			
tC, single (s)	7.3	8.8	4.7			
tC, 2 stage (s)	6.3					
tF (s)	3.7	4.2	2.5			
p0 queue free %	87	99	99			
cM capacity (veh/h)	356	482	798			

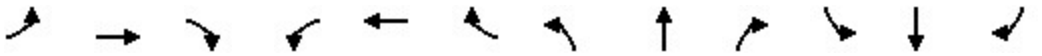
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	48	6	11	526	526	397	205
Volume Left	48	0	11	0	0	0	0
Volume Right	0	6	0	0	0	0	7
cSH	356	482	798	1700	1700	1700	1700
Volume to Capacity	0.13	0.01	0.01	0.31	0.31	0.23	0.12
Queue Length 95th (m)	3.7	0.3	0.3	0.0	0.0	0.0	0.0
Control Delay (s/veh)	16.7	12.6	9.6	0.0	0.0	0.0	0.0
Lane LOS	C	B	A				
Approach Delay (s/veh)	16.2		0.1			0.0	
Approach LOS	C						

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	15	0	1062	593	8
Future Volume (Veh/h)	0	15	0	1062	593	8
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)	0	15	0	1062	593	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1128	301	601			
vC1, stage 1 conf vol	597					
vC2, stage 2 conf vol	531					
vCu, unblocked vol	1128	301	601			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	410	702	972			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	15	531	531	395	206
Volume Left	0	0	0	0	0
Volume Right	15	0	0	0	8
cSH	702	1700	1700	1700	1700
Volume to Capacity	0.02	0.31	0.31	0.23	0.12
Queue Length 95th (m)	0.5	0.0	0.0	0.0	0.0
Control Delay (s/veh)	10.2	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	10.2	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		

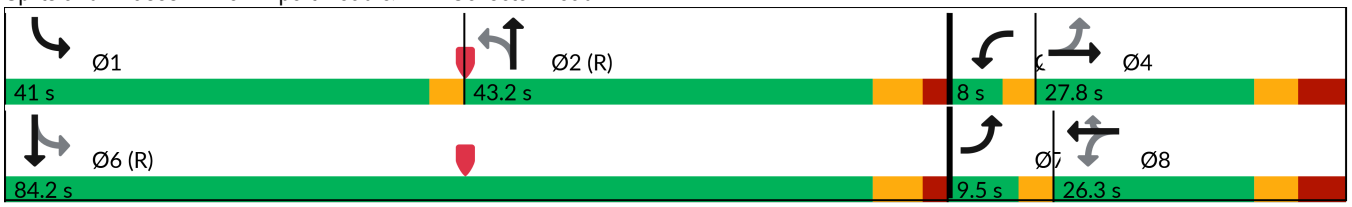


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	0	13	75	0	164	56	578	195	507	961	139
Future Volume (vph)	34	0	13	75	0	164	56	578	195	507	961	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.7	3.5	3.7	3.7	3.5	3.7	3.7	3.5	3.7	3.7
Storage Length (m)	55.0		0.0	55.0		55.0	80.0		0.0	80.0		0.0
Storage Lanes	1		0	1		1	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	0.95	0.95	1.00	0.95	0.95
Frt		0.850				0.850		0.962			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1342	1555	0	1082	1921	1021	1750	3265	0	1539	3402	0
Flt Permitted	0.757			0.541			0.259			0.232		
Satd. Flow (perm)	1069	1555	0	616	1921	1021	477	3265	0	376	3402	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		181				584		40			27	
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		349.0			193.5			537.9			81.8	
Travel Time (s)		25.1			13.9			24.2			3.7	
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 (%)	33%	0%	5%	65%	0%	60%	2%	3%	21%	16%	5%	7%
Adj. Flow (vph)	34	0	13	75	0	164	56	578	195	507	961	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	13	0	75	0	164	56	773	0	507	1100	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)		3.5			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		Yes						Yes			Yes	
Headway Factor	1.01	0.99	0.99	1.01	0.99	0.99	1.01	0.99	0.99	1.01	0.99	0.99
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1	1	1	1		1	1	
Detector Template						Right						
Leading Detector (m)	10.0	10.0		10.0	10.0	2.0	25.0	10.0		25.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0	15.0	0.0		15.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0	15.0	0.0		15.0	0.0	
Detector 1 Size(m)	10.0	10.0		10.0	10.0	2.0	10.0	10.0		10.0	10.0	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Turn Type	pm+pt	NA		pm+pt		Perm	Perm	NA		pm+pt	NA	
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	12.0	12.0		5.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	9.5	26.2		8.0	26.2	26.2	24.6	24.6		8.0	24.6	
Total Split (s)	9.5	27.8		8.0	26.3	26.3	43.2	43.2		41.0	84.2	
Total Split (%)	7.9%	23.2%		6.7%	21.9%	21.9%	36.0%	36.0%		34.2%	70.2%	
Maximum Green (s)	6.5	19.6		5.0	18.1	18.1	36.6	36.6		38.0	77.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.6	4.6		3.0	4.6	
All-Red Time (s)	0.0	4.2		0.0	4.2	4.2	2.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.2		3.0	8.2	8.2	6.6	6.6		3.0	6.6	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	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	
Recall Mode	None	None		None	None	None	C-Max	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		11.0			11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	16.1	12.6		21.1		12.0	51.0	51.0		91.1	87.5	
Actuated g/C Ratio	0.13	0.11		0.18		0.10	0.43	0.43		0.76	0.73	
v/c Ratio	0.22	0.04		0.49		0.26	0.28	0.55		0.83	0.44	
Control Delay (s/veh)	46.1	0.2		54.5		1.0	34.2	29.2		27.2	7.4	
Queue Delay	0.0	0.0		0.0		0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	46.1	0.2		54.5		1.0	34.2	29.2		27.2	7.4	
LOS	D	A		D		A	C	C		C	A	
Approach Delay (s/veh)		33.4			17.8			29.5			13.7	
Approach LOS		C			B			C			B	

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: 0.83			
Intersection Signal Delay (s/veh): 19.2		Intersection LOS: B	
Intersection Capacity Utilization 76.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Airport Road & E-W Collector Road



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	4	0	776	1607	18
Future Volume (Veh/h)	0	4	0	776	1607	18
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)	0	4	0	776	1607	18
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				371		
pX, platoon unblocked	0.89					
vC, conflicting volume	2004	813	1625			
vC1, stage 1 conf vol	1616					
vC2, stage 2 conf vol	388					
vCu, unblocked vol	1882	813	1625			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	143	326	396			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	4	388	388	1071	554
Volume Left	0	0	0	0	0
Volume Right	4	0	0	0	18
cSH	326	1700	1700	1700	1700
Volume to Capacity	0.01	0.23	0.23	0.63	0.33
Queue Length 95th (m)	0.3	0.0	0.0	0.0	0.0
Control Delay (s/veh)	16.2	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s/veh)	16.2	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	55.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	5	32	776	1607	8
Future Volume (Veh/h)	26	5	32	776	1607	8
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)	26	5	32	776	1607	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				205		
pX, platoon unblocked	0.85					
vC, conflicting volume	2059	804	1615			
vC1, stage 1 conf vol	1607					
vC2, stage 2 conf vol	452					
vCu, unblocked vol	1896	804	1615			
tC, single (s)	7.2	8.8	4.6			
tC, 2 stage (s)	6.2					
tF (s)	3.7	4.2	2.4			
p0 queue free %	78	97	90			
cM capacity (veh/h)	121	184	315			

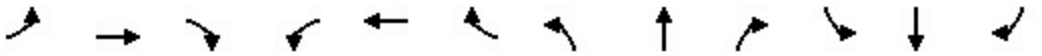
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	26	5	32	388	388	804	804	8
Volume Left	26	0	32	0	0	0	0	0
Volume Right	0	5	0	0	0	0	0	8
cSH	121	184	315	1700	1700	1700	1700	1700
Volume to Capacity	0.22	0.03	0.10	0.23	0.23	0.47	0.47	0.00
Queue Length 95th (m)	6.2	0.7	2.7	0.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	42.8	25.1	17.7	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	D	C					
Approach Delay (s/veh)	40.0		0.7			0.0		
Approach LOS	E							

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	7	0	776	1607	31
Future Volume (Veh/h)	0	7	0	776	1607	31
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)	0	7	0	776	1607	31
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				82		
pX, platoon unblocked	0.83					
vC, conflicting volume	2011	819	1638			
vC1, stage 1 conf vol	1623					
vC2, stage 2 conf vol	388					
vCu, unblocked vol	1805	819	1638			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	142	323	392			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	7	388	388	1071	567
Volume Left	0	0	0	0	0
Volume Right	7	0	0	0	31
cSH	323	1700	1700	1700	1700
Volume to Capacity	0.02	0.23	0.23	0.63	0.33
Queue Length 95th (m)	0.5	0.0	0.0	0.0	0.0
Control Delay (s/veh)	16.4	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s/veh)	16.4	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

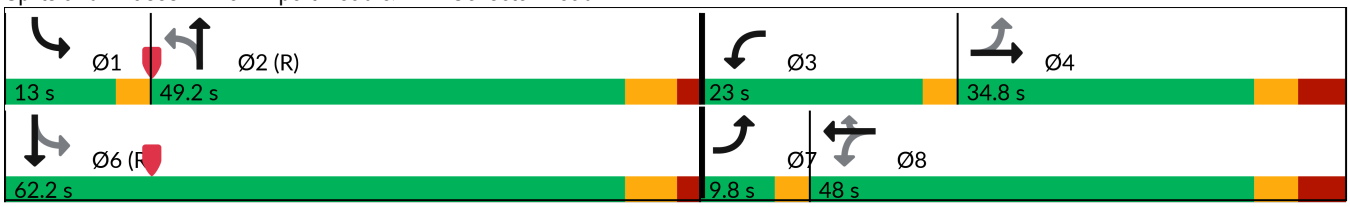


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	0	70	203	0	483	14	1139	70	166	791	38
Future Volume (vph)	137	0	70	203	0	483	14	1139	70	166	791	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.5	3.7	3.7	3.5	3.7	3.7	3.5	3.7	3.7	3.5	3.7	3.7
Storage Length (m)	55.0		0.0	55.0		55.0	80.0		0.0	80.0		0.0
Storage Lanes	1		0	1		1	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	0.95	0.95	1.00	0.95	0.95
Frt		0.850				0.850		0.991			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1785	1633	0	1082	1921	1021	1785	3541	0	1539	3491	0
Flt Permitted	0.757			0.626			0.333			0.087		
Satd. Flow (perm)	1422	1633	0	713	1921	1021	626	3541	0	141	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		215				246		6			5	
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		349.0			193.5			537.9			81.8	
Travel Time (s)		25.1			13.9			24.2			3.7	
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 (%)	0%	0%	0%	65%	0%	60%	0%	1%	21%	16%	4%	0%
Adj. Flow (vph)	137	0	70	203	0	483	14	1139	70	166	791	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	137	70	0	203	0	483	14	1209	0	166	829	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)		3.5			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		Yes						Yes			Yes	
Headway Factor	1.01	0.99	0.99	1.01	0.99	0.99	1.01	0.99	0.99	1.01	0.99	0.99
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	1		1	1	1	1	1		1	1	
Detector Template												
Leading Detector (m)	10.0	10.0		10.0	10.0	10.0	25.0	10.0		25.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0	15.0	0.0		15.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0	15.0	0.0		15.0	0.0	
Detector 1 Size(m)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Turn Type	pm+pt	NA		pm+pt		Perm	Perm	NA		pm+pt	NA	
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	12.0	12.0		5.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	9.5	26.2		8.0	26.2	26.2	24.6	24.6		8.0	24.6	
Total Split (s)	9.8	34.8		23.0	48.0	48.0	49.2	49.2		13.0	62.2	
Total Split (%)	8.2%	29.0%		19.2%	40.0%	40.0%	41.0%	41.0%		10.8%	51.8%	
Maximum Green (s)	6.8	26.6		20.0	39.8	39.8	42.6	42.6		10.0	55.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.6	4.6		3.0	4.6	
All-Red Time (s)	0.0	4.2		0.0	4.2	4.2	2.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.2		3.0	8.2	8.2	6.6	6.6		3.0	6.6	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	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	
Recall Mode	None	None		None	None	None	C-Max	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		11.0			11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	32.9	24.3		52.9		37.9	44.4	44.4		61.1	57.5	
Actuated g/C Ratio	0.27	0.20		0.44		0.32	0.37	0.37		0.51	0.48	
v/c Ratio	0.33	0.14		0.52		0.98	0.06	0.92		0.88	0.49	
Control Delay (s/veh)	26.6	0.6		28.1		57.5	26.7	48.7		66.6	22.9	
Queue Delay	0.0	0.0		0.0		0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	26.6	0.6		28.1		57.5	26.7	48.7		66.6	22.9	
LOS	C	A		C		E	C	D		E	C	
Approach Delay (s/veh)		17.8			48.8			48.4			30.2	
Approach LOS		B			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: 0.98			
Intersection Signal Delay (s/veh): 40.6		Intersection LOS: D	
Intersection Capacity Utilization 86.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: Airport Road & E-W Collector Road



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	11	0	1759	995	7
Future Volume (Veh/h)	0	11	0	1759	995	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)	0	11	0	1759	995	7
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				371		
pX, platoon unblocked	0.68					
vC, conflicting volume	1878	501	1002			
vC1, stage 1 conf vol	999					
vC2, stage 2 conf vol	880					
vCu, unblocked vol	1344	501	1002			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	290	521	687			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	11	880	880	663	339
Volume Left	0	0	0	0	0
Volume Right	11	0	0	0	7
cSH	521	1700	1700	1700	1700
Volume to Capacity	0.02	0.52	0.52	0.39	0.20
Queue Length 95th (m)	0.5	0.0	0.0	0.0	0.0
Control Delay (s/veh)	12.1	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	12.1	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	58	6	15	1759	995	7
Future Volume (Veh/h)	58	6	15	1759	995	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)	58	6	15	1759	995	7
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				205		
pX, platoon unblocked	0.67					
vC, conflicting volume	1905	498	1002			
vC1, stage 1 conf vol	995					
vC2, stage 2 conf vol	910					
vCu, unblocked vol	1357	498	1002			
tC, single (s)	7.2	8.8	4.6			
tC, 2 stage (s)	6.2					
tF (s)	3.7	4.2	2.4			
p0 queue free %	77	98	97			
cM capacity (veh/h)	256	332	573			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	58	6	15	880	880	498	498	7
Volume Left	58	0	15	0	0	0	0	0
Volume Right	0	6	0	0	0	0	0	7
cSH	256	332	573	1700	1700	1700	1700	1700
Volume to Capacity	0.23	0.02	0.03	0.52	0.52	0.29	0.29	0.00
Queue Length 95th (m)	6.8	0.4	0.6	0.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	23.2	16.0	11.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	C	B					
Approach Delay (s/veh)	22.5		0.1			0.0		
Approach LOS	C							

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	20	0	1759	995	12
Future Volume (Veh/h)	0	20	0	1759	995	12
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)	0	20	0	1759	995	12
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				82		
pX, platoon unblocked	0.67					
vC, conflicting volume	1881	504	1007			
vC1, stage 1 conf vol	1001					
vC2, stage 2 conf vol	880					
vCu, unblocked vol	1320	504	1007			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	96	100			
cM capacity (veh/h)	289	519	684			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	880	880	663	344
Volume Left	0	0	0	0	0
Volume Right	20	0	0	0	12
cSH	519	1700	1700	1700	1700
Volume to Capacity	0.04	0.52	0.52	0.39	0.20
Queue Length 95th (m)	1.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	12.2	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s/veh)	12.2	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX F:

Detailed Queueing Analyses

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	3538	3698	3603	3612
Vehs Exited	3574	3670	3591	3612
Starting Vehs	171	148	133	151
Ending Vehs	135	176	145	151
Travel Distance (km)	6395	6515	6308	6406
Travel Time (hr)	138.7	143.7	138.3	140.2
Total Delay (hr)	39.0	42.3	39.8	40.4
Total Stops	3468	3557	3539	3515
Fuel Used (l)	507.6	521.4	503.9	511.0

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	3538	3698	3603	3612
Vehs Exited	3574	3670	3591	3612
Starting Vehs	171	148	133	151
Ending Vehs	135	176	145	151
Travel Distance (km)	6395	6515	6308	6406
Travel Time (hr)	138.7	143.7	138.3	140.2
Total Delay (hr)	39.0	42.3	39.8	40.4
Total Stops	3468	3557	3539	3515
Fuel Used (l)	507.6	521.4	503.9	511.0

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	T	R	UL	T	TR	L	T	T	R	L
Maximum Queue (m)	63.4	129.2	117.6	63.1	42.9	64.4	59.8	66.7	53.8	53.9	28.7	53.0
Average Queue (m)	31.2	73.0	36.1	32.7	19.6	36.3	28.8	39.9	19.9	17.7	12.1	18.2
95th Queue (m)	53.5	113.3	99.3	52.5	38.2	58.1	54.2	65.1	39.9	38.5	24.1	40.4
Link Distance (m)		668.2	668.2	668.2		82.8			442.5	442.5		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				50.0		70.0	95.0			60.0	100.0
Storage Blk Time (%)					0	2	0			0		
Queuing Penalty (veh)					1	8	0			0		

Intersection: 1: Airport Road & Mayfield Road

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (m)	65.5	73.4	38.9
Average Queue (m)	42.7	45.8	16.5
95th Queue (m)	66.1	70.6	31.5
Link Distance (m)	435.0	435.0	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			105.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	26.8	22.6	17.2	24.9
Average Queue (m)	14.8	10.0	8.0	14.8
95th Queue (m)	24.0	18.0	14.8	22.6
Link Distance (m)	540.8	1374.7	471.0	435.9
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Airport Road & Old School Road/Healy Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	R	LT	R
Maximum Queue (m)	82.0	51.7	34.4	22.5	102.6	7.7
Average Queue (m)	42.0	23.6	8.2	5.5	43.0	0.3
95th Queue (m)	76.2	43.7	25.6	18.5	82.3	2.9
Link Distance (m)	1374.7	236.3	1868.5		217.9	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)				15.0		50.0
Storage Blk Time (%)			4	0	5	
Queuing Penalty (veh)			4	1	0	

Intersection: 5: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	UT	T	R	L	T	T
Maximum Queue (m)	49.8	10.9	26.8	9.5	20.3	12.9	40.6	37.1
Average Queue (m)	18.6	1.0	7.3	0.3	1.9	1.2	9.5	10.9
95th Queue (m)	40.8	5.8	23.0	3.8	9.7	6.6	28.2	29.8
Link Distance (m)	225.4		417.0	417.0			235.4	235.4
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		100.0			145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	L	T
Maximum Queue (m)	16.8	26.1	23.9	19.4	28.9	1.8	4.1	12.4	4.9
Average Queue (m)	0.7	6.9	8.5	3.1	8.4	0.1	0.2	0.5	0.2
95th Queue (m)	6.3	19.1	22.2	13.4	20.3	1.0	2.5	4.8	3.0
Link Distance (m)	94.3	94.3		114.2		435.0	435.0		417.0
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			30.0		70.0			70.0	
Storage Blk Time (%)			0						
Queuing Penalty (veh)			0						

Intersection: 10: Bend

Movement	EB	EB
Directions Served	T	
Maximum Queue (m)	27.5	19.8
Average Queue (m)	1.8	1.3
95th Queue (m)	13.3	11.1
Link Distance (m)	82.8	82.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 15

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	3906	3910	3896	3907
Vehs Exited	3922	3931	3887	3912
Starting Vehs	199	188	177	188
Ending Vehs	183	167	186	177
Travel Distance (km)	7247	7241	7150	7213
Travel Time (hr)	168.1	170.9	164.2	167.7
Total Delay (hr)	56.2	58.8	53.5	56.2
Total Stops	4302	4319	4266	4299
Fuel Used (l)	590.7	591.7	585.1	589.2

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	3906	3910	3896	3907
Vehs Exited	3922	3931	3887	3912
Starting Vehs	199	188	177	188
Ending Vehs	183	167	186	177
Travel Distance (km)	7247	7241	7150	7213
Travel Time (hr)	168.1	170.9	164.2	167.7
Total Delay (hr)	56.2	58.8	53.5	56.2
Total Stops	4302	4319	4266	4299
Fuel Used (l)	590.7	591.7	585.1	589.2

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	B10	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	TR	T	L	T	T	R
Maximum Queue (m)	70.4	108.9	96.6	22.3	67.1	101.3	82.6	8.0	121.4	118.0	111.7	26.6
Average Queue (m)	29.1	53.7	15.6	8.8	18.4	50.3	43.9	0.3	67.9	56.7	52.8	12.5
95th Queue (m)	53.7	94.6	63.4	18.6	41.6	82.6	75.9	4.4	121.5	100.5	86.7	23.6
Link Distance (m)		668.2	668.2	668.2		82.8		341.4		442.5	442.5	
Upstream Blk Time (%)					0	0	0					
Queuing Penalty (veh)					0	0	0					
Storage Bay Dist (m)	200.0				50.0		70.0		95.0			60.0
Storage Blk Time (%)					0	7	0		12	1	5	
Queuing Penalty (veh)					1	32	2		30	2	5	

Intersection: 1: Airport Road & Mayfield Road

Movement	SB	SB	SB	SB
Directions Served	UL	T	T	R
Maximum Queue (m)	55.6	55.7	55.0	56.4
Average Queue (m)	22.7	28.3	28.8	23.4
95th Queue (m)	43.5	43.8	46.4	41.7
Link Distance (m)		435.0	435.0	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	100.0			105.0
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	26.8	60.5	24.4	20.9
Average Queue (m)	13.0	31.4	14.0	9.6
95th Queue (m)	21.3	52.1	22.2	16.1
Link Distance (m)	540.8	1374.7	471.0	435.9
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Airport Road & Old School Road/Healy Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	R	LT	R
Maximum Queue (m)	72.1	123.7	144.3	22.5	96.4	12.9
Average Queue (m)	36.0	69.8	67.1	10.7	36.7	2.3
95th Queue (m)	61.3	113.0	127.1	27.2	71.0	9.1
Link Distance (m)	1374.7	236.3	1868.5		217.9	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)				15.0		50.0
Storage Blk Time (%)			36	0	7	
Queuing Penalty (veh)			25	2	1	

Intersection: 5: Airport Road & 12333 Airport Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	UT	T	R	L	T	T
Maximum Queue (m)	58.6	7.2	66.0	43.9	14.8	2.4	28.5	30.5
Average Queue (m)	19.2	1.7	14.4	4.3	1.8	0.1	5.5	7.0
95th Queue (m)	43.5	6.6	44.3	22.1	8.8	1.3	18.9	22.2
Link Distance (m)	225.4		417.0	417.0			235.4	235.4
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		100.0			145.0	75.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	UL	UL	R
Maximum Queue (m)	10.0	24.5	26.4	13.8	21.1	28.0	3.7
Average Queue (m)	2.4	7.7	11.9	2.3	4.1	6.3	0.1
95th Queue (m)	8.4	16.8	21.6	8.9	15.0	20.3	2.1
Link Distance (m)	94.3	94.3		114.2			
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)			30.0		70.0	70.0	60.0
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 10: Bend

Movement	EB	EB
Directions Served	T	
Maximum Queue (m)	24.5	9.3
Average Queue (m)	0.9	0.3
95th Queue (m)	10.0	5.2
Link Distance (m)	82.8	82.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 100

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	4679	4585	4770	4678
Vehs Exited	4704	4650	4729	4695
Starting Vehs	224	225	196	216
Ending Vehs	199	160	237	201
Travel Distance (km)	8305	8185	8405	8298
Travel Time (hr)	204.8	192.7	230.7	209.4
Total Delay (hr)	75.0	65.6	99.8	80.1
Total Stops	5668	5332	6025	5673
Fuel Used (l)	692.3	678.3	722.3	697.6

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	4679	4585	4770	4678
Vehs Exited	4704	4650	4729	4695
Starting Vehs	224	225	196	216
Ending Vehs	199	160	237	201
Travel Distance (km)	8305	8185	8405	8298
Travel Time (hr)	204.8	192.7	230.7	209.4
Total Delay (hr)	75.0	65.6	99.8	80.1
Total Stops	5668	5332	6025	5673
Fuel Used (l)	692.3	678.3	722.3	697.6

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	B10	NB	NB	NB	NB
Directions Served	L	T	T	R	UL	T	TR	T	L	T	T	R
Maximum Queue (m)	72.9	209.7	204.8	84.0	66.8	101.4	82.7	20.9	110.4	92.9	69.8	31.9
Average Queue (m)	39.7	129.7	103.2	45.7	27.0	48.8	41.8	0.7	65.8	45.2	34.2	12.3
95th Queue (m)	65.0	224.5	222.0	75.0	50.0	79.4	71.0	9.2	117.8	83.3	62.5	24.9
Link Distance (m)		668.2	668.2	668.2		82.8		341.4		442.5	442.5	
Upstream Blk Time (%)					0	1	0					
Queuing Penalty (veh)					0	0	0					
Storage Bay Dist (m)	200.0				50.0		70.0		95.0			60.0
Storage Blk Time (%)		11			0	6	0		10	0	1	
Queuing Penalty (veh)		23			1	23	1		19	0	0	

Intersection: 1: Airport Road & Mayfield Road

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (m)	52.4	105.1	112.5	57.8
Average Queue (m)	23.1	62.2	65.2	20.1
95th Queue (m)	44.2	95.9	99.9	40.5
Link Distance (m)		434.9	434.9	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	100.0			105.0
Storage Blk Time (%)		1	0	
Queuing Penalty (veh)		1	1	

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	44.3	28.3	23.6	43.4
Average Queue (m)	20.0	13.1	10.2	20.5
95th Queue (m)	35.9	23.6	17.3	35.8
Link Distance (m)	540.8	1374.6	471.0	435.9
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Airport Road & Old School Road/Healy Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	R	LT	R
Maximum Queue (m)	96.1	62.6	129.9	22.8	195.5	76.2
Average Queue (m)	48.6	33.8	30.6	10.3	96.3	7.6
95th Queue (m)	83.3	58.5	92.2	26.0	185.2	48.9
Link Distance (m)	1374.6	236.2	575.0		217.9	
Upstream Blk Time (%)					2	
Queuing Penalty (veh)					0	
Storage Bay Dist (m)				15.0		50.0
Storage Blk Time (%)			19	1	25	
Queuing Penalty (veh)			22	2	9	

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	26.3	40.2	73.4	7.0	47.8	31.7	11.1	15.2	12.1	41.8	50.0	22.7
Average Queue (m)	7.7	13.0	18.6	0.4	17.5	11.0	0.7	1.2	0.7	14.2	16.1	5.5
95th Queue (m)	20.7	28.5	45.9	2.9	34.8	27.0	5.1	7.0	5.2	34.9	38.8	16.9
Link Distance (m)		130.1	225.3			415.6	415.6			235.2	235.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)		0	0									
Queuing Penalty (veh)		0	0									

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	
Maximum Queue (m)	17.2	31.5	35.6	27.5	35.7	30.3	22.8	13.6	11.2	43.6	46.9	
Average Queue (m)	0.8	9.4	10.2	1.6	12.8	9.1	5.1	1.6	1.0	11.7	13.2	
95th Queue (m)	6.7	24.7	28.6	12.1	30.2	24.6	16.6	7.4	5.7	32.3	35.0	
Link Distance (m)	94.2	94.2		114.1		434.9	434.9			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			
Storage Blk Time (%)			2								0	
Queuing Penalty (veh)			0								0	

Intersection: 10: Bend

Movement	EB	EB
Directions Served	T	
Maximum Queue (m)	67.7	34.3
Average Queue (m)	5.3	1.5
95th Queue (m)	31.3	12.9
Link Distance (m)	82.8	82.8
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Airport Road & North RIRO Access

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: 16: Airport Road & Full Moves Access

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: 17: Airport Road & South RIRO Access

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)

Network Summary

Network wide Queuing Penalty: 101

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5249	5283	5430	5323
Vehs Exited	4992	5025	5137	5049
Starting Vehs	287	265	280	275
Ending Vehs	544	523	573	544
Travel Distance (km)	9464	9415	9606	9495
Travel Time (hr)	482.7	429.8	428.1	446.9
Total Delay (hr)	336.7	284.5	279.3	300.2
Total Stops	9860	9422	10219	9835
Fuel Used (l)	994.8	955.1	964.1	971.3

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	5249	5283	5430	5323
Vehs Exited	4992	5025	5137	5049
Starting Vehs	287	265	280	275
Ending Vehs	544	523	573	544
Travel Distance (km)	9464	9415	9606	9495
Travel Time (hr)	482.7	429.8	428.1	446.9
Total Delay (hr)	336.7	284.5	279.3	300.2
Total Stops	9860	9422	10219	9835
Fuel Used (l)	994.8	955.1	964.1	971.3

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	B10	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	TR	T	L	T	T	R
Maximum Queue (m)	100.9	168.0	149.0	41.6	76.2	110.3	82.7	88.6	126.4	169.8	179.0	90.7
Average Queue (m)	45.0	92.7	60.3	15.8	33.2	72.3	62.2	9.6	77.9	83.9	76.5	15.6
95th Queue (m)	84.6	141.2	131.9	30.7	67.8	112.6	92.4	51.3	140.5	147.2	132.3	44.3
Link Distance (m)		668.2	668.2	668.2		82.8		341.4		442.5	442.5	
Upstream Blk Time (%)					0	5	1					
Queuing Penalty (veh)					0	0	0					
Storage Bay Dist (m)	200.0				50.0		70.0		95.0			60.0
Storage Blk Time (%)					6	21	4		13	2	15	
Queuing Penalty (veh)					46	111	17		42	6	14	

Intersection: 1: Airport Road & Mayfield Road

Movement	SB	SB	SB	SB
Directions Served	UL	T	T	R
Maximum Queue (m)	70.0	80.9	83.5	100.5
Average Queue (m)	35.8	42.7	44.4	36.7
95th Queue (m)	64.7	73.4	74.4	74.2
Link Distance (m)		434.9	434.9	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	100.0			105.0
Storage Blk Time (%)				1
Queuing Penalty (veh)				2

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	32.6	59.7	63.8	34.2
Average Queue (m)	16.8	32.4	25.7	15.5
95th Queue (m)	27.2	52.6	46.7	27.1
Link Distance (m)	540.8	1374.6	471.0	435.9
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Airport Road & Old School Road/Healy Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	R	LT	R
Maximum Queue (m)	190.1	252.5	579.2	22.5	234.6	110.0
Average Queue (m)	93.6	216.0	531.2	7.7	187.6	35.7
95th Queue (m)	173.1	297.6	724.0	24.5	287.9	118.0
Link Distance (m)	1374.6	236.2	575.0		217.9	
Upstream Blk Time (%)		67	26		43	
Queuing Penalty (veh)		0	232		0	
Storage Bay Dist (m)				15.0		50.0
Storage Blk Time (%)			64	0	67	
Queuing Penalty (veh)			47	1	31	

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	74.6	113.9	62.3	9.3	34.4	126.3	114.5	16.8	2.5	53.6	52.7	16.9
Average Queue (m)	43.8	20.9	18.9	1.5	11.8	43.8	29.9	3.1	0.2	11.9	12.8	1.9
95th Queue (m)	74.4	65.9	44.8	6.3	28.7	95.5	80.0	11.2	1.9	35.9	38.1	8.6
Link Distance (m)		130.1	225.3			415.6	415.6			235.2	235.2	
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)	7					2						
Queuing Penalty (veh)	7					1						

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	UL	T	T	R
Maximum Queue (m)	9.7	21.0	36.9	54.8	48.4	104.5	71.7	25.3	27.5	53.9	65.1	9.4
Average Queue (m)	1.4	7.5	18.4	4.7	11.7	25.4	16.2	3.0	6.9	13.8	19.5	0.4
95th Queue (m)	6.3	16.0	36.4	24.3	33.6	71.2	48.8	13.8	21.2	37.7	50.9	4.5
Link Distance (m)	94.2	94.2		114.1		434.9	434.9			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			8	0	0	1	0				0	
Queuing Penalty (veh)			1	0	1	0	0				0	

Intersection: 10: Bend

Movement	EB	EB
Directions Served	T	
Maximum Queue (m)	24.7	10.5
Average Queue (m)	1.7	0.7
95th Queue (m)	12.1	8.3
Link Distance (m)	82.8	82.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Airport Road & North RIRO Access

Movement	NB
Directions Served	T
Maximum Queue (m)	155.3
Average Queue (m)	117.9
95th Queue (m)	217.3
Link Distance (m)	150.8
Upstream Blk Time (%)	22
Queuing Penalty (veh)	201
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Airport Road & Full Moves Access

Movement	NB
Directions Served	LT
Maximum Queue (m)	163.5
Average Queue (m)	106.9
95th Queue (m)	227.4
Link Distance (m)	159.4
Upstream Blk Time (%)	19
Queuing Penalty (veh)	169
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: Airport Road & South RIRO Access

Movement	NB	B13	B13
Directions Served	T	T	
Maximum Queue (m)	883.0	247.9	160.5
Average Queue (m)	356.4	48.5	30.2
95th Queue (m)	1001.7	199.6	152.9
Link Distance (m)	930.8	235.2	235.2
Upstream Blk Time (%)	20	3	3
Queuing Penalty (veh)	177	12	14
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1131

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5080	5131	5115	5110
Vehs Exited	5084	5161	5106	5116
Starting Vehs	200	200	164	186
Ending Vehs	196	170	173	178
Travel Distance (km)	7907	8116	7975	8000
Travel Time (hr)	173.0	183.6	178.4	178.3
Total Delay (hr)	48.3	55.8	52.7	52.3
Total Stops	4583	4758	4709	4682
Fuel Used (l)	634.8	652.0	637.5	641.4

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	5080	5131	5115	5110
Vehs Exited	5084	5161	5106	5116
Starting Vehs	200	200	164	186
Ending Vehs	196	170	173	178
Travel Distance (km)	7907	8116	7975	8000
Travel Time (hr)	173.0	183.6	178.4	178.3
Total Delay (hr)	48.3	55.8	52.7	52.3
Total Stops	4583	4758	4709	4682
Fuel Used (l)	634.8	652.0	637.5	641.4

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	UL	T	T	T	R	L	T	T
Maximum Queue (m)	105.9	81.0	98.3	131.5	56.3	83.0	71.2	45.5	21.1	112.4	103.7	92.3
Average Queue (m)	50.4	47.4	50.4	67.8	20.5	44.8	36.1	15.2	6.9	64.0	45.8	36.8
95th Queue (m)	89.7	68.7	77.5	106.0	42.2	68.3	59.5	41.6	17.9	104.9	82.5	69.9
Link Distance (m)		668.3	668.3	668.3		396.8	396.8	396.8			438.6	438.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				165.0				60.0	95.0		
Storage Blk Time (%)										5	0	1
Queuing Penalty (veh)										10	0	1

Intersection: 1: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	27.9	48.8	97.2	104.9	41.0
Average Queue (m)	12.9	21.8	62.6	67.3	18.0
95th Queue (m)	25.7	41.1	92.7	97.0	33.7
Link Distance (m)			429.0	429.0	
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: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (m)	40.1	21.7	11.7	18.0	15.8	11.4	22.9	18.8
Average Queue (m)	21.2	10.8	2.7	7.7	5.7	1.0	13.2	10.0
95th Queue (m)	35.9	17.1	8.9	12.7	13.1	6.0	19.5	16.6
Link Distance (m)	535.4	533.7		470.4	470.4		435.8	435.8
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			55.0			55.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	31.0	27.1	43.5	13.0	70.0	18.7	22.5	16.4	15.2	32.9	39.1	19.1
Average Queue (m)	6.8	11.9	13.4	1.1	23.8	3.5	7.0	2.7	1.7	12.4	15.8	3.3
95th Queue (m)	20.8	23.3	32.4	5.9	47.1	12.7	19.1	10.9	8.9	28.1	35.0	11.5
Link Distance (m)		130.1	225.3			415.6	415.6			1182.2	1182.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	10.9	27.6	27.9	21.2	34.4	39.3	30.4	11.5	14.2	33.5	40.8	1.7
Average Queue (m)	0.7	9.2	8.1	1.7	13.8	8.9	7.6	1.2	1.0	10.6	13.6	0.1
95th Queue (m)	5.8	22.0	23.4	10.3	30.0	25.3	22.8	6.6	7.1	28.9	33.5	1.0
Link Distance (m)	94.2	94.2		114.1		429.0	429.0			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			1									
Queuing Penalty (veh)			0									

Zone Summary

Zone wide Queuing Penalty: 12

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5778	5870	5836	5829
Vehs Exited	5771	5899	5830	5834
Starting Vehs	231	216	214	221
Ending Vehs	238	187	220	213
Travel Distance (km)	9543	9607	9380	9510
Travel Time (hr)	224.0	235.0	226.8	228.6
Total Delay (hr)	77.0	86.5	81.1	81.5
Total Stops	5909	6130	6044	6028
Fuel Used (l)	781.1	799.2	774.9	785.0

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	5778	5870	5836	5829
Vehs Exited	5771	5899	5830	5834
Starting Vehs	231	216	214	221
Ending Vehs	238	187	220	213
Travel Distance (km)	9543	9607	9380	9510
Travel Time (hr)	224.0	235.0	226.8	228.6
Total Delay (hr)	77.0	86.5	81.1	81.5
Total Stops	5909	6130	6044	6028
Fuel Used (l)	781.1	799.2	774.9	785.0

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	T	R	L	T	T
Maximum Queue (m)	159.0	71.1	73.9	74.0	48.7	91.9	86.0	72.9	28.2	173.2	208.5	189.0
Average Queue (m)	85.5	45.7	44.9	43.5	20.8	62.3	55.9	39.3	7.0	124.1	105.3	83.0
95th Queue (m)	147.2	66.5	67.5	66.7	40.2	87.6	79.8	66.4	20.8	186.0	180.2	145.7
Link Distance (m)		668.3	668.3	668.3		396.8	396.8	396.8			438.6	438.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				165.0				60.0	95.0		
Storage Blk Time (%)								0		52	5	20
Queuing Penalty (veh)								0		182	18	19

Intersection: 1: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	UL	T	T	R
Maximum Queue (m)	60.9	82.0	91.2	88.9	66.8
Average Queue (m)	17.0	39.5	50.8	51.4	27.5
95th Queue (m)	45.5	69.3	79.1	76.6	52.1
Link Distance (m)			429.0	429.0	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)		0	0		
Queuing Penalty (veh)		1	0		

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	TR
Maximum Queue (m)	43.0	51.2	12.6	24.2	22.1	20.4	16.2
Average Queue (m)	18.5	27.6	6.1	13.1	10.8	11.0	9.0
95th Queue (m)	32.3	44.8	13.4	20.7	18.4	17.7	15.2
Link Distance (m)	535.4	533.7		470.4	470.4	435.8	435.8
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)			55.0				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	62.4	47.3	48.4	9.4	52.3	58.7	65.0	14.3	4.7	44.6	41.8	15.5
Average Queue (m)	30.3	11.8	14.0	2.1	14.0	20.8	23.1	1.1	0.2	14.7	15.5	1.9
95th Queue (m)	53.5	28.6	36.6	7.6	35.6	48.7	52.7	6.7	1.9	32.8	34.1	9.5
Link Distance (m)		130.1	225.3			415.6	415.6			1182.2	1182.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)	2	0										
Queuing Penalty (veh)	2	0										

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	UL	T	T	R
Maximum Queue (m)	7.8	29.1	36.6	16.4	29.9	95.0	89.9	21.8	27.6	28.0	41.7	6.7
Average Queue (m)	0.8	7.9	19.1	2.3	9.5	34.8	35.9	5.6	6.0	9.3	12.1	0.3
95th Queue (m)	4.6	18.4	36.9	10.3	23.2	78.8	79.0	17.7	18.4	23.1	31.5	3.1
Link Distance (m)	94.2	94.2		114.1		429.0	429.0			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			8			1	1				0	
Queuing Penalty (veh)			1			0	1				0	

Zone Summary

Zone wide Queuing Penalty: 223

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5256	5252	5134	5213
Vehs Exited	5260	5221	5166	5216
Starting Vehs	211	160	192	188
Ending Vehs	207	191	160	183
Travel Distance (km)	8190	8185	8145	8174
Travel Time (hr)	187.6	185.1	178.7	183.8
Total Delay (hr)	58.7	56.6	51.3	55.5
Total Stops	4331	4231	4127	4229
Fuel Used (l)	651.0	653.3	643.1	649.1

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	5256	5252	5134	5213
Vehs Exited	5260	5221	5166	5216
Starting Vehs	211	160	192	188
Ending Vehs	207	191	160	183
Travel Distance (km)	8190	8185	8145	8174
Travel Time (hr)	187.6	185.1	178.7	183.8
Total Delay (hr)	58.7	56.6	51.3	55.5
Total Stops	4331	4231	4127	4229
Fuel Used (l)	651.0	653.3	643.1	649.1

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	UL	T	T	T	R	L	T	T
Maximum Queue (m)	113.1	81.0	81.6	122.9	50.2	78.8	73.0	49.4	22.4	118.4	93.1	70.9
Average Queue (m)	49.3	49.7	51.5	70.9	20.2	42.8	34.7	11.7	6.3	65.4	41.2	35.7
95th Queue (m)	88.4	72.7	76.7	106.2	40.5	65.3	61.6	36.8	17.3	110.8	75.2	65.5
Link Distance (m)		668.3	668.3	668.3		396.8	396.8	396.8			438.6	438.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				165.0				60.0	95.0		
Storage Blk Time (%)								0		7	0	1
Queuing Penalty (veh)								0		14	0	1

Intersection: 1: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	27.9	69.2	111.6	108.1	42.7
Average Queue (m)	12.7	24.8	67.3	70.5	18.5
95th Queue (m)	24.9	52.4	100.6	102.0	32.5
Link Distance (m)			429.0	429.0	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)			1	1	
Queuing Penalty (veh)			1	1	

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (m)	79.4	45.2	18.2	24.5	20.6	9.5	49.4	38.1
Average Queue (m)	43.0	17.3	2.7	8.0	3.2	0.5	22.2	12.3
95th Queue (m)	69.6	33.3	10.6	18.2	11.5	4.1	40.1	28.7
Link Distance (m)	535.4	533.7		470.4	470.4		435.8	435.8
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			55.0			55.0		
Storage Blk Time (%)							0	
Queuing Penalty (veh)							0	

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	21.4	32.1	65.6	8.8	44.9	21.2	28.0	14.5	11.5	41.0	44.5	19.3
Average Queue (m)	5.2	12.6	15.9	0.7	18.8	3.6	7.4	2.1	0.8	14.1	15.0	4.6
95th Queue (m)	15.1	25.3	44.0	4.6	36.9	12.9	21.1	9.1	5.6	33.2	34.7	14.0
Link Distance (m)		130.1	225.3			415.6	415.6			1182.2	1182.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	13.7	29.7	34.7	29.6	47.5	31.1	24.9	15.5	10.3	35.1	51.0	3.3
Average Queue (m)	1.0	8.8	7.8	1.9	12.8	7.9	6.8	1.8	1.4	9.5	12.9	0.2
95th Queue (m)	7.7	22.4	24.1	13.7	29.5	21.0	20.0	8.2	7.9	25.6	35.4	1.7
Link Distance (m)	94.2	94.2		114.1		429.0	429.0			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			2								0	
Queuing Penalty (veh)			0								0	

Zone Summary

Zone wide Queuing Penalty: 18

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6055	5957	5997	6001
Vehs Exited	6052	5920	6003	5993
Starting Vehs	215	198	253	221
Ending Vehs	218	235	247	232
Travel Distance (km)	9902	9564	9664	9710
Travel Time (hr)	227.5	258.8	262.4	249.6
Total Delay (hr)	74.7	110.5	112.8	99.3
Total Stops	5341	5555	6067	5651
Fuel Used (l)	801.8	808.8	824.8	811.8

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	6055	5957	5997	6001
Vehs Exited	6052	5920	6003	5993
Starting Vehs	215	198	253	221
Ending Vehs	218	235	247	232
Travel Distance (km)	9902	9564	9664	9710
Travel Time (hr)	227.5	258.8	262.4	249.6
Total Delay (hr)	74.7	110.5	112.8	99.3
Total Stops	5341	5555	6067	5651
Fuel Used (l)	801.8	808.8	824.8	811.8

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	T	R	L	T	T
Maximum Queue (m)	184.8	99.9	106.6	90.8	45.6	105.4	95.3	76.5	34.3	156.8	342.3	346.8
Average Queue (m)	84.0	45.8	45.1	43.0	20.7	65.6	58.4	38.8	10.0	129.2	241.9	230.8
95th Queue (m)	163.3	80.7	78.5	76.0	39.9	92.5	85.2	64.8	26.4	223.1	500.0	477.2
Link Distance (m)		668.3	668.3	668.3		396.8	396.8	396.8			438.6	438.6
Upstream Blk Time (%)											9	6
Queuing Penalty (veh)											0	0
Storage Bay Dist (m)	200.0				165.0				60.0	95.0		
Storage Blk Time (%)	1							0		55	4	23
Queuing Penalty (veh)	3							0		199	15	22

Intersection: 1: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	UL	T	T	R
Maximum Queue (m)	58.0	61.4	78.8	73.6	75.4
Average Queue (m)	19.2	32.9	46.4	47.1	33.1
95th Queue (m)	57.2	55.0	70.6	70.1	59.1
Link Distance (m)			429.0	429.0	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (m)	73.6	92.0	14.4	42.6	35.2	4.2	31.7	28.3
Average Queue (m)	38.9	47.7	6.0	22.4	16.4	0.1	16.2	10.4
95th Queue (m)	66.0	76.7	13.8	36.3	31.4	2.3	30.1	22.9
Link Distance (m)	535.4	533.7		470.4	470.4		435.8	435.8
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			55.0			55.0		
Storage Blk Time (%)				0				
Queuing Penalty (veh)				0				

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	59.5	56.9	41.9	7.2	42.9	77.6	67.6	18.0	4.6	40.9	46.9	19.3
Average Queue (m)	29.7	13.7	13.0	1.6	14.5	20.8	22.7	2.7	0.3	12.2	15.8	2.9
95th Queue (m)	54.0	33.6	31.3	6.4	33.3	53.7	52.3	11.4	2.4	28.9	36.2	12.7
Link Distance (m)		130.1	225.3			415.6	415.6			1182.2	1182.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)	1	0										
Queuing Penalty (veh)	1	0										

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	UL	T	T	R
Maximum Queue (m)	14.2	19.5	35.3	33.1	37.8	104.6	96.2	55.6	23.0	29.6	36.8	7.5
Average Queue (m)	1.9	7.9	16.0	3.2	10.3	37.5	37.5	6.1	7.2	9.4	13.5	0.3
95th Queue (m)	8.2	16.6	32.1	19.3	25.6	89.2	84.1	28.6	19.0	23.1	30.4	3.2
Link Distance (m)	94.2	94.2		114.1		429.0	429.0			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			4			1	2					
Queuing Penalty (veh)			0			1	1					

Zone Summary

Zone wide Queuing Penalty: 242

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	4799	4677	4875	4785
Vehs Exited	4795	4702	4862	4785
Starting Vehs	209	192	225	202
Ending Vehs	213	167	238	199
Travel Distance (km)	8489	8280	8645	8471
Travel Time (hr)	212.8	222.1	224.4	219.8
Total Delay (hr)	80.2	93.1	89.5	87.6
Total Stops	5959	5812	6193	5989
Fuel Used (l)	717.7	717.8	741.3	725.6

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	4799	4677	4875	4785
Vehs Exited	4795	4702	4862	4785
Starting Vehs	209	192	225	202
Ending Vehs	213	167	238	199
Travel Distance (km)	8489	8280	8645	8471
Travel Time (hr)	212.8	222.1	224.4	219.8
Total Delay (hr)	80.2	93.1	89.5	87.6
Total Stops	5959	5812	6193	5989
Fuel Used (l)	717.7	717.8	741.3	725.6

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	B10	NB	NB	NB	NB
Directions Served	L	T	T	R	UL	T	TR	T	L	T	T	R
Maximum Queue (m)	88.3	205.9	199.4	123.2	76.6	98.0	80.5	29.8	126.3	123.6	114.1	29.2
Average Queue (m)	39.9	129.3	108.8	45.2	28.1	55.4	46.4	1.6	77.3	54.8	41.4	12.3
95th Queue (m)	67.2	201.2	204.4	86.4	56.6	89.6	76.0	13.8	150.8	129.0	105.4	24.1
Link Distance (m)		668.2	668.2	668.2		82.8		341.4		442.5	442.5	
Upstream Blk Time (%)					0	1	0					
Queuing Penalty (veh)					0	0	0					
Storage Bay Dist (m)	200.0				50.0		70.0		95.0			60.0
Storage Blk Time (%)		1			2	10	1		20	0	1	
Queuing Penalty (veh)		2			14	41	2		38	0	1	

Intersection: 1: Airport Road & Mayfield Road

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (m)	58.8	106.3	102.8	40.8
Average Queue (m)	24.3	60.8	65.2	18.1
95th Queue (m)	47.9	92.1	95.0	33.7
Link Distance (m)		434.9	434.9	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	100.0			105.0
Storage Blk Time (%)		1	0	
Queuing Penalty (veh)		1	1	

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	36.8	31.1	21.3	48.8
Average Queue (m)	18.7	14.1	11.1	20.7
95th Queue (m)	30.4	24.6	18.4	36.6
Link Distance (m)	540.8	1374.6	471.0	435.9
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Airport Road & Old School Road/Healy Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	R	LT	R
Maximum Queue (m)	92.8	71.6	153.3	22.6	193.3	109.1
Average Queue (m)	50.8	33.4	39.0	9.2	116.9	9.8
95th Queue (m)	85.0	55.9	121.5	24.7	222.2	54.1
Link Distance (m)	1374.6	236.2	575.0		217.9	
Upstream Blk Time (%)					7	
Queuing Penalty (veh)					0	
Storage Bay Dist (m)				15.0		50.0
Storage Blk Time (%)			17	1	31	
Queuing Penalty (veh)			20	3	12	

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	31.2	29.6	44.2	14.7	50.5	36.0	25.6	8.1	16.4	38.2	44.6	25.6
Average Queue (m)	6.6	12.0	14.0	1.2	19.1	10.9	1.7	0.9	1.6	13.5	15.1	5.9
95th Queue (m)	21.6	23.8	32.4	7.0	39.9	28.7	11.0	4.8	8.3	32.4	36.0	17.8
Link Distance (m)		130.1	225.3			415.6	415.6			235.2	235.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T
Maximum Queue (m)	7.5	21.0	34.2	15.5	33.2	38.3	26.4	11.4	18.0	37.5	40.0
Average Queue (m)	0.2	6.8	8.5	1.7	11.6	11.3	4.0	0.7	1.4	9.7	11.2
95th Queue (m)	4.1	17.9	25.2	9.5	26.4	30.5	15.1	4.9	8.4	26.2	29.0
Link Distance (m)	94.2	94.2		114.1		434.9	434.9			415.6	415.6
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: 10: Bend

Movement	EB	EB
Directions Served	T	
Maximum Queue (m)	57.8	5.6
Average Queue (m)	2.6	0.2
95th Queue (m)	22.6	3.1
Link Distance (m)	82.8	82.8
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Airport Road & North RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	8.7
Average Queue (m)	1.3
95th Queue (m)	6.3
Link Distance (m)	88.5
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Airport Road & Full Moves Access

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (m)	23.2	88.9	83.0
Average Queue (m)	7.0	26.0	11.1
95th Queue (m)	20.0	72.6	49.3
Link Distance (m)	96.4	159.4	150.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 17: Airport Road & South RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	10.5
Average Queue (m)	1.5
95th Queue (m)	7.0
Link Distance (m)	96.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 133

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5463	5433	5269	5387
Vehs Exited	5107	5042	5059	5070
Starting Vehs	292	318	329	311
Ending Vehs	648	709	539	632
Travel Distance (km)	9564	9486	9585	9545
Travel Time (hr)	527.9	596.2	485.1	536.4
Total Delay (hr)	379.2	448.9	336.9	388.3
Total Stops	10668	11085	10683	10811
Fuel Used (l)	1049.2	1091.4	1011.2	1050.6

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	5463	5433	5269	5387
Vehs Exited	5107	5042	5059	5070
Starting Vehs	292	318	329	311
Ending Vehs	648	709	539	632
Travel Distance (km)	9564	9486	9585	9545
Travel Time (hr)	527.9	596.2	485.1	536.4
Total Delay (hr)	379.2	448.9	336.9	388.3
Total Stops	10668	11085	10683	10811
Fuel Used (l)	1049.2	1091.4	1011.2	1050.6

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	B10	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	TR	T	L	T	T	R
Maximum Queue (m)	105.5	180.0	164.9	42.5	82.6	113.1	82.7	107.2	136.4	148.8	117.1	118.1
Average Queue (m)	57.7	98.7	63.2	14.5	38.3	84.9	69.0	18.2	74.6	76.0	70.7	15.4
95th Queue (m)	97.7	160.9	148.0	29.8	78.9	121.2	95.5	74.3	130.9	120.6	104.8	49.0
Link Distance (m)		668.2	668.2	668.2		82.8		341.4		442.5	442.5	
Upstream Blk Time (%)					0	9	2					
Queuing Penalty (veh)					0	0	0					
Storage Bay Dist (m)	200.0				50.0		70.0		95.0			60.0
Storage Blk Time (%)					6	30	8		11	3	17	
Queuing Penalty (veh)					44	163	37		36	8	16	

Intersection: 1: Airport Road & Mayfield Road

Movement	SB	SB	SB	SB
Directions Served	UL	T	T	R
Maximum Queue (m)	93.8	85.3	82.7	97.4
Average Queue (m)	39.7	42.4	45.6	38.5
95th Queue (m)	74.1	73.2	76.8	72.1
Link Distance (m)		434.9	434.9	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	100.0			105.0
Storage Blk Time (%)	0			0
Queuing Penalty (veh)	1			1

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	31.5	55.2	44.0	36.8
Average Queue (m)	16.8	33.0	22.6	16.7
95th Queue (m)	27.6	50.6	37.5	29.4
Link Distance (m)	540.8	1374.6	471.0	435.9
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Airport Road & Old School Road/Healy Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	R	LT	R
Maximum Queue (m)	174.9	252.5	579.1	22.5	233.0	110.0
Average Queue (m)	108.4	241.4	569.2	7.1	130.7	22.0
95th Queue (m)	182.4	254.3	629.8	23.0	250.8	89.6
Link Distance (m)	1374.6	236.2	575.0		217.9	
Upstream Blk Time (%)		90	31		13	
Queuing Penalty (veh)		0	288		0	
Storage Bay Dist (m)				15.0		50.0
Storage Blk Time (%)			65	0	48	
Queuing Penalty (veh)			48	2	22	

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	74.1	103.3	44.6	9.2	165.6	314.0	308.5	147.9	4.4	51.8	53.9	16.4
Average Queue (m)	45.2	31.9	18.8	1.0	40.2	115.0	101.2	13.8	0.1	15.2	16.5	1.7
95th Queue (m)	76.4	101.9	39.2	5.2	157.7	339.6	329.3	94.6	1.8	39.9	42.4	8.8
Link Distance (m)		130.1	225.3			415.6	415.6			235.2	235.2	
Upstream Blk Time (%)		6				5	4					
Queuing Penalty (veh)		0				23	18					
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)	17	0				22	20			0		
Queuing Penalty (veh)	15	0				15	5			0		

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	UL	T	T	R
Maximum Queue (m)	13.8	25.6	35.8	30.6	68.2	180.7	175.1	30.0	28.3	62.0	69.4	7.8
Average Queue (m)	2.2	8.4	19.1	4.0	11.4	34.9	28.1	2.9	5.7	16.0	20.2	0.8
95th Queue (m)	9.3	18.2	34.1	16.6	39.2	103.2	92.3	14.1	17.7	42.5	49.6	5.3
Link Distance (m)	94.2	94.2		114.1		434.9	434.9			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			4	0		4	3				0	
Queuing Penalty (veh)			0	0		1	2				0	

Intersection: 10: Bend

Movement	EB	EB
Directions Served	T	
Maximum Queue (m)	56.5	9.4
Average Queue (m)	3.6	0.8
95th Queue (m)	24.3	8.1
Link Distance (m)	82.8	82.8
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Airport Road & North RIRO Access

Movement	EB	NB
Directions Served	R	T
Maximum Queue (m)	10.9	155.3
Average Queue (m)	3.5	138.3
95th Queue (m)	10.6	206.9
Link Distance (m)	88.5	150.8
Upstream Blk Time (%)		23
Queuing Penalty (veh)		219
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Airport Road & Full Moves Access

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (m)	39.4	164.0	127.3
Average Queue (m)	12.5	145.7	28.5
95th Queue (m)	29.2	215.7	84.9
Link Distance (m)	96.4	159.4	150.8
Upstream Blk Time (%)		30	0
Queuing Penalty (veh)		277	0
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 17: Airport Road & South RIRO Access

Movement	EB	NB	B13	B13
Directions Served	R	T	T	
Maximum Queue (m)	8.9	965.7	244.2	245.1
Average Queue (m)	4.5	629.5	95.8	83.5
95th Queue (m)	11.4	1237.2	282.8	265.7
Link Distance (m)	96.0	930.8	235.2	235.2
Upstream Blk Time (%)		38	14	11
Queuing Penalty (veh)		350	64	51
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1708

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5153	5293	5222	5224
Vehs Exited	5177	5284	5242	5236
Starting Vehs	180	184	197	184
Ending Vehs	156	193	177	169
Travel Distance (km)	8153	8298	8266	8239
Travel Time (hr)	178.2	190.7	200.9	189.9
Total Delay (hr)	50.0	60.2	71.7	60.7
Total Stops	4654	5016	5115	4927
Fuel Used (l)	654.4	678.4	681.8	671.5

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	5153	5293	5222	5224
Vehs Exited	5177	5284	5242	5236
Starting Vehs	180	184	197	184
Ending Vehs	156	193	177	169
Travel Distance (km)	8153	8298	8266	8239
Travel Time (hr)	178.2	190.7	200.9	189.9
Total Delay (hr)	50.0	60.2	71.7	60.7
Total Stops	4654	5016	5115	4927
Fuel Used (l)	654.4	678.4	681.8	671.5

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	UL	T	T	T	R	L	T	T
Maximum Queue (m)	106.8	91.0	102.9	118.4	46.0	77.5	66.1	60.0	30.2	133.0	166.2	156.1
Average Queue (m)	48.1	47.1	52.1	69.1	18.2	44.1	35.2	13.8	6.8	87.1	73.7	57.7
95th Queue (m)	87.6	70.3	80.1	102.3	38.9	68.1	58.7	41.7	21.6	170.4	178.8	154.5
Link Distance (m)		668.3	668.3	668.3		396.8	396.8	396.8			438.6	438.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				165.0				60.0	95.0		
Storage Blk Time (%)								0		31	3	2
Queuing Penalty (veh)								0		62	9	2

Intersection: 1: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	38.5	57.8	107.9	120.8	50.4
Average Queue (m)	13.1	23.8	67.3	70.8	19.4
95th Queue (m)	26.6	45.1	102.5	107.8	37.9
Link Distance (m)			429.0	429.0	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)			1	1	
Queuing Penalty (veh)			1	2	

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (m)	36.9	21.1	12.8	18.7	14.0	7.5	23.0	17.1
Average Queue (m)	20.9	11.0	2.4	8.4	5.6	0.6	12.1	9.5
95th Queue (m)	32.2	17.0	9.3	14.1	11.5	3.8	19.9	16.1
Link Distance (m)	535.4	533.7		470.4	470.4		435.8	435.8
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			55.0			55.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	32.0	31.1	55.5	13.9	53.4	23.7	25.2	15.8	14.5	62.5	68.4	21.9
Average Queue (m)	6.5	11.7	18.8	1.3	18.1	4.0	9.2	2.1	1.1	17.4	21.9	5.1
95th Queue (m)	19.7	23.5	41.3	7.3	39.7	14.1	22.3	8.8	6.5	42.2	49.5	15.2
Link Distance (m)		130.1	225.3			415.6	415.6			1182.2	1182.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)										0		
Queuing Penalty (veh)										0		

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	5.0	25.7	35.9	26.4	44.9	27.7	28.4	9.6	14.9	38.8	49.7	3.4
Average Queue (m)	0.3	7.1	8.4	2.6	13.1	7.1	6.9	0.8	1.4	11.8	16.7	0.2
95th Queue (m)	3.5	19.6	25.3	13.9	32.9	20.9	20.8	5.6	7.7	30.9	39.3	1.5
Link Distance (m)	94.2	94.2		114.1		429.0	429.0			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			3								0	
Queuing Penalty (veh)			0								0	

Intersection: 15: Airport Road & North RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	8.7
Average Queue (m)	1.0
95th Queue (m)	5.5
Link Distance (m)	84.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Airport Road & Full Moves Access

Movement	EB	NB	NB	NB	SB	SB
Directions Served	LR	L	T	T	T	TR
Maximum Queue (m)	35.6	21.0	28.5	31.9	37.2	41.7
Average Queue (m)	8.9	6.3	4.5	7.7	9.6	8.5
95th Queue (m)	23.6	16.9	18.5	24.7	29.1	28.0
Link Distance (m)	91.0		159.3	159.3	151.1	151.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)		55.0				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 17: Airport Road & South RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	8.9
Average Queue (m)	2.0
95th Queue (m)	7.8
Link Distance (m)	90.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 76

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6032	6007	5901	5978
Vehs Exited	6014	5866	5869	5916
Starting Vehs	247	198	211	221
Ending Vehs	265	339	243	280
Travel Distance (km)	9776	9580	9361	9573
Travel Time (hr)	247.9	352.8	225.5	275.4
Total Delay (hr)	96.3	204.0	80.2	126.8
Total Stops	6625	7499	6097	6741
Fuel Used (l)	826.8	909.8	784.3	840.3

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	6032	6007	5901	5978
Vehs Exited	6014	5866	5869	5916
Starting Vehs	247	198	211	221
Ending Vehs	265	339	243	280
Travel Distance (km)	9776	9580	9361	9573
Travel Time (hr)	247.9	352.8	225.5	275.4
Total Delay (hr)	96.3	204.0	80.2	126.8
Total Stops	6625	7499	6097	6741
Fuel Used (l)	826.8	909.8	784.3	840.3

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	T	R	L	T	T
Maximum Queue (m)	213.2	170.3	159.6	150.8	46.2	105.8	89.4	66.6	31.6	174.9	324.4	324.8
Average Queue (m)	117.5	72.1	71.3	56.0	19.9	65.2	57.8	40.1	8.9	140.3	209.9	198.7
95th Queue (m)	242.6	194.2	179.9	121.4	39.0	90.6	80.9	67.8	23.7	202.6	464.0	457.3
Link Distance (m)		668.3	668.3	668.3		396.8	396.8	396.8			438.6	438.6
Upstream Blk Time (%)											19	13
Queuing Penalty (veh)											0	0
Storage Bay Dist (m)	200.0				165.0				60.0	95.0		
Storage Blk Time (%)	14	3						1		64	18	33
Queuing Penalty (veh)	30	10						0		226	63	32

Intersection: 1: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	UL	T	T	R
Maximum Queue (m)	119.0	91.1	85.9	77.0	69.2
Average Queue (m)	29.6	39.7	50.0	50.7	29.3
95th Queue (m)	96.7	77.1	74.9	73.2	54.6
Link Distance (m)			429.0	429.0	
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: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	TR
Maximum Queue (m)	44.7	58.8	14.6	24.8	26.7	23.1	20.6
Average Queue (m)	19.1	25.3	6.5	12.2	11.4	10.5	9.4
95th Queue (m)	34.3	44.1	12.7	19.8	19.8	17.7	16.5
Link Distance (m)	535.4	533.7		470.4	470.4	435.8	435.8
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)			55.0				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	58.9	31.0	40.3	7.2	41.2	71.4	81.9	8.8	6.1	53.7	51.9	20.2
Average Queue (m)	27.7	12.6	14.0	1.5	16.4	18.0	20.3	1.0	0.3	17.5	21.4	3.7
95th Queue (m)	46.8	26.4	35.0	6.1	37.5	45.6	51.9	6.2	3.6	39.6	42.9	14.3
Link Distance (m)		130.1	225.3			415.6	415.6			1182.2	1182.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)	1											
Queuing Penalty (veh)	1											

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	UL	T	T	R
Maximum Queue (m)	10.0	27.4	35.4	45.3	31.5	69.2	76.7	19.0	40.3	38.6	38.8	10.0
Average Queue (m)	1.5	9.5	18.1	4.1	9.1	30.6	32.1	4.9	8.9	10.6	14.6	0.7
95th Queue (m)	6.5	21.6	34.0	20.8	23.7	65.3	67.7	16.3	26.3	27.5	35.3	5.7
Link Distance (m)	94.2	94.2		114.1		429.0	429.0			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			5			0	0				0	
Queuing Penalty (veh)			0			0	0				0	

Intersection: 15: Airport Road & North RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	9.0
Average Queue (m)	2.6
95th Queue (m)	9.0
Link Distance (m)	84.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Airport Road & Full Moves Access

Movement	EB	NB	NB	NB	SB	SB
Directions Served	LR	L	T	T	T	TR
Maximum Queue (m)	36.5	30.1	58.2	66.4	31.3	37.1
Average Queue (m)	15.6	3.0	14.1	17.6	11.8	8.0
95th Queue (m)	29.2	15.9	38.8	44.3	26.6	24.5
Link Distance (m)	91.0		159.3	159.3	151.1	151.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)		55.0				
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Intersection: 17: Airport Road & South RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	9.0
Average Queue (m)	4.2
95th Queue (m)	10.9
Link Distance (m)	90.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 364

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5366	5339	5267	5324
Vehs Exited	5413	5364	5257	5345
Starting Vehs	236	207	187	204
Ending Vehs	189	182	197	187
Travel Distance (km)	8471	8252	8066	8263
Travel Time (hr)	205.6	192.9	182.6	193.7
Total Delay (hr)	72.4	62.9	55.7	63.7
Total Stops	4786	4554	4255	4533
Fuel Used (l)	693.9	669.0	648.2	670.4

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	5366	5339	5267	5324
Vehs Exited	5413	5364	5257	5345
Starting Vehs	236	207	187	204
Ending Vehs	189	182	197	187
Travel Distance (km)	8471	8252	8066	8263
Travel Time (hr)	205.6	192.9	182.6	193.7
Total Delay (hr)	72.4	62.9	55.7	63.7
Total Stops	4786	4554	4255	4533
Fuel Used (l)	693.9	669.0	648.2	670.4

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	UL	T	T	T	R	L	T	T
Maximum Queue (m)	137.3	112.4	152.8	143.2	48.3	65.6	65.0	51.3	21.8	146.0	158.9	112.5
Average Queue (m)	58.5	52.1	56.8	73.7	18.8	45.3	37.8	14.0	6.2	89.7	66.4	43.9
95th Queue (m)	122.0	87.4	98.3	116.3	38.6	61.3	59.1	41.2	18.0	157.7	148.6	106.3
Link Distance (m)		668.3	668.3	668.3		396.8	396.8	396.8			438.6	438.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				165.0				60.0	95.0		
Storage Blk Time (%)								0		29	4	1
Queuing Penalty (veh)								0		59	10	1

Intersection: 1: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (m)	26.5	59.5	109.3	109.3	55.0
Average Queue (m)	11.6	23.4	67.0	70.4	21.3
95th Queue (m)	24.7	46.8	97.2	100.5	41.3
Link Distance (m)			429.0	429.0	
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: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (m)	79.8	35.0	13.1	19.7	14.6	12.4	41.7	37.5
Average Queue (m)	40.1	16.5	1.9	9.0	3.4	0.7	21.8	10.8
95th Queue (m)	65.4	30.2	8.2	18.4	9.9	5.8	36.3	25.3
Link Distance (m)	535.4	533.7		470.4	470.4		435.8	435.8
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			55.0			55.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	25.0	60.0	53.0	12.8	88.8	21.2	29.6	13.2	18.5	42.0	41.8	19.8
Average Queue (m)	7.0	13.9	15.5	0.7	21.6	5.3	9.7	2.1	1.7	16.2	20.5	3.6
95th Queue (m)	20.2	32.5	38.4	5.0	50.3	15.8	23.0	8.9	9.2	36.6	42.2	13.1
Link Distance (m)		130.1	225.3			415.6	415.6			1182.2	1182.2	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)		1										
Queuing Penalty (veh)		0										

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	
Maximum Queue (m)	15.7	31.0	32.8	14.4	44.6	41.6	35.6	9.8	16.6	48.1	43.0	
Average Queue (m)	1.0	9.8	8.3	1.8	14.8	10.4	8.7	1.1	0.8	11.0	15.4	
95th Queue (m)	7.1	25.0	23.8	9.6	32.6	28.1	25.4	6.1	6.6	31.5	36.7	
Link Distance (m)	94.2	94.2		114.1		429.0	429.0			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			
Storage Blk Time (%)			2								0	
Queuing Penalty (veh)			0								0	

Intersection: 15: Airport Road & North RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	8.6
Average Queue (m)	0.9
95th Queue (m)	5.0
Link Distance (m)	84.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Airport Road & Full Moves Access

Movement	EB	NB	NB	NB	SB	SB
Directions Served	LR	L	T	T	T	TR
Maximum Queue (m)	28.2	15.6	26.0	32.4	30.4	27.7
Average Queue (m)	6.2	5.2	3.8	5.4	5.8	4.7
95th Queue (m)	20.1	13.5	16.2	21.2	22.1	18.2
Link Distance (m)	91.0		159.3	159.3	151.1	151.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)		55.0				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 17: Airport Road & South RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	8.5
Average Queue (m)	2.0
95th Queue (m)	7.7
Link Distance (m)	90.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 72

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6101	6170	6093	6125
Vehs Exited	6092	6143	6094	6110
Starting Vehs	262	243	247	248
Ending Vehs	271	270	246	262
Travel Distance (km)	9836	9876	9822	9844
Travel Time (hr)	252.4	271.1	243.4	255.6
Total Delay (hr)	100.1	118.0	90.7	102.9
Total Stops	6082	6406	5911	6133
Fuel Used (l)	831.4	851.3	819.4	834.0

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	Avg
Vehs Entered	6101	6170	6093	6125
Vehs Exited	6092	6143	6094	6110
Starting Vehs	262	243	247	248
Ending Vehs	271	270	246	262
Travel Distance (km)	9836	9876	9822	9844
Travel Time (hr)	252.4	271.1	243.4	255.6
Total Delay (hr)	100.1	118.0	90.7	102.9
Total Stops	6082	6406	5911	6133
Fuel Used (l)	831.4	851.3	819.4	834.0

Intersection: 1: Airport Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	T	R	L	T	T
Maximum Queue (m)	225.1	176.1	167.4	96.1	42.8	103.0	93.2	68.4	35.7	174.8	286.0	251.8
Average Queue (m)	150.5	95.9	92.6	48.4	20.4	67.6	59.9	39.7	8.9	132.6	138.8	117.3
95th Queue (m)	280.2	259.4	244.0	84.5	36.4	92.6	86.4	69.5	23.8	196.5	286.1	252.9
Link Distance (m)		668.3	668.3	668.3		396.8	396.8	396.8			438.6	438.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	200.0				165.0				60.0	95.0		
Storage Blk Time (%)	21	2						1		58	4	21
Queuing Penalty (veh)	47	5						0		210	14	20

Intersection: 1: Airport Road & Mayfield Road

Movement	NB	SB	SB	SB	SB
Directions Served	R	UL	T	T	R
Maximum Queue (m)	89.1	86.3	91.5	86.6	88.8
Average Queue (m)	16.5	38.7	49.9	52.6	33.0
95th Queue (m)	51.0	75.0	76.7	77.4	62.5
Link Distance (m)			429.0	429.0	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0	100.0			105.0
Storage Blk Time (%)		1	0		0
Queuing Penalty (veh)		2	0		0

Intersection: 3: Torbram Road & Old School Road

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	TR
Maximum Queue (m)	79.1	78.4	22.4	49.7	46.2	31.3	22.2
Average Queue (m)	35.9	44.4	6.5	23.9	16.2	15.6	8.4
95th Queue (m)	60.0	71.0	16.3	41.3	33.6	27.9	18.0
Link Distance (m)	535.4	533.7		470.4	470.4	435.8	435.8
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)			55.0				
Storage Blk Time (%)				0			
Queuing Penalty (veh)				0			

Intersection: 5: Airport Road & Alban Road/12333 Airport Road

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (m)	65.9	63.8	49.8	7.0	54.0	58.2	65.8	14.0	8.8	54.7	56.6	18.4
Average Queue (m)	28.6	13.4	13.8	1.4	19.2	21.3	23.7	1.3	0.4	19.0	22.0	3.9
95th Queue (m)	53.2	36.3	33.6	5.7	41.5	47.5	52.5	7.4	3.3	41.6	46.1	14.2
Link Distance (m)		130.1	225.3			415.6	415.6			1182.2	1182.2	
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (m)	55.0			100.0	120.0			145.0	75.0			100.0
Storage Blk Time (%)	1											
Queuing Penalty (veh)	1											

Intersection: 6: Airport Road & Perdue Court/Davis Lane

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	UL	T	T	R
Maximum Queue (m)	10.0	19.9	36.9	56.5	34.2	98.7	99.0	22.4	26.6	38.4	28.2	11.1
Average Queue (m)	1.1	8.0	18.7	5.0	10.5	33.2	34.6	3.2	7.4	9.0	10.4	0.8
95th Queue (m)	5.8	16.4	34.6	25.7	28.0	77.8	78.2	13.6	21.3	24.5	24.2	5.3
Link Distance (m)	94.2	94.2		114.1		429.0	429.0			415.6	415.6	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)			30.0		70.0			65.0	70.0			60.0
Storage Blk Time (%)			7			1	1					
Queuing Penalty (veh)			1			0	1					

Intersection: 15: Airport Road & North RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	9.0
Average Queue (m)	2.2
95th Queue (m)	8.2
Link Distance (m)	84.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Airport Road & Full Moves Access

Movement	EB	NB	NB	NB	SB	SB
Directions Served	LR	L	T	T	T	TR
Maximum Queue (m)	40.8	11.6	50.8	45.0	37.7	39.1
Average Queue (m)	14.5	1.4	13.1	15.6	11.7	7.0
95th Queue (m)	31.4	6.7	36.5	38.5	28.7	23.4
Link Distance (m)	91.0		159.3	159.3	151.1	151.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)		55.0				
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Intersection: 17: Airport Road & South RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	9.0
Average Queue (m)	4.7
95th Queue (m)	11.4
Link Distance (m)	90.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 302

Intersection: 13: Airport Road & E-W Collector Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	40.5	15.7	61.1	139.3	61.3	47.2	86.5	98.1	56.1	77.6	67.5
Average Queue (m)	15.4	3.1	37.9	27.5	26.9	9.6	42.6	46.9	48.7	52.1	35.4
95th Queue (m)	31.5	10.9	67.7	125.7	50.6	27.1	76.5	88.9	62.0	89.2	69.2
Link Distance (m)		334.2		178.5			526.3	526.3		56.2	56.2
Upstream Blk Time (%)				5					5	11	2
Queuing Penalty (veh)				0					0	92	18
Storage Bay Dist (m)	55.0		55.0		55.0	80.0			80.0		
Storage Blk Time (%)	0		14	1	1		0		5	11	
Queuing Penalty (veh)	0		22	3	1		0		25	58	

Intersection: 15: Airport Road & North RIRO Access

Movement	EB	SB
Directions Served	R	T
Maximum Queue (m)	8.6	8.0
Average Queue (m)	1.3	0.3
95th Queue (m)	6.0	4.4
Link Distance (m)	106.8	273.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Airport Road & Full Moves Access

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (m)	22.1	36.3	35.5	43.7	45.6	78.4	68.6	17.0
Average Queue (m)	7.0	4.6	10.8	6.0	7.3	26.4	19.2	0.7
95th Queue (m)	18.2	21.0	26.2	24.0	27.9	69.7	54.1	7.6
Link Distance (m)		74.4		104.1	104.1	146.8	146.8	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	15.0		55.0					30.0
Storage Blk Time (%)	11	4					3	0
Queuing Penalty (veh)	1	1					0	0

Intersection: 17: Airport Road & South RIRO Access

Movement	EB	SB	SB
Directions Served	R	T	TR
Maximum Queue (m)	8.7	106.7	94.0
Average Queue (m)	2.4	27.4	17.3
95th Queue (m)	8.5	79.8	62.4
Link Distance (m)	70.8	104.1	104.1
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		4	0
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 226

Intersection: 13: Airport Road & E-W Collector Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	61.7	163.7	62.2	197.7	62.5	85.8	192.5	211.2	56.0	69.4	61.8
Average Queue (m)	39.7	53.4	36.5	192.7	61.9	12.3	129.5	128.6	34.2	43.8	40.6
95th Queue (m)	70.1	185.8	63.8	197.9	67.3	56.1	187.1	189.3	56.0	69.1	63.4
Link Distance (m)		334.2		178.5			526.3	526.3		56.2	56.2
Upstream Blk Time (%)				58					3	8	3
Queuing Penalty (veh)				0					0	42	13
Storage Bay Dist (m)	55.0		55.0		55.0	80.0			80.0		
Storage Blk Time (%)	27		7	6	53		37		3	8	
Queuing Penalty (veh)	19		32	40	108		5		11	14	

Intersection: 15: Airport Road & North RIRO Access

Movement	EB
Directions Served	R
Maximum Queue (m)	15.2
Average Queue (m)	2.9
95th Queue (m)	10.5
Link Distance (m)	106.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Airport Road & Full Moves Access

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (m)	22.2	49.0	18.4	59.3	59.1	57.2	49.8	10.0
Average Queue (m)	12.1	6.6	4.0	21.1	26.4	22.2	15.3	0.3
95th Queue (m)	22.7	26.8	13.6	50.1	56.9	48.6	38.6	4.0
Link Distance (m)		74.4		104.1	104.1	146.8	146.8	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	15.0		55.0					30.0
Storage Blk Time (%)	23	2		0			1	
Queuing Penalty (veh)	1	1		0			0	

Intersection: 17: Airport Road & South RIRO Access

Movement	EB	NB	NB	SB	SB
Directions Served	R	T	T	T	TR
Maximum Queue (m)	15.4	29.5	29.9	56.4	55.7
Average Queue (m)	4.8	1.0	1.0	8.2	6.2
95th Queue (m)	13.8	11.7	11.9	37.5	32.5
Link Distance (m)	70.8	56.2	56.2	104.1	104.1
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 287

APPENDIX G:

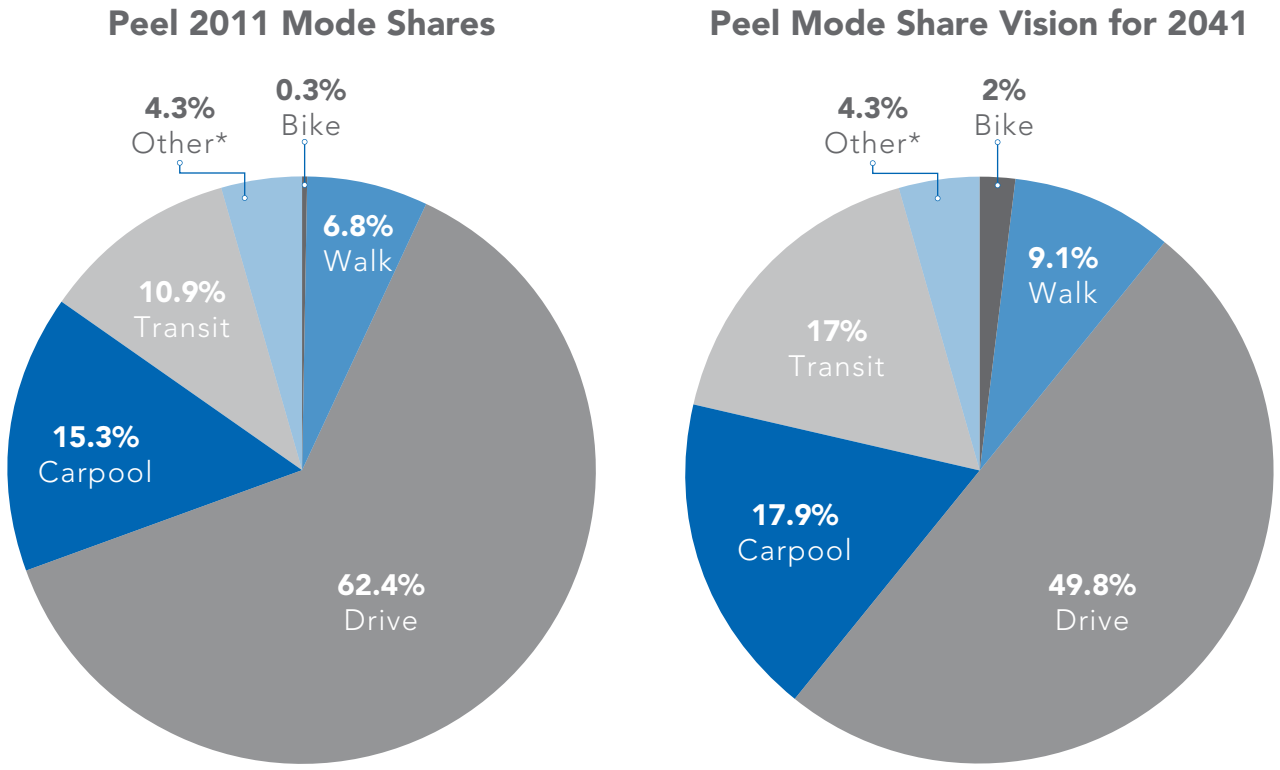
Transportation Planning Policy Excerpts

Let'sMovePeel

Long Range Transportation Plan **2019**

Region of Peel
working with you

FIGURE 3-3
Current and Desired Mode Share Targets, Region of Peel



*"Other" modes include school buses, taxis, and motorcycles.

3.2.2 Transportation Demand Management (TDM)

Transportation demand management (TDM) refers to policies, programs, and services that promote travel by sustainable modes while reducing driving by individuals, particularly in weekday peak periods. The travel modes most often associated with TDM are transit, carpooling/vanpooling, cycling and walking. TDM is also associated with options that reduce commuting such as compressed work weeks, alternative work schedules and teleworking.

TDM tools and techniques represent an economical and efficient way to maximize the return on investment in major transportation infrastructure and services such as rapid transit lines, cycling facilities and carpool lots.

TDM strategies embedded within the STS, and by extension the LRTP, are aligned with the Metrolinx 2041 RTP for the GTHA.[22] This alignment will help ensure a seamless inter and intra-regional travel network and viable non-driving travel options to alleviate the future transportation system from pressures associated with growth.

For a full account of Transportation Demand Management measures, refer to the Sustainable Transportation Strategy (STS) 2018-2022.

A

Appendix A

Region of Peel 50% Sustainable Mode Share Target Background Paper

TABLE 12: Final Targets: Peel Region Mode Share Targets by Municipality 2041
(Source: IBI Group/Region of Peel)

Peel Region	2011	2041 Vision
Driving	62.5%	49.8%
Walking	6.8%	9.1%
Cycling	0.3%	2.0%
Transit	10.8%	17.0%
Carpool	15.2%	17.9%
Other	4.3%	4.3%
Sustainable Transportation	37.5%	50.3%

Caledon	2011	2041 Vision
Driving	71.0%	68.1%
Walking	3.5%	3.6%
Cycling	0.0%	0.8%
Transit	2.0%	2.5%
Carpool	8.2%	9.9%
Other	15.3%	15.1%
Sustainable Transportation	29.0%	31.9%

Brampton	2011	2041 Vision
Driving	62.7%	51.8%
Walking	7.4%	9.1%
Cycling	0.2%	1.8%
Transit	8.8%	14.6%
Carpool	16.5%	18.6%
Other	4.4%	4.0%
Sustainable Transportation	37.3%	48.1%

Mississauga	2011	2041 Vision
Driving	61.8%	45.4%
Walking	6.6%	9.8%
Cycling	0.4%	2.3%
Transit	12.9%	21.1%
Carpool	14.8%	18.3%
Other	3.4%	3.1%
Sustainable Transportation	38.2%	54.6%

Town of Caledon

Multi-Modal Transportation Master Plan

June 2024

TOWN OF CALEDON

FUTURE CALEDON

In Collaboration with
R.J. Burnside & Associates Ltd.

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- **Capacity of Commuter Accommodation:** The need for public commuting by automobile includes a range of purposes such as travel to work, medical, shopping or leisure purposes from/to locations that are not adequately served by transit / active transportation and/or do not adequately serve users with mobility or other barriers to travel by other modes. Capacity improvements aim to facilitate these driving trips while minimizing congestion.

- **Accommodation of Alternative Modes of Travel:** In order for Caledon roads to provide all the necessary street elements and subsurface utilities for successful Complete Streets, the Town must acquire the necessary property and public right-of-way. This right-of-way will not only be used to facilitate mobility, but in an urbanized environment like the future SABE, the public right-of-way can be used to support an active transportation, pedestrian-oriented community.

- **Capacity for Goods Movement:** Within urbanized areas, the economic competitiveness of a municipality is affected by the efficiency and capacity of the movement of goods to / from business areas. Traffic congestion or lack of direct routes can significantly add to the cost of goods and services through transportation costs. Economic competitiveness often relies upon the connectivity between industry and transportation infrastructure including freeways, regional arterial roads and intermodal terminals. Capacity improvements aim to ensure that efficient goods movement is provided.

- **Network efficiency and connectivity:** Network efficiency and road connectivity needs commonly result from discontinuous or misaligned roadways. Misaligned intersections can contribute to poor roadway geometry and/or traffic movements that are not adequately supported by roadway conditions.

- **Community Circulation and Land Access Accommodation:** Within the Town of Caledon, new collector road networks are established by the Town's Secondary Plans. Secondary plans provide more detailed policies for the area it covers, and also establishes a collector road network within the lands. Guiding principles are provided to assist in the development of a Secondary Plan framework for the SABE.

Road improvement recommendations were summarized for the 2031, 2041, and 2051 horizon years. These road recommendations are presented in **Table ES-1, ES-2, and ES-3** respectively. The proposed ultimate (2051) road network is illustrated in **Figure ES-1**.

Table ES-1: Road Improvement Recommendations (2031)

ID	Road	From	To	Recommendation
1	Chinguacousy Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
2	McLaughlin Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes

ID	Road	From	To	Recommendation
3	Albion Vaughan Road	Mayfield Road	King Street	Urbanization and widening from 2 to 4 lanes
4	Humber Station Road	Mayfield Road	North of King Street (Settlement Area Limits)	Urbanization and widening from 2 to 4 lanes
5	Abbotside Way	Bonnieglen Farm Boulevard	Heart Lake Road	Extension (4 Lanes)
6	Healey Road	The Gore Road	Coleraine Drive	Urbanization and widening from 2 to 4 lanes
7	Torbram Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
8	George Bolton Parkway	West of Coleraine Drive	Humber Station Road	Extension (4 Lanes)
9	Kennedy Road	Newhouse Boulevard	Old School Road	Urbanization and widening from 2 to 4 lanes

Table ES-2: Road Improvement Recommendations (2041)

ID	Road	From	To	Recommendation
10	Innis Lake Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
11	Centreville Creek Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
12	Old School Road	Winston Churchill Boulevard	Airport Road	Urbanization and widening from 2 to 4 lanes
13	Healey Road	Airport Road	The Gore Road	Urbanization and widening from 2 to 4 lanes
14	Kennedy Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes
15	Caledon King Townline	King Street	Columbia Way	Urbanization and widening from 2 to 4 lanes
16	Columbia Way	Regional Road 50	Caledon King Townline	Urbanization and widening from 2 to 4 lanes

Table ES-3: Road Improvement Recommendations (2051)

ID	Road	From	To	Recommendation
17	Chinguacousy Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes
18	McLaughlin Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes
19	Bramalea Road	Mayfield Road	King Street	Urbanization and widening from 2 to 4 lanes
20	Heritage Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
21	Creditview Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
22	Heart Lake Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes

Additional road connectivity and network studies are listed below in **Table ES-4**

Table ES-4: Additional Road Studies and Classifications

ID	Additional Study	Description	Study Classification	Lead Agency
18	Alternative Routes to Bolton and Established Communities	MTO to collaborate with the Region and the Town to extend Highway 427 to Highway 9.	Alternate Route Study	MTO
19	Mis-aligned intersections (see **Appendix E**)	Monitor mis-aligned intersections for future improvements	Intersection Monitoring	Town of Caledon / Region of Peel
20	Horseshoe Hill from Olde Base Line Road to Highway 9	Remove from Region's Strategic Goods Movement Network	Goods Movement Update	Region of Peel
21	Mountainview Road from Olde Base Line Road to Charleston Sideroad	Remove from Region's Strategic Goods Movement Network	Goods Movement Update	Region of Peel

Town of Caledon

Transportation Master Plan

FIGURE ES-1

Road Network Improvements

Road Improvements (Phasing)

- Widening to 4 lanes (by 2031)
- Widening to 4 lanes (by 2041)
- Widening to 4 lanes (by 2051)

Future Land Uses

- Community
- Employment

0 1 2 4 6 8 km

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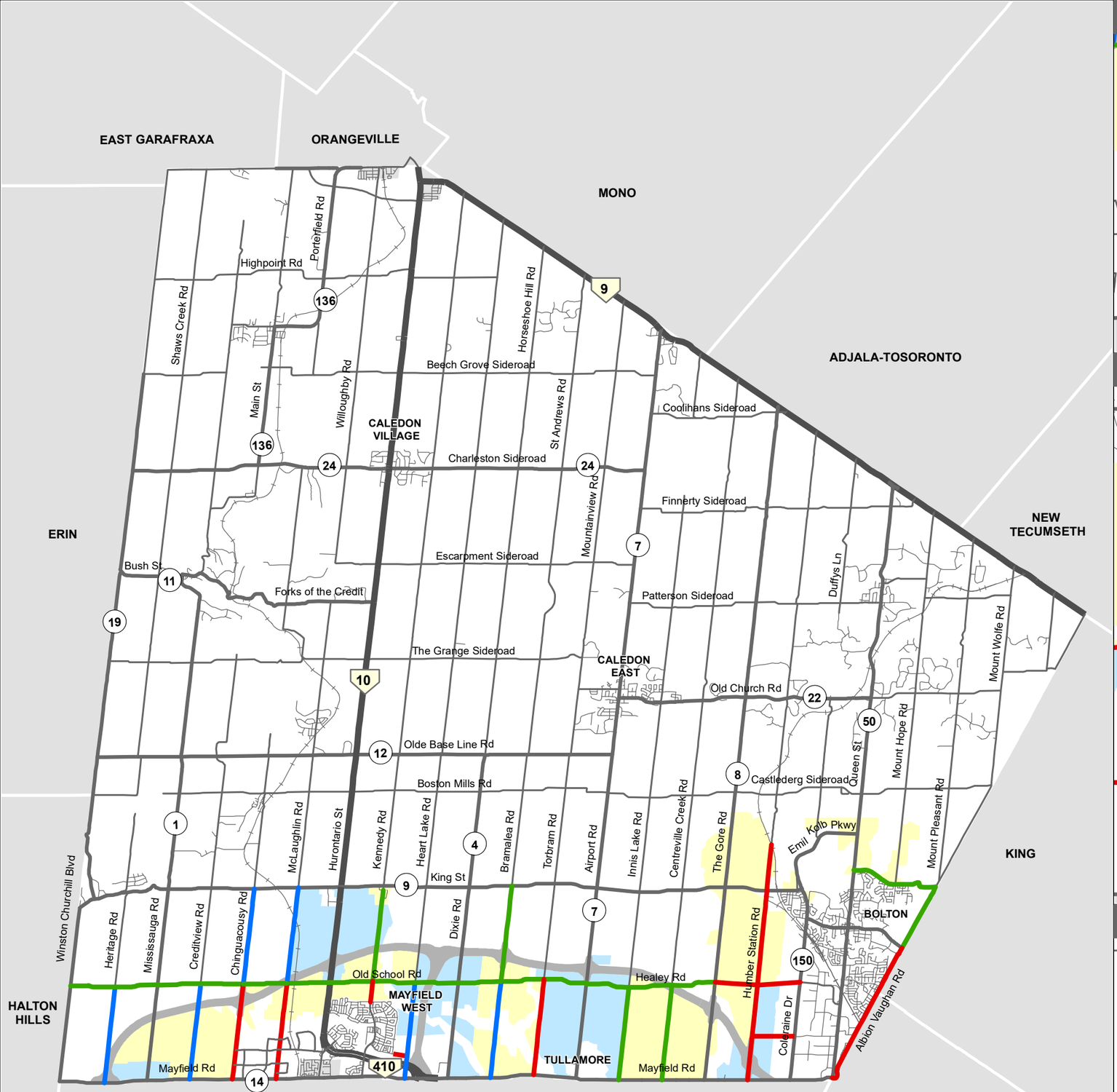
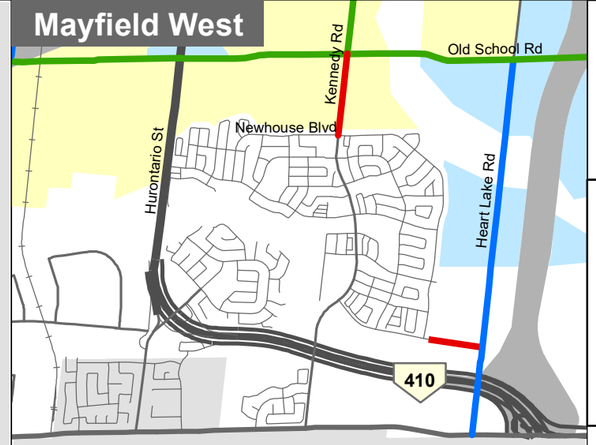
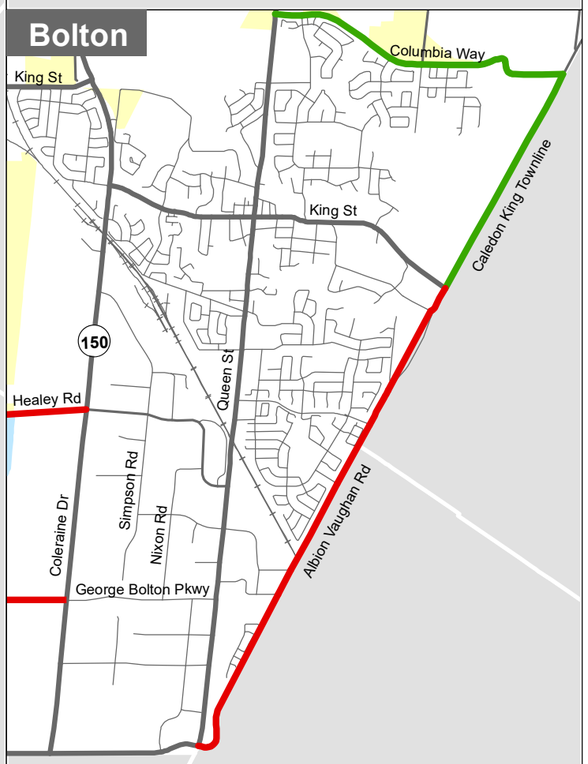
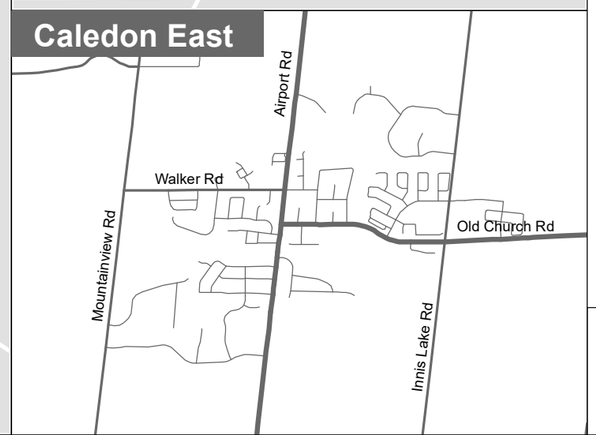






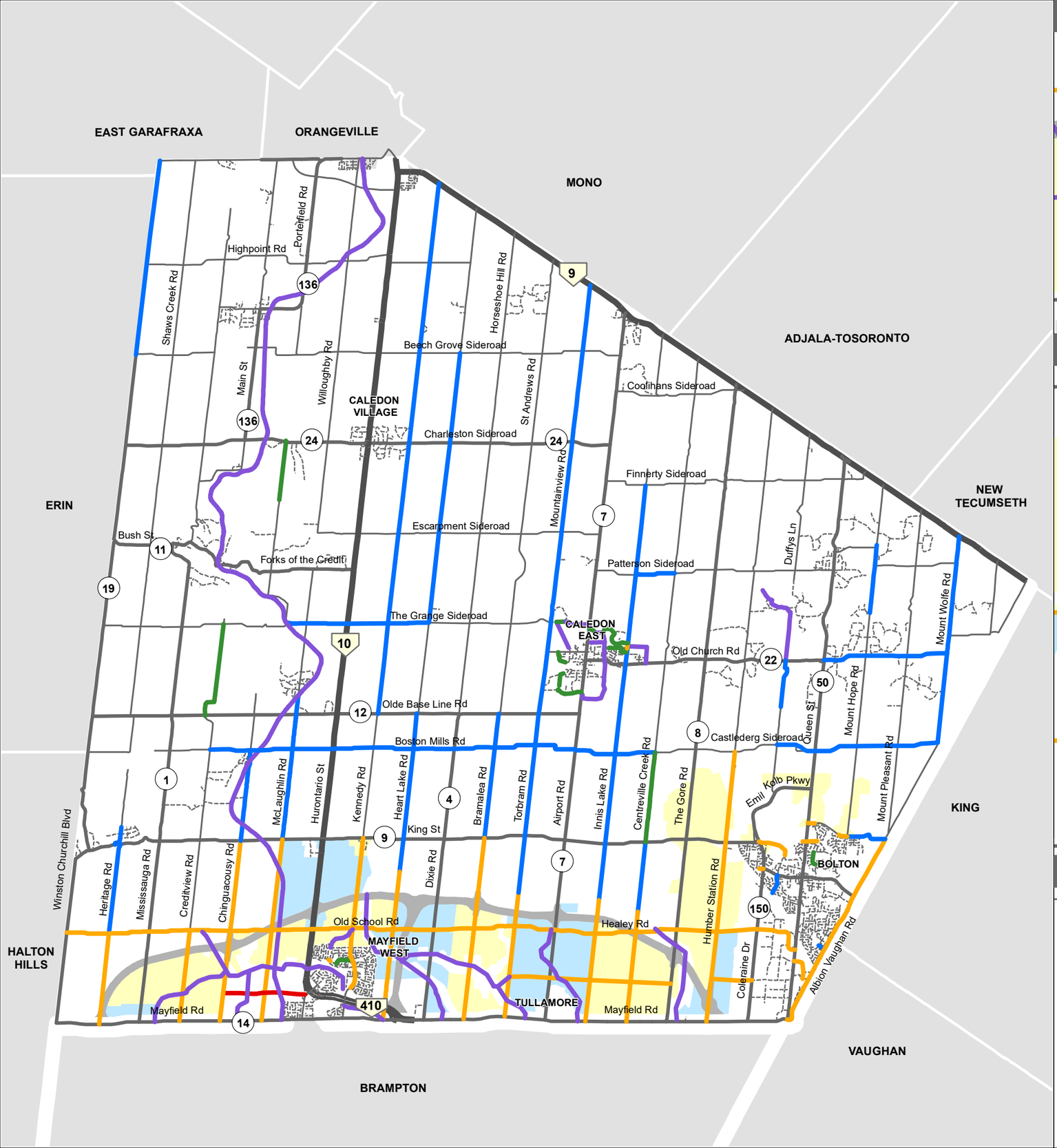


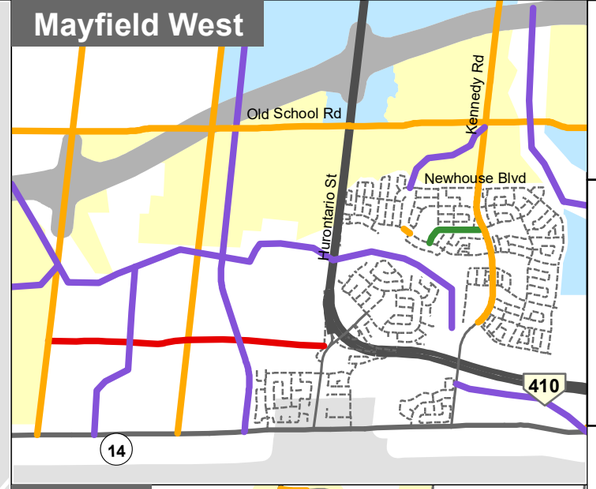
Town of Caledon

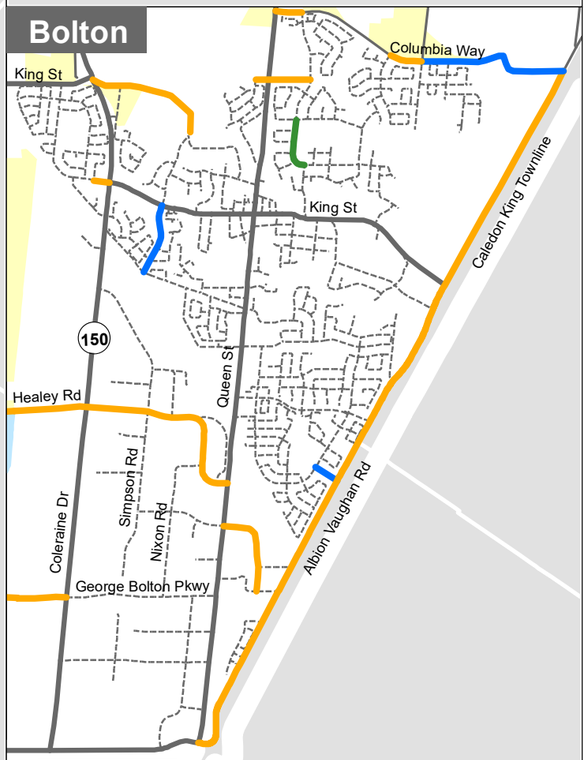
Transportation Master Plan

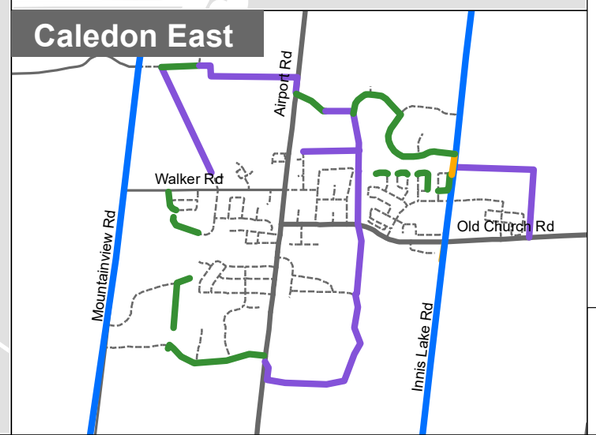
FIGURE ES-2

Future Active Transportation Network









Proposed Facility Type

- Multi-use Trail
- Painted Bike Lane
- Physically Separated
- Shared
- Visually Separated

Future Land Uses

- Community
- Employment

Source: Town of Caledon ATMP

0 1 2 4 6 8 km

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Town of Caledon

Transportation Master Plan

FIGURE ES-3

Proposed Transit Network

Existing

- GO Transit
- Brampton Transit
- Orangeville Transit

Future

- Proposed Corridors
- Bolton GO Rail
- Caledon GO Station
- Potential Second GO Station
- Mayfield Transit Hub
- GTA West Preferred Route

Future Land Uses

- Community
- Employment

0 1 2 4 6 8 km

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Mayfield West

Bolton

Caledon East

- There has been a reduction in the use of other shared transportation modes such as carpooling and ride-hailing due to perceived health risks.
- Perceived health risks from shared transportation modes may exacerbate the use of the personal vehicles.
- The emerging trend of "working from home" from primarily knowledge workers, most prevalent near the peak of the pandemic, may persist post-pandemic.
- The trip purpose for regional transit may shift away from essential, commuter trips to non-essential trips like for leisure and sporting events, local tourism, airport travel.
- Rising housing prices during the pandemic and other factors caused relocation of many residents away from urban centres to more suburban municipalities. This relocation may lead to lengthier trip distances and commute times which have negative environmental consequences. Increased auto dependence and rising fuel prices during the beginning of 2022 have increased the need for alternate, affordable, and sustainable modes of transportation.

Transportation shocks within this plan's horizon include the adoption of emerging technologies such as autonomous and electric vehicles, extreme climate change, and economic trends that can alter trip making behavior of people and goods such as fuel prices, inflation, and supply chain disruptions. A future-ready transportation system ensures that the system can absorb these potential shocks and adapt using a multi-modal transportation approach supported by growth management and land use planning.

4.6 Sustainable Mode Share Objectives

The Region of Peel's 2019 *Long Term Transportation Plan* (LRTP) targets a region-wide sustainable mode share of 50% by 2041. Sustainable mode share includes carpooling, walking, transit, biking and other non-single occupancy vehicle trips (e.g., school bus, taxis, etc.). The 2041 sustainable target mode share for Caledon is 32%, which is 3% higher than the 2011 sustainable mode share for the AM peak period. This target non-auto mode split corresponds to the following breakdown shown in **Table 4-3**.

However, these objectives were established before the Region of Peel allocated land uses to the Town of Caledon by 2051 through the Municipal Comprehensive Review (MCR); it is anticipated that a higher transit modal share will be required for development of the SABE and a population of 300,000 for the Town of Caledon. Therefore, the target 2051 mode splits as shown in the table were developed as part of this MMTMP based on a benchmarking exercise of municipalities that currently have a population density comparable to SABE.

Table 4-3: Caledon Mode Share Target Breakdown

Mode of Travel	2011 [2]	2041 Vision [2]	2051 Vision
Driving	71.0%	68.1%	60%
Walking	3.5%	3.6%	6%
Cycling	0.0%	0.8%	1%

Mode of Travel	2011 [2]	2041 Vision [2]	2051 Vision
Transit	2.0%	2.5%	6%
Carpool	8.2%	9.9%	13%
Other [1]	15.3%	15.1%	14%
Sustainable Transportation	**29.0%**	**31.9%**	**40%**

Note: 1. "Other" modes include motorcycle and school bus.
2. Source: Region of Peel's 2019 Long Term Transportation Plan (LRTP)

4.7 MMTMP Vision and Objectives

By 2051, the Town will have a transportation system that provides **accessible**, **affordable**, **safe**, and **sustainable** travel choices for all, and is well-integrated, effective to use, promotes healthy lifestyles, and supports economic prosperity, livable communities and climate commitments. The MMTMP's objectives include:

1. Develop a future-ready transportation plan for the Town and expand the multi-modality of the transportation system including driving, transit, walking, cycling, and other emerging mobility options.

2. Provide infrastructure to support and manage future land use growth and address the needs and priorities for both rural and urban communities.

3. Deliver sustainable strategies that protect natural heritage assets while reducing transportation's effects on climate change.

4. Build a safe and inclusive transportation system that supports age-friendly communities and promotes healthy living.

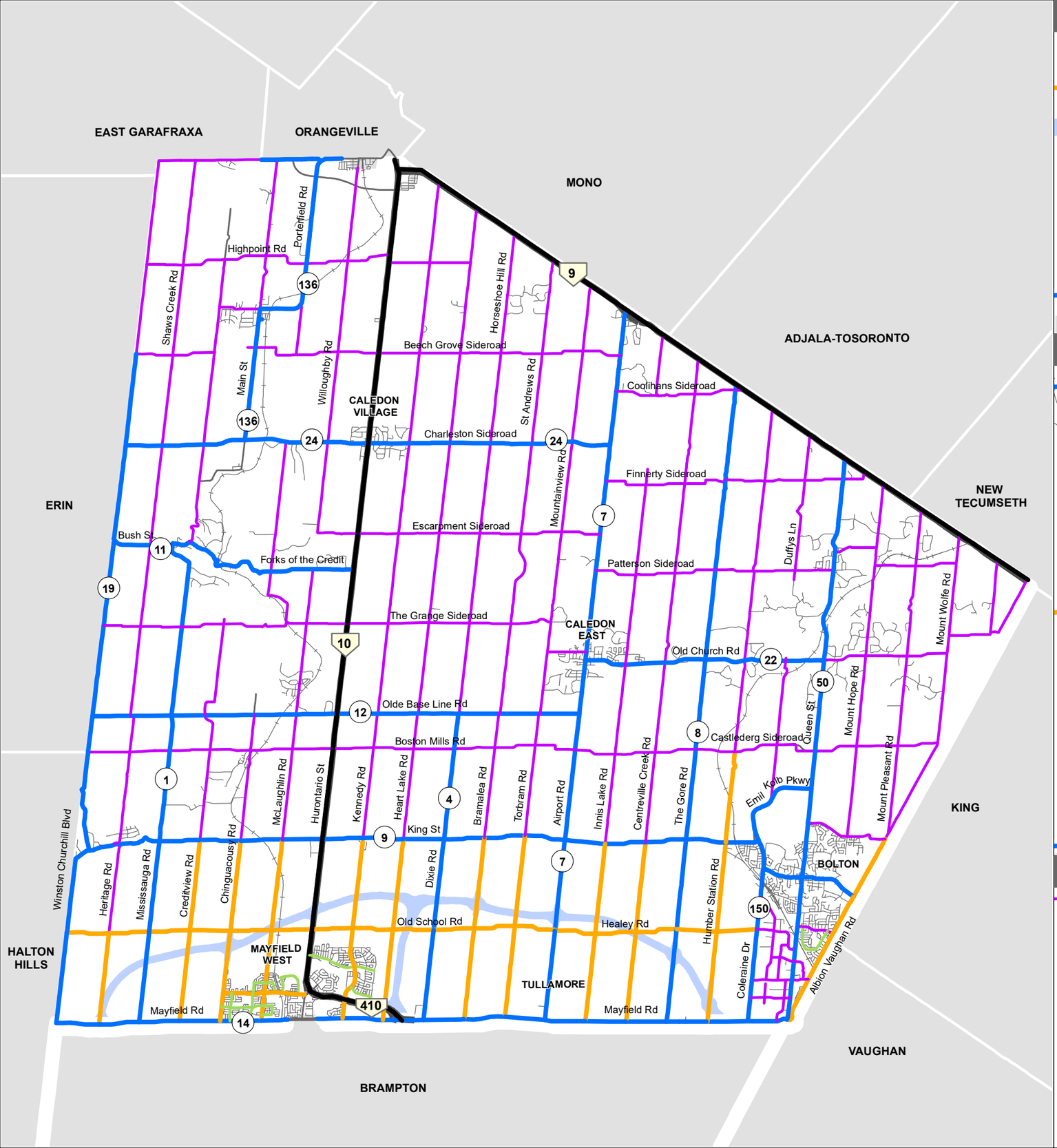
5. Develop complementary transportation solutions that support Provincial, Regional, and Local policies and the Town's Official Plan (OP).

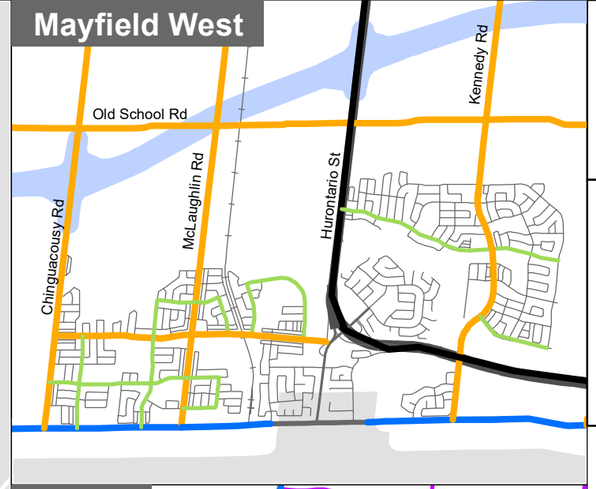
Town of Caledon

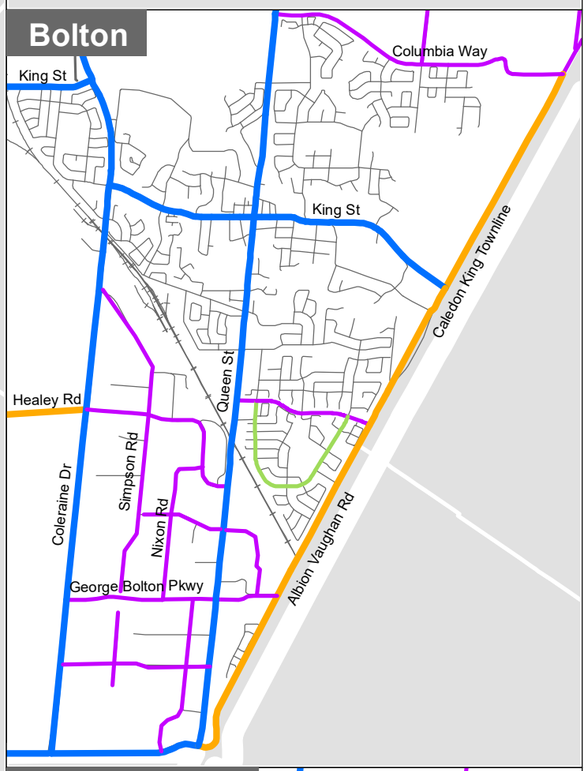
Transportation Master Plan

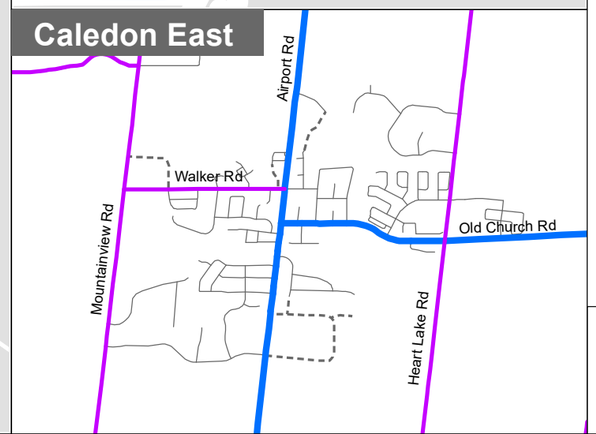
FIGURE 9-2

Road Classifications









- Provincial Highway / Freeway
- Regional Arterial
- Town Arterial
- Major Collector
- Minor Collector
- Local
- GTA West Corridor

0 1 2 4 6 8 km

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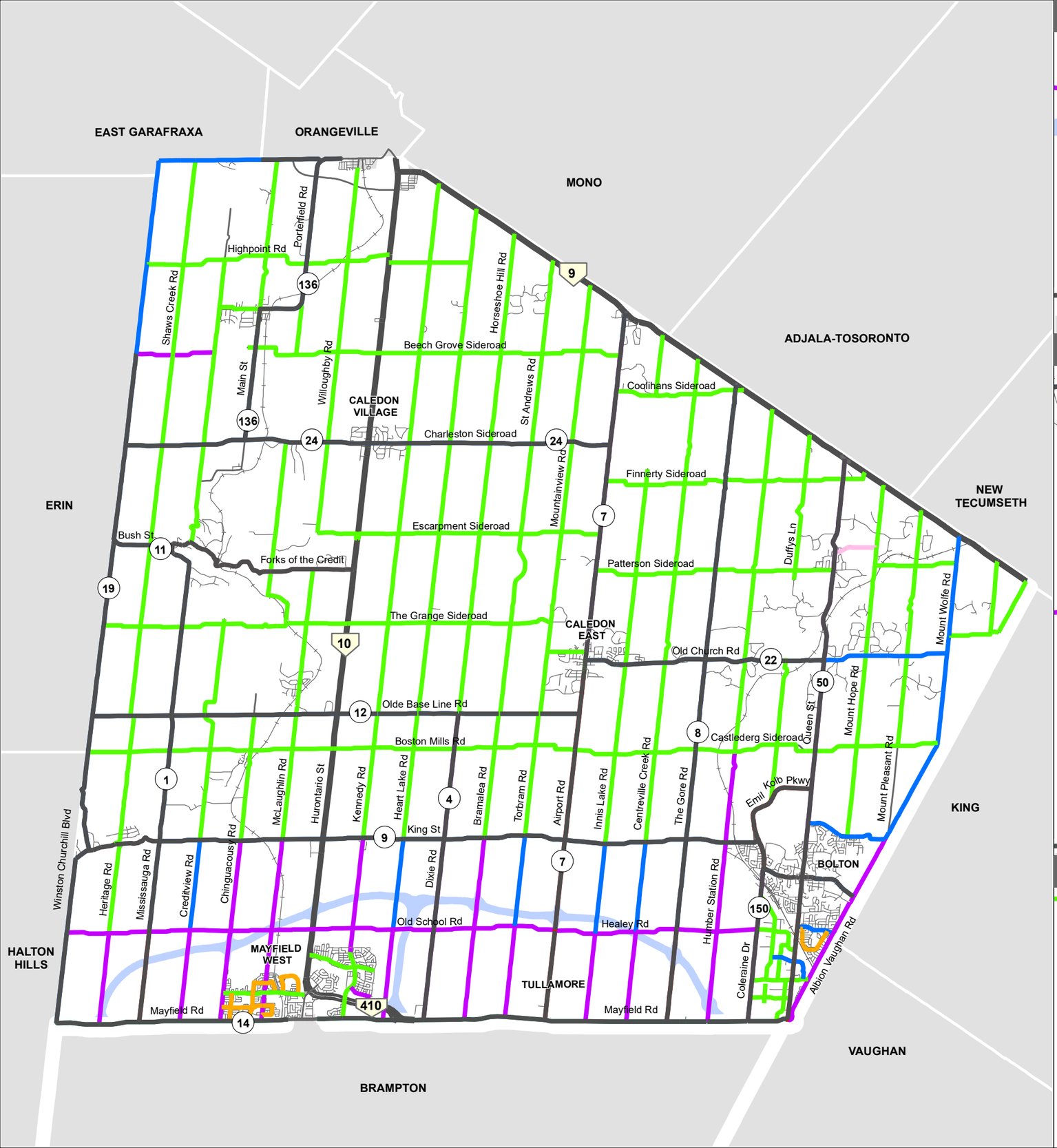
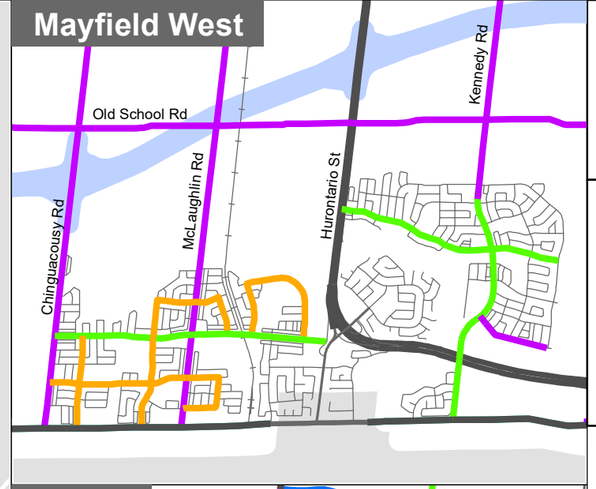
Town of Caledon

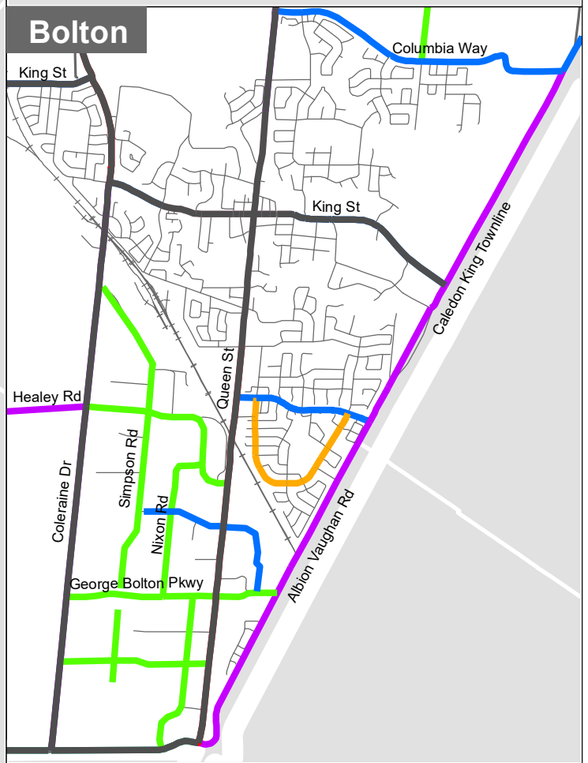
Transportation Master Plan

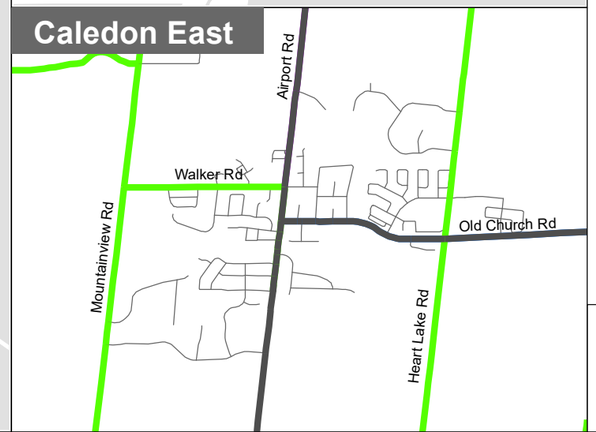
FIGURE 9-3

Right of Way (ROW) Widths









ROW Width (m)

- 20
- 22
- 26
- 30
- 36
- Regional Roads
- GTA West Corridor

*** Note: ROW widths along Regional roads are based on the Region's 2019 Long Range Transportation Plan. Refer to Region for latest Regional Road ROWs.**

0 1 2 4 6 8 km

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Appendix F

Complete Streets Framework

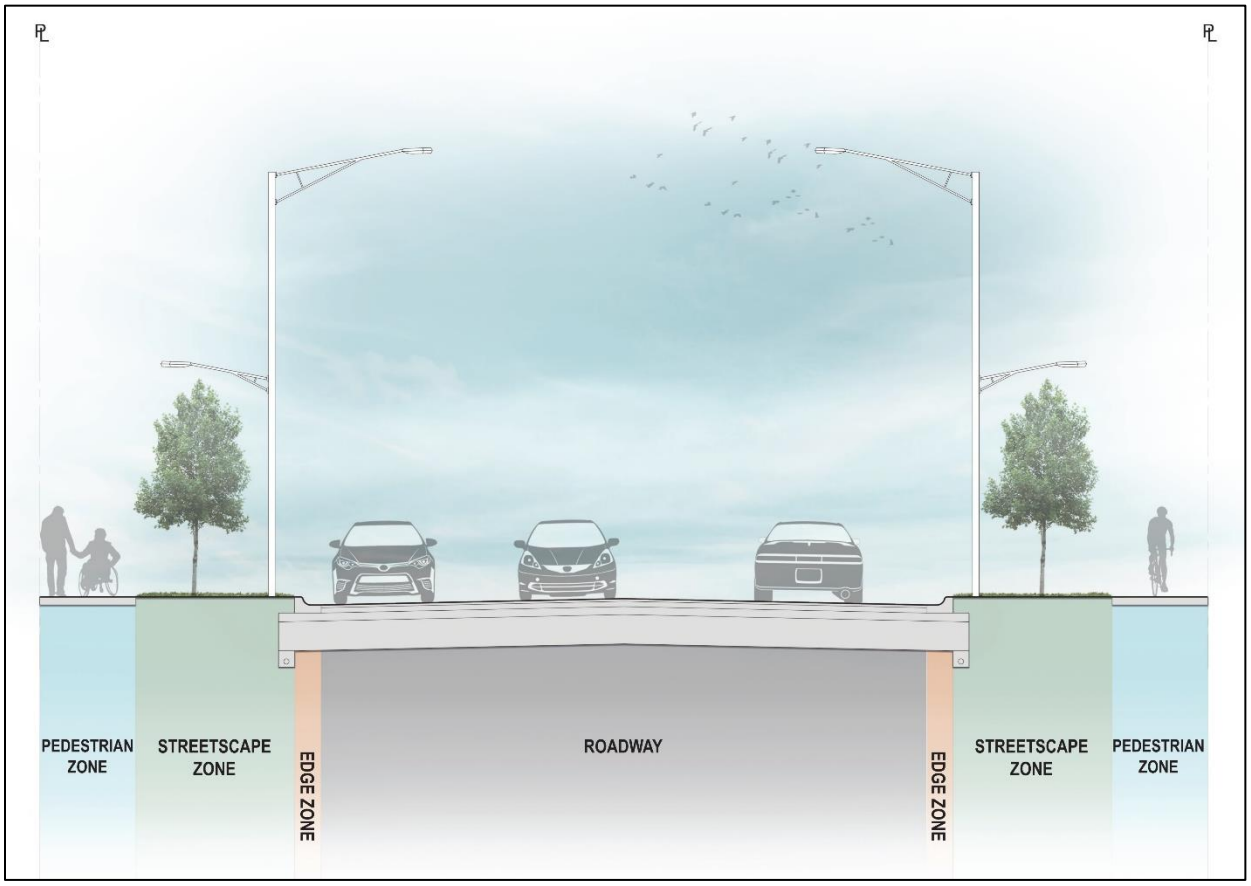


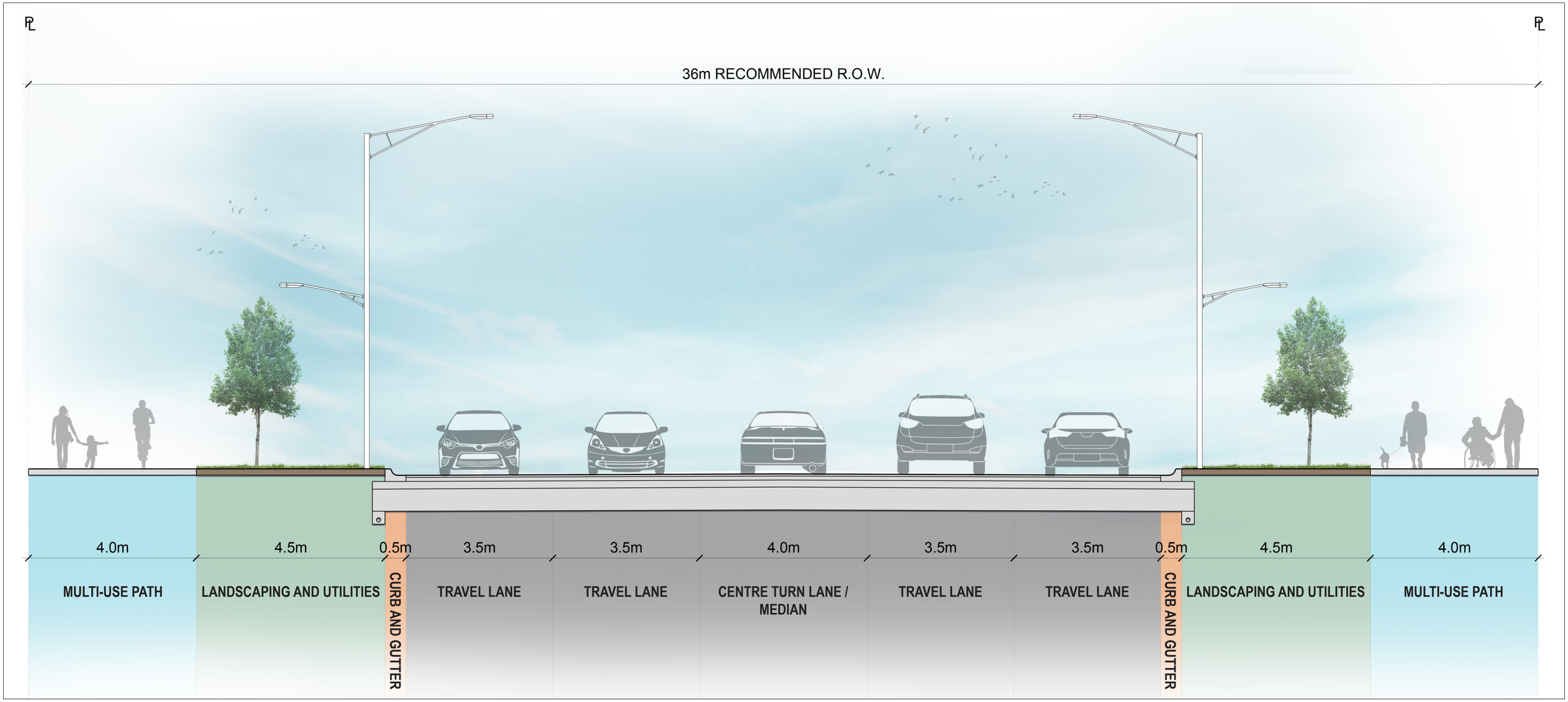
Figure F-1: Cross Section Elements

Table F-2: Complete Streets Cross-Section Elements

	Description	Potential Elements	Design Guidelines
Roadway	Provide for the safe and efficient movement of vehicles, and may accommodate bike lanes or parking	Travel lanes	• The number of travel lanes and lane widths should consider the users of the street, including impacts on pedestrian crossing distances and the role of medians • Travel lanes should not exceed 3.5 m unless it is a shared vehicle lane • Passing / curb lanes should be a minimum of 3.25 m and should be sufficiently wide to accommodate the anticipated range of transit vehicles • In urban areas, where lower speeds are desired, narrower travel lane widths may be more appropriate
		Shared vehicle lane	• A desired minimum vehicle lane width of 4.5 m for vehicle lanes that are shared with cyclists
		Auxiliary Left Turn Lane	• To provision for auxiliary left turns at intersections, a lane width as narrow as 3.0 m plus a 2.0 m median separation to opposing traffic is acceptable if trucks and buses make up less than 15 veh/h of the turning traffic; otherwise, a minimum left turn lane of 3.3 m is desired
		Parking lane	• A minimum on-street parking width of 2.4 m is desired; however, a width of 2.0 m can be considered in constrained areas • On-street parking is discouraged along roads with operating speeds of over 60 km/h
		Centre turn lane	• Widths are generally the same as the adjacent through lane • A centre turn lane width of 4.0 m is desired for roads with design speeds greater than 60 km/h; otherwise a 3.5 m width is acceptable • A width of 5.0 m should be avoided due to operational concerns
		Medians	• An overall median width of 6.0 m width (including the gutter) is desired to accommodate a protected structural pier or left-turn auxiliary lanes • Wider medians with barriers are desirable along high speed, arterial roads
		On-street bicycle lanes	• See **Town Active Transportation Master Plan (ATMP)** for details on bicycle facility design requirements, including the appropriateness of facility type based on the context of the road and environment • A bicycle lane that is greater than 2.0 m, not including buffer width, is discouraged as vehicles may use it as a travel / passing lane

	Description	Potential Elements	Design Guidelines
Edge Zone	Located between the vehicle lanes and green zone and may include curbing or shoulders	Paved shoulder	• See **Town ATMP** for details on bicycle facility design requirements, including the appropriateness of facility type based on the context of the road and environment • A paved shoulder that is greater than 2.0 m, not including buffer width, is discouraged as vehicles may use it as a travel / passing lane • Paved shoulders should not include bicycle lane signage as they also serve as a refuge for disabled vehicles
		Cycle Track	• A minimum and desired width of 1.5 m and 2.0-2.5 m, respectively, is recommended for a one-way cycle track • A minimum and desired width of 3.0 m and 3.5-4.0 m, respectively, is recommended for a two-way cycle track
		Curb and gutter	• A curb and gutter should be provided along roads within urbanized areas or with main street environments
Streetscape Zone	Located within the boulevard and provides aesthetic and low impact development (LID) elements, street furniture, lighting, and a buffer to pedestrians	Lighting, road signs, above and below ground utilities	• In urban areas, lighting should be designed to accommodate pedestrians (i.e., illumination of sidewalks) • In rural areas, lighting should be incorporated for the purpose of enhancing roadway safety and visibility
		Planting and furnishing	• Provides space for plantation, street furniture, pedestrian amenities (e.g., benches), transit amenities (e.g., shelters) and utilities • Planting / furnishing zones is typically 1.0 to 3.0 m wide, but can vary on a corridor basis • No elements should impede pedestrian movement
		Low Impact Development (LID)	• Cost effective LID practices should be incorporated, where possible, for stormwater management
		Rural swale	• Edges of rural roads, except those in main street environments, should include swales for drainage
Pedestrian Zone	Boulevard space dedicated to sidewalks for pedestrians or a multi-use path for both pedestrians and cyclists	Sidewalk	• Sidewalks should be provided directly adjacent to the building frontage, property line or marketing zone depending on the context of the corridor • Sidewalks should be free of obstructions and constructed to meet AODA standards • A minimum width of 1.8 m is recommended • Within urban areas or along main streets, sidewalks and/or multi-use paths should be provided along both sides of the road

	Description	Potential Elements	Design Guidelines
		Multi-use path	• See **Town ATMP** for details on bicycle facility design requirements, including the appropriateness of facility type based on the context of the road and environment • Within urban areas or along main streets, sidewalks and/or multi-use paths should be provided along both sides of the road • Supportive amenities, including benches, waste bins, lighting and signage, are recommended
Marketing Zone	Located between the pedestrian zone and the building frontage	Patios Spil-out retail Awnings Building entrances Street furniture	• Marketing zone encouraged in urban areas to provide street identify / character and promote pedestrian activity • Elements should be installed such that pedestrian movement is not impeded



CALEDON MULTI-MODEL TRANSPORTATION PLAN

URBAN ARTERIAL STREET - 4 LANES

2023.08.08

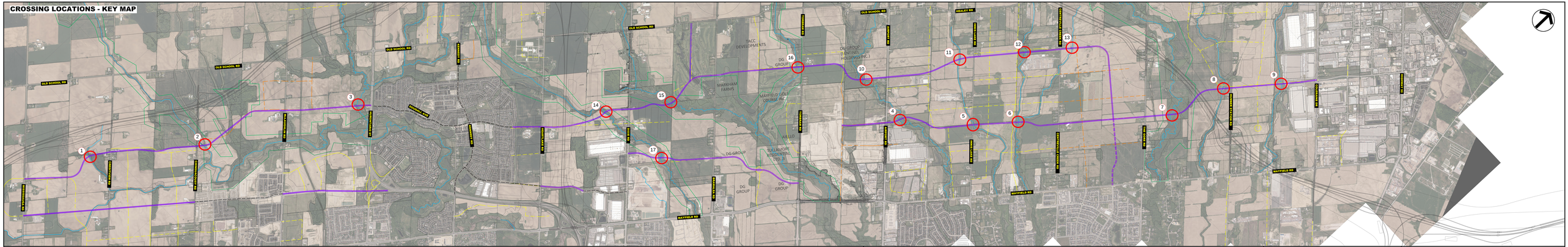
BURNSIDE

Multimodal Transportation Master Plan Addendum

Town of Caledon

Final Report

January 28, 2026



LEGEND

- PREFERRED MAJOR COLLECTOR ROAD ALIGNMENT
- PROPOSED COLLECTOR ROADS (THROUGH DEVELOPMENT PLANS)
- PROPOSED COLLECTOR ROADS (THROUGH DEVELOPMENT PLANS - FIXED)
- GREENBELT AREA
- WATERCOURSE
- EXISTING ROADWAY

TOWN OF CALEDON

HDR

CALEDON MULTIMODAL TMP ADDENDUM

PREFERRED ALTERNATIVE ALIGNMENTS

SCALE: 1:5000

DATE: JANUARY 2025

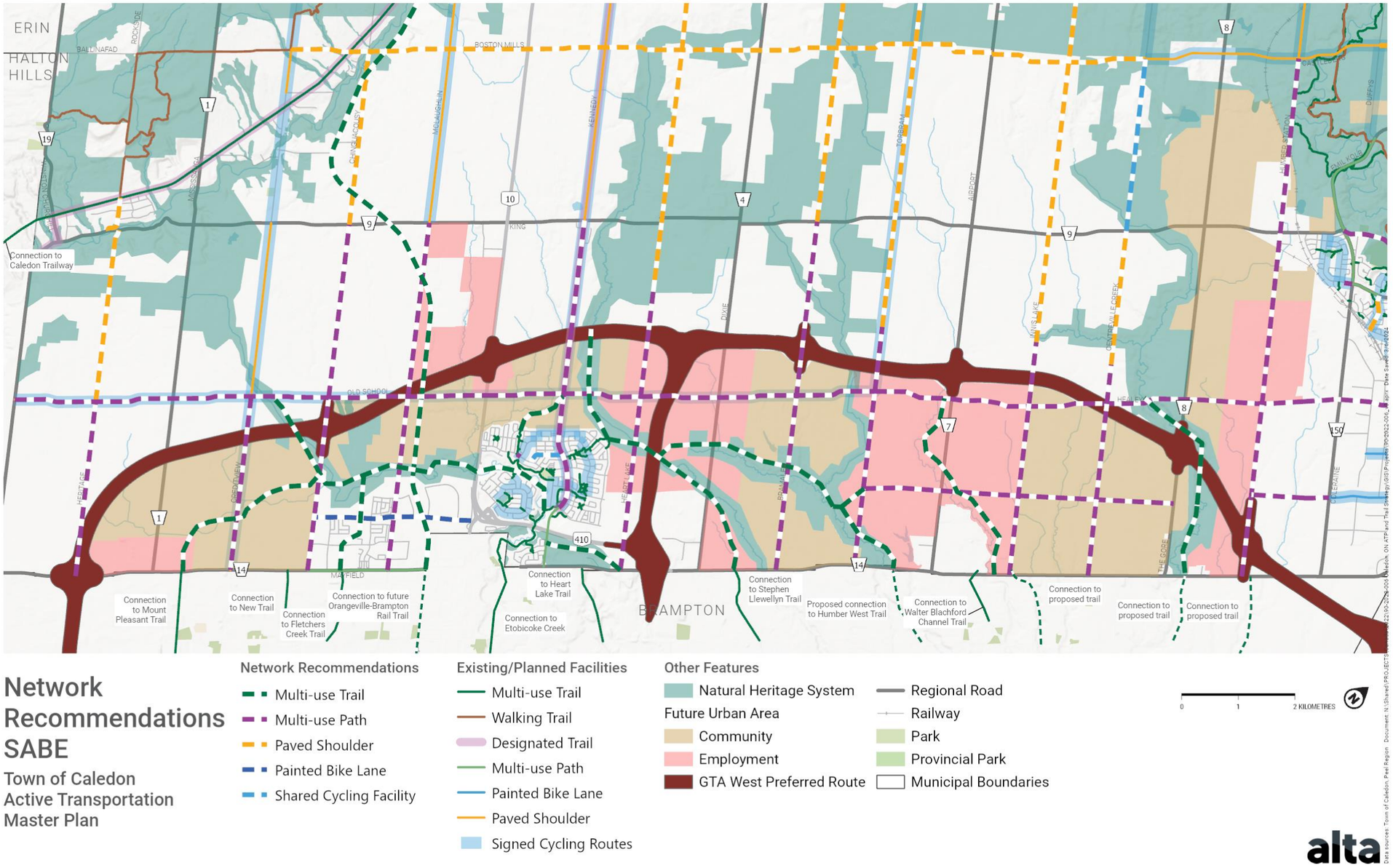
Town of Caledon

Active Transportation Master Plan

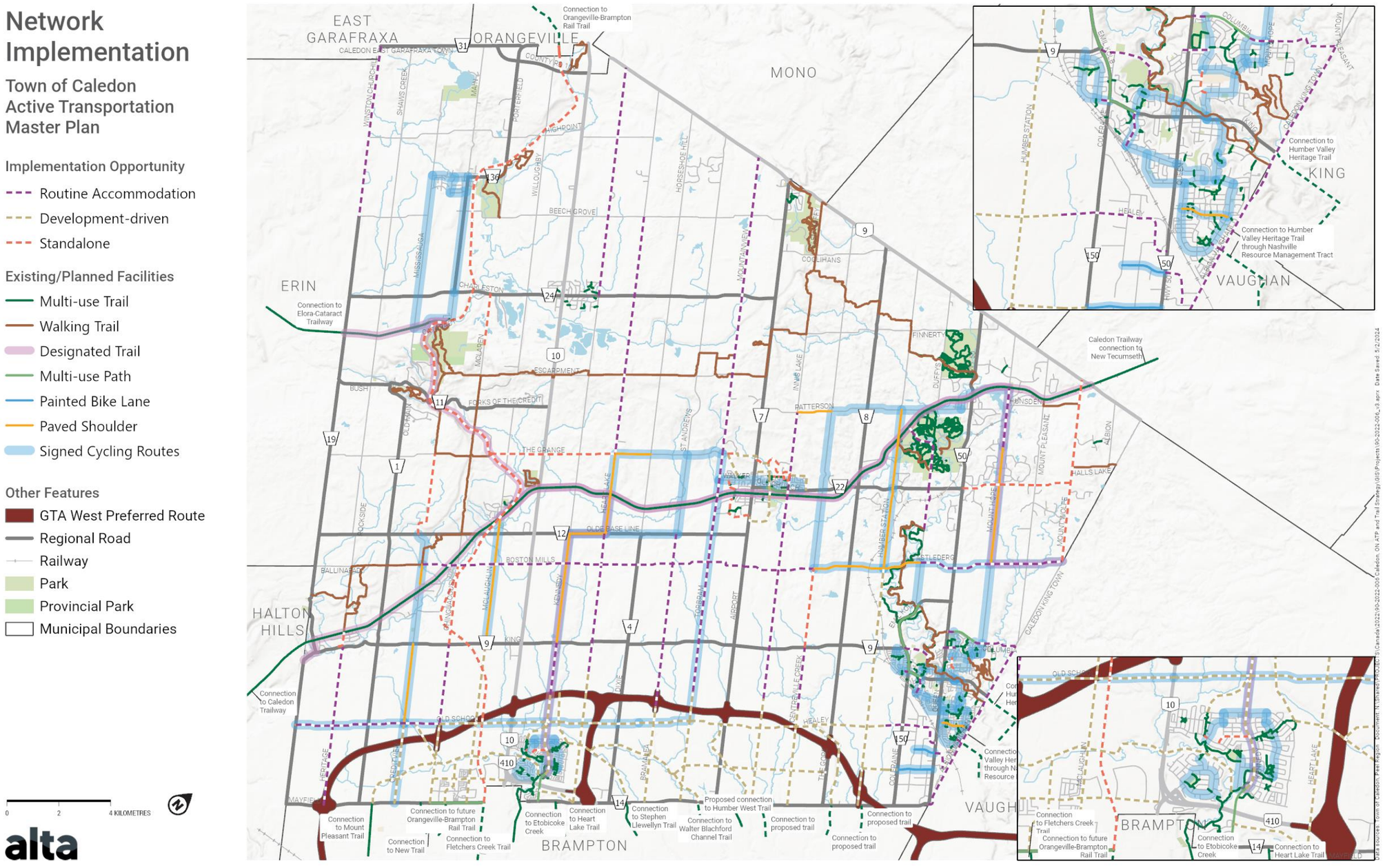
June 2024

TOWN OF CALEDON

Map 6. Network recommendations in the Settlement Area Boundary Expansion area



Map 7. Network implementation



APPENDIX H:

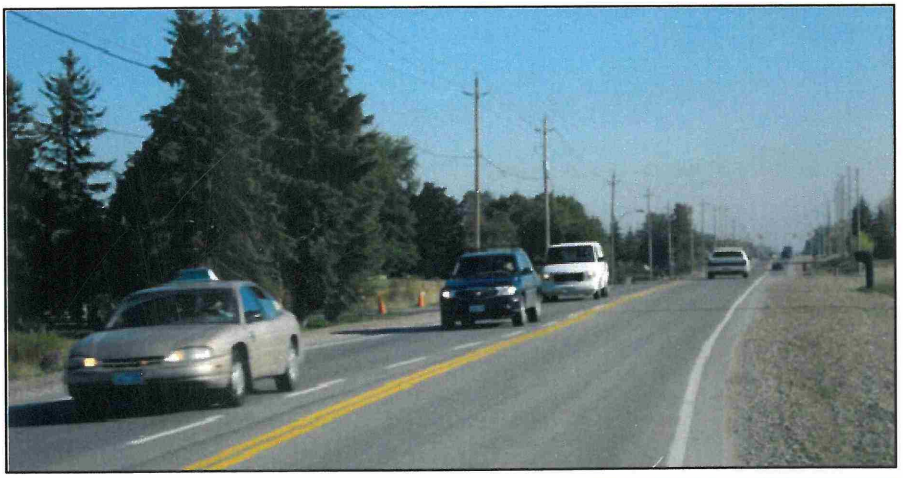
Transportation Improvement Excerpts

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

5.0 Design Concepts

5.1 ALTERNATIVE DESIGN CONCEPTS

5.1.1 Background and Introduction

Based on the results of the evaluation of alternative solutions and feedback following Public Information Centre No. 1, the Recommended Alternative Solution of Widening Mayfield Road was confirmed by the Study team. This solution includes intersection improvements, consideration of roundabouts, minimizing impacts on property and the environment, and private property access management. Other items such as upgrading or building other routes/roads, and providing enhanced transit service throughout the Region will also be implemented with all Alternative Design Concepts. The next step in the study process was to identify and assess practical design alternatives and select a preferred design alternative for presentation to the public.

5.1.2 Roadway Design Criteria

Roadway design criteria were established and refined early in the study to arrive at a suitable set of design criteria that would be applied to the development of roadway designs as part of the preferred solution. The following table summarizes the existing and proposed design criteria and which form the basis for the design alternatives prepared as part of the Class EA and preliminary design:

Table 5.1.2.1 – Roadway Design Criteria

CRITERIA/ DESCRIPTION	EXISTING CONDITIONS	URBAN ARTERIAL UNDIVIDED Controlled Access	URBAN ARTERIAL DIVIDED Controlled Access
Design Classification:	**Built up areas**: Rural Arterial Road Undivided Posted Speed 60 km/hr **Rural Areas**: Rural Arterial Road Undivided Posted Speed 80 km/hr	**Built up areas**: UAU 70, Design Speed 70 km/hr, Posted Speed 60 km/hr **Rural Areas**: UAD 90, Design Speed 90 km/hr, Posted Speed 80 km/hr	**Built up areas**: UAD 70, Design Speed 70 km/hr, Posted Speed 60 km/hr **Rural Areas**: UAD 90 Design Speed 90 km/hr, Posted Speed 80 km/hr
Cross Section:	**Right of Way:** Varies but generally 30 meters or larger.	**Right of Way**: 50 metres (165 feet nominally)	**Right of Way**: 50 metres (165 feet nominally)

Table 5.1.2.1 – Roadway Design Criteria			
CRITERIA/ DESCRIPTION	**EXISTING CONDITIONS**	**URBAN ARTERIAL UNDIVIDED Controlled Access**	**URBAN ARTERIAL DIVIDED Controlled Access**
	Road Platform: 2 paved lanes with gravel shoulders and turn lanes at Intersections. Drainage by means of ditches with some minor storm sewers in built up areas.	**Road Platform:** 6 lanes no center median. Curb & gutter with storm sewers	**Road Platform**: 6 lanes divided by 6.0 m raised median. Curb & gutter with storm sewers
Maximum Gradient:	Approx. 4% east of Goreway Drive	6.0%	6.0%
Minimum Gradient:	-	0.5%	0.5%
Crest/Sag(1) Minimum K Values	-	UAU70: Crest: SSD:32 PSD:350 Sag: SSD: 30 UAU90: Crest: SSD: 16 PSD: 250 Sag: SSD: 20	UAD70: Crest: SSD:32 PSD:350 Sag: SSD: 30 UAD90: Crest: SSD: 16 PSD: 250 Sag: SSD: 20
Minimum Stopping Sight Distance:	-	UAU70: 94 m UAU90: 131 m	UAD70: 94 m UAD90: 131 m
Equivalent Minimum "K" Factor:	-	UAU70: 16 UAU90: 32	UAD70: 16 UAD90: 32
Minimum Radius of Horizontal Curvature:	Approx. 320m @ 60kmh posted (i.e. east of Airport Road)	UAU70: 200 m UAU90: 375 m	UAD70: 200 m UAD90: 375 m
Super elevation:	-	Maximum (eMax) = 4%	Maximum (eMax) = 4%
Lane Widths(2)	Generally 3.75m through lanes	Through Lanes: 3.75 m Turn Lanes: 3.5 m	Through Lanes: 3.75 m Turn Lanes: 3.5 m
Sidewalk Width	N/A	1.5 m	1.5 m
Multi-use Trail Width	N/A	3.0 m	3.0 m

6.0 Recommended Design Concept

6.1 DESCRIPTION OF RECOMMENDED DESIGN CONCEPT

Following a comprehensive evaluation process, the study team has confirmed the Recommended Design Alternative is "Concept 4 – Modified Widening of Mayfield Road about the Centerline". The recommended Design Concept was developed based on the various discussions, comments, investigations, studies, etc. undertaken as part of the Class Environmental Assessment Study. Figures 6.1.1.1 and 6.1.1.2 illustrate the proposed road cross section with and without median.

Following a comprehensive evaluation process, the study team has confirmed the Recommended Design Alternative is "Concept 4 – Modified Widening of Mayfield Road about the Centerline"

Figure 6.1.1 – Landscape Cross Section – Ultimate 6 Lanes Without Median

Figure 6.1.2 – Landscape Cross Section – Ultimate 6 Lanes With Median

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:

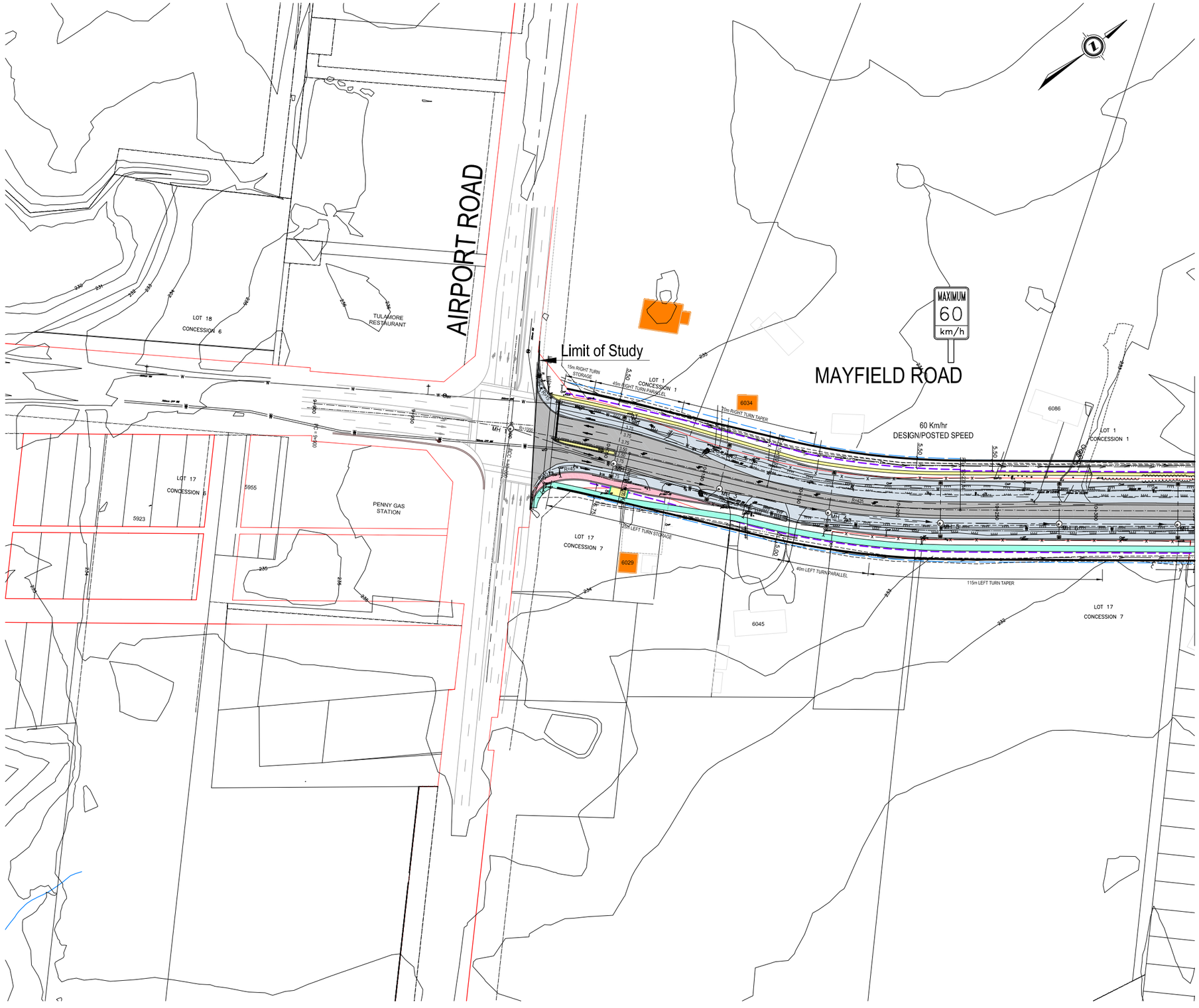
Eastbound – three through lanes

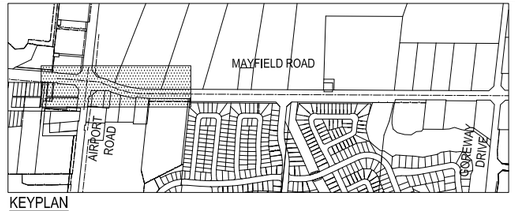
Westbound – three through lanes

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)

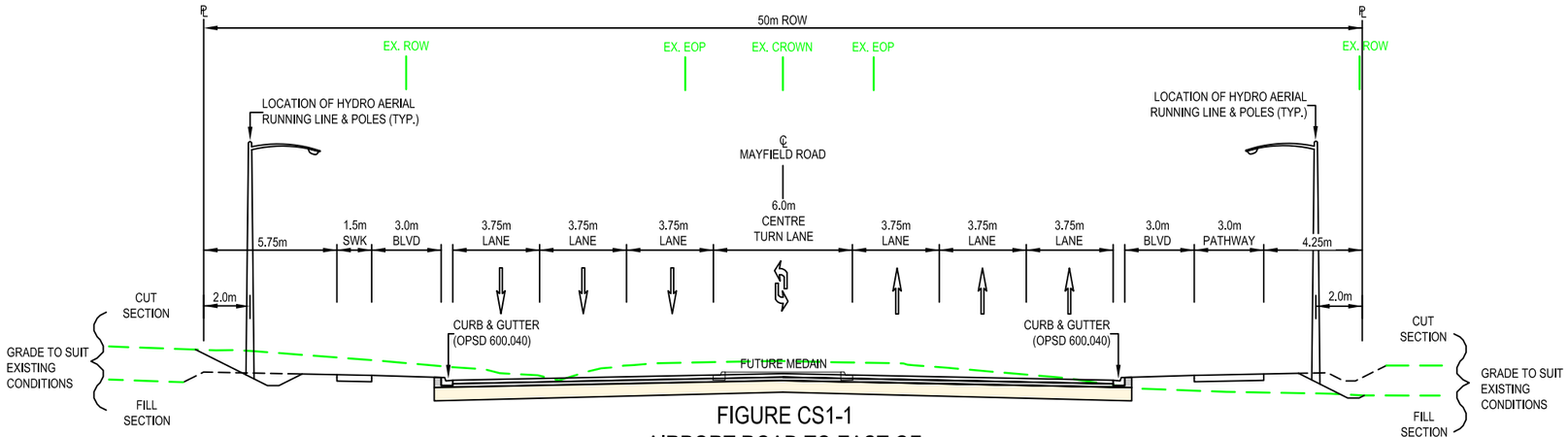


FIGURE CS1-1
AIRPORT ROAD TO EAST OF
GOREWAY DRIVE/INNIS LAKE ROAD

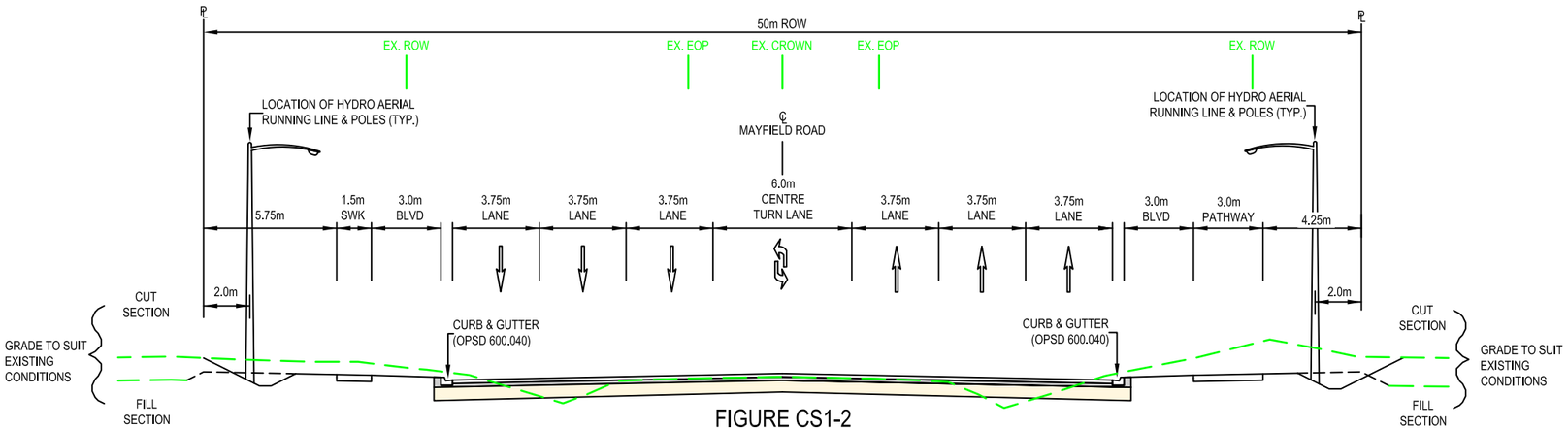


FIGURE CS1-2
EAST OF GOREWAY DRIVE/INNIS LAKE
ROAD TO EAST OF THE GORE ROAD

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Client

Region of Peel
Working for you

Drawing Title

MAYFIELD ROAD
AIRPORT ROAD TO COLERAINE DRIVE
CLASS EA STUDY REPORT
RECOMMENDED DESIGN ALTERNATIVE
"DESIGN CONCEPT 4 MODIFIED"
EQUAL WIDENING CONCEPT
TO MINIMIZE PROPERTY IMPACTS

Drawn By	Checked By	Drawing Number
W.R.W.	J.C.B.	CS1
Date	Project No.	
2012-10-17	160210480	

V:\01602\Active\160210480\design\drawings\class_ea\report\esr_dwgs\typicals-OPT1-4
2012/10/17 10:52 AM by:white, bill (kitchener)

Region of Peel

Mayfield Road

Class Environmental Assessment

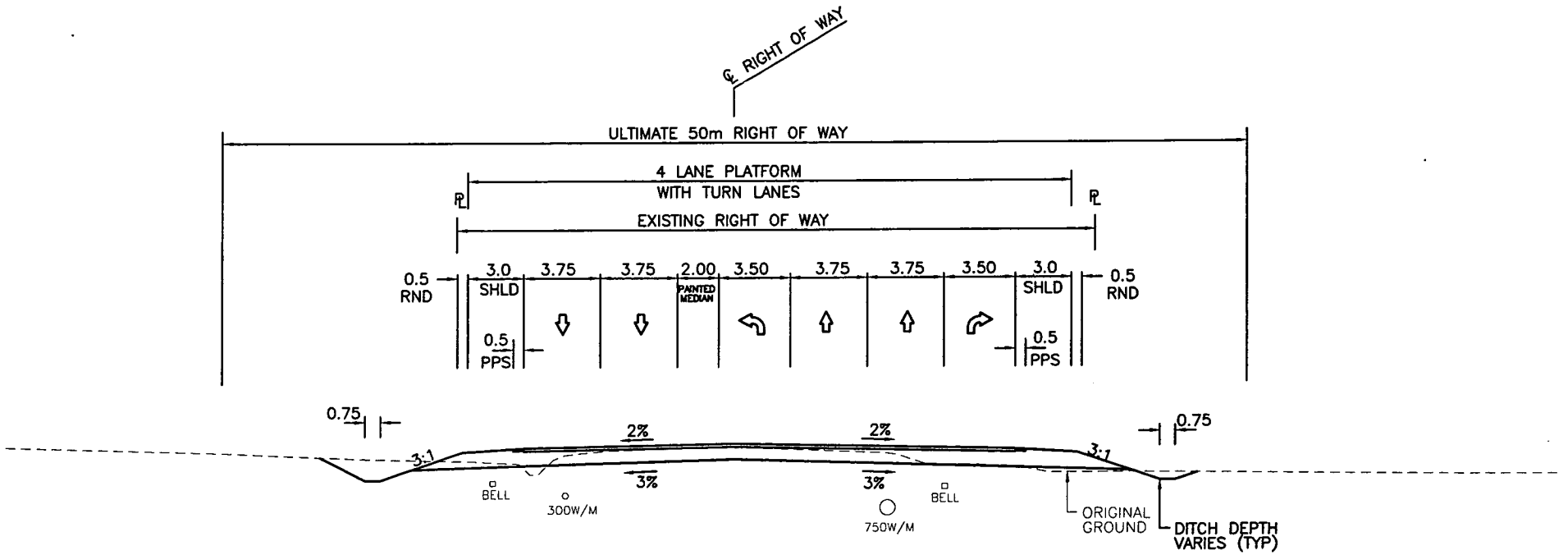
Heart Lake Road to Airport Road

Environmental Study Report

STANTEC CONSULTING LTD.
49 Frederick Street
Kitchener, Ontario N2H 6M7

May 2004

Stantec



W:\Active\60210370\design\drawing\class_ea\report\typl_60210370_mayfield.dwg
2004-04-07 08:08AM By: bwhite

Stantec

MAYFIELD ROAD CLASS EA
REGION OF PEEL
DIXIE ROAD TO AIRPORT ROAD

TYPICAL 4-LANE
RURAL ROAD SECTION

Date:	Scale:	Project No.	Figure No.
04/07/04	N.T.S.	60210370	Figure 5.2

90 Km/h DESIGN SPEED

80 Km/h DESIGN SPEED

80 Km/h DESIGN SPEED

AT THE DETAIL DESIGN STAGE THE TURN LANE REQUIREMENTS AT AIRPORT ROAD MUST BE REVIEWED BASED ON AN UPDATED TRAFFIC ANALYSIS.

AIRPORT ROAD

REQUIRED CULVERT EXTENSIONS AND CHANNEL IMPROVEMENTS TO BE DETERMINED

REGION OF PEEL STRUCTURE #140810 3m WIDE CONCRETE BOX CULVERT (OPEN BOTTOM)

120m TAPER

30m PARALLEL LANE

150m LEFT TURN STORAGE

70m RIGHT TURN TAPER

70m PARALLEL LANE TO BE CONFIRM DURING FINAL DESIGN

50m RIGHT TURN STORAGE

ILLUSTRATED INTERSECTION IMPROVEMENT'S AS PER COMPLETED AIRPORT ROAD CLASS ENVIRONMENTAL ASSESSMENT.

SEE FIGURE J9

COSIMO & IDA CRUPI

GRADING LIMIT MODIFICATIONS MAY BE REQUIRED DURING FINAL DESIGN UPON COMPLETION OF CULVERT HYDRAULIC MODELLING (TYP.)

ADDITIONAL CULVERT RELIEF REQUIRED. CULVERT DETAILS TO BE CONFIRMED DURING FINAL DESIGN.

FIELD ENTRANCE LOCATIONS TO BE REVIEWED DURING FINAL DESIGN (TYP.)

CURB & GUTTER LIMITS TO BE DETERMINED DURING FINAL DESIGN (TYP.)

JOT HOLDINGS INC.

LARISSA BARBASH

AMJER & DALJIT BOLA

1509429 ONTARIO INC.

5981 ESSO 7/24 EXPRESS COFFEE TIME

FUTURE CITY OF BRAMPTON GATEWAY FEATURE

1526400 Ontario Inc.

12050 TULLAMORE COUNTRY MARKET

12016

6034

6086

6045 (AUDETTE)

6045

TOWN OF CALEDON
FORMERLY TOWNSHIP OF ALBION
CON 1
LOT 1

LOT 17
CON 7 ND
FORMERLY TOWNSHIP OF TORONTO GORE
CITY OF BRAMPTON

11850

11903

11859

11796

6.000 WIDE BELL EASEMENT

℄ RIGHT OF WAY

ULTIMATE 50m RIGHT OF WAY

ULTIMATE BOULEVARD | 4 LANE PLATFORM WITH TURN LANES | ULTIMATE BOULEVARD

EXISTING RIGHT OF WAY

0.5 | 3.75 | 3.75 | 2.0 | 3.50 | 3.75 | 3.75 | 3.50 | 0.5 | VARIES

1.0m KILL STRIP | CENTRE MEDIAN | 1.0m KILL STRIP

BELL | GAS

SEMI-MOUNTABLE CURB & GUTTER | 300W/M | 750W/M | SEMI-MOUNTABLE CURB & GUTTER | ORIGINAL GROUND

Legend

- EXISTING RIGHT-OF-WAY
- ULTIMATE RIGHT-OF-WAY
- PROPOSED IMPROVEMENTS (BY OTHERS)
- EXISTING PAVEMENT
- PROPOSED PAVEMENT WIDENING
- PROPOSED IMPROVEMENTS (BY OTHERS)
- PRELIMINARY PROPERTY ACQUISITION REQUIREMENTS

Stantec

1:2000 0 20 60 100m

MAYFIELD ROAD CLASS ENVIRONMENTAL ASSESSMENT & PRELIMINARY DESIGN STUDY
PEEL REGION

RECOMMENDED DESIGN CONCEPT
MAYFIELD ROAD
HEART LAKE ROAD TO AIRPORT ROAD

Date:	Scale:	Project No.	Figure No.
APRIL 2004	1:2000	60210370	**Figure J8**

Environmental Study Report

Airport Road

from 1.0 km north of Mayfield Rd to 0.6 km north of King St

Schedule C Class Environmental Assessment Study

Region of Peel
Working for you

5.0 DESCRIPTION OF RECOMMENDED DESIGN

The proposed design criteria for the widening of Airport Road are based on a design speed of 90 km/hour in rural sections and 70 km/hour within Sandhill as presented in **Table 1** below.

DESIGN PARAMETERS	PRESENT CONDITIONS	DESIGN STANDARDS / MINIMUMS		PROPOSED STANDARDS
		TAC	MTO	
Row Width	36m	20 - 45	N/A	45 m [1]
Posted Speed	80 & 60km/hr. [2]	80 km/hr.	80 km/hr.	80 & 60km/hr. [2]
Design Speed (D.S.)	90 & 70km/hr [3]	90 km/hr.	90 km/hr.	90 & 70km/hr. [3]
Minimum Stopping Sight Distance	95 m	130-170 m	160 m	160 m
Equivalent Minimum 'K' Factor for 90km/hr. D.S.	n/a	30 – 40 Sag 32 – 53 Crest	40 Sag 50 Crest	30 Sag 32 Crest
Equivalent Minimum 'K' Factor for 70km/hr. D.S.	n/a	20 – 25 Sag 16 – 23 Crest	25 Sag 25 Crest	25 Sag 25 Crest
Minimum Radius for 70km/hr. D.S.		190 m	190 m	190 m
Minimum Radius for 90km/hr D.S		340 m	340 m	340 m
Number of Lanes	2 Lanes Rural	4	4	5 Lane Rural [4]
Lane Width for 90km/hr. D.S.	2 x 3.6 m	3.5 – 3.7 m	3.5 m	3.75m Curb Lanes 3.65m Inside Lanes 3.5m Turn lanes 5.5m Median
Lane Width for 70km/hr. D.S.	2 x 3.6 m	3.5 – 3.7 m	3.5 m	3.75m Curb Lanes 3.5m Inside Lanes 3.35 -3.5m Turn lanes 5.5m Median
Boulevard Width	N/A	3.0 m	3.0m	5.5m Min.

Table 1 – Design Criteria for Airport Rd from 1.0 km north of Mayfield Rd to 0.6 km north of King St

5.1.4 Cross Sections

Airport Road will be widened to provide a 4-lane cross section and a centre left turn lane within the designated 45.0m right-of-way. The project comprises both rural and urban sections of roadway. The urbanized section is planned within Sandhill. A 5.5m two-way centre left turn lane is provided throughout the corridor to enable safe turning into existing property accesses. A 3.75m curb lane (outer lane) is also provided to assist goods movement as identified in the Peel Strategic Goods Movement Network Study. Details of the typical sections are illustrated in **Exhibit 6** and **Exhibit 7** (pages 37 and 38):
It should be noted that Norris Bridge, Deans Culvert, and Salt Creek Culvert crossing are designed with 1.8m wide shoulder and 2.0m wide sidewalk at the culvert crossing.

5.1.5 Cross Slope and Superelevation

A standard 2.0% cross fall is proposed along the corridor.

At roundabout approaches the following will be provided:

- adequate signage to alert drivers about the speed reduction prior to entering the roundabout
- a reverse crown (-2.0%) to reduce lateral force

There are no areas of superelevation within the corridor.

5.2 ROUNDABOUT DESIGN

The existing intersections of Old School Road-Healey Road and King Street at Airport Road are proposed as two lane urban roundabouts with a 55.0m Inscribed Circle Diameter (ICD) and 5.0m wide circulatory roadway. The entry and exit width of approaches varies based on the number of entering and receiving lanes. However a minimum width of ± 4.2m per lane is provided for an entry and exit lane.
Both roundabouts will be wide enough to accommodate tractor trailers or any large vehicle turning pattern in all directions. The roundabout approaches are designed with large enough entry and exit radii so that tractor trailers will be able to make a right turn without encroaching onto another lane or travelling over roadside curbs.

Rural and Urban Sections

Rural section refers to those portions of road that utilize ditches for storm water drainage and infiltration and typically have a paved shoulder that may be used for safe stopping or for bicyclists.

Urban section refers to those portions of road (within Sandhill) that utilize curbs and gutters to direct storm water from the road surface and typically have sidewalks and/or multi-use trails for pedestrians.

Cross Slope and Superelevation: On straight sections of normal two-lane roads, the pavement cross section is usually highest in the center and drains to both sides. Cross slope is used to provide drainage so that the water will run off the surface to a gutter or ditch.

On horizontal curves, the cross slope is banked (**superelevated**) to reduce steering effort and lateral force required to go around the curve.

Roundabout Terms

Inscribed Circle Diameter is the basic limit used to define the size of a roundabout. It is measured between the outer edges of the circulatory roadway.

The **Centre Island** is the raised area in the centre of a roundabout around which traffic circulates**.**

The **Apron** is the crossable area (with mountable curb) at the edge of the centre island which may be used by long vehicles as extra space for turning as they move through the roundabout.

Raised Splitter Islands are designed at all approaches to provide smooth transitioning of traffic into the roundabout. It also serves as a refuge area for pedestrians and cyclists crossing the road. Consideration to existing and proposed accesses to abutting properties was given while designing the lengths of these islands, which varies between 50m to 165m. No turn restrictions are intended for existing properties or future developments unless the access is located close to the intersection. In this case access would be restricted to right-in/right-out only.

3.0m wide crosswalks are provided for pedestrians at a distance of 15m from the roundabout entries and exits. It is required that all crosswalk ramps be complaint with the Accessibility for Ontarians with Disabilities Act (AODA) and may include accessible curb ramps and tactile surfaces. The proposed roundabout design will provide surface indicators at crosswalk ramps to accommodate users who have accessibility needs.

A 5.0m truck apron with mountable curb is designed with the central island to provide adequate space for larger vehicles making a left turn. The inner island will be landscaped.

The Federal Highway Administration (FHWA) recommends successive curves at roundabout approaches to slow traffic down before entering the roundabout. The suggested treatment is to create a broad radius as vehicles start to slow down, followed by a moderate radius in the middle of the approach, and finally a sharp radius prior to entering the roundabout. Flatter exiting curves are provided at each approach for acceleration and to avoid unnecessary traffic delay within the roundabouts.

The paved shoulders (in the rural section) and bike lanes (in the urban section) will be ramped into a curbed and raised multi-use path for cyclists to cross the roundabout without entering main travel lanes. This is primarily done for safety reason to provide cyclists with an off-street path for road crossing. Cyclists may also choose to enter the roundabout in the same manner as other vehicles, however not recommended. Details of the proposed roundabout geometrics are as follows:

5.2.1 Healey Road / Old School Road Intersection

- Horizontal alignments of Airport Road at the side streets is skewed at 85°
- Northbound and Southbound Approach: Two lane approaches along Airport Road in each direction.
- East approach: Two entry (westbound) and a single receiving lane (eastbound)
- West approach: Single out (eastbound) and two receiving lanes (westbound) tapered off to a single lane to match existing configuration

5.2.2 King Street Intersection

- An 8 degree deflection is provided between the existing and proposed horizontal alignment at the King Street roundabout. The deflection amount was determined by adjusting the impact to property without compromising safety and design standards.

- Northbound and Southbound Approach: Two lane approaches along Airport Road in each direction.
- West and East Approach: Flared from an existing single lane to two entry lanes at both approaches. The two receiving lanes will merge into a single lane to match existing configuration.

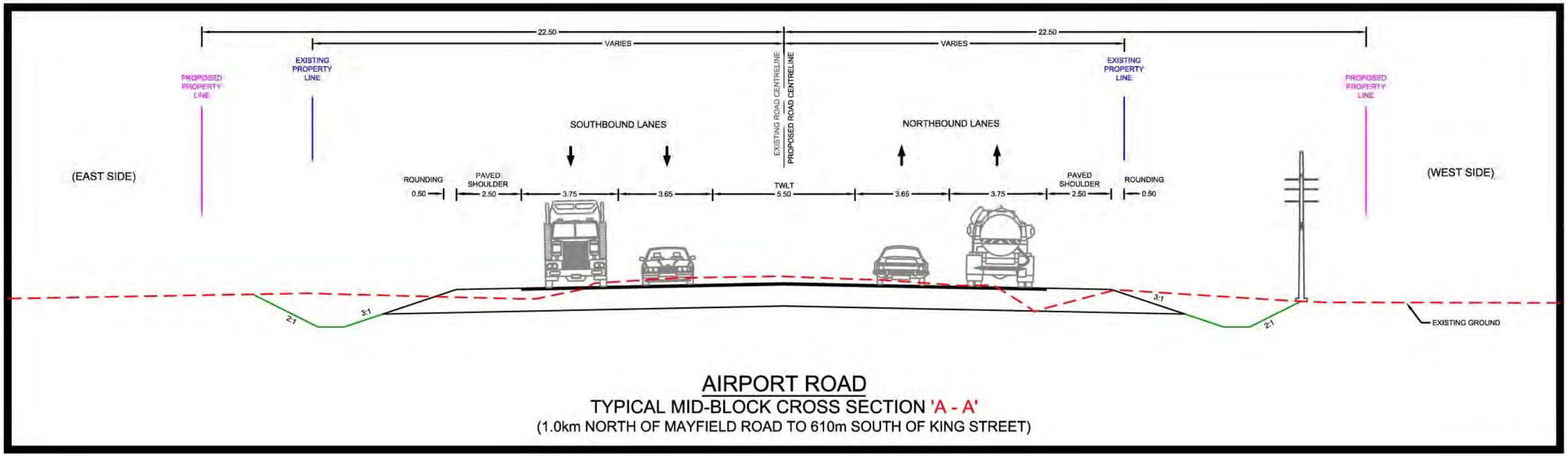
5.3 TYPICAL CROSS SECTIONS and RECOMMENDED DESIGN

The following exhibits illustrate the proposed rural and urban cross sections and the recommended design alternative as discussed

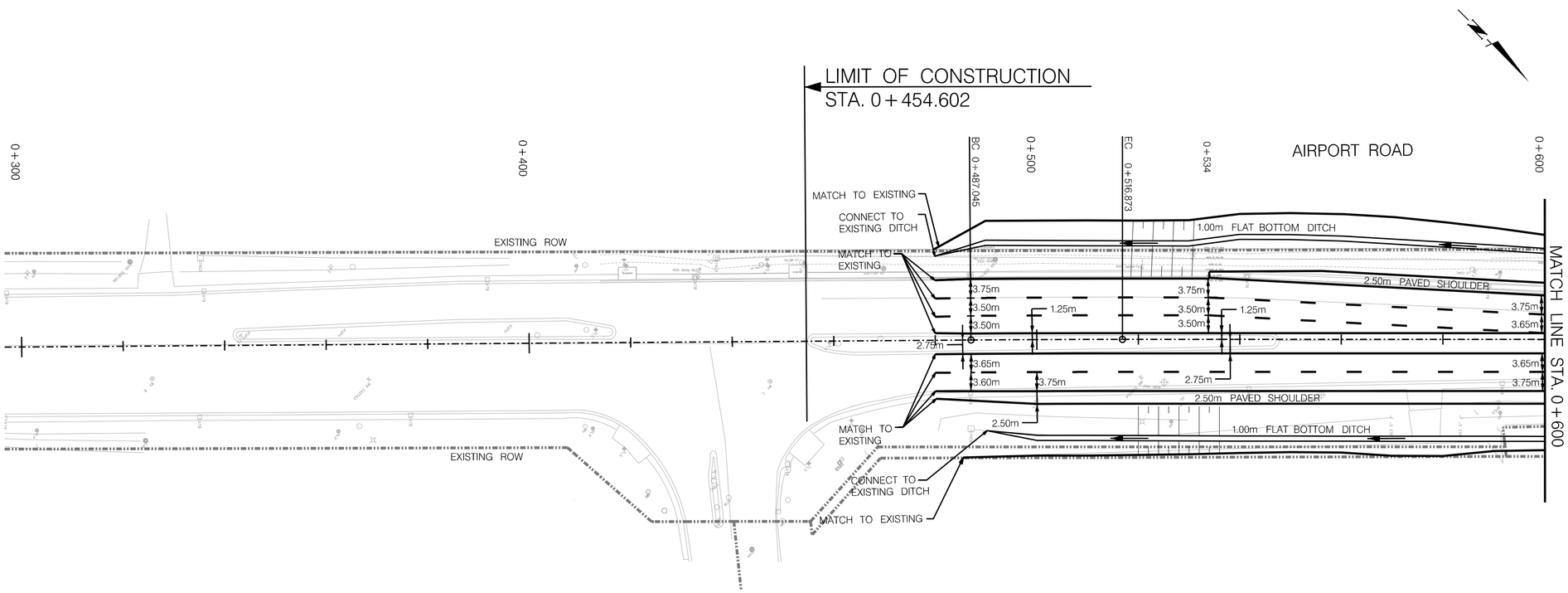
Exhibit 6 - Rural Section – Airport Road 1.0 km north of Mayfield Road to 610m south of King Street (south of Sandhill)

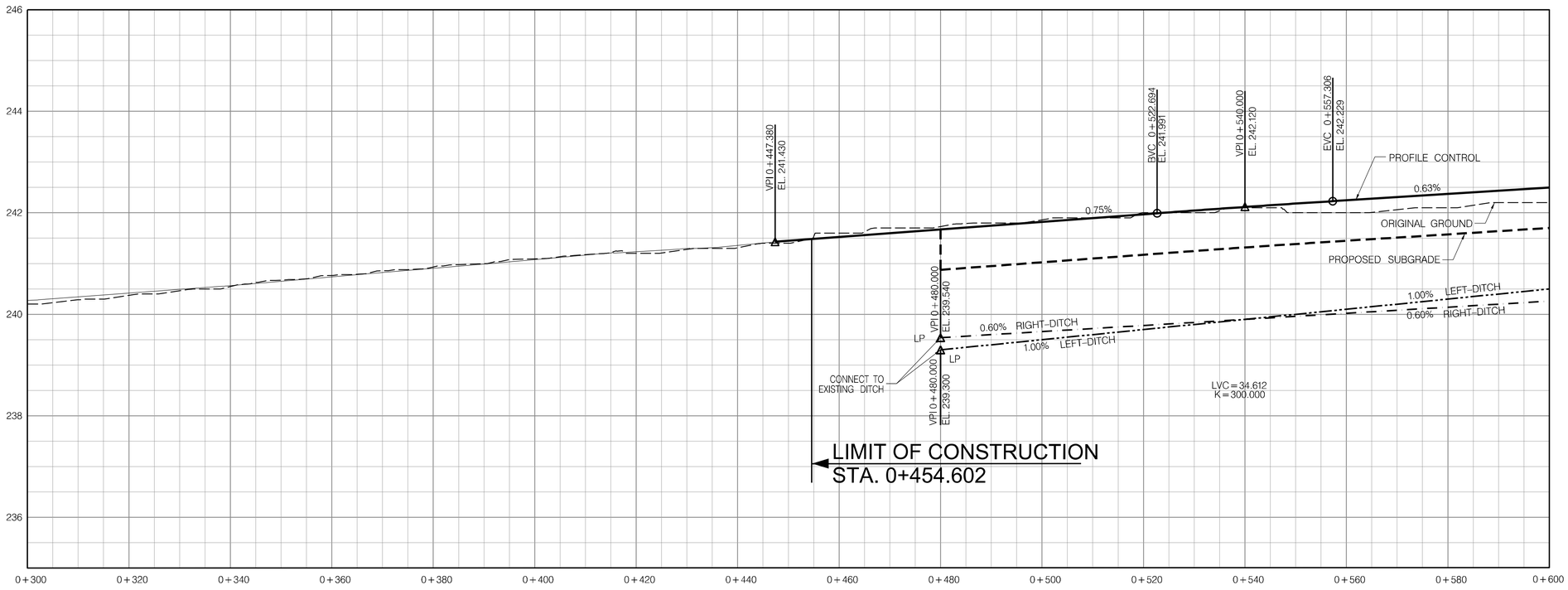
The rural mid-block cross section at the above locations features 2 north bound and 2 southbound through lanes and a centre turning lane.

- Begins at Station 0+640 and Ends at Station 4+900
- 3.65m Through Lane (inner lane)
- 3.75m Curb Lane (outer lane)
- 2.5m Paved Shoulder
- 0.5m Rounding to ditch
- 1m Flat Bottom Ditch with typical 3:1 foreslope, 2:1 backslope



AIRPORT ROAD
TYPICAL MID-BLOCK CROSS SECTION 'A - A'
(1.0km NORTH OF MAYFIELD ROAD TO 610m SOUTH OF KING STREET)





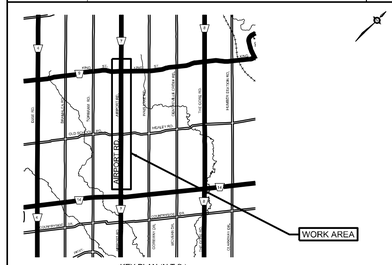
PROPOSED								241.524	241.673	241.822	241.971	242.115	242.245	242.371	242.497
EXISTING	240.200	240.374	240.548	240.764	240.930	241.093	241.200	241.312	241.600	241.728	241.862	242.000	242.100	242.000	242.100	242.200

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.



KEY PLAN (N.T.S.)

LEGEND:

LEFT DITCH

RIGHT DITCH

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. Elev.
Description
Location

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

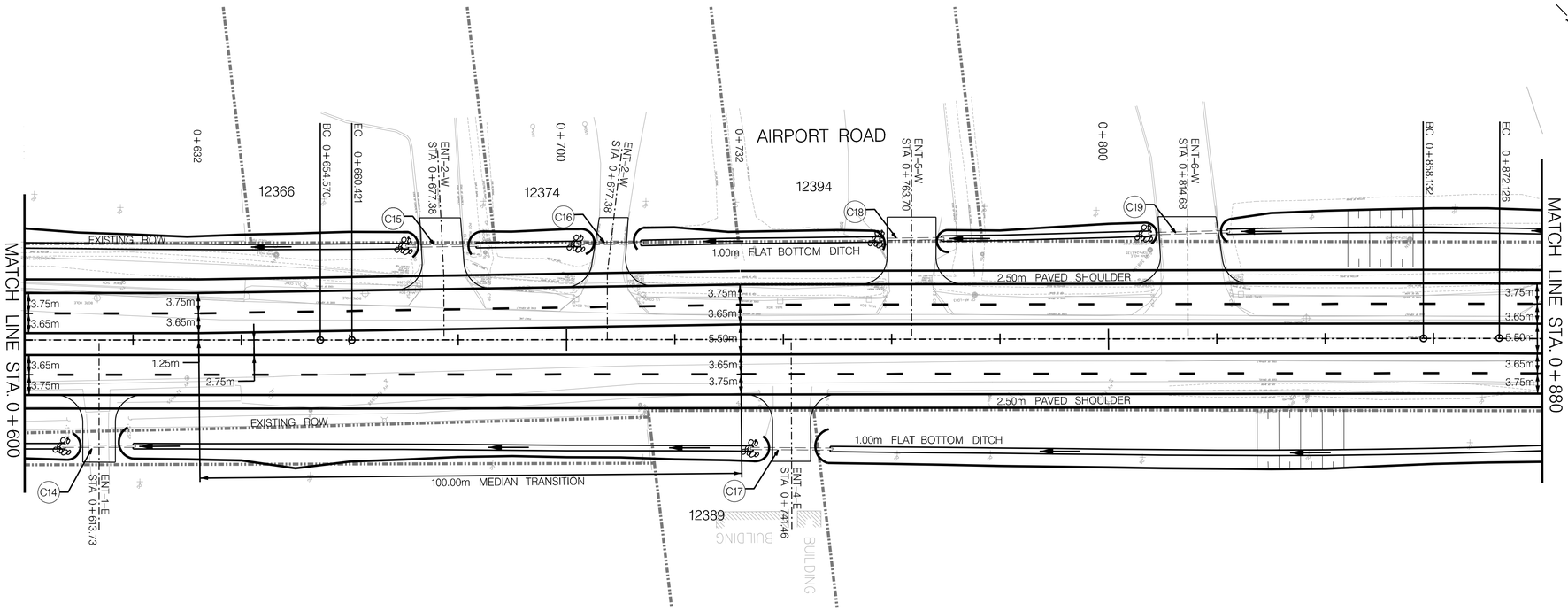
AIRPORT ROAD
PLAN AND PROFILE

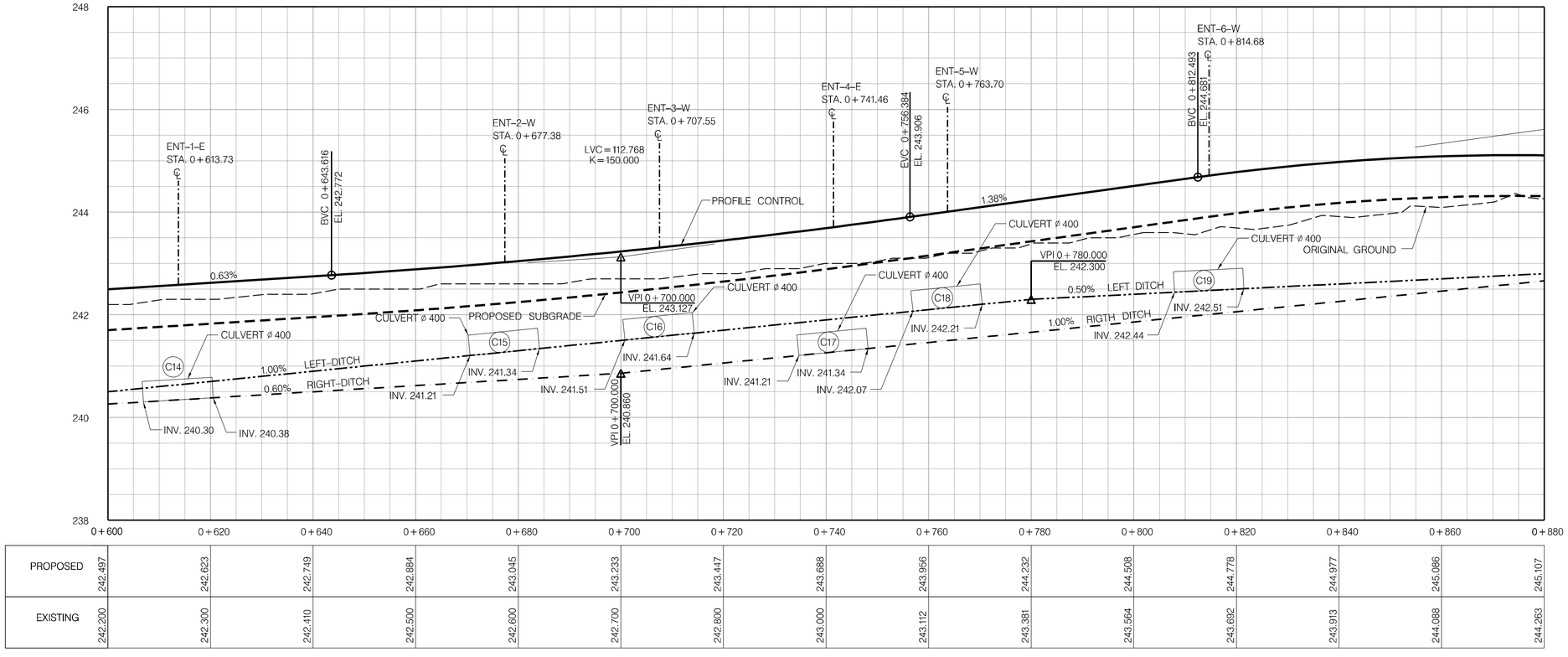
(FROM STA. 0+300 TO STA. 0+600)

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-001**





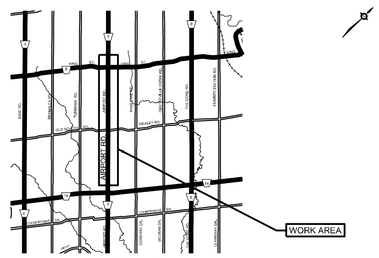
PROPOSED	242.497	242.623	242.749	242.884	243.045	243.233	243.447	243.688	243.956	244.232	244.508	244.778	244.977	245.086	245.107
EXISTING	242.200	242.300	242.410	242.500	242.600	242.700	242.800	243.000	243.112	243.381	243.564	243.692	243.913	244.088	244.263

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.



KEY PLAN (N.T.S.)

LEGEND:

LEFT DITCH

RIGHT DITCH

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. Elev.
Description
Location

The Contractor Is Responsible For Locating And Protecting All Existing Utilities Prior To And During Construction. Location Of Existing Utilities Approximate Only, To Be Vertified In Field By Contractor.

Designed by

Approved by

Chkd.

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

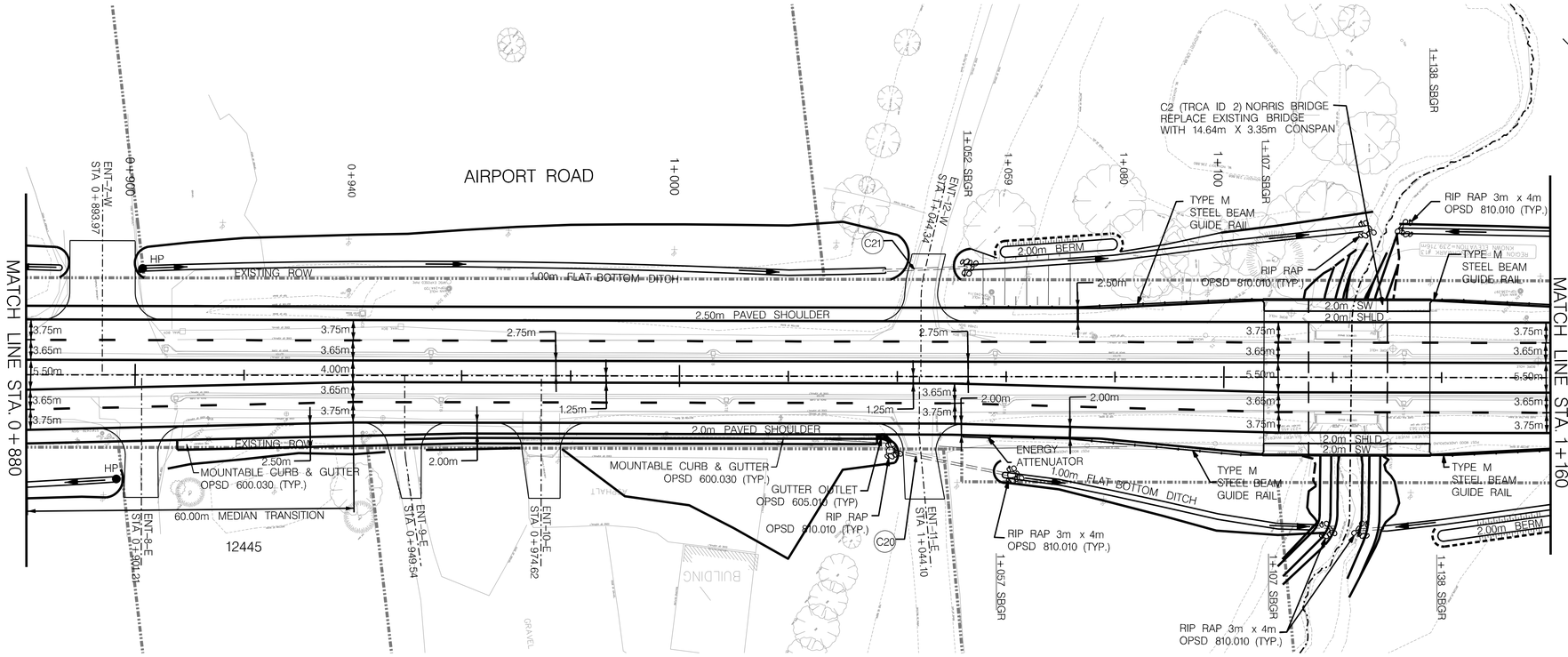
1m 0 1 2 3m — VERTICAL SCALE

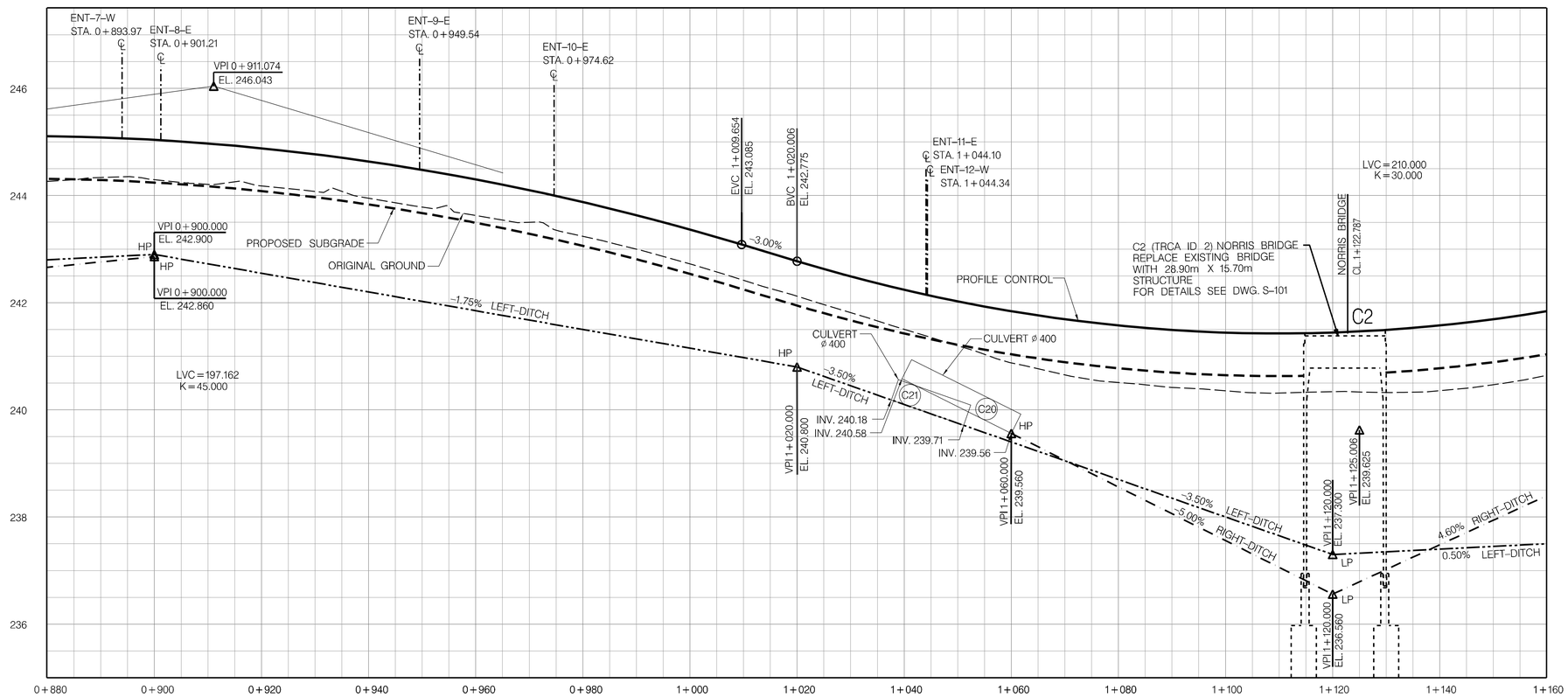
Region of Peel
Working for you

AIRPORT ROAD
PLAN AND PROFILE

(FROM STA. 0+600 TO STA. 0+880)

CAD Area	X-XX	Area	X-XX	Project No.	14-4030
Checked by		Drawn by	G.P.		
Date	JULY 2018	Sheet	X of X	Plan No.	NC-002





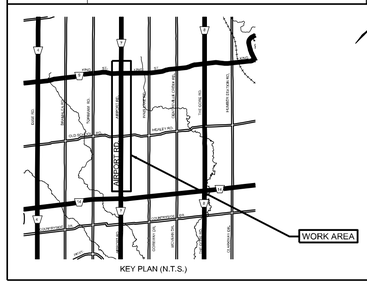
PROPOSED	245.107	245.039	244.882	244.636	244.301	243.877	243.364	242.775	242.241	241.841	241.575	241.441	241.441	241.575	241.841
EXISTING	244.263	244.296	244.178	243.950	243.628	243.240	242.723	242.120	241.502	240.877	240.510	240.355	240.339	240.357	240.645

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.



KEY PLAN (N.T.S.)

LEGEND:

LEFT DITCH

RIGHT DITCH

General Notes

All Driveways Are ASPHALT Unless Otherwise Noted

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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:
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ENERSOURCE TELECOM
HYDRO ONE TELECOM
ROGERS CABLE
ALLSTREAM
PSN (PUBLIC SECTOR NETWORK)
FUTUREWAY (FCI BROADBAND)

10m 0 10 20 30m — HORIZONTAL SCALE

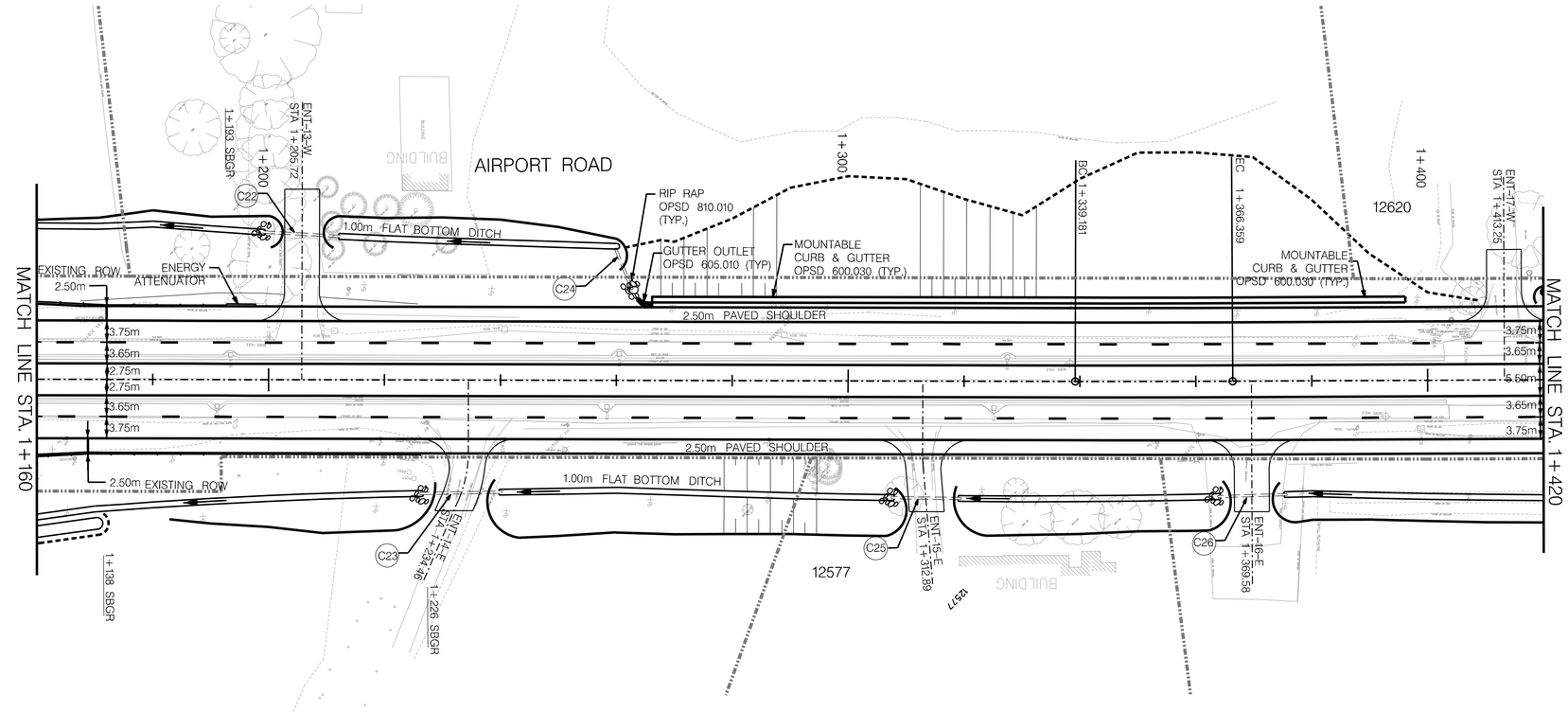
1m 0 1 2 3m — VERTICAL SCALE

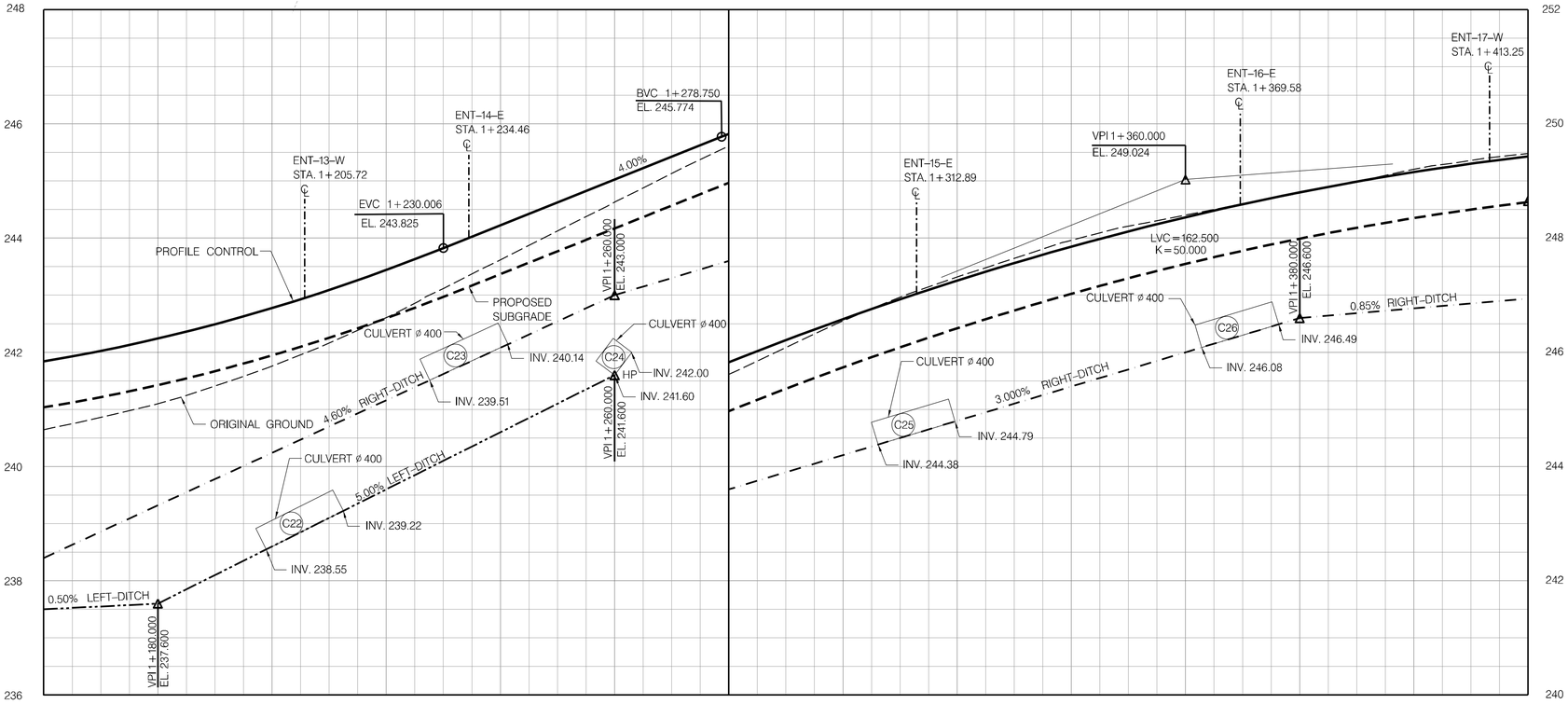
Region of Peel
Working for you

AIRPORT ROAD
PLAN AND PROFILE

(FROM STA. 0+880 TO STA. 1+160)

CAD Area	X-XX	Area	X-XX	Project No.	14-4030
Checked by	X-XX	Drawn by	G.P.		
Date	JULY 2018	Sheet	X of X	Plan No.	NC-003





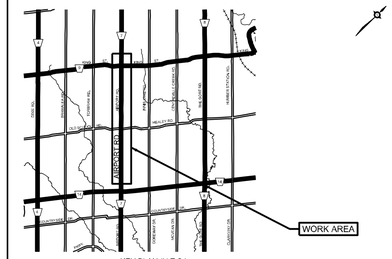
PROPOSED	241.841	242.241	242.774	243.441	244.224	245.024	245.824	246.579	247.254	247.849	248.364	248.799	249.154	249.429
EXISTING	240.645	241.101	241.759	242.608	243.618	244.630	245.612	246.547	247.317	247.961	248.402	248.788	249.203	249.478

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.



KEY PLAN (N.T.S.)

LEGEND:

LEFT DITCH

RIGHT DITCH

General Notes

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WS20 Proposed Water Service, Size In mm

B.M. No, Description Location — Elev.

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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

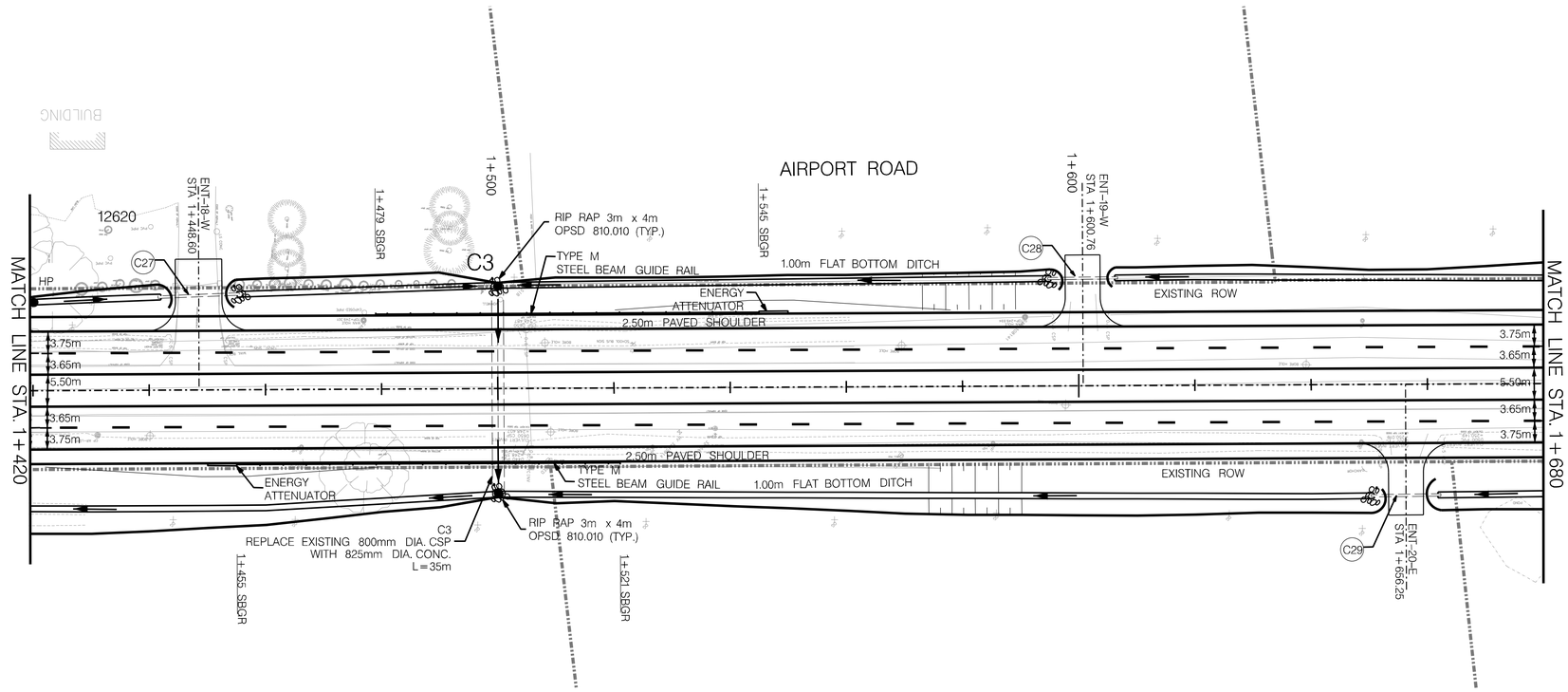
AIRPORT ROAD
PLAN AND PROFILE

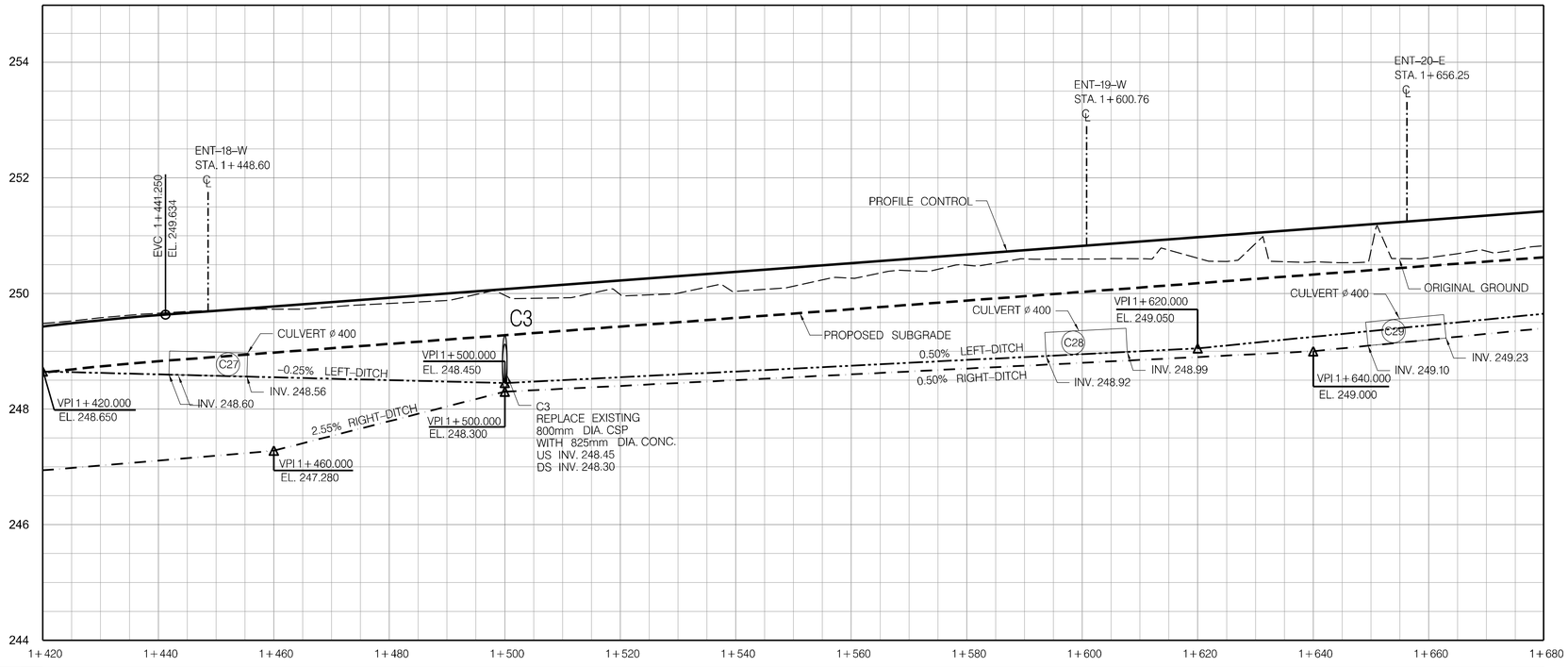
(FROM STA. 1+160 TO STA. 1+420)

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-004**





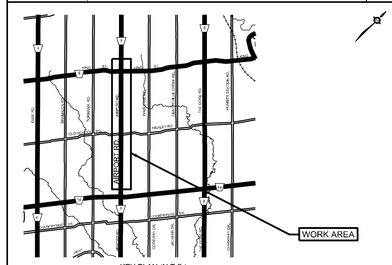
PROPOSED	249.429	249.624	249.774	249.924	250.074	250.224	250.374	250.524	250.674	250.824	250.974	251.124	251.274	251.424
EXISTING	249.478	249.656	249.726	249.826	249.969	249.981	250.038	250.264	250.491	250.595	250.611	250.546	250.618	250.824

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.



KEY PLAN (N.T.S.)

LEGEND:

LEFT DITCH

RIGHT DITCH

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

2OC Existing Water Service, Size In mm

WS20 Proposed Water Service, Size In mm

B.M. No. Elev.
Description
Location

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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
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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

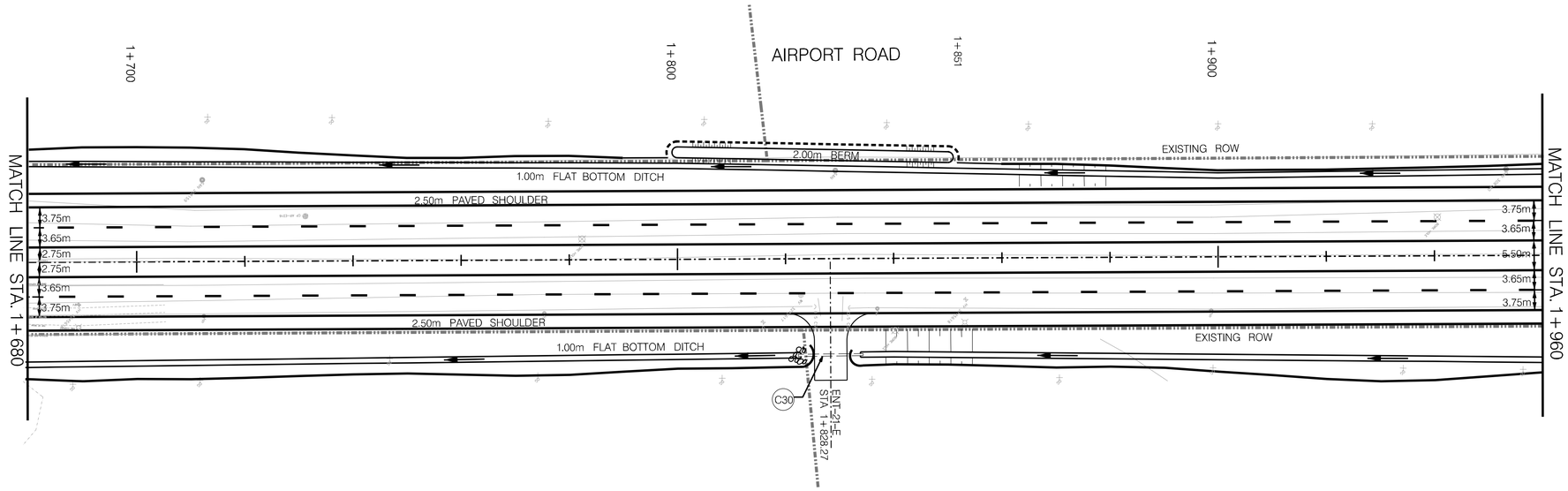
AIRPORT ROAD
PLAN AND PROFILE

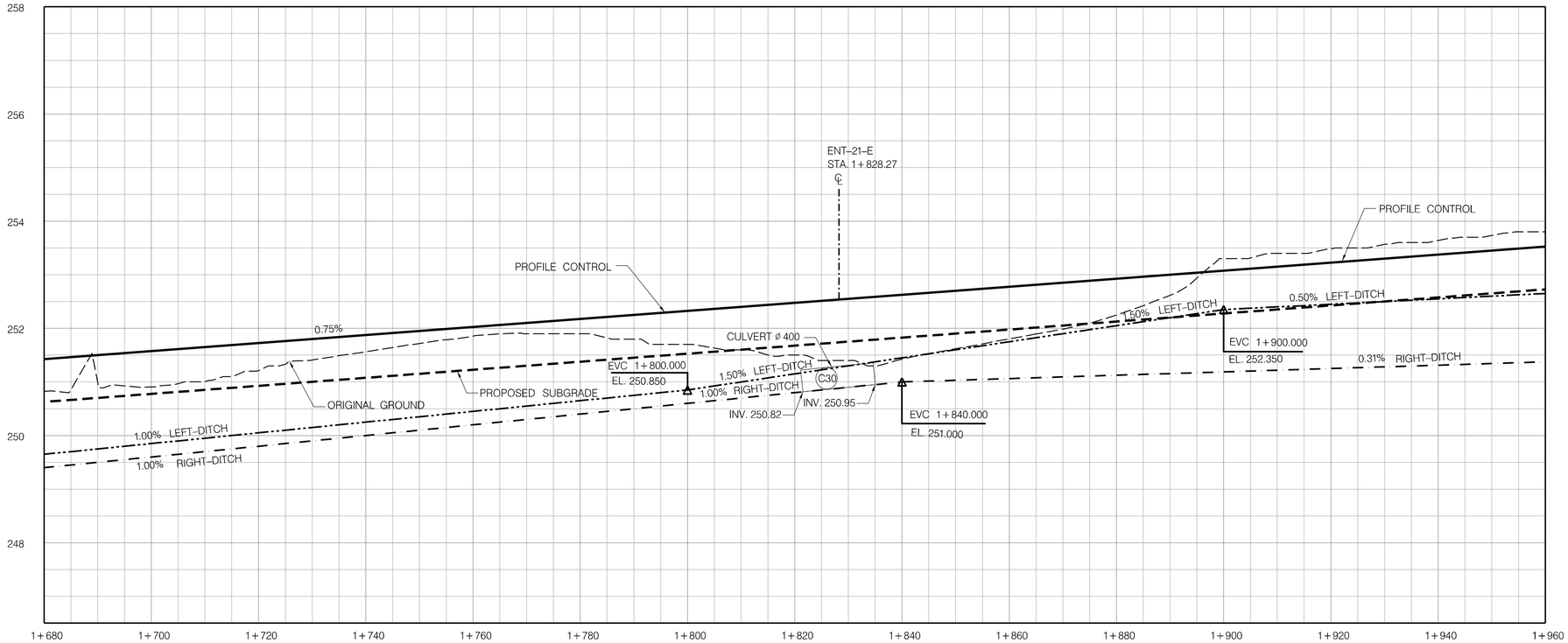
(FROM STA. 1+420 TO STA. 1+680)

CAD Area	X-XX	Area	X-XX
Checked by		Drawn by	G.P.
Date	JULY 2018	Sheet	X of X

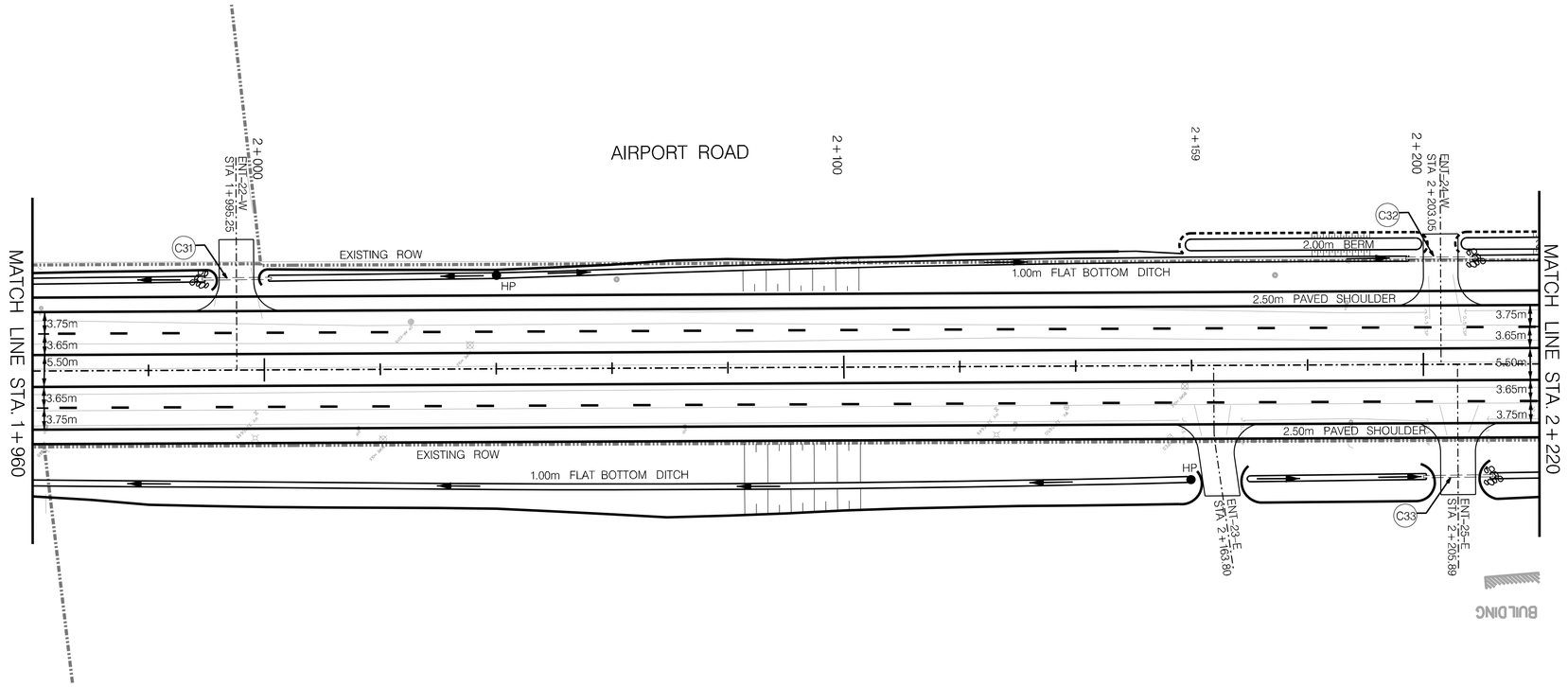
Project No. 14-4030

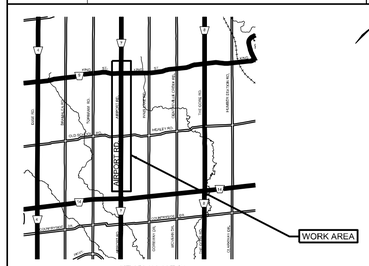
Plan No. **NC-005**


1+700
1+800
AIRPORT ROAD
1+851
1+900
MATCH LINE STA. 1+680
MATCH LINE STA. 1+960
EXISTING ROW
2.00m BERM
1.00m FLAT BOTTOM DITCH
2.50m PAVED SHOULDER
3.75m
3.65m
2.75m
2.75m
3.65m
3.75m
5.50m
2.50m PAVED SHOULDER
1.00m FLAT BOTTOM DITCH
EXISTING ROW
C30
ENT-21-E
STA 1+828.27


258
256
254
252
250
248
ENT-21-E
STA. 1+828.27
℄
PROFILE CONTROL
PROFILE CONTROL
0.75%
CULVERT ø 400
EVC 1+800.000
EL. 250.850
1.50% LEFT-DITCH
1.00% RIGHT-DITCH
(C30)
INV. 250.82
INV. 250.95
ORIGINAL GROUND
PROPOSED SUBGRADE
1.00% LEFT-DITCH
1.00% RIGHT-DITCH
EVC 1+840.000
EL. 251.000
1.50% LEFT-DITCH
0.50% LEFT-DITCH
EVC 1+900.000
EL. 252.350
0.31% RIGHT-DITCH
1+680
1+700
1+720
1+740
1+760
1+780
1+800
1+820
1+840
1+860
1+880
1+900
1+920
1+940
1+960

| | | |





KEY PLAN (N.T.S.)

PROPOSED	253.524	253.674	253.824	253.974	254.115	254.223	254.298	254.340	254.348	254.323	254.265	254.174	254.074	253.974
EXISTING	253.800	253.900	254.063	254.100	254.100	254.100	254.100	254.123	254.200	254.200	254.300	254.300	254.200	254.000

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.

LEGEND:

LEFT DITCH

RIGHT DITCH

General Notes

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All Pipes Size In mm

2OC Existing Water Service, Size In mm

WS20 Proposed Water Service, Size In mm

B.M. No. Elev.
Description
Location

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Designed by

Chkd.

Approved by

NOTICE TO CONTRACTOR

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CITY OF BRAMPTON WORKS DEPT.
TOWN OF CALEDON WORKS DEPT.
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ONTARIO MINISTRY OF TRANSPORTATION
ONTARIO CLEAN WATER AGENCY
HYDRO ONE NETWORKS
ENERSOURCE, HYDRO MISSISSAUGA
HYDRO ONE BRAMPTON

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ENERSOURCE TELECOM
HYDRO ONE TELECOM
ROGERS CABLE
ALLSTREAM
PSN (PUBLIC SECTOR NETWORK)
FUTUREWAY (FCI BROADBAND)

10m 0 10 20 30m — HORIZONTAL SCALE

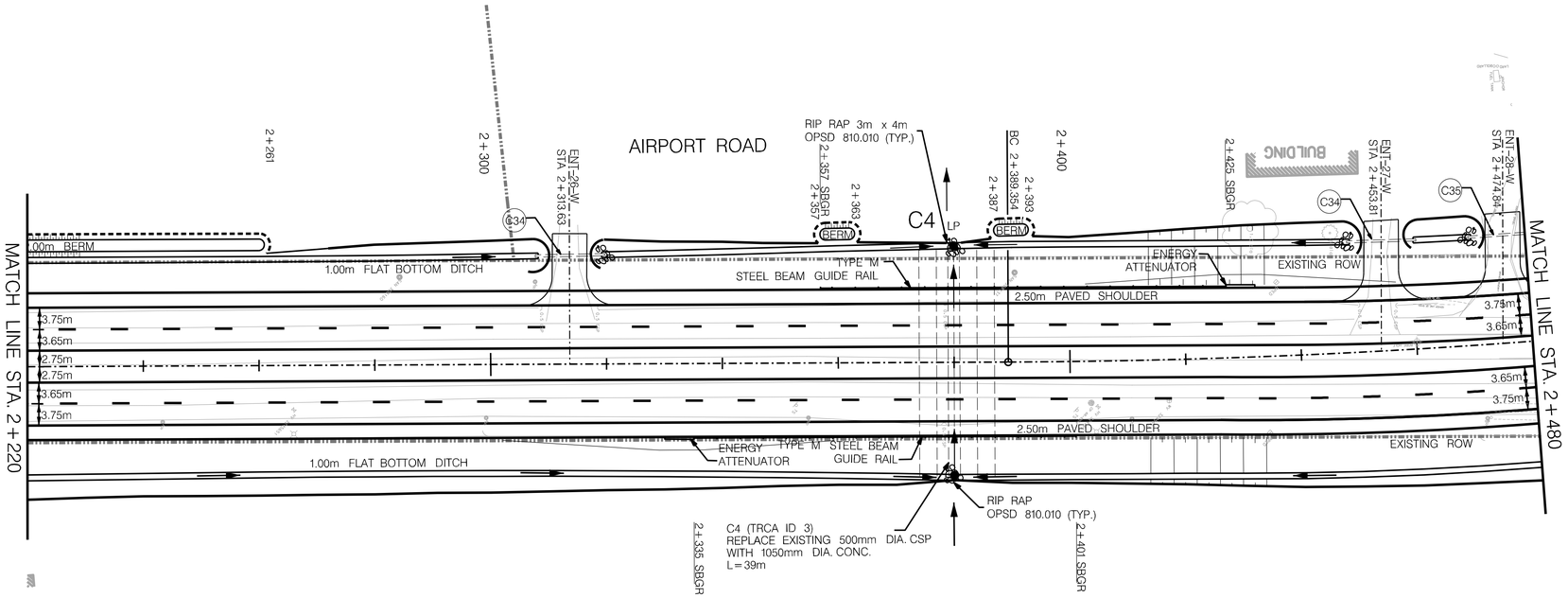
1m 0 1 2 3m — VERTICAL SCALE

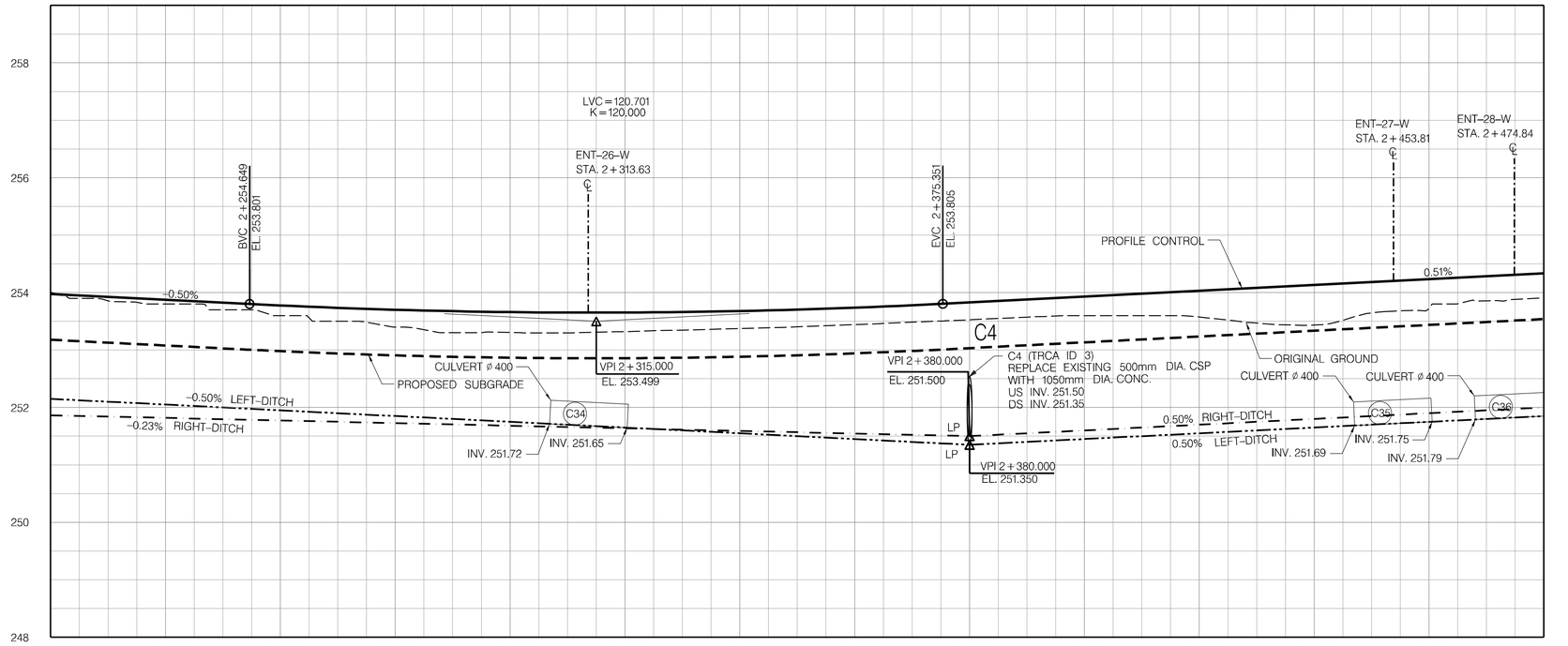
Region of Peel
Working for you

AIRPORT ROAD
PLAN AND PROFILE

(FROM STA. 1+960 TO STA. 2+220)

CAD Area	X-XX	Area	X-XX	Project No.	14-4030
Checked by		Drawn by	G.P.		
Date	JULY 2018	Sheet	X of X	Plan No.	NC-007





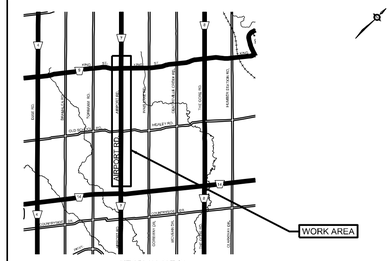
PROPOSED	253.974	253.874	253.776	253.701	253.660	253.652	253.678	253.737	253.828	253.929	254.031	254.132	254.233	254.334
EXISTING	254.000	253.800	253.600	253.400	253.305	253.320	253.373	253.441	253.526	253.600	253.576	253.434	253.726	253.907

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.



KEY PLAN (N.T.S.)

LEGEND:

LEFT DITCH

RIGHT DITCH

General Notes

All Driveways Are ASPHALT Unless Otherwise Noted

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All Pipes Size In mm

20C Existing Water Service, Size In mm

WS20 Proposed Water Service, Size In mm

B.M. No. Elev.
Description
Location

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Designed by

Chkd.

Approved by

NOTICE TO CONTRACTOR

48 HOURS PRIOR TO COMMENCING WORK NOTIFY THE FOLLOWING

THE REGIONAL MUNICIPALITY OF PEEL
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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

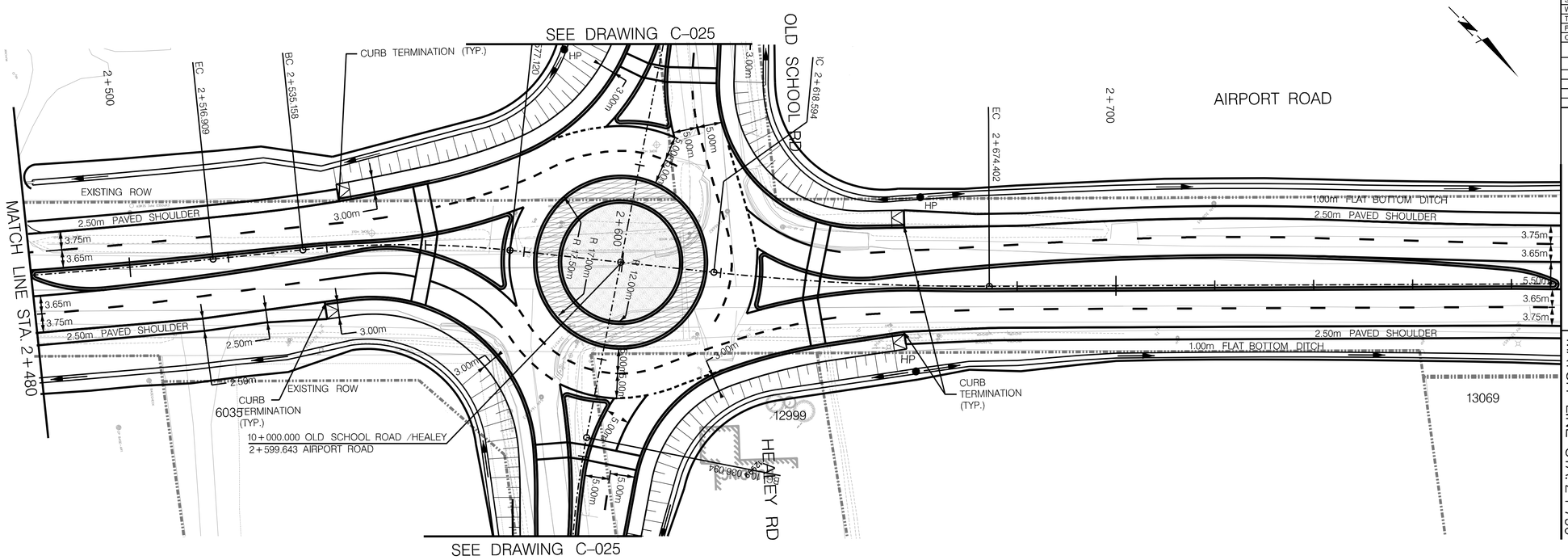
1m 0 1 2 3m VERTICAL SCALE

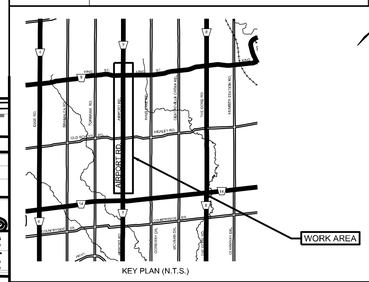
Region of Peel
Working for you

AIRPORT ROAD
PLAN AND PROFILE

(FROM STA. 2+220 TO STA. 2+480)

CAD Area	X-XX	Area	X-XX	Project No.	14-4030
Checked by		Drawn by	G.P.		
Date	JULY 2018	Sheet	X of X	Plan No.	NC-008





KEY PLAN (N.T.S.)

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.

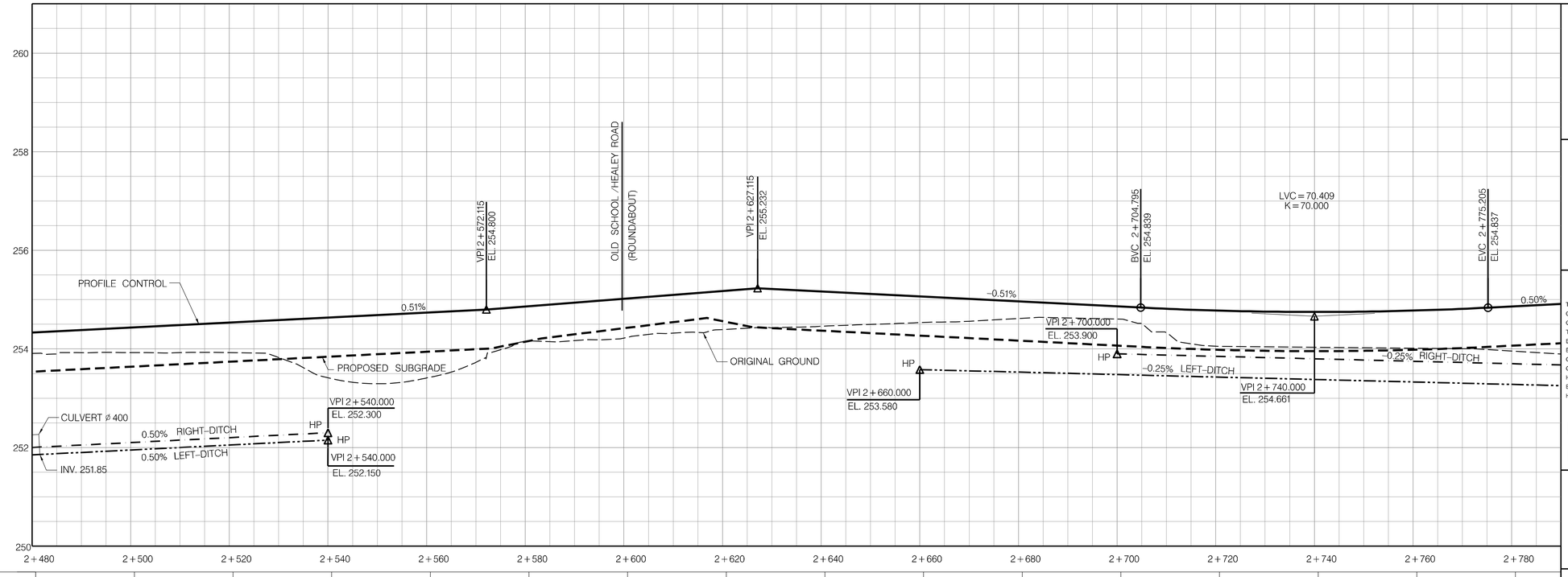
REVISIONS

DATE	DETAILS	INIT.
JULY 2018	ISSUED FOR 30% DESIGN REVIEW	T.P.
JAN 2019	ISSUED FOR 60% DESIGN REVIEW	T.P.

LEGEND:

LEFT DITCH

RIGHT DITCH



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

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All Pipes Size In mm

20C Existing Water Service, Size In mm

WS20 Proposed Water Service, Size In mm

B.M. No. Elev.
Description
Location

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

Approved by

Chkd.

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

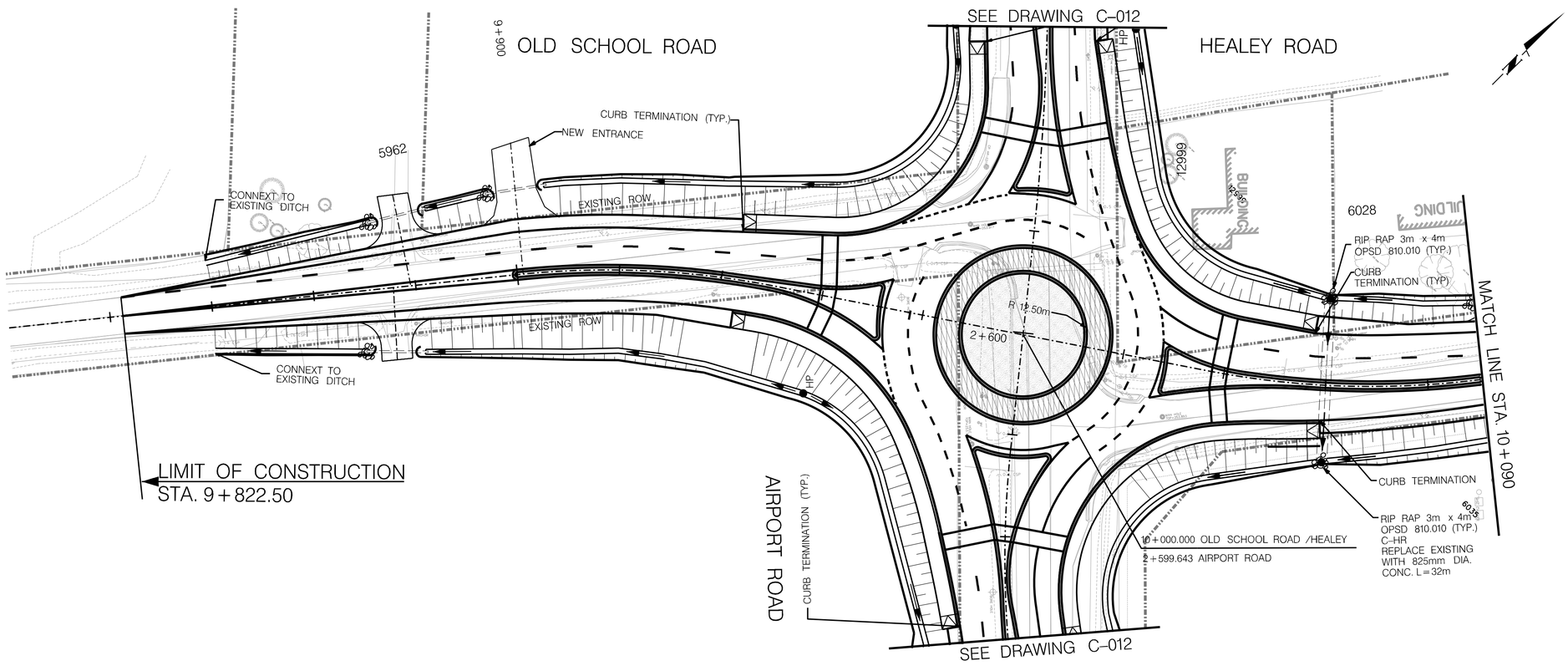
AIRPORT ROAD
PLAN AND PROFILE

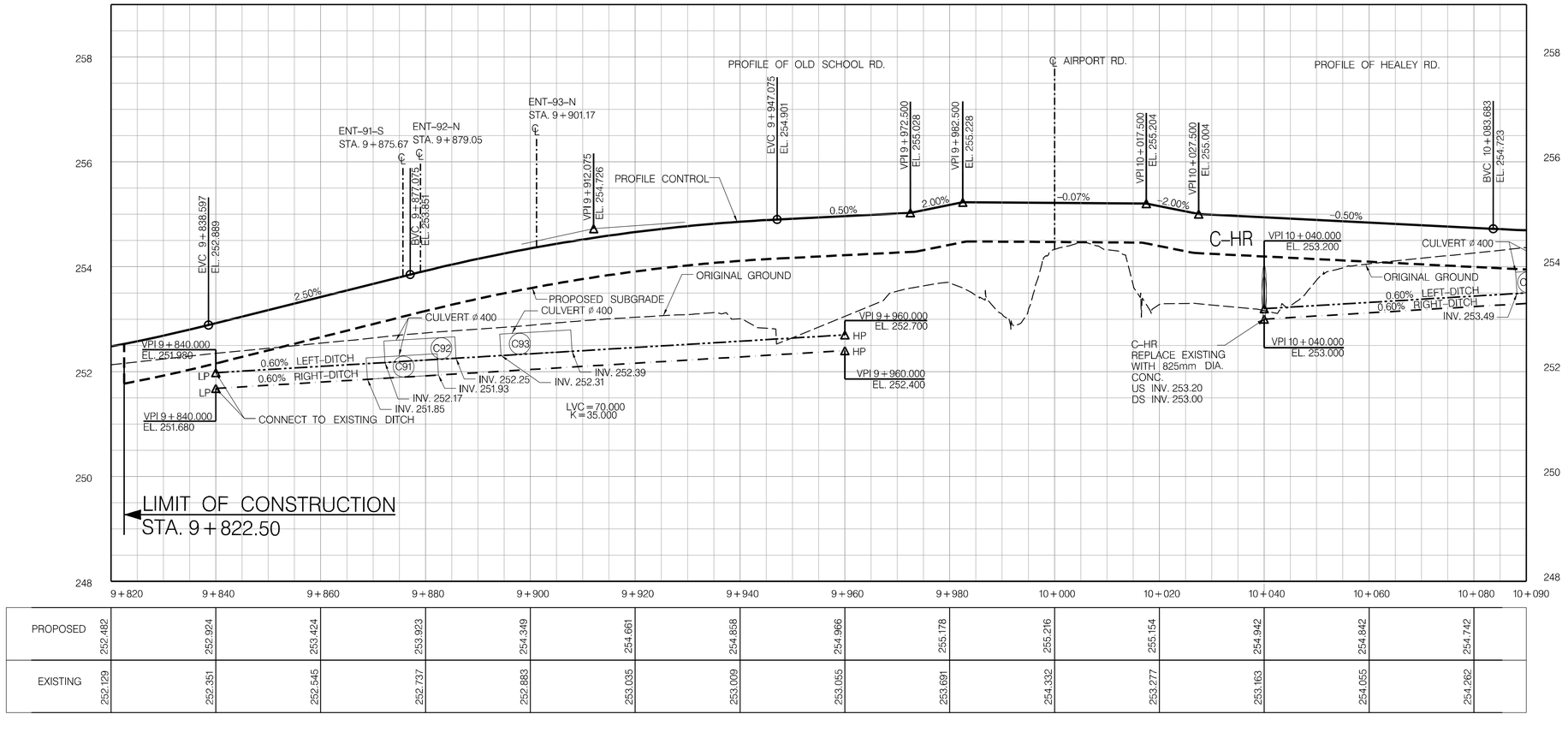
(FROM STA. 2+480 TO STA. 2+790)

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**





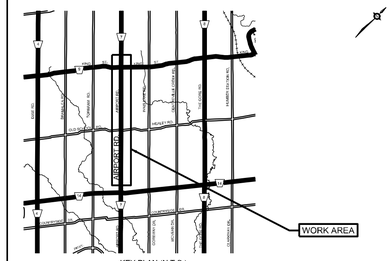
PROPOSED	252.482		252.924		253.424		253.923		254.349		254.661		254.858		254.966		255.178		255.216		255.154		254.942		254.842		254.742	
EXISTING	252.129		252.351		252.545		252.737		252.883		253.035		253.009		253.055		253.691		254.332		253.277		253.163		254.055		254.262	

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.



KEY PLAN (N.T.S.)

LEGEND:

LEFT DITCH

RIGHT DITCH

General Notes

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All Pipes Size In mm

20C Existing Water Service, Size In mm

WS20 Proposed Water Service, Size In mm

B.M. No. Elev.
Description
Location

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Designed by

Chkd.

Approved by

NOTICE TO CONTRACTOR

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ONTARIO CLEAN WATER AGENCY
HYDRO ONE NETWORKS
ENERSOURCE, HYDRO MISSISSAUGA
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CABLE TELEVISION/FIBREOPTIC PROVIDERS:
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ROGERS CABLE
ALLSTREAM
PSN (PUBLIC SECTOR NETWORK)
FUTUREWAY (FCI BROADBAND)

10m 0 10 20 30m HORIZONTAL SCALE

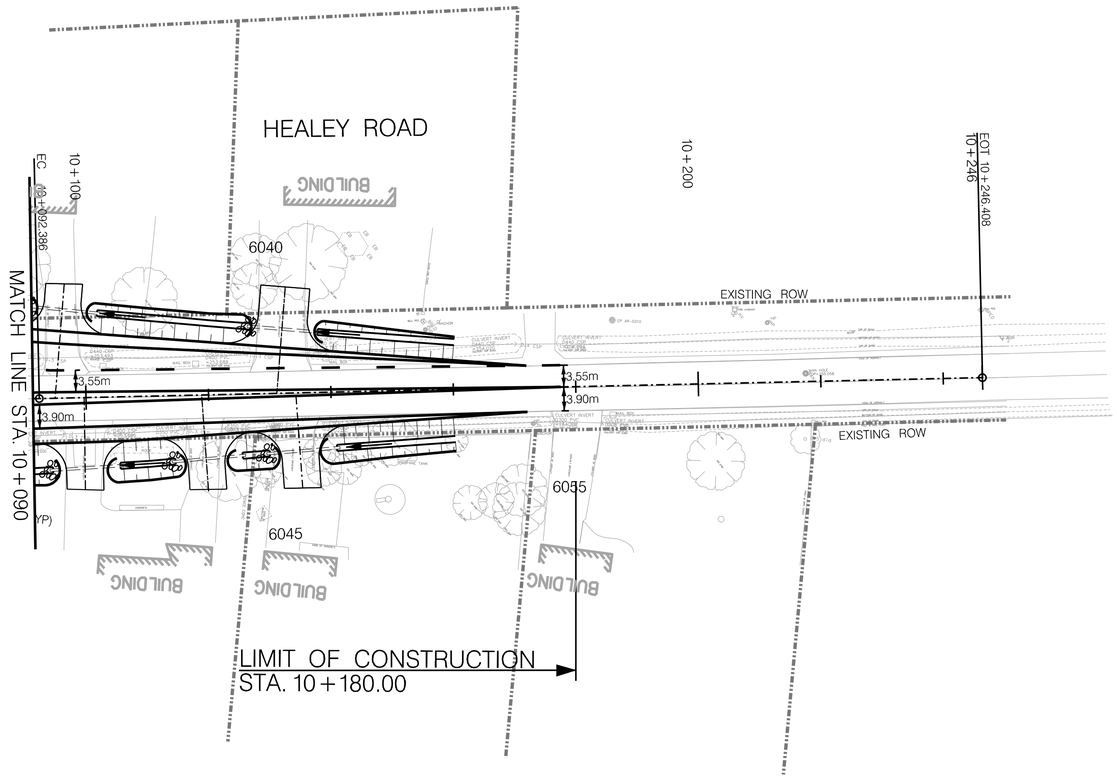
1m 0 1 2 3m VERTICAL SCALE

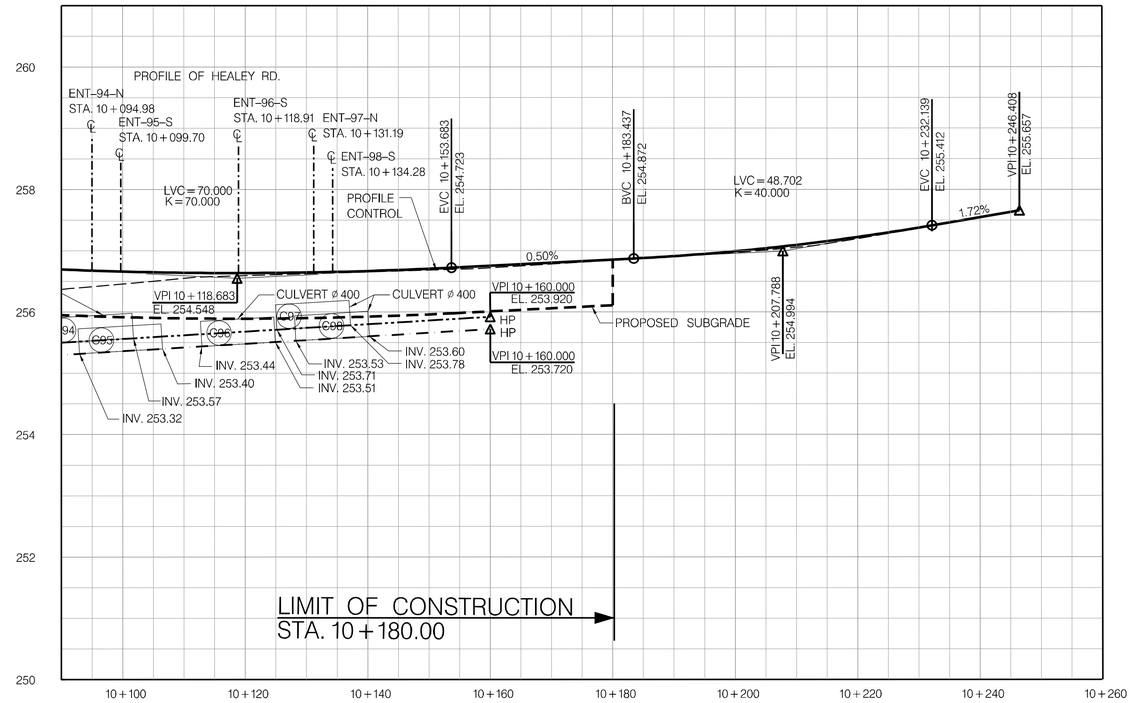
Region of Peel
Working for you

AIRPORT ROAD

PLAN AND PROFILE
OLD SCHOOL ROAD/HEALEY ROAD
(FROM STA. 9+820 TO STA. 10+090)

CAD Area	X-XX	Area	X-XX	Project No.	14-4030
Checked by		Drawn by	G.P.		
Date	JULY 2018	Sheet	X of X	Plan No.	NC-022





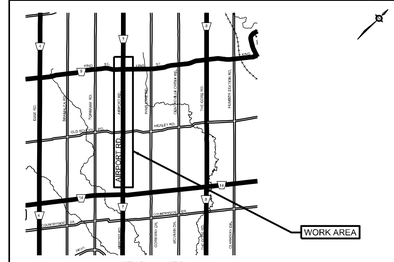
PROPOSED	254.661	254.636	254.668	254.755	254.855	254.989	255.222	255.547	
EXISTING	254.457	254.595	254.655	254.722	254.845	254.971	255.193	255.535	

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.



KEY PLAN (N.T.S.)

LEGEND:

LEFT DITCH

RIGHT DITCH

General Notes

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WS20 Proposed Water Service, Size In mm

B.M. No. Description Location — Elev.

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Designed by

Approved by

Chkd.

NOTICE TO CONTRACTOR

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CITY OF BRAMPTON WORKS DEPT.
TOWN OF CALEDON WORKS DEPT.
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ENBRIDGE INCORPORATED-GAS DISTRIBUTION
ONTARIO MINISTRY OF TRANSPORTATION
ONTARIO CLEAN WATER AGENCY
HYDRO ONE NETWORKS
ENERSOURCE, HYDRO MISSISSAUGA
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CABLE TELEVISION/FIBREOPTIC PROVIDERS:
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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

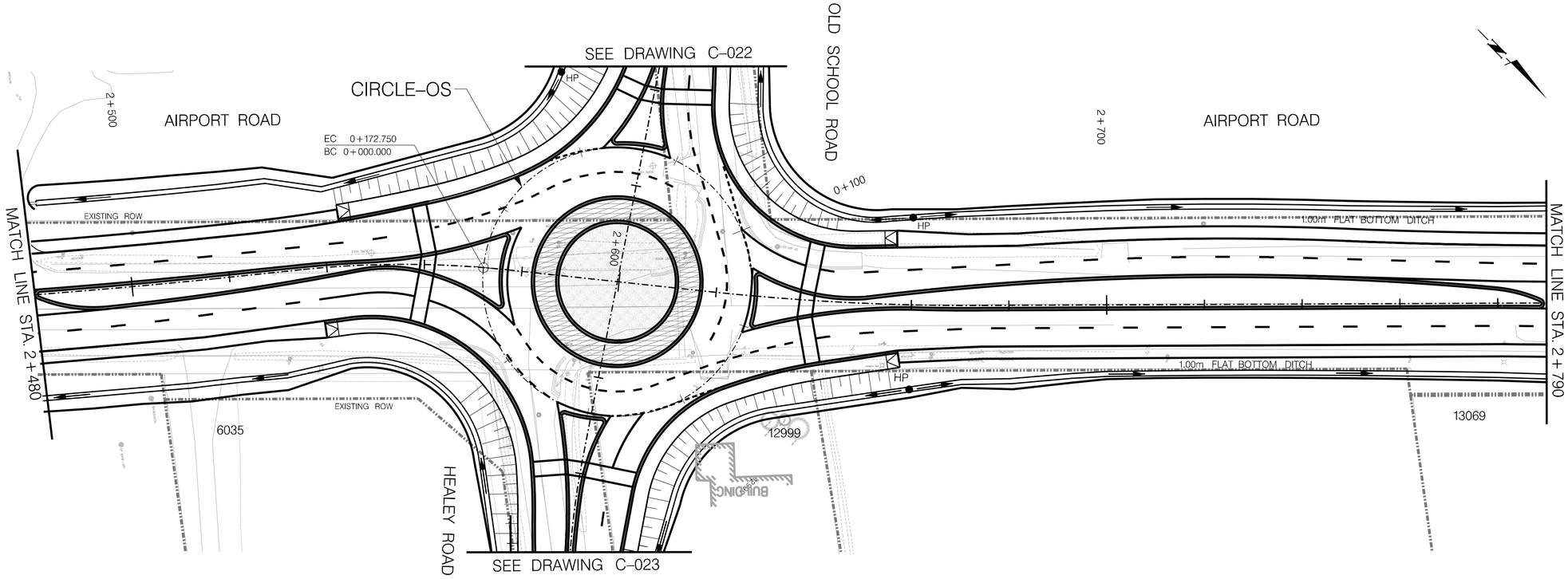
PLAN AND PROFILE
OLD SCHOOL ROAD/HEALEY ROAD

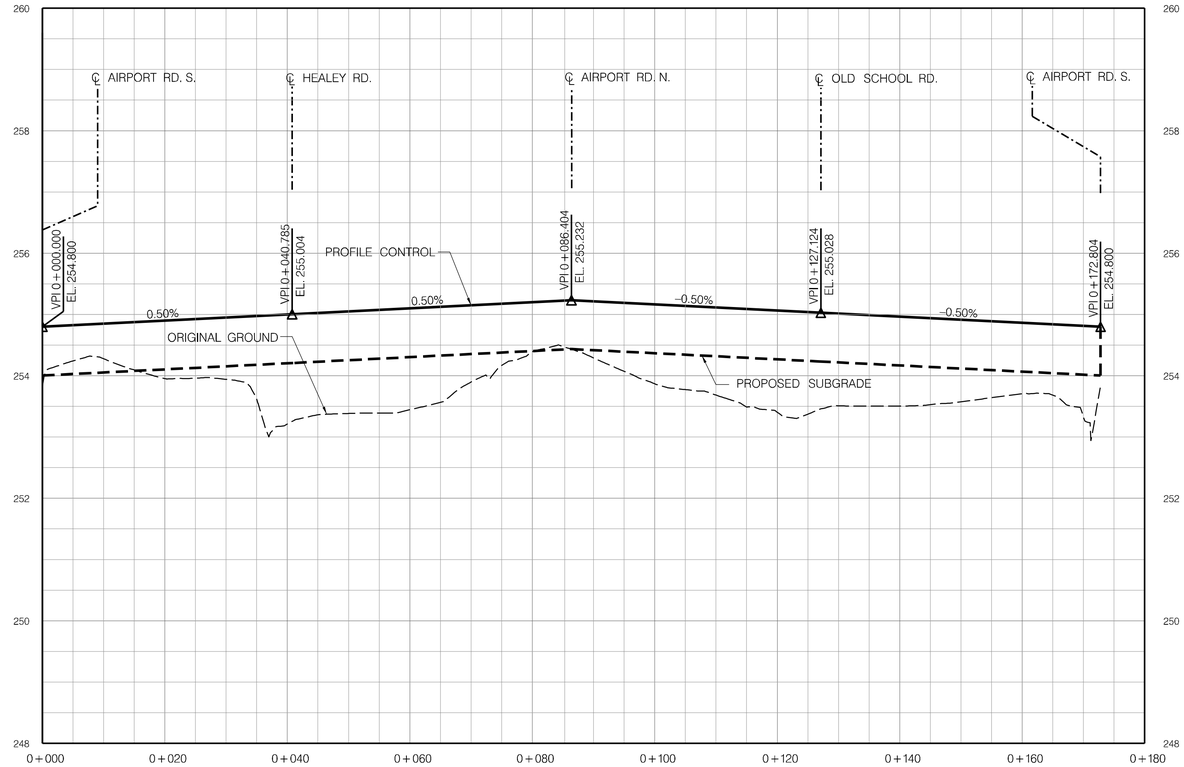
(FROM STA. 10+090 TO STA. 10+246.408)

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-023**





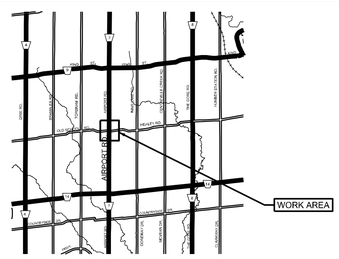
PROPOSED	254.800	254.900	255.000	255.100	255.200	255.164	255.064	254.964	254.864	254.801
EXISTING	253.827	253.954	253.211	253.445	254.395	253.868	253.404	253.505	253.708	

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.



KEY PLAN (N.T.S.)

General Notes

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B.M. No. Elev.
Description
Location

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Designed by

Chkd.

Approved by

NOTICE TO CONTRACTOR

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HYDRO ONE TELECOM
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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
ROUNDABOUT CIRCLE
AT AIRPORT ROAD AND OLD SCHOOL ROAD / HEALEY ROAD

CAD Area	X-XX	Area	X-XX	Project No.	14-4030
Checked by		Drawn by	G.P.		
Date	JULY 2018	Sheet	X of X	Plan No.	NC-026

Highway 413 is a proposed highway and transit corridor running through York, Peel and Halton Regions.

The Project includes the 52-kilometre (km) Highway 413 corridor, a 4 km extension to Highway 410, and a 3 km extension to Highway 427 (both facilitating connection to the Highway 413 corridor), for a total of 59 km of new infrastructure.

The highway will have 11 interchanges at municipal roads. Features such as service centres, carpool lots, truck inspection stations, and the potential for electric vehicle charging stations, have been explored as part of Preliminary Design.

The transitway will be a separate corridor running alongside the highway, dedicated for public transit, which will be subject to a separate Environmental Assessment (EA).

The Preferred Alignment

Highway 413 would extend from Highway 400, between King Road and Kirby Road, to the 401/407 ETR interchange near Mississauga, Milton and Halton Hills.

APPENDIX I:

E-W Collector Road Conceptual Design

LEGEND

- Road
- Watercourse (Fish Habitat)

Natural Features and Natural Hazards

- Occupied Redside Dace Habitat (Meander Belt +30m)
- Candidate Significant Wetland, NRSI
- Candidate Significant Wetland, GEI
- Unevaluated Wetland, NRSI
- Unevaluated Wetland, GEI
- Significant Valleyland (TRCA)
- Significant Valleyland (TRCA, MTE, GEI)
- Significant Woodland
- Non-Significant Woodland
- Flood Hazard (TRCA 2024)
- Meander Belt (Geo Morphix)
- Meander Belt (TRCA)
- Long Term Stable Top of Slope (MTE)

Natural Feature Buffers and Natural Hazard Setbacks

- Fish Habitat (Watercourse +15m)
- Unevaluated Wetland +15m
- Candidate Significant Wetland +30m
- Significant Valleyland +15m
- Woodland +10m
- Floodline +10m
- Meander Belt +10m

Proposed Natural Hazards and Setbacks

- Natural Heritage Features and Hazards
- Natural Heritage Features and Hazard Setbacks

ROAD ALIGNMENT IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE AS PART OF FUTURE DEVELOPMENT APPLICATIONS AND/OR DETAILED DESIGN WORK BY THE TOWN OF CALEDON

FUTURE ROAD ALIGNMENT WEST OF TORBRAM ROAD

E-W COLLECTOR ROAD

FUTURE EXTENSION EAST OF AIRPORT ROAD

100 0m 100 200

SCALE: 1:3000

NOTES:

1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM THIS OFFICE.
2. THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.
4. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
5. DO NOT SCALE DRAWINGS.
6. **THE E-W COLLECTOR ROAD ALIGNMENT OUTLINED HEREIN IS CONCEPTUAL AND SUBJECT TO CHANGE AS PART OF FUTURE DEVELOPMENT APPLICATIONS AND/OR DETAILED DESIGN BY THE TOWN OF CALEDON.**
7. ENVIRONMENTAL CONSTRAINTS PER 8-9 OF THE BROCCOLINI AIRPORT ROAD MESR.

No.	ISSUE	DATE: MM/DD/YYYY
0	ISSUED FOR 1st SUBMISSION	11/14/2025
1	ISSUED FOR 2nd SUBMISSION	04/29/2026

Engineer

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

Engineer

Project: 0 AIRPORT ROAD
TOWN OF CALEDON

Drawing: E-W COLLECTOR ROAD CONCEPTUAL LAYOUT

CROZIER CONSULTING ENGINEERS

Drawn By	Design By	Project
R.L.		2278-7228
Check By	Check By	Drawing
M.Y.	M.L.	FIG I1

APPENDIX J:

Background Development Excerpts

OCTOBER 15, 2025

PROJECT NO: 2022-5842

SENT VIA: EMAIL

Town of Caledon
6311 Old Church Road
Caledon, ON L7C 1J6

Attn: Dan Terzievski
Director, Transportation, Town of Caledon

Tong Wang, P.Eng.
Manger, Transportation Engineering, Town of Caledon

RE: TRANSPORTATION REVIEW LETTER – STREET C REMOVAL
TULLAMORE LANDS, TOWN OF CALEDON, REGION OF PEEL

Dear Dan and Emma,

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 Tullamore Lands industrial development located at 0 & 12245 Torbram Road in the Town of Caledon. The purpose of this Transportation Review Letter is to review transportation impacts associated with the potential removal of Street C (Meek Road) from the industrial subdivision. This removal would consequently result in a larger single reconfigured development block instead of the currently approved 2 separate blocks north and south of Street C.

The following submissions were previously prepared in support of the Proposed industrial subdivision:

- TIS (Crozier, June 2021)
- TIS Update (Crozier, December 2021)
- TIS Update (Crozier, April 2023)
- TIS Update (Crozier, October 2023)
- TIS Update (Crozier, April 2024)
- TIS Update (Crozier, April 2025)

The Draft Plan of Subdivision, approved on March 10, 2025, includes 8 industrial buildings and 3 collector roadways.

This Transportation Update Letter reviews the potential impacts of removing Street C from the Tullamore Lands Draft Plan of Subdivision to determine if it can be supported from a transportation perspective. This transportation assessment is inclusive of the following elements:

- Development Proposal
- Site Generated Traffic Review
- Traffic Operations Review
- Transportation Considerations

1.0 Development Considerations

The section herein reviews the development updates for consideration, in comparison to the previous submission (Crozier, April 2025).

1.1 Naming Conventions

The street names utilized in the previous submissions preceded the establishment of the planned street names outlined in the approved Draft Plan of Subdivision. While the planned street names reflect the actual street names that will be implemented upon Draft Plan buildout, for consistency with previous submissions, the Transportation Review Letter herein utilizes the street names utilized in the Transportation Impact Study Update(Crozier, April 2025).

Table 1 summarizes the street naming conventions used herein.

Table 1: Street Naming Conventions

Planned Street Name[1]	Designated Street Name[2]
Alban Road	Street A
Ionic Drive	Street B
Meek Road	Street C

Note 1: Per the approved Draft Plan of Subdivision.
Note 2: Per the previously submitted Transportation Impact Study Update (Crozier, April 2025).

Attachment 1 includes the previously approved Draft Plan of Subdivision, dated February 11, 2025.

1.2 Development Proposal

The approved Tullamore Lands Draft Plan of Subdivision comprises 8 industrial buildings, with 3 collector roadways. A revision to the approved Draft Plan of Subdivision, in the form of a full removal of Street C, is proposed for consideration. This change allows for Block 7 (Building E) and Block 8 (Building F) to be combined into a larger block, with the site access proposed off Street B.

Table 2 outlines the development proposal, in comparison to the previous submission.

Table 2: Development Proposal

Block	Building	Land Use	April 2025	October 2025
1[1]	Building A	Industrial Warehouse	104,443 m²	111,087 m² (+6,644 m²)
3	Building C		72,901 m²	72,901 m²
4[1]	Building D		90,933 m²	91,868 m² (+935 m²)
7[2]	Building E		89,493 m²	183,500 m² (+19,917 m²)
8[2]	Building F		74,090 m²	
5[1]	Building H		87,230 m²	87,144 m² (-86 m²)
2	Building I		26,979 m²	26,979 m²
	Building J		9,197 m²	9,197 m²
	Total		**555,266 m²**	**575,185 m² (+27,410 m²)**

Note 1: Updated based on the Site Plans for the submitted individual block Site Plan Applications.
Note 2: With the removal of Street C, Block 7 and Block 8 are expected to be combined into a singular block with a larger total gross floor area. The gross floor area is assumed to be 50% of the lot size.

With the removal of Street C, as well as accounting for changes in development yield based on the submitted individual block Site Plan Applications, an increase of 27,410 m² in industrial warehouse gross floor area is expected, in comparison to the previous submission (Crozier, March 2025).

Attachment 2 includes the previously submitted Site Plans, prepared by Turner Fleisher.

2.0 Site Generated Traffic Review

2.1 Zonal Distribution

Consistent with the previous submission (Crozier, March 2025), the buildings were assigned to different zones for the purpose of trip distribution purposes. **Table 3** outlines the transportation zones.

Table 4: Site Trip Generation

Zone	Building	Land Use	GFA (ft²)	Weekday A.M.[1]			Weekday P.M.[1]		
				In	Out	Total	In	Out	Total
Vehicle									
1	Building A	Warehouse	1,195,740	129	38	167	48	122	170
2	Building D		988,867	110	33	142	41	105	145
	Building H		938,018	105	31	136	39	100	139
3	Building C		784,706	91	27	118	34	87	121
4	Building I		290,402	45	13	58	17	44	61
	Building J		98,997	27	8	35	11	28	39
5	New Building[2]		1,975,194	201	60	261	74	190	264
Total				**706**	**211**	**917**	**263**	**676**	**938**
Passenger Car									
1	Building A	Warehouse	1,195,740	103	31	134	38	98	136
2	Building D		988,867	88	26	114	33	84	116
	Building H		938,018	84	25	109	31	80	111
3	Building C		784,706	73	22	94	27	69	97
4	Building I		290,402	36	10	46	14	35	49
	Building J		98,997	22	6	28	9	22	31
5	New Building[2]		1,975,194	161	48	209	59	152	211
Total				**567**	**169**	**734**	**210**	**541**	**751**
Truck									
1	Building A	Warehouse	1,195,740	26	7	33	10	24	34
2	Building D		988,867	22	7	28	8	21	29
	Building H		938,018	21	6	27	8	20	28
3	Building C		784,706	18	5	24	7	18	24
4	Building I		290,402	9	3	12	3	9	12
	Building J		98,997	5	2	7	2	6	8
5	New Building[2]		1,975,194	40	12	52	15	38	53
Total				**140**	**41**	**183**	**54**	**135**	**188**

Note 1: Rounding may cause appearance of minor discrepancies.
Note 2: With the removal of Street C, Block 7 and Block 8 are expected to be combined into a singular block with a larger total gross floor area. The gross floor area is assumed to be 50% of the lot size.

Following the removal of Street C and as well as the updated development yield based on the individual block Site Plan Applications, the Proposed Development is expected to generate 917 and 938 two-way vehicle trips during the weekday a.m. and p.m. peak hours, respectively. The vehicle trips are inclusive of passenger car and truck trips.

2.3 Trip Distribution

As there are no changes to the external study road network gateways, the trip distribution remains unchanged, in comparison to the approved TIS (Crozier, March 2025).

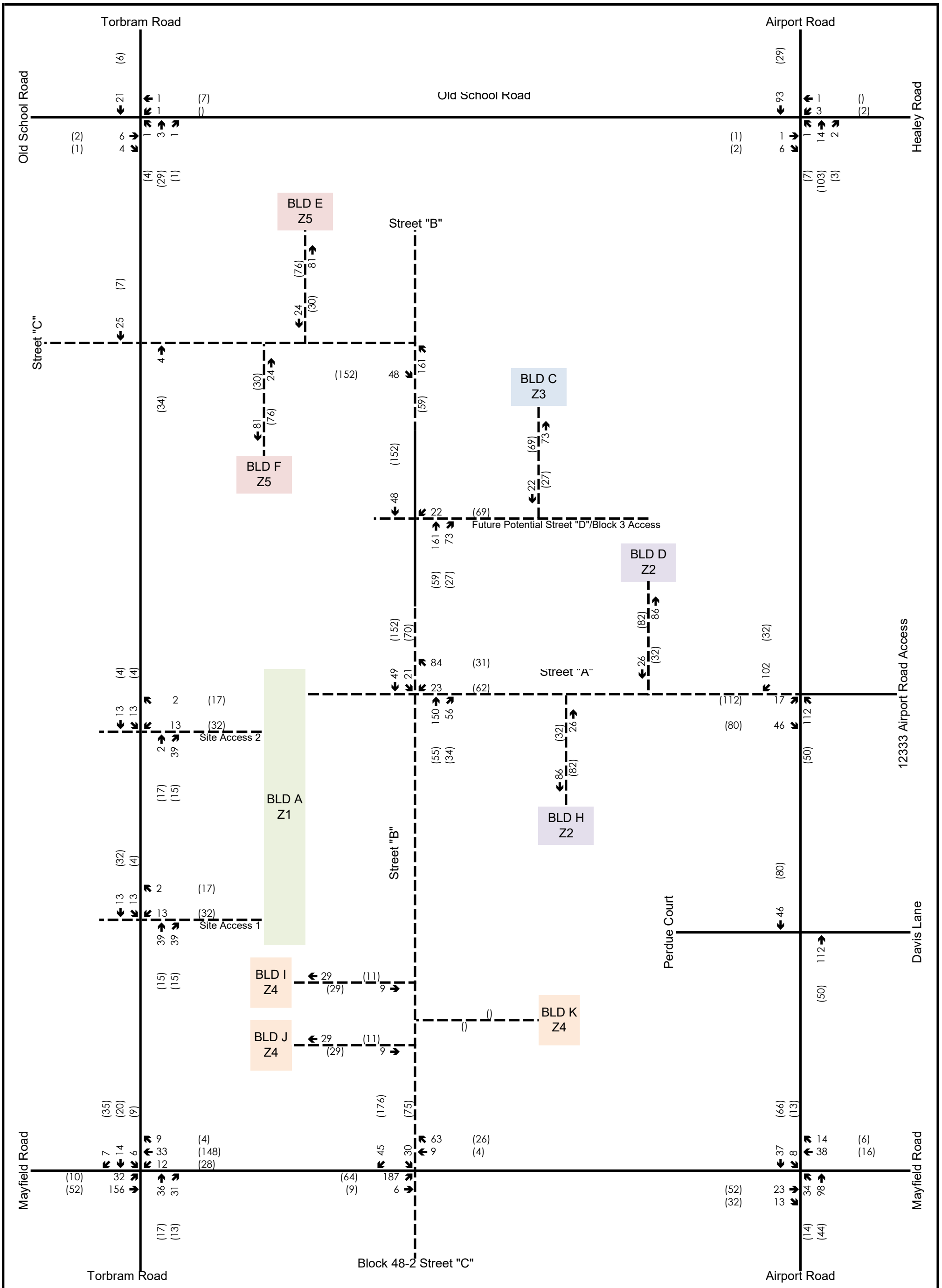
Attachment 3 includes the previous submission excerpts.

2.4 Trip Assignment

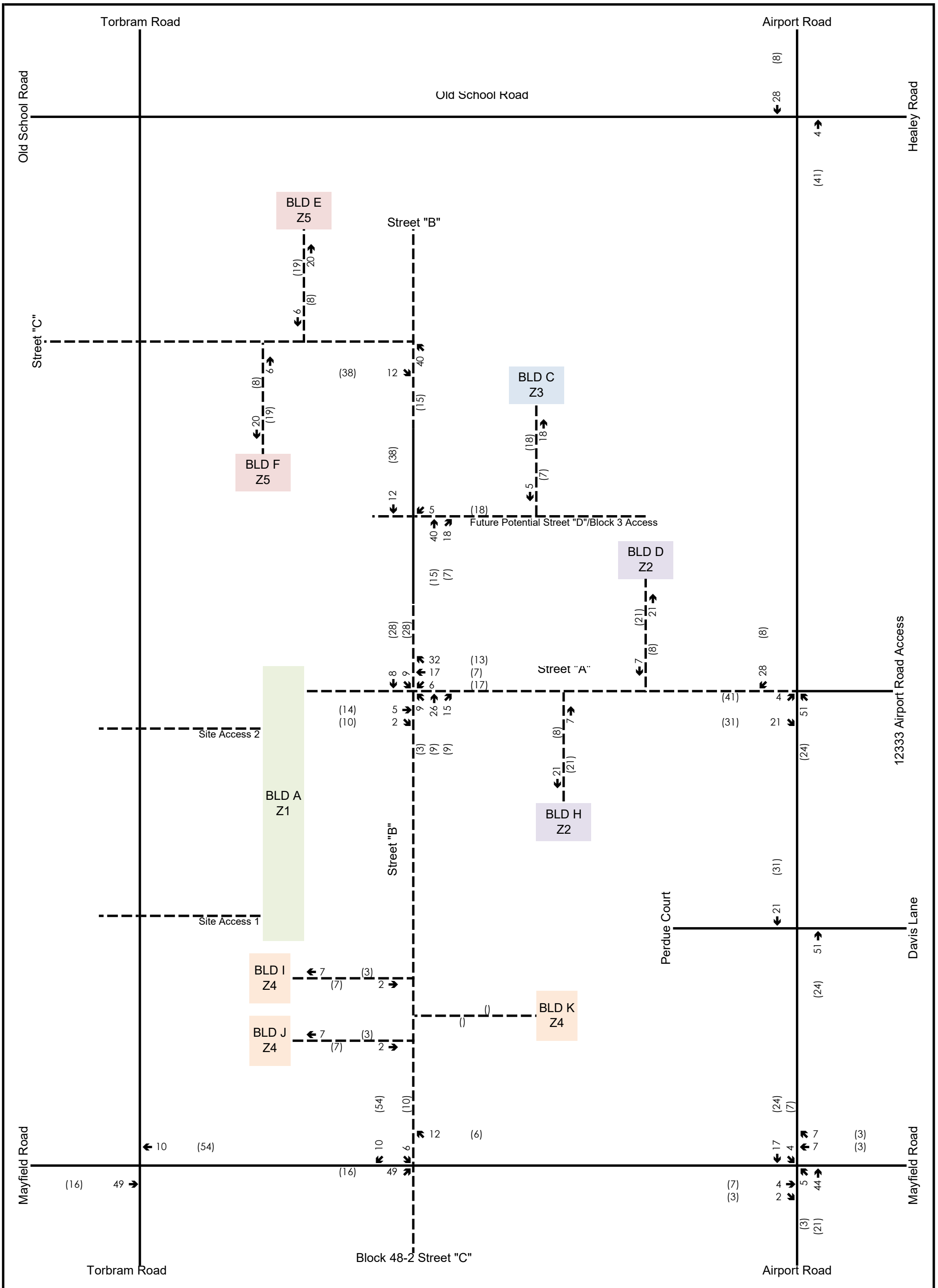
The site generated trips were assigned to the study road network based on the trip distribution outlined in the previous submission (Crozier, March 2025), accounting for the removal of Street C.

Given that the only external roadways expected to be used by truck trips are Mayfield Road and Airport Road, as well as the proposed internal collector road network, the truck trips are not expected to be impacted by the removal of Street C.

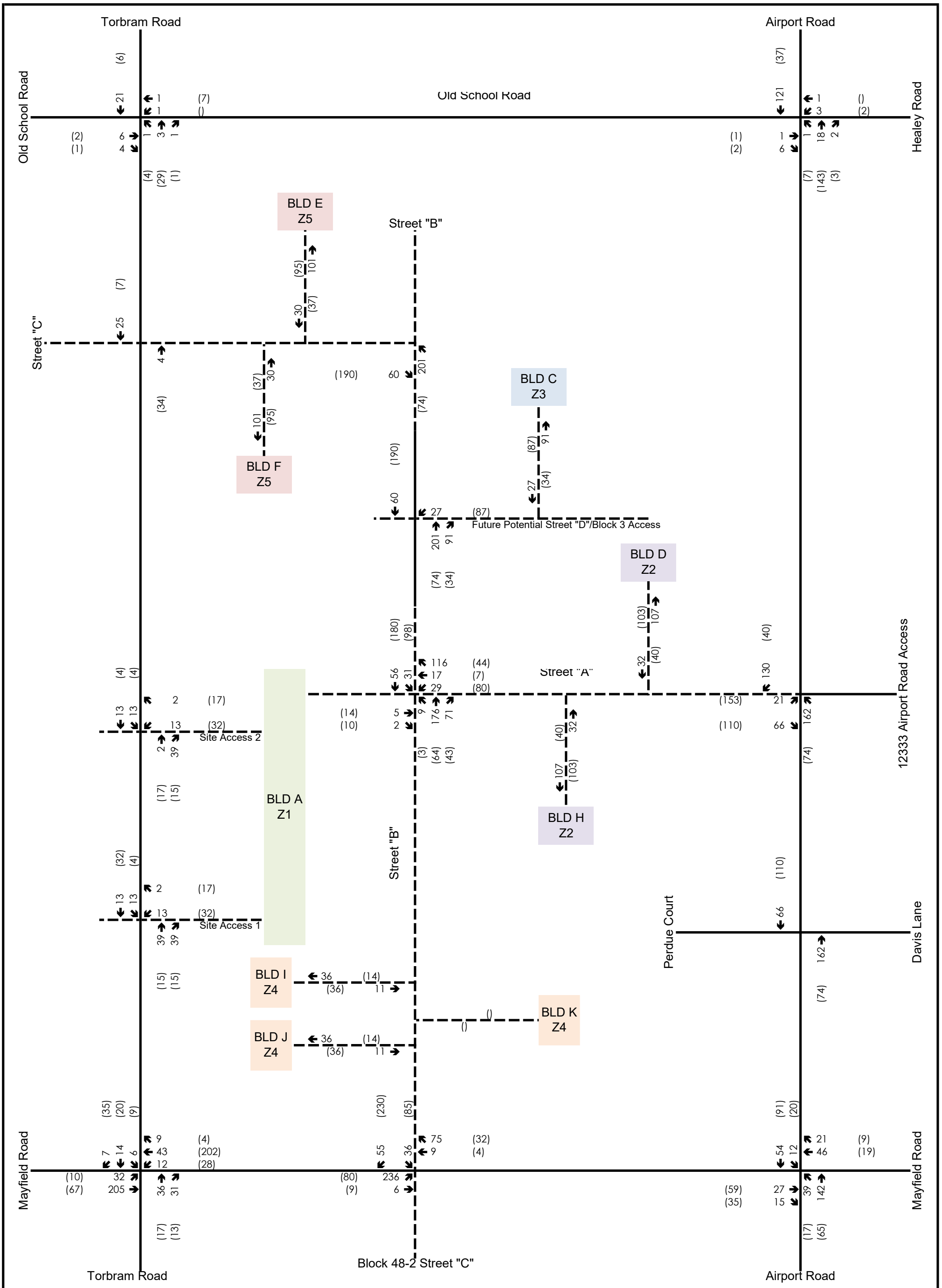
The trip assignment for the site generated trips was updated due to the proposed removal of Street C. **Figure 1**, **Figure 2**, and **Figure 3** illustrates the passenger car, truck and total site traffic volumes, respectively.



Legend	Tullamore Industrial	CROZIER CONSULTING ENGINEERS	Figure 1
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 2
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 3
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

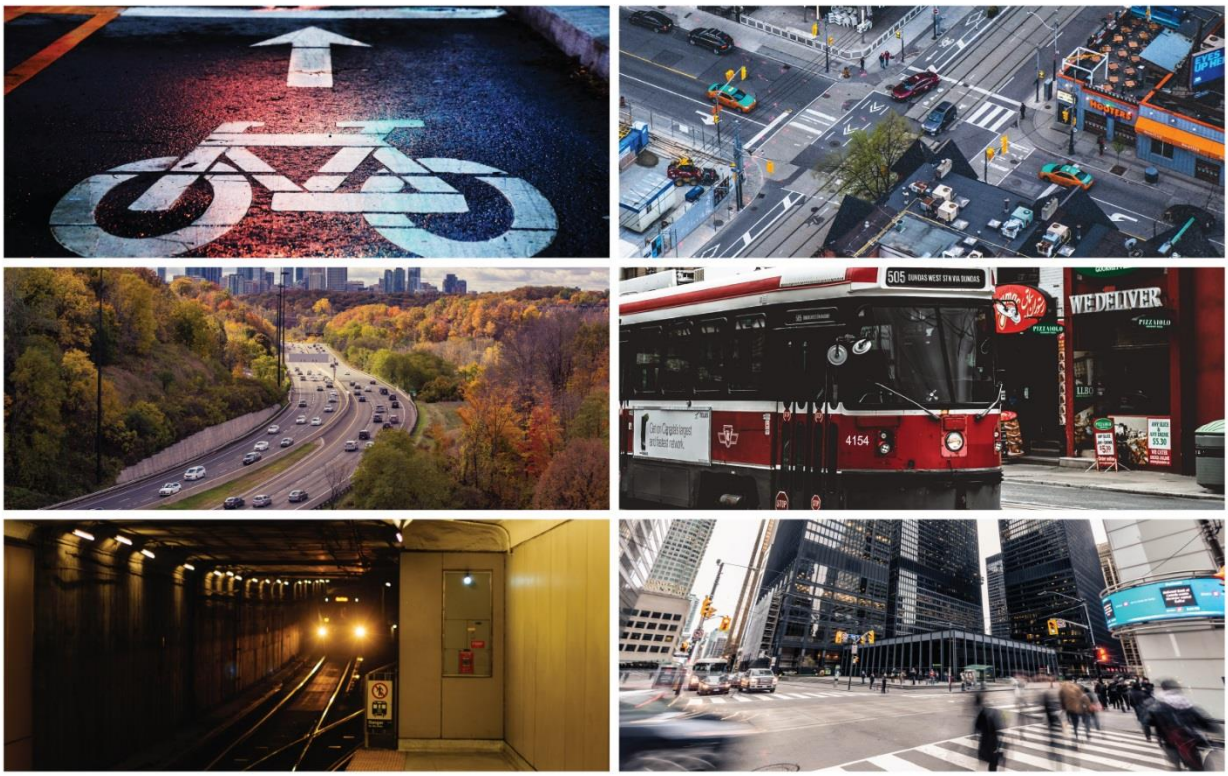
TOWN OF CALEDON
PLANNING
RECEIVED
July 30, 2021

AIRFIELD DEVELOPMENTS INC. & AIRFIELD II DEVELOPMENTS INC.

6034 MAYFIELD ROAD

TRANSPORTATION IMPACT STUDY AND DEMAND MANAGEMENT PLAN

JULY 29, 2021



1 INTRODUCTION

WSP was retained by Airfield Developments Inc. and Airfield II Developments Inc. to undertake a Transportation Impact Study (TIS) for the proposed development located at the northeast quadrant of the intersection of Airport Road & Mayfield Road in the Town of Caledon. **Figure 1.1** illustrates the site location and context.

The development proposal will consist of two industrial buildings with a combined gross floor area (GFA) of 44,535 m^2.

The development will have three vehicular driveways onto Airport Road and Mayfield Road, one of which will be a full-moves access.

Figure 1.2 illustrates the proposed site plan.

wsp

Figure 1.1

Site Location and Context

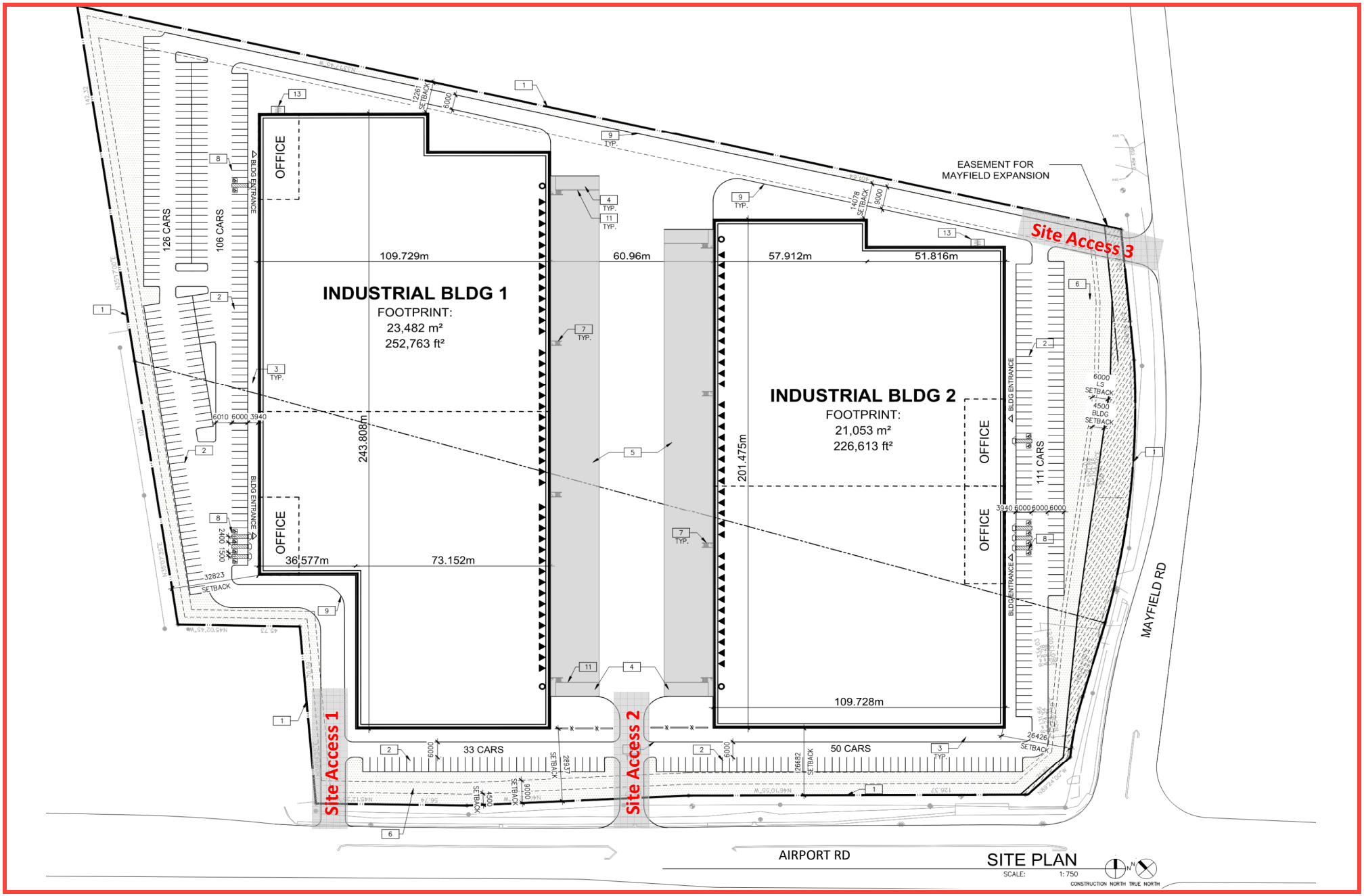


Figure 1.2

Proposed
Site Plan

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.

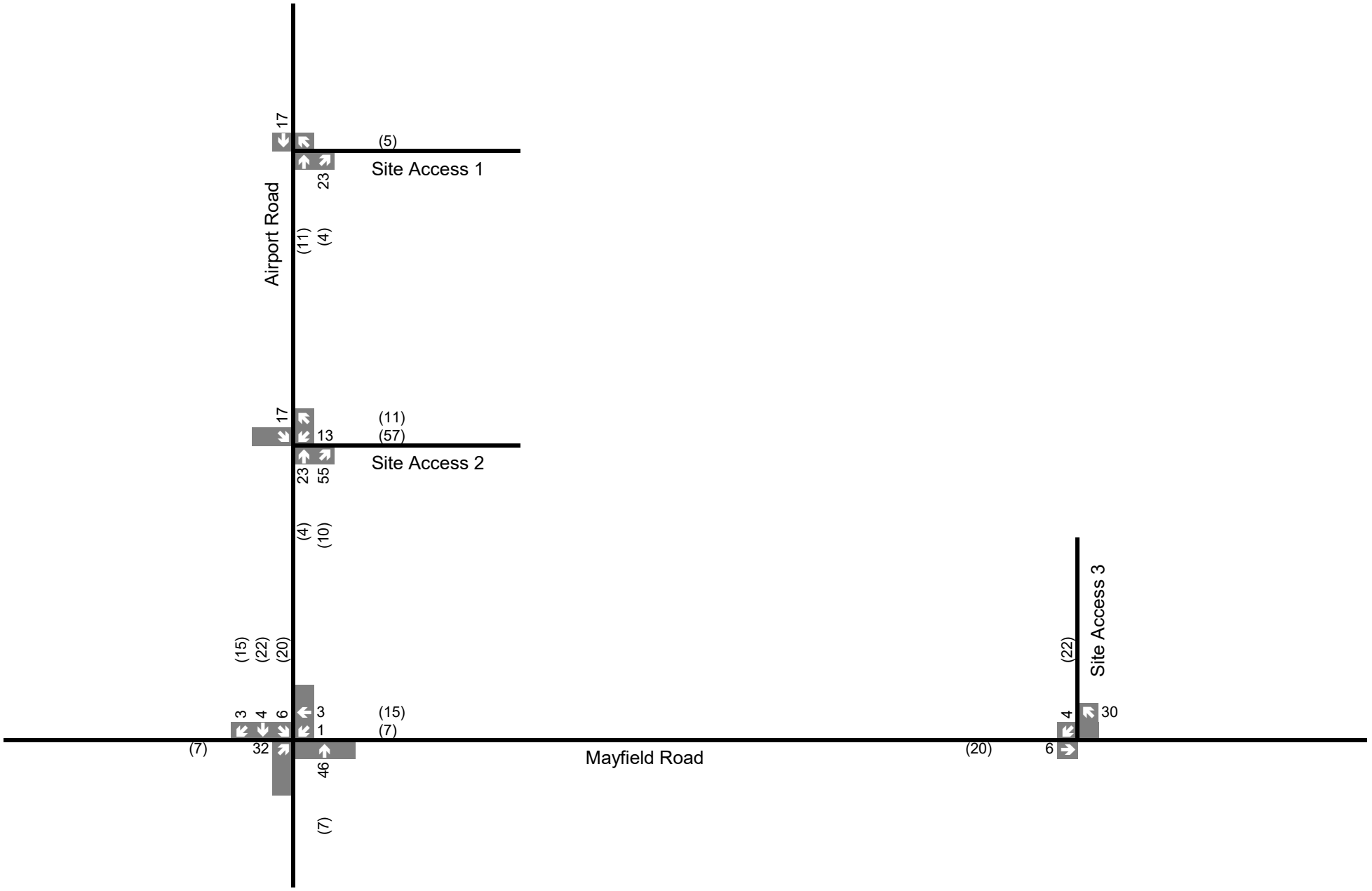
4.3 TRIP DISTRIBUTION AND ASSIGNMENT

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

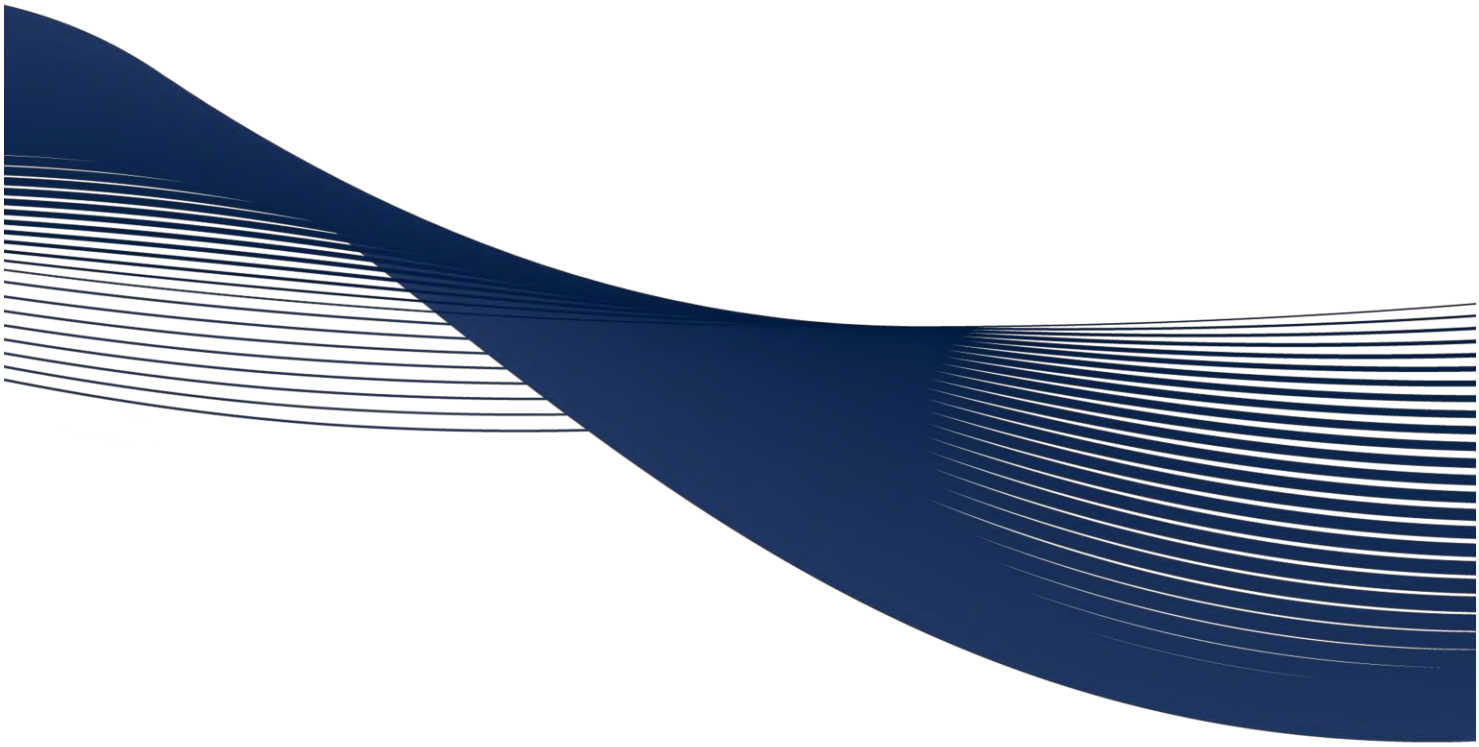
Site Generated Traffic Volumes

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

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1 Introduction

Cole Engineering Group Ltd. (Cole Engineering) was retained by Brampton Area 48 Landowners Group Inc. (the "Owner") to undertake a revised Traffic Impact Study for the proposed Block 48-2 development: a 315 hectare area bounded by Bramalea Road to the west, Countryside Drive to the south, Mayfield Road to the north, and Airport Road to the east, in the City of Brampton (the "City"). The site location is shown in **Figure 1-1**, following the Report.

The Block 48-2 Council Approved Block Plan is shown in **Figure 1-2**, following the Report. The proposed block plan will include 3,391 low to medium density residential developments, 22.59 ha of institutional lands including three (3) elementary schools, two (2) secondary schools and two (2) worship places, and 14.43 ha of commercial / retail lands including district retail, mixed use and convienience commercial lands. The breakdown pertaining to the proposed land uses is summarized in **Table 1.1** below.

Table 1.1 Site Statistics

Land Use	Components	Completion Date
Single Detached Residential	1,723 Units	2021
Semi-detached Residential	240 Units	2021
Townhouse	1,208 Units	2021
Apartment	220 Units	2021
District Retail	9.34 ha	2021
Mixed Use	4.09 ha	2021
Conv. Commercial	1.00 ha	2021
Institutional	3 Elementary Schools, 2 Secondary Schools and 2 Places of Worship (22.59 ha)	2021

Note: The full build-out horizon was provided by the Brampton Area 48 Landowners Group.

1.1 Background

Block 48-2 is part of the larger Countryside Villages Secondary Plan Area 48 (Secondary Plan), which is bounded by Heart Lake Road, Mayfield Road, Airport Road and Countryside Drive. Transportation policies regarding the Secondary Plan are in the City's *Office Consolidation Secondary Plan Area 48 – Countryside Villages Secondary Plan*. The Secondary Plan policy includes intended road facilities and functions, which according to the policy is to be further refined at the Block Plan stage of approval and further refined at the subdivision stage of approval. The purpose of the Traffic Impact Study is to confirm, identify and recommend road improvements to accommodate traffic needs related to the proposed development for Block 48-2. This includes the following activities:

- Review and assess the existing traffic condition;
- Estimate and project future traffic volumes related to growth and developments within the Study Area for the 2021 and 2031 time horizons; and,
- Review and assess future traffic operations given the traffic forecast, with and without the proposed development.

- Multi-use trails or similar walking / cycling paths to / from the four (4) elementary schools and one (1) secondary school from every adjacent residential neighbourhood.

Figure 3-7 illustrates the pathway and trails proposed by the City Transportation Master Plan – Technical Report 5 (Active Transportation report). It also illustrates the additional inter-block pathways and trails recommended in this Study.

3.5 Transit Network

As confirmed by Brampton Transit, the ultimate transit service strategy for Block 48-2 has been determined and illustrated in **Figure 3-8**, following the Report. In this transit service strategy, the primary corridor routes will be extended aligned to the arterial roads to extend the "base grid" philosophy of the transit network to this area. The proposed transit routes will provide transit availability to the future proposed residential areas and the proposed school locations. The proposed ultimate transit routes are as follows:

- Route 15 Bramalea extension;
- Route 14 Tobram extension;
- Route 30 Airport Road extension;
- Future Mountainash / Inspire Boulevard Local Route;
- Future Route 12 Grenoble extension; and,
- Future Countryside Drive route.

Figure 3-8 also illustrates the proposed bus stop locations. The potential stop locations were determined after consultation with Brampton Transit based on balancing maximizing route coverage and minimizing walk distance to attract people to use public transit. As shown on Figure 3-8, the proposed bus stop locations are within a 400m walking distance of most uses in the community.

Interim transit service will be provided at the discretion of Brampton Transit as the area is gradually developed and occupied. The implementation time of the transit services will depend on the development pace and the provision of necessary infrastructure required to support regular transit operations. The associated transit stop locations will be established through subdivision applications submitted to Brampton Transit.

3.6 Trip Generation (Block 48-2 Traffic Volumes)

Block 48-2 will include 3,391 low to medium density residential developments, 22.59 ha of institutional lands including three (3) elementary schools, two (2) secondary schools and two (2) worship places, and 14.43 ha of commercial / retail lands including district retail, mixed use and convienience commercial lands. The district retail and worship uses have been assessed as part of separate traffic impact studies and thus are included in this study as background developments. The trip generation for the remaining area was undertaken using information contained in the *Trip Generation, 9th Edition* published by the Institute of Transportation Engineers (ITE) and is summarized in **Table 3.4** on the following page.

A 6% transit / active transportation mode reduction was applied based on the Countryside Villages Secondary Plan Study and is consistent with the transit / active transportation mode reductions in the Block 48-1 Traffic Impact Study. The 6% transit / active transportation mode reduction accounts for trips that will be taken through active transportation modes such as walking / cycling or through transit use. For further details on active transportation, refer to **Section 3.4**.

Table 3.4 Site Trip Generation (New Site Statistics)

Land Use	ITE Land Use Code	Parameter	WEEKDAY AM Peak Hour			WEEKDAY PM Peak Hour		
			In	Out	Total	In	Out	Total
Low Density Residential 1,723 Units	Single Family Detached Housing (ITE Land Use Code 210)	Gross Rate (Trips / Unit)	0.19	0.56	0.75	0.63	0.37	1.00
		Gross Trips	323	969	1292	1085	638	1723
		Non-auto Reduction (6%)	19	59	78	65	38	103
		New Auto Trips	304	910	1214	1020	600	1620
Medium Density Residential 1,668 Units	Residential Condominium/ Townhouse (ITE Land Use Code 230)	Gross Rate (Trips / 1000 ft^2)(1)	0.07	0.37	0.44	0.35	0.17	0.52
		Gross Trips	125	609	734	581	286	867
		Transit / Active Transportation Reduction (6%)	8	36	44	35	17	52
		New Auto Trips	117	573	690	546	269	815
Elementary Schools 3 @ 800 each 2400 Students	Elementary School (ITE Land Use Code 520)	Gross Rate (Trips / Unit)	0.25	0.20	0.45	0.07	0.08	0.15
		Gross Trips	594	486	1080	176	184	360
		Non-auto Reduction (0%)	-	-	-	-	-	-
		New Trips	594	486	1080	176	184	360
Secondary School 2 @ 1500 each 3000 Students	High School (ITE Land Use Code 530)	Gross Rate (Trips / Unit)	0.29	0.14	0.43	0.06	0.07	0.13
		Gross Trips	877	413	1290	183	207	390
		Non-auto Reduction (0%)	-	-	-	-	-	-
		New Trips	877	413	1290	183	207	390
Mixed Use and Conv. Commercial (12,715 sqm GFA)	Shopping Center (ITE Land Use Code 820)	Gross Rate (Trips / 1000 ft^2)	0.85	0.53	1.38	2.59	2.81	5.40
		Gross Trips	117	72	189	355	384	739
		Non-auto Reduction (6%)	7	4	11	21	23	44
		New Trips	110	68	178	334	361	695
Total New Trips			**2002**	**2450**	**4452**	**2259**	**1621**	**3880**

Based on the approved Block Plan, the proposed development is expected to generate **4,452** two-way trips (2,002 inbound trips and 2,450 outbound trips) during the weekday morning peak hour and **3,880** two-way trips (2,259 inbound trips and 1,621 outbound trips) during the weekday p.m. peak hour.

Based on the former site statistics, Block 48-2 was to contain 3,593 low to medium density residential developments, four (4) elementary schools, one (1) secondary school, two (2) worship places, and 14.43 ha of commercial / retail lands. The district retail and worship uses were assessed as part of separate traffic impact studies and thus were included in this study as background developments. For the remaining Block 48-2 development trip generation, based on the former site statistics, was undertaken using information contained in the Trip Generation, 8th Edition published by the Institute of Transportation Engineers (ITE). Trip generation based on the former site statistics is summarized in **Table 3.5**.

Based on the land areas for the low density and medium density residential zones as shown in **Figure 1-2**, following the Report, it was assumed that 80% of the residential units will be low density with remaining 20% as medium density.

Table 3.5 Site Trip Generation (Former Site Statistics)

Land Use	ITE Land Use Code	Parameter	WEEKDAY AM Peak Hour			WEEKDAY PM Peak Hour		
			In	Out	Total	In	Out	Total
Low Density Residential 2,843 Units	Single Family Detached Housing (ITE Land Use Code 210)	Gross Rate (Trips / Unit)	0.20	0.57	0.77	0.64	0.36	1.00
		Gross Trips	568	1621	2189	1872	1053	2925
		Non-auto Reduction (6%)	33	98	131	113	62	175
		New Auto Trips	535	1523	2058	1759	991	2750
Medium Density Residential 750 Units	Residential Condominium/ Townhouse (ITE Land Use Code 230)	Gross Rate (Trips / 1000 ft^2)	0.09	0.42	0.51	0.33	0.19	0.52
		Gross Trips	68	291	359	250	140	390
		Transit / Active Transportation Reduction (6%)	4	19	23	15	9	24
		New Auto Trips	64	272	336	235	131	366
Elementary Schools 4 @ 800 each 3200 Students	Elementary School (ITE Land Use Code 520)	Gross Rate (Trips / Unit)	0.25	0.20	0.45	0.07	0.08	0.15
		Gross Trips	792	648	1440	236	244	480
		Non-auto Reduction (0%)	0	0	0	0	0	0
		New Trips	792	648	1440	236	244	480
Secondary School 1500 Students	High School (ITE Land Use Code 530)	Gross Rate (Trips / 1000 ft^2)	0.26	0.16	0.42	0.06	0.07	0.13
		Gross Trips	391	239	630	92	103	195
		Non-auto Reduction (6%)	0	0	0	0	0	0
		New Trips	391	239	630	92	103	195
Total New Trips			**1782**	**2682**	**4464**	**2322**	**1469**	**3791**

Based on the former site statistics, the proposed development is expected to generate **4,464** two-way trips (1,782 inbound trips and 2,682 outbound trips) during the weekday morning peak hour and **3,791** two-way trips (2,322 inbound trips and 1,469 outbound trips) during the weekday p.m. peak hour. As the generated trips using the former site statistics are very similar to the trips generated using the new site statistics, the analysis that was based on the former site statistics were maintained for this study.

3.7 Trip Distribution and Assignment

Trip distribution for the residential component was established based on the 2006 Transportation Tomorrow Survey (TTS). This assumption was further reviewed to generate trip distributions on roads within the study area based on routes that drivers would likely take to access the Study Area and move around. **Table 3.6** below summarizes the directional distribution of the residential uses. Additional trip distribution analysis was conducted based on the 2006 TTS for a similar area south of Block 48-2 bounded by Countryside Drive to the north, Sandalwood Parkway to the south, Airport Road to the east, and Bramalea Road to the west as per Region's comments.

School distribution data was received from the Peel District School Board in 2012. As confirmed by the Peel District School Board, the proposed elementary schools will serve the immediate neighbourhood, as such most of the trips are expected to be generated within the study area. Therefore, it is assumed that 90% of elementary school trips will be generated within the study area and 10% will be generated externally. One of the proposed secondary schools will operate under the Region's separate school board and the other one will operate under the public board. Based on the existing school catchment area (illustrated in **Figure 3-9**) and the location of the proposed secondary schools, it is assumed that 20% of secondary schools trips will be generated internaly and 80% will be generated externally.

As the study area is geographically located along the northern boundary of the existing school catchment areas, it is expected that all external school trips will be designated to / from the west, south and east, as summarized in **Table 3.7** on the following page.

Table 3.6 Residential Trip Distribution

Direction	Via	AM Peak Hour				PM Peak Hour			
		Inbound		Outbound		Inbound		Outbound	
		Percentage	Traffic Data	Percentage	Traffic Data	Percentage	Traffic Data	Percentage	Traffic Data
North	Bramalea Road	5%	608	1%	198	1%	198	5%	608
	Torbram Road	0%	0	0%	0	0%	0	0%	0
	Airport Road	10%	2078	1%	496	1%	496	10%	2078
South	Bramalea Road	10%	2270	15%	6067	15%	6067	10%	2270
	Torbram Road	10%	2064	15%	5801	15%	5801	10%	2064
	Airport Road	20%	3765	25%	8482	25%	8482	20%	3765
East	Mayfield Road	5%	946	3%	704	3%	704	5%	946
	Countryside Drive	5%	706	10%	1525	10%	1525	5%	706
West	Mayfield Road	25%	4495	25%	8592	25%	8592	25%	4495
	Countryside Drive	10%	1976	5%	1696	5%	1696	10%	1976
Total		**100%**	**18907**	**100%**	**3356**	**100%**	**3356**	**100%**	**18907**

Table 3.7 External School Trip Distribution

Direction	Via	AM Peak Hour		PM Peak Hour	
		Inbound	Outbound	Inbound	Outbound
South	Bramalea Road	10%	10%	10%	10%
	Torbram Road	20%	20%	20%	20%
	Airport Road	10%	10%	10%	10%
West	Mayfield Road	5%	5%	5%	5%
	Countryside Drive	5%	5%	5%	5%
East	Mayfield Road	25%	25%	25%	25%
	Countryside Drive	25%	25%	25%	25%
Total		**100%**	**100%**	**100%**	**100%**

Within the Study Area, equal distribution of internal trips for school trips from all residential blocks were assumed.

Built upon the general trip distributions, site traffic was assigned to the Study Area intersections and access points. The Block 48-2 total site traffic volumes are shown in **Figure 3-10**, following the report.

4 Background Traffic Assumptions

This Study reviews the traffic conditions for the 2021 horizon year. The future background conditions for 2021 represents the baseline scenario without the Block 48-2 development.

4.1 Planned Transportation Improvements

Table 4.1 below summarizes the planned transportation improvements based on the ***10-year Roads Capital Program*** from the City and the ***2011-2031 Road Program*** from the Region. Accordingly, the planned road improvements and associated timeline for the improvements are illustrated in **Figure 4-1**, following the Report.

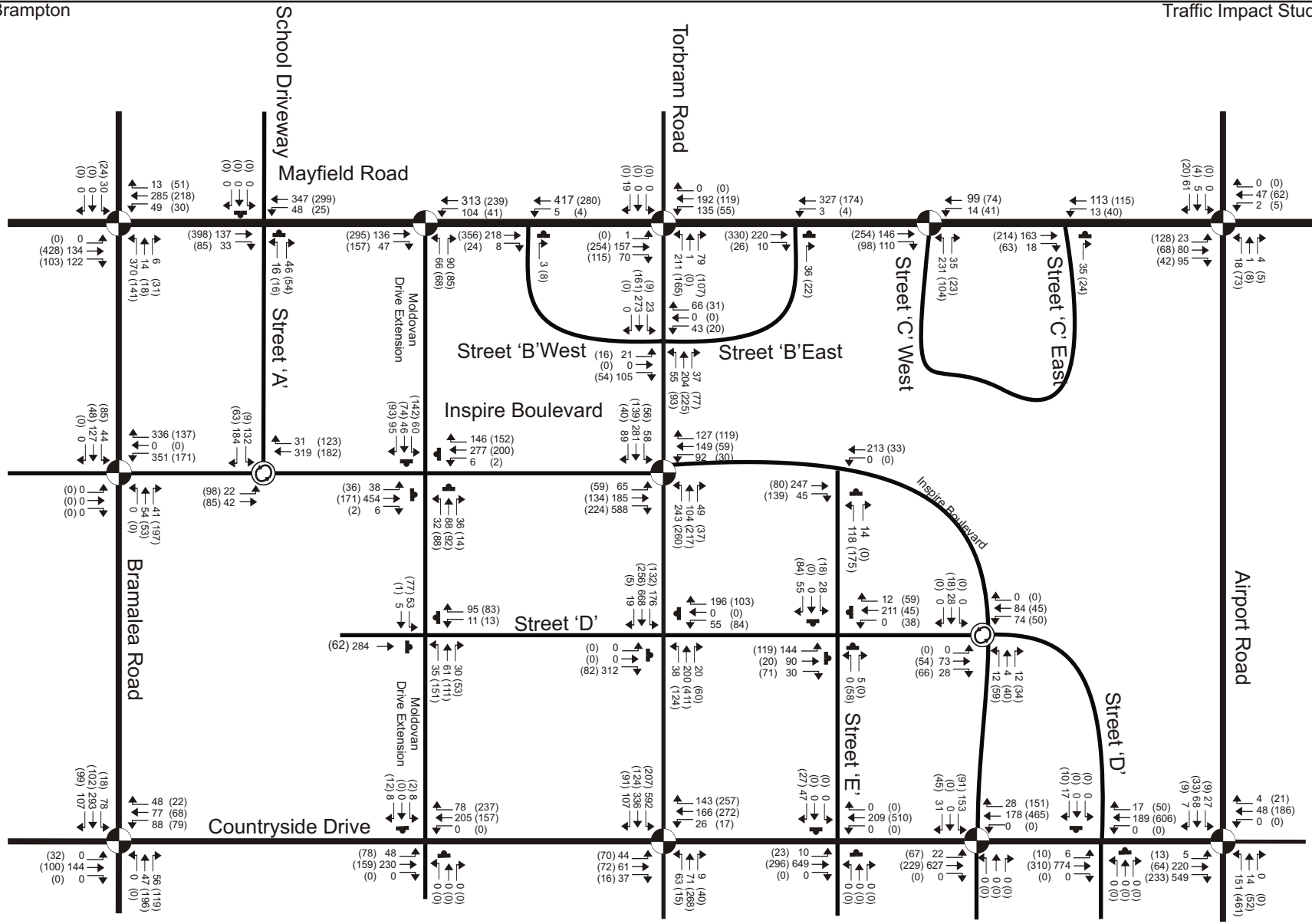
Table 4.1 Scheduled Road Improvements

Road	Section	Road Improvement	EA Status
Countryside Drive	Airport Road to Torbram Road	Widening to a four-lane cross section plus centre turn lane	Completed December 2005
Countryside Drive	Torbram Road to Bramalea Road	Widening to a four-lane cross section plus centre turn lane	Completed June 2012
Mayfield Road	Airport Road to Bramalea Road	Widening to a five-lane cross section with turning lanes	Completed May 2004
Bramalea Road	Mayfield Road to Countryside Drive	Widening to a four-lane cross section plus centre turn lane	Completed November 2005
Torbram Road	Mayfield Road to Countryside Drive	Widening to a four-lane cross section plus centre turn lane	Completed November 2010

Given the schedule of road improvements, the Study assumes that within the Study Area:

- Mayfield Road will be widened to five-lanes by 2021; and,
- Bramalea Road will be widened to four-lanes by 2021.

Figure 3-3
Block 48-2 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

TRAFFIC IMPACT STUDY

Proposed Commercial Development
13846 & 13940 Airport Road
Caledon, ON

January 2022

Prepared for
RG Consulting Inc.

TOWN OF CALEDON
PLANNING
RECEIVED
March 18, 2022

TRANS-PLAN
Transportation Engineering

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Toronto, ON, M6J 1V2

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1. INTRODUCTION

Trans-Plan has been retained by RG Consulting Inc. to provide a Traffic Impact Study (TIS) for a proposed commercial development in the community of Sandhill, in the Town of Caledon, Regional Municipality of Peel.

Our Traffic Impact Study will consist of:

- A review of the proposed development
- A review and assessment of the existing road network
- An analysis of existing and future traffic conditions in the study area, based on recent traffic counts at the study area intersections
- Site trip generation estimates for commercial uses, based on development plans
- An assessment of the impact of site-generated traffic on the study area intersections under future background and total traffic conditions at full build-out (2 years), and a 5-year horizon
- Determination of any roadway improvements, if necessary, to accommodate the proposed development

York Region transportation staff were provided a study terms of reference prior to the completion of the study.

SITE LOCATION

The site, shown in Figure 1, is located at 13846 and 13940 Airport Road, on the southwest quadrant of Airport Road and King Street. Currently the site is vacant, with the surrounding area consisting of mostly residential uses, and includes an Auto Market, a Trucking Company, and a Community Church.

2. PROPOSED DEVELOPMENT

The proposed site plan, provided in Figure 2, includes three blocks consisting of 8 buildings designated for commercial uses, and shows the following changes to the lot:

Block 1

- Building 'A' – one-storey building with a total GFA of 4,036 ft² (375m²)
- Building 'B' – two-storey building with a total GFA of 42,334 ft² (3,933m²)
- Building 'C' – two-storey building with a total GFA of 13,024 ft² (1,210m²)
- Building 'H' – one-storey building with a total GFA of 695 ft² (64.6m²)

Block 3

- Building 'D' – two-storey building with a total GFA of 11,786 ft² (1,097 m²)
- Building 'E' – two-storey building with a total GFA of 45,187 ft² (4,198 m²)
- Building 'F' and Building 'G' – two-storey buildings each with a total GFA of 47,318 ft² (4,396m²), and a combined GFA of 94,636 ft² (8,792m²)

Access to the site is proposed via three (3) driveways along Airport Road: one full moves access approximately 300m south of the Airport Road and King Street intersection and is proposed to be signalized. The other two accesses are configured as right-in/right-out (RIRO) and are located approximately 165m and 300m north and south of the full moves access, respectively.

There will be internal laneway connections between Block 1 and Block 2 stemming from the private road allowance to allow connectivity for motorists to each access point.

The development also proposes the implementation of traffic signals at the full moves access to maintain operational efficiency along the corridor, however the Region of Peel has recently approved road improvements for the segment of Airport Road included in the study area, which will be discussed further in this report.

3. EXISTING CONDITIONS

3.1 Road Network

The study area roadway characteristics are shown in Figure 3. The boundary roadways located in the study area are described as follows:

Airport Road (Regional Road 7) is a two-lane arterial road running in a north-south direction, under the jurisdiction of the Region of Peel. Airport Road consists of two travel lanes; one in each direction, with the posted speed limit set at 80 km/h, and a reduction to 60 km/h on the north and south approaches to its intersection with King Street.

King Street (Regional Road 9) is a two-lane arterial road running east-west under the jurisdiction of the Region of Peel, located north of the site. King Street consists of two travel lanes; one in each direction, with the posted speed limit set at 70 km/h. King Street and Airport Road form a signalized intersection, which acts as the northern limit of the study area.

Old School Road is two-lane local road running in an east-west direction under the jurisdiction of the Region of Peel, with the posted speed limit set at 70 km/h. Old School Road intersects with Airport Road approximately 2.5 kilometers south of the site as the west approach, forming an offset unsignalized intersection with Healey Road.

Healey Road is a two-lane local road running in an east-west direction, under the jurisdiction of the Region of Peel, with the posted speed limit set at 70 km/h. Healey Road is located approximately 40m south of the Old School Road and Airport Road intersection, acting as the east approach.

3.2 Traffic Counts

Detailed TMC data for intersections within the study area was either obtained from Spectrum or conducted by Trans-Plan, and current signal timing plans for the Airport Road and King Street intersection provided by the Region of Peel. Source data is provided in Appendix A, and a summary of the count hours and peak hours obtained for each intersection provided in Table 1.

- Implementation of two-lane roundabout intersections at:
  - Airport Road & King Street
  - Airport Road and Old School Road / Healey Road
- Road widening from 2 to 4 lanes
- Two-way center left-turn lane

The above-mentioned road improvements are expected to start construction by 2024, with anticipated completion by 2025, and therefor will be included in the analysis of future background and total traffic conditions for the 2028 horizon year. Appendix C provides some design drawings we received, depicting the roundabout designs.

The site plan also proposes traffic signals to be implemented at the main full-movement access due to the anticipated high left-turning volumes and will be analyzed as a signalized intersection in the capacity analysis provided further in this report. The future study area roadway characteristics are illustrated in Figure 5.

It should be noted that for the analysis of background traffic conditions for the horizon year 2028, TMC data used for the offset intersection at Airport Road and Old School Road / Healey Road was adjusted to depict intersection movements more accurately for the new roundabout configuration anticipated in 2025. Based on the review of future background conditions, future background traffic volumes for the 2023 and 2028 horizon years are provided in Figure 6 and Figure 7, respectively.

5. SITE TRAFFIC

5.1 Trip Generation

Site trips for the proposed development were generated using the Institute of Transportation Engineers (ITE) Trip Generation manuals, 10th Edition. Land uses for each building have not yet been designated, as a result, Land Use Code (LUC) 820 for Shopping Centers was utilized. Although the trip generation results are seemingly aggressive, this was done to represent more of a worst-case scenario, as to ensure not to undercut the potential trips generated by the proposed development.

An adjustment for pass-by trips is also included which arise from existing traffic on the roadway network entering the proposed development as an intermediate stop on the way to another ultimate destination along the same travel route. Typical pass-by trip rates are provided in the ITE Trip Generation Handbook for shopping centers and indicates average pass-by trip rates are 0%, 34% and 26% during the AM, PM and Saturday peak periods, respectively.

A summary of the trip generation of the proposed site is provided in Table 2.

Table 2 – Site Trip Generation Results

Land Use	Size (Sq.ft. GFA)		Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Shopping Center (ITE Code 820)	212.5	Distribution	62%	38%	100%	48%	52%	100%	52%	48%	100%
		Equation	T = 0.50(X) + 151.78			Ln(T) = 0.74 Ln(X) + 2.89			Ln(T) = 0.79 Ln(X) + 2.79		
		Rate	0.75	0.46	1.21	2.15	2.32	4.47	7.27	6.72	13.99
		Trips	160	98	258	456	493	949	584	539	1123
		Pass-by (0% AM, 34% PM, 26% SAT)	0	0	0	161	161	322	146	146	292
Total New Site Trips			**160**	**98**	**258**	**295**	**332**	**627**	**438**	**393**	**831**

Based on the trip generation, the subject site is expected to generate approximately 258 new two-way trips during the weekday AM peak hour, 627 trips in the PM peak hour, and 831 during the Saturday peak hour.

5.2 Trip Distribution and Assignment

Site trips were distributed and assigned to/from the site and the boundary roadways within the study area according to the existing traffic patterns along Airport Road between King Street and Healey Road, as derived from the traffic counts. The existing traffic volume percent split along Airport Road is an approximate 70/30 split during the weekday, with southbound traffic acting as the predominant flow during the AM peak hour, and northbound being predominant in the PM peak hour. The existing traffic volume split during the Saturday peak hour is an approximate 50/50 split.

The site traffic assignment for the development is provided in Figure 8, and pass-by traffic assignment for the weekday AM and PM, and Saturday peak hours is shown in Figure 9.

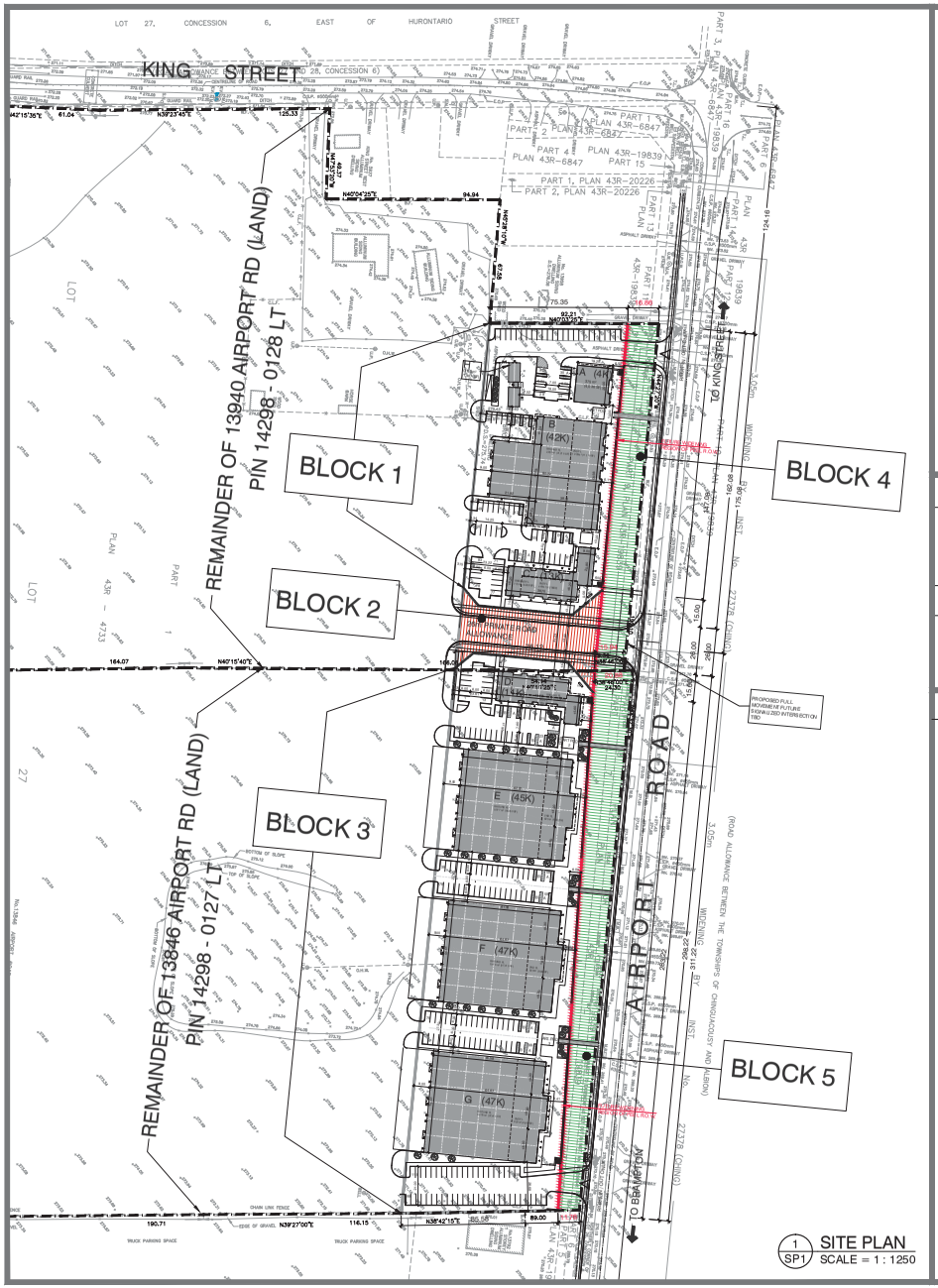
6. FUTURE TOTAL TRAFFIC CONDITIONS

Site traffic volumes were added to the future background traffic volumes to obtain future total traffic volumes for the peak hours. The future total traffic volumes for the horizon years 2023 and 2028 in the weekday AM and PM, and Saturday peak hours are shown in Figure 10 and Figure 11, respectively.

7. CAPACITY ANALYSIS

A capacity analysis was undertaken for the study area intersections and site driveway access points using Synchro analysis software.

As mentioned previously in this report, road improvements along Airport Road have been approved, with construction anticipated to begin by 2024 and completed by 2025. This in mind, traffic modelling for the



1 SP1 SITE PLAN
SCALE = 1 : 1250

LEGEND

- SITE BOUNDARY
- PROPOSED ROAD WIDENING BY REGION OF PEEL TRANSPORTATION (13940 AIRPORT RD - 15.94 TO 16.86 m WIDE))
- PROPOSED ROAD WIDENING BY REGION OF PEEL TRANSPORTATION (13846 AIRPORT RD - 11.76 TO 20.88 m WIDE)
- PROPOSED 26M ROAD ALLOWANCE
- PROPOSED BUILDING FOOTPRINT
- SP A B — PROPOSED SIGN PYLON LOCATION / PROPOSED ACCESSIBLE PARKING TYPE A / PROPOSED ACCESSIBLE PARKING TYPE B
- ART POD 1 — PROPOSED ART POD LOCATION REFER TO TYPICAL ENLARGEMENT BY LANDSCAPE ARCHITECT - STUDIO TLA
- a+w=SO — PROPOSED ART+WORK SIGN WALL LOCATION
- DC — PROPOSED DEPRESSED CURB, AS PER TOWN OF CALEDON STANDARDS.

NOTES - SITE PLAN CONSIDERATIONS :
1. AIRPORT ROAD IS PROPOSED TO EXPAND TO A 45m R.O.W.
2. NUMBER OF PARKING STALLS ARE DEPENDANT ON USE OF BUILDING
3. 26m R.O.W. TO SPLIT TWO PROPOSED BLOCKS
4. SUBJECT SITE IS CURRENTLY ZONED HIGHWAY COMMERCIAL UNDER BY-LAW 2006-50, CALEDON

KEY MAP - NTS — SUBJECT PROPERTY

LEGAL DESCRIPTION :

PART OF LOT 27, CONCESSION 6
EAST OF HURONTARIO STREET
FORMERLY IN THE TOWNSHIP OF CHINGUACOUSY,
COUNTY OF PEEL,
NEW IN THE TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL

SURVEY NOTE :

SITE PLAN INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHIC SURVEY PLAN PREPARED BY
MANDARIN SURVEYORS LTD. O.L.S., C.L.S.
DATED:
FEBRUARY 10, 2020 - PROPERTY AT 13840 AIRPORT RD AND
FEBRUARY 11, 2020 - PROPERTY AT 13940 AIRPORT RD

CONSULTANT LIST :

PLANNING & ARCHITECTURE:	RG CONSULTING INC.	416.213.0200
LANDSCAPE DESIGN:	STUDIO TLA	416.638.4911
ENGINEERING:	CALDER ENGINEERING LTD.	905.857.7600
ENVIRONMENTAL: GEOTECHNICAL & HYDROGEOLOGICAL:	PEACE ENVIRONMENTAL HLV2K ENGINEERING LIMITED	416.213.1700 905.569.9765
O.L.S.URVEYING:	MANDARIN SURVEY GROUP	647.430.1366

BLOCK AND BUILDING SCHEDULE :

BLOCK 1
ZONING DESIGNATION - CH 563
11,715m² (1.17 hc = 2.90 ac)
BLOCK 1 BUILDING SCHEDULE:

	GROUND FLOOR AREA:	2ND FLOOR:	TOTAL BUILDING AREA:
H -	136.3 m² : 1,467 SF (EX. HOUSE INCLUDED - 64.6 m² - 695 SF)		
A -	375.0 m² : 4,036 SF		
B -	2,900.0 m² : 31,215 SF	1,033.0 m² : 11,119 SF	3,933.0 m² : 42,334 SF
C -	770.0 m² : 8,288 SF	440.0 m² : 4,736 SF	1,210.0 m² : 13,024 SF

TOTAL BUILDING AREA INCLUDING 2ND FLOOR:
5,654.3 m² : 60,862 SF (DENSITY 48.3%)

TOTAL NUMBER OF PARKING : 83
6 TYPE A AND 3 TYPE B ACCESSIBLE PARKING INCLUDED)

BLOCK 2
ZONING DESIGNATION - CH 563 AND SOUTH PART - CH 302
2,280 m² (0.23 hc = 0.56 ac)
26 m WIDE ROAD ALLOWANCE - PRIVATE ROAD

BLOCK 3
ZONING DESIGNATION - CH 302 AND NORTH PART - CH 563
24,221 m² (2.42 hc = 5.99 ac)

	GROUND FLOOR AREA:	2ND FLOOR:	TOTAL BUILDING AREA:
D -	712.0 m² : 7,664 SF	385.0 m² : 4,144 SF	1,097.0 m² : 11,786 SF
E -	3,377.0 m² : 36,350 SF	821.0 m² : 8,837 SF	4,198.0 m² : 45,187 SF
F -	3,476.0 m² : 37,415 SF	920.0 m² : 9,902 SF	4,396.0 m² : 47,318 SF
G -	3,476.0 m² : 37,415 SF	920.0 m² : 9,902 SF	4,396.0 m² : 47,318 SF

TOTAL BUILDING AREA INCLUDING 2ND FLOOR:
14,087 m² : 151,631SF (DENSITY 58.2%)

TOTAL NUMBER OF PARKING : 166
(6 TYPE A AND 6 TYPE B ACCESSIBLE PARKING INCLUDED)

BLOCK 4
ZONING DESIGNATION - CH 563
3,112 m² (0.31 hc = 0.77 ac)
ROAD WIDENING BY REGION OF PEEL TRANSPORTATION

BLOCK 5
ZONING DESIGNATION - CH 302
4,808 m² (0.48 hc = 1.19 ac)
ROAD WIDENING BY REGION OF PEEL TRANSPORTATION

SITE STATISTICS :

TOWN OF CALEDON - ZONING BY-LAW 2006-50 - CH - HIGHWAY COMMERCIAL
ZONING DESIGNATION CH-563 AND CH-302

		PROPOSED			REQUIRED
LOT AREA :	DEVELOPMENT AREA (26 m PRIVATE ROAD ALLOWANCE INCLUDED)	38,216 m² (2,280 m²)	3.82 hc (0.23 hc)	9.45 ac (0.53 ac)	
	PROPOSED ROAD WIDENING BY REGION OF PEEL TRANSPORTATION (13940 AIRPORT RD)	3,112 m²	0.31 hc	0.77 ac	
	PROPOSED ROAD WIDENING BY REGION OF PEEL TRANSPORTATION (13846 AIRPORT RD)	4,808 m²	0.48 hc	1.19 ac	
	TOTAL LOT AREA	46,136m²	4.61 hc	11.40 ac	
TOTAL COVERAGE :		15,222.3 m² (163,851 SF)			
TOTAL 2ND STOREY AREA :		4,519.0 m² (48,642 SF)			
TOTAL BUILDING GFA :		19,741.3 m² (212,493 SF)			
TOTAL DENSITY :		51.7%			
TOTAL NUMBER OF PARKING SPACES: (1 SPACE / 40m²) (ACCESSIBLE PARKING INCLUDED)		249			381
ACCESSIBLE PARKING : (REQUIRED 2 ACCESSIBLE SPACES + 2%)		20			10
TOTAL NUMBER OF LOADING SPACES: (1 / 2,800 m² OF NET FLOOR AREA)		23			6

2 SP1 SITE PLAN SECTION A-A
SCALE = 1 : 250

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PRINTS ARE NOT TO BE SCALED

NO.:	DATE:	REVISION:
1	26/06/17	PRELIMINARY
8	27/05/19	PRELIMINARY
13	25/09/19	PRELIMINARY- FLOOR PLANS
14	15/11/19	ISSUED FOR DART MEETING
15	03/12/19	TOWN COMMENTS CHANGES
16	12/12/19	ISSUED FOR COORDINATION
17	09/01/20	TOWN COMMENTS CHANGES
18	05/02/20	ISSUED FOR COORDINATION
19	26/02/20	ISSUED FOR COORDINATION
20	21/04/20	HERITAGE HOUSE LANDSCAPE
21	06/05/20	ISSUED FOR COORDINATION
25	25/05/20	ISSUED FOR COORDINATION
26	04/06/20	ISSUED FOR COORDINATION
27	17/07/20	ISSUED FOR COORDINATION
28	19/11/20	ISSUED FOR COORDINATION
29	19/01/21	ISSUED FOR COORDINATION
30	23/03/21	ISSUED FOR COORDINATION
31	14/07/21	ISSUED FOR COORDINATION
32	09/08/21	ISSUED FOR COORDINATION

- ☐ ISSUED FOR CONSTRUCTION
- ☐ ISSUED FOR PRICING
- ☐ ISSUED FOR BUILDING PERMIT
- ☐ ISSUED FOR PRELIMINARY REVIEW

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DRAFT FOR DISCUSSION ONLY

PROPOSED DEVELOPMENT
FOR FALCO GROUP
13846 & 13940 AIRPORT ROAD
SANDHILL, CALEDON, ON

project number:	1710
date:	JULY 2021
scale:	AS NOTED
drawn by:	ZL
checked by:	RG
drawing number:	P17-01-01D

MASTER SITE PLAN
SP1

Figure 8: Site Trip Assignment, Weekday AM and PM, and Saturday Peak Hours

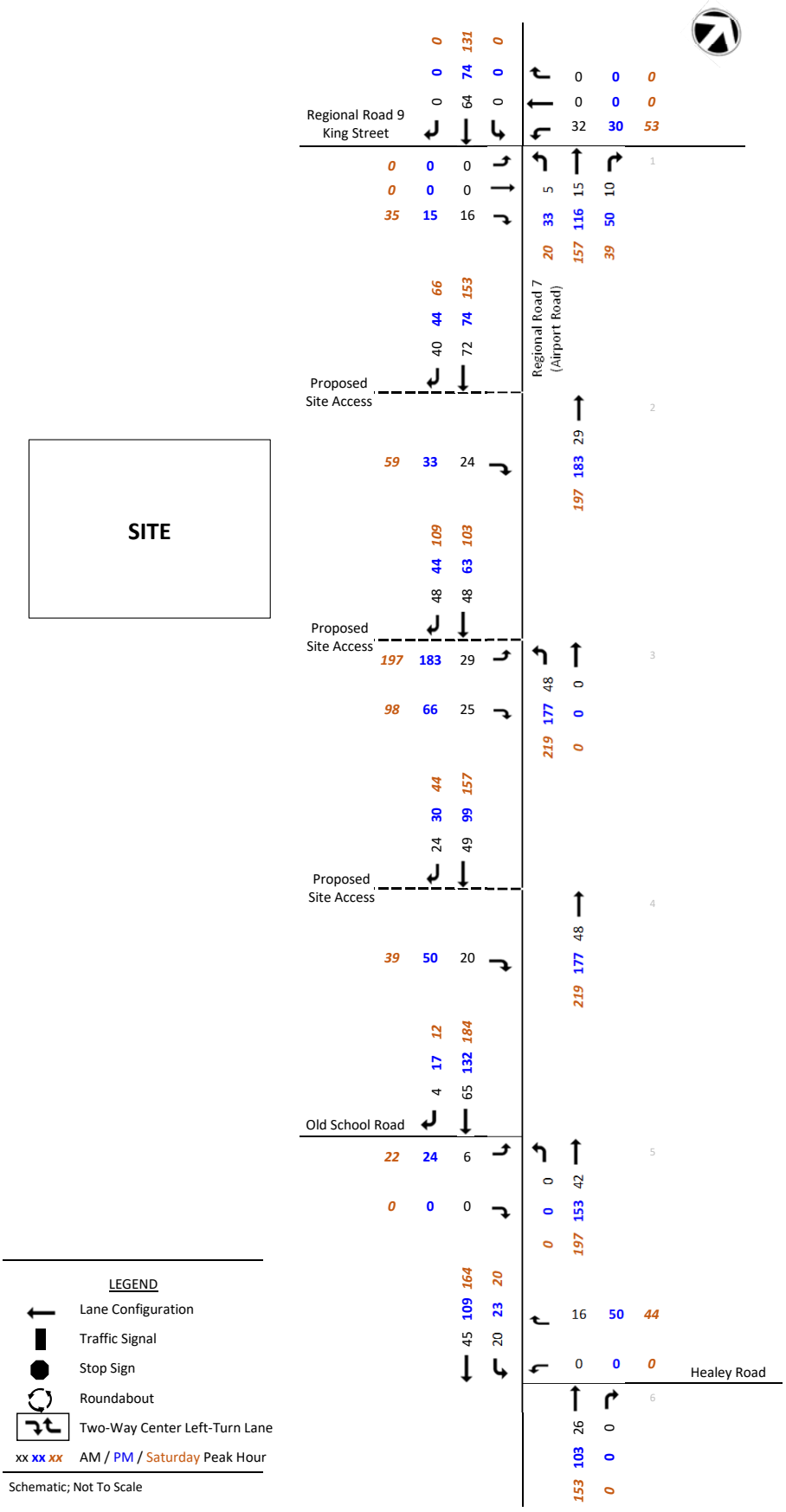

Figure 9: Pass-by Trip Assignment, Weekday AM and PM, and Saturday Peak Hours

TOWN OF CALEDON
PLANNING
RECEIVED
September 6, 2024

MAYFIELD-TULLAMORE COMMUNITY

Transportation Study

Prepared For: Mayfield-Tullamore Landowners Group

August 2024

BA Group

1.6 The Proposal

The community will consist of approximately 7,800 residential units, with a mix of unit types, as well as supporting institutional, recreational and non-residential uses. As a complete community, the supporting land-uses will generally act to internalize trip-making rather than act as external generators of activity.

1.7 This Study

A terms of reference related to this study was submitted to Town of Caledon staff in addition to two transportation-focussed pre-submission meeting. The terms of reference is appended as **Appendix A**.

The proposed community will be developed over a long period of time with a series of studies providing additional details as the plan evolves, comments are received, and phasing plans are refined. The purpose of this study is to provide an end-state (full build-out) review of the community to help confirm the basic structure of the community as a prelude to further discussions with stakeholders.

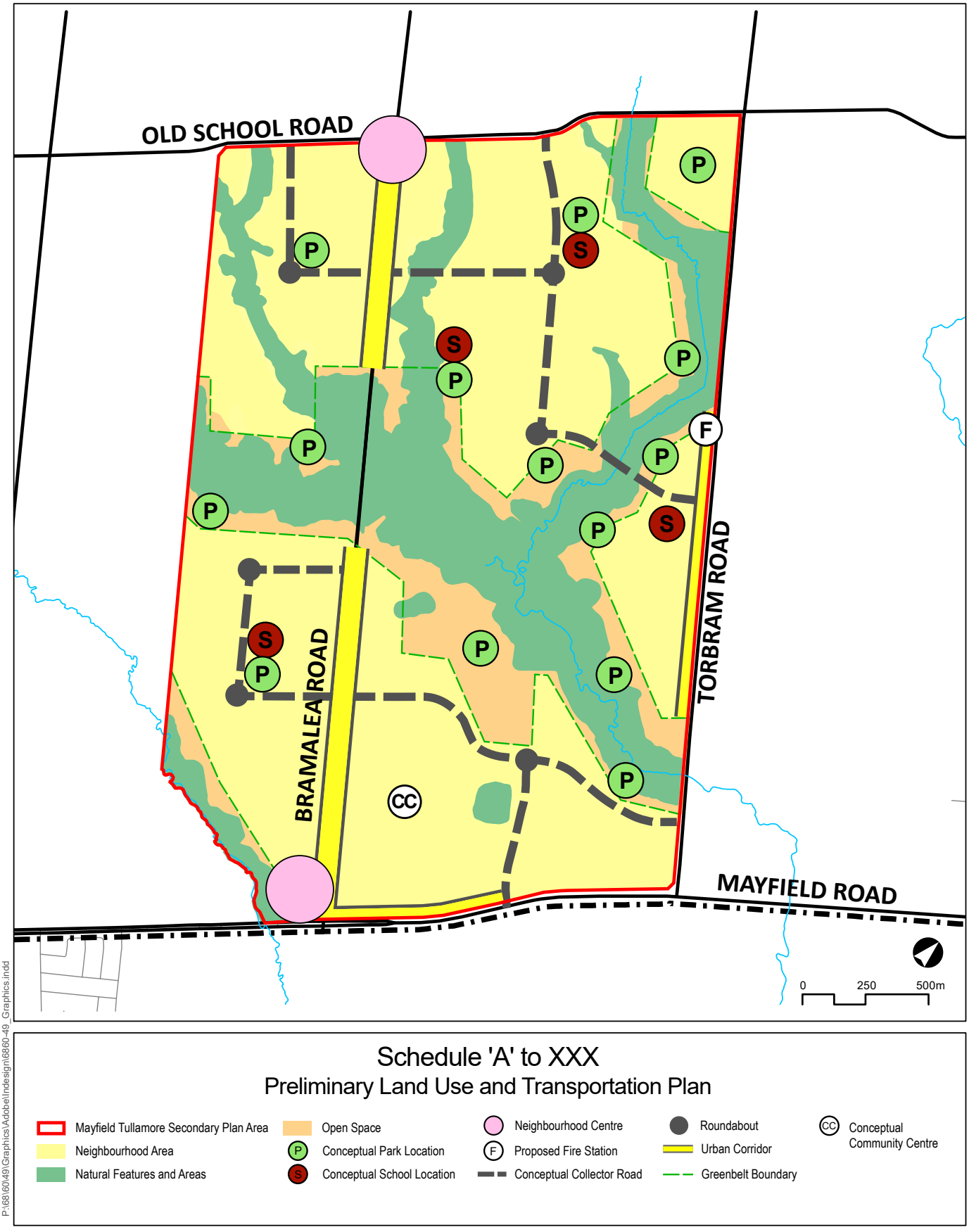

FIGURE 4 STRUCTURE PLAN

5.2 Site Generated Traffic

5.2.1 Residential Trip Generation

To develop an understanding of expected traffic generation and trip distribution across the internal collector road network, the structure plan has been divided into zones that are generally bounded by the proposed collector road network and the Greenbelt. **Exhibit 1** illustrates the assumed zones, lettered A to G.

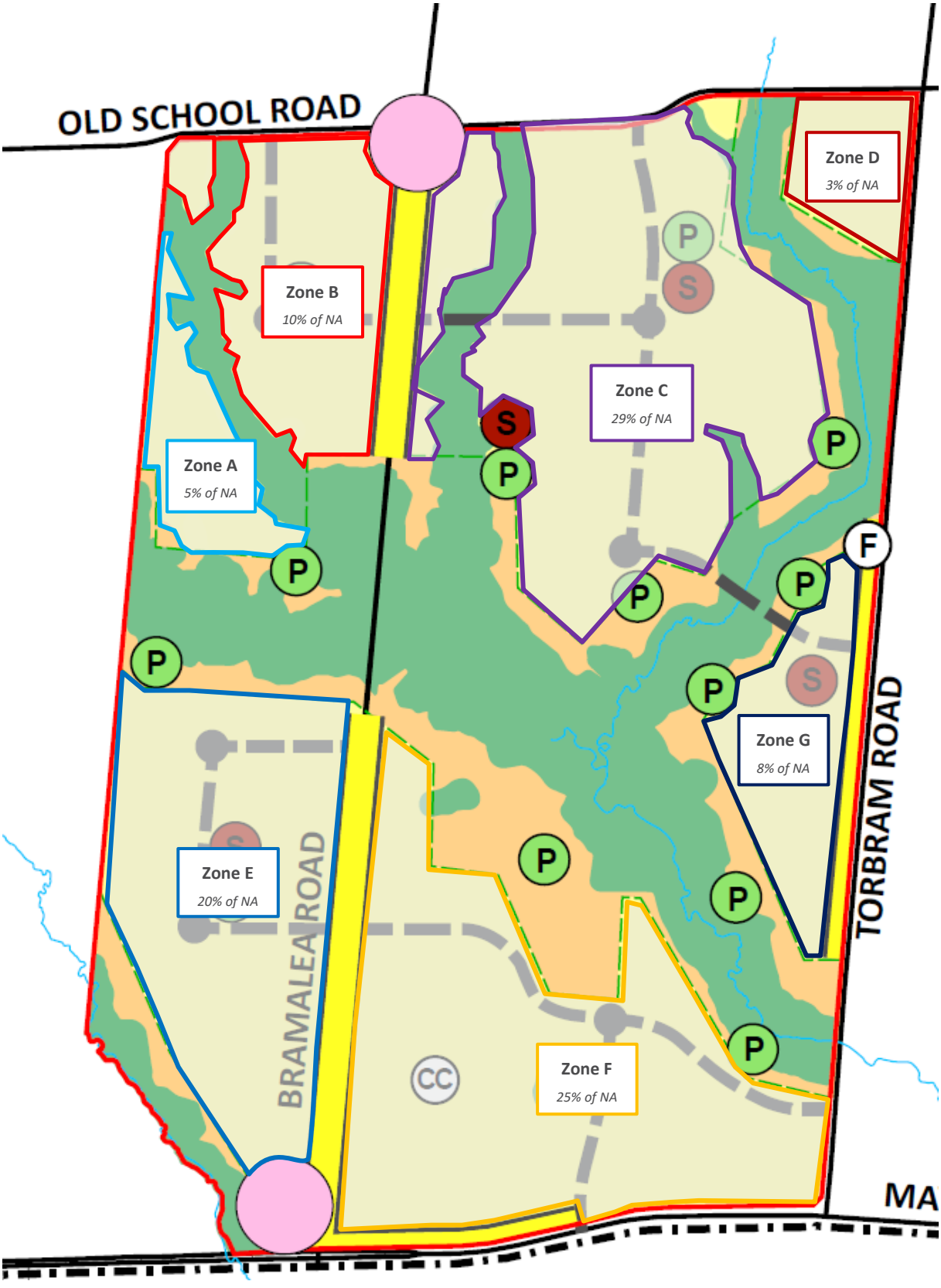

Exhibit 1: Traffic Zones

The land budget prepared for the plan provides the total number of units, by housing type across the neighbourhood area of the plan (land coloured in yellow in **Exhibit 1**). Based on the relative areas of the letter zones, an approximate number of housing units, per type, were assigned to each zone. It was assumed that single-/ semi-detached, street townhouses, and stacked houses were distributed evenly across zones, and that apartment units were concentrated in the neighbourhood centre located in Zone E. **Table 1** provides a summary of the unit distribution across letter zones.

Table 1 Neighbourhood Area - Unit Distribution by Zone

Letter Zone	Approximate Number of Units per Type					
	Single / Semi-Detached	Secondary Unit	Street Townhouse	Stacked Townhouse	Apartment	Total
A	208	0	143	59	0	410
B	375	0	257	107	0	740
C	1103	0	756	315	0	2174
D	112	0	77	32	0	221
E	749	0	513	214	325	1801
F	937	0	643	268	0	1847
G	310	0	213	89	0	612
Total	**3795**[1]	**0**	**2602**	**1084**	**325**	**7806**

Notes:
1. It is assumed that half of the single / semi-detached housing units are single detached housing units and half are semi-detached units.

Based on the above, vehicle trips were generated per zone based on trips rates provided in the 11th Edition of the ITE Trip Generation Manual for each type of housing unit. **Table 2** provides a summary of vehicle trip rates for each housing type.

Table 2 ITE Trip Generation by Housing Type

Plan Designation	ITE LUC	AM Peak Hour			PM Peak Hour		
		In	Out	2-Way	In	Out	2-Way
Single-Detached	210: Detached Single Family Housing	0.18	0.52	0.70	0.59	0.35	0.94
Semi-Detached / Townhouses	215: Attached Single Family Housing	0.12	0.36	0.48	0.34	0.23	0.57
Stacked Townhouse	220: Multi-Family Housing (Low Rise)	0.10	0.30	0.40	0.32	0.19	0.51
Apartments	221: Multi-Family Housing (Mid Rise)	0.09	0.28	0.37	0.24	0.15	0.39

Based on the above trip rates, **Table 3** summarizes the number of trips expected to be generated by the site, structured by zone, during the morning and afternoon peak hours.

Table 3 Residential Vehicle Trips

Letter Zone	Unit Type	Units	AM Peak Hour			PM Peak Hour		
			In	Out	2-Way	In	Out	2-Way
A	Single	104	20	55	75	60	35	100
	Semis & Townhouse	247	30	90	120	85	60	140
	Stacked Townhouse	59	5	20	25	20	10	30
	Zone A Total	**410**	**55**	**165**	**220**	**165**	**105**	**270**
B	Single	188	35	100	130	110	65	175
	Townhouse	445	55	160	215	150	105	255
	Stacked Townhouse	107	10	35	45	35	20	55
	Zone B Total	**740**	**100**	**295**	**390**	**295**	**190**	**485**
C	Single	551	95	285	385	325	190	520
	Townhouse	1307	155	470	630	440	305	745
	Stacked Townhouse	315	30	95	125	100	60	160
	Zone C Total	**2174**	**280**	**850**	**1140**	**865**	**555**	**1425**
D	Single	56	10	30	40	35	20	55
	Townhouse	133	15	50	65	45	30	75
	Stacked Townhouse	32	5	10	15	10	5	15
	Zone D Total	**221**	**30**	**90**	**120**	**90**	**55**	**145**
E	Single	374	65	195	260	220	130	350
	Townhouse	888	105	320	425	300	205	505
	Stacked Townhouse	214	20	65	85	70	40	110
	Apartment	325	30	95	120	75	50	125
	Zone E Total	**1801**	**220**	**675**	**890**	**665**	**425**	**1090**
F	Single	469	80	245	330	275	165	440
	Townhouse	1111	135	400	535	375	260	635
	Stacked Townhouse	268	25	80	105	85	50	135
	Zone F Total	**1847**	**240**	**725**	**970**	**735**	**475**	**1210**
G	Single	155	25	80	110	90	55	145
	Townhouse	368	45	135	175	125	85	210
	Stacked Townhouse	89	10	25	35	30	15	45
	Zone G Total	**612**	**80**	**240**	**320**	**245**	**155**	**400**
Total		**7806**	**1005**	**3040**	**4050**	**3060**	**1960**	**5025**
Blended Trip Rate (7806 units)			*0.13*	*0.39*	*0.52*	*0.39*	*0.25*	*0.64*

The site is expected to generate 4,050 and 5,025 two-way residential vehicle trips during the morning and afternoon peak hours, respectively.

5.2.2 Retail Trip Generation

The structure plan currently proposes approximately 40,000 m^2 of retail GFA, to be distributed across the Urban Corridor (UC) area proposed for the site, which will be located primarily along Bramalea Road. Considering that the planned population of the community will total over 25,000 people, it is expected that the retail uses on site will primarily be oriented towards fulfilling the needs of the community, and the retail uses on site will not generate a significant amount of external trips.

5.2.3 Trip Distribution

Site traffic has been assigned to the area road network based on a review of travel information provided by the 2016 Transportation Tomorrow Survey (TTS) and expected road network traffic patterns and connectivity at the time of the buildout of the site. Site traffic distribution is summarized in **Table 4**. Detailed TTS output data and distribution assumptions are provided in **Appendix E**.

Table 4 Site Traffic Distribution

Direction	Outbound	Inbound
To / From the North on Hurontario Street	5%	5%
To / From the South on Highway 410	30%	30%
To / From the East on Highway 413	10%	10%
To / From the West on Highway 413	15%	15%
To / From the North on Bramalea / Torbram / Dixie Road	5%	5%
To / From the South on Bramalea / Torbram / Dixie Road	35%	35%
Total	**100%**	**100%**

Notes:
1. Based on TTS Zones 3010, 3012, 2014 & 3442

5.3 Site Traffic Volumes

New site traffic generated by the community has been assigned to the proposed structure plan road network and the existing road network based upon the directional distribution summarized above. New site traffic volumes for the weekday morning and afternoon peak hours are illustrated in **Figure 10**.

5.4 Future Total Traffic Volumes

Future total traffic volumes, which reflect the addition of TMP volumes and new site traffic volumes are illustrated in **Figure 11**.

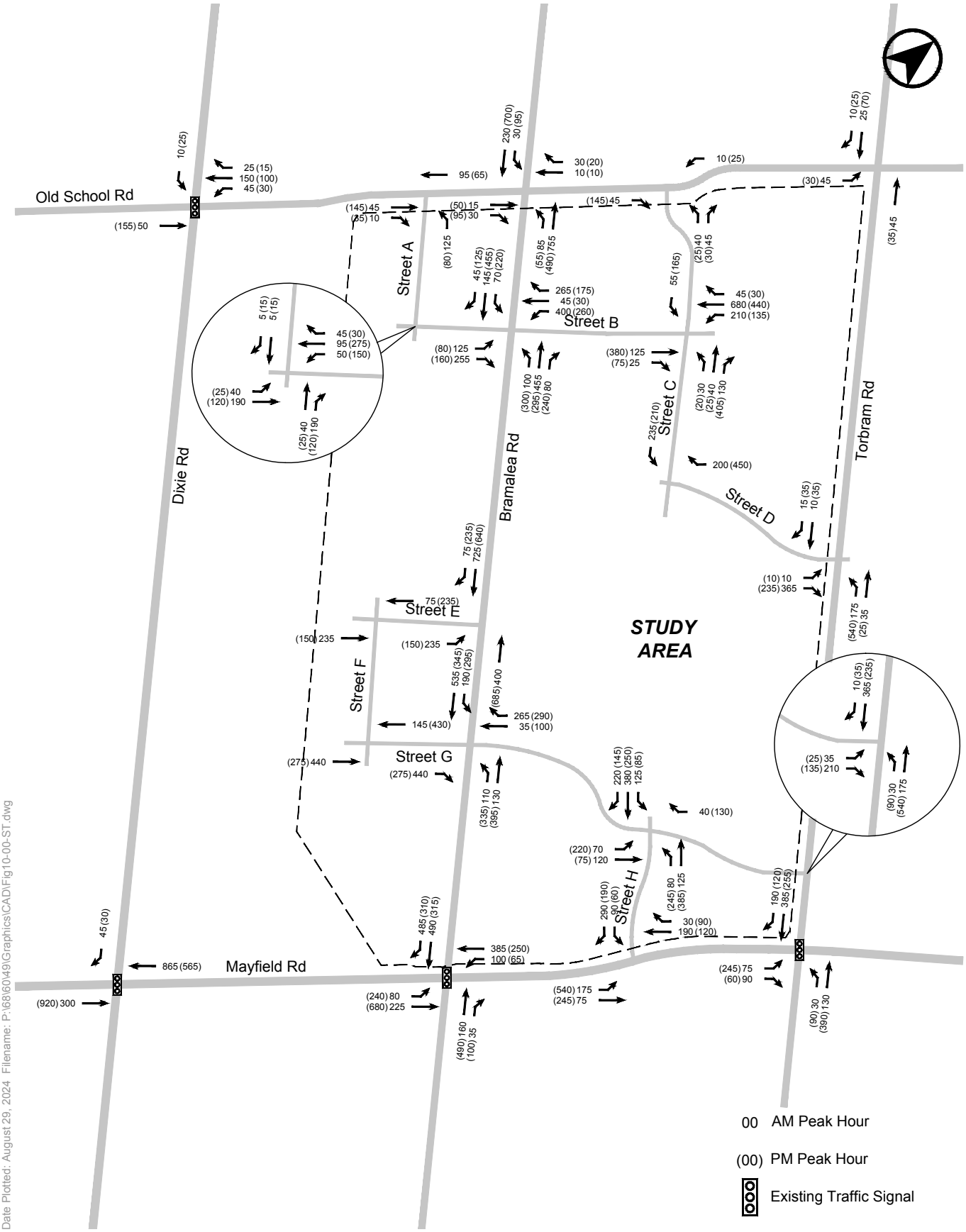

FIGURE 10 SITE TRAFFIC VOLUMES

APPENDIX K:

Warrants Assessment Reports

CROZIER

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2028 Future Background	**Analyst**	MY

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	Free Flow (Rural)	**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	71	519	32	4	740	3	2	0	28	21	0	3	0
PM	39	885	49	28	632	9	6	0	61	80	0	8	0
AHV	28	351	20	8	343	3	2	0	22	25	0	3	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

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	805	134.2%	43.3%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	120	170	120	170	52	43.3%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	753	125.5%	54.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	27	54.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 54.0%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [ ] **May Be** [X] **Unlikely**

CROZIER

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2033 Future Background	**Analyst**	MY

Study Intersection Summary

Major Street	Torbram Road	**Direction**	North/South
Minor Street	Old School Road	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Free Flow (Rural)	**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: Torbram Road						Minor: Old School Road						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	13	119	17	4	370	26	49	265	57	35	95	2	0
PM	40	354	65	1	185	82	44	214	17	25	373	3	0
AHV	13	118	21	1	139	27	23	120	19	15	117	1	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

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	614	102.3%	102.3%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	120	170	120	170	295	245.8%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	319	53.2%	53.2%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	158	316.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 102.3%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [X] **May Be** [ ] **Unlikely**

CROZIER

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2033 Future Background	**Analyst**	MY

Study Intersection Summary

Major Street	Torbram Road	**Direction**	North/South
Minor Street	Old School Road	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Free Flow (Rural)	**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: Torbram Road						Minor: Old School Road						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	13	127	17	4	404	26	49	292	57	35	105	2	0
PM	40	385	65	1	197	82	44	234	17	25	410	3	0
AHV	13	128	21	1	150	27	23	132	19	15	129	1	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

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	659	109.8%	109.8%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	120	170	120	170	319	265.8%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	340	56.7%	56.7%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	170	340.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 109.8%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [X] **May Be** [ ] **Unlikely**

CROZIER

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2033 Future Background	**Analyst**	MY

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	Free Flow (Rural)	**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	71	526	32	4	848	3	2	0	28	21	0	3	0
PM	39	1019	49	28	657	9	6	0	61	80	0	8	0
AHV	28	386	20	8	376	3	2	0	22	25	0	3	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

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	873	145.5%	43.3%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	120	170	120	170	52	43.3%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	821	136.8%	54.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	27	54.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 54.0%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [ ] **May Be** [X] **Unlikely**

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TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2038 Future Background	**Analyst**	MY

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	Free Flow (Rural)	**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	71	535	32	4	865	3	2	0	28	21	0	3	0
PM	39	1037	49	28	669	9	6	0	61	80	0	8	0
AHV	28	393	20	8	384	3	2	0	22	25	0	3	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

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	888	148.0%	43.3%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	120	170	120	170	52	43.3%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	836	139.3%	54.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	27	54.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 54.0%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [ ] **May Be** [X] **Unlikely**

CROZIER

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2028 Future Total	**Analyst**	MY

Study Intersection Summary

Major Street	Airport Road	**Direction**	North/South
Minor Street	Full Moves Access	**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: Airport Road						Minor: Full Moves Access						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	45	338	0	0	812	3	7	0	15	0	0	0	0
PM	21	910	0	0	554	1	35	0	17	0	0	0	0
AHV	17	312	0	0	342	1	11	0	8	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

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	691	144.0%	10.6%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	19	10.6%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	672	140.0%	22.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	11	22.0%	
Applicable Threshold		X						

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 22.0%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [ ] **May Be** [X] **Unlikely**

CROZIER

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2033 Future Total	**Analyst**	MY

Study Intersection Summary

Major Street	Airport Road	**Direction**	North/South
Minor Street	Full Moves Access	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Free Flow (Rural)	**Number of Lanes**	2+
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: Airport Road						Minor: Full Moves Access						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	32	378	0	0	869	8	26	0	5	0	0	0	0
PM	15	1034	0	0	590	7	58	0	6	0	0	0	0
AHV	12	353	0	0	365	4	21	0	3	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

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	758	126.3%	13.3%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	24	13.3%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	734	122.3%	42.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	21	42.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 42.0%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [ ] **May Be** [X] **Unlikely**

CROZIER

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2038 Future Total	**Analyst**	MY

Study Intersection Summary

Major Street	Airport Road	**Direction**	North/South
Minor Street	Full Moves Access	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Free Flow (Rural)	**Number of Lanes**	2+
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: Airport Road						Minor: Full Moves Access						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	32	386	0	0	885	8	26	0	5	0	0	0	0
PM	15	1051	0	0	601	7	58	0	6	0	0	0	0
AHV	12	359	0	0	372	4	21	0	3	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

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	771	128.5%	13.3%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	24	13.3%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	747	124.5%	42.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	21	42.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 42.0%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [ ] **May Be** [X] **Unlikely**

CROZIER

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	Broccolini Airport Road	**Project Number**	2278-7228
		Date	2026-05-05
Horizon	2051 Future Total	**Analyst**	MY

Study Intersection Summary

Major Street	Airport Road	**Direction**	North/South
Minor Street	Full Moves Access	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Free Flow (Rural)	**Number of Lanes**	2+
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: Airport Road						Minor: Full Moves Access						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	32	776	0	0	1607	8	26	0	5	0	0	0	0
PM	15	1759	0	0	995	7	58	0	6	0	0	0	0
AHV	12	634	0	0	651	4	21	0	3	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

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	1325	220.8%	13.3%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	24	13.3%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	1301	216.8%	42.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	21	42.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 42.0%
Percentage Required to be Undoubtedly Warranted: 200%

Signal Justification 7 Met: [ ] **Undoubtedly** [ ] **May Be** [X] **Unlikely**

APPENDIX L:

Institute of Transportation Engineers' Trip Generation Manual Excerpts

Land Use: 150
Warehousing

Description

A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas. High-cube transload and short-term storage warehouse (Land Use 154), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas.

Source Numbers

184, 331, 406, 411, 443, 579, 583, 596, 598, 611, 619, 642, 752, 869, 875, 876, 914, 940, 1050

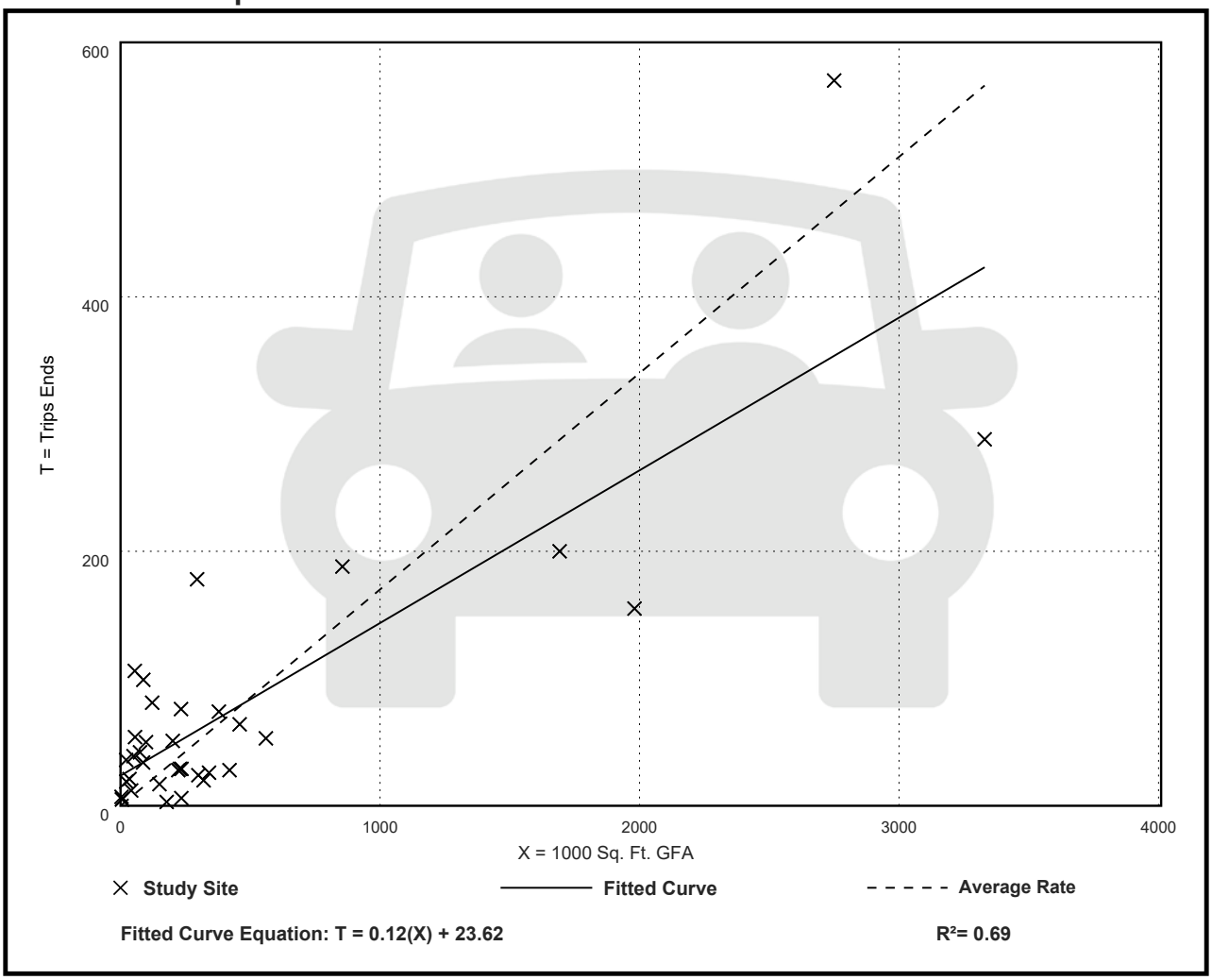
Warehousing
(150)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 36
Avg. 1000 Sq. Ft. GFA: 448
Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.19

Data Plot and Equation



Fitted Curve Equation: T = 0.12(X) + 23.62

R^2= 0.69

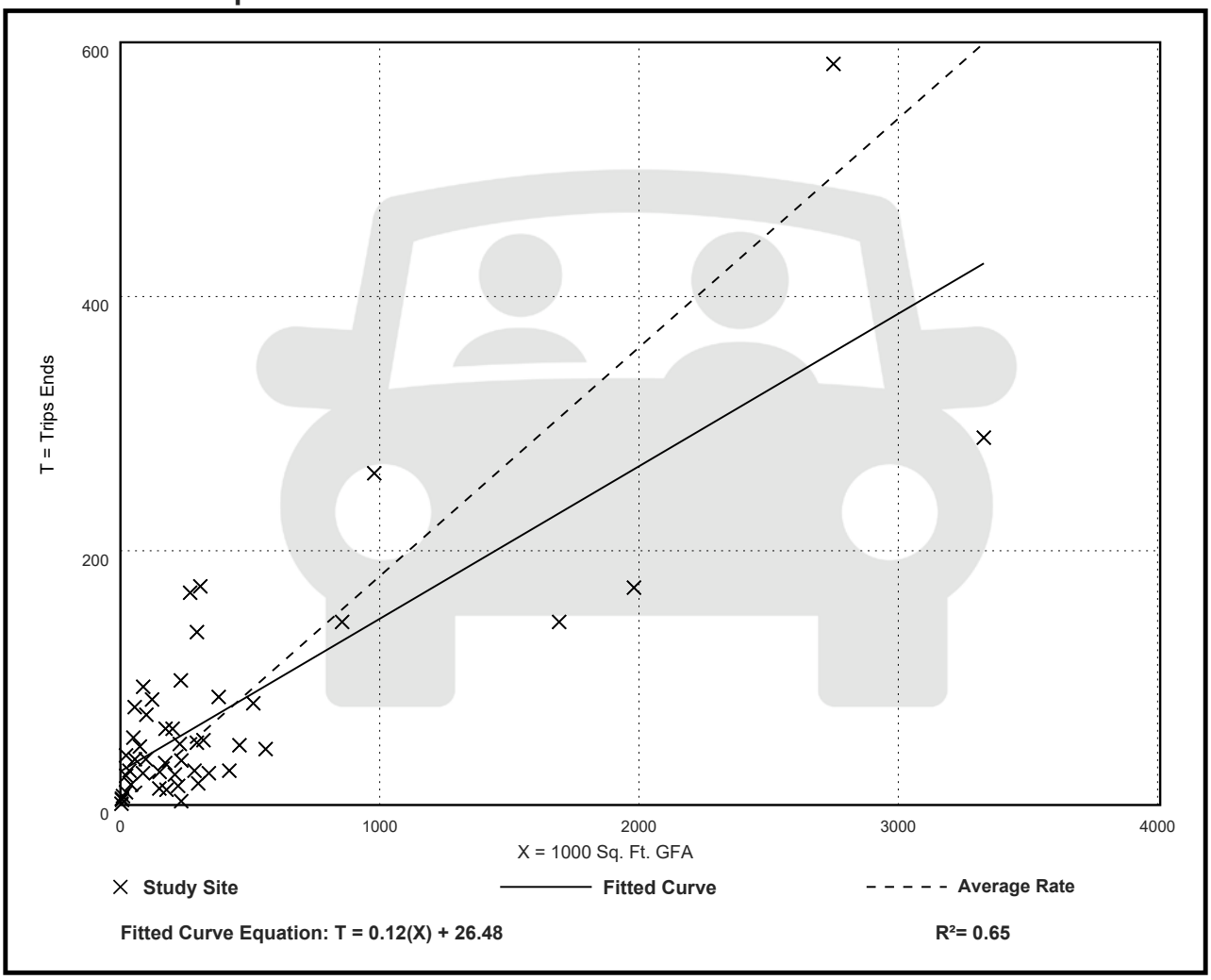
Warehousing
(150)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 49
Avg. 1000 Sq. Ft. GFA: 400
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.01 - 1.80	0.18

Data Plot and Equation



Fitted Curve Equation: T = 0.12(X) + 26.48

R^2= 0.65

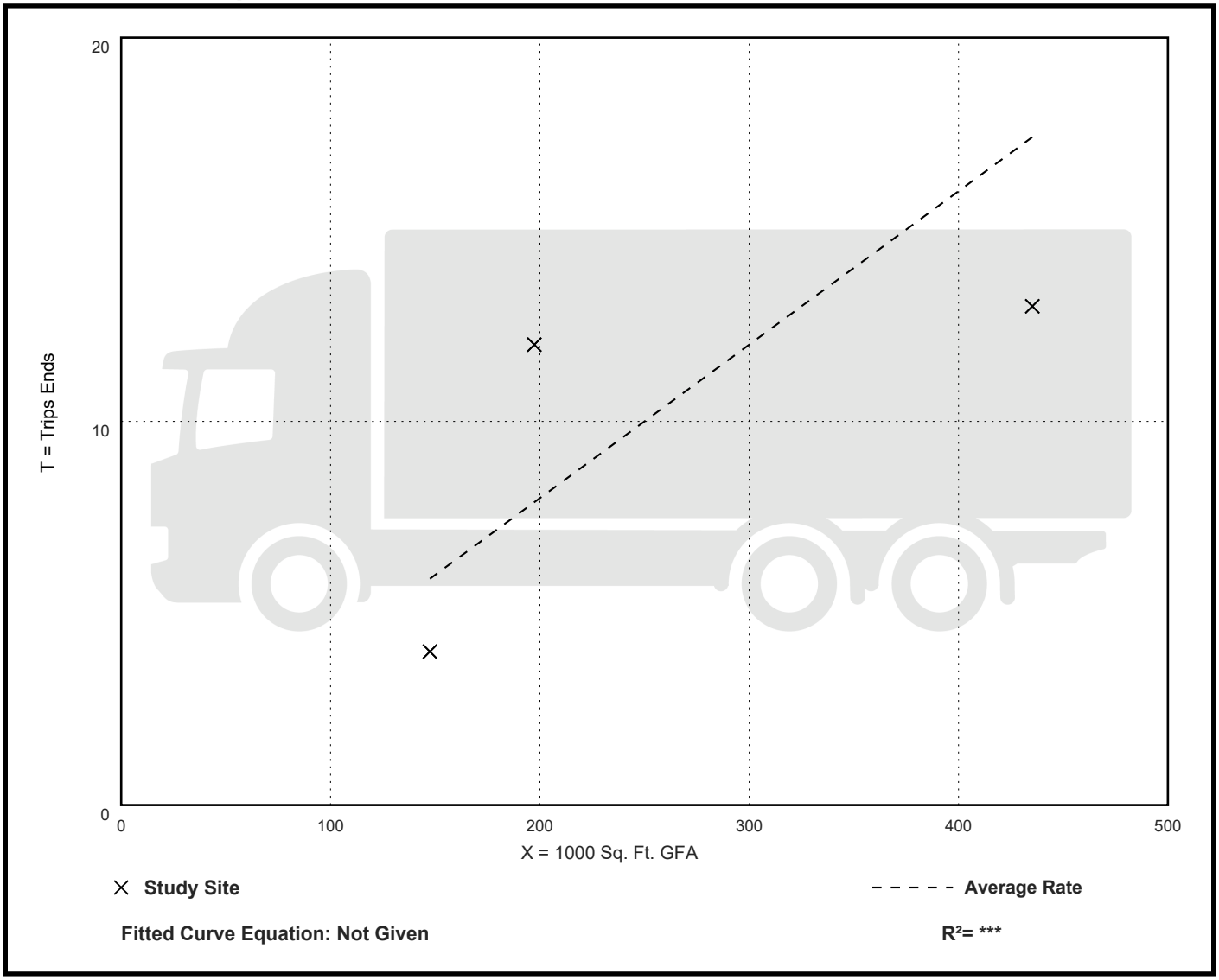
Industrial Park
(130)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 260
Directional Distribution: 45% entering, 55% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.04	0.03 - 0.06	0.02

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

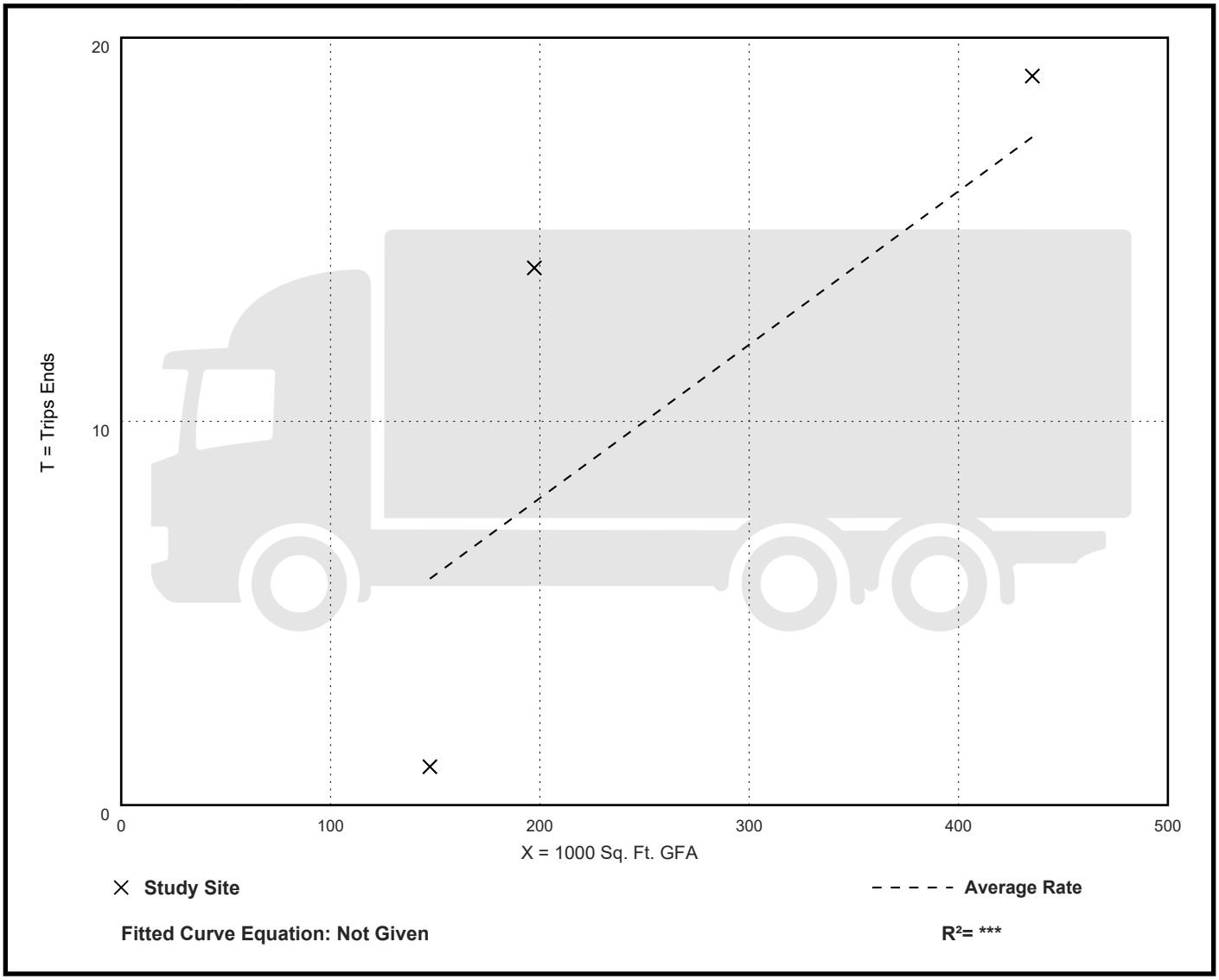
Industrial Park
(130)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 260
Directional Distribution: 38% entering, 62% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.04	0.01 - 0.07	0.03

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= *

Trip Generation Handbook
3rd Edition

SEPTEMBER 2017

INSTITUTE OF TRANSPORTATION ENGINEERS

5.5.2 Baseline Site Mode Shares and Vehicle Occupancy

Baseline person trips are calculated by

- First, converting ITE **baseline vehicle trip generation** estimates to **vehicle person trips** using the baseline vehicle occupancy for the specific land use code (or the same general land use category), and
- Second, converting **vehicle person trips** to **person trips by mode** through the use of applicable baseline mode shares.

Baseline vehicle trip generation can be estimated from data provided in *Trip Generation Manual*. Procedures for making those estimates are described in Chapters 3 and 4. Little information is provided regarding baseline vehicle occupancy or mode shares.

For this *Handbook*, a limited amount of weekday commuter peak period (7:00–9:00 a.m., 4:00–6:00 p.m.) mode share and vehicle occupancy data were collected for baseline sites to provide a general starting point for some of the more common land use types. Baseline data were collected at apartments, motels, offices, shopping centers, restaurants, a bank, and a bowling alley.[5] These baseline mode share and vehicle occupancy data are presented in Appendix B.

There are not enough samples in the Appendix B data to derive precise percentages by mode for the land use types for which data were collected. However, in almost all cases, the percentage of total person trips in vehicles exceeds 95 percent. In some cases the averages by land use are 100 percent motor vehicle. Based on the limited data shown, the analyst can reasonably conclude the following with regard to baseline mode shares:

- The percentage mode share of person trips made by vehicle (personal passenger vehicle plus truck) for most baseline sites is 95 percent or more.
- The majority of non-vehicle trips are by walking.
- From the limited number of samples with more than 100 observations, it appears there may be only very small directional differences in total vehicle share percentages for some land uses. Smaller samples contain slightly larger variations. Those could be real or could be just statistical data noise from smaller samples.
- Percentages of person trips in vehicles are only available in this data set for a few land uses. The findings may or may not be transferrable to other land uses. It is not suggested at this time to assume the same results for other land uses. However, it may be reasonable to assume similar results for land uses within the same land use category (such as residential, lodging, or general retail).

If the analyst assumes a mode share of 95 percent of person trips are in vehicles, then the ITE vehicle trip generation rates/equations (when converted to person trips) represent 95 percent of the total person trips (both drivers and passengers). The other 5 percent are walk, bicycle, and transit trips.

[5] The land use types were selected so the data would be transferrable to similar land uses. For example, residential apartment mode shares should be applicable to all suburban baseline apartment classifications.

APPENDIX M:

Transportation Tomorrow Survey Data

Fri Feb 14 2025 14:31:20 GMT-0500 (Eastern Standard Time) - Run Time: 3162ms

Cross Tabulation Query Form - Trip - 2022

Row: Planning district of origin - pd_orig

Column: 2006 GTA zone of destination - gta06_dest

Filters:

Trip Purpose of Destination - purp_dest In W,

and

2006 GTA zone of destination - gta06_dest In 3014,3015,3440,3441

and

Start time of trip - start_time In 0630-0930

Trip 2022

Table:

,3014,3015,3440

Newmarket,14,0,0

Aurora,9,0,0

Vaughan,0,37,0

Caledon,146,104,29

Brampton,106,77,129

Mississauga,43,0,0

Halton Hills,4,0,0

Flamborough,16,0,0

Erin,10,0,0

Orangeville,0,9,0

New Tecumseth,116,0,0

Mulmur ,6,0,0

Fri Feb 14 2025 14:35:57 GMT-0500 (Eastern Standard Time) - Run Time: 3327ms

Cross Tabulation Query Form - Trip - 2022

Row: 2006 GTA zone of origin - gta06_orig

Column: 2006 GTA zone of destination - gta06_dest

Filters:

Trip Purpose of Destination - purp_dest In W,

and

2006 GTA zone of destination - gta06_dest In 3014,3015,3440,3441

and

Start time of trip - start_time In 0630-0930

and

Planning district of origin - pd_orig In 34, 35, 36,

Trip 2022

Table:

,3014,3015,3440

3005,0,0,29

3008,33,0,0

3010,113,0,0

3198,0,104,0

3337,67,0,0

3360,5,0,0

3371,6,0,0

3373,5,0,0

3376,5,0,0

3384,0,0,106

3420,0,48,0

3434,0,26,0

3459,0,0,23

3460,0,3,0

3464,18,0,0

3716,33,0,0

3810,10,0,0

Fri Feb 14 2025 15:13:26 GMT-0500 (Eastern Standard Time) - Run Time: 3434ms

Cross Tabulation Query Form - Trip - 2022

Row: Planning district of destination - pd_dest

Column: 2006 GTA zone of origin - gta06_orig

Filters:

Trip Purpose of Origin - purp_orig In W,

and

2006 GTA zone of origin - gta06_orig In 3014,3015,3440,3441

and

Start time of trip - start_time In 1530-1830

Trip 2022

Table:

,3014,3015,3440,3441

PD 9 of Toronto,0,52,0,0

PD 16 of Toronto,0,6,0,0

Aurora,9,0,0,0

Vaughan,0,24,0,0

Caledon,181,52,0,0

Brampton,38,77,23,35

Mississauga,10,0,0,0

Flamborough,16,0,0,0

Orangeville,0,9,0,0

New Tecumseth,81,0,0,0

Fri Feb 14 2025 15:32:33 GMT-0500 (Eastern Standard Time) - Run Time: 3474ms

Cross Tabulation Query Form - Trip - 2022

Row: 2006 GTA zone of destination - gta06_dest

Column: 2006 GTA zone of origin - gta06_orig

Filters:

Trip Purpose of Origin - purp_orig In W,

and

2006 GTA zone of origin - gta06_orig In 3014,3015,3440,3441

and

Start time of trip - start_time In 1530-1830

and

Planning district of destination - pd_dest In 34, 35, 36,

Trip 2022

Table:

,3014,3015,3440,3441

3008,33,0,0,0

3010,113,0,0,0

3107,35,0,0,0

3198,0,52,0,0

3373,5,0,0,0

3375,0,26,0,0

3376,5,0,0,0

3377,0,0,23,0

3417,0,3,0,0

3420,0,48,0,0

3440,6,0,0,0

3462,4,0,0,0

3464,18,0,0,0

3468,0,0,0,35

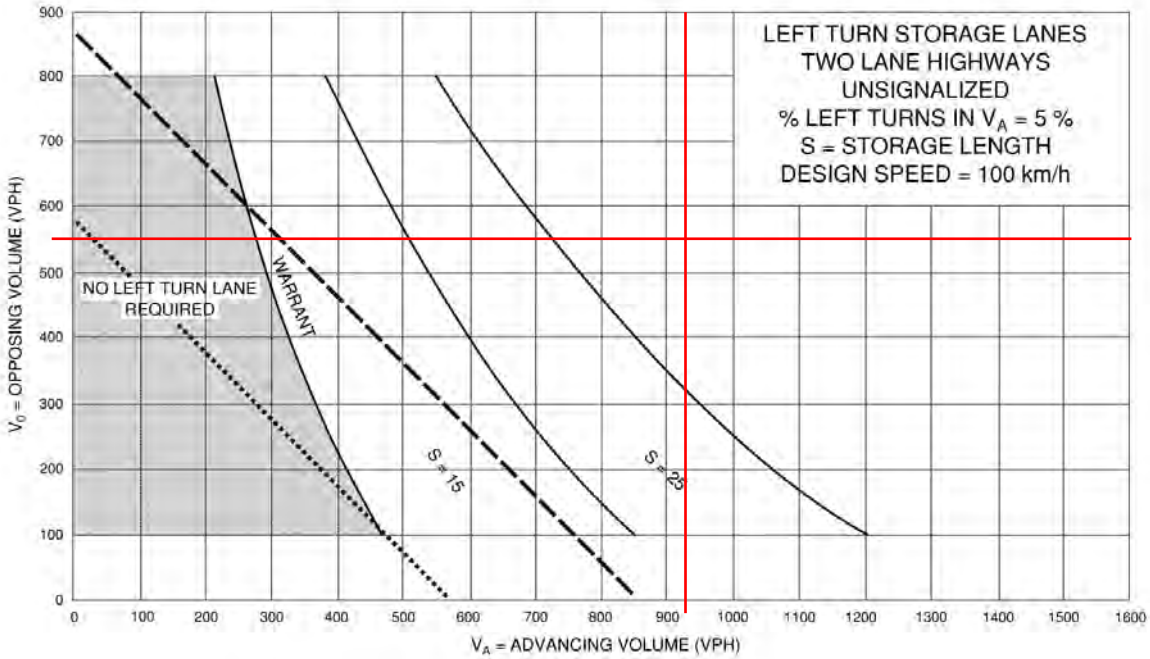
3810,10,0,0,0

APPENDIX N:

Site Access Review Excerpts

Exhibit-9A-23

2028 FT P.M.



TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

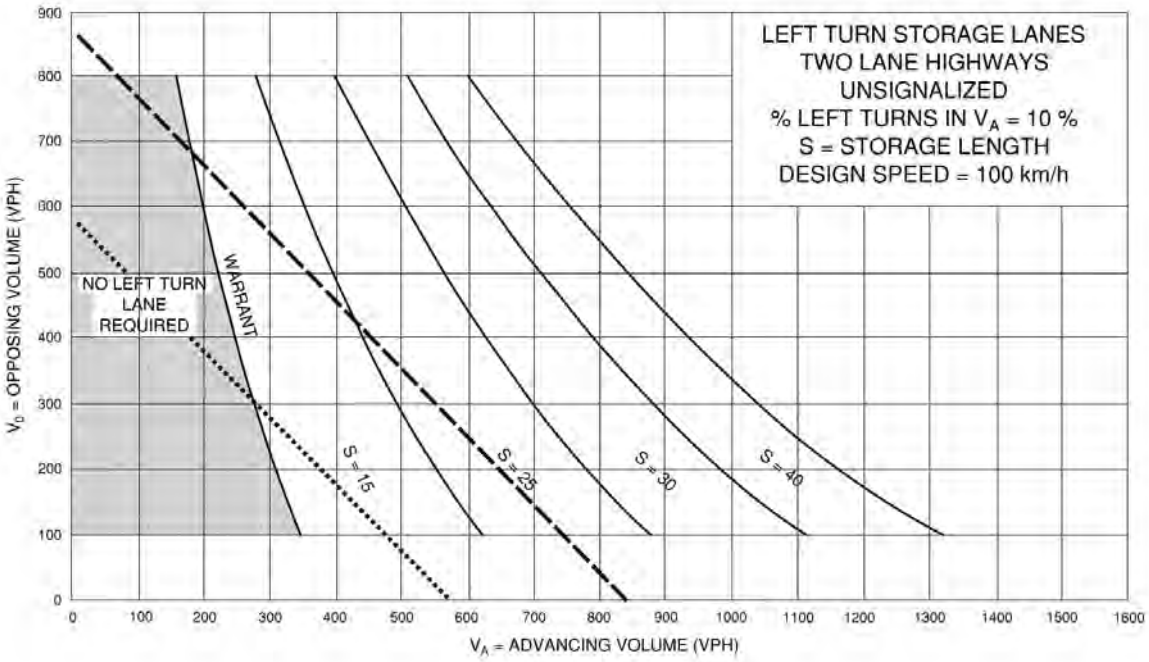
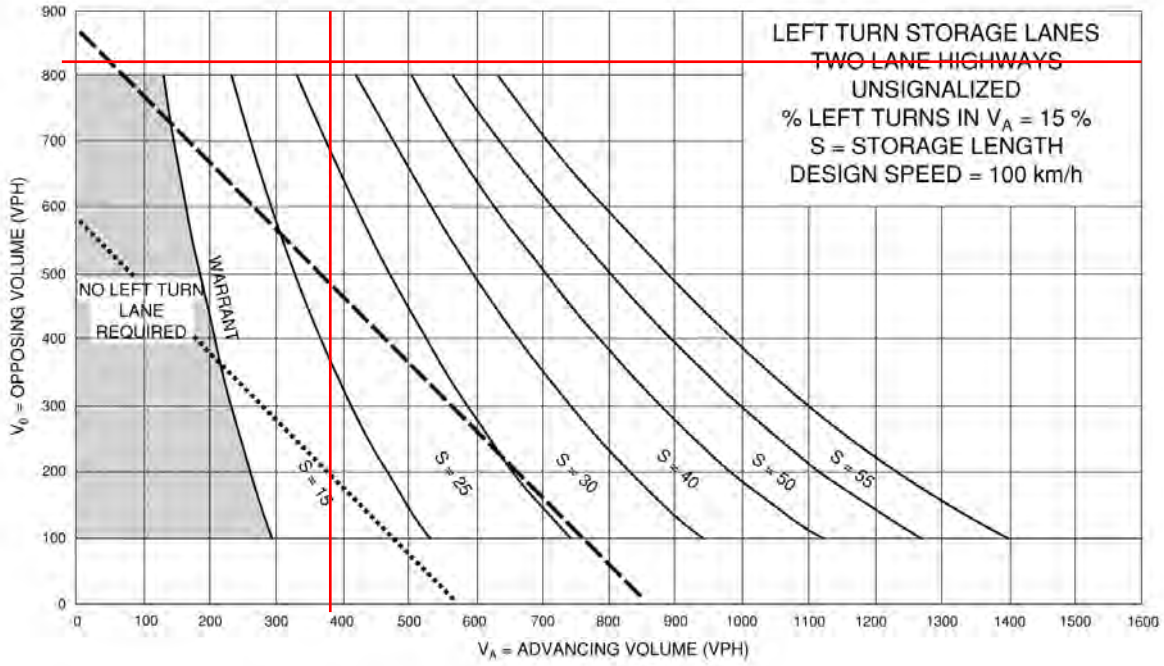


Exhibit-9A-24

2028 FT A.M.



TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

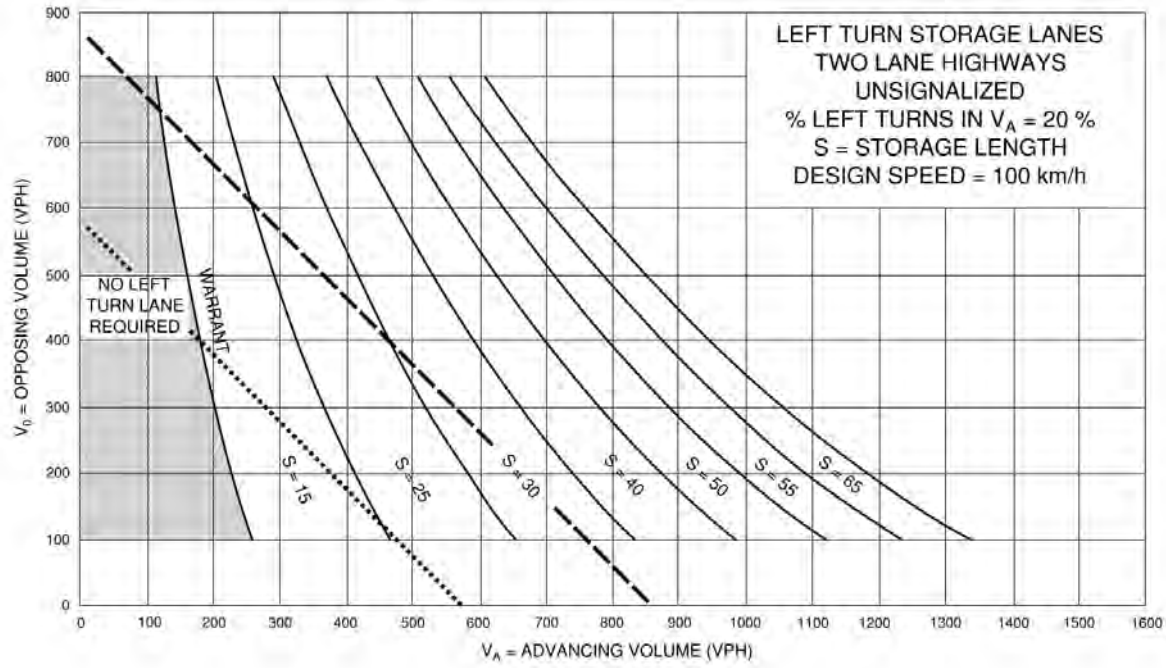
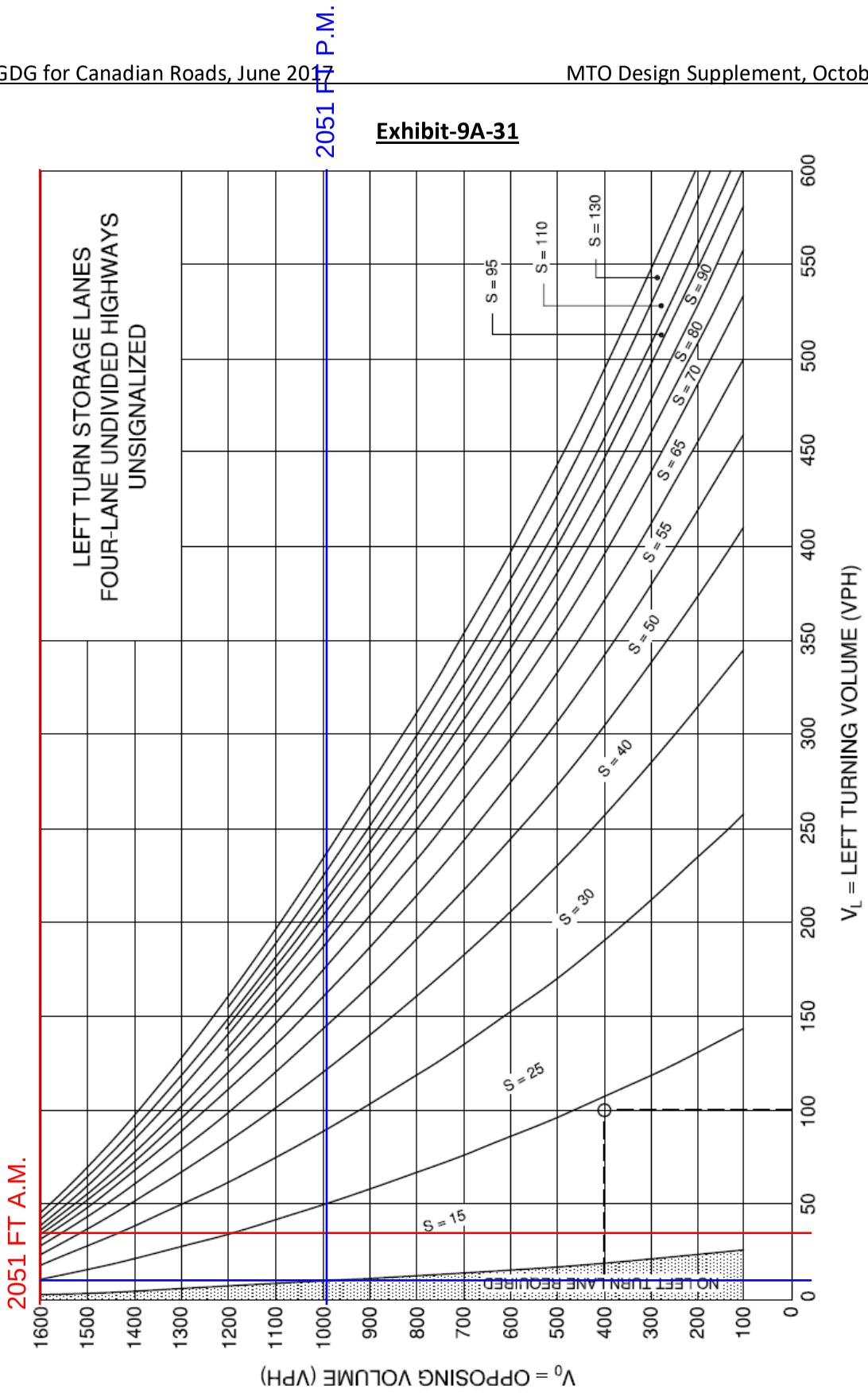
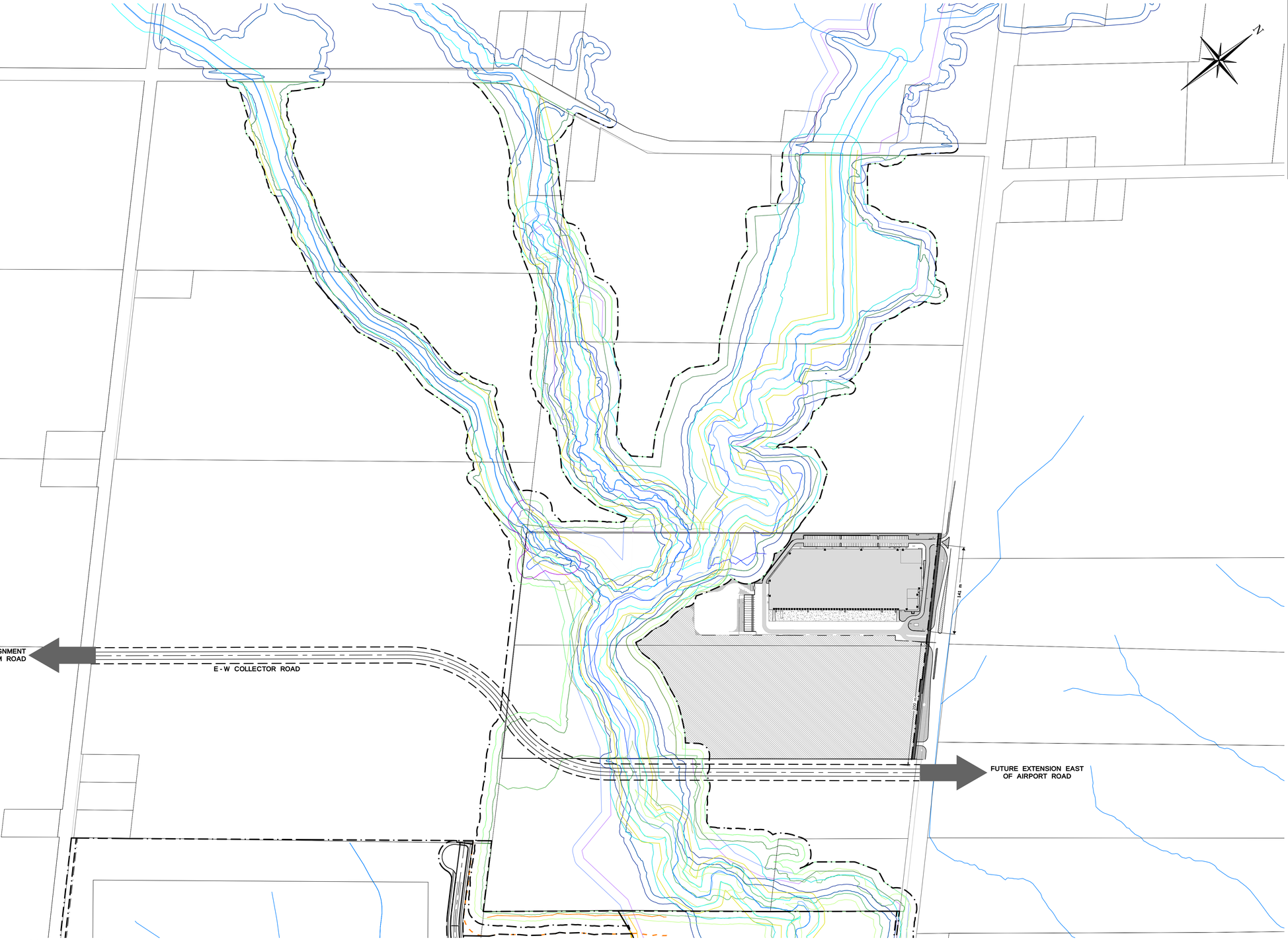


Exhibit-9A-31



APPENDIX O:

Proposed Access Spacing Diagrams



LEGEND

- Road
- Watercourse (Fish Habitat)

Natural Features and Natural Hazards

- Occupied Redside Dace Habitat (Meander Belt +30m)
- Candidate Significant Wetland, NRSI
- Candidate Significant Wetland, GEI
- Unevaluated Wetland, NRSI
- Unevaluated Wetland, GEI
- Significant Valleyland (TRCA)
- Significant Valleyland (TRCA, MTE, GEI)
- Significant Woodland
- Non-Significant Woodland
- Flood Hazard (TRCA 2024)
- Meander Belt (Geo Morphix)
- Meander Belt (TRCA)
- Long Term Stable Top of Slope (MTE)

Natural Feature Buffers and Natural Hazard Setbacks

- Fish Habitat (Watercourse +15m)
- Unevaluated Wetland +15m
- Candidate Significant Wetland +30m
- Significant Valleyland +15m
- Woodland +10m
- Floodline +10m
- Meander Belt +10m

Proposed Natural Hazards and Setbacks

- Natural Heritage Features and Hazards
- Natural Heritage Features and Hazard Setbacks

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7. ENVIRONMENTAL CONSTRAINTS PER 8-9 OF THE BROCCOLINI AIRPORT ROAD MESR.

No.	ISSUE	DATE: MM/DD/YYYY
0	**ISSUED FOR 1st SUBMISSION**	**11/14/2025**
1	**ISSUED FOR 2nd SUBMISSION**	04/29/2026

Engineer

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

Engineer

Project

0 AIRPORT ROAD
TOWN OF CALEDON

Drawing

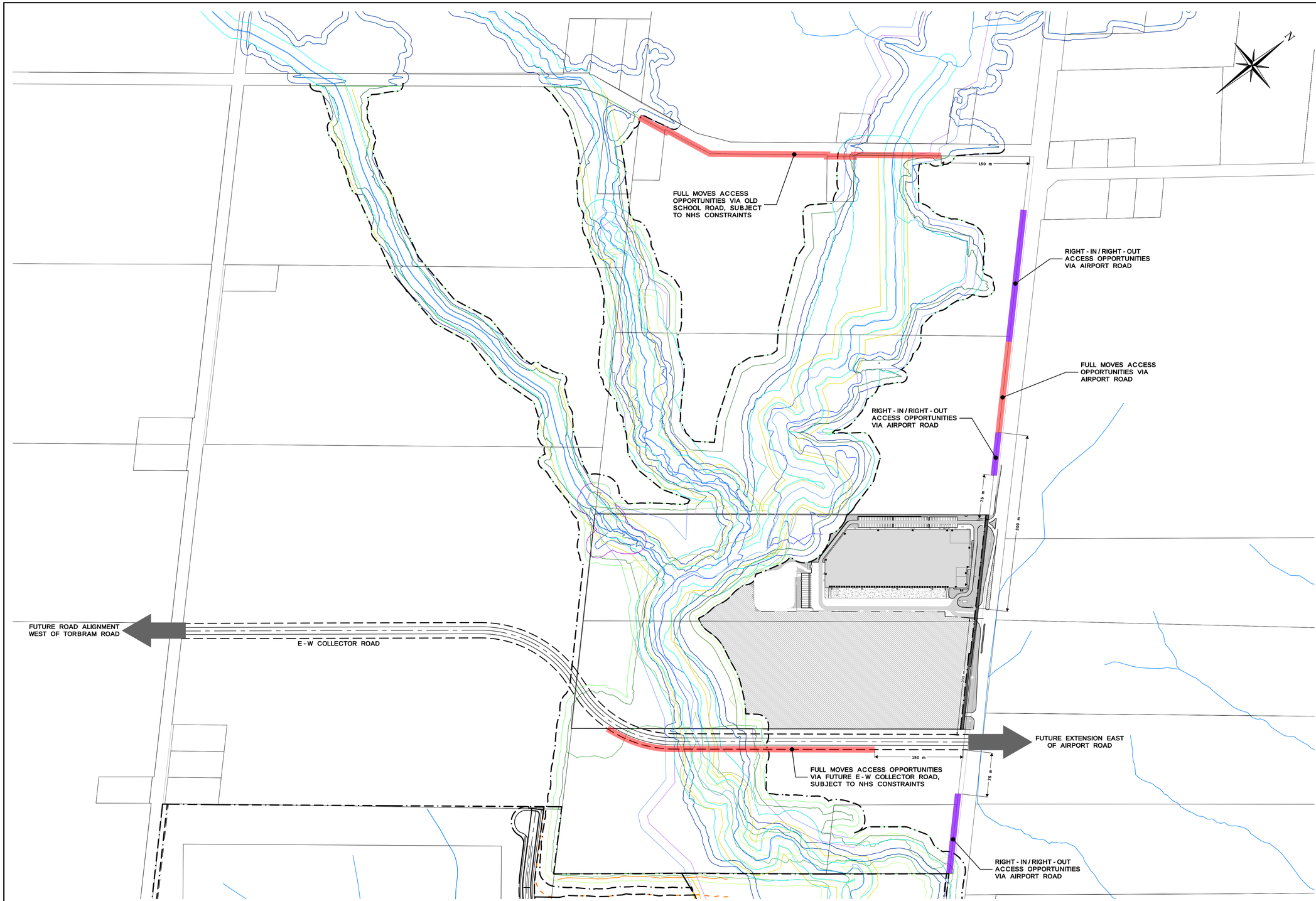
PROPOSED ACCESS SPACING DIAGRAM

CROZIER CONSULTING ENGINEERS

Drawn By	Design By	Project
R.L.		2278-7228
Check By	Check By	Drawing
M.Y.	M.L.	FIG I1

APPENDIX P:

Corridor Access Management Diagram



LEGEND

- Road
- Watercourse (Fish Habitat)

Natural Features and Natural Hazards

- Occupied Redside Dace Habitat (Meander Belt +30m)
- Candidate Significant Wetland, NRSI
- Candidate Significant Wetland, GEI
- Unevaluated Wetland, NRSI
- Unevaluated Wetland, GEI
- Significant Valleyland (TRCA)
- Significant Valleyland (TRCA, MTE, GEI)
- Significant Woodland
- Non-Significant Woodland
- Flood Hazard (TRCA 2024)
- Meander Belt (Geo Morphix)
- Meander Belt (TRCA)
- Long Term Stable Top of Slope (MTE)

Natural Feature Buffers and Natural Hazard Setbacks

- Fish Habitat (Watercourse +15m)
- Unevaluated Wetland +15m
- Candidate Significant Wetland +30m
- Significant Valleyland +15m
- Woodland +10m
- Floodline +10m
- Meander Belt +10m

Proposed Natural Hazards and Setbacks

- Natural Heritage Features and Hazards
- Natural Heritage Features and Hazard Setbacks

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7. ENVIRONMENTAL CONSTRAINTS PER 8-9 OF THE BROCCOLINI AIRPORT ROAD MESR.

No.	ISSUE	DATE: MM/DD/YYYY
0	**ISSUED FOR 1st SUBMISSION**	**11/14/2025**
1	**ISSUED FOR 2nd SUBMISSION**	04/29/2026

Engineer

FOR REVIEW
NOT TO BE USED FOR CONSTRUCTION

Engineer

Project

0 AIRPORT ROAD
TOWN OF CALEDON

Drawing

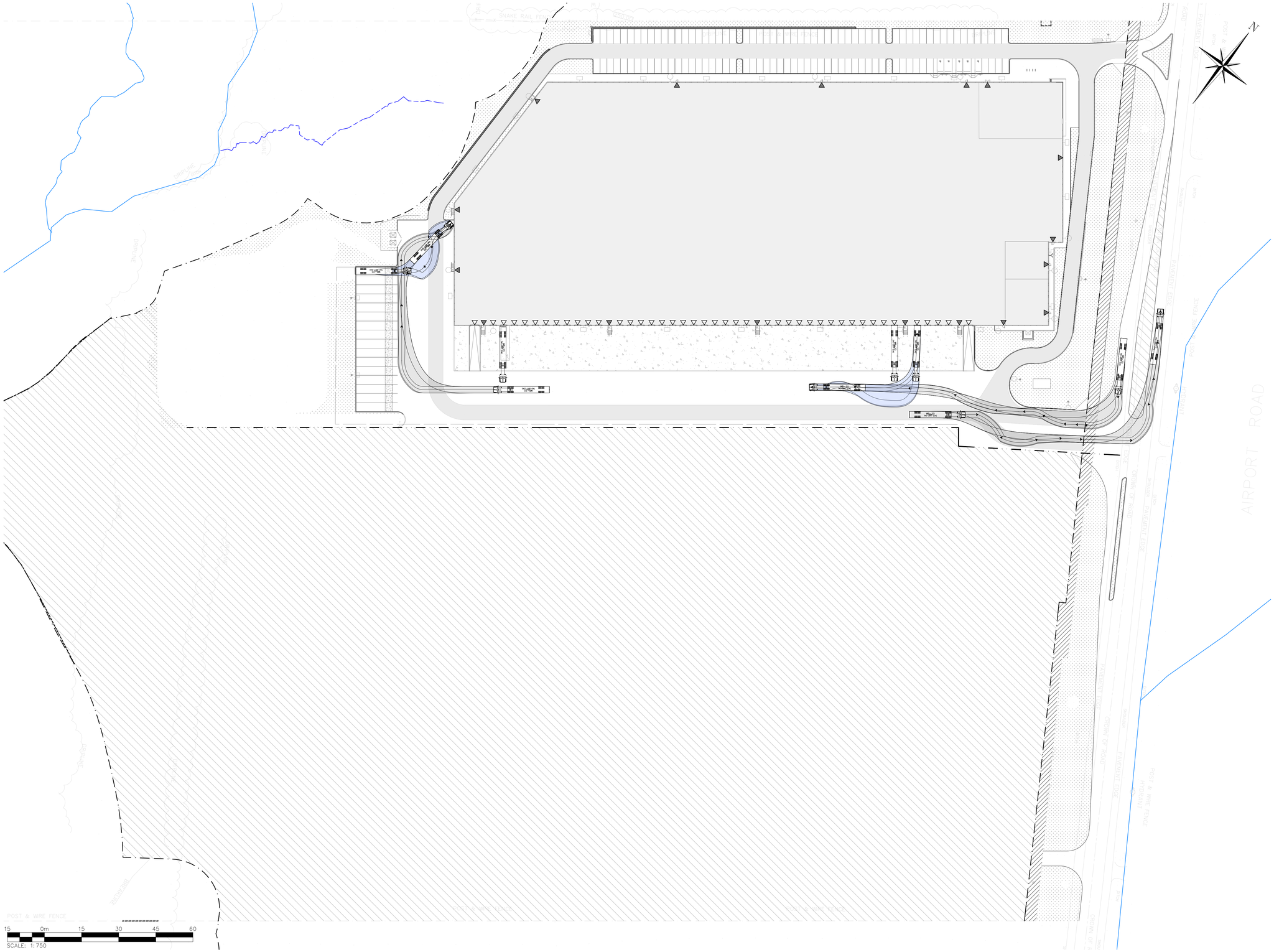
ACCESS MANAGEMENT DIAGRAM

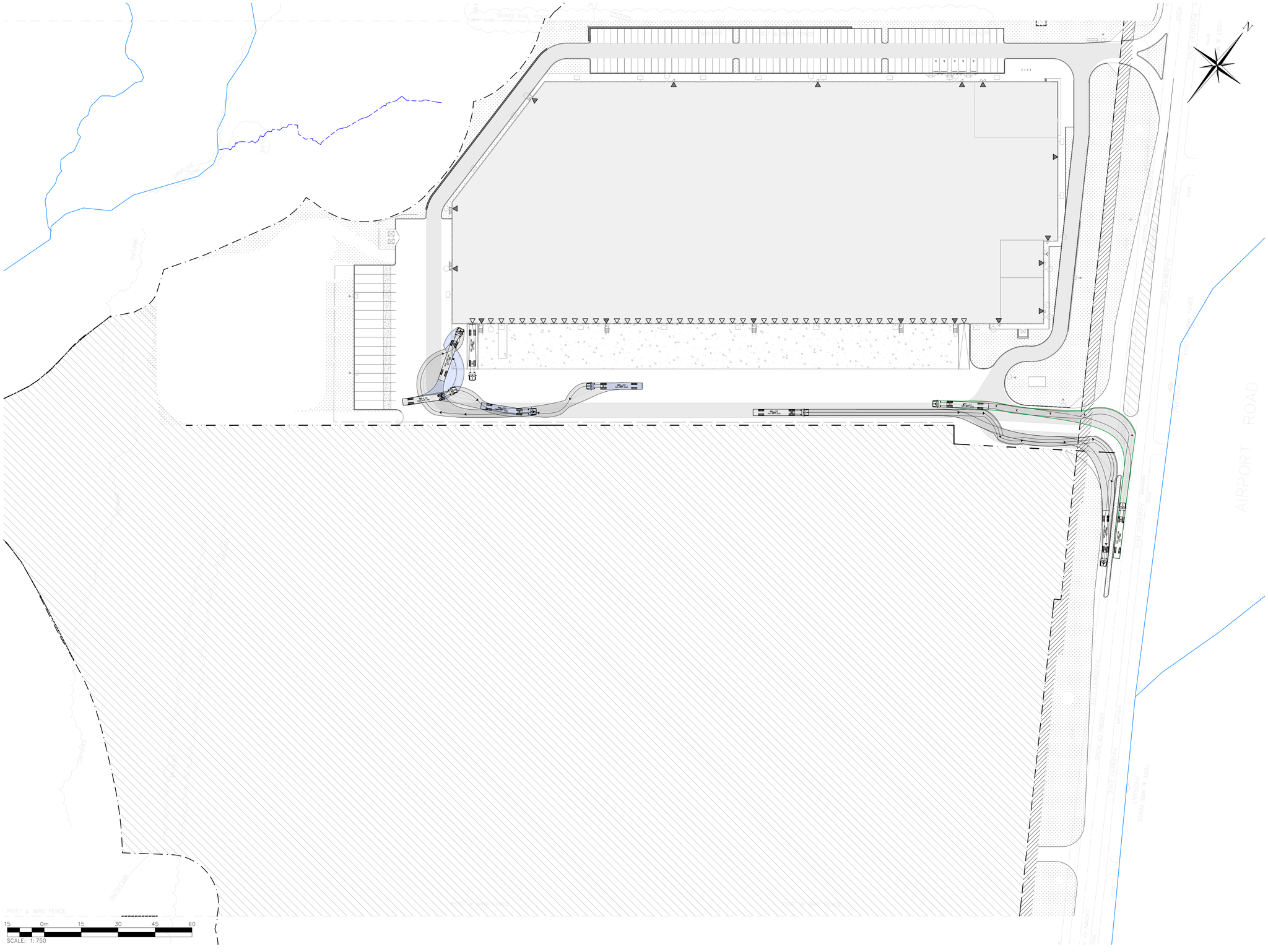
CROZIER CONSULTING ENGINEERS

Drawn By	Design By	Project
R.L.		2278-7228
Check By	Check By	Drawing
M.Y.	M.L.	FIG I1

APPENDIX Q:

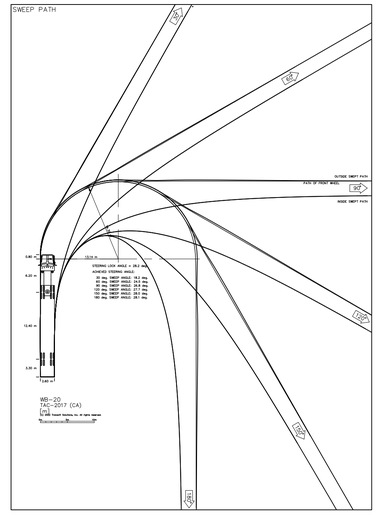
Vehicle Turning Diagrams

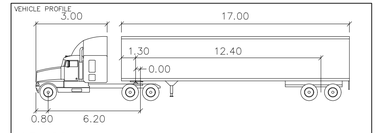

SNAKE RAIL FENCE
POST & WIRE FENCE
POST & WIRE FENCE
POST & WIRE FENCE
AIRPORT ROAD
AIRPORT ROAD
AIRPORT ROAD



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	11/14/2025
2	ISSUED FOR 2nd SUBMISSION	05/05/2026

Project

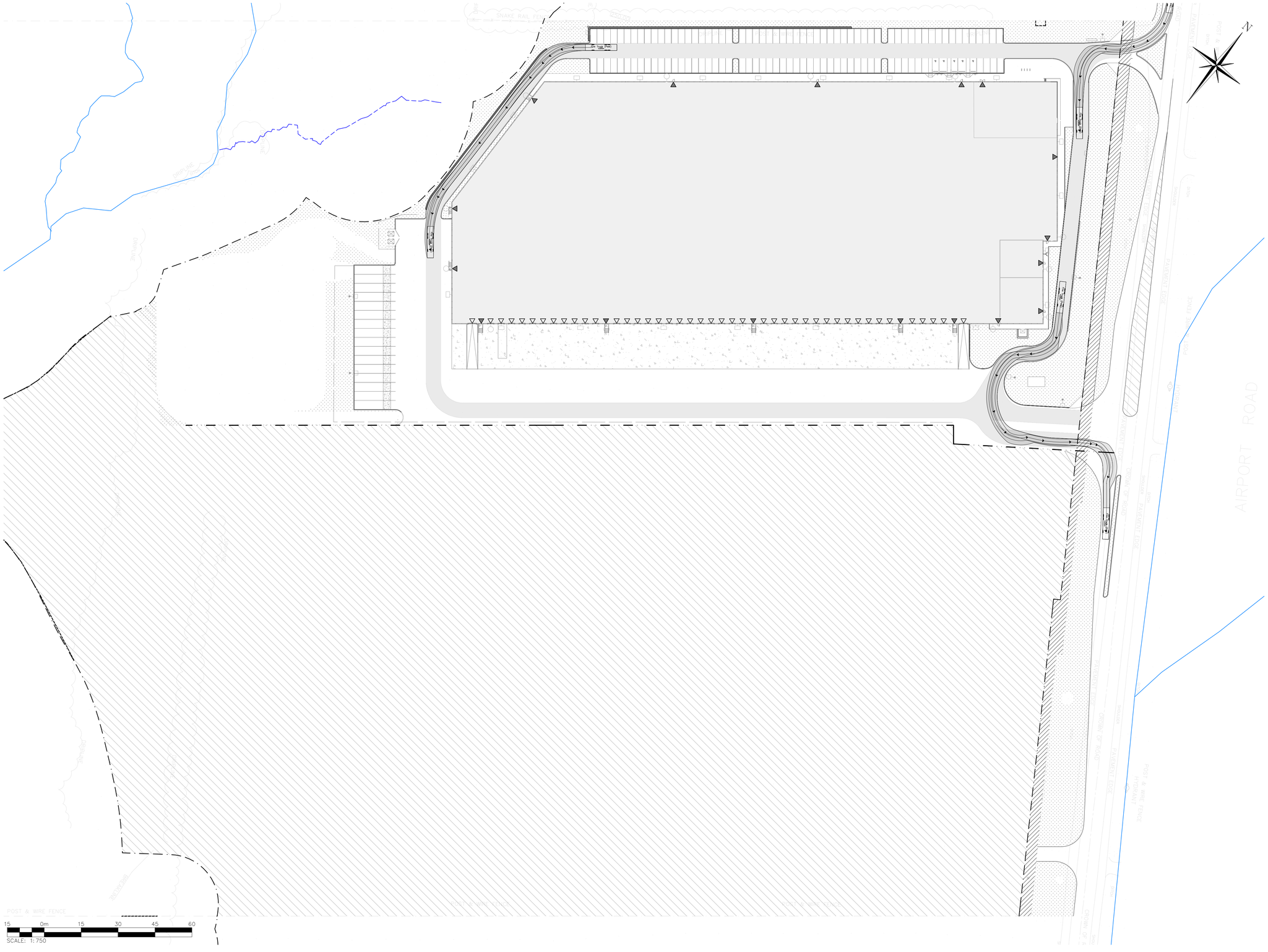
BROCCOLINI AIRPORT ROAD
TOWN OF CALEDON

Drawing

VEHICLE MANEUVERING ANALYSIS

CROZIER
CONSULTING ENGINEERS

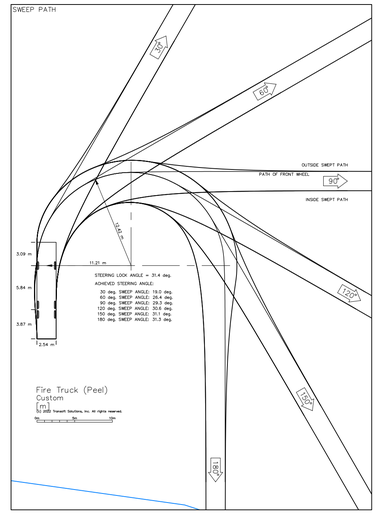
Drawn By	Design By	Project
R.L.		2278–7228
Check By	Check By	Drawing
M.Y.	M.L.	T301



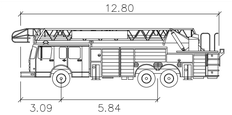
FOR REVIEW

NOT TO BE USED FOR CONSTRUCTION

SWEEP PATH



VEHICLE PROFILE



Fire Truck (Peel)

meters

Width	: 2.54
Track	: 2.54
Lock to Lock Time	: 6.0
Steering Angle	: 31.4

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 1st SUBMISSION	11/14/2025
2	ISSUED FOR 2nd SUBMISSION	05/05/2026

Project

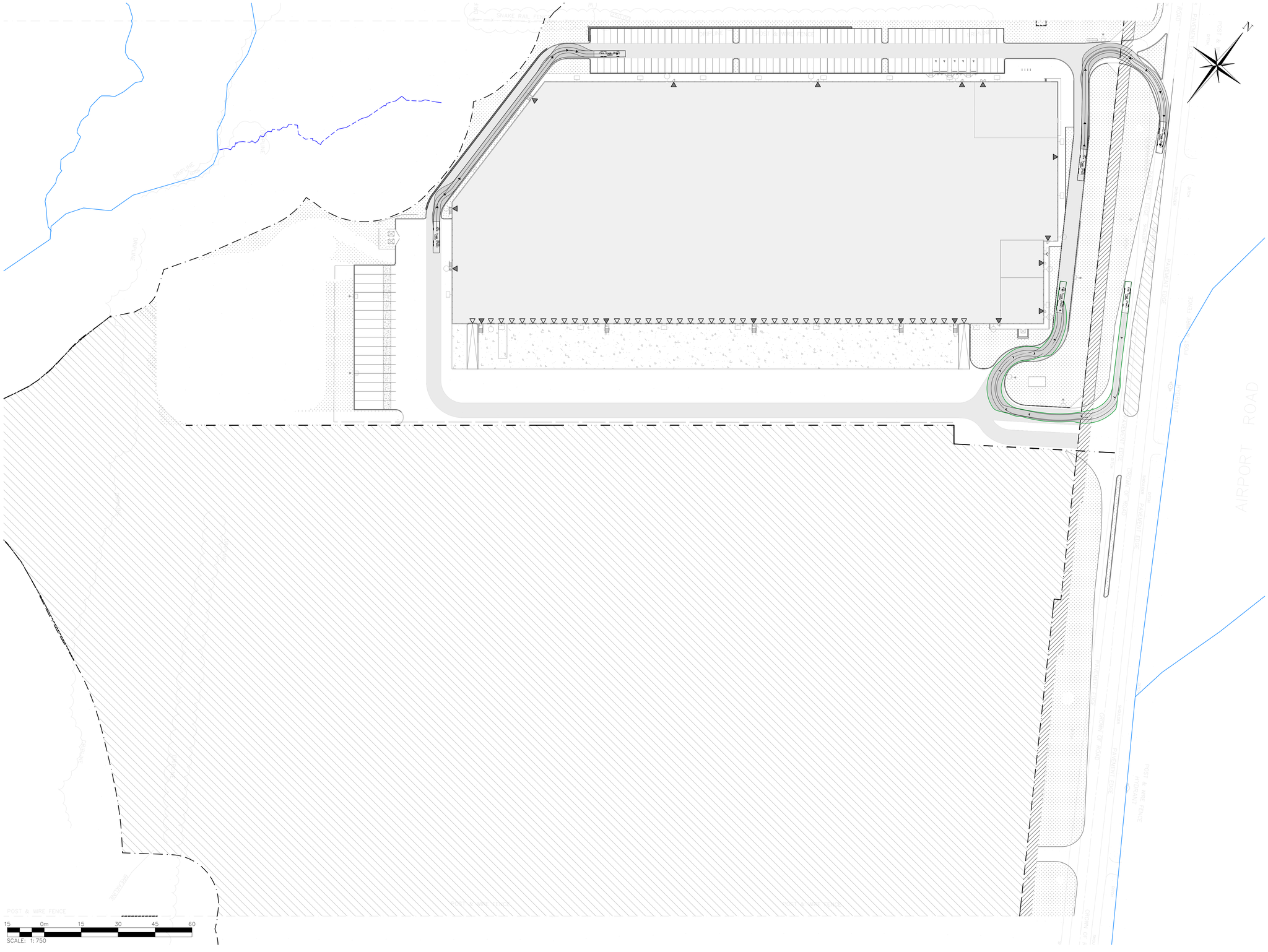
BROCCOLINI AIRPORT ROAD
TOWN OF CALEDON

Drawing

VEHICLE MANEUVERING ANALYSIS

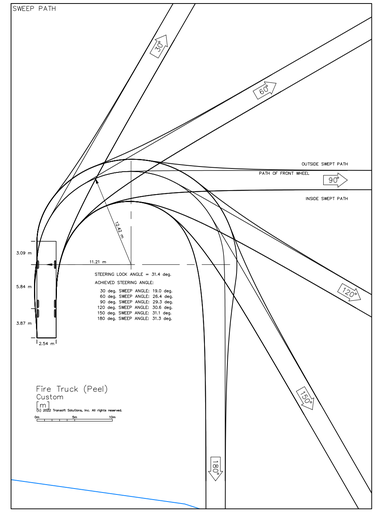
CROZIER
CONSULTING ENGINEERS

Drawn By	R.L.	Design By	
Check By	M.Y.	Check By	M.L.
Project	2278-7228		
Drawing	T302		

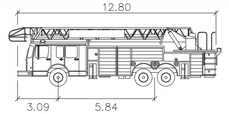


FOR REVIEW

NOT TO BE USED FOR CONSTRUCTION



VEHICLE PROFILE



Fire Truck (Peel)

meters

Width	: 2.54
Track	: 2.54
Lock to Lock Time	: 6.0
Steering Angle	: 31.4

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 1st SUBMISSION	11/14/2025
2	ISSUED FOR 2nd SUBMISSION	05/05/2026

Project

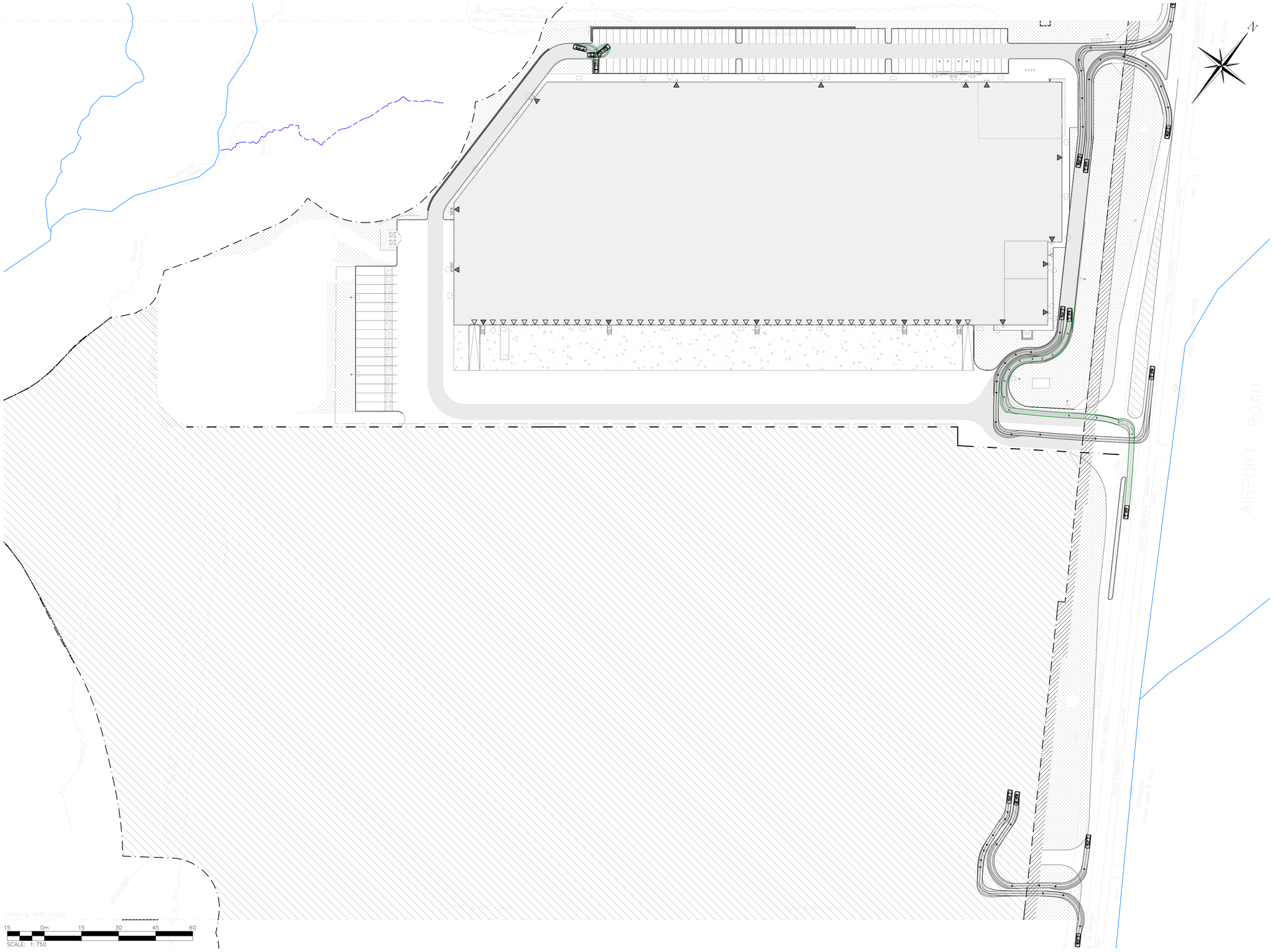
BROCCOLINI AIRPORT ROAD
TOWN OF CALEDON

Drawing

VEHICLE MANEUVERING ANALYSIS

CROZIER
CONSULTING ENGINEERS

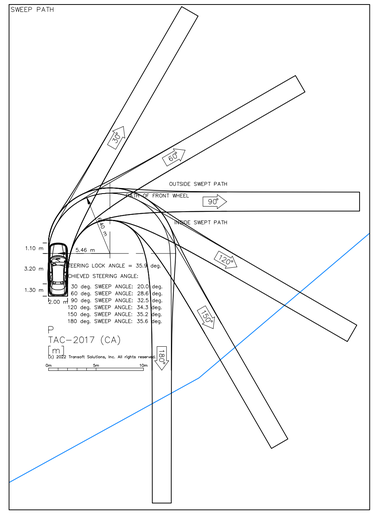
Drawn By	Design By	Project
R.L.		2278-7228
Check By	Check By	Drawing
M.Y.	M.L.	T303



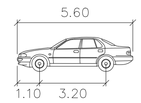
FOR REVIEW

NOT TO BE USED FOR CONSTRUCTION

SWEEP PATH



VEHICLE PROFILE



P

	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.0
Steering Angle	: 35.9

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR 1st SUBMISSION	11/14/2025
2	ISSUED FOR 2nd SUBMISSION	05/05/2026

Project

BROCCOLINI AIRPORT ROAD
TOWN OF CALEDON

Drawing

VEHICLE MANEUVERING ANALYSIS

CROZIER
CONSULTING ENGINEERS

Drawn By	Design By	Project
R.L.		2278-7228
Check By	Check By	Drawing
M.Y.	M.L.	T304

APPENDIX R:

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 or Planned Development *Zone* is different from the above requirements, the applicable minimum *parking* provisions of the Exception or Planned Development *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.

OFFICE CONSOLIDATION

This a consolidation of the Town's by-law to regulate the use of highways and parking on highways and to repeal certain by-laws being By-law Number 2024-048 as amended by By-law 2025-064, 2025-073 and 2025-091. The following consolidation is an electronic reproduction made available for information purposes only and is not an official version of the by-law. Official versions of all by-laws can be obtained from the Town Clerk by calling (905) 584-2272. If there are any discrepancies between this consolidation and By-laws 2024-048, 2025-064, 2025-073 and 2025-091 the By-laws shall prevail.

THE CORPORATION OF THE TOWN OF CALEDON

BY-LAW NO. BL- 2024-048

A by-law to regulate the use of highways and
parking on highways and to repeal certain by-laws

WHEREAS Subsection 11(3) of the *Municipal Act, 2001* authorizes a municipality to pass by-laws respecting highways, including parking and traffic on highways under the jurisdiction of the Town of Caledon;

[Whereas Clause [Section 27(1)] added, By-law 2025-073, effective September 23/25]

AND WHEREAS pursuant to Section 27(1) of the Act, a municipality may pass bylaws in respect of a highway only if it has jurisdiction over the highway;

AND WHEREAS Sections 100 and 100.1 of the *Municipal Act, 2001* authorize a municipality to pass by-laws respecting parking lots;

AND WHEREAS Section 101 of the *Municipal Act, 2001* authorizes a municipality to pass by-laws providing for the removal of vehicles parked illegally at the owner's expense;

AND WHEREAS Section 102 of the *Municipal Act, 2001* authorizes a municipality to pass by-laws respecting accessible parking and for the removal of a vehicle at the owner's expense;

AND WHEREAS Part IX of the *Highway Traffic Act* authorizes a municipality to provide for rates of speed within the municipality;

AND WHEREAS Section 7.1 of the *Fire Protection and Prevention Act, 1997* authorizes a municipality to pass by-laws designating private roads as fire routes and providing for the impounding of any vehicle parked or left along any of the fire routes at the expense of the owner of the vehicle;

AND WHEREAS Subsection 7(2) of the *Motorized Snow Vehicles Act* authorizes a municipality to pass by-laws respecting the operation of motorized snow vehicles within a municipality, including any highways;

AND WHEREAS the Council for The Corporation of the Town of Caledon considers it advisable to enact an updated and consolidated traffic by-law;

NOW THEREFORE the Council of The Corporation of the Town of Caledon **ENACTS AS FOLLOWS**:

PART 1 - DEFINITIONS

GENERAL DEFINITIONS

1.1 Where words and phrases used in this by-law are defined in the *HIGHWAY TRAFFIC ACT*, but not defined in this by-law, the definitions in the *HIGHWAY TRAFFIC ACT* and its regulations or its successors shall apply to such words and phrases.

3.59 No PERSON, without a valid temporary parking pass, shall PARK a VEHICLE on a HIGHWAY:

(a) For period longer than three (3) continuous hours;

(b) Between the hours of 2:00 a.m. and 6:00 am;

3.60 The DIRECTOR is hereby designated to issue a temporary parking pass and determine such procedures, terms, and conditions under which a temporary parking pass may be issued.

3.61 A temporary parking pass shall not grant any exemption to any regulations set out in this By-law except for the purpose specified on the pass in accordance with Article 3.59.

Accessible Parking for Persons with Disabilities

3.62 No PERSON shall PARK, STOP or STAND a vehicle in a DESIGNATED ACCESSIBLE PARKING SPACE, or be entitled to the benefit of an exemption under this by-law, unless a currently valid ACCESSIBLE PARKING PERMIT has been issued to that PERSON or to a passenger being picked up or transported in such VEHICLE, and such permit is displayed on or in the VEHICLE in accordance with the *HIGHWAY TRAFFIC ACT*.

3.63 No PERSON driving a VEHICLE displaying a VALID ACCESSIBLE PARKING PERMIT, shall PARK on or behind an ACCESS AISLE.

3.64 Every OWNER and operator of a PARKING LOT who is required to provide a DESIGNATED ACCESSIBLE PARKING SPACE is responsible for the procurement, installation and maintenance of the accessible parking sign and for ensuring that the sign conforms with the *HIGHWAY TRAFFIC ACT* and to the requirements of this by-law.

3.65 No PERSON shall relocate or remove a DESIGNATED ACCESSIBLE PARKING SPACE without the prior written approval of the DIRECTOR.

3.66 No OWNER or operator of a PARKING LOT shall at any time obstruct, cause to be obstructed or permit to be obstructed by any means or in any manner a DESIGNATED ACCESSIBLE PARKING SPACE.

3.67 Every OWNER or operator of a PARKING LOT who is required to provide a DESIGNATED ACCESSIBLE PARKING SPACE shall keep the PARKING SPACE clear of snow and ice.

3.68 Where an OWNER or operator of a PARKING LOT is required to provide a DESIGNATED ACCESSIBLE PARKING SPACE and fails to maintain a PARKING SPACE in good repair the TOWN may undertake or cause to undertake the necessary repair at the OWNER's or operator's expense and the TOWN may recover the expense incurred in doing it by action or in like manner as municipal taxes.

3.69 The OWNER or operator of a PARKING LOT shall not require the driver of a VEHICLE on or in which a permit is displayed in accordance with the requirements of the *HIGHWAY TRAFFIC ACT* and this by-law to pay an amount in excess of the normal fee paid by other users of the same PARKING LOT.

3.70 The OWNERs and operators of PARKING LOTs or other parking facilities to which the public has access, whether on payment of a fee or otherwise, shall provide DESIGNATED ACCESSIBLE PARKING SPACES in accordance with Ontario Regulation 191/11 (Integrated Accessibility Standards) as amended made under the Accessibility for Ontarians with Disabilities Act, 2005 as amended, as well as meeting the technical guidelines set out in Schedule "O" of this by-law.

[Section "Electric Vehicles" added, By-law 2025-073, effective September 23/25]

Electric Vehicles

3.71 No Person shall Park or leave Vehicle or any part of a Vehicle:

(a) in an ELECTRIC VEHICLE PARKING STALL where such VEHICLE is not an ELECTRIC VEHICLE.

(b) in an ELECTRIC VEHICLE PARKING STALL where such VEHICLE is not connected to an ELECTRIC VEHICLE CHARGING STATION and actively charging.

O. Reg. 191/11: INTEGRATED ACCESSIBILITY STANDARDS

Under: Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11

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Versions | Other regulations under the same Act

CURRENT **January 1, 2024 - e-Laws currency date (October 24, 2025)**

November 29, 2023 - December 31, 2023

July 1, 2016 - November 28, 2023

June 6, 2016 - June 30, 2016

January 1, 2013 - June 5, 2016

December 14, 2012 - December 31, 2012

July 1, 2011 - December 13, 2012

June 3, 2011 - June 30, 2011

Show less

Accessibility for Ontarians with Disabilities Act, 2005

ONTARIO REGULATION 191/11

INTEGRATED ACCESSIBILITY STANDARDS

CURRENT Consolidation period: January [illegible] e-Laws currency date (October 24, 2025)

3. Parking for law enforcement vehicles.

4. Parking for medical transportation vehicles, such as ambulances.

5. Parking used as a parking lot for impounded vehicles. O. Reg. 413/12, s. 6.

(2) The requirements in respect of off-street parking facilities do not apply to off-street parking facilities if,

(a) the off-street parking facilities are not located on a barrier-free path of travel, regulated under Ontario Regulation 350/06 (Building Code) made under the *Building Code Act, 1992; and*

(b) the obligated organization has multiple off-street parking facilities on a single site that serve a building or facility. O. Reg. 413/12, s. 6.

Types of accessible parking spaces

80.34 Off-street parking facilities must provide the following two types of parking spaces for the use of persons with disabilities:

1. Type A, a wider parking space which has a minimum width of 3,400 mm and signage that identifies the space as “van accessible”.

2. Type B, a standard parking space which has a minimum width of 2,400 mm. O. Reg. 413/12, s. 6.

Access aisles

80.35 (1) Access aisles, that is the space between parking spaces that allows persons with disabilities to get in and out of their vehicles, must be provided for all parking spaces for the use of persons with disabilities in off-street parking facilities. O. Reg. 413/12, s. 6.

(2) Access aisles may be shared by two parking spaces for the use of persons with disabilities in an off-street parking facility and must meet the following requirements:

1. They must have a minimum width of 1,500 mm.

2. They must extend the full length of the parking space.

3. They must be marked with high tonal contrast diagonal lines, which discourages parking in them, where the surface is asphalt, concrete or some other hard surface. O. Reg. 413/12, s. 6.

Minimum number and type of accessible parking spaces

80.36 (1) Off-street parking facilities must have a minimum number of parking spaces for the use of persons with disabilities, in accordance with the following requirements:

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12 parking spaces or fewer.

2. Four per cent of the total number of parking spaces for the use of persons with disabilities, where there are between 13 and 100 parking spaces in accordance with the following ratio, rounding up to the nearest whole number:

i. Where an even number of parking spaces for the use of persons with disabilities are provided in accordance with the requirements of this paragraph, an equal number of parking spaces that meet the requirements of a Type A parking space and a Type B parking space must be provided.

ii. Where an odd number of parking spaces for the use of persons with disabilities are provided in accordance with the requirements of this paragraph, the number of parking spaces must be divided equally between parking spaces that meet the requirements of a Type A parking space and a Type B parking space, but the additional parking space, the odd-numbered space, may be a Type B parking space.

3. One parking space for the use of persons with disabilities and an additional three per cent of parking spaces for the use of persons with disabilities, where there are between 101 and 200 parking spaces must be parking spaces for the use of persons with disabilities, calculated in accordance with ratios set out in subparagraphs 2 i and ii, rounding up to the nearest whole number.

4. Two parking spaces for the use of persons with disabilities and an additional two per cent of parking spaces for the use of persons with disabilities, where there are between 201 and 1,000 parking spaces must be parking spaces for the use of persons with disabilities in accordance with the ratio in subparagraphs 2 i and ii, rounding up to the nearest whole number.

5. Eleven parking spaces for the use of persons with disabilities and an additional one per cent of parking spaces for the use of persons with disabilities, where more than 1,000 parking spaces are provided must be parking spaces for the use of persons with disabilities in accordance with the ratio in subparagraphs 2 i and ii, rounding up to the nearest whole number. O. Reg. 413/12, s. 6.

(2) If an obligated organization provides more than one off-street parking facility at a site, the obligated organization shall calculate the number and type of parking spaces for the use of persons with disabilities according to the number and type[illegible]g spaces required for each off-street parking facility. O. Reg. 413

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APPENDIX S:

Vehicle Parking Justification Excerpts

ONTARIO REGULATION 157/22

made under the

PLANNING ACT

Made: March 4, 2022
Filed: March 4, 2022
Published on e-Laws: March 7, 2022
Printed in *The Ontario Gazette*: March 19, 2022

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 291 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 lands described in subsection (1) shall be considered as a single lot.

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 section 2.

(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) uses permitted in the Prestige Industrial (MP) and Prestige Industrial (MP-522) zones of the Zoning By-law;

(b) a cold storage warehouse; and

(c) a transportation depot.

(3) The zoning requirements for the Prestige Industrial (MP-522) Zone set out in section 13 of the Zoning By-law apply to the uses permitted under subsection (2), with the following exceptions:

1. The front lot line shall be the lot line abutting Mayfield Road.

2. The exterior side lot line shall be the lot line abutting Dixie Road.

3. There is no minimum front yard setback.

4. The rear yard setback is 6 metres.

5. The maximum building height is 20 metres.

6. The minimum number of required parking spaces for all uses is one space per 230 square meters of gross floor area.

7. A planting strip is not required abutting an Environmental Protection Zone that has a minimum width of 6 metres.

8. There are no zoning requirements for a business office use.

9. Section 5.2.21.2 of the Zoning By-law does not apply.

Serviced Industrial Zone

4. (1) This section applies to the lands located in the area shown as the Serviced Industrial Zone on the map referred to in section 2.

(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) uses permitted in the Serviced Industrial (MS) Zone of the Zoning By-law;

(b) a business office;

(c) a cold storage warehouse; and

(d) a place of assembly.

(3) The zoning requirements for the Serviced Industrial (MS) Zone set out in section 8 of the Zoning By-law apply to the uses permitted under subsection (2), with the following exceptions:

1. The front yard setback is 6 metres for any front lot line, except for any front lot line for a lot containing a residential zone or a residential use, for which the front yard setback is 15 metres.

2. The rear yard setback is 6 metres.

3. The exterior side yard setback is 6 metres for any exterior side lot line.

4. The exterior side yard setback for a lot line containing a residential zone or a residential use is 15 metres.

5. The maximum building height is 20 metres.

6. The minimum number of required parking spaces for all uses is one space per 230 metres of gross floor area.

7. A planting strip of 6 metres in width is required along lot lines abutting a residential zone or a lot containing a residential use.

8. A planting strip of 3 metres in width is required between a storm water management facility and any parking, loading or delivery space.

9. A planting strip is not required abutting an Environmental Protection Zone that has a minimum width of 6 metres.

10. A planting strip of 1.5 metres in width is required along all other interior side lot lines.

11. A planting strip of 6 metres in width is required along all other street lines.

12. Section 5.2.21.2 of the Zoning By-law does not apply.

13. Footnote 24 for the Serviced Industrial (MS) Zone in the Zoning By-law does not apply.

Environmental Protection Zone

5. (1) This section applies to the lands located in the area shown as the Environmental Protection Zone on the map referred to in section 2.

(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 the uses permitted within the Environmental Policy Area 1 Zone (EPA1) of the Zoning By-law.

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.