TOWN OF CALEDON
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August 8th, 2025

Simpson Road Landowners Group Inc.

TRANSPORTATION IMPACT STUDY UPDATE

Proposed Industrial Development

Coleraine Drive and Mayfield Road, Town of Caledon

August 2025

24085

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August 7, 2025

Reference Number: 24085

Simpson Road Landowners Group Inc.
c/o Helen Mihailidi
7501 Keele Street, Suite 200
Vaughan, ON
L4K 1Y2

Dear Helen Mihailidi,

RE: Transportation Impact Study Update
Proposed Industrial Development
Coleraine Drive and Mayfield Road, Town of Caledon

LEA Consulting Ltd. (LEA) is pleased to present the findings of our Transportation Impact Study (TIS) Update for the proposed industrial development located at the northeast corner of Coleraine Drive and Mayfield Road in the Town of Caledon (herein referred to as the "subject site").

By way of background, LEA submitted a Transportation Impact Study dated November 2023. Comments have subsequently been provided by the Region of Peel dated November 1, 2024 and the Town of Caledon dated October 30, 2024. As such, this TIS Update has been prepared to address the Region and City's comments and provide an update on the development. The comments received are provided below, followed by LEA's response.

1 RESPONSE TO COMMENTS

1.1 REGION OF PEEL (NOVEMBER 1, 2024)

Access/Study Requirements

Comment: *A Traffic Impact Study (TIS) was received as a part of the 1st submission, dated November 2023; please find our comments on the TIS below.*

LEA Response: Noted.

Comment: *A TIS satisfactory to the Region is required. Access configuration, location, type and geometrics will be determined through its review.*

LEA Response: Noted.

Comment: *At the block planning stage and to coordinate with the Mayfield Rd capital project, should there be any road or intersection work within the Region's ROW and/or changes to the Town's previously approved Simpson Rd design, please provide the ultimate design for the intersection of Mayfield Rd and Simpson Rd to*

ensure it meets current standards. Should construction of Simpson Rd proceed in advance of the Mayfield Rd capital project, interim design will also be required for review.

LEA Response: Noted.

Comment: *Further, based on the Trip Generations rates, an auxiliary right-turn lane is required for the Simpson Rd and Mayfield Rd intersection. Interim and ultimate functional designs that address auxiliary turn lane requirements and geometrics for the proposed Simpson Rd extension at Mayfield Rd are required for our review and approval. Storage and taper are to be included.*

LEA Response: Noted. It is confirmed that an auxiliary right-turn lane on the north leg of the Simpson Road and Mayfield Road intersection is factored into the analysis.

Comment: *Please be advised that through the interim and ultimate design exercise, additional land dedication may be required.*

LEA Response: Noted.

Comment: *Please provide a signal warrant for the future Simpson Rd and Mayfield Rd intersection.*

LEA Response: A signal warrant has been provided, and the results indicate that a signal is not warranted under future total conditions for 2033. Please refer to **Section 8** in the attached TIS Update.

Comment: *Please provide AUTOturn analysis/turning templates for the largest vehicle type turning in and out of the proposed future Simpson Rd extension at Mayfield Rd.*

LEA Response: Please refer to **Appendix J** in the attached TIS Update for an updated Functional Design Review.

Comment: *A comprehensive Access Plan/ Tertiary Plan will be required which includes all of the subject properties to ensure that a comprehensive development plan is created for the sites fronting on Coleraine Dr (Regional Road 150) and Mayfield Rd (Regional Road 14). To ensure that future developments along this corridor adhere to the Region of Peel's Access control by-law, the Access Plan would demonstrate a comprehensive development scheme along these lands which includes reciprocal access easements between adjacent properties and shows potential locations of vehicular access point(s) onto Coleraine Dr and Mayfield Rd.*

LEA Response: Noted.

Comment: *Please be advised that the existing accesses along Coleraine Dr are subject to review, and there may be requirements to close or consolidate accesses as will be determined through the comprehensive Access Plan.*

LEA Response: Noted.

Comment: *Please refer to the Road Characterization Study (RCS), which defines our various road classifications as well as the minimum access spacing distances that are associated with them. This portion of Mayfield Rd and Coleraine Dr is classified as an Industrial Connector which calls for 450 metre spacing for a full moves access.*

LEA Response: Noted.

Comment: *Additional detailed comments/requirements may apply after receipt and review of a subsequent submission.*

LEA Response: Noted.

1.2 TOWN OF CALEDON (OCTOBER 30, 2024)

Comment: *The Towns Transportation Engineering's prefers that MUTs along Simpson Road Extension serve both pedestrians and cyclists (if space permits). At a minimum, an active transportation facility should be provided as per the 2012 Simpson Road EA Study.*

LEA Response: Noted. The 100% Detailed Design for Simpson Road Extension Phase 3 prepared by Wood incorporates a 1.5m sidewalk on the east side of Simpson Road Extension.

Comment: *Caledon's Official Plan seeks complete communities with compact design, mixed uses, connected streets, and sustainable transportation.*

LEA Response: Noted.

Comment: *The active transportation network within the study area and the future potential connections to the Town's active transportation network should be Illustrated. They must be aligned with the active transportation network identified in the Town's Multi-Modal Transportation Master Plan.*

LEA Response: A pedestrian and cyclist circulation plan has been provided in **Section 10** in the attached TIS Update.

Comment: *Transportation Demand Management measures and initiatives and Parking policies need to be developed to achieve the Town's future non-auto modal split targets and reduce single-occupant vehicles..*

LEA Response: A Transportation Demand Management plan has been provided in **Section 11** in the attached TIS Update. Vehicular parking rates will be determined on a site-specific basis during subsequent applications.

Comment: *The secondary plan should suggest high-level policies for access management along roadways, aligning with the Multimodal TMP and TAC's recommendation. Policies related to transit stops and bicycle parking rates should also be provided.*

LEA Response: A high-level future transit network has been provided in **Section 10** in the attached TIS Update. Bicycle parking rates will be determined on a site-specific basis during subsequent applications.

Comment: *Ensure that the George Bolton Parkway (GBP) extension is included in the analysis.*

LEA Response: Acknowledged. The Caledon MMTMP recommended the extension of George Bolton Parkway west of Coleraine Drive to Humber Station Road as a four-lane road by 2031. However, most of the future background sites were either east of our subject site (and the extension) or south of the extension so the future background traffic distribution would not be affected. For the Triangle Lands and Humber Station development, both are located along Mayfield Road, and traffic going east/west would likely go via Mayfield Road or George Bolton Parkway. As George Bolton Parkway is not included in our study area, the distribution for future background 2033 is not shown. The distribution along Mayfield Road in 2033 is already shown in the analysis. For traffic going north/south, Coleraine Drive would be utilized, which is already shown in our analysis.

Comment: *Note that the Town Council has approved the Town of Caledon's Official Plan, Multi-Modal Transportation Master Plan, and Active Transportation Master Plan.*

LEA Response: Noted.

Comment: *Parr Boulevard and Simpson Road are collector roads. Brampton Transit now operates the transit route in Bolton. Furthermore, the transit route and schedules have been updated.*

LEA Response: Noted. The existing transit network has been updated, please refer to **Section 2.2** in the attached TIS Update.

Comment: *Differences were observed when comparing the Turning Movement Count Data at the intersection of Parr Boulevard and Simpson Road to the existing traffic volumes.*

LEA Response: Noted. A common peak hour of 7:00AM-8:00AM was used for the AM Peak Hour analysis, to match the peak hour of the majority of the studied intersections. The AM peak hour for Parr Boulevard and Simpson Road may have been a different time, however the turning movement counts at 7:00AM-8:00AM were used instead for consistency. Similarly, a common peak hour of 5:30PM-6:30PM was used for the PM Peak Hour analysis, and 2:00PM-3:00PM was used for the Saturday Peak Hour analysis.

Comment: *Considering the multiple undeveloped lots near the study intersections, consideration should be given to using general growth rates on Town Roads. Available traffic data is attached with the comments. To inquire if more detailed data is available, please contact baqar.muhammad@caledon.ca*

LEA Response: A growth rate of 2% was applied for Town Roads (Simpson Road and Parr Boulevard). The adjacent regional roads (Coleraine Drive and Highway 50) had low growth rates of 0.5% (information provided by Peel Region), and given the Town's concerns about the low rates, a slightly higher rate of 2% was applied to the town roads as a conservative measure. For Parr Boulevard, traffic volume information from 2014 and 2016 was provided by the Town and indicated a growth rate of 69% which was not considered sustainable to applied in the analysis. Therefore, the growth rate of 2% was still applied for Parr Boulevard. Please refer to **Section 4.1** in the attached TIS Update.

Comment: *Ensure an accurate model is established by including the impacts of background development traffic on Town Roads. Revise as required.*

- *Already shared Background developments:*
    - *171 Parr Blvd. (SPA 2021-0067)*
    - *0 Simpson Road (SPA 2021 -0042)*
    - *0 Simpson Road (SPA 2024-0064)*
    - *8281 and 0 Healey Road (SPA 2021-0097)*
    - *New Background developments that should be accounted for if the 0% growth rate is continued.*
- *Please reach out to staff if required:*
    - *90-100 Parr Blvd (SPA 2024-0050)*

LEA Response: As the list of these background developments does not match the background developments shared in previous versions of the TIS, it is uncertain whether they were intended as applicable to this subject site. However, each of these background developments were considered and treated as follows:

- 171 Parr Blvd. (SPA 2021-0067) and 0 Simpson Road (SPA 2024-0064) were added to the future background analysis, due to their proximity to the subject site. As more detailed data was not available, trip generation was calculated with the provided GFA from the Caledon Development Applications Map, using average rates with LUC 130 (Industrial Park), General Urban/Suburban setting and trip distribution was considered as the same as the subject site due to their proximity.

- 0 Simpson Road (SPA 2021-0042) and 8281 and 0 Healey Road (SPA 2021-0097) were not added to the future background analysis due to being further away from the subject site, and lack of available data (including GFA). However, LEA has introduced a conservative 2% corridor growth rate on Town Roads and it is expected that this rate should also account for any future background traffic volumes generated by these two developments.

- 90-100 Parr Blvd (SPA 2024-0050) was not added to the future background analysis as LEA has introduced a conservative 2% corridor growth rate on Town Roads. This development also did not have any available data on the Caledon Development Applications Map

Please refer to **Section 4.2** in the attached TIS Update.

Comment: *In regard to the provided trip generation: Is a more general Land Use Code such as Industrial Park (LUC 130) is more applicable and conservative? Consider the uncertainties associated with the non-participating landowners, and the variations in proposed uses*

LEA Response: The Land Use Code for the updated trip generation has been changed to LUC 130 as the Zoning By-laws indicate the subject site land can be utilized for both general industrial and warehousing uses.

Comment: *Consider how the connection of Simpson Road to Mayfield Road will impact traffic volumes and the anticipated operations by redistributing background traffic volumes. Make reasonable assumptions as required to account for the redistribution of traffic.*

LEA Response: For background traffic volumes included in the previous TIS submission, traffic volumes did not need to be redistributed as logically it would make more sense for traffic to be directed north/south

along either Coleraine Drive or Highway 50 depending on the future background development. For the two new developments included in this TIS submission, the connection of Simpson Road to Mayfield Road was considered for the traffic distribution

Comment: *Trips removed from 12197 Coleraine Drive (#6) were assigned to Simpson Road despite the lack of frontage on Simpson Road. If this is a conservative assumption, it should be documented.*

LEA Response: No trips removed from 12197 Coleraine Drive (#6) were assigned to Simpson Road. Please refer to **Figure 5-1** in the attached TIS Update. The trips were removed from the existing accesses on Coleraine Drive and Mayfield Road and carried through the network.

Comment: *Otherwise, the assignment of site-generated trips should align with feasible access locations (considering relevant policies) and property frontage. Any required easements would ideally be documented in the recommendations.*

LEA Response: Noted.

Comment: *Include Town TOR response in the report appendices. Revisit the TOR response and revise the report to include considerations for active transportation (walking, cycling, and transit). Key points of the TOR response are as follows:*

- *Identify other transportation infrastructure improvements and missing links for all modes of transportation required above and beyond those identified in the Region and Town Transportation Master Plans and construction programs. This can be done through providing a pedestrian and cyclist circulation plan as part of subsequent submissions.*

LEA Response: A pedestrian and cyclist circulation plan has been provided in **Section 10** in the attached TIS Update.

Comment: *The TIS should be revised to include transit recommendations. Appropriate transit-related policies should be included in the OPA. Please be advised that the proposed interim and ultimate transit routes are subject to review and approval by Brampton Transit.*

LEA Response: A high-level future transit network has been provided in **Section 10** in the attached TIS Update.

Comment: *As part of subsequent applications: Site access/intersection operations are to be determined*

LEA Response: Noted.

Comment: *Traffic management measures at intersections should be further reviewed and developed to ensure they operate at an acceptable LOS to the Town's satisfaction.*

LEA Response: Noted.

Comment: *General bicycle parking rates should be proposed in line with nearby municipalities.*

LEA Response: Noted. Bicycle parking rates will be determined on a site-specific basis during subsequent applications.

Comment: *Further details on the internal road network will be required in subsequent applications.*

LEA Response: Noted.

Comment: *Please note that a phasing plan for the Transportation Infrastructure could be requested to be reviewed by transportation after the OPA approval.*

LEA Response: Noted.

Comment: *Transportation Engineering reserves the right for additional comments based on a revised submission. Transportation Engineering requests that the Traffic Consultant provide a response letter with the re-submission package clearly reiterating the Town's comments in order and including details for how each comment has been addressed.*

LEA Response: Noted.

Should you have any questions regarding this letter, please do not hesitate to contact the undersigned.

Yours truly,

LEA CONSULTING LTD.

Zara Georgis, M. Eng., P. Eng
Manager, Transportation Engineering (Western Canada)

Jorge Ordenes, M.Sc., E.I.T
Project Coordinator

Encl. Transportation Impact Study Update – Coleraine Drive and Mayfield Road, Proposed Industrial Development, Town of Caledon (July 2025)

Disclaimer

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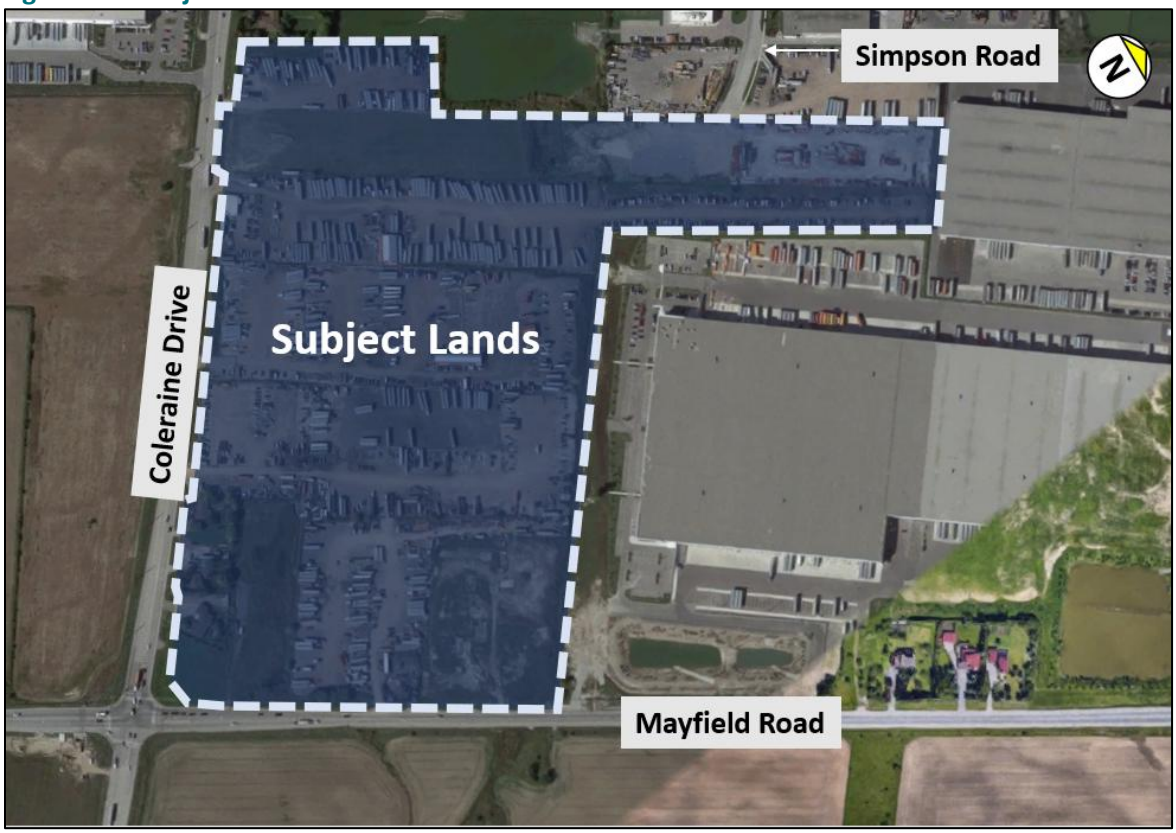
1 INTRODUCTION

LEA Consulting Ltd. (LEA) was retained by Simpson Road Landowners Group Inc. to undertake a Transportation Impact Study (TIS) Update for the proposed development of an industrial block of approximately 23.6 hectares of land located at the northeast corner of Coleraine Drive and Mayfield Road in the Town of Caledon, herein referred to as the "subject lands".

By way of background, a TIS dated November 2023 was previously prepared and submitted by LEA in support of the Block Plan Application and Official Plan Amendment (OPA) applications. The following study has been prepared as an update to the previous November 2023 TIS to reflect the latest development application and address the comments received by the Region of Peel and the Town of Caledon.

The subject lands are bounded by Coleraine Road to the west, and Mayfield Road to the south. To the east and north of the site, industrial parcels of land are present. The subject lands are currently occupied by residential use on the southwest corner of the site, open lands, various truck and transportation uses, and a former garden supply store. The location of the subject lands is illustrated in **Figure 1-1**.

Figure 1-1: Subject Lands Location



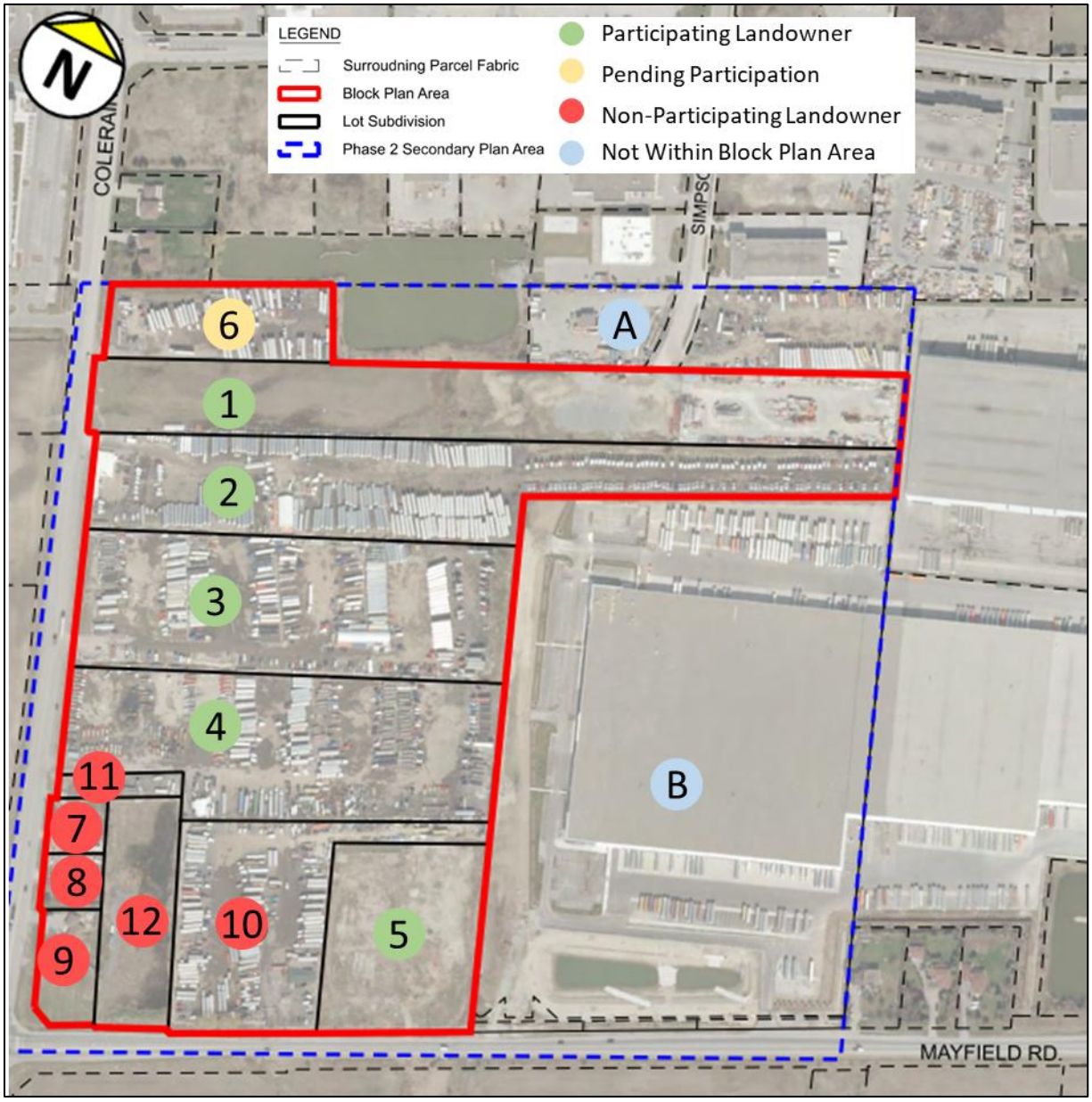
Source: Google Maps, accessed July 2023

The purpose of this study is to assess the proposed redevelopment from a transportation perspective, determine the traffic impacts to the adjacent road network, and identify any required mitigation measures. This TIS will assess a five-year horizon to the year 2028 and a 10-year horizon to the year 2033. The study will be prepared in accordance with the Town of Caledon's TIS Terms of Reference and Guidelines (2017).

1.1 PROPOSED LAND USE PLAN

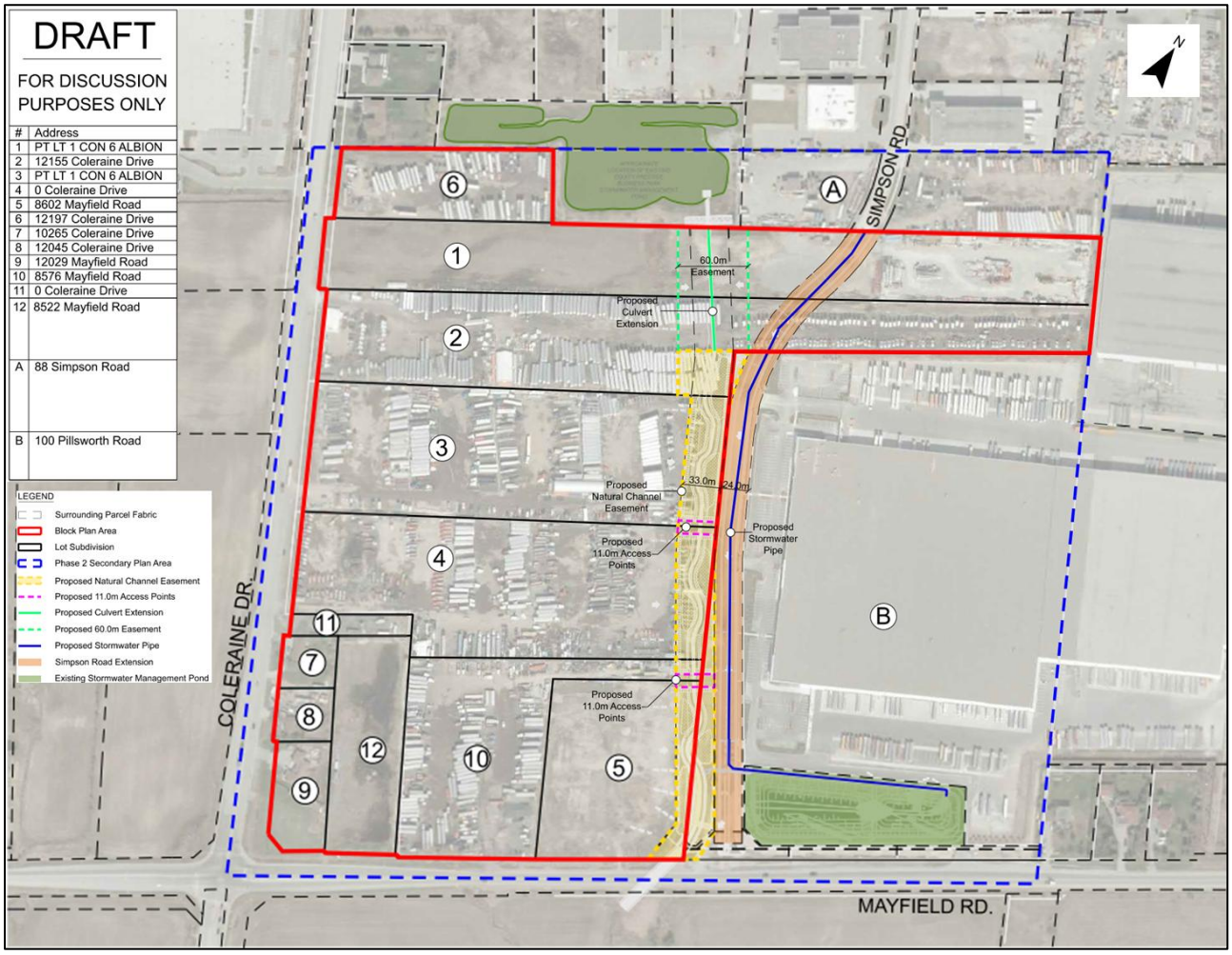
The block plan consists of 12 blocks. It is noted that some parcels in the block plan are categorized as “pending participation” or "non-participating landowners" due to the pending finalization of the development plan. **Figure 1-2** illustrates the current ownership mapping with a breakdown of the parcels, with the proposed block plan illustrated in **Figure 1-3**.

Figure 1-2: Subject Land’s Parcel Mapping



Source: Weston Consulting, July 2023

Figure 1-3: Proposed Block Plan



Source: Weston Consulting, July 2025

As this TIS is for the whole block plan, for the parcels that do not yet have development plans, it was assumed that these sites would occupy 50% lot coverage. Further, the subject lands are planned for warehouse and office uses. A breakdown of the proposed GFA by parcel is summarized in **Table 1-1.** It should be noted that since the previous November 2023 submission, the site statistics have remained the same.

Table 1-1: Proposed GFA

Parcel Number	Address	Land Use	Site Area		GFA	
			m^2	ha	m^2	ft^2
1	0 Coleraine Drive	Warehouse	40111.9 m^2	4.0 ha	3,309 m^2	35,617.78 ft^2
		Office			4,020 m^2	43,270.92 ft^2
2	12155 Coleraine Road	Warehouse	41551.8 m^2	4.2 ha	1,995.57 m^2	21,480.14 ft^2
3	PT LT 1 CON 6 ALBION	Warehouse	39746.4 m^2	4.0 ha	19,873.20 m^2	213,913.34 ft^2
4	0 Coleraine Drive	Warehouse	38278.1 m^2	3.8 ha	19,139.05 m^2	206,011.02 ft^2
5	8602 Mayfield Road	Warehouse	19410.5 m^2	1.9 ha	7,265.92 m^2	78,209.71 ft^2
6	12197 Coleraine Drive	Warehouse	11326.6 m^2	1.1 ha	5,663.30 m^2	60,959.25 ft^2
7	10265 Coleraine Drive	Warehouse	2235.4 m^2	0.2 ha	1,177 m^2	12,669.12 ft^2
8	12045 Coleraine Drive	Warehouse	2360 m^2	0.2 ha	1,180 m^2	12,701.41 ft^2
9	12029 Coleraine Drive	Warehouse	4721.9 m^2	0.5 ha	2,360.95 m^2	25,413.05 ft^2
10	8576 Mayfield Road	Warehouse	23229 m^2	2.3 ha	11,614.50 m^2	125,017.44 ft^2
11	0 Coleraine Drive	Warehouse	2008.7 m^2	0.2 ha	1,004.35 m^2	10,810.73 ft^2
12	8522 Mayfield Road	Warehouse	11,526 m^2	1.1 ha	5,763 m^2	62,032.42 ft^2
		Total	236,506.3 m^2	23.6 ha	84,365.8 m^2	908,106 ft^2

2 POLICY CONTEXT & BACKGROUND STUDIES

The study area is guided by the regulatory framework of various policy documents, standards, and guidelines. This section summarizes the various provincial, regional, and local planning policies and guiding documents influencing the study area.

2.1 PROVINCIAL POLICY FRAMEWORK

Several provincial policy documents provide the basis and guidance for the transportation vision for the Transportation Impact Study. Provincial plans are identified and summarized below.

2.1.1 Provincial Planning Statement (2024)

The Provincial Planning Statement (PPS) came into effect on October 20, 2024, issued under the authority of Section 3 of the Planning Act, which states all decisions affecting land use planning matters "shall be consistent with" the PPS. The PPS 2024 in effect revokes the Provincial Policy Statement 2020 and amends regulations (O. Reg. 416/05 and O. Reg. 311/06) under the Places to Growth Act.

The Provincial Planning Statement outlines the strategic vision for land use and development within Ontario. It represents the minimum standards that will guide planning authorities and decision-makers in developing and implementing specific plans, including transportation facilities to support the long-term prosperity and social well-being of Ontario. Transportation policies within the Provincial Planning Statement focus on the safe and efficient movement of people and goods through a multi-modal transportation system and land use pattern that supports transit and active transportation. Proposed policies also recognize that new developments should be compatible with existing or planned corridors and transportation facilities.

Furthermore, the Provincial Planning Statement guides decisions on a wide range of issues including land use, urban form, housing, environment, resource protection, transportation, and infrastructure in the interest of economic prosperity. The PPS addresses specific issues through policy direction, including designating lands within settlement areas located adjacent to major goods movement facilities and corridors (i.e., major highway interchanges) for manufacturing, warehousing, and employment activities.

2.1.2 Highway 413 Transportation Corridor Route Planning and Environmental Assessment Study

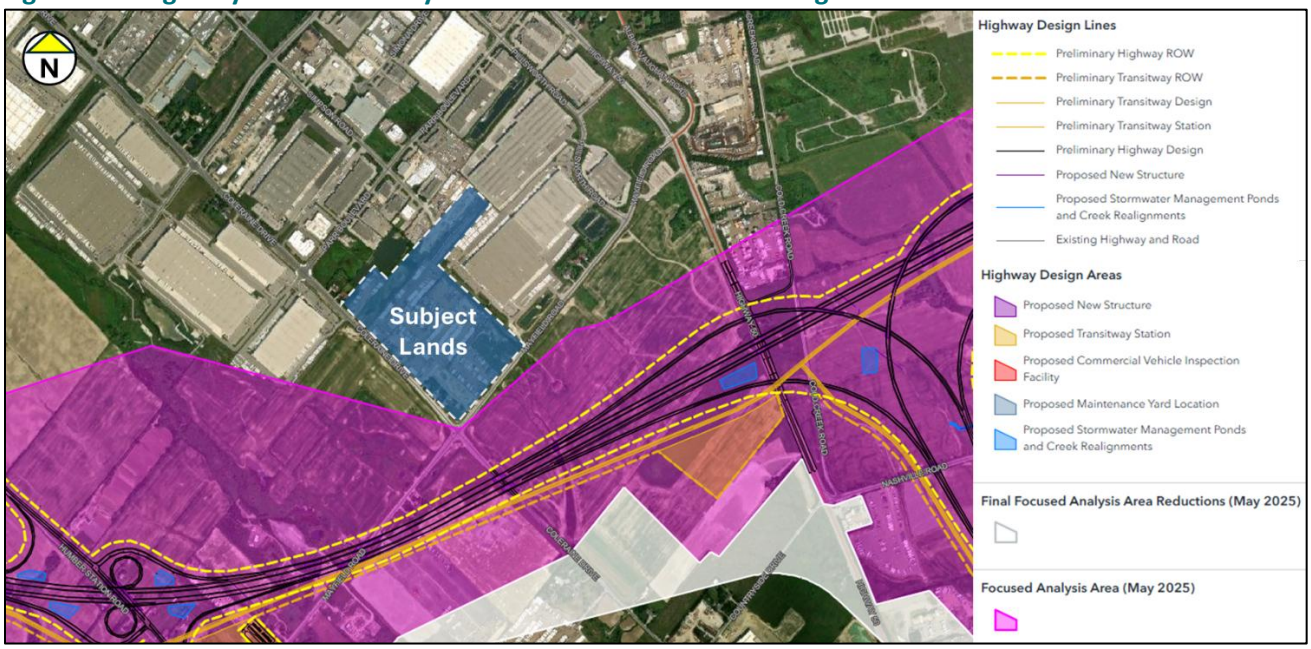
The Ministry of Transportation (MTO) initiated the Highway 413 Transportation Corridor Environmental Assessment (EA) (formerly GTA West Corridor) in 2007 to propose a new 400-series highway and transit corridor across the Halton, Peel, and York Region. A Terms of Reference was prepared for approval by the Ministry of the Environment (MOE) outlining the preliminary transportation problems and opportunities, existing environmental conditions, and the proposed alternatives to the undertaking.

Following approval of the Terms of Reference, Stage 1 of the EA included a Transportation Development Strategy to determine recommendations for transit improvements, transportation demand management measures, and widening of provincial facilities in the western GTA. Stage 2 was initiated in 2014 and completed in 2024. Stage 2 focuses on identifying the route and developing the preliminary design for the new multi-modal transportation corridor. Currently, the preferred route includes 11 interchanges along municipal roads. Within Stage 2 of the project, Highway 413 Act was passed on November 25, 2024. At the current stage, a Draft Environmental Impact Assessment Report (EIAR) is anticipated to be published, which will include a description of the local environmental conditions and studies. The final EIAR will be published

following a 30-day comment review period. Final refinements of the Preliminary Design of the preferred route are also expected.

As illustrated in **Figure 2-1**, the subject lands are located just outside of the route planning study area.

Figure 2-1: Highway 413 Technically Preferred Route and Interchange Locations



Source: Highway 413 project website (May 2025)

2.2 REGIONAL POLICY FRAMEWORK

Several regional policy documents provide the basis and guidance for the transportation vision for the Transportation Impact Study. Regional plans are identified and summarized below.

2.2.1 Region of Peel Official Plan (2022)

The Region of Peel Official Plan provides the long-term strategic policy framework for managing growth and development to create healthy, resilient, equitable, and sustainable regional communities for those living and working in Peel Region. The Regional Official Plan has an overarching theme of sustainable development to enable the integration of the environmental, social, economic, and cultural imperatives throughout the Plan.

Under the Regional Official Plan, the subject lands are included as part of the Pearson Airport Hub (Hwy 50 Corridor), a provincially significant employment zone. From a transportation perspective, the Regional Official Plan includes policies to support goods movement by coordinating the major road network, the provincial freeway network, areas of significant employment activity, and major goods movement corridors. Furthermore, the Regional Official Plan includes policies to strengthen the regional network to accommodate current and projected travel demands of the people who live, work, or travel within the Region. Policies focus on creating a sustainable transportation system by encouraging the development of a safe, attractive, accessible, and integrated network for all travel modes.

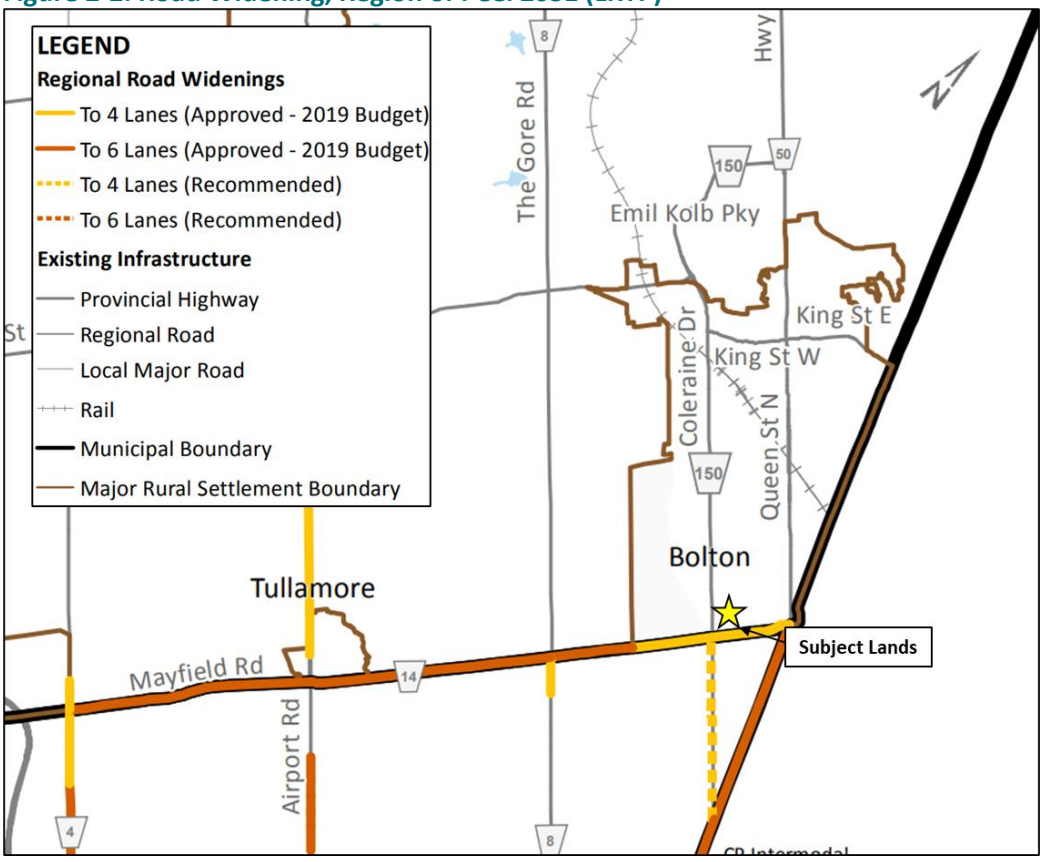
2.2.2 Peel Region Long Range Transportation Plan (2019)

Peel Region's Long Range Transportation Plan (LRTP) is a 5-year plan based on a 2041 horizon that guides transportation planning needs in the Region of Peel. The overarching goal of the LRTP is to establish a transportation network system where 50% of travel is through sustainable modes, such as walking, cycling, transit, and carpooling by 2041. The LRTP includes 3 focus areas including sustainable mobility, safe mobility, and vehicular mobility & goods movement to achieve a safer and more efficient road system.

To allow for growth, the LRTP prioritizes Region-wide strategies that focus on balancing intersection improvements and new infrastructure to facilitate transit, walking, and cycling with road widening and new road development.

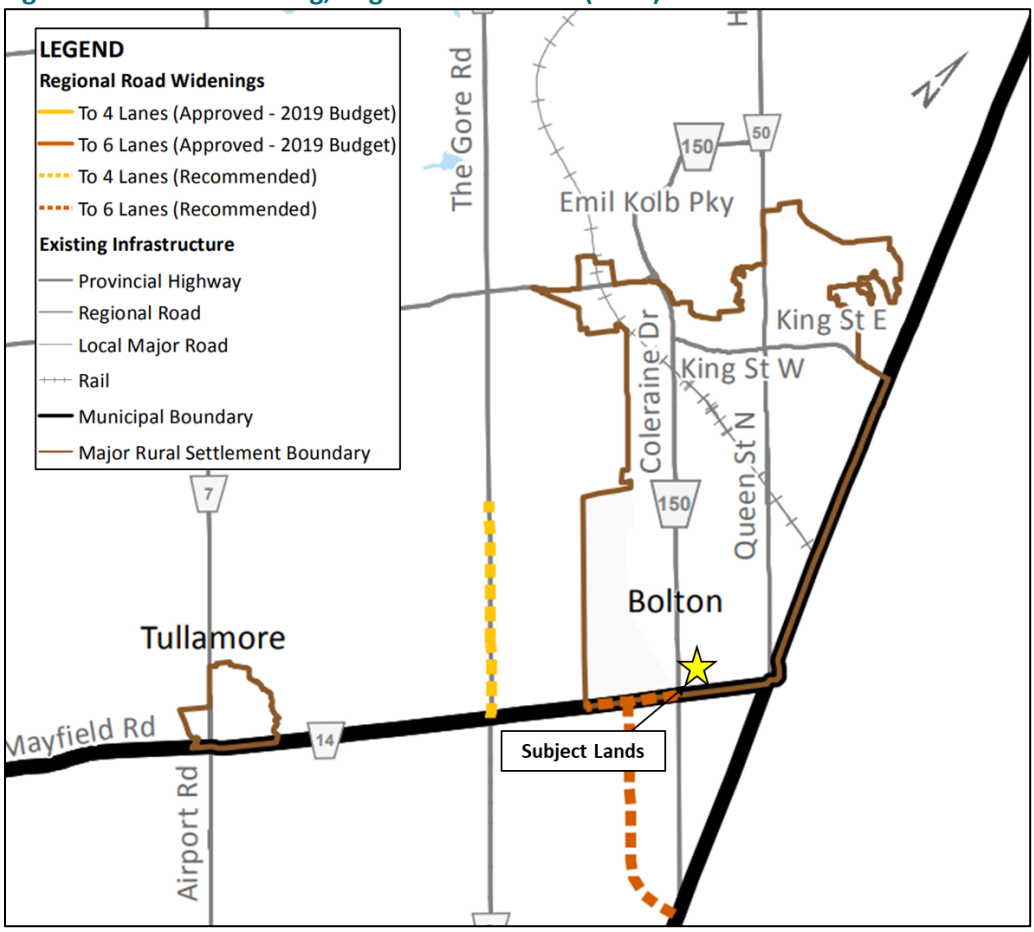
As illustrated in **Figure 2-2**, by the 2031 horizon year, **Mayfield Road is proposed to widen to 4 lanes east of Humber Station Road** while **Coleraine Drive is recommended to widen to 4 lanes south of Mayfield Road to Highway 50**. As illustrated in **Figure 2-3,** by the 2041 horizon year, **Mayfield Road is proposed to widen to 6 lanes between Humber Station Road and Coleraine Drive**. **Cycling infrastructure is also proposed along Mayfield Road and Coleraine Drive**.

Figure 2-2: Road Widening, Region of Peel 2031 (LRTP)



Source: Long Range Transportation Plan (Region of Peel, 2019)

Figure 2-3: Road Widening, Region of Peel 2041 (LRTP)



Source: Long Range Transportation Plan (Region of Peel, 2019)

2.3 LOCAL POLICY FRAMEWORK

Several local policy documents provide the basis and guidance for the transportation vision for the Transportation Impact Study. Local plans are identified and summarized below.

2.3.1 Future Caledon - Official Plan (2024)

The Future Caledon Official Plan was adopted by Council on March 26, 2024 and was prepared to conform with the 2020 Provincial Policy Statement, 2019 Growth Plan for the Greater Golden Horseshoe, and 2022 Region of Peel Official Plan. The Official Plan will be implemented in 3 phases to replace the existing 2018 plan. The adopted Plan provides the Phase 1 framework and policies to guide development and support population and employment growth to 2051.

The new Official Plan envisions a multimodal transportation system for the Town that is safe, efficient, manages future demand and congestion, and is well-integrated with the land use and development within the Town and across the Region. **Based on Schedule C1: Town-Wide Transportation Network of the draft Official Plan, a conceptual north-south and conceptual east-west collector road is proposed throughout the subject lands.** The feasibility of new collector roads will be conducted through secondary planning to facilitate

development, connect future communities and employment lands, and accommodate continuity of transit service and active transportation routes while protecting the natural environmental features.

2.3.2 Caledon Transportation Master Plan (2017)

The Town of Caledon Transportation Master Plan (TMP) addresses the Town's transportation needs for the year 2031. The goals of the TMP include providing a transportation framework that will support economically sustainable and environmentally respectful growth and identifying opportunities for a multimodal transportation network while considering the needs of automobiles and safe and efficient goods movement.

The recommended transportation network identified in Caledon's TMP includes intersection and road improvements, plans for a Transit Implementation Strategy for future public transit service, and recommended active transportation facilities to connect Rural Service Centres to nearby communities, conservation areas, and scenic areas.

2.3.3 Caledon Multi-Modal Transportation Master Plan (2024)

The Town of Caledon's Multi-Modal Transportation Master Plan (MMTMP) has been adopted by Council in June 2024. The MMTMP works in coordination with the Caledon Official Plan to develop the long-term strategy for Caledon's transportation system to accommodate the needs of pedestrians, cyclists, transit riders, and motorists while enhancing connectivity and accessibility. The future collector road identified in the MMTMP would be assessed as part of the secondary or block plan process to connect to the Town's collector and arterial road network.

The recommended MMTMP strategy includes proposing Coleraine Drive and Mayfield Drive as future transit corridors.

2.3.4 Caledon Active Transportation Master Plan (2024)

The Town of Caledon's initiated its Active Transportation Master Plan (ATMP) in April 2022, and has been adopted by Council in June 2024 to promote active transportation, trail development, and sustainable development. The ATMP builds on the Town's Multi-Modal Transportation Master Plan to identify gaps in the existing active transportation network and to prioritize the implementation of a trail system, routes, and facilities to support a network of active transportation opportunities for people of all ages and abilities. Furure planned Regional improvements are proposed along Mayfield Road and Highway 50.

2.3.5 South Simpson Industrial Secondary Plan (2018)

It is understood that the subject lands are located within the southwestern corner of the South Simpson Industrial Secondary Plan lands. The South Simpson Industrial Secondary Plan was approved by the Town of Caledon in April 2018. The Secondary Plan applies to lands north of Mayfield Road, located on the east side of Coleraine Drive.

The subject lands are located in the Phase 2 Secondary Plan Area as identified by **Figure 2-4** below. The *Prestige Industrial* designation permits the following uses:

- Manufacturing, fabricating, printing, processing, assembling and packaging operations;
- Warehousing and wholesale operations;
- Laboratories;
- Computer and data processing;
- Research and development facilities;
- Corporate offices;
- Offices related to permitted industrial uses;
- Complementary uses, such as open space and recreation facilities, public uses and utilities, which do not detract from, and which are compatible with the development and operation of prestige industrial uses;
- Day care facility; and
- Commercial uses (no major retail use).

Figure 2-4: South Simpson Industrial Secondary Plan Schedule C-5



Source: Town of Caledon, 2018

The proposed Block development will incorporate the Town of Caledon Official Plan and the South Simpson Industrial Secondary Plan policies.

2.3.6 Proposed Block Plan, Master Environmental Servicing Plan and Proposed Development

It is our understanding that a Block Plan and Master Environmental Servicing Plan are being undertaken for the subject lands. It is understood that the policies of the Secondary Plan speak to development which adheres to a Master Environmental Servicing Plan (MESP) which was completed in 2000. In 2013, an Environmental Assessment was undertaken for Simpson Road, which currently terminates at the north end of the subject lands. The EA alters the previously approved MESP for several aspects.

Given the fragmented ownership of the land in addition to changes which have occurred since the MESP was approved and the lack of details on how some of the Secondary Plan lands will be serviced appropriately, an update to the MESP is required. It is understood that Town of Caledon staff are requiring the South Simpson Landowners Group Inc. to prepare and receive approval of a Block Plan for the proposed development and to update the Master Environmental and Servicing Plan to the Town's satisfaction before submitting a development application and site development in the South Simpson Secondary Plan lands identified as the South Simpson Landowners Group Inc. lands.

As part of the studies required as part of the Block Plan, it is understood that a Transportation Impact Study is required, which this report serves as.

2.4 MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

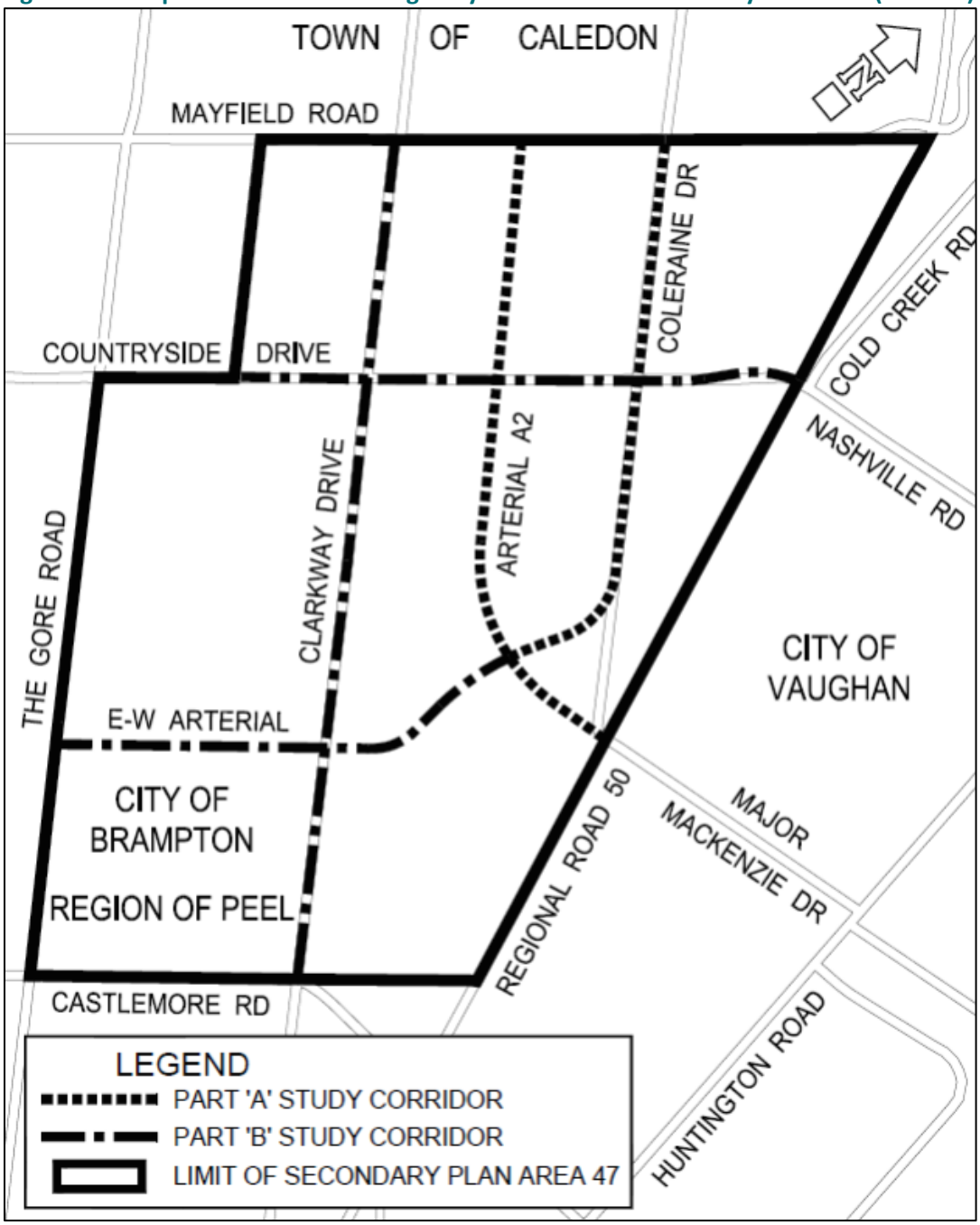
2.4.1 Highway 427 Industrial Secondary Plan Area (Area 47)

The Region of Peel and the City of Brampton undertook two Schedule 'C' Municipal Class Environmental Assessments (Class EA) Phases 3 & 4 study for the arterial roads within the Highway 427 Industrial Secondary Plan Area (Area 47), located south of the subject lands. The purpose of the study was to consider a range of transportation improvements to satisfy future capacity needs. The preferred design identified in the Highway 427 Industrial Secondary Plan Area Class EA includes the following:

- Arterial A2: a new 6-lane north-south roadway that connects Major Mackenzie Drive to Mayfield Road
- Coleraine Drive: an existing roadway that will be widened to 4 lanes and upgraded to include curb and gutter and multi-use pathways (MUP)
- Countryside Drive: an existing roadway which will be widened to 4 lanes and upgraded to include curb and gutter and MUP
- Clarkway Drive: an existing roadway that will have portions widening to 4 lanes and upgraded to include storm sewers, sidewalks, and cycle lanes
- East-West Arterial: a new 4-lane roadway connecting the Gore Road to Arterial A2.

The proposed roadways within the Highway 427 Industrial Secondary Plan Area are illustrated in **Figure 2-5**.

Figure 2-5: Proposed Roads within Highway 427 Industrial Secondary Plan Area (Area 47)



Source: Region of Peel, 2022

3 EXISTING TRANSPORTATION CONDITIONS

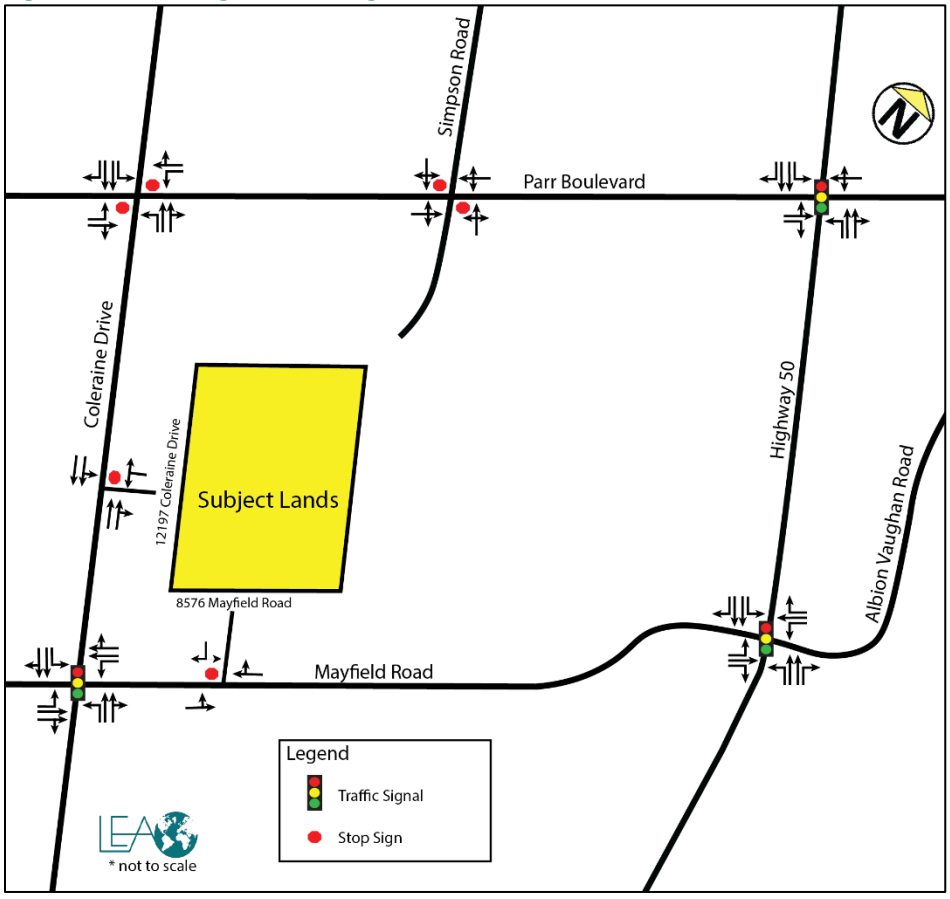
This section identifies the existing transportation conditions present in the study area, including the road, transit, cyclist and pedestrian networks. The study area was determined by assessing the size of the proposed development and its anticipated transportation impact. The terms of reference and correspondence confirming the scope and details of this study with the Town are included in **Appendix A**. The study area includes the following intersections:

- Mayfield Road and Coleraine Drive (Signalized);
- Parr Boulevard and Coleraine Drive (Unsignalized);
- Parr Boulevard and Simpson Road (Unsignalized);
- Parr Boulevard and Highway 50 (Signalized); and
- Mayfield Road/Albion-Vaughan Road and Highway 50 (Signalized).

3.1 EXISTING ROAD NETWORK

This section will describe the road network with the above-mentioned study area. The existing intersection controls and lane configuration are illustrated in **Figure 3-1**.

Figure 3-1: Existing Lane Configuration



Coleraine Drive is a north-south Medium Capacity Arterial roadway with a four-lane cross-section (two (2) lanes per direction) in the vicinity of the subject site. Under the Region of Peel's jurisdiction, the roadway extends from the intersection with Highway 50 in the south in the City of Brampton to the intersection with King Street West/Harvest Moon Drive in the Town of Caledon in the north. The roadway operates with a posted speed limit of 70 km/h within the study area.

Highway 50 is a north-south High Capacity Arterial roadway with a four-lane cross-section (two (2) lanes per direction) in the vicinity of the subject site. Under the jurisdiction of the Region of Peel, the roadway extends north from the intersection with Steeles Avenue (the road continues south of the intersection as Albion Road) in the south in the City of Brampton to the intersection with Highway 9 in the north in the Town of Caledon. The roadway operates with posted speed limits of 60 km/h and 70 km/h within the study area.

Mayfield Road is an east-west High Capacity Arterial roadway with a two-lane cross-section (one (1) lane per direction) in the vicinity of the subject site. Under the jurisdiction of the Region of Peel, the roadway operates between the intersection with Highway 50 in the east (the road continues east of the intersection as Albion Vaughan Road) to the intersection with Winston Churchill Boulevard in the west (the roadway continues west of the intersection as Side Road 17) straddling the border of the City of Brampton and the Town of Caledon. The roadway operates with a posted speed limit of 60 km/h within the study area.

Albion Vaughan Road is a north-south Medium Capacity Arterial roadway with a two-lane cross-section (one (1) lane per direction) in the vicinity of the subject site. Under the jurisdiction of the Town of Caledon, the roadway extends north from the intersection with Highway 50 in the south to the intersection with King Street East/King Road in the north (the road continues north of the intersection as Caledon King Townline). The roadway operates with a posted speed limit of 50 km/h within the study area.

Parr Boulevard is an east-west collector road with a two-lane cross-section (one (1) lane per direction) in the vicinity of the subject site. Under the jurisdiction of the Town of Caledon, the roadway extends from the intersection with Highway 50 in the east to Coleraine Drive in the west. The roadway operates with an assumed speed limit of 50 km/h within the study area.

Simpson Road is a north-south collector road with a two-lane cross-section (one (1) lane per direction) in the vicinity of the subject site. Under the jurisdiction of the Town of Caledon, the roadway extends from the northern property limits of the subject lands in the south to the intersection with Healey Road in the north (the road continues north of the intersection as Holland Drive). The roadway operates with an assumed speed limit of 50 km/h within the study area.

3.2 TRANSIT NETWORK

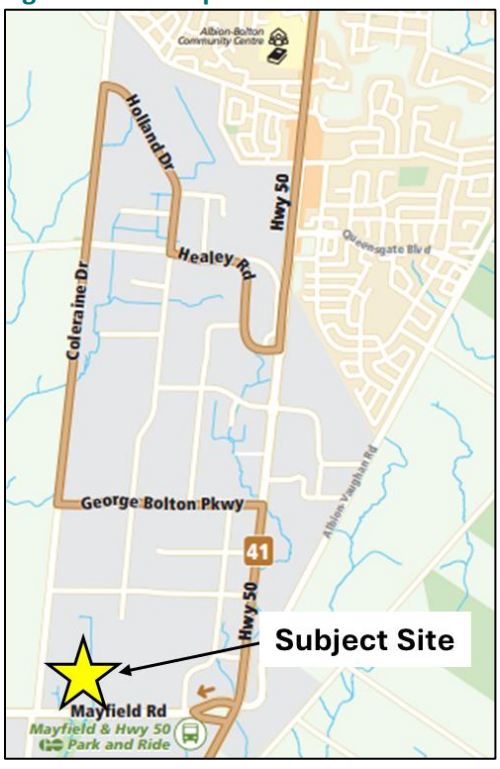
There is currently no Town-wide local public transit service operated by the Town of Caledon. However, following the Town's Transit Feasibility Study in 2019, Voyago was retained to provide local service in the Bolton area. It is understood that as of 2024, service by Voyago has been replaced by Brampton Transit via route 41 which operates along Highway 50 between Queen Street/Highway 7 in Brampton to Columbia Way/Bolton Heights in Caledon. The route operates Monday to Friday during peak commute hours and services the employment lands along Coleraine Drive.

An inter-regional commuter bus service is also available within the Bolton area. The inter-regional route is operated by GO Transit between Malton and the area of Highway 50 and Columbia Way with opportunities to transfer to Metrolinx's GO rail transit. The route operates Monday to Friday during peak hours. The existing transit routes within the Bolton area are illustrated in **Figure 3-2** and **Figure 3-3**. Details of the available services in the area are provided in **Table 3-1**.

Table 3-1: Existing Transit Service

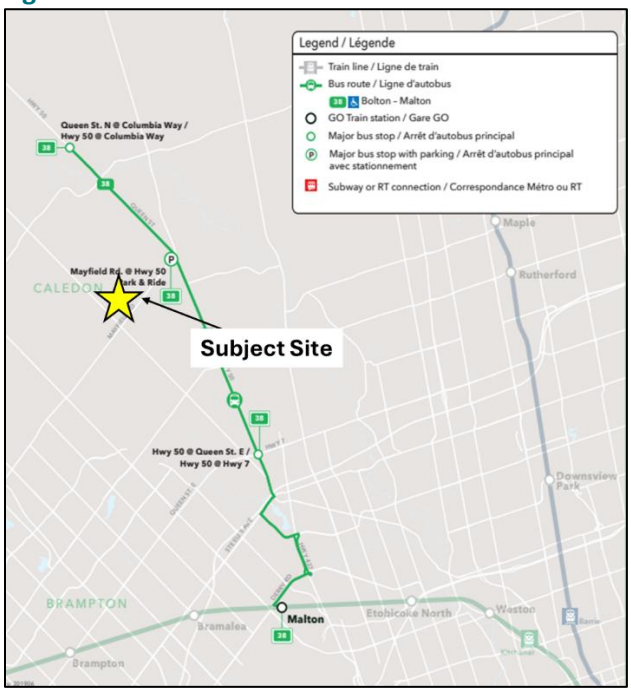
Transit System	Route	Description	Frequency	Accessibility from Subject Site
Brampton Transit	Route 41	Bolton to Brampton (Monday to Friday, 5AM – 9:30AM and 3PM – 6:30PM)	2 Hours	Highway 50 @ Mayfield Road: 1 km
GO Transit	Route 38	Bolton to Malton (Monday to Friday, 5AM – 7:30AM and 3:30PM – 6:30PM)	60 Minutes	

Figure 3-2: Brampton Transit Route



Source: Brampton Transit (2025)

Figure 3-3: GO Transit Route 38

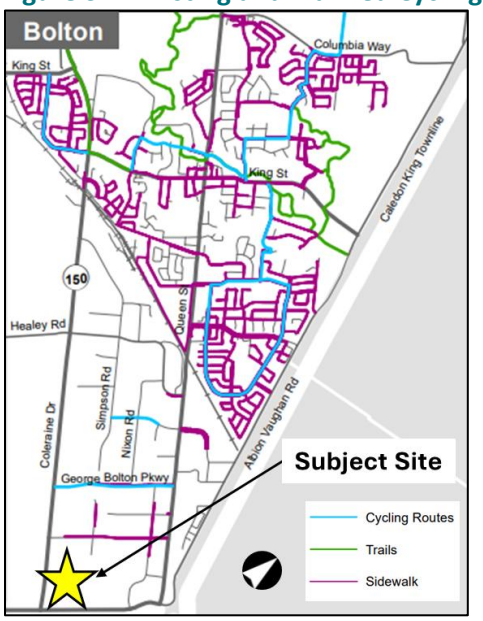


Source: GO Train and Bus Schedule (Metrolinx, July 2025)

3.3 CYCLING NETWORK

The subject site is located in a location with limited access to existing cycling infrastructure. The closest cycling infrastructure to the subject site are Separated On-Road Cycling Route facilities along George Bolton Parkway as illustrated in **Figure 3-4**.

Figure 3-4: Existing and Planned Cycling Network



Source: Town of Caledon, 2025

3.4 PEDESTRIAN NETWORK

Pedestrian facilities are limited within the study area. In the area immediately surrounding the subject lands, the existing pedestrian network consists of sidewalks provided along one side of Parr Boulevard and Simpson Road as well as along parts of Highway 50. Of note, sidewalk infrastructure is largely not provided along the segments of Mayfield Road or Coleraine Drive and is not provided along Albion Vaughan Road within the vicinity of the subject site. Some sidewalk infrastructure is provided along Coleraine Drive and Mayfield Road in the vicinity of the intersection of the two roads.

Despite the lack of sidewalk infrastructure provided on the above-mentioned roadways, pedestrian crosswalks are available on all approaches with protected pedestrian phases at all signalized intersections in the study area. The exception to this is that there is no pedestrian crosswalk infrastructure provided across the south leg of the Highway 50 and Mayfield Road intersection.

3.5 TRAFFIC DATA COLLECTION

Turning movement counts (TMCs) were used as the source of traffic data in the intersection capacity analysis. Traffic counts were collected by LEA Consulting on Thursday, September 14, 2023, and Saturday, September 16, 2023, between 7:00 AM - 9:30 AM and 4:00 PM - 6:00 PM and to capture the weekday and weekend AM and PM peak periods.

A common peak hour of 7:00 AM – 8:00 AM for the AM peak, 5:30 PM – 6:30 PM for the PM peak and 2:00 PM – 3:00 PM for the Saturday peak was used for the existing volume counts. The common peak hour was selected based on the peak hour for the majority of the study intersections.

It is noted that there was construction at the intersection of Mayfield Road and Coleraine Drive during the surveys. The Saturday counts were not adjusted as it is assumed that the construction would not have a significant impact. However, December 2021 counts were obtained and utilized for the weekday AM and PM peak hours, and traffic volume balancing was completed along Coleraine Drive.

Signal timing plans at the signalized intersections were obtained from the Region of Peel. A summary of the TMC data collected is outlined in **Table 3-2** with details of the TMC data collected found within **Appendix B**.

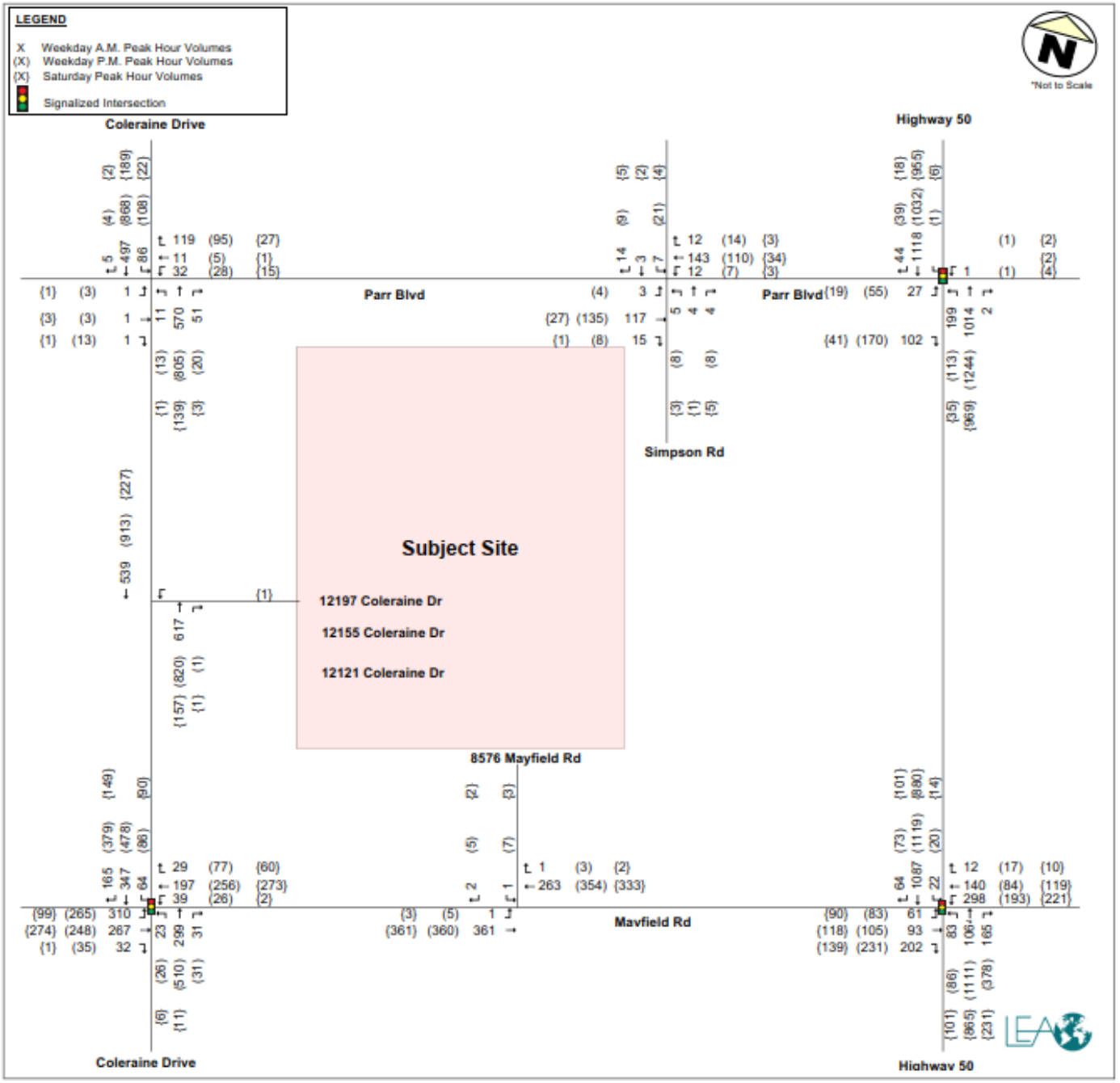
Table 3-2: Data Collection Summary

Intersection	TMC Date	Source
Mayfield Road & Coleraine Drive	Wednesday, December 8, 2021	Spectrum
	Saturday, September 16, 2023	LEA Consulting Ltd.
Coleraine Drive & Parr Boulevard	Thursday, September 14, 2023 Saturday, September 16, 2023	LEA Consulting Ltd.
Parr Boulevard & Simpson Road		
Parr Boulevard & Highway 50		
Mayfield Road & Highway 50		
Mayfield Road & South Site Access		
Coleraine Drive and West Site Access		

3.6 EXISTING TRAFFIC VOLUMES

The existing traffic volumes in the study area during the weekday AM, PM and Saturday peak hours are illustrated in **Figure 3-5**.

Figure 3-5: Existing Traffic Volumes



4 FUTURE BACKGROUND TRAFFIC CONDITIONS

For the analysis of future background traffic conditions, this study considers a five- and ten-year horizon from the existing year 2023 to the future years 2028 and 2033, respectively. Future background conditions include the traffic added to the network from other future developments, corridor growth, and road network improvements. The future background conditions will be used as the baseline for evaluating the impact of the proposed development.

4.1 CORRIDOR GROWTH

The Region of Peel provided growth rates for the study area corridors, which were subsequently applied to all through movements in addition to major movements at the studied intersections. For Parr Boulevard, traffic volume information from 2014 and 2016 indicated a growth rate of 69%, which was not considered sustainable for this analysis. Therefore, a 2% growth rate was applied to Parr Boulevard. Similarly, a growth rate of 2% was applied to Simpson Road for consistency. **Table 4-1** summarizes the applied growth rates, with the details provided in **Appendix C**.

Table 4-1: Corridor Growth

Corridor	AM/PM/Sat Peak Annual Growth
Mayfield Rd EB	0.5%
Mayfield Rd WB	1%
Coleraine Dr NB	0.5%
Coleraine Dr SB	0.5%
Hwy 50 NB	0.5%
Hwy 50 SB	0.5%
Parr Boulevard EB	2%
Parr Boulevard WB	2%
Simpson Road NB	2%
Simpson Road SB	2%

4.2 BACKGROUND DEVELOPMENTS

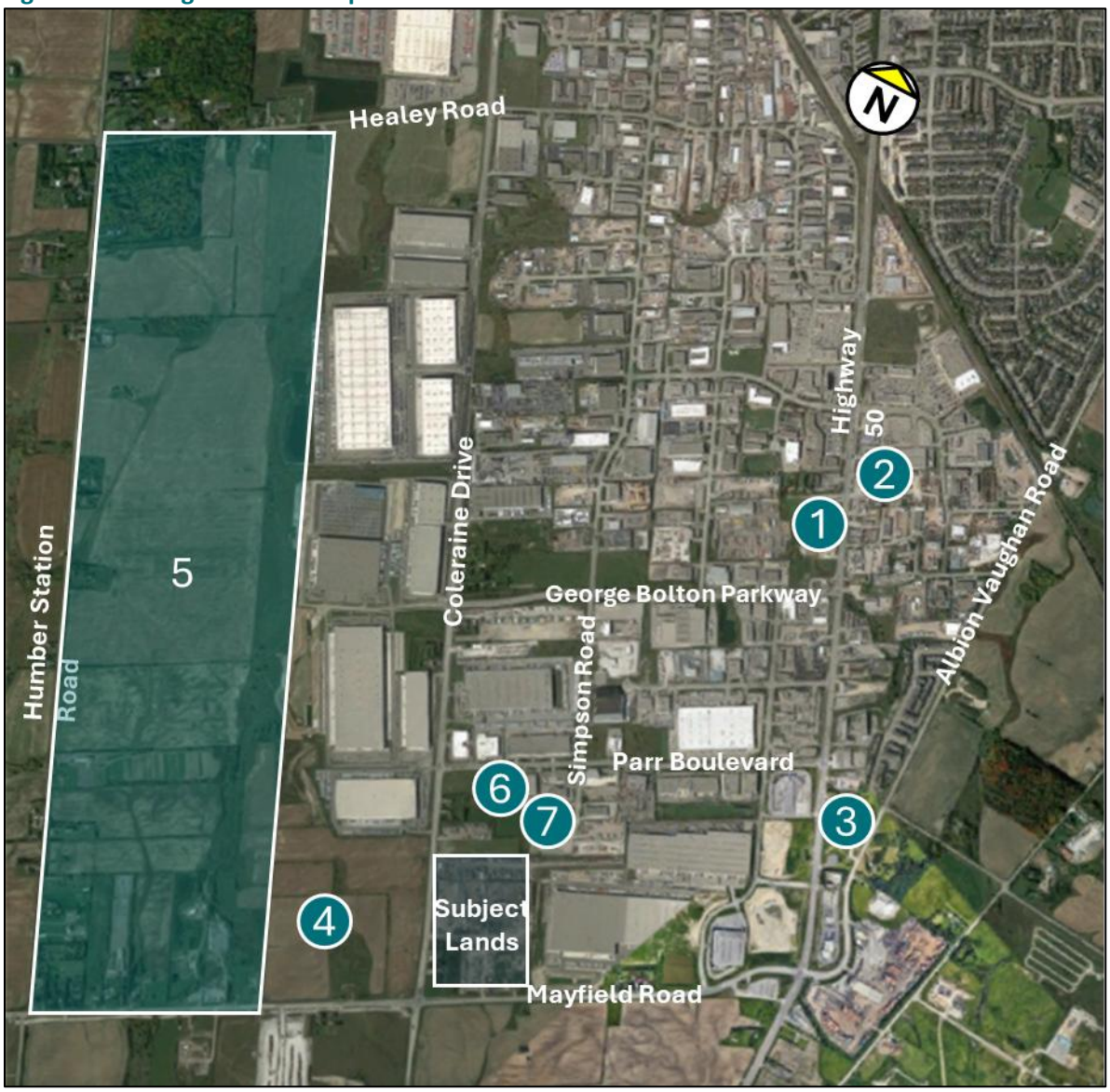
Seven (7) background developments located within or near the study area were considered under future background conditions. Detailed information on the background developments included in the analysis was obtained from the Town's development application online inventory. The site statistics of the background developments are summarized below in **Table 4-2** and the location of each background development relative to the location of the subject site is illustrated below in **Figure 4-1**

Table 4-2: Background Developments

#	Location	Proposed Development	Anticipated Horizon	Source of Traffic Volumes
1	12544 Highway 50	Gas Station 279 m^2 of retail GFA 461 m^2 of retail GFA	2028	TIS dated March 2017 (Figure 5-1) LMM Engineering Inc.
2	12563 & 12599 Highway 50 (Phase 1)	2,238 residential units; 3,179 m^2 Retail	2033	TIS dated January 2022 (Figure 21 & 24) BA Group
3	12148 Albion Vaughan Road	306 residential units; 225m^2 commercial space	2028	TIS dated September 2021 (Figure 4.2A -4.2B) Paradigm
4	Triangle Lands	406,000 m^2 of industrial GFA	2028	TIS dated Sept 2023 LEA Estimate
5	Humber Station Lands (Phase 1)	2,028 Jobs/Employee Warehousing	2028	TIS Dated Sept 2023 (Figure 5-1:5-4) LEA Consulting Ltd
	Humber Station Lands (Full Buildout)	2,548 Jobs/Employee Warehousing	2033	
6	171 Parr Blvd (SPA 2021-0067)	Industrial use with accessory office; 3658 m^2 of GFA	2028	Trip generation baseline auto trips calculated with average rates based on ITE Trip Generation Manual, 11th Edition. LUC 130 (Industrial Park) was used, with General Urban/Suburban setting, AM/PM Weekday Peak Hour. PM Peak Hour rates used for Saturday Peak due to small number of studies. Trip distribution same as subject site due to proximity.
7	0 Simpson Road (SPA 2019-0064)	2 storey office with maintenance shop and cleaning shop; 1355 m^2 of GFA	2028	Same as 171 Parr Blvd methodology.

The background development traffic volumes were extracted from their respective traffic studies for their development applications and subsequently assigned to the study area road network. Relevant excerpts from the traffic studies for each background development are included in **Appendix C**.

Figure 4-1: Background Development Locations

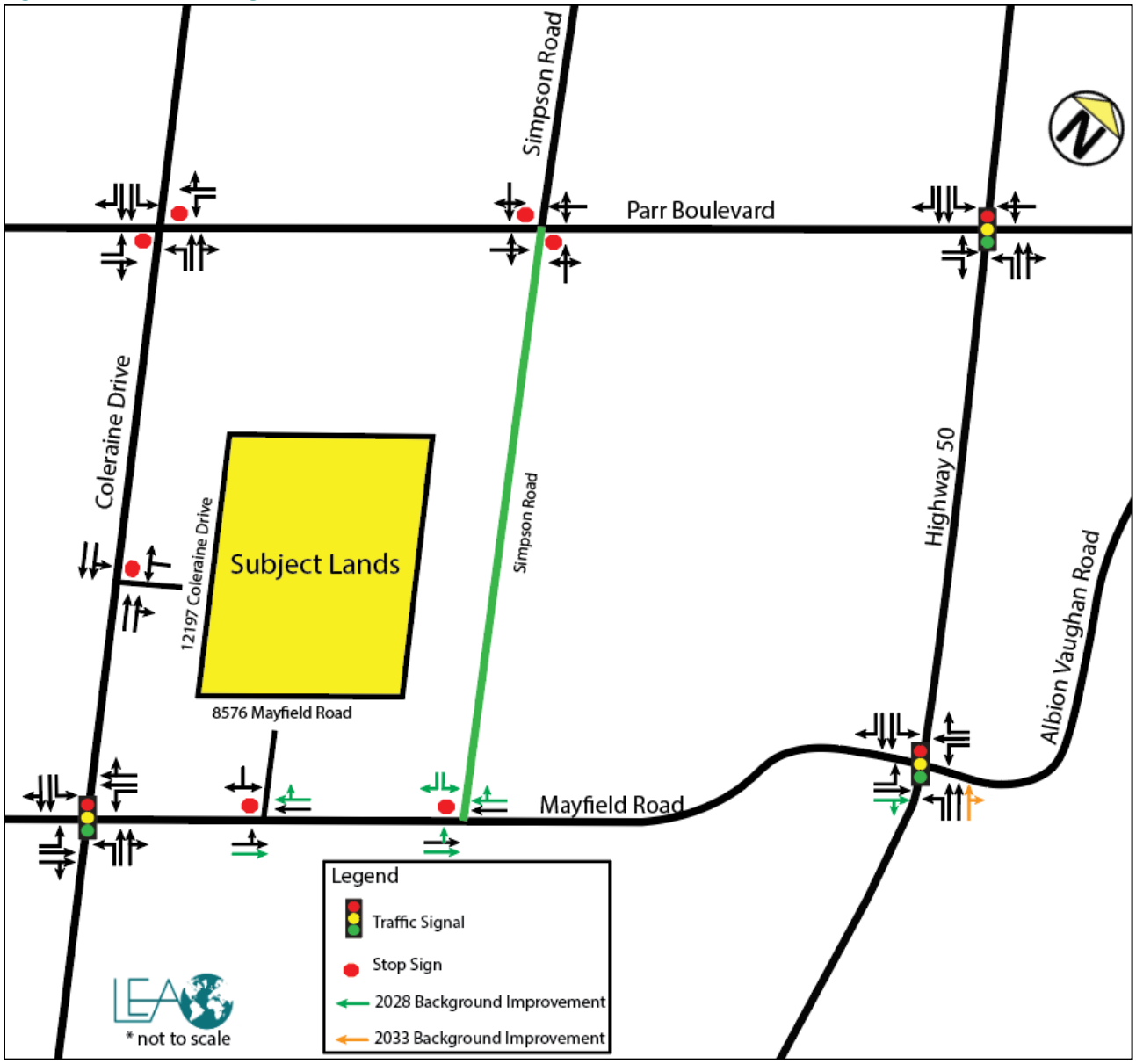


Source: Google Maps, 2023

4.3 PLANNED EXTERNAL ROAD NETWORK

As identified in **Section 2**, it is understood that Mayfield Road will be widened from 2 lanes to 4 lanes between Humber Station Road and Highway 50 by the 2028 horizon year and Highway 50 will be widened from 5 lanes to 7 lanes from Castlemore Road to Mayfield Road by the 2033 horizon year. In addition, the Simpson Road extension is expected to be completed by the 2028 horizon year. **Figure 4-2** illustrates the future background road network.

Figure 4-2: Future Background Road Network

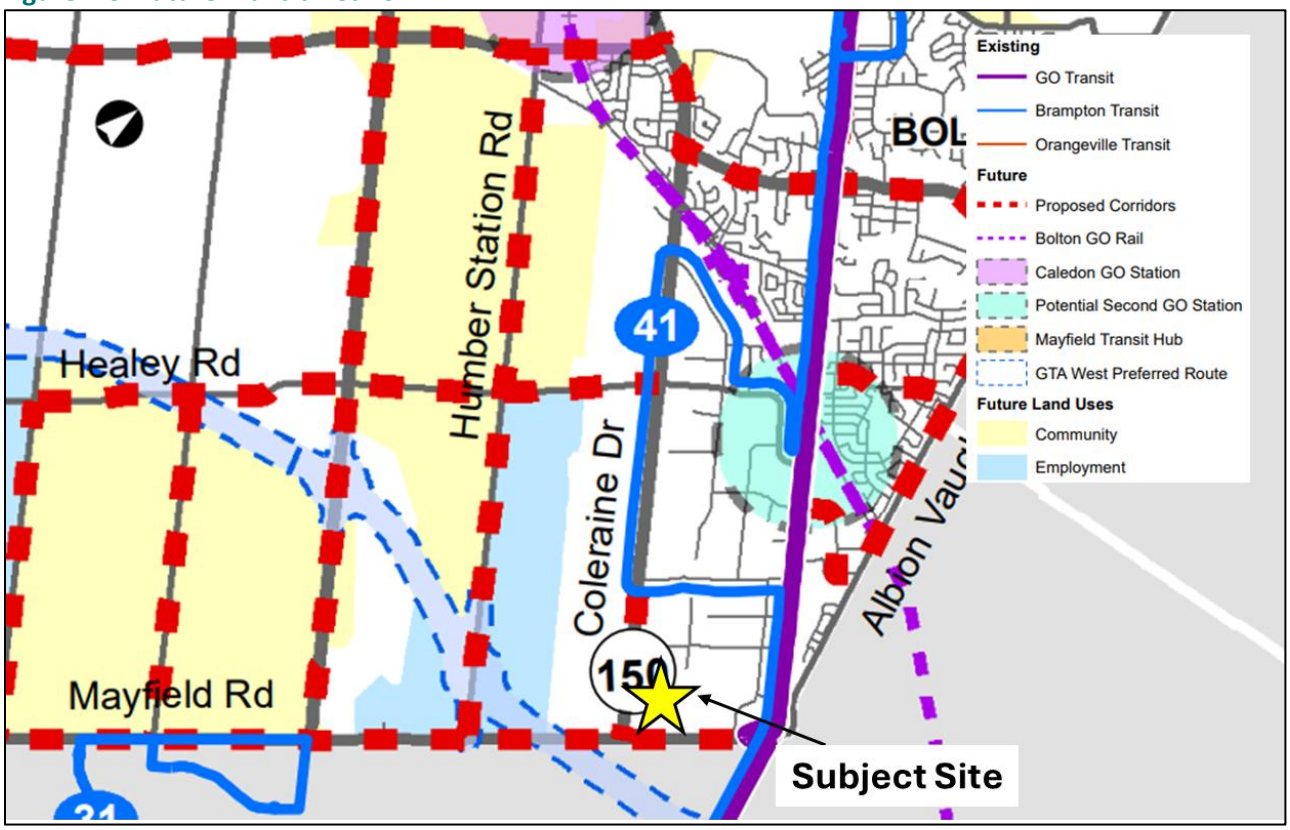


4.4 PLANNED TRANSIT AND ACTIVE TRANSPORTATION IMPROVEMENTS

As illustrated in **Figure 4-3**, the Town of Caledon's Multi-Modal Transportation Master Plan (MMTMP) proposes a future transit network including local transit routes along the subject land's boundary roadways and improvements to the nearby priority areas including the Caledon GO Station (planned at King Street & Humber Station Road).

These nearby transit initiatives aim to expand transit reach to existing and proposed residential and employment land uses. Having more frequent and reliable transit service, as well as improving first/last mile initiatives to existing transit stops will enhance the multi-modal transportation network in the study area.

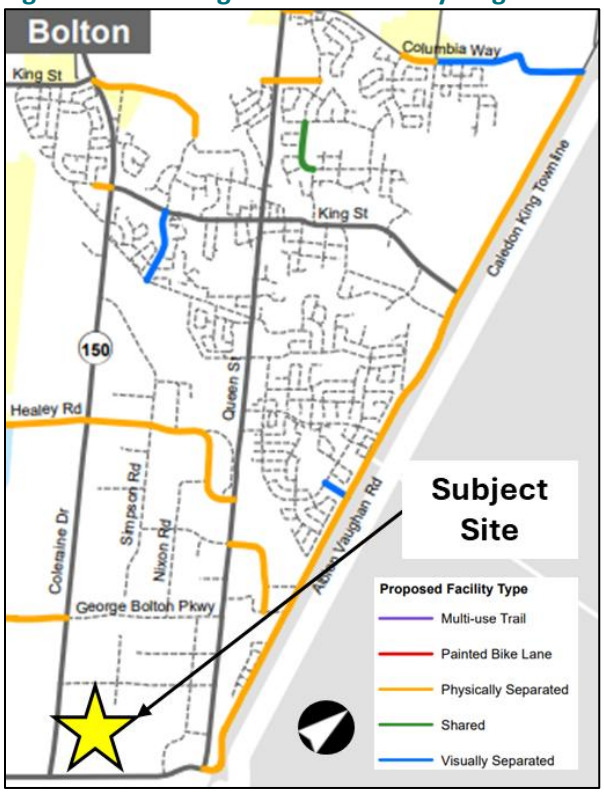
Figure 4-3: Future Transit Network



Source: Multi-Modal Transportation Master Plan (Town of Caledon, June 2024)

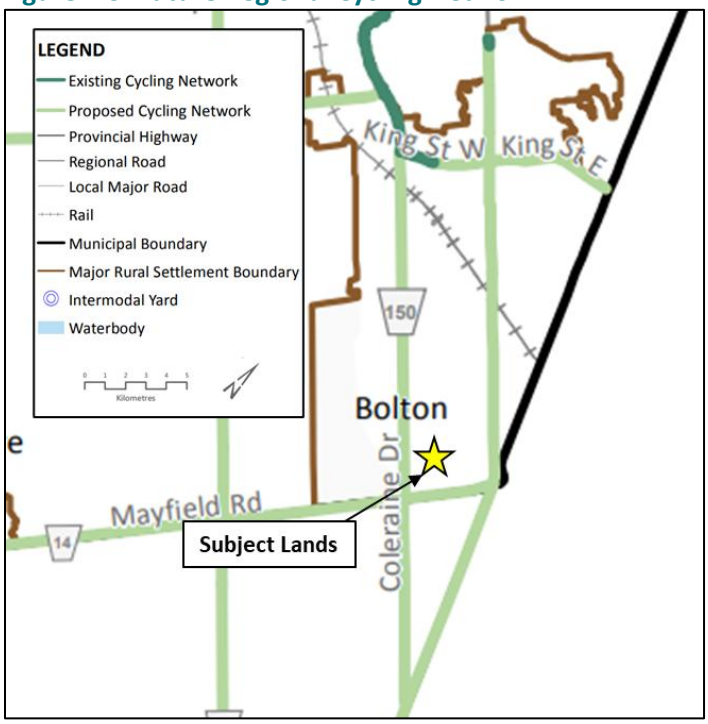
As illustrated in **Figure 4-4**, the Town of Caledon's Active Transportation Master Plan proposes separated on-road facilities near the subject lands along Albion Vaughan Road. In addition, regional cycling facilities (see **Figure 4-5**) are proposed along Coleraine Drive and Mayfield Road.

Figure 4-4: Existing & Future Local Cycling Network



Source: Active Transportation Master Plan (Town of Caledon, June 2024)

Figure 4-5: Future Regional Cycling Network



Source: Long Range Transportation Plan (Peel Region, 2019)

4.5 FUTURE BACKGROUND TRAFFIC VOLUMES

The future background traffic volumes for the weekday AM, PM and Saturday peak hours under the 2028 and 2033 horizon years illustrated in **Figure 4-6** and **Figure 4-7**.

Figure 4-6: 2028 Future Background Traffic Volumes

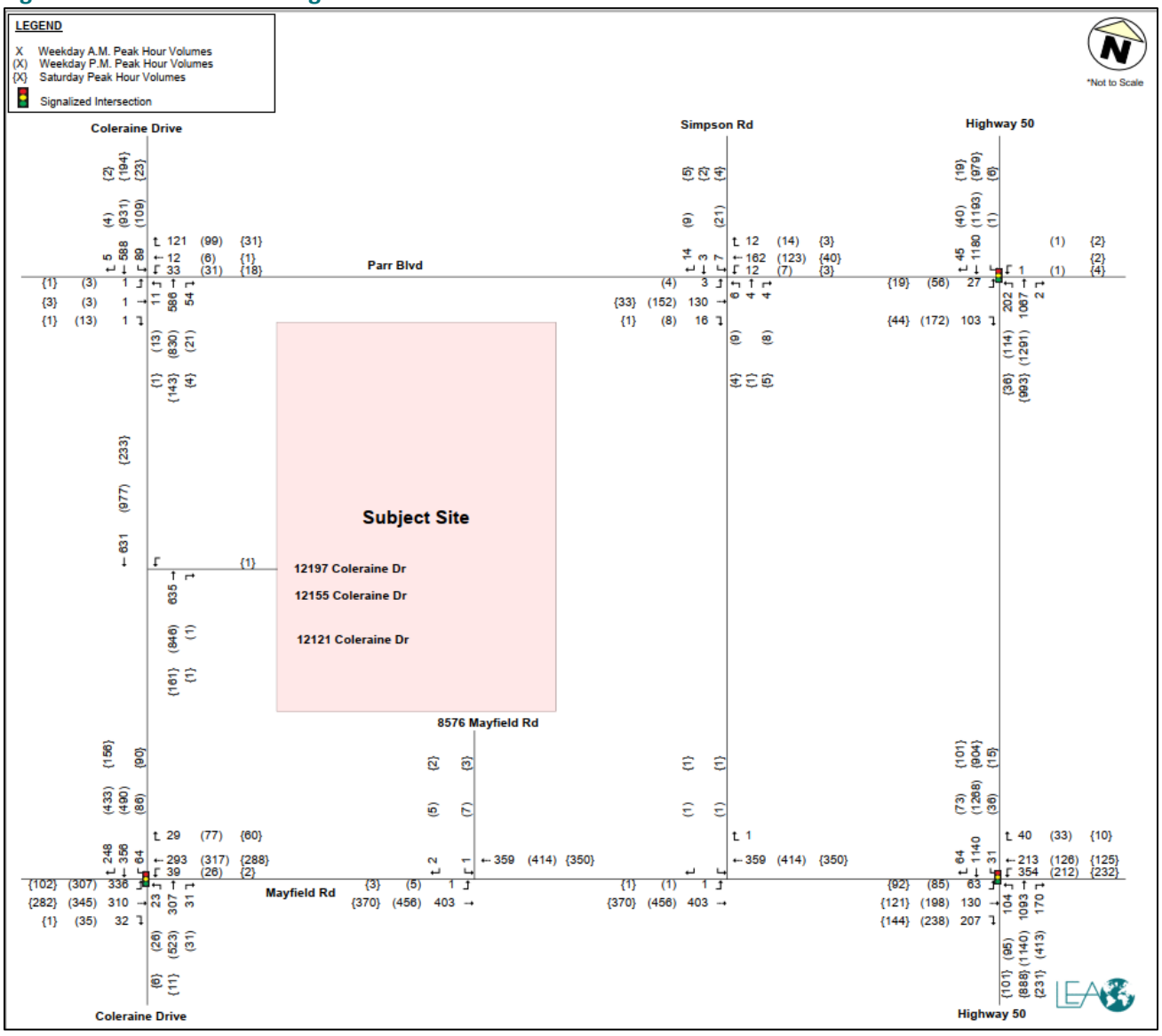
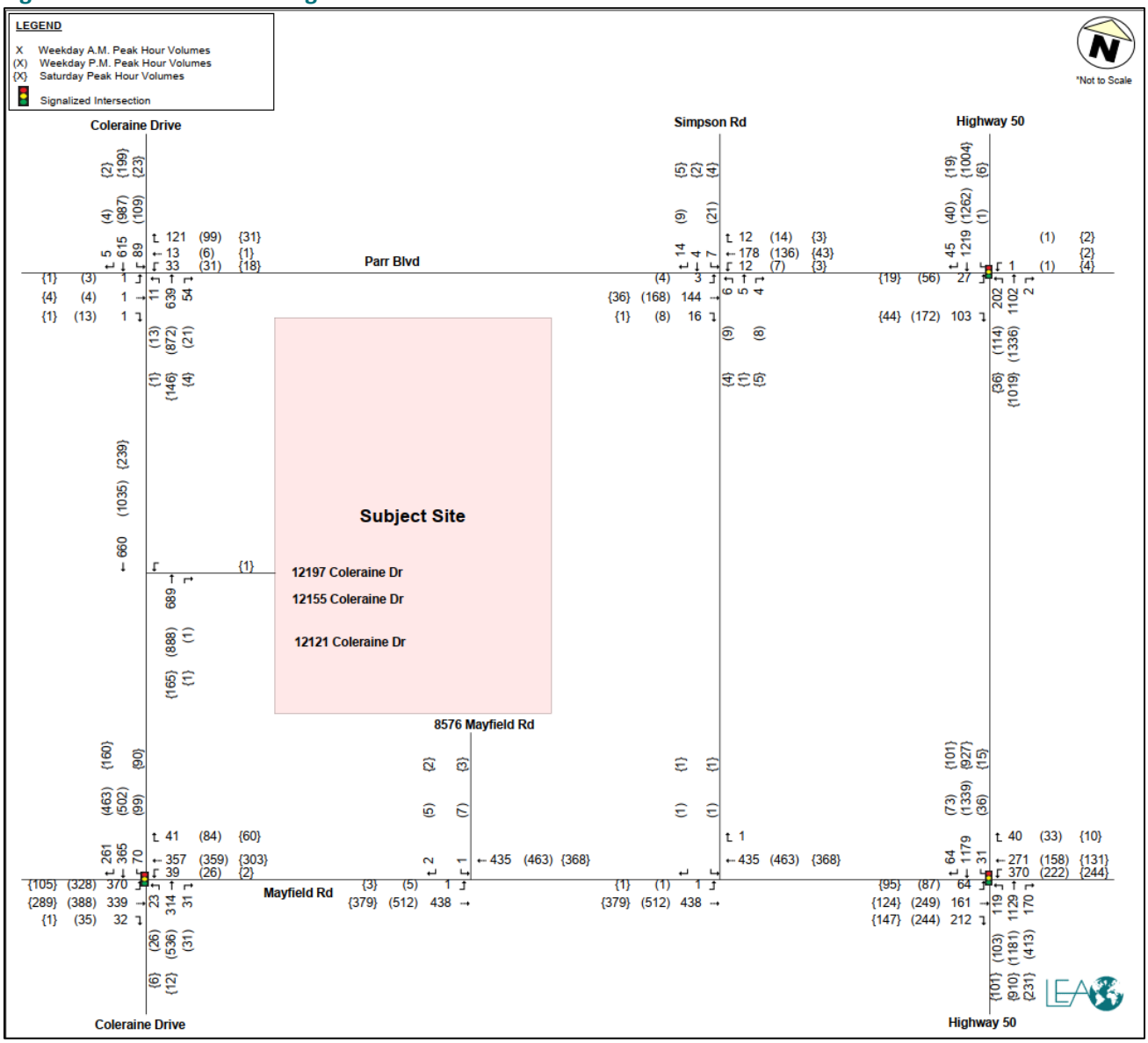


Figure 4-7: 2033 Future Background Traffic Volumes



5 SITE-GENERATED TRAFFIC

As mentioned earlier, the full buildout of the subject lands is not yet confirmed. Resultantly, for the pending parcels, an assumed 50% lot coverage was utilized to estimate the total GFA and calculate site trips for the analysis. Therefore, the approximate full buildout of the subject lands consists of approximately 908,500 ft^2 of warehouse GFA. In addition, it was assumed that 96% of trips would access the site via Simpson Road, and 4% would access via Mayfield Road.

This section provides details regarding the site-generated traffic that has been conducted to assess the future travel demand and capacity deficiencies of the road network upon the full buildout of the subject lands. The calculation, distribution, and assignment of future site-generated trips are discussed below.

5.1 MODAL SPLIT

Data from the 2016 Transportation Tomorrow Survey (TTS) was extracted to identify the modal split of trips from the study area. The trips were filtered for planning district of employment zones 34 and 35 (northern Peel Rgion) and for the employment trips, trip purpose included home-based work. The modal split is summarized in **Table 5-1**. Detailed TTS data is provided in **Appendix D**.

Table 5-1: Modal Splits

Land Use	Description	Modal Split
Proposed Industrial	**Total**	**100%**
	Auto Driver Trips	84%
	Passenger Trip	9%
	Transit Trips	5%
	Pedestrian Trips	2%
	Cycling Trips	0%
	Paid Rideshare	0%
	Auto Trips	**84%**
	Non-Auto Trips	**16%**

5.2 TRIP GENERATION

It is understood that warehousing activities are proposed for the subject lands. As such, trip generation for the development was estimated using the average baseline auto and truck trip rates from the ITE Trip Generation Manual 11th Edition for ITE LUC 130 – Industrial Park in General Urban/Suburban and based on the proposed estimated GFA of 908,500 ft^2. The trip generation was calculated for the AM, PM, and Saturday peak hours. Of note, due to the small number of ITE studies available for Saturday, the PM peak rates were used for the Saturday peak hour as a conservative estimate.

A summary of the site trip generation for auto and truck trips is provided in **Table 5-2** and **Table 5-3**, respectively.

Table 5-2: Subject Site Trip Generation (Auto Trips)

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Sat Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
ITE LUC 130 Industrial Park 908,500 ft^2	Auto Trip Rate (/1000 ft^2)	0.28	0.06	0.34	0.07	0.27	0.34	0.07	0.27	0.34
	Total ITE Auto Trips	250	59	309	68	241	309	68	241	309
Total New Auto Trips		**250**	**59**	**309**	**68**	**241**	**309**	**68**	**241**	**309**

Table 5-3: Subject Site Trip Generation (Truck Trips)

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Sat Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
ITE LUC 130 Industrial Park 908,500 ft^2	Truck Trip Rate (/1000 ft^2)	0.02	0.02	0.04	0.02	0.02	0.04	0.02	0.02	0.04
	Total ITE Auto Trips	16	20	36	14	23	37	14	23	37
Total New Truck Trips		**16**	**20**	**36**	**14**	**23**	**37**	**14**	**23**	**37**

The subject lands are anticipated to generate 309 two-way auto vehicle trips during the AM peak hour (250 inbound and 59 outbound), 309 two-way auto vehicle trips during the PM peak hour (68 inbound, 241 outbound) and 309 two-way auto vehicle trips during the Saturday peak hour (68 inbound, 241 outbound).

In addition, 36 two-way truck trips (16 inbound, 20 outbound) are anticipated for the AM peak hour, 37 two-way truck trips (14 inbound, 23 outbound) are anticipated for the PM peak hour and 37 two-way truck trips (14 inbound, 23 outbound) are anticipated for the Saturday peak hour.

5.3 TRIP DISTRIBUTION AND ASSIGNMENT

The directional trip distribution of site traffic was derived using 2016 TTS data filtered for trips originating in/ destined to industrial areas during the AM and PM and Saturday peak periods within Traffic Analysis Zone 3191. Inbound and outbound distribution was based on the results of the peak hour for the peak direction (i.e., inbound direction based on AM in and outbound direction based on PM out). Site traffic was assigned to the road network based on logical routing, turn restrictions, and changes in the future network.

The trip distribution for the subject lands is outlined in **Table 5-4**. Detailed TTS data is provided in **Appendix D**.

Table 5-4: Trip Distribution

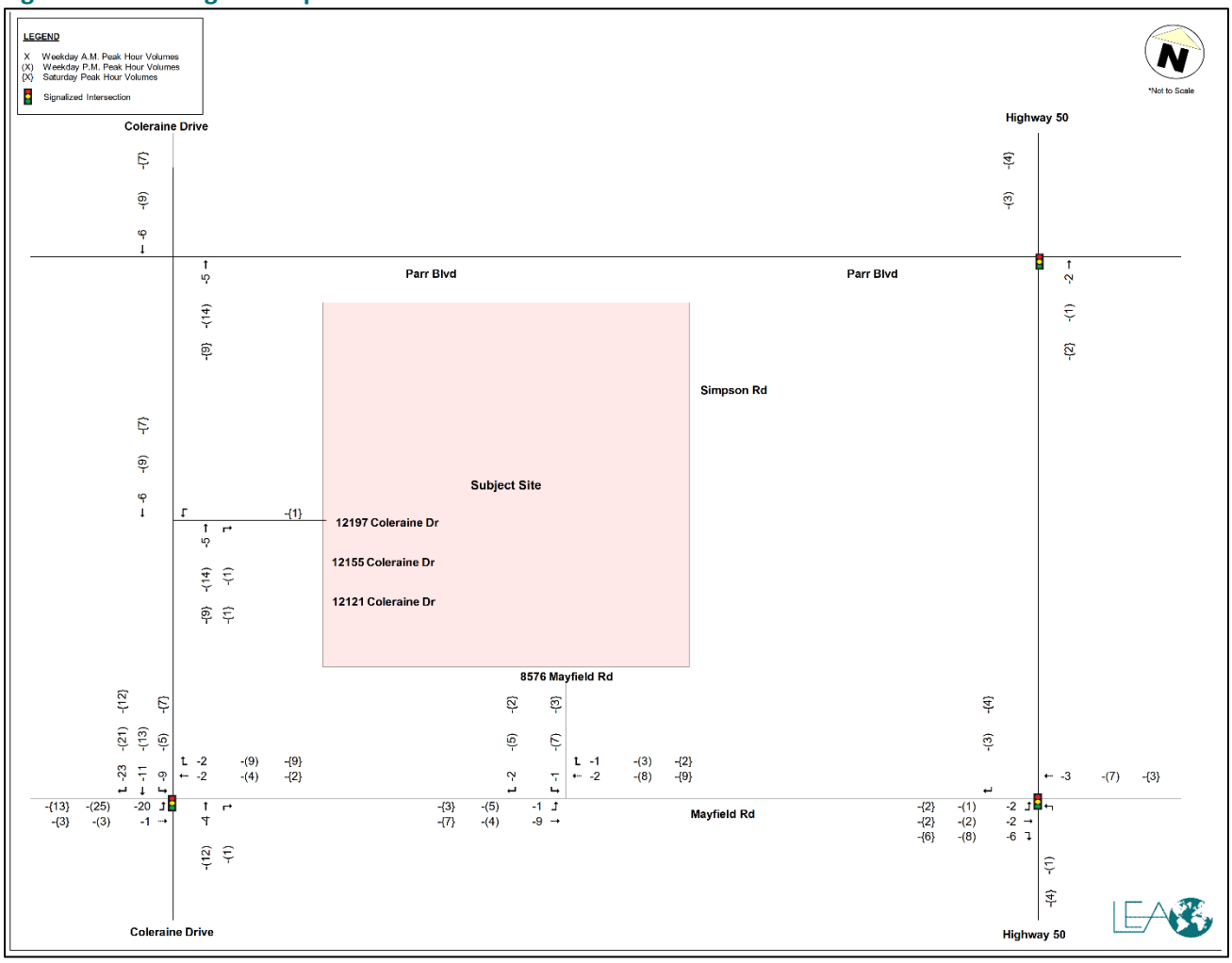
Direction From/To	Expected Route	Weekday AM/PM/Saturday Peak Hour	
		In	Out
North	Albion Vaughan Road	12%	4%
	Coleraine Drive	26%	36%
	Highway 50	4%	5%
South	Highway 50	23%	19%
West	Mayfield Road	35%	36%
TOTAL		**100%**	**100%**

The existing trips on-site were removed based on existing trip patterns. 12197 Coleraine Drive was surveyed and removed accordingly based on observed traffic volumes. 12155 Coleraine Drive trips were derived from the video footage at 12197 Coleraine Drive. The driveway trips for 12121 Coleraine Drive and 8576 Mayfield Road were determined based on the trip drop-off between the intersection of Coleraine Drive & Mayfield Road to 12155 Coleraine Drive. Inbound/Outbound trip proportions at this driveway were assumed to match neighboring driveways due to the similar land uses. **Table 5-5** summarizes the trips removed and **Figure 5-1** illustrates the trips removed on the road network.

Table 5-5: Existing Trips Removal

Existing Trips Removal (Vehicle + Trucks)									
Address	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Sat Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
12197 Coleraine Dr, Caledon	-0	-0	-0	-1	-0	-1	-1	-1	-2
12155 Coleraine Dr, Caledon	-14	-18	-32	-20	-31	-51	-16	-13	-29
12121 Coleraine Dr, Caledon	-18	-30	-48	-32	-20	-52	-12	-14	-26
8576 Mayfield Rd, Bolton	-2	-3	-5	-8	-12	-20	-5	-5	-10
Sum	**-34**	**-51**	**-85**	**-61**	**-63**	**-124**	**-34**	**-33**	**-67**

Figure 5-1: Existing Site Trip Removal



The site generated traffic volumes for the weekday AM, PM and Saturday peak hours for auto trips are illustrated in **Figure 5-2** and the site generated truck trips are illustrated in **Figure 5-3**.

Figure 5-2: Total Site-Generated Auto Peak Hour Traffic Volumes

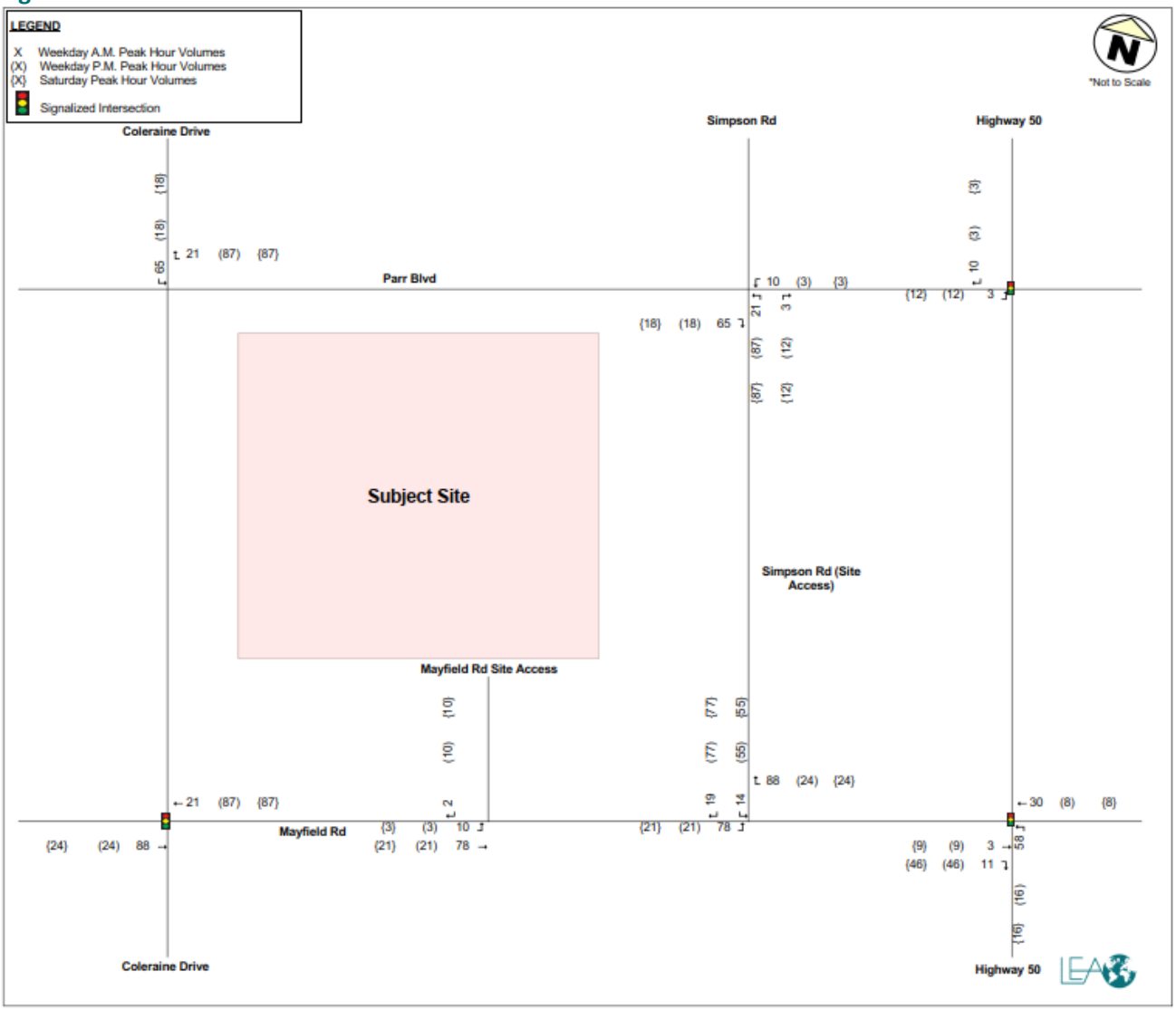
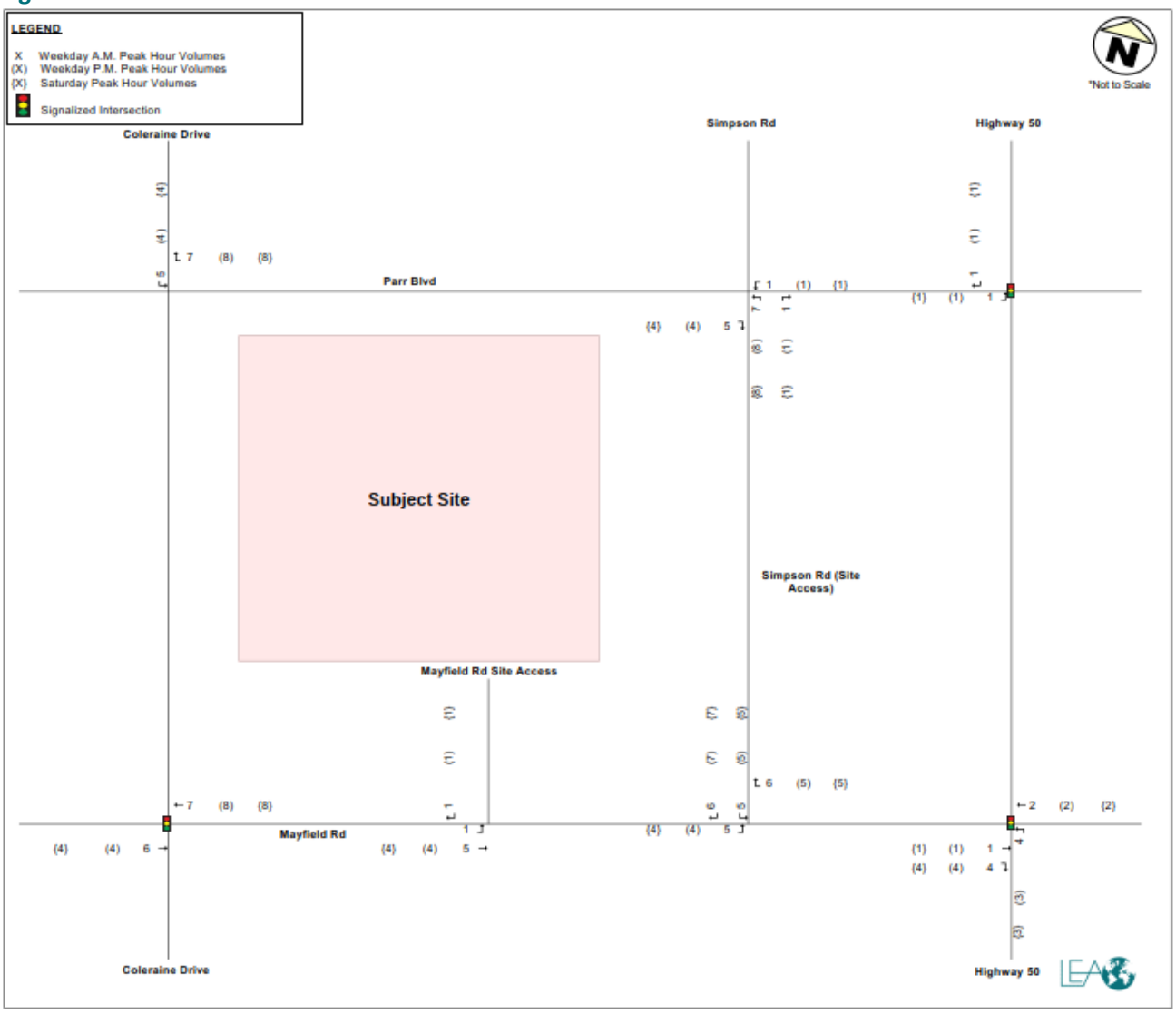


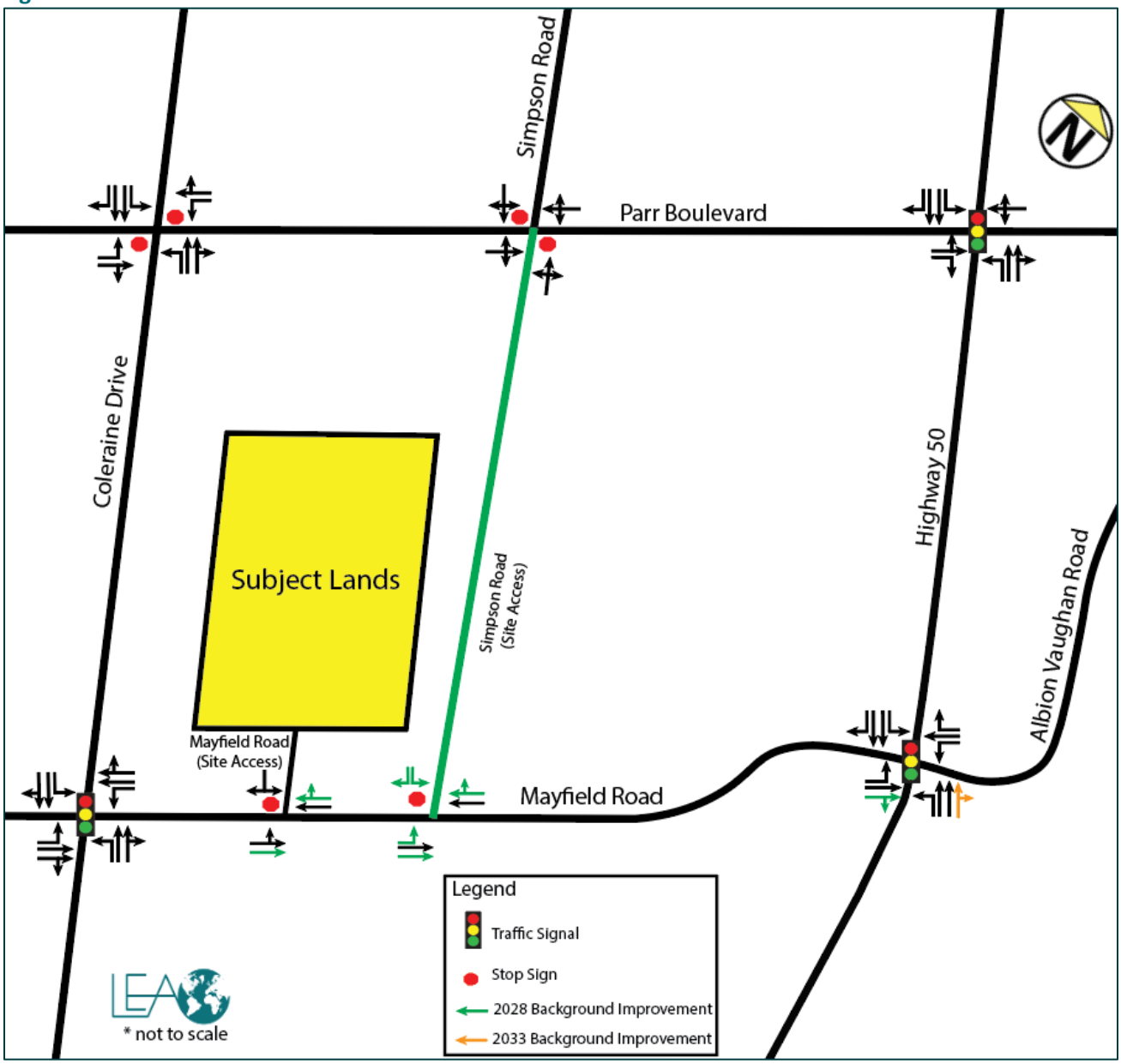
Figure 5-3: Total Site Generated Truck Peak Hour Traffic Volumes



6 FUTURE TOTAL TRANSPORTATION CONDITIONS

Future total traffic conditions include the addition of site trips to the 2028 and 2033 future background volumes. Changes noted under future background conditions were maintained in the future total analysis. In addition, the Simpson Road extension is expected to be completed by the 2028 horizon year. The future road network configuration in 2033 is illustrated below in **Figure 6-1**. A functional design plan is provided in **Appendix J**.

Figure 6-1: Future Road Network



6.1 FUTURE TOTAL TRAFFIC VOLUMES

The future total traffic volumes for the weekday AM, PM and Saturday peak hours under the 2028 and 2033 horizon years are illustrated in **Figure 6-2** and **Figure 6-3**, respectively.

Figure 6-2: 2028 Future Total Peak Hour Traffic Volumes

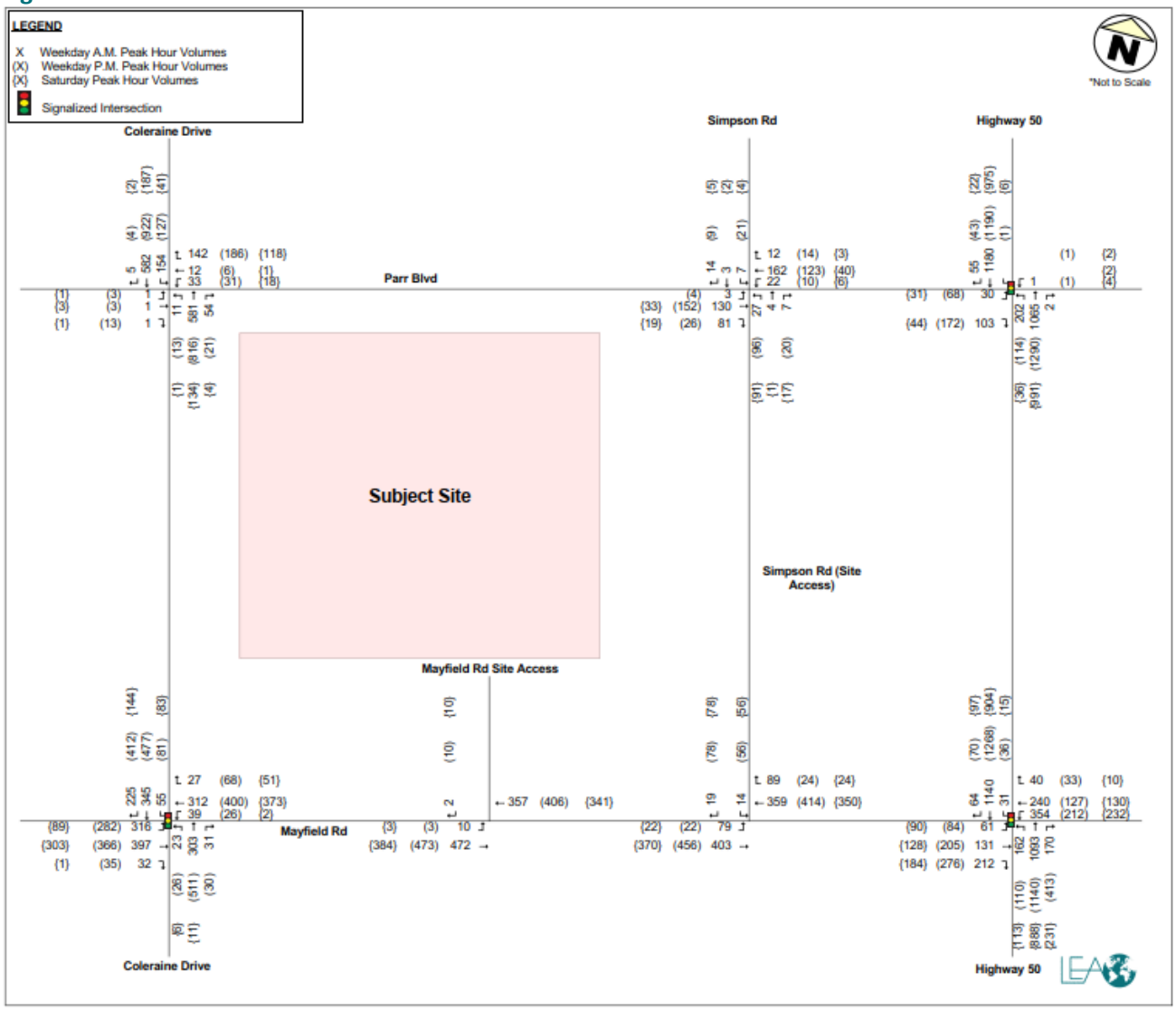
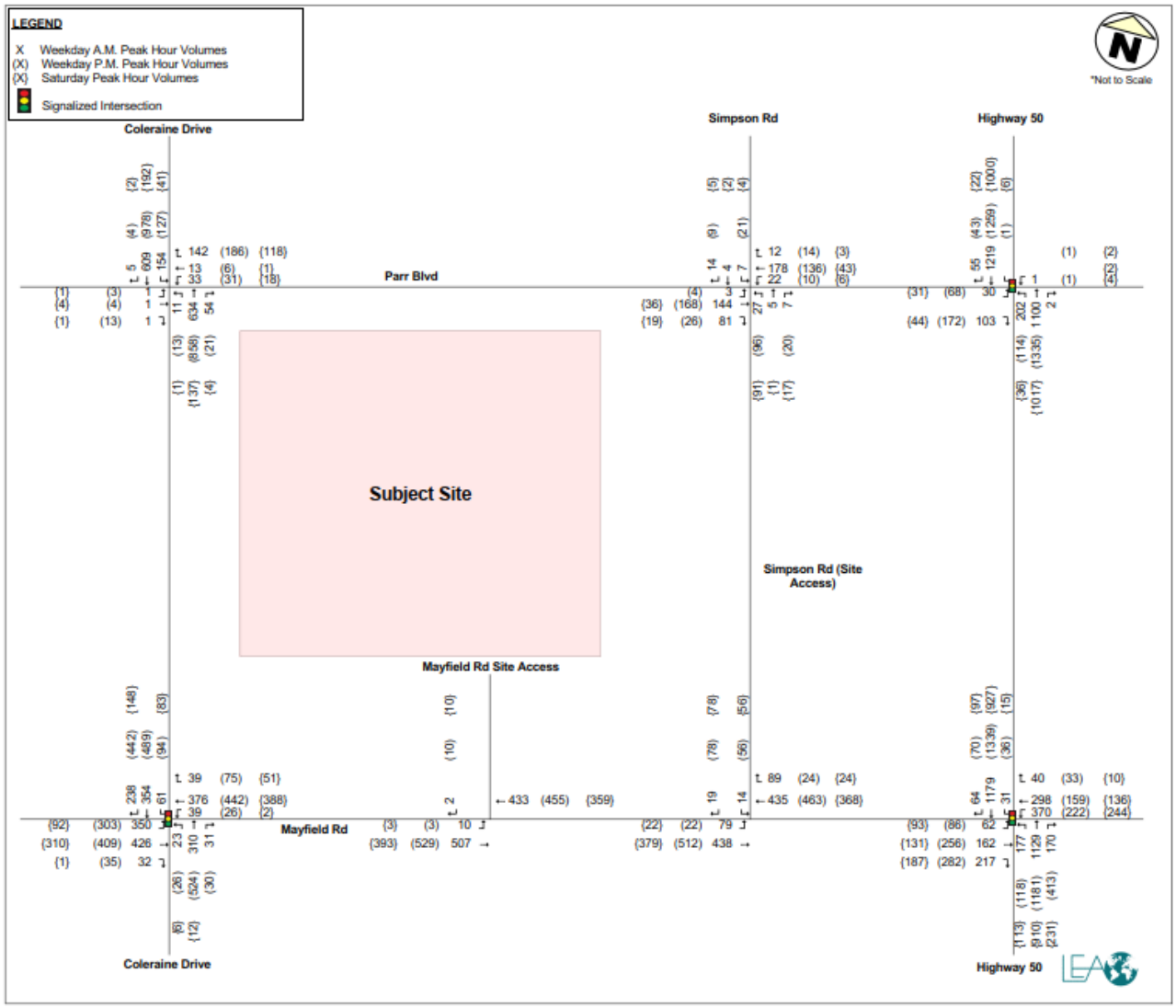


Figure 6-3: 2033 Future Total Peak Hour Traffic Volumes



7 INTERSECTION CAPACITY ANALYSIS

The intersection capacity analysis was undertaken using Synchro 11.0, which is based on the Highway Capacity Manual (2000) methodology and adheres to the Town of Caledon's Transportation Impact Studies Terms of Reference and Guidelines (2017). HCM 2000 and 6 results are presented for signalized and unsignalized study intersections, respectively.

As per the Town of Caledon guidelines, critical movements of interest for signalized intersections were identified as those with a volume-to-capacity (v/c) ratio greater than 0.90 for overall intersection operations, through movements or shared through/turning movements and a v/c ratio greater than 1.00 for exclusive turning movements. For unsignalized intersections, critical movements were identified as those with a level-of-service (LOS) 'E' or greater. LOS definitions are included in **Appendix E**.

The following sections outline a comparison of the capacity analysis results under existing, future background (2028 and 2033), and future total (2028 and 2033) conditions. The analysis outlines the intersection capacity analysis for signalized and unsignalized intersections. Detailed intersection capacity analysis is provided in the following appendices:

- **Appendix F:** Existing Intersection Capacity Analysis;
- **Appendix G:** 2028 and 2033 Future Background Intersection Capacity Analysis; and
- **Appendix H:** 2028 and 2033 Future Total Intersection Capacity Analysis.

7.1 SYNCHRO MODEL INPUTS AND ASSUMPTIONS

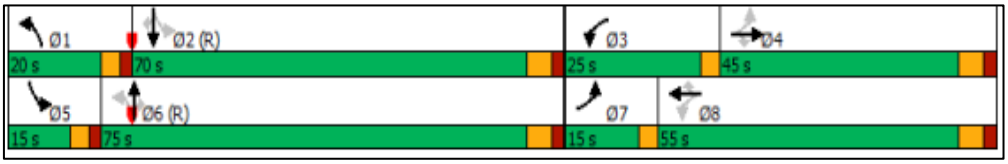
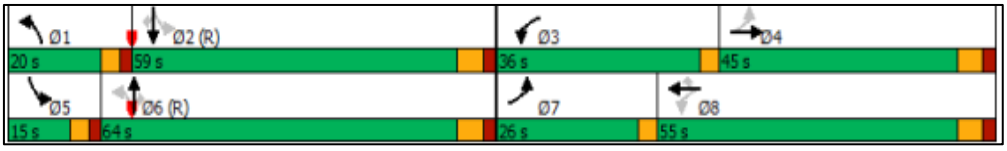
7.1.1 Existing Synchro Model Inputs

Existing traffic operations were assessed to provide a baseline for future traffic operations and identify intersections currently experiencing capacity constraints. The existing analysis incorporates the most recent signal timing plans for the study intersections. Furthermore, as stated by the Region of Peel Synchro guidelines, a peak hour factor (PHF) of 1.00 was utilized.

7.1.2 Future Background Synchro Model Inputs

Input parameters from the existing conditions scenario were maintained with corresponding future background volumes. However, signal timing modifications were made to accommodate capacity constraints identified due to the addition of future background traffic under all horizon years. The existing cycle length of 160 seconds was maintained for each peak hour. The detailed signal timings recommended under future conditions for each horizon year is provided in **Table 7-1**.

Table 7-1: Recommended Signal Timing Plan Modifications - Mayfield Road/Albion Vaughan Road & Highway 50

Timing Plan	Cycle Length	Timings
AM Peak Hour		
Original	160	
Proposed		
PM Peak Hour		
Original	160	
Proposed		

7.1.3 Future Background Left-Turn Warrant Analysis

At the intersection of Mayfield Road and the future Simpson Road, an analysis was undertaken to determine if an exclusive eastbound left was warranted.

The Ministry of Transportation of Ontario (MTO) Geometric Design Standard Chapter E has a methodology for determining appropriate storage lengths for left-turn lanes for at-grade intersections. In Appendix B of Chapter E, Figure E8-1 titled “Left turn storage lanes four-lane undivided highways Unsignalized” displays graphically the relationship between opposing volumes and the minimum left-turn volumes to determine the storage lane and length requirements.

Based on the comparison between the opposing volumes and the left-turning volumes, it was determined that a left-turn warrant was met during the AM peak hour. As such, for the future background and future total scenarios, the analysis includes an exclusive eastbound-left movement. A detailed summary of the left-turn warrant analysis is provided in **Appendix I**.

7.1.4 Future Total Synchro Model Inputs

Input parameters from the existing and future background scenarios were maintained with the corresponding future total volumes.

7.2 SIGNALIZED INTERSECTION CAPACITY ANALYSIS (2028)

The results for the studied signalized intersections under the 2028 horizon year during the weekday AM, PM and Saturday peak hours are summarized in the sections below.

7.2.1 Coleraine Drive and Mayfield Road

The intersection capacity analysis results at Coleraine Drive and Mayfield Road during the AM, PM and Saturday peak hours are summarized in **Table 7-2**.

Table 7-2: Coleraine Drive and Mayfield Road Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	0.51	C (31)	-/-	-	0.52	C (31)	-/-	-	0.50	C (29)	-/-
EBL	310	0.43	B (10)	31/55	336	0.44	A (9)	31/54	316	0.42	A (9)	28/49
EBTR	299	0.15	A (9)	15/25	342	0.14	A (8)	16/26	429	0.17	A (8)	20/32
WBL	39	0.08	B (16)	5/14	39	0.07	B (15)	5/13	39	0.08	B (14)	5/14
WBTR	226	0.15	B (17)	16/26	322	0.16	B (16)	22/37	339	0.17	B (15)	23/39
NBL	23	0.19	D (50)	6/14	23	0.26	D (52)	6/15	23	0.24	D (51)	6/15
NBTR	330	0.66	E (56)	44/59	338	0.66	E (56)	46/60	334	0.66	E (57)	45/60
SBL	64	0.47	D (43)	13/24	64	0.31	D (42)	13/24	55	0.27	D (42)	12/21
SBTR	512	0.61	D (45)	57/70	604	0.65	D (48)	60/76	570	0.63	D (48)	59/74
PM Peak Hour												
Overall	-	0.61	D (37)	-/-	-	0.62	D (36)	-/-	-	0.61	C (34)	-/-
EBL	265	0.48	B (13)	31/51	307	0.49	B (13)	35/56	282	0.48	B (13)	31/51
EBTR	283	0.14	B (11)	16/25	380	0.17	B (11)	22/33	401	0.18	B (11)	23/35
WBL	26	0.06	B (17)	4/10	26	0.05	B (17)	4/9	26	0.05	B (17)	4/9
WBTR	333	0.23	B (19)	24/35	394	0.22	B (19)	30/41	468	0.26	B (19)	38/50
NBL	26	0.45	D (52)	6/17	26	0.46	D (53)	6/17	26	0.46	D (52)	6/17
NBTR	541	0.81	E (58)	73/91	554	0.81	E (57)	75/93	541	0.75	D (54)	74/91
SBL	86	0.54	D (40)	17/29	86	0.43	D (38)	17/28	81	0.42	D (38)	16/27
SBTR	857	0.78	D (47)	92/112	923	0.82	D (49)	101/120	889	0.79	D (48)	96/114
Saturday Peak Hour												
Overall	-	0.23	B (16)	-/-	-	0.21	B (16)	-/-	-	0.22	B (15)	-/-
EBL	99	0.16	A (6)	4/11	102	0.14	A (6)	4/11	89	0.13	A (6)	3/10
EBTR	275	0.12	A (6)	7/15	283	0.11	A (6)	7/16	304	0.12	A (6)	8/17
WBL	2	0.01	A (9)	0/1	2	0.00	A (9)	0/1	2	0.00	A (8)	0/1
WBTR	333	0.17	A (10)	12/24	348	0.16	A (10)	12/25	424	0.19	A (9)	16/31
NBL	6	0.07	D (49)	1/5	6	0.07	D (49)	1/5	6	0.07	D (49)	1/5
NBT	11	0.05	D (48)	1/4	11	0.05	D (48)	1/4	11	0.05	D (48)	1/4
NBR	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	90	0.45	D (41)	19/31	90	0.37	D (40)	19/31	83	0.34	D (40)	17/29
SBTR	149	0.05	D (38)	0/0	156	0.05	D (38)	0/0	144	0.05	D (38)	0/0

Existing Conditions: The signalized intersection operates within capacity, with acceptable delays and an overall LOS of 'E' or better during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Background Conditions: Volumes from the background development traffic and growth are expected to minorly increase delays and v/c ratios, however, the signalized intersection continues to operate within capacity, with acceptable delays and an overall LOS of 'E' or better during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Total Conditions: During the AM peak hour,the intersection is forecasted to operate sufficiently in the future with an overall V/C ratio of 0.50, delay time of 29 seconds and LOS of C. All movements are expected to operate sufficiently and within capacity. During the PM peak hour, the intersection is also forecasted to operate sufficiently in the future with an overall V/C ratio of 0.61, delay time of 34 seconds and LOS C. All movements are expected to operate within capacity and sufficiently. Lastly, during the Saturday peak hour, the intersection is also forecasted to operate sufficiently in the future with an overall V/C ratio of 0.22, delay time of 15 seconds and LOS of B. All movements are expected to operate within capacity and sufficiently.

7.2.2 Highway 50 and Parr Boulevard

The intersection capacity analysis results at Highway 50 and Parr Boulevard during the AM, PM and Saturday peak hours are summarized in **Table 7-3.**

Table 7-3: Highway 50 and Parr Boulevard Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	0.51	A (9)	-/-	-	0.48	A (8)	-/-	-	0.48	A (8)	-/-
EBLT	27	0.26	D (53)	7/16	27	0.25	D (54)	7/16	30	0.28	D (54)	7/17
EBR	102	0.09	D (52)	0/17	102	0.06	D (52)	0/17	102	0.06	D (52)	0/17
WBLT	1	0.01	D (51)	0/2	1	0.01	D (52)	0/2	1	0.01	D (52)	0/2
WBR	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
NBL	199	0.53	A (5)	6/14	202	0.49	A (5)	6/12	202	0.49	A (5)	6/12
NBTR	1016	0.37	A (3)	26/43	1069	0.36	A (3)	27/39	1067	0.36	A (3)	26/39
SBL	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBT	1118	0.51	A (9)	56/95	1180	0.45	A (8)	54/84	1180	0.45	A (8)	54/84
SBR	44	0.03	A (2)	0/3	45	0.03	A (2)	0/3	55	0.04	A (2)	1/3
PM Peak Hour												
Overall	-	0.48	A (10)	-/-	-	0.45	A (9)	-/-	-	0.46	A (10)	-/-
EBLT	55	0.45	D (55)	13/26	56	0.44	D (55)	14/27	68	0.50	D (54)	16/31
EBR	170	0.12	D (51)	0/21	172	0.21	D (52)	4/25	172	0.19	D (51)	3/24
WBLTR	2	0.00	D (50)	0/0	2	0.00	D (50)	0/0	2	0.00	D (49)	0/0
NBL	113	0.32	A (4)	4/9	114	0.30	A (4)	4/9	114	0.30	A (4)	4/9
NBT	1244	0.47	A (4)	40/62	1291	0.44	A (4)	40/61	1290	0.44	A (4)	42/64
NBR	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	1	0.00	A (5)	0/1	1	0.00	A (5)	0/1	1	0.00	A (5)	0/1
SBT	1032	0.41	A (7)	47/72	1193	0.45	A (8)	56/82	1190	0.46	A (8)	58/86
SBR	39	0.03	A (2)	0/3	40	0.03	A (2)	0/3	43	0.03	A (3)	0/3
Saturday Peak Hour												
Overall	-	0.35	A (5)	-/-	-	0.34	A (5)	-/-	-	0.35	A (6)	-/-
EBLT	19	0.22	D (51)	4/12	19	0.22	D (51)	4/12	31	0.33	D (51)	7/16
EBR	41	0.03	D (52)	0/7	44	0.03	D (48)	0/7	44	0.03	D (49)	0/7
WBLTR	8	0.10	D (50)	1/7	8	0.07	D (49)	1/7	8	0.06	D (49)	1/6
NBL	35	0.08	A (2)	1/3	36	0.08	A (2)	1/3	36	0.08	A (2)	1/3

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
NBT	969	0.34	A (3)	24/32	993	0.33	A (3)	24/33	991	0.33	A (3)	24/35
NBR	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	6	0.02	A (3)	0/2	6	0.01	A (3)	0/2	6	0.01	A (3)	0/2
SBT	955	0.35	A (5)	36/49	979	0.35	A (5)	37/50	975	0.35	A (5)	37/53
SBR	18	0.01	A (2)	0/1	19	0.01	A (2)	0/1	22	0.01	A (2)	0/1

Existing Conditions: The signalized intersection operates within capacity, with acceptable delays and an overall LOS of 'A' during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Background Conditions: Volumes from the background development traffic and growth are expected to minorly increase delays and v/c ratios, however, the signalized intersection continues to operate within capacity, with acceptable delays and an overall LOS of 'A' during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Total Conditions: During the AM peak hour the intersection is forecasted to operate sufficiently in the future with an overall V/C ratio of 0.48, delay time of 8 seconds and LOS of A. All movements are expected to operate sufficiently and within capacity. During the PM peak hour, the intersection is also forecasted to operate sufficiently in the future with an overall V/C ratio of 0.46, delay time of 10 seconds and LOS of A. All movements are expected to operate sufficiently and within capacity. Lastly during the Saturday peak hour, the intersection is also forecasted to operate sufficiently in the future with an overall V/C ratio of 0.35, delay time of 6 seconds and LOS of A. All movements are once again expected to operate sufficiently and within capacity.

7.2.3 Highway 50 & Mayfield Road/Albion Vaughan Road

The intersection capacity analysis results at Highway 50 and Mayfield Road/Albion Vaughan Road during the AM, PM and Saturday peak hours are summarized in **Table 7-4.**

Table 7-4: Highway 50 and Mayfield Road/Albion Vaughan Road Intersection Capacity Analysis

Mvmt	Existing				Future Background 2028				Future Total 2028			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	0.71	C (35)	-/-	-	0.74	D (45)	-/-	-	0.77	D (45)	-/-
EBL	61	0.29	E (59)	16/26	63	0.30	E (61)	16/28	61	0.29	E (60)	16/27
EBT	93	0.58	E (73)	31/48								
EBTR	-				337	0.61	E (73)	32/48	342	0.60	E (72)	33/49
EBR	202	0.38	E (69)	6/37	-				-			
WBL	298	0.89	E (78)	90/114	354	**1.21**	**F (178)**	124/181	354	**1.21**	**F (177)**	125/178
WBT	140	0.40	E (57)	43/62	213	0.61	E (63)	68/95	240	0.66	E (65)	78/105
WBR	12	0.01	D (52)	0/0	40	0.03	D (54)	0/1	40	0.03	D (53)	0/1
NBL	83	0.41	B (16)	9/20	103	0.34	B (15)	11/21	161	0.50	B (17)	18/32
NBT	1064	0.55	C (21)	115/158	1093	0.51	C (21)	111/144	1093	0.52	C (21)	111/150
NBR	165	0.13	B (15)	4/18	170	0.12	B (15)	5/18	170	0.12	B (16)	5/18
SBL	22	0.09	B (15)	2/7	31	0.10	B (14)	3/8	31	0.10	B (15)	3/8
SBT	1087	0.64	C (27)	122/187	1139	0.55	C (23)	117/161	1139	0.58	C (26)	126/182
SBR	64	0.04	B (17)	0/3	64	0.04	B (16)	0/2	64	0.04	B (17)	0/3
PM Peak Hour												
Overall	-	0.61	C (29)	-/-	-	0.67	C (32)	-/-	-	0.69	C (33)	-/-
EBL	83	0.33	E (59)	22/37	85	0.32	E (57)	22/36	84	0.30	E (55)	22/35
EBT	105	0.62	E (77)	35/55	-				-			
EBTR	-				435	0.71	E (75)	44/62	481	0.74	E (75)	49/67
EBR	231	0.18	E (67)	0/29	-				-			
WBL	193	0.74	E (66)	56/79	212	0.91	**F (91)**	60/91	212	0.91	**F (89)**	59/91
WBT	84	0.49	E (67)	27/46	126	0.45	E (64)	39/61	127	0.43	E (62)	39/60
WBR	17	0.01	E (61)	0/0	33	0.02	E (59)	0/0	33	0.02	E (57)	0/0
NBL	86	0.41	B (14)	9/17	95	0.34	B (15)	10/19	110	0.39	B (17)	12/22
NBT	1111	0.55	B (18)	113/147	1139	0.52	B (19)	116/149	1139	0.53	C (20)	118/154
NBR	378	0.29	B (14)	11/32	413	0.30	B (16)	14/37	413	0.30	B (17)	14/38
SBL	20	0.08	B (13)	2/5	36	0.12	B (13)	4/9	36	0.12	B (14)	4/9
SBT	1119	0.57	C (23)	118/170	1267	0.59	C (22)	136/186	1267	0.61	C (24)	140/195
SBR	73	0.05	B (15)	0/0	73	0.05	B (14)	0/0	70	0.04	B (15)	0/0
Saturday Peak Hour												
Overall	-	0.52	C (29)	-/-	-	0.52	C (29)	-/-	-	0.53	C (30)	-/-
EBL	90	0.35	E (58)	23/37	92	0.39	E (61)	25/40	90	0.38	E (61)	24/39
EBT	118	0.65	E (77)	39/60	-				-			
EBTR	-				264	0.48	E (72)	21/37	312	0.52	E (72)	22/39
EBR	139	0.11	E (66)	0/22	-				-			
WBL	221	0.71	E (59)	62/85	232	0.83	E (73)	67/93	232	0.84	E (75)	67/93
WBT	119	0.43	E (62)	36/58	125	0.48	E (65)	39/62	130	0.49	E (65)	41/64
WBR	10	0.01	E (57)	0/0	10	0.01	E (60)	0/0	10	0.01	E (59)	0/0
NBL	101	0.29	B (12)	11/21	101	0.25	B (10)	10/18	113	0.28	B (11)	11/21
NBT	865	0.41	B (17)	64/110	887	0.38	B (15)	60/103	887	0.38	B (15)	60/104

Mvmt	Existing				Future Background 2028				Future Total 2028			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
NBR	231	0.16	B (14)	0/14	231	0.15	B (12)	0/13	231	0.15	B (12)	0/13
SBL	14	0.04	B (13)	2/5	15	0.04	B (12)	2/4	15	0.04	B (12)	2/5
SBT	880	0.44	C (20)	86/116	903	0.41	B (18)	83/106	903	0.42	B (18)	83/109
SBR	101	0.06	B (15)	0/8	101	0.06	B (14)	0/7	97	0.06	B (14)	0/7

Existing Conditions: The signalized intersection operates within capacity, with acceptable delays and an overall LOS of 'C' during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Background Conditions: Volumes from the background development traffic and growth are expected to increase delays and v/c ratios, and the westbound left movement is expected to operate above capacity. With signal optimization, the westbound left is expected to operate with a V/C ratio of 0.91 and delay of 74 seconds during the AM peak hour, and a V/C ratio of 0.83 and delay of 72 seconds during the PM peak hour. This is a result of background traffic. During the Saturday peak hour, all movements are expected to operate sufficiently and within capacity.

Future Total Conditions: Similar to future background conditions, with signal optimization, the westbound left movement is expected to operate with a V/C ratio of 0.0.91 and delay of 74 seconds during the AM peak hour and a V/C ratio of 0.83 and delay of 71 seconds during the PM peak hour. This is not a result of the proposed development; however, it is expected that this movement can sufficiently progress through the intersection within one (1) cycle. During Saturday peak hours, all movements are expected to operate sufficiently and within capacity. Overall, with a result of the added site traffic, the intersection is expected to operate sufficiently in the future with the optimized signal timing plan.

As mentioned in **Section 7.1.2**, the signal timing plan was optimized during the AM and PM peak hour for the future scenarios. The optimized intersection capacity analysis results are summarized in **Table 7-5.**

Table 7-5: Highway 50 and Mayfield Road/Albion Vaughan Road Intersection Capacity Analysis – Optimized

Mvmt	Existing				Future Background 2028 (Optimized)				Future Total 2028 (Optimized)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	0.71	C (35)	-/-	-	0.70	D (38)	-/-	-	0.73	D (39)	-/-
EBL	61	0.29	E (59)	16/26	63	0.32	E (62)	15/26	61	0.32	E (62)	14/25
EBT	93	0.58	E (73)	31/48	-				-			
EBTR	-				337	0.56	E (72)	26/43	342	0.58	E (73)	27/44
EBR	202	0.38	E (69)	6/37	-				-			
WBL	298	0.89	E (78)	90/114	354	0.91	E (74)	101/139	354	0.91	E (74)	101/139
WBT	140	0.40	E (57)	43/62	213	0.48	D (54)	63/89	240	0.54	E (55)	72/100
WBR	12	0.01	D (52)	0/0	40	0.03	D (48)	0/1	40	0.03	D (48)	0/1
NBL	83	0.41	B (16)	9/20	103	0.37	B (19)	13/24	161	0.53	C (22)	21/36
NBT	1064	0.55	C (21)	115/158	1093	0.56	C (25)	128/161	1093	0.56	C (26)	128/162
NBR	165	0.13	B (15)	4/18	170	0.13	B (19)	8/23	170	0.13	B (19)	8/23
SBL	22	0.09	B (15)	2/7	31	0.12	B (18)	4/9	31	0.12	B (19)	4/9
SBT	1087	0.64	C (27)	122/187	1139	0.61	C (29)	136/184	1139	0.64	C (32)	147/198

Mvmt	Existing				Future Background 2028 (Optimized)				Future Total 2028 (Optimized)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
SBR	64	0.04	B (17)	0/3	64	0.04	B (19)	0/3	64	0.04	C (21)	0/3
PM Peak Hour												
Overall	-	0.61	C (29)	-/-	-	0.66	C (32)	-/-	-	0.68	C (33)	-/-
EBL	83	0.33	E (59)	22/37	85	0.32	E (57)	22/35	84	0.30	E (56)	21/34
EBT	105	0.62	E (77)	35/55	-				-			
EBTR					435	0.71	E (74)	44/62	481	0.74	E (75)	49/67
EBR	231	0.18	E (67)	0/29	-				-			
WBL	193	0.74	E (66)	56/79	212	0.83	E (72)	59/81	212	0.83	E (71)	58/79
WBT	84	0.49	E (67)	27/46	126	0.41	E (61)	38/59	127	0.39	E (60)	38/59
WBR	17	0.01	E (61)	0/0	33	0.02	E (57)	0/0	33	0.02	E (55)	0/0
NBL	86	0.41	B (14)	9/17	95	0.35	B (16)	10/20	110	0.41	B (18)	13/23
NBT	1111	0.55	B (18)	113/147	1139	0.53	C (21)	121/156	1139	0.54	C (21)	124/161
NBR	378	0.29	B (14)	11/32	413	0.31	B (17)	16/42	413	0.31	B (18)	16/43
SBL	20	0.08	B (13)	2/5	36	0.13	B (14)	4/9	36	0.13	B (15)	4/10
SBT	1119	0.57	C (23)	118/170	1267	0.61	C (24)	142/194	1267	0.62	C (26)	147/203
SBR	73	0.05	B (15)	0/0	73	0.05	B (15)	0/0	70	0.04	B (16)	0/0

The AM peak hour at the signalized intersection of Hwy 50 & Mayfield Rd/ Albion Vaughn Rd is expected to operate sufficiently in the future with the optimized signal timing plan. The intersection is expected to operate with an overall V/C ratio of 0.73, delay time of 39 secs and LOS of D. Note, the westbound left is expected to operate with a V/C ratio of 0.91, delay time of 74 secs and LOS of E which is identical to the conditions observed in the future background scenario. This is not a result of our proposed development but is a result of the background growth applied to this movement. However, despite the V/C ratio of 0.91, the delay time of 74 secs being less than 1 cycle length (160 secs) indicates that this movement can sufficiently progress through the intersection within 1 cycle. Overall, this intersection is expected to operate sufficiently in the future AM peak with the optimized signal timing plan.

The PM peak hour at this intersection is also expected to operate sufficiently in the future with the optimized signal timing plan. All movements are expected to operate within capacity and sufficiently.

7.3 UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS (2028)

The results for the studied unsignalized intersections under the 2028 horizon year during the weekday AM, PM and Saturday peak hours are summarized in the sections below.

7.3.1 Coleraine Drive and Parr Boulevard

The intersection capacity analysis results at Coleraine Drive and Parr Boulevard during the AM, PM and Saturday peak hours are summarized in **Table 7-6.**

Table 7-6: Coleraine Drive and Parr Boulevard Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (3)	-/-	-	-	- (3)	-/-	-	-	- (4)	-/-
NBL	11	0.01	A (9)	-/0	11	0.01	A (9)	-/0	11	0.01	A (9)	-/0
NBT	570	0.00	(0)	-/0	586	0.00	(0)	-/0	581	0.00	(0)	-/0
NBR	51	0.00	(0)	-/0	54	0.00	(0)	-/0	54	0.00	(0)	-/0
EBL	1	0.01	D (31)	-/0	1	0.01	D (35)	-/0	1	0.01	E (46)	-/0
EBTR	2	0.01	C (20)	-/0	2	0.01	C (23)	-/0	2	0.01	D (27)	-/0
WBL	32	0.22	E (36)	-/1	33	0.22	D (35)	-/1	33	0.28	E (47)	-/1
WBTR	130	0.28	C (16)	-/1	133	0.27	C (15)	-/1	154	0.33	C (16)	-/1
SBL	86	0.10	A (10)	-/0	89	0.09	A (9)	-/0	154	0.16	A (10)	-/1
SBT	497	0.00	(0)	-/0	588	0.00	(0)	-/0	582	0.00	(0)	-/0
SBR	5	0.00	(0)	-/0	5	0.00	(0)	-/0	5	0.00	(0)	-/0
PM Peak Hour												
Overall	-	-	- (4)	-/-	-	-	- (3)	-/-	-	-	- (4)	-/-
NBL	13	0.03	B (14)	-/0	13	0.02	A (10)	-/0	13	0.02	A (10)	-/0
NBT	805	0.00	(0)	-/0	830	0.00	(0)	-/0	816	0.00	(0)	-/0
NBR	20	0.00	(0)	-/0	21	0.00	(0)	-/0	21	0.00	(0)	-/0
EBL	3	0.06	**F (78)**	-/0	3	0.06	**F (83)**	-/0	3	0.08	**F (108)**	-/0
EBTR	16	0.10	D (31)	-/0	16	0.09	D (26)	-/0	16	0.09	D (27)	-/0
WBL	28	0.48	**F (115)**	-/2	31	0.48	**F (103)**	-/2	31	0.51	**F (114)**	-/2
WBTR	100	0.35	C (24)	-/2	105	0.29	C (19)	-/1	192	0.44	C (20)	-/2
SBL	108	0.15	B (11)	-/1	109	0.14	B (10)	-/1	127	0.16	B (10)	-/1
SBT	868	0.00	(0)	-/0	931	0.00	(0)	-/0	922	0.00	(0)	-/0
SBR	4	0.00	(0)	-/0	4	0.00	(0)	-/0	4	0.00	(0)	-/0
Saturday Peak Hour												
Overall	-	-	- (2)	-/-	-	-	- (2)	-/-	-	-	- (3)	-/-
NBL	1	0.00	A (8)	-/0	1	0.00	A (8)	-/0	1	0.00	A (8)	-/0
NBT	139	0.00	(0)	-/0	143	0.00	(0)	-/0	134	0.00	(0)	-/0
NBR	3	0.00	(0)	-/0	4	0.00	(0)	-/0	4	0.00	(0)	-/0
EBL	1	0.00	B (11)	-/0	1	0.00	B (11)	-/0	1	0.00	B (12)	-/0
EBTR	4	0.01	B (11)	-/0	4	0.01	B (11)	-/0	4	0.01	B (11)	-/0
WBL	15	0.02	B (11)	-/0	18	0.03	B (11)	-/0	18	0.03	B (11)	-/0
WBTR	28	0.03	A (9)	-/0	32	0.03	A (9)	-/0	119	0.12	A (9)	-/0
SBL	22	0.02	A (8)	-/0	23	0.02	A (8)	-/0	41	0.03	A (8)	-/0
SBT	189	0.00	(0)	-/0	194	0.00	(0)	-/0	187	0.00	(0)	-/0
SBR	2	0.00	(0)	-/0	2	0.00	(0)	-/0	2	0.00	(0)	-/0

The eastbound left and westbound left movements during the PM peak hour operate with an LOS F in the existing, future background and future total scenarios. However, this movement experiences constraints in the existing scenario with dedicated left turn lanes, indicating that it is not due to the addition of subject site traffic. No additional capacity constraints have been identified as all movements have available capacity under existing and future scenarios during the AM, PM and Saturday peak hours. Site traffic has a negligible impact on intersection operation.

7.3.2 Simpson Road and Parr Boulevard

The intersection capacity analysis results at Simpson Road and Parr Boulevard during the AM, PM and Saturday peak hours are summarized in **Table 7-7.**

Table 7-7: Simpson Road and Parr Boulevard Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (2)	-/-	-	-	- (1)	-/-	-	-	- (2)	-/-
NBLTR	13	0.02	B (11)	-/0	14	0.02	B (11)	-/0	38	0.07	B (12)	-/0
EBL	3	0.00	A (8)	-/0	3	0.00	A (8)	-/0	3	0.00	A (8)	-/0
EBT	117	0.00	A (0)	-/0	129	0.00	A (0)	-/0	129	0.00	A (0)	-/0
EBR	15	0.00	(0)	-/0	15	0.00	(0)	-/0	80	0.00	(0)	-/0
WBL	12	0.01	A (8)	-/0	12	0.01	A (8)	-/0	22	0.02	A (8)	-/0
WBT	143	0.00	A (0)	-/0	161	0.00	A (0)	-/0	161	0.00	A (0)	-/0
WBR	12	0.00	(0)	-/0	12	0.00	(0)	-/0	12	0.00	(0)	-/0
SBLTR	24	0.04	B (11)	-/0	24	0.03	B (10)	-/0	24	0.03	B (10)	-/0
PM Peak Hour												
Overall	-	-	- (2)	-/-	-	-	- (2)	-/-	-	-	- (4)	-/-
NBLTR	16	0.02	B (10)	-/0	17	0.02	B (10)	-/0	116	0.18	B (12)	-/1
EBL	4	0.00	A (8)	-/0	4	0.00	A (8)	-/0	4	0.00	A (8)	-/0
EBT	135	0.00	A (0)	-/0	151	0.00	A (0)	-/0	151	0.00	A (0)	-/0
EBR	8	0.00	(0)	-/0	8	0.00	(0)	-/0	26	0.00	(0)	-/0
WBL	7	0.01	A (8)	-/0	7	0.01	A (8)	-/0	10	0.01	A (8)	-/0
WBT	110	0.00	A (0)	-/0	123	0.00	A (0)	-/0	123	0.00	A (0)	-/0
WBR	14	0.00	(0)	-/0	14	0.00	(0)	-/0	14	0.00	(0)	-/0
SBLTR	30	0.04	B (10)	-/0	30	0.04	B (10)	-/0	30	0.04	B (11)	-/0
Saturday Peak Hour												
Overall	-	-	- (2)	-/-	-	-	- (2)	-/-	-	-	- (5)	-/-
NBLTR	9	0.01	A (9)	-/0	10	0.01	A (9)	-/0	109	0.12	A (10)	-/0
EBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
EBT	27	0.00	(0)	-/0	32	0.00	(0)	-/0	32	0.00	(0)	-/0
EBR	1	0.00	(0)	-/0	1	0.00	(0)	-/0	19	0.00	(0)	-/0
WBL	3	0.00	A (7)	-/0	3	0.00	A (7)	-/0	6	0.00	A (7)	-/0
WBT	34	0.00	A (0)	-/0	40	0.00	A (0)	-/0	40	0.00	A (0)	-/0
WBR	3	0.00	(0)	-/0	3	0.00	(0)	-/0	3	0.00	(0)	-/0
SBLTR	11	0.01	A (9)	-/0	11	0.01	A (9)	-/0	11	0.01	A (9)	-/0

No capacity constraints have been identified as all movements have available capacity and experience a LOS of 'B' or better under existing and future scenarios during the AM, PM and Saturday peak hours. Site traffic has a negligible impact on intersection operation.

7.3.3 Mayfield Road & 8576 Mayfield Road (The Tow Company Inc.)/Future Site Access

The intersection capacity analysis results at Mayfield Road and 8567 Mayfield Road for the existing and future background scenarios, and Mayfield Road and the future site access via Simpson Road for the future total scenario during the AM, PM and Saturday peak hours are summarized in **Table 7-8.**

Table 7-8: Mayfield Road & 8576 Mayfield Road (The Tow Company Inc.)/Future Site Access Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
EBL	1	0.00	A (8)	-/0	1	0.00	A (8)	-/0	10	0.01	A (8)	-/0
EBT	361	0.00	A (0)	-/0	403	0.00	A (0)	-/0	472	0.00	A (0)	-/0
WBT	263	0.00	(0)	-/0	359	0.00	(0)	-/0	357	0.00	(0)	-/0
WBR	1	0.00	(0)	-/0	1	0.00	(0)	-/0	0	0.00	(0)	-/0
SBLR	3	0.01	B (12)	-/0	3	0.01	B (11)	-/0	2	0.00	A (9)	-/0
PM Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
EBL	5	0.01	A (9)	-/0	5	0.00	A (8)	-/0	3	0.00	A (8)	-/0
EBT	360	0.00	A (0)	-/0	456	0.00	A (0)	-/0	473	0.00	A (0)	-/0
WBT	354	0.00	(0)	-/0	414	0.00	(0)	-/0	406	0.00	(0)	-/0
WBR	3	0.00	(0)	-/0	3	0.00	(0)	-/0	0	0.00	(0)	-/0
SBLR	12	0.03	B (14)	-/0	12	0.02	B (12)	-/0	10	0.00	A (10)	-/0
Saturday Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
EBL	3	0.00	A (8)	-/0	3	0.00	A (8)	-/0	3	0.00	A (8)	-/0
EBT	361	0.00	A (0)	-/0	370	0.00	A (0)	-/0	384	0.00	A (0)	-/0
WBT	333	0.00	(0)	-/0	350	0.00	(0)	-/0	341	0.00	(0)	-/0
WBR	2	0.00	(0)	-/0	2	0.00	(0)	-/0	0	0.00	(0)	-/0
SBLR	5	0.01	B (13)	-/0	5	0.01	B (11)	-/0	10	0.01	A (9)	-/0

No capacity constraints have been identified as all movements have available capacity and experience a LOS of 'B' or better under existing and future scenarios during the AM, PM and Saturday peak hours. Site traffic has a negligible impact on intersection operation. The future unsignalized access is expected to operate sufficiently.

7.3.4 Coleraine Drive and 12155 Coleraine Drive (Babbar Transport Bolton Yard)

The intersection capacity analysis results at Coleraine Drive and 12155 Coleraine Drive (Babbar Transport Bolton Yard) during the AM, PM and Saturday peak hours are summarized in **Table 7-9.**

Table 7-9: Coleraine Drive and 12133 Coleraine Drive (Babbar Transport Bolton Yard) Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
NBT	617	0.00	(0)	-/0	635	0.00	(0)	-/0	630	0.00	(0)	-/0
NBR	0	0.00	(0)	-/0	0	0.00	(0)	-/0	0	0.00	(0)	-/0
WBLR	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBT	539	0.00	(0)	-/0	631	0.00	(0)	-/0	625	0.00	(0)	-/0
PM Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
NBT	820	0.00	(0)	-/0	846	0.00	(0)	-/0	832	0.00	(0)	-/0
NBR	1	0.00	(0)	-/0	1	0.00	(0)	-/0	0	0.00	(0)	-/0
WBLR	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBT	913	0.00	(0)	-/0	977	0.00	(0)	-/0	968	0.00	(0)	-/0
Saturday Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
NBT	157	0.00	(0)	-/0	161	0.00	(0)	-/0	152	0.00	(0)	-/0
NBR	1	0.00	(0)	-/0	1	0.00	(0)	-/0	0	0.00	(0)	-/0
WBLR	1	0.00	B (12)	-/0	1	0.00	B (10)	-/0	0	0.00	A (0)	-/0
SBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBT	227	0.00	(0)	-/0	233	0.00	(0)	-/0	226	0.00	(0)	-/0

No capacity constraints have been identified as all movements have available capacity and experience a LOS of 'B' or better under existing and future scenarios during the AM, PM and Saturday peak hours. Site traffic has a negligible impact on intersection operation.

7.3.5 Mayfield Road and Simpson Road

The intersection capacity analysis results at Mayfield Road and Simpson Road during the AM, PM and Saturday peak hours are summarized in **Table 7-10.**

Table 7-10: Mayfield Road and Simpson Road Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall					-	-	- (0)	-/-	-	-	- (1)	-/-
EBL					1	0.00	A (8)	-/0	79	0.07	A (8)	-/0
EBT					403	0.00	(0)	-/0	403	0.00	(0)	-/0
WBT			-		359	0.00	(0)	-/0	359	0.00	(0)	-/0
WBR					1	0.00	(0)	-/0	89	0.00	(0)	-/0
SBL					0	0.00	A (0)	-/0	14	0.04	C (17)	-/0
SBR					0	0.00	A (0)	-/0	19	0.02	A (10)	-/0
PM Peak Hour												
Overall					-	-	- (0)	-/-	-	-	- (2)	-/-
EBL					1	0.00	A (8)	-/0	22	0.02	A (8)	-/0
EBT					456	0.00	(0)	-/0	456	0.00	(0)	-/0
WBT			-		414	0.00	(0)	-/0	414	0.00	(0)	-/0
WBR					0	0.00	(0)	-/0	24	0.00	(0)	-/0
SBL					1	0.00	B (14)	-/0	55	0.15	C (16)	-/1
SBR					1	0.00	A (10)	-/0	78	0.10	B (10)	-/0
Saturday Peak Hour												
Overall					-	-	- (0)	-/-	-	-	- (2)	-/-
EBL					1	0.00	A (8)	-/0	22	0.02	A (8)	-/0
EBT					370	0.00	(0)	-/0	370	0.00	(0)	-/0
WBT			-		350	0.00	(0)	-/0	350	0.00	(0)	-/0
WBR					0	0.00	(0)	-/0	24	0.00	(0)	-/0
SBL					1	0.00	B (13)	-/0	55	0.13	B (15)	-/0
SBR					1	0.00	A (9)	-/0	78	0.09	A (10)	-/0

No capacity constraints have been identified as all movements have available capacity and experience a LOS of 'C' or better under existing and future scenarios during the AM, PM and Saturday peak hours. Site traffic has a negligible impact on intersection operation.

7.4 SIGNALIZED INTERSECTION CAPACITY ANALYSIS (2033)

The results for the studied signalized intersections under the 2033 horizon year during the weekday AM, PM and Saturday peak hours are summarized in the sections below.

7.4.1 Coleraine Drive and Mayfield Road

The intersection capacity analysis results at Coleraine Drive and Mayfield Road during the AM, PM and Saturday peak hours are summarized in **Table 7-11**.

Table 7-11: Coleraine Drive and Mayfield Road Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2033)				Future Total (2033)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	0.51	C (31)	-/-	-	0.59	C (30)	-/-	-	0.56	C (29)	-/-
EBL	310	0.43	B (10)	31/55	370	0.52	A (10)	35/61	350	0.50	A (10)	32/56
EBTR	299	0.15	A (9)	15/25	371	0.15	A (8)	18/29	458	0.19	A (8)	22/35
WBL	39	0.08	B (16)	5/14	39	0.07	B (16)	5/14	39	0.08	B (15)	5/14
WBTR	226	0.15	B (17)	16/26	398	0.21	B (17)	29/45	415	0.21	B (16)	29/47
NBL	23	0.19	D (50)	6/14	23	0.28	D (52)	6/15	23	0.25	D (51)	6/15
NBTR	330	0.66	E (56)	44/59	345	0.67	E (56)	47/61	341	0.66	E (56)	46/61
SBL	64	0.47	D (43)	13/24	70	0.33	D (42)	15/25	61	0.30	D (42)	13/23
SBTR	512	0.61	D (45)	57/70	626	0.66	D (48)	63/78	592	0.64	D (48)	60/75
PM Peak Hour												
Overall	-	0.61	D (37)	-/-	-	0.68	D (36)	-/-	-	0.67	D (35)	-/-
EBL	265	0.48	B (13)	31/51	328	0.55	B (14)	39/61	303	0.55	B (14)	34/55
EBTR	283	0.14	B (11)	16/25	423	0.19	B (12)	26/37	444	0.20	B (12)	27/39
WBL	26	0.06	B (17)	4/10	26	0.06	B (18)	4/10	26	0.06	B (17)	4/10
WBTR	333	0.23	B (19)	24/35	443	0.25	B (20)	35/47	517	0.29	B (20)	43/56
NBL	26	0.45	D (52)	6/17	26	0.46	D (52)	6/17	26	0.46	D (53)	6/17
NBTR	541	0.81	E (58)	73/91	567	0.81	E (57)	77/95	554	0.81	E (57)	75/93
SBL	86	0.54	D (40)	17/29	99	0.48	D (38)	19/32	94	0.46	D (38)	18/30
SBTR	857	0.78	D (47)	92/112	965	0.84	D (50)	106/128	931	0.82	D (49)	101/121
Saturday Peak Hour												
Overall	-	0.23	B (16)	-/-	-	0.21	B (16)	-/-	-	0.23	B (15)	-/-
EBL	99	0.16	A (6)	4/11	105	0.15	A (6)	4/12	92	0.14	A (6)	4/10
EBTR	275	0.12	A (6)	7/15	290	0.11	A (6)	7/16	311	0.12	A (6)	8/17
WBL	2	0.01	A (9)	0/1	2	0.00	A (9)	0/1	2	0.00	A (8)	0/1
WBTR	333	0.17	A (10)	12/24	363	0.16	A (10)	13/26	439	0.20	A (9)	17/32
NBL	6	0.07	D (49)	1/5	6	0.08	D (49)	1/5	6	0.07	D (49)	1/5
NBT	11	0.05	D (48)	1/4	12	0.05	D (48)	1/4	12	0.05	D (48)	1/4
NBR	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	90	0.45	D (41)	19/31	90	0.37	D (40)	19/31	83	0.34	D (40)	17/29
SBTR	149	0.05	D (38)	0/0	160	0.05	D (38)	0/0	148	0.05	D (38)	0/0

Existing Conditions: The signalized intersection operates within capacity, with acceptable delays and an overall LOS of 'D' or better during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Background Conditions: Volumes from the background development traffic and growth are expected to minorly increase delays and v/c ratios, however, the signalized intersection continues to operate within capacity, with acceptable delays and an overall LOS of 'E' or better during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Total Conditions: During the AM Peak hour, the intersection is expected to operate sufficiently in the future with an overall V/C ratio of 0.56, delay time of 29 secs and LOS of C. During the PM peak hour the intersection is also expected to operate sufficiently in the future with an overall V/C ratio of 0.67, delay time of 35 secs and LOS of D. Lastly in the Saturday peak hour the intersection is expected to operate sufficiently in the future with an overall V/C ratio of 0.23, delay time of 15 secs and LOS of B. All movements are expected to operate sufficiently and within capacity.

7.4.2 Highway 50 and Parr Boulevard

The intersection capacity analysis results at Highway 50 and Parr Boulevard during the AM, PM and Saturday peak hours are summarized in **Table 7-12.**

Table 7-12: Highway 50 and Parr Boulevard Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2033)				Future Total (2033)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	0.51	A (9)	-/-	-	0.49	A (8)	-/-	-	0.49	A (8)	-/-
EBLT	27	0.26	D (53)	7/16	27	0.25	D (54)	7/16	30	0.28	D (54)	7/17
EBR	102	0.09	D (52)	0/17	102	0.06	D (52)	0/17	102	0.06	D (52)	0/17
WBLT	1	0.01	D (51)	0/2	1	0.01	D (52)	0/2	1	0.01	D (52)	0/2
WBR	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
NBL	199	0.53	A (5)	6/14	202	0.50	A (5)	6/12	202	0.50	A (5)	6/12
NBTR	1016	0.37	A (3)	26/43	1104	0.37	A (3)	28/41	1102	0.37	A (3)	28/41
SBL	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBT	1118	0.51	A (9)	56/95	1219	0.47	A (8)	57/91	1219	0.47	A (8)	57/91
SBR	44	0.03	A (2)	0/3	45	0.03	A (2)	0/3	55	0.04	A (2)	1/3
PM Peak Hour												
Overall	-	0.48	A (10)	-/-	-	0.48	A (9)	-/-	-	0.49	A (10)	-/-
EBLT	55	0.45	D (55)	13/26	56	0.44	D (54)	14/27	68	0.50	D (54)	16/31
EBR	170	0.12	D (51)	0/21	172	0.26	D (52)	5/27	172	0.25	D (51)	5/27
WBLTR	2	0.00	D (50)	0/0	2	0.00	D (50)	0/0	2	0.00	D (49)	0/0
NBL	113	0.32	A (4)	4/9	114	0.32	A (5)	4/9	114	0.32	A (5)	4/9
NBT	1244	0.47	A (4)	40/62	1336	0.46	A (4)	42/65	1335	0.46	A (4)	44/68
NBR	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	1	0.00	A (5)	0/1	1	0.00	A (5)	0/1	1	0.00	A (5)	0/1
SBT	1032	0.41	A (7)	47/72	1262	0.48	A (8)	61/91	1259	0.48	A (8)	63/93
SBR	39	0.03	A (2)	0/3	40	0.03	A (2)	0/3	43	0.03	A (3)	0/3
Saturday Peak Hour												
Overall	-	0.35	A (5)	-/-	-	0.35	A (5)	-/-	-	0.36	A (6)	-/-
EBLT	19	0.22	D (51)	4/12	19	0.22	D (51)	4/12	31	0.33	D (51)	7/17
EBR	41	0.03	D (52)	0/7	44	0.03	D (48)	0/8	44	0.03	D (49)	0/7
WBLTR	8	0.10	D (50)	1/7	8	0.07	D (49)	1/7	8	0.06	D (49)	1/6
NBL	35	0.08	A (2)	1/3	36	0.08	A (2)	1/3	36	0.08	A (2)	1/3
NBT	969	0.34	A (3)	24/32	1019	0.34	A (3)	25/34	1017	0.34	A (3)	25/37

NBR	0	0.00	(0)	0/0	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	6	0.02	A (3)	0/2	6	0.01	A (3)	0/2	6	0.01	A (3)	0/2
SBT	955	0.35	A (5)	36/49	1004	0.36	A (5)	39/52	1000	0.36	A (5)	38/55
SBR	18	0.01	A (2)	0/1	19	0.01	A (2)	0/1	22	0.01	A (2)	0/1

Existing Conditions: The signalized intersection operates within capacity, with acceptable delays and an overall LOS of 'D' during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Background Conditions: Volumes from the background development traffic and growth are expected to minorly increase delays and v/c ratios, however, the signalized intersection continues to operate within capacity, with acceptable delays and an overall LOS of 'D' during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Total Conditions: Minor increases in delay and v/c ratio are expected under future total conditions compared to future background conditions during the AM, PM, and Saturday peak hours. Overall, the intersection is expected to operate under acceptable conditions.

7.4.3 Highway 50 & Mayfield Road/Albion Vaughan Road

The intersection capacity analysis results at Highway 50 and Mayfield Road/Albion Vaughan Road during the AM, PM and Saturday peak hours are summarized in **Table 7-13.** As mentioned in **Section 7.1.2**, the signal timing plan used in 2033 is the same as the optimized 2028 plans during the AM and PM peak hour.

Table 7-13: Highway 50 and Mayfield Road/Albion Vaughan Road Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2033) Optimized				Future Total (2033) Optimized			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour – Using optimized 2028 signal timing plans												
Overall	-	0.71	C (35)	-/-	-	0.75	D (40)	-/-	-	0.78	D (41)	-/-
EBL	61	0.29	E (59)	16/26	64	0.32	E (61)	15/25	62	0.32	E (61)	14/25
EBT	93	0.58	E (73)	31/48	373	0.64	E (74)	34/52	378	0.66	E (74)	35/53
EBR	202	0.38	E (69)	6/37	0	0.00	(0)	0/0	0	0.00	(0)	0/0
WBL	298	0.89	E (78)	90/114	370	0.94	E (78)	104/150	370	0.94	E (78)	104/150
WBT	140	0.40	E (57)	43/62	271	0.58	E (55)	81/111	298	0.64	E (57)	91/122
WBR	12	0.01	D (52)	0/0	40	0.03	D (46)	0/1	40	0.03	D (46)	0/1
NBL	83	0.41	B (16)	9/20	118	0.45	C (22)	16/28	176	0.59	C (27)	24/49
NBT	1064	0.55	C (21)	115/158	1299	0.48	C (25)	101/123	1299	0.48	C (25)	101/123
NBR	165	0.13	B (15)	4/18	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	22	0.09	B (15)	2/7	31	0.13	B (18)	4/10	31	0.13	B (20)	4/10
SBT	1087	0.64	C (27)	122/187	1178	0.65	C (32)	150/202	1178	0.69	D (36)	163/217
SBR	64	0.04	B (17)	0/3	64	0.04	C (21)	0/3	64	0.04	C (23)	0/3
PM Peak Hour – Using optimized 2028 signal timing plans												
Overall	-	0.61	C (29)	-/-	-	0.73	D (36)	-/-	-	0.75	D (37)	-/-
EBL	83	0.33	E (59)	22/37	87	0.29	D (53)	21/34	86	0.28	D (52)	21/33
EBT	105	0.62	E (77)	35/55	492	0.77	E (74)	60/78	538	0.78	E (73)	65/84
EBR	231	0.18	E (67)	0/29	0	0.00	(0)	0/0	0	0.00	(0)	0/0
WBL	193	0.74	E (66)	56/79	222	0.86	E (73)	59/87	222	0.86	E (72)	58/88
WBT	84	0.49	E (67)	27/46	158	0.44	E (58)	47/69	159	0.42	E (57)	47/69
WBR	17	0.01	E (61)	0/0	33	0.02	D (53)	0/0	33	0.02	D (52)	0/0

Mvmt	Existing Conditions (2023)				Future Background (2033) Optimized				Future Total (2033) Optimized			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
NBL	86	0.41	B (14)	9/17	103	0.43	C (21)	12/23	118	0.50	C (23)	15/28
NBT	1111	0.55	B (18)	113/147	1593	0.55	C (23)	121/149	1593	0.56	C (24)	124/153
NBR	378	0.29	B (14)	11/32	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	20	0.08	B (13)	2/5	36	0.18	B (16)	4/10	36	0.19	B (17)	4/10
SBT	1119	0.57	C (23)	118/170	1338	0.68	C (29)	166/226	1338	0.70	C (31)	173/236
SBR	73	0.05	B (15)	0/0	73	0.05	B (17)	0/0	70	0.04	B (19)	0/0
Saturday Peak Hour												
Overall	-	0.52	C (29)	-/-	-	0.54	C (29)	-/-	-	0.55	C (30)	-/-
EBL	90	0.35	E (58)	23/37	95	0.39	E (61)	25/41	93	0.39	E (61)	25/40
EBT	118	0.65	E (77)	39/60	270	0.49	E (72)	21/37	318	0.52	E (72)	23/39
EBR	139	0.11	E (66)	0/22	0	0.00	(0)	0/0	0	0.00	(0)	0/0
WBL	221	0.71	E (59)	62/85	244	0.87	E (78)	71/103	244	0.87	E (79)	71/103
WBT	119	0.43	E (62)	36/58	131	0.50	E (65)	41/65	136	0.50	E (65)	43/66
WBR	10	0.01	E (57)	0/0	10	0.01	E (60)	0/0	10	0.01	E (59)	0/0
NBL	101	0.29	B (12)	11/21	101	0.26	B (11)	10/19	113	0.29	B (11)	11/21
NBT	865	0.41	B (17)	64/110	1140	0.35	B (14)	50/83	1140	0.35	B (14)	50/84
NBR	231	0.16	B (14)	0/14	0	0.00	(0)	0/0	0	0.00	(0)	0/0
SBL	14	0.04	B (13)	2/5	15	0.05	B (12)	2/4	15	0.05	B (12)	2/5
SBT	880	0.44	C (20)	86/116	926	0.43	B (18)	85/110	926	0.43	B (19)	85/113
SBR	101	0.06	B (15)	0/8	101	0.06	B (14)	0/7	97	0.06	B (14)	0/7

Existing Conditions: The signalized intersection operates within capacity, with acceptable delays and an overall LOS of 'C' during the weekday AM, PM, and Saturday peak hours. No critical movements have been identified.

Future Background Conditions: Volumes from the background development traffic and growth are expected to increase delays and v/c ratios. With signal optimization, the westbound left is expected to operate with a V/C ratio of 0.94 and delay of 78 seconds during the AM peak hour. This is a result of applied background growth. During Saturday peak hour, all movements are expected to operate sufficiently and within capacity.

Future Total Conditions: Similar to future background conditions, with signal optimization, the westbound left movement is expected to operate with a V/C ratio of 0.0.94 and delay of 78 seconds during the AM peak hour. This is not a result of the proposed development; however, it is expected that this movement can sufficiently progress through the intersection within one (1) cycle. During Saturday peak hours, all movements are expected to operate sufficiently and within capacity. Overall, with a result of the added site traffic, the intersection is expected to operate sufficiently in the future with the optimized signal timing plan.

7.5 UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS (2033)

The results for the studied unsignalized intersections under the 2033 horizon year during the weekday AM, PM and Saturday peak hours are summarized in the sections below.

7.5.1 Coleraine Drive and Parr Boulevard

The intersection capacity analysis results at Coleraine Drive and Parr Boulevard during the AM, PM and Saturday peak hours are summarized in **Table 7-14.**

Table 7-14: Coleraine Drive and Parr Boulevard Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2033)				Future Total (2033)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (3)	-/-	-	-	- (3)	-/-	-	-	- (4)	-/-
NBL	11	0.01	A (9)	-/0	11	0.01	A (9)	-/0	11	0.01	A (9)	-/0
NBT	570	0.00	(0)	-/0	639	0.00	(0)	-/0	634	0.00	(0)	-/0
NBR	51	0.00	(0)	-/0	54	0.00	(0)	-/0	54	0.00	(0)	-/0
EBL	1	0.01	D (31)	-/0	1	0.01	E (39)	-/0	1	0.01	**F (52)**	-/0
EBTR	2	0.01	C (20)	-/0	2	0.01	C (24)	-/0	2	0.01	D (29)	-/0
WBL	32	0.22	E (36)	-/1	33	0.24	E (40)	-/1	33	0.32	**F (55)**	-/1
WBTR	130	0.28	C (16)	-/1	134	0.30	C (17)	-/1	155	0.37	C (18)	-/2
SBL	86	0.10	A (10)	-/0	89	0.10	A (9)	-/0	154	0.17	A (10)	-/1
SBT	497	0.00	(0)	-/0	615	0.00	(0)	-/0	609	0.00	(0)	-/0
SBR	5	0.00	(0)	-/0	5	0.00	(0)	-/0	5	0.00	(0)	-/0
PM Peak Hour												
Overall	-	-	- (4)	-/-	-	-	- (4)	-/-	-	-	- (5)	-/-
NBL	13	0.03	B (14)	-/0	13	0.02	B (10)	-/0	13	0.02	B (10)	-/0
NBT	805	0.00	(0)	-/0	872	0.00	(0)	-/0	858	0.00	(0)	-/0
NBR	20	0.00	(0)	-/0	21	0.00	(0)	-/0	21	0.00	(0)	-/0
EBL	3	0.06	**F (78)**	-/0	3	0.07	**F (97)**	-/0	3	0.09	**F (129)**	-/0
EBTR	16	0.10	D (31)	-/0	17	0.12	D (33)	-/0	17	0.12	D (35)	-/0
WBL	28	0.48	**F (115)**	-/2	31	0.55	**F (130)**	-/2	31	0.59	**F (143)**	-/2
WBTR	100	0.35	C (24)	-/2	105	0.32	C (21)	-/1	192	0.47	C (22)	-/3
SBL	108	0.15	B (11)	-/1	109	0.14	B (11)	-/1	127	0.16	B (11)	-/1
SBT	868	0.00	(0)	-/0	987	0.00	(0)	-/0	978	0.00	(0)	-/0
SBR	4	0.00	(0)	-/0	4	0.00	(0)	-/0	4	0.00	(0)	-/0
Saturday Peak Hour												
Overall	-	-	- (2)	-/-	-	-	- (2)	-/-	-	-	- (3)	-/-
NBL	1	0.00	A (8)	-/0	1	0.00	A (8)	-/0	1	0.00	A (8)	-/0
NBT	139	0.00	(0)	-/0	146	0.00	(0)	-/0	137	0.00	(0)	-/0
NBR	3	0.00	(0)	-/0	4	0.00	(0)	-/0	4	0.00	(0)	-/0
EBL	1	0.00	B (11)	-/0	1	0.00	B (11)	-/0	1	0.00	B (12)	-/0
EBTR	4	0.01	B (11)	-/0	5	0.01	B (11)	-/0	5	0.01	B (11)	-/0
WBL	15	0.02	B (11)	-/0	18	0.03	B (11)	-/0	18	0.03	B (11)	-/0
WBTR	28	0.03	A (9)	-/0	32	0.03	A (9)	-/0	119	0.12	A (9)	-/0
SBL	22	0.02	A (8)	-/0	23	0.02	A (8)	-/0	41	0.03	A (8)	-/0
SBT	189	0.00	(0)	-/0	199	0.00	(0)	-/0	192	0.00	(0)	-/0
SBR	2	0.00	(0)	-/0	2	0.00	(0)	-/0	2	0.00	(0)	-/0

The eastbound and westbound left movements operate with an LOS F in the existing, future background and future total scenarios. This is due to constraints in the existing scenario with dedicated left turn lanes, indicating that it is not due to the addition of subject site traffic. No additional capacity constraints have been identified as all movements have available capacity under existing and future scenarios during the AM, PM and Saturday peak hours. Site traffic has a negligible impact on intersection operation.

7.5.2 Simpson Road and Parr Boulevard

The intersection capacity analysis results at Simpson Road and Parr Boulevard during the AM, PM and Saturday peak hours are summarized in **Table 7-15.**

Table 7-15: Simpson Road and Parr Boulevard Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2033)				Future Total (2033)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (2)	-/-	-	-	- (1)	-/-	-	-	- (2)	-/-
NBLTR	13	0.02	B (11)	-/0	15	0.02	B (11)	-/0	39	0.07	B (12)	-/0
EBL	3	0.00	A (8)	-/0	3	0.00	A (8)	-/0	3	0.00	A (8)	-/0
EBT	117	0.00	A (0)	-/0	143	0.00	A (0)	-/0	143	0.00	A (0)	-/0
EBR	15	0.00	(0)	-/0	15	0.00	(0)	-/0	80	0.00	(0)	-/0
WBL	12	0.01	A (8)	-/0	12	0.01	A (8)	-/0	22	0.02	A (8)	-/0
WBT	143	0.00	A (0)	-/0	177	0.00	A (0)	-/0	177	0.00	A (0)	-/0
WBR	12	0.00	(0)	-/0	12	0.00	(0)	-/0	12	0.00	(0)	-/0
SBLTR	24	0.04	B (11)	-/0	25	0.04	B (10)	-/0	25	0.04	B (11)	-/0
PM Peak Hour												
Overall	-	-	- (2)	-/-	-	-	- (2)	-/-	-	-	- (4)	-/-
NBLTR	16	0.02	B (10)	-/0	17	0.02	B (10)	-/0	116	0.19	B (12)	-/1
EBL	4	0.00	A (8)	-/0	4	0.00	A (8)	-/0	4	0.00	A (8)	-/0
EBT	135	0.00	A (0)	-/0	167	0.00	A (0)	-/0	167	0.00	A (0)	-/0
EBR	8	0.00	(0)	-/0	8	0.00	(0)	-/0	26	0.00	(0)	-/0
WBL	7	0.01	A (8)	-/0	7	0.01	A (8)	-/0	10	0.01	A (8)	-/0
WBT	110	0.00	A (0)	-/0	136	0.00	A (0)	-/0	136	0.00	A (0)	-/0
WBR	14	0.00	(0)	-/0	14	0.00	(0)	-/0	14	0.00	(0)	-/0
SBLTR	30	0.04	B (10)	-/0	30	0.04	B (11)	-/0	30	0.05	B (11)	-/0
Saturday Peak Hour												
Overall	-	-	- (2)	-/-	-	-	- (2)	-/-	-	-	- (5)	-/-
NBLTR	9	0.01	A (9)	-/0	10	0.01	A (9)	-/0	109	0.12	A (10)	-/0
EBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
EBT	27	0.00	(0)	-/0	35	0.00	(0)	-/0	35	0.00	(0)	-/0
EBR	1	0.00	(0)	-/0	1	0.00	(0)	-/0	19	0.00	(0)	-/0
WBL	3	0.00	A (7)	-/0	3	0.00	A (7)	-/0	6	0.00	A (7)	-/0
WBT	34	0.00	A (0)	-/0	43	0.00	A (0)	-/0	43	0.00	A (0)	-/0
WBR	3	0.00	(0)	-/0	3	0.00	(0)	-/0	3	0.00	(0)	-/0
SBLTR	11	0.01	A (9)	-/0	11	0.01	A (9)	-/0	11	0.01	A (9)	-/0

No capacity constraints have been identified as all movements have available capacity and experience a LOS of 'B' or better under existing and future scenarios during the AM, PM, and Saturday peak hours. The Simpson Road extension is expected to operate sufficiently with Parr Boulevard. Site traffic has a negligible impact on intersection operation.

7.5.3 Mayfield Road & 8576 Mayfield Road (The Tow Company Inc.)/Future Site Access

The intersection capacity analysis results at Mayfield Road & 8576 Mayfield Road (The Tow Company Inc.)/Future Site Access during the AM, PM and Saturday peak hours are summarized in **Table 7-16.**

Table 7-16: Mayfield Road & 8576 Mayfield Road (The Tow Company Inc.)/Future Site Access Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2033)				Future Total (2033)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
EBL	1	0.00	A (8)	-/0	1	0.00	A (8)	-/0	10	0.01	A (8)	-/0
EBT	361	0.00	A (0)	-/0	438	0.00	(0)	-/0	507	0.00	A (0)	-/0
WBT	263	0.00	(0)	-/0	435	0.00	(0)	-/0	433	0.00	(0)	-/0
WBR	1	0.00	(0)	-/0	1	0.00	(0)	-/0	0	0.00	(0)	-/0
SBL	-				1	0.00	B (14)	-/0	0	0.00	A (0)	0
SBLR	3	0.01	B (12)	-/0								
SBR	-				2	0.00	A (10)	-/0	2	0.00	A (10)	-/0
PM Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (1)	-/-
EBL	5	0.01	A (9)	-/0	5	0.01	A (8)	-/0	-	-	- (0)	-/-
EBT	360	0.00	A (0)	-/0	512	0.00	(0)	-/0	3	0.00	A (8)	-/0
WBT	354	0.00	(0)	-/0	463	0.00	(0)	-/0	529	0.00	A (0)	-/0
WBR	3	0.00	(0)	-/0	3	0.00	(0)	-/0	455	0.00	(0)	-/0
SBL	-				7	0.02	C (15)	-/0	0	0.00	A (0)	0
SBLR	12	0.03	B (14)	-/0	-				-			
SBR	-				5	0.01	A (10)	-/0	10	0.01	A (10)	-/0
Saturday Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
EBL	3	0.00	A (8)	-/0	3	0.00	A (8)	-/0	3	0.00	A (8)	-/0
EBT	361	0.00	A (0)	-/0	379	0.00	(0)	-/0	393	0.00	A (0)	-/0
WBT	333	0.00	(0)	-/0	368	0.00	(0)	-/0	359	0.00	(0)	-/0
WBR	2	0.00	(0)	-/0	2	0.00	(0)	-/0	0	0.00	(0)	-/0
SBL	-				3	0.01	B (13)	-/0	0	0.00	A (0)	0
SBLR	5	0.01	B (13)	-/0	-				-			
SBR	-				2	0.00	A (9)	-/0	10	0.01	A (9)	-/0

No capacity constraints have been identified as all movements have available capacity and experience a LOS of 'C' or better under existing and future scenarios during the AM, PM, and Saturday peak hours. Site traffic has a negligible impact on intersection operation. The future unsignalized access is expected to operate sufficiently.

7.5.4 Coleraine Drive and 12155 Coleraine Drive (Babbar Transport Bolton Yard)

The intersection capacity analysis results at Coleraine Drive and 12155 Coleraine Drive (Babbar Transport Bolton Yard) during the AM, PM and Saturday peak hours are summarized in **Table 7-17.**

Table 7-17: Coleraine Drive and 12133 Coleraine Drive (Babbar Transport Bolton Yard) Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2033)				Future Total (2033)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
NBT	617	0.00	(0)	-/0	689	0.00	(0)	-/0	684	0.00	(0)	-/0
NBR	0	0.00	(0)	-/0	0	0.00	(0)	-/0	0	0.00	(0)	-/0
WBLR	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBT	539	0.00	(0)	-/0	660	0.00	(0)	-/0	654	0.00	(0)	-/0
PM Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
NBT	820	0.00	(0)	-/0	888	0.00	(0)	-/0	874	0.00	(0)	-/0
NBR	1	0.00	(0)	-/0	1	0.00	(0)	-/0	0	0.00	(0)	-/0
WBLR	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBT	913	0.00	(0)	-/0	1035	0.00	(0)	-/0	1026	0.00	(0)	-/0
Saturday Peak Hour												
Overall	-	-	- (0)	-/-	-	-	- (0)	-/-	-	-	- (0)	-/-
NBT	157	0.00	(0)	-/0	165	0.00	(0)	-/0	156	0.00	(0)	-/0
NBR	1	0.00	(0)	-/0	1	0.00	(0)	-/0	0	0.00	(0)	-/0
WBLR	1	0.00	B (12)	-/0	1	0.00	B (10)	-/0	0	0.00	A (0)	-/0
SBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0
SBT	227	0.00	(0)	-/0	239	0.00	(0)	-/0	232	0.00	(0)	-/0

No capacity constraints have been identified as all movements have available capacity and experience a LOS of 'B' or better under existing and future scenarios during the AM, PM, and Saturday peak hours. Site traffic has a negligible impact on intersection operation.

7.5.5 Mayfield Road and Simpson Road

The intersection capacity analysis results at Mayfield Road and Simpson Road during the AM, PM and Saturday peak hours are summarized in **Table 7-18.**

Table 7-18: Mayfield Road and Simpson Road Intersection Capacity Analysis

Mvmt	Existing Conditions (2023)				Future Background (2028)				Future Total (2028)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall					-	-	- (0)	-/-	-	-	- (1)	-/-
EBL					1	0.00	A (8)	-/0	79	0.08	A (9)	-/0
EBT					438	0.00	A (0)	-/0	438	0.00	(0)	-/0
WBT			-		435	0.00	(0)	-/0	435	0.00	(0)	-/0
WBR					1	0.00	(0)	-/0	89	0.00	(0)	-/0
SBL					0	0.00	A (0)	-/0	14	0.05	C (19)	-/0
SBR					0	0.00	A (0)	-/0	19	0.03	B (10)	-/0
PM Peak Hour												
Overall					-	-	- (0)	-/-	-	-	- (2)	-/-
EBL					1	0.00	A (8)	-/0	22	0.02	A (8)	-/0
EBT					512	0.00	A (0)	-/0	512	0.00	(0)	-/0
WBT			-		463	0.00	(0)	-/0	463	0.00	(0)	-/0
WBR					0	0.00	(0)	-/0	24	0.00	(0)	-/0
SBL					1	0.00	B (15)	-/0	55	0.17	C (18)	-/1
SBR					1	0.00	A (10)	-/0	78	0.10	B (10)	-/0
Saturday Peak Hour												
Overall					-	-	- (0)	-/-	-	-	- (2)	-/-
EBL					1	0.00	A (8)	-/0	22	0.02	A (8)	-/0
EBT					379	0.00	A (0)	-/0	379	0.00	(0)	-/0
WBT			-		368	0.00	(0)	-/0	368	0.00	(0)	-/0
WBR					0	0.00	(0)	-/0	24	0.00	(0)	-/0
SBL					1	0.00	B (13)	-/0	55	0.13	B (15)	-/0
SBR					1	0.00	A (9)	-/0	78	0.10	A (10)	-/0

No capacity constraints have been identified as all movements have available capacity and experience a LOS of 'C' or better under existing and future scenarios during the AM, PM and Saturday peak hours. Site traffic has a negligible impact on intersection operation.

7.6 SUMMARY OF INTERSECTION CAPACITY ANALYSIS RESULTS

With signal optimization, the planned widenings along the adjacent regional roads, and other road network infrastructure improvements, the intersection capacity analysis indicates that site traffic is expected to have an acceptable impact on the surrounding road network. In addition, the proposed site access to the subject lands on the future Simpson Road extension is expected to operate sufficiently under future horizons.

A small number of capacity constraints have been identified due to high volumes of background development traffic and general traffic growth at the intersection of Highway 50 and Mayfield Road/Albion Vaughan Road; however, this is not attributed to site traffic. Overall, the subject lands are expected to have an acceptable impact on the road network operations in the surrounding area.

8 SIGNAL WARRANT ANALYSIS

A signal warrant analysis for the future intersection of Mayfield Road and Simpson Road was conducted adhering to the methodologies outlined in the *Ontario Ministry of Transportation (OTM) Book 12 – Traffic Signals*. The 8-hour signal warrant was performed for the future total conditions. The future volumes at the intersection were forecasted based on the estimated future total AM and PM peak hour volumes and factored the 8-hour volume profile of the traffic counts collected at the intersection in September 2023. It is assumed that the future total 8-hour volume profile will be similar to the counts collected in 2023. In addition, no trip reduction was considered in the warrant analysis. **Table 8-1** summarizes the warrant review results. Warrant details are provided in **Appendix I**.

Table 8-1: Signal Warrant Review

Justification 1: Minimum Vehicle Volume				
	Requirement	Value	Percent Met	Result
Major Street: Mayfield Rd	600	557	62%	Condition not met
Requirement after 150% expansion	900	-	-	-
Minor Street: Simpson Rd	180	42	15%	Condition not met
Requirement after 150% expansion	270	-	-	-
Justification 2: Delay to Cross Traffic				
	Requirement	Value	Percent Met	Result
Major Street: Mayfield Rd	600	516	57%	Condition not met
Requirement after 150% expansion	900	-	-	-
Minor Street: Simpson Rd	50	17	23%	Condition not met
Requirement after 150% expansion	75	-	-	-

The results indicate that a traffic signal is not warranted under future total conditions for 2033.

9 PARKING AND LOADING ASSESSMENT

9.1 VEHICLE PARKING REQUIREMENTS

Upon the development of the site, the subject lands will be required to follow the Town of Caledon Zoning By-law 2006-50 parking standards. **Table 9-1** summarizes the parking requirements.

Table 9-1: Town of Caledon Parking Standards – Vehicle Parking

Land Use	Town of Caledon ZBL 2006-50	
	Parking Rate	Minimum Parking Requirement
Industrial	Up to 5,000 m^2	1 space per 60 m^2 net floor area
	5,000 m^2 to 10,000 m^2	83 parking spaces, plus 1 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 space per 170 m^2 or portion thereof of net floor area of 10,000 m^2

9.1.1 Accessible Parking Requirements

The Town of Caledon Zoning By-law 2015-058 provides accessible parking standards based on the number of required parking spaces. **Table 9-2** summarizes the accessible parking requirements.

Table 9-2: Town of Caledon Accessible Parking Standards

Number of Required Parking Spaces	Number of Designated Accessible Spaces(1)
1 to 12	1 Type A
13 to 100	4%
101 to 200	1 accessible space plus 3%
201 to 1000	2 accessible spaces plus 2%
More than 1000 parking spaces	11 accessible spaces plus 1%

(1) Where an even number of accessible parking spaces are required, an equal number of Type A and B accessible parking spaces shall be provided. Where an odd number of accessible parking spaces are required, an equal number of Type A and B accessible parking spaces shall be provided but the last accessible parking space may be Type B

9.2 LOADING REQUIREMENTS

The Town of Caledon Zoning By-law 2006-50 also provides loading standards applicable to the subject lands. 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. **Table 9-3** summarizes the loading requirements.

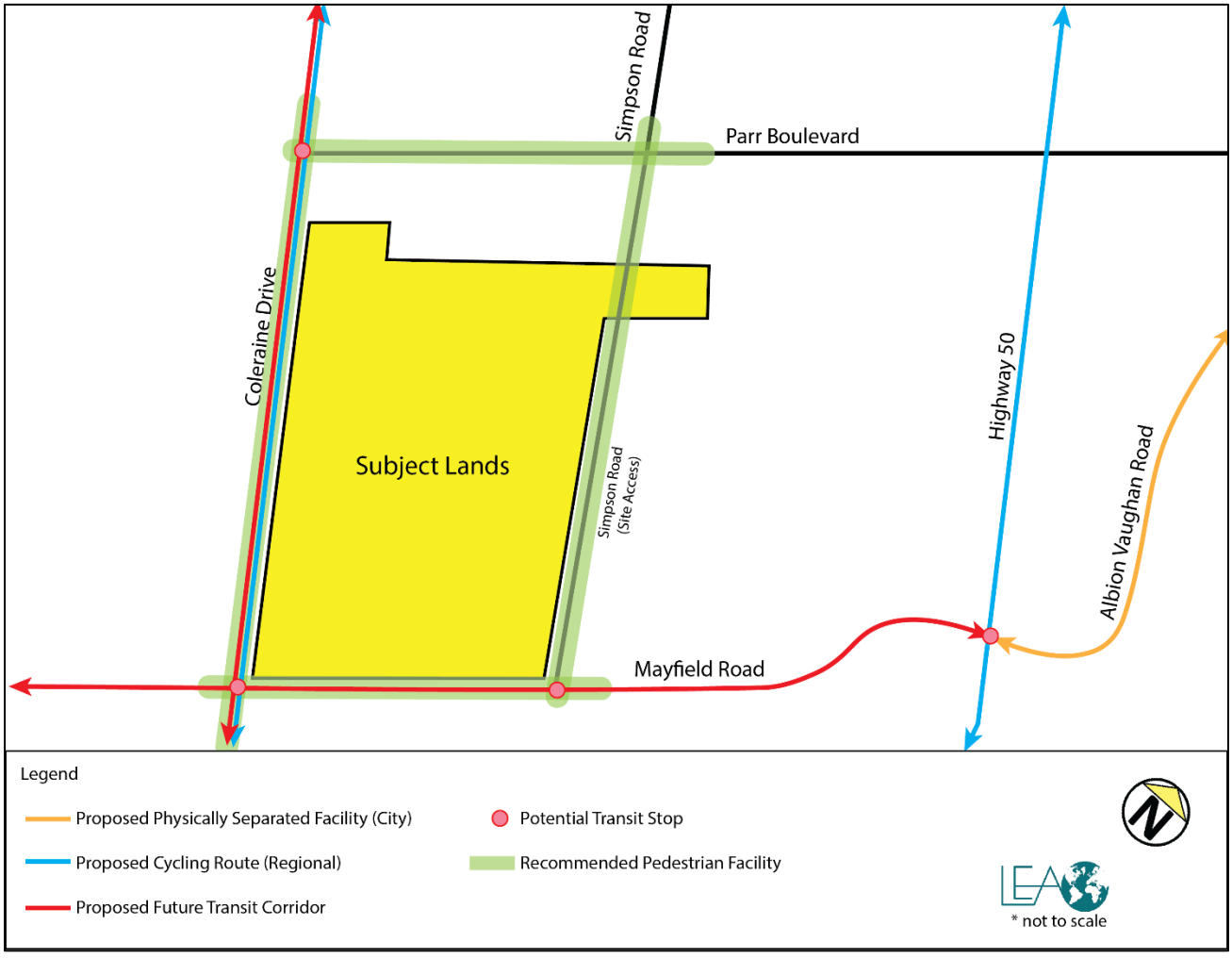
Table 9-3: Town of Caledon Loading Standards

Land Use	Town of Caledon ZBL 2006-50	
	Loading Rate	Minimum Loading Requirement
Industrial	300 m^2 or less	No requirement
	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 7,441m^2

10 PEDESTRIAN AND CYCLIST CIRCULATION PLAN

As the block plan is in the preliminary stages, the access points for pedestrians have not yet been realized. It is assumed that the future pedestrian and cyclist connection points will be determined as each site goes through the subsequent development phases. However, a preliminary pedestrian and circulation plan has been conceptualized and is illustrated in **Figure 10-1**.

Figure 10-1: Pedestrian and Cyclist Circulation Plan



11 TRANSPORTATION DEMAND MANAGEMENT

A Transportation Demand Management (TDM) Strategy is necessary to ensure successful implementation of initiatives that act to reduce automobile use and increase the use of active and sustainable modes of transportation. The following section provides an overview of what Transportation Demand Management is and how it can be applied to reduce dependency on single occupancy vehicles (SOV) and encourage other methods of travel throughout the study area.

11.1 WHAT IS TDM?

Transportation Demand Management seeks to apply behaviour change tools and incentives to align transport demand with supply. TDM is a toolkit of strategies that facilitates a more efficient transportation network by influencing travel behaviour. Effective implementation of TDM strategies may improve the supply or reduce the demand on a transportation network, resulting in reduced congestion. These strategies provide methods to reduce, re-mode, re-time, and/or re-route trips, also known as the 4 R's of TDM.

11.2 HOW ARE TDM GOALS ACHIEVED?

TDM strategies generally fall into 3 categories:

1. **Land Use and Urban Design Strategies:** Utilizing the streetscape and land use development to support a more efficient transport network by prioritizing efficient modes such as walking, cycling, transit, or carpooling.
2. **Incentive and Disincentive Strategies:** A "carrot and stick" approach to TDM that influences travel choices by making a particular mode or travel choice more attractive (incentive) and/or another mode less attractive (disincentive).
3. **Educational, Promotional, and Outreach Strategies:** Utilizing information and events to improve understanding, raise awareness, and raise positive sentiment to sustainable travel.

The most effective TDM strategy is well-planned, customized, and coordinated, utilizing a comprehensive suite of TDM strategies to target workplaces within the study area.

11.3 TDM BENEFITS

Transportation studies generally have an overall vision for their transportation network in which certain TDM benefits are prioritized and TDM strategies are selected to complement the area vision to the greatest extent possible. Some TDM benefits are as follows:

- Congestion reduction for all users by managing travel demand thus improving the experience for all modes;
- Energy/emission reduction through fewer or more efficient vehicle trips;
- Improving health and fitness by increasing active transportation trips and improving air quality;
- Improving the livability of an area by providing more attractive streetscaping, encouraging livable urban design, and increasing street animation;
- Parking management solutions that reduce the overall developable space dedicated to parking; and

- Improving safety for all users through the design and prioritization of alternative modes.

11.4 TDM GOALS

- Potential goals for TDM initiatives
- Establish a complete community that has a variety of reliable and connected transportation options.
- Support active modes of transportation.
- Develop TDM programs (programming/marketing).
- Enhance the safety, comfort, and accessibility for pedestrians and cyclists.

11.5 SUBJECT LANDS PROPOSED TDM MEASURES

It is recommended that developments within the subject lands be required to submit and implement a Transportation Demand Management Plan that demonstrates how the proposed development will support a shift to more sustainable travel modes. The following section provides a list of potential TDM measures to be explored and applied by each subsequent planning application and confirmed at the site plan stage by the individual landowners. The set of TDM measures would also be determined on a site-by-site basis based on the specific proposed uses.

11.5.1 Pedestrian-Based Strategies

Development within the subject lands should ensure safe, comfortable, and convenient pedestrian connections to key destinations within the surrounding area. Pedestrian strategies to encourage walking as a mode of travel include:

- Orient building entrances close to the street with direct connections to pedestrian pathways.
- Provide landscaping and pedestrian amenities such as trees, sidewalks, benches, and marked crossings to create an attractive public realm and encourage walking.
- Provide green space and outdoor amenities that are within convenient walking distance.

11.5.2 Cycling-Based Strategies

Development within the subject lands should promote cycling as a potential travel option. Cycling strategies to encourage biking as a mode of travel include:

- Avoid barriers to cyclists such as curbs or stairs, where possible. Where they exist, stairways leading to and from station areas should be outfitted with bike ramps.
- Provide cycling infrastructure and end-of-trip infrastructure such as secure bicycle racks, bicycle storage, and shower and change room facilities. Bicycle parking rates will be determined on a site-specific basis during subsequent applications. General bicycle parking rates should be proposed in line with nearby municipalities.
- Provide bike rental or bike share facilities within future mobility hubs or key transit locations.
- Provide cyclists with sheltered and secure bicycle storage facilities.

11.5.3 Transit-Based Strategies

Development within the subject lands should prioritize connections and access to transit while encouraging transit as a desirable mode choice. Transit strategies to encourage transit trips include:

- Prioritize bus traffic over motorized vehicles in the vicinity of the proposed bus terminal.
- Provide weather-protected transit stops.
- Provide real-time information displays at major transfer points or within building common areas to minimize waiting uncertainty.
- Subsidize transit passes or pre-loaded transit cards for new residents and/or employees.
- Enhance the comfort of outdoor pedestrian waiting areas through year-round planting that provide shelter from the wind in the winter months and shade during the summer months.

11.5.4 Travel and Parking Management Strategies

Development within the subject lands should increase awareness of sustainable transportation opportunities and avoid an oversupply of parking. Travel and parking strategies to reduce private vehicle trips include:

- Encourage participation in Smart Commute Workplace programs to expand travel opportunities for employees in sustainable ways.
- Permit reductions in maximum and minimum parking requirements once TDM measures are adopted as part of a development approval.
- Reduce minimum parking standards for small-scale retail and employment uses near transit routes.
- Encourage shared parking arrangements between uses to reduce the need for parking spaces within a development.
- Provide dedicated and/or preferential, publicly accessible car-share or carpooling parking spaces.

As an incentive to encourage TDM within the subject lands, the Town may permit reduced parking standards for developments that demonstrate through a TDM plan and implementation strategy, that a reduction in parking standards is appropriate.

12 CONCLUSIONS

- This Transportation Impact Study Update has been prepared to support the Secondary Plan study and development of the transportation network in the Simpson Lands. The subject lands are planned for industrial and office use consisting of approximately 908,500 ft^2 of warehouse GFA.
- The subject lands study area is serviced by Peel Region, Town of Caledon, and City of Brampton roads. There are 3 regional roadways and 3 municipal roadways comprising the arterial and collector road network in the study area.
- Local transit service for the Bolton area is provided by Brampton Transit while inter-regional commuter bus service is operated by GO Transit between Malton and the area of Highway 50 & Columbia Way. Bike lanes are provided on both sides of George Bolton Parkway, east of Coleraine Drive. However, no cycling facilities are available along the remaining study area roadways. The study area also exhibits poor pedestrian connectivity which can be attributed to the lack of collector/local streets, missing facilities, and discontinuous sidewalks.
- This Transportation Assessment considers the 5 and 10-year horizon from the existing year 2023. The future background conditions include traffic added to the network from other future developments, corridor growth, and road network improvements.
- The subject lands are anticipated to generate 309 two-way auto vehicle trips during the AM peak hour (250 inbound and 59 outbound), 309 two-way auto vehicle trips during the PM peak hour (68 inbound, 241 outbound) and 309 two-way auto vehicle trips during the Saturday peak hour (68 inbound, 241 outbound). In addition, 36 two-way truck trips (16 inbound, 20 outbound) are anticipated for the AM peak hour, 37 two-way truck trips (14 inbound, 23 outbound) are anticipated for the PM peak hour and 37 two-way truck trips (14 inbound, 23 outbound) are anticipated for the Saturday peak hour.
- The intersection capacity analysis was conducted for the AM, PM and Saturday peak hours under the existing, future background (2028 and 2033) and future total (2028 and 2033) horizons. With signal optimizations, planned widenings along adjacent regional roads, and other road network infrastructure improvements, the intersection capacity analysis results indicate that site traffic is expected to have an acceptable impact on the surrounding road network. In addition, the proposed site accesses to the subject lands are expected to operate sufficiently under future horizons.
- A small number of capacity constraints have been identified due to high volumes of background development and growth traffic at study area intersections; however, none are attributed to site traffic. Overall, the subject lands are expected to have an acceptable impact on the road network operations in the surrounding area.
- A signal warrant analysis was undertaken for the future total 2033 traffic volumes at the future intersection of Mayfield Road and Simpson Road. The results indicate that a signal is not warranted.
- A list of TDM strategies have been recommended to reduce single-occupant vehicle trips and encourage multi-modal travel alternatives for the subject lands.

APPENDIX A

Terms of Reference

LEA Consulting Ltd.
625 Cochrane Drive, 9th Floor
Markham, ON, L3R 9R9 Canada
T | 905 470 0015 F | 905 470 0030
WWW.LEA.CA

July 31st,2023

Reference Number: 24085

Hashim Hamdani
10 Peel Centre Drive
Brampton, ON, L6T 4B9

RE: Terms of Reference – Coleraine Drive and Mayfield Road

Dear Hashim,

LEA Consulting Ltd. (LEA) has prepared the following letter outlining our proposed Terms of Reference (TOR) pertaining to a Transportation Impact Study (TIS) for your review. The TIS will be conducted for a proposed block plan in the Town of Caledon (herein referred to as the "Subject Lands"). The property contains approximately 36.75 hectares of land which is located in the northeast quadrant of Coleraine Drive and Mayfield Road as shown in **Figure 1**. The subject lands are currently occupied by open lands, various truck and transportation uses and a former garden supply store.

Figure 1: Study Area



1. DESCRIPTION OF THE DEVELOPMENT

- Proposed Block Plan (Industrial uses)

2. PROPOSED STUDY AREA

- Based on the scale of the project and the existing road network layout, the following intersections are proposed to be analyzed:
  - Mayfield Road and Coleraine Drive (Signalized)
  - Parr Boulevard and Coleraine Drive (Unsignalized)
  - Parr Boulevard and Simpson Road (Unsignalized)
  - Parr Boulevard and Highway 50 (Signalized)
  - Mayfield Road/Albion Vaughn Road and Highway 50 (Signalized)

3. HORIZON & ANALYSIS

- 2023 existing condition and 2028 future background and future total conditions.
- Analysis will be conducted for weekday AM, PM, and Sat peak hours.

4. DATA COLLECTION

- Turning movement counts (TMC) will be obtained from the Region of Peel for the public road intersections listed above or surveyed by Lea Consulting Ltd.

5. FUTURE BACKGROUND CONDITIONS

- *Road Network Improvements* – Lea will note any network improvements identified within the study area and account for any traffic diversions associated with these improvements within our analysis.
- *Background Development Traffic* –Lea has identified the following background developments within the study area:
  - **12148 Albion Vaughan Road – 265 Residential Units**
- Please advise of any other relevant background developments to be considered. LEA also requests that any other relevant background development documents be made available including the South Simpson Industrial Secondary Plan and the Municipal Class Environmental Assessment for Simpson Road (2013).
- Relatedly, please confirm the status of the South Simpson Industrial Secondary Plan if it is not approved as of yet, and please confirm the road extensions which should be considered for the analysis. It is understood the Town is contemplating a potential new east-west road intersecting with Coleraine Drive, which may extend east of the intersection into the subject lands.
- *General Corridor Growth Rate* – Historical intersection TMC data will be reviewed, and LEA will consult with City Staff to determine corridor growth rates.

6. TRIP GENERATION, DISTRIBUTION AND TRIP ASSIGNMENT

- Please note, at this time, no site statistics are available. Should a trip generation assessment be required for this block application, trip generation will be based on ITE trip generation rates.
- Trip distribution and assignment shall be based on a review of the existing traffic data (i.e. directional splits of site traffic) and TTS 2016 survey data. Modal split shall also be based on TTS 2016 survey data.

7. INTERSECTION CAPCITY ANALYSIS

- Shall be conducted for signalized and unsignalized intersections using Synchro Version 11 Software adhering to the analysis methodology outlined in the Highway Capacity Manual 2000.
- Input parameters shall be based on the suggested values as outlined in the Town of Caledon/Peel Region Synchro Guidelines.

8. PARKING AND LOADING

- It is assumed that no parking and loading assessment will be required to be undertaken at the block plan level. Please confirm if this should be required.

9. TRANSPORTATION DEMAND MANAGEMENT

- Please confirm if a high-level Transportation Demand Management (TDM) plan will be required to be provided for the block plan.

Should you have any comments with our assumptions or have any concerns, please contact the undersigned at (905) 470-0015 ext. 354 (ZGeorgis@lea.ca).

Yours truly,

LEA CONSULTING LTD.



Zara Georgis, M.Eng., P.Eng.

Project Manager, Transportation Engineering and Planning

Transportation Development Comments - Terms of Reference - Coleraine Drive and Mayfield Road Block Plan

Barnes, Catherine <catherine.barnes@peelregion.ca>

Thu 8/3/2023 2:45 PM

To:Harkarandeep Bains <HBains@lea.ca>

Cc:Hamdani, Hashim <hashimali.hamdani@peelregion.ca>

External Sender

Hi Harkarandeep,

The Region has reviewed the Terms of Reference you provided and offer the following information to assist the Applicant with the submission of a complete Traffic Impact Study.

To answer the questions in your email first; please note that we do require site statistics. Secondly, we are ok with traffic counts being taken in summer, but only in conjunction with previous traffic counts from previous years. As summer traffic counts are not all encompassing of traffic and can be misleading.

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 14 (Mayfield Road) – Industrial Connector

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

- Regional Road 150 (Coleraine Road) – Industrial Connector

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

- 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.
- Proposed Study Area – we would like to see the future Simpson Road at Mayfield Road included in the study.
- Horizon & Analysis Periods – we would like to see 5 & 10 year analysis. We would like to see off Peak hours as well.
- Data Collection - please use Region of Peel TMCs – in conjunction with any counts surveyed by Lea Consulting Ltd.
- Access justification, type and location will be reviewed/determined after review of the TIS;
- Please note that the future Simpson Road extension should be considered in the study as this will be the main access to the sites that front Simpson Road.
- Any accesses proposed off a Regional Road may require auxiliary turn lanes, this will be reviewed/determined after review of the TIS;
- Please review the Region's 'Heavy Truck Restrictions,'& "Axle Load Restrictions' as per our Region of Peel By-Law 15-2013 https://www.peelregion.ca/pw/transportation/business/heavy-truck-restrictions.asp
- Please see the following contacts to obtain data for your analysis:
    - Please contact Transportation to confirm growth rates along the subject Regional road(s).

- Please contact Damian Jamroz (damian.jamroz@peelregion.ca) Supervisor of Traffic Operations to obtain the most recent TMCs and/or average annual daily traffic (AADT).
- Please contact Rebecca Caughey (Rebecca.caughey@peelregion.ca)Acting Supervisor's 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 Development Services Planning staff to obtain details on surrounding developments in the area that would affect traffic capacity in the planning horizon year(s)

Please reach out to the Town for further information in regards to Future Background Conditions, etc.

I trust this to be satisfactory; please do not hesitate to contact me should you have any questions or concerns.

Thank you,

Catherine Barnes
Region of Peel
Specialist, Transportation Development
Transportation Division, Public Works.
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON , L6T 4B9
During this Health Emergency please contact me via email as I am out of the office working remotely.

Region of Peel
working with you

P **Please consider the environment before printing this email.**

Our working hours may be different. Please do not feel obligated to reply outside of your working hours.

The Region of Peel is situated on the Treaty Lands and Territory of the Mississaugas of the Credit First Nation as well as the traditional territory of the Anishinabeg, Huron-Wendat and Haudenosaunee peoples.

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From: Kavleen Younan <Kavleen.Younan@caledon.ca>
Sent: July 31, 2023 10:39 AM
To: Zara Georgis
Cc: Matthew Doren; Harkarandeep Bains; Anatole Kung; James Todd; Emma Howlett
Subject: FW: Coleraine Drive and Mayfield Road Block Plan (South Simpson Landowners)
Attachments: 24085-Coleraine Drive and Mayfield Road Block Plan- TOR (July 28, 2023).pdf

External Sender

Good Morning Zara,

Thank you for your email. We will review the proposed TOR and get back to you with any comments shortly.

Regarding the collection of traffic counts, as outlined in your Terms of Reference (TOR), TMC data (non-summer) should be obtained from the Region. Alternatively, if you prefer to conduct new counts during the summer, it would be essential to provide appropriate justification demonstrating that the collected counts do not significantly differ from non-summer counts.

Thanks

Kavleen Sachdeva Younan, P.Eng.
Transportation Engineer
Engineering Services

Office: 905.584.2272 x 4416
Email: kavleen.younan@caledon.ca

Town of Caledon | www.caledon.ca | www.visitcaledon.ca | Follow us @TownofCaledon

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From: Zara Georgis <ZGeorgis@lea.ca>
Sent: July 28, 2023 3:54 PM
To: Jillian Britto <Jillian.Britto@caledon.ca>
Cc: Matthew Doren <MDoren@lea.ca>; Harkarandeep Bains <HBains@lea.ca>; Anatole Kung <AKung@lea.ca>; James Todd <jtodd@westonconsulting.com>
Subject: Coleraine Drive and Mayfield Road Block Plan (South Simpson Landowners)

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 Jillian,

I hope you are doing well.

Kindly find attached TOR for your review. It is our understanding that the block plan will propose industrial uses, but site statistics and density are not yet forecasted. Please advise if this would be required for the Block Plan TIS study.

In addition, LEA proposes to undertake counts next week in order to meet an end of August submission timeline. Please advise if you have any concerns with undertaking summer counts in support of this study.

Thanks,

Zara Georgis, M.Eng., P.Eng.
Project Manager, Transportation Planning & Engineering
LEA Consulting Ltd.
40 University Avenue, Suite 503 | Toronto, ON | M5J 1T1
T: 905 470 0015 E: ZGeorgis@lea.ca W: www.LEA.ca



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APPENDIX B

Traffic Data & Signal Timing Plans

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & COLERAINE DR
Date: Wed, Dec 08, 2021 Deployment Lead: Theo Daglis

Turning Movement Count (3 . MAYFIELD RD & COLERAINE DR) CustID: 01401354 MioID:

Start Time	N Approach COLERAINE DR						E Approach MAYFIELD RD						S Approach COLERAINE DR						W Approach MAYFIELD RD						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:00:00	71	99	14	0	0	184	7	43	6	0	0	56	5	82	3	0	0	90	8	58	118	0	0	184	514	
07:15:00	31	88	22	0	0	141	5	51	12	0	0	68	7	79	6	0	0	92	14	68	73	0	0	155	456	
07:30:00	34	97	16	0	0	147	6	55	14	0	0	75	4	58	3	0	0	65	5	65	62	0	0	132	419	
07:45:00	29	63	12	0	0	104	11	48	7	0	0	66	15	80	11	0	0	106	5	76	57	0	0	138	414	1803
08:00:00	37	68	18	0	0	123	10	44	9	0	0	63	11	67	8	0	0	86	12	56	48	0	0	116	388	1677
08:15:00	31	72	13	0	0	116	14	49	13	0	0	76	4	69	7	0	0	80	7	60	60	0	0	127	399	1620
08:30:00	23	75	19	0	0	117	12	47	4	0	0	63	6	51	2	0	0	59	11	53	56	0	0	120	359	1560
08:45:00	25	65	21	0	0	111	10	29	4	0	0	43	7	63	3	0	0	73	10	45	50	0	0	105	332	1478
09:00:00	27	69	16	0	0	112	15	33	6	0	0	54	7	59	4	0	0	70	16	53	48	0	0	117	353	1443
09:15:00	20	61	14	0	0	95	18	31	5	0	0	54	13	50	7	0	0	70	8	61	34	0	0	103	322	1366
09:30:00	26	40	20	0	0	86	15	41	2	0	0	58	3	42	3	0	0	48	17	50	38	0	0	105	297	1304
09:45:00	17	61	18	0	0	96	15	36	2	0	0	53	4	50	4	0	0	58	5	43	34	0	0	82	289	1261
BREAK																										
15:00:00	88	75	24	0	0	187	13	54	11	0	0	78	10	100	3	0	0	113	11	47	62	0	0	120	498	
15:15:00	51	73	21	0	0	145	21	61	5	0	0	87	7	81	14	0	0	102	9	71	38	0	0	118	452	
15:30:00	55	80	15	0	0	150	10	86	23	0	0	119	8	83	2	0	0	93	6	72	39	0	0	117	479	
15:45:00	59	60	15	1	0	135	15	50	14	0	0	79	12	79	14	0	0	105	7	67	48	0	0	122	441	1870
16:00:00	72	80	11	0	0	163	18	62	7	0	0	87	11	105	8	0	0	124	10	57	34	0	0	101	475	1847
16:15:00	62	51	18	0	0	131	14	75	5	0	0	94	6	105	7	0	0	118	12	81	46	0	0	139	482	1877
16:30:00	64	70	13	0	0	147	18	69	13	0	0	100	13	100	10	0	0	123	8	70	42	0	0	120	490	1888
16:45:00	50	59	20	0	0	129	19	66	3	0	0	88	8	116	12	1	0	137	5	77	46	0	0	128	482	1929
17:00:00	111	115	16	0	0	242	16	74	10	0	0	100	10	103	14	0	0	127	9	56	36	0	0	101	570	2024
17:15:00	96	127	28	0	0	251	15	71	7	0	0	93	9	129	3	0	0	141	16	80	51	0	0	147	632	2174
17:30:00	87	120	20	0	0	227	26	58	5	0	0	89	10	126	3	0	0	139	8	61	77	0	0	146	601	2285
17:45:00	85	116	22	0	0	223	20	53	4	0	0	77	2	152	6	0	0	160	2	51	101	0	0	154	614	2417
Grand Total	1251	1884	426	1	0	3562	343	1286	191	0	0	1820	192	2029	157	1	0	2379	221	1478	1298	0	0	2997	**10758**	-
Approach%	35.1%	52.9%	12%	0%		-	18.8%	70.7%	10.5%	0%		-	8.1%	85.3%	6.6%	0%		-	7.4%	49.3%	43.3%	0%		-	**-**	-
Totals %	11.6%	17.5%	4%	0%		33.1%	3.2%	12%	1.8%	0%		16.9%	1.8%	18.9%	1.5%	0%		22.1%	2.1%	13.7%	12.1%	0%		27.9%	**-**	-
Heavy	232	82	321	0		-	279	255	18	0		-	22	86	25	1		-	13	224	278	0		-	**-**	-
Heavy %	18.5%	4.4%	75.4%	0%		-	81.3%	19.8%	9.4%	0%		-	11.5%	4.2%	15.9%	100%		-	5.9%	15.2%	21.4%	0%		-	**-**	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & COLERAINE DR
Date: Wed, Dec 08, 2021 Deployment Lead: Theo Daglis

Peak Hour: 07:00 AM - 08:00 AM Weather: Light Snow (-6.56 °C)

Start Time	N Approach COLERAINE DR						E Approach MAYFIELD RD						S Approach COLERAINE DR						W Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
07:00:00	71	99	14	0	0	184	7	43	6	0	0	56	5	82	3	0	0	90	8	58	118	0	0	184	514
07:15:00	31	88	22	0	0	141	5	51	12	0	0	68	7	79	6	0	0	92	14	68	73	0	0	155	456
07:30:00	34	97	16	0	0	147	6	55	14	0	0	75	4	58	3	0	0	65	5	65	62	0	0	132	419
07:45:00	29	63	12	0	0	104	11	48	7	0	0	66	15	80	11	0	0	106	5	76	57	0	0	138	414
Grand Total	165	347	64	0	0	576	29	197	39	0	0	265	31	299	23	0	0	353	32	267	310	0	0	609	**1803**
Approach%	28.6%	60.2%	11.1%	0%		-	10.9%	74.3%	14.7%	0%		-	8.8%	84.7%	6.5%	0%		-	5.3%	43.8%	50.9%	0%		-	**-**
Totals %	9.2%	19.2%	3.5%	0%		31.9%	1.6%	10.9%	2.2%	0%		14.7%	1.7%	16.6%	1.3%	0%		19.6%	1.8%	14.8%	17.2%	0%		33.8%	**-**
PHF	0.58	0.88	0.73	0		0.78	0.66	0.9	0.7	0		0.88	0.52	0.91	0.52	0		0.83	0.57	0.88	0.66	0		0.83	**-**
Heavy	41	17	52	0		110	22	37	5	0		64	4	9	1	0		14	2	53	28	0		83	**-**
Heavy %	24.8%	4.9%	81.3%	0%		19.1%	75.9%	18.8%	12.8%	0%		24.2%	12.9%	3%	4.3%	0%		4%	6.3%	19.9%	9%	0%		13.6%	**-**
Lights	124	330	12	0		466	7	160	34	0		201	27	290	22	0		339	30	214	282	0		526	**-**
Lights %	75.2%	95.1%	18.8%	0%		80.9%	24.1%	81.2%	87.2%	0%		75.8%	87.1%	97%	95.7%	0%		96%	93.8%	80.1%	91%	0%		86.4%	**-**
Single-Unit Trucks	19	16	28	0		63	14	14	3	0		31	1	9	1	0		11	2	17	8	0		27	**-**
Single-Unit Trucks %	11.5%	4.6%	43.8%	0%		10.9%	48.3%	7.1%	7.7%	0%		11.7%	3.2%	3%	4.3%	0%		3.1%	6.3%	6.4%	2.6%	0%		4.4%	**-**
Buses	1	0	0	0		1	0	5	0	0		5	0	0	0	0		0	0	6	2	0		8	**-**
Buses %	0.6%	0%	0%	0%		0.2%	0%	2.5%	0%	0%		1.9%	0%	0%	0%	0%		0%	0%	2.2%	0.6%	0%		1.3%	**-**
Articulated Trucks	21	1	24	0		46	8	18	2	0		28	3	0	0	0		3	0	30	18	0		48	**-**
Articulated Trucks %	12.7%	0.3%	37.5%	0%		8%	27.6%	9.1%	5.1%	0%		10.6%	9.7%	0%	0%	0%		0.8%	0%	11.2%	5.8%	0%		7.9%	**-**

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & COLERAINE DR
Date: Wed, Dec 08, 2021 Deployment Lead: Theo Daglis

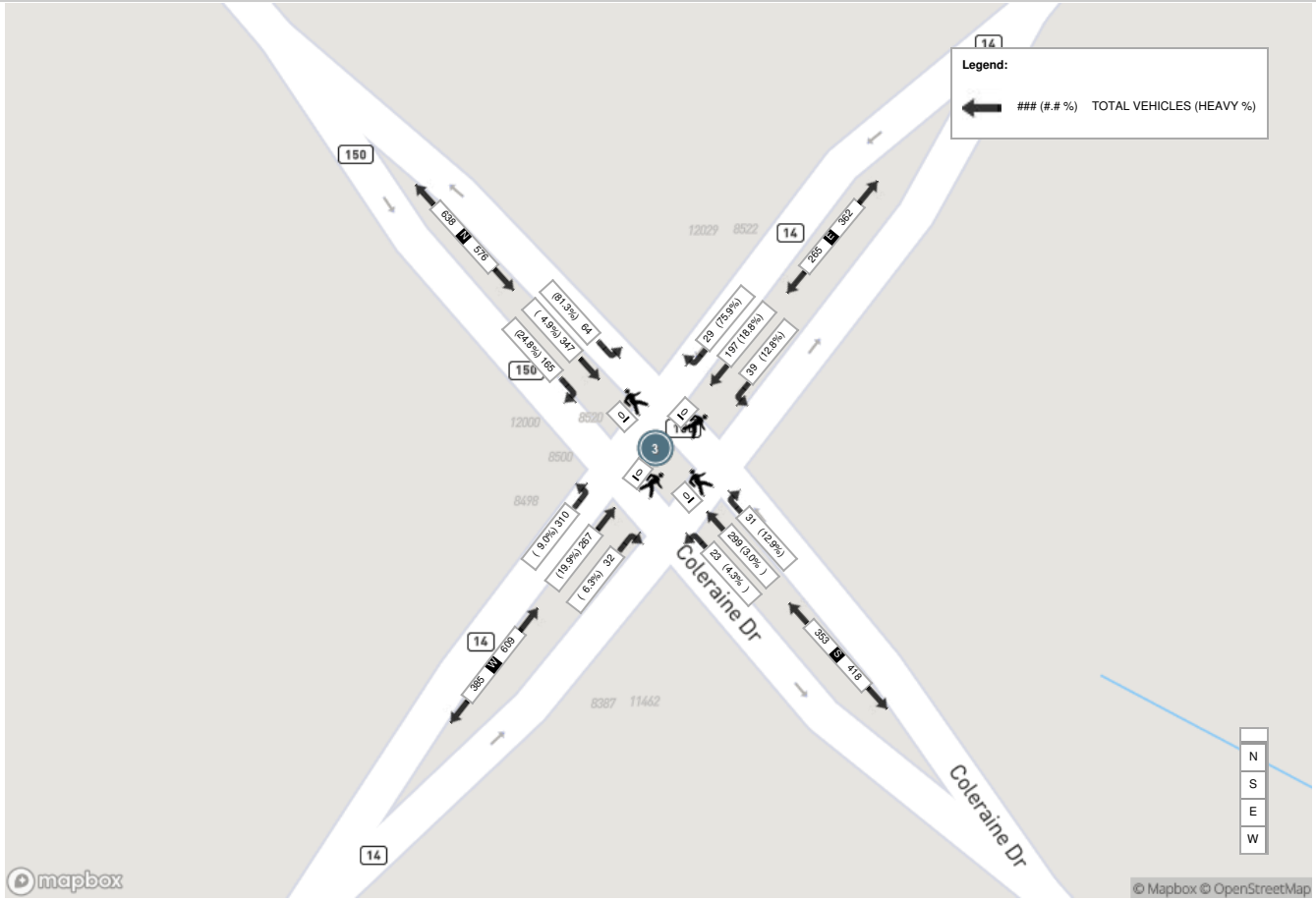
Peak Hour: 05:00 PM - 06:00 PM Weather: Light Snow (-2.17 °C)

Start Time	N Approach COLERAINE DR						E Approach MAYFIELD RD						S Approach COLERAINE DR						W Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
17:00:00	111	115	16	0	0	242	16	74	10	0	0	100	10	103	14	0	0	127	9	56	36	0	0	101	570
17:15:00	96	127	28	0	0	251	15	71	7	0	0	93	9	129	3	0	0	141	16	80	51	0	0	147	632
17:30:00	87	120	20	0	0	227	26	58	5	0	0	89	10	126	3	0	0	139	8	61	77	0	0	146	601
17:45:00	85	116	22	0	0	223	20	53	4	0	0	77	2	152	6	0	0	160	2	51	101	0	0	154	614
Grand Total	379	478	86	0	0	943	77	256	26	0	0	359	31	510	26	0	0	567	35	248	265	0	0	548	**2417**
Approach%	40.2%	50.7%	9.1%	0%		-	21.4%	71.3%	7.2%	0%		-	5.5%	89.9%	4.6%	0%		-	6.4%	45.3%	48.4%	0%		-	**-**
Totals %	15.7%	19.8%	3.6%	0%		39%	3.2%	10.6%	1.1%	0%		14.9%	1.3%	21.1%	1.1%	0%		23.5%	1.4%	10.3%	11%	0%		22.7%	**-**
PHF	0.85	0.94	0.77	0		0.94	0.74	0.86	0.65	0		0.9	0.78	0.84	0.46	0		0.89	0.55	0.78	0.66	0		0.89	**-**
Heavy	26	9	30	0		65	58	44	4	0		106	3	16	3	0		22	2	25	55	0		82	**-**
Heavy %	6.9%	1.9%	34.9%	0%		6.9%	75.3%	17.2%	15.4%	0%		29.5%	9.7%	3.1%	11.5%	0%		3.9%	5.7%	10.1%	20.8%	0%		15%	**-**
Lights	353	469	56	0		878	19	212	22	0		253	28	494	23	0		545	33	223	210	0		466	**-**
Lights %	93.1%	98.1%	65.1%	0%		93.1%	24.7%	82.8%	84.6%	0%		70.5%	90.3%	96.9%	88.5%	0%		96.1%	94.3%	89.9%	79.2%	0%		85%	**-**
Single-Unit Trucks	9	4	5	0		18	28	16	1	0		45	2	13	2	0		17	2	11	21	0		34	**-**
Single-Unit Trucks %	2.4%	0.8%	5.8%	0%		1.9%	36.4%	6.3%	3.8%	0%		12.5%	6.5%	2.5%	7.7%	0%		3%	5.7%	4.4%	7.9%	0%		6.2%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	17	5	25	0		47	30	28	3	0		61	1	3	1	0		5	0	14	34	0		48	**-**
Articulated Trucks %	4.5%	1%	29.1%	0%		5%	39%	10.9%	11.5%	0%		17%	3.2%	0.6%	3.8%	0%		0.9%	0%	5.6%	12.8%	0%		8.8%	**-**

Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & COLERAINE DR
Date: Wed, Dec 08, 2021 Deployment Lead: Theo Daglis

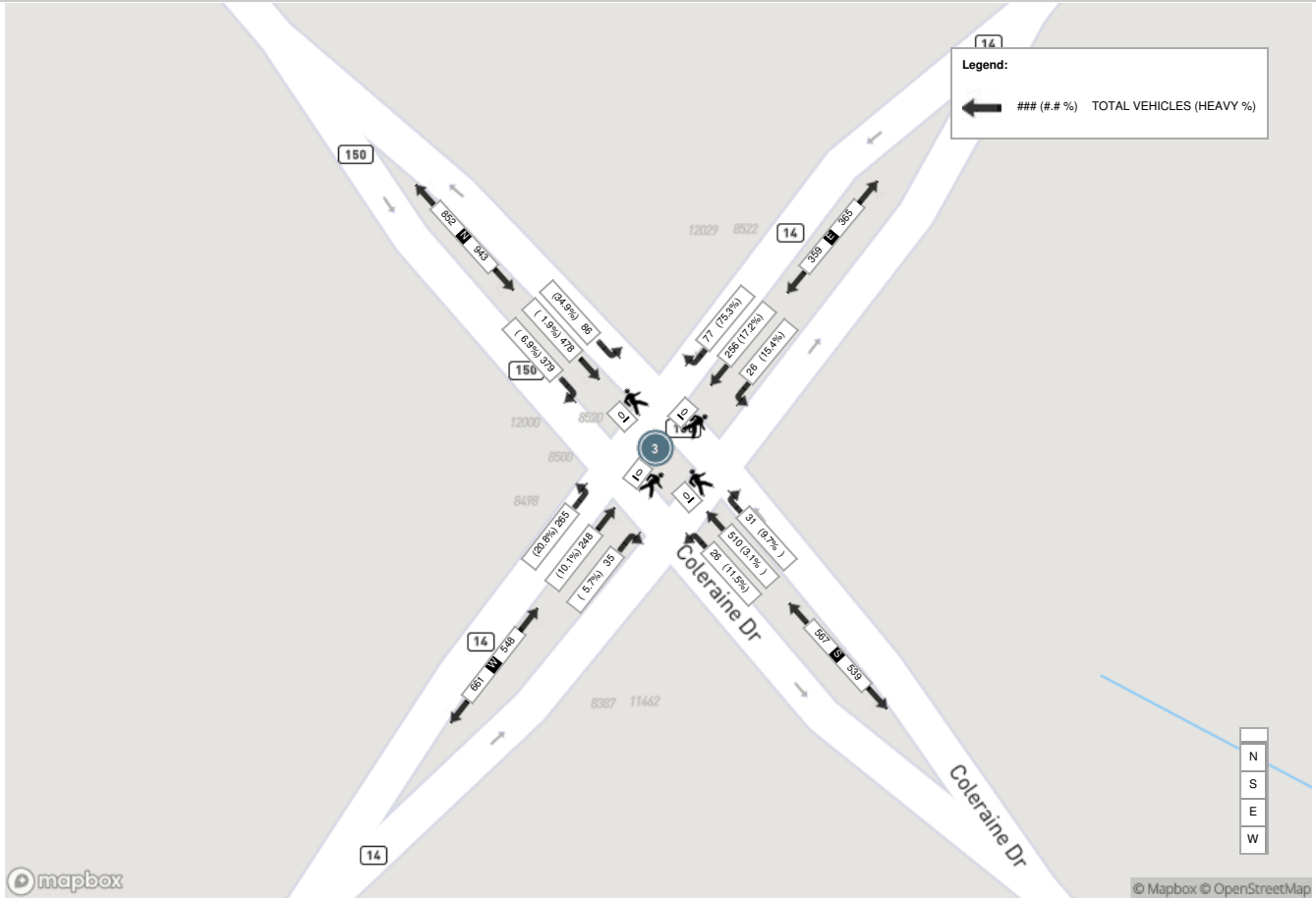
Peak Hour: 07:00 AM - 08:00 AM **Weather: Light Snow (-6.56 °C)**



Spectrum

Turning Movement Count
Location Name: MAYFIELD RD & COLERAINE DR
Date: Wed, Dec 08, 2021 Deployment Lead: Theo Daglis

Peak Hour: 05:00 PM - 06:00 PM Weather: Light Snow (-2.17 °C)



LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023

Turning Movement Data

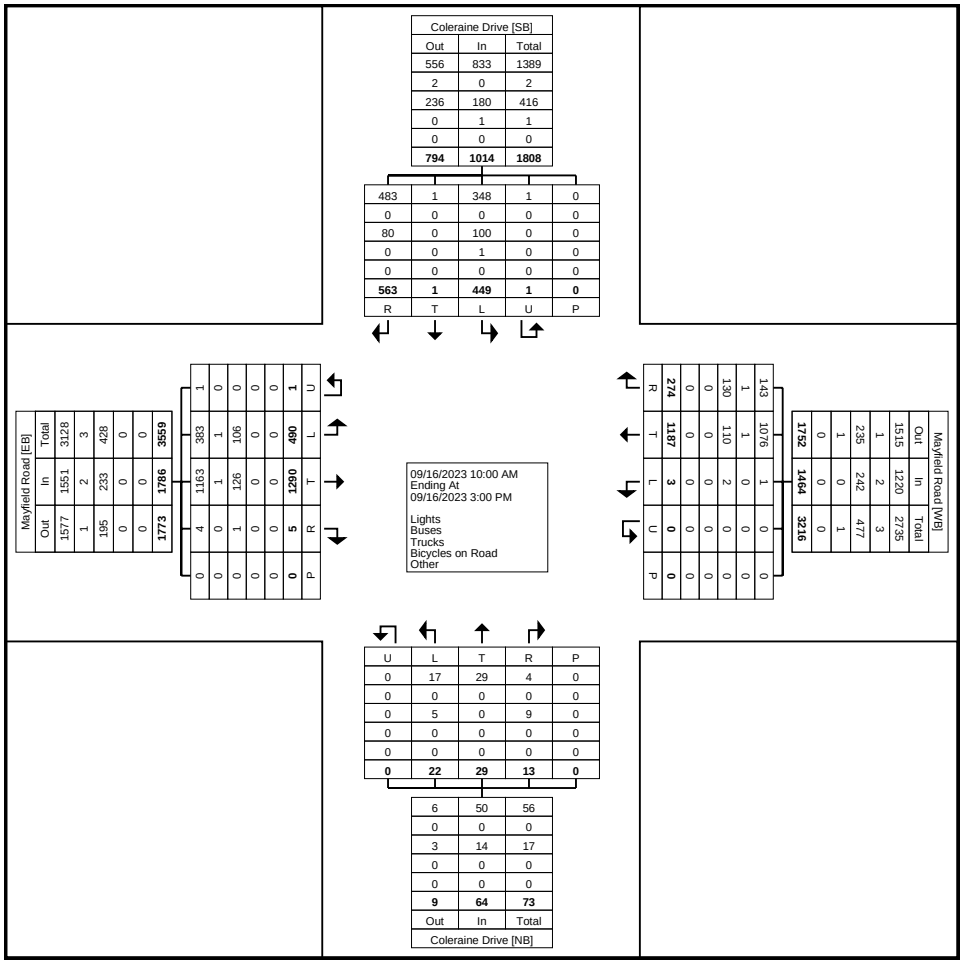
Start Time	Coleraine Drive Southbound						Mayfield Road Westbound						Coleraine Drive Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
10:00 AM	25	0	32	0	0	57	10	40	0	0	0	50	0	1	0	0	0	1	0	62	25	0	0	87	195
10:15 AM	25	0	25	0	0	50	12	49	0	0	0	61	1	0	2	0	0	3	0	64	19	0	0	83	197
10:30 AM	17	0	21	0	0	38	18	67	0	0	0	85	0	1	0	0	0	1	1	47	24	0	0	72	196
10:45 AM	23	0	22	0	0	45	11	50	0	0	0	61	0	0	1	0	0	1	0	70	13	0	0	83	190
Hourly Total	90	0	100	0	0	190	51	206	0	0	0	257	1	2	3	0	0	6	1	243	81	0	0	325	778
11:00 AM	26	0	18	0	0	44	6	51	0	0	0	57	0	0	2	0	0	2	0	73	28	1	0	102	205
11:15 AM	25	0	21	0	0	46	10	56	0	0	0	66	1	1	0	0	0	2	0	57	25	0	0	82	196
11:30 AM	20	0	28	0	0	48	9	50	0	0	0	59	1	0	1	0	0	2	0	69	28	0	0	97	206
11:45 AM	20	0	19	1	0	40	13	53	0	0	0	66	0	0	0	0	0	0	0	55	23	0	0	78	184
Hourly Total	91	0	86	1	0	178	38	210	0	0	0	248	2	1	3	0	0	6	0	254	104	1	0	359	791
12:00 PM	18	0	23	0	0	41	31	78	0	0	0	109	0	1	1	0	0	2	0	82	28	0	0	110	262
12:15 PM	26	0	22	0	0	48	10	60	1	0	0	71	3	2	3	0	0	8	3	62	25	0	0	90	217
12:30 PM	29	0	23	0	0	52	13	65	0	0	0	78	1	5	2	0	0	8	0	46	26	0	0	72	210
12:45 PM	19	0	22	0	0	41	14	47	0	0	0	61	1	1	2	0	0	4	0	62	28	0	0	90	196
Hourly Total	92	0	90	0	0	182	68	250	1	0	0	319	5	9	8	0	0	22	3	252	107	0	0	362	885
1:00 PM	44	0	21	0	0	65	20	68	0	0	0	88	0	0	0	0	0	0	0	63	24	0	0	87	240
1:15 PM	20	0	22	0	0	42	12	48	0	0	0	60	2	2	1	0	0	5	0	65	18	0	0	83	190
1:30 PM	41	0	21	0	0	62	12	57	0	0	0	69	3	2	1	0	0	6	0	66	28	0	0	94	231
1:45 PM	36	1	19	0	0	56	13	75	0	0	0	88	0	2	0	0	0	2	0	77	29	0	0	106	252
Hourly Total	141	1	83	0	0	225	57	248	0	0	0	305	5	6	2	0	0	13	0	271	99	0	0	370	913
2:00 PM	28	0	26	0	0	54	15	56	2	0	0	73	0	2	4	0	0	6	0	72	18	0	0	90	223
2:15 PM	37	0	26	0	0	63	14	71	0	0	0	85	0	4	1	0	0	5	1	78	27	0	0	106	259
2:30 PM	57	0	18	0	0	75	14	80	0	0	0	94	0	2	0	0	0	2	0	51	27	0	0	78	249
2:45 PM	27	0	20	0	0	47	17	66	0	0	0	83	0	3	1	0	0	4	0	69	27	0	0	96	230
Hourly Total	149	0	90	0	0	239	60	273	2	0	0	335	0	11	6	0	0	17	1	270	99	0	0	370	961
Grand Total	563	1	449	1	0	1014	274	1187	3	0	0	1464	13	29	22	0	0	64	5	1290	490	1	0	1786	4328
Approach %	55.5	0.1	44.3	0.1	-	-	18.7	81.1	0.2	0.0	-	-	20.3	45.3	34.4	0.0	-	-	0.3	72.2	27.4	0.1	-	-	-
Total %	13.0	0.0	10.4	0.0	-	23.4	6.3	27.4	0.1	0.0	-	33.8	0.3	0.7	0.5	0.0	-	1.5	0.1	29.8	11.3	0.0	-	41.3	-
Lights	483	1	348	1	-	833	143	1076	1	0	-	1220	4	29	17	0	-	50	4	1163	383	1	-	1551	3654
% Lights	85.8	100.0	77.5	100.0	-	82.1	52.2	90.6	33.3	-	-	83.3	30.8	100.0	77.3	-	-	78.1	80.0	90.2	78.2	100.0	-	86.8	84.4
Buses	0	0	0	0	-	0	1	1	0	0	-	2	0	0	0	0	-	0	0	1	1	0	-	2	4
% Buses	0.0	0.0	0.0	0.0	-	0.0	0.4	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.2	0.0	-	0.1	0.1
Trucks	80	0	100	0	-	180	130	110	2	0	-	242	9	0	5	0	-	14	1	126	106	0	-	233	669
% Trucks	14.2	0.0	22.3	0.0	-	17.8	47.4	9.3	66.7	-	-	16.5	69.2	0.0	22.7	-	-	21.9	20.0	9.8	21.6	0.0	-	13.0	15.5
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1

% Bicycles on Road	0.0	0.0	0.2	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: 24085_Coleraine Dr & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023
Page No: 3



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023

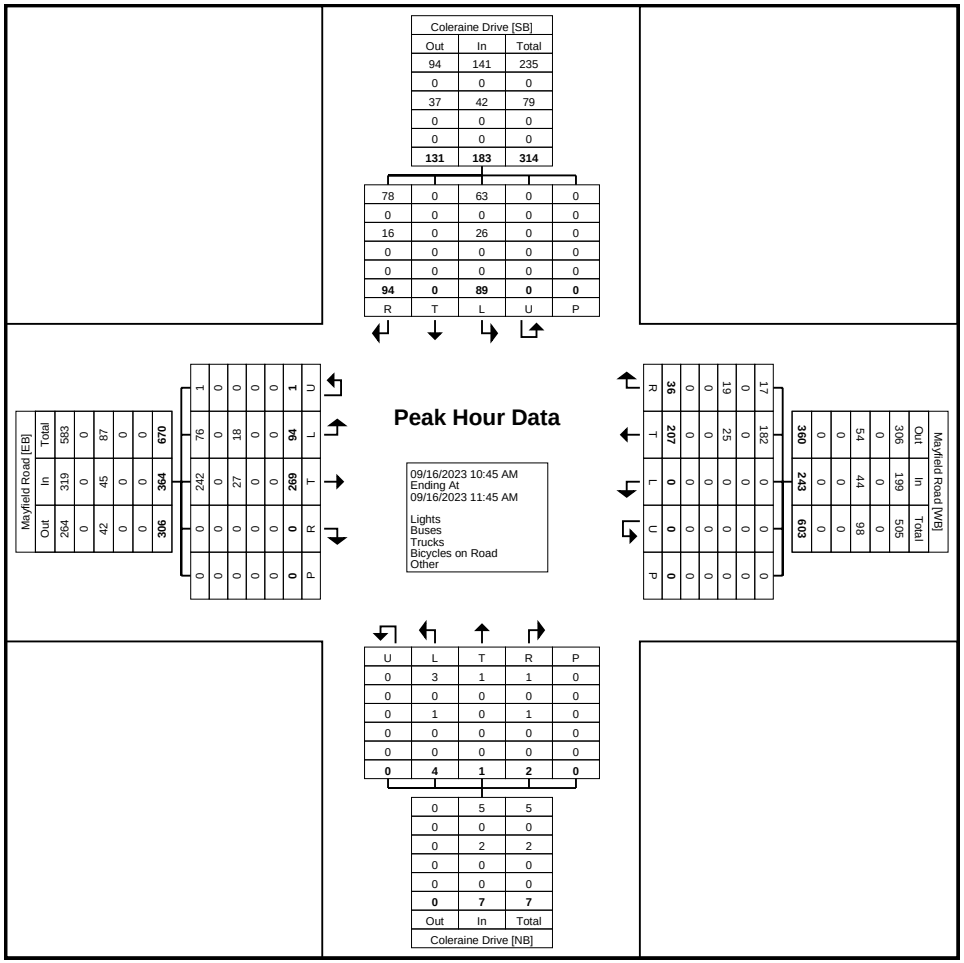
Turning Movement Peak Hour Data (10:45 AM)

Start Time	Coleraine Drive Southbound						Mayfield Road Westbound						Coleraine Drive Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
10:45 AM	23	0	22	0	0	45	11	50	0	0	0	61	0	0	1	0	0	1	0	70	13	0	0	83	190
11:00 AM	26	0	18	0	0	44	6	51	0	0	0	57	0	0	2	0	0	2	0	73	28	1	0	102	205
11:15 AM	25	0	21	0	0	46	10	56	0	0	0	66	1	1	0	0	0	2	0	57	25	0	0	82	196
11:30 AM	20	0	28	0	0	48	9	50	0	0	0	59	1	0	1	0	0	2	0	69	28	0	0	97	206
Total	94	0	89	0	0	183	36	207	0	0	0	243	2	1	4	0	0	7	0	269	94	1	0	364	797
Approach %	51.4	0.0	48.6	0.0	-	-	14.8	85.2	0.0	0.0	-	-	28.6	14.3	57.1	0.0	-	-	0.0	73.9	25.8	0.3	-	-	-
Total %	11.8	0.0	11.2	0.0	-	23.0	4.5	26.0	0.0	0.0	-	30.5	0.3	0.1	0.5	0.0	-	0.9	0.0	33.8	11.8	0.1	-	45.7	-
PHF	0.904	0.000	0.795	0.000	-	0.953	0.818	0.924	0.000	0.000	-	0.920	0.500	0.250	0.500	0.000	-	0.875	0.000	0.921	0.839	0.250	-	0.892	0.967
Lights	78	0	63	0	-	141	17	182	0	0	-	199	1	1	3	0	-	5	0	242	76	1	-	319	664
% Lights	83.0	-	70.8	-	-	77.0	47.2	87.9	-	-	-	81.9	50.0	100.0	75.0	-	-	71.4	-	90.0	80.9	100.0	-	87.6	83.3
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	-	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Trucks	16	0	26	0	-	42	19	25	0	0	-	44	1	0	1	0	-	2	0	27	18	0	-	45	133
% Trucks	17.0	-	29.2	-	-	23.0	52.8	12.1	-	-	-	18.1	50.0	0.0	25.0	-	-	28.6	-	10.0	19.1	0.0	-	12.4	16.7
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	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (10:45 AM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023

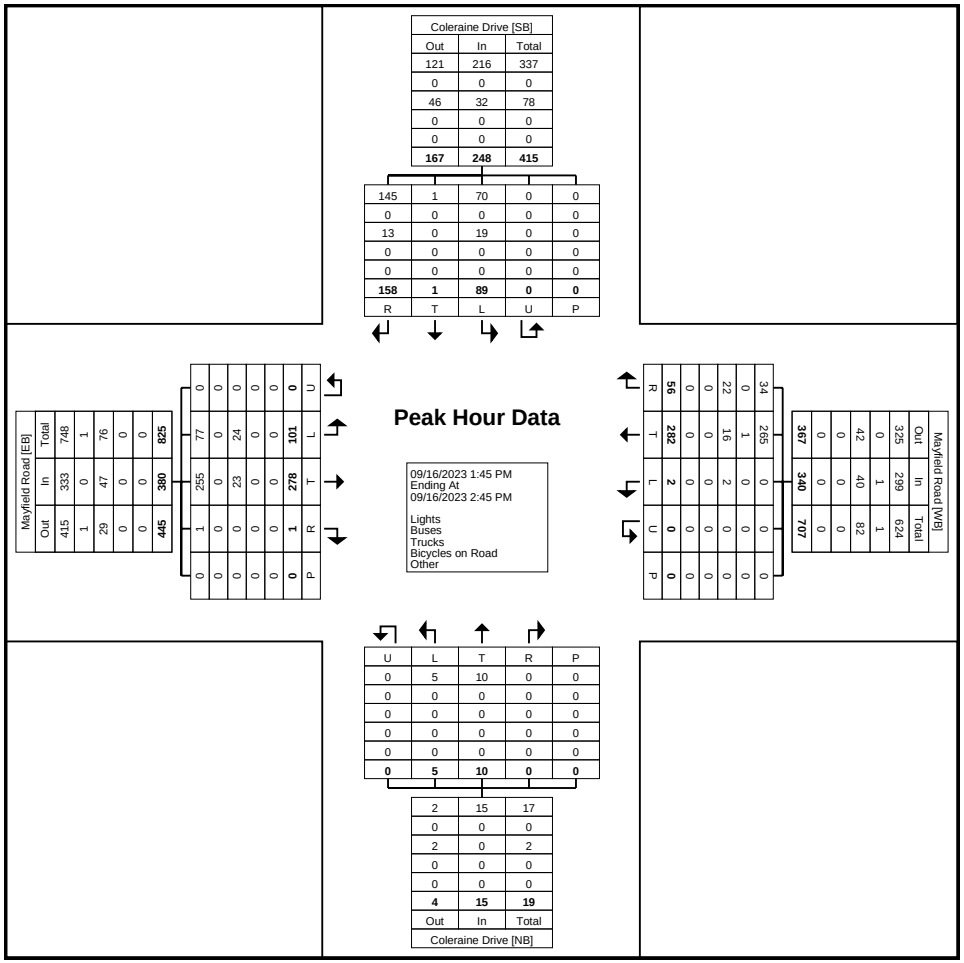
Turning Movement Peak Hour Data (1:45 PM)

Start Time	Coleraine Drive Southbound						Mayfield Road Westbound						Coleraine Drive Northbound						Mayfield Road Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
1:45 PM	36	1	19	0	0	56	13	75	0	0	0	88	0	2	0	0	0	2	0	77	29	0	0	106	252
2:00 PM	28	0	26	0	0	54	15	56	2	0	0	73	0	2	4	0	0	6	0	72	18	0	0	90	223
2:15 PM	37	0	26	0	0	63	14	71	0	0	0	85	0	4	1	0	0	5	1	78	27	0	0	106	259
2:30 PM	57	0	18	0	0	75	14	80	0	0	0	94	0	2	0	0	0	2	0	51	27	0	0	78	249
Total	158	1	89	0	0	248	56	282	2	0	0	340	0	10	5	0	0	15	1	278	101	0	0	380	983
Approach %	63.7	0.4	35.9	0.0	-	-	16.5	82.9	0.6	0.0	-	-	0.0	66.7	33.3	0.0	-	-	0.3	73.2	26.6	0.0	-	-	-
Total %	16.1	0.1	9.1	0.0	-	25.2	5.7	28.7	0.2	0.0	-	34.6	0.0	1.0	0.5	0.0	-	1.5	0.1	28.3	10.3	0.0	-	38.7	-
PHF	0.693	0.250	0.856	0.000	-	0.827	0.933	0.881	0.250	0.000	-	0.904	0.000	0.625	0.313	0.000	-	0.625	0.250	0.891	0.871	0.000	-	0.896	0.949
Lights	145	1	70	0	-	216	34	265	0	0	-	299	0	10	5	0	-	15	1	255	77	0	-	333	863
% Lights	91.8	100.0	78.7	-	-	87.1	60.7	94.0	0.0	-	-	87.9	-	100.0	100.0	-	-	100.0	100.0	91.7	76.2	-	-	87.6	87.8
Buses	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.3	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.1
Trucks	13	0	19	0	-	32	22	16	2	0	-	40	0	0	0	0	-	0	0	23	24	0	-	47	119
% Trucks	8.2	0.0	21.3	-	-	12.9	39.3	5.7	100.0	-	-	11.8	-	0.0	0.0	-	-	0.0	0.0	8.3	23.8	-	-	12.4	12.1
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	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (1:45 PM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023

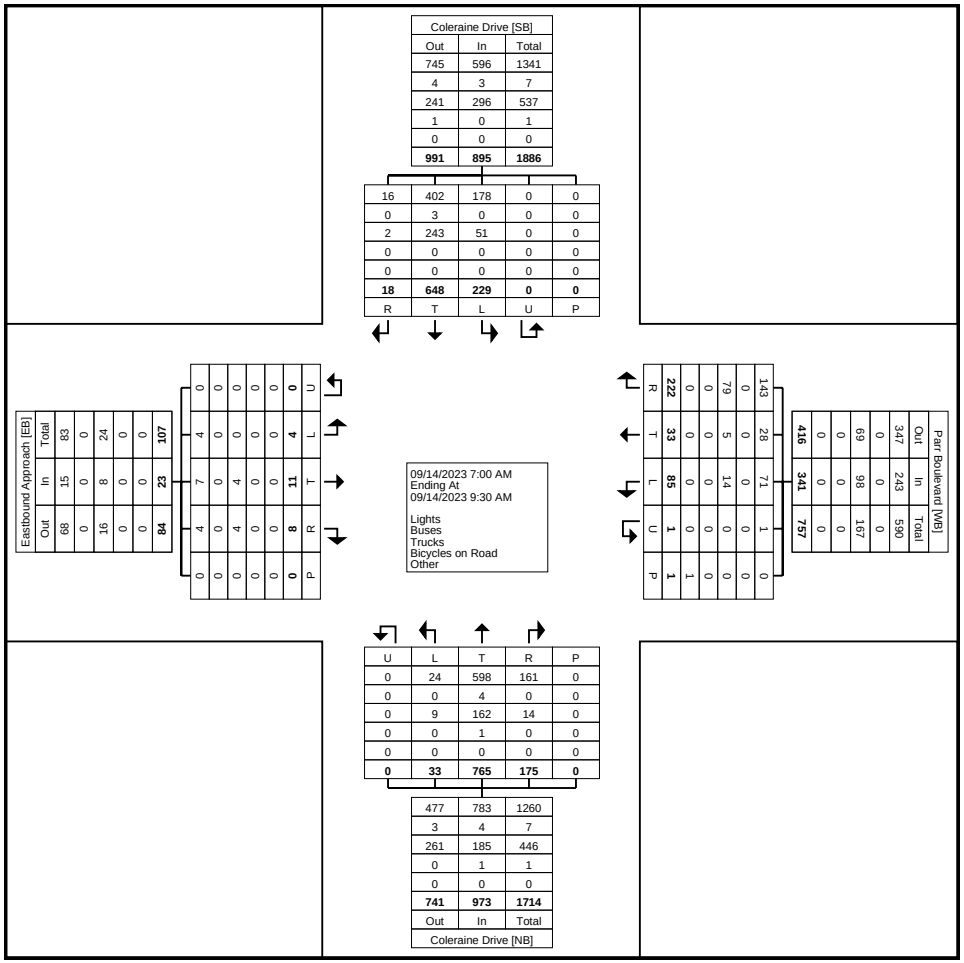
Turning Movement Data

Start Time	Coleraine Drive Southbound						Parr Boulevard Westbound						Coleraine Drive Northbound						Eastbound Approach Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	1	91	20	0	0	112	28	3	15	1	0	47	8	128	3	0	0	139	0	0	0	0	0	0	298
7:15 AM	1	69	12	0	0	82	42	0	9	0	0	51	11	134	4	0	0	149	0	0	0	0	0	0	282
7:30 AM	2	76	26	0	0	104	28	6	2	0	0	36	15	61	1	0	0	77	0	0	1	0	0	1	218
7:45 AM	1	65	28	0	0	94	21	2	6	0	0	29	17	81	3	0	0	101	1	1	0	0	0	2	226
Hourly Total	5	301	86	0	0	392	119	11	32	1	0	163	51	404	11	0	0	466	1	1	1	0	0	3	1024
8:00 AM	2	61	27	0	0	90	8	3	5	0	0	16	20	76	5	0	0	101	1	1	1	0	0	3	210
8:15 AM	1	50	26	0	0	77	21	5	10	0	0	36	31	60	2	0	0	93	1	2	0	0	0	3	209
8:30 AM	0	64	26	0	0	90	20	2	17	0	1	39	19	56	2	0	0	77	2	1	1	0	0	4	210
8:45 AM	4	58	24	0	0	86	20	4	13	0	0	37	22	64	4	0	0	90	2	2	0	0	0	4	217
Hourly Total	7	233	103	0	0	343	69	14	45	0	1	128	92	256	13	0	0	361	6	6	2	0	0	14	846
9:00 AM	4	42	16	0	0	62	18	2	6	0	0	26	22	63	7	0	0	92	1	2	1	0	0	4	184
9:15 AM	2	72	24	0	0	98	16	6	2	0	0	24	10	42	2	0	0	54	0	2	0	0	0	2	178
Grand Total	18	648	229	0	0	895	222	33	85	1	1	341	175	765	33	0	0	973	8	11	4	0	0	23	2232
Approach %	2.0	72.4	25.6	0.0	-	-	65.1	9.7	24.9	0.3	-	-	18.0	78.6	3.4	0.0	-	-	34.8	47.8	17.4	0.0	-	-	-
Total %	0.8	29.0	10.3	0.0	-	40.1	9.9	1.5	3.8	0.0	-	15.3	7.8	34.3	1.5	0.0	-	43.6	0.4	0.5	0.2	0.0	-	1.0	-
Lights	16	402	178	0	-	596	143	28	71	1	-	243	161	598	24	0	-	783	4	7	4	0	-	15	1637
% Lights	88.9	62.0	77.7	-	-	66.6	64.4	84.8	83.5	100.0	-	71.3	92.0	78.2	72.7	-	-	80.5	50.0	63.6	100.0	-	-	65.2	73.3
Buses	0	3	0	0	-	3	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	7
% Buses	0.0	0.5	0.0	-	-	0.3	0.0	0.0	0.0	0.0	-	0.0	0.0	0.5	0.0	-	-	0.4	0.0	0.0	0.0	-	-	0.0	0.3
Trucks	2	243	51	0	-	296	79	5	14	0	-	98	14	162	9	0	-	185	4	4	0	0	-	8	587
% Trucks	11.1	37.5	22.3	-	-	33.1	35.6	15.2	16.5	0.0	-	28.7	8.0	21.2	27.3	-	-	19.0	50.0	36.4	0.0	-	-	34.8	26.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023

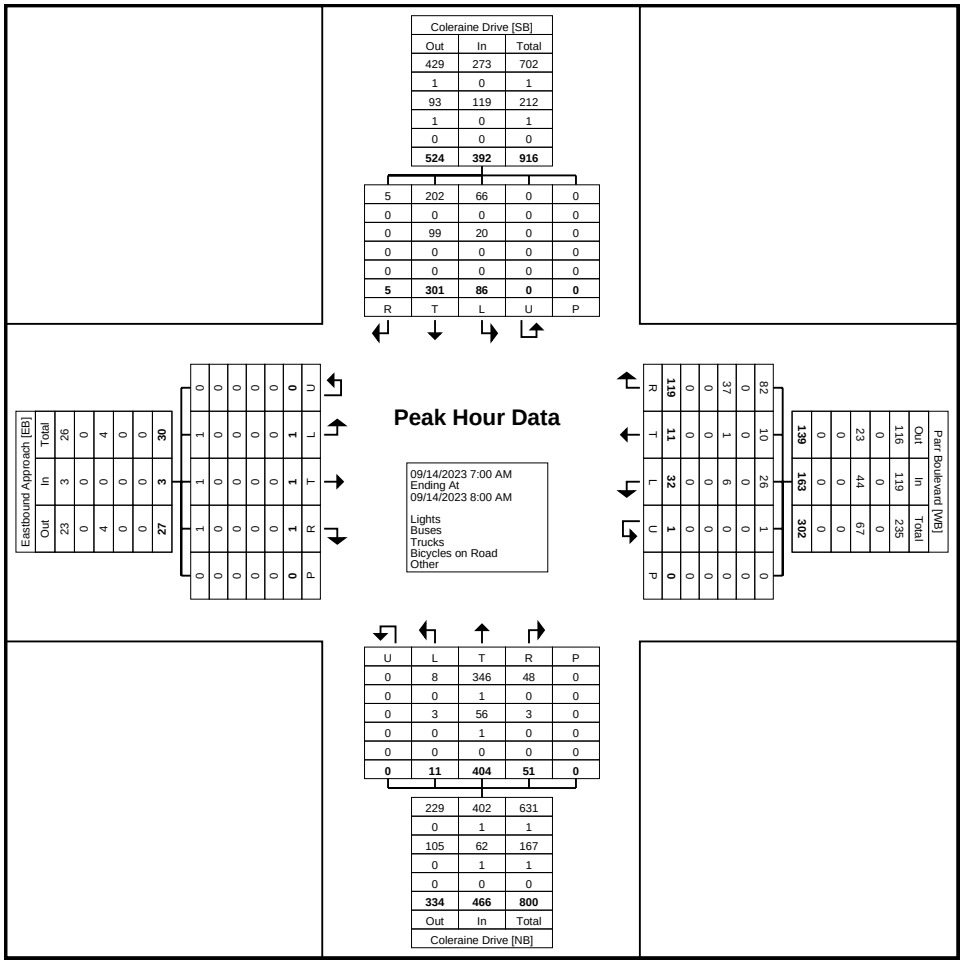
Turning Movement Peak Hour Data (7:00 AM)

Start Time	Coleraine Drive Southbound						Parr Boulevard Westbound						Coleraine Drive Northbound						Eastbound Approach Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	1	91	20	0	0	112	28	3	15	1	0	47	8	128	3	0	0	139	0	0	0	0	0	0	298
7:15 AM	1	69	12	0	0	82	42	0	9	0	0	51	11	134	4	0	0	149	0	0	0	0	0	0	282
7:30 AM	2	76	26	0	0	104	28	6	2	0	0	36	15	61	1	0	0	77	0	0	1	0	0	1	218
7:45 AM	1	65	28	0	0	94	21	2	6	0	0	29	17	81	3	0	0	101	1	1	0	0	0	2	226
Total	5	301	86	0	0	392	119	11	32	1	0	163	51	404	11	0	0	466	1	1	1	0	0	3	1024
Approach %	1.3	76.8	21.9	0.0	-	-	73.0	6.7	19.6	0.6	-	-	10.9	86.7	2.4	0.0	-	-	33.3	33.3	33.3	0.0	-	-	-
Total %	0.5	29.4	8.4	0.0	-	38.3	11.6	1.1	3.1	0.1	-	15.9	5.0	39.5	1.1	0.0	-	45.5	0.1	0.1	0.1	0.0	-	0.3	-
PHF	0.625	0.827	0.768	0.000	-	0.875	0.708	0.458	0.533	0.250	-	0.799	0.750	0.754	0.688	0.000	-	0.782	0.250	0.250	0.250	0.000	-	0.375	0.859
Lights	5	202	66	0	-	273	82	10	26	1	-	119	48	346	8	0	-	402	1	1	1	0	-	3	797
% Lights	100.0	67.1	76.7	-	-	69.6	68.9	90.9	81.3	100.0	-	73.0	94.1	85.6	72.7	-	-	86.3	100.0	100.0	100.0	-	-	100.0	77.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.1
Trucks	0	99	20	0	-	119	37	1	6	0	-	44	3	56	3	0	-	62	0	0	0	0	-	0	225
% Trucks	0.0	32.9	23.3	-	-	30.4	31.1	9.1	18.8	0.0	-	27.0	5.9	13.9	27.3	-	-	13.3	0.0	0.0	0.0	-	-	0.0	22.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Peak Hour Data Plot (7:00 AM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023

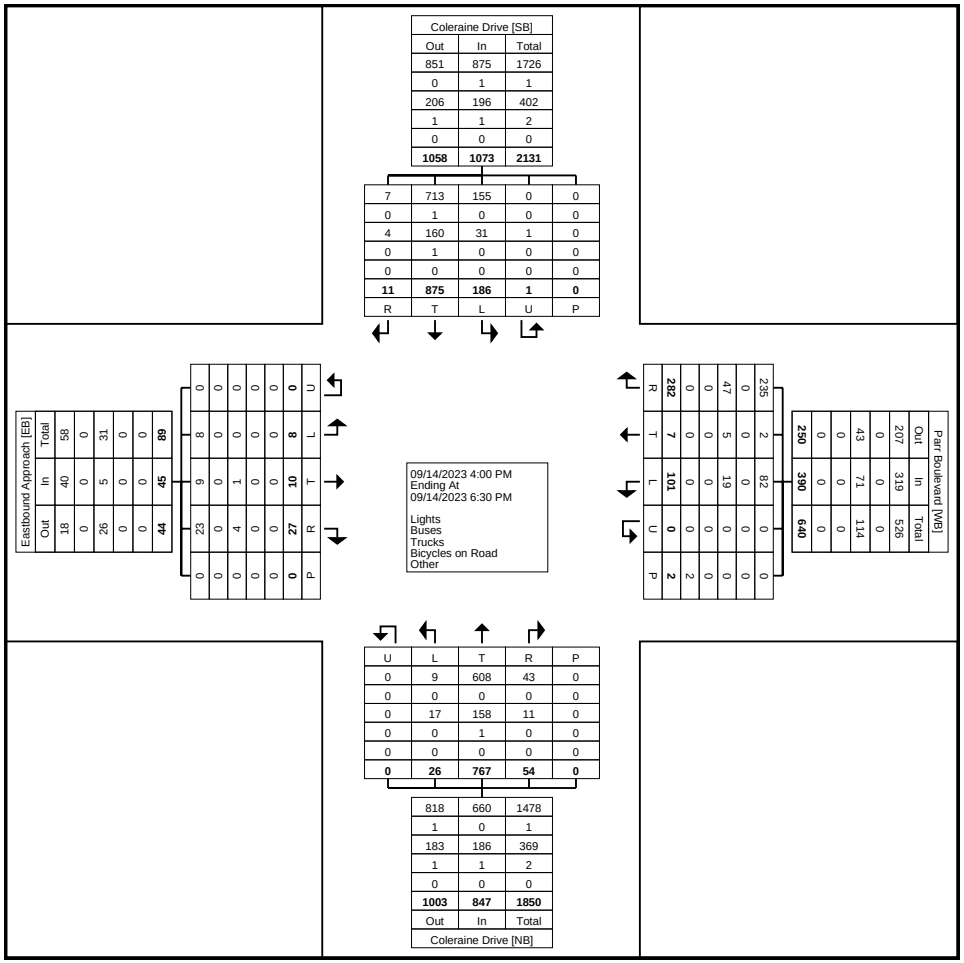
Turning Movement Data

Start Time	Coleraine Drive Southbound						Parr Boulevard Westbound						Coleraine Drive Northbound						Eastbound Approach Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:00 PM	0	96	18	0	0	114	33	0	13	0	0	46	5	62	5	0	0	72	3	2	2	0	0	7	239
4:15 PM	1	59	18	0	0	78	31	0	11	0	0	42	3	48	2	0	0	53	2	2	0	0	0	4	177
4:30 PM	2	72	11	0	0	85	23	0	12	0	0	35	5	62	0	0	0	67	4	0	1	0	0	5	192
4:45 PM	1	76	8	0	0	85	26	1	6	0	0	33	5	44	3	0	0	52	1	0	1	0	0	2	172
Hourly Total	4	303	55	0	0	362	113	1	42	0	0	156	18	216	10	0	0	244	10	4	4	0	0	18	780
5:00 PM	1	70	13	0	0	84	45	0	20	0	0	65	12	60	3	0	0	75	3	2	0	0	0	5	229
5:15 PM	2	77	10	1	0	90	29	1	11	0	2	41	4	47	0	0	0	51	1	1	1	0	0	3	185
5:30 PM	1	126	27	0	0	154	21	3	6	0	0	30	4	90	4	0	0	98	3	2	1	0	0	6	288
5:45 PM	1	75	10	0	0	86	23	1	5	0	0	29	5	135	2	0	0	142	7	1	0	0	0	8	265
Hourly Total	5	348	60	1	0	414	118	5	42	0	2	165	25	332	9	0	0	366	14	6	2	0	0	22	967
6:00 PM	2	152	53	0	0	207	20	0	9	0	0	29	8	110	2	0	0	120	1	0	2	0	0	3	359
6:15 PM	0	72	18	0	0	90	31	1	8	0	0	40	3	109	5	0	0	117	2	0	0	0	0	2	249
Grand Total	11	875	186	1	0	1073	282	7	101	0	2	390	54	767	26	0	0	847	27	10	8	0	0	45	2355
Approach %	1.0	81.5	17.3	0.1	-	-	72.3	1.8	25.9	0.0	-	-	6.4	90.6	3.1	0.0	-	-	60.0	22.2	17.8	0.0	-	-	-
Total %	0.5	37.2	7.9	0.0	-	45.6	12.0	0.3	4.3	0.0	-	16.6	2.3	32.6	1.1	0.0	-	36.0	1.1	0.4	0.3	0.0	-	1.9	-
Lights	7	713	155	0	-	875	235	2	82	0	-	319	43	608	9	0	-	660	23	9	8	0	-	40	1894
% Lights	63.6	81.5	83.3	0.0	-	81.5	83.3	28.6	81.2	-	-	81.8	79.6	79.3	34.6	-	-	77.9	85.2	90.0	100.0	-	-	88.9	80.4
Buses	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	4	160	31	1	-	196	47	5	19	0	-	71	11	158	17	0	-	186	4	1	0	0	-	5	458
% Trucks	36.4	18.3	16.7	100.0	-	18.3	16.7	71.4	18.8	-	-	18.2	20.4	20.6	65.4	-	-	22.0	14.8	10.0	0.0	-	-	11.1	19.4
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023

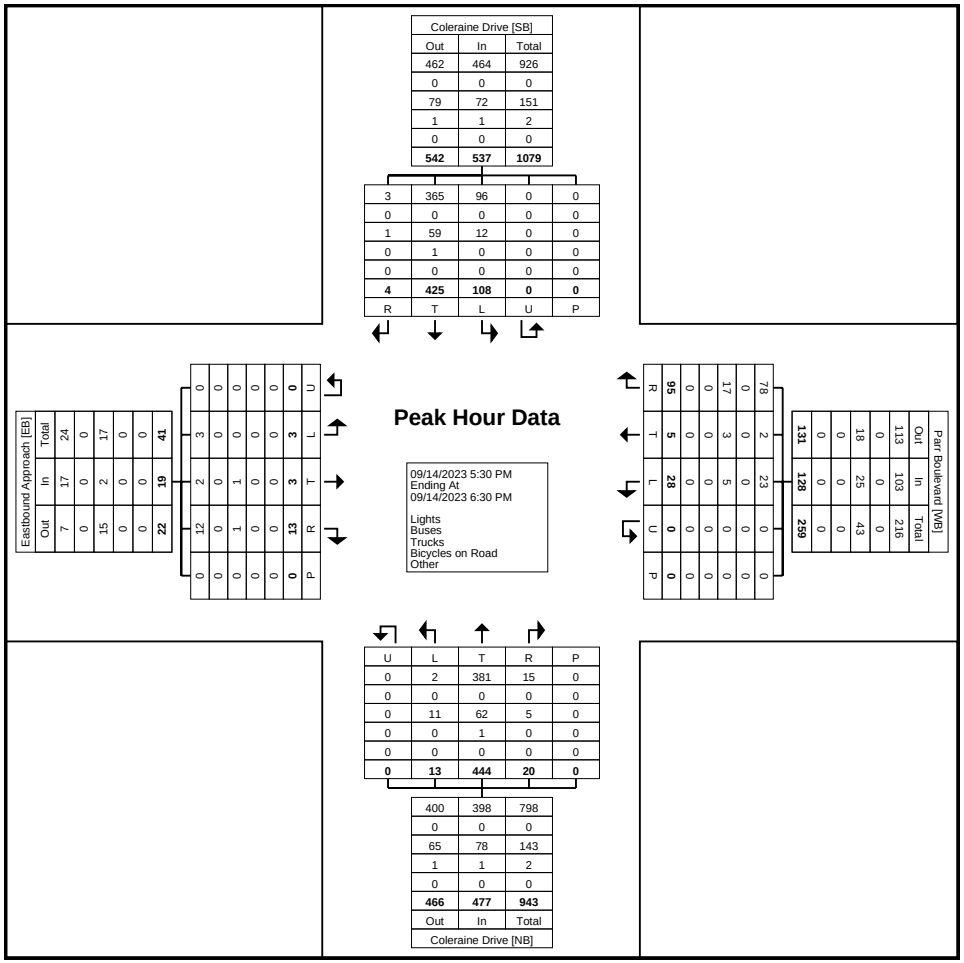
Turning Movement Peak Hour Data (5:30 PM)

Start Time	Coleraine Drive Southbound						Parr Boulevard Westbound						Coleraine Drive Northbound						Eastbound Approach Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
5:30 PM	1	126	27	0	0	154	21	3	6	0	0	30	4	90	4	0	0	98	3	2	1	0	0	6	288
5:45 PM	1	75	10	0	0	86	23	1	5	0	0	29	5	135	2	0	0	142	7	1	0	0	0	8	265
6:00 PM	2	152	53	0	0	207	20	0	9	0	0	29	8	110	2	0	0	120	1	0	2	0	0	3	359
6:15 PM	0	72	18	0	0	90	31	1	8	0	0	40	3	109	5	0	0	117	2	0	0	0	0	2	249
Total	4	425	108	0	0	537	95	5	28	0	0	128	20	444	13	0	0	477	13	3	3	0	0	19	1161
Approach %	0.7	79.1	20.1	0.0	-	-	74.2	3.9	21.9	0.0	-	-	4.2	93.1	2.7	0.0	-	-	68.4	15.8	15.8	0.0	-	-	-
Total %	0.3	36.6	9.3	0.0	-	46.3	8.2	0.4	2.4	0.0	-	11.0	1.7	38.2	1.1	0.0	-	41.1	1.1	0.3	0.3	0.0	-	1.6	-
PHF	0.500	0.699	0.509	0.000	-	0.649	0.766	0.417	0.778	0.000	-	0.800	0.625	0.822	0.650	0.000	-	0.840	0.464	0.375	0.375	0.000	-	0.594	0.808
Lights	3	365	96	0	-	464	78	2	23	0	-	103	15	381	2	0	-	398	12	2	3	0	-	17	982
% Lights	75.0	85.9	88.9	-	-	86.4	82.1	40.0	82.1	-	-	80.5	75.0	85.8	15.4	-	-	83.4	92.3	66.7	100.0	-	-	89.5	84.6
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	1	59	12	0	-	72	17	3	5	0	-	25	5	62	11	0	-	78	1	1	0	0	-	2	177
% Trucks	25.0	13.9	11.1	-	-	13.4	17.9	60.0	17.9	-	-	19.5	25.0	14.0	84.6	-	-	16.4	7.7	33.3	0.0	-	-	10.5	15.2
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.2
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Peak Hour Data Plot (5:30 PM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023

Turning Movement Data

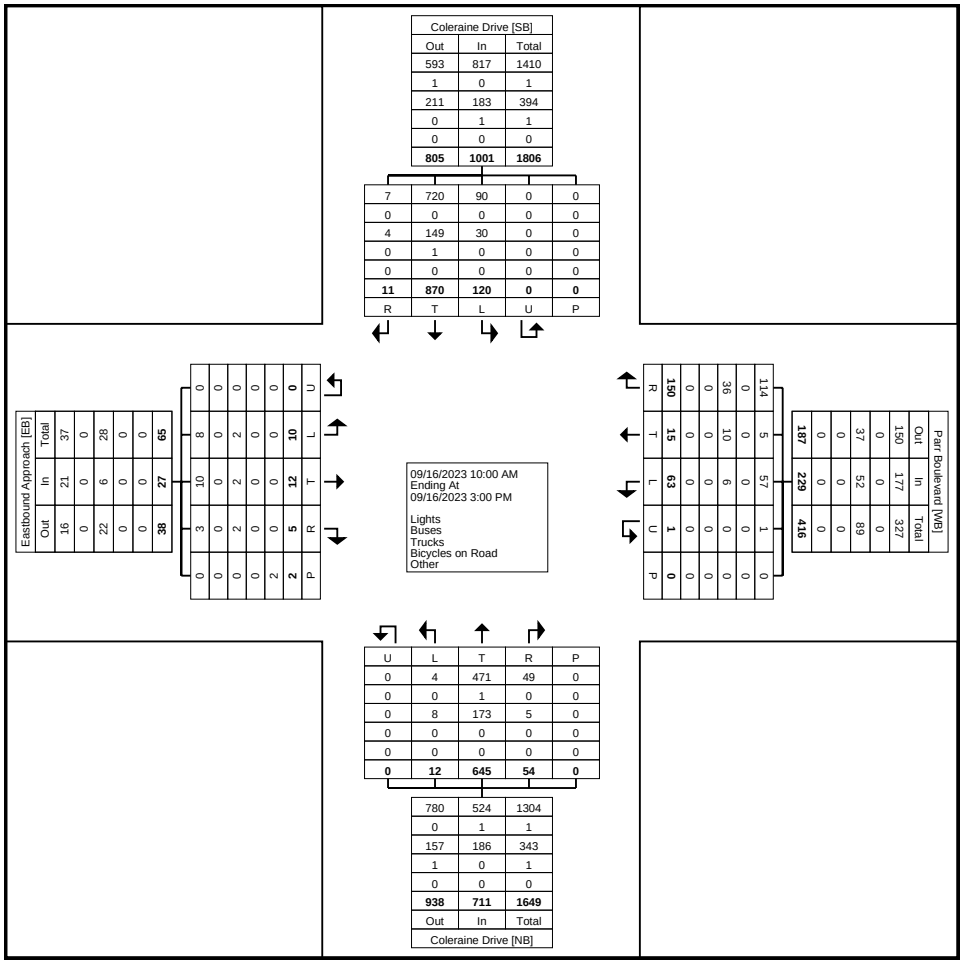
Start Time	Coleraine Drive Southbound						Parr Boulevard Westbound						Coleraine Drive Northbound						Eastbound Approach Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
10:00 AM	0	47	13	0	0	60	5	0	1	0	0	6	5	26	0	0	0	31	0	0	0	0	0	0	97
10:15 AM	0	45	6	0	0	51	4	1	1	0	0	6	1	27	0	0	0	28	0	0	0	0	1	0	85
10:30 AM	0	31	11	0	0	42	6	2	1	0	0	9	3	39	0	0	0	42	1	1	0	0	1	2	95
10:45 AM	0	38	4	0	0	42	13	2	2	0	0	17	2	26	2	0	0	30	0	1	0	0	0	1	90
Hourly Total	0	161	34	0	0	195	28	5	5	0	0	38	11	118	2	0	0	131	1	2	0	0	2	3	367
11:00 AM	2	42	5	0	0	49	4	1	2	0	0	7	2	21	1	0	0	24	1	1	0	0	0	2	82
11:15 AM	1	37	5	0	0	43	10	1	5	0	0	16	2	33	1	0	0	36	0	0	2	0	0	2	97
11:30 AM	0	41	5	0	0	46	12	3	2	0	0	17	5	29	0	0	0	34	0	3	0	0	0	3	100
11:45 AM	2	35	9	0	0	46	9	2	7	0	0	18	6	30	0	0	0	36	1	1	0	0	0	2	102
Hourly Total	5	155	24	0	0	184	35	7	16	0	0	58	15	113	2	0	0	130	2	5	2	0	0	9	381
12:00 PM	1	37	7	0	0	45	8	0	3	1	0	12	4	52	0	0	0	56	0	0	0	0	0	0	113
12:15 PM	2	47	4	0	0	53	4	0	6	0	0	10	8	25	1	0	0	34	0	1	1	0	0	2	99
12:30 PM	0	44	6	0	0	50	8	0	2	0	0	10	1	32	2	0	0	35	0	1	0	0	0	1	96
12:45 PM	0	39	0	0	0	39	6	1	3	0	0	10	2	38	1	0	0	41	0	0	0	0	0	0	90
Hourly Total	3	167	17	0	0	187	26	1	14	1	0	42	15	147	4	0	0	166	0	2	1	0	0	3	398
1:00 PM	0	53	11	0	0	64	10	0	5	0	0	15	2	35	2	0	0	39	0	0	2	0	0	2	120
1:15 PM	0	41	3	0	0	44	9	0	0	0	0	9	1	26	0	0	0	27	1	0	2	0	0	3	83
1:30 PM	1	50	3	0	0	54	8	1	5	0	0	14	3	36	1	0	0	40	0	0	2	0	0	2	110
1:45 PM	0	54	6	0	0	60	7	0	3	0	0	10	4	31	0	0	0	35	0	0	0	0	0	0	105
Hourly Total	1	198	23	0	0	222	34	1	13	0	0	48	10	128	3	0	0	141	1	0	6	0	0	7	418
2:00 PM	1	41	2	0	0	44	10	0	5	0	0	15	1	31	0	0	0	32	0	0	1	0	0	1	92
2:15 PM	0	47	8	0	0	55	7	1	7	0	0	15	1	32	1	0	0	34	0	1	0	0	0	1	105
2:30 PM	1	66	6	0	0	73	4	0	2	0	0	6	0	37	0	0	0	37	1	0	0	0	0	1	117
2:45 PM	0	35	6	0	0	41	6	0	1	0	0	7	1	39	0	0	0	40	0	2	0	0	0	2	90
Hourly Total	2	189	22	0	0	213	27	1	15	0	0	43	3	139	1	0	0	143	1	3	1	0	0	5	404
Grand Total	11	870	120	0	0	1001	150	15	63	1	0	229	54	645	12	0	0	711	5	12	10	0	2	27	1968
Approach %	1.1	86.9	12.0	0.0	-	-	65.5	6.6	27.5	0.4	-	-	7.6	90.7	1.7	0.0	-	-	18.5	44.4	37.0	0.0	-	-	-
Total %	0.6	44.2	6.1	0.0	-	50.9	7.6	0.8	3.2	0.1	-	11.6	2.7	32.8	0.6	0.0	-	36.1	0.3	0.6	0.5	0.0	-	1.4	-
Lights	7	720	90	0	-	817	114	5	57	1	-	177	49	471	4	0	-	524	3	10	8	0	-	21	1539
% Lights	63.6	82.8	75.0	-	-	81.6	76.0	33.3	90.5	100.0	-	77.3	90.7	73.0	33.3	-	-	73.7	60.0	83.3	80.0	-	-	77.8	78.2
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.2	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.1
Trucks	4	149	30	0	-	183	36	10	6	0	-	52	5	173	8	0	-	186	2	2	2	0	-	6	427
% Trucks	36.4	17.1	25.0	-	-	18.3	24.0	66.7	9.5	0.0	-	22.7	9.3	26.8	66.7	-	-	26.2	40.0	16.7	20.0	-	-	22.2	21.7
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1

% Bicycles on Road	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Data Plot

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625 Cochrane Drive

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905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-SAT
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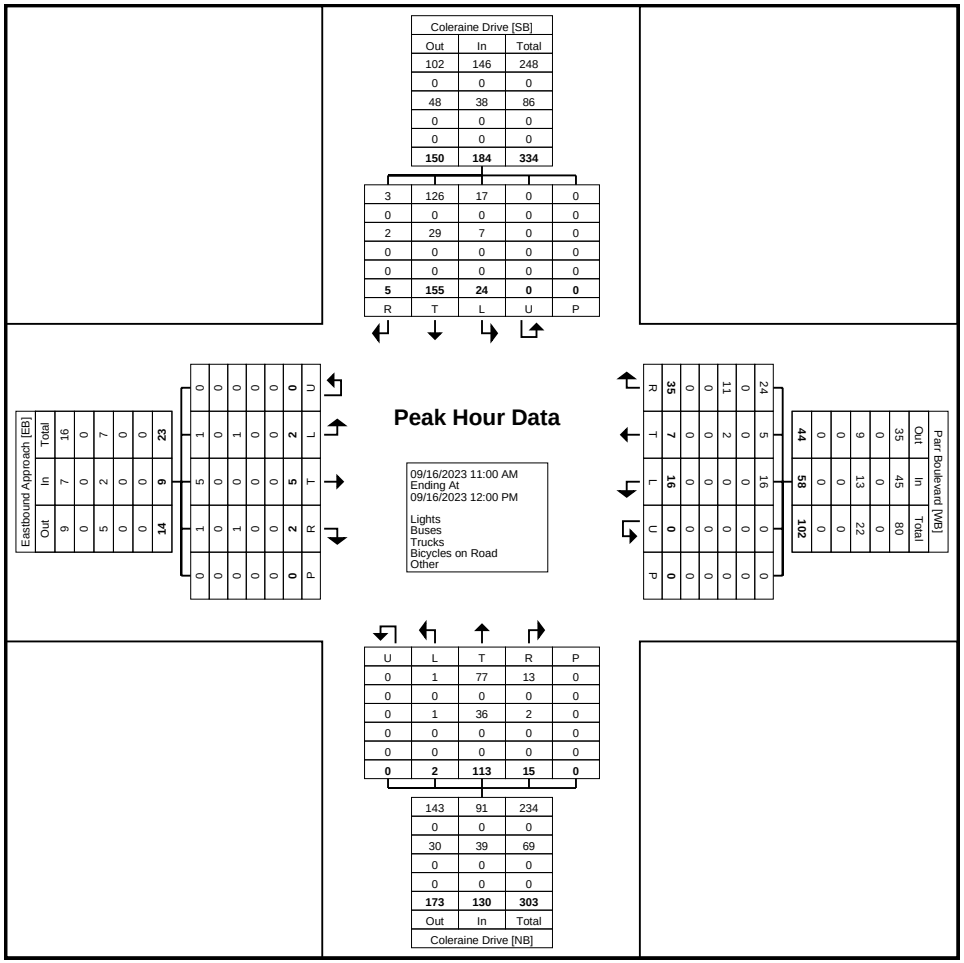
Turning Movement Peak Hour Data (11:00 AM)

Start Time	Coleraine Drive Southbound						Parr Boulevard Westbound						Coleraine Drive Northbound						Eastbound Approach Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	2	42	5	0	0	49	4	1	2	0	0	7	2	21	1	0	0	24	1	1	0	0	0	2	82
11:15 AM	1	37	5	0	0	43	10	1	5	0	0	16	2	33	1	0	0	36	0	0	2	0	0	2	97
11:30 AM	0	41	5	0	0	46	12	3	2	0	0	17	5	29	0	0	0	34	0	3	0	0	0	3	100
11:45 AM	2	35	9	0	0	46	9	2	7	0	0	18	6	30	0	0	0	36	1	1	0	0	0	2	102
Total	5	155	24	0	0	184	35	7	16	0	0	58	15	113	2	0	0	130	2	5	2	0	0	9	381
Approach %	2.7	84.2	13.0	0.0	-	-	60.3	12.1	27.6	0.0	-	-	11.5	86.9	1.5	0.0	-	-	22.2	55.6	22.2	0.0	-	-	-
Total %	1.3	40.7	6.3	0.0	-	48.3	9.2	1.8	4.2	0.0	-	15.2	3.9	29.7	0.5	0.0	-	34.1	0.5	1.3	0.5	0.0	-	2.4	-
PHF	0.625	0.923	0.667	0.000	-	0.939	0.729	0.583	0.571	0.000	-	0.806	0.625	0.856	0.500	0.000	-	0.903	0.500	0.417	0.250	0.000	-	0.750	0.934
Lights	3	126	17	0	-	146	24	5	16	0	-	45	13	77	1	0	-	91	1	5	1	0	-	7	289
% Lights	60.0	81.3	70.8	-	-	79.3	68.6	71.4	100.0	-	-	77.6	86.7	68.1	50.0	-	-	70.0	50.0	100.0	50.0	-	-	77.8	75.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	2	29	7	0	-	38	11	2	0	0	-	13	2	36	1	0	-	39	1	0	1	0	-	2	92
% Trucks	40.0	18.7	29.2	-	-	20.7	31.4	28.6	0.0	-	-	22.4	13.3	31.9	50.0	-	-	30.0	50.0	0.0	50.0	-	-	22.2	24.1
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	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
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Count Name: 24085_Coleraine Dr & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (11:00 AM)

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905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-SAT
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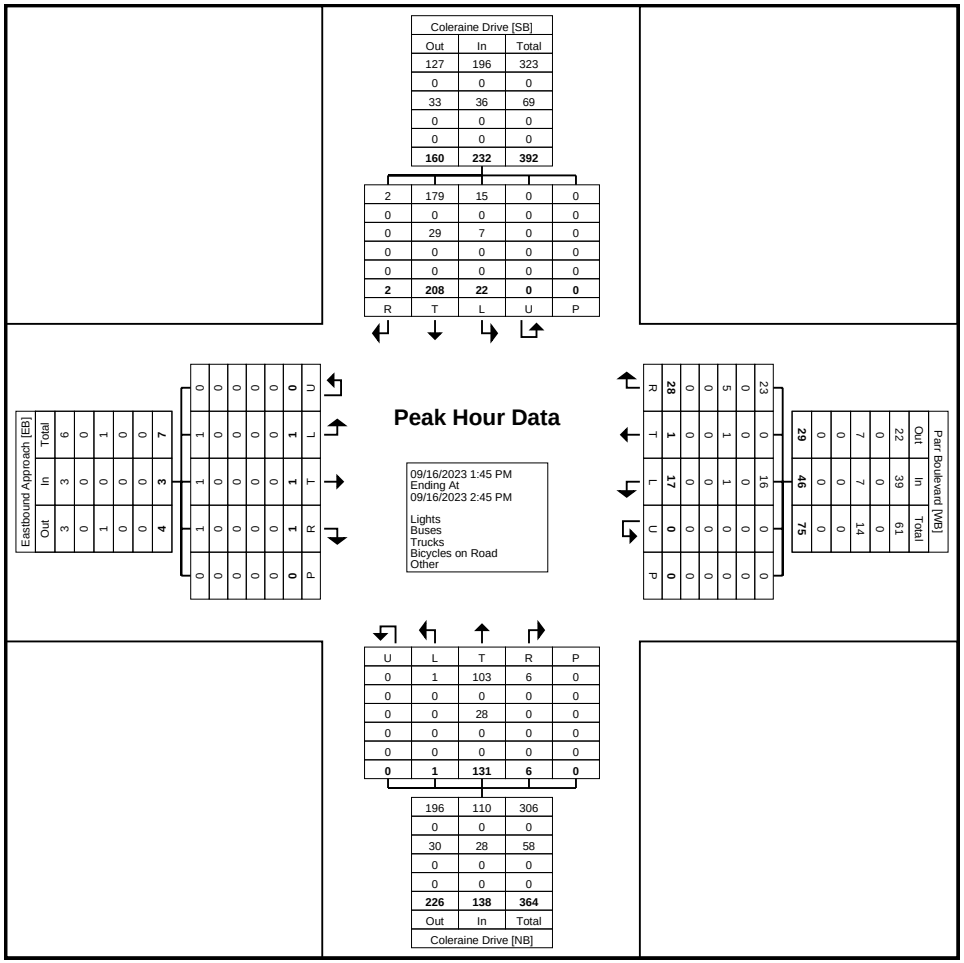
Turning Movement Peak Hour Data (1:45 PM)

Start Time	Coleraine Drive Southbound						Parr Boulevard Westbound						Coleraine Drive Northbound						Eastbound Approach Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
1:45 PM	0	54	6	0	0	60	7	0	3	0	0	10	4	31	0	0	0	35	0	0	0	0	0	0	105
2:00 PM	1	41	2	0	0	44	10	0	5	0	0	15	1	31	0	0	0	32	0	0	1	0	0	1	92
2:15 PM	0	47	8	0	0	55	7	1	7	0	0	15	1	32	1	0	0	34	0	1	0	0	0	1	105
2:30 PM	1	66	6	0	0	73	4	0	2	0	0	6	0	37	0	0	0	37	1	0	0	0	0	1	117
Total	2	208	22	0	0	232	28	1	17	0	0	46	6	131	1	0	0	138	1	1	1	0	0	3	419
Approach %	0.9	89.7	9.5	0.0	-	-	60.9	2.2	37.0	0.0	-	-	4.3	94.9	0.7	0.0	-	-	33.3	33.3	33.3	0.0	-	-	-
Total %	0.5	49.6	5.3	0.0	-	55.4	6.7	0.2	4.1	0.0	-	11.0	1.4	31.3	0.2	0.0	-	32.9	0.2	0.2	0.2	0.0	-	0.7	-
PHF	0.500	0.788	0.688	0.000	-	0.795	0.700	0.250	0.607	0.000	-	0.767	0.375	0.885	0.250	0.000	-	0.932	0.250	0.250	0.250	0.000	-	0.750	0.895
Lights	2	179	15	0	-	196	23	0	16	0	-	39	6	103	1	0	-	110	1	1	1	0	-	3	348
% Lights	100.0	86.1	68.2	-	-	84.5	82.1	0.0	94.1	-	-	84.8	100.0	78.6	100.0	-	-	79.7	100.0	100.0	100.0	-	-	100.0	83.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	29	7	0	-	36	5	1	1	0	-	7	0	28	0	0	-	28	0	0	0	0	-	0	71
% Trucks	0.0	13.9	31.8	-	-	15.5	17.9	100.0	5.9	-	-	15.2	0.0	21.4	0.0	-	-	20.3	0.0	0.0	0.0	-	-	0.0	16.9
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	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Coleraine Dr & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (1:45 PM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023

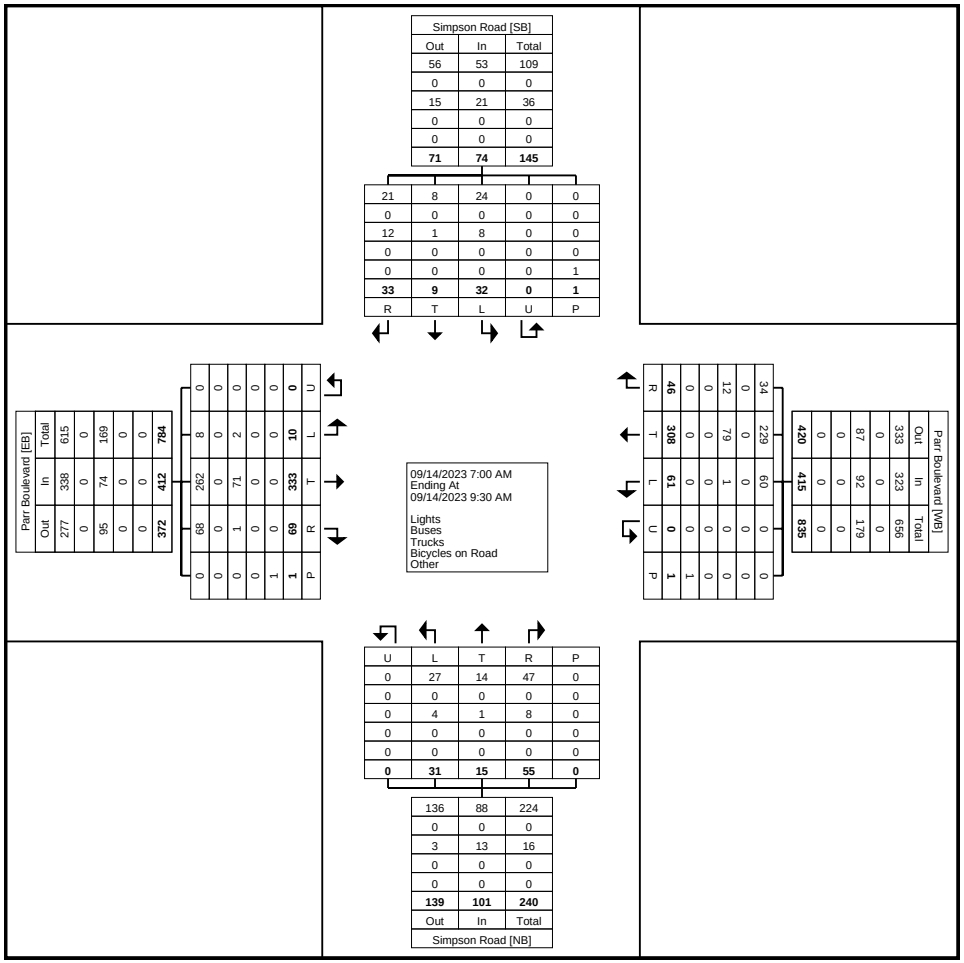
Turning Movement Data

Start Time	Simpson Road Southbound						Parr Boulevard Westbound						Simpson Road Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	3	1	2	0	0	6	4	37	1	0	1	42	1	0	1	0	0	2	3	27	1	0	0	31	81
7:15 AM	4	0	1	0	0	5	4	47	2	0	0	53	0	2	0	0	0	2	3	14	1	0	0	18	78
7:30 AM	4	0	1	0	0	5	2	34	1	0	0	37	1	0	1	0	0	2	4	39	0	0	1	43	87
7:45 AM	3	2	3	0	0	8	2	25	8	0	0	35	2	2	3	0	0	7	5	37	1	0	0	43	93
Hourly Total	14	3	7	0	0	24	12	143	12	0	1	167	4	4	5	0	0	13	15	117	3	0	1	135	339
8:00 AM	3	1	3	0	0	7	5	16	6	0	0	27	0	1	2	0	0	3	11	39	1	0	0	51	88
8:15 AM	5	1	3	0	0	9	4	30	11	0	0	45	4	2	3	0	0	9	17	37	1	0	0	55	118
8:30 AM	4	2	2	0	1	8	3	30	16	0	0	49	27	6	12	0	0	45	10	33	1	0	0	44	146
8:45 AM	1	1	6	0	0	8	7	35	3	0	0	45	10	1	5	0	0	16	9	36	2	0	0	47	116
Hourly Total	13	5	14	0	1	32	19	111	36	0	0	166	41	10	22	0	0	73	47	145	5	0	0	197	468
9:00 AM	2	1	5	0	0	8	7	31	11	0	0	49	6	0	1	0	0	7	5	36	0	0	0	41	105
9:15 AM	4	0	6	0	0	10	8	23	2	0	0	33	4	1	3	0	0	8	2	35	2	0	0	39	90
Grand Total	33	9	32	0	1	74	46	308	61	0	1	415	55	15	31	0	0	101	69	333	10	0	1	412	1002
Approach %	44.6	12.2	43.2	0.0	-	-	11.1	74.2	14.7	0.0	-	-	54.5	14.9	30.7	0.0	-	-	16.7	80.8	2.4	0.0	-	-	-
Total %	3.3	0.9	3.2	0.0	-	7.4	4.6	30.7	6.1	0.0	-	41.4	5.5	1.5	3.1	0.0	-	10.1	6.9	33.2	1.0	0.0	-	41.1	-
Lights	21	8	24	0	-	53	34	229	60	0	-	323	47	14	27	0	-	88	68	262	8	0	-	338	802
% Lights	63.6	88.9	75.0	-	-	71.6	73.9	74.4	98.4	-	-	77.8	85.5	93.3	87.1	-	-	87.1	98.6	78.7	80.0	-	-	82.0	80.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	12	1	8	0	-	21	12	79	1	0	-	92	8	1	4	0	-	13	1	71	2	0	-	74	200
% Trucks	36.4	11.1	25.0	-	-	28.4	26.1	25.6	1.6	-	-	22.2	14.5	6.7	12.9	-	-	12.9	1.4	21.3	20.0	-	-	18.0	20.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023

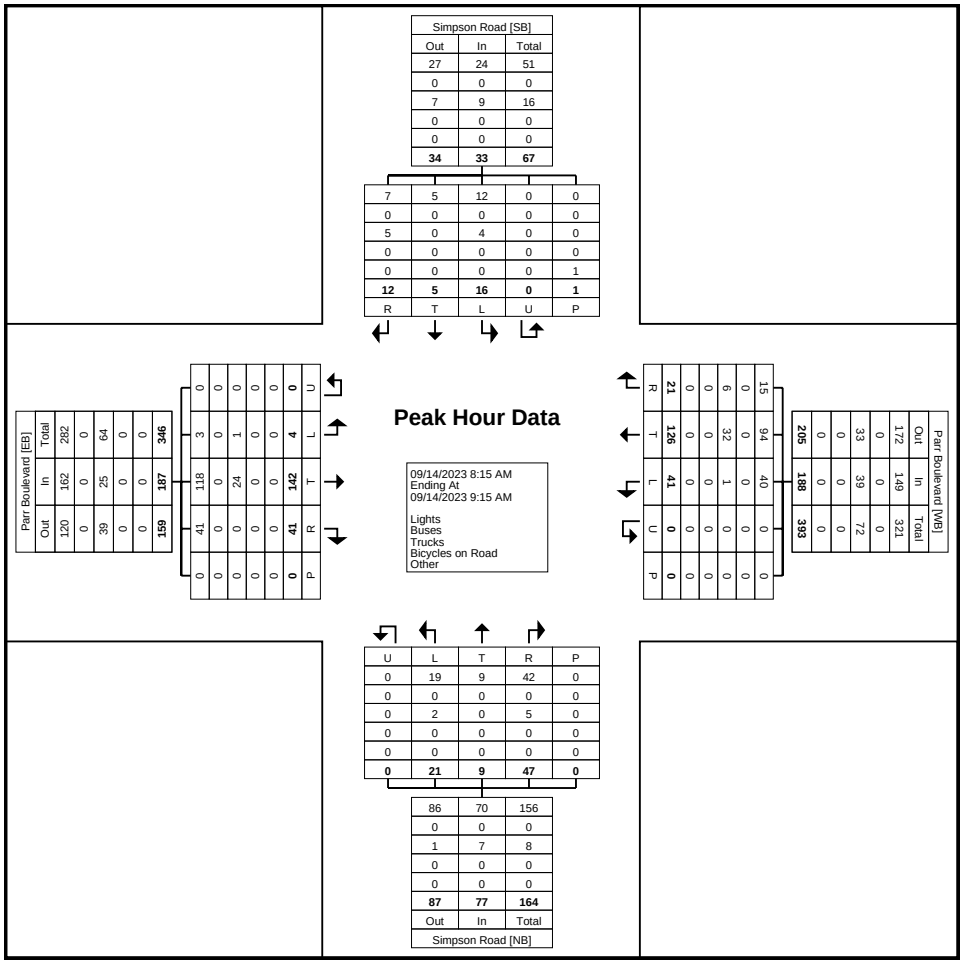
Turning Movement Peak Hour Data (8:15 AM)

Start Time	Simpson Road Southbound						Parr Boulevard Westbound						Simpson Road Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
8:15 AM	5	1	3	0	0	9	4	30	11	0	0	45	4	2	3	0	0	9	17	37	1	0	0	55	118
8:30 AM	4	2	2	0	1	8	3	30	16	0	0	49	27	6	12	0	0	45	10	33	1	0	0	44	146
8:45 AM	1	1	6	0	0	8	7	35	3	0	0	45	10	1	5	0	0	16	9	36	2	0	0	47	116
9:00 AM	2	1	5	0	0	8	7	31	11	0	0	49	6	0	1	0	0	7	5	36	0	0	0	41	105
Total	12	5	16	0	1	33	21	126	41	0	0	188	47	9	21	0	0	77	41	142	4	0	0	187	485
Approach %	36.4	15.2	48.5	0.0	-	-	11.2	67.0	21.8	0.0	-	-	61.0	11.7	27.3	0.0	-	-	21.9	75.9	2.1	0.0	-	-	-
Total %	2.5	1.0	3.3	0.0	-	6.8	4.3	26.0	8.5	0.0	-	38.8	9.7	1.9	4.3	0.0	-	15.9	8.5	29.3	0.8	0.0	-	38.6	-
PHF	0.600	0.625	0.667	0.000	-	0.917	0.750	0.900	0.641	0.000	-	0.959	0.435	0.375	0.438	0.000	-	0.428	0.603	0.959	0.500	0.000	-	0.850	0.830
Lights	7	5	12	0	-	24	15	94	40	0	-	149	42	9	19	0	-	70	41	118	3	0	-	162	405
% Lights	58.3	100.0	75.0	-	-	72.7	71.4	74.6	97.6	-	-	79.3	89.4	100.0	90.5	-	-	90.9	100.0	83.1	75.0	-	-	86.6	83.5
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	5	0	4	0	-	9	6	32	1	0	-	39	5	0	2	0	-	7	0	24	1	0	-	25	80
% Trucks	41.7	0.0	25.0	-	-	27.3	28.6	25.4	2.4	-	-	20.7	10.6	0.0	9.5	-	-	9.1	0.0	16.9	25.0	-	-	13.4	16.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Peak Hour Data Plot (8:15 AM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023

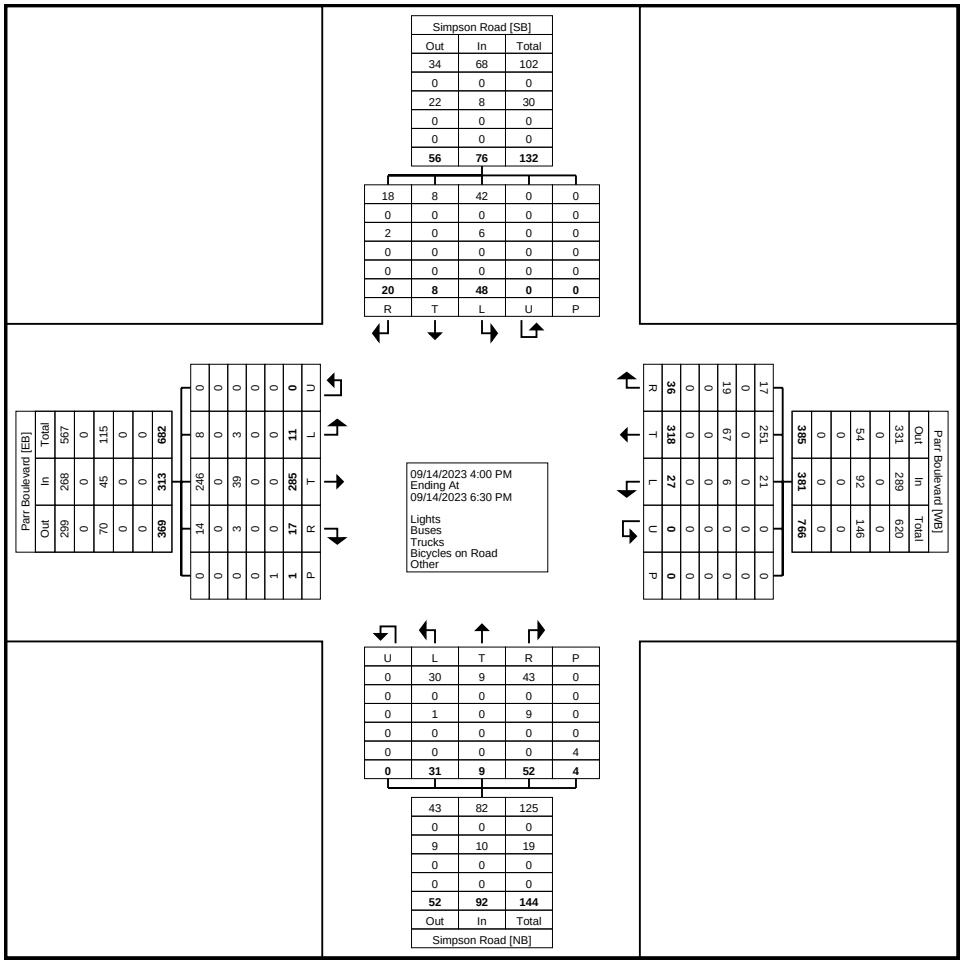
Turning Movement Data

Start Time	Simpson Road Southbound						Parr Boulevard Westbound						Simpson Road Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:00 PM	2	2	6	0	0	10	5	38	2	0	0	45	10	2	2	0	2	14	3	35	1	0	1	39	108
4:15 PM	2	3	5	0	0	10	1	31	7	0	0	39	9	0	2	0	0	11	0	25	0	0	0	25	85
4:30 PM	0	2	1	0	0	3	5	30	4	0	0	39	12	3	5	0	0	20	0	23	2	0	0	25	87
4:45 PM	2	1	6	0	0	9	4	30	2	0	0	36	3	2	1	0	0	6	1	17	1	0	0	19	70
Hourly Total	6	8	18	0	0	32	15	129	15	0	0	159	34	7	10	0	2	51	4	100	4	0	1	108	350
5:00 PM	3	0	6	0	0	9	2	45	1	0	0	48	9	2	12	0	0	23	4	30	2	0	0	36	116
5:15 PM	2	0	3	0	0	5	5	34	4	0	0	43	1	0	1	0	0	2	1	20	1	0	0	22	72
5:30 PM	2	0	9	0	0	11	4	24	0	0	0	28	4	0	3	0	0	7	2	40	2	0	0	44	90
5:45 PM	1	0	3	0	0	4	4	29	3	0	0	36	1	0	2	0	0	3	2	13	1	0	0	16	59
Hourly Total	8	0	21	0	0	29	15	132	8	0	0	155	15	2	18	0	0	35	9	103	6	0	0	118	337
6:00 PM	4	0	5	0	0	9	2	27	3	0	0	32	2	0	2	0	2	4	2	64	1	0	0	67	112
6:15 PM	2	0	4	0	0	6	4	30	1	0	0	35	1	0	1	0	0	2	2	18	0	0	0	20	63
Grand Total	20	8	48	0	0	76	36	318	27	0	0	381	52	9	31	0	4	92	17	285	11	0	1	313	862
Approach %	26.3	10.5	63.2	0.0	-	-	9.4	83.5	7.1	0.0	-	-	56.5	9.8	33.7	0.0	-	-	5.4	91.1	3.5	0.0	-	-	-
Total %	2.3	0.9	5.6	0.0	-	8.8	4.2	36.9	3.1	0.0	-	44.2	6.0	1.0	3.6	0.0	-	10.7	2.0	33.1	1.3	0.0	-	36.3	-
Lights	18	8	42	0	-	68	17	251	21	0	-	289	43	9	30	0	-	82	14	246	8	0	-	268	707
% Lights	90.0	100.0	87.5	-	-	89.5	47.2	78.9	77.8	-	-	75.9	82.7	100.0	96.8	-	-	89.1	82.4	86.3	72.7	-	-	85.6	82.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	2	0	6	0	-	8	19	67	6	0	-	92	9	0	1	0	-	10	3	39	3	0	-	45	155
% Trucks	10.0	0.0	12.5	-	-	10.5	52.8	21.1	22.2	-	-	24.1	17.3	0.0	3.2	-	-	10.9	17.6	13.7	27.3	-	-	14.4	18.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023

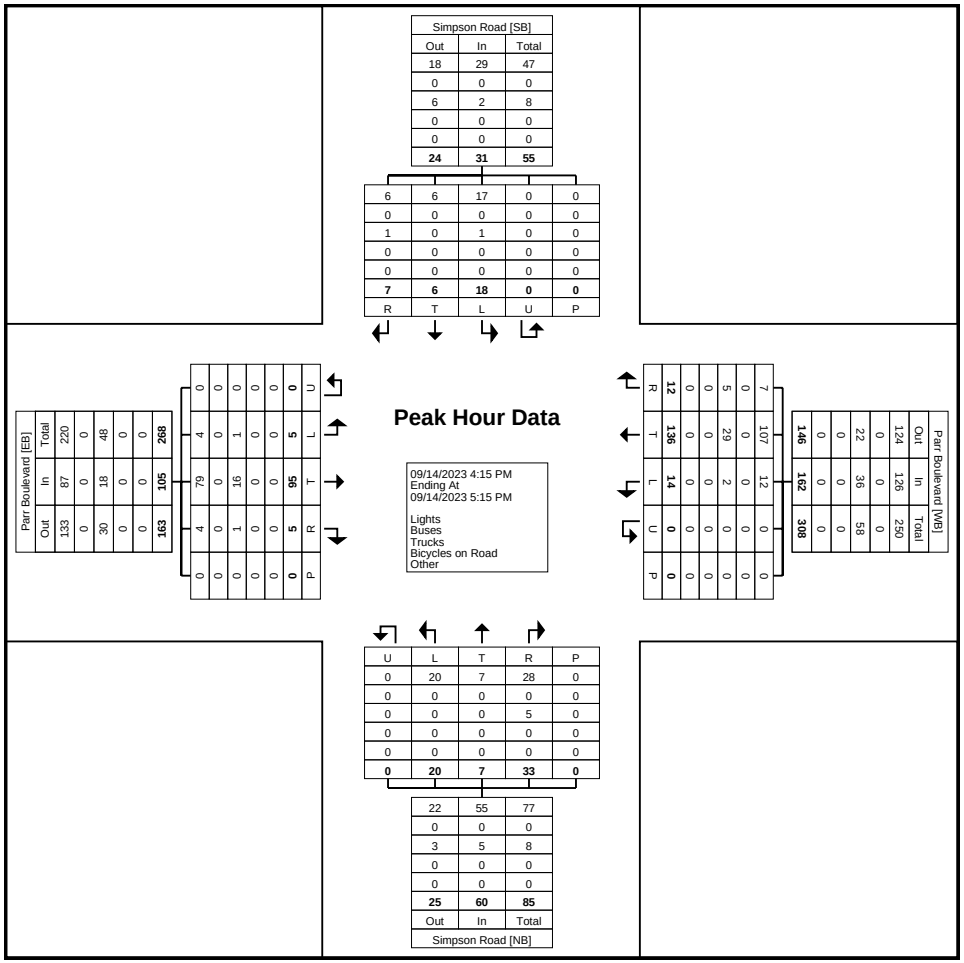
Turning Movement Peak Hour Data (4:15 PM)

Start Time	Simpson Road Southbound						Parr Boulevard Westbound						Simpson Road Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:15 PM	2	3	5	0	0	10	1	31	7	0	0	39	9	0	2	0	0	11	0	25	0	0	0	25	85
4:30 PM	0	2	1	0	0	3	5	30	4	0	0	39	12	3	5	0	0	20	0	23	2	0	0	25	87
4:45 PM	2	1	6	0	0	9	4	30	2	0	0	36	3	2	1	0	0	6	1	17	1	0	0	19	70
5:00 PM	3	0	6	0	0	9	2	45	1	0	0	48	9	2	12	0	0	23	4	30	2	0	0	36	116
Total	7	6	18	0	0	31	12	136	14	0	0	162	33	7	20	0	0	60	5	95	5	0	0	105	358
Approach %	22.6	19.4	58.1	0.0	-	-	7.4	84.0	8.6	0.0	-	-	55.0	11.7	33.3	0.0	-	-	4.8	90.5	4.8	0.0	-	-	-
Total %	2.0	1.7	5.0	0.0	-	8.7	3.4	38.0	3.9	0.0	-	45.3	9.2	2.0	5.6	0.0	-	16.8	1.4	26.5	1.4	0.0	-	29.3	-
PHF	0.583	0.500	0.750	0.000	-	0.775	0.600	0.756	0.500	0.000	-	0.844	0.688	0.583	0.417	0.000	-	0.652	0.313	0.792	0.625	0.000	-	0.729	0.772
Lights	6	6	17	0	-	29	7	107	12	0	-	126	28	7	20	0	-	55	4	79	4	0	-	87	297
% Lights	85.7	100.0	94.4	-	-	93.5	58.3	78.7	85.7	-	-	77.8	84.8	100.0	100.0	-	-	91.7	80.0	83.2	80.0	-	-	82.9	83.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	1	0	1	0	-	2	5	29	2	0	-	36	5	0	0	0	-	5	1	16	1	0	-	18	61
% Trucks	14.3	0.0	5.6	-	-	6.5	41.7	21.3	14.3	-	-	22.2	15.2	0.0	0.0	-	-	8.3	20.0	16.8	20.0	-	-	17.1	17.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Peak Hour Data Plot (4:15 PM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023

Turning Movement Data

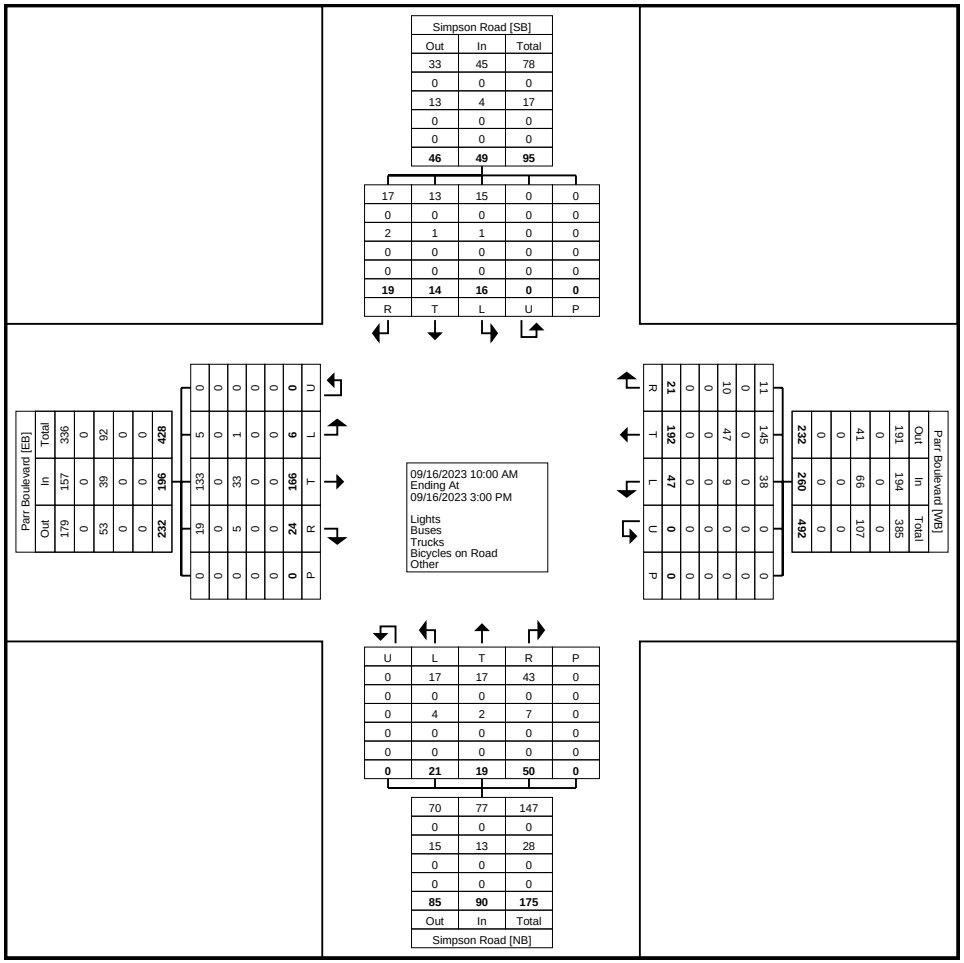
Start Time	Simpson Road Southbound						Parr Boulevard Westbound						Simpson Road Northbound						Parr Boulevard Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
10:00 AM	1	1	2	0	0	4	0	4	1	0	0	5	5	0	0	0	0	5	3	16	2	0	0	21	35
10:15 AM	1	1	1	0	0	3	0	7	5	0	0	12	2	3	0	0	0	5	2	6	0	0	0	8	28
10:30 AM	1	1	2	0	0	4	3	5	3	0	0	11	2	1	1	0	0	4	1	14	0	0	0	15	34
10:45 AM	0	1	1	0	0	2	3	13	2	0	0	18	3	1	4	0	0	8	1	7	0	0	0	8	36
Hourly Total	3	4	6	0	0	13	6	29	11	0	0	46	12	5	5	0	0	22	7	43	2	0	0	52	133
11:00 AM	0	0	0	0	0	0	1	7	4	0	0	12	3	2	0	0	0	5	1	7	1	0	0	9	26
11:15 AM	2	0	0	0	0	2	1	14	4	0	0	19	2	0	3	0	0	5	0	7	0	0	0	7	33
11:30 AM	0	0	0	0	0	0	1	13	4	0	0	18	3	1	2	0	0	6	2	11	1	0	0	14	38
11:45 AM	1	1	0	0	0	2	2	15	1	0	0	18	3	0	2	0	0	5	2	13	1	0	0	16	41
Hourly Total	3	1	0	0	0	4	5	49	13	0	0	67	11	3	7	0	0	21	5	38	3	0	0	46	138
12:00 PM	2	0	0	0	0	2	1	9	3	0	0	13	2	1	1	0	0	4	3	9	0	0	0	12	31
12:15 PM	1	3	1	0	0	5	1	9	2	0	0	12	3	3	3	0	0	9	3	9	1	0	0	13	39
12:30 PM	0	2	1	0	0	3	0	9	4	0	0	13	7	1	0	0	0	8	3	6	0	0	0	9	33
12:45 PM	0	0	1	0	0	1	2	10	5	0	0	17	2	1	0	0	0	3	0	3	0	0	0	3	24
Hourly Total	3	5	3	0	0	11	4	37	14	0	0	55	14	6	4	0	0	24	9	27	1	0	0	37	127
1:00 PM	1	1	0	0	0	2	0	15	2	0	0	17	4	1	0	0	0	5	1	12	0	0	0	13	37
1:15 PM	1	1	0	0	0	2	1	10	3	0	0	14	1	0	0	0	0	1	0	4	0	0	0	4	21
1:30 PM	2	0	0	0	0	2	1	9	1	0	0	11	2	3	1	0	0	6	0	6	0	0	0	6	25
1:45 PM	1	0	3	0	0	4	1	9	0	0	0	10	1	0	1	0	0	2	1	9	0	0	0	10	26
Hourly Total	5	2	3	0	0	10	3	43	6	0	0	52	8	4	2	0	0	14	2	31	0	0	0	33	109
2:00 PM	2	1	1	0	0	4	1	11	1	0	0	13	1	1	1	0	0	3	0	4	0	0	0	4	24
2:15 PM	1	1	1	0	0	3	1	11	1	0	0	13	2	0	2	0	0	4	0	10	0	0	0	10	30
2:30 PM	1	0	2	0	0	3	0	5	1	0	0	6	0	0	0	0	0	0	0	6	0	0	0	6	15
2:45 PM	1	0	0	0	0	1	1	7	0	0	0	8	2	0	0	0	0	2	1	7	0	0	0	8	19
Hourly Total	5	2	4	0	0	11	3	34	3	0	0	40	5	1	3	0	0	9	1	27	0	0	0	28	88
Grand Total	19	14	16	0	0	49	21	192	47	0	0	260	50	19	21	0	0	90	24	166	6	0	0	196	595
Approach %	38.8	28.6	32.7	0.0	-	-	8.1	73.8	18.1	0.0	-	-	55.6	21.1	23.3	0.0	-	-	12.2	84.7	3.1	0.0	-	-	-
Total %	3.2	2.4	2.7	0.0	-	8.2	3.5	32.3	7.9	0.0	-	43.7	8.4	3.2	3.5	0.0	-	15.1	4.0	27.9	1.0	0.0	-	32.9	-
Lights	17	13	15	0	-	45	11	145	38	0	-	194	43	17	17	0	-	77	19	133	5	0	-	157	473
% Lights	89.5	92.9	93.8	-	-	91.8	52.4	75.5	80.9	-	-	74.6	86.0	89.5	81.0	-	-	85.6	79.2	80.1	83.3	-	-	80.1	79.5
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	2	1	1	0	-	4	10	47	9	0	-	66	7	2	4	0	-	13	5	33	1	0	-	39	122
% Trucks	10.5	7.1	6.3	-	-	8.2	47.6	24.5	19.1	-	-	25.4	14.0	10.5	19.0	-	-	14.4	20.8	19.9	16.7	-	-	19.9	20.5
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	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023

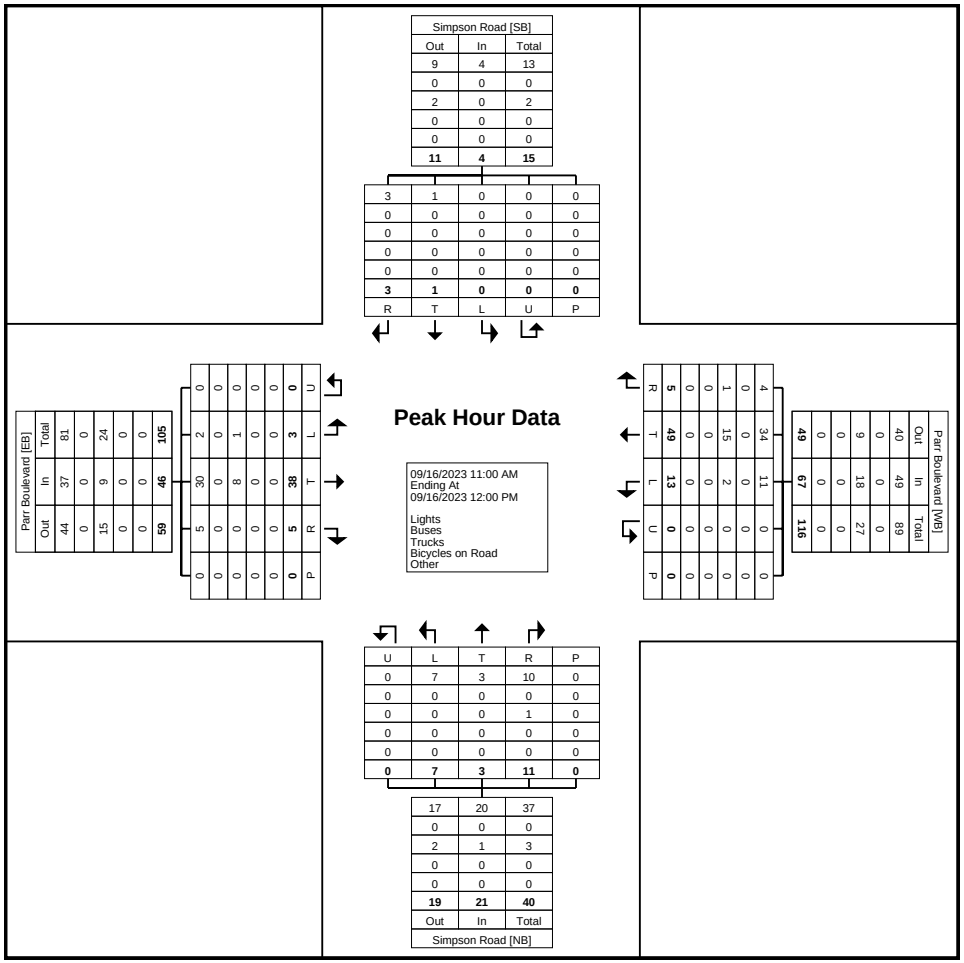
Turning Movement Peak Hour Data (11:00 AM)

Start Time	Simpson Road Southbound						Parr Boulevard Westbound						Simpson Road Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	0	0	0	0	0	0	1	7	4	0	0	12	3	2	0	0	0	5	1	7	1	0	0	9	26
11:15 AM	2	0	0	0	0	2	1	14	4	0	0	19	2	0	3	0	0	5	0	7	0	0	0	7	33
11:30 AM	0	0	0	0	0	0	1	13	4	0	0	18	3	1	2	0	0	6	2	11	1	0	0	14	38
11:45 AM	1	1	0	0	0	2	2	15	1	0	0	18	3	0	2	0	0	5	2	13	1	0	0	16	41
Total	3	1	0	0	0	4	5	49	13	0	0	67	11	3	7	0	0	21	5	38	3	0	0	46	138
Approach %	75.0	25.0	0.0	0.0	-	-	7.5	73.1	19.4	0.0	-	-	52.4	14.3	33.3	0.0	-	-	10.9	82.6	6.5	0.0	-	-	-
Total %	2.2	0.7	0.0	0.0	-	2.9	3.6	35.5	9.4	0.0	-	48.6	8.0	2.2	5.1	0.0	-	15.2	3.6	27.5	2.2	0.0	-	33.3	-
PHF	0.375	0.250	0.000	0.000	-	0.500	0.625	0.817	0.813	0.000	-	0.882	0.917	0.375	0.583	0.000	-	0.875	0.625	0.731	0.750	0.000	-	0.719	0.841
Lights	3	1	0	0	-	4	4	34	11	0	-	49	10	3	7	0	-	20	5	30	2	0	-	37	110
% Lights	100.0	100.0	-	-	-	100.0	80.0	69.4	84.6	-	-	73.1	90.9	100.0	100.0	-	-	95.2	100.0	78.9	66.7	-	-	80.4	79.7
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	0	0	0	-	0	1	15	2	0	-	18	1	0	0	0	-	1	0	8	1	0	-	9	28
% Trucks	0.0	0.0	-	-	-	0.0	20.0	30.6	15.4	-	-	26.9	9.1	0.0	0.0	-	-	4.8	0.0	21.1	33.3	-	-	19.6	20.3
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	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (11:00 AM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023

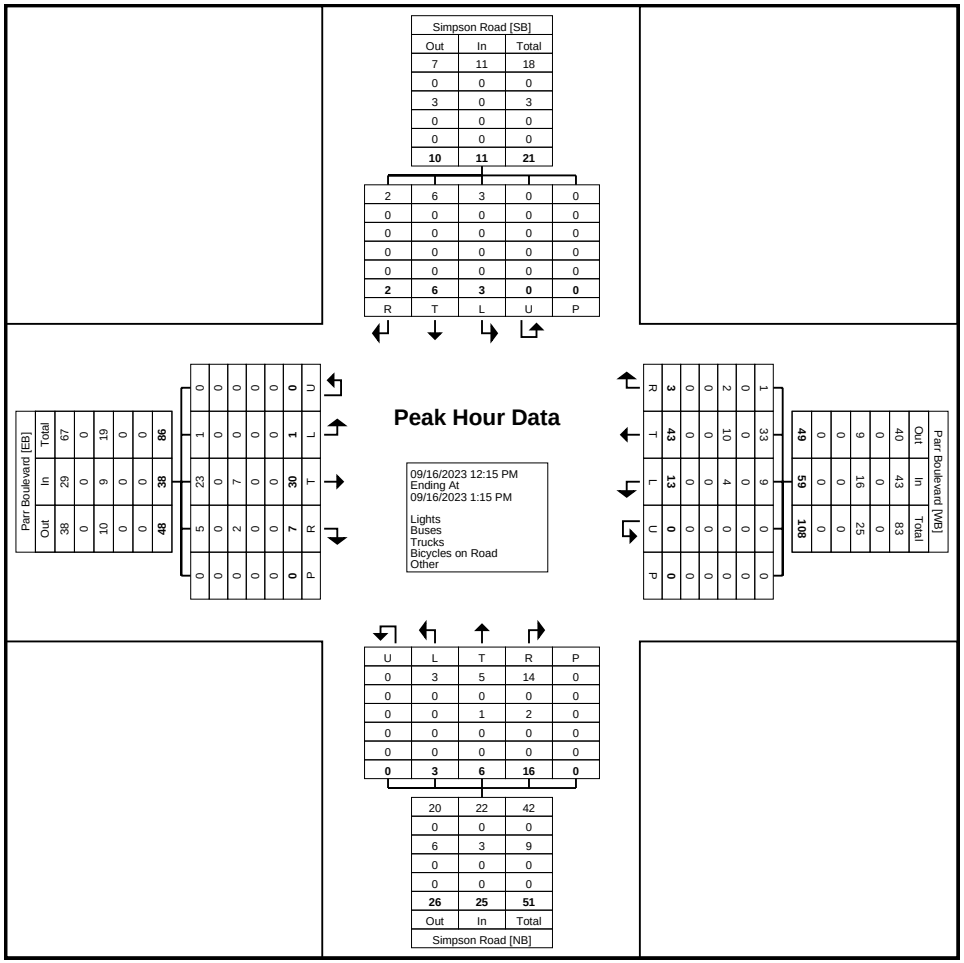
Turning Movement Peak Hour Data (12:15 PM)

Start Time	Simpson Road Southbound						Parr Boulevard Westbound						Simpson Road Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
12:15 PM	1	3	1	0	0	5	1	9	2	0	0	12	3	3	3	0	0	9	3	9	1	0	0	13	39
12:30 PM	0	2	1	0	0	3	0	9	4	0	0	13	7	1	0	0	0	8	3	6	0	0	0	9	33
12:45 PM	0	0	1	0	0	1	2	10	5	0	0	17	2	1	0	0	0	3	0	3	0	0	0	3	24
1:00 PM	1	1	0	0	0	2	0	15	2	0	0	17	4	1	0	0	0	5	1	12	0	0	0	13	37
Total	2	6	3	0	0	11	3	43	13	0	0	59	16	6	3	0	0	25	7	30	1	0	0	38	133
Approach %	18.2	54.5	27.3	0.0	-	-	5.1	72.9	22.0	0.0	-	-	64.0	24.0	12.0	0.0	-	-	18.4	78.9	2.6	0.0	-	-	-
Total %	1.5	4.5	2.3	0.0	-	8.3	2.3	32.3	9.8	0.0	-	44.4	12.0	4.5	2.3	0.0	-	18.8	5.3	22.6	0.8	0.0	-	28.6	-
PHF	0.500	0.500	0.750	0.000	-	0.550	0.375	0.717	0.650	0.000	-	0.868	0.571	0.500	0.250	0.000	-	0.694	0.583	0.625	0.250	0.000	-	0.731	0.853
Lights	2	6	3	0	-	11	1	33	9	0	-	43	14	5	3	0	-	22	5	23	1	0	-	29	105
% Lights	100.0	100.0	100.0	-	-	100.0	33.3	76.7	69.2	-	-	72.9	87.5	83.3	100.0	-	-	88.0	71.4	76.7	100.0	-	-	76.3	78.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	0	0	0	-	0	2	10	4	0	-	16	2	1	0	0	-	3	2	7	0	0	-	9	28
% Trucks	0.0	0.0	0.0	-	-	0.0	66.7	23.3	30.8	-	-	27.1	12.5	16.7	0.0	-	-	12.0	28.6	23.3	0.0	-	-	23.7	21.1
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	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Simpson Rd & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (12:15 PM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023

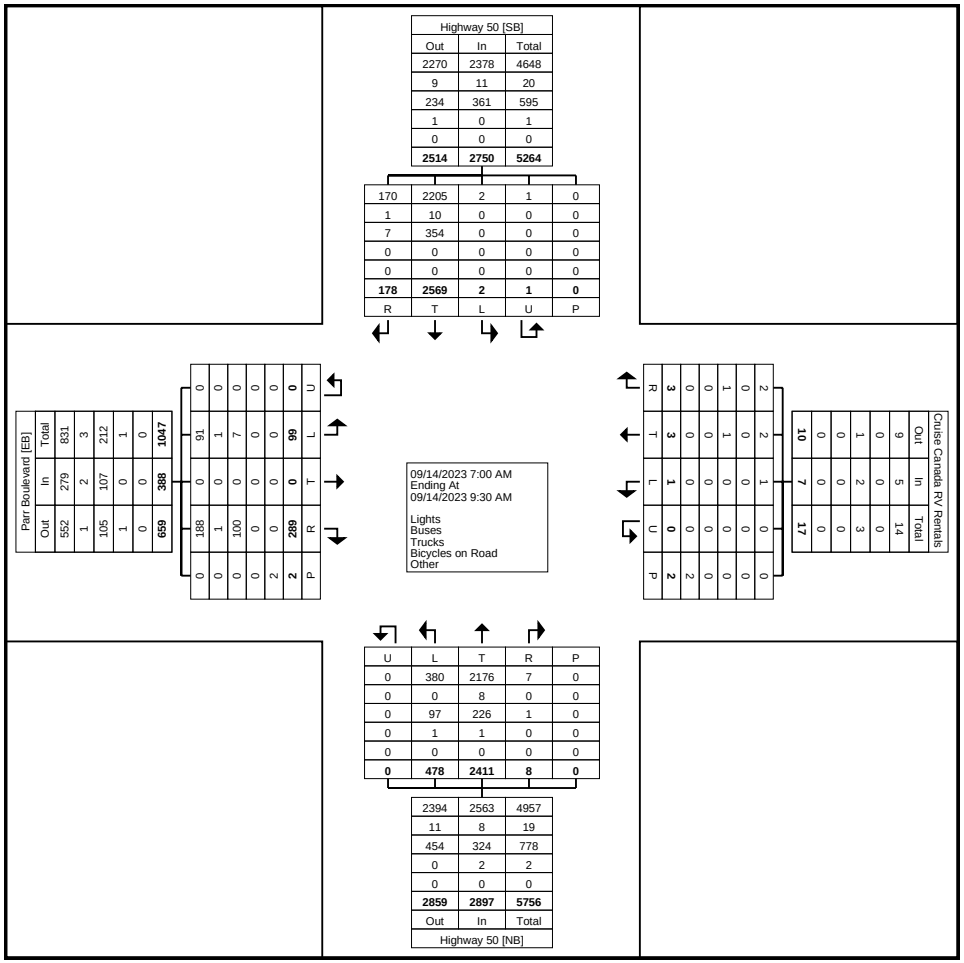
Turning Movement Data

Start Time	Highway 50 Southbound						Cruise Canada RV Rentals Westbound						Highway 50 Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	9	290	0	1	0	300	0	0	0	0	0	0	0	254	47	0	0	301	33	0	8	0	0	41	642
7:15 AM	10	285	0	0	0	295	0	0	0	0	0	0	0	246	61	0	0	307	18	0	1	0	0	19	621
7:30 AM	10	296	0	0	0	306	0	0	0	0	0	0	0	231	44	0	0	275	25	0	8	0	0	33	614
7:45 AM	15	247	0	0	0	262	0	0	1	0	2	1	2	283	47	0	0	332	26	0	10	0	1	36	631
Hourly Total	44	1118	0	1	0	1163	0	0	1	0	2	1	2	1014	199	0	0	1215	102	0	27	0	1	129	2508
8:00 AM	21	277	0	0	0	298	0	0	0	0	0	0	0	253	34	0	0	287	23	0	8	0	0	31	616
8:15 AM	21	239	0	0	0	260	0	1	0	0	0	1	2	236	49	0	0	287	20	0	10	0	0	30	578
8:30 AM	20	255	0	0	0	275	0	1	0	0	0	1	2	256	61	0	0	319	46	0	18	0	1	64	659
8:45 AM	28	225	1	0	0	254	2	1	0	0	0	3	1	213	58	0	0	272	49	0	11	0	0	60	589
Hourly Total	90	996	1	0	0	1087	2	3	0	0	0	5	5	958	202	0	0	1165	138	0	47	0	1	185	2442
9:00 AM	30	250	1	0	0	281	1	0	0	0	0	1	0	242	44	0	0	286	19	0	12	0	0	31	599
9:15 AM	14	205	0	0	0	219	0	0	0	0	0	0	1	197	33	0	0	231	30	0	13	0	0	43	493
Grand Total	178	2569	2	1	0	2750	3	3	1	0	2	7	8	2411	478	0	0	2897	289	0	99	0	2	388	6042
Approach %	6.5	93.4	0.1	0.0	-	-	42.9	42.9	14.3	0.0	-	-	0.3	83.2	16.5	0.0	-	-	74.5	0.0	25.5	0.0	-	-	-
Total %	2.9	42.5	0.0	0.0	-	45.5	0.0	0.0	0.0	0.0	-	0.1	0.1	39.9	7.9	0.0	-	47.9	4.8	0.0	1.6	0.0	-	6.4	-
Lights	170	2205	2	1	-	2378	2	2	1	0	-	5	7	2176	380	0	-	2563	188	0	91	0	-	279	5225
% Lights	95.5	85.8	100.0	100.0	-	86.5	66.7	66.7	100.0	-	-	71.4	87.5	90.3	79.5	-	-	88.5	65.1	-	91.9	-	-	71.9	86.5
Buses	1	10	0	0	-	11	0	0	0	0	-	0	0	8	0	0	-	8	1	0	1	0	-	2	21
% Buses	0.6	0.4	0.0	0.0	-	0.4	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.3	0.3	-	1.0	-	-	0.5	0.3
Trucks	7	354	0	0	-	361	1	1	0	0	-	2	1	226	97	0	-	324	100	0	7	0	-	107	794
% Trucks	3.9	13.8	0.0	0.0	-	13.1	33.3	33.3	0.0	-	-	28.6	12.5	9.4	20.3	-	-	11.2	34.6	-	7.1	-	-	27.6	13.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	1	0	-	2	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.2	-	-	0.1	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-AM
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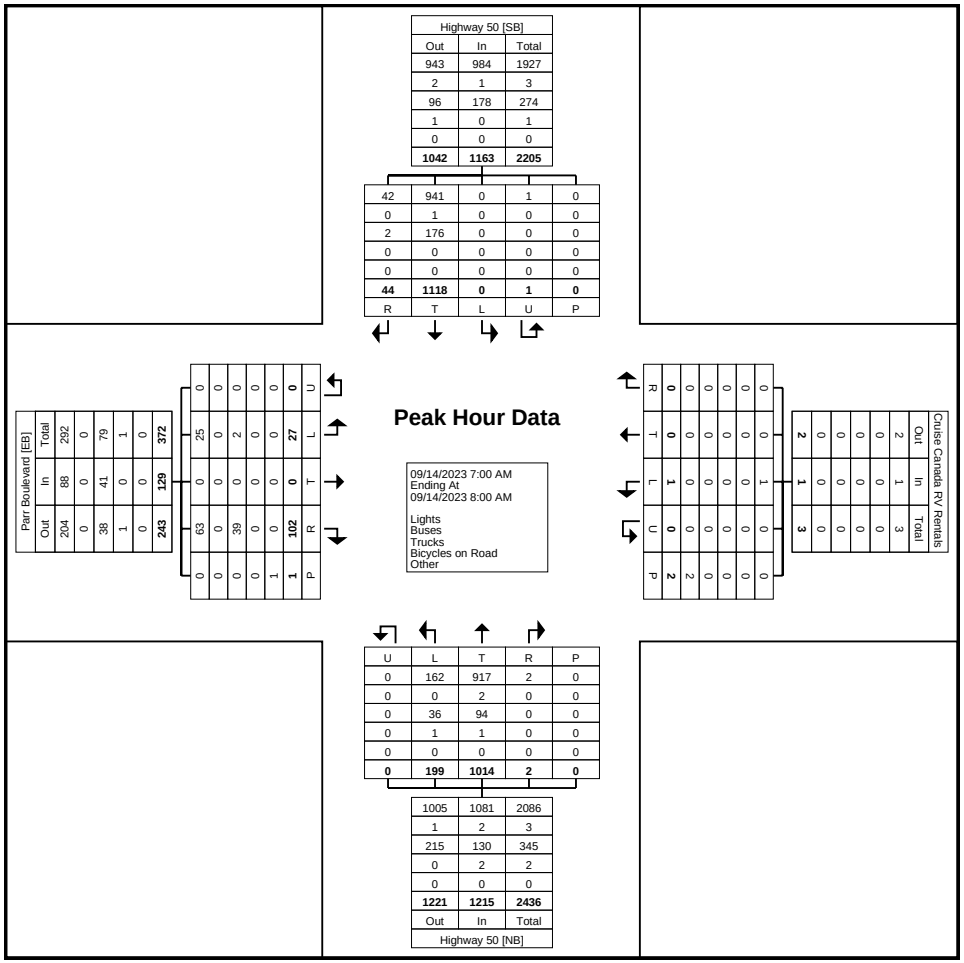
Turning Movement Peak Hour Data (7:00 AM)

Start Time	Highway 50 Southbound						Cruise Canada RV Rentals Westbound						Highway 50 Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	9	290	0	1	0	300	0	0	0	0	0	0	0	254	47	0	0	301	33	0	8	0	0	41	642
7:15 AM	10	285	0	0	0	295	0	0	0	0	0	0	0	246	61	0	0	307	18	0	1	0	0	19	621
7:30 AM	10	296	0	0	0	306	0	0	0	0	0	0	0	231	44	0	0	275	25	0	8	0	0	33	614
7:45 AM	15	247	0	0	0	262	0	0	1	0	2	1	2	283	47	0	0	332	26	0	10	0	1	36	631
Total	44	1118	0	1	0	1163	0	0	1	0	2	1	2	1014	199	0	0	1215	102	0	27	0	1	129	2508
Approach %	3.8	96.1	0.0	0.1	-	-	0.0	0.0	100.0	0.0	-	-	0.2	83.5	16.4	0.0	-	-	79.1	0.0	20.9	0.0	-	-	-
Total %	1.8	44.6	0.0	0.0	-	46.4	0.0	0.0	0.0	0.0	-	0.0	0.1	40.4	7.9	0.0	-	48.4	4.1	0.0	1.1	0.0	-	5.1	-
PHF	0.733	0.944	0.000	0.250	-	0.950	0.000	0.000	0.250	0.000	-	0.250	0.250	0.896	0.816	0.000	-	0.915	0.773	0.000	0.675	0.000	-	0.787	0.977
Lights	42	941	0	1	-	984	0	0	1	0	-	1	2	917	162	0	-	1081	63	0	25	0	-	88	2154
% Lights	95.5	84.2	-	100.0	-	84.6	-	-	100.0	-	-	100.0	100.0	90.4	81.4	-	-	89.0	61.8	-	92.6	-	-	68.2	85.9
Buses	0	1	0	0	-	1	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	3
% Buses	0.0	0.1	-	0.0	-	0.1	-	-	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	-	0.0	-	-	0.0	0.1
Trucks	2	176	0	0	-	178	0	0	0	0	-	0	0	94	36	0	-	130	39	0	2	0	-	41	349
% Trucks	4.5	15.7	-	0.0	-	15.3	-	-	0.0	-	-	0.0	0.0	9.3	18.1	-	-	10.7	38.2	-	7.4	-	-	31.8	13.9
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	1	0	-	2	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	-	0.0	-	0.0	-	-	0.0	-	-	0.0	0.0	0.1	0.5	-	-	0.2	0.0	-	0.0	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-AM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Peak Hour Data Plot (7:00 AM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023

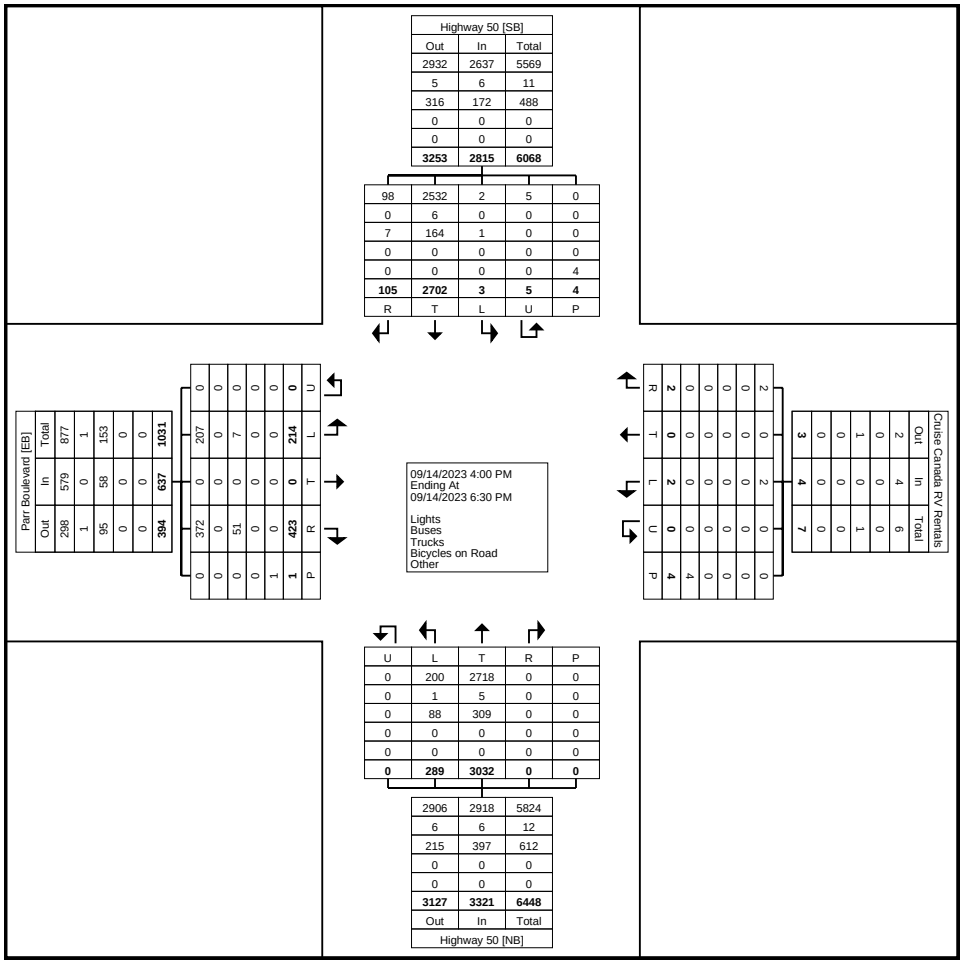
Turning Movement Data

Start Time	Highway 50 Southbound						Cruise Canada RV Rentals Westbound						Highway 50 Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:00 PM	8	305	1	0	1	314	0	0	0	0	0	0	0	316	31	0	0	347	51	0	35	0	0	86	747
4:15 PM	13	254	0	1	0	268	0	0	1	0	0	1	0	328	29	0	0	357	32	0	23	0	0	55	681
4:30 PM	16	292	0	0	0	308	0	0	0	0	0	0	0	300	23	0	0	323	50	0	17	0	0	67	698
4:45 PM	11	243	1	0	1	255	1	0	0	0	0	1	0	289	29	0	0	318	32	0	20	0	0	52	626
Hourly Total	48	1094	2	1	2	1145	1	0	1	0	0	2	0	1233	112	0	0	1345	165	0	95	0	0	260	2752
5:00 PM	11	332	0	0	1	343	0	0	0	0	0	0	0	300	31	0	0	331	56	0	48	0	1	104	778
5:15 PM	7	244	0	2	0	253	0	0	0	0	0	0	0	255	33	0	0	288	32	0	16	0	0	48	589
5:30 PM	7	287	1	0	1	295	1	0	1	0	2	2	0	310	24	0	0	334	49	0	22	0	0	71	702
5:45 PM	11	247	0	0	0	258	0	0	0	0	0	0	0	345	36	0	0	381	27	0	10	0	0	37	676
Hourly Total	36	1110	1	2	2	1149	1	0	1	0	2	2	0	1210	124	0	0	1334	164	0	96	0	1	260	2745
6:00 PM	13	266	0	2	0	281	0	0	0	0	2	0	0	299	24	0	0	323	66	0	19	0	0	85	689
6:15 PM	8	232	0	0	0	240	0	0	0	0	0	0	0	290	29	0	0	319	28	0	4	0	0	32	591
Grand Total	105	2702	3	5	4	2815	2	0	2	0	4	4	0	3032	289	0	0	3321	423	0	214	0	1	637	6777
Approach %	3.7	96.0	0.1	0.2	-	-	50.0	0.0	50.0	0.0	-	-	0.0	91.3	8.7	0.0	-	-	66.4	0.0	33.6	0.0	-	-	-
Total %	1.5	39.9	0.0	0.1	-	41.5	0.0	0.0	0.0	0.0	-	0.1	0.0	44.7	4.3	0.0	-	49.0	6.2	0.0	3.2	0.0	-	9.4	-
Lights	98	2532	2	5	-	2637	2	0	2	0	-	4	0	2718	200	0	-	2918	372	0	207	0	-	579	6138
% Lights	93.3	93.7	66.7	100.0	-	93.7	100.0	-	100.0	-	-	100.0	-	89.6	69.2	-	-	87.9	87.9	-	96.7	-	-	90.9	90.6
Buses	0	6	0	0	-	6	0	0	0	0	-	0	0	5	1	0	-	6	0	0	0	0	-	0	12
% Buses	0.0	0.2	0.0	0.0	-	0.2	0.0	-	0.0	-	-	0.0	-	0.2	0.3	-	-	0.2	0.0	-	0.0	-	-	0.0	0.2
Trucks	7	164	1	0	-	172	0	0	0	0	-	0	0	309	88	0	-	397	51	0	7	0	-	58	627
% Trucks	6.7	6.1	33.3	0.0	-	6.1	0.0	-	0.0	-	-	0.0	-	10.2	30.4	-	-	12.0	12.1	-	3.3	-	-	9.1	9.3
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	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023

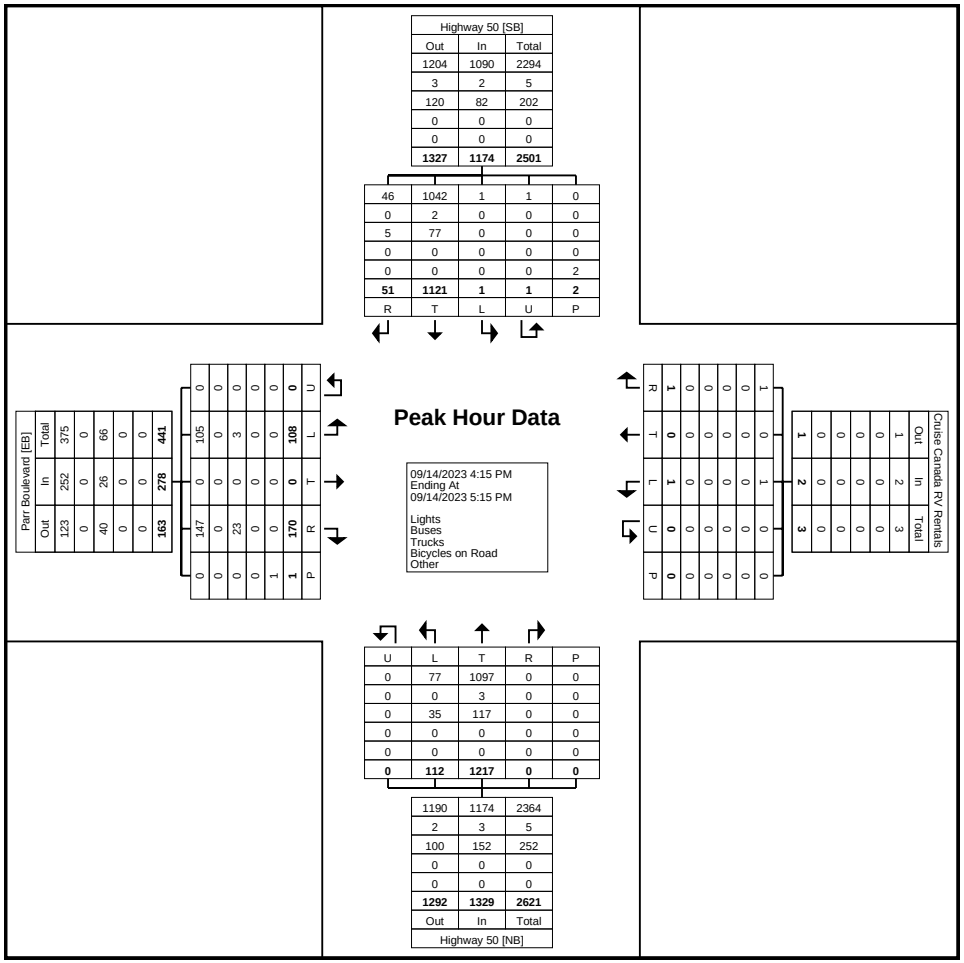
Turning Movement Peak Hour Data (4:15 PM)

Start Time	Highway 50 Southbound						Cruise Canada RV Rentals Westbound						Highway 50 Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:15 PM	13	254	0	1	0	268	0	0	1	0	0	1	0	328	29	0	0	357	32	0	23	0	0	55	681
4:30 PM	16	292	0	0	0	308	0	0	0	0	0	0	0	300	23	0	0	323	50	0	17	0	0	67	698
4:45 PM	11	243	1	0	1	255	1	0	0	0	0	1	0	289	29	0	0	318	32	0	20	0	0	52	626
5:00 PM	11	332	0	0	1	343	0	0	0	0	0	0	0	300	31	0	0	331	56	0	48	0	1	104	778
Total	51	1121	1	1	2	1174	1	0	1	0	0	2	0	1217	112	0	0	1329	170	0	108	0	1	278	2783
Approach %	4.3	95.5	0.1	0.1	-	-	50.0	0.0	50.0	0.0	-	-	0.0	91.6	8.4	0.0	-	-	61.2	0.0	38.8	0.0	-	-	-
Total %	1.8	40.3	0.0	0.0	-	42.2	0.0	0.0	0.0	0.0	-	0.1	0.0	43.7	4.0	0.0	-	47.8	6.1	0.0	3.9	0.0	-	10.0	-
PHF	0.797	0.844	0.250	0.250	-	0.856	0.250	0.000	0.250	0.000	-	0.500	0.000	0.928	0.903	0.000	-	0.931	0.759	0.000	0.563	0.000	-	0.668	0.894
Lights	46	1042	1	1	-	1090	1	0	1	0	-	2	0	1097	77	0	-	1174	147	0	105	0	-	252	2518
% Lights	90.2	93.0	100.0	100.0	-	92.8	100.0	-	100.0	-	-	100.0	-	90.1	68.8	-	-	88.3	86.5	-	97.2	-	-	90.6	90.5
Buses	0	2	0	0	-	2	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	5
% Buses	0.0	0.2	0.0	0.0	-	0.2	0.0	-	0.0	-	-	0.0	-	0.2	0.0	-	-	0.2	0.0	-	0.0	-	-	0.0	0.2
Trucks	5	77	0	0	-	82	0	0	0	0	-	0	0	117	35	0	-	152	23	0	3	0	-	26	260
% Trucks	9.8	6.9	0.0	0.0	-	7.0	0.0	-	0.0	-	-	0.0	-	9.6	31.3	-	-	11.4	13.5	-	2.8	-	-	9.4	9.3
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	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-PM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Peak Hour Data Plot (4:15 PM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023

Turning Movement Data

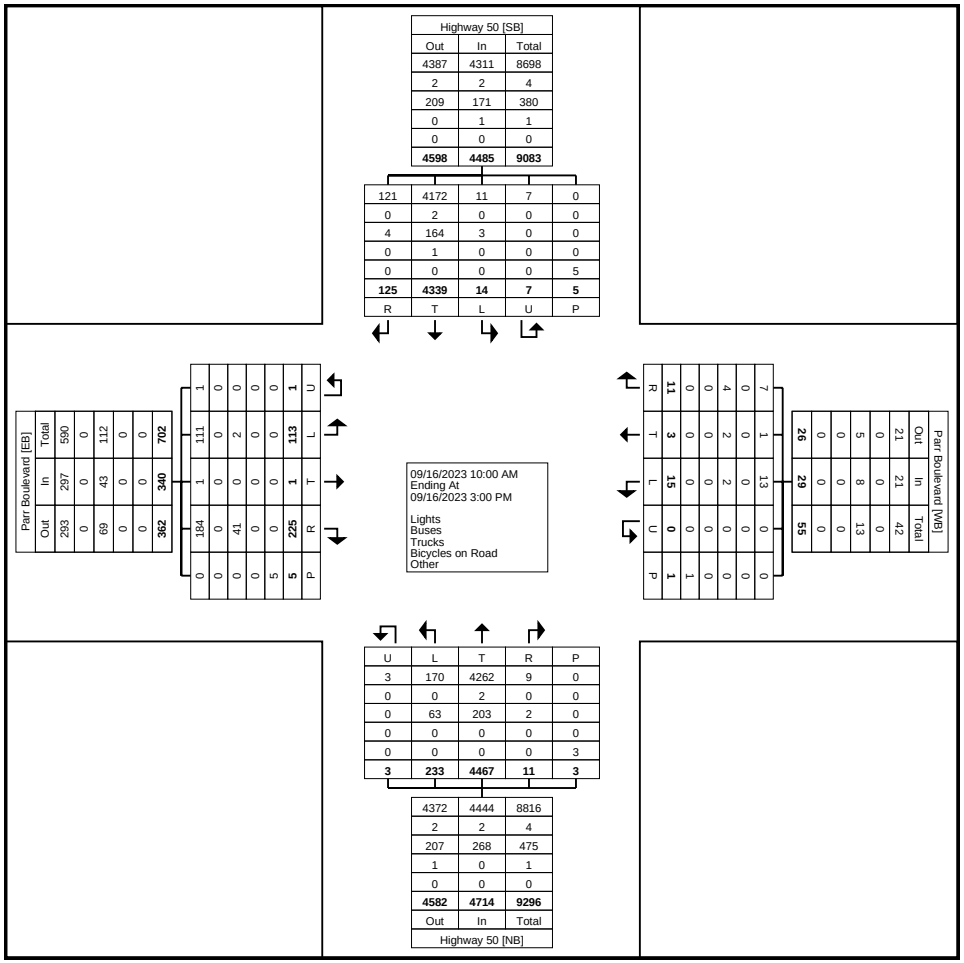
Start Time	Highway 50 Southbound						Parr Boulevard Westbound						Highway 50 Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
10:00 AM	7	184	0	0	0	191	1	0	0	0	0	1	0	186	4	0	0	190	19	0	8	1	0	28	410
10:15 AM	6	181	0	0	0	187	1	0	1	0	0	2	4	209	15	0	0	228	9	0	8	0	0	17	434
10:30 AM	5	228	0	2	2	235	0	0	1	0	0	1	0	200	12	0	0	212	14	0	5	0	0	19	467
10:45 AM	8	229	1	0	0	238	0	0	1	0	0	1	1	204	15	0	0	220	12	0	4	0	0	16	475
Hourly Total	26	822	1	2	2	851	2	0	3	0	0	5	5	799	46	0	0	850	54	0	25	1	0	80	1786
11:00 AM	7	181	0	0	0	188	0	0	0	0	0	0	1	209	12	0	0	222	12	0	4	0	0	16	426
11:15 AM	10	222	1	0	0	233	1	0	1	0	0	2	0	178	17	0	0	195	10	0	8	0	0	18	448
11:30 AM	12	201	0	0	2	213	0	0	1	0	0	1	0	241	11	0	0	252	10	0	9	0	0	19	485
11:45 AM	9	192	0	1	0	202	0	0	0	0	0	0	0	204	17	1	0	222	11	0	3	0	0	14	438
Hourly Total	38	796	1	1	2	836	1	0	2	0	0	3	1	832	57	1	0	891	43	0	24	0	0	67	1797
12:00 PM	7	247	0	1	0	255	1	1	0	0	0	2	0	213	15	0	0	228	11	0	6	0	0	17	502
12:15 PM	4	227	2	1	0	234	0	0	0	0	0	0	0	229	9	0	0	238	11	1	5	0	0	17	489
12:30 PM	5	252	0	0	0	257	0	0	1	0	0	1	0	214	11	0	0	225	12	0	9	0	1	21	504
12:45 PM	4	185	0	1	0	190	0	0	1	0	0	1	1	243	15	0	0	259	9	0	4	0	0	13	463
Hourly Total	20	911	2	3	0	936	1	1	2	0	0	4	1	899	50	0	0	950	43	1	24	0	1	68	1958
1:00 PM	8	223	0	0	0	231	1	0	0	0	0	1	0	232	14	0	0	246	15	0	6	0	0	21	499
1:15 PM	5	208	3	0	0	216	1	0	1	0	0	2	0	279	12	0	0	291	9	0	2	0	0	11	520
1:30 PM	7	237	0	0	0	244	2	0	2	0	0	4	2	223	9	0	0	234	11	0	6	0	0	17	499
1:45 PM	3	187	1	0	0	191	1	0	1	0	0	2	2	234	10	0	3	246	9	0	7	0	3	16	455
Hourly Total	23	855	4	0	0	882	5	0	4	0	0	9	4	968	45	0	3	1017	44	0	21	0	3	65	1973
2:00 PM	7	244	2	0	0	253	1	0	2	0	0	3	0	254	12	1	0	267	7	0	6	0	0	13	536
2:15 PM	4	251	2	1	1	258	1	0	0	0	1	1	0	240	10	1	0	251	14	0	7	0	0	21	531
2:30 PM	4	231	1	0	0	236	0	1	2	0	0	3	0	229	6	0	0	235	11	0	3	0	0	14	488
2:45 PM	3	229	1	0	0	233	0	1	0	0	0	1	0	246	7	0	0	253	9	0	3	0	1	12	499
Hourly Total	18	955	6	1	1	980	2	2	4	0	1	8	0	969	35	2	0	1006	41	0	19	0	1	60	2054
Grand Total	125	4339	14	7	5	4485	11	3	15	0	1	29	11	4467	233	3	3	4714	225	1	113	1	5	340	9568
Approach %	2.8	96.7	0.3	0.2	-	-	37.9	10.3	51.7	0.0	-	-	0.2	94.8	4.9	0.1	-	-	66.2	0.3	33.2	0.3	-	-	-
Total %	1.3	45.3	0.1	0.1	-	46.9	0.1	0.0	0.2	0.0	-	0.3	0.1	46.7	2.4	0.0	-	49.3	2.4	0.0	1.2	0.0	-	3.6	-
Lights	121	4172	11	7	-	4311	7	1	13	0	-	21	9	4262	170	3	-	4444	184	1	111	1	-	297	9073
% Lights	96.8	96.2	78.6	100.0	-	96.1	63.6	33.3	86.7	-	-	72.4	81.8	95.4	73.0	100.0	-	94.3	81.8	100.0	98.2	100.0	-	87.4	94.8
Buses	0	2	0	0	-	2	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	4
% Buses	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Trucks	4	164	3	0	-	171	4	2	2	0	-	8	2	203	63	0	-	268	41	0	2	0	-	43	490
% Trucks	3.2	3.8	21.4	0.0	-	3.8	36.4	66.7	13.3	-	-	27.6	18.2	4.5	27.0	0.0	-	5.7	18.2	0.0	1.8	0.0	-	12.6	5.1
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1

% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Data Plot

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Count Name: 24085_Hwy 50 & Parr Blvd-SAT
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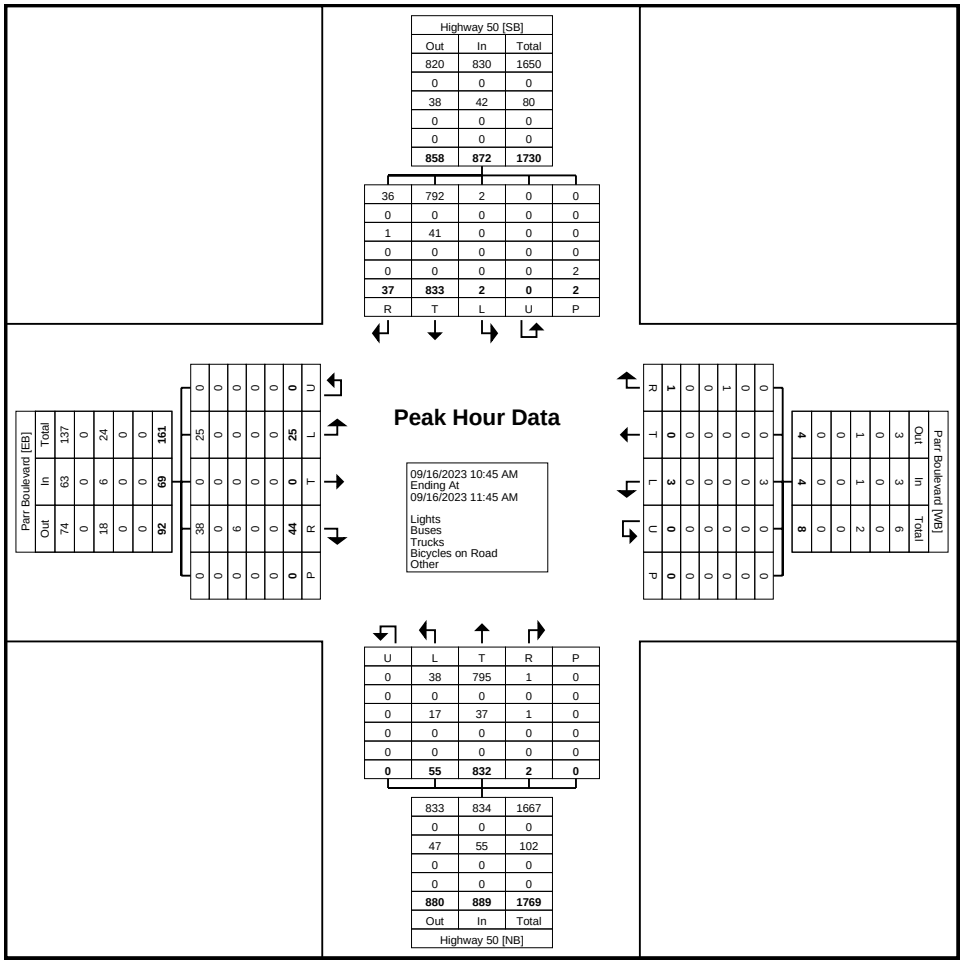
Turning Movement Peak Hour Data (10:45 AM)

Start Time	Highway 50 Southbound						Parr Boulevard Westbound						Highway 50 Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
10:45 AM	8	229	1	0	0	238	0	0	1	0	0	1	1	204	15	0	0	220	12	0	4	0	0	16	475
11:00 AM	7	181	0	0	0	188	0	0	0	0	0	0	1	209	12	0	0	222	12	0	4	0	0	16	426
11:15 AM	10	222	1	0	0	233	1	0	1	0	0	2	0	178	17	0	0	195	10	0	8	0	0	18	448
11:30 AM	12	201	0	0	2	213	0	0	1	0	0	1	0	241	11	0	0	252	10	0	9	0	0	19	485
Total	37	833	2	0	2	872	1	0	3	0	0	4	2	832	55	0	0	889	44	0	25	0	0	69	1834
Approach %	4.2	95.5	0.2	0.0	-	-	25.0	0.0	75.0	0.0	-	-	0.2	93.6	6.2	0.0	-	-	63.8	0.0	36.2	0.0	-	-	-
Total %	2.0	45.4	0.1	0.0	-	47.5	0.1	0.0	0.2	0.0	-	0.2	0.1	45.4	3.0	0.0	-	48.5	2.4	0.0	1.4	0.0	-	3.8	-
PHF	0.771	0.909	0.500	0.000	-	0.916	0.250	0.000	0.750	0.000	-	0.500	0.500	0.863	0.809	0.000	-	0.882	0.917	0.000	0.694	0.000	-	0.908	0.945
Lights	36	792	2	0	-	830	0	0	3	0	-	3	1	795	38	0	-	834	38	0	25	0	-	63	1730
% Lights	97.3	95.1	100.0	-	-	95.2	0.0	-	100.0	-	-	75.0	50.0	95.6	69.1	-	-	93.8	86.4	-	100.0	-	-	91.3	94.3
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Trucks	1	41	0	0	-	42	1	0	0	0	-	1	1	37	17	0	-	55	6	0	0	0	-	6	104
% Trucks	2.7	4.9	0.0	-	-	4.8	100.0	-	0.0	-	-	25.0	50.0	4.4	30.9	-	-	6.2	13.6	-	0.0	-	-	8.7	5.7
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	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (10:45 AM)

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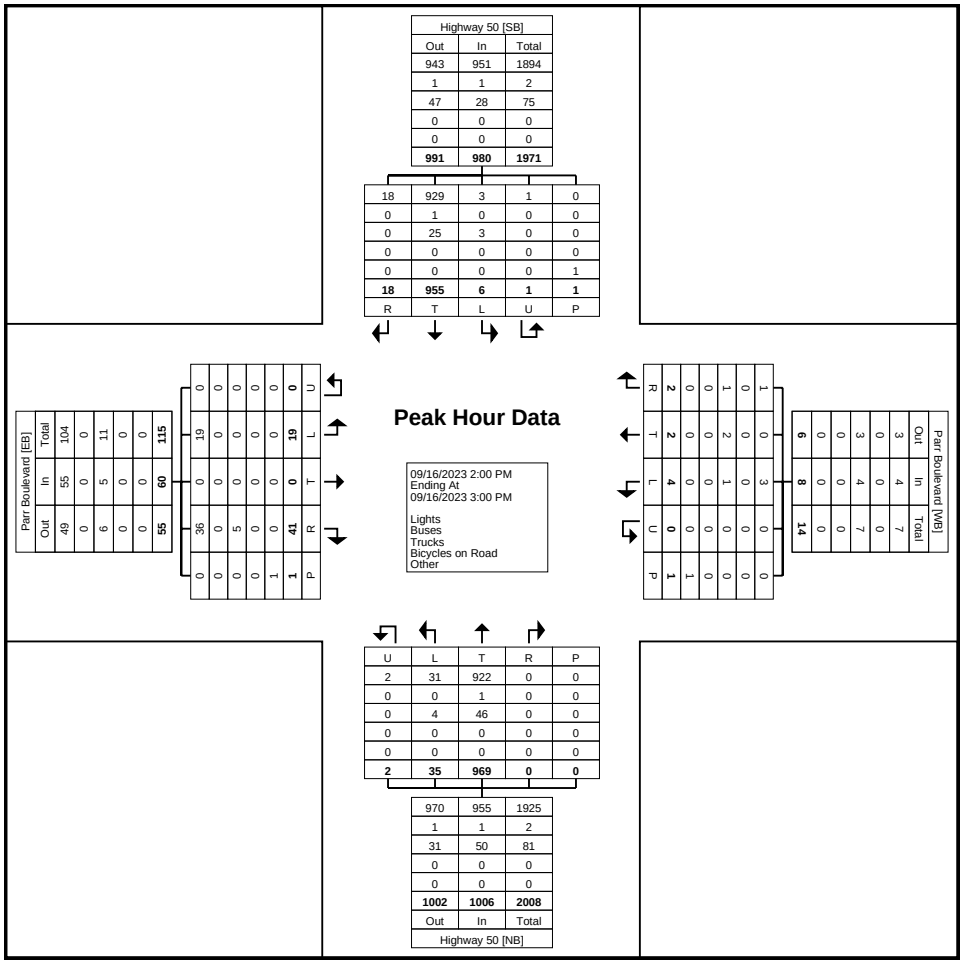
Turning Movement Peak Hour Data (2:00 PM)

Start Time	Highway 50 Southbound						Parr Boulevard Westbound						Highway 50 Northbound						Parr Boulevard Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
2:00 PM	7	244	2	0	0	253	1	0	2	0	0	3	0	254	12	1	0	267	7	0	6	0	0	13	536
2:15 PM	4	251	2	1	1	258	1	0	0	0	1	1	0	240	10	1	0	251	14	0	7	0	0	21	531
2:30 PM	4	231	1	0	0	236	0	1	2	0	0	3	0	229	6	0	0	235	11	0	3	0	0	14	488
2:45 PM	3	229	1	0	0	233	0	1	0	0	0	1	0	246	7	0	0	253	9	0	3	0	1	12	499
Total	18	955	6	1	1	980	2	2	4	0	1	8	0	969	35	2	0	1006	41	0	19	0	1	60	2054
Approach %	1.8	97.4	0.6	0.1	-	-	25.0	25.0	50.0	0.0	-	-	0.0	96.3	3.5	0.2	-	-	68.3	0.0	31.7	0.0	-	-	-
Total %	0.9	46.5	0.3	0.0	-	47.7	0.1	0.1	0.2	0.0	-	0.4	0.0	47.2	1.7	0.1	-	49.0	2.0	0.0	0.9	0.0	-	2.9	-
PHF	0.643	0.951	0.750	0.250	-	0.950	0.500	0.500	0.500	0.000	-	0.667	0.000	0.954	0.729	0.500	-	0.942	0.732	0.000	0.679	0.000	-	0.714	0.958
Lights	18	929	3	1	-	951	1	0	3	0	-	4	0	922	31	2	-	955	36	0	19	0	-	55	1965
% Lights	100.0	97.3	50.0	100.0	-	97.0	50.0	0.0	75.0	-	-	50.0	-	95.1	88.6	100.0	-	94.9	87.8	-	100.0	-	-	91.7	95.7
Buses	0	1	0	0	-	1	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	2
% Buses	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	-	0.1	0.0	0.0	-	0.1	0.0	-	0.0	-	-	0.0	0.1
Trucks	0	25	3	0	-	28	1	2	1	0	-	4	0	46	4	0	-	50	5	0	0	0	-	5	87
% Trucks	0.0	2.6	50.0	0.0	-	2.9	50.0	100.0	25.0	-	-	50.0	-	4.7	11.4	0.0	-	5.0	12.2	-	0.0	-	-	8.3	4.2
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	0.0	0.0	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Parr Blvd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (2:00 PM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-AM
Site Code: 24085
Start Date: 09/14/2023

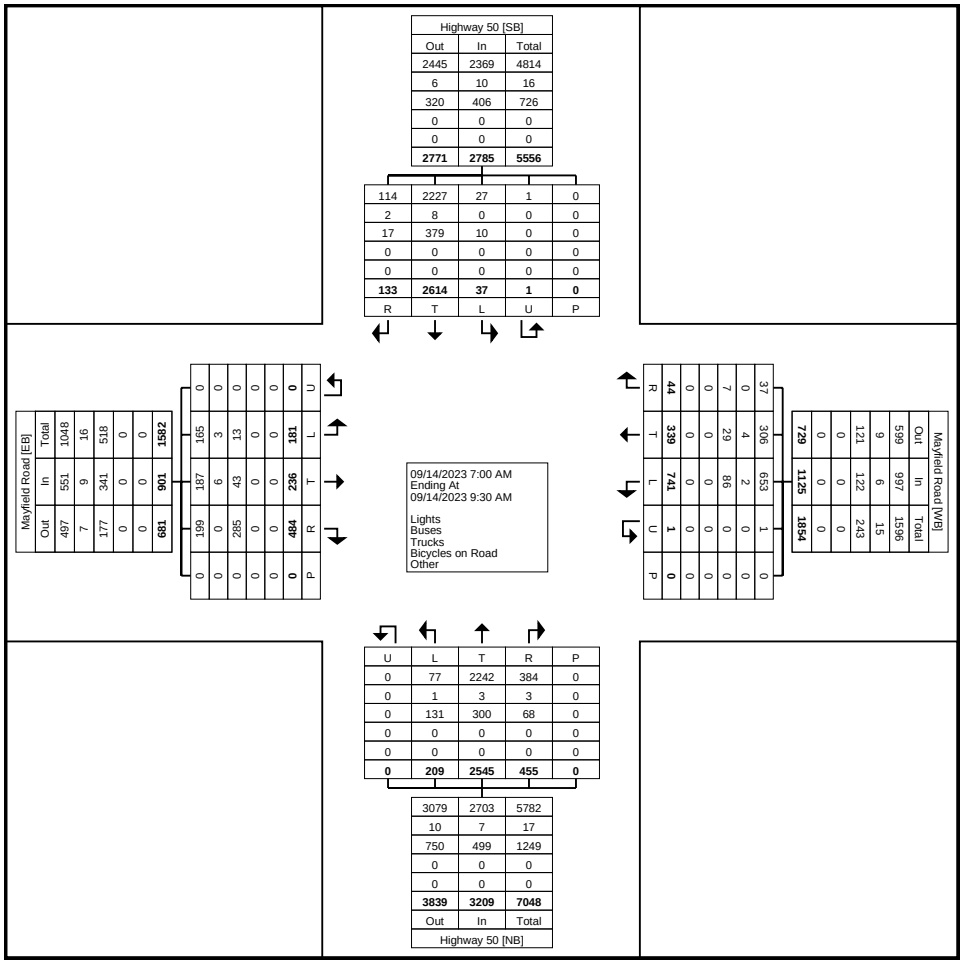
Turning Movement Data

Start Time	Highway 50 Southbound						Mayfield Road Westbound						Highway 50 Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	10	270	4	0	0	284	1	28	72	0	0	101	42	279	19	0	0	340	53	23	12	0	0	88	813
7:15 AM	19	273	4	0	0	296	1	36	70	0	0	107	40	266	25	0	0	331	54	20	17	0	0	91	825
7:30 AM	15	276	4	0	0	295	2	46	84	0	0	132	33	241	15	0	0	289	51	27	14	0	0	92	808
7:45 AM	20	268	10	0	0	298	8	30	72	0	0	110	50	278	24	0	0	352	44	23	18	0	0	85	845
Hourly Total	64	1087	22	0	0	1173	12	140	298	0	0	450	165	1064	83	0	0	1312	202	93	61	0	0	356	3291
8:00 AM	8	251	2	0	0	261	1	55	85	0	0	141	44	257	19	0	0	320	48	15	15	0	0	78	800
8:15 AM	9	280	1	0	0	290	4	39	76	0	0	119	42	249	18	0	0	309	48	30	23	0	0	101	819
8:30 AM	13	281	2	0	0	296	7	33	76	0	0	116	54	298	20	0	0	372	45	18	17	0	0	80	864
8:45 AM	13	227	3	0	0	243	11	34	82	1	0	128	54	230	19	0	0	303	38	40	26	0	0	104	778
Hourly Total	43	1039	8	0	0	1090	23	161	319	1	0	504	194	1034	76	0	0	1304	179	103	81	0	0	363	3261
9:00 AM	12	259	4	1	0	276	5	22	64	0	0	91	54	247	23	0	0	324	51	20	23	0	0	94	785
9:15 AM	14	229	3	0	0	246	4	16	60	0	0	80	42	200	27	0	0	269	52	20	16	0	0	88	683
Grand Total	133	2614	37	1	0	2785	44	339	741	1	0	1125	455	2545	209	0	0	3209	484	236	181	0	0	901	8020
Approach %	4.8	93.9	1.3	0.0	-	-	3.9	30.1	65.9	0.1	-	-	14.2	79.3	6.5	0.0	-	-	53.7	26.2	20.1	0.0	-	-	-
Total %	1.7	32.6	0.5	0.0	-	34.7	0.5	4.2	9.2	0.0	-	14.0	5.7	31.7	2.6	0.0	-	40.0	6.0	2.9	2.3	0.0	-	11.2	-
Lights	114	2227	27	1	-	2369	37	306	653	1	-	997	384	2242	77	0	-	2703	199	187	165	0	-	551	6620
% Lights	85.7	85.2	73.0	100.0	-	85.1	84.1	90.3	88.1	100.0	-	88.6	84.4	88.1	36.8	-	-	84.2	41.1	79.2	91.2	-	-	61.2	82.5
Buses	2	8	0	0	-	10	0	4	2	0	-	6	3	3	1	0	-	7	0	6	3	0	-	9	32
% Buses	1.5	0.3	0.0	0.0	-	0.4	0.0	1.2	0.3	0.0	-	0.5	0.7	0.1	0.5	-	-	0.2	0.0	2.5	1.7	-	-	1.0	0.4
Trucks	17	379	10	0	-	406	7	29	86	0	-	122	68	300	131	0	-	499	285	43	13	0	-	341	1368
% Trucks	12.8	14.5	27.0	0.0	-	14.6	15.9	8.6	11.6	0.0	-	10.8	14.9	11.8	62.7	-	-	15.6	58.9	18.2	7.2	-	-	37.8	17.1
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	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: 24085_Hwy 50 & Mayfield Rd-AM
Site Code: 24085
Start Date: 09/14/2023



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Site Code: 24085
Start Date: 09/14/2023

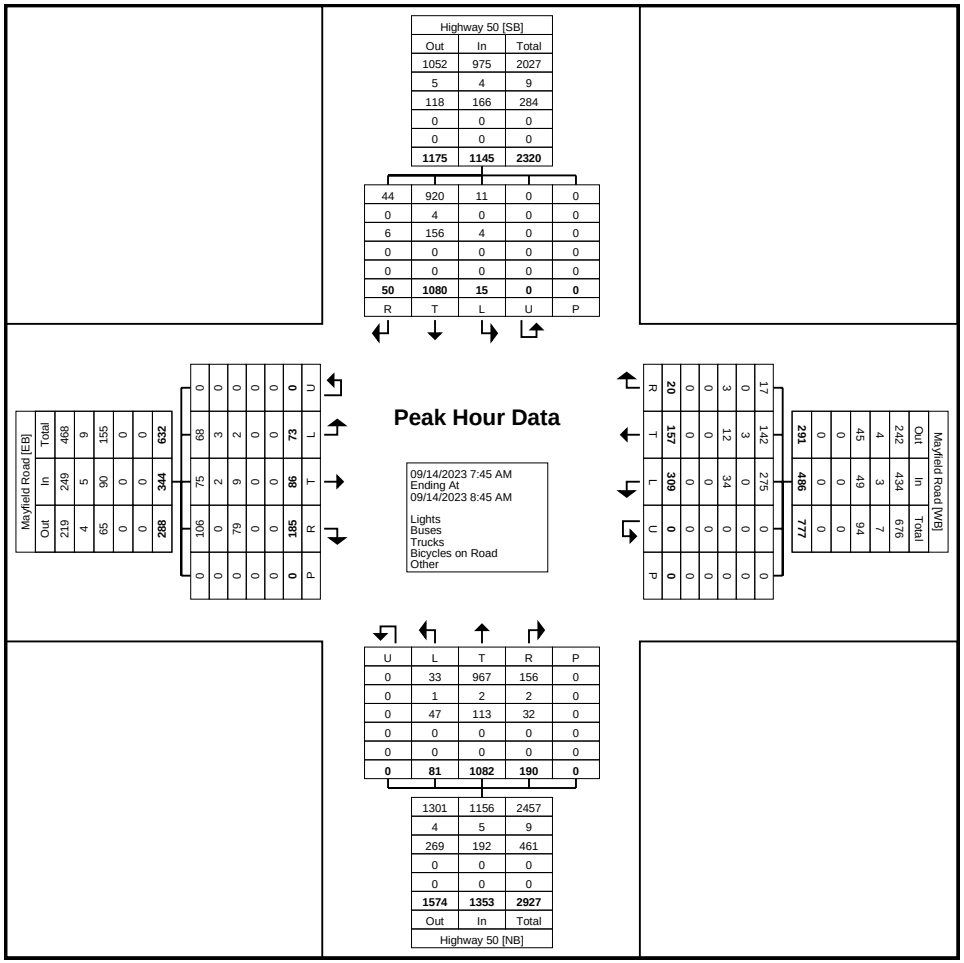
Turning Movement Peak Hour Data (7:45 AM)

Start Time	Highway 50 Southbound						Mayfield Road Westbound						Highway 50 Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:45 AM	20	268	10	0	0	298	8	30	72	0	0	110	50	278	24	0	0	352	44	23	18	0	0	85	845
8:00 AM	8	251	2	0	0	261	1	55	85	0	0	141	44	257	19	0	0	320	48	15	15	0	0	78	800
8:15 AM	9	280	1	0	0	290	4	39	76	0	0	119	42	249	18	0	0	309	48	30	23	0	0	101	819
8:30 AM	13	281	2	0	0	296	7	33	76	0	0	116	54	298	20	0	0	372	45	18	17	0	0	80	864
Total	50	1080	15	0	0	1145	20	157	309	0	0	486	190	1082	81	0	0	1353	185	86	73	0	0	344	3328
Approach %	4.4	94.3	1.3	0.0	-	-	4.1	32.3	63.6	0.0	-	-	14.0	80.0	6.0	0.0	-	-	53.8	25.0	21.2	0.0	-	-	-
Total %	1.5	32.5	0.5	0.0	-	34.4	0.6	4.7	9.3	0.0	-	14.6	5.7	32.5	2.4	0.0	-	40.7	5.6	2.6	2.2	0.0	-	10.3	-
PHF	0.625	0.961	0.375	0.000	-	0.961	0.625	0.714	0.909	0.000	-	0.862	0.880	0.908	0.844	0.000	-	0.909	0.964	0.717	0.793	0.000	-	0.851	0.963
Lights	44	920	11	0	-	975	17	142	275	0	-	434	156	967	33	0	-	1156	106	75	68	0	-	249	2814
% Lights	88.0	85.2	73.3	-	-	85.2	85.0	90.4	89.0	-	-	89.3	82.1	89.4	40.7	-	-	85.4	57.3	87.2	93.2	-	-	72.4	84.6
Buses	0	4	0	0	-	4	0	3	0	0	-	3	2	2	1	0	-	5	0	2	3	0	-	5	17
% Buses	0.0	0.4	0.0	-	-	0.3	0.0	1.9	0.0	-	-	0.6	1.1	0.2	1.2	-	-	0.4	0.0	2.3	4.1	-	-	1.5	0.5
Trucks	6	156	4	0	-	166	3	12	34	0	-	49	32	113	47	0	-	192	79	9	2	0	-	90	497
% Trucks	12.0	14.4	26.7	-	-	14.5	15.0	7.6	11.0	-	-	10.1	16.8	10.4	58.0	-	-	14.2	42.7	10.5	2.7	-	-	26.2	14.9
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	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-AM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Peak Hour Data Plot (7:45 AM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-PM
Site Code: 24085
Start Date: 09/14/2023

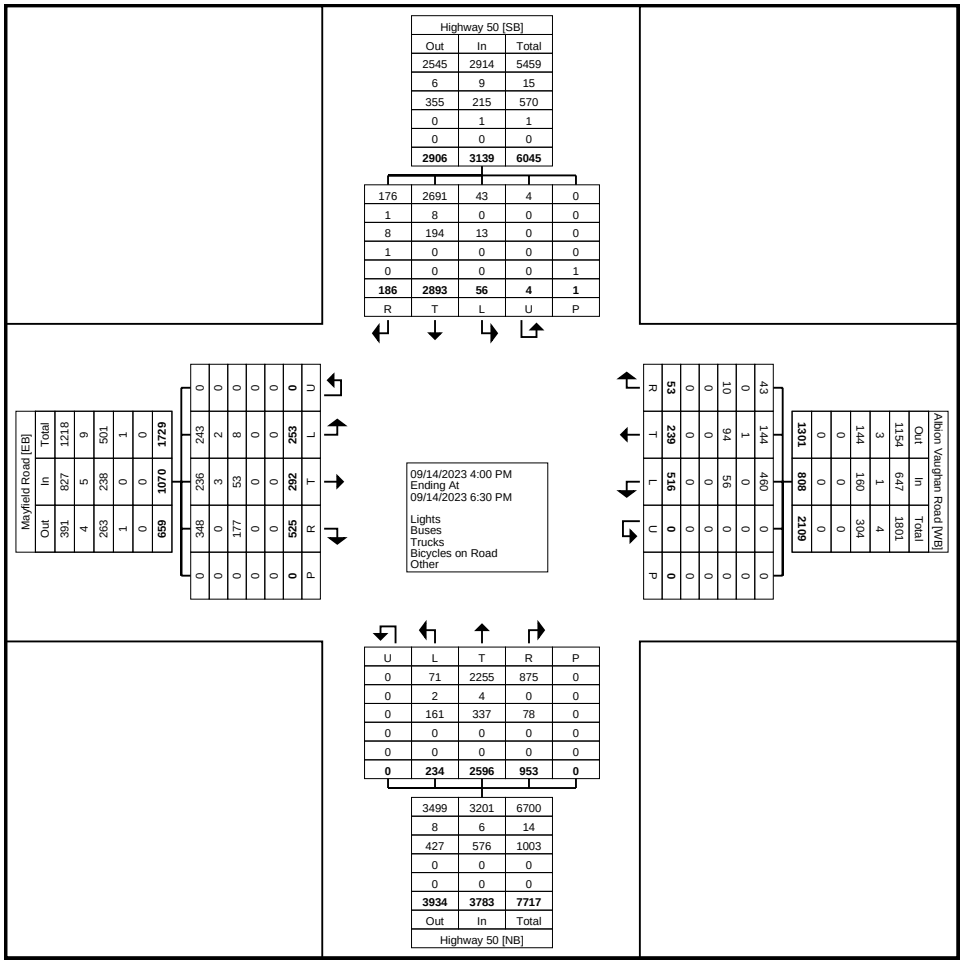
Turning Movement Data

Start Time	Highway 50 Southbound						Albion Vaughan Road Westbound						Highway 50 Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:00 PM	24	292	7	0	0	323	6	30	53	0	0	89	89	240	24	0	0	353	54	36	38	0	0	128	893
4:15 PM	19	302	6	0	0	327	9	13	48	0	0	70	112	303	20	0	0	435	34	23	26	0	0	83	915
4:30 PM	19	272	7	3	0	301	5	31	55	0	0	91	93	238	33	0	0	364	53	40	25	0	0	118	874
4:45 PM	19	287	6	0	1	312	5	29	49	0	0	83	101	198	20	0	0	319	61	31	29	0	0	121	835
Hourly Total	81	1153	26	3	1	1263	25	103	205	0	0	333	395	979	97	0	0	1471	202	130	118	0	0	450	3517
5:00 PM	19	321	5	0	0	345	7	29	57	0	0	93	83	274	27	0	0	384	43	22	22	0	0	87	909
5:15 PM	13	300	5	0	0	318	4	23	61	0	0	88	97	232	24	0	0	353	49	35	30	0	0	114	873
5:30 PM	22	306	5	1	0	334	3	31	60	0	0	94	90	264	20	0	0	374	55	36	21	0	0	112	914
5:45 PM	14	280	10	0	0	304	6	22	41	0	0	69	126	329	25	0	0	480	50	27	25	0	0	102	955
Hourly Total	68	1207	25	1	0	1301	20	105	219	0	0	344	396	1099	96	0	0	1591	197	120	98	0	0	415	3651
6:00 PM	22	259	0	0	0	281	5	21	52	0	0	78	85	255	22	0	0	362	64	21	29	0	0	114	835
6:15 PM	15	274	5	0	0	294	3	10	40	0	0	53	77	263	19	0	0	359	62	21	8	0	0	91	797
Grand Total	186	2893	56	4	1	3139	53	239	516	0	0	808	953	2596	234	0	0	3783	525	292	253	0	0	1070	8800
Approach %	5.9	92.2	1.8	0.1	-	-	6.6	29.6	63.9	0.0	-	-	25.2	68.6	6.2	0.0	-	-	49.1	27.3	23.6	0.0	-	-	-
Total %	2.1	32.9	0.6	0.0	-	35.7	0.6	2.7	5.9	0.0	-	9.2	10.8	29.5	2.7	0.0	-	43.0	6.0	3.3	2.9	0.0	-	12.2	-
Lights	176	2691	43	4	-	2914	43	144	460	0	-	647	875	2255	71	0	-	3201	348	236	243	0	-	827	7589
% Lights	94.6	93.0	76.8	100.0	-	92.8	81.1	60.3	89.1	-	-	80.1	91.8	86.9	30.3	-	-	84.6	66.3	80.8	96.0	-	-	77.3	86.2
Buses	1	8	0	0	-	9	0	1	0	0	-	1	0	4	2	0	-	6	0	3	2	0	-	5	21
% Buses	0.5	0.3	0.0	0.0	-	0.3	0.0	0.4	0.0	-	-	0.1	0.0	0.2	0.9	-	-	0.2	0.0	1.0	0.8	-	-	0.5	0.2
Trucks	8	194	13	0	-	215	10	94	56	0	-	160	78	337	161	0	-	576	177	53	8	0	-	238	1189
% Trucks	4.3	6.7	23.2	0.0	-	6.8	18.9	39.3	10.9	-	-	19.8	8.2	13.0	68.8	-	-	15.2	33.7	18.2	3.2	-	-	22.2	13.5
Bicycles on Road	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.5	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-PM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-PM
Site Code: 24085
Start Date: 09/14/2023

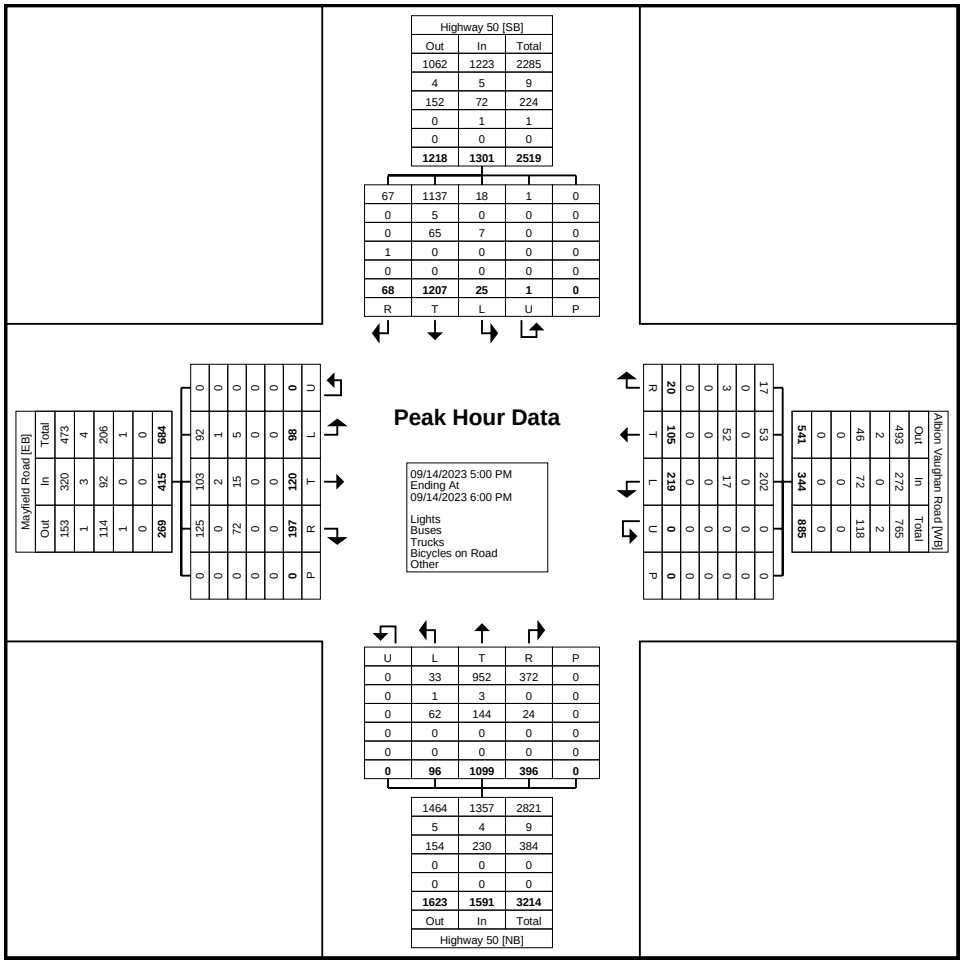
Turning Movement Peak Hour Data (5:00 PM)

Start Time	Highway 50 Southbound						Albion Vaughan Road Westbound						Highway 50 Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
5:00 PM	19	321	5	0	0	345	7	29	57	0	0	93	83	274	27	0	0	384	43	22	22	0	0	87	909
5:15 PM	13	300	5	0	0	318	4	23	61	0	0	88	97	232	24	0	0	353	49	35	30	0	0	114	873
5:30 PM	22	306	5	1	0	334	3	31	60	0	0	94	90	264	20	0	0	374	55	36	21	0	0	112	914
5:45 PM	14	280	10	0	0	304	6	22	41	0	0	69	126	329	25	0	0	480	50	27	25	0	0	102	955
Total	68	1207	25	1	0	1301	20	105	219	0	0	344	396	1099	96	0	0	1591	197	120	98	0	0	415	3651
Approach %	5.2	92.8	1.9	0.1	-	-	5.8	30.5	63.7	0.0	-	-	24.9	69.1	6.0	0.0	-	-	47.5	28.9	23.6	0.0	-	-	-
Total %	1.9	33.1	0.7	0.0	-	35.6	0.5	2.9	6.0	0.0	-	9.4	10.8	30.1	2.6	0.0	-	43.6	5.4	3.3	2.7	0.0	-	11.4	-
PHF	0.773	0.940	0.625	0.250	-	0.943	0.714	0.847	0.898	0.000	-	0.915	0.786	0.835	0.889	0.000	-	0.829	0.895	0.833	0.817	0.000	-	0.910	0.956
Lights	67	1137	18	1	-	1223	17	53	202	0	-	272	372	952	33	0	-	1357	125	103	92	0	-	320	3172
% Lights	98.5	94.2	72.0	100.0	-	94.0	85.0	50.5	92.2	-	-	79.1	93.9	86.6	34.4	-	-	85.3	63.5	85.8	93.9	-	-	77.1	86.9
Buses	0	5	0	0	-	5	0	0	0	0	-	0	0	3	1	0	-	4	0	2	1	0	-	3	12
% Buses	0.0	0.4	0.0	0.0	-	0.4	0.0	0.0	0.0	-	-	0.0	0.0	0.3	1.0	-	-	0.3	0.0	1.7	1.0	-	-	0.7	0.3
Trucks	0	65	7	0	-	72	3	52	17	0	-	72	24	144	62	0	-	230	72	15	5	0	-	92	466
% Trucks	0.0	5.4	28.0	0.0	-	5.5	15.0	49.5	7.8	-	-	20.9	6.1	13.1	64.6	-	-	14.5	36.5	12.5	5.1	-	-	22.2	12.8
Bicycles on Road	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	1.5	0.0	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-PM
Site Code: 24085
Start Date: 09/14/2023



Turning Movement Peak Hour Data Plot (5:00 PM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023

Turning Movement Data

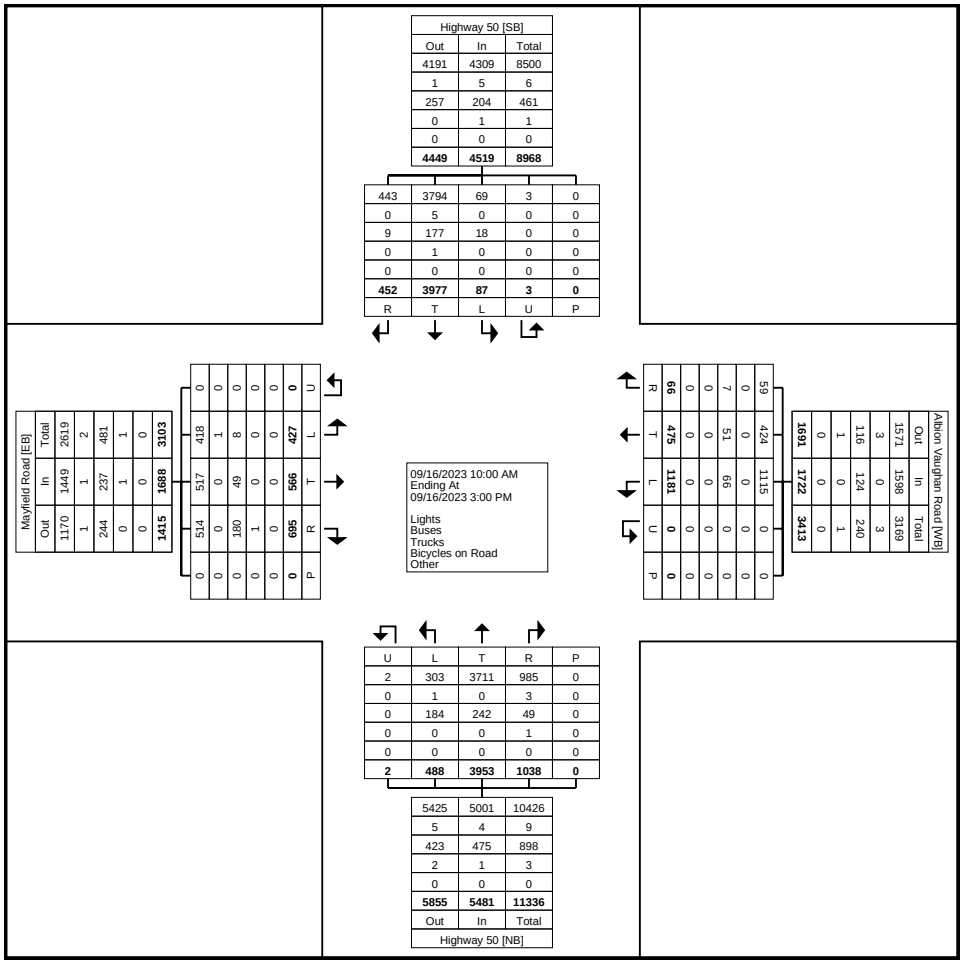
Start Time	Highway 50 Southbound						Albion Vaughan Road Westbound						Highway 50 Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
10:00 AM	11	171	4	0	0	186	3	18	79	0	0	100	53	149	22	0	0	224	26	30	24	0	0	80	590
10:15 AM	15	179	1	0	0	195	4	22	56	0	0	82	49	182	22	0	0	253	40	29	24	0	0	93	623
10:30 AM	22	198	3	1	0	224	2	24	65	0	0	91	42	189	36	0	0	267	36	23	15	0	0	74	656
10:45 AM	21	240	4	0	0	265	2	16	58	0	0	76	36	187	20	1	0	244	35	35	18	0	0	88	673
Hourly Total	69	788	12	1	0	870	11	80	258	0	0	349	180	707	100	1	0	988	137	117	81	0	0	335	2542
11:00 AM	18	167	2	0	0	187	4	22	66	0	0	92	43	173	15	0	0	231	34	29	23	0	0	86	596
11:15 AM	19	189	7	0	0	215	1	18	64	0	0	83	47	159	25	0	0	231	25	24	24	0	0	73	602
11:30 AM	21	187	3	0	0	211	5	20	56	0	0	81	41	203	21	0	0	265	36	33	19	0	0	88	645
11:45 AM	19	178	7	0	0	204	6	16	46	0	0	68	37	195	26	0	0	258	27	22	16	0	0	65	595
Hourly Total	77	721	19	0	0	817	16	76	232	0	0	324	168	730	87	0	0	985	122	108	82	0	0	312	2438
12:00 PM	29	206	5	0	0	240	7	32	61	0	0	100	49	186	33	0	0	268	38	34	22	0	0	94	702
12:15 PM	26	213	5	0	0	244	4	23	64	0	0	91	50	195	15	0	0	260	43	37	26	0	0	106	701
12:30 PM	33	237	5	0	0	275	3	22	52	0	0	77	52	195	29	0	0	276	34	21	15	0	0	70	698
12:45 PM	23	156	3	0	0	182	3	17	51	0	0	71	67	217	22	0	0	306	42	17	20	0	0	79	638
Hourly Total	111	812	18	0	0	941	17	94	228	0	0	339	218	793	99	0	0	1110	157	109	83	0	0	349	2739
1:00 PM	28	201	5	0	0	234	1	26	50	0	0	77	58	214	23	0	0	295	36	33	22	0	0	91	697
1:15 PM	18	212	8	0	0	238	1	16	62	0	0	79	66	249	23	0	0	338	28	18	24	0	0	70	725
1:30 PM	23	194	6	0	0	223	6	26	71	0	0	103	56	191	24	1	0	272	39	37	25	0	0	101	699
1:45 PM	25	169	5	0	0	199	4	38	59	0	0	101	61	204	31	0	0	296	37	26	20	0	0	83	679
Hourly Total	94	776	24	0	0	894	12	106	242	0	0	360	241	858	101	1	0	1201	140	114	91	0	0	345	2800
2:00 PM	24	208	3	0	0	235	2	33	59	0	0	94	60	238	17	0	0	315	37	41	24	0	0	102	746
2:15 PM	29	239	3	1	0	272	1	28	67	0	0	96	55	215	26	0	0	296	40	30	23	0	0	93	757
2:30 PM	24	218	3	1	0	246	5	29	41	0	0	75	60	192	31	0	0	283	26	24	24	0	0	74	678
2:45 PM	24	215	5	0	0	244	2	29	54	0	0	85	56	220	27	0	0	303	36	23	19	0	0	78	710
Hourly Total	101	880	14	2	0	997	10	119	221	0	0	350	231	865	101	0	0	1197	139	118	90	0	0	347	2891
Grand Total	452	3977	87	3	0	4519	66	475	1181	0	0	1722	1038	3953	488	2	0	5481	695	566	427	0	0	1688	13410
Approach %	10.0	88.0	1.9	0.1	-	-	3.8	27.6	68.6	0.0	-	-	18.9	72.1	8.9	0.0	-	-	41.2	33.5	25.3	0.0	-	-	-
Total %	3.4	29.7	0.6	0.0	-	33.7	0.5	3.5	8.8	0.0	-	12.8	7.7	29.5	3.6	0.0	-	40.9	5.2	4.2	3.2	0.0	-	12.6	-
Lights	443	3794	69	3	-	4309	59	424	1115	0	-	1598	985	3711	303	2	-	5001	514	517	418	0	-	1449	12357
% Lights	98.0	95.4	79.3	100.0	-	95.4	89.4	89.3	94.4	-	-	92.8	94.9	93.9	62.1	100.0	-	91.2	74.0	91.3	97.9	-	-	85.8	92.1
Buses	0	5	0	0	-	5	0	0	0	0	-	0	3	0	1	0	-	4	0	0	1	0	-	1	10
% Buses	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.3	0.0	0.2	0.0	-	0.1	0.0	0.0	0.2	-	-	0.1	0.1
Trucks	9	177	18	0	-	204	7	51	66	0	-	124	49	242	184	0	-	475	180	49	8	0	-	237	1040
% Trucks	2.0	4.5	20.7	0.0	-	4.5	10.6	10.7	5.6	-	-	7.2	4.7	6.1	37.7	0.0	-	8.7	25.9	8.7	1.9	-	-	14.0	7.8
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	1	0	0	0	-	1	1	0	0	0	-	1	3

% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.1	0.0	0.0	0.0	-	0.0	0.1	0.0	0.0	-	-	0.1	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Data Plot

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023

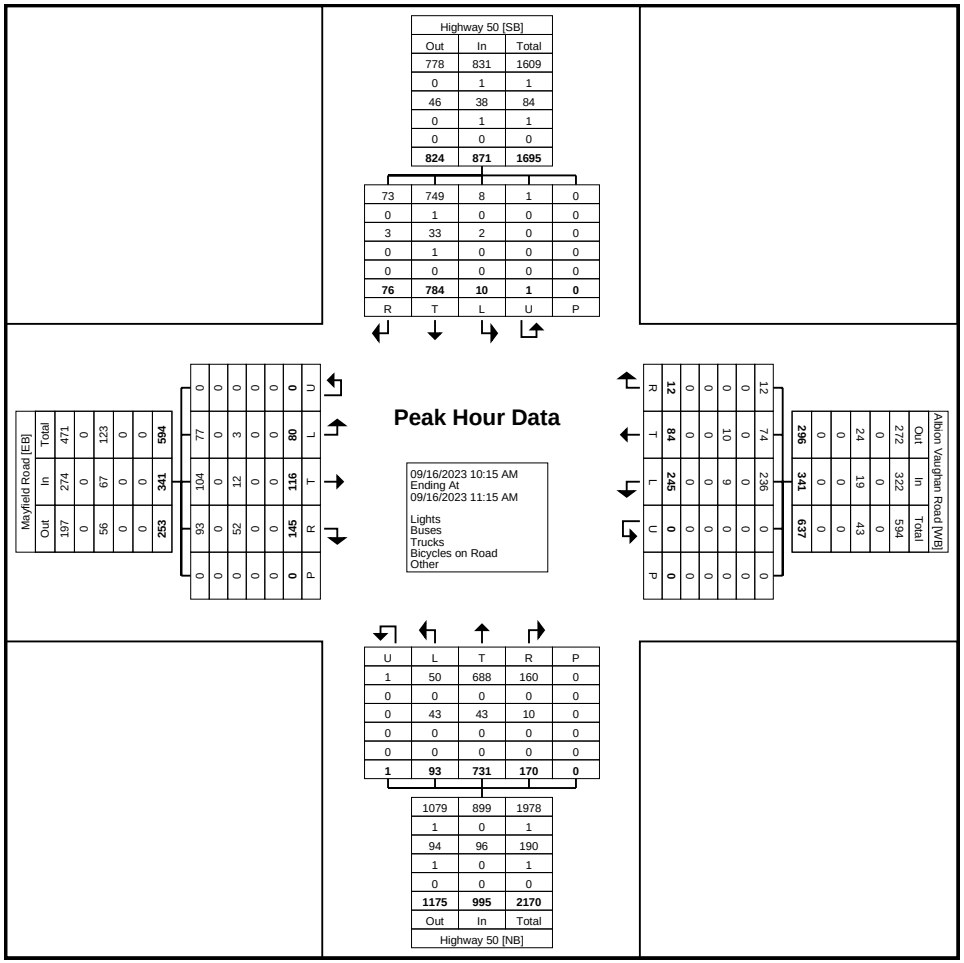
Turning Movement Peak Hour Data (10:15 AM)

Start Time	Highway 50 Southbound						Albion Vaughan Road Westbound						Highway 50 Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
10:15 AM	15	179	1	0	0	195	4	22	56	0	0	82	49	182	22	0	0	253	40	29	24	0	0	93	623
10:30 AM	22	198	3	1	0	224	2	24	65	0	0	91	42	189	36	0	0	267	36	23	15	0	0	74	656
10:45 AM	21	240	4	0	0	265	2	16	58	0	0	76	36	187	20	1	0	244	35	35	18	0	0	88	673
11:00 AM	18	167	2	0	0	187	4	22	66	0	0	92	43	173	15	0	0	231	34	29	23	0	0	86	596
Total	76	784	10	1	0	871	12	84	245	0	0	341	170	731	93	1	0	995	145	116	80	0	0	341	2548
Approach %	8.7	90.0	1.1	0.1	-	-	3.5	24.6	71.8	0.0	-	-	17.1	73.5	9.3	0.1	-	-	42.5	34.0	23.5	0.0	-	-	-
Total %	3.0	30.8	0.4	0.0	-	34.2	0.5	3.3	9.6	0.0	-	13.4	6.7	28.7	3.6	0.0	-	39.1	5.7	4.6	3.1	0.0	-	13.4	-
PHF	0.864	0.817	0.625	0.250	-	0.822	0.750	0.875	0.928	0.000	-	0.927	0.867	0.967	0.646	0.250	-	0.932	0.906	0.829	0.833	0.000	-	0.917	0.947
Lights	73	749	8	1	-	831	12	74	236	0	-	322	160	688	50	1	-	899	93	104	77	0	-	274	2326
% Lights	96.1	95.5	80.0	100.0	-	95.4	100.0	88.1	96.3	-	-	94.4	94.1	94.1	53.8	100.0	-	90.4	64.1	89.7	96.3	-	-	80.4	91.3
Buses	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	3	33	2	0	-	38	0	10	9	0	-	19	10	43	43	0	-	96	52	12	3	0	-	67	220
% Trucks	3.9	4.2	20.0	0.0	-	4.4	0.0	11.9	3.7	-	-	5.6	5.9	5.9	46.2	0.0	-	9.6	35.9	10.3	3.8	-	-	19.6	8.6
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (10:15 AM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023

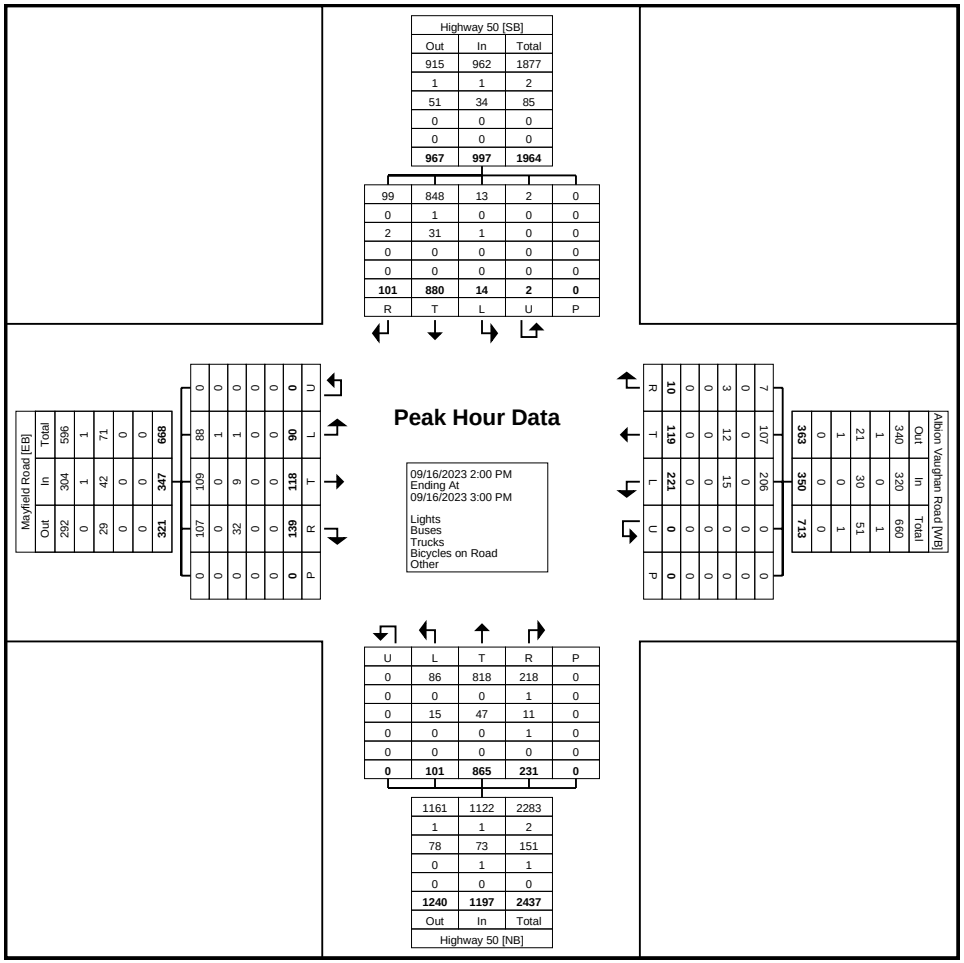
Turning Movement Peak Hour Data (2:00 PM)

Start Time	Highway 50 Southbound						Albion Vaughan Road Westbound						Highway 50 Northbound						Mayfield Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
2:00 PM	24	208	3	0	0	235	2	33	59	0	0	94	60	238	17	0	0	315	37	41	24	0	0	102	746
2:15 PM	29	239	3	1	0	272	1	28	67	0	0	96	55	215	26	0	0	296	40	30	23	0	0	93	757
2:30 PM	24	218	3	1	0	246	5	29	41	0	0	75	60	192	31	0	0	283	26	24	24	0	0	74	678
2:45 PM	24	215	5	0	0	244	2	29	54	0	0	85	56	220	27	0	0	303	36	23	19	0	0	78	710
Total	101	880	14	2	0	997	10	119	221	0	0	350	231	865	101	0	0	1197	139	118	90	0	0	347	2891
Approach %	10.1	88.3	1.4	0.2	-	-	2.9	34.0	63.1	0.0	-	-	19.3	72.3	8.4	0.0	-	-	40.1	34.0	25.9	0.0	-	-	-
Total %	3.5	30.4	0.5	0.1	-	34.5	0.3	4.1	7.6	0.0	-	12.1	8.0	29.9	3.5	0.0	-	41.4	4.8	4.1	3.1	0.0	-	12.0	-
PHF	0.871	0.921	0.700	0.500	-	0.916	0.500	0.902	0.825	0.000	-	0.911	0.963	0.909	0.815	0.000	-	0.950	0.869	0.720	0.938	0.000	-	0.850	0.955
Lights	99	848	13	2	-	962	7	107	206	0	-	320	218	818	86	0	-	1122	107	109	88	0	-	304	2708
% Lights	98.0	96.4	92.9	100.0	-	96.5	70.0	89.9	93.2	-	-	91.4	94.4	94.6	85.1	-	-	93.7	77.0	92.4	97.8	-	-	87.6	93.7
Buses	0	1	0	0	-	1	0	0	0	0	-	0	1	0	0	0	-	1	0	0	1	0	-	1	3
% Buses	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.4	0.0	0.0	-	-	0.1	0.0	0.0	1.1	-	-	0.3	0.1
Trucks	2	31	1	0	-	34	3	12	15	0	-	30	11	47	15	0	-	73	32	9	1	0	-	42	179
% Trucks	2.0	3.5	7.1	0.0	-	3.4	30.0	10.1	6.8	-	-	8.6	4.8	5.4	14.9	-	-	6.1	23.0	7.6	1.1	-	-	12.1	6.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.4	0.0	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 idinsmore@lea.ca

Count Name: 24085_Hwy 50 & Mayfield Rd-SAT
Site Code: 24085
Start Date: 09/16/2023



Turning Movement Peak Hour Data Plot (2:00 PM)

LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Project No.: 24085
Intersection: Site Access & Mayfield Rd
Weather: Clear
Surveyor(s): ID

File Name : Site Access & Mayfield Rd-AM
Site Code : 24085
Start Date : 2023-09-14
Page No : 1

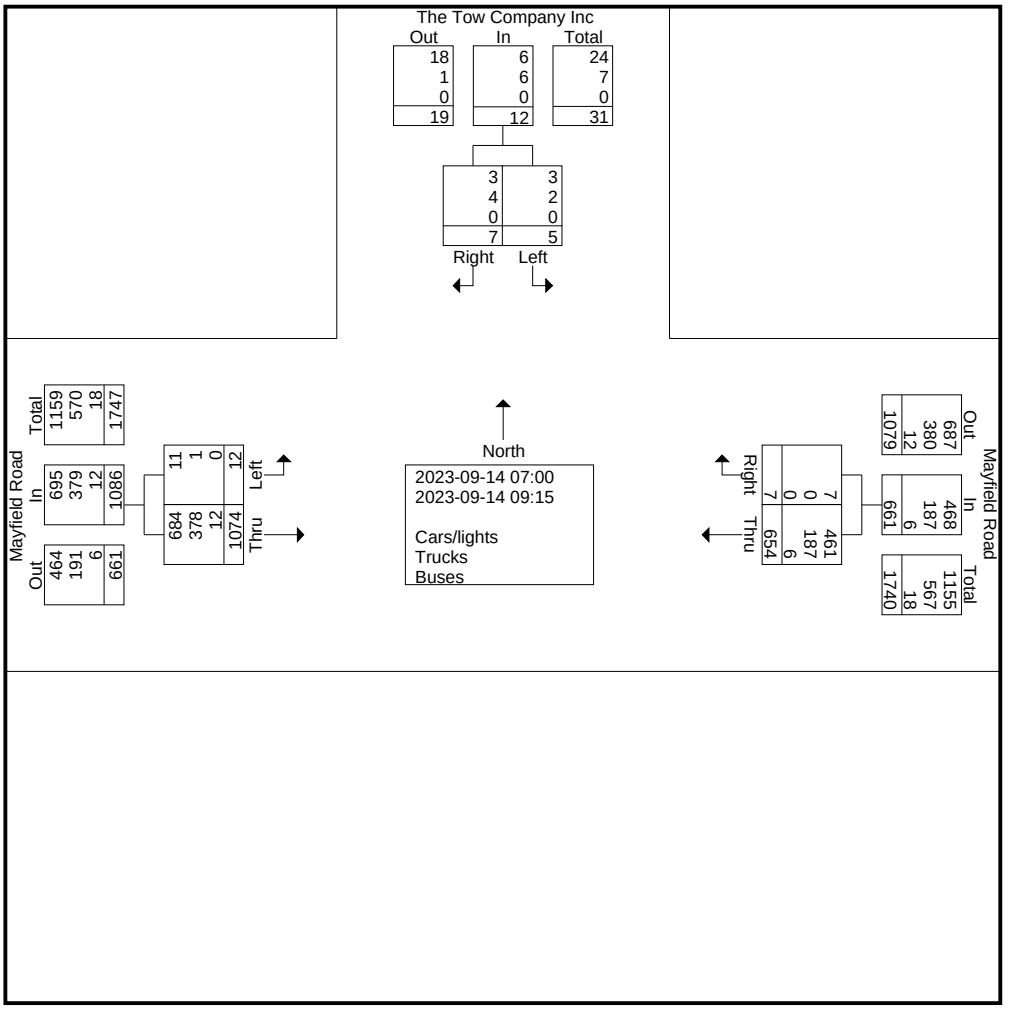
Groups Printed- Cars/lights - Trucks - Buses

	The Tow Company Inc Southbound				Mayfield Road Westbound				Mayfield Road Eastbound						
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00	0	1	[0]	1	64	0	[0]	64	0	125	[0]	125	0	190	190
07:15	1	0	[0]	1	72	1	[0]	73	0	104	[0]	104	0	178	178
07:30	0	0	[0]	0	67	0	[0]	67	0	101	[0]	101	0	168	168
07:45	0	1	[0]	1	73	0	[0]	73	1	108	[0]	109	0	183	183
Total	1	2	[0]	3	276	1	[0]	277	1	438	[0]	439	0	719	719
08:00	1	0	[0]	1	74	0	[0]	74	2	99	[0]	101	0	176	176
08:15	0	0	[0]	0	63	1	[0]	64	0	121	[0]	121	0	185	185
08:30	1	0	[0]	1	59	0	[0]	59	3	101	[0]	104	0	164	164
08:45	0	2	[0]	2	65	1	[0]	66	3	119	[0]	122	0	190	190
Total	2	2	[0]	4	261	2	[0]	263	8	440	[0]	448	0	715	715
09:00	1	2	[0]	3	63	1	[0]	64	1	95	[0]	96	0	163	163
09:15	1	1	[0]	2	54	3	[0]	57	2	101	[0]	103	0	162	162
Grand Total	5	7	[0]	12	654	7	[0]	661	12	1074	[0]	1086	0	1759	1759
Apprch %	41.7	58.3			98.9	1.1			1.1	98.9					
Total %	0.3	0.4		0.7	37.2	0.4		37.6	0.7	61.1		61.7	0	100	
Cars/lights	3	3		6	461	7		468	11	684		695	0	0	1169
% Cars/lights	60	42.9	0	50	70.5	100	0	70.8	91.7	63.7	0	64	0	0	66.5
Trucks	2	4		6	187	0		187	1	378		379	0	0	572
% Trucks	40	57.1	0	50	28.6	0	0	28.3	8.3	35.2	0	34.9	0	0	32.5
Buses	0	0		0	6	0		6	0	12		12	0	0	18
% Buses	0	0	0	0	0.9	0	0	0.9	0	1.1	0	1.1	0	0	1

LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Site Access & Mayfield Rd-AM
Site Code : 24085
Start Date : 2023-09-14
Page No : 2

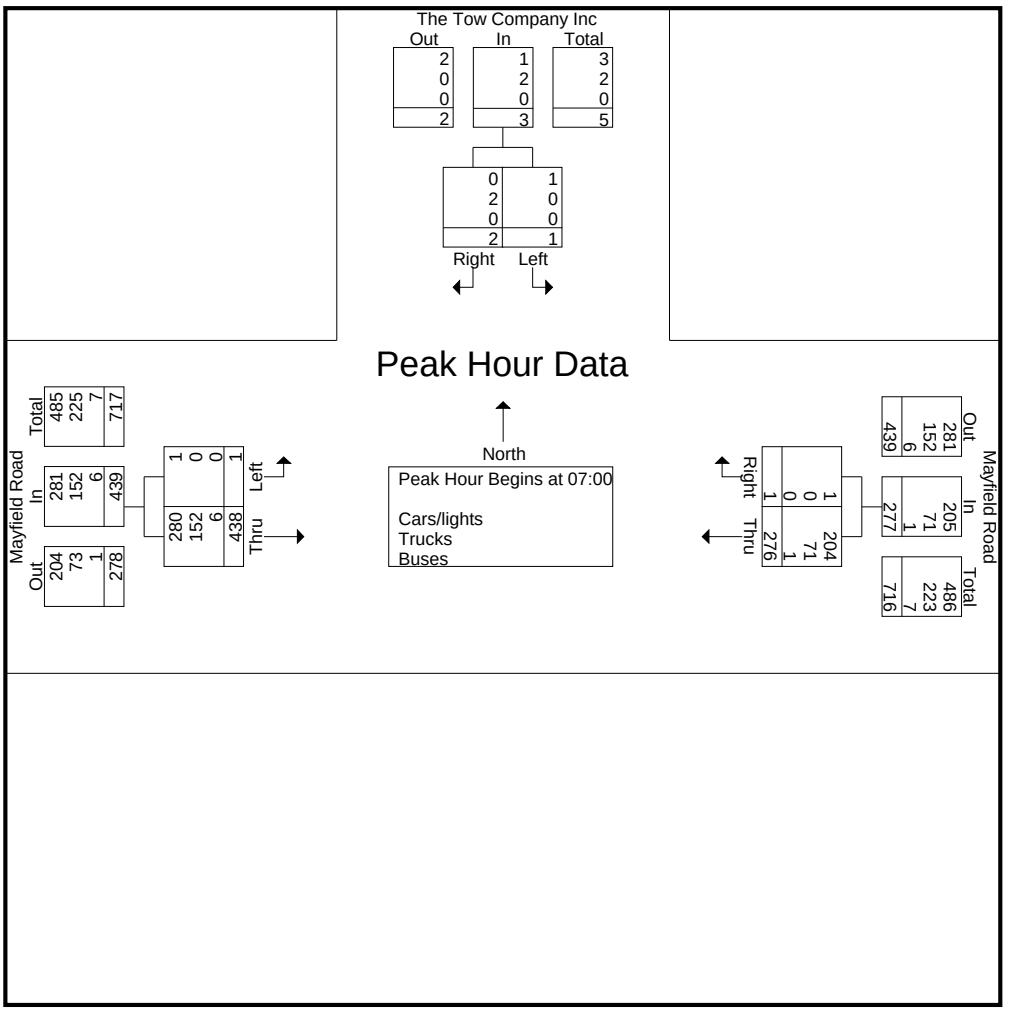


LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Site Access & Mayfield Rd-AM
Site Code : 24085
Start Date : 2023-09-14
Page No : 3

	The Tow Company Inc Southbound			Mayfield Road Westbound			Mayfield Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 09:15 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00										
07:00	0	**1**	**1**	64	0	64	0	**125**	**125**	**190**
07:15	**1**	0	1	72	**1**	**73**	0	104	104	178
07:30	0	0	0	67	0	67	0	101	101	168
07:45	0	1	1	**73**	0	73	**1**	108	109	183
Total Volume	1	2	3	276	1	277	1	438	439	719
% App. Total	33.3	66.7		99.6	0.4		0.2	99.8		
PHF	.250	.500	.750	.945	.250	.949	.250	.876	.878	.946
Cars/lights	1	0	1	204	1	205	1	280	281	487
% Cars/lights	100	0	33.3	73.9	100	74.0	100	63.9	64.0	67.7
Trucks	0	2	2	71	0	71	0	152	152	225
% Trucks	0	100	66.7	25.7	0	25.6	0	34.7	34.6	31.3
Buses	0	0	0	1	0	1	0	6	6	7
% Buses	0	0	0	0.4	0	0.4	0	1.4	1.4	1.0



LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Project No.: 24085
Intersection: Site Access & Mayfield Rd
Weather: Clear
Surveyor(s): ID

File Name : Site Access & Mayfield Rd-PM
Site Code : 24085
Start Date : 2023-09-14
Page No : 1

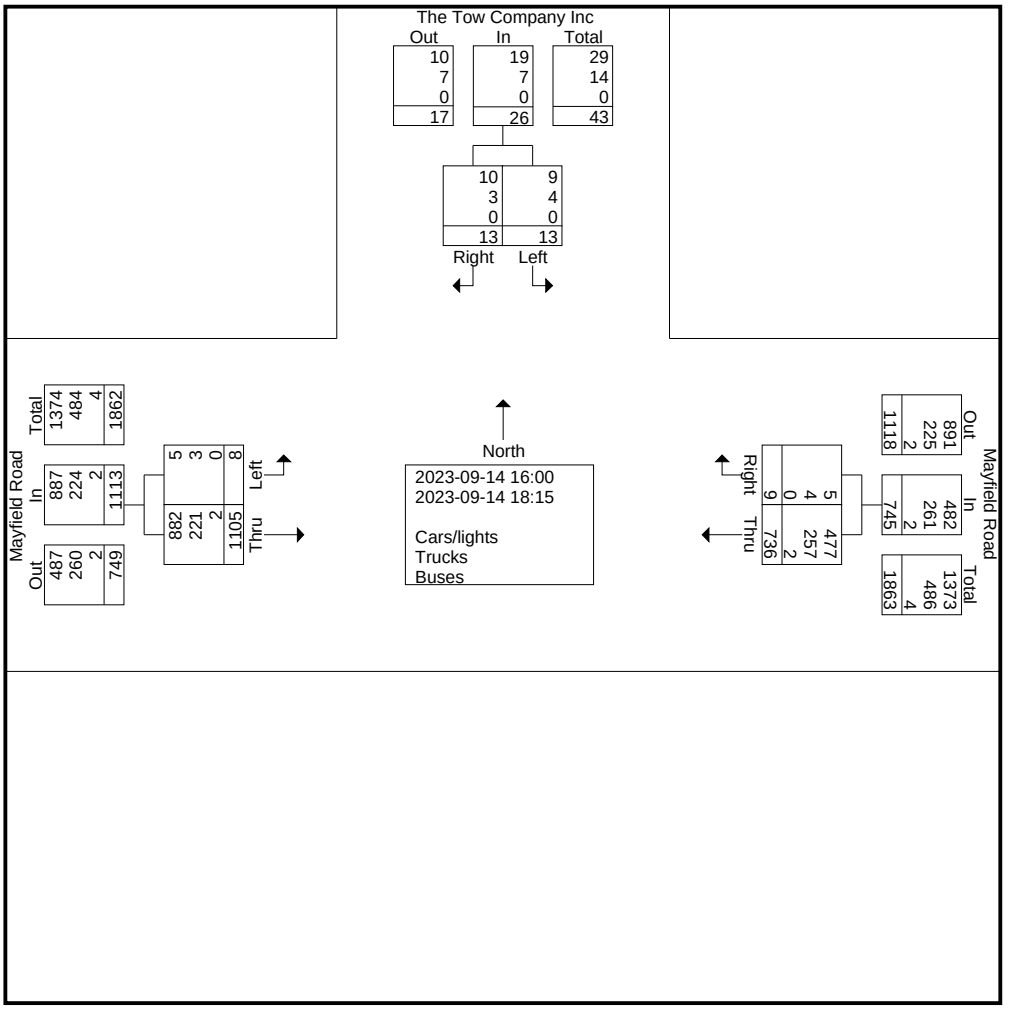
Groups Printed- Cars/lights - Trucks - Buses

	The Tow Company Inc Southbound				Mayfield Road Westbound				Mayfield Road Eastbound						
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
16:00	2	0	[0]	2	85	0	[0]	85	1	109	[0]	110	0	197	197
16:15	2	1	[0]	3	61	1	[0]	62	2	112	[0]	114	0	179	179
16:30	1	0	[0]	1	96	2	[0]	98	0	113	[0]	113	0	212	212
16:45	0	3	[0]	3	80	1	[0]	81	0	110	[0]	110	0	194	194
Total	5	4	[0]	9	322	4	[0]	326	3	444	[0]	447	0	782	782
17:00	0	3	[0]	3	80	1	[0]	81	0	98	[0]	98	0	182	182
17:15	1	1	[0]	2	76	1	[0]	77	0	122	[0]	122	0	201	201
17:30	1	1	[0]	2	73	1	[0]	74	2	127	[0]	129	0	205	205
17:45	0	1	[0]	1	71	0	[0]	71	2	99	[0]	101	0	173	173
Total	2	6	[0]	8	300	3	[0]	303	4	446	[0]	450	0	761	761
18:00	2	2	[0]	4	62	2	[0]	64	0	120	[0]	120	0	188	188
18:15	4	1	[0]	5	52	0	[0]	52	1	95	[0]	96	0	153	153
Grand Total	13	13	[0]	26	736	9	[0]	745	8	1105	[0]	1113	0	1884	1884
Apprch %	50	50			98.8	1.2			0.7	99.3					
Total %	0.7	0.7		1.4	39.1	0.5		39.5	0.4	58.7		59.1	0	100	
Cars/lights	9	10		19	477	5		482	5	882		887	0	0	1388
% Cars/lights	69.2	76.9	0	73.1	64.8	55.6	0	64.7	62.5	79.8	0	79.7	0	0	73.7
Trucks	4	3		7	257	4		261	3	221		224	0	0	492
% Trucks	30.8	23.1	0	26.9	34.9	44.4	0	35	37.5	20	0	20.1	0	0	26.1
Buses	0	0		0	2	0		2	0	2		2	0	0	4
% Buses	0	0	0	0	0.3	0	0	0.3	0	0.2	0	0.2	0	0	0.2

LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Site Access & Mayfield Rd-PM
Site Code : 24085
Start Date : 2023-09-14
Page No : 2

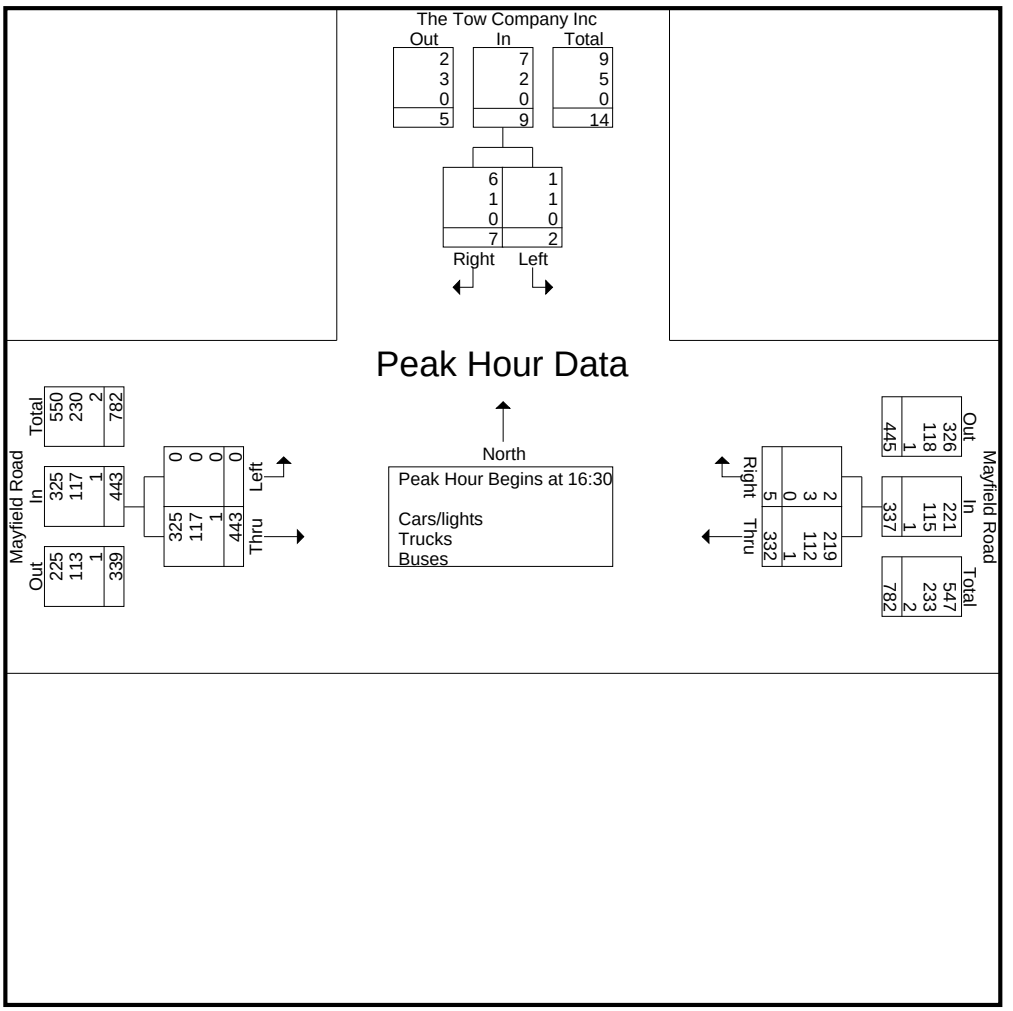


LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Site Access & Mayfield Rd-PM
Site Code : 24085
Start Date : 2023-09-14
Page No : 3

	The Tow Company Inc Southbound			Mayfield Road Westbound			Mayfield Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:15 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:30										
16:30	**1**	0	1	**96**	**2**	**98**	0	113	113	**212**
16:45	0	**3**	**3**	80	1	81	0	110	110	194
17:00	0	3	3	80	1	81	0	98	98	182
17:15	1	1	2	76	1	77	0	**122**	**122**	201
Total Volume	2	7	9	332	5	337	0	443	443	789
% App. Total	22.2	77.8		98.5	1.5		0	100		
PHF	.500	.583	.750	.865	.625	.860	.000	.908	.908	.930
Cars/lights	1	6	7	219	2	221	0	325	325	553
% Cars/lights	50.0	85.7	77.8	66.0	40.0	65.6	0	73.4	73.4	70.1
Trucks	1	1	2	112	3	115	0	117	117	234
% Trucks	50.0	14.3	22.2	33.7	60.0	34.1	0	26.4	26.4	29.7
Buses	0	0	0	1	0	1	0	1	1	2
% Buses	0	0	0	0.3	0	0.3	0	0.2	0.2	0.3



LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Project No.: 24085
Intersection: Site Access & Mayfield Rd
Weather: Clear
Surveyor(s): ID

File Name : Site Access & Mayfield Rd-SAT
Site Code : 24085
Start Date : 2023-09-16
Page No : 1

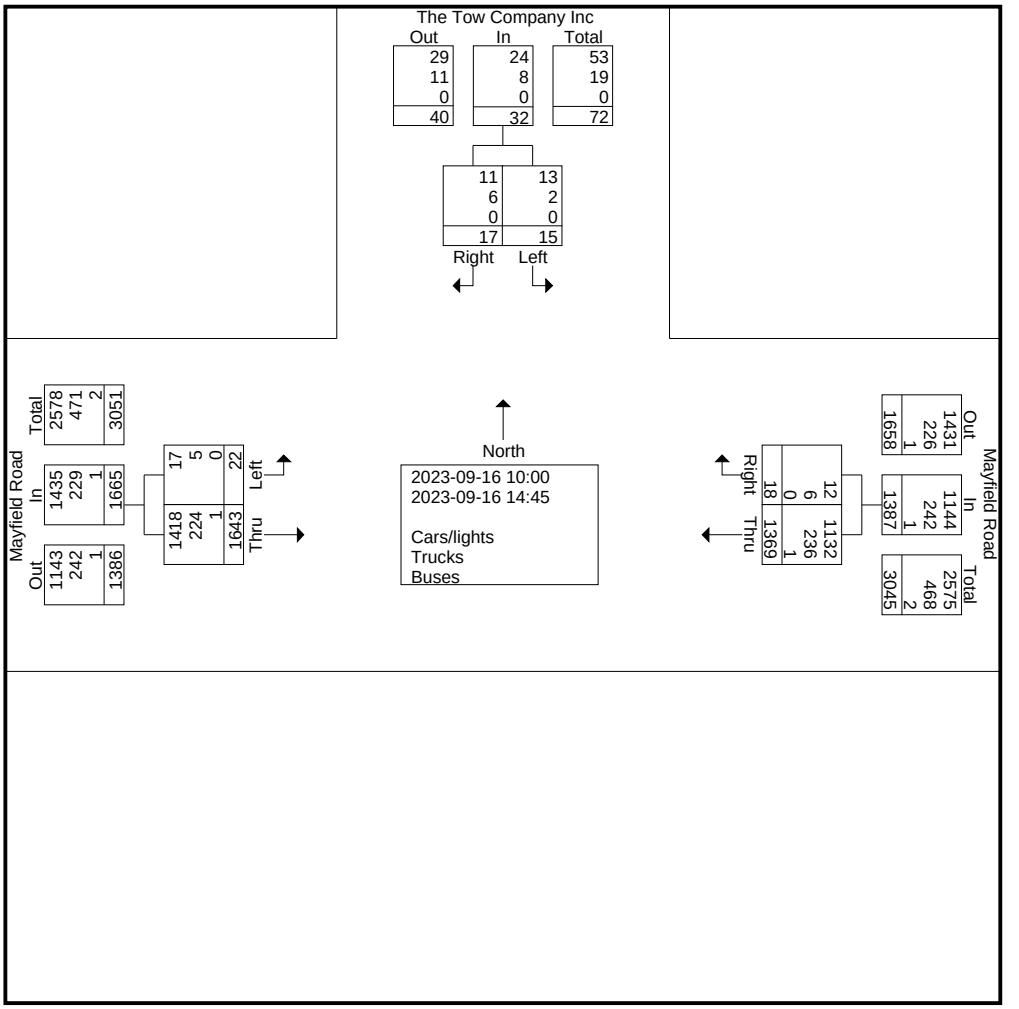
Groups Printed- Cars/lights - Trucks - Buses

	The Tow Company Inc Southbound				Mayfield Road Westbound				Mayfield Road Eastbound						
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
10:00	0	0	[0]	0	14	0	[0]	14	0	15	[0]	15	0	29	29
10:15	0	0	[0]	0	48	3	[0]	51	1	93	[0]	94	0	145	145
10:30	0	1	[0]	1	67	0	[0]	67	0	85	[0]	85	0	153	153
10:45	0	0	[0]	0	78	0	[0]	78	1	74	[0]	75	0	153	153
Total	0	1	[0]	1	207	3	[0]	210	2	267	[0]	269	0	480	480
11:00	0	0	[0]	0	60	0	[0]	60	2	84	[0]	86	0	146	146
11:15	1	1	[0]	2	54	2	[0]	56	3	88	[0]	91	0	149	149
11:30	2	1	[0]	3	68	1	[0]	69	1	73	[0]	74	0	146	146
11:45	1	4	[0]	5	58	1	[0]	59	0	94	[0]	94	0	158	158
Total	4	6	[0]	10	240	4	[0]	244	6	339	[0]	345	0	599	599
12:00	0	3	[0]	3	73	1	[0]	74	3	77	[0]	80	0	157	157
12:15	0	0	[0]	0	94	0	[0]	94	0	104	[0]	104	0	198	198
12:30	0	0	[0]	0	76	1	[0]	77	1	84	[0]	85	0	162	162
12:45	4	3	[0]	7	72	2	[0]	74	1	69	[0]	70	0	151	151
Total	4	6	[0]	10	315	4	[0]	319	5	334	[0]	339	0	668	668
13:00	1	1	[0]	2	57	1	[0]	58	2	84	[0]	86	0	146	146
13:15	3	0	[0]	3	91	1	[0]	92	1	83	[0]	84	0	179	179
13:30	0	1	[0]	1	57	1	[0]	58	1	87	[0]	88	0	147	147
13:45	0	0	[0]	0	73	2	[0]	75	2	88	[0]	90	0	165	165
Total	4	2	[0]	6	278	5	[0]	283	6	342	[0]	348	0	637	637
14:00	2	1	[0]	3	85	0	[0]	85	2	94	[0]	96	0	184	184
14:15	1	1	[0]	2	69	1	[0]	70	1	95	[0]	96	0	168	168
14:30	0	0	[0]	0	82	1	[0]	83	0	102	[0]	102	0	185	185
14:45	0	0	[0]	0	93	0	[0]	93	0	70	[0]	70	0	163	163
Total	3	2	[0]	5	329	2	[0]	331	3	361	[0]	364	0	700	700
Grand Total	15	17	[0]	32	1369	18	[0]	1387	22	1643	[0]	1665	0	3084	3084
Apprch %	46.9	53.1			98.7	1.3			1.3	98.7					
Total %	0.5	0.6		1	44.4	0.6		45	0.7	53.3		54	0	100	
Cars/lights	13	11		24	1132	12		1144	17	1418		1435	0	0	2603
% Cars/lights	86.7	64.7	0	75	82.7	66.7	0	82.5	77.3	86.3	0	86.2	0	0	84.4
Trucks	2	6		8	236	6		242	5	224		229	0	0	479
% Trucks	13.3	35.3	0	25	17.2	33.3	0	17.4	22.7	13.6	0	13.8	0	0	15.5
Buses	0	0		0	1	0		1	0	1		1	0	0	2
% Buses	0	0	0	0	0.1	0	0	0.1	0	0.1	0	0.1	0	0	0.1

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625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Site Access & Mayfield Rd-SAT
Site Code : 24085
Start Date : 2023-09-16
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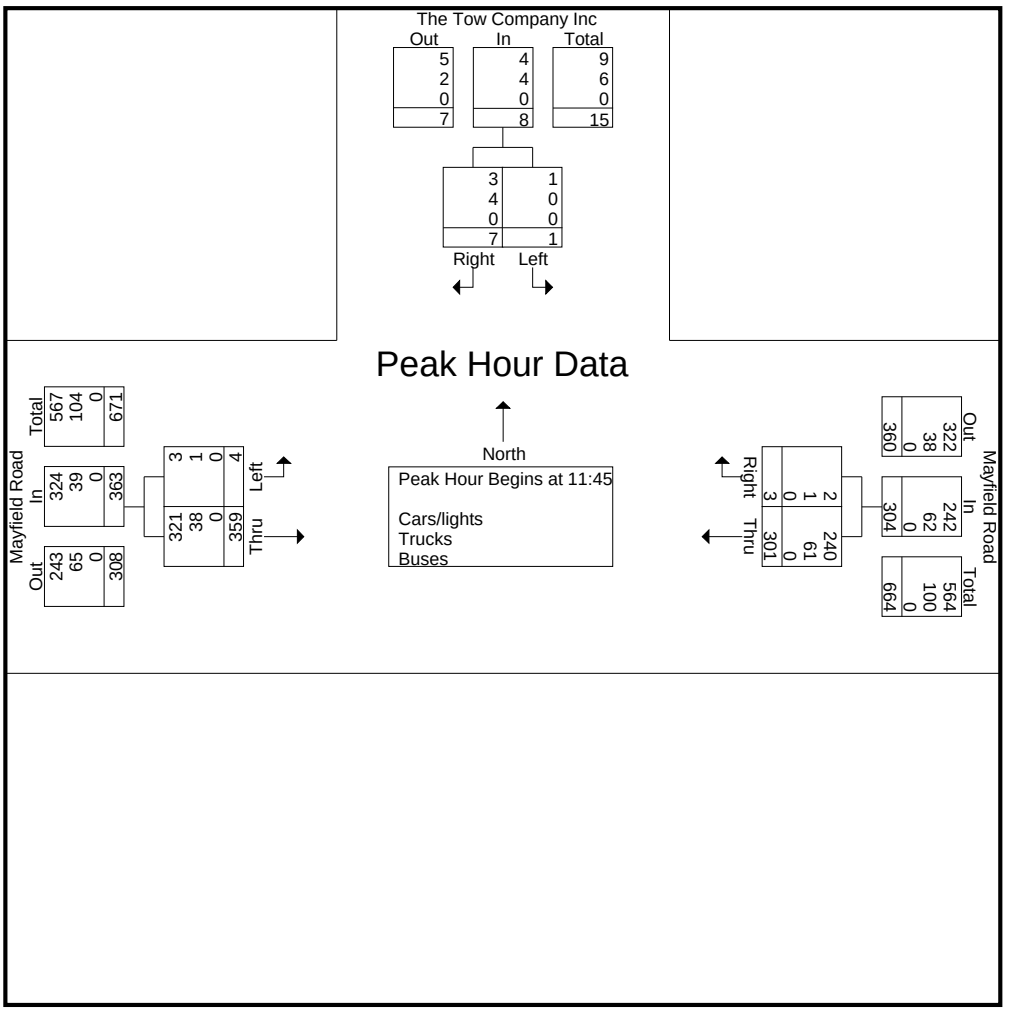


LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Site Access & Mayfield Rd-SAT
Site Code : 24085
Start Date : 2023-09-16
Page No : 3

	The Tow Company Inc Southbound			Mayfield Road Westbound			Mayfield Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 11:45										
11:45	**1**	**4**	**5**	58	**1**	59	0	94	94	158
12:00	0	3	3	73	1	74	**3**	77	80	157
12:15	0	0	0	**94**	0	**94**	0	**104**	**104**	**198**
12:30	0	0	0	76	1	77	1	84	85	162
Total Volume	1	7	8	301	3	304	4	359	363	675
% App. Total	12.5	87.5		99	1		1.1	98.9		
PHF	.250	.438	.400	.801	.750	.809	.333	.863	.873	.852
Cars/lights	1	3	4	240	2	242	3	321	324	570
% Cars/lights	100	42.9	50.0	79.7	66.7	79.6	75.0	89.4	89.3	84.4
Trucks	0	4	4	61	1	62	1	38	39	105
% Trucks	0	57.1	50.0	20.3	33.3	20.4	25.0	10.6	10.7	15.6
Buses	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0



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625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Project No.: 24085
Intersection: Coleraine Dr & Site Access
Weather: Clear
Surveyor(s): ID

File Name : Coleraine Dr & Site Access-AM
Site Code : 24085
Start Date : 2023-09-14
Page No : 1

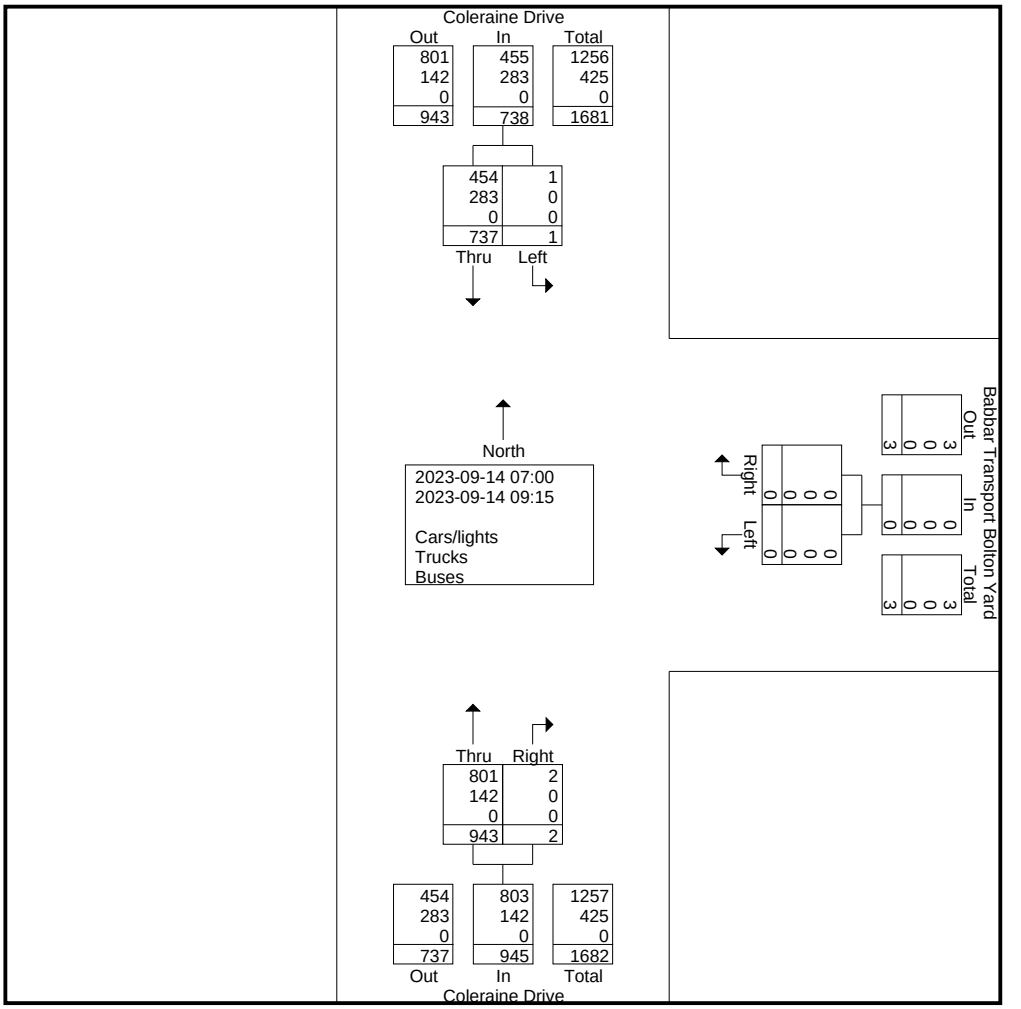
Groups Printed- Cars/lights - Trucks - Buses

	Coleraine Drive Southbound				Babbar Transport Bolton Yard Westbound				Coleraine Drive Northbound						
Start Time	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00	0	122	[0]	122	0	0	[0]	0	128	0	[0]	128	0	250	250
07:15	0	71	[0]	71	0	0	[0]	0	139	0	[0]	139	0	210	210
07:30	0	75	[0]	75	0	0	[0]	0	81	0	[0]	81	0	156	156
07:45	0	75	[0]	75	0	0	[0]	0	103	0	[0]	103	0	178	178
Total	0	343	[0]	343	0	0	[0]	0	451	0	[0]	451	0	794	794
08:00	0	72	[0]	72	0	0	[0]	0	102	2	[0]	104	0	176	176
08:15	1	62	[0]	63	0	0	[0]	0	87	0	[0]	87	0	150	150
08:30	0	71	[0]	71	0	0	[0]	0	74	0	[0]	74	0	145	145
08:45	0	66	[0]	66	0	0	[0]	0	85	0	[0]	85	0	151	151
Total	1	271	[0]	272	0	0	[0]	0	348	2	[0]	350	0	622	622
09:00	0	54	[0]	54	0	0	[0]	0	96	0	[0]	96	0	150	150
09:15	0	69	[0]	69	0	0	[0]	0	48	0	[0]	48	0	117	117
Grand Total	1	737	[0]	738	0	0	[0]	0	943	2	[0]	945	0	1683	1683
Apprch %	0.1	99.9			0	0			99.8	0.2					
Total %	0.1	43.8		43.9	0	0		0	56	0.1		56.1	0	100	
Cars/lights	1	454		455	0	0		0	801	2		803	0	0	1258
% Cars/lights	100	61.6	0	61.7	0	0	0	0	84.9	100	0	85	0	0	74.7
Trucks	0	283		283	0	0		0	142	0		142	0	0	425
% Trucks	0	38.4	0	38.3	0	0	0	0	15.1	0	0	15	0	0	25.3
Buses	0	0		0	0	0		0	0	0		0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : Coleraine Dr & Site Access-AM
Site Code : 24085
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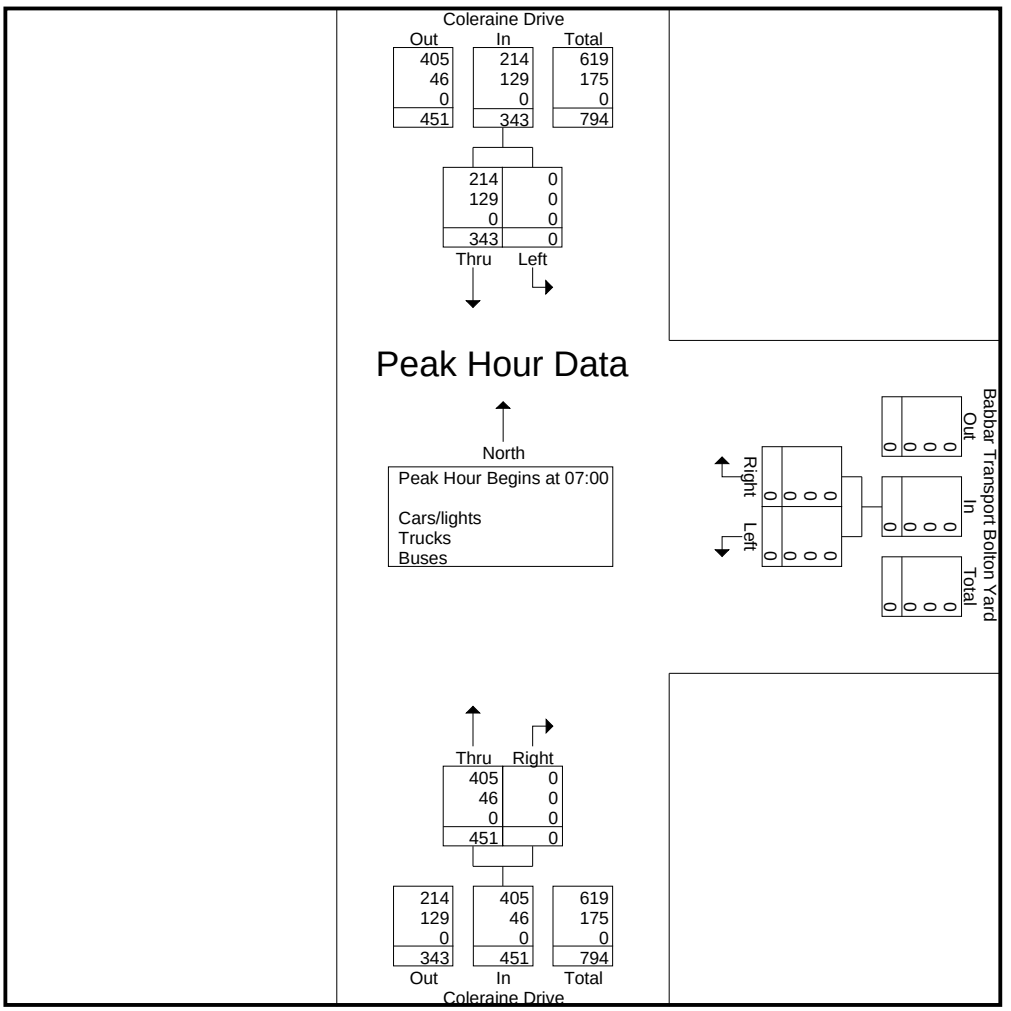


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Markham, ON L3R 9R9

File Name : Coleraine Dr & Site Access-AM
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	Coleraine Drive Southbound			Babbar Transport Bolton Yard Westbound			Coleraine Drive Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 09:15 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00										
07:00	0	**122**	**122**	0	0	0	128	0	128	**250**
07:15	0	71	71	0	0	0	**139**	0	**139**	210
07:30	0	75	75	0	0	0	81	0	81	156
07:45	0	75	75	0	0	0	103	0	103	178
Total Volume	0	343	343	0	0	0	451	0	451	794
% App. Total	0	100		0	0		100	0		
PHF	.000	.703	.703	.000	.000	.000	.811	.000	.811	.794
Cars/lights	0	214	214	0	0	0	405	0	405	619
% Cars/lights	0	62.4	62.4	0	0	0	89.8	0	89.8	78.0
Trucks	0	129	129	0	0	0	46	0	46	175
% Trucks	0	37.6	37.6	0	0	0	10.2	0	10.2	22.0
Buses	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0



LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Project No.: 24085
Intersection: Coleraine Dr & Site Access
Weather: Clear
Surveyor(s): ID

File Name : Coleraine Dr & Site Access-PM
Site Code : 24085
Start Date : 2023-09-14
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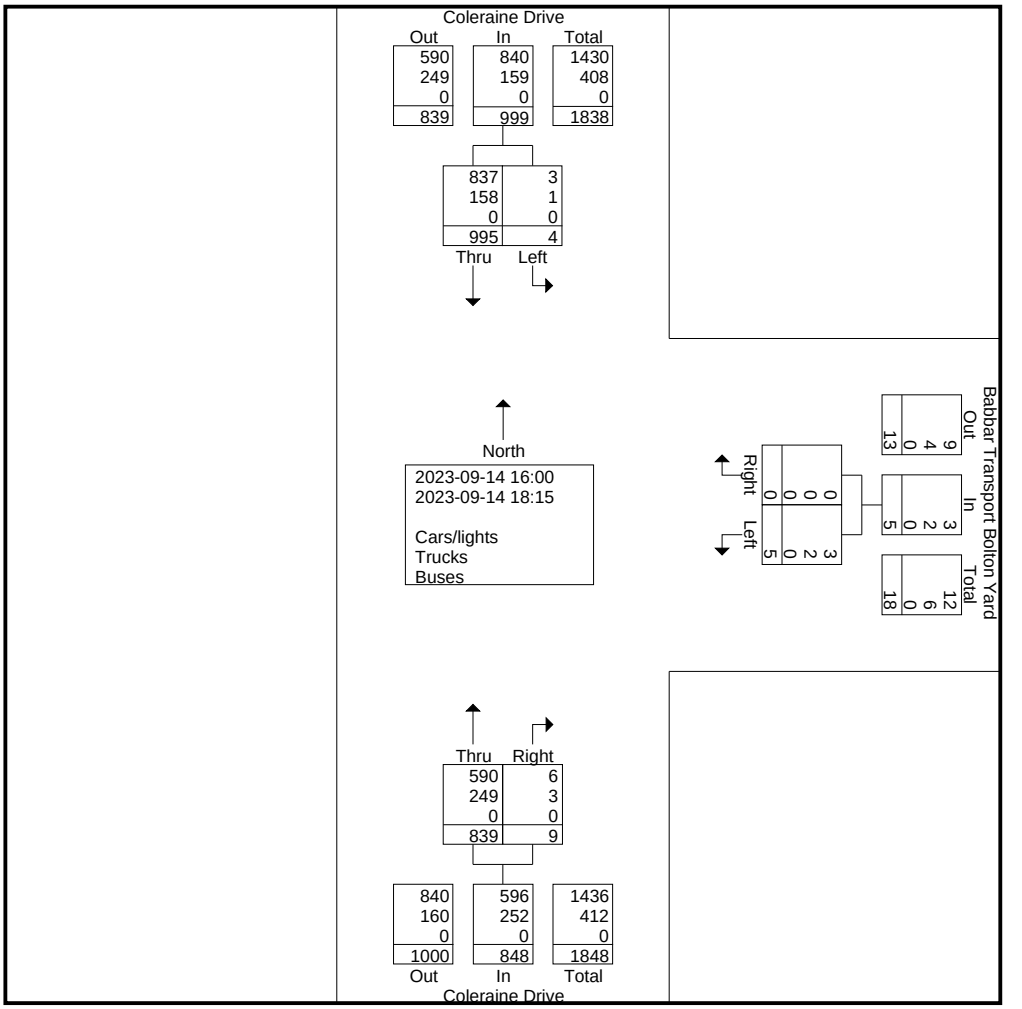
Groups Printed- Cars/lights - Trucks - Buses

	Coleraine Drive Southbound				Babbar Transport Bolton Yard Westbound				Coleraine Drive Northbound						
Start Time	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
16:00	2	87	[0]	89	1	0	[0]	1	63	1	[0]	64	0	154	154
16:15	0	75	[0]	75	0	0	[0]	0	58	2	[0]	60	0	135	135
16:30	0	88	[0]	88	0	0	[0]	0	60	2	[0]	62	0	150	150
16:45	2	80	[0]	82	1	0	[0]	1	62	2	[0]	64	0	147	147
Total	4	330	[0]	334	2	0	[0]	2	243	7	[0]	250	0	586	586
17:00	0	100	[0]	100	3	0	[0]	3	74	1	[0]	75	0	178	178
17:15	0	95	[0]	95	0	0	[0]	0	63	0	[0]	63	0	158	158
17:30	0	134	[0]	134	0	0	[0]	0	93	0	[0]	93	0	227	227
17:45	0	82	[0]	82	0	0	[0]	0	153	0	[0]	153	0	235	235
Total	0	411	[0]	411	3	0	[0]	3	383	1	[0]	384	0	798	798
18:00	0	145	[0]	145	0	0	[0]	0	107	1	[0]	108	0	253	253
18:15	0	109	[0]	109	0	0	[0]	0	106	0	[0]	106	0	215	215
Grand Total	4	995	[0]	999	5	0	[0]	5	839	9	[0]	848	0	1852	1852
Apprch %	0.4	99.6			100	0			98.9	1.1					
Total %	0.2	53.7		53.9	0.3	0		0.3	45.3	0.5		45.8	0	100	
Cars/lights	3	837		840	3	0		3	590	6		596	0	0	1439
% Cars/lights	75	84.1	0	84.1	60	0	0	60	70.3	66.7	0	70.3	0	0	77.7
Trucks	1	158		159	2	0		2	249	3		252	0	0	413
% Trucks	25	15.9	0	15.9	40	0	0	40	29.7	33.3	0	29.7	0	0	22.3
Buses	0	0		0	0	0		0	0	0		0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : Coleraine Dr & Site Access-PM
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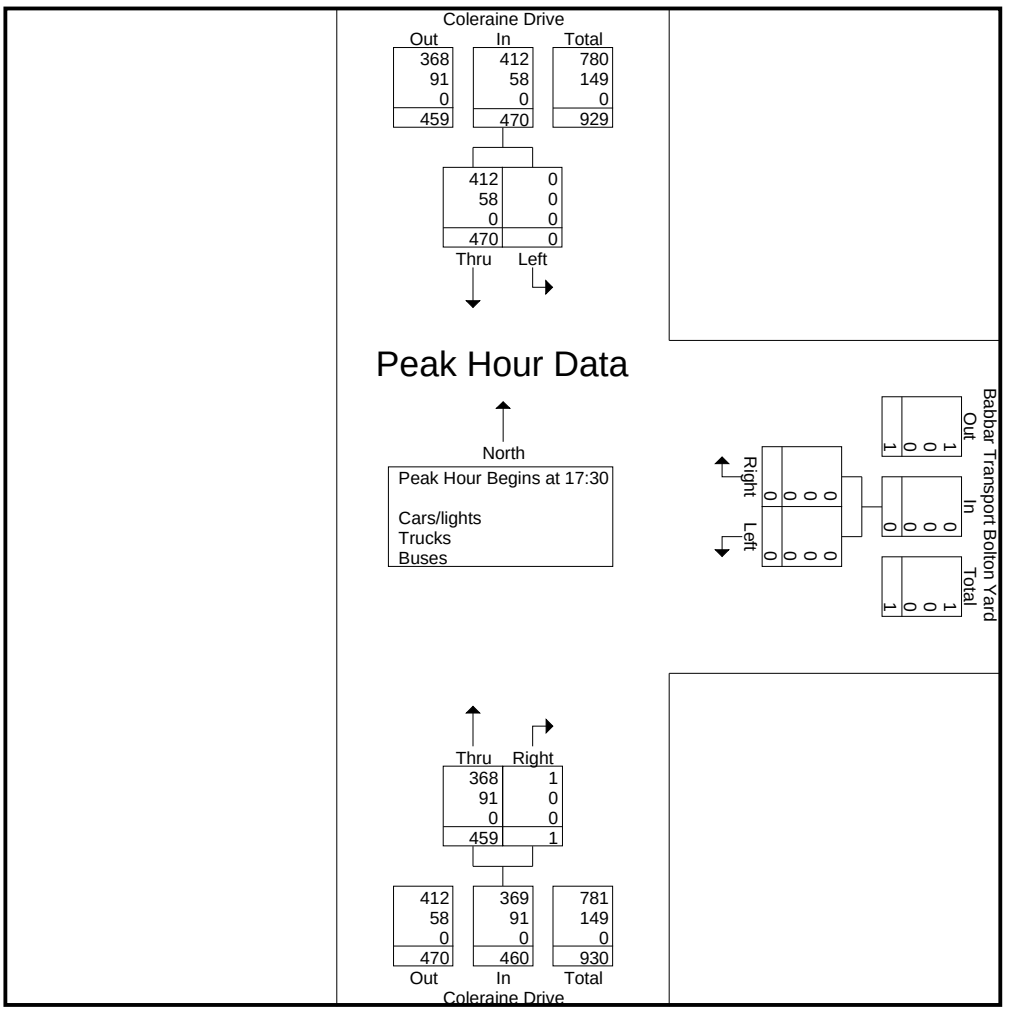


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625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Coleraine Dr & Site Access-PM
Site Code : 24085
Start Date : 2023-09-14
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	Coleraine Drive Southbound			Babbar Transport Bolton Yard Westbound			Coleraine Drive Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:15 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:30										
17:30	0	134	134	0	0	0	93	0	93	227
17:45	0	82	82	0	0	0	**153**	0	**153**	235
18:00	0	**145**	**145**	0	0	0	107	**1**	108	**253**
18:15	0	109	109	0	0	0	106	0	106	215
Total Volume	0	470	470	0	0	0	459	1	460	930
% App. Total	0	100		0	0		99.8	0.2		
PHF	.000	.810	.810	.000	.000	.000	.750	.250	.752	.919
Cars/lights	0	412	412	0	0	0	368	1	369	781
% Cars/lights	0	87.7	87.7	0	0	0	80.2	100	80.2	84.0
Trucks	0	58	58	0	0	0	91	0	91	149
% Trucks	0	12.3	12.3	0	0	0	19.8	0	19.8	16.0
Buses	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0



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625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Project No.: 24085
Intersection: Coleraine Dr & Site Access
Weather: Clear
Surveyor(s): ID

File Name : Coleraine Dr & Site Access-SAT
Site Code : 24085
Start Date : 2023-09-16
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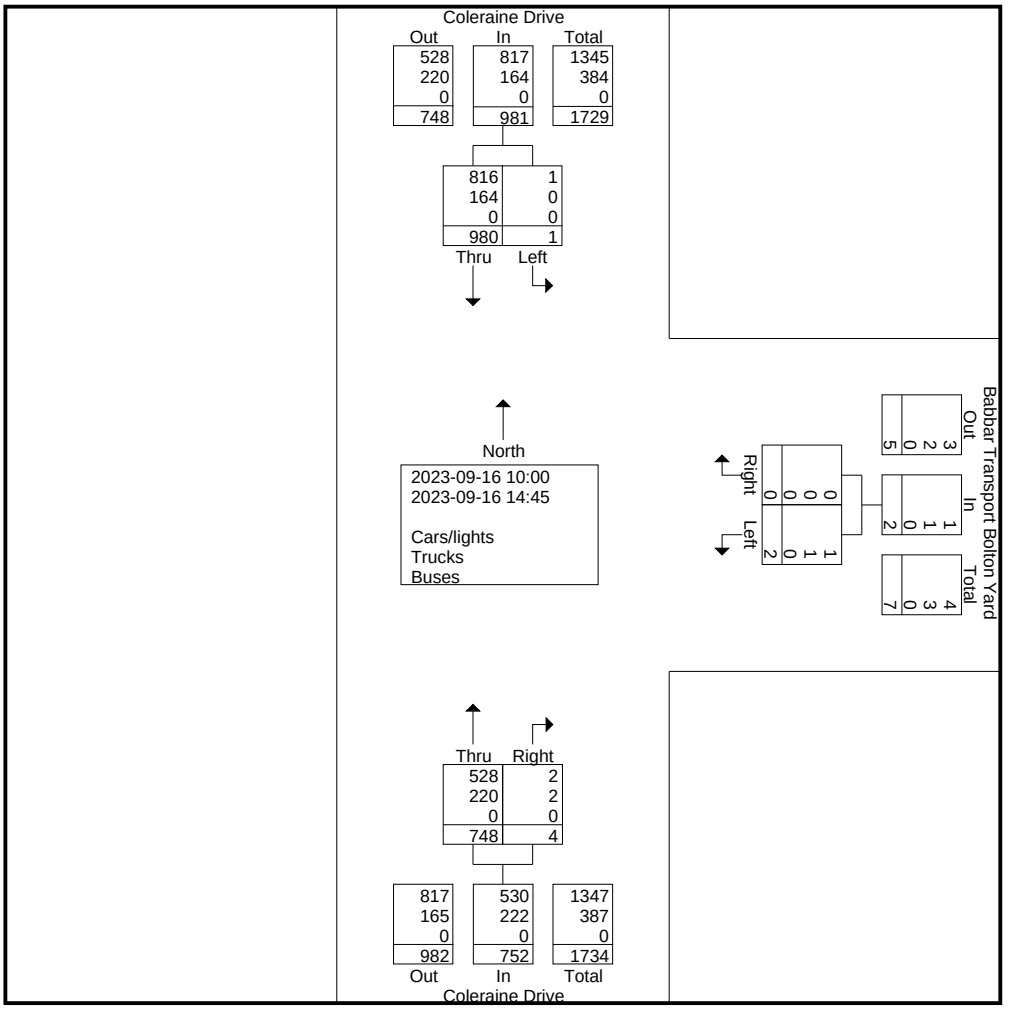
Groups Printed- Cars/lights - Trucks - Buses

	Coleraine Drive Southbound				Babbar Transport Bolton Yard Westbound				Coleraine Drive Northbound						
Start Time	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
10:00	0	57	[0]	57	0	0	[0]	0	35	0	[0]	35	0	92	92
10:15	0	48	[0]	48	0	0	[0]	0	31	0	[0]	31	0	79	79
10:30	0	34	[0]	34	0	0	[0]	0	40	0	[0]	40	0	74	74
10:45	0	43	[0]	43	0	0	[0]	0	22	0	[0]	22	0	65	65
Total	0	182	[0]	182	0	0	[0]	0	128	0	[0]	128	0	310	310
11:00	0	44	[0]	44	0	0	[0]	0	34	0	[0]	34	0	78	78
11:15	0	46	[0]	46	1	0	[0]	1	32	1	[0]	33	0	80	80
11:30	0	46	[0]	46	0	0	[0]	0	35	0	[0]	35	0	81	81
11:45	0	35	[0]	35	0	0	[0]	0	30	0	[0]	30	0	65	65
Total	0	171	[0]	171	1	0	[0]	1	131	1	[0]	132	0	304	304
12:00	0	39	[0]	39	0	0	[0]	0	56	0	[0]	56	0	95	95
12:15	0	48	[0]	48	0	0	[0]	0	35	0	[0]	35	0	83	83
12:30	0	52	[0]	52	0	0	[0]	0	44	0	[0]	44	0	96	96
12:45	0	40	[0]	40	0	0	[0]	0	43	0	[0]	43	0	83	83
Total	0	179	[0]	179	0	0	[0]	0	178	0	[0]	178	0	357	357
13:00	0	63	[0]	63	0	0	[0]	0	42	0	[0]	42	0	105	105
13:15	0	42	[0]	42	0	0	[0]	0	28	0	[0]	28	0	70	70
13:30	0	60	[0]	60	0	0	[0]	0	40	0	[0]	40	0	100	100
13:45	1	56	[0]	57	0	0	[0]	0	44	2	[0]	46	0	103	103
Total	1	221	[0]	222	0	0	[0]	0	154	2	[0]	156	0	378	378
14:00	0	50	[0]	50	1	0	[0]	1	35	1	[0]	36	0	87	87
14:15	0	61	[0]	61	0	0	[0]	0	43	0	[0]	43	0	104	104
14:30	0	75	[0]	75	0	0	[0]	0	37	0	[0]	37	0	112	112
14:45	0	41	[0]	41	0	0	[0]	0	42	0	[0]	42	0	83	83
Total	0	227	[0]	227	1	0	[0]	1	157	1	[0]	158	0	386	386
Grand Total	1	980	[0]	981	2	0	[0]	2	748	4	[0]	752	0	1735	1735
Apprch %	0.1	99.9			100	0			99.5	0.5					
Total %	0.1	56.5		56.5	0.1	0		0.1	43.1	0.2		43.3	0	100	
Cars/lights	1	816		817	1	0		1	528	2		530	0	0	1348
% Cars/lights	100	83.3	0	83.3	50	0	0	50	70.6	50	0	70.5	0	0	77.7
Trucks	0	164		164	1	0		1	220	2		222	0	0	387
% Trucks	0	16.7	0	16.7	50	0	0	50	29.4	50	0	29.5	0	0	22.3
Buses	0	0		0	0	0		0	0	0		0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Coleraine Dr & Site Access-SAT
Site Code : 24085
Start Date : 2023-09-16
Page No : 2

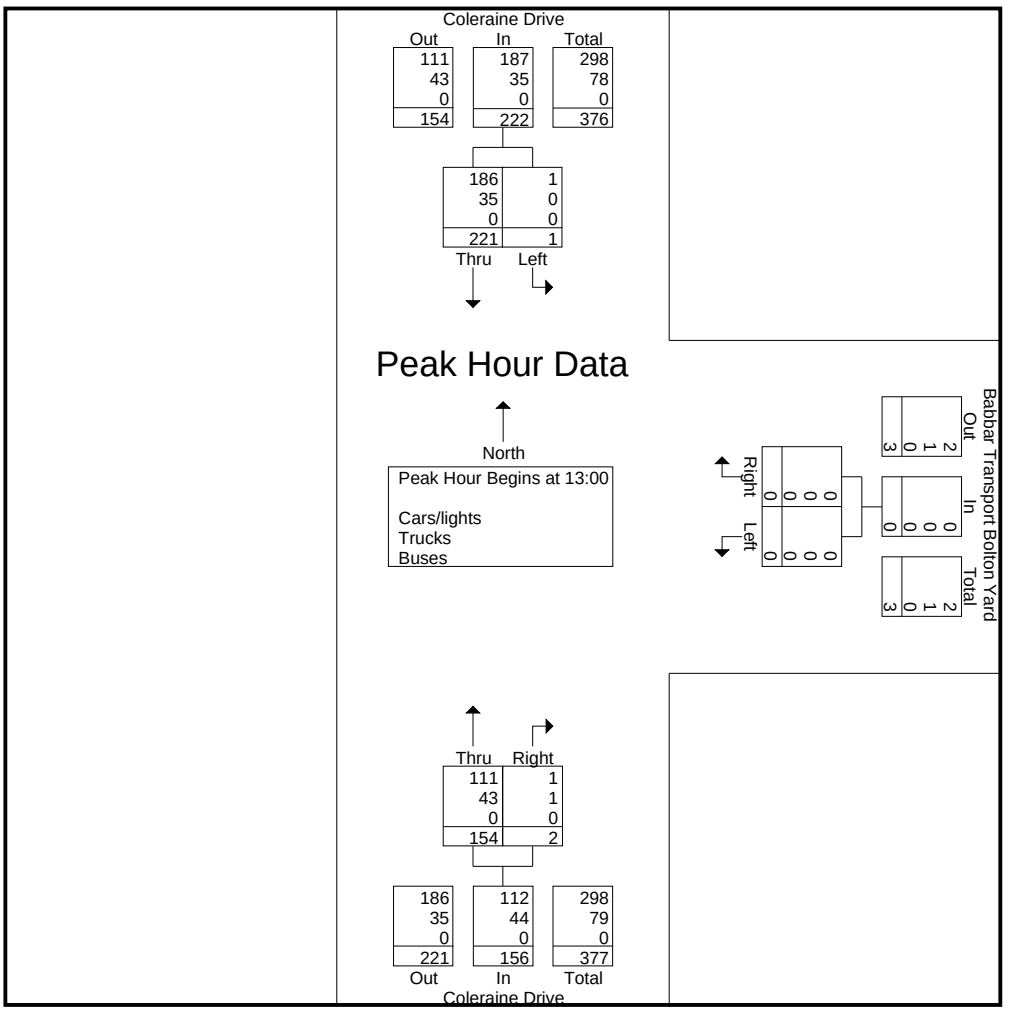


LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

File Name : Coleraine Dr & Site Access-SAT
Site Code : 24085
Start Date : 2023-09-16
Page No : 3

	Coleraine Drive Southbound			Babbar Transport Bolton Yard Westbound			Coleraine Drive Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 13:00										
13:00	0	**63**	**63**	0	0	0	42	0	42	**105**
13:15	0	42	42	0	0	0	28	0	28	70
13:30	0	60	60	0	0	0	40	0	40	100
13:45	**1**	56	57	0	0	0	**44**	**2**	**46**	103
Total Volume	1	221	222	0	0	0	154	2	156	378
% App. Total	0.5	99.5		0	0		98.7	1.3		
PHF	.250	.877	.881	.000	.000	.000	.875	.250	.848	.900
Cars/lights	1	186	187	0	0	0	111	1	112	299
% Cars/lights	100	84.2	84.2	0	0	0	72.1	50.0	71.8	79.1
Trucks	0	35	35	0	0	0	43	1	44	79
% Trucks	0	15.8	15.8	0	0	0	27.9	50.0	28.2	20.9
Buses	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0



APPENDIX C

Background Developments & Growth Rates

TOWN OF CALEDON
PLANNING
RECEIVED
Oct 01, 2020

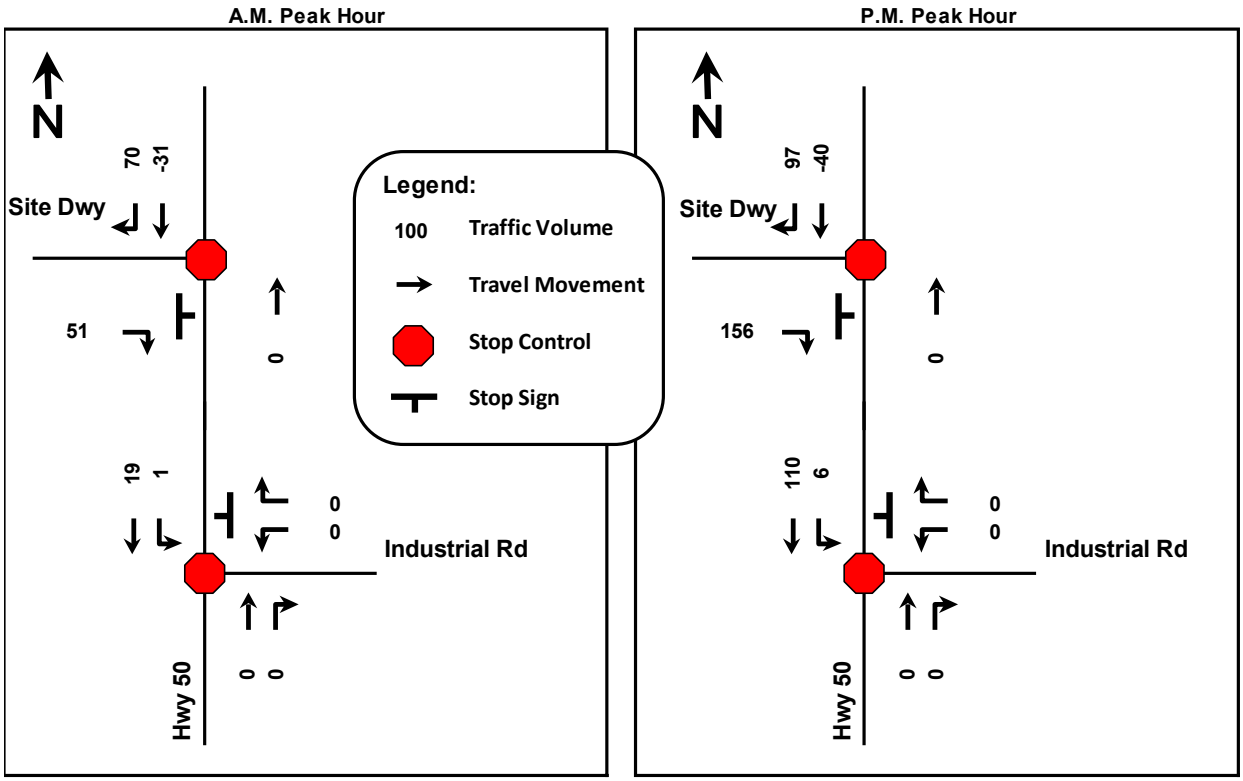
Table 5-1 Trip Generation Summary

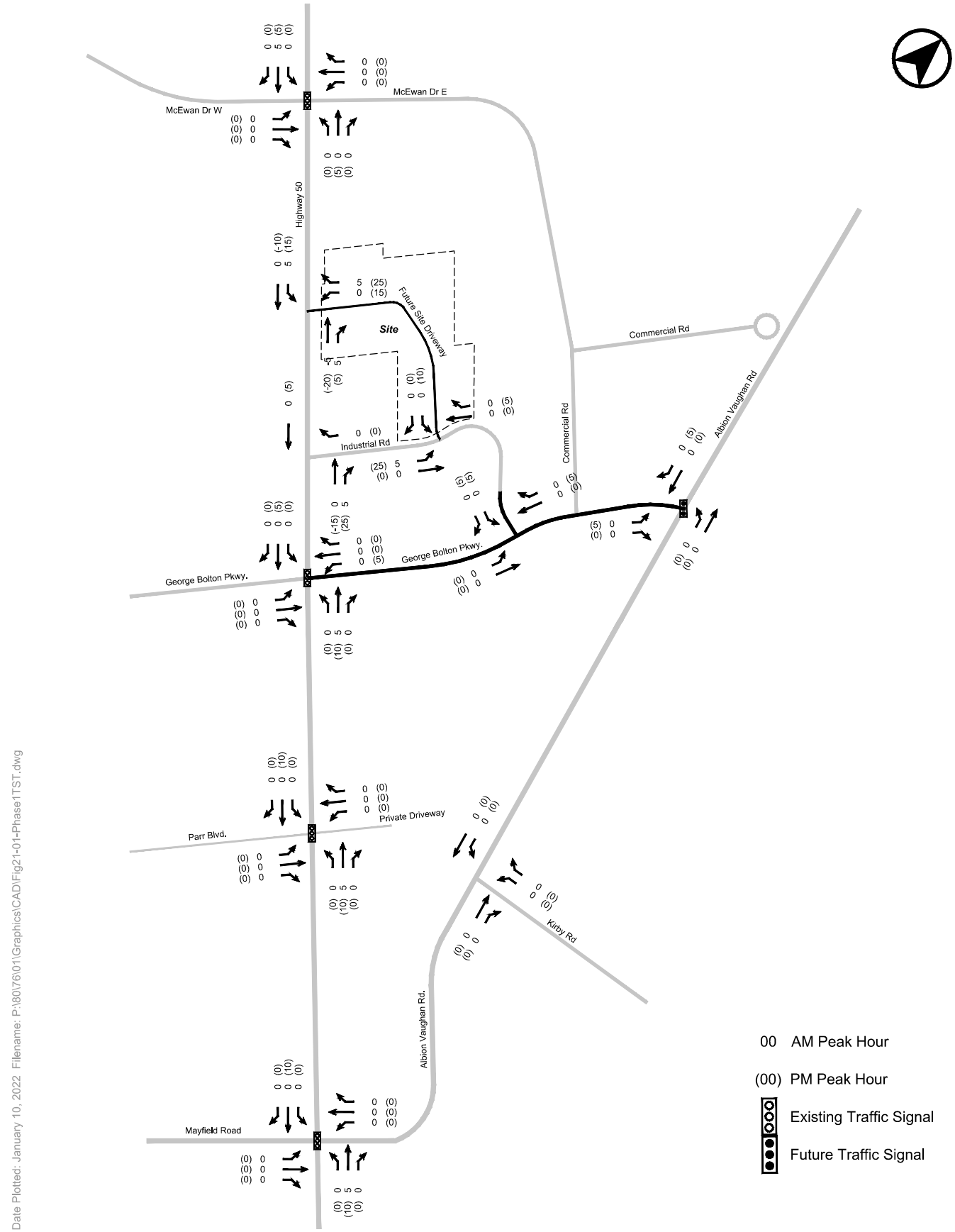
Land Use	Size	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		In	Out	Total	In	Out	Total
Gasoline Station with Convenience Market and Car Wash	8 Positions	43	42	**85**	53	54	**107**
Auto Body Shop / Shopping Center	278.7 m^2 / 3,000 s.f.	12	7	**19**	30	32	**62**
Office	460.7 m^2 / 4960 s.f.	15	2	**17**	14	70	**84**
Pass-by Trips		31	31	**62**	40	40	**80**
Primary New Trips		**39**	**20**	**59**	**57**	**116**	**173**

In order to analyze the future total conditions, the estimated new peak hour vehicular trips summarized in Table 5-1 were assigned to the site driveways and study intersections. The directional route distribution of site generated traffic was based on the access configuration.

Based on the abovementioned trip distribution the estimated new trips associated with the proposed development summarized in Table 5-1 were assigned at the site driveways and study intersections accordingly. The total new assigned peak hour site generated traffic volumes with pass-by reduction are shown in **Figure 5-1**.

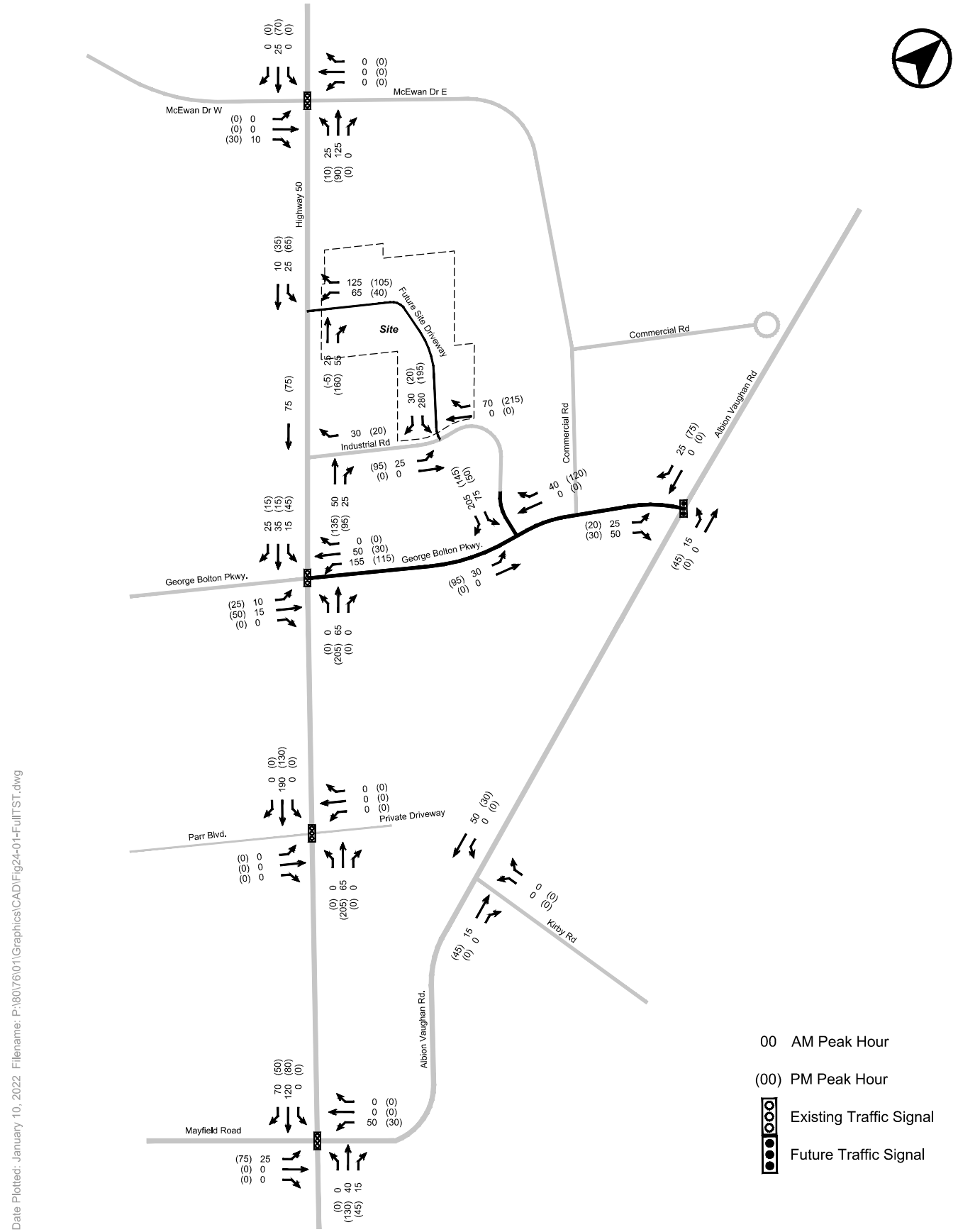
Figure 5-1 Total Peak Hour Proposed Site Development Related Trips





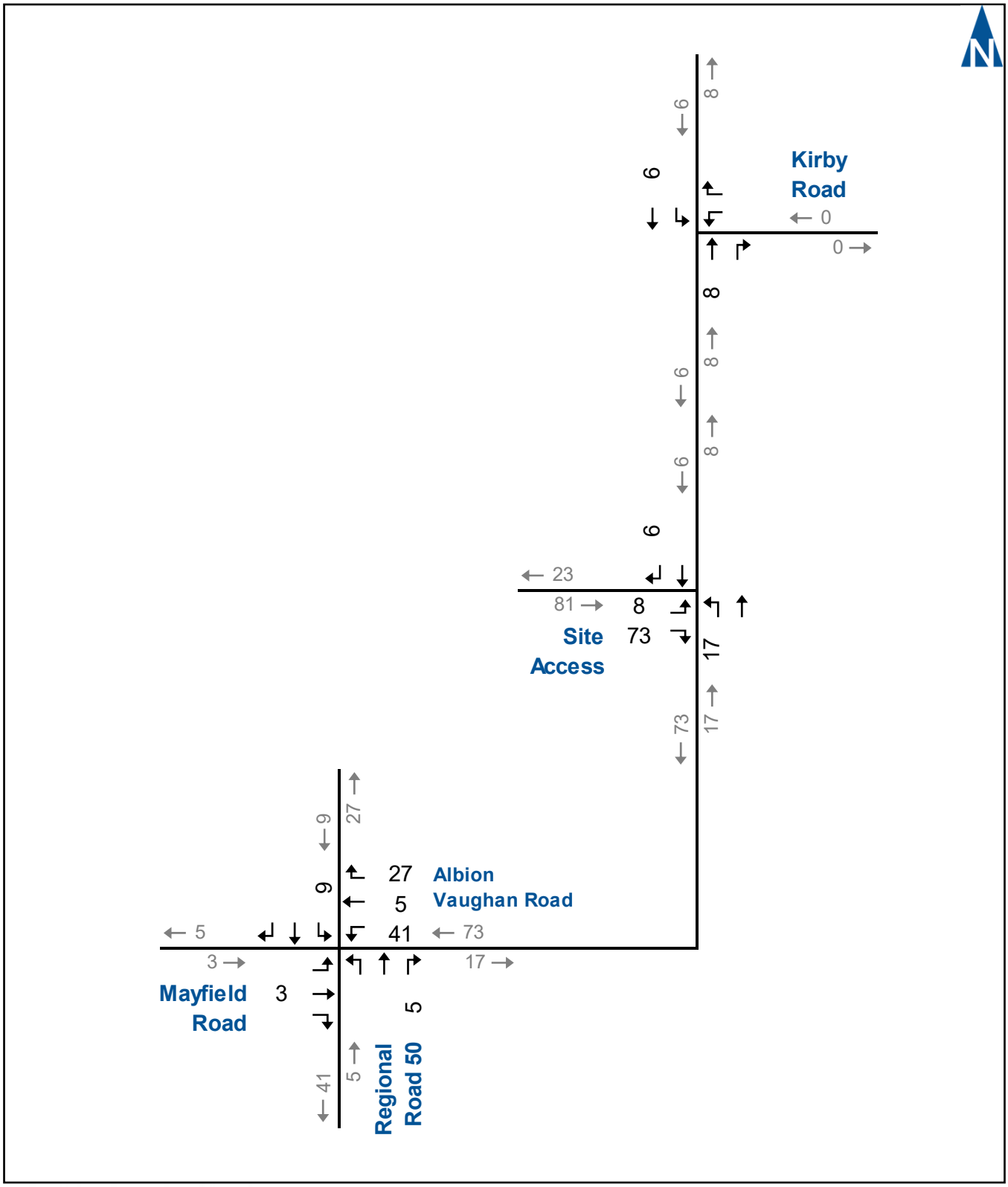
Date Plotted: January 10, 2022 Filename: P:\8076\01\Graphics\CAD\Fig21-01-Phase1TST.dwg

FIGURE 21 PHASE 1 TOTAL SITE TRAFFIC VOLUMES

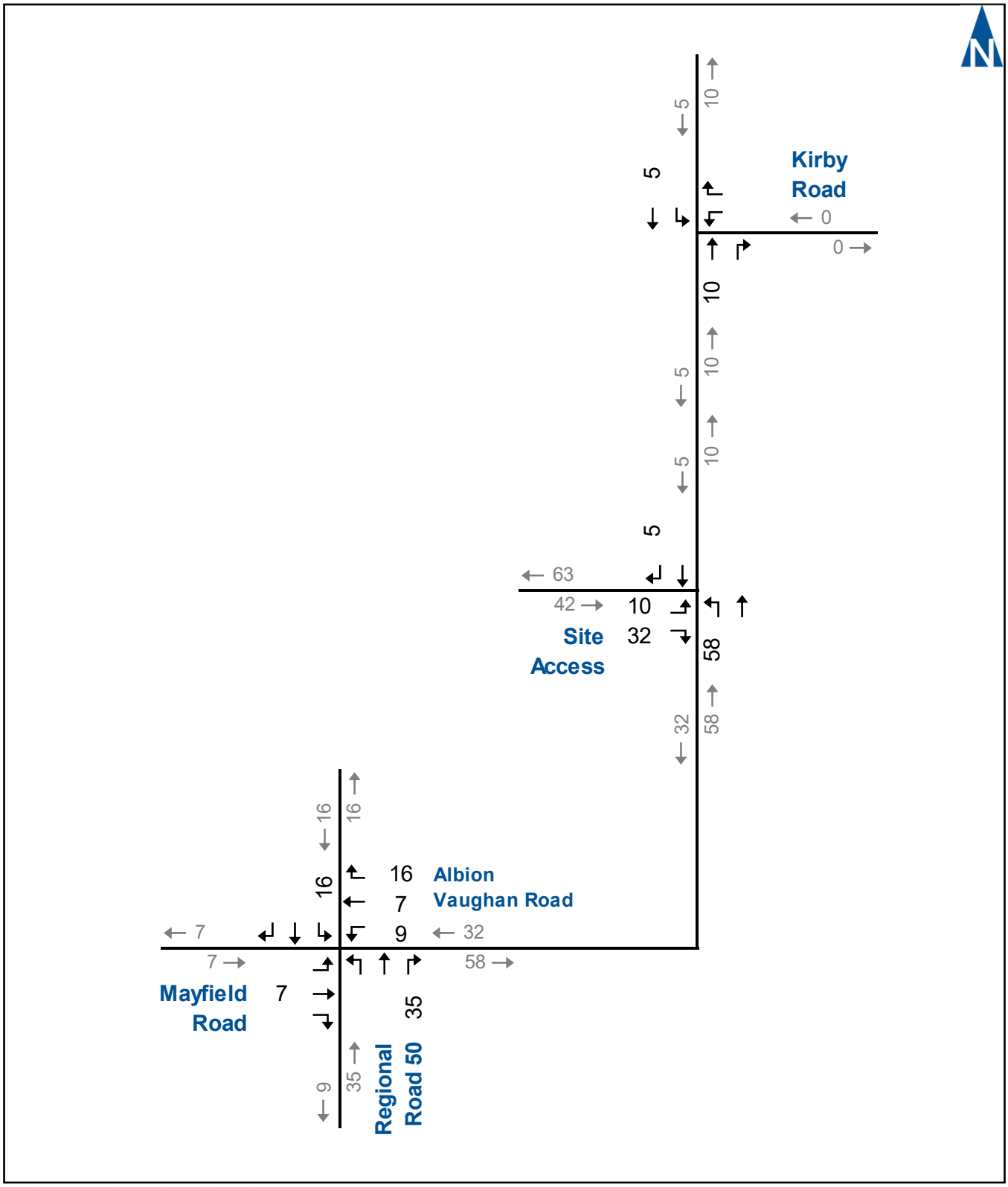


Date Plotted: January 10, 2022 Filename: P:\8076\01\Graphics\CAD\Fig24-01-FullTST.dwg

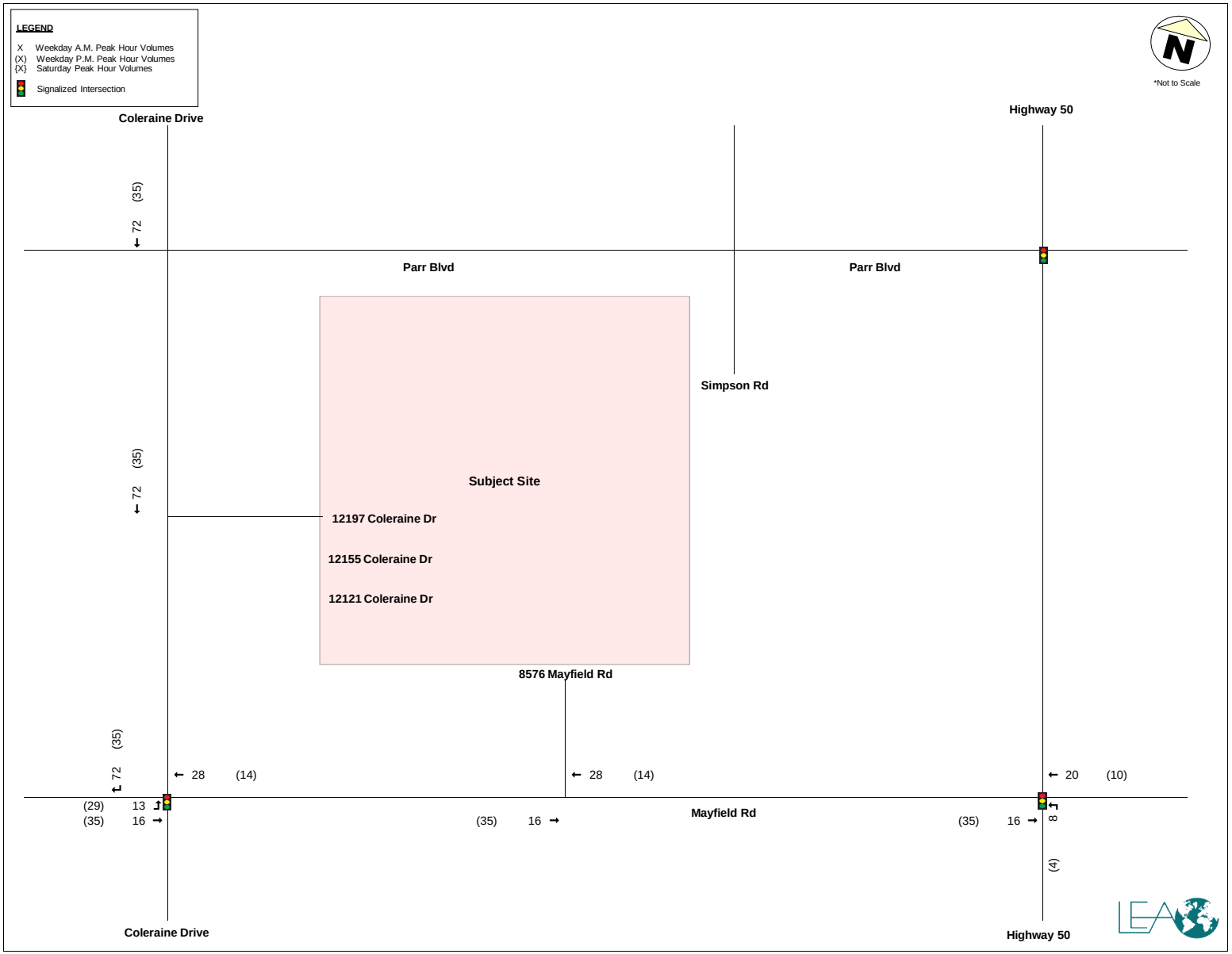
FIGURE 24 FULL BUILD-OUT TOTAL SITE TRAFFIC VOLUMES



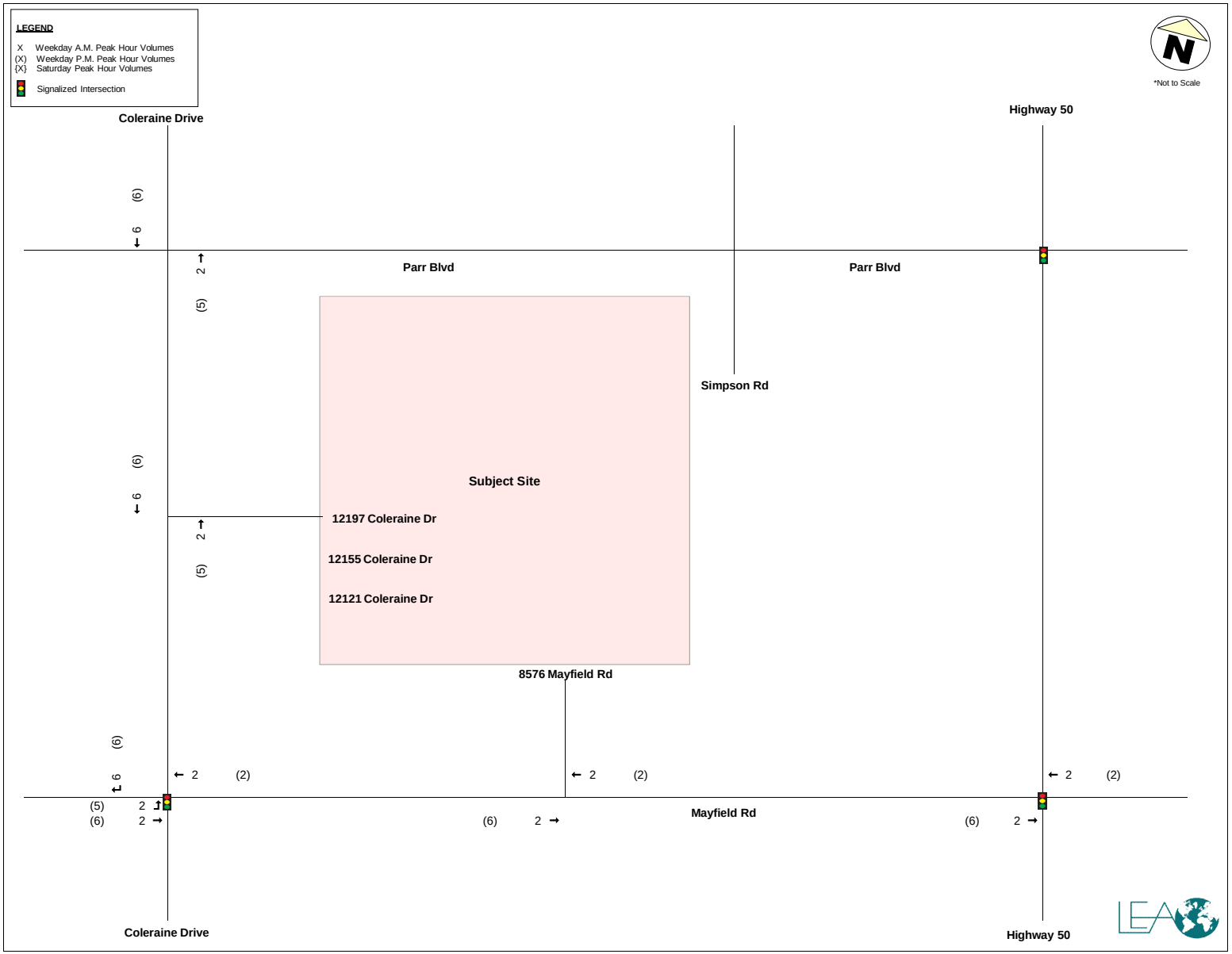
Site Traffic Volumes
AM Peak Hour



Site Traffic Volumes
PM Peak Hour



Triangle Lands Auto Trips



Triangle Lands Truck Trips

Table 5-3: Trip Distribution

Direction From/ To	Expected Route	Industrial Weekday AM/PM	
		In	Out
North	Albion Vaughn Road	8%	9%
	Coleraine Drive	14%	11%
	Highway 50	-	4%
	Humber Station Road	3%	-
South	Clarkway Drive	18%	22%
	Highway 50	3%	4%
East	Healey Road	6%	3%
West	Healey Road	13%	16%
	Mayfield Road	35%	31%
	Total	100%	100%

The site-generated traffic volumes for the weekday AM and PM peak hours under the 2028, 2033, and 2043 horizon years are illustrated in **Figure 5-1** to **Figure 5-6**.

Figure 5-1: Total Site-Generated Auto Peak Hour Traffic Volumes (Phase 1 - 2028)

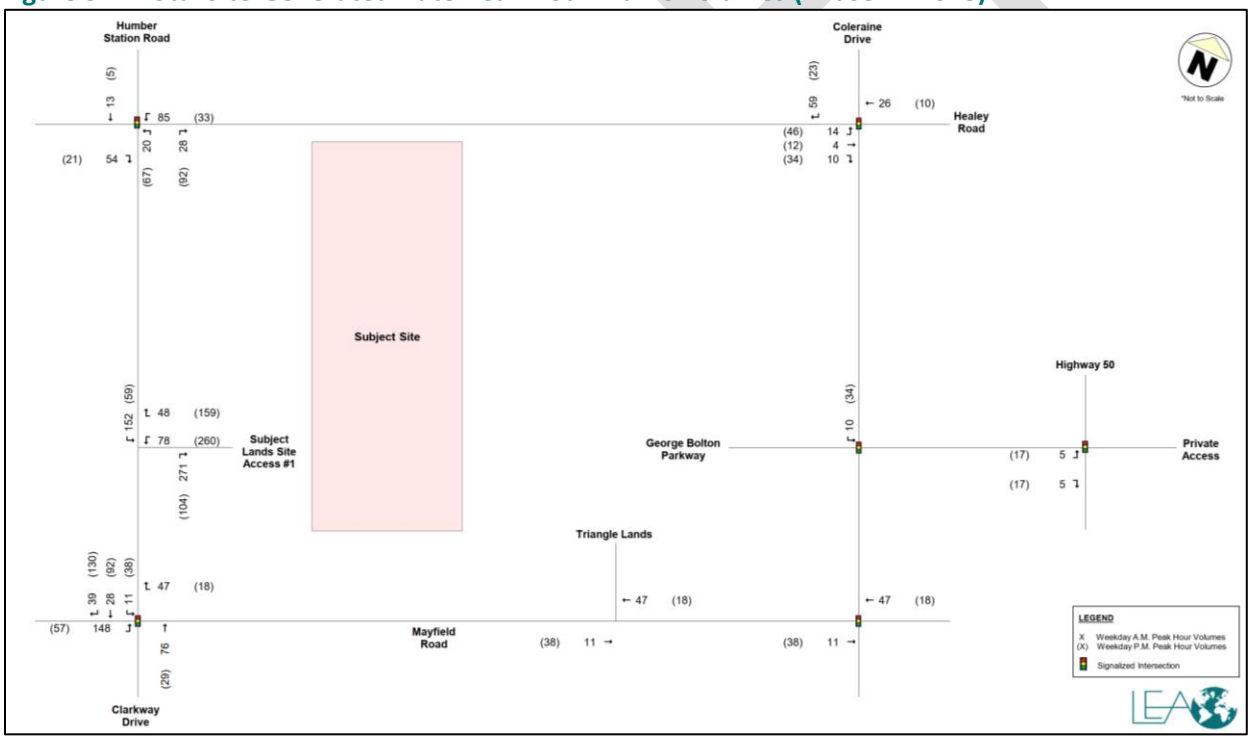


Figure 5-2: Total Site-Generated Truck Peak Hour Traffic Volumes (Phase 1 - 2028)

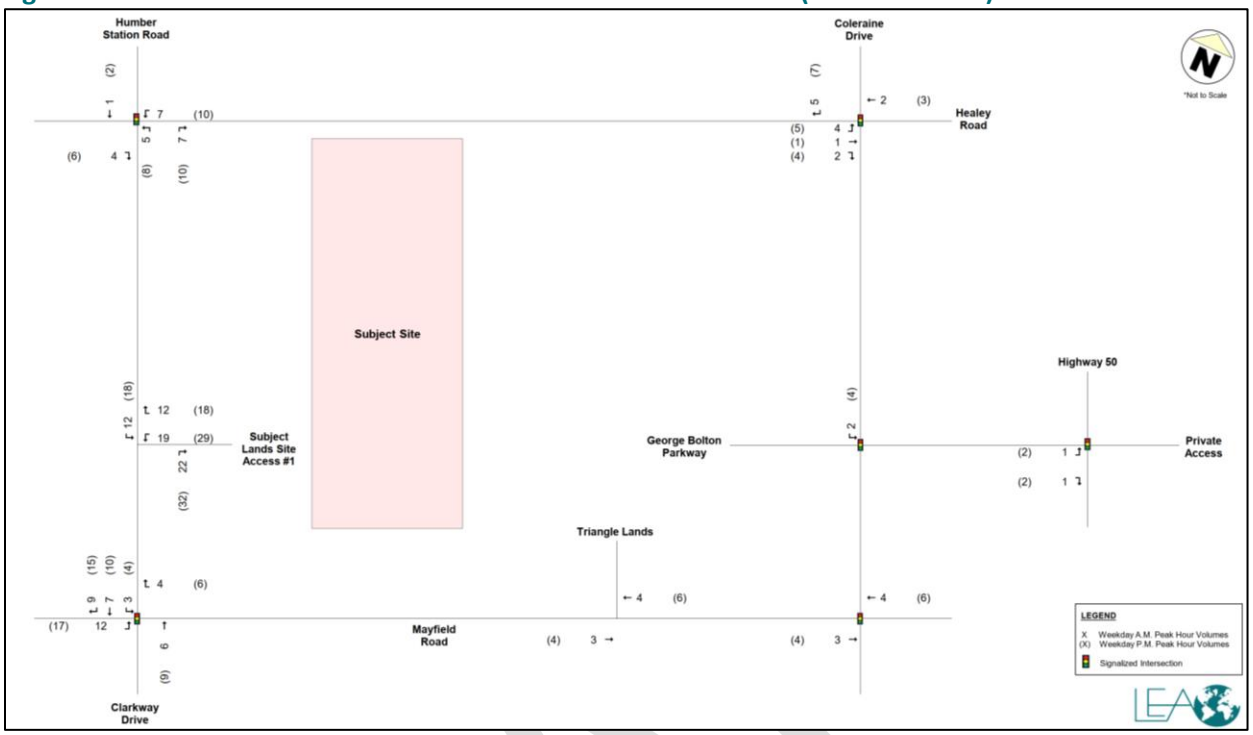


Figure 5-3: Total Site-Generated Auto Peak Hour Traffic Volumes (Full Buildout - 2033)

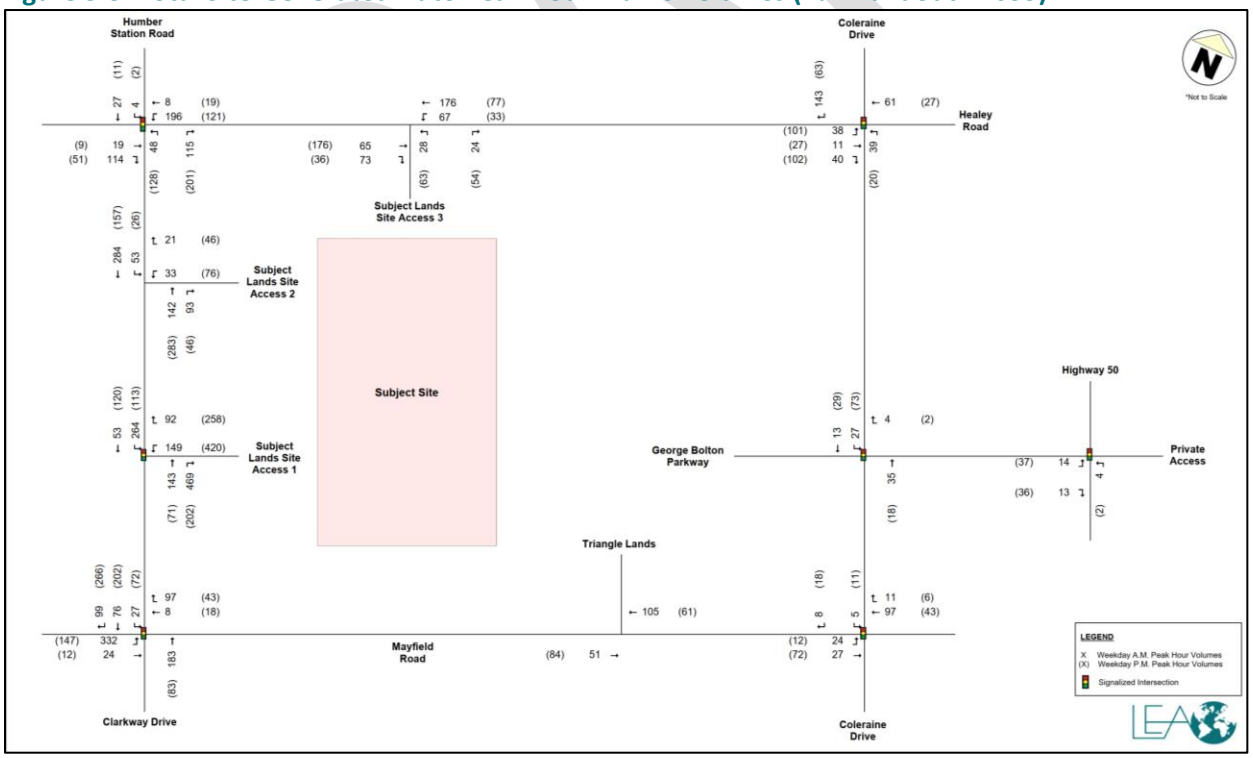
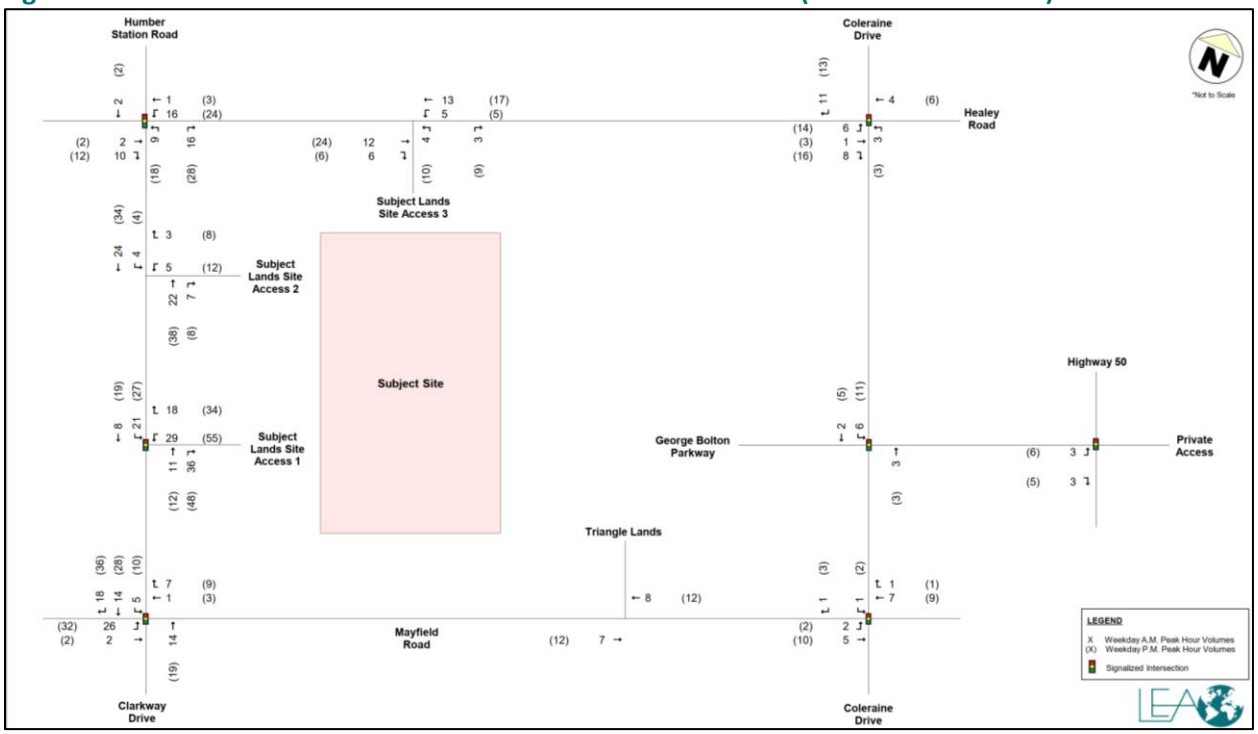
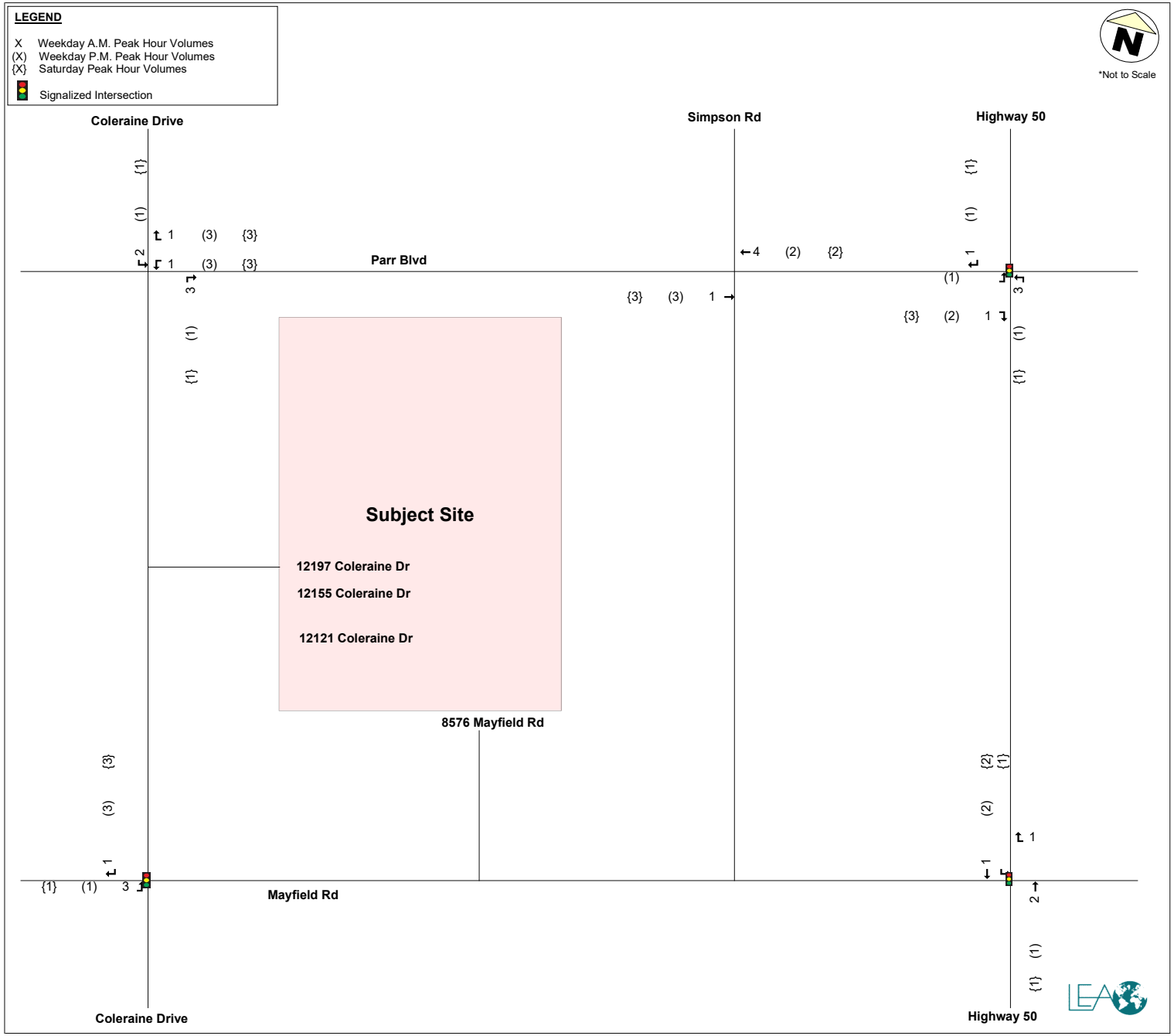
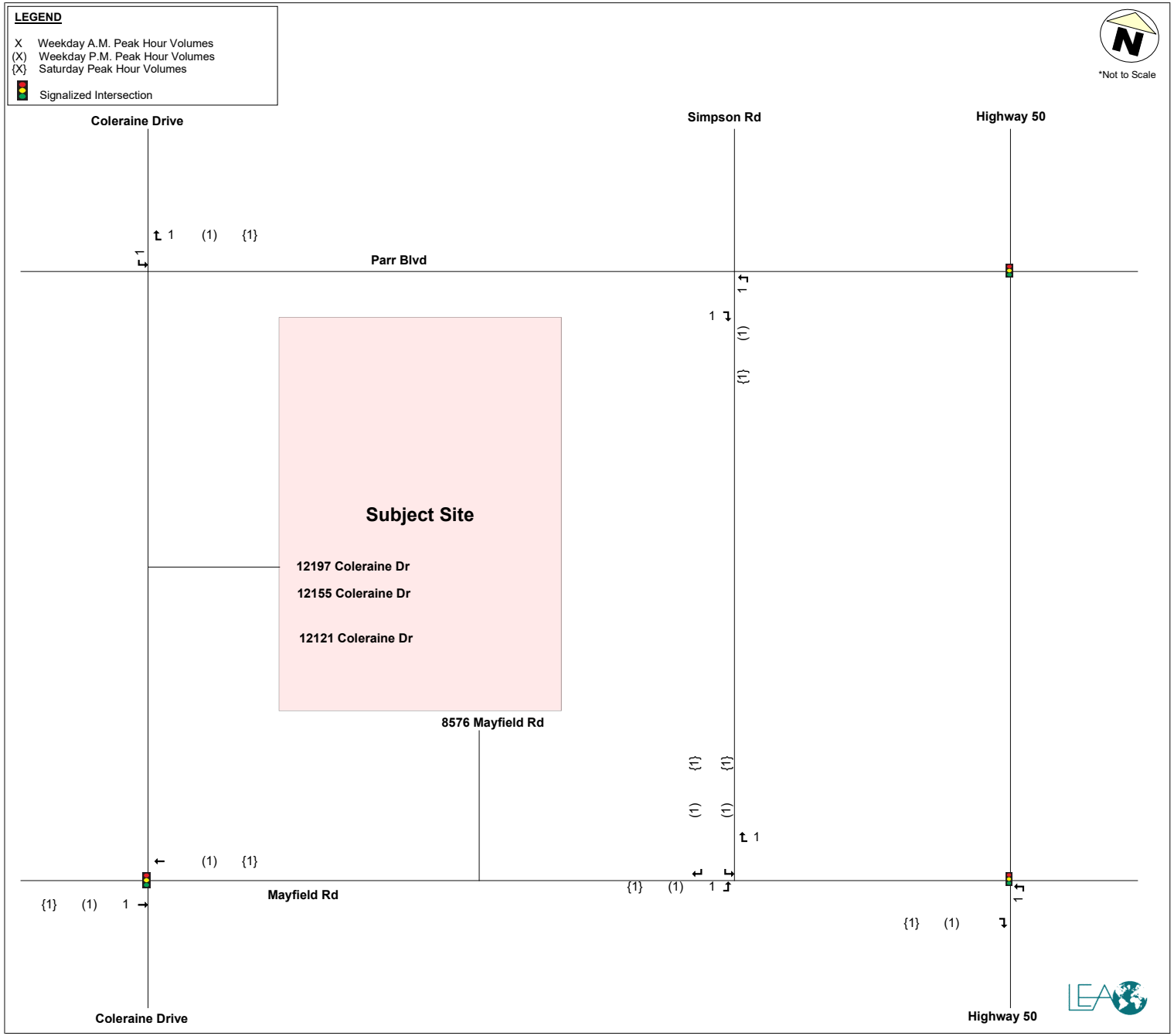


Figure 5-4: Total Site-Generated Truck Peak Hour Traffic Volumes (Full Buildout - 2033)





171 Parr Boulevard



0 Simpson Road

Date: September 19, 2023
Requestor: Harkarandeep Bains, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: Coleraine Dr North of Mayfield Rd

Harkarandeep Bains,

See below the forecasted compound annual growth rate values for Coleraine Dr North of Mayfield Rd.

2011 to 2021	2021 to 2031
1.0%	0.5%

These growth rates are estimated using several sources including socioeconomic data and results from the Region of Peel's Travel Demand Forecasting Model. Please note that this area may be further affected by future growth (after 2031 and beyond). It is important to exercise professional judgment when using these values.

If you require further assistance, please contact me at transportationplanningdata@peelregion.ca

Regards,

Ucchas Saha
Transportation Planner, Transportation Planning
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9

Date: September 19, 2023
Requestor: Harkarandeep Bains, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: Coleraine Dr South of Mayfield Rd

Harkarandeep Bains,

See below the forecasted compound annual growth rate values for Coleraine Dr South of Mayfield Rd.

2011 to 2021	2021 to 2031
0.5%	0.5%

These growth rates are estimated using several sources including socioeconomic data and results from the Region of Peel's Travel Demand Forecasting Model. These rates assume a road widening occurring between 2021 and 2031. Please note that this area may be further affected by future growth (after 2031 and beyond). It is important to exercise professional judgment when using these values.

If you require further assistance, please contact me at transportationplanningdata@peelregion.ca

Regards,

Ucchas Saha
Transportation Planner, Transportation Planning
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9

Date: September 19, 2023
Requestor: Harkarandeep Bains, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: Hwy 50 North of Mayfield Rd

Harkarandeep Bains,

See below the forecasted compound annual growth rate values for Hwy 50 North of Mayfield Rd.

2011 to 2021	2021 to 2031
1.0%	0.5%

These growth rates are estimated using several sources including socioeconomic data and results from the Region of Peel's Travel Demand Forecasting Model. Please note that this area may be further affected by future growth (after 2031 and beyond). It is important to exercise professional judgment when using these values.

If you require further assistance, please contact me at transportationplanningdata@peelregion.ca

Regards,

Ucchas Saha
Transportation Planner, Transportation Planning
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9

Date: September 19, 2023
Requestor: Harkarandeep Bains, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: Hwy 50 South of Mayfield Rd

Harkarandeep Bains,

See below the forecasted compound annual growth rate values for Hwy 50 South of Mayfield Rd.

2011 to 2021	2021 to 2031
0.5%	0.5%

These growth rates are estimated using several sources including socioeconomic data and results from the Region of Peel's Travel Demand Forecasting Model. These rates assume a road widening occurring between 2021 and 2031. Please note that this area may be further affected by future growth (after 2031 and beyond). It is important to exercise professional judgment when using these values.

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Regards,

Ucchas Saha
Transportation Planner, Transportation Planning
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9

Date: September 19, 2023
Requestor: Harkarandeep Bains, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: Mayfield Rd East of Coleraine Dr

Harkarandeep Bains,

See below the forecasted compound annual growth rate values for Mayfield Rd East of Coleraine Dr.

2011 to 2021	2021 to 2031
1.0%	0.5%

These growth rates are estimated using several sources including socioeconomic data and results from the Region of Peel's Travel Demand Forecasting Model. These rates assume a road widening occurring between 2021 and 2031. Please note that this area may be further affected by future growth (after 2031 and beyond). It is important to exercise professional judgment when using these values.

If you require further assistance, please contact me at transportationplanningdata@peelregion.ca

Regards,

Ucchas Saha
Transportation Planner, Transportation Planning
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9

Date: September 19, 2023
Requestor: Harkarandeep Bains, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: Mayfield Rd West of Coleraine Dr

Harkarandeep Bains,

See below the forecasted compound annual growth rate values for Mayfield Rd West of Coleraine Dr.

2011 to 2021	2021 to 2031
1.0%	1.0%

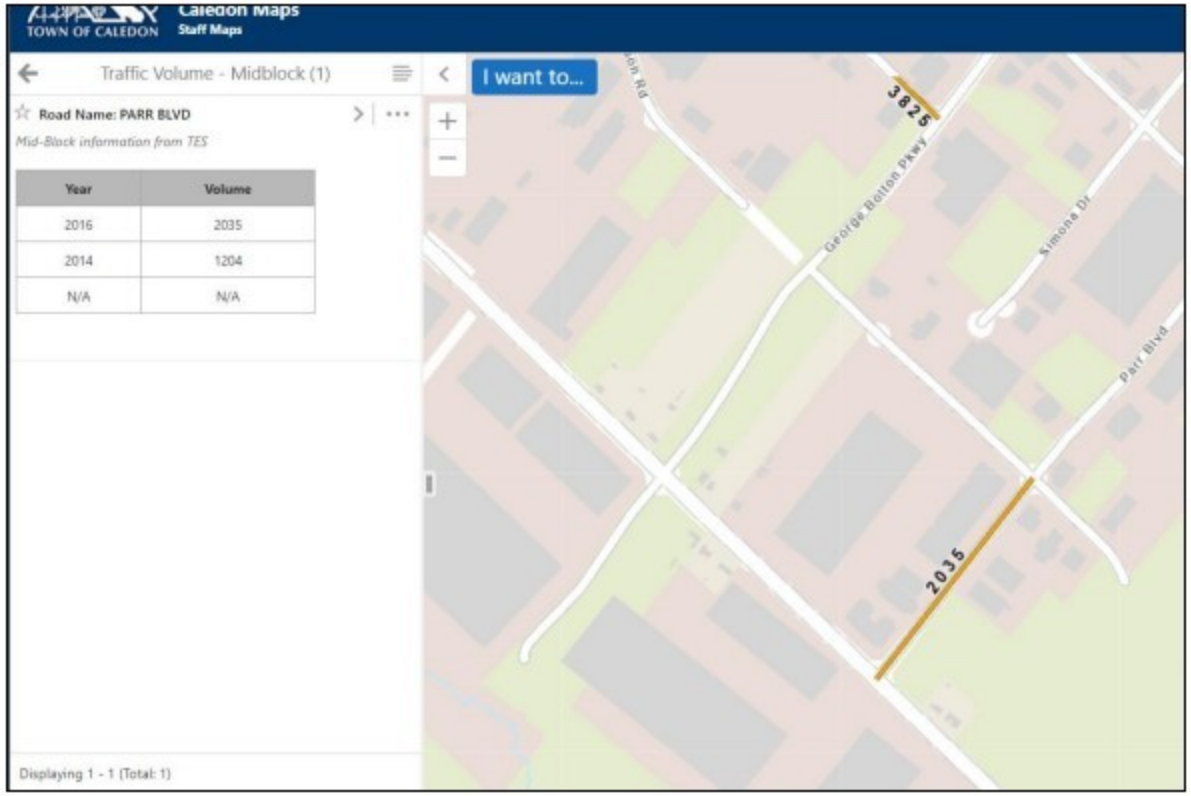
These growth rates are estimated using several sources including socioeconomic data and results from the Region of Peel's Travel Demand Forecasting Model. These rates assume a road widening occurring between 2021 and 2031. Please note that this area may be further affected by future growth (after 2031 and beyond). It is important to exercise professional judgment when using these values.

If you require further assistance, please contact me at transportationplanningdata@peelregion.ca

Regards,

Ucchas Saha
Transportation Planner, Transportation Planning
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9

Available Traffic Data:



APPENDIX D

Detailed TTS Calculations

Work AM IN PM Out

AM IN

Thu Aug 03 2023 14:40:31 GMT-0400 (Eastern Daylight Time) - Run Time: 2888ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: 2006 GTA zone of origin - gta06_orig
Column: 2006 GTA zone of destination - gta06_dest

RowID
ColID (5191)
TSIG

Filters:
Start time of trip - start_time in 0600-1000
and
Trip purpose of destinatio F
and
Primary travel mode of trip M P T

Trip 2016
Table:

	1
51	25
72	43
116	12
118	21
160	21
163	34
173	24
178	23
191	16
196	11
222	12
223	17
235	13
250	15
281	7
295	6
328	13
360	26
366	52
371	32
378	25
382	20
384	10
385	8
396	8
413	18
433	17
458	27
491	20
496	15
542	14
548	16
1186	21
2016	22
2017	13
2020	21
2022	31
2023	53
2025	30
2027	13
2032	32
2132	16
2201	22
2216	33
2258	18
2427	16
2434	45
2958	14
2962	31
2969	18
2997	22
2998	27
3.002.118	118
3010	16
3.105.134	134
3156	53
3.153.215	215
3.186.111	111 Caledon 1332
3190	67
3.192.258	258
3.193.205	205
3194	96
3197	9
3199	50
3237	97
3238	39
3251	53
3252	50
3260	7
3262	12
3263	77
3264	85
3267	42
3272	34
3273	13
3274	24
3275	41
3279	63
3.280.135	135
3286	59
3318	38
3431	12
3436	51
3442	14
3447	30
3449	14
3456	14
3486	18
3488	27
3495	36
3515	23
3516	26
3517	46
3.518.149	149
3519	16
3602	35
3603	18
3606	6
3607	27
3615	18
3617	14
3628	58
3638	7
3644	10
3645	22
3649	7
3664	48
3671	19
3675	23
3681	12
3686	43
3688	8
3714	15
3877	41
4096	32
4132	69
4133	23
4158	55
4160	15
4175	6
8403	45
8409	13
8415	42
8526	14
8.993.107	107
8598	21
8592	56
8582	14
8593	68
8589	56
8595	33
8596	68
8597	24
8642	18
8.993.123	123
	5129

Thu Aug 03 2023 14:41:14 GMT-0400 (Eastern Daylight Time) - Run Time: 2716ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of origin - pd_orig
Column: 2006 GTA zone of destination - gta06_dest

RowID
ColID (5191)
TSIG

Filters:
Start time of trip - start_time in 0600-1000
and
Trip purpose of t F
and
Primary travel mo M P T

Trip 2016
Table:

Inbound Direction

	1		Route 1	Route 2	Route 3	Route 4	Route 5	Route 1	Route 2	Route 3	Route 4	Route 5
PD 1 of Toronto	68	1%	Hwy 50 S	Mayfield Rd W				1%	1%			
PD 2 of Toronto	12	0%	Hwy 50 S	Mayfield Rd W				0%	0%			
PD 3 of Toronto	123	2%	Hwy 50 S					2%				
PD 4 of Toronto	40	1%	Hwy 50 S					1%				
PD 5 of Toronto	17	1%	Hwy 50 S					1%				
PD 6 of Toronto	35	1%	Hwy 50 S					1%				
PD 7 of Toronto	6	0%	Hwy 50 S					0%				
PD 8 of Toronto	13	0%	Hwy 50 S	Mayfield Rd W				0%	0%			
PD 9 of Toronto	153	3%	Hwy 50 S					3%				
PD 10 of Toronto	44	1%	Hwy 50 S					1%				
PD 11 of Toronto	44	1%	Hwy 50 S					1%				
PD 12 of Toronto	20	1%	Hwy 50 S					1%				
PD 13 of Toronto	15	0%	Hwy 50 S					0%				
PD 14 of Toronto	14	0%	Hwy 50 S					0%				
PD 15 of Toronto	16	1%	Hwy 50 S					1%				
Oshawa	21	1%	Hwy 50 S					1%				
Georgina	27	1%			Albion N					1%		
Aurora	14	0%			Albion N					0%		
Richmond Hill	74	1%	Hwy 50 S					1%				
Markham	61	1%	Hwy 50 S	Mayfield Rd W				1%	1%			
King	71	1%	Hwy 50 S		Albion N			1%		1%		
Vaughan	230	2%	Hwy 50 S	Mayfield Rd W				2%	2%			
3.002.118	118	2%				Coleraine N					2%	
3010	16	1%		Mayfield Rd W		Coleraine N					1%	
3.105.134	134	3%				Coleraine N					3%	
3156	53	1%				Coleraine N					1%	
3.153.215	215	4%				Coleraine N					4%	
3.186.111	111	2%				Coleraine N					2%	
3190	67	1%			Albion N		Hwy 50 N			1%		1%
3.192.258	258	2%			Albion N	Coleraine N	Hwy 50 N			2%	2%	2%
3.193.205	205	1%			Albion N	Coleraine N	Hwy 50 N			1%	1%	1%
3194	96	2%				Coleraine N					2%	
3197	9	0%				Coleraine N					0%	
3199	50	1%			Albion N	Coleraine N				1%	1%	
Brampton	1344	26%		Mayfield Rd W					26%			
Mississauga	433	4%	Hwy 50 S	Mayfield Rd W				4%	4%			
Halton Hills	77	1%		Mayfield Rd W		Coleraine N					1%	
Milton	91	1%	Hwy 50 S	Mayfield Rd W				1%	1%			
Burlington	32	1%	Hwy 50 S	Mayfield Rd W				1%	1%			
Orangeville	58	1%				Coleraine N					1%	
Barrie	14	0%			Albion N					0%		
Innisfil	54	1%			Albion N					1%		
New Tecumseth	370	4%			Albion N	Coleraine N				4%	4%	
Adjala-Tosoront	163	2%			Albion N	Coleraine N				2%	2%	
Mono	42	1%				Coleraine N					1%	
	5128							23%	35%	12%	26%	4%
								100%				

Direction	Route	Dist
N	Coleraine Dr	26%
	Albion Vaughan Rd	12%
	Highway 50	4%
S	Highway 50	23%
W	Mayfield Rd	35%
		100%

PM OUT

Thu Aug 03 2023 14:40:45 GMT-0400 (Eastern Daylight Time) - Run Time: 2286ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: 2006 GTA zone of destination - gta06_dest
Column: 2006 GTA zone of origin - gta06_orig

RowID
ColID (5191)
TSIG

Filters:
Start time of trip - start_time in 1500-1900
and
Trip purpose of origin - pu F
and

Thu Aug 03 2023 14:46:53 GMT-0400 (Eastern Daylight Time) - Run Time: 2481ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of destination - pd_dest
Column: 2006 GTA zone of origin - gta06_orig

RowID
ColID (5191)
TSIG

Filters:
Start time of trip - start_time in 1500-1900
and
Trip purpose F
and

Primary travel mode of trip M P T

Trip 2016
Table:

	1		
72	43		
88	20		
116	12		
149	21		
154	17		
160	21		
163	47		
173	24		
178	23		
223	17		
238	25		
241	15		
281	7		
339	13		
343	26		
346	52		
371	17		
374	7		
376	25		
392	20		
394	10		
396	8		
398	8		
401	40		
413	17		
438	27		
548	14		
638	38		
1160	21		
2005	15		
2014	11		
2017	13		
2020	21		
2023	53		
2024	30		
2027	13		
2052	32		
2058	13		
2072	12		
2098	24		
2132	16		
2133	18		
2141	22		
2145	33		
2427	16		
2436	45		
2538	14		
2852	31		
2740	28		
3039	44		
3,188,153	153		
3156	53		
3,153,241	241		
3,188,111	111		
3,190,178	178	Caledon	1440
3191	14		
3,192,239	239		
3,193,241	241		
3196	67		
3197	16		
3198	83		
3137	65		
3138	39		
3145	77		
3352	29		
3357	12		
3360	7		
3367	42		
3368	19		
3,371,156	104		
3372	34		
3373	13		
3374	24		
3375	41		
3379	63		
3,380,166	165		
3386	59		
3397	14		
3419	38		
3430	18		
3431	51		
3442	14		
3447	61		
3448	14		
3456	14		
3466	18		
3468	27		
3485	36		
3515	23		
3516	26		
3517	46		
3,518,129	129		
3519	16		
3603	18		
3606	6		
3607	27		
3615	18		
3617	14		
3629	58		
3638	7		
3644	10		
3666	48		
3670	6		
3671	19		
3678	23		
3686	28		
3688	8		
3714	15		
3716	21		
3876	12		
4030	19		
4094	32		
4110	86		
4123	23		
4139	55		
4140	15		
4173	12		
4175	6		
6004	42		
8,402,105	105		
8403	13		
8404	13		
8405	13		
8415	42		
8523	12		
8529	14		
8,563,107	107		
8538	21		
8541	56		
8542	14		
8563	17		
8585	45		
8590	22		
8595	33		
8596	68		
8597	24		
8642	17		
8663	68		
	5205		

Primary travel M P T

Trip 2016
Table:

Outbound Direction

	1	Route 1	Route 2	Route 3	Route 4	Route 5	Route 1	Route 2	Route 3	Route 4	Route 5
PD 1 of Tors	63	0.005 Hwy 50 S	Mayfield Rd W				1%	1%			
PD 2 of Tors	12	0 Hwy 50 S					0%				
PD 3 of Tors	153	0.015 Hwy 50 S	Mayfield Rd W				2%	2%			
PD 5 of Tors	42	0.005 Hwy 50 S	Mayfield Rd W				1%	1%			
PD 6 of Tors	22	0 Hwy 50 S	Mayfield Rd W				0%	0%			
PD 8 of Tors	13	0 Hwy 50 S	Mayfield Rd W				0%	0%			
PD 9 of Tors	146	0.03 Hwy 50 S					3%				
PD 10 of Tor	66	0.01 Hwy 50 S					1%				
PD 11 of Tor	44	0.005 Hwy 50 S	Mayfield Rd W				1%	1%			
PD 14 of Tor	14	0 Hwy 50 S	Mayfield Rd W				0%	0%			
PD 16 of Tor	38	0.005 Hwy 50 S	Mayfield Rd W				1%	1%			
Oshawa	21	0 Hwy 50 S	Mayfield Rd W	Albion N			0%	0%	0%		
East Gwillimbi	28	0.005		Albion N	Coleraine N				1%	1%	
Aurora	14	0 Hwy 50 S		Albion N			0%		0%		
Richmond Hi	56	0.01 Hwy 50 S					1%				
Markham	61	0.005 Hwy 50 S	Mayfield Rd W				1%	1%			
King	31	0.005		Albion N	Coleraine N				1%	1%	
Vaughan	271	0.05 Hwy 50 S					5%				
3039	44	0.005	Mayfield Rd W		Coleraine N			1%		1%	
3,188,153	153	0.03			Coleraine N					3%	
3156	53	0.01			Coleraine N					1%	
3,153,241	241	0.05			Coleraine N					5%	
3,188,111	111	0.02			Coleraine N					2%	
3,190,178	178	0.03			Coleraine N					3%	
3191	14	0			Coleraine N					0%	
3,192,239	239	0.025			Coleraine N	Hwy 50 N				3%	3%
3,193,241	241	0.025			Coleraine N	Hwy 50 N				3%	3%
3196	67	0.01			Coleraine N					1%	
3197	16	0			Coleraine N					0%	
3198	83	0.01		Albion N	Coleraine N				1%	1%	
Brampton	1335	0.26	Mayfield Rd W					26%			
Mississauga	339	0.03 Hwy 50 S	Mayfield Rd W				3%	3%			
Halton Hills	88	0.01	Mayfield Rd W		Coleraine N			1%		1%	
Milton	109	0.01 Hwy 50 S	Mayfield Rd W				1%	1%			
Oakville	19	0 Hwy 50 S	Mayfield Rd W				0%	0%			
Burlington	32	0.005 Hwy 50 S	Mayfield Rd W				1%	1%			
Grimsby	42	0.005 Hwy 50 S	Mayfield Rd W				1%	1%			
Orangeville	144	0.03			Coleraine N					3%	
Barrie	27	0.01		Albion N					1%		
Innisfil	76	0.005 Hwy 50 S		Albion N			1%		1%		
Bradford-West	17	0		Albion N	Coleraine N				0%	0%	
New Tecumi	246	0.05			Coleraine N					5%	
Adjala-Tosor	152	0.03			Coleraine N					3%	
Mono	42	0.01			Coleraine N					1%	
	5203						19%	36%	4%	36%	5%
							100%				

Direction	Route	Dist
N	Albion Vaughn Rd	4%
	Coleraine Drive	36%
	Highway 50	5%
S	Highway 50	19%
W	Mayfield Rd	36%
		100%

APPENDIX E

LOS Definitions

LEVELS OF SERVICE FOR SIGNALIZED INTERSECTIONS: METHODOLOGY

Signalized intersection analyses contained in this report were carried out using methodology described in the ***Highway Capacity Manual,*** *2000 update*, by the Transportation Research Board and implemented using Synchro 11 software.

Analyses of signalized intersections compare the volume of traffic passing through an intersection with the capacity of each of the intersection's approaches. Volumes can be either observed or estimated whereas an intersection's capacity is a function of its geometry, the number of lanes per approach, speeds, signal timing, and other considerations. The level of service is evaluated in terms of the average control delay (seconds) per vehicle, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Delay is a complex measure and is calculated as a function of a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

The criteria for each level of service are given below.

Level of Service	Features	Control Delay (sec/veh)
A	Very low control delay. Occurs when signal progression (i.e. coordination) is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not have to stop.	0.0 – 10.0
B	Occurs with good progression, short cycle length, or both. More vehicles stop than with LOS A.	10.1 – 20.0
C	Occurs with fair progression, longer cycle length, or both. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.	20.0 – 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles have to stop. Individual cycle failures are noticeable (i.e. some vehicles require more than one cycle to make it through the intersection).	35.0 – 55.0
E	Considered by many agencies to be the limit of acceptable delay. High delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.	55.0- 80.0
F	Considered to be unacceptable to most drivers and often occurs with oversaturation. It may also occur at high v/c ratios below 1.0 with many individual cycle failures.	80.1 +

LEVELS OF SERVICE FOR UNSIGNALIZED INTERSECTIONS: METHODOLOGY

Unsignalized intersection analyses contained in this report were carried out using methodology described in the ***Highway Capacity Manual*** *(2000 edition)* by the Transportation Research Board and implemented using the Synchro 11 software.

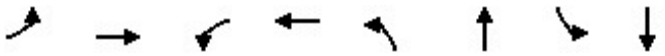
Analyses of unsignalized intersections compare observed or estimated traffic volumes with the capacity of each of the intersection's approaches. The analysis derives an estimation of queue lengths and the resulting delays experienced by vehicles from the time they join a queue to the moment they cross the stop bar at the intersection. Queuing and delays at unsignalized approaches are a function of the volumes of all other conflicting movements and the characteristics of the intersection. Traffic volumes can be either observed or estimated while an intersection's capacity is a function of its geometry, lane configurations, speeds, and other operational considerations. The resulting statistic is termed "average total delay" for each approach and is measured in seconds per vehicle. The delay can then be assigned a letter grade, which provides a simple qualitative assessment of the Level of Service for any unsignalized intersection.

The Level of Service grading for unsignalized intersections is more sensitive than that used for signalized analyses: delays are more onerous at unsignalized intersections as drivers must remain attentive while waiting for acceptable conditions to complete their movement. As a result, the thresholds between grades are lower for unsignalized analyses.

Level of Service	Features	Average Total Delay (sec/veh)
A	Almost no delay occurs. Approaches appear clear and turns are made easily.	0.0 – 10.0
B	Short delays are experienced. Drivers find their movement becoming more restricted.	10.1 – 15.0
C	Longer delays occur. Operation of both the minor and major streets are generally stable but movements from the minor street become more difficult. This level is often used for urban intersection design standards.	15.1 – 25.0
D	Motorists encounter increasing traffic restrictions and substantial delays. Delays on the major street occur as turning traffic interferes with the flow of traffic. Traffic flows are approaching the capacity of the intersection.	25.1 - 35.0
E	At level "E", capacity is reached. There are long queues of vehicles waiting upstream for the approach to clear. Delays to vehicles reach frustrating levels.	35.1- 50.0
F	Intersection saturation occurs as vehicle demand has exceeded the capacity. Drivers will often accept less than ideal gap opportunities; safety is compromised.	50.1 +

APPENDIX F

Existing Intersection Capacity Analysis

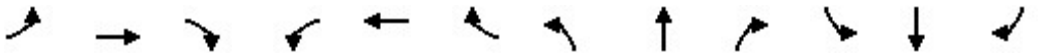


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	310	267	39	197	23	299	64	347
Future Volume (vph)	310	267	39	197	23	299	64	347
Lane Group Flow (vph)	310	299	39	226	23	330	64	512
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	15.0	80.0	65.0	65.0	32.0	32.0	18.0	50.0
Total Split (%)	11.5%	61.5%	50.0%	50.0%	24.6%	24.6%	13.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	89.0	85.0	67.7	67.7	18.4	18.4	35.0	31.0
Actuated g/C Ratio	0.68	0.65	0.52	0.52	0.14	0.14	0.27	0.24
v/c Ratio	0.41	0.15	0.08	0.15	0.19	0.67	0.42	0.64
Control Delay	11.0	9.4	20.0	17.4	52.7	58.6	42.9	41.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.0	9.4	20.0	17.4	52.7	58.6	42.9	41.5
LOS	B	A	C	B	D	E	D	D
Approach Delay		10.2		17.8		58.2		41.6
Approach LOS		B		B		E		D
Queue Length 50th (m)	31.1	14.7	5.4	15.6	5.6	44.4	13.3	56.5
Queue Length 95th (m)	54.6	25.0	13.5	26.3	14.4	58.8	24.3	70.0
Internal Link Dist (m)		209.3		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	754	1957	493	1464	160	671	169	1075
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.15	0.08	0.15	0.14	0.49	0.38	0.48

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 92 (71%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 30.8	Intersection LOS: C
Intersection Capacity Utilization 72.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	267	32	39	197	29	23	299	31	64	347	165
Future Volume (vph)	310	267	32	39	197	29	23	299	31	64	347	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1623	2986		1580	2796		1716	3462		986	3117	
Flt Permitted	0.58	1.00		0.57	1.00		0.46	1.00		0.35	1.00	
Satd. Flow (perm)	999	2986		947	2796		837	3462		361	3117	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	310	267	32	39	197	29	23	299	31	64	347	165
RTOR Reduction (vph)	0	6	0	0	8	0	0	6	0	0	50	0
Lane Group Flow (vph)	310	293	0	39	218	0	23	324	0	64	462	0
Heavy Vehicles (%)	10%	22%	6%	13%	21%	76%	4%	3%	13%	81%	5%	25%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	84.4	84.4		67.2	67.2		18.4	18.4		31.6	31.6	
Effective Green, g (s)	84.4	84.4		67.2	67.2		18.4	18.4		31.6	31.6	
Actuated g/C Ratio	0.65	0.65		0.52	0.52		0.14	0.14		0.24	0.24	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	716	1938		489	1445		118	490		136	757	
v/s Ratio Prot	c0.05	0.10			0.08			0.09		0.04	c0.15	
v/s Ratio Perm	c0.23			0.04			0.03			0.08		
v/c Ratio	0.43	0.15		0.08	0.15		0.19	0.66		0.47	0.61	
Uniform Delay, d1	9.9	8.9		15.8	16.5		49.3	52.8		40.1	43.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.2		0.3	0.2		0.8	3.3		2.6	1.5	
Delay (s)	10.4	9.0		16.1	16.7		50.1	56.2		42.7	45.2	
Level of Service	B	A		B	B		D	E		D	D	
Approach Delay (s)		9.7			16.6			55.8			44.9	
Approach LOS		A			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	32	11	119	11	570	51	86	497	5
Future Vol, veh/h	1	1	1	32	11	119	11	570	51	86	497	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	19	9	31	27	10	6	23	20	0
Mvmt Flow	1	1	1	32	11	119	11	570	51	86	497	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	982	1312	249	1039	1292	311	502	0	0	621	0	0
Stage 1	669	669	-	618	618	-	-	-	-	-	-	-
Stage 2	313	643	-	421	674	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.88	6.68	7.52	4.64	-	-	4.56	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.88	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.88	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.69	4.09	3.61	2.47	-	-	2.43	-	-
Pot Cap-1 Maneuver	206	160	757	163	153	606	902	-	-	826	-	-
Stage 1	418	459	-	404	462	-	-	-	-	-	-	-
Stage 2	678	472	-	537	435	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	142	142	757	148	135	606	902	-	-	826	-	-
Mov Cap-2 Maneuver	142	142	-	148	135	-	-	-	-	-	-	-
Stage 1	413	411	-	399	456	-	-	-	-	-	-	-
Stage 2	525	466	-	479	390	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.6	19.6	0.2	1.4
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	902	-	-	142	239	148	468	826	-	-
HCM Lane V/C Ratio	0.012	-	-	0.007	0.008	0.216	0.278	0.104	-	-
HCM Control Delay (s)	9	-	-	30.5	20.2	35.9	15.6	9.9	-	-
HCM Lane LOS	A	-	-	D	C	E	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.8	1.1	0.3	-	-

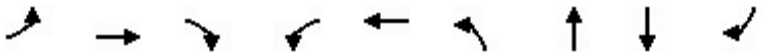
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	117	15	12	143	12	5	4	4	7	3	14
Future Vol, veh/h	3	117	15	12	143	12	5	4	4	7	3	14
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	19	0	0	24	17	40	25	50	43	33	36
Mvmt Flow	3	117	15	12	143	12	5	4	4	7	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	156	0	0	132	0	0	313	311	125	309	312	150
Stage 1	-	-	-	-	-	-	131	131	-	174	174	-
Stage 2	-	-	-	-	-	-	182	180	-	135	138	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.75	6.7	7.53	6.83	6.56
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.75	-	6.53	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.75	-	6.53	5.83	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.86	4.225	3.75	3.887	4.297	3.624
Pot Cap-1 Maneuver	1436	-	-	1466	-	-	572	568	811	571	555	814
Stage 1	-	-	-	-	-	-	789	746	-	741	700	-
Stage 2	-	-	-	-	-	-	739	709	-	779	727	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1435	-	-	1466	-	-	555	561	811	560	548	813
Mov Cap-2 Maneuver	-	-	-	-	-	-	555	561	-	560	548	-
Stage 1	-	-	-	-	-	-	787	745	-	739	693	-
Stage 2	-	-	-	-	-	-	717	702	-	769	726	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	11	10.5
HCM LOS			B	B

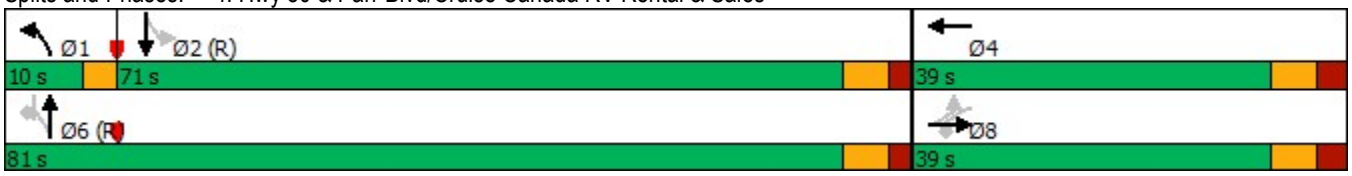
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	617	1435	-	-	1466	-	-	682
HCM Lane V/C Ratio	0.021	0.002	-	-	0.008	-	-	0.035
HCM Control Delay (s)	11	7.5	0	-	7.5	0	-	10.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

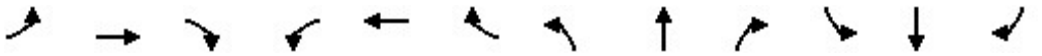


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	27	0	102	1	0	199	1014	1118	44
Future Volume (vph)	27	0	102	1	0	199	1014	1118	44
Lane Group Flow (vph)	0	27	102	0	1	199	1016	1118	44
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	NA	custom
Protected Phases		8			4	1	6	2	
Permitted Phases	8		8	8		6			6
Detector Phase	8	8	8	8	4	1	6	2	6
Switch Phase									
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		9.3	9.3		9.3	100.8	97.7	84.2	97.7
Actuated g/C Ratio		0.08	0.08		0.08	0.84	0.81	0.70	0.81
v/c Ratio		0.26	0.56		0.01	0.51	0.37	0.51	0.04
Control Delay		57.4	21.7		49.0	6.8	3.5	9.8	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		57.4	21.7		49.0	6.8	3.5	9.8	1.2
LOS		E	C		D	A	A	A	A
Approach Delay		29.1			49.0		4.1	9.5	
Approach LOS		C			D		A	A	
Queue Length 50th (m)		6.5	0.0		0.2	6.1	25.6	56.3	0.3
Queue Length 95th (m)		15.8	17.4		2.0	14.0	43.1	95.0	2.8
Internal Link Dist (m)		828.8			20.9		732.4	332.3	
Turn Bay Length (m)						35.0			20.0
Base Capacity (vph)		363	384		380	387	2726	2208	1216
Starvation Cap Reductn		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0
Reduced v/c Ratio		0.07	0.27		0.00	0.51	0.37	0.51	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 7.9	Intersection LOS: A
Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales

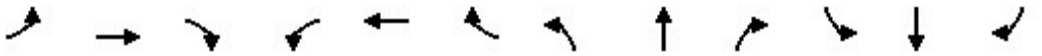




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	102	1	0	0	199	1014	2	0	1118	44
Future Volume (vph)	27	0	102	1	0	0	199	1014	2	0	1118	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		1.00		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.95		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1706	1157		1825		1513	3348			3147	1487
Flt Permitted		0.76	1.00		0.74		0.21	1.00			1.00	1.00
Satd. Flow (perm)		1360	1157		1421		339	3348			3147	1487
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	27	0	102	1	0	0	199	1014	2	0	1118	44
RTOR Reduction (vph)	0	0	94	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	27	8	0	1	0	199	1016	0	0	1118	37
Confl. Peds. (#/hr)							1		2	2		1
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	7%	0%	38%	0%	0%	0%	18%	9%	0%	0%	16%	5%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		9.3	9.3		9.3		97.7	97.7			84.2	97.7
Effective Green, g (s)		9.3	9.3		9.3		97.7	97.7			84.2	97.7
Actuated g/C Ratio		0.08	0.08		0.08		0.81	0.81			0.70	0.81
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		105	89		110		378	2725			2208	1210
v/s Ratio Prot							c0.05	0.30			0.36	
v/s Ratio Perm		c0.02	0.01		0.00		c0.38					0.03
v/c Ratio		0.26	0.09		0.01		0.53	0.37			0.51	0.03
Uniform Delay, d1		52.1	51.4		51.1		4.1	3.0			8.3	2.1
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.3	0.4		0.0		1.3	0.4			0.8	0.0
Delay (s)		53.4	51.8		51.1		5.4	3.4			9.1	2.2
Level of Service		D	D		D		A	A			A	A
Approach Delay (s)		52.2			51.1			3.7			8.9	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		

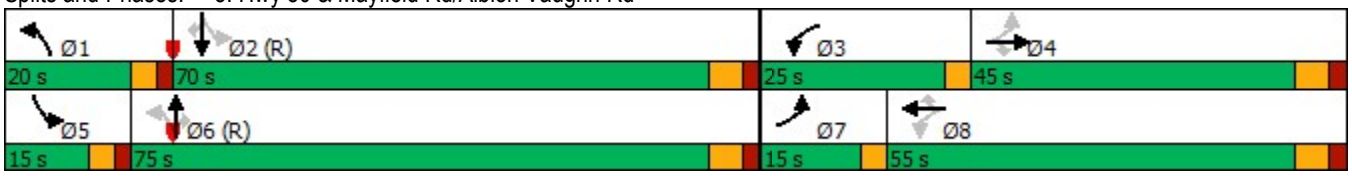
c Critical Lane Group

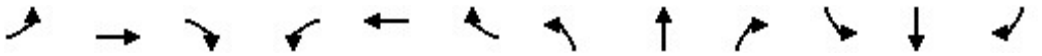


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	93	202	298	140	12	83	1064	165	22	1087	64
Future Volume (vph)	61	93	202	298	140	12	83	1064	165	22	1087	64
Lane Group Flow (vph)	61	93	202	298	140	12	83	1064	165	22	1087	64
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	7	4	4	3	8	8	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	15.0	45.0	45.0	25.0	55.0	55.0	20.0	75.0	75.0	15.0	70.0	70.0
Total Split (%)	9.4%	28.1%	28.1%	15.6%	34.4%	34.4%	12.5%	46.9%	46.9%	9.4%	43.8%	43.8%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	30.0	16.9	16.9	45.4	31.1	31.1	105.3	96.3	96.3	99.4	88.1	88.1
Actuated g/C Ratio	0.19	0.11	0.11	0.28	0.19	0.19	0.66	0.60	0.60	0.62	0.55	0.55
v/c Ratio	0.25	0.60	0.77	0.84	0.40	0.04	0.41	0.54	0.19	0.08	0.64	0.08
Control Delay	44.4	83.6	30.5	72.1	60.4	0.2	16.9	21.8	5.0	11.5	28.4	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.4	83.6	30.5	72.1	60.4	0.2	16.9	21.8	5.0	11.5	28.4	1.2
LOS	D	F	C	E	E	A	B	C	A	B	C	A
Approach Delay		46.8			66.5			19.4			26.6	
Approach LOS		D			E			B			C	
Queue Length 50th (m)	15.5	30.6	6.0	89.6	42.7	0.0	9.2	114.5	4.3	2.3	122.2	0.0
Queue Length 95th (m)	26.1	48.0	36.6	114.4	62.1	0.0	19.9	157.9	18.2	6.9	186.7	2.5
Internal Link Dist (m)		330.4			656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0	50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	271	352	369	354	544	467	222	1979	889	275	1703	837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.26	0.55	0.84	0.26	0.03	0.37	0.54	0.19	0.08	0.64	0.08

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 27 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay: 31.4	Intersection LOS: C	
Intersection Capacity Utilization 83.1%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	93	202	298	140	12	83	1064	165	22	1087	64
Future Volume (vph)	61	93	202	298	140	12	83	1064	165	22	1087	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1653	1466	956	1594	1795	1365	1116	3288	1389	1451	3093	1439
Flt Permitted	0.67	1.00	1.00	0.55	1.00	1.00	0.17	1.00	1.00	0.22	1.00	1.00
Satd. Flow (perm)	1162	1466	956	924	1795	1365	201	3288	1389	329	3093	1439
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	61	93	202	298	140	12	83	1064	165	22	1087	64
RTOR Reduction (vph)	0	0	163	0	0	10	0	0	56	0	0	29
Lane Group Flow (vph)	61	93	39	298	140	2	83	1064	109	22	1087	35
Heavy Vehicles (%)	8%	31%	67%	12%	7%	17%	60%	11%	15%	23%	18%	11%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Actuated Green, G (s)	25.7	17.4	17.4	42.4	31.1	31.1	104.8	93.8	93.8	93.6	87.6	87.6
Effective Green, g (s)	25.7	17.4	17.4	42.4	31.1	31.1	104.8	93.8	93.8	93.6	87.6	87.6
Actuated g/C Ratio	0.16	0.11	0.11	0.26	0.19	0.19	0.65	0.59	0.59	0.58	0.55	0.55
Clearance Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	212	159	103	336	348	265	201	1927	814	234	1693	787
v/s Ratio Prot	0.01	0.06		c0.12	0.08		c0.03	c0.32		0.00	c0.35	
v/s Ratio Perm	0.03		0.04	c0.11		0.00	0.24		0.08	0.05		0.02
v/c Ratio	0.29	0.58	0.38	0.89	0.40	0.01	0.41	0.55	0.13	0.09	0.64	0.04
Uniform Delay, d1	58.5	67.9	66.3	54.2	56.3	52.0	14.8	20.3	14.9	15.0	25.3	16.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	5.4	2.3	23.3	0.8	0.0	1.4	1.1	0.3	0.2	1.9	0.1
Delay (s)	59.3	73.3	68.6	77.5	57.1	52.0	16.2	21.4	15.2	15.2	27.1	16.9
Level of Service	E	E	E	E	E	D	B	C	B	B	C	B
Approach Delay (s)		68.2			70.5			20.3			26.4	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	361	263	1	1	2
Future Vol, veh/h	1	361	263	1	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	44	27	0	0	100
Mvmt Flow	1	361	263	1	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	264	0	-	0	627	264
Stage 1	-	-	-	-	264	-
Stage 2	-	-	-	-	363	-
Critical Hdwy	4.1	-	-	-	6.4	7.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	4.2
Pot Cap-1 Maneuver	1312	-	-	-	451	587
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	708	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1312	-	-	-	451	587
Mov Cap-2 Maneuver	-	-	-	-	451	-
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	708	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1312	-	-	-	533
HCM Lane V/C Ratio	0.001	-	-	-	0.006
HCM Control Delay (s)	7.7	0	-	-	11.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

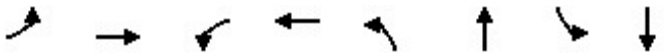
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	617	0	0	539
Future Vol, veh/h	0	0	617	0	0	539
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	7	0	0	24
Mvmt Flow	0	0	617	0	0	539

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	887	309	0	0	617	0
Stage 1	617	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	287	693	-	-	973	-
Stage 1	506	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	287	693	-	-	973	-
Mov Cap-2 Maneuver	398	-	-	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	757	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	973	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

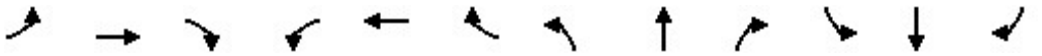


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	265	248	26	256	26	510	86	478
Future Volume (vph)	265	248	26	256	26	510	86	478
Lane Group Flow (vph)	265	283	26	333	26	541	86	857
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	12.0	80.0	68.0	68.0	36.0	36.0	14.0	50.0
Total Split (%)	9.2%	61.5%	52.3%	52.3%	27.7%	27.7%	10.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	82.3	78.3	64.1	64.1	24.7	24.7	41.7	37.7
Actuated g/C Ratio	0.63	0.60	0.49	0.49	0.19	0.19	0.32	0.29
v/c Ratio	0.46	0.14	0.06	0.25	0.44	0.81	0.51	0.80
Control Delay	14.8	11.3	19.3	17.8	69.8	60.0	41.8	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.8	11.3	19.3	17.8	69.8	60.0	41.8	40.2
LOS	B	B	B	B	E	E	D	D
Approach Delay		13.0		17.9		60.4		40.3
Approach LOS		B		B		E		D
Queue Length 50th (m)	30.9	15.8	3.8	24.2	6.3	73.4	16.6	91.5
Queue Length 95th (m)	50.7	24.6	9.5	34.9	16.7	91.2	28.7	112.1
Internal Link Dist (m)		209.3		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	572	1976	464	1351	69	782	175	1192
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.14	0.06	0.25	0.38	0.69	0.49	0.72

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 80.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	248	35	26	256	77	26	510	31	86	478	379
Future Volume (vph)	265	248	35	26	256	77	26	510	31	86	478	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1475	3271		1552	2702		1594	3495		1322	3270	
Flt Permitted	0.53	1.00		0.58	1.00		0.19	1.00		0.19	1.00	
Satd. Flow (perm)	816	3271		945	2702		310	3495		270	3270	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	265	248	35	26	256	77	26	510	31	86	478	379
RTOR Reduction (vph)	0	8	0	0	21	0	0	3	0	0	117	0
Lane Group Flow (vph)	265	275	0	26	312	0	26	538	0	86	740	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	21%	10%	6%	15%	17%	75%	12%	3%	10%	35%	2%	7%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	78.3	78.3		64.1	64.1		24.7	24.7		37.7	37.7	
Effective Green, g (s)	78.3	78.3		64.1	64.1		24.7	24.7		37.7	37.7	
Actuated g/C Ratio	0.60	0.60		0.49	0.49		0.19	0.19		0.29	0.29	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	548	1970		465	1332		58	664		159	948	
v/s Ratio Prot	c0.04	0.08			0.12			0.15		0.04	c0.23	
v/s Ratio Perm	c0.25			0.03			0.08			0.12		
v/c Ratio	0.48	0.14		0.06	0.23		0.45	0.81		0.54	0.78	
Uniform Delay, d1	12.6	11.2		17.2	18.9		46.6	50.4		36.2	42.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		0.2	0.4		5.4	7.2		3.7	4.2	
Delay (s)	13.3	11.4		17.4	19.3		52.0	57.6		39.9	46.6	
Level of Service	B	B		B	B		D	E		D	D	
Approach Delay (s)		12.3			19.2			57.4			46.0	
Approach LOS		B			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	3	13	28	5	95	13	805	20	108	868	4
Future Vol, veh/h	3	3	13	28	5	95	13	805	20	108	868	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	33	8	18	60	18	85	8	25	11	7	25
Mvmt Flow	3	3	13	28	5	95	13	805	20	108	868	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1515	1935	434	1493	1929	413	872	0	0	825	0	0
Stage 1	1084	1084	-	841	841	-	-	-	-	-	-	-
Stage 2	431	851	-	652	1088	-	-	-	-	-	-	-
Critical Hdwy	7.5	7.16	7.06	7.86	7.7	7.26	5.8	-	-	4.32	-	-
Critical Hdwy Stg 1	6.5	6.16	-	6.86	6.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	6.16	-	6.86	6.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.33	3.38	3.68	4.6	3.48	3.05	-	-	2.31	-	-
Pot Cap-1 Maneuver	84	46	554	73	34	546	410	-	-	746	-	-
Stage 1	235	233	-	294	267	-	-	-	-	-	-	-
Stage 2	578	310	-	387	191	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	52	38	554	58	28	546	410	-	-	746	-	-
Mov Cap-2 Maneuver	52	38	-	58	28	-	-	-	-	-	-	-
Stage 1	227	199	-	285	258	-	-	-	-	-	-	-
Stage 2	453	300	-	318	163	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	38.2	44.2	0.2	1.2
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	410	-	-	52	156	58	284	746	-	-
HCM Lane V/C Ratio	0.032	-	-	0.058	0.103	0.483	0.352	0.145	-	-
HCM Control Delay (s)	14.1	-	-	78.4	30.7	115.1	24.4	10.6	-	-
HCM Lane LOS	B	-	-	F	D	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	1.9	1.5	0.5	-	-

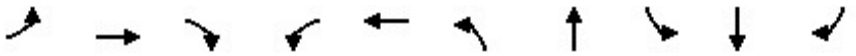
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	135	8	7	110	14	8	0	8	21	0	9
Future Vol, veh/h	4	135	8	7	110	14	8	0	8	21	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	25	12	13	29	21	50	13	0	25	10	0	11
Mvmt Flow	4	135	8	7	110	14	8	0	8	21	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	124	0	0	143	0	0	283	285	139	282	282	117
Stage 1	-	-	-	-	-	-	147	147	-	131	131	-
Stage 2	-	-	-	-	-	-	136	138	-	151	151	-
Critical Hdwy	4.35	-	-	4.39	-	-	7.23	6.5	6.45	7.2	6.5	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.5	-	6.2	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.5	-	6.2	5.5	-
Follow-up Hdwy	2.425	-	-	2.461	-	-	3.617	4	3.525	3.59	4	3.399
Pot Cap-1 Maneuver	1332	-	-	1290	-	-	648	628	852	654	630	911
Stage 1	-	-	-	-	-	-	830	779	-	854	792	-
Stage 2	-	-	-	-	-	-	842	786	-	833	776	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1332	-	-	1290	-	-	637	622	852	644	624	911
Mov Cap-2 Maneuver	-	-	-	-	-	-	637	622	-	644	624	-
Stage 1	-	-	-	-	-	-	828	777	-	851	787	-
Stage 2	-	-	-	-	-	-	829	781	-	823	774	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	10	10.3
HCM LOS			B	B

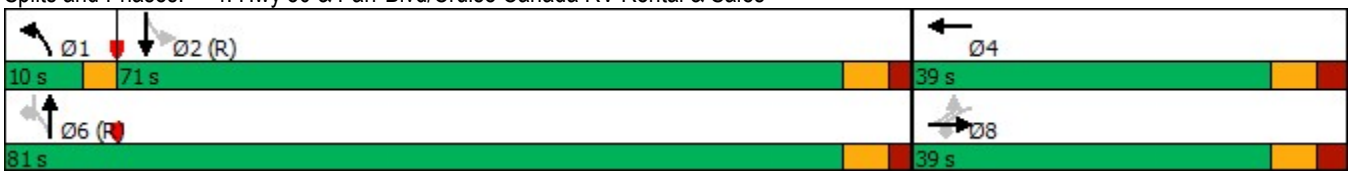
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	729	1332	-	-	1290	-	-	706
HCM Lane V/C Ratio	0.022	0.003	-	-	0.005	-	-	0.042
HCM Control Delay (s)	10	7.7	0	-	7.8	0	-	10.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

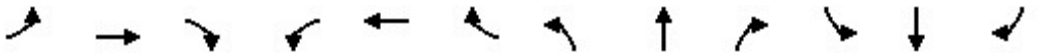


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	55	0	170	1	0	113	1244	1	1032	39
Future Volume (vph)	55	0	170	1	0	113	1244	1	1032	39
Lane Group Flow (vph)	0	55	170	0	2	113	1244	1	1032	39
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		10.6	10.6		10.6	99.5	96.4	86.0	86.0	96.4
Actuated g/C Ratio		0.09	0.09		0.09	0.83	0.80	0.72	0.72	0.80
v/c Ratio		0.45	0.60		0.01	0.32	0.47	0.00	0.41	0.03
Control Delay		63.0	16.7		0.0	4.5	4.6	6.0	7.8	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		63.0	16.7		0.0	4.5	4.6	6.0	7.8	1.2
LOS		E	B		A	A	A	A	A	A
Approach Delay		28.0					4.6		7.6	
Approach LOS		C					A		A	
Queue Length 50th (m)		13.2	0.0		0.0	3.8	40.1	0.1	46.8	0.2
Queue Length 95th (m)		26.4	20.9		0.0	9.0	62.2	0.7	71.6	2.6
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		369	512		449	360	2641	303	2490	1201
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.15	0.33		0.00	0.31	0.47	0.00	0.41	0.03

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 3 (3%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	

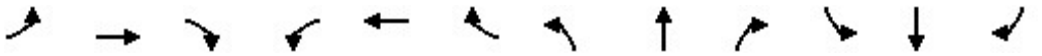
Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	0	170	1	0	1	113	1244	0	1	1032	39
Future Volume (vph)	55	0	170	1	0	1	113	1244	0	1	1032	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.99		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.93		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1734	1452		1735		1394	3288		1785	3476	1487
Flt Permitted		0.76	1.00		0.86		0.24	1.00		0.22	1.00	1.00
Satd. Flow (perm)		1380	1452		1531		354	3288		422	3476	1487
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	55	0	170	1	0	1	113	1244	0	1	1032	39
RTOR Reduction (vph)	0	0	155	0	2	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	55	15	0	0	0	113	1244	0	1	1032	32
Confl. Peds. (#/hr)	2					2	1					1
Heavy Vehicles (%)	5%	0%	10%	0%	0%	0%	28%	11%	0%	0%	5%	5%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		10.6	10.6		10.6		96.4	96.4		86.0	86.0	96.4
Effective Green, g (s)		10.6	10.6		10.6		96.4	96.4		86.0	86.0	96.4
Actuated g/C Ratio		0.09	0.09		0.09		0.80	0.80		0.72	0.72	0.80
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		121	128		135		348	2641		302	2491	1194
v/s Ratio Prot							0.02	c0.38			0.30	
v/s Ratio Perm		c0.04	0.01		0.00		0.24			0.00		0.02
v/c Ratio		0.45	0.12		0.00		0.32	0.47		0.00	0.41	0.03
Uniform Delay, d1		52.0	50.4		49.9		3.3	3.7		4.8	6.9	2.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.7	0.4		0.0		0.5	0.6		0.0	0.5	0.0
Delay (s)		54.7	50.8		49.9		3.8	4.3		4.8	7.4	2.4
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		51.7			49.9			4.3			7.2	
Approach LOS		D			D			A			A	

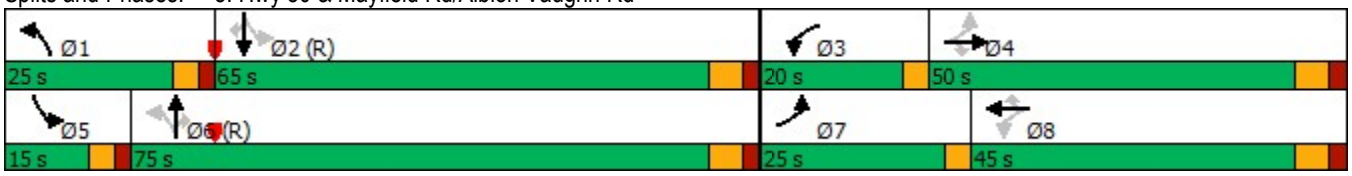
Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

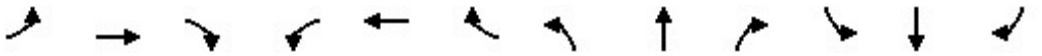


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	105	231	193	84	17	86	1111	378	20	1119	73
Future Volume (vph)	83	105	231	193	84	17	86	1111	378	20	1119	73
Lane Group Flow (vph)	83	105	231	193	84	17	86	1111	378	20	1119	73
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	7	4	4	3	8	8	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	25.0	50.0	50.0	20.0	45.0	45.0	25.0	75.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	31.3%	31.3%	12.5%	28.1%	28.1%	15.6%	46.9%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	30.5	15.6	15.6	38.5	20.8	20.8	113.0	103.0	103.0	103.7	92.4	92.4
Actuated g/C Ratio	0.19	0.10	0.10	0.24	0.13	0.13	0.71	0.64	0.64	0.65	0.58	0.58
v/c Ratio	0.30	0.62	0.70	0.69	0.49	0.06	0.40	0.54	0.36	0.07	0.57	0.08
Control Delay	50.2	84.9	18.9	65.6	74.7	0.4	13.8	18.3	4.5	9.1	24.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.2	84.9	18.9	65.6	74.7	0.4	13.8	18.3	4.5	9.1	24.0	0.2
LOS	D	F	B	E	E	A	B	B	A	A	C	A
Approach Delay		41.7			64.4			14.8			22.3	
Approach LOS		D			E			B			C	
Queue Length 50th (m)	22.3	34.5	0.0	56.3	26.6	0.0	8.5	113.2	11.0	1.8	118.1	0.0
Queue Length 95th (m)	36.8	54.7	28.9	79.4	45.7	0.0	16.9	147.3	31.5	5.4	170.4	0.0
Internal Link Dist (m)		330.4			656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0	50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	379	470	512	281	318	398	245	2061	1057	282	1970	950
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.22	0.45	0.69	0.26	0.04	0.35	0.54	0.36	0.07	0.57	0.08

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 72 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.70		
Intersection Signal Delay: 24.8	Intersection LOS: C	
Intersection Capacity Utilization 71.5%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	105	231	193	84	17	86	1111	378	20	1119	73
Future Volume (vph)	83	105	231	193	84	17	86	1111	378	20	1119	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1767	1731	1268	1608	1325	1238	1056	3202	1479	1428	3411	1549
Flt Permitted	0.70	1.00	1.00	0.49	1.00	1.00	0.17	1.00	1.00	0.22	1.00	1.00
Satd. Flow (perm)	1307	1731	1268	825	1325	1238	191	3202	1479	329	3411	1549
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	83	105	231	193	84	17	86	1111	378	20	1119	73
RTOR Reduction (vph)	0	0	208	0	0	15	0	0	109	0	0	31
Lane Group Flow (vph)	83	105	23	193	84	2	86	1111	269	20	1119	42
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	1%	11%	26%	11%	45%	29%	69%	14%	8%	25%	7%	1%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Actuated Green, G (s)	27.0	15.6	15.6	35.2	20.8	20.8	112.0	101.0	101.0	98.4	92.4	92.4
Effective Green, g (s)	27.0	15.6	15.6	35.2	20.8	20.8	112.0	101.0	101.0	98.4	92.4	92.4
Actuated g/C Ratio	0.17	0.10	0.10	0.22	0.13	0.13	0.70	0.63	0.63	0.62	0.58	0.58
Clearance Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	253	168	123	262	172	160	212	2021	933	243	1969	894
v/s Ratio Prot	0.02	0.06		c0.08	0.06		c0.04	c0.35		0.00	c0.33	
v/s Ratio Perm	0.03		0.02	c0.09		0.00	0.25		0.18	0.05		0.03
v/c Ratio	0.33	0.62	0.18	0.74	0.49	0.01	0.41	0.55	0.29	0.08	0.57	0.05
Uniform Delay, d1	58.0	69.4	66.3	55.5	64.7	60.7	12.3	16.7	13.3	12.6	21.3	14.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	7.1	0.7	10.3	2.2	0.0	1.3	1.1	0.8	0.1	1.2	0.1
Delay (s)	58.8	76.5	67.1	65.8	66.8	60.7	13.6	17.7	14.1	12.8	22.5	14.8
Level of Service	E	E	E	E	E	E	B	B	B	B	C	B
Approach Delay (s)		67.8			65.8			16.6			21.8	
Approach LOS		E			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	360	354	3	7	5
Future Vol, veh/h	5	360	354	3	7	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	60	19	26	33	29	20
Mvmt Flow	5	360	354	3	7	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	357	0	-	0	726	356
Stage 1	-	-	-	-	356	-
Stage 2	-	-	-	-	370	-
Critical Hdwy	4.7	-	-	-	6.69	6.4
Critical Hdwy Stg 1	-	-	-	-	5.69	-
Critical Hdwy Stg 2	-	-	-	-	5.69	-
Follow-up Hdwy	2.74	-	-	-	3.761	3.48
Pot Cap-1 Maneuver	941	-	-	-	354	649
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	643	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	941	-	-	-	352	649
Mov Cap-2 Maneuver	-	-	-	-	352	-
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	643	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	941	-	-	-	435
HCM Lane V/C Ratio	0.005	-	-	-	0.028
HCM Control Delay (s)	8.8	0	-	-	13.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

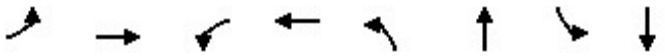
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	820	1	0	913
Future Vol, veh/h	0	0	820	1	0	913
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	11	0	0	6
Mvmt Flow	0	0	820	1	0	913

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1278	411	0	0	821	0
Stage 1	821	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	161	596	-	-	817	-
Stage 1	398	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	161	596	-	-	817	-
Mov Cap-2 Maneuver	289	-	-	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	610	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	817	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

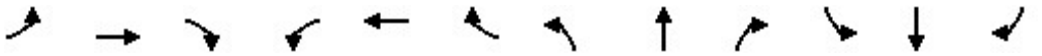


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	99	274	2	273	6	11	90	0
Future Volume (vph)	99	274	2	273	6	11	90	0
Lane Group Flow (vph)	99	275	2	333	6	11	90	149
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	9.0	62.0	53.0	53.0	38.0	38.0	10.0	48.0
Total Split (%)	8.2%	56.4%	48.2%	48.2%	34.5%	34.5%	9.1%	43.6%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	84.0	80.0	69.5	69.5	12.0	12.0	20.0	16.0
Actuated g/C Ratio	0.76	0.73	0.63	0.63	0.11	0.11	0.18	0.15
v/c Ratio	0.15	0.11	0.01	0.16	0.04	0.03	0.42	0.17
Control Delay	4.5	5.1	10.5	8.6	44.8	44.1	44.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.5	5.1	10.5	8.6	44.8	44.1	44.2	0.4
LOS	A	A	B	A	D	D	D	A
Approach Delay		5.0		8.6		44.4		16.9
Approach LOS		A		A		D		B
Queue Length 50th (m)	3.8	7.0	0.1	11.7	1.2	1.2	18.7	0.0
Queue Length 95th (m)	11.4	15.3	1.4	24.4	5.4	4.1	31.3	0.0
Internal Link Dist (m)		209.3		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	675	2455	346	2058	348	1028	214	1420
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.11	0.01	0.16	0.02	0.01	0.42	0.10

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 48 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 9.9	Intersection LOS: A
Intersection Capacity Utilization 49.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	274	1	2	273	60	6	11	0	90	0	149
Future Volume (vph)	99	274	1	2	273	60	6	11	0	90	0	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.97		1.00	1.00		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1487	3379		892	3241		1785	3650		1487	2900	
Flt Permitted	0.53	1.00		0.58	1.00		0.66	1.00		0.53	1.00	
Satd. Flow (perm)	825	3379		547	3241		1235	3650		829	2900	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	99	274	1	2	273	60	6	11	0	90	0	149
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	123	0
Lane Group Flow (vph)	99	275	0	2	321	0	6	11	0	90	26	0
Heavy Vehicles (%)	20%	8%	0%	100%	4%	35%	0%	0%	0%	20%	0%	7%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	76.6	76.6		66.1	66.1		7.2	7.2		19.4	19.4	
Effective Green, g (s)	76.6	76.6		66.1	66.1		7.2	7.2		19.4	19.4	
Actuated g/C Ratio	0.70	0.70		0.60	0.60		0.07	0.07		0.18	0.18	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	619	2353		328	1947		80	238		201	511	
v/s Ratio Prot	c0.01	0.08			0.10			0.00		c0.04	0.01	
v/s Ratio Perm	c0.10			0.00			0.00			c0.04		
v/c Ratio	0.16	0.12		0.01	0.17		0.07	0.05		0.45	0.05	
Uniform Delay, d1	5.5	5.5		8.8	9.7		48.3	48.2		39.8	37.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.0	0.2		0.4	0.1		1.6	0.0	
Delay (s)	5.6	5.6		8.8	9.9		48.7	48.3		41.3	37.7	
Level of Service	A	A		A	A		D	D		D	D	
Approach Delay (s)		5.6			9.9			48.4			39.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	3	1	15	1	27	1	139	3	22	189	2
Future Vol, veh/h	1	3	1	15	1	27	1	139	3	22	189	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	7	100	19	0	17	0	18	11	0
Mvmt Flow	1	3	1	15	1	27	1	139	3	22	189	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	305	377	95	283	378	71	191	0	0	142	0	0
Stage 1	233	233	-	143	143	-	-	-	-	-	-	-
Stage 2	72	144	-	140	235	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.64	8.5	7.28	4.1	-	-	4.46	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.64	7.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.64	7.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.57	5	3.49	2.2	-	-	2.38	-	-
Pot Cap-1 Maneuver	630	558	949	634	379	925	1395	-	-	1329	-	-
Stage 1	755	716	-	831	589	-	-	-	-	-	-	-
Stage 2	935	782	-	834	517	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	602	548	949	623	372	925	1395	-	-	1329	-	-
Mov Cap-2 Maneuver	602	548	-	623	372	-	-	-	-	-	-	-
Stage 1	754	704	-	830	588	-	-	-	-	-	-	-
Stage 2	906	781	-	816	508	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	9.8	0.1	0.8
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1395	-	-	602	613	623	878	1329	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.007	0.024	0.032	0.017	-	-
HCM Control Delay (s)	7.6	-	-	11	10.9	10.9	9.2	7.8	-	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.1	0.1	0.1	-	-

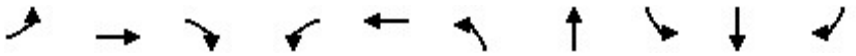
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	27	1	3	34	3	3	1	5	4	2	5
Future Vol, veh/h	0	27	1	3	34	3	3	1	5	4	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	15	0	0	15	67	33	0	20	0	50	0
Mvmt Flow	0	27	1	3	34	3	3	1	5	4	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	37	0	0	28	0	0	73	71	28	73	70	36
Stage 1	-	-	-	-	-	-	28	28	-	42	42	-
Stage 2	-	-	-	-	-	-	45	43	-	31	28	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.43	6.5	6.4	7.1	7	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.5	-	6.1	6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.5	-	6.1	6	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.797	4	3.48	3.5	4.45	3.3
Pot Cap-1 Maneuver	1587	-	-	1599	-	-	847	823	998	923	737	1042
Stage 1	-	-	-	-	-	-	915	876	-	978	774	-
Stage 2	-	-	-	-	-	-	896	863	-	991	786	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1587	-	-	1599	-	-	840	821	998	917	736	1042
Mov Cap-2 Maneuver	-	-	-	-	-	-	840	821	-	917	736	-
Stage 1	-	-	-	-	-	-	915	876	-	978	772	-
Stage 2	-	-	-	-	-	-	888	861	-	985	786	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	9	8.9
HCM LOS			A	A

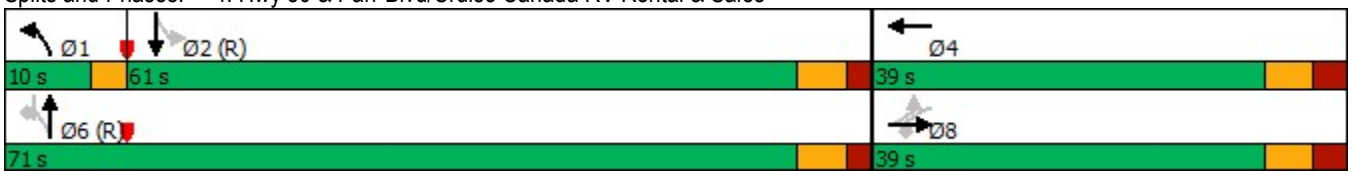
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	918	1587	-	-	1599	-	-	926
HCM Lane V/C Ratio	0.01	-	-	-	0.002	-	-	0.012
HCM Control Delay (s)	9	0	-	-	7.3	0	-	8.9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

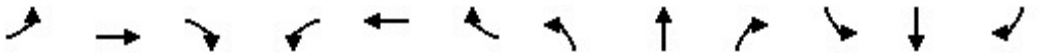


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	19	0	41	4	2	35	969	6	955	18
Future Volume (vph)	19	0	41	4	2	35	969	6	955	18
Lane Group Flow (vph)	0	19	41	0	8	35	969	6	955	18
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	71.0	61.0	61.0	71.0
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	9.1%	64.5%	55.5%	55.5%	64.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.3	8.3		8.3	94.8	92.9	87.5	87.5	92.9
Actuated g/C Ratio		0.08	0.08		0.08	0.86	0.84	0.80	0.80	0.84
v/c Ratio		0.18	0.25		0.10	0.08	0.33	0.02	0.34	0.01
Control Delay		52.4	10.3		44.8	1.9	2.8	4.7	4.9	0.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		52.4	10.3		44.8	1.9	2.8	4.7	4.9	0.2
LOS		D	B		D	A	A	A	A	A
Approach Delay		23.6			44.8		2.8		4.8	
Approach LOS		C			D		A		A	
Queue Length 50th (m)		4.1	0.0		1.3	0.9	23.6	0.3	36.3	0.0
Queue Length 95th (m)		12.2	6.9		6.5	2.5	32.2	1.6	49.2	0.5
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		421	458		300	473	2937	295	2818	1326
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.05	0.09		0.03	0.07	0.33	0.02	0.34	0.01

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 105 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 4.5	Intersection LOS: A
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

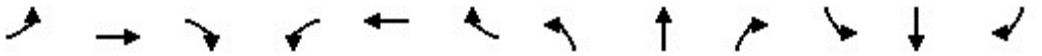
Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	0	41	4	2	2	35	969	0	6	955	18
Future Volume (vph)	19	0	41	4	2	2	35	969	0	6	955	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1823	1426		1203		1608	3476		1189	3544	1562
Flt Permitted		0.75	1.00		0.83		0.28	1.00		0.30	1.00	1.00
Satd. Flow (perm)		1444	1426		1026		465	3476		370	3544	1562
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	0	41	4	2	2	35	969	0	6	955	18
RTOR Reduction (vph)	0	0	39	0	2	0	0	0	0	0	0	3
Lane Group Flow (vph)	0	19	2	0	6	0	35	969	0	6	955	15
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	0%	0%	12%	25%	100%	50%	11%	5%	0%	50%	3%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		6.7	6.7		6.7		90.3	90.3		83.6	83.6	90.3
Effective Green, g (s)		6.7	6.7		6.7		90.3	90.3		83.6	83.6	90.3
Actuated g/C Ratio		0.06	0.06		0.06		0.82	0.82		0.76	0.76	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		87	86		62		420	2853		281	2693	1282
v/s Ratio Prot							0.00	c0.28			c0.27	
v/s Ratio Perm		c0.01	0.00		0.01		0.07			0.02		0.01
v/c Ratio		0.22	0.03		0.10		0.08	0.34		0.02	0.35	0.01
Uniform Delay, d1		49.2	48.6		48.8		2.1	2.4		3.2	4.3	1.8
Progression Factor		1.02	1.06		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		1.3	0.1		0.7		0.1	0.3		0.1	0.4	0.0
Delay (s)		51.4	51.5		49.5		2.1	2.8		3.4	4.7	1.8
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		51.5			49.5			2.7			4.6	
Approach LOS		D			D			A			A	

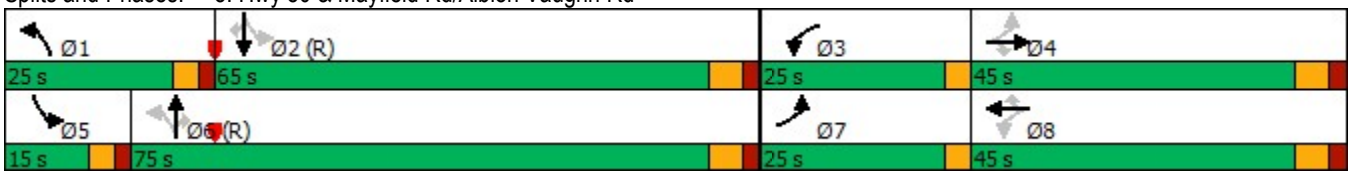
Intersection Summary			
HCM 2000 Control Delay	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

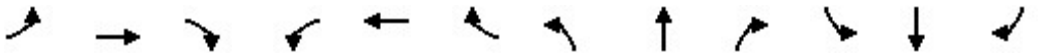


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	118	139	221	119	10	101	865	231	14	880	101
Future Volume (vph)	90	118	139	221	119	10	101	865	231	14	880	101
Lane Group Flow (vph)	90	118	139	221	119	10	101	865	231	14	880	101
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	7	4	4	3	8	8	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	25.0	45.0	45.0	25.0	45.0	45.0	25.0	75.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	28.1%	28.1%	15.6%	28.1%	28.1%	15.6%	46.9%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	31.6	16.4	16.4	43.5	25.3	25.3	107.0	101.2	101.2	102.9	91.6	91.6
Actuated g/C Ratio	0.20	0.10	0.10	0.27	0.16	0.16	0.67	0.63	0.63	0.64	0.57	0.57
v/c Ratio	0.32	0.65	0.54	0.67	0.43	0.03	0.29	0.39	0.23	0.03	0.44	0.11
Control Delay	46.8	85.1	17.2	58.8	65.4	0.2	12.0	16.7	2.5	10.2	21.1	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.8	85.1	17.2	58.8	65.4	0.2	12.0	16.7	2.5	10.2	21.1	2.6
LOS	D	F	B	E	E	A	B	B	A	B	C	A
Approach Delay		48.0			59.4			13.6			19.1	
Approach LOS		D			E			B			B	
Queue Length 50th (m)	23.1	38.8	0.0	62.0	36.3	0.0	11.2	64.4	0.0	1.5	86.3	0.0
Queue Length 95th (m)	37.3	59.9	21.9	85.3	57.5	0.0	20.9	110.4	13.6	4.7	116.1	8.0
Internal Link Dist (m)		330.4			656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0	50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	392	428	417	335	420	380	417	2197	1026	407	2010	944
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.28	0.33	0.66	0.28	0.03	0.24	0.39	0.23	0.03	0.44	0.11

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 7 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.67		
Intersection Signal Delay: 25.2	Intersection LOS: C	
Intersection Capacity Utilization 66.4%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	118	139	221	119	10	101	865	231	14	880	101
Future Volume (vph)	90	118	139	221	119	10	101	865	231	14	880	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1750	1779	1298	1668	1746	1229	1552	3476	1490	1668	3510	1566
Flt Permitted	0.68	1.00	1.00	0.45	1.00	1.00	0.25	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)	1254	1779	1298	791	1746	1229	405	3476	1490	524	3510	1566
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	90	118	139	221	119	10	101	865	231	14	880	101
RTOR Reduction (vph)	0	0	125	0	0	8	0	0	89	0	0	43
Lane Group Flow (vph)	90	118	14	221	119	2	101	865	142	14	880	58
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	8%	23%	7%	10%	30%	15%	5%	5%	7%	4%	2%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Actuated Green, G (s)	28.1	16.4	16.4	40.1	25.4	25.4	107.1	98.1	98.1	95.6	91.6	91.6
Effective Green, g (s)	28.1	16.4	16.4	40.1	25.4	25.4	107.1	98.1	98.1	95.6	91.6	91.6
Actuated g/C Ratio	0.18	0.10	0.10	0.25	0.16	0.16	0.67	0.61	0.61	0.60	0.57	0.57
Clearance Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	182	133	311	277	195	346	2131	913	341	2009	896
v/s Ratio Prot	0.03	0.07		c0.09	0.07		c0.02	c0.25		0.00	c0.25	
v/s Ratio Perm	0.04		0.01	c0.09		0.00	0.18		0.10	0.02		0.04
v/c Ratio	0.35	0.65	0.11	0.71	0.43	0.01	0.29	0.41	0.16	0.04	0.44	0.06
Uniform Delay, d1	57.3	69.0	65.2	52.0	60.8	56.7	11.3	15.9	13.2	13.3	19.5	15.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	7.7	0.4	7.4	1.1	0.0	0.5	0.6	0.4	0.0	0.7	0.1
Delay (s)	58.2	76.7	65.5	59.4	61.8	56.7	11.8	16.5	13.6	13.3	20.2	15.3
Level of Service	E	E	E	E	E	E	B	B	B	B	C	B
Approach Delay (s)		67.4			60.1			15.6			19.6	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	361	333	2	3	2
Future Vol, veh/h	3	361	333	2	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	33	11	10	0	33	0
Mvmt Flow	3	361	333	2	3	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	335	0	-	0	701	334
Stage 1	-	-	-	-	334	-
Stage 2	-	-	-	-	367	-
Critical Hdwy	4.43	-	-	-	6.73	6.2
Critical Hdwy Stg 1	-	-	-	-	5.73	-
Critical Hdwy Stg 2	-	-	-	-	5.73	-
Follow-up Hdwy	2.497	-	-	-	3.797	3.3
Pot Cap-1 Maneuver	1070	-	-	-	362	712
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	638	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1070	-	-	-	361	712
Mov Cap-2 Maneuver	-	-	-	-	361	-
Stage 1	-	-	-	-	658	-
Stage 2	-	-	-	-	638	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1070	-	-	-	450
HCM Lane V/C Ratio	0.003	-	-	-	0.011
HCM Control Delay (s)	8.4	0	-	-	13.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	157	1	0	227
Future Vol, veh/h	1	0	157	1	0	227
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	100	0	24	100	0	10
Mvmt Flow	1	0	157	1	0	227

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	272	79	0	0	158	0
Stage 1	158	-	-	-	-	-
Stage 2	114	-	-	-	-	-
Critical Hdwy	8.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	7.8	-	-	-	-	-
Critical Hdwy Stg 2	7.8	-	-	-	-	-
Follow-up Hdwy	4.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	485	972	-	-	1434	-
Stage 1	626	-	-	-	-	-
Stage 2	670	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	485	972	-	-	1434	-
Mov Cap-2 Maneuver	516	-	-	-	-	-
Stage 1	626	-	-	-	-	-
Stage 2	670	-	-	-	-	-

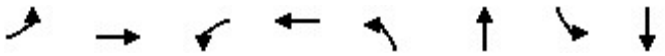
Approach	WB	NB	SB
HCM Control Delay, s	12	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	516	1434	-
HCM Lane V/C Ratio	-	-	0.002	-	-
HCM Control Delay (s)	-	-	12	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

APPENDIX G

2028 & 2033 Future Background Intersection Capacity Analysis

2028 Future Background Intersection Capacity Analysis

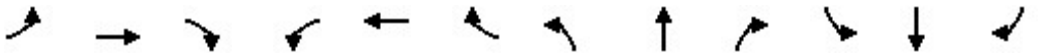


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	336	310	39	293	23	307	64	356
Future Volume (vph)	336	310	39	293	23	307	64	356
Lane Group Flow (vph)	336	342	39	322	23	338	64	604
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	15.0	80.0	65.0	65.0	32.0	32.0	18.0	50.0
Total Split (%)	11.5%	61.5%	50.0%	50.0%	24.6%	24.6%	13.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	91.7	87.7	70.3	70.3	18.1	18.1	32.3	28.3
Actuated g/C Ratio	0.71	0.67	0.54	0.54	0.14	0.14	0.25	0.22
v/c Ratio	0.42	0.14	0.07	0.16	0.26	0.67	0.27	0.70
Control Delay	9.6	8.2	18.5	16.5	57.4	58.7	38.5	39.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.6	8.2	18.5	16.5	57.4	58.7	38.5	39.2
LOS	A	A	B	B	E	E	D	D
Approach Delay		8.9		16.8		58.6		39.1
Approach LOS		A		B		E		D
Queue Length 50th (m)	30.7	15.7	5.0	21.8	5.7	45.5	13.4	60.4
Queue Length 95th (m)	53.5	26.0	13.4	36.6	14.8	60.1	23.9	75.6
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	797	2431	555	1952	120	697	289	1229
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.14	0.07	0.16	0.19	0.48	0.22	0.49

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 92 (71%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 28.7	Intersection LOS: C
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	336	310	32	39	293	29	23	307	31	64	356	248
Future Volume (vph)	336	310	32	39	293	29	23	307	31	64	356	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3599		1785	3601		1785	3600		1785	3425	
Flt Permitted	0.53	1.00		0.55	1.00		0.33	1.00		0.33	1.00	
Satd. Flow (perm)	1003	3599		1026	3601		625	3600		626	3425	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	336	310	32	39	293	29	23	307	31	64	356	248
RTOR Reduction (vph)	0	5	0	0	5	0	0	6	0	0	113	0
Lane Group Flow (vph)	336	337	0	39	317	0	23	332	0	64	491	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	87.1	87.1		69.8	69.8		18.1	18.1		28.9	28.9	
Effective Green, g (s)	87.1	87.1		69.8	69.8		18.1	18.1		28.9	28.9	
Actuated g/C Ratio	0.67	0.67		0.54	0.54		0.14	0.14		0.22	0.22	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	758	2411		550	1933		87	501		208	761	
v/s Ratio Prot	c0.05	0.09			0.09			0.09		0.02	c0.14	
v/s Ratio Perm	c0.25			0.04			0.04			0.05		
v/c Ratio	0.44	0.14		0.07	0.16		0.26	0.66		0.31	0.65	
Uniform Delay, d1	8.8	7.8		14.5	15.3		50.0	53.1		41.1	45.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.1		0.2	0.2		1.6	3.3		0.8	1.9	
Delay (s)	9.2	7.9		14.7	15.5		51.6	56.3		41.9	47.8	
Level of Service	A	A		B	B		D	E		D	D	
Approach Delay (s)		8.6			15.4			56.0			47.2	
Approach LOS		A			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	33	12	121	11	586	54	89	588	5
Future Vol, veh/h	1	1	1	33	12	121	11	586	54	89	588	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	1	1	33	12	121	11	586	54	89	588	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1087	1428	294	1108	1406	320	593	0	0	640	0	0
Stage 1	766	766	-	635	635	-	-	-	-	-	-	-
Stage 2	321	662	-	473	771	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	173	136	708	167	140	682	993	-	-	954	-	-
Stage 1	366	415	-	438	476	-	-	-	-	-	-	-
Stage 2	671	462	-	546	413	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	122	122	708	153	126	682	993	-	-	954	-	-
Mov Cap-2 Maneuver	122	122	-	153	126	-	-	-	-	-	-	-
Stage 1	362	376	-	433	471	-	-	-	-	-	-	-
Stage 2	532	457	-	493	375	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.6	19	0.1	1.2
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	993	-	-	122	208	153	488	954	-	-
HCM Lane V/C Ratio	0.011	-	-	0.008	0.01	0.216	0.273	0.093	-	-
HCM Control Delay (s)	8.7	-	-	34.8	22.5	34.9	15.1	9.2	-	-
HCM Lane LOS	A	-	-	D	C	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.8	1.1	0.3	-	-

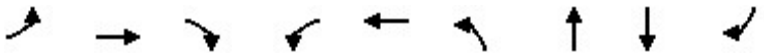
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	129	15	12	161	12	6	4	4	7	3	14
Future Vol, veh/h	3	129	15	12	161	12	6	4	4	7	3	14
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	129	15	12	161	12	6	4	4	7	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	174	0	0	144	0	0	343	341	137	339	342	168
Stage 1	-	-	-	-	-	-	143	143	-	192	192	-
Stage 2	-	-	-	-	-	-	200	198	-	147	150	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1415	-	-	1451	-	-	615	584	917	619	583	881
Stage 1	-	-	-	-	-	-	865	782	-	814	745	-
Stage 2	-	-	-	-	-	-	806	741	-	860	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1414	-	-	1451	-	-	598	577	917	607	576	880
Mov Cap-2 Maneuver	-	-	-	-	-	-	598	577	-	607	576	-
Stage 1	-	-	-	-	-	-	863	780	-	812	738	-
Stage 2	-	-	-	-	-	-	783	734	-	850	775	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	10.6	10.1
HCM LOS			B	B

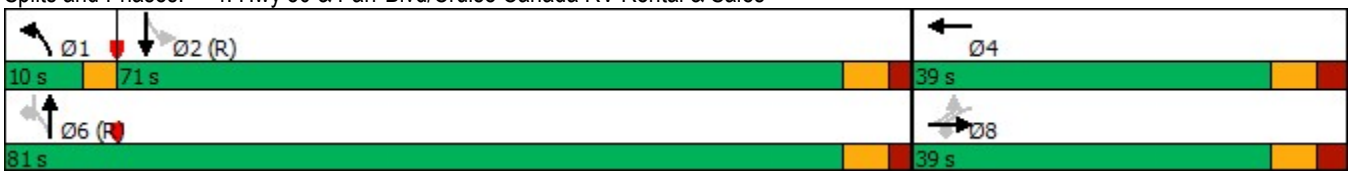
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	656	1414	-	-	1451	-	-	735
HCM Lane V/C Ratio	0.021	0.002	-	-	0.008	-	-	0.033
HCM Control Delay (s)	10.6	7.6	0	-	7.5	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

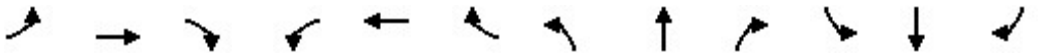


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	27	0	102	1	0	202	1067	1180	45
Future Volume (vph)	27	0	102	1	0	202	1067	1180	45
Lane Group Flow (vph)	0	27	102	0	1	202	1069	1180	45
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	NA	custom
Protected Phases		8			4	1	6	2	
Permitted Phases	8		8	8		6			6
Detector Phase	8	8	8	8	4	1	6	2	6
Switch Phase									
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		8.8	8.8		8.8	101.3	98.2	86.0	98.2
Actuated g/C Ratio		0.07	0.07		0.07	0.84	0.82	0.72	0.82
v/c Ratio		0.25	0.48		0.01	0.48	0.36	0.45	0.04
Control Delay		58.1	17.9		51.0	5.5	3.2	8.1	1.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		58.1	17.9		51.0	5.5	3.2	8.1	1.0
LOS		E	B		D	A	A	A	A
Approach Delay		26.3			51.0		3.6	7.9	
Approach LOS		C			D		A	A	
Queue Length 50th (m)		6.5	0.0		0.2	6.0	26.5	53.8	0.3
Queue Length 95th (m)		16.1	17.3		2.1	11.9	39.2	84.4	2.5
Internal Link Dist (m)		828.8			20.9		732.4	332.3	
Turn Bay Length (m)						35.0			20.0
Base Capacity (vph)		388	501		380	425	2986	2615	1283
Starvation Cap Reductn		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0
Reduced v/c Ratio		0.07	0.20		0.00	0.48	0.36	0.45	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 6.7	Intersection LOS: A
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	102	1	0	0	202	1067	2	0	1180	45
Future Volume (vph)	27	0	102	1	0	0	202	1067	2	0	1180	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		1.00		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.95		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1825	1597		1825		1785	3649			3650	1561
Flt Permitted		0.76	1.00		0.74		0.20	1.00			1.00	1.00
Satd. Flow (perm)		1455	1597		1421		375	3649			3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	27	0	102	1	0	0	202	1067	2	0	1180	45
RTOR Reduction (vph)	0	0	95	0	0	0	0	0	0	0	0	6
Lane Group Flow (vph)	0	27	7	0	1	0	202	1069	0	0	1180	39
Confl. Peds. (#/hr)							1		2	2		1
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		8.8	8.8		8.8		98.2	98.2			86.0	98.2
Effective Green, g (s)		8.8	8.8		8.8		98.2	98.2			86.0	98.2
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82			0.72	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		106	117		104		414	2986			2615	1277
v/s Ratio Prot							c0.04	0.29			0.32	
v/s Ratio Perm		c0.02	0.00		0.00		c0.36					0.02
v/c Ratio		0.25	0.06		0.01		0.49	0.36			0.45	0.03
Uniform Delay, d1		52.5	51.8		51.6		3.9	2.8			7.1	2.0
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.3	0.2		0.0		0.9	0.3			0.6	0.0
Delay (s)		53.8	52.0		51.6		4.8	3.1			7.7	2.1
Level of Service		D	D		D		A	A			A	A
Approach Delay (s)		52.4			51.6			3.4			7.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

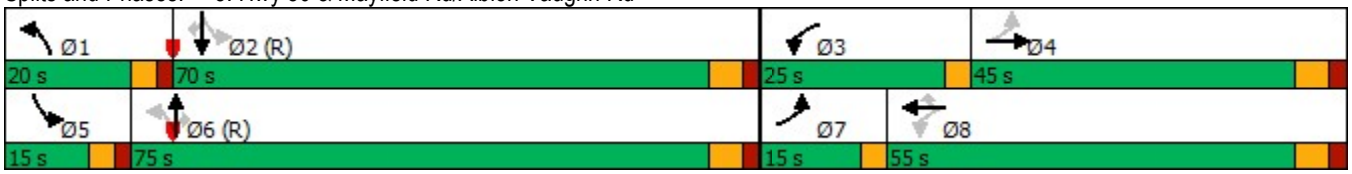


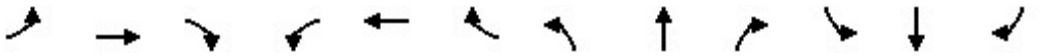
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	63	130	354	213	40	103	1093	170	31	1139	64
Future Volume (vph)	63	130	354	213	40	103	1093	170	31	1139	64
Lane Group Flow (vph)	63	337	354	213	40	103	1093	170	31	1139	64
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	15.0	45.0	25.0	55.0	55.0	20.0	75.0	75.0	15.0	70.0	70.0
Total Split (%)	9.4%	28.1%	15.6%	34.4%	34.4%	12.5%	46.9%	46.9%	9.4%	43.8%	43.8%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	28.0	14.9	43.4	29.3	29.3	105.6	95.3	95.3	102.6	91.3	91.3
Actuated g/C Ratio	0.18	0.09	0.27	0.18	0.18	0.66	0.60	0.60	0.64	0.57	0.57
v/c Ratio	0.26	0.75	1.18	0.61	0.11	0.34	0.50	0.17	0.10	0.55	0.07
Control Delay	46.6	48.4	156.0	68.8	0.9	12.4	20.7	4.6	10.0	23.3	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.6	48.4	156.0	68.8	0.9	12.4	20.7	4.6	10.0	23.3	1.0
LOS	D	D	F	E	A	B	C	A	B	C	A
Approach Delay		48.1		115.2			18.1			21.8	
Approach LOS		D		F			B			C	
Queue Length 50th (m)	16.2	32.0	~124.4	68.2	0.0	10.8	110.6	4.7	3.1	117.4	0.0
Queue Length 95th (m)	28.1	48.4	#180.8	95.2	0.8	20.5	143.7	17.5	7.9	161.4	2.3
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	268	915	299	582	537	349	2173	1005	326	2082	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.37	1.18	0.37	0.07	0.30	0.50	0.17	0.10	0.55	0.07

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 27 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 39.0	Intersection LOS: D
Intersection Capacity Utilization 87.9%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	130	207	354	213	40	103	1093	170	31	1139	64
Future Volume (vph)	63	130	207	354	213	40	103	1093	170	31	1139	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3314		1785	1921	1597	1785	3650	1597	1785	3650	1597
Flt Permitted	0.62	1.00		0.22	1.00	1.00	0.17	1.00	1.00	0.20	1.00	1.00
Satd. Flow (perm)	1174	3314		404	1921	1597	312	3650	1597	372	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	63	130	207	354	213	40	103	1093	170	31	1139	64
RTOR Reduction (vph)	0	140	0	0	0	33	0	0	56	0	0	28
Lane Group Flow (vph)	63	197	0	354	213	7	103	1093	114	31	1139	36
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	23.9	15.6		40.6	29.3	29.3	104.6	93.6	93.6	98.6	90.6	90.6
Effective Green, g (s)	23.9	15.6		40.6	29.3	29.3	104.6	93.6	93.6	98.6	90.6	90.6
Actuated g/C Ratio	0.15	0.10		0.25	0.18	0.18	0.65	0.58	0.58	0.62	0.57	0.57
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	207	323		292	351	292	305	2135	934	299	2066	904
v/s Ratio Prot	0.02	0.06		c0.17	0.11		c0.02	c0.30		0.01	c0.31	
v/s Ratio Perm	0.03			c0.14		0.00	0.20		0.07	0.06		0.02
v/c Ratio	0.30	0.61		1.21	0.61	0.03	0.34	0.51	0.12	0.10	0.55	0.04
Uniform Delay, d1	60.0	69.3		54.6	60.1	53.6	14.1	19.7	14.8	13.6	21.9	15.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	3.4		122.9	3.0	0.0	0.7	0.9	0.3	0.2	1.1	0.1
Delay (s)	60.8	72.7		177.5	63.0	53.7	14.8	20.5	15.1	13.7	22.9	15.5
Level of Service	E	E		F	E	D	B	C	B	B	C	B
Approach Delay (s)		70.8			129.2			19.4			22.3	
Approach LOS		E			F			B			C	

Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	403	359	1	1	2
Future Vol, veh/h	1	403	359	1	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	1	403	359	1	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	360	0	-	0	564	180
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	204	-
Critical Hdwy	4.1	-	-	-	6.8	6.92
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.31
Pot Cap-1 Maneuver	1210	-	-	-	460	835
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	816	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1210	-	-	-	460	835
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	682	-
Stage 2	-	-	-	-	816	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1210	-	-	-	657
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s)	8	0	-	-	10.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	635	0	0	631
Future Vol, veh/h	0	0	635	0	0	631
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	635	0	0	631

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	951	318	0	0	635	0
Stage 1	635	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	262	684	-	-	958	-
Stage 1	496	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	262	684	-	-	958	-
Mov Cap-2 Maneuver	380	-	-	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	718	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	958	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

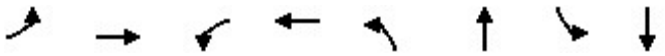
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	403	359	1	0	0
Future Vol, veh/h	1	403	359	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	403	359	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	360	0	-	0	564	180
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	204	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1210	-	-	-	460	838
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	816	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1210	-	-	-	460	838
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	682	-
Stage 2	-	-	-	-	816	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1210	-	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-	-
HCM Control Delay (s)	8	-	-	-	0	0
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	-

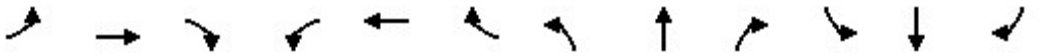


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	336	310	39	293	23	307	64	356
Future Volume (vph)	336	310	39	293	23	307	64	356
Lane Group Flow (vph)	336	342	39	322	23	338	64	604
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	15.0	80.0	65.0	65.0	32.0	32.0	18.0	50.0
Total Split (%)	11.5%	61.5%	50.0%	50.0%	24.6%	24.6%	13.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	91.7	87.7	70.3	70.3	18.1	18.1	32.3	28.3
Actuated g/C Ratio	0.71	0.67	0.54	0.54	0.14	0.14	0.25	0.22
v/c Ratio	0.42	0.14	0.07	0.16	0.26	0.67	0.27	0.70
Control Delay	9.6	8.2	18.5	16.5	57.4	58.7	38.5	39.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.6	8.2	18.5	16.5	57.4	58.7	38.5	39.2
LOS	A	A	B	B	E	E	D	D
Approach Delay		8.9		16.8		58.6		39.1
Approach LOS		A		B		E		D
Queue Length 50th (m)	30.7	15.7	5.0	21.8	5.7	45.5	13.4	60.4
Queue Length 95th (m)	53.5	26.0	13.4	36.6	14.8	60.1	23.9	75.6
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	797	2431	555	1952	120	697	289	1229
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.14	0.07	0.16	0.19	0.48	0.22	0.49

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 92 (71%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 28.7	Intersection LOS: C
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	336	310	32	39	293	29	23	307	31	64	356	248
Future Volume (vph)	336	310	32	39	293	29	23	307	31	64	356	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3599		1785	3601		1785	3600		1785	3425	
Flt Permitted	0.53	1.00		0.55	1.00		0.33	1.00		0.33	1.00	
Satd. Flow (perm)	1003	3599		1026	3601		625	3600		626	3425	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	336	310	32	39	293	29	23	307	31	64	356	248
RTOR Reduction (vph)	0	5	0	0	5	0	0	6	0	0	113	0
Lane Group Flow (vph)	336	337	0	39	317	0	23	332	0	64	491	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	87.1	87.1		69.8	69.8		18.1	18.1		28.9	28.9	
Effective Green, g (s)	87.1	87.1		69.8	69.8		18.1	18.1		28.9	28.9	
Actuated g/C Ratio	0.67	0.67		0.54	0.54		0.14	0.14		0.22	0.22	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	758	2411		550	1933		87	501		208	761	
v/s Ratio Prot	c0.05	0.09			0.09			0.09		0.02	c0.14	
v/s Ratio Perm	c0.25			0.04			0.04			0.05		
v/c Ratio	0.44	0.14		0.07	0.16		0.26	0.66		0.31	0.65	
Uniform Delay, d1	8.8	7.8		14.5	15.3		50.0	53.1		41.1	45.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.1		0.2	0.2		1.6	3.3		0.8	1.9	
Delay (s)	9.2	7.9		14.7	15.5		51.6	56.3		41.9	47.8	
Level of Service	A	A		B	B		D	E		D	D	
Approach Delay (s)		8.6			15.4			56.0			47.2	
Approach LOS		A			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	33	12	121	11	586	54	89	588	5
Future Vol, veh/h	1	1	1	33	12	121	11	586	54	89	588	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	1	1	33	12	121	11	586	54	89	588	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1087	1428	294	1108	1406	320	593	0	0	640	0	0
Stage 1	766	766	-	635	635	-	-	-	-	-	-	-
Stage 2	321	662	-	473	771	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	173	136	708	167	140	682	993	-	-	954	-	-
Stage 1	366	415	-	438	476	-	-	-	-	-	-	-
Stage 2	671	462	-	546	413	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	122	122	708	153	126	682	993	-	-	954	-	-
Mov Cap-2 Maneuver	122	122	-	153	126	-	-	-	-	-	-	-
Stage 1	362	376	-	433	471	-	-	-	-	-	-	-
Stage 2	532	457	-	493	375	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.6	19	0.1	1.2
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	993	-	-	122	208	153	488	954	-	-
HCM Lane V/C Ratio	0.011	-	-	0.008	0.01	0.216	0.273	0.093	-	-
HCM Control Delay (s)	8.7	-	-	34.8	22.5	34.9	15.1	9.2	-	-
HCM Lane LOS	A	-	-	D	C	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.8	1.1	0.3	-	-

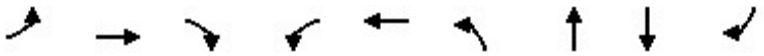
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	129	15	12	161	12	6	4	4	7	3	14
Future Vol, veh/h	3	129	15	12	161	12	6	4	4	7	3	14
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	129	15	12	161	12	6	4	4	7	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	174	0	0	144	0	0	343	341	137	339	342	168
Stage 1	-	-	-	-	-	-	143	143	-	192	192	-
Stage 2	-	-	-	-	-	-	200	198	-	147	150	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1415	-	-	1451	-	-	615	584	917	619	583	881
Stage 1	-	-	-	-	-	-	865	782	-	814	745	-
Stage 2	-	-	-	-	-	-	806	741	-	860	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1414	-	-	1451	-	-	598	577	917	607	576	880
Mov Cap-2 Maneuver	-	-	-	-	-	-	598	577	-	607	576	-
Stage 1	-	-	-	-	-	-	863	780	-	812	738	-
Stage 2	-	-	-	-	-	-	783	734	-	850	775	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	10.6	10.1
HCM LOS			B	B

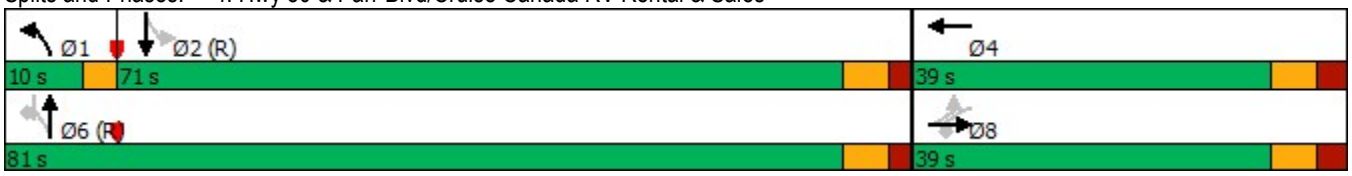
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	656	1414	-	-	1451	-	-	735
HCM Lane V/C Ratio	0.021	0.002	-	-	0.008	-	-	0.033
HCM Control Delay (s)	10.6	7.6	0	-	7.5	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

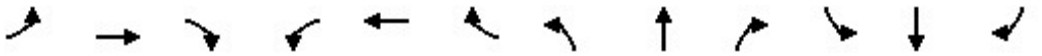


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	27	0	102	1	0	202	1067	1180	45
Future Volume (vph)	27	0	102	1	0	202	1067	1180	45
Lane Group Flow (vph)	0	27	102	0	1	202	1069	1180	45
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	NA	custom
Protected Phases		8			4	1	6	2	
Permitted Phases	8		8	8		6			6
Detector Phase	8	8	8	8	4	1	6	2	6
Switch Phase									
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		8.8	8.8		8.8	101.3	98.2	86.0	98.2
Actuated g/C Ratio		0.07	0.07		0.07	0.84	0.82	0.72	0.82
v/c Ratio		0.25	0.48		0.01	0.48	0.36	0.45	0.04
Control Delay		58.1	17.9		51.0	5.5	3.2	8.1	1.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		58.1	17.9		51.0	5.5	3.2	8.1	1.0
LOS		E	B		D	A	A	A	A
Approach Delay		26.3			51.0		3.6	7.9	
Approach LOS		C			D		A	A	
Queue Length 50th (m)		6.5	0.0		0.2	6.0	26.5	53.8	0.3
Queue Length 95th (m)		16.1	17.3		2.1	11.9	39.2	84.4	2.5
Internal Link Dist (m)		828.8			20.9		732.4	332.3	
Turn Bay Length (m)						35.0			20.0
Base Capacity (vph)		388	501		380	425	2986	2615	1283
Starvation Cap Reductn		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0
Reduced v/c Ratio		0.07	0.20		0.00	0.48	0.36	0.45	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 6.7	Intersection LOS: A
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	102	1	0	0	202	1067	2	0	1180	45
Future Volume (vph)	27	0	102	1	0	0	202	1067	2	0	1180	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		1.00		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.95		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1825	1597		1825		1785	3649			3650	1561
Flt Permitted		0.76	1.00		0.74		0.20	1.00			1.00	1.00
Satd. Flow (perm)		1455	1597		1421		375	3649			3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	27	0	102	1	0	0	202	1067	2	0	1180	45
RTOR Reduction (vph)	0	0	95	0	0	0	0	0	0	0	0	6
Lane Group Flow (vph)	0	27	7	0	1	0	202	1069	0	0	1180	39
Confl. Peds. (#/hr)							1		2	2		1
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		8.8	8.8		8.8		98.2	98.2			86.0	98.2
Effective Green, g (s)		8.8	8.8		8.8		98.2	98.2			86.0	98.2
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82			0.72	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		106	117		104		414	2986			2615	1277
v/s Ratio Prot							c0.04	0.29			0.32	
v/s Ratio Perm		c0.02	0.00		0.00		c0.36					0.02
v/c Ratio		0.25	0.06		0.01		0.49	0.36			0.45	0.03
Uniform Delay, d1		52.5	51.8		51.6		3.9	2.8			7.1	2.0
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.3	0.2		0.0		0.9	0.3			0.6	0.0
Delay (s)		53.8	52.0		51.6		4.8	3.1			7.7	2.1
Level of Service		D	D		D		A	A			A	A
Approach Delay (s)		52.4			51.6			3.4			7.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

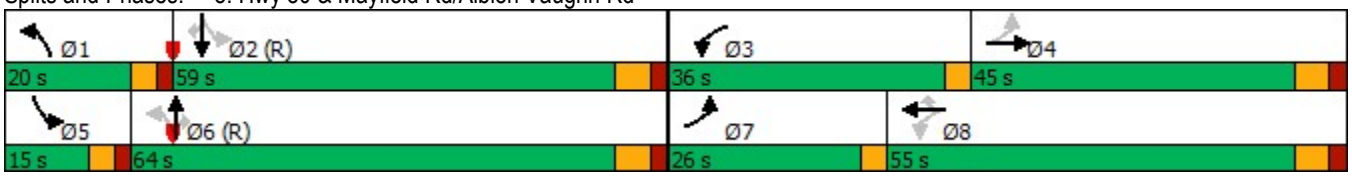


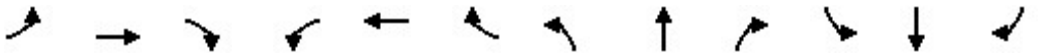
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	63	130	354	213	40	103	1093	170	31	1139	64
Future Volume (vph)	63	130	354	213	40	103	1093	170	31	1139	64
Lane Group Flow (vph)	63	337	354	213	40	103	1093	170	31	1139	64
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	26.0	45.0	36.0	55.0	55.0	20.0	64.0	64.0	15.0	59.0	59.0
Total Split (%)	16.3%	28.1%	22.5%	34.4%	34.4%	12.5%	40.0%	40.0%	9.4%	36.9%	36.9%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.5	13.6	50.9	36.9	36.9	98.6	87.8	87.8	94.4	83.1	83.1
Actuated g/C Ratio	0.17	0.08	0.32	0.23	0.23	0.62	0.55	0.55	0.59	0.52	0.52
v/c Ratio	0.27	0.74	0.89	0.48	0.09	0.37	0.55	0.18	0.11	0.60	0.07
Control Delay	42.2	41.2	70.5	57.6	0.7	16.3	26.0	7.2	13.5	29.6	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	41.2	70.5	57.6	0.7	16.3	26.0	7.2	13.5	29.6	1.2
LOS	D	D	E	E	A	B	C	A	B	C	A
Approach Delay		41.4		61.4			22.9			27.7	
Approach LOS		D		E			C			C	
Queue Length 50th (m)	14.9	25.8	100.6	63.1	0.0	13.0	127.5	7.9	3.8	135.5	0.0
Queue Length 95th (m)	25.9	43.0	#138.5	89.1	0.8	23.8	161.2	22.7	9.2	183.5	2.6
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	382	940	417	582	537	314	2002	930	293	1896	877
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.36	0.85	0.37	0.07	0.33	0.55	0.18	0.11	0.60	0.07

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 27 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 87.9%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	130	207	354	213	40	103	1093	170	31	1139	64
Future Volume (vph)	63	130	207	354	213	40	103	1093	170	31	1139	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3314		1785	1921	1597	1785	3650	1597	1785	3650	1597
Flt Permitted	0.62	1.00		0.23	1.00	1.00	0.15	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	1174	3314		437	1921	1597	272	3650	1597	344	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	63	130	207	354	213	40	103	1093	170	31	1139	64
RTOR Reduction (vph)	0	172	0	0	0	31	0	0	56	0	0	31
Lane Group Flow (vph)	63	165	0	354	213	9	103	1093	114	31	1139	33
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	22.3	14.2		48.0	36.9	36.9	97.9	86.2	86.2	90.5	82.5	82.5
Effective Green, g (s)	22.3	14.2		48.0	36.9	36.9	97.9	86.2	86.2	90.5	82.5	82.5
Actuated g/C Ratio	0.14	0.09		0.30	0.23	0.23	0.61	0.54	0.54	0.57	0.52	0.52
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	194	294		390	443	368	277	1966	860	266	1882	823
v/s Ratio Prot	0.02	0.05		c0.17	0.11		c0.03	c0.30		0.01	c0.31	
v/s Ratio Perm	0.03			c0.10		0.01	0.20		0.07	0.06		0.02
v/c Ratio	0.32	0.56		0.91	0.48	0.03	0.37	0.56	0.13	0.12	0.61	0.04
Uniform Delay, d1	61.4	69.9		49.5	53.3	47.6	18.0	24.3	18.3	17.4	27.3	19.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	2.4		24.1	0.8	0.0	0.8	1.1	0.3	0.2	1.5	0.1
Delay (s)	62.4	72.3		73.6	54.1	47.7	18.9	25.4	18.7	17.6	28.7	19.3
Level of Service	E	E		E	D	D	B	C	B	B	C	B
Approach Delay (s)		70.8			65.1			24.1			28.0	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	403	359	1	1	2
Future Vol, veh/h	1	403	359	1	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	1	403	359	1	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	360	0	-	0	564	180
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	204	-
Critical Hdwy	4.1	-	-	-	6.8	6.92
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.31
Pot Cap-1 Maneuver	1210	-	-	-	460	835
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	816	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1210	-	-	-	460	835
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	682	-
Stage 2	-	-	-	-	816	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1210	-	-	-	657
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s)	8	0	-	-	10.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	635	0	0	631
Future Vol, veh/h	0	0	635	0	0	631
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	635	0	0	631

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	951	318	0	0	635	0
Stage 1	635	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	262	684	-	-	958	-
Stage 1	496	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	262	684	-	-	958	-
Mov Cap-2 Maneuver	380	-	-	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	718	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	958	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

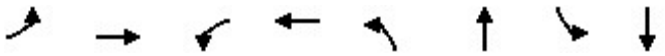
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	403	359	1	0	0
Future Vol, veh/h	1	403	359	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	403	359	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	360	0	-	0	564	180
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	204	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1210	-	-	-	460	838
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	816	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1210	-	-	-	460	838
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	682	-
Stage 2	-	-	-	-	816	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1210	-	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-	-
HCM Control Delay (s)	8	-	-	-	0	0
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	-

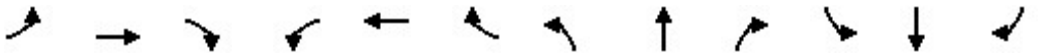


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	307	345	26	317	26	523	86	490
Future Volume (vph)	307	345	26	317	26	523	86	490
Lane Group Flow (vph)	307	380	26	394	26	554	86	923
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	12.0	80.0	68.0	68.0	36.0	36.0	14.0	50.0
Total Split (%)	9.2%	61.5%	52.3%	52.3%	27.7%	27.7%	10.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	82.9	78.9	64.5	64.5	24.6	24.6	41.1	37.1
Actuated g/C Ratio	0.64	0.61	0.50	0.50	0.19	0.19	0.32	0.29
v/c Ratio	0.47	0.17	0.05	0.22	0.46	0.81	0.41	0.84
Control Delay	14.0	11.7	19.2	18.1	71.2	59.5	36.2	42.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	11.7	19.2	18.1	71.2	59.5	36.2	42.0
LOS	B	B	B	B	E	E	D	D
Approach Delay		12.7		18.1		60.0		41.5
Approach LOS		B		B		E		D
Queue Length 50th (m)	34.6	21.9	3.8	29.8	6.3	75.2	16.5	100.5
Queue Length 95th (m)	56.1	33.2	9.4	40.8	16.8	92.8	27.8	120.3
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	658	2189	490	1774	68	810	229	1245
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.17	0.05	0.22	0.38	0.68	0.38	0.74

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 34.5	Intersection LOS: C
Intersection Capacity Utilization 86.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	307	345	35	26	317	77	26	523	31	86	490	433
Future Volume (vph)	307	345	35	26	317	77	26	523	31	86	490	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3600		1785	3543		1785	3617		1785	3393	
Flt Permitted	0.48	1.00		0.53	1.00		0.16	1.00		0.18	1.00	
Satd. Flow (perm)	910	3600		989	3543		306	3617		340	3393	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	307	345	35	26	317	77	26	523	31	86	490	433
RTOR Reduction (vph)	0	5	0	0	16	0	0	3	0	0	131	0
Lane Group Flow (vph)	307	375	0	26	378	0	26	551	0	86	792	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	78.9	78.9		64.5	64.5		24.6	24.6		37.1	37.1	
Effective Green, g (s)	78.9	78.9		64.5	64.5		24.6	24.6		37.1	37.1	
Actuated g/C Ratio	0.61	0.61		0.50	0.50		0.19	0.19		0.29	0.29	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	629	2184		490	1757		57	684		202	968	
v/s Ratio Prot	c0.04	0.10			0.11			0.15		0.03	c0.23	
v/s Ratio Perm	c0.25			0.03			0.09			0.09		
v/c Ratio	0.49	0.17		0.05	0.22		0.46	0.81		0.43	0.82	
Uniform Delay, d1	12.2	11.2		16.9	18.5		46.8	50.4		36.0	43.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.2		0.2	0.3		5.7	6.9		1.4	5.5	
Delay (s)	12.8	11.4		17.2	18.8		52.5	57.3		37.5	48.8	
Level of Service	B	B		B	B		D	E		D	D	
Approach Delay (s)		12.0			18.7			57.1			47.8	
Approach LOS		B			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	3	13	31	6	99	13	830	21	109	931	4
Future Vol, veh/h	3	3	13	31	6	99	13	830	21	109	931	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	3	13	31	6	99	13	830	21	109	931	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1593	2026	466	1552	2020	426	935	0	0	851	0	0
Stage 1	1149	1149	-	867	867	-	-	-	-	-	-	-
Stage 2	444	877	-	685	1153	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	73	58	549	79	59	582	741	-	-	796	-	-
Stage 1	215	275	-	318	373	-	-	-	-	-	-	-
Stage 2	568	369	-	409	274	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	49	49	549	65	50	582	741	-	-	796	-	-
Mov Cap-2 Maneuver	49	49	-	65	50	-	-	-	-	-	-	-
Stage 1	211	237	-	312	366	-	-	-	-	-	-	-
Stage 2	456	362	-	340	236	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	34.9	38.2	0.1	1.1
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	741	-	-	49	188	65	362	796	-	-
HCM Lane V/C Ratio	0.018	-	-	0.061	0.085	0.477	0.29	0.137	-	-
HCM Control Delay (s)	9.9	-	-	83.2	25.9	103.1	19	10.2	-	-
HCM Lane LOS	A	-	-	F	D	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	1.9	1.2	0.5	-	-

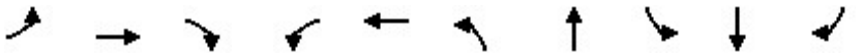
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	151	8	7	123	14	9	0	8	21	0	9
Future Vol, veh/h	4	151	8	7	123	14	9	0	8	21	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	151	8	7	123	14	9	0	8	21	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	137	0	0	159	0	0	312	314	155	311	311	130
Stage 1	-	-	-	-	-	-	163	163	-	144	144	-
Stage 2	-	-	-	-	-	-	149	151	-	167	167	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1459	-	-	1433	-	-	644	605	896	645	607	925
Stage 1	-	-	-	-	-	-	844	767	-	864	782	-
Stage 2	-	-	-	-	-	-	858	776	-	840	764	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1459	-	-	1433	-	-	634	600	896	635	602	925
Mov Cap-2 Maneuver	-	-	-	-	-	-	634	600	-	635	602	-
Stage 1	-	-	-	-	-	-	841	765	-	861	778	-
Stage 2	-	-	-	-	-	-	845	772	-	830	762	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	10	10.4
HCM LOS			B	B

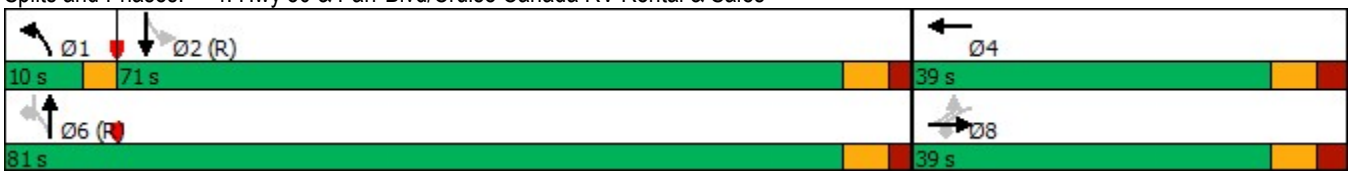
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	735	1459	-	-	1433	-	-	701
HCM Lane V/C Ratio	0.023	0.003	-	-	0.005	-	-	0.043
HCM Control Delay (s)	10	7.5	0	-	7.5	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

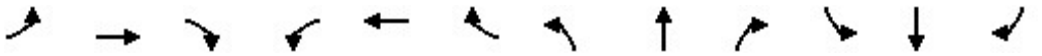


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	56	0	172	1	0	114	1291	1	1193	40
Future Volume (vph)	56	0	172	1	0	114	1291	1	1193	40
Lane Group Flow (vph)	0	56	172	0	2	114	1291	1	1193	40
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		10.5	10.5		10.5	99.6	96.5	86.6	86.6	96.5
Actuated g/C Ratio		0.09	0.09		0.09	0.83	0.80	0.72	0.72	0.80
v/c Ratio		0.44	0.61		0.01	0.29	0.44	0.00	0.45	0.03
Control Delay		62.3	19.7		0.0	4.0	4.3	6.0	7.9	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.3	19.7		0.0	4.0	4.3	6.0	7.9	1.2
LOS		E	B		A	A	A	A	A	A
Approach Delay		30.1					4.3		7.7	
Approach LOS		C					A		A	
Queue Length 50th (m)		13.5	3.5		0.0	3.8	39.7	0.1	55.6	0.3
Queue Length 95th (m)		26.6	25.0		0.0	8.6	60.6	0.7	82.4	2.6
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		387	542		448	393	2935	290	2634	1262
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.14	0.32		0.00	0.29	0.44	0.00	0.45	0.03

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 3 (3%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	0	172	1	0	1	114	1291	0	1	1193	40
Future Volume (vph)	56	0	172	1	0	1	114	1291	0	1	1193	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.99		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.93		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1820	1597		1735		1785	3650		1785	3650	1561
Flt Permitted		0.76	1.00		0.86		0.20	1.00		0.21	1.00	1.00
Satd. Flow (perm)		1450	1597		1528		371	3650		402	3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	56	0	172	1	0	1	114	1291	0	1	1193	40
RTOR Reduction (vph)	0	0	143	0	2	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	56	29	0	0	0	114	1291	0	1	1193	33
Confl. Peds. (#/hr)	2					2	1					1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		10.5	10.5		10.5		96.5	96.5		86.6	86.6	96.5
Effective Green, g (s)		10.5	10.5		10.5		96.5	96.5		86.6	86.6	96.5
Actuated g/C Ratio		0.09	0.09		0.09		0.80	0.80		0.72	0.72	0.80
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		126	139		133		379	2935		290	2634	1255
v/s Ratio Prot							0.02	c0.35			c0.33	
v/s Ratio Perm		c0.04	0.02		0.00		0.22			0.00		0.02
v/c Ratio		0.44	0.21		0.00		0.30	0.44		0.00	0.45	0.03
Uniform Delay, d1		52.0	50.9		50.0		3.7	3.6		4.7	6.9	2.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.5	0.7		0.0		0.4	0.5		0.0	0.6	0.0
Delay (s)		54.5	51.6		50.0		4.1	4.0		4.7	7.5	2.4
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		52.3			50.0			4.0			7.3	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

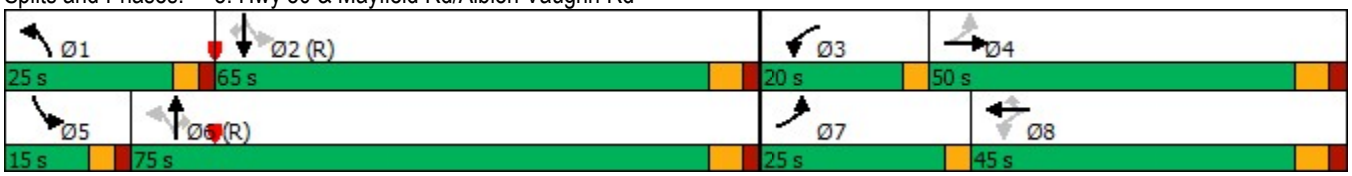


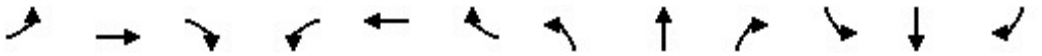
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	85	198	212	126	33	95	1139	413	36	1267	73
Future Volume (vph)	85	198	212	126	33	95	1139	413	36	1267	73
Lane Group Flow (vph)	85	435	212	126	33	95	1139	413	36	1267	73
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	25.0	50.0	20.0	45.0	45.0	25.0	75.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	31.3%	12.5%	28.1%	28.1%	15.6%	46.9%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	32.9	18.0	40.9	23.3	23.3	108.0	97.6	97.6	104.7	93.4	93.4
Actuated g/C Ratio	0.21	0.11	0.26	0.15	0.15	0.68	0.61	0.61	0.65	0.58	0.58
v/c Ratio	0.29	0.80	0.89	0.45	0.10	0.34	0.51	0.38	0.11	0.59	0.07
Control Delay	47.8	50.1	85.2	67.5	0.5	12.1	20.1	5.2	9.8	23.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.8	50.1	85.2	67.5	0.5	12.1	20.1	5.2	9.8	23.6	0.2
LOS	D	D	F	E	A	B	C	A	A	C	A
Approach Delay		49.7		71.6			15.9			22.0	
Approach LOS		D		E			B			C	
Queue Length 50th (m)	22.3	43.6	60.2	39.1	0.0	9.7	115.6	13.7	3.6	135.6	0.0
Queue Length 95th (m)	36.1	61.6	#90.8	60.9	0.0	18.7	149.4	37.0	8.7	185.5	0.0
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	397	1047	243	462	484	370	2225	1097	322	2131	976
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.42	0.87	0.27	0.07	0.26	0.51	0.38	0.11	0.59	0.07

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 72 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay: 27.8	Intersection LOS: C	
Intersection Capacity Utilization 86.4%	ICU Level of Service E	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	198	237	212	126	33	95	1139	413	36	1267	73
Future Volume (vph)	85	198	237	212	126	33	95	1139	413	36	1267	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3352		1785	1921	1597	1785	3650	1597	1785	3650	1577
Flt Permitted	0.68	1.00		0.19	1.00	1.00	0.14	1.00	1.00	0.19	1.00	1.00
Satd. Flow (perm)	1270	3352		358	1921	1597	259	3650	1597	357	3650	1577
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	85	198	237	212	126	33	95	1139	413	36	1267	73
RTOR Reduction (vph)	0	167	0	0	0	28	0	0	125	0	0	30
Lane Group Flow (vph)	85	268	0	212	126	5	95	1139	288	36	1267	43
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	29.3	18.0		37.6	23.3	23.3	107.7	96.6	96.6	101.5	93.5	93.5
Effective Green, g (s)	29.3	18.0		37.6	23.3	23.3	107.7	96.6	96.6	101.5	93.5	93.5
Actuated g/C Ratio	0.18	0.11		0.24	0.15	0.15	0.67	0.60	0.60	0.63	0.58	0.58
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	268	377		232	279	232	280	2203	964	297	2132	921
v/s Ratio Prot	0.02	0.08		c0.09	0.07		c0.02	c0.31		0.01	c0.35	
v/s Ratio Perm	0.04			c0.12		0.00	0.20		0.18	0.07		0.03
v/c Ratio	0.32	0.71		0.91	0.45	0.02	0.34	0.52	0.30	0.12	0.59	0.05
Uniform Delay, d1	56.1	68.5		54.1	62.5	58.6	14.3	18.3	15.3	12.6	21.2	14.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	6.2		36.3	1.2	0.0	0.7	0.9	0.8	0.2	1.2	0.1
Delay (s)	56.7	74.7		90.5	63.7	58.6	15.0	19.1	16.1	12.8	22.4	14.3
Level of Service	E	E		F	E	E	B	B	B	B	C	B
Approach Delay (s)		71.8			78.5			18.1			21.7	
Approach LOS		E			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	456	414	3	7	5
Future Vol, veh/h	5	456	414	3	7	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	456	414	3	7	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	417	0	-	0	654	209
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	238	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1153	-	-	-	404	803
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1153	-	-	-	402	803
Mov Cap-2 Maneuver	-	-	-	-	402	-
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	785	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1153	-	-	-	508
HCM Lane V/C Ratio	0.004	-	-	-	0.024
HCM Control Delay (s)	8.1	0	-	-	12.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	846	1	0	977
Future Vol, veh/h	0	0	846	1	0	977
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	846	1	0	977

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1336	424	0	0	847	0
Stage 1	847	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	147	584	-	-	799	-
Stage 1	386	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	147	584	-	-	799	-
Mov Cap-2 Maneuver	276	-	-	-	-	-
Stage 1	386	-	-	-	-	-
Stage 2	588	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	799	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

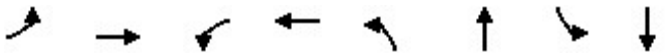
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	456	414	0	1	1
Future Vol, veh/h	1	456	414	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	456	414	0	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	414	0	-	0	644	207
Stage 1	-	-	-	-	414	-
Stage 2	-	-	-	-	230	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1156	-	-	-	410	805
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1156	-	-	-	410	805
Mov Cap-2 Maneuver	-	-	-	-	410	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1156	-	-	-	410	805
HCM Lane V/C Ratio	0.001	-	-	-	0.002	0.001
HCM Control Delay (s)	8.1	-	-	-	13.8	9.5
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

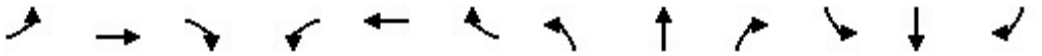


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	307	345	26	317	26	523	86	490
Future Volume (vph)	307	345	26	317	26	523	86	490
Lane Group Flow (vph)	307	380	26	394	26	554	86	923
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	12.0	80.0	68.0	68.0	36.0	36.0	14.0	50.0
Total Split (%)	9.2%	61.5%	52.3%	52.3%	27.7%	27.7%	10.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	82.9	78.9	64.5	64.5	24.6	24.6	41.1	37.1
Actuated g/C Ratio	0.64	0.61	0.50	0.50	0.19	0.19	0.32	0.29
v/c Ratio	0.47	0.17	0.05	0.22	0.46	0.81	0.41	0.84
Control Delay	14.0	11.7	19.2	18.1	71.2	59.5	36.2	42.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	11.7	19.2	18.1	71.2	59.5	36.2	42.0
LOS	B	B	B	B	E	E	D	D
Approach Delay		12.7		18.1		60.0		41.5
Approach LOS		B		B		E		D
Queue Length 50th (m)	34.6	21.9	3.8	29.8	6.3	75.2	16.5	100.5
Queue Length 95th (m)	56.1	33.2	9.4	40.8	16.8	92.8	27.8	120.3
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	658	2189	490	1774	68	810	229	1245
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.17	0.05	0.22	0.38	0.68	0.38	0.74

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 34.5	Intersection LOS: C
Intersection Capacity Utilization 86.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	307	345	35	26	317	77	26	523	31	86	490	433
Future Volume (vph)	307	345	35	26	317	77	26	523	31	86	490	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3600		1785	3543		1785	3617		1785	3393	
Flt Permitted	0.48	1.00		0.53	1.00		0.16	1.00		0.18	1.00	
Satd. Flow (perm)	910	3600		989	3543		306	3617		340	3393	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	307	345	35	26	317	77	26	523	31	86	490	433
RTOR Reduction (vph)	0	5	0	0	16	0	0	3	0	0	131	0
Lane Group Flow (vph)	307	375	0	26	378	0	26	551	0	86	792	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	78.9	78.9		64.5	64.5		24.6	24.6		37.1	37.1	
Effective Green, g (s)	78.9	78.9		64.5	64.5		24.6	24.6		37.1	37.1	
Actuated g/C Ratio	0.61	0.61		0.50	0.50		0.19	0.19		0.29	0.29	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	629	2184		490	1757		57	684		202	968	
v/s Ratio Prot	c0.04	0.10			0.11			0.15		0.03	c0.23	
v/s Ratio Perm	c0.25			0.03			0.09			0.09		
v/c Ratio	0.49	0.17		0.05	0.22		0.46	0.81		0.43	0.82	
Uniform Delay, d1	12.2	11.2		16.9	18.5		46.8	50.4		36.0	43.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.2		0.2	0.3		5.7	6.9		1.4	5.5	
Delay (s)	12.8	11.4		17.2	18.8		52.5	57.3		37.5	48.8	
Level of Service	B	B		B	B		D	E		D	D	
Approach Delay (s)		12.0			18.7			57.1			47.8	
Approach LOS		B			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	3	13	31	6	99	13	830	21	109	931	4
Future Vol, veh/h	3	3	13	31	6	99	13	830	21	109	931	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	3	13	31	6	99	13	830	21	109	931	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1593	2026	466	1552	2020	426	935	0	0	851	0	0
Stage 1	1149	1149	-	867	867	-	-	-	-	-	-	-
Stage 2	444	877	-	685	1153	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	73	58	549	79	59	582	741	-	-	796	-	-
Stage 1	215	275	-	318	373	-	-	-	-	-	-	-
Stage 2	568	369	-	409	274	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	49	49	549	65	50	582	741	-	-	796	-	-
Mov Cap-2 Maneuver	49	49	-	65	50	-	-	-	-	-	-	-
Stage 1	211	237	-	312	366	-	-	-	-	-	-	-
Stage 2	456	362	-	340	236	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	34.9	38.2	0.1	1.1
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	741	-	-	49	188	65	362	796	-	-
HCM Lane V/C Ratio	0.018	-	-	0.061	0.085	0.477	0.29	0.137	-	-
HCM Control Delay (s)	9.9	-	-	83.2	25.9	103.1	19	10.2	-	-
HCM Lane LOS	A	-	-	F	D	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	1.9	1.2	0.5	-	-

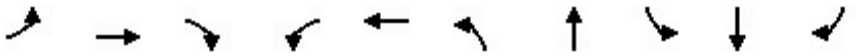
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	151	8	7	123	14	9	0	8	21	0	9
Future Vol, veh/h	4	151	8	7	123	14	9	0	8	21	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	151	8	7	123	14	9	0	8	21	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	137	0	0	159	0	0	312	314	155	311	311	130
Stage 1	-	-	-	-	-	-	163	163	-	144	144	-
Stage 2	-	-	-	-	-	-	149	151	-	167	167	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1459	-	-	1433	-	-	644	605	896	645	607	925
Stage 1	-	-	-	-	-	-	844	767	-	864	782	-
Stage 2	-	-	-	-	-	-	858	776	-	840	764	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1459	-	-	1433	-	-	634	600	896	635	602	925
Mov Cap-2 Maneuver	-	-	-	-	-	-	634	600	-	635	602	-
Stage 1	-	-	-	-	-	-	841	765	-	861	778	-
Stage 2	-	-	-	-	-	-	845	772	-	830	762	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	10	10.4
HCM LOS			B	B

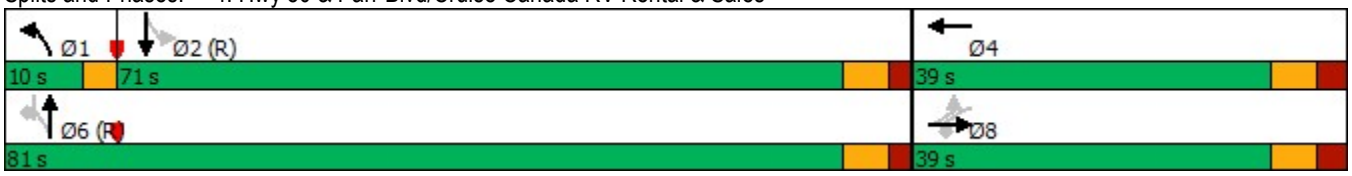
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	735	1459	-	-	1433	-	-	701
HCM Lane V/C Ratio	0.023	0.003	-	-	0.005	-	-	0.043
HCM Control Delay (s)	10	7.5	0	-	7.5	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	56	0	172	1	0	114	1291	1	1193	40
Future Volume (vph)	56	0	172	1	0	114	1291	1	1193	40
Lane Group Flow (vph)	0	56	172	0	2	114	1291	1	1193	40
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		10.5	10.5		10.5	99.6	96.5	86.6	86.6	96.5
Actuated g/C Ratio		0.09	0.09		0.09	0.83	0.80	0.72	0.72	0.80
v/c Ratio		0.44	0.61		0.01	0.29	0.44	0.00	0.45	0.03
Control Delay		62.3	19.7		0.0	4.0	4.3	6.0	7.9	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.3	19.7		0.0	4.0	4.3	6.0	7.9	1.2
LOS		E	B		A	A	A	A	A	A
Approach Delay		30.1					4.3		7.7	
Approach LOS		C					A		A	
Queue Length 50th (m)		13.5	3.5		0.0	3.8	39.7	0.1	55.6	0.3
Queue Length 95th (m)		26.6	25.0		0.0	8.6	60.6	0.7	82.4	2.6
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		387	542		448	393	2935	290	2634	1262
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.14	0.32		0.00	0.29	0.44	0.00	0.45	0.03

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 3 (3%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	0	172	1	0	1	114	1291	0	1	1193	40
Future Volume (vph)	56	0	172	1	0	1	114	1291	0	1	1193	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.99		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.93		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1820	1597		1735		1785	3650		1785	3650	1561
Flt Permitted		0.76	1.00		0.86		0.20	1.00		0.21	1.00	1.00
Satd. Flow (perm)		1450	1597		1528		371	3650		402	3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	56	0	172	1	0	1	114	1291	0	1	1193	40
RTOR Reduction (vph)	0	0	143	0	2	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	56	29	0	0	0	114	1291	0	1	1193	33
Confl. Peds. (#/hr)	2					2	1					1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		10.5	10.5		10.5		96.5	96.5		86.6	86.6	96.5
Effective Green, g (s)		10.5	10.5		10.5		96.5	96.5		86.6	86.6	96.5
Actuated g/C Ratio		0.09	0.09		0.09		0.80	0.80		0.72	0.72	0.80
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		126	139		133		379	2935		290	2634	1255
v/s Ratio Prot							0.02	c0.35			c0.33	
v/s Ratio Perm		c0.04	0.02		0.00		0.22			0.00		0.02
v/c Ratio		0.44	0.21		0.00		0.30	0.44		0.00	0.45	0.03
Uniform Delay, d1		52.0	50.9		50.0		3.7	3.6		4.7	6.9	2.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.5	0.7		0.0		0.4	0.5		0.0	0.6	0.0
Delay (s)		54.5	51.6		50.0		4.1	4.0		4.7	7.5	2.4
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		52.3			50.0			4.0			7.3	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

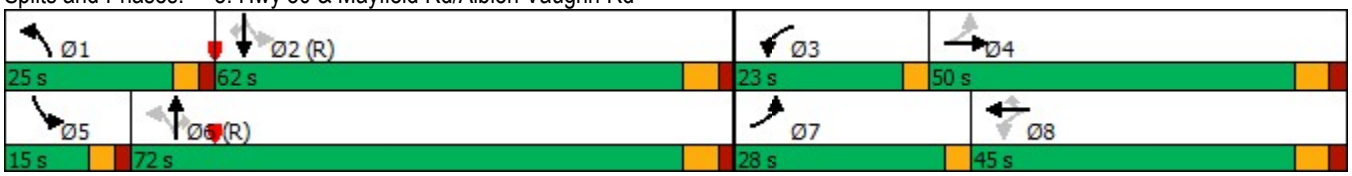


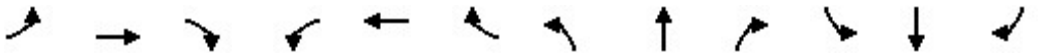
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	85	198	212	126	33	95	1139	413	36	1267	73
Future Volume (vph)	85	198	212	126	33	95	1139	413	36	1267	73
Lane Group Flow (vph)	85	435	212	126	33	95	1139	413	36	1267	73
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	28.0	50.0	23.0	45.0	45.0	25.0	72.0	72.0	15.0	62.0	62.0
Total Split (%)	17.5%	31.3%	14.4%	28.1%	28.1%	15.6%	45.0%	45.0%	9.4%	38.8%	38.8%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	32.7	18.0	43.3	25.7	25.7	105.8	95.4	95.4	102.5	91.2	91.2
Actuated g/C Ratio	0.20	0.11	0.27	0.16	0.16	0.66	0.60	0.60	0.64	0.57	0.57
v/c Ratio	0.29	0.80	0.80	0.41	0.09	0.35	0.52	0.38	0.12	0.61	0.08
Control Delay	45.9	50.1	69.8	63.8	0.5	13.3	21.6	6.0	10.9	25.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	50.1	69.8	63.8	0.5	13.3	21.6	6.0	10.9	25.3	0.2
LOS	D	D	E	E	A	B	C	A	B	C	A
Approach Delay		49.4		61.6			17.3			23.6	
Approach LOS		D		E			B			C	
Queue Length 50th (m)	21.7	43.6	58.6	38.1	0.0	10.4	121.4	16.0	3.8	142.4	0.0
Queue Length 95th (m)	35.1	61.6	#80.7	59.3	0.0	19.8	156.2	41.5	9.2	193.5	0.0
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	424	1047	275	462	484	361	2175	1075	312	2080	956
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.42	0.77	0.27	0.07	0.26	0.52	0.38	0.12	0.61	0.08

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 72 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 28.0	Intersection LOS: C
Intersection Capacity Utilization 86.4%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	198	237	212	126	33	95	1139	413	36	1267	73
Future Volume (vph)	85	198	237	212	126	33	95	1139	413	36	1267	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3352		1785	1921	1597	1785	3650	1597	1785	3650	1577
Flt Permitted	0.68	1.00		0.19	1.00	1.00	0.13	1.00	1.00	0.19	1.00	1.00
Satd. Flow (perm)	1270	3352		356	1921	1597	249	3650	1597	348	3650	1577
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	85	198	237	212	126	33	95	1139	413	36	1267	73
RTOR Reduction (vph)	0	167	0	0	0	28	0	0	126	0	0	31
Lane Group Flow (vph)	85	268	0	212	126	5	95	1139	287	36	1267	42
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	29.3	18.1		39.9	25.7	25.7	105.4	94.3	94.3	99.2	91.2	91.2
Effective Green, g (s)	29.3	18.1		39.9	25.7	25.7	105.4	94.3	94.3	99.2	91.2	91.2
Actuated g/C Ratio	0.18	0.11		0.25	0.16	0.16	0.66	0.59	0.59	0.62	0.57	0.57
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	268	379		256	308	256	270	2151	941	287	2080	898
v/s Ratio Prot	0.02	0.08		c0.10	0.07		c0.02	c0.31		0.01	c0.35	
v/s Ratio Perm	0.04			c0.11		0.00	0.21		0.18	0.07		0.03
v/c Ratio	0.32	0.71		0.83	0.41	0.02	0.35	0.53	0.31	0.13	0.61	0.05
Uniform Delay, d1	56.1	68.4		52.2	60.3	56.6	15.5	19.6	16.4	13.6	22.7	15.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	5.9		19.3	0.9	0.0	0.8	0.9	0.8	0.2	1.3	0.1
Delay (s)	56.7	74.3		71.5	61.2	56.6	16.3	20.5	17.3	13.8	24.0	15.3
Level of Service	E	E		E	E	E	B	C	B	B	C	B
Approach Delay (s)		71.5			66.7			19.5			23.3	
Approach LOS		E			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	456	414	3	7	5
Future Vol, veh/h	5	456	414	3	7	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	456	414	3	7	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	417	0	-	0	654	209
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	238	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1153	-	-	-	404	803
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1153	-	-	-	402	803
Mov Cap-2 Maneuver	-	-	-	-	402	-
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	785	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1153	-	-	-	508
HCM Lane V/C Ratio	0.004	-	-	-	0.024
HCM Control Delay (s)	8.1	0	-	-	12.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	846	1	0	977
Future Vol, veh/h	0	0	846	1	0	977
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	846	1	0	977

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1336	424	0	0	847	0
Stage 1	847	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	147	584	-	-	799	-
Stage 1	386	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	147	584	-	-	799	-
Mov Cap-2 Maneuver	276	-	-	-	-	-
Stage 1	386	-	-	-	-	-
Stage 2	588	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	799	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

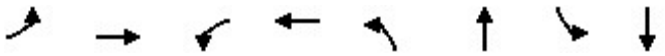
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	456	414	0	1	1
Future Vol, veh/h	1	456	414	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	456	414	0	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	414	0	-	0	644	207
Stage 1	-	-	-	-	414	-
Stage 2	-	-	-	-	230	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1156	-	-	-	410	805
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1156	-	-	-	410	805
Mov Cap-2 Maneuver	-	-	-	-	410	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1156	-	-	-	410	805
HCM Lane V/C Ratio	0.001	-	-	-	0.002	0.001
HCM Control Delay (s)	8.1	-	-	-	13.8	9.5
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

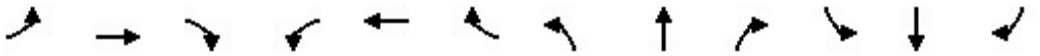


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	102	282	2	288	6	11	90	0
Future Volume (vph)	102	282	2	288	6	11	90	0
Lane Group Flow (vph)	102	283	2	348	6	11	90	156
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	9.0	62.0	53.0	53.0	38.0	38.0	10.0	48.0
Total Split (%)	8.2%	56.4%	48.2%	48.2%	34.5%	34.5%	9.1%	43.6%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	84.0	80.0	69.8	69.8	12.0	12.0	20.0	16.0
Actuated g/C Ratio	0.76	0.73	0.63	0.63	0.11	0.11	0.18	0.15
v/c Ratio	0.13	0.11	0.00	0.15	0.05	0.03	0.35	0.17
Control Delay	4.3	5.1	10.0	8.5	45.0	44.1	41.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	5.1	10.0	8.5	45.0	44.1	41.3	0.4
LOS	A	A	A	A	D	D	D	A
Approach Delay		4.9		8.5		44.4		15.4
Approach LOS		A		A		D		B
Queue Length 50th (m)	3.9	7.1	0.2	12.3	1.2	1.2	18.5	0.0
Queue Length 95th (m)	11.4	15.6	1.3	25.0	5.4	4.1	30.7	0.0
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	799	2651	682	2265	345	1028	256	1484
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.11	0.00	0.15	0.02	0.01	0.35	0.11

Intersection Summary			
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 48 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	282	1	2	288	60	6	11	0	90	0	156
Future Volume (vph)	102	282	1	2	288	60	6	11	0	90	0	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.97		1.00	1.00		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3648		1767	3556		1785	3650		1785	3103	
Flt Permitted	0.52	1.00		0.58	1.00		0.65	1.00		0.53	1.00	
Satd. Flow (perm)	976	3648		1076	3556		1227	3650		995	3103	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	102	282	1	2	288	60	6	11	0	90	0	156
RTOR Reduction (vph)	0	0	0	0	11	0	0	0	0	0	128	0
Lane Group Flow (vph)	102	283	0	2	337	0	6	11	0	90	28	0
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	76.6	76.6		66.4	66.4		7.2	7.2		19.4	19.4	
Effective Green, g (s)	76.6	76.6		66.4	66.4		7.2	7.2		19.4	19.4	
Actuated g/C Ratio	0.70	0.70		0.60	0.60		0.07	0.07		0.18	0.18	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	732	2540		649	2146		80	238		241	547	
v/s Ratio Prot	c0.01	0.08			c0.09			0.00		c0.03	0.01	
v/s Ratio Perm	0.09			0.00			0.00			c0.03		
v/c Ratio	0.14	0.11		0.00	0.16		0.07	0.05		0.37	0.05	
Uniform Delay, d1	5.4	5.5		8.7	9.5		48.3	48.2		39.3	37.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.0	0.2		0.4	0.1		1.0	0.0	
Delay (s)	5.5	5.6		8.7	9.7		48.7	48.3		40.3	37.7	
Level of Service	A	A		A	A		D	D		D	D	
Approach Delay (s)		5.6			9.7			48.4			38.6	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	3	1	18	1	31	1	143	4	23	194	2
Future Vol, veh/h	1	3	1	18	1	31	1	143	4	23	194	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	1	3	1	18	1	31	1	143	4	23	194	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	314	389	97	292	389	74	196	0	0	147	0	0
Stage 1	240	240	-	147	147	-	-	-	-	-	-	-
Stage 2	74	149	-	145	242	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.52	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.01	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	620	549	947	643	547	979	1389	-	-	1447	-	-
Stage 1	748	711	-	847	777	-	-	-	-	-	-	-
Stage 2	933	778	-	849	707	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	592	540	947	631	538	979	1389	-	-	1447	-	-
Mov Cap-2 Maneuver	592	540	-	631	538	-	-	-	-	-	-	-
Stage 1	747	700	-	846	776	-	-	-	-	-	-	-
Stage 2	902	777	-	831	696	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	9.6	0.1	0.8
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1389	-	-	592	605	631	955	1447	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.007	0.029	0.034	0.016	-	-
HCM Control Delay (s)	7.6	-	-	11.1	11	10.9	8.9	7.5	-	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.1	0.1	0	-	-

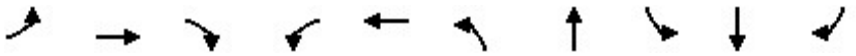
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	32	1	3	40	3	4	1	5	4	2	5
Future Vol, veh/h	0	32	1	3	40	3	4	1	5	4	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	32	1	3	40	3	4	1	5	4	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	33	0	0	84	82	33	84	81	42
Stage 1	-	-	-	-	-	-	33	33	-	48	48	-
Stage 2	-	-	-	-	-	-	51	49	-	36	33	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1579	-	-	1592	-	-	908	812	1046	908	813	1034
Stage 1	-	-	-	-	-	-	988	872	-	971	859	-
Stage 2	-	-	-	-	-	-	967	858	-	985	872	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1579	-	-	1592	-	-	901	810	1046	902	811	1034
Mov Cap-2 Maneuver	-	-	-	-	-	-	901	810	-	902	811	-
Stage 1	-	-	-	-	-	-	988	872	-	971	857	-
Stage 2	-	-	-	-	-	-	958	856	-	979	872	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	8.8	8.9
HCM LOS			A	A

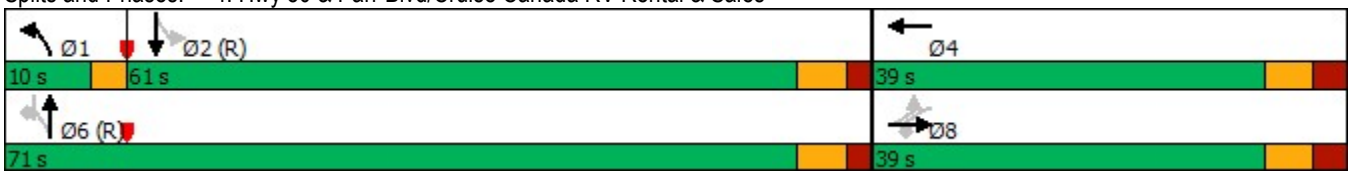
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	957	1579	-	-	1592	-	-	937
HCM Lane V/C Ratio	0.01	-	-	-	0.002	-	-	0.012
HCM Control Delay (s)	8.8	0	-	-	7.3	0	-	8.9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

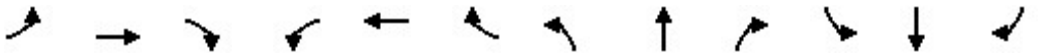


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	19	0	44	4	2	36	993	6	979	19
Future Volume (vph)	19	0	44	4	2	36	993	6	979	19
Lane Group Flow (vph)	0	19	44	0	8	36	993	6	979	19
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	71.0	61.0	61.0	71.0
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	9.1%	64.5%	55.5%	55.5%	64.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.3	8.3		8.3	94.8	92.9	87.5	87.5	92.9
Actuated g/C Ratio		0.08	0.08		0.08	0.86	0.84	0.80	0.80	0.84
v/c Ratio		0.18	0.25		0.07	0.07	0.32	0.01	0.34	0.01
Control Delay		52.4	11.1		43.0	1.9	2.8	4.5	4.8	0.3
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		52.4	11.1		43.0	1.9	2.8	4.5	4.8	0.3
LOS		D	B		D	A	A	A	A	A
Approach Delay		23.6			43.0		2.7		4.8	
Approach LOS		C			D		A		A	
Queue Length 50th (m)		4.1	0.0		1.3	1.0	24.0	0.3	37.2	0.0
Queue Length 95th (m)		11.8	7.4		6.5	2.6	32.5	1.6	50.3	0.6
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		421	508		449	514	3084	431	2903	1326
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.05	0.09		0.02	0.07	0.32	0.01	0.34	0.01

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 105 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 4.5	Intersection LOS: A
Intersection Capacity Utilization 57.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	0	44	4	2	2	36	993	0	6	979	19
Future Volume (vph)	19	0	44	4	2	2	36	993	0	6	979	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1823	1597		1801		1785	3650		1784	3650	1562
Flt Permitted		0.75	1.00		0.83		0.27	1.00		0.29	1.00	1.00
Satd. Flow (perm)		1444	1597		1536		503	3650		542	3650	1562
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	0	44	4	2	2	36	993	0	6	979	19
RTOR Reduction (vph)	0	0	41	0	2	0	0	0	0	0	0	3
Lane Group Flow (vph)	0	19	3	0	6	0	36	993	0	6	979	16
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		6.7	6.7		6.7		90.3	90.3		83.7	83.7	90.3
Effective Green, g (s)		6.7	6.7		6.7		90.3	90.3		83.7	83.7	90.3
Actuated g/C Ratio		0.06	0.06		0.06		0.82	0.82		0.76	0.76	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		87	97		93		454	2996		412	2777	1282
v/s Ratio Prot							0.00	c0.27			c0.27	
v/s Ratio Perm		c0.01	0.00		0.00		0.06			0.01		0.01
v/c Ratio		0.22	0.03		0.07		0.08	0.33		0.01	0.35	0.01
Uniform Delay, d1		49.2	48.6		48.7		2.1	2.4		3.2	4.3	1.8
Progression Factor		1.02	0.99		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		1.3	0.1		0.3		0.1	0.3		0.1	0.4	0.0
Delay (s)		51.3	48.2		49.0		2.1	2.7		3.2	4.6	1.8
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		49.1			49.0			2.7			4.6	
Approach LOS		D			D			A			A	

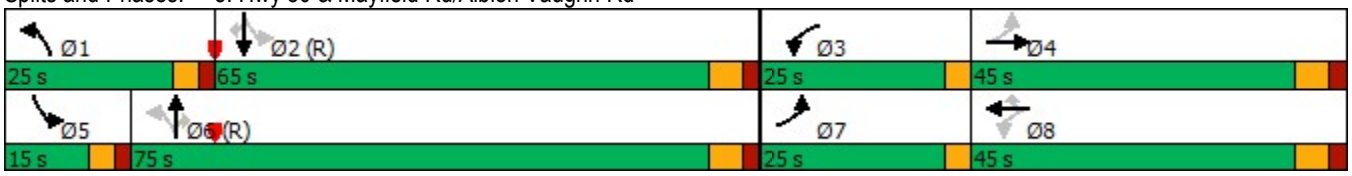
Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

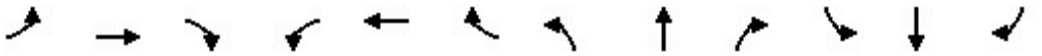


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	92	121	232	125	10	101	887	231	15	903	101
Future Volume (vph)	92	121	232	125	10	101	887	231	15	903	101
Lane Group Flow (vph)	92	264	232	125	10	101	887	231	15	903	101
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	25.0	45.0	25.0	45.0	45.0	25.0	75.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	28.1%	15.6%	28.1%	28.1%	15.6%	46.9%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	28.6	13.1	40.2	21.8	21.8	109.9	104.5	104.5	106.6	95.3	95.3
Actuated g/C Ratio	0.18	0.08	0.25	0.14	0.14	0.69	0.65	0.65	0.67	0.60	0.60
v/c Ratio	0.35	0.65	0.80	0.48	0.03	0.25	0.37	0.21	0.03	0.42	0.10
Control Delay	50.6	40.0	71.6	70.5	0.2	9.8	14.5	2.3	8.5	18.5	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	40.0	71.6	70.5	0.2	9.8	14.5	2.3	8.5	18.5	2.1
LOS	D	D	E	E	A	A	B	A	A	B	A
Approach Delay		42.7		69.3			11.8			16.7	
Approach LOS		D		E			B			B	
Queue Length 50th (m)	24.5	20.8	67.3	39.2	0.0	10.1	60.0	0.4	1.5	82.6	0.0
Queue Length 95th (m)	39.8	36.5	93.2	62.1	0.0	18.4	102.6	13.1	4.4	106.1	7.2
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	373	915	302	462	468	489	2382	1108	444	2174	996
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.77	0.27	0.02	0.21	0.37	0.21	0.03	0.42	0.10

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 7 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 74.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	121	143	232	125	10	101	887	231	15	903	101
Future Volume (vph)	92	121	143	232	125	10	101	887	231	15	903	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3354		1785	1921	1597	1785	3650	1577	1785	3650	1597
Flt Permitted	0.68	1.00		0.27	1.00	1.00	0.25	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)	1272	3354		502	1921	1597	464	3650	1577	551	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	92	121	143	232	125	10	101	887	231	15	903	101
RTOR Reduction (vph)	0	131	0	0	0	9	0	0	83	0	0	41
Lane Group Flow (vph)	92	133	0	232	125	1	101	887	148	15	903	60
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	25.0	13.1		36.7	21.8	21.8	110.5	101.5	101.5	99.4	95.4	95.4
Effective Green, g (s)	25.0	13.1		36.7	21.8	21.8	110.5	101.5	101.5	99.4	95.4	95.4
Actuated g/C Ratio	0.16	0.08		0.23	0.14	0.14	0.69	0.63	0.63	0.62	0.60	0.60
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	236	274		280	261	217	403	2315	1000	373	2176	952
v/s Ratio Prot	0.03	0.04		c0.11	0.07		c0.02	c0.24		0.00	c0.25	
v/s Ratio Perm	0.03			c0.08		0.00	0.16		0.09	0.02		0.04
v/c Ratio	0.39	0.48		0.83	0.48	0.01	0.25	0.38	0.15	0.04	0.41	0.06
Uniform Delay, d1	60.0	70.2		54.9	63.9	59.7	9.9	14.1	11.8	11.8	17.3	13.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.3		17.9	1.4	0.0	0.3	0.5	0.3	0.0	0.6	0.1
Delay (s)	61.1	71.6		72.9	65.2	59.7	10.2	14.6	12.1	11.8	17.9	13.7
Level of Service	E	E		E	E	E	B	B	B	B	B	B
Approach Delay (s)		68.9			69.9			13.8			17.4	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	370	350	2	3	2
Future Vol, veh/h	3	370	350	2	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	370	350	2	3	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	352	0	-	0	542	176
Stage 1	-	-	-	-	351	-
Stage 2	-	-	-	-	191	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1218	-	-	-	475	843
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1218	-	-	-	474	843
Mov Cap-2 Maneuver	-	-	-	-	474	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	828	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1218	-	-	-	575
HCM Lane V/C Ratio	0.002	-	-	-	0.009
HCM Control Delay (s)	8	0	-	-	11.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	161	1	0	233
Future Vol, veh/h	1	0	161	1	0	233
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1	0	161	1	0	233

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	279	81	0	0	162	0
Stage 1	162	-	-	-	-	-
Stage 2	117	-	-	-	-	-
Critical Hdwy	6.82	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	691	969	-	-	1429	-
Stage 1	853	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	691	969	-	-	1429	-
Mov Cap-2 Maneuver	714	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	714	1429	-
HCM Lane V/C Ratio	-	-	0.001	-	-
HCM Control Delay (s)	-	-	10	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

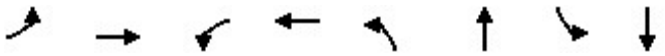
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	370	350	0	1	1
Future Vol, veh/h	1	370	350	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	370	350	0	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	350	0	-	0	537	175
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	187	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1220	-	-	-	479	844
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	832	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1220	-	-	-	479	844
Mov Cap-2 Maneuver	-	-	-	-	479	-
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	832	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1220	-	-	-	479	844
HCM Lane V/C Ratio	0.001	-	-	-	0.002	0.001
HCM Control Delay (s)	8	-	-	-	12.5	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

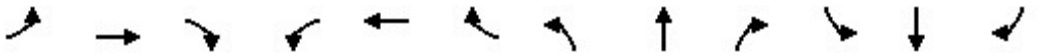


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	102	282	2	288	6	11	90	0
Future Volume (vph)	102	282	2	288	6	11	90	0
Lane Group Flow (vph)	102	283	2	348	6	11	90	156
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	9.0	62.0	53.0	53.0	38.0	38.0	10.0	48.0
Total Split (%)	8.2%	56.4%	48.2%	48.2%	34.5%	34.5%	9.1%	43.6%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	84.0	80.0	69.8	69.8	12.0	12.0	20.0	16.0
Actuated g/C Ratio	0.76	0.73	0.63	0.63	0.11	0.11	0.18	0.15
v/c Ratio	0.13	0.11	0.00	0.15	0.05	0.03	0.35	0.17
Control Delay	4.3	5.1	10.0	8.5	45.0	44.1	41.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	5.1	10.0	8.5	45.0	44.1	41.3	0.4
LOS	A	A	A	A	D	D	D	A
Approach Delay		4.9		8.5		44.4		15.4
Approach LOS		A		A		D		B
Queue Length 50th (m)	3.9	7.1	0.2	12.3	1.2	1.2	18.5	0.0
Queue Length 95th (m)	11.4	15.6	1.3	25.0	5.4	4.1	30.7	0.0
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	799	2651	682	2265	345	1028	256	1484
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.11	0.00	0.15	0.02	0.01	0.35	0.11

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 48 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 9.4	Intersection LOS: A
Intersection Capacity Utilization 49.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	282	1	2	288	60	6	11	0	90	0	156
Future Volume (vph)	102	282	1	2	288	60	6	11	0	90	0	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.97		1.00	1.00		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3648		1767	3556		1785	3650		1785	3103	
Flt Permitted	0.52	1.00		0.58	1.00		0.65	1.00		0.53	1.00	
Satd. Flow (perm)	976	3648		1076	3556		1227	3650		995	3103	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	102	282	1	2	288	60	6	11	0	90	0	156
RTOR Reduction (vph)	0	0	0	0	11	0	0	0	0	0	128	0
Lane Group Flow (vph)	102	283	0	2	337	0	6	11	0	90	28	0
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	76.6	76.6		66.4	66.4		7.2	7.2		19.4	19.4	
Effective Green, g (s)	76.6	76.6		66.4	66.4		7.2	7.2		19.4	19.4	
Actuated g/C Ratio	0.70	0.70		0.60	0.60		0.07	0.07		0.18	0.18	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	732	2540		649	2146		80	238		241	547	
v/s Ratio Prot	c0.01	0.08			c0.09			0.00		c0.03	0.01	
v/s Ratio Perm	0.09			0.00			0.00			c0.03		
v/c Ratio	0.14	0.11		0.00	0.16		0.07	0.05		0.37	0.05	
Uniform Delay, d1	5.4	5.5		8.7	9.5		48.3	48.2		39.3	37.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.0	0.2		0.4	0.1		1.0	0.0	
Delay (s)	5.5	5.6		8.7	9.7		48.7	48.3		40.3	37.7	
Level of Service	A	A		A	A		D	D		D	D	
Approach Delay (s)		5.6			9.7			48.4			38.6	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	3	1	18	1	31	1	143	4	23	194	2
Future Vol, veh/h	1	3	1	18	1	31	1	143	4	23	194	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	1	3	1	18	1	31	1	143	4	23	194	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	314	389	97	292	389	74	196	0	0	147	0	0
Stage 1	240	240	-	147	147	-	-	-	-	-	-	-
Stage 2	74	149	-	145	242	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.52	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.01	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	620	549	947	643	547	979	1389	-	-	1447	-	-
Stage 1	748	711	-	847	777	-	-	-	-	-	-	-
Stage 2	933	778	-	849	707	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	592	540	947	631	538	979	1389	-	-	1447	-	-
Mov Cap-2 Maneuver	592	540	-	631	538	-	-	-	-	-	-	-
Stage 1	747	700	-	846	776	-	-	-	-	-	-	-
Stage 2	902	777	-	831	696	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	9.6	0.1	0.8
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1389	-	-	592	605	631	955	1447	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.007	0.029	0.034	0.016	-	-
HCM Control Delay (s)	7.6	-	-	11.1	11	10.9	8.9	7.5	-	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	32	1	3	40	3	4	1	5	4	2	5
Future Vol, veh/h	0	32	1	3	40	3	4	1	5	4	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	32	1	3	40	3	4	1	5	4	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	33	0	0	84	82	33	84	81	42
Stage 1	-	-	-	-	-	-	33	33	-	48	48	-
Stage 2	-	-	-	-	-	-	51	49	-	36	33	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1579	-	-	1592	-	-	908	812	1046	908	813	1034
Stage 1	-	-	-	-	-	-	988	872	-	971	859	-
Stage 2	-	-	-	-	-	-	967	858	-	985	872	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1579	-	-	1592	-	-	901	810	1046	902	811	1034
Mov Cap-2 Maneuver	-	-	-	-	-	-	901	810	-	902	811	-
Stage 1	-	-	-	-	-	-	988	872	-	971	857	-
Stage 2	-	-	-	-	-	-	958	856	-	979	872	-

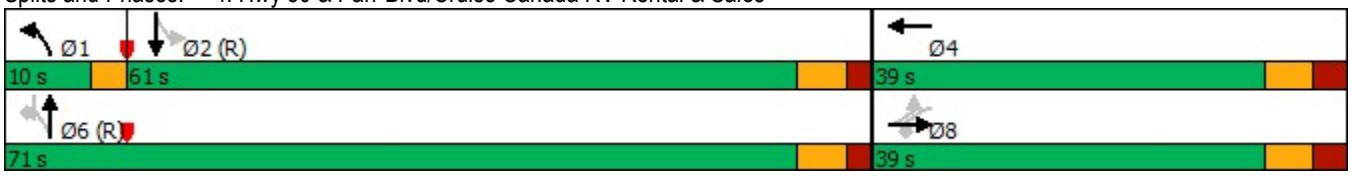
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	8.8	8.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	957	1579	-	-	1592	-	-	937
HCM Lane V/C Ratio	0.01	-	-	-	0.002	-	-	0.012
HCM Control Delay (s)	8.8	0	-	-	7.3	0	-	8.9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	19	0	44	4	2	36	993	6	979	19
Future Volume (vph)	19	0	44	4	2	36	993	6	979	19
Lane Group Flow (vph)	0	19	44	0	8	36	993	6	979	19
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	71.0	61.0	61.0	71.0
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	9.1%	64.5%	55.5%	55.5%	64.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.3	8.3		8.3	94.8	92.9	87.5	87.5	92.9
Actuated g/C Ratio		0.08	0.08		0.08	0.86	0.84	0.80	0.80	0.84
v/c Ratio		0.18	0.25		0.07	0.07	0.32	0.01	0.34	0.01
Control Delay		52.4	11.1		43.0	1.9	2.8	4.5	4.8	0.3
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		52.4	11.1		43.0	1.9	2.8	4.5	4.8	0.3
LOS		D	B		D	A	A	A	A	A
Approach Delay		23.6			43.0		2.7		4.8	
Approach LOS		C			D		A		A	
Queue Length 50th (m)		4.1	0.0		1.3	1.0	24.0	0.3	37.2	0.0
Queue Length 95th (m)		11.8	7.4		6.5	2.6	32.5	1.6	50.3	0.6
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		421	508		449	514	3084	431	2903	1326
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.05	0.09		0.02	0.07	0.32	0.01	0.34	0.01

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 105 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 4.5	Intersection LOS: A
Intersection Capacity Utilization 57.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	0	44	4	2	2	36	993	0	6	979	19
Future Volume (vph)	19	0	44	4	2	2	36	993	0	6	979	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1823	1597		1801		1785	3650		1784	3650	1562
Flt Permitted		0.75	1.00		0.83		0.27	1.00		0.29	1.00	1.00
Satd. Flow (perm)		1444	1597		1536		503	3650		542	3650	1562
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	0	44	4	2	2	36	993	0	6	979	19
RTOR Reduction (vph)	0	0	41	0	2	0	0	0	0	0	0	3
Lane Group Flow (vph)	0	19	3	0	6	0	36	993	0	6	979	16
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		6.7	6.7		6.7		90.3	90.3		83.7	83.7	90.3
Effective Green, g (s)		6.7	6.7		6.7		90.3	90.3		83.7	83.7	90.3
Actuated g/C Ratio		0.06	0.06		0.06		0.82	0.82		0.76	0.76	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		87	97		93		454	2996		412	2777	1282
v/s Ratio Prot							0.00	c0.27			c0.27	
v/s Ratio Perm		c0.01	0.00		0.00		0.06			0.01		0.01
v/c Ratio		0.22	0.03		0.07		0.08	0.33		0.01	0.35	0.01
Uniform Delay, d1		49.2	48.6		48.7		2.1	2.4		3.2	4.3	1.8
Progression Factor		1.02	0.99		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		1.3	0.1		0.3		0.1	0.3		0.1	0.4	0.0
Delay (s)		51.3	48.2		49.0		2.1	2.7		3.2	4.6	1.8
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		49.1			49.0			2.7			4.6	
Approach LOS		D			D			A			A	

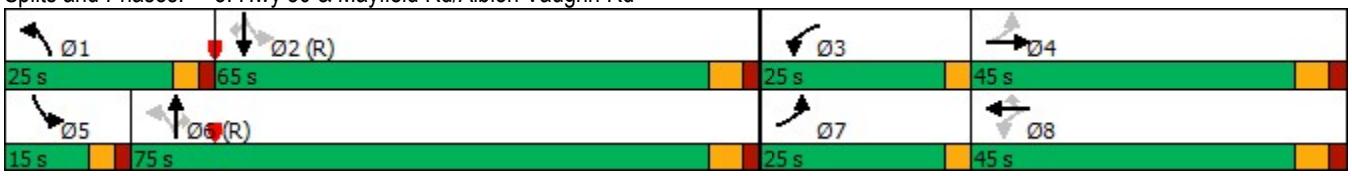
Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

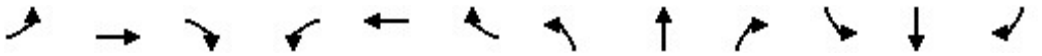


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	92	121	232	125	10	101	887	231	15	903	101
Future Volume (vph)	92	121	232	125	10	101	887	231	15	903	101
Lane Group Flow (vph)	92	264	232	125	10	101	887	231	15	903	101
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	25.0	45.0	25.0	45.0	45.0	25.0	75.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	28.1%	15.6%	28.1%	28.1%	15.6%	46.9%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	28.6	13.1	40.2	21.8	21.8	109.9	104.5	104.5	106.6	95.3	95.3
Actuated g/C Ratio	0.18	0.08	0.25	0.14	0.14	0.69	0.65	0.65	0.67	0.60	0.60
v/c Ratio	0.35	0.65	0.80	0.48	0.03	0.25	0.37	0.21	0.03	0.42	0.10
Control Delay	50.6	40.0	71.6	70.5	0.2	9.8	14.5	2.3	8.5	18.5	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	40.0	71.6	70.5	0.2	9.8	14.5	2.3	8.5	18.5	2.1
LOS	D	D	E	E	A	A	B	A	A	B	A
Approach Delay		42.7		69.3			11.8			16.7	
Approach LOS		D		E			B			B	
Queue Length 50th (m)	24.5	20.8	67.3	39.2	0.0	10.1	60.0	0.4	1.5	82.6	0.0
Queue Length 95th (m)	39.8	36.5	93.2	62.1	0.0	18.4	102.6	13.1	4.4	106.1	7.2
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	373	915	302	462	468	489	2382	1108	444	2174	996
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.77	0.27	0.02	0.21	0.37	0.21	0.03	0.42	0.10

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 7 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 74.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	121	143	232	125	10	101	887	231	15	903	101
Future Volume (vph)	92	121	143	232	125	10	101	887	231	15	903	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3354		1785	1921	1597	1785	3650	1577	1785	3650	1597
Flt Permitted	0.68	1.00		0.27	1.00	1.00	0.25	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)	1272	3354		502	1921	1597	464	3650	1577	551	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	92	121	143	232	125	10	101	887	231	15	903	101
RTOR Reduction (vph)	0	131	0	0	0	9	0	0	83	0	0	41
Lane Group Flow (vph)	92	133	0	232	125	1	101	887	148	15	903	60
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	25.0	13.1		36.7	21.8	21.8	110.5	101.5	101.5	99.4	95.4	95.4
Effective Green, g (s)	25.0	13.1		36.7	21.8	21.8	110.5	101.5	101.5	99.4	95.4	95.4
Actuated g/C Ratio	0.16	0.08		0.23	0.14	0.14	0.69	0.63	0.63	0.62	0.60	0.60
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	236	274		280	261	217	403	2315	1000	373	2176	952
v/s Ratio Prot	0.03	0.04		c0.11	0.07		c0.02	c0.24		0.00	c0.25	
v/s Ratio Perm	0.03			c0.08		0.00	0.16		0.09	0.02		0.04
v/c Ratio	0.39	0.48		0.83	0.48	0.01	0.25	0.38	0.15	0.04	0.41	0.06
Uniform Delay, d1	60.0	70.2		54.9	63.9	59.7	9.9	14.1	11.8	11.8	17.3	13.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.3		17.9	1.4	0.0	0.3	0.5	0.3	0.0	0.6	0.1
Delay (s)	61.1	71.6		72.9	65.2	59.7	10.2	14.6	12.1	11.8	17.9	13.7
Level of Service	E	E		E	E	E	B	B	B	B	B	B
Approach Delay (s)		68.9			69.9			13.8			17.4	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	370	350	2	3	2
Future Vol, veh/h	3	370	350	2	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	370	350	2	3	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	352	0	-	0	542	176
Stage 1	-	-	-	-	351	-
Stage 2	-	-	-	-	191	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1218	-	-	-	475	843
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1218	-	-	-	474	843
Mov Cap-2 Maneuver	-	-	-	-	474	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	828	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1218	-	-	-	575
HCM Lane V/C Ratio	0.002	-	-	-	0.009
HCM Control Delay (s)	8	0	-	-	11.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	161	1	0	233
Future Vol, veh/h	1	0	161	1	0	233
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1	0	161	1	0	233

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	279	81	0	0	162	0
Stage 1	162	-	-	-	-	-
Stage 2	117	-	-	-	-	-
Critical Hdwy	6.82	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	691	969	-	-	1429	-
Stage 1	853	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	691	969	-	-	1429	-
Mov Cap-2 Maneuver	714	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	714	1429	-
HCM Lane V/C Ratio	-	-	0.001	-	-
HCM Control Delay (s)	-	-	10	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0

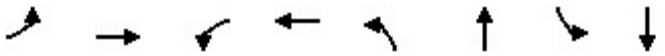
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	370	350	0	1	1
Future Vol, veh/h	1	370	350	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	370	350	0	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	350	0	-	0	537	175
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	187	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1220	-	-	-	479	844
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	832	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1220	-	-	-	479	844
Mov Cap-2 Maneuver	-	-	-	-	479	-
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	832	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1220	-	-	-	479	844
HCM Lane V/C Ratio	0.001	-	-	-	0.002	0.001
HCM Control Delay (s)	8	-	-	-	12.5	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

2033 Future Background Intersection Capacity Analysis

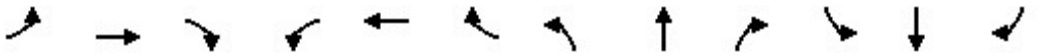


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	370	339	39	357	23	314	70	365
Future Volume (vph)	370	339	39	357	23	314	70	365
Lane Group Flow (vph)	370	371	39	398	23	345	70	626
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	15.0	80.0	65.0	65.0	32.0	32.0	18.0	50.0
Total Split (%)	11.5%	61.5%	50.0%	50.0%	24.6%	24.6%	13.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	91.1	87.1	68.9	68.9	18.4	18.4	32.9	28.9
Actuated g/C Ratio	0.70	0.67	0.53	0.53	0.14	0.14	0.25	0.22
v/c Ratio	0.50	0.15	0.07	0.21	0.28	0.67	0.29	0.71
Control Delay	10.8	8.6	19.1	17.6	58.1	58.5	38.6	39.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.8	8.6	19.1	17.6	58.1	58.5	38.6	39.4
LOS	B	A	B	B	E	E	D	D
Approach Delay		9.7		17.7		58.4		39.3
Approach LOS		A		B		E		D
Queue Length 50th (m)	35.2	17.6	5.1	28.7	5.7	46.5	14.6	63.1
Queue Length 95th (m)	60.7	28.7	13.5	45.1	14.9	61.1	25.4	78.4
Internal Link Dist (m)		689.8		209.6		684.9		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	746	2417	529	1912	113	698	290	1230
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.15	0.07	0.21	0.20	0.49	0.24	0.51

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 92 (71%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 28.4	Intersection LOS: C
Intersection Capacity Utilization 81.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	339	32	39	357	41	23	314	31	70	365	261
Future Volume (vph)	370	339	32	39	357	41	23	314	31	70	365	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3603		1785	3594		1785	3601		1785	3422	
Flt Permitted	0.49	1.00		0.53	1.00		0.31	1.00		0.33	1.00	
Satd. Flow (perm)	916	3603		998	3594		592	3601		616	3422	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	370	339	32	39	357	41	23	314	31	70	365	261
RTOR Reduction (vph)	0	4	0	0	6	0	0	6	0	0	114	0
Lane Group Flow (vph)	370	367	0	39	392	0	23	339	0	70	512	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	86.5	86.5		68.4	68.4		18.4	18.4		29.5	29.5	
Effective Green, g (s)	86.5	86.5		68.4	68.4		18.4	18.4		29.5	29.5	
Actuated g/C Ratio	0.67	0.67		0.53	0.53		0.14	0.14		0.23	0.23	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	710	2397		525	1890		83	509		212	776	
v/s Ratio Prot	c0.06	0.10			0.11			0.09		0.02	c0.15	
v/s Ratio Perm	c0.29			0.04			0.04			0.05		
v/c Ratio	0.52	0.15		0.07	0.21		0.28	0.67		0.33	0.66	
Uniform Delay, d1	9.3	8.1		15.2	16.4		49.9	52.9		40.7	45.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		0.3	0.2		1.8	3.3		0.9	2.0	
Delay (s)	10.0	8.2		15.5	16.6		51.7	56.2		41.7	47.7	
Level of Service	A	A		B	B		D	E		D	D	
Approach Delay (s)		9.1			16.5			55.9			47.1	
Approach LOS		A			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	33	13	121	11	639	54	89	615	5
Future Vol, veh/h	1	1	1	33	13	121	11	639	54	89	615	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	1	1	33	13	121	11	639	54	89	615	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1141	1508	308	1174	1486	347	620	0	0	693	0	0
Stage 1	793	793	-	688	688	-	-	-	-	-	-	-
Stage 2	348	715	-	486	798	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	158	122	694	149	126	655	970	-	-	912	-	-
Stage 1	352	403	-	407	450	-	-	-	-	-	-	-
Stage 2	647	438	-	537	401	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	108	109	694	136	112	655	970	-	-	912	-	-
Mov Cap-2 Maneuver	108	109	-	136	112	-	-	-	-	-	-	-
Stage 1	348	364	-	403	445	-	-	-	-	-	-	-
Stage 2	506	433	-	483	362	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.1	21.1	0.1	1.2
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	970	-	-	108	188	136	445	912	-	-
HCM Lane V/C Ratio	0.011	-	-	0.009	0.011	0.243	0.301	0.098	-	-
HCM Control Delay (s)	8.8	-	-	38.6	24.4	39.8	16.5	9.4	-	-
HCM Lane LOS	A	-	-	E	C	E	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.9	1.3	0.3	-	-

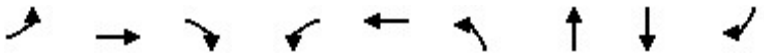
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	143	15	12	177	12	6	5	4	7	4	14
Future Vol, veh/h	3	143	15	12	177	12	6	5	4	7	4	14
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	143	15	12	177	12	6	5	4	7	4	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	190	0	0	158	0	0	373	371	151	369	372	184
Stage 1	-	-	-	-	-	-	157	157	-	208	208	-
Stage 2	-	-	-	-	-	-	216	214	-	161	164	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1396	-	-	1434	-	-	588	562	901	591	561	864
Stage 1	-	-	-	-	-	-	850	772	-	799	734	-
Stage 2	-	-	-	-	-	-	791	729	-	846	766	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1395	-	-	1434	-	-	570	555	901	579	554	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	555	-	579	554	-
Stage 1	-	-	-	-	-	-	848	770	-	797	727	-
Stage 2	-	-	-	-	-	-	767	722	-	835	764	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	10.9	10.3
HCM LOS			B	B

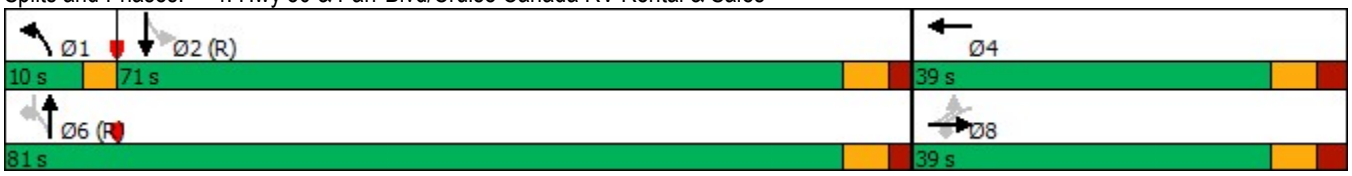
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	626	1395	-	-	1434	-	-	704
HCM Lane V/C Ratio	0.024	0.002	-	-	0.008	-	-	0.036
HCM Control Delay (s)	10.9	7.6	0	-	7.5	0	-	10.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

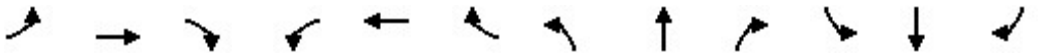


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	27	0	102	1	0	202	1102	1219	45
Future Volume (vph)	27	0	102	1	0	202	1102	1219	45
Lane Group Flow (vph)	0	27	102	0	1	202	1104	1219	45
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	NA	custom
Protected Phases		8			4	1	6	2	
Permitted Phases	8		8	8		6			6
Detector Phase	8	8	8	8	4	1	6	2	6
Switch Phase									
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		8.8	8.8		8.8	101.3	98.2	85.5	98.2
Actuated g/C Ratio		0.07	0.07		0.07	0.84	0.82	0.71	0.82
v/c Ratio		0.25	0.48		0.01	0.49	0.37	0.47	0.04
Control Delay		58.1	17.9		51.0	5.8	3.3	8.5	1.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		58.1	17.9		51.0	5.8	3.3	8.5	1.0
LOS		E	B		D	A	A	A	A
Approach Delay		26.3			51.0		3.7	8.3	
Approach LOS		C			D		A	A	
Queue Length 50th (m)		6.5	0.0		0.2	6.0	27.8	56.9	0.3
Queue Length 95th (m)		16.1	17.3		2.1	11.9	41.0	90.5	2.5
Internal Link Dist (m)		828.8			20.9		520.2	332.3	
Turn Bay Length (m)						35.0			20.0
Base Capacity (vph)		388	501		380	415	2986	2600	1283
Starvation Cap Reductn		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0
Reduced v/c Ratio		0.07	0.20		0.00	0.49	0.37	0.47	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 6.9	Intersection LOS: A
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales

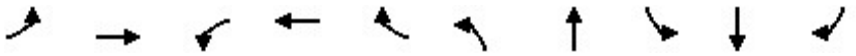




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	102	1	0	0	202	1102	2	0	1219	45
Future Volume (vph)	27	0	102	1	0	0	202	1102	2	0	1219	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		1.00		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.95		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1825	1597		1825		1785	3649			3650	1561
Flt Permitted		0.76	1.00		0.74		0.19	1.00			1.00	1.00
Satd. Flow (perm)		1455	1597		1421		354	3649			3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	27	0	102	1	0	0	202	1102	2	0	1219	45
RTOR Reduction (vph)	0	0	95	0	0	0	0	0	0	0	0	6
Lane Group Flow (vph)	0	27	7	0	1	0	202	1104	0	0	1219	39
Confl. Peds. (#/hr)							1		2	2		1
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		8.8	8.8		8.8		98.2	98.2			85.5	98.2
Effective Green, g (s)		8.8	8.8		8.8		98.2	98.2			85.5	98.2
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82			0.71	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		106	117		104		405	2986			2600	1277
v/s Ratio Prot							c0.04	0.30			0.33	
v/s Ratio Perm		c0.02	0.00		0.00		c0.37					0.02
v/c Ratio		0.25	0.06		0.01		0.50	0.37			0.47	0.03
Uniform Delay, d1		52.5	51.8		51.6		4.2	2.8			7.4	2.0
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.3	0.2		0.0		1.0	0.4			0.6	0.0
Delay (s)		53.8	52.0		51.6		5.2	3.2			8.1	2.1
Level of Service		D	D		D		A	A			A	A
Approach Delay (s)		52.4			51.6			3.5			7.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

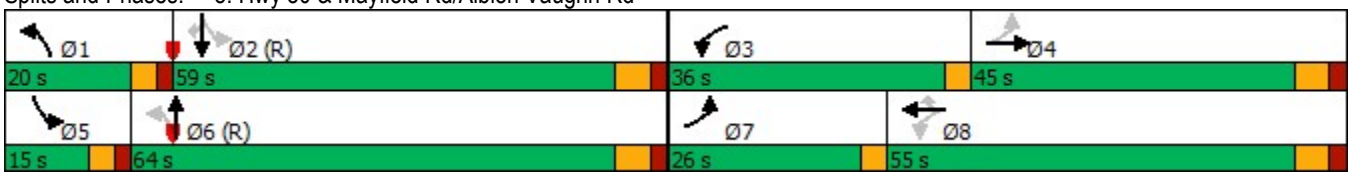


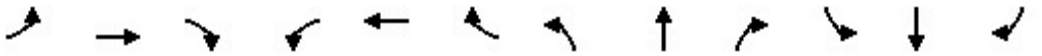
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	64	161	370	271	40	118	1129	31	1178	64
Future Volume (vph)	64	161	370	271	40	118	1129	31	1178	64
Lane Group Flow (vph)	64	373	370	271	40	118	1299	31	1178	64
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6	5	2	
Permitted Phases	4		8		8	6		2		2
Detector Phase	7	4	3	8	8	1	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	15.0	41.3	41.3
Total Split (s)	26.0	45.0	36.0	55.0	55.0	20.0	64.0	15.0	59.0	59.0
Total Split (%)	16.3%	28.1%	22.5%	34.4%	34.4%	12.5%	40.0%	9.4%	36.9%	36.9%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	28.0	15.1	52.8	38.8	38.8	97.3	85.9	91.6	80.3	80.3
Actuated g/C Ratio	0.18	0.09	0.33	0.24	0.24	0.61	0.54	0.57	0.50	0.50
v/c Ratio	0.27	0.78	0.92	0.58	0.09	0.45	0.47	0.12	0.64	0.08
Control Delay	40.7	47.9	74.3	59.1	0.6	18.9	24.6	14.7	32.7	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.7	47.9	74.3	59.1	0.6	18.9	24.6	14.7	32.7	1.3
LOS	D	D	E	E	A	B	C	B	C	A
Approach Delay		46.8		63.9			24.1		30.7	
Approach LOS		D		E			C		C	
Queue Length 50th (m)	14.8	34.0	103.9	81.3	0.0	15.7	100.5	3.9	150.2	0.0
Queue Length 95th (m)	25.3	51.7	#149.9	110.8	0.8	28.0	123.1	9.6	202.0	2.7
Internal Link Dist (m)		330.4		656.8			717.1		188.2	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		35.0		120.0
Base Capacity (vph)	386	940	417	582	537	295	2768	265	1832	850
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.40	0.89	0.47	0.07	0.40	0.47	0.12	0.64	0.08

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 27 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.92		
Intersection Signal Delay: 36.0	Intersection LOS: D	
Intersection Capacity Utilization 90.8%	ICU Level of Service E	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	161	212	370	271	40	118	1129	170	31	1178	64
Future Volume (vph)	64	161	212	370	271	40	118	1129	170	31	1178	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1785	3339		1785	1921	1597	1785	5142		1785	3650	1597
Flt Permitted	0.59	1.00		0.21	1.00	1.00	0.12	1.00		0.16	1.00	1.00
Satd. Flow (perm)	1113	3339		402	1921	1597	234	5142		300	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	64	161	212	370	271	40	118	1129	170	31	1178	64
RTOR Reduction (vph)	0	162	0	0	0	30	0	9	0	0	0	32
Lane Group Flow (vph)	64	211	0	370	271	10	118	1290	0	31	1178	32
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6			2		2
Actuated Green, G (s)	23.8	15.7		49.9	38.8	38.8	96.9	84.3		87.7	79.7	79.7
Effective Green, g (s)	23.8	15.7		49.9	38.8	38.8	96.9	84.3		87.7	79.7	79.7
Actuated g/C Ratio	0.15	0.10		0.31	0.24	0.24	0.61	0.53		0.55	0.50	0.50
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	199	327		395	465	387	263	2709		238	1818	795
v/s Ratio Prot	0.02	0.06		c0.18	0.14		c0.04	0.25		0.01	c0.32	
v/s Ratio Perm	0.03			c0.11		0.01	0.24			0.06		0.02
v/c Ratio	0.32	0.64		0.94	0.58	0.03	0.45	0.48		0.13	0.65	0.04
Uniform Delay, d1	60.1	69.5		48.6	53.5	46.2	20.3	23.9		17.5	29.8	20.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.9	4.3		29.4	1.9	0.0	1.2	0.6		0.2	1.8	0.1
Delay (s)	61.1	73.8		78.0	55.3	46.2	21.5	24.5		17.8	31.6	20.7
Level of Service	E	E		E	E	D	C	C		B	C	C
Approach Delay (s)		71.9			67.1			24.3			30.7	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	438	435	1	1	2
Future Vol, veh/h	1	438	435	1	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	1	438	435	1	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	436	0	-	0	657	218
Stage 1	-	-	-	-	436	-
Stage 2	-	-	-	-	221	-
Critical Hdwy	4.1	-	-	-	6.8	6.92
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.31
Pot Cap-1 Maneuver	1134	-	-	-	402	789
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1134	-	-	-	402	789
Mov Cap-2 Maneuver	-	-	-	-	402	-
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	801	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1134	-	-	-	402	789
HCM Lane V/C Ratio	0.001	-	-	-	0.002	0.003
HCM Control Delay (s)	8.2	0	-	-	14	9.6
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	689	0	0	660
Future Vol, veh/h	0	0	689	0	0	660
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	689	0	0	660

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1019	345	0	0	689	0
Stage 1	689	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	236	657	-	-	915	-
Stage 1	465	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	236	657	-	-	915	-
Mov Cap-2 Maneuver	356	-	-	-	-	-
Stage 1	465	-	-	-	-	-
Stage 2	707	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	915	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

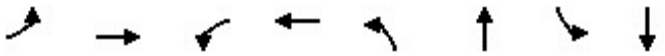
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	438	435	1	0	0
Future Vol, veh/h	1	438	435	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	438	435	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	436	0	-	0	657	218
Stage 1	-	-	-	-	436	-
Stage 2	-	-	-	-	221	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1134	-	-	-	402	792
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1134	-	-	-	402	792
Mov Cap-2 Maneuver	-	-	-	-	402	-
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	801	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1134	-	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-	-
HCM Control Delay (s)	8.2	-	-	-	0	0
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	-

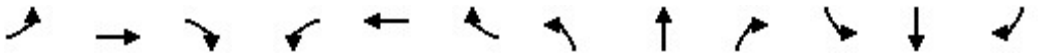


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	328	388	26	359	26	536	99	502
Future Volume (vph)	328	388	26	359	26	536	99	502
Lane Group Flow (vph)	328	423	26	443	26	567	99	965
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	12.0	80.0	68.0	68.0	36.0	36.0	14.0	50.0
Total Split (%)	9.2%	61.5%	52.3%	52.3%	27.7%	27.7%	10.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	82.2	78.2	63.8	63.8	25.0	25.0	41.8	37.8
Actuated g/C Ratio	0.63	0.60	0.49	0.49	0.19	0.19	0.32	0.29
v/c Ratio	0.53	0.19	0.06	0.25	0.46	0.81	0.46	0.86
Control Delay	15.6	12.2	19.3	18.9	71.3	59.7	37.5	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.6	12.2	19.3	18.9	71.3	59.7	37.5	43.1
LOS	B	B	B	B	E	E	D	D
Approach Delay		13.7		18.9		60.2		42.6
Approach LOS		B		B		E		D
Queue Length 50th (m)	38.5	25.5	3.8	34.6	6.2	77.0	18.9	105.5
Queue Length 95th (m)	60.5	37.0	9.5	46.5	16.8	95.2	31.5	127.6
Internal Link Dist (m)		689.8		209.6		684.9		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	618	2174	466	1757	67	810	228	1248
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.19	0.06	0.25	0.39	0.70	0.43	0.77

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 34.8	Intersection LOS: C
Intersection Capacity Utilization 90.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	328	388	35	26	359	84	26	536	31	99	502	463
Future Volume (vph)	328	388	35	26	359	84	26	536	31	99	502	463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3605		1785	3546		1785	3618		1785	3387	
Flt Permitted	0.45	1.00		0.51	1.00		0.16	1.00		0.17	1.00	
Satd. Flow (perm)	849	3605		949	3546		301	3618		328	3387	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	328	388	35	26	359	84	26	536	31	99	502	463
RTOR Reduction (vph)	0	5	0	0	15	0	0	3	0	0	136	0
Lane Group Flow (vph)	328	418	0	26	428	0	26	564	0	99	829	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	78.2	78.2		63.8	63.8		25.0	25.0		37.8	37.8	
Effective Green, g (s)	78.2	78.2		63.8	63.8		25.0	25.0		37.8	37.8	
Actuated g/C Ratio	0.60	0.60		0.49	0.49		0.19	0.19		0.29	0.29	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	592	2168		465	1740		57	695		205	984	
v/s Ratio Prot	c0.05	0.12			0.12			0.16		0.04	c0.24	
v/s Ratio Perm	c0.28			0.03			0.09			0.10		
v/c Ratio	0.55	0.19		0.06	0.25		0.46	0.81		0.48	0.84	
Uniform Delay, d1	12.9	11.7		17.3	19.2		46.5	50.2		35.9	43.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.2		0.2	0.3		5.7	7.1		1.8	6.6	
Delay (s)	14.1	11.9		17.6	19.5		52.2	57.4		37.6	49.9	
Level of Service	B	B		B	B		D	E		D	D	
Approach Delay (s)		12.8			19.4			57.2			48.8	
Approach LOS		B			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	4	13	31	6	99	13	872	21	109	987	4
Future Vol, veh/h	3	4	13	31	6	99	13	872	21	109	987	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	4	13	31	6	99	13	872	21	109	987	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1670	2124	494	1623	2118	447	991	0	0	893	0	0
Stage 1	1205	1205	-	909	909	-	-	-	-	-	-	-
Stage 2	465	919	-	714	1209	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	64	51	526	70	51	564	706	-	-	768	-	-
Stage 1	198	259	-	300	357	-	-	-	-	-	-	-
Stage 2	552	353	-	393	258	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	42	43	526	56	43	564	706	-	-	768	-	-
Mov Cap-2 Maneuver	42	43	-	56	43	-	-	-	-	-	-	-
Stage 1	194	222	-	295	351	-	-	-	-	-	-	-
Stage 2	439	347	-	323	221	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	42.9	45.7	0.1	1
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	706	-	-	42	144	56	333	768	-	-
HCM Lane V/C Ratio	0.018	-	-	0.071	0.118	0.554	0.315	0.142	-	-
HCM Control Delay (s)	10.2	-	-	97.2	33.3	130.4	20.7	10.5	-	-
HCM Lane LOS	B	-	-	F	D	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.4	2.2	1.3	0.5	-	-

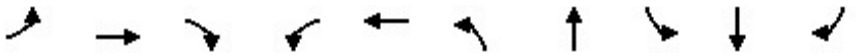
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	167	8	7	136	14	9	0	8	21	0	9
Future Vol, veh/h	4	167	8	7	136	14	9	0	8	21	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	167	8	7	136	14	9	0	8	21	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	150	0	0	175	0	0	341	343	171	340	340	143
Stage 1	-	-	-	-	-	-	179	179	-	157	157	-
Stage 2	-	-	-	-	-	-	162	164	-	183	183	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1444	-	-	1414	-	-	617	583	878	618	585	910
Stage 1	-	-	-	-	-	-	827	755	-	850	772	-
Stage 2	-	-	-	-	-	-	845	766	-	823	752	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1444	-	-	1414	-	-	607	578	878	609	580	910
Mov Cap-2 Maneuver	-	-	-	-	-	-	607	578	-	609	580	-
Stage 1	-	-	-	-	-	-	825	753	-	847	768	-
Stage 2	-	-	-	-	-	-	832	762	-	813	750	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	10.2	10.6
HCM LOS			B	B

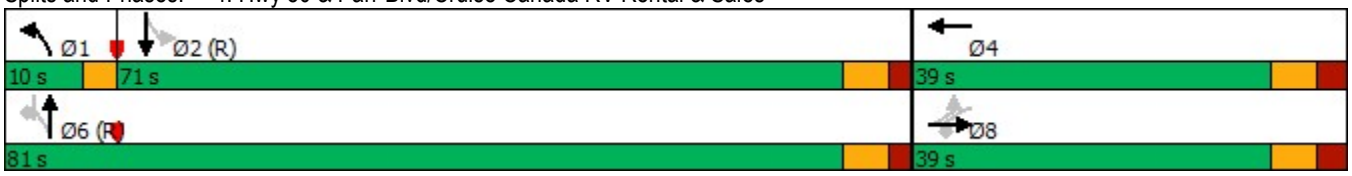
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	710	1444	-	-	1414	-	-	676
HCM Lane V/C Ratio	0.024	0.003	-	-	0.005	-	-	0.044
HCM Control Delay (s)	10.2	7.5	0	-	7.6	0	-	10.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

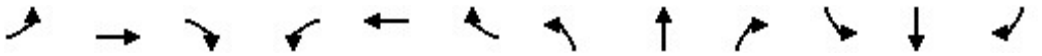


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	56	0	172	1	0	114	1336	1	1262	40
Future Volume (vph)	56	0	172	1	0	114	1336	1	1262	40
Lane Group Flow (vph)	0	56	172	0	2	114	1336	1	1262	40
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		10.6	10.6		10.6	99.5	96.4	86.5	86.5	96.4
Actuated g/C Ratio		0.09	0.09		0.09	0.83	0.80	0.72	0.72	0.80
v/c Ratio		0.44	0.62		0.01	0.31	0.46	0.00	0.48	0.03
Control Delay		61.9	21.8		0.0	4.4	4.4	6.0	8.3	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		61.9	21.8		0.0	4.4	4.4	6.0	8.3	1.2
LOS		E	C		A	A	A	A	A	A
Approach Delay		31.7					4.4		8.1	
Approach LOS		C					A		A	
Queue Length 50th (m)		13.5	5.4		0.0	3.8	41.9	0.1	60.5	0.3
Queue Length 95th (m)		26.5	27.1		0.0	8.9	65.1	0.7	91.0	2.6
Internal Link Dist (m)		828.8			20.9		520.2		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		387	536		449	369	2932	277	2630	1261
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.14	0.32		0.00	0.31	0.46	0.00	0.48	0.03

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 3 (3%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 8.1	Intersection LOS: A
Intersection Capacity Utilization 70.5%	ICU Level of Service C
Analysis Period (min) 15	

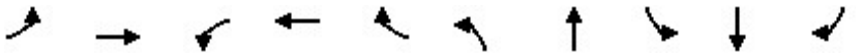
Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	0	172	1	0	1	114	1336	0	1	1262	40
Future Volume (vph)	56	0	172	1	0	1	114	1336	0	1	1262	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.99		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.93		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1820	1597		1735		1785	3650		1785	3650	1561
Flt Permitted		0.76	1.00		0.86		0.18	1.00		0.20	1.00	1.00
Satd. Flow (perm)		1450	1597		1530		338	3650		385	3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	56	0	172	1	0	1	114	1336	0	1	1262	40
RTOR Reduction (vph)	0	0	136	0	2	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	56	36	0	0	0	114	1336	0	1	1262	33
Confl. Peds. (#/hr)	2					2	1					1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		10.6	10.6		10.6		96.4	96.4		86.5	86.5	96.4
Effective Green, g (s)		10.6	10.6		10.6		96.4	96.4		86.5	86.5	96.4
Actuated g/C Ratio		0.09	0.09		0.09		0.80	0.80		0.72	0.72	0.80
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		128	141		135		354	2932		277	2631	1254
v/s Ratio Prot							0.02	c0.37			c0.35	
v/s Ratio Perm		c0.04	0.02		0.00		0.24			0.00		0.02
v/c Ratio		0.44	0.26		0.00		0.32	0.46		0.00	0.48	0.03
Uniform Delay, d1		51.9	51.0		49.9		4.0	3.7		4.7	7.1	2.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.4	1.0		0.0		0.5	0.5		0.0	0.6	0.0
Delay (s)		54.3	52.0		49.9		4.6	4.2		4.7	7.8	2.4
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		52.5			49.9			4.2			7.6	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

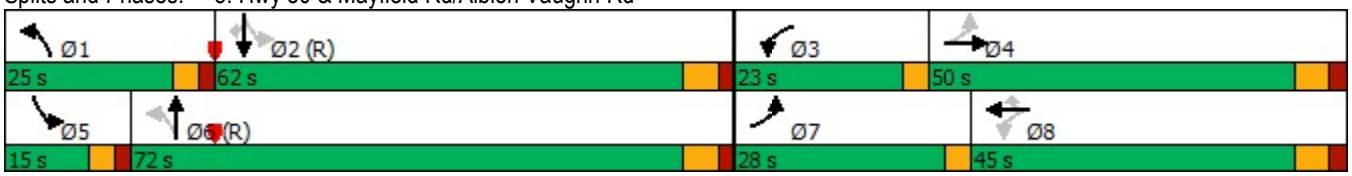


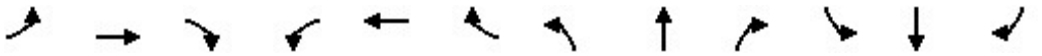
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	87	249	222	158	33	103	1180	36	1338	73
Future Volume (vph)	87	249	222	158	33	103	1180	36	1338	73
Lane Group Flow (vph)	87	492	222	158	33	103	1593	36	1338	73
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6	5	2	
Permitted Phases	4		8		8	6		2		2
Detector Phase	7	4	3	8	8	1	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	15.0	41.3	41.3
Total Split (s)	28.0	50.0	23.0	45.0	45.0	25.0	72.0	15.0	62.0	62.0
Total Split (%)	17.5%	31.3%	14.4%	28.1%	28.1%	15.6%	45.0%	9.4%	38.8%	38.8%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	36.9	22.2	47.7	30.1	30.1	101.7	91.0	97.8	86.5	86.5
Actuated g/C Ratio	0.23	0.14	0.30	0.19	0.19	0.64	0.57	0.61	0.54	0.54
v/c Ratio	0.27	0.82	0.84	0.44	0.08	0.43	0.55	0.16	0.68	0.08
Control Delay	42.3	57.0	70.3	60.8	0.4	17.2	23.0	13.4	30.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.3	57.0	70.3	60.8	0.4	17.2	23.0	13.4	30.2	0.2
LOS	D	E	E	E	A	B	C	B	C	A
Approach Delay		54.8		61.1			22.6		28.3	
Approach LOS		D		E			C		C	
Queue Length 50th (m)	21.4	59.8	59.4	47.1	0.0	12.3	121.3	4.2	165.6	0.0
Queue Length 95th (m)	34.3	77.9	#87.0	69.4	0.0	23.1	149.4	10.0	225.7	0.0
Internal Link Dist (m)		330.4		656.8			717.1		188.2	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		35.0		120.0
Base Capacity (vph)	454	1030	274	462	484	325	2894	220	1972	913
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.48	0.81	0.34	0.07	0.32	0.55	0.16	0.68	0.08

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 72 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 125		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay: 32.9	Intersection LOS: C	
Intersection Capacity Utilization 90.5%	ICU Level of Service E	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	249	243	222	158	33	103	1180	413	36	1338	73
Future Volume (vph)	87	249	243	222	158	33	103	1180	413	36	1338	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.93		1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1785	3380		1785	1921	1597	1785	5041		1785	3650	1577
Flt Permitted	0.66	1.00		0.16	1.00	1.00	0.10	1.00		0.11	1.00	1.00
Satd. Flow (perm)	1234	3380		298	1921	1597	194	5041		200	3650	1577
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	87	249	243	222	158	33	103	1180	413	36	1338	73
RTOR Reduction (vph)	0	132	0	0	0	27	0	29	0	0	0	34
Lane Group Flow (vph)	87	360	0	222	158	6	103	1564	0	36	1338	39
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6			2		2
Actuated Green, G (s)	33.3	22.2		44.2	30.1	30.1	101.5	90.0		94.5	86.5	86.5
Effective Green, g (s)	33.3	22.2		44.2	30.1	30.1	101.5	90.0		94.5	86.5	86.5
Actuated g/C Ratio	0.21	0.14		0.28	0.19	0.19	0.63	0.56		0.59	0.54	0.54
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	295	468		258	361	300	237	2835		197	1973	852
v/s Ratio Prot	0.02	0.11		c0.10	0.08		c0.03	c0.31		0.01	c0.37	
v/s Ratio Perm	0.04			c0.13		0.00	0.24			0.10		0.03
v/c Ratio	0.29	0.77		0.86	0.44	0.02	0.43	0.55		0.18	0.68	0.05
Uniform Delay, d1	52.7	66.4		49.3	57.5	52.9	19.8	22.2		15.7	26.7	17.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	7.5		24.1	0.9	0.0	1.3	0.8		0.4	1.9	0.1
Delay (s)	53.3	73.9		73.4	58.3	53.0	21.1	23.0		16.2	28.6	17.4
Level of Service	D	E		E	E	D	C	C		B	C	B
Approach Delay (s)		70.8			66.0			22.9			27.7	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	35.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	512	463	3	7	5
Future Vol, veh/h	5	512	463	3	7	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	512	463	3	7	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	466	0	-	0	731	233
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	266	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1106	-	-	-	361	775
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	760	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1106	-	-	-	359	775
Mov Cap-2 Maneuver	-	-	-	-	359	-
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	760	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1106	-	-	-	359	775
HCM Lane V/C Ratio	0.005	-	-	-	0.019	0.006
HCM Control Delay (s)	8.3	0	-	-	15.2	9.7
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	888	1	0	1035
Future Vol, veh/h	0	0	888	1	0	1035
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	888	1	0	1035

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1407	445	0	0	889	0
Stage 1	889	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	132	566	-	-	771	-
Stage 1	367	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	132	566	-	-	771	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	367	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	771	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

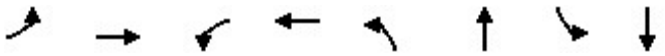
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	512	463	0	1	1
Future Vol, veh/h	1	512	463	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	512	463	0	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	463	0	-	0	721	232
Stage 1	-	-	-	-	463	-
Stage 2	-	-	-	-	258	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1109	-	-	-	367	776
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	767	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1109	-	-	-	367	776
Mov Cap-2 Maneuver	-	-	-	-	367	-
Stage 1	-	-	-	-	605	-
Stage 2	-	-	-	-	767	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1109	-	-	-	367	776
HCM Lane V/C Ratio	0.001	-	-	-	0.003	0.001
HCM Control Delay (s)	8.2	-	-	-	14.8	9.6
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

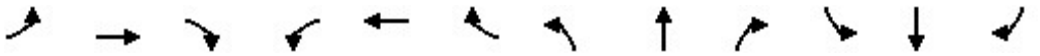


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	105	289	2	303	6	12	90	0
Future Volume (vph)	105	289	2	303	6	12	90	0
Lane Group Flow (vph)	105	290	2	363	6	12	90	160
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	9.0	62.0	53.0	53.0	38.0	38.0	10.0	48.0
Total Split (%)	8.2%	56.4%	48.2%	48.2%	34.5%	34.5%	9.1%	43.6%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	84.0	80.0	69.8	69.8	12.0	12.0	20.0	16.0
Actuated g/C Ratio	0.76	0.73	0.63	0.63	0.11	0.11	0.18	0.15
v/c Ratio	0.13	0.11	0.00	0.16	0.05	0.03	0.35	0.18
Control Delay	4.3	5.1	10.0	8.6	45.0	44.1	41.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	5.1	10.0	8.6	45.0	44.1	41.3	0.5
LOS	A	A	A	A	D	D	D	A
Approach Delay		4.9		8.6		44.4		15.2
Approach LOS		A		A		D		B
Queue Length 50th (m)	4.0	7.3	0.2	13.0	1.2	1.3	18.5	0.0
Queue Length 95th (m)	11.7	16.0	1.3	26.1	5.4	4.4	30.7	0.0
Internal Link Dist (m)		689.8		209.6		684.9		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	788	2651	677	2267	344	1028	256	1473
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.11	0.00	0.16	0.02	0.01	0.35	0.11

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 48 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 9.4	Intersection LOS: A
Intersection Capacity Utilization 49.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	289	1	2	303	60	6	12	0	90	0	160
Future Volume (vph)	105	289	1	2	303	60	6	12	0	90	0	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.98		1.00	1.00		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3648		1767	3560		1785	3650		1785	3103	
Flt Permitted	0.51	1.00		0.57	1.00		0.65	1.00		0.53	1.00	
Satd. Flow (perm)	962	3648		1068	3560		1222	3650		994	3103	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	105	289	1	2	303	60	6	12	0	90	0	160
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	132	0
Lane Group Flow (vph)	105	290	0	2	353	0	6	12	0	90	28	0
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	76.6	76.6		66.4	66.4		7.2	7.2		19.4	19.4	
Effective Green, g (s)	76.6	76.6		66.4	66.4		7.2	7.2		19.4	19.4	
Actuated g/C Ratio	0.70	0.70		0.60	0.60		0.07	0.07		0.18	0.18	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	723	2540		644	2148		79	238		241	547	
v/s Ratio Prot	c0.01	0.08			c0.10			0.00		c0.03	0.01	
v/s Ratio Perm	0.09			0.00			0.00			c0.03		
v/c Ratio	0.15	0.11		0.00	0.16		0.08	0.05		0.37	0.05	
Uniform Delay, d1	5.4	5.5		8.7	9.6		48.3	48.2		39.3	37.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.0	0.2		0.4	0.1		1.0	0.0	
Delay (s)	5.5	5.6		8.7	9.8		48.7	48.3		40.3	37.7	
Level of Service	A	A		A	A		D	D		D	D	
Approach Delay (s)		5.6			9.7			48.4			38.6	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	4	1	18	1	31	1	146	4	23	199	2
Future Vol, veh/h	1	4	1	18	1	31	1	146	4	23	199	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	1	4	1	18	1	31	1	146	4	23	199	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	321	397	100	298	397	75	201	0	0	150	0	0
Stage 1	245	245	-	150	150	-	-	-	-	-	-	-
Stage 2	76	152	-	148	247	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.52	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.01	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	613	544	943	637	541	978	1383	-	-	1444	-	-
Stage 1	743	707	-	843	775	-	-	-	-	-	-	-
Stage 2	930	775	-	845	703	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	585	535	943	625	532	978	1383	-	-	1444	-	-
Mov Cap-2 Maneuver	585	535	-	625	532	-	-	-	-	-	-	-
Stage 1	742	696	-	842	774	-	-	-	-	-	-	-
Stage 2	899	774	-	826	692	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.2	9.6	0.1	0.8
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1383	-	-	585	586	625	953	1444	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.009	0.029	0.034	0.016	-	-
HCM Control Delay (s)	7.6	-	-	11.2	11.2	10.9	8.9	7.5	-	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.1	0.1	0	-	-

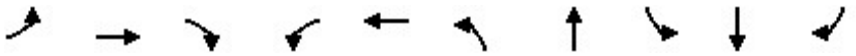
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	35	1	3	43	3	4	1	5	4	2	5
Future Vol, veh/h	0	35	1	3	43	3	4	1	5	4	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	35	1	3	43	3	4	1	5	4	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	46	0	0	36	0	0	90	88	36	90	87	45
Stage 1	-	-	-	-	-	-	36	36	-	51	51	-
Stage 2	-	-	-	-	-	-	54	52	-	39	36	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1575	-	-	1588	-	-	900	806	1042	900	807	1031
Stage 1	-	-	-	-	-	-	985	869	-	967	856	-
Stage 2	-	-	-	-	-	-	963	856	-	981	869	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1575	-	-	1588	-	-	893	804	1042	894	805	1031
Mov Cap-2 Maneuver	-	-	-	-	-	-	893	804	-	894	805	-
Stage 1	-	-	-	-	-	-	985	869	-	967	854	-
Stage 2	-	-	-	-	-	-	954	854	-	975	869	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	8.8	8.9
HCM LOS			A	A

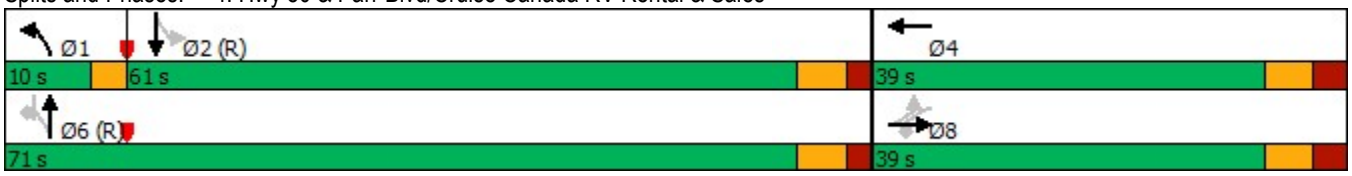
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	950	1575	-	-	1588	-	-	932
HCM Lane V/C Ratio	0.011	-	-	-	0.002	-	-	0.012
HCM Control Delay (s)	8.8	0	-	-	7.3	0	-	8.9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	19	0	44	4	2	36	1019	6	1004	19
Future Volume (vph)	19	0	44	4	2	36	1019	6	1004	19
Lane Group Flow (vph)	0	19	44	0	8	36	1019	6	1004	19
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	71.0	61.0	61.0	71.0
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	9.1%	64.5%	55.5%	55.5%	64.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.3	8.3		8.3	94.8	92.9	87.5	87.5	92.9
Actuated g/C Ratio		0.08	0.08		0.08	0.86	0.84	0.80	0.80	0.84
v/c Ratio		0.18	0.25		0.07	0.07	0.33	0.01	0.35	0.01
Control Delay		52.4	11.1		43.0	1.9	2.8	4.5	4.9	0.3
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		52.4	11.1		43.0	1.9	2.8	4.5	4.9	0.3
LOS		D	B		D	A	A	A	A	A
Approach Delay		23.6			43.0		2.8		4.8	
Approach LOS		C			D		A		A	
Queue Length 50th (m)		4.1	0.0		1.3	1.0	24.8	0.3	38.6	0.0
Queue Length 95th (m)		11.8	7.6		6.5	2.6	33.6	1.6	51.8	0.6
Internal Link Dist (m)		828.8			20.9		520.2		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		421	508		449	503	3084	420	2903	1326
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.05	0.09		0.02	0.07	0.33	0.01	0.35	0.01

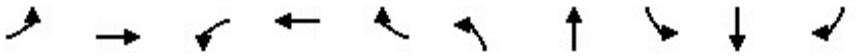
Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 105 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 4.5	Intersection LOS: A
Intersection Capacity Utilization 58.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	0	44	4	2	2	36	1019	0	6	1004	19
Future Volume (vph)	19	0	44	4	2	2	36	1019	0	6	1004	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1823	1597		1801		1785	3650		1784	3650	1562
Flt Permitted		0.75	1.00		0.83		0.26	1.00		0.28	1.00	1.00
Satd. Flow (perm)		1444	1597		1536		488	3650		528	3650	1562
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	0	44	4	2	2	36	1019	0	6	1004	19
RTOR Reduction (vph)	0	0	41	0	2	0	0	0	0	0	0	3
Lane Group Flow (vph)	0	19	3	0	6	0	36	1019	0	6	1004	16
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		6.7	6.7		6.7		90.3	90.3		83.7	83.7	90.3
Effective Green, g (s)		6.7	6.7		6.7		90.3	90.3		83.7	83.7	90.3
Actuated g/C Ratio		0.06	0.06		0.06		0.82	0.82		0.76	0.76	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		87	97		93		443	2996		401	2777	1282
v/s Ratio Prot							0.00	c0.28			c0.28	
v/s Ratio Perm		c0.01	0.00		0.00		0.06			0.01		0.01
v/c Ratio		0.22	0.03		0.07		0.08	0.34		0.01	0.36	0.01
Uniform Delay, d1		49.2	48.6		48.7		2.1	2.4		3.2	4.3	1.8
Progression Factor		1.02	0.99		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		1.3	0.1		0.3		0.1	0.3		0.1	0.4	0.0
Delay (s)		51.4	48.2		49.0		2.2	2.8		3.2	4.7	1.8
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		49.2			49.0			2.7			4.6	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

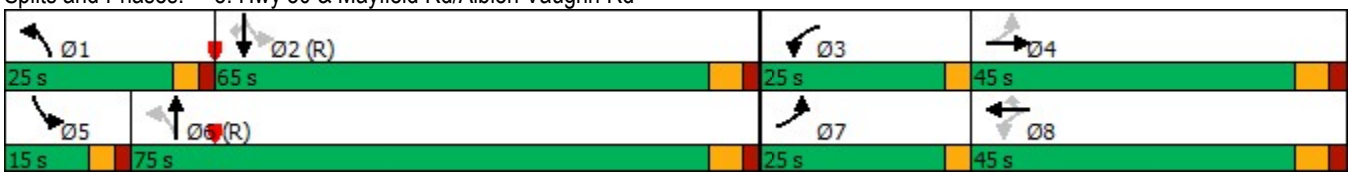


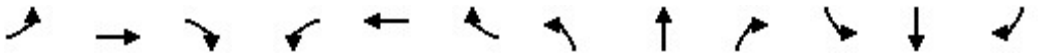
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	95	124	244	131	10	101	909	15	926	101
Future Volume (vph)	95	124	244	131	10	101	909	15	926	101
Lane Group Flow (vph)	95	270	244	131	10	101	1140	15	926	101
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6	5	2	
Permitted Phases	4		8		8	6		2		2
Detector Phase	7	4	3	8	8	1	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	15.0	41.3	41.3
Total Split (s)	25.0	45.0	25.0	45.0	45.0	25.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	28.1%	15.6%	28.1%	28.1%	15.6%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	28.9	13.2	40.6	22.0	22.0	109.5	104.1	106.2	94.9	94.9
Actuated g/C Ratio	0.18	0.08	0.25	0.14	0.14	0.68	0.65	0.66	0.59	0.59
v/c Ratio	0.36	0.66	0.83	0.50	0.03	0.26	0.34	0.04	0.43	0.10
Control Delay	50.6	40.2	75.0	71.1	0.2	10.0	13.3	8.6	18.9	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	40.2	75.0	71.1	0.2	10.0	13.3	8.6	18.9	2.2
LOS	D	D	E	E	A	B	B	A	B	A
Approach Delay		42.9		71.7			13.1		17.1	
Approach LOS		D		E			B		B	
Queue Length 50th (m)	25.3	21.3	71.3	41.3	0.0	10.1	49.9	1.5	85.4	0.0
Queue Length 95th (m)	40.8	37.0	#103.2	64.7	0.0	18.5	82.9	4.4	109.8	7.2
Internal Link Dist (m)		330.4		656.8			717.1		188.2	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		35.0		120.0
Base Capacity (vph)	374	917	302	462	468	478	3316	364	2165	993
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.81	0.28	0.02	0.21	0.34	0.04	0.43	0.10

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 7 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 25.5	Intersection LOS: C
Intersection Capacity Utilization 75.6%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	124	146	244	131	10	101	909	231	15	926	101
Future Volume (vph)	95	124	146	244	131	10	101	909	231	15	926	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1785	3354		1785	1921	1597	1785	5072		1785	3650	1597
Flt Permitted	0.67	1.00		0.26	1.00	1.00	0.24	1.00		0.22	1.00	1.00
Satd. Flow (perm)	1265	3354		488	1921	1597	447	5072		420	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	95	124	146	244	131	10	101	909	231	15	926	101
RTOR Reduction (vph)	0	134	0	0	0	9	0	18	0	0	0	41
Lane Group Flow (vph)	95	136	0	244	131	1	101	1122	0	15	926	60
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6			2		2
Actuated Green, G (s)	25.5	13.3		37.2	22.0	22.0	110.0	101.0		98.9	94.9	94.9
Effective Green, g (s)	25.5	13.3		37.2	22.0	22.0	110.0	101.0		98.9	94.9	94.9
Actuated g/C Ratio	0.16	0.08		0.23	0.14	0.14	0.69	0.63		0.62	0.59	0.59
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	241	278		282	264	219	391	3201		293	2164	947
v/s Ratio Prot	0.03	0.04		c0.11	0.07		c0.02	c0.22		0.00	c0.25	
v/s Ratio Perm	0.03			c0.09		0.00	0.16			0.03		0.04
v/c Ratio	0.39	0.49		0.87	0.50	0.01	0.26	0.35		0.05	0.43	0.06
Uniform Delay, d1	59.7	70.1		54.9	63.9	59.6	10.3	14.0		11.9	17.7	13.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.1	1.4		23.0	1.5	0.0	0.4	0.3		0.1	0.6	0.1
Delay (s)	60.8	71.5		78.0	65.3	59.6	10.6	14.3		11.9	18.4	13.9
Level of Service	E	E		E	E	E	B	B		B	B	B
Approach Delay (s)		68.7			73.2			14.0			17.8	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	29.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	379	368	2	3	2
Future Vol, veh/h	3	379	368	2	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	379	368	2	3	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	370	0	-	0	565	185
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	196	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1200	-	-	-	460	832
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	824	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1200	-	-	-	459	832
Mov Cap-2 Maneuver	-	-	-	-	459	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	824	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1200	-	-	-	459	832
HCM Lane V/C Ratio	0.003	-	-	-	0.007	0.002
HCM Control Delay (s)	8	0	-	-	12.9	9.3
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	165	1	0	239
Future Vol, veh/h	1	0	165	1	0	239
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1	0	165	1	0	239

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	286	83	0	0	166	0
Stage 1	166	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.82	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	684	966	-	-	1424	-
Stage 1	849	-	-	-	-	-
Stage 2	895	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	684	966	-	-	1424	-
Mov Cap-2 Maneuver	709	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	709	1424	-
HCM Lane V/C Ratio	-	-	0.001	-	-
HCM Control Delay (s)	-	-	10.1	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	379	368	0	1	1
Future Vol, veh/h	1	379	368	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	379	368	0	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	368	0	-	0	560	184
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	192	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1202	-	-	-	463	833
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1202	-	-	-	463	833
Mov Cap-2 Maneuver	-	-	-	-	463	-
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	828	-

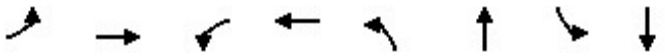
Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1202	-	-	-	463	833
HCM Lane V/C Ratio	0.001	-	-	-	0.002	0.001
HCM Control Delay (s)	8	-	-	-	12.8	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

APPENDIX H

2028 & 2033 Future Total Intersection Capacity Analysis

2028 Future Total Intersection Capacity Analysis

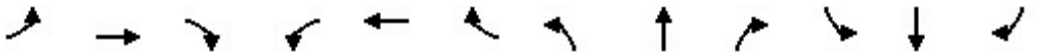


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	316	397	39	312	23	303	55	345
Future Volume (vph)	316	397	39	312	23	303	55	345
Lane Group Flow (vph)	316	429	39	339	23	334	55	570
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	15.0	80.0	65.0	65.0	32.0	32.0	18.0	50.0
Total Split (%)	11.5%	61.5%	50.0%	50.0%	24.6%	24.6%	13.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	92.3	88.3	71.4	71.4	17.9	17.9	31.7	27.7
Actuated g/C Ratio	0.71	0.68	0.55	0.55	0.14	0.14	0.24	0.21
v/c Ratio	0.40	0.17	0.08	0.17	0.24	0.67	0.24	0.69
Control Delay	9.1	8.3	18.1	16.2	56.0	58.9	38.3	40.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	8.3	18.1	16.2	56.0	58.9	38.3	40.3
LOS	A	A	B	B	E	E	D	D
Approach Delay		8.7		16.4		58.7		40.1
Approach LOS		A		B		E		D
Queue Length 50th (m)	27.9	20.3	4.9	22.7	5.7	45.0	11.5	58.5
Queue Length 95th (m)	48.8	32.1	13.5	38.6	14.7	59.6	21.4	73.5
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	790	2456	517	1984	132	697	286	1219
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.17	0.08	0.17	0.17	0.48	0.19	0.47

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 92 (71%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 27.9	Intersection LOS: C
Intersection Capacity Utilization 75.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	397	32	39	312	27	23	303	31	55	345	225
Future Volume (vph)	316	397	32	39	312	27	23	303	31	55	345	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3609		1785	3607		1785	3599		1785	3434	
Flt Permitted	0.53	1.00		0.50	1.00		0.37	1.00		0.34	1.00	
Satd. Flow (perm)	987	3609		943	3607		687	3599		632	3434	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	316	397	32	39	312	27	23	303	31	55	345	225
RTOR Reduction (vph)	0	3	0	0	4	0	0	6	0	0	97	0
Lane Group Flow (vph)	316	426	0	39	335	0	23	328	0	55	473	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	87.7	87.7		70.8	70.8		17.9	17.9		28.3	28.3	
Effective Green, g (s)	87.7	87.7		70.8	70.8		17.9	17.9		28.3	28.3	
Actuated g/C Ratio	0.67	0.67		0.54	0.54		0.14	0.14		0.22	0.22	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	751	2434		513	1964		94	495		203	747	
v/s Ratio Prot	c0.04	0.12			0.09			0.09		0.02	c0.14	
v/s Ratio Perm	c0.24			0.04			0.03			0.04		
v/c Ratio	0.42	0.17		0.08	0.17		0.24	0.66		0.27	0.63	
Uniform Delay, d1	8.4	7.8		14.1	14.9		50.0	53.2		41.3	46.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.2		0.3	0.2		1.4	3.3		0.7	1.8	
Delay (s)	8.8	8.0		14.4	15.0		51.4	56.5		42.0	47.9	
Level of Service	A	A		B	B		D	E		D	D	
Approach Delay (s)		8.3			15.0			56.2			47.4	
Approach LOS		A			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	33	12	142	11	581	54	154	582	5
Future Vol, veh/h	1	1	1	33	12	142	11	581	54	154	582	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	1	1	33	12	142	11	581	54	154	582	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1209	1547	291	1230	1525	318	587	0	0	635	0	0
Stage 1	890	890	-	630	630	-	-	-	-	-	-	-
Stage 2	319	657	-	600	895	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	141	115	712	136	119	684	998	-	-	958	-	-
Stage 1	308	364	-	441	478	-	-	-	-	-	-	-
Stage 2	673	465	-	459	362	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	88	95	712	117	99	684	998	-	-	958	-	-
Mov Cap-2 Maneuver	88	95	-	117	99	-	-	-	-	-	-	-
Stage 1	305	305	-	436	473	-	-	-	-	-	-	-
Stage 2	514	460	-	383	304	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.3	21.9	0.1	2
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	998	-	-	88	168	117	468	958	-	-
HCM Lane V/C Ratio	0.011	-	-	0.011	0.012	0.282	0.329	0.161	-	-
HCM Control Delay (s)	8.6	-	-	46.4	26.7	47.4	16.4	9.5	-	-
HCM Lane LOS	A	-	-	E	D	E	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	1.1	1.4	0.6	-	-

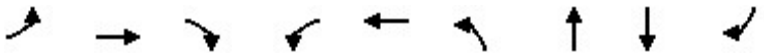
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	129	80	22	161	12	27	4	7	7	3	14
Future Vol, veh/h	3	129	80	22	161	12	27	4	7	7	3	14
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	129	80	22	161	12	27	4	7	7	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	174	0	0	209	0	0	395	393	169	393	427	168
Stage 1	-	-	-	-	-	-	175	175	-	212	212	-
Stage 2	-	-	-	-	-	-	220	218	-	181	215	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1415	-	-	1374	-	-	568	546	880	570	523	881
Stage 1	-	-	-	-	-	-	832	758	-	795	731	-
Stage 2	-	-	-	-	-	-	787	726	-	825	729	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1414	-	-	1374	-	-	548	535	880	553	512	880
Mov Cap-2 Maneuver	-	-	-	-	-	-	548	535	-	553	512	-
Stage 1	-	-	-	-	-	-	830	756	-	793	717	-
Stage 2	-	-	-	-	-	-	757	712	-	812	728	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	11.6	10.3
HCM LOS			B	B

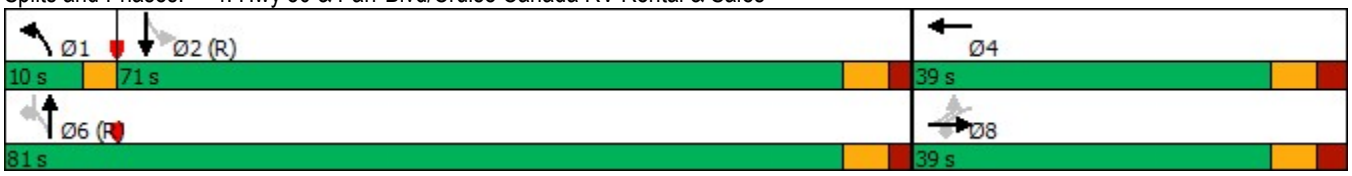
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	587	1414	-	-	1374	-	-	697
HCM Lane V/C Ratio	0.065	0.002	-	-	0.016	-	-	0.034
HCM Control Delay (s)	11.6	7.6	0	-	7.7	0	-	10.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

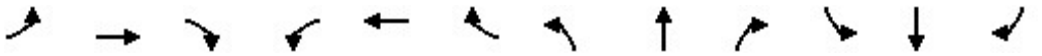


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	30	0	102	1	0	202	1065	1180	55
Future Volume (vph)	30	0	102	1	0	202	1065	1180	55
Lane Group Flow (vph)	0	30	102	0	1	202	1067	1180	55
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	NA	custom
Protected Phases		8			4	1	6	2	
Permitted Phases	8		8	8		6			6
Detector Phase	8	8	8	8	4	1	6	2	6
Switch Phase									
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		8.9	8.9		8.9	101.2	98.1	85.9	98.1
Actuated g/C Ratio		0.07	0.07		0.07	0.84	0.82	0.72	0.82
v/c Ratio		0.28	0.48		0.01	0.48	0.36	0.45	0.04
Control Delay		59.0	17.8		50.0	5.6	3.2	8.1	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		59.0	17.8		50.0	5.6	3.2	8.1	1.2
LOS		E	B		D	A	A	A	A
Approach Delay		27.2			50.0		3.6	7.8	
Approach LOS		C			D		A	A	
Queue Length 50th (m)		7.2	0.0		0.2	6.0	26.4	53.8	0.7
Queue Length 95th (m)		17.1	17.3		2.1	11.9	39.0	84.4	3.2
Internal Link Dist (m)		828.8			20.9		732.4	332.3	
Turn Bay Length (m)						35.0			20.0
Base Capacity (vph)		388	501		379	423	2985	2614	1282
Starvation Cap Reductn		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0
Reduced v/c Ratio		0.08	0.20		0.00	0.48	0.36	0.45	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 6.8	Intersection LOS: A
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	102	1	0	0	202	1065	2	0	1180	55
Future Volume (vph)	30	0	102	1	0	0	202	1065	2	0	1180	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		1.00		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.95		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1825	1597		1825		1785	3649			3650	1561
Flt Permitted		0.76	1.00		0.74		0.20	1.00			1.00	1.00
Satd. Flow (perm)		1455	1597		1417		375	3649			3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	0	102	1	0	0	202	1065	2	0	1180	55
RTOR Reduction (vph)	0	0	94	0	0	0	0	0	0	0	0	6
Lane Group Flow (vph)	0	30	8	0	1	0	202	1067	0	0	1180	49
Confl. Peds. (#/hr)							1		2	2		1
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		8.9	8.9		8.9		98.1	98.1			85.9	98.1
Effective Green, g (s)		8.9	8.9		8.9		98.1	98.1			85.9	98.1
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82			0.72	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		107	118		105		414	2983			2612	1276
v/s Ratio Prot							c0.04	0.29			0.32	
v/s Ratio Perm		c0.02	0.00		0.00		c0.36					0.03
v/c Ratio		0.28	0.06		0.01		0.49	0.36			0.45	0.04
Uniform Delay, d1		52.5	51.7		51.5		3.9	2.8			7.2	2.1
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.4	0.2		0.0		0.9	0.3			0.6	0.1
Delay (s)		54.0	51.9		51.5		4.8	3.2			7.7	2.1
Level of Service		D	D		D		A	A			A	A
Approach Delay (s)		52.4			51.5			3.4			7.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

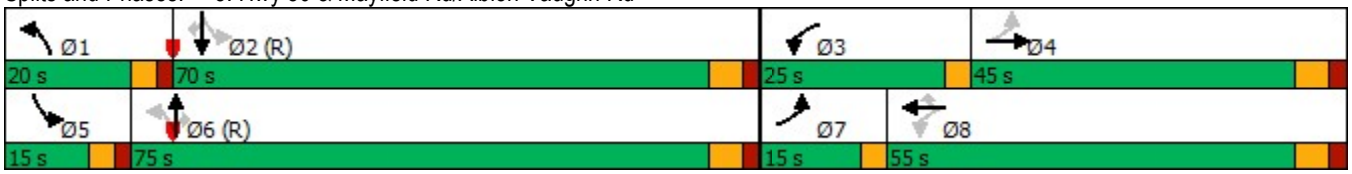


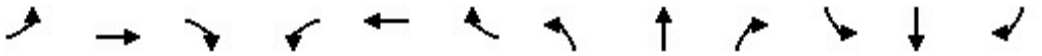
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	61	131	354	240	40	161	1093	170	31	1139	64
Future Volume (vph)	61	131	354	240	40	161	1093	170	31	1139	64
Lane Group Flow (vph)	61	343	354	240	40	161	1093	170	31	1139	64
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	15.0	45.0	25.0	55.0	55.0	20.0	75.0	75.0	15.0	70.0	70.0
Total Split (%)	9.4%	28.1%	15.6%	34.4%	34.4%	12.5%	46.9%	46.9%	9.4%	43.8%	43.8%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	28.7	15.8	44.3	30.2	30.2	106.7	94.4	94.4	98.3	87.0	87.0
Actuated g/C Ratio	0.18	0.10	0.28	0.19	0.19	0.67	0.59	0.59	0.61	0.54	0.54
v/c Ratio	0.25	0.74	1.18	0.66	0.11	0.49	0.51	0.17	0.10	0.57	0.07
Control Delay	45.4	47.7	155.1	70.2	0.8	15.4	21.4	4.8	11.0	26.9	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	47.7	155.1	70.2	0.8	15.4	21.4	4.8	11.0	26.9	1.2
LOS	D	D	F	E	A	B	C	A	B	C	A
Approach Delay		47.3		113.2			18.8			25.2	
Approach LOS		D		F			B			C	
Queue Length 50th (m)	15.6	33.2	~125.2	77.7	0.0	17.6	111.1	4.7	3.1	125.5	0.0
Queue Length 95th (m)	26.6	48.9	#177.6	104.8	0.8	32.3	150.0	18.3	8.4	182.2	2.5
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	271	913	299	582	537	346	2153	998	322	1984	913
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.38	1.18	0.41	0.07	0.47	0.51	0.17	0.10	0.57	0.07

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 27 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 40.2	Intersection LOS: D
Intersection Capacity Utilization 88.6%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	131	212	354	240	40	161	1093	170	31	1139	64
Future Volume (vph)	61	131	212	354	240	40	161	1093	170	31	1139	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3312		1785	1921	1597	1785	3650	1597	1785	3650	1597
Flt Permitted	0.61	1.00		0.21	1.00	1.00	0.15	1.00	1.00	0.20	1.00	1.00
Satd. Flow (perm)	1145	3312		389	1921	1597	287	3650	1597	384	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	61	131	212	354	240	40	161	1093	170	31	1139	64
RTOR Reduction (vph)	0	138	0	0	0	32	0	0	57	0	0	29
Lane Group Flow (vph)	61	205	0	354	240	8	161	1093	113	31	1139	35
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	24.4	16.3		41.3	30.2	30.2	105.9	92.9	92.9	94.5	86.5	86.5
Effective Green, g (s)	24.4	16.3		41.3	30.2	30.2	105.9	92.9	92.9	94.5	86.5	86.5
Actuated g/C Ratio	0.15	0.10		0.26	0.19	0.19	0.66	0.58	0.58	0.59	0.54	0.54
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	207	337		292	362	301	324	2119	927	296	1973	863
v/s Ratio Prot	0.01	0.06		c0.17	0.12		c0.04	0.30		0.01	c0.31	
v/s Ratio Perm	0.03			c0.15		0.00	0.28		0.07	0.06		0.02
v/c Ratio	0.29	0.61		1.21	0.66	0.03	0.50	0.52	0.12	0.10	0.58	0.04
Uniform Delay, d1	59.5	68.8		54.0	60.2	52.9	16.0	20.1	15.1	14.8	24.5	17.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	3.1		122.9	4.5	0.0	1.2	0.9	0.3	0.2	1.2	0.1
Delay (s)	60.3	71.9		176.9	64.7	52.9	17.2	21.0	15.4	15.0	25.8	17.3
Level of Service	E	E		F	E	D	B	C	B	B	C	B
Approach Delay (s)		70.1			126.6			19.9			25.1	
Approach LOS		E			F			B			C	

Intersection Summary			
HCM 2000 Control Delay	45.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	472	357	0	0	2
Future Vol, veh/h	10	472	357	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	472	357	0	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	357	0	-	0	613	179
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1213	-	-	-	429	839
Stage 1	-	-	-	-	685	-
Stage 2	-	-	-	-	769	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1213	-	-	-	424	839
Mov Cap-2 Maneuver	-	-	-	-	424	-
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	769	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1213	-	-	-	-	839
HCM Lane V/C Ratio	0.008	-	-	-	-	0.002
HCM Control Delay (s)	8	0	-	-	0	9.3
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	630	0	0	625
Future Vol, veh/h	0	0	630	0	0	625
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	630	0	0	625

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	943	315	0	0	630	0
Stage 1	630	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	265	687	-	-	962	-
Stage 1	498	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	265	687	-	-	962	-
Mov Cap-2 Maneuver	383	-	-	-	-	-
Stage 1	498	-	-	-	-	-
Stage 2	721	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	962	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

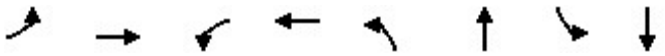
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	79	403	359	89	14	19
Future Vol, veh/h	79	403	359	89	14	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	79	403	359	89	14	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	448	0	-	0	764	224
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	360	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1123	-	-	-	344	786
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	683	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1123	-	-	-	320	786
Mov Cap-2 Maneuver	-	-	-	-	320	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	683	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1123	-	-	-	320	786
HCM Lane V/C Ratio	0.07	-	-	-	0.044	0.024
HCM Control Delay (s)	8.4	-	-	-	16.8	9.7
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.1

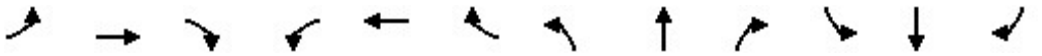


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	316	397	39	312	23	303	55	345
Future Volume (vph)	316	397	39	312	23	303	55	345
Lane Group Flow (vph)	316	429	39	339	23	334	55	570
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	15.0	80.0	65.0	65.0	32.0	32.0	18.0	50.0
Total Split (%)	11.5%	61.5%	50.0%	50.0%	24.6%	24.6%	13.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	92.3	88.3	71.4	71.4	17.9	17.9	31.7	27.7
Actuated g/C Ratio	0.71	0.68	0.55	0.55	0.14	0.14	0.24	0.21
v/c Ratio	0.40	0.17	0.08	0.17	0.24	0.67	0.24	0.69
Control Delay	9.1	8.3	18.1	16.2	56.0	58.9	38.3	40.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	8.3	18.1	16.2	56.0	58.9	38.3	40.3
LOS	A	A	B	B	E	E	D	D
Approach Delay		8.7		16.4		58.7		40.1
Approach LOS		A		B		E		D
Queue Length 50th (m)	27.9	20.3	4.9	22.7	5.7	45.0	11.5	58.5
Queue Length 95th (m)	48.8	32.1	13.5	38.6	14.7	59.6	21.4	73.5
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	790	2456	517	1984	132	697	286	1219
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.17	0.08	0.17	0.17	0.48	0.19	0.47

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 92 (71%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 27.9	Intersection LOS: C
Intersection Capacity Utilization 75.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	397	32	39	312	27	23	303	31	55	345	225
Future Volume (vph)	316	397	32	39	312	27	23	303	31	55	345	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3609		1785	3607		1785	3599		1785	3434	
Flt Permitted	0.53	1.00		0.50	1.00		0.37	1.00		0.34	1.00	
Satd. Flow (perm)	987	3609		943	3607		687	3599		632	3434	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	316	397	32	39	312	27	23	303	31	55	345	225
RTOR Reduction (vph)	0	3	0	0	4	0	0	6	0	0	97	0
Lane Group Flow (vph)	316	426	0	39	335	0	23	328	0	55	473	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	87.7	87.7		70.8	70.8		17.9	17.9		28.3	28.3	
Effective Green, g (s)	87.7	87.7		70.8	70.8		17.9	17.9		28.3	28.3	
Actuated g/C Ratio	0.67	0.67		0.54	0.54		0.14	0.14		0.22	0.22	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	751	2434		513	1964		94	495		203	747	
v/s Ratio Prot	c0.04	0.12			0.09			0.09		0.02	c0.14	
v/s Ratio Perm	c0.24			0.04			0.03			0.04		
v/c Ratio	0.42	0.17		0.08	0.17		0.24	0.66		0.27	0.63	
Uniform Delay, d1	8.4	7.8		14.1	14.9		50.0	53.2		41.3	46.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.2		0.3	0.2		1.4	3.3		0.7	1.8	
Delay (s)	8.8	8.0		14.4	15.0		51.4	56.5		42.0	47.9	
Level of Service	A	A		B	B		D	E		D	D	
Approach Delay (s)		8.3			15.0			56.2			47.4	
Approach LOS		A			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	33	12	142	11	581	54	154	582	5
Future Vol, veh/h	1	1	1	33	12	142	11	581	54	154	582	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	1	1	33	12	142	11	581	54	154	582	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1209	1547	291	1230	1525	318	587	0	0	635	0	0
Stage 1	890	890	-	630	630	-	-	-	-	-	-	-
Stage 2	319	657	-	600	895	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	141	115	712	136	119	684	998	-	-	958	-	-
Stage 1	308	364	-	441	478	-	-	-	-	-	-	-
Stage 2	673	465	-	459	362	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	88	95	712	117	99	684	998	-	-	958	-	-
Mov Cap-2 Maneuver	88	95	-	117	99	-	-	-	-	-	-	-
Stage 1	305	305	-	436	473	-	-	-	-	-	-	-
Stage 2	514	460	-	383	304	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.3	21.9	0.1	2
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	998	-	-	88	168	117	468	958	-	-
HCM Lane V/C Ratio	0.011	-	-	0.011	0.012	0.282	0.329	0.161	-	-
HCM Control Delay (s)	8.6	-	-	46.4	26.7	47.4	16.4	9.5	-	-
HCM Lane LOS	A	-	-	E	D	E	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	1.1	1.4	0.6	-	-

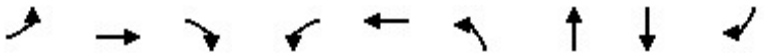
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	129	80	22	161	12	27	4	7	7	3	14
Future Vol, veh/h	3	129	80	22	161	12	27	4	7	7	3	14
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	129	80	22	161	12	27	4	7	7	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	174	0	0	209	0	0	395	393	169	393	427	168
Stage 1	-	-	-	-	-	-	175	175	-	212	212	-
Stage 2	-	-	-	-	-	-	220	218	-	181	215	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1415	-	-	1374	-	-	568	546	880	570	523	881
Stage 1	-	-	-	-	-	-	832	758	-	795	731	-
Stage 2	-	-	-	-	-	-	787	726	-	825	729	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1414	-	-	1374	-	-	548	535	880	553	512	880
Mov Cap-2 Maneuver	-	-	-	-	-	-	548	535	-	553	512	-
Stage 1	-	-	-	-	-	-	830	756	-	793	717	-
Stage 2	-	-	-	-	-	-	757	712	-	812	728	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	11.6	10.3
HCM LOS			B	B

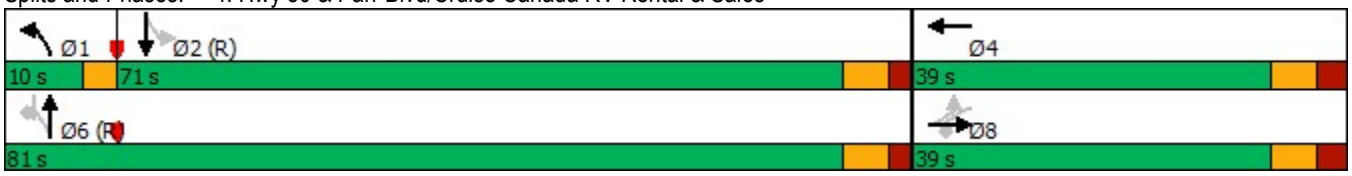
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	587	1414	-	-	1374	-	-	697
HCM Lane V/C Ratio	0.065	0.002	-	-	0.016	-	-	0.034
HCM Control Delay (s)	11.6	7.6	0	-	7.7	0	-	10.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

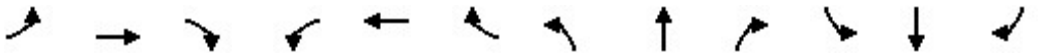


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	30	0	102	1	0	202	1065	1180	55
Future Volume (vph)	30	0	102	1	0	202	1065	1180	55
Lane Group Flow (vph)	0	30	102	0	1	202	1067	1180	55
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	NA	custom
Protected Phases		8			4	1	6	2	
Permitted Phases	8		8	8		6			6
Detector Phase	8	8	8	8	4	1	6	2	6
Switch Phase									
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		8.9	8.9		8.9	101.2	98.1	85.9	98.1
Actuated g/C Ratio		0.07	0.07		0.07	0.84	0.82	0.72	0.82
v/c Ratio		0.28	0.48		0.01	0.48	0.36	0.45	0.04
Control Delay		59.0	17.8		50.0	5.6	3.2	8.1	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		59.0	17.8		50.0	5.6	3.2	8.1	1.2
LOS		E	B		D	A	A	A	A
Approach Delay		27.2			50.0		3.6	7.8	
Approach LOS		C			D		A	A	
Queue Length 50th (m)		7.2	0.0		0.2	6.0	26.4	53.8	0.7
Queue Length 95th (m)		17.1	17.3		2.1	11.9	39.0	84.4	3.2
Internal Link Dist (m)		828.8			20.9		732.4	332.3	
Turn Bay Length (m)						35.0			20.0
Base Capacity (vph)		388	501		379	423	2985	2614	1282
Starvation Cap Reductn		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0
Reduced v/c Ratio		0.08	0.20		0.00	0.48	0.36	0.45	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 6.8	Intersection LOS: A
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	102	1	0	0	202	1065	2	0	1180	55
Future Volume (vph)	30	0	102	1	0	0	202	1065	2	0	1180	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		1.00		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.95		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1825	1597		1825		1785	3649			3650	1561
Flt Permitted		0.76	1.00		0.74		0.20	1.00			1.00	1.00
Satd. Flow (perm)		1455	1597		1417		375	3649			3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	0	102	1	0	0	202	1065	2	0	1180	55
RTOR Reduction (vph)	0	0	94	0	0	0	0	0	0	0	0	6
Lane Group Flow (vph)	0	30	8	0	1	0	202	1067	0	0	1180	49
Confl. Peds. (#/hr)							1		2	2		1
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		8.9	8.9		8.9		98.1	98.1			85.9	98.1
Effective Green, g (s)		8.9	8.9		8.9		98.1	98.1			85.9	98.1
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82			0.72	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		107	118		105		414	2983			2612	1276
v/s Ratio Prot							c0.04	0.29			0.32	
v/s Ratio Perm		c0.02	0.00		0.00		c0.36					0.03
v/c Ratio		0.28	0.06		0.01		0.49	0.36			0.45	0.04
Uniform Delay, d1		52.5	51.7		51.5		3.9	2.8			7.2	2.1
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.4	0.2		0.0		0.9	0.3			0.6	0.1
Delay (s)		54.0	51.9		51.5		4.8	3.2			7.7	2.1
Level of Service		D	D		D		A	A			A	A
Approach Delay (s)		52.4			51.5			3.4			7.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

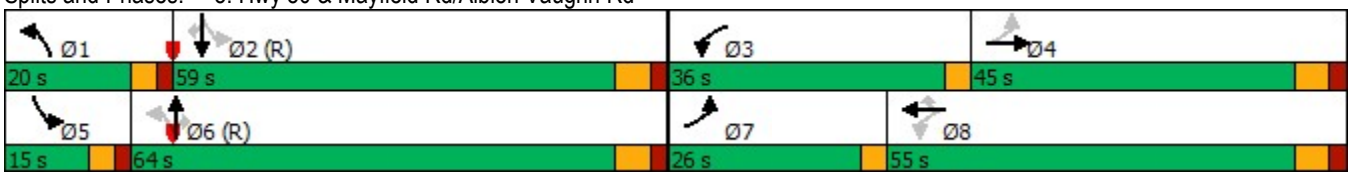


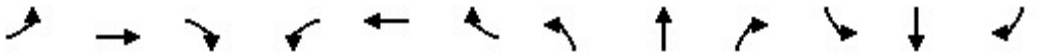
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	61	131	354	240	40	161	1093	170	31	1139	64
Future Volume (vph)	61	131	354	240	40	161	1093	170	31	1139	64
Lane Group Flow (vph)	61	343	354	240	40	161	1093	170	31	1139	64
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	26.0	45.0	36.0	55.0	55.0	20.0	64.0	64.0	15.0	59.0	59.0
Total Split (%)	16.3%	28.1%	22.5%	34.4%	34.4%	12.5%	40.0%	40.0%	9.4%	36.9%	36.9%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.5	13.8	51.0	37.2	37.2	100.6	87.7	87.7	90.1	78.8	78.8
Actuated g/C Ratio	0.17	0.09	0.32	0.23	0.23	0.63	0.55	0.55	0.56	0.49	0.49
v/c Ratio	0.27	0.75	0.89	0.54	0.09	0.52	0.55	0.18	0.11	0.63	0.08
Control Delay	42.0	42.6	70.6	59.0	0.7	19.2	26.1	7.2	14.0	33.5	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	42.6	70.6	59.0	0.7	19.2	26.1	7.2	14.0	33.5	1.4
LOS	D	D	E	E	A	B	C	A	B	C	A
Approach Delay		42.5		61.8			23.1			31.4	
Approach LOS		D		E			C			C	
Queue Length 50th (m)	14.4	27.2	100.4	72.0	0.0	21.1	127.7	7.9	3.8	146.8	0.0
Queue Length 95th (m)	25.1	44.5	#138.6	99.9	0.8	35.7	161.9	22.8	9.2	198.1	2.8
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	380	939	416	582	537	321	1999	929	292	1797	836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.37	0.85	0.41	0.07	0.50	0.55	0.18	0.11	0.63	0.08

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 27 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay: 34.6	Intersection LOS: C	
Intersection Capacity Utilization 88.6%	ICU Level of Service E	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	131	212	354	240	40	161	1093	170	31	1139	64
Future Volume (vph)	61	131	212	354	240	40	161	1093	170	31	1139	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3312		1785	1921	1597	1785	3650	1597	1785	3650	1597
Flt Permitted	0.61	1.00		0.23	1.00	1.00	0.13	1.00	1.00	0.19	1.00	1.00
Satd. Flow (perm)	1145	3312		432	1921	1597	245	3650	1597	362	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	61	131	212	354	240	40	161	1093	170	31	1139	64
RTOR Reduction (vph)	0	171	0	0	0	31	0	0	56	0	0	33
Lane Group Flow (vph)	61	172	0	354	240	9	161	1093	114	31	1139	31
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	22.4	14.4		48.2	37.2	37.2	99.0	86.0	86.0	86.1	78.1	78.1
Effective Green, g (s)	22.4	14.4		48.2	37.2	37.2	99.0	86.0	86.0	86.1	78.1	78.1
Actuated g/C Ratio	0.14	0.09		0.30	0.23	0.23	0.62	0.54	0.54	0.54	0.49	0.49
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	192	298		390	446	371	304	1961	858	265	1781	779
v/s Ratio Prot	0.02	0.05		c0.17	0.12		c0.05	0.30		0.01	c0.31	
v/s Ratio Perm	0.03			c0.10		0.01	0.27		0.07	0.06		0.02
v/c Ratio	0.32	0.58		0.91	0.54	0.03	0.53	0.56	0.13	0.12	0.64	0.04
Uniform Delay, d1	61.3	69.9		49.4	53.9	47.4	20.2	24.4	18.4	18.8	30.5	21.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	2.7		24.1	1.3	0.0	1.7	1.1	0.3	0.2	1.8	0.1
Delay (s)	62.2	72.6		73.5	55.1	47.4	21.9	25.6	18.8	19.0	32.2	21.5
Level of Service	E	E		E	E	D	C	C	B	B	C	C
Approach Delay (s)		71.0			64.9			24.4			31.4	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	38.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	472	357	0	0	2
Future Vol, veh/h	10	472	357	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	472	357	0	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	357	0	-	0	613	179
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1213	-	-	-	429	839
Stage 1	-	-	-	-	685	-
Stage 2	-	-	-	-	769	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1213	-	-	-	424	839
Mov Cap-2 Maneuver	-	-	-	-	424	-
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	769	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1213	-	-	-	-	839
HCM Lane V/C Ratio	0.008	-	-	-	-	0.002
HCM Control Delay (s)	8	0	-	-	0	9.3
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	630	0	0	625
Future Vol, veh/h	0	0	630	0	0	625
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	630	0	0	625

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	943	315	0	0	630	0
Stage 1	630	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	265	687	-	-	962	-
Stage 1	498	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	265	687	-	-	962	-
Mov Cap-2 Maneuver	383	-	-	-	-	-
Stage 1	498	-	-	-	-	-
Stage 2	721	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	962	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

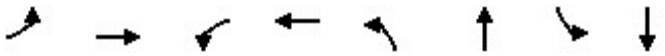
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	79	403	359	89	14	19
Future Vol, veh/h	79	403	359	89	14	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	79	403	359	89	14	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	448	0	-	0	764	224
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	360	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1123	-	-	-	344	786
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	683	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1123	-	-	-	320	786
Mov Cap-2 Maneuver	-	-	-	-	320	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	683	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1123	-	-	-	320	786
HCM Lane V/C Ratio	0.07	-	-	-	0.044	0.024
HCM Control Delay (s)	8.4	-	-	-	16.8	9.7
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.1

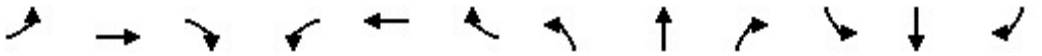


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	282	366	26	400	26	511	81	477
Future Volume (vph)	282	366	26	400	26	511	81	477
Lane Group Flow (vph)	282	401	26	468	26	541	81	889
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	12.0	80.0	68.0	68.0	36.0	36.0	14.0	50.0
Total Split (%)	9.2%	61.5%	52.3%	52.3%	27.7%	27.7%	10.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	83.9	79.9	65.7	65.7	25.7	25.7	40.1	36.1
Actuated g/C Ratio	0.65	0.61	0.51	0.51	0.20	0.20	0.31	0.28
v/c Ratio	0.46	0.18	0.05	0.26	0.45	0.75	0.37	0.83
Control Delay	13.6	11.5	19.0	18.8	71.4	56.0	35.6	41.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	11.5	19.0	18.8	71.4	56.0	35.6	41.7
LOS	B	B	B	B	E	E	D	D
Approach Delay		12.4		18.8		56.7		41.2
Approach LOS		B		B		E		D
Queue Length 50th (m)	30.7	23.0	3.7	37.5	6.3	73.5	15.6	95.9
Queue Length 95th (m)	51.2	35.0	9.4	50.1	17.0	90.5	26.6	114.3
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	615	2218	490	1813	65	810	237	1242
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.18	0.05	0.26	0.40	0.67	0.34	0.72

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 86.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	282	366	35	26	400	68	26	511	30	81	477	412
Future Volume (vph)	282	366	35	26	400	68	26	511	30	81	477	412
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3602		1785	3571		1785	3617		1785	3396	
Flt Permitted	0.44	1.00		0.52	1.00		0.16	1.00		0.21	1.00	
Satd. Flow (perm)	824	3602		969	3571		292	3617		386	3396	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	282	366	35	26	400	68	26	511	30	81	477	412
RTOR Reduction (vph)	0	5	0	0	10	0	0	3	0	0	128	0
Lane Group Flow (vph)	282	396	0	26	458	0	26	538	0	81	761	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	79.3	79.3		65.1	65.1		25.7	25.7		36.7	36.7	
Effective Green, g (s)	79.3	79.3		65.1	65.1		25.7	25.7		36.7	36.7	
Actuated g/C Ratio	0.61	0.61		0.50	0.50		0.20	0.20		0.28	0.28	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	585	2197		485	1788		57	715		195	958	
v/s Ratio Prot	c0.04	0.11			0.13			0.15		0.03	c0.22	
v/s Ratio Perm	c0.25			0.03			0.09			0.09		
v/c Ratio	0.48	0.18		0.05	0.26		0.46	0.75		0.42	0.79	
Uniform Delay, d1	12.0	11.1		16.6	18.6		46.0	49.1		36.1	43.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.2		0.2	0.3		5.7	4.5		1.4	4.6	
Delay (s)	12.6	11.3		16.9	18.9		51.7	53.6		37.5	47.7	
Level of Service	B	B		B	B		D	D		D	D	
Approach Delay (s)		11.8			18.8			53.5			46.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	3	13	31	6	186	13	816	21	127	922	4
Future Vol, veh/h	3	3	13	31	6	186	13	816	21	127	922	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	3	13	31	6	186	13	816	21	127	922	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1613	2039	461	1570	2033	419	926	0	0	837	0	0
Stage 1	1176	1176	-	853	853	-	-	-	-	-	-	-
Stage 2	437	863	-	717	1180	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	71	57	553	76	58	589	746	-	-	806	-	-
Stage 1	207	267	-	324	378	-	-	-	-	-	-	-
Stage 2	574	374	-	391	266	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	47	553	61	48	589	746	-	-	806	-	-
Mov Cap-2 Maneuver	38	47	-	61	48	-	-	-	-	-	-	-
Stage 1	203	225	-	318	372	-	-	-	-	-	-	-
Stage 2	380	368	-	317	224	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	39.3	32.7	0.2	1.2
HCM LOS	E	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	746	-	-	38	183	61	436	806	-	-
HCM Lane V/C Ratio	0.017	-	-	0.079	0.087	0.508	0.44	0.158	-	-
HCM Control Delay (s)	9.9	-	-	107.7	26.5	113.8	19.6	10.3	-	-
HCM Lane LOS	A	-	-	F	D	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	2	2.2	0.6	-	-

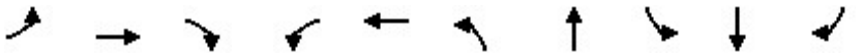
Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	151	26	10	123	14	96	0	20	21	0	9
Future Vol, veh/h	4	151	26	10	123	14	96	0	20	21	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	151	26	10	123	14	96	0	20	21	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	137	0	0	177	0	0	327	329	164	332	335	130
Stage 1	-	-	-	-	-	-	172	172	-	150	150	-
Stage 2	-	-	-	-	-	-	155	157	-	182	185	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1459	-	-	1411	-	-	630	593	886	625	589	925
Stage 1	-	-	-	-	-	-	835	760	-	857	777	-
Stage 2	-	-	-	-	-	-	852	772	-	824	751	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1459	-	-	1411	-	-	619	586	886	606	583	925
Mov Cap-2 Maneuver	-	-	-	-	-	-	619	586	-	606	583	-
Stage 1	-	-	-	-	-	-	832	758	-	854	771	-
Stage 2	-	-	-	-	-	-	837	766	-	803	749	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	11.7	10.6
HCM LOS			B	B

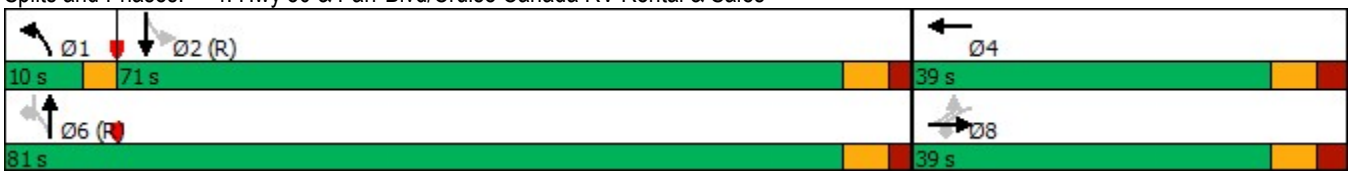
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	653	1459	-	-	1411	-	-	676
HCM Lane V/C Ratio	0.178	0.003	-	-	0.007	-	-	0.044
HCM Control Delay (s)	11.7	7.5	0	-	7.6	0	-	10.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.1

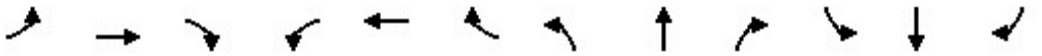


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	68	0	172	1	0	114	1290	1	1190	43
Future Volume (vph)	68	0	172	1	0	114	1290	1	1190	43
Lane Group Flow (vph)	0	68	172	0	2	114	1290	1	1190	43
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		11.4	11.4		11.4	98.7	95.6	85.6	85.6	95.6
Actuated g/C Ratio		0.10	0.10		0.10	0.82	0.80	0.71	0.71	0.80
v/c Ratio		0.50	0.59		0.01	0.30	0.44	0.00	0.46	0.03
Control Delay		63.3	18.1		0.0	4.3	4.6	6.0	8.4	1.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		63.3	18.1		0.0	4.3	4.6	6.0	8.4	1.4
LOS		E	B		A	A	A	A	A	A
Approach Delay		30.9					4.6		8.2	
Approach LOS		C					A		A	
Queue Length 50th (m)		16.3	3.2		0.0	4.0	42.1	0.1	57.5	0.3
Queue Length 95th (m)		30.6	24.4		0.0	9.3	64.4	0.7	86.0	3.0
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		387	542		451	390	2909	286	2604	1251
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.18	0.32		0.00	0.29	0.44	0.00	0.46	0.03

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 3 (3%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	0	172	1	0	1	114	1290	0	1	1190	43
Future Volume (vph)	68	0	172	1	0	1	114	1290	0	1	1190	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.99		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.93		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1820	1597		1735		1785	3650		1785	3650	1561
Flt Permitted		0.76	1.00		0.86		0.20	1.00		0.21	1.00	1.00
Satd. Flow (perm)		1450	1597		1537		369	3650		403	3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	68	0	172	1	0	1	114	1290	0	1	1190	43
RTOR Reduction (vph)	0	0	143	0	2	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	68	29	0	0	0	114	1290	0	1	1190	36
Confl. Peds. (#/hr)	2					2	1					1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		11.4	11.4		11.4		95.6	95.6		85.6	85.6	95.6
Effective Green, g (s)		11.4	11.4		11.4		95.6	95.6		85.6	85.6	95.6
Actuated g/C Ratio		0.10	0.10		0.10		0.80	0.80		0.71	0.71	0.80
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		137	151		146		376	2907		287	2603	1243
v/s Ratio Prot							0.02	c0.35			c0.33	
v/s Ratio Perm		c0.05	0.02		0.00		0.22			0.00		0.02
v/c Ratio		0.50	0.19		0.00		0.30	0.44		0.00	0.46	0.03
Uniform Delay, d1		51.6	50.1		49.1		4.0	3.8		4.9	7.3	2.5
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.8	0.6		0.0		0.5	0.5		0.0	0.6	0.0
Delay (s)		54.4	50.7		49.2		4.4	4.3		5.0	7.9	2.6
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		51.7			49.2			4.3			7.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

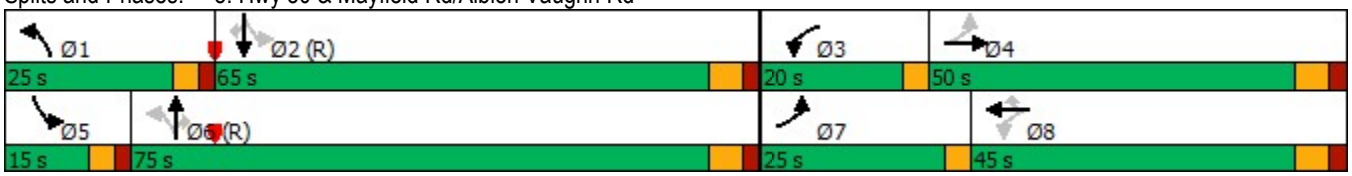


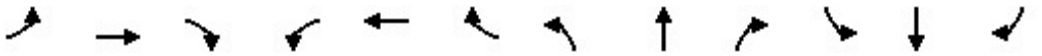
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	84	205	212	127	33	110	1139	413	36	1267	70
Future Volume (vph)	84	205	212	127	33	110	1139	413	36	1267	70
Lane Group Flow (vph)	84	480	212	127	33	110	1139	413	36	1267	70
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	25.0	50.0	20.0	45.0	45.0	25.0	75.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	31.3%	12.5%	28.1%	28.1%	15.6%	46.9%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	34.0	19.4	42.3	24.8	24.8	107.2	96.2	96.2	102.6	91.3	91.3
Actuated g/C Ratio	0.21	0.12	0.26	0.16	0.16	0.67	0.60	0.60	0.64	0.57	0.57
v/c Ratio	0.28	0.82	0.89	0.43	0.09	0.39	0.52	0.38	0.11	0.61	0.07
Control Delay	46.3	50.3	84.2	65.3	0.5	13.6	21.0	5.5	10.5	25.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.3	50.3	84.2	65.3	0.5	13.6	21.0	5.5	10.5	25.3	0.1
LOS	D	D	F	E	A	B	C	A	B	C	A
Approach Delay		49.7		70.3			16.6			23.6	
Approach LOS		D		E			B			C	
Queue Length 50th (m)	21.8	48.5	59.4	38.9	0.0	11.7	118.4	14.1	3.7	140.1	0.0
Queue Length 95th (m)	35.2	66.9	#90.4	60.2	0.0	22.0	153.5	38.3	9.0	195.0	0.0
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	407	1057	242	462	484	361	2195	1086	317	2083	957
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.45	0.88	0.27	0.07	0.30	0.52	0.38	0.11	0.61	0.07

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 72 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay: 28.8	Intersection LOS: C	
Intersection Capacity Utilization 87.8%	ICU Level of Service E	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	205	275	212	127	33	110	1139	413	36	1267	70
Future Volume (vph)	84	205	275	212	127	33	110	1139	413	36	1267	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3336		1785	1921	1597	1785	3650	1597	1785	3650	1577
Flt Permitted	0.68	1.00		0.18	1.00	1.00	0.13	1.00	1.00	0.19	1.00	1.00
Satd. Flow (perm)	1269	3336		336	1921	1597	248	3650	1597	355	3650	1577
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	84	205	275	212	127	33	110	1139	413	36	1267	70
RTOR Reduction (vph)	0	182	0	0	0	28	0	0	128	0	0	30
Lane Group Flow (vph)	84	298	0	212	127	5	110	1139	285	36	1267	40
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	30.6	19.4		39.0	24.8	24.8	107.1	95.2	95.2	99.3	91.3	91.3
Effective Green, g (s)	30.6	19.4		39.0	24.8	24.8	107.1	95.2	95.2	99.3	91.3	91.3
Actuated g/C Ratio	0.19	0.12		0.24	0.16	0.16	0.67	0.60	0.60	0.62	0.57	0.57
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	278	404		232	297	247	280	2171	950	291	2082	899
v/s Ratio Prot	0.02	0.09		c0.09	0.07		c0.03	c0.31		0.01	c0.35	
v/s Ratio Perm	0.04			c0.13		0.00	0.23		0.18	0.07		0.03
v/c Ratio	0.30	0.74		0.91	0.43	0.02	0.39	0.52	0.30	0.12	0.61	0.04
Uniform Delay, d1	54.9	67.8		53.1	61.2	57.3	15.5	19.1	16.0	13.4	22.6	15.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	6.9		36.3	1.0	0.0	0.9	0.9	0.8	0.2	1.3	0.1
Delay (s)	55.5	74.7		89.5	62.2	57.3	16.4	20.0	16.8	13.6	23.9	15.2
Level of Service	E	E		F	E	E	B	B	B	B	C	B
Approach Delay (s)		71.9			77.3			19.0			23.2	
Approach LOS		E			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	473	406	0	0	10
Future Vol, veh/h	3	473	406	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	473	406	0	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	406	0	-	0	649	203
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	243	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1164	-	-	-	407	810
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	781	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1164	-	-	-	406	810
Mov Cap-2 Maneuver	-	-	-	-	406	-
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	781	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1164	-	-	-	-	810
HCM Lane V/C Ratio	0.003	-	-	-	-	0.012
HCM Control Delay (s)	8.1	0	-	-	0	9.5
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	832	0	0	968
Future Vol, veh/h	0	0	832	0	0	968
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	832	0	0	968

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1316	416	0	0	832	0
Stage 1	832	-	-	-	-	-
Stage 2	484	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	152	591	-	-	809	-
Stage 1	393	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	152	591	-	-	809	-
Mov Cap-2 Maneuver	281	-	-	-	-	-
Stage 1	393	-	-	-	-	-
Stage 2	591	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	809	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

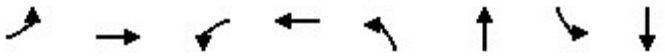
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	456	414	24	55	78
Future Vol, veh/h	22	456	414	24	55	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	456	414	24	55	78

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	438	0	-	0	698	219
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	272	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1133	-	-	-	379	791
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	755	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1133	-	-	-	372	791
Mov Cap-2 Maneuver	-	-	-	-	372	-
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	755	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1133	-	-	-	372	791
HCM Lane V/C Ratio	0.019	-	-	-	0.148	0.099
HCM Control Delay (s)	8.2	-	-	-	16.3	10
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	0.3

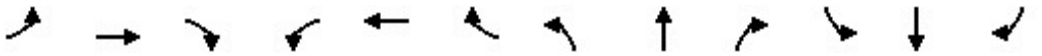


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	282	366	26	400	26	511	81	477
Future Volume (vph)	282	366	26	400	26	511	81	477
Lane Group Flow (vph)	282	401	26	468	26	541	81	889
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	12.0	80.0	68.0	68.0	36.0	36.0	14.0	50.0
Total Split (%)	9.2%	61.5%	52.3%	52.3%	27.7%	27.7%	10.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	83.9	79.9	65.7	65.7	25.7	25.7	40.1	36.1
Actuated g/C Ratio	0.65	0.61	0.51	0.51	0.20	0.20	0.31	0.28
v/c Ratio	0.46	0.18	0.05	0.26	0.45	0.75	0.37	0.83
Control Delay	13.6	11.5	19.0	18.8	71.4	56.0	35.6	41.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	11.5	19.0	18.8	71.4	56.0	35.6	41.7
LOS	B	B	B	B	E	E	D	D
Approach Delay		12.4		18.8		56.7		41.2
Approach LOS		B		B		E		D
Queue Length 50th (m)	30.7	23.0	3.7	37.5	6.3	73.5	15.6	95.9
Queue Length 95th (m)	51.2	35.0	9.4	50.1	17.0	90.5	26.6	114.3
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	615	2218	490	1813	65	810	237	1242
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.18	0.05	0.26	0.40	0.67	0.34	0.72

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 86.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	282	366	35	26	400	68	26	511	30	81	477	412
Future Volume (vph)	282	366	35	26	400	68	26	511	30	81	477	412
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3602		1785	3571		1785	3617		1785	3396	
Flt Permitted	0.44	1.00		0.52	1.00		0.16	1.00		0.21	1.00	
Satd. Flow (perm)	824	3602		969	3571		292	3617		386	3396	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	282	366	35	26	400	68	26	511	30	81	477	412
RTOR Reduction (vph)	0	5	0	0	10	0	0	3	0	0	128	0
Lane Group Flow (vph)	282	396	0	26	458	0	26	538	0	81	761	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	79.3	79.3		65.1	65.1		25.7	25.7		36.7	36.7	
Effective Green, g (s)	79.3	79.3		65.1	65.1		25.7	25.7		36.7	36.7	
Actuated g/C Ratio	0.61	0.61		0.50	0.50		0.20	0.20		0.28	0.28	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	585	2197		485	1788		57	715		195	958	
v/s Ratio Prot	c0.04	0.11			0.13			0.15		0.03	c0.22	
v/s Ratio Perm	c0.25			0.03			0.09			0.09		
v/c Ratio	0.48	0.18		0.05	0.26		0.46	0.75		0.42	0.79	
Uniform Delay, d1	12.0	11.1		16.6	18.6		46.0	49.1		36.1	43.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.2		0.2	0.3		5.7	4.5		1.4	4.6	
Delay (s)	12.6	11.3		16.9	18.9		51.7	53.6		37.5	47.7	
Level of Service	B	B		B	B		D	D		D	D	
Approach Delay (s)		11.8			18.8			53.5			46.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	3	13	31	6	186	13	816	21	127	922	4
Future Vol, veh/h	3	3	13	31	6	186	13	816	21	127	922	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	3	13	31	6	186	13	816	21	127	922	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1613	2039	461	1570	2033	419	926	0	0	837	0	0
Stage 1	1176	1176	-	853	853	-	-	-	-	-	-	-
Stage 2	437	863	-	717	1180	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	71	57	553	76	58	589	746	-	-	806	-	-
Stage 1	207	267	-	324	378	-	-	-	-	-	-	-
Stage 2	574	374	-	391	266	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	47	553	61	48	589	746	-	-	806	-	-
Mov Cap-2 Maneuver	38	47	-	61	48	-	-	-	-	-	-	-
Stage 1	203	225	-	318	372	-	-	-	-	-	-	-
Stage 2	380	368	-	317	224	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	39.3	32.7	0.2	1.2
HCM LOS	E	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	746	-	-	38	183	61	436	806	-	-
HCM Lane V/C Ratio	0.017	-	-	0.079	0.087	0.508	0.44	0.158	-	-
HCM Control Delay (s)	9.9	-	-	107.7	26.5	113.8	19.6	10.3	-	-
HCM Lane LOS	A	-	-	F	D	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	2	2.2	0.6	-	-

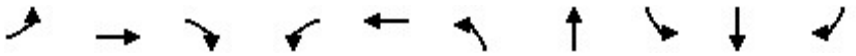
Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	151	26	10	123	14	96	0	20	21	0	9
Future Vol, veh/h	4	151	26	10	123	14	96	0	20	21	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	151	26	10	123	14	96	0	20	21	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	137	0	0	177	0	0	327	329	164	332	335	130
Stage 1	-	-	-	-	-	-	172	172	-	150	150	-
Stage 2	-	-	-	-	-	-	155	157	-	182	185	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1459	-	-	1411	-	-	630	593	886	625	589	925
Stage 1	-	-	-	-	-	-	835	760	-	857	777	-
Stage 2	-	-	-	-	-	-	852	772	-	824	751	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1459	-	-	1411	-	-	619	586	886	606	583	925
Mov Cap-2 Maneuver	-	-	-	-	-	-	619	586	-	606	583	-
Stage 1	-	-	-	-	-	-	832	758	-	854	771	-
Stage 2	-	-	-	-	-	-	837	766	-	803	749	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	11.7	10.6
HCM LOS			B	B

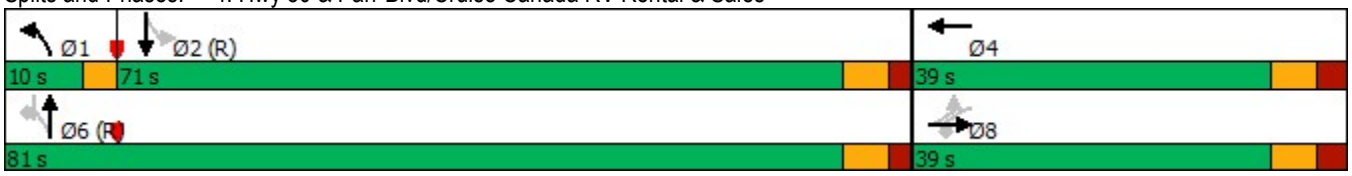
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	653	1459	-	-	1411	-	-	676
HCM Lane V/C Ratio	0.178	0.003	-	-	0.007	-	-	0.044
HCM Control Delay (s)	11.7	7.5	0	-	7.6	0	-	10.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.1

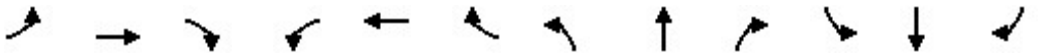


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	68	0	172	1	0	114	1290	1	1190	43
Future Volume (vph)	68	0	172	1	0	114	1290	1	1190	43
Lane Group Flow (vph)	0	68	172	0	2	114	1290	1	1190	43
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		11.4	11.4		11.4	98.7	95.6	85.6	85.6	95.6
Actuated g/C Ratio		0.10	0.10		0.10	0.82	0.80	0.71	0.71	0.80
v/c Ratio		0.50	0.59		0.01	0.30	0.44	0.00	0.46	0.03
Control Delay		63.3	18.1		0.0	4.3	4.6	6.0	8.4	1.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		63.3	18.1		0.0	4.3	4.6	6.0	8.4	1.4
LOS		E	B		A	A	A	A	A	A
Approach Delay		30.9					4.6		8.2	
Approach LOS		C					A		A	
Queue Length 50th (m)		16.3	3.2		0.0	4.0	42.1	0.1	57.5	0.3
Queue Length 95th (m)		30.6	24.4		0.0	9.3	64.4	0.7	86.0	3.0
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		387	542		451	390	2909	286	2604	1251
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.18	0.32		0.00	0.29	0.44	0.00	0.46	0.03

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 3 (3%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	0	172	1	0	1	114	1290	0	1	1190	43
Future Volume (vph)	68	0	172	1	0	1	114	1290	0	1	1190	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.99		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.93		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1820	1597		1735		1785	3650		1785	3650	1561
Flt Permitted		0.76	1.00		0.86		0.20	1.00		0.21	1.00	1.00
Satd. Flow (perm)		1450	1597		1537		369	3650		403	3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	68	0	172	1	0	1	114	1290	0	1	1190	43
RTOR Reduction (vph)	0	0	143	0	2	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	68	29	0	0	0	114	1290	0	1	1190	36
Confl. Peds. (#/hr)	2					2	1					1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		11.4	11.4		11.4		95.6	95.6		85.6	85.6	95.6
Effective Green, g (s)		11.4	11.4		11.4		95.6	95.6		85.6	85.6	95.6
Actuated g/C Ratio		0.10	0.10		0.10		0.80	0.80		0.71	0.71	0.80
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		137	151		146		376	2907		287	2603	1243
v/s Ratio Prot							0.02	c0.35			c0.33	
v/s Ratio Perm		c0.05	0.02		0.00		0.22			0.00		0.02
v/c Ratio		0.50	0.19		0.00		0.30	0.44		0.00	0.46	0.03
Uniform Delay, d1		51.6	50.1		49.1		4.0	3.8		4.9	7.3	2.5
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.8	0.6		0.0		0.5	0.5		0.0	0.6	0.0
Delay (s)		54.4	50.7		49.2		4.4	4.3		5.0	7.9	2.6
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		51.7			49.2			4.3			7.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

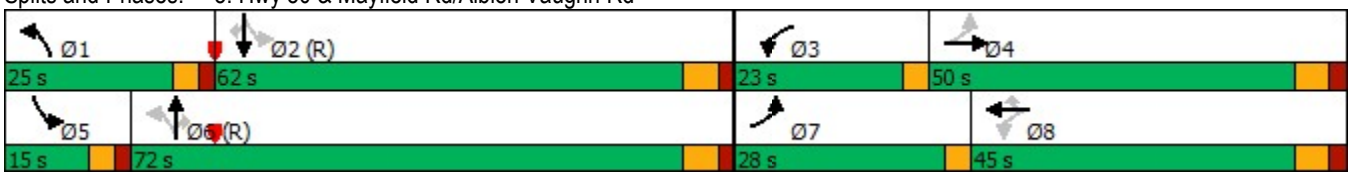


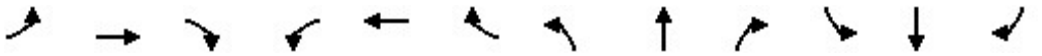
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	84	205	212	127	33	110	1139	413	36	1267	70
Future Volume (vph)	84	205	212	127	33	110	1139	413	36	1267	70
Lane Group Flow (vph)	84	480	212	127	33	110	1139	413	36	1267	70
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	28.0	50.0	23.0	45.0	45.0	25.0	72.0	72.0	15.0	62.0	62.0
Total Split (%)	17.5%	31.3%	14.4%	28.1%	28.1%	15.6%	45.0%	45.0%	9.4%	38.8%	38.8%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	33.9	19.4	44.7	27.1	27.1	105.0	94.0	94.0	100.5	89.2	89.2
Actuated g/C Ratio	0.21	0.12	0.28	0.17	0.17	0.66	0.59	0.59	0.63	0.56	0.56
v/c Ratio	0.28	0.82	0.80	0.39	0.09	0.41	0.53	0.39	0.12	0.62	0.07
Control Delay	44.5	50.3	68.8	61.9	0.5	14.9	22.6	6.3	11.6	27.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	50.3	68.8	61.9	0.5	14.9	22.6	6.3	11.6	27.1	0.2
LOS	D	D	E	E	A	B	C	A	B	C	A
Approach Delay		49.4		60.4			18.0			25.3	
Approach LOS		D		E			B			C	
Queue Length 50th (m)	21.2	48.5	57.8	38.0	0.0	12.5	124.3	16.4	3.9	146.9	0.0
Queue Length 95th (m)	34.2	66.9	#79.4	58.7	0.0	23.3	160.2	42.7	9.5	202.6	0.0
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	434	1057	274	462	484	353	2145	1064	307	2034	937
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.45	0.77	0.27	0.07	0.31	0.53	0.39	0.12	0.62	0.07

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 72 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.82		
Intersection Signal Delay: 29.0	Intersection LOS: C	
Intersection Capacity Utilization 87.8%	ICU Level of Service E	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	205	275	212	127	33	110	1139	413	36	1267	70
Future Volume (vph)	84	205	275	212	127	33	110	1139	413	36	1267	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3336		1785	1921	1597	1785	3650	1597	1785	3650	1577
Flt Permitted	0.68	1.00		0.18	1.00	1.00	0.13	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	1269	3336		336	1921	1597	238	3650	1597	346	3650	1577
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	84	205	275	212	127	33	110	1139	413	36	1267	70
RTOR Reduction (vph)	0	182	0	0	0	27	0	0	128	0	0	31
Lane Group Flow (vph)	84	298	0	212	127	6	110	1139	285	36	1267	39
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	30.5	19.4		41.2	27.1	27.1	104.9	93.0	93.0	97.1	89.1	89.1
Effective Green, g (s)	30.5	19.4		41.2	27.1	27.1	104.9	93.0	93.0	97.1	89.1	89.1
Actuated g/C Ratio	0.19	0.12		0.26	0.17	0.17	0.66	0.58	0.58	0.61	0.56	0.56
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	277	404		256	325	270	271	2121	928	281	2032	878
v/s Ratio Prot	0.02	0.09		c0.10	0.07		c0.03	c0.31		0.01	c0.35	
v/s Ratio Perm	0.04			c0.12		0.00	0.24		0.18	0.07		0.02
v/c Ratio	0.30	0.74		0.83	0.39	0.02	0.41	0.54	0.31	0.13	0.62	0.04
Uniform Delay, d1	55.0	67.8		51.2	59.1	55.4	16.7	20.4	17.1	14.4	24.1	16.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	6.9		19.3	0.8	0.0	1.0	1.0	0.9	0.2	1.5	0.1
Delay (s)	55.6	74.7		70.5	59.9	55.4	17.7	21.4	17.9	14.7	25.5	16.2
Level of Service	E	E		E	E	E	B	C	B	B	C	B
Approach Delay (s)		71.9			65.6			20.3			24.8	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	473	406	0	0	10
Future Vol, veh/h	3	473	406	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	473	406	0	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	406	0	-	0	649	203
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	243	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1164	-	-	-	407	810
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	781	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1164	-	-	-	406	810
Mov Cap-2 Maneuver	-	-	-	-	406	-
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	781	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1164	-	-	-	-	810
HCM Lane V/C Ratio	0.003	-	-	-	-	0.012
HCM Control Delay (s)	8.1	0	-	-	0	9.5
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	832	0	0	968
Future Vol, veh/h	0	0	832	0	0	968
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	832	0	0	968

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1316	416	0	0	832	0
Stage 1	832	-	-	-	-	-
Stage 2	484	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	152	591	-	-	809	-
Stage 1	393	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	152	591	-	-	809	-
Mov Cap-2 Maneuver	281	-	-	-	-	-
Stage 1	393	-	-	-	-	-
Stage 2	591	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	809	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

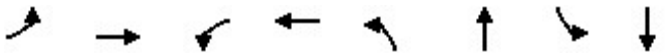
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	456	414	24	55	78
Future Vol, veh/h	22	456	414	24	55	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	456	414	24	55	78

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	438	0	-	0	698	219
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	272	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1133	-	-	-	379	791
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	755	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1133	-	-	-	372	791
Mov Cap-2 Maneuver	-	-	-	-	372	-
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	755	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1133	-	-	-	372	791
HCM Lane V/C Ratio	0.019	-	-	-	0.148	0.099
HCM Control Delay (s)	8.2	-	-	-	16.3	10
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	0.3

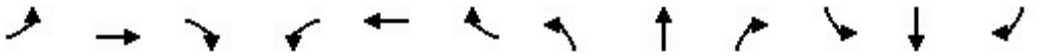


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	89	303	2	373	6	11	83	0
Future Volume (vph)	89	303	2	373	6	11	83	0
Lane Group Flow (vph)	89	304	2	424	6	11	83	144
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	9.0	62.0	53.0	53.0	38.0	38.0	10.0	48.0
Total Split (%)	8.2%	56.4%	48.2%	48.2%	34.5%	34.5%	9.1%	43.6%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	84.0	80.0	71.8	71.8	12.0	12.0	20.0	16.0
Actuated g/C Ratio	0.76	0.73	0.65	0.65	0.11	0.11	0.18	0.15
v/c Ratio	0.12	0.11	0.00	0.18	0.04	0.03	0.33	0.18
Control Delay	4.3	5.1	10.0	8.6	44.8	44.1	40.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	5.1	10.0	8.6	44.8	44.1	40.7	0.5
LOS	A	A	A	A	D	D	D	A
Approach Delay		4.9		8.6		44.4		15.2
Approach LOS		A		A		D		B
Queue Length 50th (m)	3.3	7.7	0.2	15.8	1.2	1.2	17.0	0.0
Queue Length 95th (m)	10.2	16.6	1.3	30.8	5.4	4.1	28.8	0.0
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	749	2654	688	2344	350	1028	256	1426
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.11	0.00	0.18	0.02	0.01	0.32	0.10

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 48 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.33	
Intersection Signal Delay: 9.2	Intersection LOS: A
Intersection Capacity Utilization 48.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	303	1	2	373	51	6	11	0	83	0	144
Future Volume (vph)	89	303	1	2	373	51	6	11	0	83	0	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.98		1.00	1.00		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3648		1767	3584		1785	3650		1785	3103	
Flt Permitted	0.48	1.00		0.57	1.00		0.66	1.00		0.53	1.00	
Satd. Flow (perm)	908	3648		1054	3584		1241	3650		995	3103	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	89	303	1	2	373	51	6	11	0	83	0	144
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	119	0
Lane Group Flow (vph)	89	304	0	2	417	0	6	11	0	83	25	0
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	76.6	76.6		67.8	67.8		7.2	7.2		19.4	19.4	
Effective Green, g (s)	76.6	76.6		67.8	67.8		7.2	7.2		19.4	19.4	
Actuated g/C Ratio	0.70	0.70		0.62	0.62		0.07	0.07		0.18	0.18	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	678	2540		649	2209		81	238		241	547	
v/s Ratio Prot	c0.01	0.08			c0.12			0.00		c0.03	0.01	
v/s Ratio Perm	0.08			0.00			0.00			c0.03		
v/c Ratio	0.13	0.12		0.00	0.19		0.07	0.05		0.34	0.05	
Uniform Delay, d1	5.4	5.5		8.1	9.2		48.3	48.2		39.2	37.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.0	0.2		0.4	0.1		0.9	0.0	
Delay (s)	5.5	5.6		8.1	9.4		48.7	48.3		40.0	37.7	
Level of Service	A	A		A	A		D	D		D	D	
Approach Delay (s)		5.6			9.3			48.4			38.5	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	3	1	18	1	118	1	134	4	41	187	2
Future Vol, veh/h	1	3	1	18	1	118	1	134	4	41	187	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	1	3	1	18	1	118	1	134	4	41	187	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	339	409	94	315	409	69	189	0	0	138	0	0
Stage 1	269	269	-	138	138	-	-	-	-	-	-	-
Stage 2	70	140	-	177	271	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.52	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.01	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	596	535	951	619	533	986	1397	-	-	1458	-	-
Stage 1	719	690	-	857	784	-	-	-	-	-	-	-
Stage 2	938	785	-	813	686	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	513	519	951	602	518	986	1397	-	-	1458	-	-
Mov Cap-2 Maneuver	513	519	-	602	518	-	-	-	-	-	-	-
Stage 1	718	671	-	856	783	-	-	-	-	-	-	-
Stage 2	824	784	-	786	667	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	9.5	0.1	1.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1397	-	-	513	585	602	979	1458	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.007	0.03	0.122	0.028	-	-
HCM Control Delay (s)	7.6	-	-	12	11.2	11.2	9.2	7.5	-	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.1	0.4	0.1	-	-

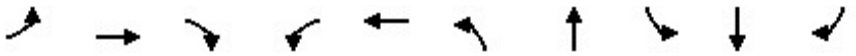
Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	32	19	6	40	3	91	1	17	4	2	5
Future Vol, veh/h	0	32	19	6	40	3	91	1	17	4	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	32	19	6	40	3	91	1	17	4	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	51	0	0	99	97	42	105	105	42
Stage 1	-	-	-	-	-	-	42	42	-	54	54	-
Stage 2	-	-	-	-	-	-	57	55	-	51	51	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1579	-	-	1568	-	-	888	797	1034	880	789	1034
Stage 1	-	-	-	-	-	-	978	864	-	963	854	-
Stage 2	-	-	-	-	-	-	960	853	-	967	856	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1579	-	-	1568	-	-	879	794	1034	862	786	1034
Mov Cap-2 Maneuver	-	-	-	-	-	-	879	794	-	862	786	-
Stage 1	-	-	-	-	-	-	978	864	-	963	851	-
Stage 2	-	-	-	-	-	-	949	850	-	950	856	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.9	9.6	9
HCM LOS			A	A

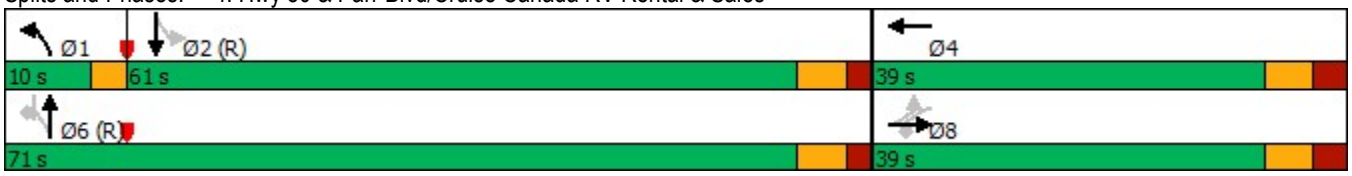
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	899	1579	-	-	1568	-	-	915
HCM Lane V/C Ratio	0.121	-	-	-	0.004	-	-	0.012
HCM Control Delay (s)	9.6	0	-	-	7.3	0	-	9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	31	0	44	4	2	36	991	6	975	22
Future Volume (vph)	31	0	44	4	2	36	991	6	975	22
Lane Group Flow (vph)	0	31	44	0	8	36	991	6	975	22
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	71.0	61.0	61.0	71.0
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	9.1%	64.5%	55.5%	55.5%	64.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.8	8.8		8.8	94.3	92.4	87.0	87.0	92.4
Actuated g/C Ratio		0.08	0.08		0.08	0.86	0.84	0.79	0.79	0.84
v/c Ratio		0.27	0.24		0.07	0.07	0.32	0.01	0.34	0.02
Control Delay		53.6	10.7		41.9	2.1	2.9	4.8	5.1	0.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		53.6	10.7		41.9	2.1	2.9	4.8	5.1	0.4
LOS		D	B		D	A	A	A	A	A
Approach Delay		28.4			41.9		2.9		5.0	
Approach LOS		C			D		A		A	
Queue Length 50th (m)		6.8	0.0		1.3	1.0	23.9	0.3	37.1	0.0
Queue Length 95th (m)		16.4	7.3		6.3	2.9	35.4	1.7	52.9	0.8
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		421	508		446	512	3067	429	2887	1319
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.07	0.09		0.02	0.07	0.32	0.01	0.34	0.02

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 105 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	0	44	4	2	2	36	991	0	6	975	22
Future Volume (vph)	31	0	44	4	2	2	36	991	0	6	975	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1823	1597		1801		1785	3650		1784	3650	1562
Flt Permitted		0.75	1.00		0.83		0.27	1.00		0.29	1.00	1.00
Satd. Flow (perm)		1444	1597		1524		503	3650		543	3650	1562
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	31	0	44	4	2	2	36	991	0	6	975	22
RTOR Reduction (vph)	0	0	41	0	2	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	31	3	0	6	0	36	991	0	6	975	18
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		7.2	7.2		7.2		89.8	89.8		83.2	83.2	89.8
Effective Green, g (s)		7.2	7.2		7.2		89.8	89.8		83.2	83.2	89.8
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82		0.76	0.76	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		94	104		99		452	2979		410	2760	1275
v/s Ratio Prot							0.00	c0.27			c0.27	
v/s Ratio Perm		c0.02	0.00		0.00		0.06			0.01		0.01
v/c Ratio		0.33	0.03		0.06		0.08	0.33		0.01	0.35	0.01
Uniform Delay, d1		49.1	48.1		48.2		2.2	2.5		3.3	4.5	1.9
Progression Factor		1.00	1.01		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.1	0.1		0.3		0.1	0.3		0.1	0.4	0.0
Delay (s)		51.4	48.5		48.5		2.2	2.8		3.4	4.8	1.9
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		49.7			48.5			2.8			4.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

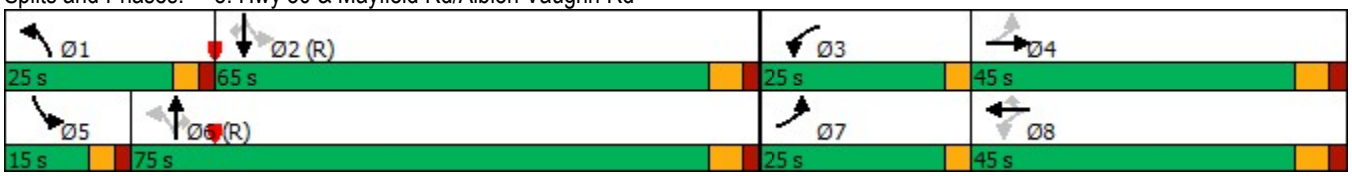


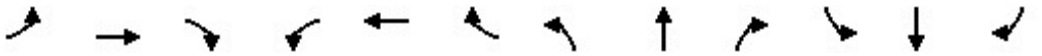
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	90	128	232	130	10	113	887	231	15	903	97
Future Volume (vph)	90	128	232	130	10	113	887	231	15	903	97
Lane Group Flow (vph)	90	311	232	130	10	113	887	231	15	903	97
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	25.0	45.0	25.0	45.0	45.0	25.0	75.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	28.1%	15.6%	28.1%	28.1%	15.6%	46.9%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	28.8	13.5	40.6	22.3	22.3	109.7	104.1	104.1	106.1	94.8	94.8
Actuated g/C Ratio	0.18	0.08	0.25	0.14	0.14	0.69	0.65	0.65	0.66	0.59	0.59
v/c Ratio	0.34	0.70	0.81	0.49	0.03	0.28	0.37	0.21	0.03	0.42	0.10
Control Delay	50.0	37.4	72.6	70.1	0.2	10.3	14.8	2.4	8.7	18.8	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.0	37.4	72.6	70.1	0.2	10.3	14.8	2.4	8.7	18.8	2.0
LOS	D	D	E	E	A	B	B	A	A	B	A
Approach Delay		40.2		69.8			12.0			17.1	
Approach LOS		D		E			B			B	
Queue Length 50th (m)	23.9	22.1	67.3	40.9	0.0	11.4	60.0	0.4	1.5	82.6	0.0
Queue Length 95th (m)	38.8	38.7	#93.5	63.6	0.0	20.8	104.3	13.3	4.5	108.9	6.8
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	375	940	298	462	468	487	2374	1105	442	2163	992
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.33	0.78	0.28	0.02	0.23	0.37	0.21	0.03	0.42	0.10

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 7 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.81		
Intersection Signal Delay: 24.6	Intersection LOS: C	
Intersection Capacity Utilization 74.3%	ICU Level of Service D	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	128	183	232	130	10	113	887	231	15	903	97
Future Volume (vph)	90	128	183	232	130	10	113	887	231	15	903	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3328		1785	1921	1597	1785	3650	1577	1785	3650	1597
Flt Permitted	0.67	1.00		0.24	1.00	1.00	0.25	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)	1266	3328		455	1921	1597	462	3650	1577	551	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	90	128	183	232	130	10	113	887	231	15	903	97
RTOR Reduction (vph)	0	168	0	0	0	9	0	0	84	0	0	40
Lane Group Flow (vph)	90	143	0	232	130	1	113	887	147	15	903	57
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	25.3	13.5		37.1	22.3	22.3	110.1	101.1	101.1	98.8	94.8	94.8
Effective Green, g (s)	25.3	13.5		37.1	22.3	22.3	110.1	101.1	101.1	98.8	94.8	94.8
Actuated g/C Ratio	0.16	0.08		0.23	0.14	0.14	0.69	0.63	0.63	0.62	0.59	0.59
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	238	280		276	267	222	403	2306	996	371	2162	946
v/s Ratio Prot	0.03	0.04		c0.11	0.07		c0.02	c0.24		0.00	c0.25	
v/s Ratio Perm	0.03			c0.09		0.00	0.17		0.09	0.02		0.04
v/c Ratio	0.38	0.51		0.84	0.49	0.01	0.28	0.38	0.15	0.04	0.42	0.06
Uniform Delay, d1	59.7	70.1		54.7	63.6	59.3	10.2	14.3	12.0	12.0	17.7	13.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	1.6		20.0	1.4	0.0	0.4	0.5	0.3	0.0	0.6	0.1
Delay (s)	60.7	71.7		74.7	65.0	59.3	10.6	14.8	12.3	12.1	18.2	13.9
Level of Service	E	E		E	E	E	B	B	B	B	B	B
Approach Delay (s)		69.2			70.9			13.9			17.7	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	384	341	0	0	10
Future Vol, veh/h	3	384	341	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	384	341	0	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	341	0	-	0	539	171
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1229	-	-	-	477	849
Stage 1	-	-	-	-	698	-
Stage 2	-	-	-	-	822	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1229	-	-	-	476	849
Mov Cap-2 Maneuver	-	-	-	-	476	-
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	822	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1229	-	-	-	-	849
HCM Lane V/C Ratio	0.002	-	-	-	-	0.012
HCM Control Delay (s)	7.9	0	-	-	0	9.3
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	152	0	0	226
Future Vol, veh/h	0	0	152	0	0	226
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	152	0	0	226

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	265	76	0	0	152	0
Stage 1	152	-	-	-	-	-
Stage 2	113	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	707	976	-	-	1441	-
Stage 1	866	-	-	-	-	-
Stage 2	905	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	707	976	-	-	1441	-
Mov Cap-2 Maneuver	726	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	905	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1441	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

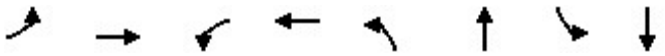
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	370	350	24	55	78
Future Vol, veh/h	22	370	350	24	55	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	370	350	24	55	78

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	374	0	-	0	591	187
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1196	-	-	-	443	830
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	793	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1196	-	-	-	435	830
Mov Cap-2 Maneuver	-	-	-	-	435	-
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	793	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1196	-	-	-	435	830
HCM Lane V/C Ratio	0.018	-	-	-	0.126	0.094
HCM Control Delay (s)	8.1	-	-	-	14.5	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.3

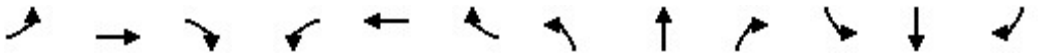


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	89	303	2	373	6	11	83	0
Future Volume (vph)	89	303	2	373	6	11	83	0
Lane Group Flow (vph)	89	304	2	424	6	11	83	144
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	9.0	62.0	53.0	53.0	38.0	38.0	10.0	48.0
Total Split (%)	8.2%	56.4%	48.2%	48.2%	34.5%	34.5%	9.1%	43.6%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	84.0	80.0	71.8	71.8	12.0	12.0	20.0	16.0
Actuated g/C Ratio	0.76	0.73	0.65	0.65	0.11	0.11	0.18	0.15
v/c Ratio	0.12	0.11	0.00	0.18	0.04	0.03	0.33	0.18
Control Delay	4.3	5.1	10.0	8.6	44.8	44.1	40.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	5.1	10.0	8.6	44.8	44.1	40.7	0.5
LOS	A	A	A	A	D	D	D	A
Approach Delay		4.9		8.6		44.4		15.2
Approach LOS		A		A		D		B
Queue Length 50th (m)	3.3	7.7	0.2	15.8	1.2	1.2	17.0	0.0
Queue Length 95th (m)	10.2	16.6	1.3	30.8	5.4	4.1	28.8	0.0
Internal Link Dist (m)		689.8		209.6		564.3		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	749	2654	688	2344	350	1028	256	1426
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.11	0.00	0.18	0.02	0.01	0.32	0.10

Intersection Summary			
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 48 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 9.2		Intersection LOS: A	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	303	1	2	373	51	6	11	0	83	0	144
Future Volume (vph)	89	303	1	2	373	51	6	11	0	83	0	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.98		1.00	1.00		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3648		1767	3584		1785	3650		1785	3103	
Flt Permitted	0.48	1.00		0.57	1.00		0.66	1.00		0.53	1.00	
Satd. Flow (perm)	908	3648		1054	3584		1241	3650		995	3103	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	89	303	1	2	373	51	6	11	0	83	0	144
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	119	0
Lane Group Flow (vph)	89	304	0	2	417	0	6	11	0	83	25	0
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	76.6	76.6		67.8	67.8		7.2	7.2		19.4	19.4	
Effective Green, g (s)	76.6	76.6		67.8	67.8		7.2	7.2		19.4	19.4	
Actuated g/C Ratio	0.70	0.70		0.62	0.62		0.07	0.07		0.18	0.18	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	678	2540		649	2209		81	238		241	547	
v/s Ratio Prot	c0.01	0.08			c0.12			0.00		c0.03	0.01	
v/s Ratio Perm	0.08			0.00			0.00			c0.03		
v/c Ratio	0.13	0.12		0.00	0.19		0.07	0.05		0.34	0.05	
Uniform Delay, d1	5.4	5.5		8.1	9.2		48.3	48.2		39.2	37.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.0	0.2		0.4	0.1		0.9	0.0	
Delay (s)	5.5	5.6		8.1	9.4		48.7	48.3		40.0	37.7	
Level of Service	A	A		A	A		D	D		D	D	
Approach Delay (s)		5.6			9.3			48.4			38.5	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	3	1	18	1	118	1	134	4	41	187	2
Future Vol, veh/h	1	3	1	18	1	118	1	134	4	41	187	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	1	3	1	18	1	118	1	134	4	41	187	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	339	409	94	315	409	69	189	0	0	138	0	0
Stage 1	269	269	-	138	138	-	-	-	-	-	-	-
Stage 2	70	140	-	177	271	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.52	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.01	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	596	535	951	619	533	986	1397	-	-	1458	-	-
Stage 1	719	690	-	857	784	-	-	-	-	-	-	-
Stage 2	938	785	-	813	686	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	513	519	951	602	518	986	1397	-	-	1458	-	-
Mov Cap-2 Maneuver	513	519	-	602	518	-	-	-	-	-	-	-
Stage 1	718	671	-	856	783	-	-	-	-	-	-	-
Stage 2	824	784	-	786	667	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	9.5	0.1	1.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1397	-	-	513	585	602	979	1458	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.007	0.03	0.122	0.028	-	-
HCM Control Delay (s)	7.6	-	-	12	11.2	11.2	9.2	7.5	-	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.1	0.4	0.1	-	-

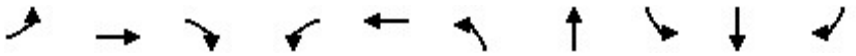
Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	32	19	6	40	3	91	1	17	4	2	5
Future Vol, veh/h	0	32	19	6	40	3	91	1	17	4	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	32	19	6	40	3	91	1	17	4	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	51	0	0	99	97	42	105	105	42
Stage 1	-	-	-	-	-	-	42	42	-	54	54	-
Stage 2	-	-	-	-	-	-	57	55	-	51	51	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1579	-	-	1568	-	-	888	797	1034	880	789	1034
Stage 1	-	-	-	-	-	-	978	864	-	963	854	-
Stage 2	-	-	-	-	-	-	960	853	-	967	856	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1579	-	-	1568	-	-	879	794	1034	862	786	1034
Mov Cap-2 Maneuver	-	-	-	-	-	-	879	794	-	862	786	-
Stage 1	-	-	-	-	-	-	978	864	-	963	851	-
Stage 2	-	-	-	-	-	-	949	850	-	950	856	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.9	9.6	9
HCM LOS			A	A

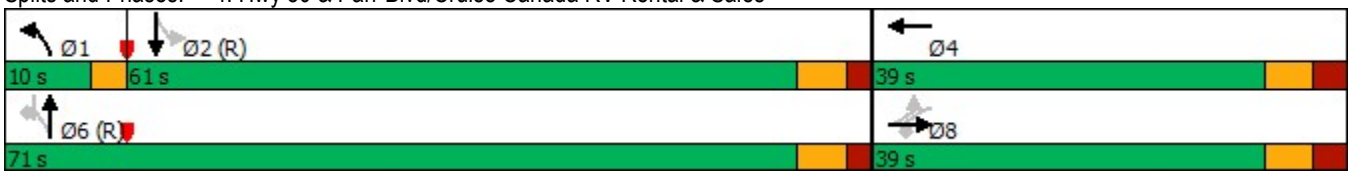
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	899	1579	-	-	1568	-	-	915
HCM Lane V/C Ratio	0.121	-	-	-	0.004	-	-	0.012
HCM Control Delay (s)	9.6	0	-	-	7.3	0	-	9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	31	0	44	4	2	36	991	6	975	22
Future Volume (vph)	31	0	44	4	2	36	991	6	975	22
Lane Group Flow (vph)	0	31	44	0	8	36	991	6	975	22
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	71.0	61.0	61.0	71.0
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	9.1%	64.5%	55.5%	55.5%	64.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.8	8.8		8.8	94.3	92.4	87.0	87.0	92.4
Actuated g/C Ratio		0.08	0.08		0.08	0.86	0.84	0.79	0.79	0.84
v/c Ratio		0.27	0.24		0.07	0.07	0.32	0.01	0.34	0.02
Control Delay		53.6	10.7		41.9	2.1	2.9	4.8	5.1	0.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		53.6	10.7		41.9	2.1	2.9	4.8	5.1	0.4
LOS		D	B		D	A	A	A	A	A
Approach Delay		28.4			41.9		2.9		5.0	
Approach LOS		C			D		A		A	
Queue Length 50th (m)		6.8	0.0		1.3	1.0	23.9	0.3	37.1	0.0
Queue Length 95th (m)		16.4	7.3		6.3	2.9	35.4	1.7	52.9	0.8
Internal Link Dist (m)		828.8			20.9		732.4		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		421	508		446	512	3067	429	2887	1319
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.07	0.09		0.02	0.07	0.32	0.01	0.34	0.02

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 105 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	0	44	4	2	2	36	991	0	6	975	22
Future Volume (vph)	31	0	44	4	2	2	36	991	0	6	975	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1823	1597		1801		1785	3650		1784	3650	1562
Flt Permitted		0.75	1.00		0.83		0.27	1.00		0.29	1.00	1.00
Satd. Flow (perm)		1444	1597		1524		503	3650		543	3650	1562
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	31	0	44	4	2	2	36	991	0	6	975	22
RTOR Reduction (vph)	0	0	41	0	2	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	31	3	0	6	0	36	991	0	6	975	18
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		7.2	7.2		7.2		89.8	89.8		83.2	83.2	89.8
Effective Green, g (s)		7.2	7.2		7.2		89.8	89.8		83.2	83.2	89.8
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82		0.76	0.76	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		94	104		99		452	2979		410	2760	1275
v/s Ratio Prot							0.00	c0.27			c0.27	
v/s Ratio Perm		c0.02	0.00		0.00		0.06			0.01		0.01
v/c Ratio		0.33	0.03		0.06		0.08	0.33		0.01	0.35	0.01
Uniform Delay, d1		49.1	48.1		48.2		2.2	2.5		3.3	4.5	1.9
Progression Factor		1.00	1.01		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.1	0.1		0.3		0.1	0.3		0.1	0.4	0.0
Delay (s)		51.4	48.5		48.5		2.2	2.8		3.4	4.8	1.9
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		49.7			48.5			2.8			4.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

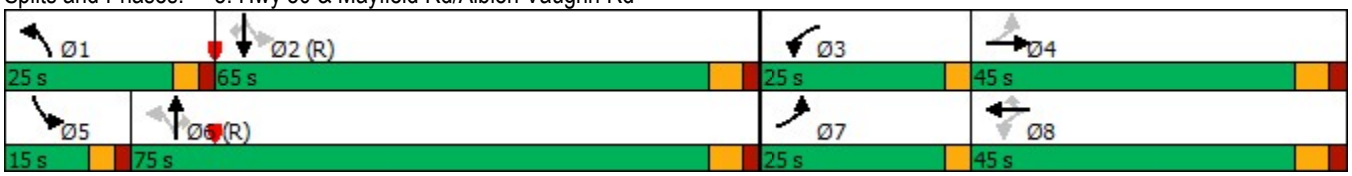


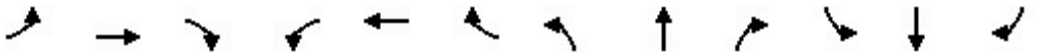
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	90	128	232	130	10	113	887	231	15	903	97
Future Volume (vph)	90	128	232	130	10	113	887	231	15	903	97
Lane Group Flow (vph)	90	311	232	130	10	113	887	231	15	903	97
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6	2		2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	41.3	15.0	41.3	41.3
Total Split (s)	25.0	45.0	25.0	45.0	45.0	25.0	75.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	28.1%	15.6%	28.1%	28.1%	15.6%	46.9%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	28.8	13.5	40.6	22.3	22.3	109.7	104.1	104.1	106.1	94.8	94.8
Actuated g/C Ratio	0.18	0.08	0.25	0.14	0.14	0.69	0.65	0.65	0.66	0.59	0.59
v/c Ratio	0.34	0.70	0.81	0.49	0.03	0.28	0.37	0.21	0.03	0.42	0.10
Control Delay	50.0	37.4	72.6	70.1	0.2	10.3	14.8	2.4	8.7	18.8	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.0	37.4	72.6	70.1	0.2	10.3	14.8	2.4	8.7	18.8	2.0
LOS	D	D	E	E	A	B	B	A	A	B	A
Approach Delay		40.2		69.8			12.0			17.1	
Approach LOS		D		E			B			B	
Queue Length 50th (m)	23.9	22.1	67.3	40.9	0.0	11.4	60.0	0.4	1.5	82.6	0.0
Queue Length 95th (m)	38.8	38.7	#93.5	63.6	0.0	20.8	104.3	13.3	4.5	108.9	6.8
Internal Link Dist (m)		330.4		656.8			717.1			732.4	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		85.0	35.0		120.0
Base Capacity (vph)	375	940	298	462	468	487	2374	1105	442	2163	992
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.33	0.78	0.28	0.02	0.23	0.37	0.21	0.03	0.42	0.10

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 7 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.81		
Intersection Signal Delay: 24.6	Intersection LOS: C	
Intersection Capacity Utilization 74.3%	ICU Level of Service D	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	128	183	232	130	10	113	887	231	15	903	97
Future Volume (vph)	90	128	183	232	130	10	113	887	231	15	903	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1785	3328		1785	1921	1597	1785	3650	1577	1785	3650	1597
Flt Permitted	0.67	1.00		0.24	1.00	1.00	0.25	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)	1266	3328		455	1921	1597	462	3650	1577	551	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	90	128	183	232	130	10	113	887	231	15	903	97
RTOR Reduction (vph)	0	168	0	0	0	9	0	0	84	0	0	40
Lane Group Flow (vph)	90	143	0	232	130	1	113	887	147	15	903	57
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	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	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6		6	2		2
Actuated Green, G (s)	25.3	13.5		37.1	22.3	22.3	110.1	101.1	101.1	98.8	94.8	94.8
Effective Green, g (s)	25.3	13.5		37.1	22.3	22.3	110.1	101.1	101.1	98.8	94.8	94.8
Actuated g/C Ratio	0.16	0.08		0.23	0.14	0.14	0.69	0.63	0.63	0.62	0.59	0.59
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3	6.3	5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	238	280		276	267	222	403	2306	996	371	2162	946
v/s Ratio Prot	0.03	0.04		c0.11	0.07		c0.02	c0.24		0.00	c0.25	
v/s Ratio Perm	0.03			c0.09		0.00	0.17		0.09	0.02		0.04
v/c Ratio	0.38	0.51		0.84	0.49	0.01	0.28	0.38	0.15	0.04	0.42	0.06
Uniform Delay, d1	59.7	70.1		54.7	63.6	59.3	10.2	14.3	12.0	12.0	17.7	13.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	1.6		20.0	1.4	0.0	0.4	0.5	0.3	0.0	0.6	0.1
Delay (s)	60.7	71.7		74.7	65.0	59.3	10.6	14.8	12.3	12.1	18.2	13.9
Level of Service	E	E		E	E	E	B	B	B	B	B	B
Approach Delay (s)		69.2			70.9			13.9			17.7	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	384	341	0	0	10
Future Vol, veh/h	3	384	341	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	384	341	0	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	341	0	-	0	539	171
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1229	-	-	-	477	849
Stage 1	-	-	-	-	698	-
Stage 2	-	-	-	-	822	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1229	-	-	-	476	849
Mov Cap-2 Maneuver	-	-	-	-	476	-
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	822	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1229	-	-	-	-	849
HCM Lane V/C Ratio	0.002	-	-	-	-	0.012
HCM Control Delay (s)	7.9	0	-	-	0	9.3
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	152	0	0	226
Future Vol, veh/h	0	0	152	0	0	226
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	152	0	0	226

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	265	76	0	0	152	0
Stage 1	152	-	-	-	-	-
Stage 2	113	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	707	976	-	-	1441	-
Stage 1	866	-	-	-	-	-
Stage 2	905	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	707	976	-	-	1441	-
Mov Cap-2 Maneuver	726	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	905	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1441	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

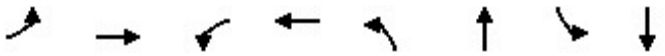
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	370	350	24	55	78
Future Vol, veh/h	22	370	350	24	55	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	370	350	24	55	78

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	374	0	-	0	591	187
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1196	-	-	-	443	830
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	793	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1196	-	-	-	435	830
Mov Cap-2 Maneuver	-	-	-	-	435	-
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	793	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1196	-	-	-	435	830
HCM Lane V/C Ratio	0.018	-	-	-	0.126	0.094
HCM Control Delay (s)	8.1	-	-	-	14.5	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.3

2033 Future Total Intersection Capacity Analysis

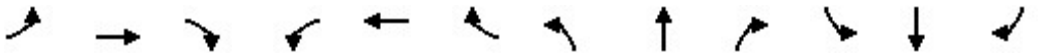


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	350	426	39	376	23	310	61	354
Future Volume (vph)	350	426	39	376	23	310	61	354
Lane Group Flow (vph)	350	458	39	415	23	341	61	592
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	15.0	80.0	65.0	65.0	32.0	32.0	18.0	50.0
Total Split (%)	11.5%	61.5%	50.0%	50.0%	24.6%	24.6%	13.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	91.8	87.8	70.1	70.1	18.2	18.2	32.2	28.2
Actuated g/C Ratio	0.71	0.68	0.54	0.54	0.14	0.14	0.25	0.22
v/c Ratio	0.48	0.19	0.08	0.21	0.26	0.67	0.26	0.70
Control Delay	10.2	8.6	18.8	17.1	56.5	58.7	38.4	39.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.2	8.6	18.8	17.1	56.5	58.7	38.4	39.9
LOS	B	A	B	B	E	E	D	D
Approach Delay		9.3		17.3		58.6		39.7
Approach LOS		A		B		E		D
Queue Length 50th (m)	32.2	22.2	5.0	29.3	5.7	46.0	12.8	60.3
Queue Length 95th (m)	55.8	35.1	13.6	47.1	14.7	60.6	23.1	75.3
Internal Link Dist (m)		689.8		209.6		684.9		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	737	2443	494	1946	125	697	288	1223
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.19	0.08	0.21	0.18	0.49	0.21	0.48

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 92 (71%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 27.5	Intersection LOS: C
Intersection Capacity Utilization 79.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	426	32	39	376	39	23	310	31	61	354	238
Future Volume (vph)	350	426	32	39	376	39	23	310	31	61	354	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3612		1785	3599		1785	3600		1785	3430	
Flt Permitted	0.48	1.00		0.49	1.00		0.35	1.00		0.33	1.00	
Satd. Flow (perm)	899	3612		917	3599		652	3600		621	3430	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	350	426	32	39	376	39	23	310	31	61	354	238
RTOR Reduction (vph)	0	3	0	0	5	0	0	6	0	0	103	0
Lane Group Flow (vph)	350	455	0	39	410	0	23	335	0	61	489	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	87.1	87.1		69.4	69.4		18.2	18.2		28.9	28.9	
Effective Green, g (s)	87.1	87.1		69.4	69.4		18.2	18.2		28.9	28.9	
Actuated g/C Ratio	0.67	0.67		0.53	0.53		0.14	0.14		0.22	0.22	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	702	2420		489	1921		91	504		206	762	
v/s Ratio Prot	c0.06	0.13			0.11			0.09		0.02	c0.14	
v/s Ratio Perm	c0.28			0.04			0.04			0.05		
v/c Ratio	0.50	0.19		0.08	0.21		0.25	0.66		0.30	0.64	
Uniform Delay, d1	8.9	8.1		14.8	15.9		49.8	53.0		41.0	45.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.2		0.3	0.3		1.5	3.3		0.8	1.9	
Delay (s)	9.5	8.3		15.1	16.2		51.3	56.3		41.8	47.7	
Level of Service	A	A		B	B		D	E		D	D	
Approach Delay (s)		8.8			16.1			56.0			47.1	
Approach LOS		A			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	33	13	142	11	634	54	154	609	5
Future Vol, veh/h	1	1	1	33	13	142	11	634	54	154	609	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	1	1	33	13	142	11	634	54	154	609	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1263	1627	305	1296	1605	344	614	0	0	688	0	0
Stage 1	917	917	-	683	683	-	-	-	-	-	-	-
Stage 2	346	710	-	613	922	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	129	103	697	122	106	658	975	-	-	916	-	-
Stage 1	297	354	-	410	452	-	-	-	-	-	-	-
Stage 2	649	440	-	451	352	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	78	85	697	104	87	658	975	-	-	916	-	-
Mov Cap-2 Maneuver	78	85	-	104	87	-	-	-	-	-	-	-
Stage 1	294	295	-	405	447	-	-	-	-	-	-	-
Stage 2	489	435	-	373	293	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	36.6	24.7	0.1	1.9
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	975	-	-	78	152	104	424	916	-	-
HCM Lane V/C Ratio	0.011	-	-	0.013	0.013	0.317	0.366	0.168	-	-
HCM Control Delay (s)	8.7	-	-	51.8	29	54.9	18.3	9.7	-	-
HCM Lane LOS	A	-	-	F	D	F	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	1.2	1.6	0.6	-	-

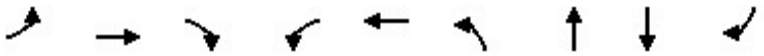
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	143	80	22	177	12	27	5	7	7	4	14
Future Vol, veh/h	3	143	80	22	177	12	27	5	7	7	4	14
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	143	80	22	177	12	27	5	7	7	4	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	190	0	0	223	0	0	425	423	183	423	457	184
Stage 1	-	-	-	-	-	-	189	189	-	228	228	-
Stage 2	-	-	-	-	-	-	236	234	-	195	229	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1396	-	-	1358	-	-	543	526	865	545	503	864
Stage 1	-	-	-	-	-	-	817	748	-	779	719	-
Stage 2	-	-	-	-	-	-	772	715	-	811	718	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1395	-	-	1358	-	-	523	515	865	528	492	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	523	515	-	528	492	-
Stage 1	-	-	-	-	-	-	815	747	-	777	705	-
Stage 2	-	-	-	-	-	-	742	701	-	797	717	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.8	11.9	10.6
HCM LOS			B	B

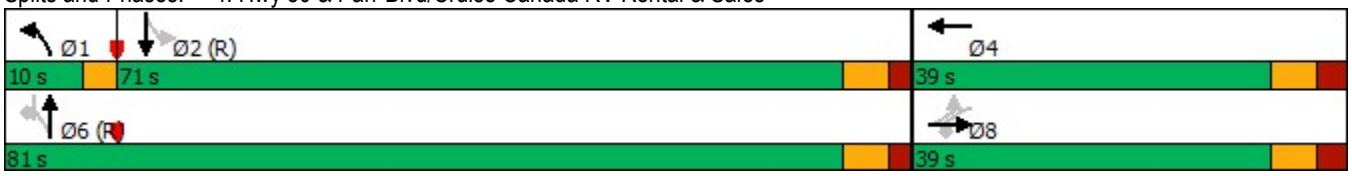
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	562	1395	-	-	1358	-	-	665
HCM Lane V/C Ratio	0.069	0.002	-	-	0.016	-	-	0.038
HCM Control Delay (s)	11.9	7.6	0	-	7.7	0	-	10.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

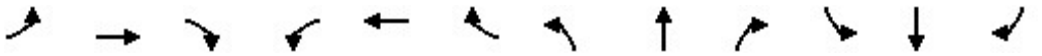


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	30	0	102	1	0	202	1100	1219	55
Future Volume (vph)	30	0	102	1	0	202	1100	1219	55
Lane Group Flow (vph)	0	30	102	0	1	202	1102	1219	55
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	NA	custom
Protected Phases		8			4	1	6	2	
Permitted Phases	8		8	8		6			6
Detector Phase	8	8	8	8	4	1	6	2	6
Switch Phase									
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		8.9	8.9		8.9	101.2	98.1	85.4	98.1
Actuated g/C Ratio		0.07	0.07		0.07	0.84	0.82	0.71	0.82
v/c Ratio		0.28	0.48		0.01	0.49	0.37	0.47	0.04
Control Delay		59.0	17.8		50.0	5.9	3.3	8.6	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		59.0	17.8		50.0	5.9	3.3	8.6	1.2
LOS		E	B		D	A	A	A	A
Approach Delay		27.2			50.0		3.7	8.3	
Approach LOS		C			D		A	A	
Queue Length 50th (m)		7.2	0.0		0.2	6.0	27.6	56.9	0.7
Queue Length 95th (m)		17.1	17.3		2.1	11.9	40.9	90.5	3.2
Internal Link Dist (m)		828.8			20.9		520.2	332.3	
Turn Bay Length (m)						35.0			20.0
Base Capacity (vph)		388	501		379	413	2985	2598	1282
Starvation Cap Reductn		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0
Reduced v/c Ratio		0.08	0.20		0.00	0.49	0.37	0.47	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 7.0	Intersection LOS: A
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales

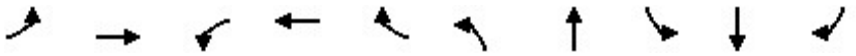




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	102	1	0	0	202	1100	2	0	1219	55
Future Volume (vph)	30	0	102	1	0	0	202	1100	2	0	1219	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		1.00		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.95		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1825	1597		1825		1785	3649			3650	1561
Flt Permitted		0.76	1.00		0.74		0.19	1.00			1.00	1.00
Satd. Flow (perm)		1455	1597		1417		354	3649			3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	0	102	1	0	0	202	1100	2	0	1219	55
RTOR Reduction (vph)	0	0	94	0	0	0	0	0	0	0	0	6
Lane Group Flow (vph)	0	30	8	0	1	0	202	1102	0	0	1219	49
Confl. Peds. (#/hr)							1		2	2		1
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		8.9	8.9		8.9		98.1	98.1			85.4	98.1
Effective Green, g (s)		8.9	8.9		8.9		98.1	98.1			85.4	98.1
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82			0.71	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1			6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		107	118		105		405	2983			2597	1276
v/s Ratio Prot							c0.04	0.30			0.33	
v/s Ratio Perm		c0.02	0.00		0.00		c0.37					0.03
v/c Ratio		0.28	0.06		0.01		0.50	0.37			0.47	0.04
Uniform Delay, d1		52.5	51.7		51.5		4.3	2.9			7.5	2.1
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.4	0.2		0.0		1.0	0.4			0.6	0.1
Delay (s)		54.0	51.9		51.5		5.2	3.2			8.1	2.1
Level of Service		D	D		D		A	A			A	A
Approach Delay (s)		52.4			51.5			3.5			7.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

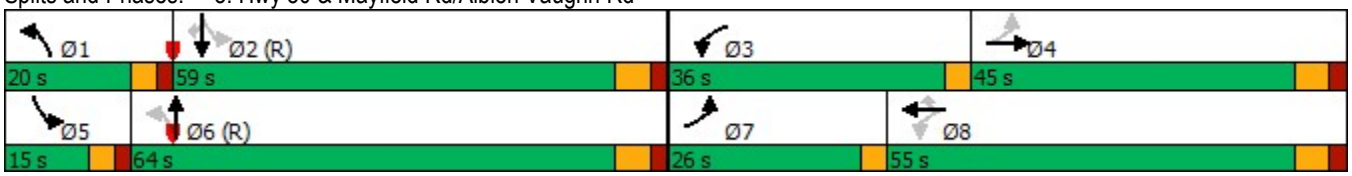


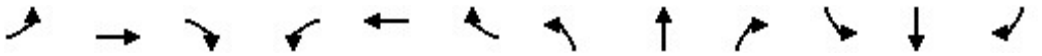
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	62	162	370	298	40	176	1129	31	1178	64
Future Volume (vph)	62	162	370	298	40	176	1129	31	1178	64
Lane Group Flow (vph)	62	379	370	298	40	176	1299	31	1178	64
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6	5	2	
Permitted Phases	4		8		8	6		2		2
Detector Phase	7	4	3	8	8	1	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	15.0	41.3	41.3
Total Split (s)	26.0	45.0	36.0	55.0	55.0	20.0	64.0	15.0	59.0	59.0
Total Split (%)	16.3%	28.1%	22.5%	34.4%	34.4%	12.5%	40.0%	9.4%	36.9%	36.9%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	27.9	15.2	52.9	39.1	39.1	99.0	85.8	86.7	75.4	75.4
Actuated g/C Ratio	0.17	0.10	0.33	0.24	0.24	0.62	0.54	0.54	0.47	0.47
v/c Ratio	0.27	0.79	0.92	0.64	0.09	0.59	0.47	0.12	0.69	0.08
Control Delay	40.5	49.0	74.4	61.0	0.6	25.4	24.6	15.3	37.4	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.5	49.0	74.4	61.0	0.6	25.4	24.6	15.3	37.4	1.5
LOS	D	D	E	E	A	C	C	B	D	A
Approach Delay		47.8		64.6			24.7		35.1	
Approach LOS		D		E			C		D	
Queue Length 50th (m)	14.3	35.1	103.8	90.8	0.0	24.3	100.6	3.9	162.7	0.0
Queue Length 95th (m)	24.7	52.8	#150.1	122.3	0.8	48.7	123.3	9.6	217.0	2.9
Internal Link Dist (m)		330.4		656.8			717.1		188.2	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		35.0		120.0
Base Capacity (vph)	383	939	417	582	537	307	2765	264	1719	804
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.40	0.89	0.51	0.07	0.57	0.47	0.12	0.69	0.08

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 27 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.92		
Intersection Signal Delay: 38.0	Intersection LOS: D	
Intersection Capacity Utilization 92.4%	ICU Level of Service F	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	162	217	370	298	40	176	1129	170	31	1178	64
Future Volume (vph)	62	162	217	370	298	40	176	1129	170	31	1178	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1785	3337		1785	1921	1597	1785	5142		1785	3650	1597
Flt Permitted	0.58	1.00		0.21	1.00	1.00	0.11	1.00		0.17	1.00	1.00
Satd. Flow (perm)	1086	3337		398	1921	1597	205	5142		318	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	62	162	217	370	298	40	176	1129	170	31	1178	64
RTOR Reduction (vph)	0	162	0	0	0	30	0	9	0	0	0	34
Lane Group Flow (vph)	62	217	0	370	298	10	176	1290	0	31	1178	30
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6			2		2
Actuated Green, G (s)	23.9	15.9		50.1	39.1	39.1	97.1	84.1		82.7	74.7	74.7
Effective Green, g (s)	23.9	15.9		50.1	39.1	39.1	97.1	84.1		82.7	74.7	74.7
Actuated g/C Ratio	0.15	0.10		0.31	0.24	0.24	0.61	0.53		0.52	0.47	0.47
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	197	331		395	469	390	296	2702		237	1704	745
v/s Ratio Prot	0.02	0.07		c0.18	0.16		c0.06	0.25		0.01	c0.32	
v/s Ratio Perm	0.03			c0.11		0.01	0.30			0.06		0.02
v/c Ratio	0.31	0.66		0.94	0.64	0.03	0.59	0.48		0.13	0.69	0.04
Uniform Delay, d1	60.0	69.4		48.4	54.1	46.0	23.4	24.0		19.5	33.6	23.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.9	4.6		29.4	2.8	0.0	3.2	0.6		0.3	2.3	0.1
Delay (s)	60.9	74.0		77.9	56.9	46.0	26.6	24.6		19.7	35.9	23.3
Level of Service	E	E		E	E	D	C	C		B	D	C
Approach Delay (s)		72.2			67.3			24.9			34.9	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	507	433	0	0	2
Future Vol, veh/h	10	507	433	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	507	433	0	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	433	0	-	0	707	217
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	274	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1137	-	-	-	374	794
Stage 1	-	-	-	-	627	-
Stage 2	-	-	-	-	753	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1137	-	-	-	370	794
Mov Cap-2 Maneuver	-	-	-	-	370	-
Stage 1	-	-	-	-	619	-
Stage 2	-	-	-	-	753	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1137	-	-	-	-	794
HCM Lane V/C Ratio	0.009	-	-	-	-	0.003
HCM Control Delay (s)	8.2	0	-	-	0	9.5
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	684	0	0	654
Future Vol, veh/h	0	0	684	0	0	654
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	684	0	0	654

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1011	342	0	0	684	0
Stage 1	684	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	239	660	-	-	919	-
Stage 1	468	-	-	-	-	-
Stage 2	709	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	239	660	-	-	919	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	709	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	919	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

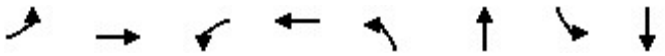
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	79	438	435	89	14	19
Future Vol, veh/h	79	438	435	89	14	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	79	438	435	89	14	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	524	0	-	0	857	262
Stage 1	-	-	-	-	480	-
Stage 2	-	-	-	-	377	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1053	-	-	-	300	743
Stage 1	-	-	-	-	594	-
Stage 2	-	-	-	-	669	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1053	-	-	-	278	743
Mov Cap-2 Maneuver	-	-	-	-	278	-
Stage 1	-	-	-	-	549	-
Stage 2	-	-	-	-	669	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1053	-	-	-	278	743
HCM Lane V/C Ratio	0.075	-	-	-	0.05	0.026
HCM Control Delay (s)	8.7	-	-	-	18.6	10
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2	0.1

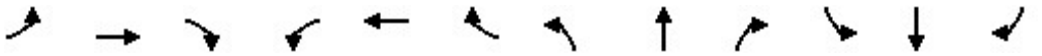


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	303	409	26	442	26	524	94	489
Future Volume (vph)	303	409	26	442	26	524	94	489
Lane Group Flow (vph)	303	444	26	517	26	554	94	931
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	12.0	80.0	68.0	68.0	36.0	36.0	14.0	50.0
Total Split (%)	9.2%	61.5%	52.3%	52.3%	27.7%	27.7%	10.8%	38.5%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	82.7	78.7	64.4	64.4	24.6	24.6	41.3	37.3
Actuated g/C Ratio	0.64	0.61	0.50	0.50	0.19	0.19	0.32	0.29
v/c Ratio	0.53	0.20	0.06	0.29	0.46	0.81	0.44	0.84
Control Delay	15.3	12.1	19.2	19.7	71.2	59.5	37.0	41.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.3	12.1	19.2	19.7	71.2	59.5	37.0	41.7
LOS	B	B	B	B	E	E	D	D
Approach Delay		13.4		19.7		60.0		41.3
Approach LOS		B		B		E		D
Queue Length 50th (m)	34.3	26.6	3.8	42.6	6.3	75.2	18.0	100.7
Queue Length 95th (m)	55.4	38.9	9.5	55.7	16.8	92.8	30.1	121.1
Internal Link Dist (m)		689.8		209.6		684.9		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	576	2186	460	1777	68	810	230	1248
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.20	0.06	0.29	0.38	0.68	0.41	0.75

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 33.8	Intersection LOS: C
Intersection Capacity Utilization 89.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	303	409	35	26	442	75	26	524	30	94	489	442
Future Volume (vph)	303	409	35	26	442	75	26	524	30	94	489	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3607		1785	3571		1785	3618		1785	3390	
Flt Permitted	0.41	1.00		0.49	1.00		0.16	1.00		0.18	1.00	
Satd. Flow (perm)	767	3607		930	3571		306	3618		340	3390	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	303	409	35	26	442	75	26	524	30	94	489	442
RTOR Reduction (vph)	0	4	0	0	10	0	0	3	0	0	135	0
Lane Group Flow (vph)	303	440	0	26	507	0	26	551	0	94	796	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	78.7	78.7		64.4	64.4		24.6	24.6		37.3	37.3	
Effective Green, g (s)	78.7	78.7		64.4	64.4		24.6	24.6		37.3	37.3	
Actuated g/C Ratio	0.61	0.61		0.50	0.50		0.19	0.19		0.29	0.29	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	552	2183		460	1769		57	684		205	972	
v/s Ratio Prot	c0.05	0.12			0.14			0.15		0.03	c0.23	
v/s Ratio Perm	c0.28			0.03			0.09			0.10		
v/c Ratio	0.55	0.20		0.06	0.29		0.46	0.81		0.46	0.82	
Uniform Delay, d1	12.5	11.5		17.0	19.3		46.8	50.4		36.1	43.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.2		0.2	0.4		5.7	6.9		1.6	5.5	
Delay (s)	13.7	11.7		17.3	19.7		52.5	57.3		37.7	48.7	
Level of Service	B	B		B	B		D	E		D	D	
Approach Delay (s)		12.5			19.6			57.1			47.7	
Approach LOS		B			B			E			D	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	4	13	31	6	186	13	858	21	127	978	4
Future Vol, veh/h	3	4	13	31	6	186	13	858	21	127	978	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	4	13	31	6	186	13	858	21	127	978	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1690	2137	489	1640	2131	440	982	0	0	879	0	0
Stage 1	1232	1232	-	895	895	-	-	-	-	-	-	-
Stage 2	458	905	-	745	1236	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	62	50	530	68	50	570	711	-	-	777	-	-
Stage 1	191	252	-	306	362	-	-	-	-	-	-	-
Stage 2	557	358	-	377	250	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	32	41	530	53	41	570	711	-	-	777	-	-
Mov Cap-2 Maneuver	32	41	-	53	41	-	-	-	-	-	-	-
Stage 1	188	211	-	300	355	-	-	-	-	-	-	-
Stage 2	362	352	-	302	209	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	48.6	38.4	0.1	1.2
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	711	-	-	32	139	53	406	777	-	-
HCM Lane V/C Ratio	0.018	-	-	0.094	0.122	0.585	0.473	0.163	-	-
HCM Control Delay (s)	10.2	-	-	128.8	34.5	142.6	21.6	10.5	-	-
HCM Lane LOS	B	-	-	F	D	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.4	2.3	2.5	0.6	-	-

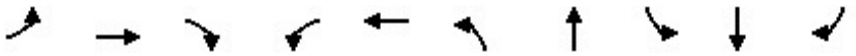
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	167	26	10	136	14	96	0	20	21	0	9
Future Vol, veh/h	4	167	26	10	136	14	96	0	20	21	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	167	26	10	136	14	96	0	20	21	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	150	0	0	193	0	0	356	358	180	361	364	143
Stage 1	-	-	-	-	-	-	188	188	-	163	163	-
Stage 2	-	-	-	-	-	-	168	170	-	198	201	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1444	-	-	1392	-	-	603	572	868	598	567	910
Stage 1	-	-	-	-	-	-	818	748	-	844	767	-
Stage 2	-	-	-	-	-	-	839	762	-	808	739	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1444	-	-	1392	-	-	592	566	868	579	561	910
Mov Cap-2 Maneuver	-	-	-	-	-	-	592	566	-	579	561	-
Stage 1	-	-	-	-	-	-	816	746	-	841	761	-
Stage 2	-	-	-	-	-	-	824	756	-	787	737	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	12.1	10.8
HCM LOS			B	B

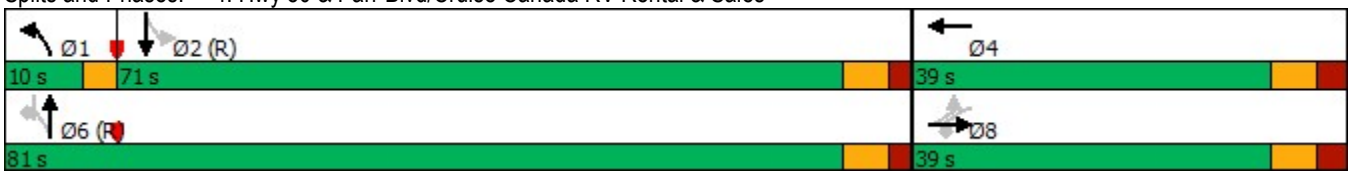
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	626	1444	-	-	1392	-	-	650
HCM Lane V/C Ratio	0.185	0.003	-	-	0.007	-	-	0.046
HCM Control Delay (s)	12.1	7.5	0	-	7.6	0	-	10.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.1

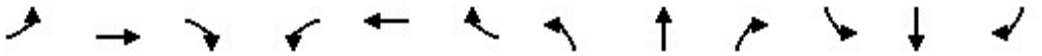


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	68	0	172	1	0	114	1335	1	1259	43
Future Volume (vph)	68	0	172	1	0	114	1335	1	1259	43
Lane Group Flow (vph)	0	68	172	0	2	114	1335	1	1259	43
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	81.0	71.0	71.0	81.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	8.3%	67.5%	59.2%	59.2%	67.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		11.4	11.4		11.4	98.7	95.6	85.6	85.6	95.6
Actuated g/C Ratio		0.10	0.10		0.10	0.82	0.80	0.71	0.71	0.80
v/c Ratio		0.50	0.60		0.01	0.32	0.46	0.00	0.48	0.03
Control Delay		63.3	20.5		0.0	4.6	4.7	6.0	8.7	1.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		63.3	20.5		0.0	4.6	4.7	6.0	8.7	1.4
LOS		E	C		A	A	A	A	A	A
Approach Delay		32.7					4.7		8.5	
Approach LOS		C					A		A	
Queue Length 50th (m)		16.3	5.4		0.0	4.0	44.4	0.1	62.7	0.3
Queue Length 95th (m)		30.6	26.8		0.0	9.3	67.7	0.7	93.3	3.0
Internal Link Dist (m)		828.8			20.9		520.2		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		387	536		451	365	2909	274	2604	1251
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.18	0.32		0.00	0.31	0.46	0.00	0.48	0.03

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 3 (3%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 8.6	Intersection LOS: A
Intersection Capacity Utilization 70.5%	ICU Level of Service C
Analysis Period (min) 15	

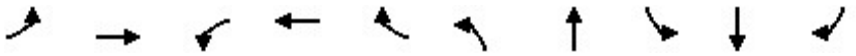
Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	0	172	1	0	1	114	1335	0	1	1259	43
Future Volume (vph)	68	0	172	1	0	1	114	1335	0	1	1259	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.99		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.93		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1820	1597		1735		1785	3650		1785	3650	1561
Flt Permitted		0.76	1.00		0.86		0.18	1.00		0.20	1.00	1.00
Satd. Flow (perm)		1450	1597		1537		336	3650		385	3650	1561
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	68	0	172	1	0	1	114	1335	0	1	1259	43
RTOR Reduction (vph)	0	0	135	0	2	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	68	37	0	0	0	114	1335	0	1	1259	36
Confl. Peds. (#/hr)	2					2	1					1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		11.4	11.4		11.4		95.6	95.6		85.6	85.6	95.6
Effective Green, g (s)		11.4	11.4		11.4		95.6	95.6		85.6	85.6	95.6
Actuated g/C Ratio		0.10	0.10		0.10		0.80	0.80		0.71	0.71	0.80
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		137	151		146		352	2907		274	2603	1243
v/s Ratio Prot							0.02	c0.37			c0.34	
v/s Ratio Perm		c0.05	0.02		0.00		0.24			0.00		0.02
v/c Ratio		0.50	0.25		0.00		0.32	0.46		0.00	0.48	0.03
Uniform Delay, d1		51.6	50.3		49.1		4.3	3.9		4.9	7.5	2.5
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.8	0.9		0.0		0.5	0.5		0.0	0.6	0.0
Delay (s)		54.4	51.2		49.2		4.8	4.4		5.0	8.2	2.6
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		52.1			49.2			4.5			8.0	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

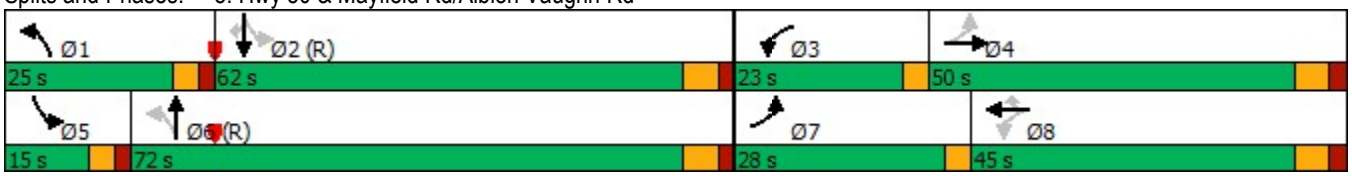


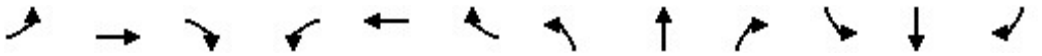
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	86	256	222	159	33	118	1180	36	1338	70
Future Volume (vph)	86	256	222	159	33	118	1180	36	1338	70
Lane Group Flow (vph)	86	537	222	159	33	118	1593	36	1338	70
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6	5	2	
Permitted Phases	4		8		8	6		2		2
Detector Phase	7	4	3	8	8	1	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	15.0	41.3	41.3
Total Split (s)	28.0	50.0	23.0	45.0	45.0	25.0	72.0	15.0	62.0	62.0
Total Split (%)	17.5%	31.3%	14.4%	28.1%	28.1%	15.6%	45.0%	9.4%	38.8%	38.8%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	38.3	23.8	49.3	31.8	31.8	100.7	89.4	95.4	84.1	84.1
Actuated g/C Ratio	0.24	0.15	0.31	0.20	0.20	0.63	0.56	0.60	0.53	0.53
v/c Ratio	0.26	0.83	0.84	0.42	0.08	0.50	0.56	0.17	0.70	0.08
Control Delay	40.9	56.3	69.6	58.7	0.4	19.9	24.0	14.3	32.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	56.3	69.6	58.7	0.4	19.9	24.0	14.3	32.5	0.2
LOS	D	E	E	E	A	B	C	B	C	A
Approach Delay		54.2		59.9			23.7		30.4	
Approach LOS		D		E			C		C	
Queue Length 50th (m)	20.8	65.1	58.5	46.7	0.0	14.7	124.2	4.3	172.5	0.0
Queue Length 95th (m)	33.1	83.4	#87.6	68.5	0.0	27.5	153.2	10.3	235.8	0.0
Internal Link Dist (m)		330.4		656.8			717.1		188.2	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		35.0		120.0
Base Capacity (vph)	465	1038	274	462	484	316	2847	217	1917	891
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.52	0.81	0.34	0.07	0.37	0.56	0.17	0.70	0.08

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 72 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		
Natural Cycle: 125		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay: 34.1	Intersection LOS: C	
Intersection Capacity Utilization 91.9%	ICU Level of Service F	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	256	281	222	159	33	118	1180	413	36	1338	70
Future Volume (vph)	86	256	281	222	159	33	118	1180	413	36	1338	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1785	3364		1785	1921	1597	1785	5041		1785	3650	1577
Flt Permitted	0.66	1.00		0.15	1.00	1.00	0.10	1.00		0.11	1.00	1.00
Satd. Flow (perm)	1233	3364		280	1921	1597	180	5041		198	3650	1577
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	86	256	281	222	159	33	118	1180	413	36	1338	70
RTOR Reduction (vph)	0	145	0	0	0	26	0	30	0	0	0	33
Lane Group Flow (vph)	86	392	0	222	159	7	118	1563	0	36	1338	37
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6			2		2
Actuated Green, G (s)	34.8	23.8		45.8	31.8	31.8	100.8	88.4		92.0	84.0	84.0
Effective Green, g (s)	34.8	23.8		45.8	31.8	31.8	100.8	88.4		92.0	84.0	84.0
Actuated g/C Ratio	0.22	0.15		0.29	0.20	0.20	0.63	0.55		0.58	0.52	0.52
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	306	500		258	381	317	237	2785		193	1916	827
v/s Ratio Prot	0.02	0.12		c0.10	0.08		c0.04	c0.31		0.01	c0.37	
v/s Ratio Perm	0.04			c0.14		0.00	0.27			0.10		0.02
v/c Ratio	0.28	0.78		0.86	0.42	0.02	0.50	0.56		0.19	0.70	0.04
Uniform Delay, d1	51.5	65.6		48.3	56.0	51.6	21.7	23.2		16.8	28.5	18.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	7.9		24.1	0.7	0.0	1.6	0.8		0.5	2.1	0.1
Delay (s)	52.0	73.5		72.4	56.7	51.6	23.3	24.0		17.2	30.6	18.6
Level of Service	D	E		E	E	D	C	C		B	C	B
Approach Delay (s)		70.6			64.7			24.0			29.7	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	529	455	0	0	10
Future Vol, veh/h	3	529	455	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	529	455	0	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	455	0	-	0	726	228
Stage 1	-	-	-	-	455	-
Stage 2	-	-	-	-	271	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1116	-	-	-	364	781
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	756	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1116	-	-	-	363	781
Mov Cap-2 Maneuver	-	-	-	-	363	-
Stage 1	-	-	-	-	609	-
Stage 2	-	-	-	-	756	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1116	-	-	-	-	781
HCM Lane V/C Ratio	0.003	-	-	-	-	0.013
HCM Control Delay (s)	8.2	0	-	-	0	9.7
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	874	0	0	1026
Future Vol, veh/h	0	0	874	0	0	1026
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	874	0	0	1026

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1387	437	0	0	874	0
Stage 1	874	-	-	-	-	-
Stage 2	513	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	136	573	-	-	781	-
Stage 1	373	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	136	573	-	-	781	-
Mov Cap-2 Maneuver	264	-	-	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	572	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	781	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

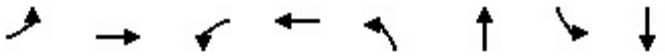
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	512	463	24	55	78
Future Vol, veh/h	22	512	463	24	55	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	512	463	24	55	78

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	487	0	-	0	775	244
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	300	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1086	-	-	-	339	763
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1086	-	-	-	332	763
Mov Cap-2 Maneuver	-	-	-	-	332	-
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1086	-	-	-	332	763
HCM Lane V/C Ratio	0.02	-	-	-	0.166	0.102
HCM Control Delay (s)	8.4	-	-	-	18	10.3
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6	0.3

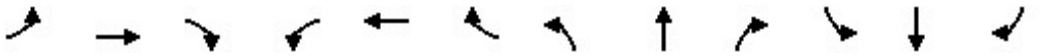


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	92	310	2	388	6	12	83	0
Future Volume (vph)	92	310	2	388	6	12	83	0
Lane Group Flow (vph)	92	311	2	439	6	12	83	148
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases	5	2		6		4	3	8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	6	6	4	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	9.5	37.0	37.0	37.0	37.0	37.0	12.5	37.0
Total Split (s)	9.0	62.0	53.0	53.0	38.0	38.0	10.0	48.0
Total Split (%)	8.2%	56.4%	48.2%	48.2%	34.5%	34.5%	9.1%	43.6%
Yellow Time (s)	3.0	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	0.0	2.4	2.4	2.4	2.8	2.8	0.0	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0	7.0	7.0	7.0	7.0	3.0	7.0
Lead/Lag	Lead		Lag	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	84.0	80.0	71.7	71.7	12.0	12.0	20.0	16.0
Actuated g/C Ratio	0.76	0.73	0.65	0.65	0.11	0.11	0.18	0.15
v/c Ratio	0.12	0.12	0.00	0.19	0.04	0.03	0.33	0.18
Control Delay	4.3	5.1	10.0	8.6	44.8	44.1	40.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	5.1	10.0	8.6	44.8	44.1	40.7	0.5
LOS	A	A	A	A	D	D	D	A
Approach Delay		4.9		8.7		44.3		14.9
Approach LOS		A		A		D		B
Queue Length 50th (m)	3.5	8.0	0.2	16.5	1.2	1.3	17.0	0.0
Queue Length 95th (m)	10.4	17.0	1.3	32.0	5.4	4.4	28.8	0.0
Internal Link Dist (m)		689.8		209.6		684.9		579.6
Turn Bay Length (m)	100.0		85.0		105.0		145.0	
Base Capacity (vph)	739	2654	682	2345	348	1028	256	1417
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.12	0.00	0.19	0.02	0.01	0.32	0.10

Intersection Summary			
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 48 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 9.2		Intersection LOS: A	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Coleraine Dr & Mayfield Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	310	1	2	388	51	6	12	0	83	0	148
Future Volume (vph)	92	310	1	2	388	51	6	12	0	83	0	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.98		1.00	1.00		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	3648		1767	3587		1785	3650		1785	3103	
Flt Permitted	0.48	1.00		0.56	1.00		0.66	1.00		0.53	1.00	
Satd. Flow (perm)	895	3648		1047	3587		1237	3650		994	3103	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	92	310	1	2	388	51	6	12	0	83	0	148
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	122	0
Lane Group Flow (vph)	92	311	0	2	433	0	6	12	0	83	26	0
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			4		3	8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	76.6	76.6		67.7	67.7		7.2	7.2		19.4	19.4	
Effective Green, g (s)	76.6	76.6		67.7	67.7		7.2	7.2		19.4	19.4	
Actuated g/C Ratio	0.70	0.70		0.62	0.62		0.07	0.07		0.18	0.18	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	670	2540		644	2207		80	238		241	547	
v/s Ratio Prot	c0.01	0.09			c0.12			0.00		c0.03	0.01	
v/s Ratio Perm	0.09			0.00			0.00			c0.03		
v/c Ratio	0.14	0.12		0.00	0.20		0.07	0.05		0.34	0.05	
Uniform Delay, d1	5.4	5.5		8.1	9.2		48.3	48.2		39.2	37.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.0	0.2		0.4	0.1		0.9	0.0	
Delay (s)	5.5	5.6		8.2	9.4		48.7	48.3		40.0	37.7	
Level of Service	A	A		A	A		D	D		D	D	
Approach Delay (s)		5.6			9.4			48.4			38.5	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	4	1	18	1	118	1	137	4	41	192	2
Future Vol, veh/h	1	4	1	18	1	118	1	137	4	41	192	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	30	-	-	75	-	-	100	-	-	55	-	67
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	1	4	1	18	1	118	1	137	4	41	192	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	345	417	96	321	417	71	194	0	0	141	0	0
Stage 1	274	274	-	141	141	-	-	-	-	-	-	-
Stage 2	71	143	-	180	276	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.52	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.01	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	590	530	948	613	527	983	1391	-	-	1455	-	-
Stage 1	714	687	-	853	781	-	-	-	-	-	-	-
Stage 2	936	782	-	810	683	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	507	515	948	595	512	983	1391	-	-	1455	-	-
Mov Cap-2 Maneuver	507	515	-	595	512	-	-	-	-	-	-	-
Stage 1	713	668	-	852	780	-	-	-	-	-	-	-
Stage 2	822	781	-	782	664	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	9.5	0.1	1.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1391	-	-	507	567	595	975	1455	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.009	0.03	0.122	0.028	-	-
HCM Control Delay (s)	7.6	-	-	12.1	11.4	11.2	9.2	7.5	-	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.1	0.4	0.1	-	-

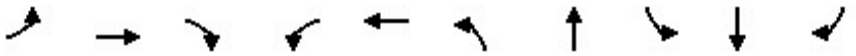
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	35	19	6	43	3	91	1	17	4	2	5
Future Vol, veh/h	0	35	19	6	43	3	91	1	17	4	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	35	19	6	43	3	91	1	17	4	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	46	0	0	54	0	0	105	103	45	111	111	45
Stage 1	-	-	-	-	-	-	45	45	-	57	57	-
Stage 2	-	-	-	-	-	-	60	58	-	54	54	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1575	-	-	1564	-	-	880	791	1031	872	783	1031
Stage 1	-	-	-	-	-	-	974	861	-	960	851	-
Stage 2	-	-	-	-	-	-	957	851	-	963	854	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1575	-	-	1564	-	-	871	788	1031	855	780	1031
Mov Cap-2 Maneuver	-	-	-	-	-	-	871	788	-	855	780	-
Stage 1	-	-	-	-	-	-	974	861	-	960	848	-
Stage 2	-	-	-	-	-	-	946	848	-	946	854	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	9.6	9
HCM LOS			A	A

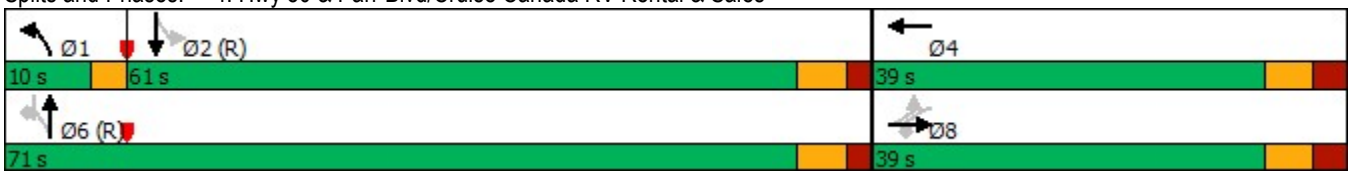
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	892	1575	-	-	1564	-	-	910
HCM Lane V/C Ratio	0.122	-	-	-	0.004	-	-	0.012
HCM Control Delay (s)	9.6	0	-	-	7.3	0	-	9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	31	0	44	4	2	36	1017	6	1000	22
Future Volume (vph)	31	0	44	4	2	36	1017	6	1000	22
Lane Group Flow (vph)	0	31	44	0	8	36	1017	6	1000	22
Turn Type	Perm	NA	Perm	D.Pm	NA	pm+pt	NA	Perm	NA	custom
Protected Phases		8			4	1	6		2	
Permitted Phases	8		8	8		6		2		6
Detector Phase	8	8	8	8	4	1	6	2	2	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	5.0	12.0	12.0	12.0	12.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	9.5	30.1	30.1	30.1	30.1
Total Split (s)	39.0	39.0	39.0	39.0	39.0	10.0	71.0	61.0	61.0	71.0
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	9.1%	64.5%	55.5%	55.5%	64.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.9	2.9	2.9	2.9	2.9	0.0	2.1	2.1	2.1	2.1
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.9	6.9		6.9	3.0	6.1	6.1	6.1	6.1
Lead/Lag						Lead		Lag	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.8	8.8		8.8	94.3	92.4	87.0	87.0	92.4
Actuated g/C Ratio		0.08	0.08		0.08	0.86	0.84	0.79	0.79	0.84
v/c Ratio		0.27	0.24		0.07	0.07	0.33	0.01	0.35	0.02
Control Delay		53.6	10.8		41.9	2.1	3.0	4.8	5.2	0.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		53.6	10.8		41.9	2.1	3.0	4.8	5.2	0.4
LOS		D	B		D	A	A	A	A	A
Approach Delay		28.5			41.9		3.0		5.0	
Approach LOS		C			D		A		A	
Queue Length 50th (m)		6.8	0.0		1.3	1.0	24.7	0.3	38.4	0.0
Queue Length 95th (m)		16.8	7.3		6.3	2.9	36.6	1.7	54.7	0.8
Internal Link Dist (m)		828.8			20.9		520.2		332.3	
Turn Bay Length (m)						35.0		25.0		20.0
Base Capacity (vph)		421	508		446	501	3067	419	2887	1319
Starvation Cap Reductn		0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.07	0.09		0.02	0.07	0.33	0.01	0.35	0.02

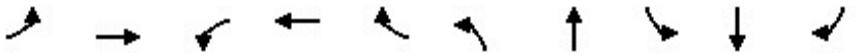
Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 105 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 58.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Hwy 50 & Parr Blvd/Cruise Canada RV Rental & Sales



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	0	44	4	2	2	36	1017	0	6	1000	22
Future Volume (vph)	31	0	44	4	2	2	36	1017	0	6	1000	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1823	1597		1801		1785	3650		1784	3650	1562
Flt Permitted		0.75	1.00		0.83		0.26	1.00		0.28	1.00	1.00
Satd. Flow (perm)		1444	1597		1524		489	3650		529	3650	1562
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	31	0	44	4	2	2	36	1017	0	6	1000	22
RTOR Reduction (vph)	0	0	41	0	2	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	31	3	0	6	0	36	1017	0	6	1000	18
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	D.Pm	NA		pm+pt	NA		Perm	NA	custom
Protected Phases		8			4		1	6			2	
Permitted Phases	8		8	8			6			2		6
Actuated Green, G (s)		7.2	7.2		7.2		89.8	89.8		83.2	83.2	89.8
Effective Green, g (s)		7.2	7.2		7.2		89.8	89.8		83.2	83.2	89.8
Actuated g/C Ratio		0.07	0.07		0.07		0.82	0.82		0.76	0.76	0.82
Clearance Time (s)		6.9	6.9		6.9		3.0	6.1		6.1	6.1	6.1
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		94	104		99		441	2979		400	2760	1275
v/s Ratio Prot							0.00	c0.28			c0.27	
v/s Ratio Perm		c0.02	0.00		0.00		0.06			0.01		0.01
v/c Ratio		0.33	0.03		0.06		0.08	0.34		0.01	0.36	0.01
Uniform Delay, d1		49.1	48.1		48.2		2.2	2.6		3.3	4.5	1.9
Progression Factor		1.00	1.01		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.1	0.1		0.3		0.1	0.3		0.1	0.4	0.0
Delay (s)		51.4	48.7		48.5		2.3	2.9		3.4	4.9	1.9
Level of Service		D	D		D		A	A		A	A	A
Approach Delay (s)		49.8			48.5			2.9			4.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

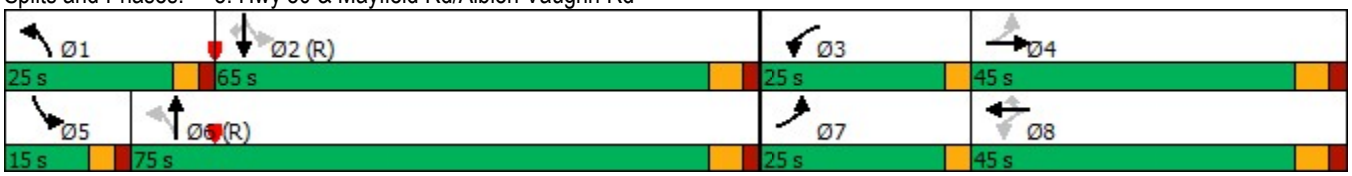


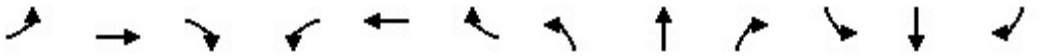
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	93	131	244	136	10	113	909	15	926	97
Future Volume (vph)	93	131	244	136	10	113	909	15	926	97
Lane Group Flow (vph)	93	317	244	136	10	113	1140	15	926	97
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		1	6	5	2	
Permitted Phases	4		8		8	6		2		2
Detector Phase	7	4	3	8	8	1	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	12.0	10.0	12.0	12.0	10.0	20.0	10.0	20.0	20.0
Minimum Split (s)	9.5	43.5	14.5	43.5	43.5	15.0	41.3	15.0	41.3	41.3
Total Split (s)	25.0	45.0	25.0	45.0	45.0	25.0	75.0	15.0	65.0	65.0
Total Split (%)	15.6%	28.1%	15.6%	28.1%	28.1%	15.6%	46.9%	9.4%	40.6%	40.6%
Yellow Time (s)	3.0	4.0	3.0	4.0	4.0	3.0	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.5	0.0	2.5	2.5	2.0	2.1	2.0	2.1	2.1
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	6.5	3.0	6.5	6.5	5.0	6.3	5.0	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	29.1	13.6	41.0	22.5	22.5	109.3	103.7	105.7	94.4	94.4
Actuated g/C Ratio	0.18	0.08	0.26	0.14	0.14	0.68	0.65	0.66	0.59	0.59
v/c Ratio	0.35	0.70	0.84	0.51	0.03	0.29	0.34	0.04	0.43	0.10
Control Delay	50.0	37.7	75.8	70.7	0.2	10.5	13.6	8.8	19.2	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.0	37.7	75.8	70.7	0.2	10.5	13.6	8.8	19.2	2.0
LOS	D	D	E	E	A	B	B	A	B	A
Approach Delay		40.5		72.1			13.3		17.5	
Approach LOS		D		E			B		B	
Queue Length 50th (m)	24.7	22.6	71.3	42.9	0.0	11.4	49.9	1.5	85.4	0.0
Queue Length 95th (m)	39.6	39.3	#103.3	66.3	0.0	20.9	84.2	4.5	112.8	6.8
Internal Link Dist (m)		330.4		656.8			717.1		188.2	
Turn Bay Length (m)	60.0		50.0		50.0	100.0		35.0		120.0
Base Capacity (vph)	376	942	299	462	468	476	3306	363	2154	988
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.34	0.82	0.29	0.02	0.24	0.34	0.04	0.43	0.10

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 7 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 25.7	Intersection LOS: C
Intersection Capacity Utilization 75.6%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Hwy 50 & Mayfield Rd/Albion Vaughn Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	131	186	244	136	10	113	909	231	15	926	97
Future Volume (vph)	93	131	186	244	136	10	113	909	231	15	926	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1785	3329		1785	1921	1597	1785	5072		1785	3650	1597
Flt Permitted	0.67	1.00		0.24	1.00	1.00	0.24	1.00		0.22	1.00	1.00
Satd. Flow (perm)	1259	3329		453	1921	1597	445	5072		420	3650	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	93	131	186	244	136	10	113	909	231	15	926	97
RTOR Reduction (vph)	0	170	0	0	0	9	0	18	0	0	0	40
Lane Group Flow (vph)	93	147	0	244	136	1	113	1122	0	15	926	57
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8		8	6			2		2
Actuated Green, G (s)	25.6	13.6		37.5	22.5	22.5	109.7	100.7		98.4	94.4	94.4
Effective Green, g (s)	25.6	13.6		37.5	22.5	22.5	109.7	100.7		98.4	94.4	94.4
Actuated g/C Ratio	0.16	0.08		0.23	0.14	0.14	0.69	0.63		0.62	0.59	0.59
Clearance Time (s)	3.0	6.5		3.0	6.5	6.5	5.0	6.3		5.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	240	282		280	270	224	391	3192		292	2153	942
v/s Ratio Prot	0.03	0.04		c0.11	0.07		c0.02	c0.22		0.00	c0.25	
v/s Ratio Perm	0.03			c0.09		0.00	0.18			0.03		0.04
v/c Ratio	0.39	0.52		0.87	0.50	0.01	0.29	0.35		0.05	0.43	0.06
Uniform Delay, d1	59.6	70.1		54.8	63.6	59.1	10.5	14.1		12.0	18.0	13.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	1.7		24.3	1.5	0.0	0.4	0.3		0.1	0.6	0.1
Delay (s)	60.6	71.8		79.1	65.1	59.1	10.9	14.4		12.1	18.7	14.1
Level of Service	E	E		E	E	E	B	B		B	B	B
Approach Delay (s)		69.3			73.7			14.1			18.1	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	393	359	0	0	10
Future Vol, veh/h	3	393	359	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	30	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	393	359	0	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	359	0	-	0	562	180
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	203	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1211	-	-	-	462	838
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1211	-	-	-	461	838
Mov Cap-2 Maneuver	-	-	-	-	461	-
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	817	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1211	-	-	-	-	838
HCM Lane V/C Ratio	0.002	-	-	-	-	0.012
HCM Control Delay (s)	8	0	-	-	0	9.3
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	156	0	0	232
Future Vol, veh/h	0	0	156	0	0	232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	156	0	0	232

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	272	78	0	0	156	0
Stage 1	156	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	700	973	-	-	1436	-
Stage 1	862	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	700	973	-	-	1436	-
Mov Cap-2 Maneuver	721	-	-	-	-	-
Stage 1	862	-	-	-	-	-
Stage 2	902	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1436	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	379	368	24	55	78
Future Vol, veh/h	22	379	368	24	55	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	15	-	-	-	0	80
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	379	368	24	55	78

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	392	0	-	0	614	196
Stage 1	-	-	-	-	380	-
Stage 2	-	-	-	-	234	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1178	-	-	-	428	819
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	789	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1178	-	-	-	420	819
Mov Cap-2 Maneuver	-	-	-	-	420	-
Stage 1	-	-	-	-	654	-
Stage 2	-	-	-	-	789	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1178	-	-	-	420	819
HCM Lane V/C Ratio	0.019	-	-	-	0.131	0.095
HCM Control Delay (s)	8.1	-	-	-	14.9	9.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.3

APPENDIX I

Warrant Analyses

LEFT TURN WARRANT

INTERSECTION: Simpson Rd (Future) and Mayfield Rd

HORIZON / DESCRIPTION: Future Total (2028)

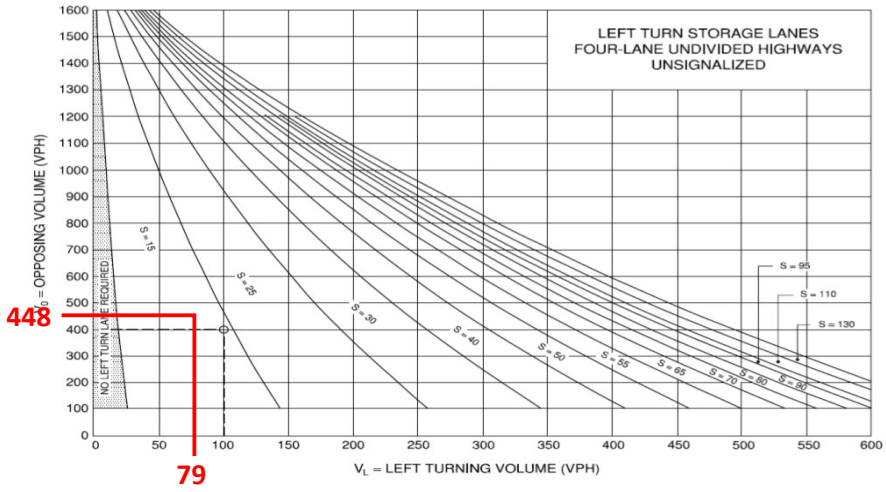
	Volumes	
	AM	PM
NBL	0	0
NBT	0	0
NBR	0	0
SBL	14	56
SBT	0	0
SBR	19	78
EBL	79	22
EBT	403	456
EBR	0	0
WBL	0	0
WBT	359	414
WBR	89	24

Major Direction: East-West

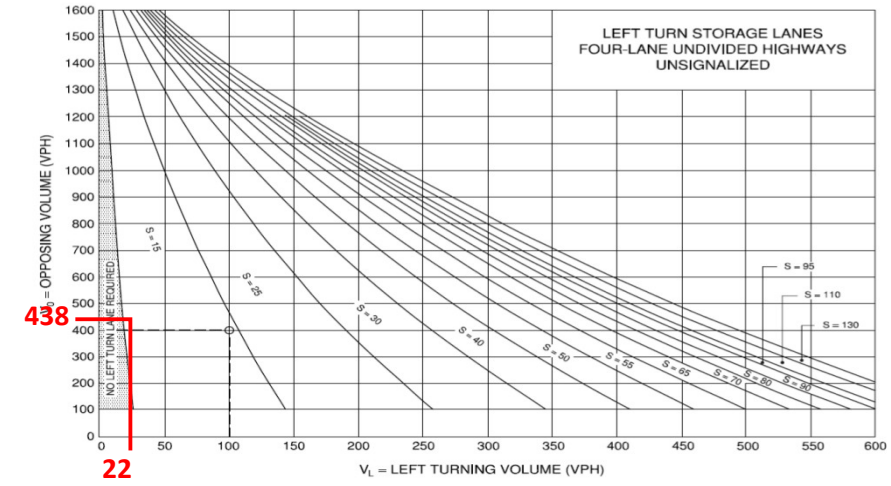
Turning Lane: Eastbound

Criteria / Value	AM	PM
Design Speed (km/h)	80	
Advance Volume (vph) (VA)	482	478
Left Turning Volume (vph) (VL)	79	22
% of Left Turning Volume	16%	5%
Opposing Volume (vph) (VO)	448	438
Warrant Met?	yes	yes
Storage Lane (m)	n/a	n/a

AM



PM



Methodology from Appendix 9A of *MTO Design Supplement For TAC Geometric Design Guide (GDG) for Canadian Roads*

M.T.O. MINIMUM REQUIREMENTS
FOR INSTALLATION OF TRAFFIC SIGNAL

Methodology from Section 4 of *Ontario Traffic Manual Book 12: Traffic Signals*

INTERSECTION: Simpson Road & Mayfield Road

HORIZON / DESCRIPTION: Future Total 2033

Number of lanes on main road: ≥2
Flow conditions: Free (speeds of 70 km/h or greater, with infrequent side friction)
Number of approach legs: 3 (T-intersection)
Number of existing roads: 1 (three or fewer existing approach legs)
Major direction: East-West

Result
Condition not met
Condition not met
Condition not met

Justification 1: if both Justification 1A and 1B are 100% fulfilled.
Justification 2: if both Justification 2A and 2B are 100% fulfilled.
Justification 3: if all of Justifications 1A, 1B, 2A, and 2B are at least 80% fulfilled (only if both roads exist).

All justifications modified by Justification 7 to use peak hour projected volumes.

Justification 1: Minimum Vehicle Volume

A. Base volume requirement: 600
Requirement after 150% expansion: 900

Value	Percent Met
557	62%

B. Base volume requirement (minor street): 180
Requirement after 150% expansion: 270

Value	Percent Met
42	15%

Justification 2: Delay to Cross Traffic

A. Base volume requirement (major street): 600
Requirement after 150% expansion: 900

Value	Percent Met
516	57%

B. Base volume requirement (crossing major): 50
Requirement after 150% expansion: 75

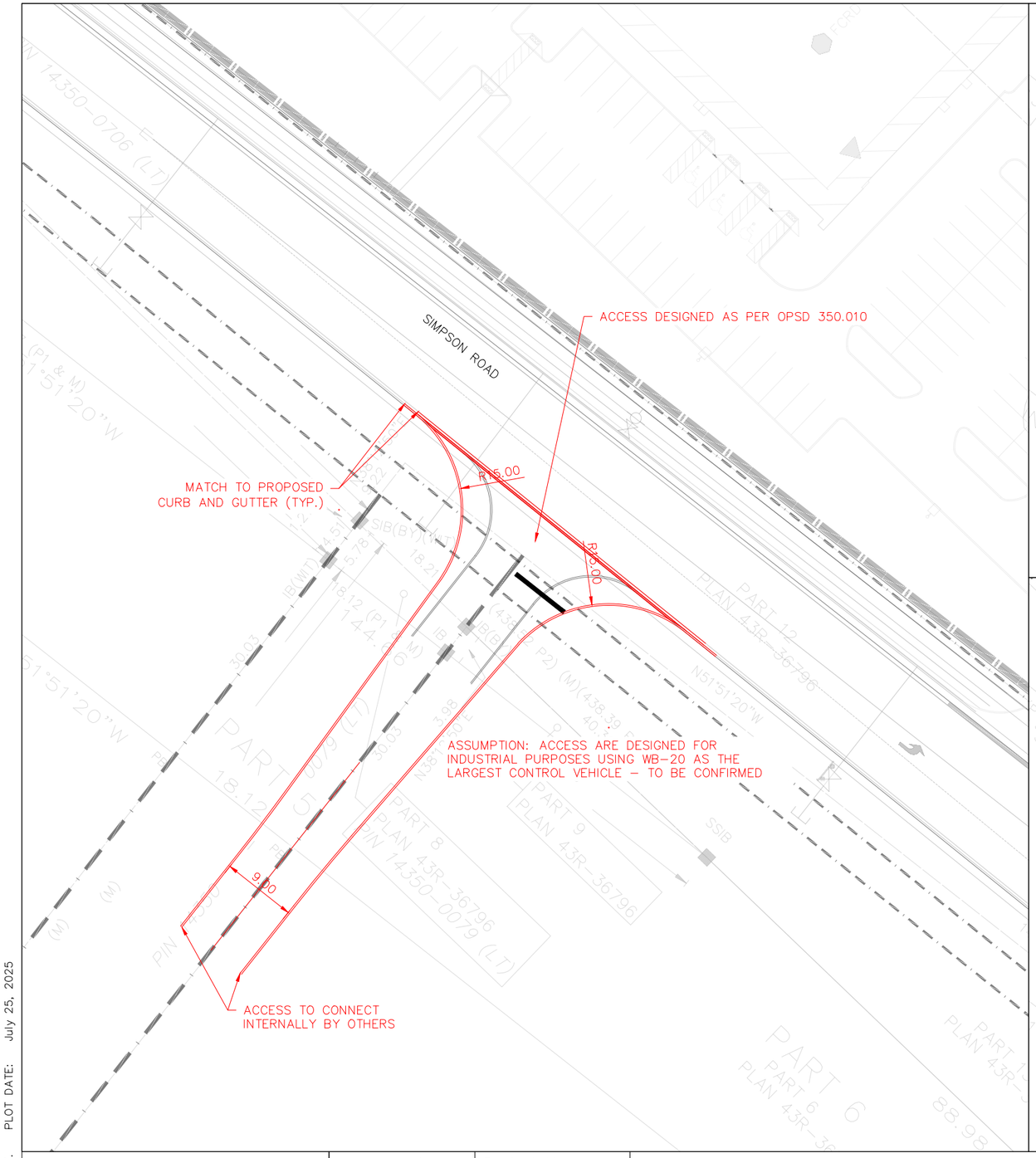
Value	Percent Met
17	23%

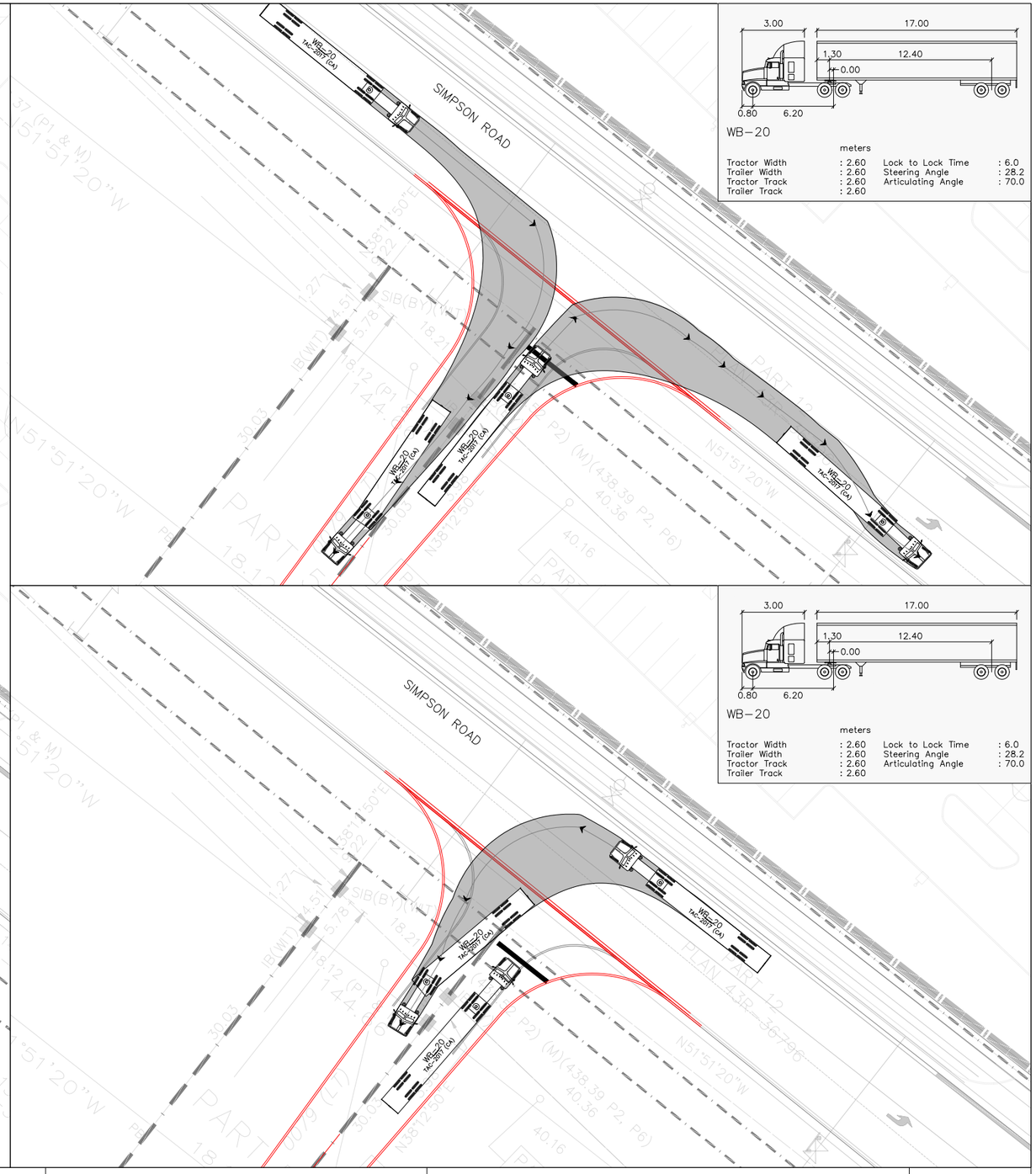
	Volumes		Sum	Average Hourly
	AM	PM		
NBL	0	0	0	0
NBT	0	0	0	0
NBR	0	0	0	0
SBL	14	56	70	17
SBT	0	0	0	0
SBR	19	78	97	24
EBL	79	22	101	25
EBT	438	512	950	238
EBR	0	0	0	0
WBL	0	0	0	0
WBT	435	463	898	225
WBR	89	24	113	28
Peds	0	0	0	0

Pedestrians crossing major road

APPENDIX J

Functional Design Plan





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		

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		

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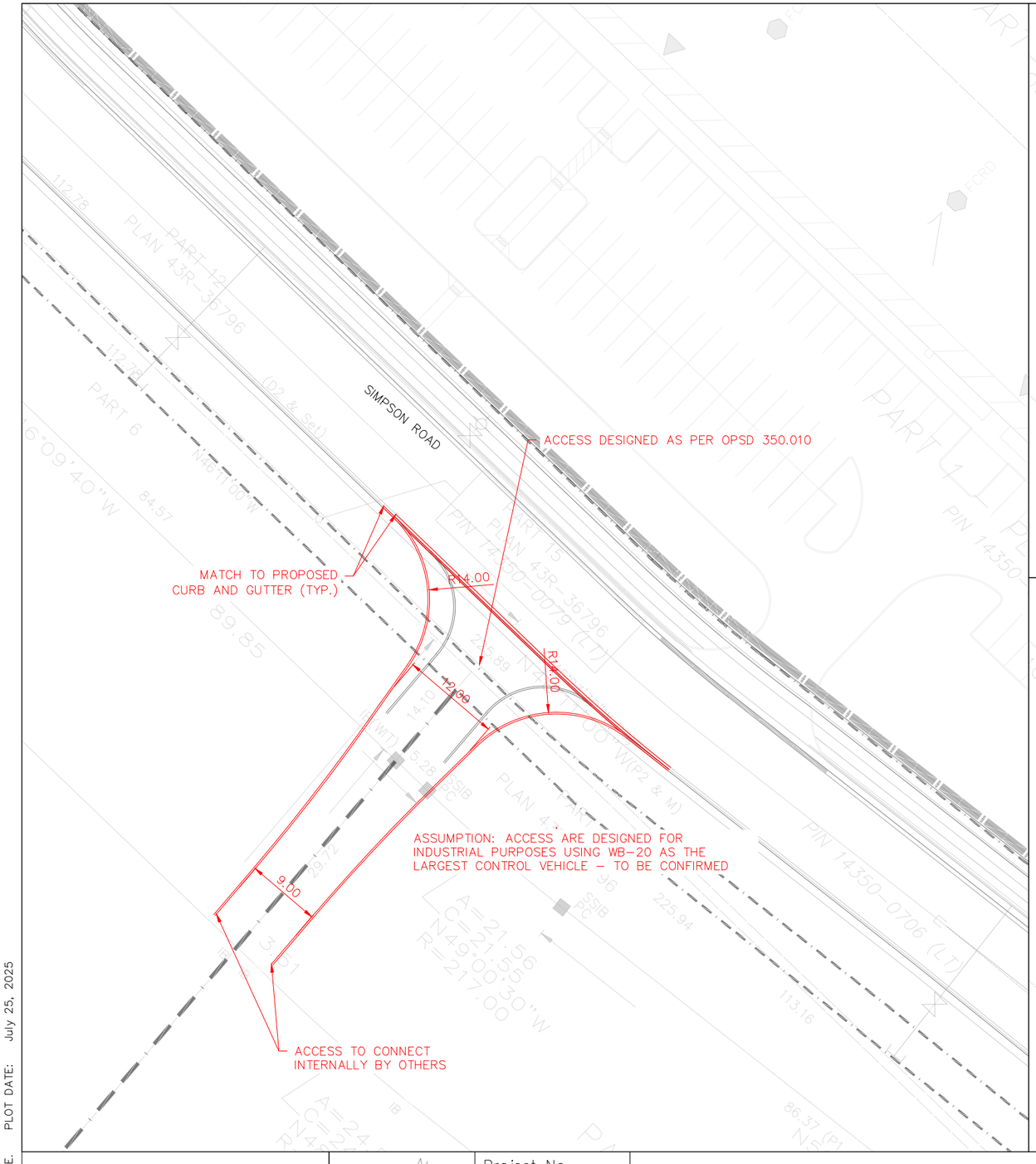
8602 MAYFIELD ROAD
CALEDON ONTARIO

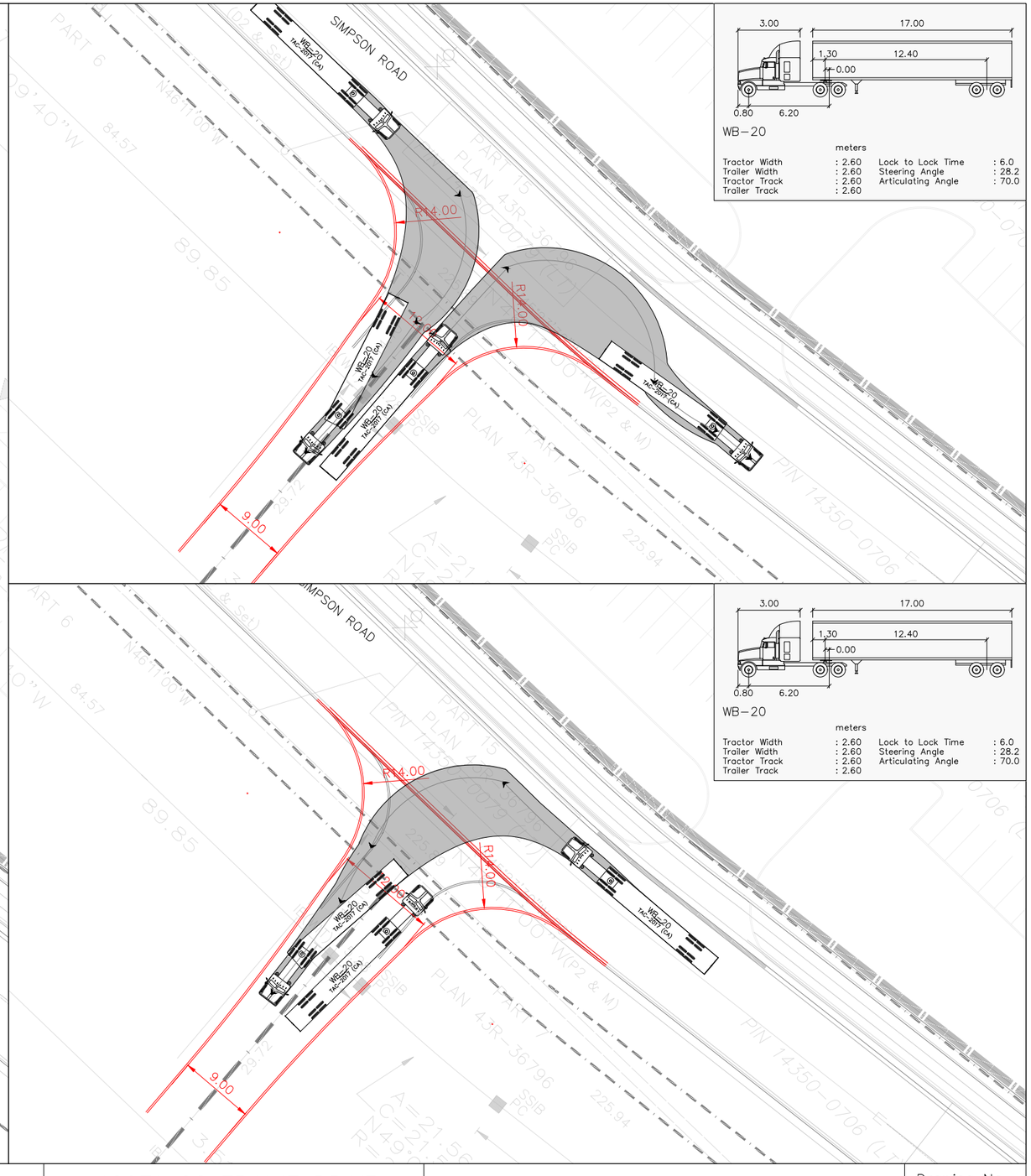
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1:600

SIMPSON ROAD
ACCESS 1

Drawing No. 001

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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		

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		

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Date JULY 25, 2025

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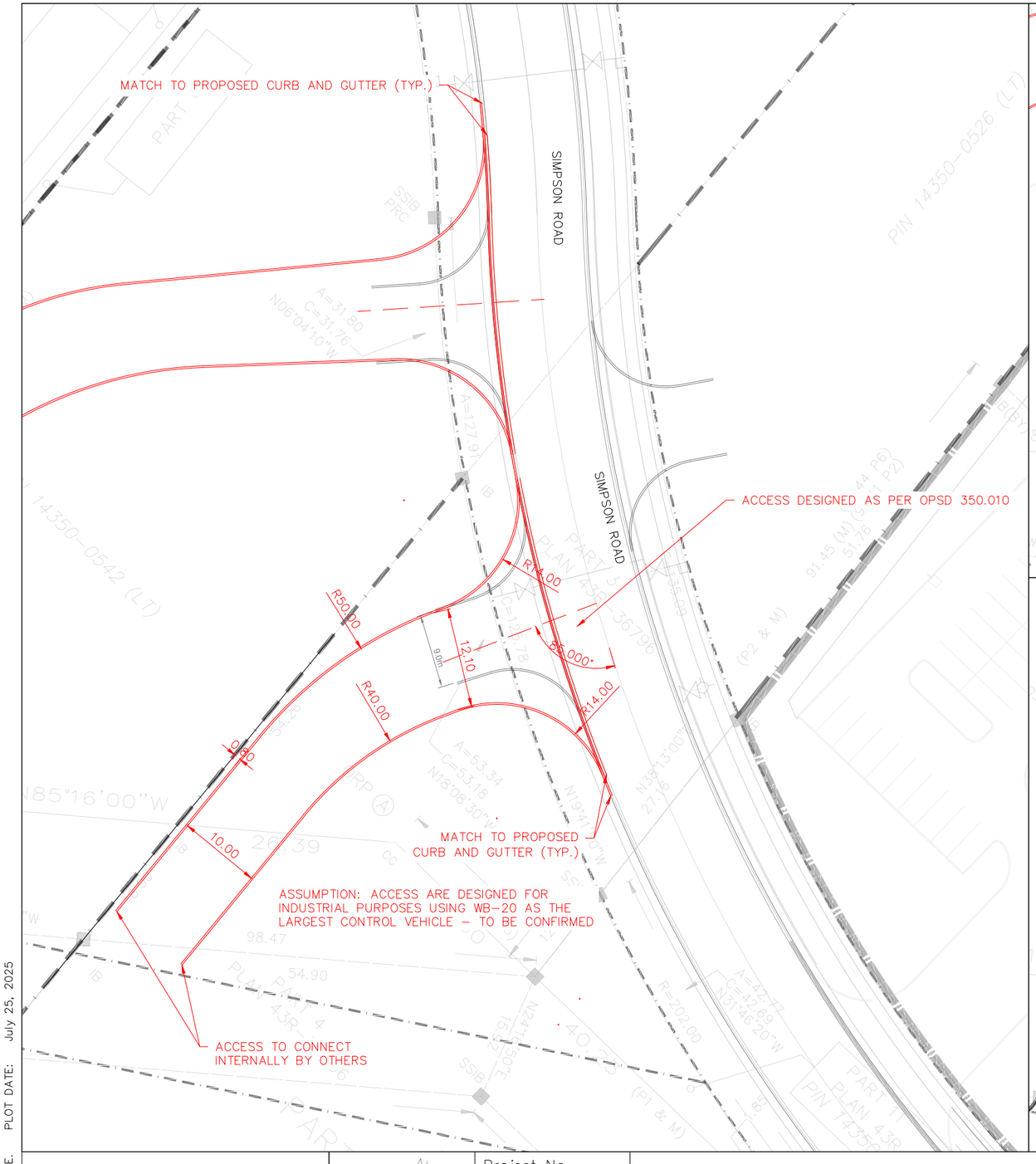
12071 COLERAINE DRIVE
CALEDON ONTARIO

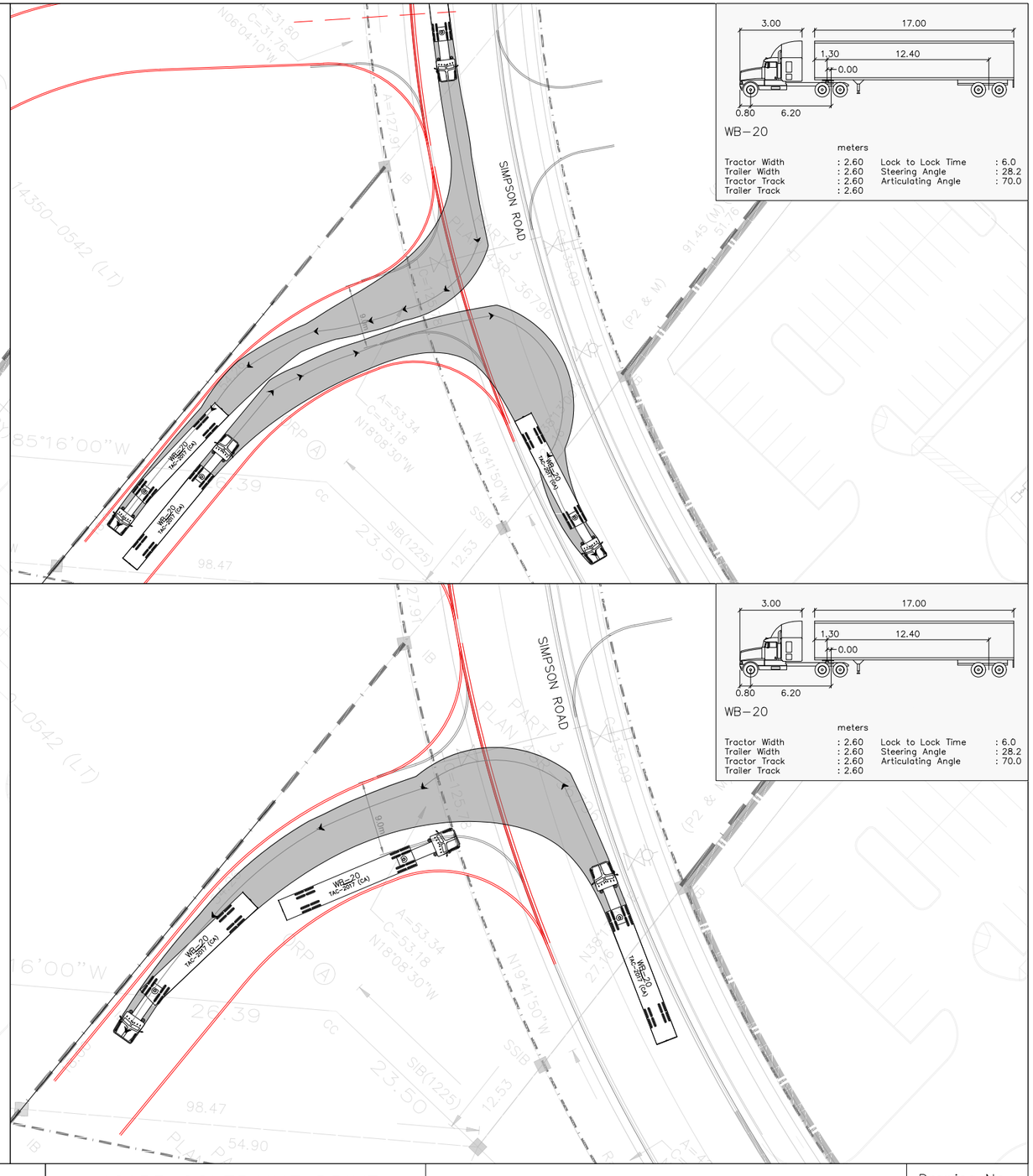
6 0 6 12 18m
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SIMPSON ROAD
ACCESS 2

Drawing No. 002

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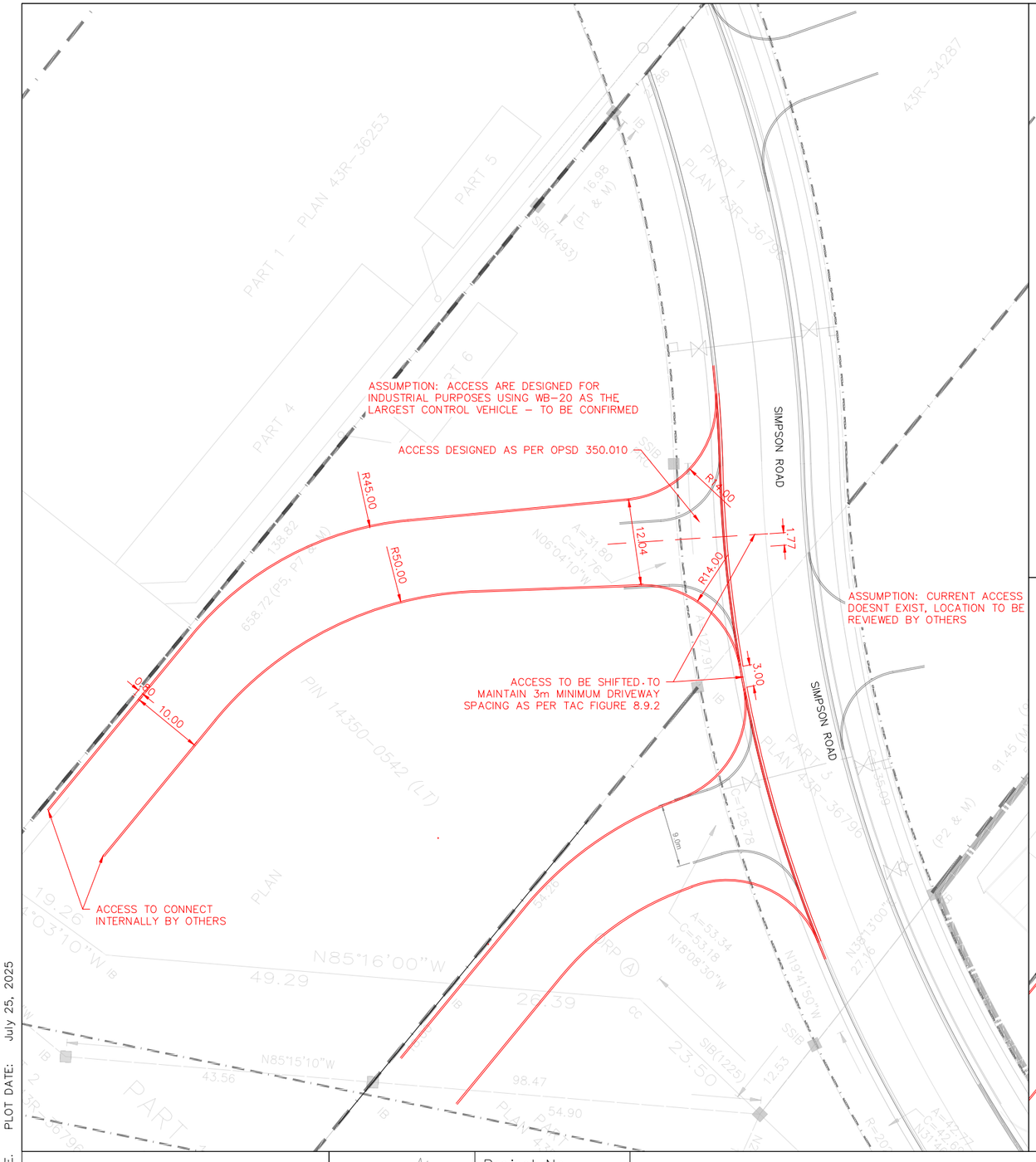
12155 COLERAINE DRIVE
CALEDON ONTARIO

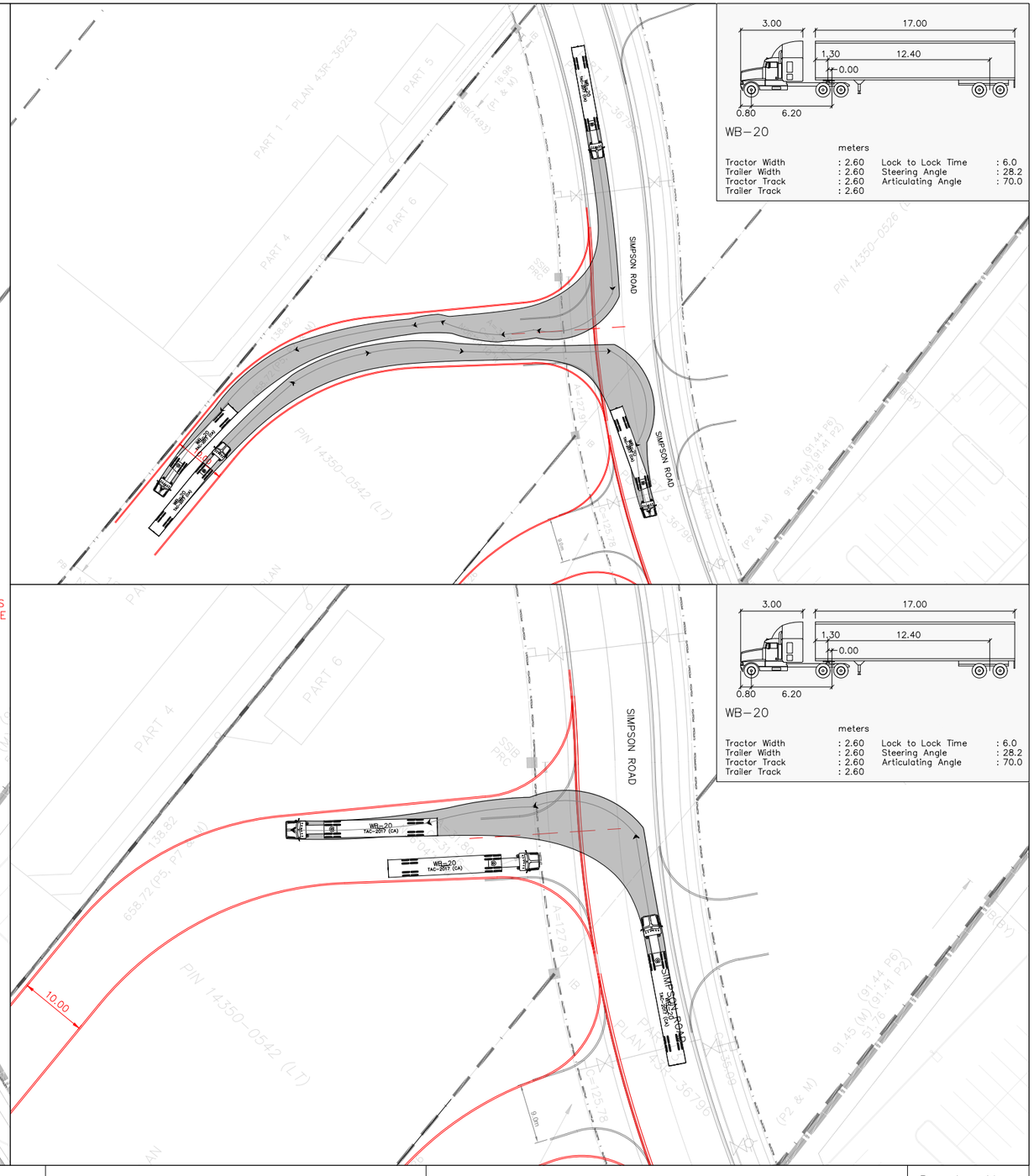
6 0 6 12 18m
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SIMPSON ROAD
ACCESS 03

Drawing No. 003

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Project No. 24085

Date JULY 25, 2025

DRAFT
FOR DISCUSSION

7.5 0 7.5 15 22.5m
1:750

SIMPSON ROAD
ACCESS 4

Drawing No. 004

DRAWING NAME: F:\24085\Drafting\24085 WF002.dwg

