



TOWN OF CALEDON
PLANNING
RECEIVED
April 7, 2026

12100 Creditview Developments Limited

TRANSPORTATION IMPACT STUDY UPDATE

Proposed Commercial Development

**12100 Creditview Road,
Town of Caledon**

March 2026
22142



March 19, 2026

Reference Number: 22142

Stephanie Volpentesta

Fieldgate Commercial
5400 Yonge Street, 1st Floor
Toronto, ON
M2N 5R5

Dear Stephanie Volpentesta:

**RE: Transportation Impact Study Update
Proposed Commercial Development
12100 Creditview Road, Town of Caledon**

LEA Consulting Ltd. is pleased to present the findings of our Transportation Impact Study for the proposed commercial development located at 12100 Creditview Road in the Town of Caledon. This TIS has been prepared for 12100 Creditview Developments Limited in support of the Site Plan Approval (SPA) for the proposed development. This report concludes that the traffic associated with the proposed development maintains acceptable conditions for the road network in the surrounding area, with signalization of the Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G') and minor optimizations for the network.

By way of background, LEA previously prepared a Transportation Impact Study dated October 2024 in support of the first submission with an updated TIS was prepared in September 2025. This update incorporates the comments received from the Town and Region's transportation staff regarding the September 2025 submission. Comments received are provided below in italics, followed by LEA's response.

1 REGION OF PEEL

A. Transportation Development

A. Access/Study Requirements

Comment 1.1: *A Traffic Impact Study (TIS) has been received by the region as a part of the second submission, dated September 24, 2025.*

- a. *The Region acknowledges that three accesses are being proposed off Mayfield Road, and the Region will be in support of all three of these accesses including one Right-In only access, one Right-In/Right-Out access, and one signalized full moves access;*

▶ **LEA Response:** Acknowledged.

- b. *The Region in theory will support a restricted right-in/right-out access, noted as south access 3 in the TIS, this access is to be spaced a minimum 100m from both 'Street G' and Creditview Road, this access is to be physically restricted by a centre median, the centre median shall extend 45 metres on either side of the access (this is for ultimate design);*



- ▶ **LEA Response:** Noted. This has been provided and illustrated in **Drawing No.01 in Appendix M.**

c. *Please analyze the queue lengths at the intersection of Mayfield Road and Robert Parkinson Drive (Street "G") under two scenarios: one with a single eastbound left-turn lane and the other with dual eastbound left-turn lanes.*

- ▶ **LEA Response:** The Town of Caledon has approved the traffic operation analysis of the Mayfield Road & Robert Parkinson Drive (Street G) intersection with a single eastbound lane configuration. It is our understanding that a supplementary analysis assessing the dual eastbound left turn lanes is no longer warranted.

Comment 1.2: *Please share Synchro file for the Region's review.*

- ▶ **LEA Response:** Please see **Appendix G, Appendix H, and Appendix I.**

Comment 1.3: *All accesses onto regional roads shall be in accordance with the Regional Standard based on the Controlled Access By-Law 62-2013, which speaks to the Road Characterization Study (RCS). The RCS defines our various road classifications as well as the minimum access spacing distances that are associated with them. This portion of Mayfield Road is classified as an Industrial Connector which calls for 450m spacing from full moves to full moves access; 100m spacing from full moves to right-in/right-out access; and 100m spacing from right-in/right out to right-in/right-out access.*

- ▶ **LEA Response:** The mentioned requirements have been met. Please see **Drawing No.01 in Appendix M.**

Comment 1.4: *Please note that all works within the Region's right-of-way will require a permit prior to any construction taking place.*

- ▶ **LEA Response:** Noted.

1. Site Plan

Comment 2.1: *All comments provided should be reflected on the site plan, including; Centre line of roadways with property dimensions reflected*

- ▶ **LEA Response:** Noted. Please see the updated site plan.

2. Draft R-Plan

Comment 3.1: *The dimension from the centerline of road allowance to the new proposed property line is shown correctly.*

- ▶ **LEA Response:** Noted.

Comment 3.2: *Please include a 0.3 metre reserve behind the property line and daylight triangle except at any approved access.*

- ▶ **LEA Response:** To be addressed by others.



3. Functional Design (The Mayfield Road Ultimate Design)

Comment 4.1: *The minimum width of entrance driveway lane in a Right-In only access (South Access 1) should be 5 meters (please refer to attached regional standard drawing 5-1-4A for a Right-In/Right-Out Access with Directional Island and Sidewalk, where applicable);*

- ▶ **LEA Response:** Noted. According to Standard 5-1-4A, a minimum width of 4 m is required; therefore, the provided 4.3 m complies with this requirement. Please see **Drawing No.001** in **Appendix M**.

Comment 4.2: *Please show the width of entrance and exit lanes in a Right-In/Right-Out access (South Access 3);*

- ▶ **LEA Response:** Noted. Please see **Drawing No.001** in **Appendix M**.

Comment 4.3: *The storage and taper length of all auxiliary right-turning lane for three proposed accesses are satisfactory;*

- ▶ **LEA Response:** Noted.

Comment 4.4: *The radius of a Right-In only access and a Right-In/Right-Out access is acceptable;*

- ▶ **LEA Response:** Noted.

Comment 4.5: *Sightline Analysis for the intersection of Street G and Mayfield and a Right-In/Right-Out access along Mayfield Road is satisfactory.*

- ▶ **LEA Response:** Noted.

4. Pavement Marking and Signage Plan

Comment 5.1: *Please include all required pavement markings and signs for three proposed accesses.*

- ▶ **LEA Response:** Noted. Please see **Appendix N**.

5. Property Requirements

Comment 6.1: *The Region requests the gratuitous dedication of lands to meet the Regional Official Plan requirement for Regional Road 14 (Mayfield Road) which has a mid block right-of-way of 55.5 metres, 27.75 metres from the centreline of the road allowance, within 245 metres of intersections additional property as per the Official Plan requirement will be required, to protect for the provision of but not limited to: utilities, sidewalks, multiuse pathways and transit bay/shelters*

- ▶ **LEA Response:** To be addressed by others.

Comment 6.2: *The Region will require the gratuitous dedication of a 15x15 metre daylight triangle at the intersection of Mayfield Road & Creditview Road.*

- ▶ **LEA Response:** Noted. Daylight triangles have been depicted on the updated drawings. Please see **Drawing No.001** in **Appendix M**.



Comment 6.3: *The Region will require the gratuitous dedication of two 15 x 15 metre signals easements at the intersection of Mayfield Road & Street G.*

▶ **LEA Response:** Noted. Please see **Drawing No.001 in Appendix M.**

Comment 6.4: *The Region will require the gratuitous dedication of a 0.3 metre reserve along the frontage of Regional Road 14 (Mayfield Road) behind the property line and daylight triangle, except at any approved access point.*

▶ **LEA Response:** Noted. Please see **Drawing No.001 in Appendix M.**

Comment 6.5: *The applicant is required to gratuitously dedicate these lands to the Region, free and clear of all encumbrances. All costs associated with the transfer are the responsibility of the applicant. The applicant must provide the Region with the necessary title documents and reference plan(s) to confirm the Regions right-of-way.*

▶ **LEA Response:** Noted.

Comment 6.6: *A draft reference plan will be required for our review and approval prior to the plans being deposited. All costs associated with preparation of plans and the transfer of the lands will be solely at the expense of the applicant.*

▶ **LEA Response:** To be addressed by others.

Comment 6.7: *Landscaping, signs, fences, cranes, gateway features or any other encroachments are not permitted within the Region's easements and/or Right of Way limits.*

▶ **LEA Response:** Noted.

Comment 6.8: *Cranes will not be permitted to swing over a Regional Road unless a crane swing license has been granted.*

▶ **LEA Response:** Noted.

6. Signals and Streetlighting

Comment 7.1: *Should any light standards or signals, including, hydro poles, sidewalks or MUPs be constructed, relocated or removed along the Region of Peel's right-of-way, photometric drawings will be required to be submitted for review and approval. This is to ensure that the proposed streetlight/signals construction, relocation and or removals comply with our current standards (RP-8-21). Please reach out to our Signals Team for review and approval. Please contact Samantha Bennett (samantha.bennett@peelregion.ca) Supervisor of Traffic Signals and Streetlighting Team.*

▶ **LEA Response:** Noted.

7. Engineering Cost Estimate

Comment 8.1: *Removals, pavement marking, and signage costs are required, if any.*

▶ **LEA Response:** A cost estimate for the mentioned items is provided in **Appendix N.**



Comment 8.2: Please have the cost estimate be stamped and signed by a Licensed Ontario Professional Engineer.

▶ **LEA Response:** Noted. This has been provided.

Comment 8.3: Please separate watermain costs from the traffic costs as they will be going to different departments.

▶ **LEA Response:** Noted.

Comment 8.4: Culvert costs - subject to review and comments from our stormwater team.

▶ **LEA Response:** Noted.

Comment 8.5: A 10% contingency will be required.

▶ **LEA Response:** Noted.

8. Engineering Requirements

Comment 9.1: A detailed engineering submission of road and access works will be required for our review and comment, designed, stamped and signed by a Licensed Ontario Professional Engineer. The engineering submission **MUST** include the removals, new construction and grading, typical sections and pavement markings and signing drawings. All works within Region of Peel's right of way must be designed in accordance to the Public Works, "Design Criteria and Development Procedures Manual" and "Material Specifications and Standard Drawings Manual";

▶ **LEA Response:** Noted.

Comment 9.2: The Owner shall submit to the Region a detailed cost estimate, stamped and signed by a Licensed Ontario Professional Engineer, of the proposed road and access works within the Regional right of way;

▶ **LEA Response:** A cost estimate for the mentioned items is provided in **Appendix N**.

Comment 9.3: Securities shall be submitted in the form of either a letter of credit or certified cheque, in the amount of 100% of the approved estimated cost of road and access works along Regional Road 14 (Mayfield Road);

▶ **LEA Response:** To be addressed by others.

Comment 9.4: A 10.8% engineering and inspection fee shall be paid to the Region based on the approved estimated cost of road and access works (minimum \$1,724.40);

▶ **LEA Response:** Noted.

Comment 9.5: The Owner will be required to submit the following prior to commencement of works within the Region's right-of-way:

- Completed Road Occupancy Permit and a permit fee as per the Region's user fees and charges By-law;
- Completed Notice to Commence Work;



- Provide proof of insurance with the Region of Peel added to the certificate as an additional insured with \$5 million minimum from the Contractor;
- Please note that any proposed construction within the Region of Peel's right of way is pending PUCG approval (minimum six week process). Please note that PUCG circulation requirements have recently changed. We require PDF

version of the full drawing set it is to be sent via email, and cannot exceed 10MB per email.

- Please be advised that any concerns or issues identified by the utility company will be the responsibility of the Owner/Applicant to address and resolve directly with the utility company.

▶ **LEA Response: Noted.**

Comment 9.6: All costs associated with the design and construction of road and access works will be 100% paid by the Owner;

▶ **LEA Response: Noted.**

9. Standards, Specifications, and Submission Requirements

Comment 10.1: Please review the Public Works Design, Specifications & Procedures Manuals, and the Region of Peel's Standard Drawings which can be found at the following links. Digital copies can be provided upon request.

- Linear Infrastructure – Site Plan Process: Public Works Design, Specifications & Procedures Manual - Linear Infrastructure - Site Plan Process - Revised November 2009 (peelregion.ca)
- Public Works Design, Specifications and Procedures Manual: Design, standards specification and procedures - Region of Peel (peelregion.ca)
- Public Works Design, Specifications and Procedures Manual – Linear Infrastructure: Public Works - Design, Specifications & Procedures Manual - Linear Infrastructure - CAD Submission Requirements - Capital Works - June 2015 (peelregion.ca)
- Public Works CAD Submission Requirements – Development: Microsoft Word - Development Submission Requirements Manual - Nov2017.docx (brampton.ca)
- Standard Drawings - Roads & Traffic : Roads and traffic - standards drawings - Region of Peel (peelregion.ca)

▶ **LEA Response: Noted.**

10. Capital Project 15-4070:

Comment 11: The proposed ROW on Creditview Road was established based on two lane Region's capital project with fully paved shoulders. However, the 12100 Creditview Developments includes three lanes incorporating a dedicated left turn lane to the site, the assumption is that this will need to be maintained for the Region's capital project. **Peel will require confirmation from the Town of Caledon that the land conveyances for Creditview Road as shown in this submission are sufficient and meet Town requirements.**

▶ **LEA Response: Noted.**



2 TOWN OF CALEDON – PUBLIC WORKS & TRANSPORTATION, TRANSPORTATION ENGINEERING

A. Key Comments

Comment 1: *Coordinate as required to ensure consistency between external works by TYLin, the overall Site Plan, and the TIS by LEA Consulting.*

▶ **LEA Response:** Noted.

Comment 2: *Include the costs for Pavement Markings and Signage in the Engineering Cost Estimate for both internal and external works.*

▶ **LEA Response:** A cost estimate for the mentioned items is provided in **Appendix N**.

Comment 3: *Street G:*

a. *The Northernmost Access on Street G (Truck Access C1/C2) shall be updated to meet Town standards. While minimum curb radii may be considered, the currently proposed radii of 3.0m and 1.9m are insufficient. Review whether the minimum OPSD curb radius of 4.5m for commercial accesses is appropriate for the proposed development.*

▶ **LEA Response:** The northernmost access on Street G has been updated to meet the Town Standards. See **Drawing No.004** in **Appendix M**.

b. *Pavement and lane widths shall be measured from the face of the curb.*

▶ **LEA Response:** Noted.

c. *Through lanes shall be 3.5m wide.*

▶ **LEA Response:** Noted. All through lanes have been drawn to have a minimum width of 3.5m.

d. *A Two-Way Left Turn Lane (TWLTL) with a minimum width of 3.4m shall be provided from the Middle Street G access (full-movement passenger vehicle access for Retail C1/C2) to the terminus (currently a cul-de-sac).*

▶ **LEA Response:** Noted. This has been included in the updated site plan and LEA's functional drawings. Please see **Appendix M**.

e. *The preferred approach is to maintain the 3.4m width south to the Mayfield intersection in the form of left-turn lanes. Please confirm with the Region if this is acceptable.*

▶ **LEA Response:** The proposed site plan includes a 3.4m wide TWLT lane south to the Mayfield intersection. See **Drawing No.001** in **Appendix M**.

f. *The Middle Street G Access (full move's passenger vehicle access C1/C2), remove the All-Way Stop Control (AWSC) install Two-Ways Stop Control (TWSC) with Street G as the major approach. This is too close to Mayfield Road for AWSC to be appropriate.*

▶ **LEA Response:** Noted. This has been included in our drawings and synchro analysis. Please see **Appendix N**.



g. Provide a Northbound Left Turn Lane at the Middle Street G Access (full move’s passenger vehicle access C1/C2). This intersection shall be TWSC.

▶ **LEA Response:** Noted. This has been included in the updated site plan and reflected in LEA’s drawings. Please see **Appendix M** and **Appendix N**.

h. As per TIS comments below, coordination is required to ensure that large delivery vehicles can maneuver along their anticipated travel paths without conflicting with oncoming traffic.

▶ **LEA Response:** The WB-20 vehicle paths have been updated in LEA’s functional design review. No conflicts are anticipated with oncoming traffic. See **Drawing No.003-005** in **Appendix M**.

Comment 4: There are inconsistencies regarding planned heavy vehicle traffic, access geometry, and roadway improvements on Creditview Road; clarity and revisions are required. Details below.

▶ **LEA Response:** Noted. Responses have been provided for the following comments.

Comment 5: Consistent with prior comments, the current proposal does not support active transportation (Walking and Cycling) along Creditview Road. The proposal should provide an Active Transportation connection to the existing transit services within Brampton. Details below.

▶ **LEA Response:** To be addressed by others.

Comment 6: Consistent with prior comments, the proposed Right-In Right-Out (RIRO) southern access on Creditview Road (Creditview # 2 in the TIS) shall conform to Region of Peel Standard 5-1-4. This includes, but is not limited to, the provision of the missing southbound right-turn lane into the RIRO access.

▶ **LEA Response:** The proposed RIRO southern access is designed as per Region of Peel Standard 5-1-4.

Comment 7: A Southbound Right-Turn Lane is required at the northern full moves site access along Creditview Road (Creditview # 1 in the TIS). Review the warrant based on the percentage of right-turning vehicles.

▶ **LEA Response:** A southbound right turn lane has been included in our updated drawings to accommodate the anticipated volume of SBR turning vehicles at this access. See **Drawing No.001** in **Appendix M**. The percentage of SBR turning vehicles at this access are summarized in **Table 2-1**.

Table 2-1: Percentage of SBR volumes (Creditview Road Access 1)

Southbound Mvmt	Peak Hour		
	AM	PM	SAT
SBR	30	57	73
SBT	149	169	87
SBL	0	0	0
Total SB movements	179	226	160
SBR %	17%	25%	46%



B. Site Plan

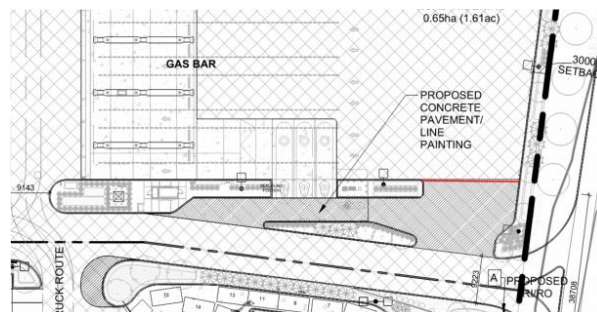
Comment 8: Multi-use paths are to be continuous across accesses (uninterrupted) as per the Town's Development Standard Manual. Revise Street G.

- ▶ **LEA Response:** Noted. Please see updated Site Plan.

Comment 9: Work with Building A to move the bicycle parking closer to their main entrance.

- ▶ **LEA Response:** The main entrance of the Costco (Building A) is expected to experience heavy vehicle and pedestrian traffic, making it unsuitable and potentially unsafe for bicycle parking. Additionally, the area east of the entrance will house the Seasonal Garden Centre, with exit-only doors and fenced merchandising space, further limiting practicality for bicycle racks. The current proposed bicycle rack locations allow cyclists to secure their bikes in a pedestrian-friendly area with lower foot traffic than the main entrance. These locations are also highly visible, situated near a primary access point and an area routinely visited by Costco staff. This placement is also consistent with the layout used at the Costco East Newmarket location.

Comment 10: Reflecting prior review comments, site accesses along Town Roads must meet the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Road recommendations for clear throat lengths (Table 8.9.3 (2017 version)). Where meeting clear throat lengths is not feasible, collaborate with LEA to include justification for reductions in the Functional Design Review Section of the TIS. Update as required. Of highest concern is the RIRO access to Creditview Road (#2). At this location, mitigation measures beyond line painting are required to ensure that bad actors do not use the hatched yellow area to skip the queue. Consider the implementation of bollards or gates to limit direct public access between the Creditview Road RIRO and the passenger vehicle gas pumps.





- ▶ **LEA Response:** As per the LEA TIS (September 2025), the total development area is approximately 28,00 m², and Creditview Road is classified as a collector road. Table 8.9.3 of the TACGDG recommends a minimum clear throat length of 8m. The current design provides approximately 6.8m, measured from the internal nose of the RIRO channelized island to the perpendicular extension of the gas bar access. Operationally, this reduced throat length does not create any performance issues. The previous TIS indicates low inbound volumes at RIRO Access 2 (0 AM/10 PM/ 12 SAT southbound right turns). Outbound 95th percentile queues are also minimal, with 0 AM, 1 PM, and 1 SAT peak hour trips. The previous traffic analysis shows the gas bar has ample queue storage capacity, with significant reserve space, making spillback from the gas bar highly unlikely. In the rare event it does occur, staff can temporarily cone off the southern access and redirect vehicles to the northern access. Given this, bollards or gates are not required. Maintaining this access will support efficient vehicle circulation surrounding the gas bar.

C. Transportation Impact Study

Comment 11: *Section 6: Considering the future additional traffic volumes anticipated along Creditview Road, explore if a traffic signal is required or desired to help vehicles enter and exit their site.*

- ▶ **LEA Response:** Signal warrant analyses were conducted for the two (2) site accesses along Creditview Road. The results of the analysis indicate that a traffic signal is not warranted for both accesses. Full details of the analysis are provided in **Appendix J**.

Comment 12: *Section 8: Consistent with prior comments, the current proposal does not adequately address Active Transportation Along Creditview Road. Key points include:*

- Existing Conditions: Creditview Road is a designated cycling route with 1.5m paved shoulders, suitable for low-volume rural traffic.*
 - ▶ **LEA Response:** The paved shoulder has been reflected in our analysis and has been included in the updated TIS (see **Section 2.3**).
- Heavy Vehicle Use: AutoTURN analysis indicates large delivery vehicles accessing Building A loading bays via Creditview Road. This type of traffic conflicts with shared cycling facilities.*
 - ▶ **LEA Response:** The provided PMSP illustrates warning signs to alert cyclists of nearby large trucks. Please see **Appendix N**.
- Policy Context: The Town's Active Transportation Master Plan (ATMP) identifies future Multi-Use Paths (MUP) along Creditview Road as development-driven infrastructure. Currently there are no grocery stores in Caledon west of Highway 10.*
 - ▶ **LEA Response:** This has been included in the updated TIS (see **Section 3.4**).
- Horizon Year Gap: The TIS horizon ends in 2029, well before ATMP improvements tied to future widening in the MMTMP.*



- ▶ **LEA Response:** Based on the Mayfield Road timeline, the road construction is expected to be completed by mid 2026. The future widening of Mayfield Road has been included in our future horizon to determine ultimate traffic conditions of the surrounding site with the added traffic volumes.
- e. *Proposal Inconsistencies: Currently, TYLin is proposing no active transportation facilities as part of their design (to be implemented imminently), while LEA is citing long-term future improvements identified in the MMTMP and ATMP being sufficient.*
 - ▶ **LEA Response:** The existing paved shoulder along Creditview Road will be maintained under future conditions, and the site will be providing a MUP along Street “G”. This has been reflected in the updated TIS and analysis (see Section 9).
- f. *Interim Need: Development will generate significant active transportation and vehicular trips; an interim facility is required before widening occurs.*
 - ▶ **LEA Response:** A 3.0m wide multi-use path will be provided along both sides of Street G to support active transportation. The existing paved shoulder along Creditview Road will be maintained under future conditions. This has been reflected in the updated TIS (see Section 9).
- g. *Preferred Approach: Incorporate a Multi-Use Path or propose feasible alternatives if a MUP is not practical.*
 - ▶ **LEA Response:** Please see response to Comment 12(f) in this section.
- h. *Action Item: Review trip forecasts, policy documents, best practices, and project constraints. Collaborate with TYLin to integrate feasible interim active transportation facility recommendations within the TIS.*
 - ▶ **LEA Response:** Noted. Regarding interim active transportation facility recommendations, please see response to Comment 12(f).

Comment 13: Section 10: Functional Design and Access Review and Appendix J: Consistent with prior comments, the functional design review is to include a review of the access geometry, including throat lengths, lane widths, and curb radii.

- ▶ **LEA Response:** Noted. Please see **Drawing No.001 in Appendix M.**

Comment 14: Consistent with prior comments, vehicles must be able to enter and exit the proposed development without encroaching upon oncoming traffic.

- a. *Northern Access on Street G (Truck Access for Retail Buildings C1/C2): Westbound right-turn movement requires revision; northbound right-turn movement is missing.*
 - ▶ **LEA Response:** The northbound right-turn movement has been included. Based on LEA’s review, the westbound right-turn movement is operational as the roads are internal and private. PTAC vehicles are expected to yield to allow trucks to complete their movements. Please see **Drawing No.004 in Appendix M.**
- b. *Middle Street G Access (full move’s passenger vehicle access C1/C2): Southbound right movement conflicts with the left turn lane. The eastbound right movement is missing from the analysis.*



- ▶ **LEA Response:** Based on LEA's review, the southbound right turn movement is functional as the road are internal and private. The eastbound right turn movement has been included. PTAC vehicles are expected to yield to allow trucks to complete their movements. Please see **Drawings No.006-007** in **Appendix M**.
- c. *Action Item: Coordination with the consultant (TYLin), preparing the Pavement Markings and Signage Plan for Street G, is recommended. Collaborate to propose mitigation measures.*
 - ▶ **LEA Response:** Please see **Appendix N** for the updated Pavement Markings and Signage Plan. This has been modified accordingly as per TYLin plans.

Comment 15: *There appear to be inconsistencies regarding planned heavy vehicle traffic, access geometry, and roadway improvements on Creditview Road. Key Action Items:*

- a. *Confirm with TYLin consultants on file the limits of roadway improvements on Creditview Road and whether these improvements are intended to accommodate heavy vehicle traffic.*
 - ▶ **LEA Response:** LEA has undertaken coordination with TYLin consultants regarding the limits of roadway improvements on Creditview.
- b. *Collaborate with TYLin to ensure the access geometry of the northern full-movement access (Creditview #1 in the TIS) restricts or limits undesired turning movements based on the scope of improvements.*
 - ▶ **LEA Response:** Adjustments to the curb radii at the Creditview Road accesses were coordinated with TYLin to accommodate WB-20 truck movements.
- c. *Collaborate to ensure internal and external signage is updated as required to communicate the heavy vehicle restrictions to drivers.*
 - ▶ **LEA Response:** Adjustments regarding internal and external signage has been coordinated with TYLin consultants.
- d. *Update the findings of the AutoTURN and Synchro analysis as required to reflect updated plans.*
 - ▶ **LEA Response:** Please see Section 6 of the updated TIS. Detailed Synchro and AutoTURN results are provided in **Appendix G, Appendix H, and Appendix I**.
- e. *Provide clarification for Town Transportation Staff via comment response.*
 - ▶ **LEA Response:** Addressed.

Comment 16: *Consistent with prior comments, include consideration for the design speed above the posted speed limit. Action Items:*

- a. *For Creditview Road, if the posted speed limit is 60km/hr, the design speed would be 80 km/hr. Revise accordingly.*
 - ▶ **LEA Response:** The design speed for Creditview Roads has been updated to 80km/h. Please see Drawing **No. 001** in **Appendix M**.
- b. *Confirm with the Region on their desired design speed along Mayfield Road.*



- ▶ **LEA Response:** A design speed of 80km/h was applied along Mayfield Road. Please see Drawing No. 001 in Appendix M

D. Pavement Markings and Signage Plan

Comment 17: Consistent with prior comments, submit the PMSP as a separate, standalone PDF file for ease of use or ensure all Pavement Markings and Signage proposed in Appendix M are included in the site plan.

- ▶ **LEA Response:** Please see Appendix N for the updated Pavement Markings and Signage Plan.

Comment 18: Pavement Markings and Signage proposed in Appendix M requires updating.

- ▶ **LEA Response:** Please see response to Comment 17 in this section.

E. Synchro Analysis

Comment 19: Consistent with prior comments, a SimTraffic analysis of queues could be required to address limitations of Synchro queue modelling. Of particular concern are cases where forecasted queues exceed storage capacity, including locations where queues may back up past proposed accesses on Creditview Road.

a. Propose mitigation measures or alternative designs as required.

- ▶ **LEA Response:** A SimTraffic Analysis was conducted to assess the queue lengths for the two (2) site accesses along Creditview Road. The results of the analysis indicate that queue lengths can be accommodated by the available storage capacity. No mitigation measures or alternative designs are required. Please see Section 7 of the updated TIS.

b. The presence of “#” and “m” in the queuing analysis indicates potential errors.

- ▶ **LEA Response:** Please see Section 6 of the updated TIS for updated results. Detailed Synchro results are provided in Appendix G, Appendix H, and Appendix I.

c. Confirm with the Region whether SimTraffic analysis is mandatory.

- ▶ **LEA Response:** Please see Section 7 of the updated TIS for the results of the SimTraffic analysis.

F. Advisory Comments

Comment 20: Comments are not repeated; however, where they apply to multiple sections (e.g., Site Plan and TIS), ensure all relevant documents are revised for consistency.

- ▶ **LEA Response:** Noted.

Comment 21: Town of Caledon staff defer to the Region of Peel with regard to roadways under their Jurisdiction.



▶ **LEA Response:** Noted.

Comment 22: *Town Transportation Engineering recommends awaiting approval of Transportation Studies supporting the Alloa Secondary Plan and Phase 1 Tertiary Plan before proceeding with the site plan application. Outstanding comments on these studies remain unresolved. If the applicant chooses to proceed, the following comments apply, but comments may change.*

▶ **LEA Response:** Noted.

Comment 23: *The Town reserves the right to implement a transit stop along Street G if deemed necessary.*

▶ **LEA Response:** Noted.



3 TOWN OF CALEDON – PUBLIC WORKS & TRANSPORTATION, DEVELOPMENT ENGINEERING

Comment 19: Add the sight triangle area highlighted in TIS Appendix L Drawing 14 and 15 (after it is updated as per comments), ensure sightline restrictions are prohibited in these area's.

- ▶ **LEA Response:** Noted. Please see **Drawing No.001** in **Appendix M**.

Comment 20: Similar to comments on the previous submission, review the proposed taper length of 36.0m for the northbound left-turn lane on Creditview Road against TAC Geometric Design Guide for Canadian Roads (Chapters 2 and 9). Revise where feasible to align with TAC standards (approx. 45m, consultant to confirm).

- Review updated queuing forecasts from LEA's TIS (last version only 20m needed for the Northbound Left Turn Lane from Creditview into Access #1).
 - ▶ **LEA Response:** Updated queueing forecast are provided in Section 6 of the updated TIS. Detailed Synchro results are provided in **Appendix G, Appendix H, and Appendix I**.
- Consider anticipated vehicular speeds and determine flexibility in reducing parallel lengths for the northbound left-turn into the site (is deceleration distance required in this context?) or the southbound left-turn onto Mayfield Road (deceleration length already overlaps with the 95th percentile queue for 35m would an additional 10m overlap be acceptable to the Region?).
 - ▶ **LEA Response:** Updated queueing forecast are provided in Section 6 of the updated TIS. Detailed Synchro results are provided in **Appendix G, Appendix H, and Appendix I**.
- Coordinate with the Region of Peel as this impacts the southbound Left Turn Lane Taper onto Creditview Road.
 - ▶ **LEA Response:** Please see response to the comment above. Queueing is not expected to impact the southbound left turn lane taper onto Creditview Road.
- Ensure both deceleration and storage lengths are adequately addressed.
 - ▶ **LEA Response:** See Section 6 of the updated TIS. Detailed Synchro results are provided in **Appendix G, Appendix H, and Appendix I**.

Comment 25: A SimTraffic analysis of queues is required to address limitations of Synchro queue modeling. Of particular concern are cases where forecasted queues exceed storage capacity, including locations where queues may back up past proposed accesses on Creditview Road.

- Propose mitigation measures or alternative designs as required.
- The presence of “#” and “m” in the queuing analysis indicates errors—please correct.
- Confirm with the Region whether SimTraffic analysis is mandatory.
 - ▶ **LEA Response:** Please see responses to Comment 19 (Synchro Analysis) from the Town of Caledon – Public Works & Transportation, Transportation Engineering.



4 TOWN OF CALEDON – PUBLIC WORKS & TRANSPORTATION, ROADWORKS 4TH SUBMISSION

Comment 1: Comment response refers to an updated TIS; this is missing in the submission package. Transportation Staff await the updated Transportation Impact Study to confirm the following:

- A. *The storage length for the southbound left-turn lane at Mayfield Road and Street G must be maximized where feasible. The design must also provide the minimum TAC taper and meet Synchro queueing requirements for the northbound left-turn lane into the middle Street G access (full-moves access for Retail C1/C2). The taper is missing; further pavement marking should be revised to provide a white dashed line on the east side of the northbound left turn lane (full-moves access for Retail C1/C2).*
- ▶ **LEA Response:** Noted. The 95th percentile queue length for the southbound left-turn movement on Mayfield Road is 32 m, and the 95th percentile queue length for the northbound left-turn movement at the middle access on Street G is less than 1 m. The total distance between the two stop lines is approximately 107 m, confirming that the queues can be accommodated without interference. As such, no taper has been applied, and the centreline will operate as a TWLTL. The PMSP for Street G has been updated to show the white dashed line on the east side of the northbound left-turn lane. Please refer to the Tylin drawings.
- B. *Review the proposed taper for the northbound left-turn lane on Creditview Road at the full moves access. Confirm feasibility of revising to the TAC-recommended approximate length (45 metres) if achievable. Consultant to confirm final value. Provide an updated TIS to confirm storage lengths and indicate the design speed assumptions used for the taper design.*
- ▶ **LEA Response:** The taper lengths provided for the full-movement access on Creditview Road meet TAC standards, with a total available length of 66 m (40 m taper and 26 m storage). A taper length of 40 m is the maximum achievable, as it is constrained by the southbound left-turn queue on Creditview Road at Mayfield Road. The Synchro analysis indicates a 95th percentile northbound left-turn queue of approximately 8.4 m, while the SimTraffic analysis shows an average queue of approximately 18 m and a maximum queue of approximately 49 m. As the taper is provided by pavement markings, queues can extend into this area without issue and remain within the available length. The design speed used is 80 km/h. Please refer to **Section 6 and 7**.
- C. *Clarify assumptions regarding heavy vehicle routing and roadway improvement timing on Creditview Road. This could be done by including a Truck Route in the TIS. The external and internal works (signage, curbs, pavement structure, etc.) will then need to be updated accordingly to direct trucks to the correct accesses.*
- ▶ **LEA Response:** Noted. Truck circulation is currently prohibited on Creditview; however, this restriction is expected to be removed on this segment in the horizon year analyzed.



Comment 2: Several outstanding comments remain regarding AutoTURN, the Pavement Markings and Signage Plan (PMSP), the Transportation Impact Study (TIS), and the Site Plan Application (SPA). These may affect the detailed design. Please refer to Comprehensive Comments previously issued for the third submission of the detailed design and second site plan application, and update all materials accordingly. Key Comments on the Site Plan and TIS:

- A SimTraffic analysis of queues is required to address limitations of Synchro queue modeling. Of particular concern are cases where forecasted queues exceed storage capacity, including locations where queues may back up past proposed accesses on Creditview Road. The capacity analysis of Street G and the site accesses is missing, this is required for storage / queuing.
 - Propose mitigation measures or alternative designs as required.
 - The presence of “#” and “m” in the queuing analysis indicates errors—please correct.
- ▶ **LEA Response:** Please see responses to Comment 19 (Synchro Analysis) from the Town of Caledon – Public Works & Transportation, Transportation Engineering.
- Vehicles must be able to enter and exit the proposed development without encroaching into oncoming traffic.
 - Northern Access on Street G (Truck Access for Retail Buildings C1/C2): Westbound right-turn movement requires revision; northbound right-turn movement is missing.
 - Middle Street G Access (the full move’s passenger vehicle access for Retail C1/C2): Southbound right movement conflicts with the left turn lane. Eastbound right movement is missing from the analysis.
- ▶ **LEA Response:** Please see responses to Comments 14a and 14b (Transportation Impact Study) from the Town of Caledon – Public Works & Transportation, Transportation Engineering.
- Consistent with prior comments, include consideration for the design speed above the posted speed limit.
- ▶ **LEA Response:** Please see responses to Comment 16 (Transportation Impact Study) from the Town of Caledon – Public Works & Transportation, Transportation Engineering.
- Provide an active transportation connection to existing transit services within Brampton. Clearly document the expected interim pedestrian route to this in the TIS.
- ▶ **LEA Response:** A 3.0 m wide multi-use path will be provided along both sides of Street G to support active transportation. The existing paved shoulder along Creditview Road will be maintained under future conditions to ensure connectivity to existing transit services within Brampton. These elements are reflected in the updated TIS (see Section 9).

Active Transportation

Comment 3: Similar to previous submissions, Multi-Use Paths (MUPs) must be continuous across all accesses in accordance with the Town’s Development Standard Manual. Please revise Street G to remove curb cuts and tactile plates and provide a continuous, level concrete treatment.

- ▶ **LEA Response:** To be addressed by others.



Comment 4: Pedestrian connections at Mayfield Road and Creditview Road appear to deviate from Regional Standards 5-2-16A and 5-2-16C. Current drawings direct pedestrians toward roadway ditches rather than sidewalks. Please coordinate with the Region and, at a minimum, maintain existing interim active transportation facilities at the intersection.

- ▶ **LEA Response:** To be addressed by others.

Detailed Design Drawings

Comment 5: The with the posted speed limit of 70 km/hr on Creditview Road the 85th percentile speeds on Creditview Road are 95 km/hr. Realistically there likely is insufficient frontage to accommodate tapers associated with a design speed. Accordingly, install 60 km/h speed limit signage along the development frontage (and slightly in advance) as per the Town's Traffic By-Law.

- ▶ **LEA Response:** Please see responses to Comment 16 (Transportation Impact Study) from the Town of Caledon – Public Works & Transportation, Transportation Engineering.

Pavement Markings and Signage Plan

Comment 6: As noted previously, include the required sight triangle areas on the detailed design drawings to maintain sightlines. The sight triangles are shown in Appendix L (Drawings 14 and 15) of the TIS and must be updated as per current comments. Ensure sightline obstructions are prohibited in these areas.

- ▶ **LEA Response:** Noted. Please see **Drawing No.001 in Appendix M.**

Comment 7: On Street G, north of the regional turn lane, provide the appropriate taper to separate the southbound left-turn movement at Mayfield Road from the northbound left-turn movement at the full-moves access. Update the Pavement Markings and Signage Plan (PMSP) to reflect Ontario Traffic Manual (OTM) recommendations, including a white dashed line on the east side of the northbound left turn lane. Additional capacity analysis is required to confirm storage sufficiency.

- ▶ **LEA Response:** Please see response to Comment 4 of this section.

Comment 8: North of the middle access on Street G, change to a southbound Left turn lane (remove northbound left into the truck access). Follow OTM and TAC guidelines when designing turn lanes.

- ▶ **LEA Response:** As the Alloa Secondary Plan has not yet been implemented at the horizon year of this project and the roadway currently functions as a cul-de-sac, this condition is considered interim. The need for a southbound left-turn lane may be revisited upon completion and implementation of the Alloa Secondary Plan.



Should you have any questions regarding this Updated Transportation Impact Study, please do not hesitate to contact the undersigned.

Yours truly,

LEA CONSULTING LTD.

ZARA MCCORMICK

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

A handwritten signature in black ink, appearing to read 'Jorge Ordenes', written over a horizontal line.

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

:ek

Encl. Transportation Impact Study – 12100 Creditview Road, Proposed Commercial Development, Town of Caledon (March 2026)

Disclaimer

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TABLE OF CONTENTS

1	Introduction.....	1
1.1	Proposed Development.....	2
2	Existing Transportation Conditions.....	4
2.1	Existing Road Network.....	4
2.2	Existing Transit Network.....	5
2.3	Existing Cycling Network.....	6
2.4	Existing Pedestrian Network.....	9
2.5	Traffic Data Collection.....	9
2.6	Existing Traffic Volumes.....	10
3	Future Background Transportation Conditions.....	11
3.1	Background Developments.....	11
3.2	Corridor Growth.....	13
3.3	Future Road Improvements & Modifications.....	13
3.4	Future Active Transportation Improvements.....	14
3.4.1	Caledon Active Transportation Master Plan (ATMP) (June 2024).....	14
3.5	Future Background Traffic Volumes.....	16
4	Site-Generated Traffic.....	17
4.1	Modal Split.....	17
4.2	Trip Generation.....	17
4.3	Trip Distribution and Assignment.....	19
5	Future Total Transportation Conditions.....	25
5.1	Future Total Traffic Volumes.....	26
6	Intersection Capacity Analysis.....	27
6.1	Existing Conditions Synchro Model Inputs.....	27
6.2	Future Conditions Synchro Model Inputs.....	27
6.3	Existing Signalized Intersections.....	28
6.3.1	Mayfield Road & Creditview Road.....	28
6.4	Mayfield Road & Robert Parkinson Drive.....	31
6.4.1	Mayfield Road & Robert Parkinson Drive (Unsignalized).....	31
6.4.2	Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street ‘G’) (Signalized)...	33

6.4.2.1	Single Left-Turn lane Justification.....	36
6.5	<i>New Unsignalized Intersections.....</i>	36
6.5.1	Creditview Road & East Site Access 1.....	36
6.5.2	Creditview Road & East Site Access 2.....	37
6.5.3	Mayfield Road & South Site Access 1.....	38
6.5.4	Mayfield Road & South Site Access 3.....	39
6.5.5	Street G & North Internal Access.....	40
6.5.6	Street G & South Internal Access.....	41
6.6	<i>Summary of Intersection Capacity Analysis.....</i>	41
7	Sim Traffic Analysis.....	42
8	Parking and Loading Review.....	44
8.1	<i>Parking Review.....</i>	44
8.2	<i>Loading Review.....</i>	44
8.3	<i>Bicycle Parking Review.....</i>	45
8.4	<i>Drive-Through Facility Review.....</i>	46
9	Active Transportation Review.....	47
10	Functional Design and Access Review.....	48
11	Conclusion and Recommendations.....	49

LIST OF TABLES

Table 1-1:	Site Statistics.....	2
Table 2-1:	Data Collection Summary.....	9
Table 3-1:	Background Developments.....	11
Table 3-2:	Estimated Saturday Trip Generation and Distribution.....	12
Table 3-3:	Statistics Comparison between Stage 1 and Stage 2 of Mayfield West Development.....	12
Table 4-1:	Projected Modal Split.....	17
Table 4-2:	Trip Generation.....	18
Table 4-3:	Trip Distribution and Assignment.....	19
Table 6-1:	Future Conditions Synchro Model Input Modifications.....	27
Table 6-2:	STP Optimization.....	28

Table 6-3: Intersection Capacity Analysis, Mayfield Road & Creditview Road (Not Optimized)	28
Table 6-4: Intersection Capacity Analysis, Mayfield Road & Creditview Road (Optimized)	29
Table 6-5: Intersection Queue Lengths, Mayfield Road & Creditview Road	30
Table 6-6: Intersection Capacity Analysis, Mayfield Road & Robert Parkinson Drive	32
Table 6-7: Traffic Signal Warrant Analysis	33
Table 6-8: Recommended Signal Timing Plan, Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G')	33
Table 6-9: Intersection Capacity Analysis, Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G')	34
Table 6-10: Intersection Queue Lengths, Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G')	35
Table 6-11: Intersection Capacity Analysis, Creditview Road & East Site Access 1	36
Table 6-12: Intersection Capacity Analysis, Creditview Road & East Site Access 2	37
Table 6-13: Intersection Capacity Analysis, Mayfield Road & South Site Access 1	38
Table 6-14: Intersection Capacity Analysis, Mayfield Road & South Site Access 3	39
Table 6-15: Intersection Capacity Analysis, Street G & North Internal Access	40
Table 6-16: Intersection Capacity Analysis, Street G & South Internal Access	41
Table 7-1: SimTraffic Queues – Creditview Road & East Access 1	42
Table 7-2: SimTraffic Queues – Creditview Road & East Access 2	43
Table 8-1: Town of Caledon Zoning By-law 2024-050 Zone C-687 Parking Requirement	44
Table 8-2: Town of Caledon Zoning By-law 2006-50 Loading Requirement	45

LIST OF FIGURES

Figure 1-1: Site Location	1
Figure 1-2: Site Plan	3
Figure 2-1: Existing Lane Configuration	4
Figure 2-2: Existing Transit Network	5
Figure 2-3: Existing Cycling Network (Caledon Multi-Modal Transportation Master Plan)	7
Figure 2-4: Future Cycling Network (Caledon Multi-Modal Transportation Master Plan)	8

Figure 2-5: Proposed Cycling Network (Mount Pleasant Block 51-1 Transportation Study)	9
Figure 2-6: Existing Peak Hour Traffic Volumes	10
Figure 3-1: Background Development Peak Hour Traffic Volumes	13
Figure 3-2: Future Background Lane Configuration	14
Figure 3-3: Caledon ATMP Proposed Network	15
Figure 3-4: Future Background Peak Hour Traffic Volumes (2029).....	16
Figure 4-1: Total Site-Generated Peak Hour Traffic Volumes.....	20
Figure 4-2: Costco + Gas Station Peak Hour Traffic Volumes (Retail A)	20
Figure 4-4: Total Site-Generated Retail Peak Hour Traffic Volumes (Retail B+C)	21
Figure 4-5: Fast Food Restaurant with Drive-Thru Peak Hour Traffic Volumes	21
Figure 4-6: Costco + Gas Bar Pass-by Peak Hour Traffic Volumes (Retail A).....	22
Figure 4-7: Retail Pass-by Peak Hour Traffic Volumes (Retail B+C).....	23
Figure 4-8: Fast Food Restaurant with Drive-Thru Pass-by Peak Hour Traffic Volumes (Retail B5).....	23
Figure 4-9: Net Total Site Generated Peak Hour Traffic Volumes.....	24
Figure 5-1: Recommended Future Road Network	25
Figure 5-2: Future Total Peak Hour Traffic Volumes (2029)	26
Figure 8-1: Proposed Drive-Through Facility	46

APPENDICES

APPENDIX A	TERMS OF REFERENCE
APPENDIX B	TMCS AND SIGNAL TIMING PLANS
APPENDIX C	BACKGROUND DEVELOPMENTS
APPENDIX D	FUTURE MAYFIELD ROAD WIDENING
APPENDIX E	MODE SPLIT & TTS DATA
APPENDIX F	COSTCO & GAS BAR PROXY TRIP GENERATION ANALYSIS
APPENDIX G	EXISTING INTERSECTION CAPACITY ANALYSIS RESULTS
APPENDIX H	FUTURE BACKGROUND (2029) INTERSECTION CAPACITY ANALYSIS RESULTS
APPENDIX I	FUTURE TOTAL (2029) INTERSECTION CAPACITY ANALYSIS RESULTS
APPENDIX J	SIGNAL WARRANT ANALYSIS
APPENDIX K	SIMTRAFFIC ANALYSIS RESULTS
APPENDIX L	ZBL 2024-050
APPENDIX M	FUNCTIONAL DESIGN REVIEW
APPENDIX N	PAVEMENT MARKING SIGNAGE PLAN & COST ESTIMATE

1 INTRODUCTION

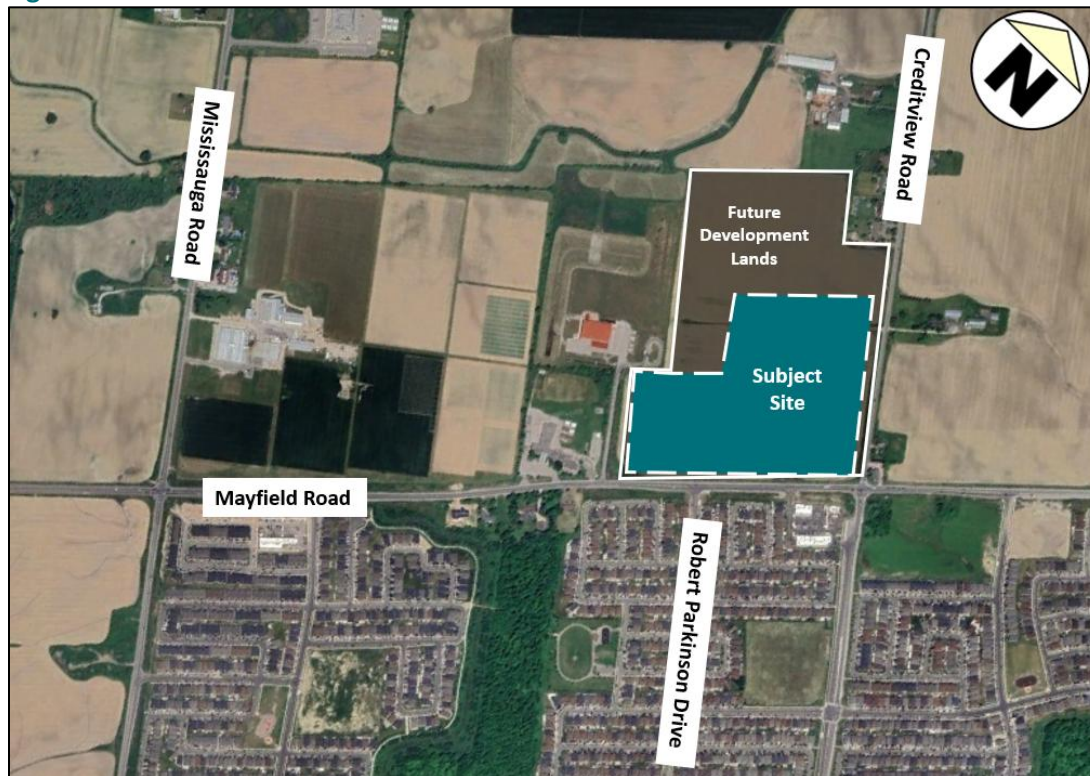
LEA Consulting Ltd. (LEA) has been retained by 12100 Creditview Developments Limited to prepare a Transportation Impact Study (TIS) in support of the Site Plan Approval (SPA) for the proposed commercial development located at 12100 Creditview Road (herein referred to as the “subject site”) in the Town of Caledon.

The subject site occupies a segment of the future development lands. As part of this application, the proposed commercial development will occur in the southern part of the development lands. The development lands are currently vacant and are bounded by Mayfield Road to the south, Creditview Road to the east, institutional properties to the west, and undeveloped lands to the north. **Figure 1-1** illustrates the development lands and subject site.

By way of background, an initial TIS was prepared by LEA, dated October 2024, in support of the first submission. Following the October 2024 TIS, comments were received from the Town and Region’s transportation staff in May 2025, and February 2025, respectively. An updated TIS has been prepared in September 2025, with additional comments received by Town staff in November 2025.

It should be noted that TYLin has been retained by 12100 Creditview Developments Limited to prepare an interim transportation assessment in support of the interim road and intersection improvements along Mayfield Road. The current study has been updated to be consistent with the TYLin interim assessment and to address comments received from both Town and Regional staff.

Figure 1-1: Site Location



Source: Google Maps, Accessed July, 2025

The purpose of this study is to assess the proposed development from a transportation perspective, to determine the traffic impacts to the adjacent road network over a five-year horizon, and to identify any required mitigation measures. The study will be conducted in accordance with the Town of Caledon *Transportation Impact Study Guidelines (2017)* and in-line with the Region of Peel *Transportation Impact Study Guidelines*.

1.1 PROPOSED DEVELOPMENT

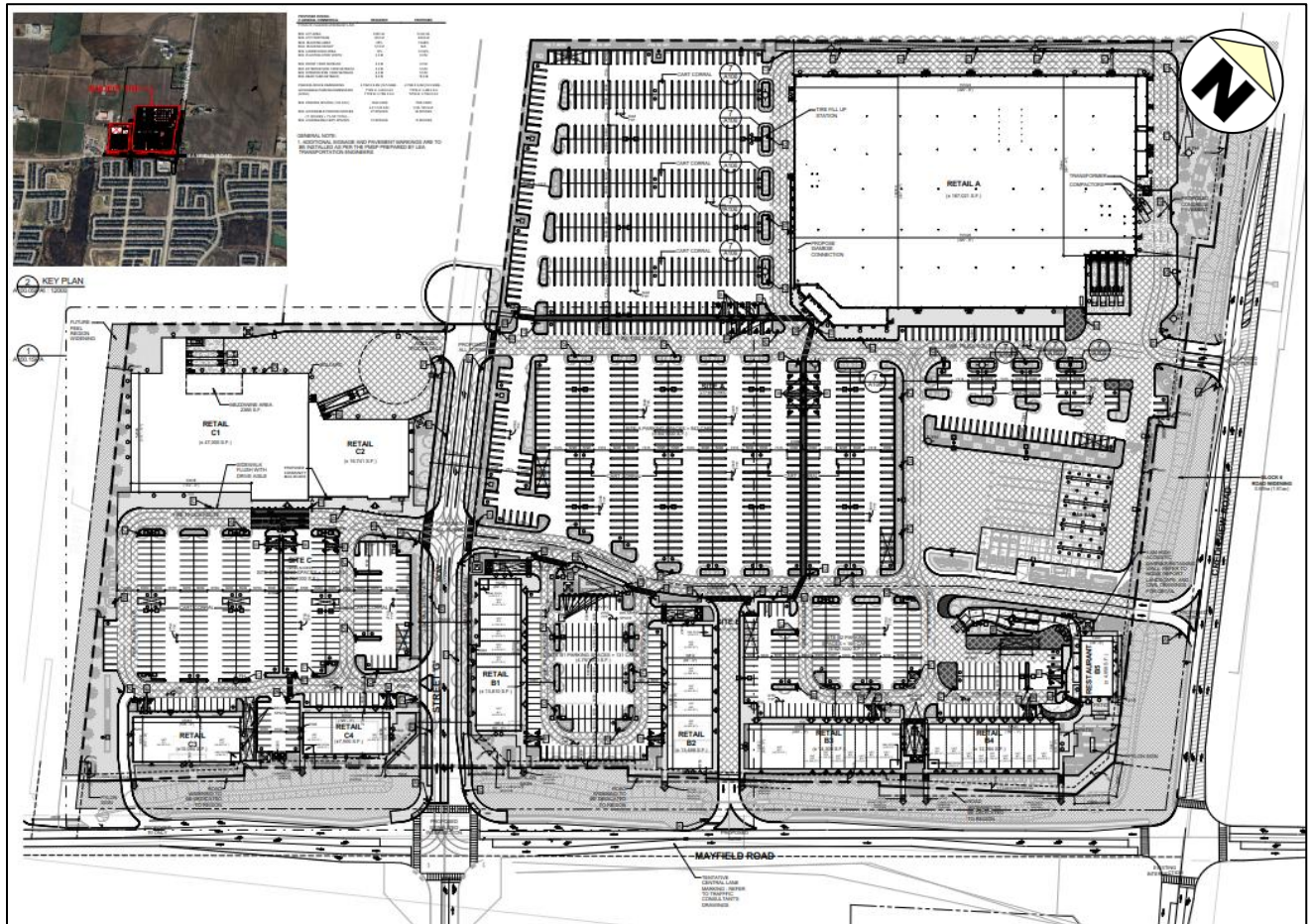
Based on the latest site plan, the development proposal consists of nine (9) commercial structures (A, B1-B5, and C1-C4) providing a total gross floor area (GFA) of 308,593 ft² and 1,556 parking spaces. A gas bar with 24 fueling stations is also proposed on the east side of the site, south of Commercial Structure A. A breakdown of the proposed land uses is presented in **Table 1-1**. Since the initial submission, there has been a change in GFA for retail buildings A, B5, and C1-C4, resulting in an addition of +4,791 ft² to the overall site.

Table 1-1: Site Statistics

Land Use	Previous Submission (October 2024)	Previous Submission (September 2025)	Current Development (February 2026)	Difference
	GFA	GFA	GFA	GFA
Retail A	162,226 ft ²	162,007 ft ²	167,021 ft ²	+5,014 ft ²
Retail B1	13,811 ft ²	13,811 ft ²	13,810 ft ²	-1 ft ²
Retail B2	13,468 ft ²	13,468 ft ²	13,468 ft ²	No Change
Retail B3	12,266 ft ²	12,266 ft ²	14,300 ft ²	+2,034 ft ²
Retail B4	14,261 ft ²	14,261 ft ²	12,264 ft ²	-1,997 ft ²
Retail B5	4,400 ft ²	4,048 ft ²	4,059 ft ²	+11 ft ²
Retail C1 (Including Mezzanine)	49,366 ft ²	49,366 ft ²	49,366 ft ²	-
Retail C2	17,000 ft ²	17,000 ft ²	16,741 ft ²	-259 ft ²
Retail C3	8,544 ft ²	10,075 ft ²	10,064 ft ²	-11 ft ²
Retail C4	8,126 ft ²	7,500 ft ²	7,500 ft ²	No Change
Overall GFA	303,468 ft²	303,802 ft²	308,593 ft²	+4,791 ft²
Gas Bar	12 fueling positions	24 fueling positions	24 fueling positions	-
Vehicular Parking Supply	1,629 spaces	1,601 spaces	1,556 spaces	-45 spaces

Access to the site is proposed via one (1) full movement driveway and one (1) right-in / right-out (RIRO) driveway off Creditview Road. One (1) right-in only driveway, one (1) RIRO driveway, and one (1) full movement driveway (Street 'G') off Mayfield Road is also available for access to the site. The proposed site plan is illustrated in **Figure 1-2**.

Figure 1-2: Site Plan



Source: Turner Fleischer, March 2026

2 EXISTING TRANSPORTATION CONDITIONS

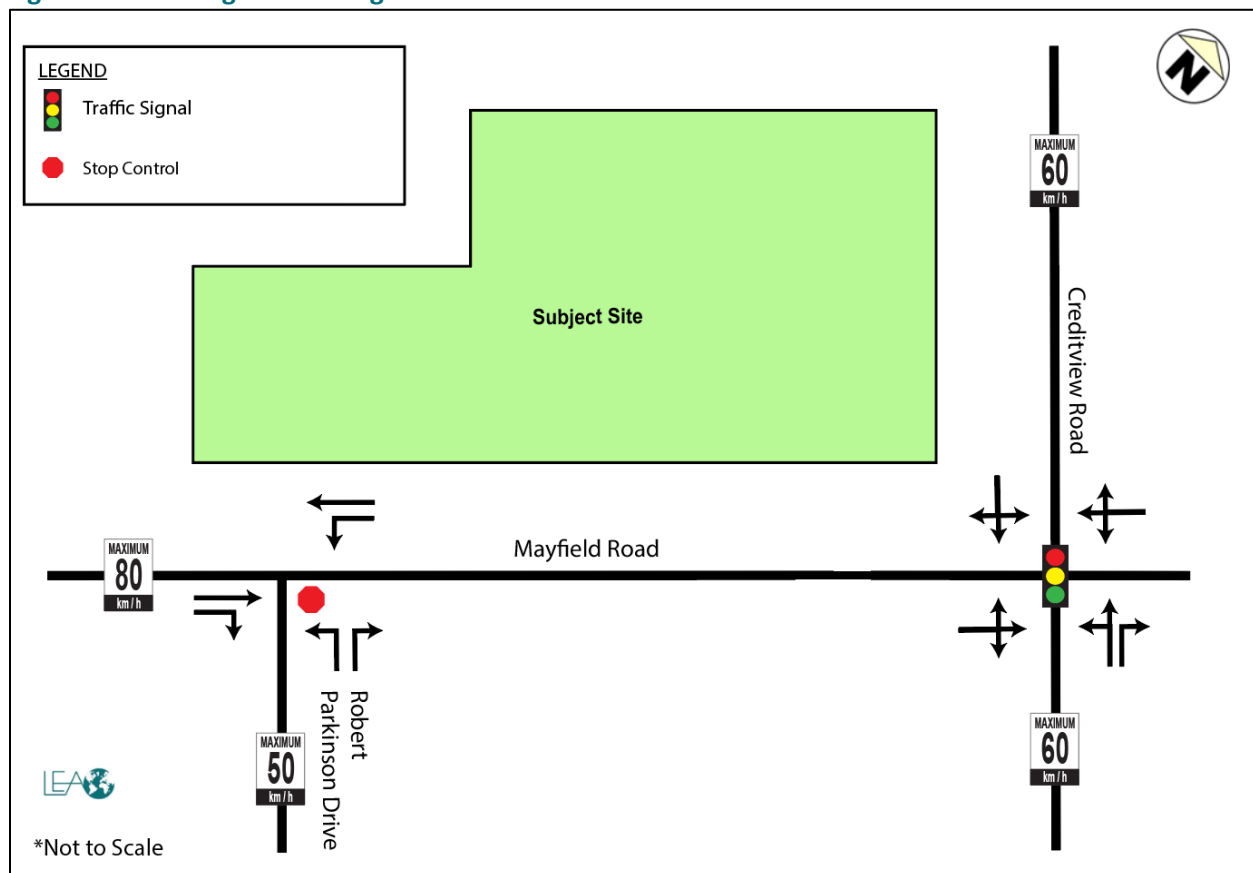
This section identifies and assesses the existing transportation conditions within the study area, including the road, transit, cycling, and pedestrian networks. The study area was determined by assessing the size of the proposed commercial development and its anticipated transportation impact, and through consultation with Town and Region staff, which is included in **Appendix A**. The study includes the following existing intersections:

- ▶ Mayfield Road & Creditview Road (Signalized); and
- ▶ Mayfield Road & Robert Parkinson Drive (Unsignalized).

2.1 EXISTING ROAD NETWORK

The following section provides a description and classification of the roadways within the study area. Roadways within the study area are under the jurisdiction of the Region of Peel, Town of Caledon, and City of Brampton. **Figure 2-1** illustrates the existing lane configuration.

Figure 2-1: Existing Lane Configuration



Mayfield Road is an east-west arterial road under the jurisdiction of the Region of Peel and operates with a two-lane cross-section (one lane per direction) within the study area. The roadway extends from Winston Churchill Boulevard in the west to Highway 50 in the east. Mayfield Road operates with a posted speed limit of 80 km/h within the study area.

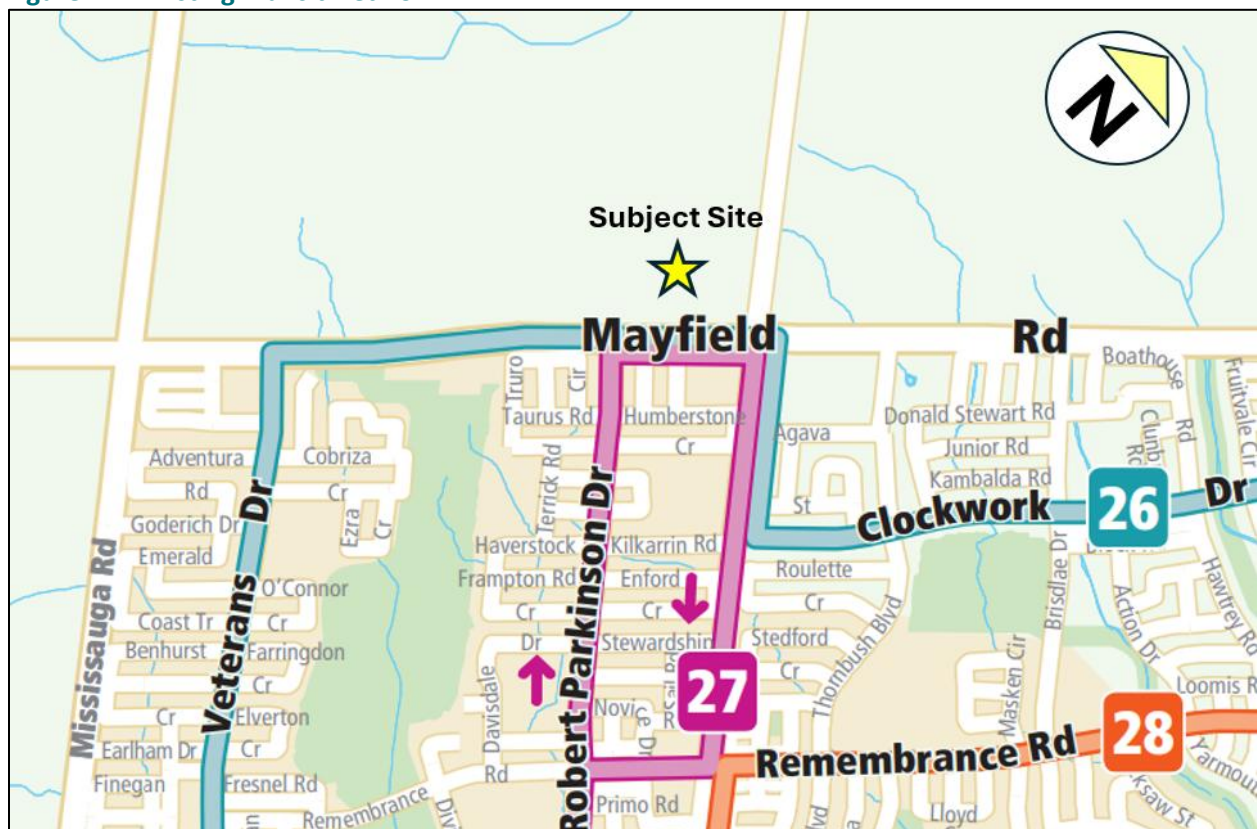
Creditview Road is a north-south collector road under the jurisdiction of the Town of Caledon and operates with a two-lane cross-section (one lane per direction) within the study area. The roadway extends from The Grande Side Road in the north to Bovaird Drive West in the south. Creditview Road operates with a posted speed limit of 60 km/h.

Robert Parkinson Drive is north-south collector road under the jurisdiction of the City of Brampton and operates with a two-lane cross-section (one lane per direction) within the study area. The roadway extends from Mayfield Road in the north to Sandalwood Parkway West in the south. Robert Parkinson Drive operates with an assumed speed limit of 50 km/h within the study area.

2.2 EXISTING TRANSIT NETWORK

There is currently limited transit accessibility surrounding the subject site. The closest available transit stops are located at the intersection of Mayfield Road & Robert Parkinson Drive and at the intersection of Mayfield Road & Creditview Road along Route 27 – Robert Parkinson, and Route 26 – Mount Pleasant provided by Brampton Transit. The existing transit network surrounding the subject site is illustrated in **Figure 2-2**. Service details of available transit routes are described below.

Figure 2-2: Existing Transit Network



Source: Brampton Transit, June 2024

Route 27 – Robert Parkinson is a bus route that operates generally in a north-south direction between Mount Pleasant GO station to the area of Robert Parkinson and Mayfield Road. The route operates Monday to Saturday, only during morning and midday hours with headways of 35-minutes.

Access Location: Route 27 is accessible at the intersection of Robert Parkinson Drive & Mayfield Road and at the intersection of Mayfield Road & Creditview Road, located directly south and south-east of the subject site, respectively.

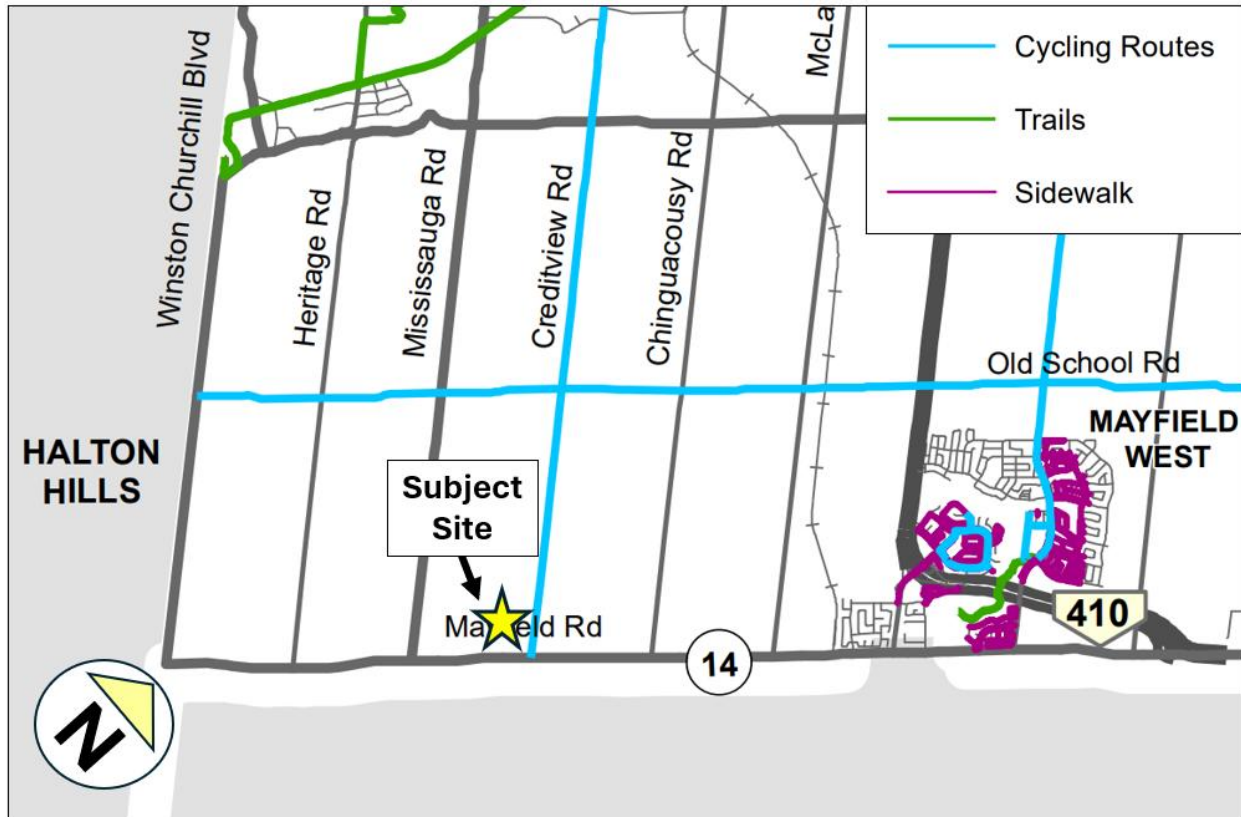
Route 26 – Mount Pleasant is a bus route that operates generally in a north-south direction between Mount Pleasant GO station to Mayfield Road & Veterans Drive, which then operates in an east-west direction to Clockword drive between Edenbrook Hill & Chinguacousy Road. This route operates every day, with headways of 22 minutes on weekdays, and between 30-60 minutes on weekends.

Access Location: Route 26 is accessible at the intersection of Robert Parkinson Drive & Mayfield Road and at the intersection of Mayfield Road & Creditview Road, located directly south and south-east of the subject site, respectively.

2.3 EXISTING CYCLING NETWORK

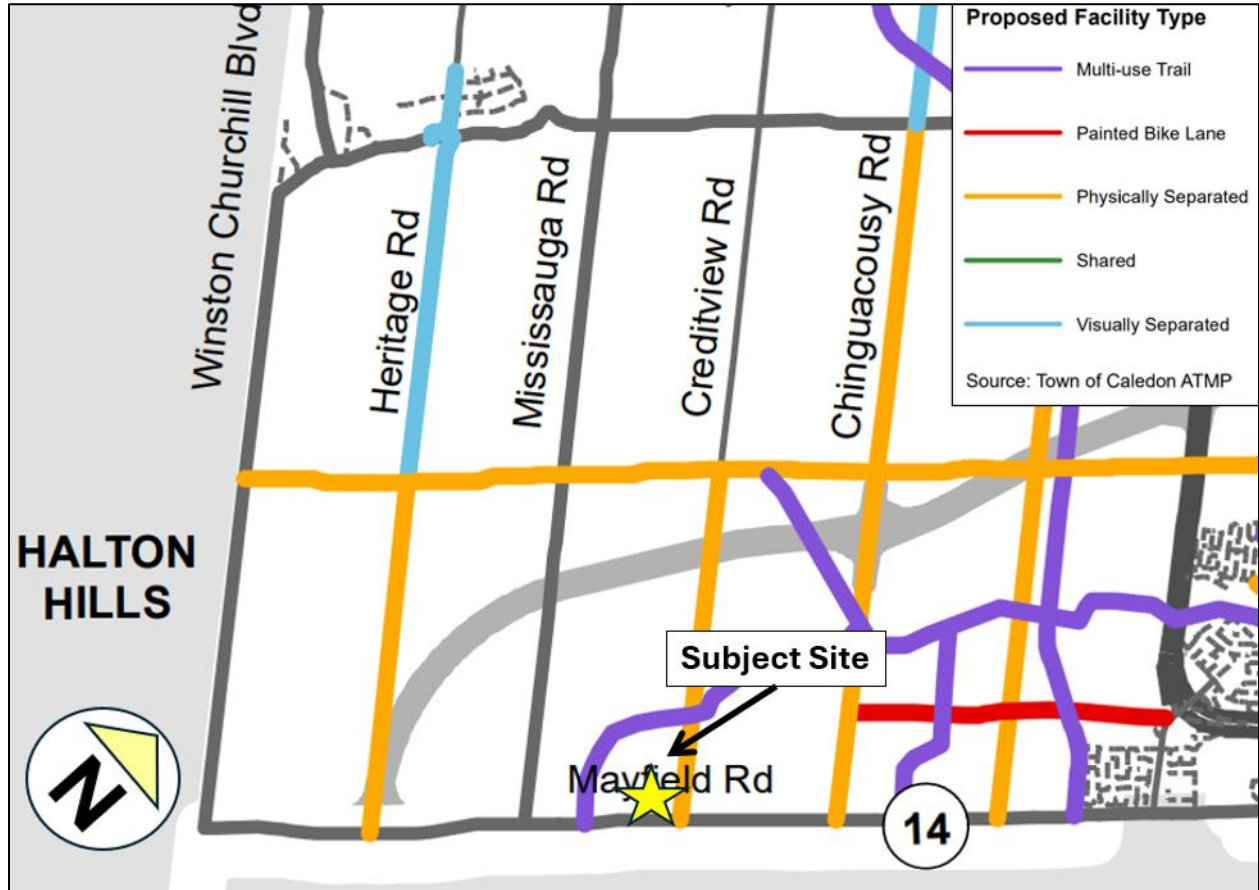
Currently, 1.5 m paved shoulders are available on Creditview Road, north of Mayfield Road. It is expected that cyclists can comfortably cycle along this route with low traffic volumes. This will be maintained under future conditions. Based on *The Town of Caledon Multi-Modal Transportation Master Plan (MMTMP)*, painted bike lanes are provided along Creditview Road, as illustrated in **Figure 2-3**. This Plan also proposes a new cycling network comprised of on-road and off-road cycling and multi-use routes intended to facilitate commute, personal, and recreational bicycle travel. Physically separated bike lanes are proposed near the subject site on Creditview Road and Chinguacousy Road, extending north from Mayfield Road. Additionally, a multi-use trail is planned to begin west of Creditview Road at Mayfield Road, providing a connection to Old School Road. Furthermore, as per the *Mount Pleasant Block 51-1 Collector Road and Transportation Study (2015)*, multi-use paths are proposed along Mayfield Road and on-street separated bike lanes are proposed along Robert Parkinson Drive. The future cycling network from the Town of Caledon is illustrated in **Figure 2-4** with the Mount Pleasant Block 51-1 proposed cycling network illustrated in **Figure 2-5**.

Figure 2-3: Existing Cycling Network (Caledon Multi-Modal Transportation Master Plan)



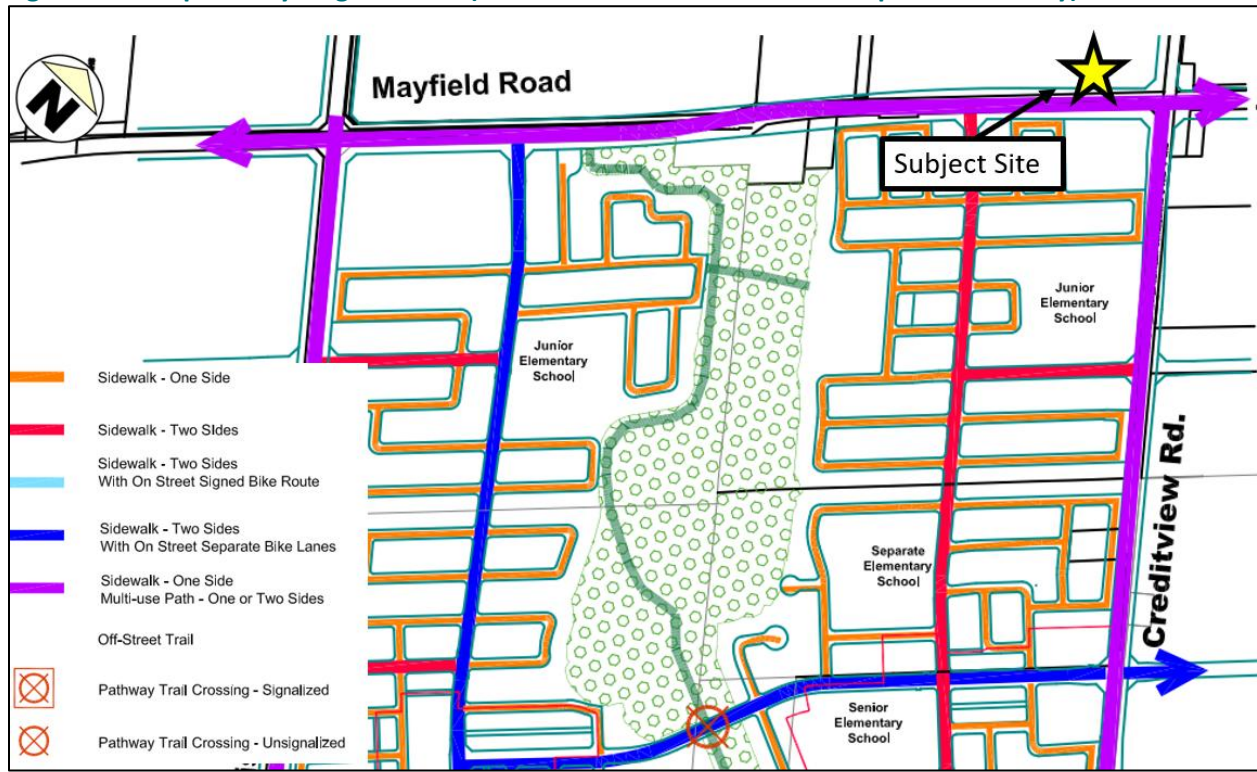
Source: Caledon Multi-Modal Transportation Master Plan, 2024

Figure 2-4: Future Cycling Network (Caledon Multi-Modal Transportation Master Plan)



Source: Caledon Multi-Modal Transportation Master Plan, 2024

Figure 2-5: Proposed Cycling Network (Mount Pleasant Block 51-1 Transportation Study)



Source: Mount Pleasant Block 51-1 Collector Road and Transportation Study, 2015

2.4 EXISTING PEDESTRIAN NETWORK

There is currently no significant pedestrian network immediately surrounding the subject site. Crosswalks are available at the Creditview Road & Mayfield Road intersection with sidewalks provided along both sides of Robert Parkinson Drive and Creditview Road, south of Mayfield Road. However, there are no sidewalks along Mayfield Road and Creditview Road, north of Mayfield Road.

2.5 TRAFFIC DATA COLLECTION

Turning movements counts (TMCs) were used as the source of traffic data for the intersection capacity analysis. Traffic counts were undertaken by LEA Consulting. A summary of the TMC data collected is provided in **Table 2-1**, with detailed traffic counts and signal timing plans available in **Appendix B**.

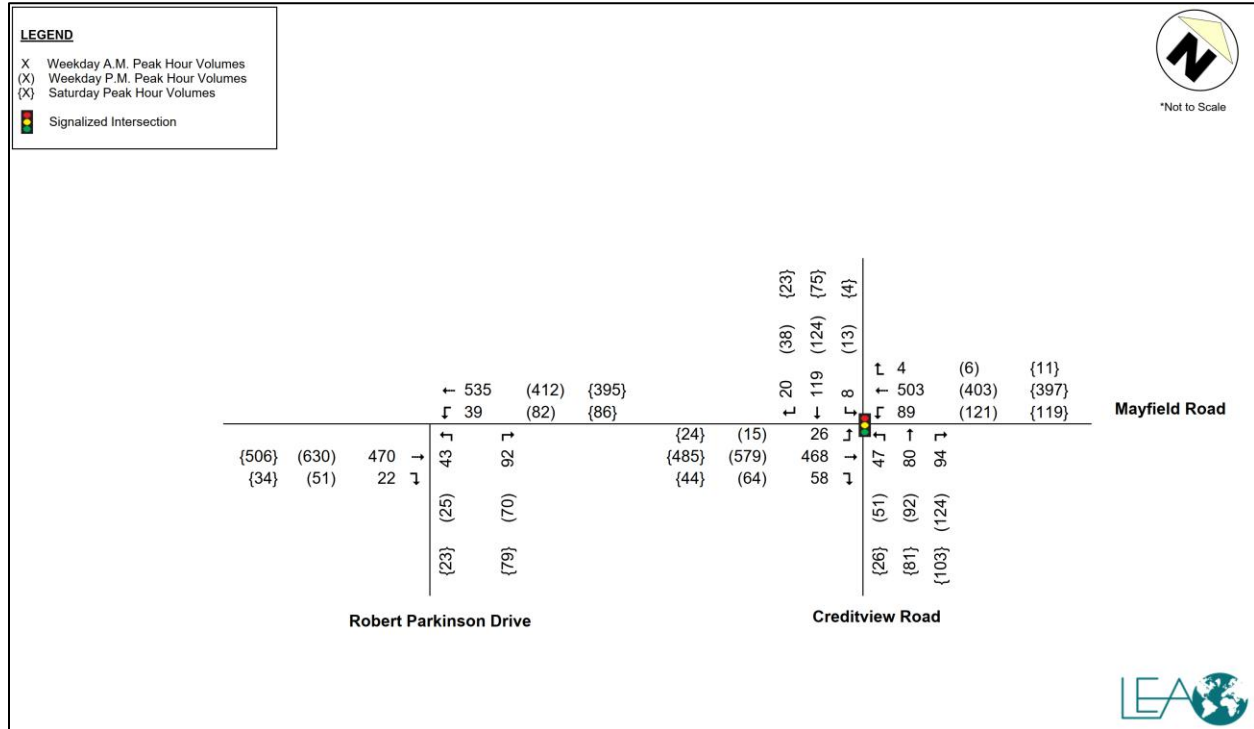
Table 2-1: Data Collection Summary

Intersection	Date	Source
Mayfield Road & Robert Parkinson Drive	September 24, 2024	LEA Consulting
Mayfield Road & Creditview Road		

2.6 EXISTING TRAFFIC VOLUMES

The existing traffic volumes for the weekday AM, PM, and Saturday peak hours are illustrated in **Figure 2-6**.

Figure 2-6: Existing Peak Hour Traffic Volumes



3 FUTURE BACKGROUND TRANSPORTATION CONDITIONS

For the analysis of future background traffic conditions, this study considers a 5-year horizon to the full build-out year of 2029. Future background traffic includes the traffic added to the network from other future developments within the surrounding study area, corridor growth, as well as all planned infrastructure improvements within the study area. The future background conditions will be used as the baseline for evaluating the impact of the proposed commercial development.

3.1 BACKGROUND DEVELOPMENTS

The Mayfield West background development has been identified and confirmed with the Town of Caledon. Site details for Phase 2 of the Mayfield West Development (Stage 1-3) are summarized in **Table 3-1**.

Table 3-1: Background Developments

Development Address	Land Uses	Prepared By	Date
Mayfield West Phase 2 (Stage 1)	Single Family Detached (Low Density Residential) Residential Condominium / Townhouse (Medium Density Residential) Apartment (High Density Residential, 4-8 storey apartment building) Elementary School High School Daycare Business Park Specialty Retail (Live-Work) Shopping Centre	Paradigm	December 2015
Mayfield West Phase 2 (Stage 2)	Single Family Detached (Low Density Residential) Multifamily Housing (Low-Rise) (Medium Density Residential) Multifamily Housing (Mid-Rise) (High Density Residential) Elementary School High School Daycare Business Park Shopping Centre	Paradigm	January 2018
Mayfield West Phase 2 (Stage 3)	Single Family Detached (Low Density Residential) Residential Condominium / Townhouse (Medium Density Residential) Elementary School Shopping Centre	GHD	June 2024

Background development site traffic volumes have been obtained from their respective Transportation Master Plans for both AM and PM peak hours. For Stage 1, site traffic figures have not been provided. Therefore, the difference between future total and future background figures have been used to determine the site traffic volumes. Furthermore, figures for the Saturday peak hour have not been provided for either of the background development studies; however, trip generation rates for for

Mayfield West Phase 2 (Stage 1) has been provided for the Saturday peak hour, as well as the number of units / GFA for both Stage 1 and 2. Accordingly, Saturday trips were calculated as follows:

Mayfield West Phase 2 (Stage 1)

Percentage of the overall trips using Mayfield Road during both AM and PM peak hours for the eastbound and westbound directions were calculated based on the trip generation volumes from the Mayfield West Phase 2 (Stage 1) TIS. The higher of these percentages was applied to the Saturday trip generation volumes to estimate the approximate number of trips utilizing Mayfield Road during the Saturday peak hour. The estimated Saturday trip generation and distribution is outlined in **Table 3-2**. A 30% volume reduction has been applied to account for the portion of the development that has already been constructed.

Table 3-2: Estimated Saturday Trip Generation and Distribution

Based on Paradigm TIS	AM			PM			Sat		
	In	Out	Total	In	Out	Total	In	Out	Total
Trip Generation	1,671	2,178	3,849	2,390	1,957	4,347	2,221	1,969	4,189
Trips Assigned to Mayfield Road	311	486	797	442	309	751	413	439	852
Percentage Utilizing Mayfield Road	19%	22%	41%	18%	16%	34%	19%	22%	41%

In comparing the percentage of trips using Mayfield Road in/out of the site, it is evident that approximately 19% and 18% of drivers are heading eastbound on Mayfield Road during the AM and PM peak hours, respectively. Similarly, approximately 22% and 16% are heading westbound on Mayfield Road during the AM and PM peak hours, respectively. As a conservative approach, it was assumed that approximately 19% and 22% of drivers would be heading eastbound and westbound, respectively, during the Saturday peak hour.

Mayfield West Phase 2 (Stage 2)

In order to determine the Saturday trip generation for Stage 2, proposed units / GFAs were compared between Stage 1 and 2 to determine the net difference. Trips were calculated based on ITE Trip Generation Manual based on the net difference in units / GFA and applied to the road network accordingly. A comparison of the site statistics between Stage 1 and Stage 2 are provided in **Table 3-3**.

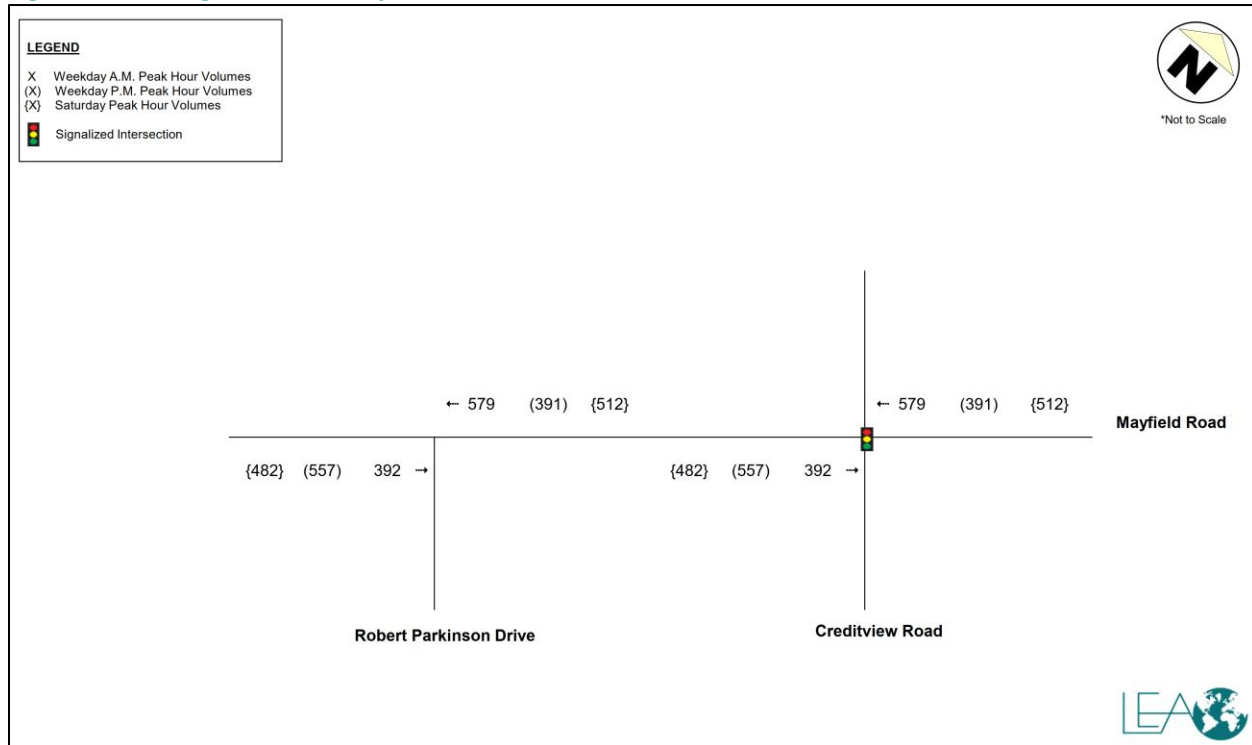
Table 3-3: Statistics Comparison between Stage 1 and Stage 2 of Mayfield West Development

Lane Use Code	Stage 1 Units / GFA	Stage 2 Units / GFA	Net Difference
LUC 210	3,210 units	3,240 units	+30 units
LUC 220	1,513 units	2,060 units	+547 units
LUC 221	394 units	168 units	-226 units
LUC 520	2,525 students	2,725 students	+200 students
LUC 530	1,500 students	1,500 students	0 students
LUC 565	68 students	68 students	0 students
LUC 770	1,164 employees	1,164 employees	0 employees
LUC 820	711,500 GFA	564,762 GFA	-146,738 GFA

In comparing the ITE trips generated for the Saturday peak hour, it is evident that based on land use and unit type changes, negative trips are generated for the Saturday peak hour. As a conservative approach, 0 trips were added to the road network for the Saturday peak hour. It should be noted that Mayfield West Phase 2 (Stage 2) is a slight modification to the work completed for Mayfield West Phase 2 (Stage 1). Detailed trip generation calculations for Mayfield West Phase 2 are provided in **Appendix C**.

The background development peak hour traffic volumes are illustrated in **Figure 3-1**.

Figure 3-1: Background Development Peak Hour Traffic Volumes



3.2 CORRIDOR GROWTH

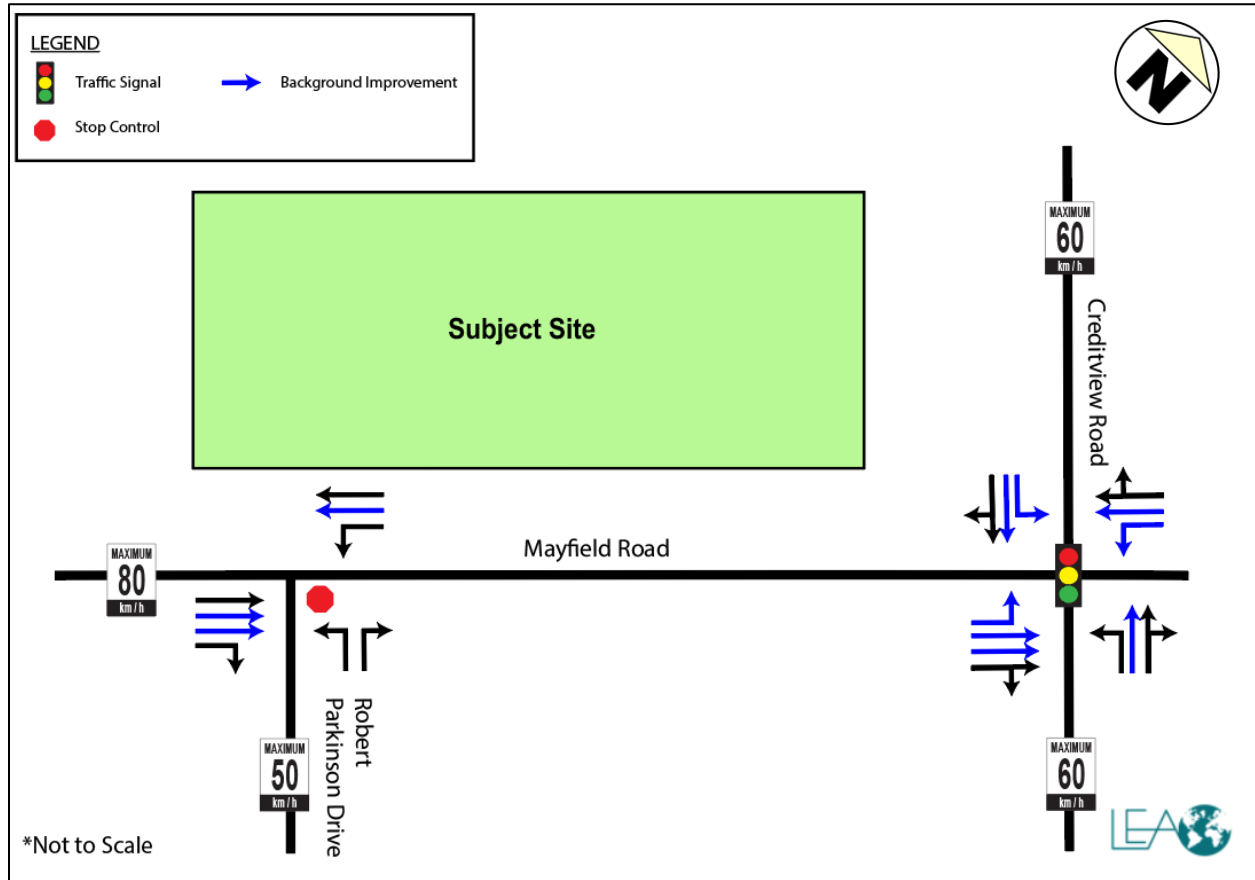
The Region of Peel has provided a 1.5% growth rate along Mayfield Road. However, a 2% growth rate has been applied as a conservative assessment. Based on correspondences with the Town of Caledon, a 2% growth rate has been applied for all movements at Mayfield Road & Robert Parkinson Drive, and Mayfield Road & Creditview Road.

3.3 FUTURE ROAD IMPROVEMENTS & MODIFICATIONS

As indicated in *The Town of Caledon Multi-Modal Transportation Master Plan (MMTMP)*, Mayfield Road is anticipated to be widened. The Region of Peel has completed the Schedule 'C' Environmental Assessment (EA) for the upgrades to Mayfield Road, spanning from Chinguacousy Road to Winston Churchill Boulevard. This EA has been finalized and the project has now been moved into the next phase, "Detailed Design & Construction". The widening includes 3 eastbound through lanes, 2 westbound through lanes, along with left and right turning lanes. In addition, per Brampton's 2015 *Transportation Master Plan*, Creditview Road is planned to widen from 2 to 4 lanes from Wanless Drive to Mayfield Road. The widening includes left turning lanes at its intersection with Mayfield Road. Preliminary design of the future road widenings is provided in **Appendix D**. Due to unexpected construction delays, the current anticipated buildout of the upgrades along Mayfield Road remain unclear. However, based on confirmation with Town and Region staff, the identified planned road network improvements will be incorporated into the 2029 future background analysis.

The future background road network and lane configuration is illustrated in **Figure 3-2**.

Figure 3-2: Future Background Lane Configuration

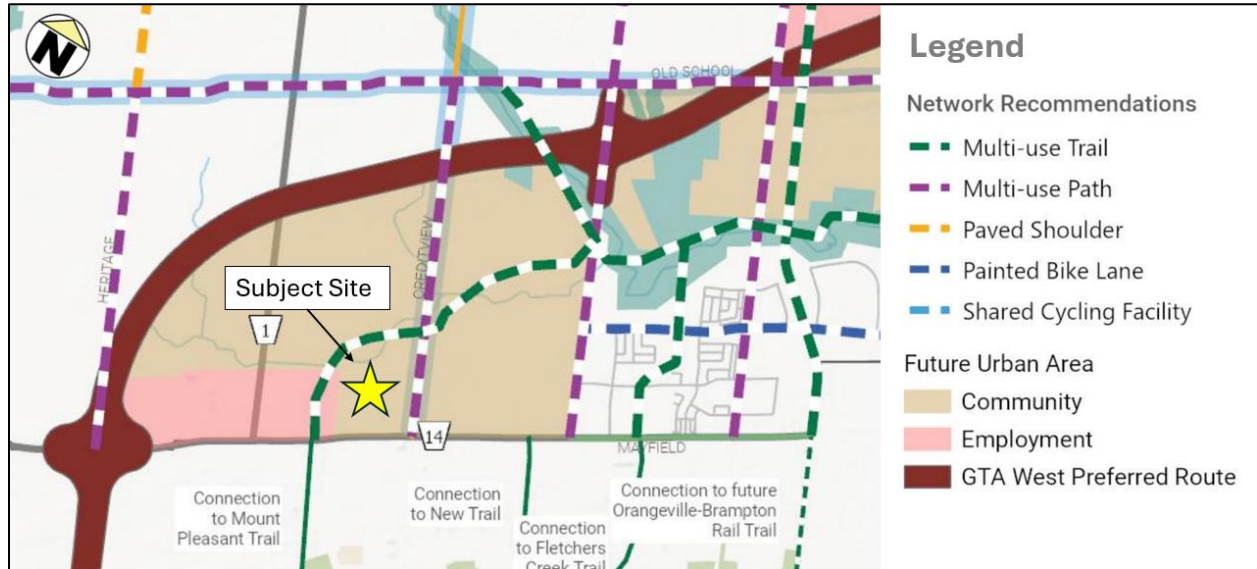


3.4 FUTURE ACTIVE TRANSPORTATION IMPROVEMENTS

3.4.1 Caledon Active Transportation Master Plan (ATMP) (June 2024)

The Caledon Active Transportation Master Plan (ATMP) identifies the Town’s strategic active transportation initiatives and outlines the framework for implementing the recommended network. As part of this plan, a multi-use path (MUP) is proposed along Creditview Road, extending from Mayfield Road in the south, to Old School Road in the north, directly adjacent to the subject site. The ATMP indicates that this facility is to be delivered through development-driven projects within the surrounding area. Additionally, the plan includes a multi-use trail (MUT) connection extending northward from the Mount Pleasant Trail located south of the subject site. **Figure 3-3** illustrates the proposed active transportation improvements near the subject site.

Figure 3-3: Caledon ATMP Proposed Network

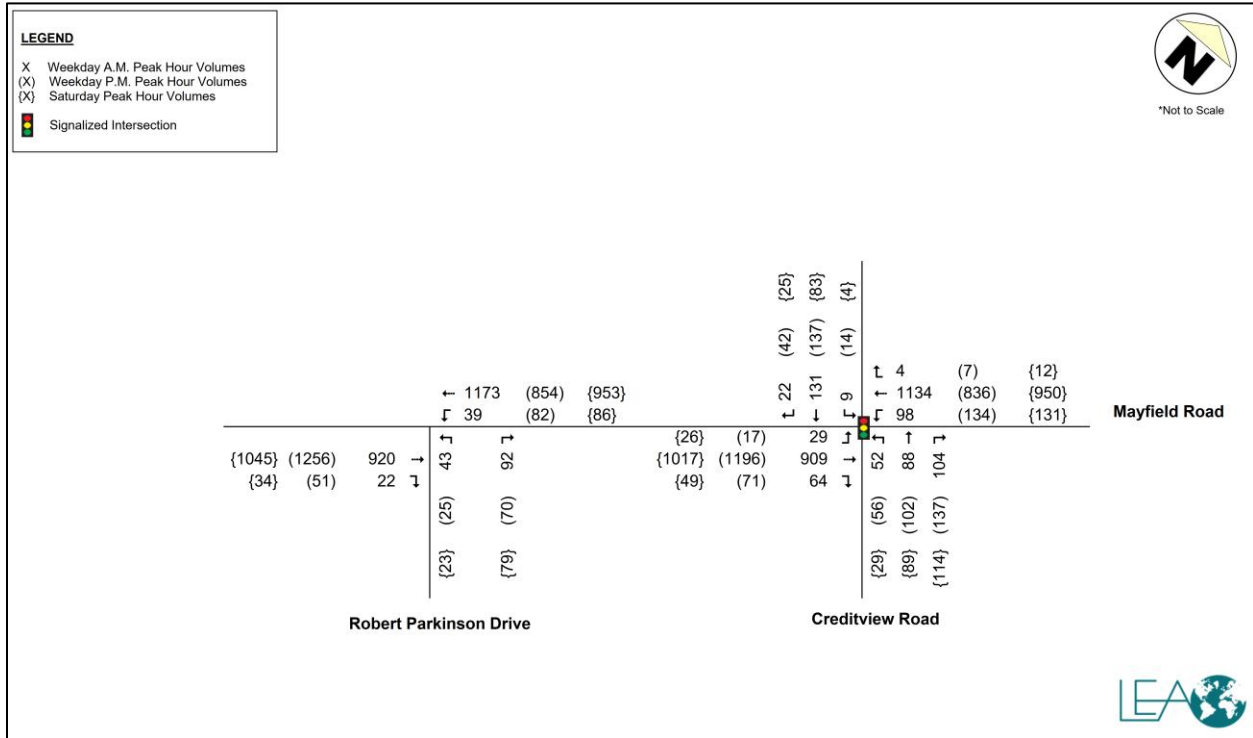


Source: Caledon ATMP, June 2024

3.5 FUTURE BACKGROUND TRAFFIC VOLUMES

The future background traffic volumes for the weekday AM, PM, and Saturday peak hours are illustrated in **Figure 3-4**.

Figure 3-4: Future Background Peak Hour Traffic Volumes (2029)



4 SITE-GENERATED TRAFFIC

The proposed development consists of nine (9) commercial structures and a gas bar. A total of 308,593 ft² of retail GFA is proposed across all commercial structures, and a total of 24 fueling positions are proposed for the gas bar. Access to the site is proposed via one (1) full movement driveway and one (1) RIRO driveway off Creditview Road. One (1) right-in only, one (1) RIRO, and one (1) full movement driveway (Street 'G') off Mayfield Road is also available for access to the site.

The sections below discuss in detail the calculation, distribution, and assignment of site-generated single-occupant vehicle (SOV) trips.

4.1 MODAL SPLIT

The town's mode split is provided in the *Town of Caledon Multi-Modal Transportation Master Plan (MMTMP)*, dated June 2024. An excerpt of the rates is provided in **Appendix E** and is presented in **Table 4-1**.

Table 4-1: Projected Modal Split

Source	Automobile	School Bus	GO Rail Only	Walk	Transit Excluding GO Rail
Caledon MMTMP (June 2024)	87%	9%	0%	3%	1%
Total	~87%	~13%			

According to the data reviewed, 87% of trips are made with automobiles while 13% of trips are made through transit and active transportation.

4.2 TRIP GENERATION

As it has been confirmed that Retail Site A will be occupied by a Costco, proxy trip generation rates for the proposed Costco and associated gas bar have been provided by Kittelson & Associates. Trip generation was estimated based on proxy trip rates for Site A, and baseline trip rates from the *ITE Trip Generation Manual 11th Edition* for Sites B and C. The retail trip generation for Sites B and C was calculated based on a total GFA of 136,000 ft², excluding Site B5, using average trip rates from ITE Land Use Code 820 – *Shopping Centre*. The trip generation for Site B5 was calculated separately, based on a GFA of 4,400 ft², using average trip rates from ITE Land Use Code 934 – *Fast Food restaurant with Drive-Thru*. Full details regarding the proxy trip rates are provided in **Appendix F**.

The projected reduced auto mode share was applied to estimate external auto driver trips for each proposed use, excluding Site A, as the majority of trips to this site are expected to occur by vehicle. Finally, pass-by trips were applied to commercial trips generated by the proposed development. As data was not available for Saturday pass-by trips, it was assumed the PM rates are the same as Saturday rates. The site trip generation is provided in **Table 4-2**. In the table below, the row titled 'Retail A Auto Driver + Truck Trips (Costco + Gas Bar)' represents the automobile trips after applying the pass-by reduction to the baseline trips generated (in addition to the estimated truck trips). Similarly, the rows 'Retail B + C (without B5) Auto + Truck Trips' and 'Retail B5 Auto + Truck Trips' represent the total combined automobile and truck trips after the pass-by reduction has been applied to the baseline trips.

Table 4-2: Trip Generation

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Costco Warehouse Retail & Gas Bar Proxy Trip Rates 167,021 ft ²	Trip Rate	1.25	0.98	2.23	3.56	3.85	7.41	5.02	5.02	10.03
	Baseline Trips Generated	210	165	375	598	647	1245	843	842	1685
	Pass-by (13%/18%/16%)	76	59	135	108	116	224	135	135	270
	Diverted Trips (40%/30%/23%)	84	66	150	179	194	373	194	194	388
	Generated Truck Trips	1	1	2	1	1	2	0	0	0
Retail A Auto Driver + Truck Trips (Costco + Gas Bar)		135	107	242	491	532	1023	708	707	1415
ITE LUC 820 – Shopping Centre 136,000 ft ²	Trip Rate	0.52	0.32	0.84	1.63	1.77	3.4	2.29	2.11	4.4
	Baseline Trips Generated	71	43	114	222	240	462	311	287	598
	Vehicle Trips Generated (13% Reduced)	62	37	99	193	209	402	271	250	521
	Pass-by (40%/40%/31%)	25	15	40	77	84	161	84	78	162
	Truck Trip Rate	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00
	Generated Truck Trips	1	0	1	1	0	1	0	0	0
Retail B + C (without B5) Auto + Truck Trips		38	22	60	117	125	242	187	172	359
ITE LUC 934 – Fast Food Restaurant with Drive-Thru 4,400 ft ²	Trip Rate	22.75	21.86	44.61	17.18	15.85	33.03	28.18	27.07	55.25
	Baseline Trips Generated	114	109	223	86	79	165	141	135	276
	Vehicle Trips	99	95	194	75	69	144	123	117	240
	Pass-by	50	48	98	41	38	79	68	64	132
	Truck Trip Rate	0.19	0.16	0.35	0.04	0.04	0.08	0.04	0.04	0.08
	Generated Truck Trips	1	1	2	0	0	0	0	0	0
Retail B5 Auto + Truck Trips		50	48	98	34	31	65	55	53	108
Total Pass-by Trips		151	122	273	226	238	464	287	277	564
Net Auto Driver Trips (Without Pass-by Trips)		223	177	400	642	688	1330	950	932	1882
Total Truck Trips (Included in Auto Driver Trips)		3	2	5	2	1	3	0	0	0
Total Auto Driver + Truck Trips		374	299	673	868	926	1794	1237	1209	2446

The subject site is anticipated to generate 673 two-way trips during the AM peak hour (374 inbound and 299 outbound), 1,794 two-way trips during the PM peak hour (868 inbound and 926 outbound), and 2,446 two-way trips during the Saturday peak hour (1,237 inbound and 1,209 outbound).

4.3 TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution for the proposed commercial development was estimated using Transportation Tomorrow Survey (TTS) 2016 data. The TTS data was filtered for Market/Shop based auto trips during the weekday AM and PM peak periods. Due to insufficient data being provided for both AM and Saturday peak periods, the PM peak period distribution was used for both AM and Saturday peak period distributions. More specifically, PM In was used for AM Out and Saturday In, and PM out was used for AM In and Saturday Out.

The site traffic was assigned to the road network based on trip patterns in the study area, changes in the future road network, logical routing, and the location and configuration of the site accesses. **Table 4-3** below outlines the trip distribution for the proposed uses. Detailed TTS calculations are provided in **Appendix E**.

Table 4-3: Trip Distribution and Assignment

Direction	Route	Weekday AM		Weekday PM		Saturday Mid-Day	
		Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
North	Creditview Road	8%	5%	5%	8%	5%	8%
South	Creditview Road	33%	25%	25%	33%	25%	33%
	Mississauga Road	12%	10%	10%	12%	10%	12%
West	Mayfield Road	3%	30%	30%	3%	30%	3%
East	Mayfield Road	44%	30%	30%	44%	30%	44%
Total		100%	100%	100%	100%	100%	100%

The total, Costco, retail, and fast-food site-generated traffic volumes for the weekday AM, PM, and Saturday peak hours are illustrated in **Figure 4-1**, **Figure 4-2**, **Figure 4-3**, and **Figure 4-4**, respectively.

Figure 4-1: Total Site-Generated Peak Hour Traffic Volumes without Pass-by Trips

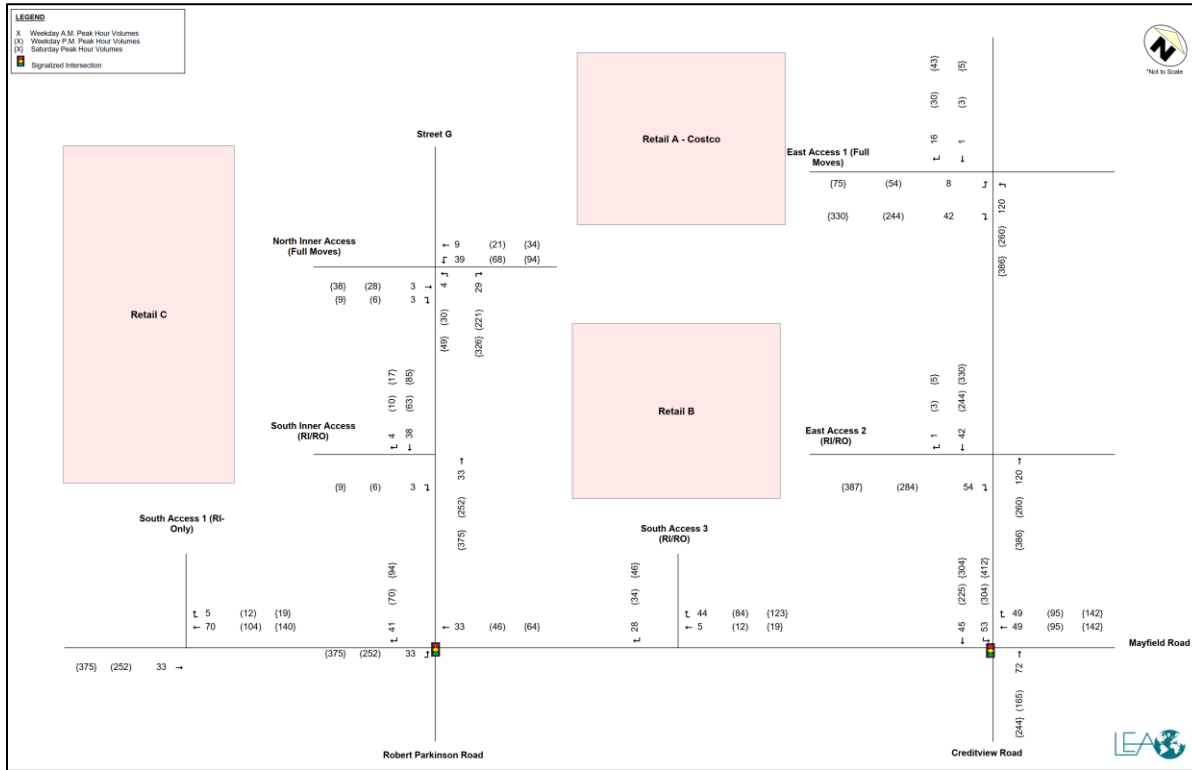


Figure 4-2: Costco + Gas Station Peak Hour Traffic Volumes (Retail A)

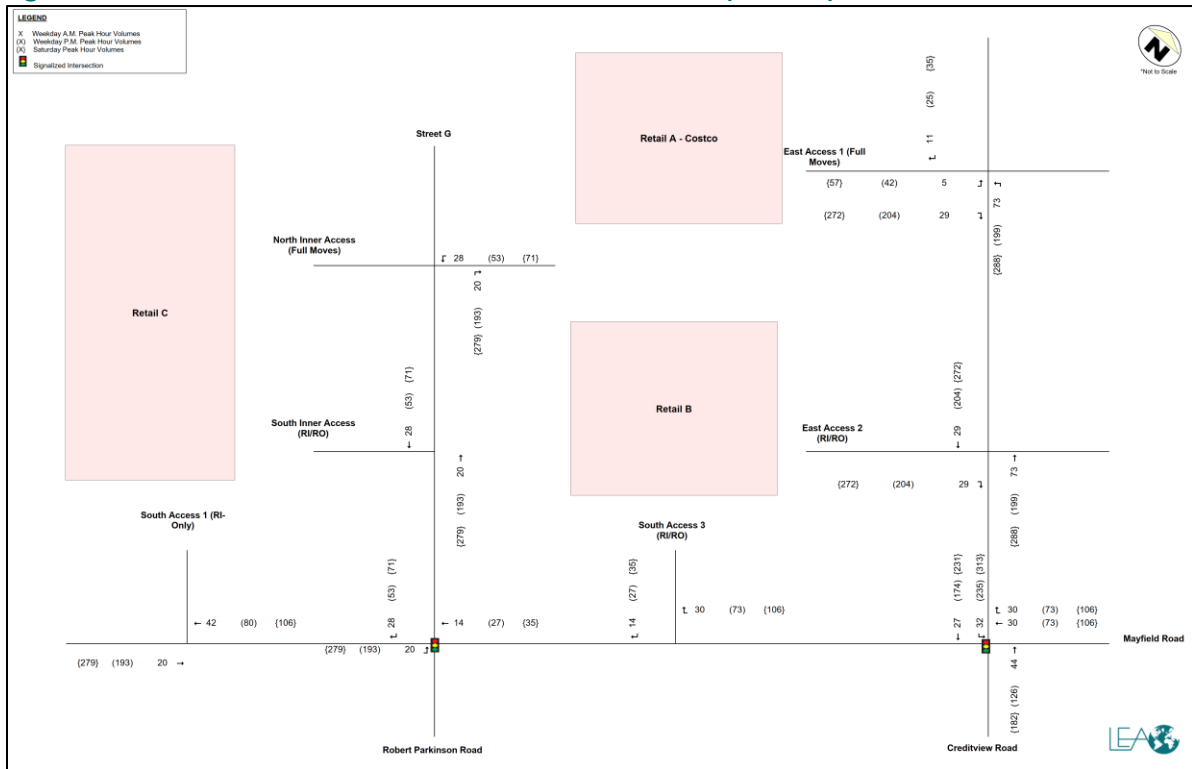


Figure 4-3: Total Site-Generated Retail Peak Hour Traffic Volumes (Retail B+C)

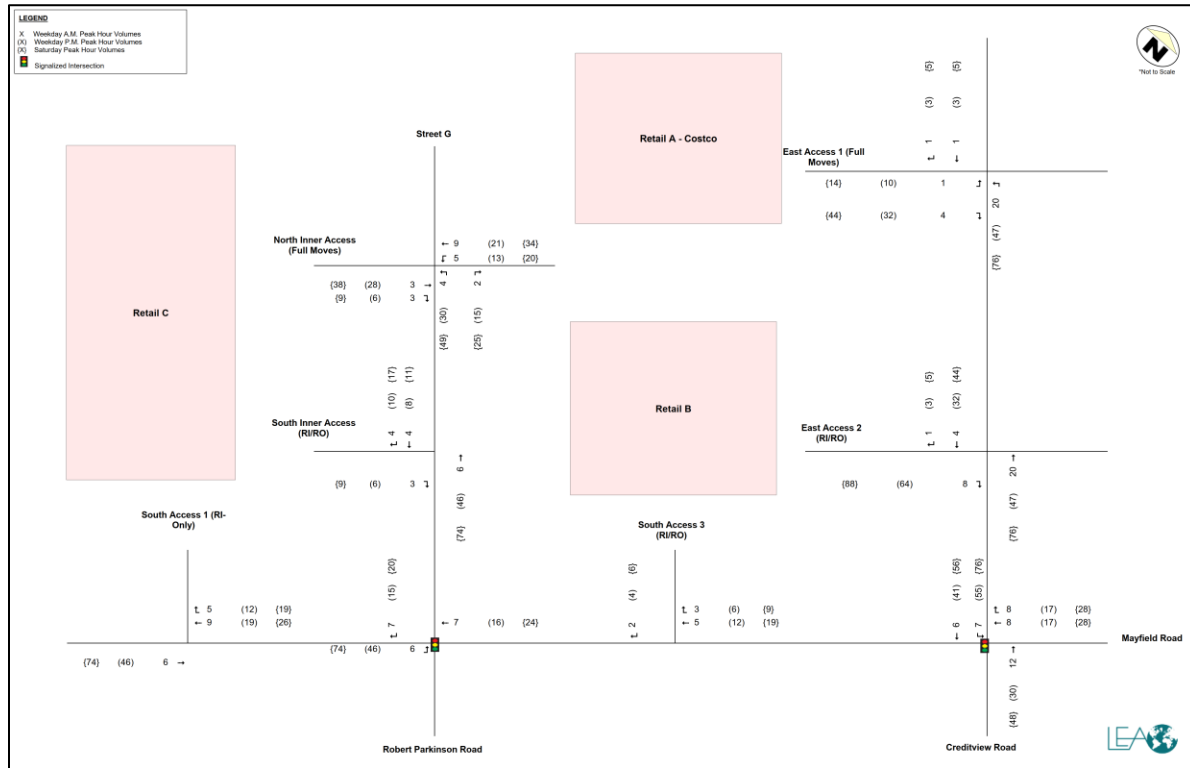
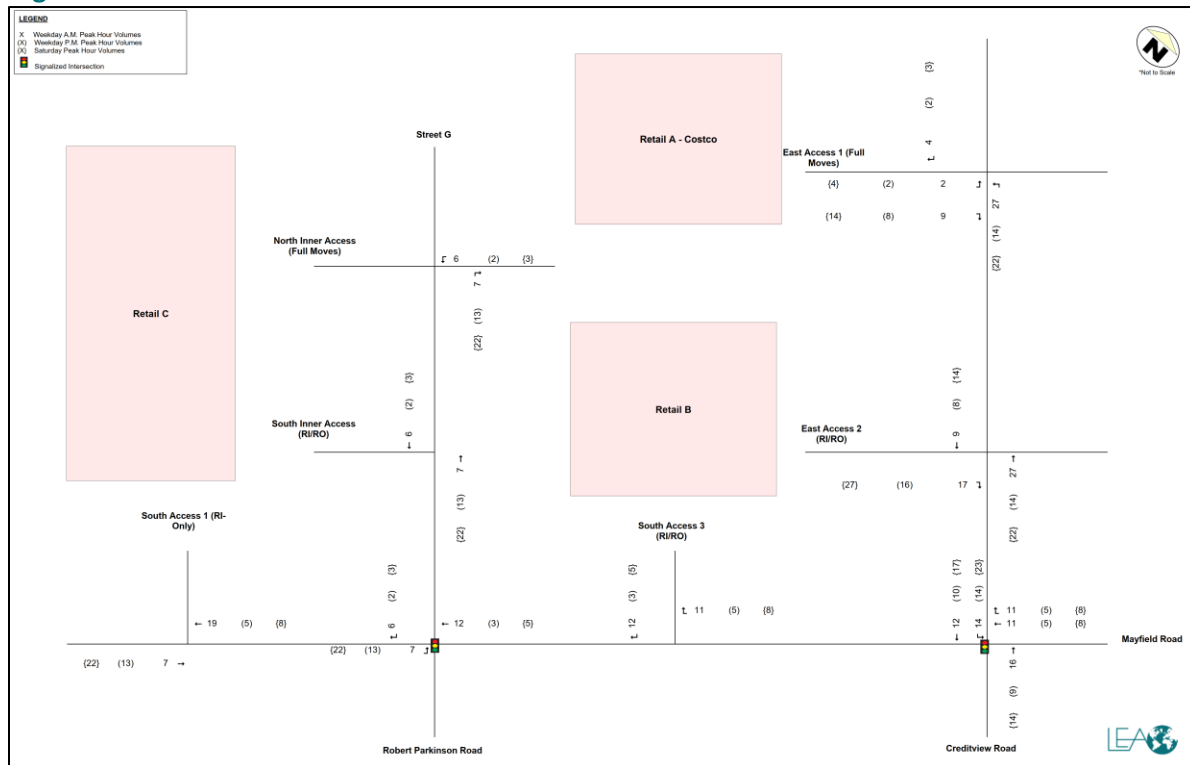


Figure 4-4: Fast Food Restaurant with Drive-Thru Peak Hour Traffic Volumes



The Costco, retail, and fast-food pass-by trips are illustrated in **Figure 4-5**, **Figure 4-6**, **Figure 4-7**, and the net site traffic volumes are illustrated in **Figure 4-8**.

Figure 4-5: Costco + Gas Bar Pass-by Peak Hour Traffic Volumes (Retail A)

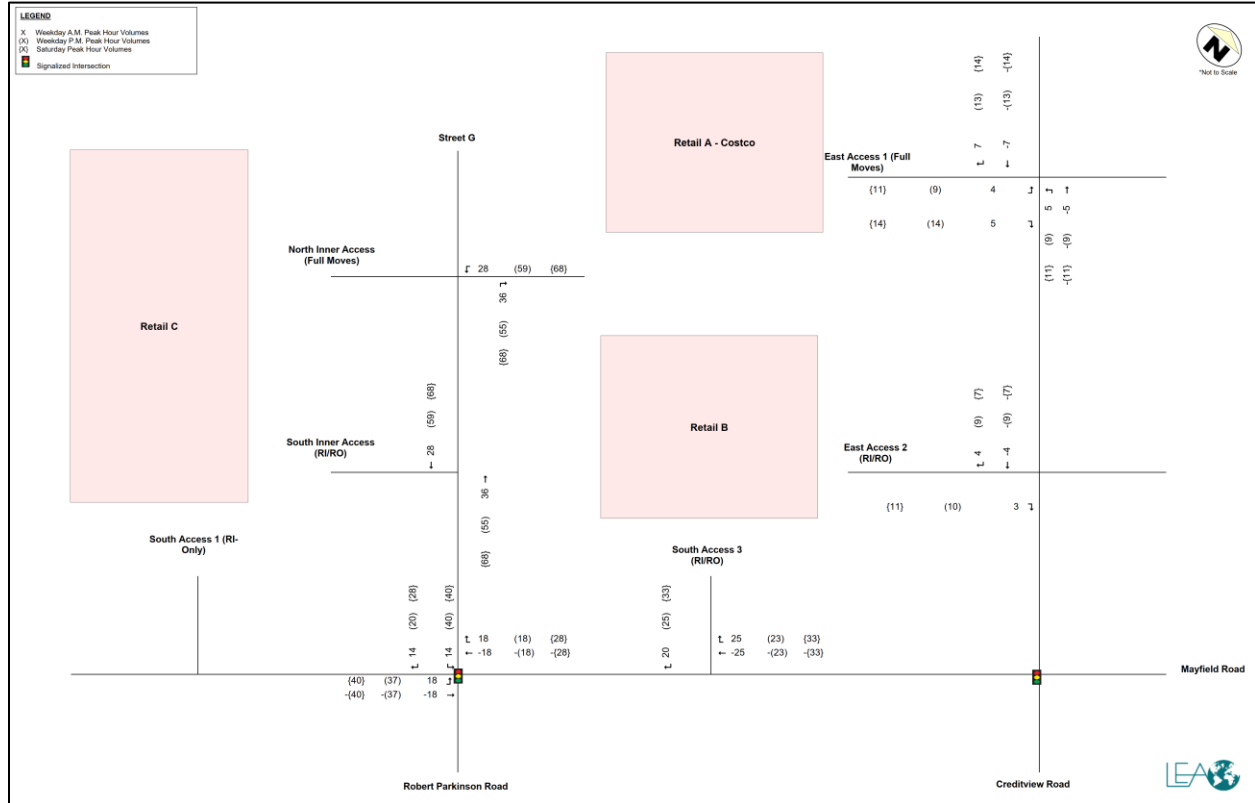


Figure 4-6: Retail Pass-by Peak Hour Traffic Volumes (Retail B+C)

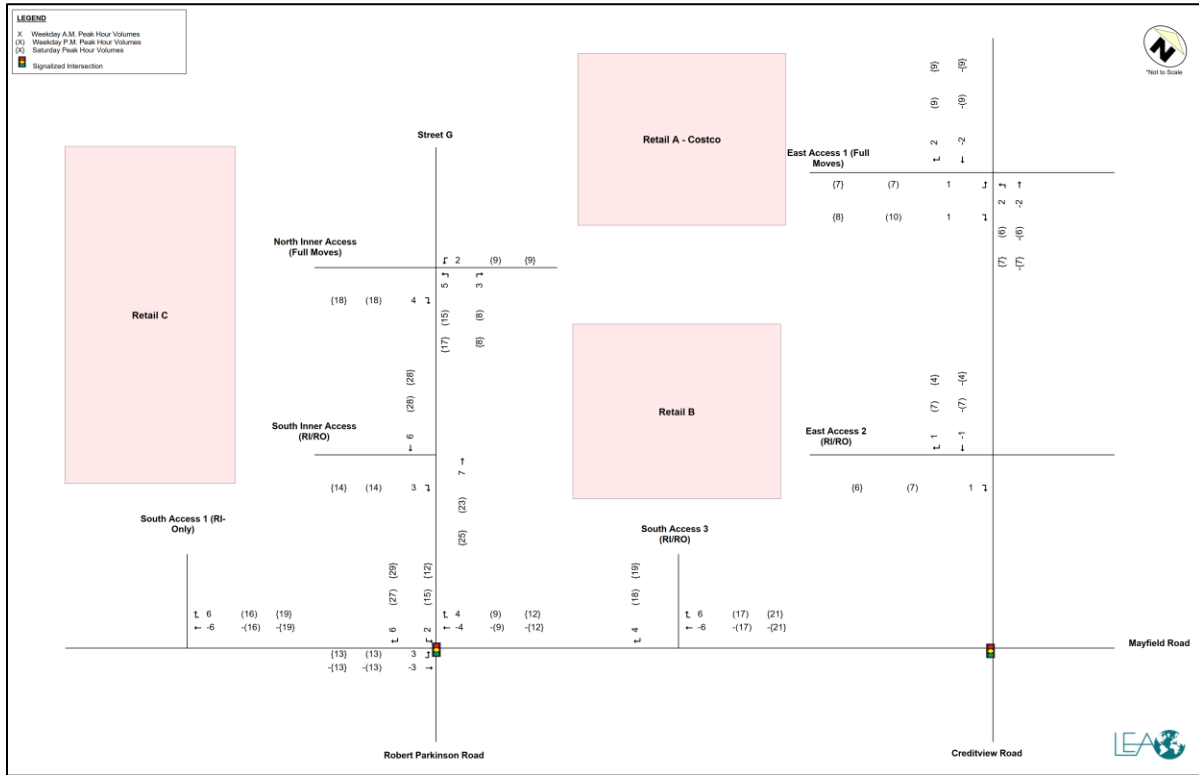


Figure 4-7: Fast Food Restaurant with Drive-Thru Pass-by Peak Hour Traffic Volumes (Retail B5)

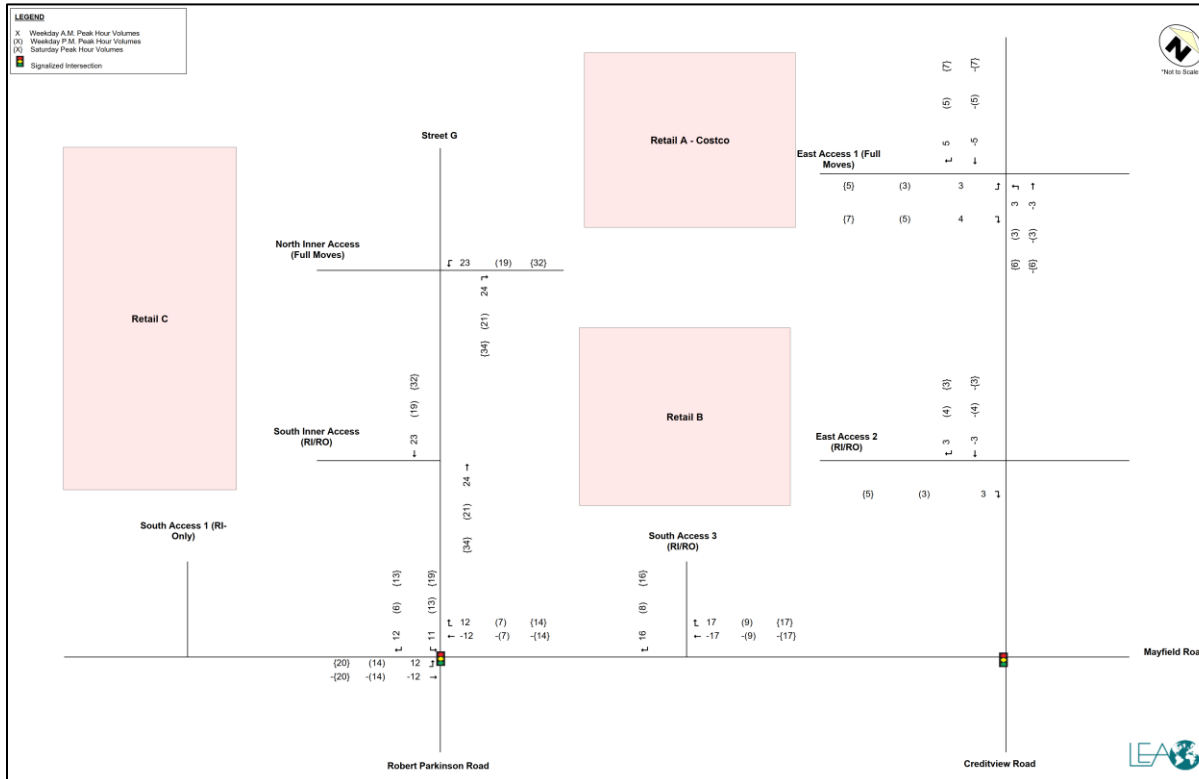
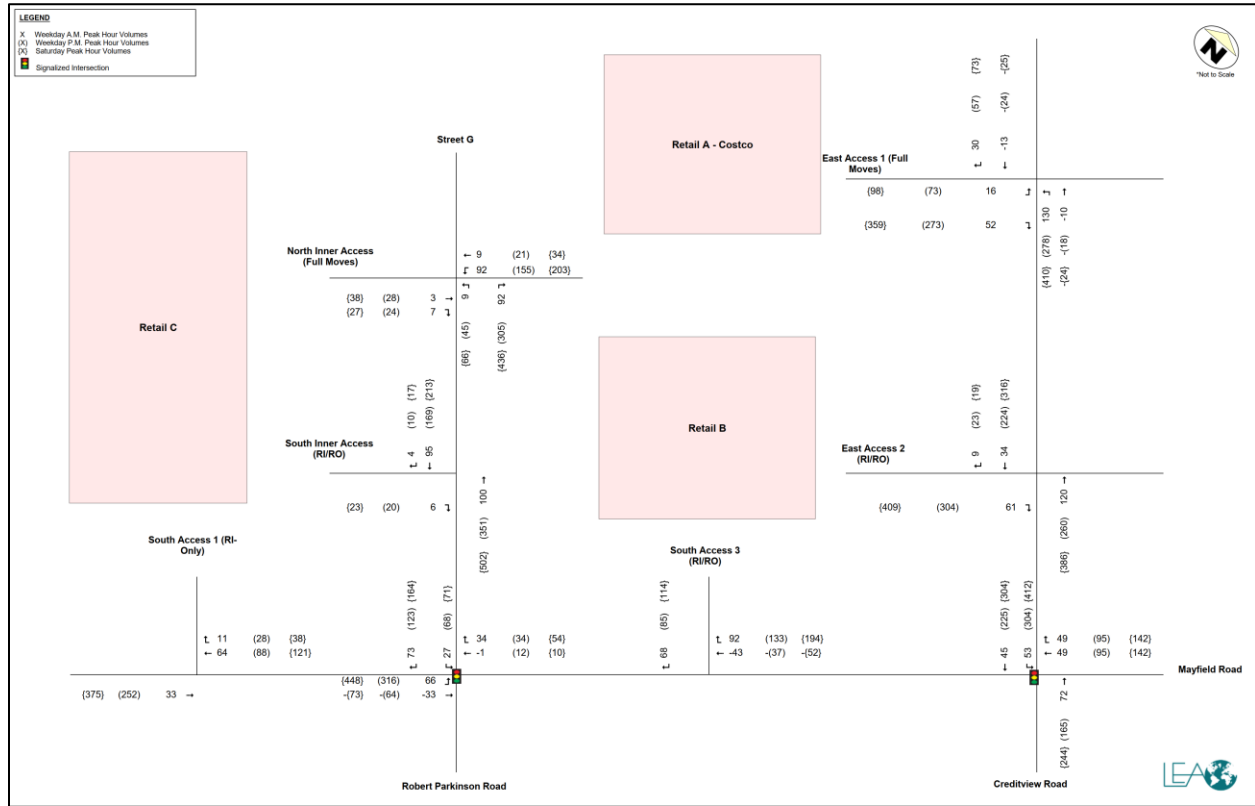


Figure 4-8: Net Total Site Generated Peak Hour Traffic Volumes



5 FUTURE TOTAL TRANSPORTATION CONDITIONS

Future total traffic conditions include the addition of site trips to the 2029 future background volumes. Five (5) new site accesses are proposed to facilitate the subject site:

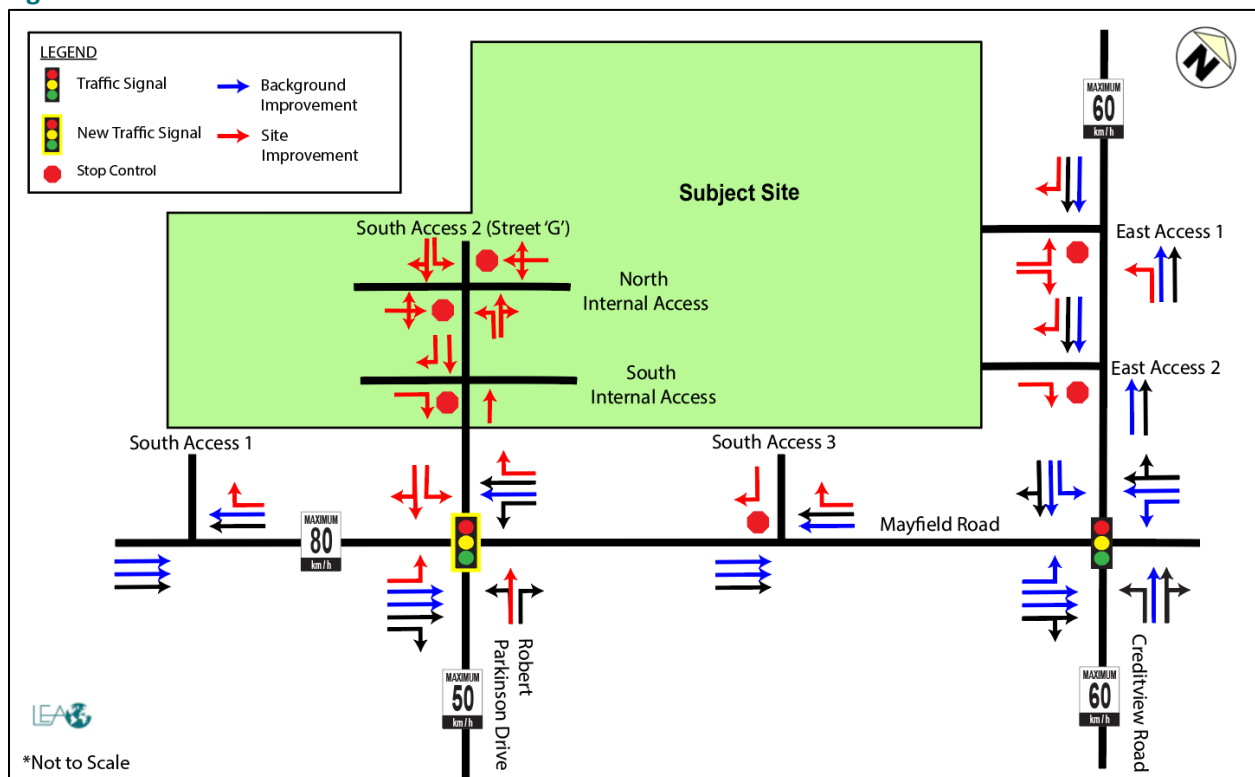
- ▶ **Creditview Road & East Site Access 1:** New full moves unsignalized access.
- ▶ **Creditview Road & East Site Access 2:** New RIRO unsignalized access.
- ▶ **Mayfield Road & South Site Access 1:** New right-in only unsignalized access.
- ▶ **Mayfield Road & South Site Access 2 (Street 'G'):** New full moves signalized access (addition of north leg). This intersection is recommended for signalization upon development of the subject site to better accommodate site traffic.
- ▶ **Mayfield Road & South Site Access 3:** New RIRO unsignalized access.

In addition, two (2) unsignalized intersections are proposed included along Street G and have been included in this updated analysis:

- ▶ **North Internal Access & Street G:** New full moves unsignalized internal intersection.
- ▶ **South Internal Access & Street G:** New RIRO unsignalized internal intersection.

The recommended future road network with the site access configurations is illustrated in **Figure 5-1**.

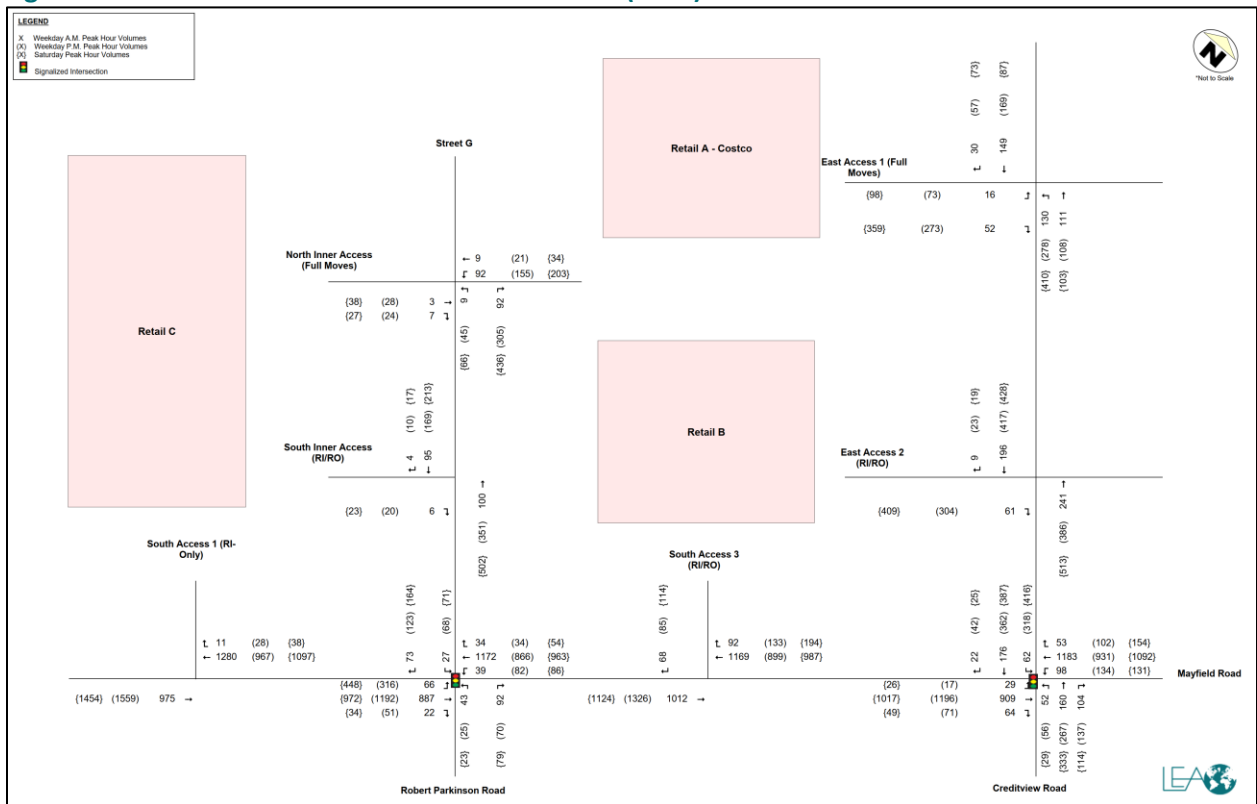
Figure 5-1: Recommended Future Road Network



5.1 FUTURE TOTAL TRAFFIC VOLUMES

The future total traffic volumes for the weekday AM, PM, and Saturday peak hours are illustrated in **Figure 5-2**.

Figure 5-2: Future Total Peak Hour Traffic Volumes (2029)



6 INTERSECTION CAPACITY ANALYSIS

The capacity analysis for the study area was undertaken using Synchro version 11.0, which is based on the Highway Capacity Manual 2000 methodology and adhering to the Town of Caledon and Peel Region *Traffic Impact Study Guidelines*. The intersection capacity analysis was conducted for the weekday AM, PM, and Saturday peak hours. As per Town of Caledon guidelines, critical movements 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.

6.1 EXISTING CONDITIONS SYNCHRO MODEL INPUTS

Existing traffic operations were assessed to provide a baseline for future traffic operations. The existing analysis incorporates the most recent signal timing plans for the study intersections. A Peak Hour Factor (PHF) of 1.0 has been applied to new roads and intersections under the Future Total Conditions scenario, while a PHF of 0.97 has been retained for both the Existing and Future Background Conditions. For the Existing Conditions, the PHF was derived based on observed traffic volumes.

6.2 FUTURE CONDITIONS SYNCHRO MODEL INPUTS

Input parameters from the existing scenario were maintained with corresponding future volumes, with the exception of the following changes outlined in **Table 6-1**.

Table 6-1: Future Conditions Synchro Model Input Modifications

Intersection/Road	Modifications
Mayfield Road & Creditview Road	<ul style="list-style-type: none"> • Addition of two (2) eastbound through lanes and one (1) westbound through lane, along with dedicated left-turning lanes to accommodate the planned widening of Mayfield Road. • Addition of one (1) northbound and southbound through lane, along with left-turning lanes at Mayfield Road & Creditview Road to accommodate the planned widening of Creditview Road. • Signal timing optimization for the PM and Weekend peak periods. Optimized STPs are summarized in Table 6-2.
Mayfield Road & Robert Parkinson Drive	<ul style="list-style-type: none"> • Addition of two (2) eastbound through lanes and one (1) westbound through lane, along with dedicated left-turning lanes to accommodate the planned widening of Mayfield Road. • Signalization with a proposed cycle length of 120 seconds.

Table 6-2: STP Optimization

Intersection	Peak Period	Optimized Signal Timing Plan	
Mayfield Road & Creditview Road	Existing PM STP		
	Optimized PM STP		
	Existing Weekend STP		
	Optimized Weekend STP		

The following sections outline a comparison of the capacity analysis results for existing, 2029 future background, and 2029 future total conditions. Detailed capacity analysis results are provided in the following appendices:

- ▶ **Appendix G:** Existing Intersection Capacity Analysis;
- ▶ **Appendix H:** 2029 Future Background Intersection Capacity Analysis; and
- ▶ **Appendix I:** 2029 Future Total Intersection Capacity Analysis.

6.3 EXISTING SIGNALIZED INTERSECTIONS

The results for the existing signalized intersections under each traffic scenario during the weekday AM, PM, and Saturday peak hours are summarized in the section below.

6.3.1 Mayfield Road & Creditview Road

The intersection capacity analysis at Mayfield Road & Creditview Road is summarized in **Table 6-3** under the existing STP, and in **Table 6-4** with the optimized STP. A summary of the queue lengths is provided in **Table 6-5**.

Table 6-3: Intersection Capacity Analysis, Mayfield Road & Creditview Road (Not Optimized)

Mvmt	Existing				Future Background 2029					Future Total 2029			
	Vol	V/C	Delay (s)	LOS	Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
AM Peak Hour													
Overall	-	-	13	B	Overall	-	-	11	B	-	-	12	B
EBLTR	552	0.53	9	A	EBL	29	0.10	13	B	29	0.12	15	B
-	-	-	-	-	EBTR	973	0.34	7	A	973	0.34	7	A
WBLTR	596	0.61	11	B	WBL	98	0.27	12	B	98	0.27	12	B
-	-	-	-	-	WBTR	1138	0.57	10	B	1236	0.63	11	B

Mvmt	Existing				Future Background 2029					Future Total 2029			
	Vol	V/C	Delay (s)	LOS	Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
NBLT	127	0.32	21	C	NBL	52	0.18	23	C	52	0.20	23	C
NBR	94	0.32	21	C	NBTR	192	0.34	21	C	264	0.42	22	C
SBLTR	147	0.37	22	C	SBL	9	0.03	22	C	62	0.25	25	C
-	-	-	-	-	SBTR	153	0.23	21	C	198	0.30	21	C
PM Peak Hour													
Overall	-	-	13	B	Overall	-	-	11	B	-	-	32	C
EBLTR	658	0.60	11	B	EBL	17	0.04	9	A	17	0.06	13	B
-	-	-	-	-	EBTR	1267	0.43	8	A	1267	0.45	9	A
WBLTR	530	0.57	10	A	WBL	134	0.45	18	B	134	0.48	21	C
-	-	-	-	-	WBTR	843	0.41	8	A	1033	0.54	11	B
NBLT	143	0.35	21	C	NBL	56	0.19	23	C	56	0.24	25	C
NBR	124	0.42	22	C	NBTR	239	0.45	22	C	404	0.54	22	C
SBLTR	175	0.43	22	C	SBL	14	0.06	24	C	318	1.38	225	F
-	-	-	-	-	SBTR	179	0.27	21	C	404	0.51	21	C
Sat Peak Hour													
Overall	-	-	12	B	Overall	-	-	10	A	-	-	62	E
EBLTR	553	0.50	9	A	EBL	26	0.07	10	B	26	0.11	16	B
-	-	-	-	-	EBTR	1066	0.36	7	A	1066	0.37	9	A
WBLTR	527	0.53	9	A	WBL	131	0.37	14	B	131	0.39	16	B
-	-	-	-	-	WBTR	962	0.46	8	A	1246	0.64	12	B
NBLT	107	0.26	21	C	NBL	29	0.09	21	C	29	0.12	24	C
NBR	103	0.34	21	C	NBTR	203	0.37	21	C	447	0.58	23	C
SBLTR	102	0.25	21	C	SBL	4	0.01	23	C	416	1.90	449	F
-	-	-	-	-	SBTR	108	0.16	20	C	412	0.51	21	C

Table 6-4: Intersection Capacity Analysis, Mayfield Road & Creditview Road (Optimized)

Mvmt	Existing				Future Background 2029					Future Total 2029			
	Vol	V/C	Delay (s)	LOS	Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
PM Peak Hour													
Overall	-	-	13	B	Overall	-	-	15	B	-	-	28	C
EBLTR	658	0.60	11	B	EBL	17	0.04	9	A	17	0.08	29	C
-	-	-	-	-	EBTR	1267	0.35	7	A	1267	0.48	20	B
WBLTR	530	0.57	10	A	WBL	134	0.43	17	B	134	0.65	51	D
-	-	-	-	-	WBTR	843	0.33	7	A	1033	0.57	22	C
NBLT	143	0.35	21	C	NBL	56	0.29	50	D	56	0.28	46	D
NBR	124	0.42	22	C	NBTR	239	0.76	58	E	404	0.79	56	E
SBLTR	175	0.43	22	C	SBL	14	0.12	45	D	318	0.82	42	D
-	-	-	-	-	SBTR	179	0.31	44	D	404	0.32	27	C
Sat Peak Hour													
Overall	-	-	12	B	Overall	-	-	12	B	-	-	34	C
EBLTR	553	0.50	9	A	EBL	26	0.06	8	A	26	0.19	45	D
-	-	-	-	-	EBTR	1066	0.28	6	A	1066	0.44	22	C
WBLTR	527	0.53	9	A	WBL	131	0.33	11	B	131	0.57	45	D
-	-	-	-	-	WBTR	962	0.36	6	A	1246	0.74	31	C

Mvmt	Existing				Future Background 2029					Future Total 2029			
	Vol	V/C	Delay (s)	LOS	Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
NBLT	107	0.26	21	C	NBL	29	0.15	50	D	29	0.14	43	D
NBR	103	0.34	21	C	NBTR	203	0.71	58	E	447	0.80	57	E
SBLTR	102	0.25	21	C	SBL	4	0.04	47	D	416	0.91	51	D
-	-	-	-	-	SBTR	108	0.22	45	D	412	0.28	23	C

Table 6-5: Intersection Queue Lengths, Mayfield Road & Creditview Road

Mvmt	Existing		Future Background 2029			Future Total 2029	
	50th Queue	95th Queue	Mvmt	50th Queue	95th Queue	50th Queue	95th Queue
AM Peak Hour							
Overall	-	-	Overall	-	-	-	-
EBLTR	36	68	EBL	1	5	2	6
-	-	-	EBTR	19	27	19	27
WBLTR	45	92	WBL	6	16	6	16
-	-	-	WBTR	41	58	46	68
NBLT	14	27	NBL	5	14	5	14
NBR	0	10	NBTR	5	12	9	18
SBLTR	14	29	SBL	1	4	7	16
-	-	-	SBTR	7	14	10	18
PM Peak Hour (Optimized under FB & FT Conditions)							
Overall	-	-	Overall	-	-	-	-
EBLTR	45	85	EBL	1	3	3	8
-	-	-	EBTR	18	65	84	109
WBLTR	38	78	WBL	10	51	38	84
-	-	-	WBTR	26	62	104	142
NBLT	15	30	NBL	14	27	13	26
NBR	0	12	NBTR	13	26	44	59
SBLTR	17	32	SBL	3	9	58	80
-	-	-	SBTR	18	25	35	43
Sat Peak Hour (Optimized under FB & FT Conditions)							
Overall	-	-	Overall	-	-	-	-
EBLTR	34	61	EBL	1	3	4	16
-	-	-	EBTR	15	45	69	91
WBLTR	36	69	WBL	8	29	28	72
-	-	-	WBTR	30	61	135	181
NBLT	11	23	NBL	7	17	7	15
NBR	0	11	NBTR	11	24	54	68
SBLTR	8	19	SBL	1	4	80	131
-	-	-	SBTR	11	18	35	43

Existing Conditions: Under existing conditions, the intersection of Mayfield Road & Creditview Road operates well during both weekday peak hours and Saturday peak. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

Future Background Conditions: Under future background conditions, with the widening of Mayfield Road and Creditview Road, the intersection is expected to operate similarly to existing conditions. The intersection is expected to operate at acceptable levels of service, with no critical movements identified.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to see capacity constraints in the SBL movement during the weekday PM and Saturday peaks (See **Table 6-3**). The proposed PM and Weekend STP changes of increasing the cycle length to 120 seconds, as well as adding an advance phase for SBL are recommended to accommodate additional traffic. As shown in **Table 6-4** and **Table 6-5**, all movements can operate within capacity and all 95th percentile queues can be accommodated by their available storage lanes.

6.4 MAYFIELD ROAD & ROBERT PARKINSON DRIVE

The results for the studied existing unsignalized intersections under each traffic scenario during the weekday AM, PM, and Saturday peak hours are summarized in the section below. The intersection of Mayfield Road and Robert Parkinson Drive currently functions as a three-leg unsignalized intersection. With the proposed site buildout, Robert Parkinson Drive will be extended through the future Site Access 2/Street 'G' access. As previously mentioned in **Section 6.4.2**, the signalization of Mayfield Road & Robert Parkinson Drive is recommended for this development. The following sections compare the intersection operations under both unsignalized and signalized conditions. A traffic signal warrant analysis was conducted to determine if signalization is recommended.

6.4.1 Mayfield Road & Robert Parkinson Drive (Unsignalized)

The intersection capacity analysis at Mayfield Road & Robert Parkinson under unsignalized conditions is summarized in **Table 6-6**.

Table 6-6: Intersection Capacity Analysis, Mayfield Road & Robert Parkinson Drive

Mvmt	Existing				Future Background 2029				Future Total 2029				
	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Mvmt	Vol	V/C	Delay (s)	LOS
AM Peak Hour													
Overall	-	-	2	-	-	-	2	-	Overall	-	-	6	-
NBL	43	0.18	24	C	43	0.50	83	F	NBLT	43	0.75	169	F
NBR	92	0.16	12	B	92	0.20	15	B	NBR	92	0.19	14	B
EBT	470	0.00	0		920	0.00	0		EBL	66	0.11	12	B
EBR	22	0.00	0		22	0.00	0		EBT	887	0.00	0	
-	-	-	-	-	-	-	-	-	EBR	22	0.00	0	
WBL	39	0.04	9	A	39	0.10	15	B	WBL	39	0.09	15	B
WBT	535	0.00	0		1173	0.00	0		WBT	1172	0.00	0	
-	-	-	-	-	-	-	-	-	WBR	34	0.00	0	
-	-	-	-	-	-	-	-	-	SBL	27	0.54	142	F
-	-	-	-	-	-	-	-	-	SBTR	73	0.16	14	B
PM Peak Hour													
Overall	-	-	2	-	-	-	3	-	Overall	-	-	59	-
NBL	25	0.14	28	D	25	0.53	148	F	NBLT	25	2.50	1423	F
NBR	70	0.15	14	B	70	0.20	18	C	NBR	70	0.19	17	C
EBT	630	0.00	0		1256	0.00	0		EBL	316	0.41	13	B
EBR	51	0.00	0		51	0.00	0		EBT	1192	0.00	0	
-	-	-	-	-	-	-	-	-	EBR	51	0.00	0	
WBL	82	0.09	9	A	82	0.30	24	C	WBL	82	0.28	22	C
WBT	412	0.00	0		854	0.00	0		WBT	866	0.00	0	
-	-	-	-	-	-	-	-	-	WBR	34	0.00	0	
-	-	-	-	-	-	-	-	-	SBL	68	4.00	1807	F
-	-	-	-	-	-	-	-	-	SBTR	123	0.21	13	B
Sat Peak Hour													
Overall	-	-	2	-	-	-	2	-	Overall	-	-	133	-
NBL	23	0.10	23	C	23	0.38	96	F	NBLT	23	3.83	2443	F
NBR	79	0.14	13	B	79	0.19	16	C	NBR	79	0.18	15	B
EBT	506	0.00	0		1045	0.00	0		EBL	448	0.65	19	C
EBR	34	0.00	0		34	0.00	0		EBT	972	0.00	0	
-	-	-	-	-	-	-	-	-	EBR	34	0.00	0	
WBL	86	0.08	9	A	86	0.24	18	C	WBL	86	0.22	17	C
WBT	395	0.00	0		953	0.00	0		WBT	963	0.00	0	
-	-	-	-	-	-	-	-	-	WBR	54	0.00	0	
-	-	-	-	-	-	-	-	-	SBL	71	8.88	4449	F
-	-	-	-	-	-	-	-	-	SBTR	164	0.31	15	B

Existing Conditions: Under existing conditions, the intersection of Mayfield Road & Robert Parkinson Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

Future Background Conditions: Under future background conditions, the NBL movement is expected to operate with a LOS of 'F' during all peak hours, the movement operates with residual capacity. The volumes in the future background conditions do not warrant a signal.

Future Total Conditions: The NBLT and SBLT are deemed critical during the weekday AM and PM peak hour and Saturday peak; this finding is attributable to background traffic growth as well as site generated trips. Signal warrant analysis will be conducted to determine whether this intersection is warranted for signalization; nonetheless, based on the Synchro results, signalization of this intersection is recommended.

However, a traffic signal warrant analysis was conducted for the intersection to determine whether signalization is required. The AM and PM peak hour average volumes were used. The traffic signal warrant analysis was conducted based on the methodologies outlined in Ontario Traffic Manual (OTM) Book 12: Traffic Signals, for the future horizon year. The results of the traffic signal warrant analysis are provided in **Table 6-7**. Full details of the analysis are provided in **Appendix J**.

Table 6-7: Traffic Signal Warrant Analysis

Justification Satisfied 80% or More					Two Justifications Satisfied 80% or More	
Justification 1	Minimum Vehicular Volumes	YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Justification 2	Delay to Cross Traffic	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>	

The intersection meets the MTO warrant criteria for signalization and is therefore recommended for further consideration. The results for a new signalized intersection under future traffic scenarios during the weekday AM, PM, and Saturday peak hours are summarized in the section below.

6.4.2 Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G') (Signalized)

Based on the Synchro results and signal warrant analysis, signalization of Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G') has been recommended to accommodate site traffic volumes. The recommended signal timing plans with a proposed cycle length of 120 seconds are summarized in **Table 6-8**.

Table 6-8: Recommended Signal Timing Plan, Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G')

Intersection	Peak Period	Recommended Signal Timing Plan
Mayfield Road & Robert Parkinson Drive / South Site Access 2	Recommended AM	
	Recommended PM	
	Recommended Sat	

The intersection capacity analysis at Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G') is summarized in **Table 6-9**, for the weekday AM, PM, and Saturday peak hours. A summary of the

queue lengths is provided in **Table 6-10**. To note, only future total conditions are provided below as signalization is recommended upon development of the site.

Table 6-9: Intersection Capacity Analysis, Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G')

Mvmt	Future Total 2029 (Optimized)			
	Vol	V/C	Delay (s)	LOS
AM Peak				
Overall	-	-	10	A
EBL	66	0.16	4	A
EBT	887	0.22	3	A
EBR	22	0.02	2	A
WBL	39	0.08	5	A
WBT	1172	0.46	7	A
WBR	34	0.03	4	A
NBLT	43	0.28	55	D
NBR	92	0.53	53	D
SBL	27	0.24	58	E
SBTR	73	0.41	51	D
PM Peak				
Overall	-	-	12	B
EBL	316	0.58	8	A
EBT	1192	0.31	5	A
EBR	51	0.04	4	A
WBL	82	0.23	11	B
WBT	866	0.38	11	B
WBR	34	0.03	8	A
NBLT	25	0.14	51	D
NBR	70	0.28	45	D
SBL	68	0.42	56	E
SBTR	123	0.47	47	D
Sat Peak				
Overall	-	-	17	B
EBL	448	0.86	23	C
EBT	972	0.26	5	A
EBR	34	0.03	4	A
WBL	86	0.22	14	B
WBT	963	0.47	16	B
WBR	54	0.06	11	B
NBLT	23	0.13	50	D
NBR	79	0.27	42	D
SBL	71	0.43	55	E
SBTR	164	0.54	46	D

Table 6-10: Intersection Queue Lengths, Mayfield Road & Robert Parkinson Drive / South Site Access 2 (Street 'G')

Mvmt	Future Total 2029 (Optimized)	
	50th Queue	95th Queue
AM Peak		
Overall	-	-
EBL	2	5
EBT	11	17
EBR	0	1
WBL	4	7
WBT	76	92
WBR	1	2
NBLT	10	22
NBR	0	16
SBL	6	16
SBR	0	0
PM Peak		
Overall	-	-
EBL	12	24
EBT	18	29
EBR	0	2
WBL	7	19
WBT	38	79
WBR	0	3
NBLT	6	15
NBR	0	14
SBL	16	31
SBR	0	0
Sat Peak		
Overall	-	-
EBL	34	75
EBT	14	23
EBR	0	2
WBL	10	20
WBT	61	103
WBR	1	6
NBLT	5	14
NBR	0	15
SBL	17	32
SBR	0	0

Future Total Conditions: Under future total traffic conditions, with signalization and implementation of the recommended signal timing plan, the intersection is expected to operate at acceptable levels of service under all peak hours. No other critical movements have been identified. After introducing a signal, the intersection performs within capacity with acceptable delays and queues during the AM, PM, and Saturday peaks. After introducing a signal, the intersection performs within capacity with acceptable delays and queues during the AM, PM, and Saturday peaks. Since introducing a signal in this intersection solves the capacity and delay issues, a dual left turning lane in the WBL is not required as the WBL is not in constraint, and the traffic volumes in this movement are manageable with a single left turning lane.

After introducing a signal, the intersection performs within capacity with acceptable delays and queues during the AM, PM, and Saturday peaks. Since introducing a signal in this intersection solves the capacity and delay issues, a dual left turning lane in the WBL is not required as the WBL is not in constraint, and the traffic volumes in this movement are manageable with a single left turning lane.

6.4.2.1 Single Left-Turn lane Justification

The introduction of a traffic signal at this intersection addresses the capacity and delay concerns. A dual westbound left-turn lane is not required, as this movement is not operating under constrained conditions, and the associated traffic volumes can be adequately accommodated by a single left-turn lane.

6.5 NEW UNSIGNALIZED INTERSECTIONS

The results for new unsignalized intersections under each traffic scenario during the weekday AM, PM, and Saturday peak hours are summarized in the section below.

6.5.1 Creditview Road & East Site Access 1

The intersection capacity analysis for weekday AM, PM, and Saturday peak hours at Creditview Road & East Site Access 1 is summarized in **Table 6-11**.

Table 6-11: Intersection Capacity Analysis, Creditview Road & East Site Access 1

AM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	3	-	-
NBL	130	0.09	8	A	0
NBT	111	0.00	0		0
EBL	16	0.03	13	B	0
EBR	52	0.05	9	A	0
SBT	149	0.00	0		0
SBR	30	0.00	0		0
PM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	7	-	-
NBL	278	0.21	8	A	1
NBT	108	0.00	0		0
EBL	73	0.27	23	C	1
EBR	273	0.28	10	B	1
SBT	169	0.00	0		0
SBR	57	0.00	0		0
Sat		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	10	-	-
NBL	410	0.29	9	A	1
NBT	103	0.00	0		0
EBL	98	0.53	45	E	3
EBR	359	0.35	10	B	2
SBT	87	0.00	0		0
SBR	73	0.00	0		0

Future Total Conditions: The full moves site access off Creditview Road is expected to operate well within capacity and with acceptable delays for all individual movements during all peak hours. No constraints have been identified.

6.5.2 Creditview Road & East Site Access 2

The intersection capacity analysis for weekday AM, PM, and Saturday peak hours at Creditview Road & East Site Access 2 is summarized in **Table 6-12**.

Table 6-12: Intersection Capacity Analysis, Creditview Road & East Site Access 2

AM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	1	-	-
NBT	241	0.00	0		0
EBR	61	0.07	9	A	0
SBT	196	0.00	0		0
SBR	9	0.00	0		0
PM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	3	-	-
NBT	386	0.00	0		0
EBR	304	0.38	12	B	2
SBT	417	0.00	0		0
SBR	23	0.00	0		0
Sat		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	4	-	-
NBT	513	0.00	0		0
EBR	409	0.51	14	B	3
SBT	428	0.00	0		0
SBR	19	0.00	0		0

Future Total Conditions: The RIRO site access off Creditview Road is expected to operate well within capacity and with acceptable delays for all individual movements during all peak hours. No constraints have been identified.

6.5.3 Mayfield Road & South Site Access 1

The intersection capacity analysis for weekday AM, PM, and Saturday peak hours at Mayfield Road & South Site Access 1 is summarized in **Table 6-13**.

Table 6-13: Intersection Capacity Analysis, Mayfield Road & South Site Access 1

AM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	0	-	-
EBT	975	0.00	0		0
WBT	1280	0.00	0		0
WBR	11	0.00	0		0
PM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	0	-	-
EBT	1559	0.00	0		0
WBT	967	0.00	0		0
WBR	28	0.00	0		0
Sat		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	0	-	-
EBT	1454	0.00	0		0
WBT	1097	0.00	0		0
WBR	38	0.00	0		0

Future Total Conditions: The right-in only site access off Mayfield Road is expected to operate well within capacity and with acceptable delays for all individual movements during all peak hours. No constraints have been identified.

6.5.4 Mayfield Road & South Site Access 3

The intersection capacity analysis for weekday AM, PM, and Saturday peak hours at Mayfield Road & South Site Access 3 is summarized in **Table 6-14**.

Table 6-14: Intersection Capacity Analysis, Mayfield Road & South Site Access 3

AM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	0	-	-
EBT	1012	0.00	0		0
WBT	1169	0.00	0		0
WBR	92	0.00	0		0
SBR	68	0.15	14	B	1
PM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	0	-	-
EBT	1326	0.00	0		0
WBT	899	0.00	0		0
WBR	133	0.00	0		0
SBR	85	0.15	13	B	1
Sat		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	1	-	-
EBT	1124	0.00	0		0
WBT	987	0.00	0		0
WBR	194	0.00	0		0
SBR	114	0.22	14	B	1

Future Total Conditions: The RIRO site access off Mayfield Road is expected to operate well within capacity and with acceptable delays for all individual movements during all peak hours. No constraints have been identified.

6.5.5 Street G & North Internal Access

The intersection capacity analysis for weekday AM, PM, and Saturday peak hours at Street G & North Internal Access is summarized in **Table 6-15**.

Table 6-15: Intersection Capacity Analysis, Street G & North Internal Access

AM	Future Total 2029				
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	5	-	-
NBL	9	0.01	7	A	0
NBT	0	0.00	0		0
NBR	92	0.00	0		0
EBLTR	10	0.01	9	A	0
WBLTR	101	0.12	10	A	0
PM	Future Total 2029				
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	6	-	-
NBL	45	0.03	7	A	0
NBT	0	0.00	0		0
NBR	305	0.00	0		0
EBLTR	52	0.08	11	B	0
WBLTR	176	0.30	13	B	1
Sat	Future Total 2029				
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	7	-	-
NBL	66	0.04	7	A	0
NBT	0	0.00	0		0
NBR	436	0.00	0		0
EBLTR	65	0.12	13	B	0
WBLTR	237	0.49	19	C	3

Future Total Conditions: The future intersection of Street G & North Internal Access is expected to operate well within capacity and with acceptable delays for all individual movements during all peak hours. No constraints have been identified.

6.5.6 Street G & South Internal Access

The intersection capacity analysis for weekday AM, PM, and Saturday peak hours at Street G & South Internal Access is summarized in **Table 6-16**.

Table 6-16: Intersection Capacity Analysis, Street G & South Internal Access

AM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	0	-	-
NBT	100	0.00	0		0
EBR	6	0.01	9	A	0
SBT	95	0.00	0		0
SBR	4	0.00	0		0
PM		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	0	-	-
NBT	351	0.00	0		0
EBR	20	0.02	9	A	0
SBT	169	0.00	0		0
SBR	10	0.00	0		0
Sat		Future Total 2029			
Mvmt	Vol	V/C	Delay(s)	LOS	95th Queue
Overall	-	-	0	-	-
NBT	502	0.00	0		0
EBR	23	0.03	10	A	0
SBT	213	0.00	0		0
SBR	17	0.00	0		0

Future Total Conditions: The future intersection of Street G & South Internal Access is expected to operate well within capacity and with acceptable delays for all individual movements during all peak hours. No constraints have been identified.

6.6 SUMMARY OF INTERSECTION CAPACITY ANALYSIS

With the signalization of Mayfield Road & Robert Parkinson Drive, and the planned widenings along adjacent roads, 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 and internal intersection on the subject lands are expected to operate sufficiently under future conditions.

7 SIM TRAFFIC ANALYSIS

SimTraffic models were developed to assess the queue lengths for the future east accesses along Creditview Road (East Access 1, East Access 2). The queue lengths for East Access 1 in summarized in **Table 7-1** and summarized in **Table 7-2** for East Access 2. Detailed results are provided in **Appendix K**.

Table 7-1: SimTraffic Queues – Creditview Road & East Access 1

Creditview Road & East Access 1						
AM	Movement	EB	EB	NB	SB	-
	Directions Served	L	R	L	R	
	Maximum Queue (m)	7.5	8.4	21	4	
	Average Queue (m)	2.4	4.9	5.8	0.2	
	95th Queue (m)	8	8.7	16.3	2	
	Link Distance (m)	98.7	98.7	0	0	
	Storage Bay Dist (m)	0	0	50	30	
PM	Movement	EB	EB	NB	SB	-
	Directions Served	L	R	L	T	
	Maximum Queue (m)	32.6	22.2	44.8	1.3	
	Average Queue (m)	9.6	12	16.7	0	
	95th Queue (m)	20	20	34.3	0.9	
	Link Distance (m)	112	112	0	233.7	
	Storage Bay Dist (m)	0	0	50	0	
Sat	Movement	EB	EB	NB	SB	SB
	Directions Served	L	R	L	T	R
	Maximum Queue (m)	29.6	34.2	48.6	1.3	6.9
	Average Queue (m)	11.4	13.9	17.7	0	1.4
	95th Queue (m)	21.8	24.2	37.9	0.9	5.8
	Link Distance (m)	121.1	121.1	0	233.8	0
	Storage Bay Dist (m)	0	0	50	0	30

Table 7-2: SimTraffic Queues – Creditview Road & East Access 2

Creditview Road & East Access 2				
AM	Movement	EB	-	-
	Directions Served	R		
	Maximum Queue (m)	9.2		
	Average Queue (m)	5.7		
	95th Queue (m)	9.5	-	-
	Link Distance (m)	108.4		
	Storage Bay Dist (m)	0		
PM	Movement	EB	-	-
	Directions Served	R		
	Maximum Queue (m)	36.7		
	Average Queue (m)	16.6		
	95th Queue (m)	27.7	-	-
	Link Distance (m)	103.8		
	Storage Bay Dist (m)	0		
Sat	Movement	EB	SB	SB
	Directions Served	R	T	T
	Maximum Queue (m)	66	18.7	7.5
	Average Queue (m)	24	1	0.2
	95th Queue (m)	48.5	8.9	5.3
	Link Distance (m)	110	100.1	100.1
	Storage Bay Dist (m)	0	0	0

Based on the results in the tables above, the maximum queue lengths do not surpass the available link distances. Therefore, it can be concluded that the anticipated queues on Creditview Road can be adequately accommodated within the existing roadway network. In addition, observations from the SimTraffic simulation indicate that queues dissipate within a short period, with no excessive queueing nor queueing spillback observed.

8 PARKING AND LOADING REVIEW

8.1 PARKING REVIEW

The subject site is located within Exception Zone C-687, as outlined in Zoning By-law 2024-050, which has passed on June 25, 2024. This By-law amends the Town of Caledon’s Comprehensive Zoning By-law 2006-50, including Section 5 - Parking, Loading and Delivery (Section 5.2.3 - Non-Residential Parking Requirements). Within this exception zone, the minimum parking requirement is 1 space per 23 m² of net floor area. It should be noted that at this stage of development, the net floor area (NFA) has not yet been determined. Therefore, as a conservative method, the GFA has been used for the parking calculation. The parking requirements and proposed supply are summarized in **Table 8-1**. The full report including the exception zone parking rates are provided in **Appendix L**.

Table 8-1: Town of Caledon Zoning By-law 2024-050 Zone C-687 Parking Requirement

Land Use	Structure	GFA	Town of Caledon ZBL 2006-50		Proposed Supply
			Parking Rate	Required Spaces ⁽¹⁾	
Commercial	A-B	20,896 m ²	1 space / 23m ² of net floor area	909	1,242
Commercial	C	7,773 m ²		338	314
Total				1,247	1,556

Note: (1) – According to Town of Caledon By-law 2006-50, Section 5.2.4, where the minimum number of parking, loading or delivery spaces is calculated on the basis of a rate or ratio, the required number of parking, loading or delivery spaces shall be rounded to the next higher whole number.

Based on the minimum parking requirements under Exception Zone C-687, the proposed commercial development is required to provide a total of 1,247 parking spaces. The proposed supply of 1,242 parking spaces for commercial lot A and B exceeds and satisfies the parking requirement. The proposed supply for commercial lot C is 314, which does not satisfy the minimum parking requirement of 338 spaces. As the number of parking spaces in commercial lot A and B significantly exceeds the required minimum, it should adequately address the parking shortfall for commercial lot C.

In the event of limited parking availability in commercial lot C, visitors may utilize the parking areas provided at lot A and B and access lot C on foot by crossing Street G. A two-way stop-control (TWSC) will be implemented for the east and west movements at the Street G & North Internal Access intersection, while the Street G & South Internal Access will operate as a right-in right-out (RIRO) intersection for the eastbound movements. Vehicles must yield to pedestrians when crossing both internal roads. Pedestrian crosswalks will be provided along Street G when crossing the North Internal Access to facilitate safe and convenient pedestrian movement. In total, the proposed supply of 1,556 parking spaces satisfies, and exceeds the number of required parking spaces for the proposed site. Eight (8) EV parking spaces will be provided between retail buildings B1 and B2.

8.2 LOADING REVIEW

The loading requirements are subject to Town of Caledon Zoning By-law 2006-50, Section 5 - Parking, Loading and Delivery (Section 5.4.2 - Delivery Space Requirements, July 20, 2023). The commercial delivery space requirement is one (1) per building per lot. The loading space requirements referenced in Section 5.4.2 of the By-law was applied to the proposed commercial development as summarized in **Table 8-2**.

Table 8-2: Town of Caledon Zoning By-law 2006-50 Loading Requirement

Land Use	Structure	Town of Caledon ZBL 2006-50		Proposed Supply
		Delivery Space Requirement	Required Spaces	
Supermarket	A	3 loading spaces + 1 space for each additional 9,300 m ² or portion thereof in excess of 7,441 m ²	4 ⁽¹⁾	4
Commercial	B1 – B2	1 per building per lot	2	2
Commercial	B3 – B4		3	3
Restaurant	B5		1	3
Commercial	C1 – C2		2	2
Commercial	C3 – C4			
Total			12	14

Note: (1) – According to Town of Caledon By-law 2006-50, Section 5.2.4, where the minimum number of parking, loading or delivery spaces is calculated on the basis of a rate or ratio, the required number of parking, loading or delivery spaces shall be rounded to the next higher whole number.

The proposed Costco for Structure A has been considered as a Supermarket, which will require a total of four (4) loading spaces. All other commercial and restaurant buildings will require one (1) delivery space per building per lot. Therefore, a total of 12 delivery spaces are required. A total of 14 delivery spaces are proposed for the overall development. Four (4) loading spaces are proposed for commercial structure A, two (2) loading spaces are proposed for commercial structures B1 and B2, and three (3) loading spaces are proposed to be shared among commercial buildings B3, B4, and B5. Commercial structures C1 and C2 share three (3) loading spaces, while structures C3 and C4 will share two (2) tandem loading spaces, located adjacent to structure C3.

With regards to the tandem loading operations for structures C3-C4, it is anticipated that staff for each unit within these buildings will coordinate loading activity, and deliveries will be scheduled to ensure that no overlapping loading activities occur at the same time. To support this, it is recommended that a formal loading schedule be established and distributed to all building tenants to ensure efficient and conflict-free loading operations. As such, it is our opinion that the proposed tandem delivery space configuration provides adequate space for commercial servicing/loading activities. Furthermore, all proposed delivery spaces meet the required delivery space dimensions of at least 9 metres long, 3.5 metres wide, 3 metres in vertical clearance.

8.3 BICYCLE PARKING REVIEW

A total of 76 bicycle parking spaces will be provided near the commercial building entrances, connected by concrete pathways for easy access. The *Town of Caledon Active Transportation Master Plan (June 2024)* recommends that for new retail/commercial units, bicycle parking must amount to 5% of the total required motor vehicle parking spaces, with a minimum of 6 spaces per building. As no bicycle rates were provided for supermarkets or restaurants, the proposed Costco and Structure B5 has been considered as a commercial building as a conservative analysis. The proposed bicycle parking has been summarized in **Table 8-3**.

Table 8-3: Bicycle Parking Proposed Supply

Land Use	Structure	Required Vehicle Spaces	Recommended Supply	Proposed Supply
Commercial	A	909	46	36
	B1-B5			
	C1-C4 ⁽¹⁾	338	18 ⁽²⁾	40
Total		1,247	64	76

Note: (1) – Structures C1 and C2 has been considered as one building.

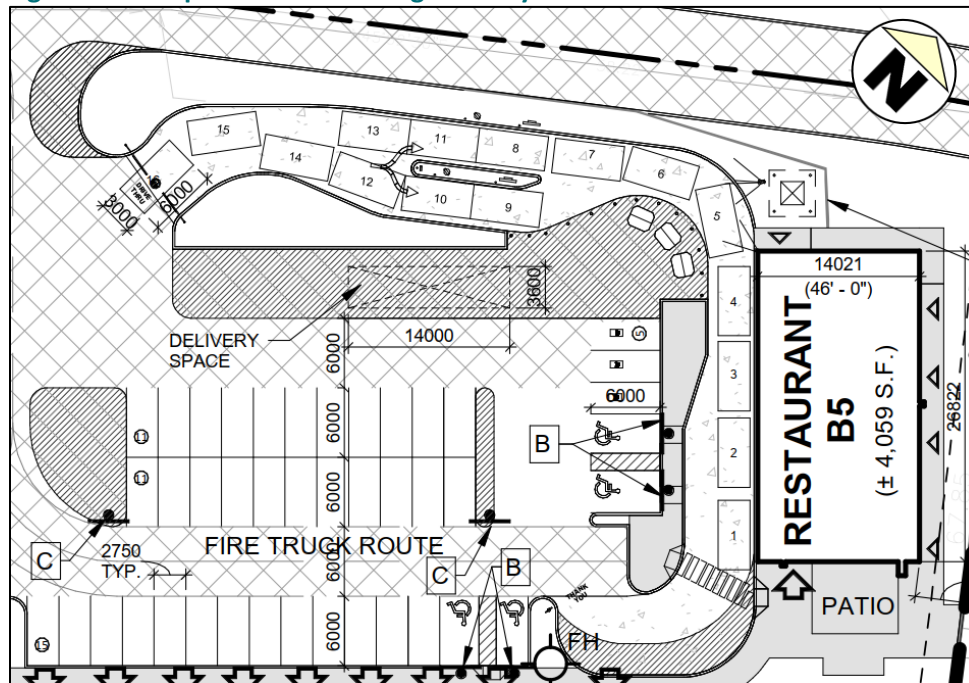
(2) – A minimum of 6 spaces per building was applied for a more conservative approach.

As per the recommended bicycle rates in the *Town of Caledon Active Transportation Master Plan*, the subject site is recommended to provide a minimum of 46 bicycle spaces for commercial lots A-B, and 18 bicycle spaces for commercial lot C, totaling 64 bicycle spaces. The proposed supply includes 36 bicycle spaces for commercial lot A-B which falls short of the recommended bicycle parking supply. However, the proposed supply of 40 bicycle spaces in commercial lot C exceeds the recommended supply. In total, the proposed supply of 76 bicycle spaces will exceed the recommended supply from the Town’s Active Transportation Master Plan, and is expected to meet the demand for the site.

8.4 DRIVE-THROUGH FACILITY REVIEW

Structure B5 is proposed to operate as a fast-food restaurant with a drive-through facility, as illustrated in **Figure 8-1**. In accordance with Zoning By-law 2006-50, *Section 4.10 – Drive-Through Service Facilities*, a maximum of two (2) queuing lanes is permitted, with each queuing space required to have a minimum length of 6 m and a width of 3 m.

Figure 8-1: Proposed Drive-Through Facility



Source: Turner Fleisher, February 2026

As per Zoning By-law 2006-50, a restaurant with a drive-through facility is required to provide a minimum of 8 queuing spaces. The proposed development will provide 16 queuing spaces, thereby meeting and

exceeding this requirement. The queuing spaces will be accommodated with two (2) queuing lanes, with all spaces meeting the specified dimension requirements.

9 ACTIVE TRANSPORTATION REVIEW

This section outlines the active transportation strategies to be implemented, in accordance with the requirements of the Town of Caledon's Green Development Standards (GDS) and Active Transportation Master Plan (ATMP). To comply with the requirements of the GDS, the proposed site must incorporate a minimum of three strategies for the draft plan of subdivision and at least one strategy for the site plan. The strategies listed below aim to reduce the number of single-occupancy vehicle trips associated with the proposed development:

1. **Bike Repair Station:** A bike repair station will be installed near the entrance to retail building C2 to support local cyclists and encourage increased bicycle usage.
2. **Pavement Marking and Signage Plan:** The proposed development will include appropriate pavement markings and signage to effectively guide vehicles, pedestrians, and cyclists.
3. **Multi-Use path:** The proposed development will provide a 3.0 m wide multi-use path (MUP) along both sides of Street 'G'. The MUPs will provide safe connected pedestrian pathways from Mayfield Road, supporting pedestrian trips to the subject site.
4. **Sidewalk Provision:** The proposed development will provide a minimum 1.8-meter-wide sidewalks surrounding the site with landscape buffers, enhancing pedestrian accessibility.
5. **Mid-block Connections:** Mid-block connections will be established along Mayfield Road to link the southern portion of the site with the sidewalk network, improving pedestrian access.

As detailed above, the proposed site will provide a bike repair station, adequate signage and pavement markings, sidewalks, and mid-block connections. Through the implementation of the proposed strategies, the proposed development satisfies the requirements of the Town's Green Development Standards and Active Transportation Master Plan. It should be noted that the existing paved shoulder along Creditview Road (See **Section 2.3**) will be maintained.

10 FUNCTIONAL DESIGN AND ACCESS REVIEW

Functional Design Review

A review of the functionality and accessibility of the proposed loading spaces was completed to determine that the proposed loading spaces can be accessed and egressed by the appropriate vehicles. The functionality of the proposed parking spaces was also confirmed. Furthermore, a review of internal roads reveals that Fire and Emergency Service vehicles can safely access the site. The swept path diagrams are provided in **Appendix M**. The review finds that all design vehicles can be accommodated.

Sightline Analysis

A sightline analysis was conducted for the proposed accesses on Mayfield Road and Creditview Road to ensure that vehicles can safely enter and exit the site. The sightline analysis considered Stopping Sight Distance and Intersection Sight Distance. The assessment is based on the methodology outlined in the Geometric Design Guide for Canadian Roads TAC manual. The sightline analysis is provided in **Appendix M**.

Based on the design speed limit of 80 km/h along Mayfield Road and 60 km/h along Creditview Road, TAC recommended a minimum distance of 130 m and 85 m respectively, in order for vehicles to safely come to a stop when they see a vehicle exiting from the minor road. As shown in **Drawing No. 013** and **Drawing No. 014**, oncoming vehicles will have a clear sight distance of 130 m. Therefore, the stopping sight distances at all site accesses are considered acceptable.

LEA also conducted an intersection sight distance analysis for the proposed site accesses. In accordance with the TAC manual, the vertex of the departure sight triangle on the minor road should be 4.4 m from the edge of the major road. **Drawing No. 015** and **Drawing No. 016** illustrates the intersection sight distance based on the 4.4 m from the edge of the road. With this distance from the edge of the road, the vertical sightlines acceptable at all site accesses.

11 CONCLUSION AND RECOMMENDATIONS

- ▶ LEA Consulting Ltd. (LEA) was retained by 12100 Creditview Developments Limited to prepare a Transportation Impact Study (TIS) for the proposed commercial development located at 12100 Creditview Road in the Town of Caledon. The subject site is currently vacant. The proposed development consists of nine (9) commercial structures (A, B1-B5, and C1-C4) providing a total gross floor area (GFA) of 308,593 ft² and 1,556 parking spaces. A gas bar with 24 fueling positions is also proposed on the east side of the site, south of Commercial Structure A. Access to the site is proposed via one (1) full movement driveway and one (1) right-in / right-out (RIRO) driveway off Creditview Road. One (1) right-in only, one (1) RIRO, and one (1) full movement driveway off Mayfield Road is also available for access to the site.
- ▶ Local transit service for the subject site is provided by Brampton Transit with the closest available stops located at the intersections of Mayfield Road & Robert Parkinson Drive and Mayfield Road & Creditview Road. There are currently limited cycling and pedestrian facilities surrounding the subject site; however, the Town of Caledon MMTMP and Mount Pleasant Block 51-1 Collector Road and Transportation Study plans for a new network of on- and off-road cycling facilities and multi-use trails.
- ▶ The proposed commercial development is anticipated to generate 673 two-way trips during the AM peak hour (374 inbound and 299 outbound), 1,794 two-way trips during the PM peak hour (868 inbound and 926 outbound), and 2,446 two-way trips during the Saturday peak hour (1,237 inbound and 1,209 outbound).
- ▶ This assessment considers a 5-year horizon from base year 2024 to future year 2029. Under existing conditions, the signalized and unsignalized intersections during all peak hours are operating at acceptable levels of service. No critical movements are identified.
- ▶ The future background scenario incorporates background development traffic, corridor growth rates, and future planned road improvements. Under future background conditions, all signalized and unsignalized intersections during all peak hours are operating at acceptable levels of service. No critical movements are identified.
- ▶ To improve traffic conditions, signalization of Mayfield Road & Robert Parkinson Drive / South Site Access 2 is recommended. With signalization and implementation of the recommended signal timing plan, the intersection is expected to operate at acceptable levels of service under all peak hours. In addition, the proposed site accesses and internal intersection within the subject lands are expected to operate sufficiently under future conditions. As such, the proposed commercial development can be accommodated by the surrounding road network.
- ▶ The signal warrant analysis conducted for the intersection of Mayfield Road & Parkinson Drive / South Site Access 2 confirms that the intersection meets the MTO warrant criteria for signalization and is therefore recommended for further consideration.
- ▶ A SimTraffic analysis was conducted for the site accesses along Creditview Road. The results of the analysis indicate that all projected queues fit within the available link distances, and confirm that queues can clear quickly without spillback.

- ▶ The subject site is within exception zone C-687 under Zoning By-law 2024-050. A total of 1,556 vehicular parking spaces are proposed, satisfying, and exceeding the parking requirements for exception zone C-687.
- ▶ The site will provide 76 bicycle spaces, satisfying the bicycle parking rates from the Town of Caledon ATMP. These spaces will be located near the building entrances.
- ▶ A total of 14 delivery spaces are proposed for the commercial development. It is anticipated that deliveries will be scheduled to ensure that no overlapping loading activities occur at the same time. As such, it is of our opinion that the proposed tandem delivery space configuration provides adequate space for commercial servicing/loading activities.
- ▶ The proposed development will incorporate multiple active transportation measures, including a bike repair station, signage and pavement markings, a multi-use path, and midblock connections to meet the Town of Caledon's Green Development Standards and Active Transportation Master Plan requirements to reduce single-occupancy vehicle trips.
- ▶ A review of the functionality and accessibility of the loading and parking spaces reveal that the proposed spaces can be safely accessed and egressed by the appropriate vehicles.
- ▶ A sightline analysis was conducted for the proposed site accesses. The analysis finds that stopping sight distance and intersection sight distances for all site accesses are considered acceptable.



APPENDIX A

Terms of Reference



November 19, 2021

Reference Number: 22142

Rosalie Shan, Region of Peel
Via Email: Rosalie.Shan@peelregion.ca

**RE: Terms of Reference
Proposed Retail Development
12100 Creditview Road, Town of Caledon**

Dear Rosalie,

We wish to confirm the following work plan for the Transportation Impact Study (TIS) for the proposed retail development located at the municipal address 12100 Creditview Road (herein referred to as the “subject site”) in the Town of Caledon, as illustrated in **Figure 1**. Based on the information received to date, the subject site is currently vacant.

Figure 1: Subject Site Location

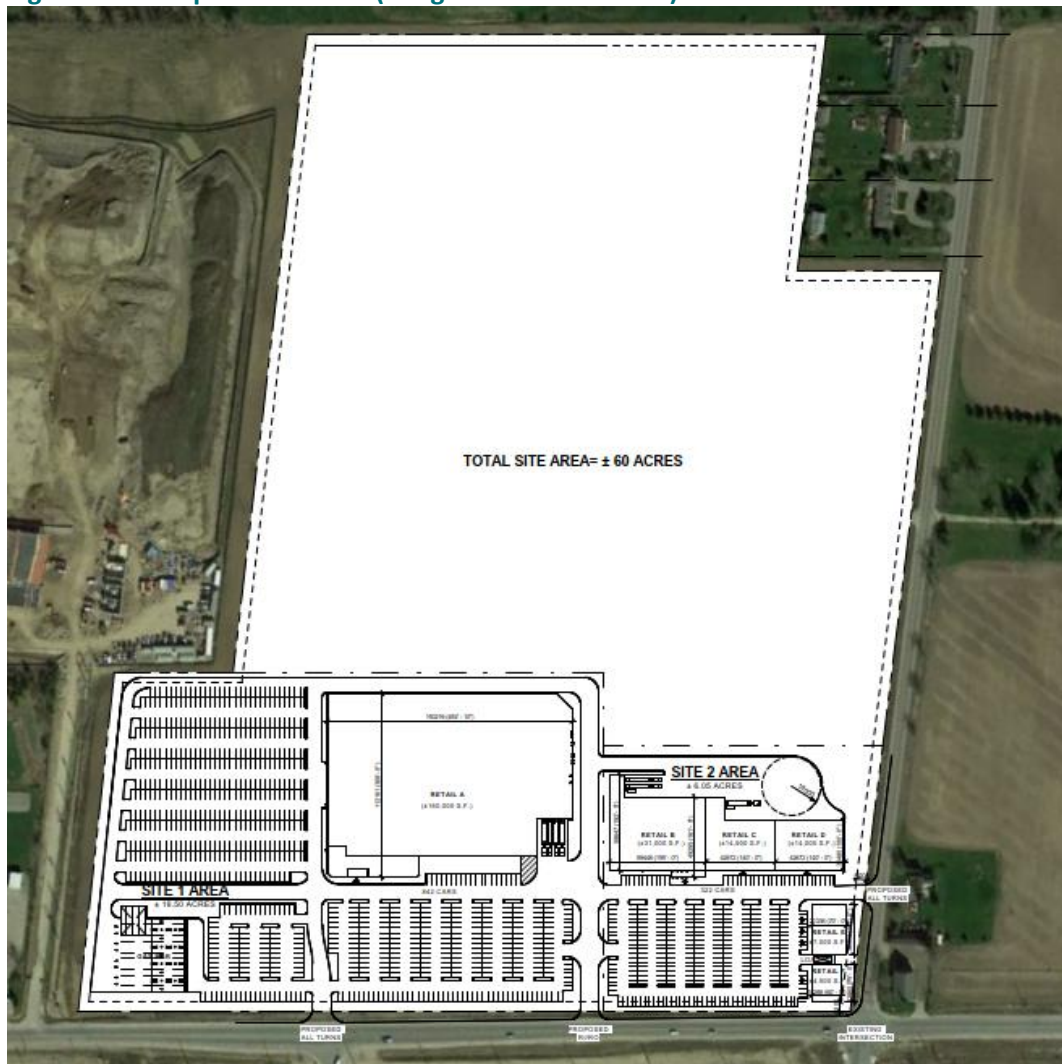




PROPOSED DEVELOPMENT

Based on the information received, it is understood that the development proposal will include six (6) retail areas (A, B, C, D, E and F) providing a total gross floor area (GFA) of 213,000 ft². Accesses are proposed via two (2) full movement driveways on Creditview Road and Mayfield Road, as well as a RI/RO driveway on Creditview Road. The proposed development will include a total of 1,164 parking spaces. The conceptual plan is illustrated in **Figure 2**.

Figure 2: Conceptual Site Plan (Image: Turner Fleischer)



The TIS for the proposed redevelopment will be conducted in accordance with the *Region of Peel Transportation Impact Study Guidelines*. Detailed below are the study assumptions requiring confirmation from Town of Caledon.



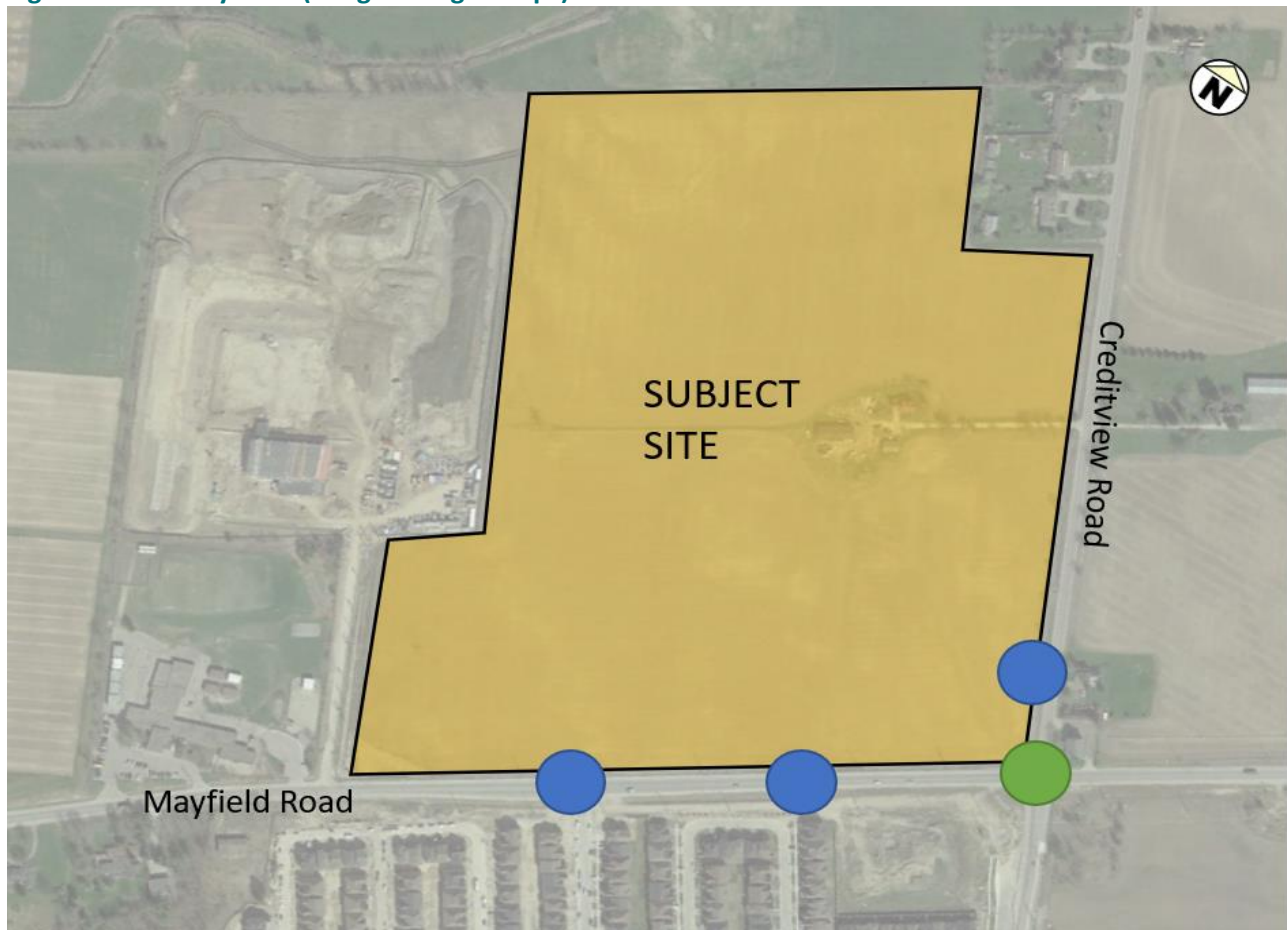
STUDY AREA & TRAFFIC DATA

The study will assess the weekday AM and PM peak hours. The proposed study area will include an analysis of the following intersections:

- ▶ Mayfield Road and Creditview Road (Signalized);
- ▶ Mayfield Road and Robert Parkinson Drive (Unsignalized);
- ▶ Proposed Site Access and Mayfield Road (Unsignalized); and
- ▶ Proposed Site Access and Creditview Road (Unsignalized).

The location of signalized (green) and unsignalized (blue) intersections are provided below in **Figure 3**.

Figure 3: TIS Study Area (Image: Google Maps)



Due to limitations brought forth by the COVID-19 pandemic in capturing accurate traffic data during typical weekday periods, LEA will use the most recent historical turning movement counts (TMC) available for the study area intersections. If the TMC data are not readily available for purchase from the Region of Peel nor Town of Caledon for all study area intersections, LEA proposes to survey the intersections and apply an appropriate adjustment factor to account for COVID-19 related restrictions.



TRAFFIC ASSESSMENT & STUDY HORIZON YEAR

The study will focus on the weekday AM and PM peak hour traffic operations of intersections within the study area. Synchro version 11.0 will be used to assess intersection operations during the weekday peak hours. The analyses will be in accordance with the City's *Synchro 11 Guidelines*. A five (5) year planning horizon year of 2026 will be assessed in this TIS.

BACKGROUND TRAFFIC

General Corridor Growth Rate – LEA will consult with the Region and the Town to obtain historical TMC data in the area for an appropriate growth rate.

Road Network Improvements – LEA will note any anticipated road network improvements identified within the study area and account for any traffic diversions associated with these improvements within our analysis. It is anticipated that there are no major road network improvements planned for the area.

Background Development Traffic – LEA will consult with Staff from Town of Caledon on any background developments to be included in the study area. LEA anticipates that the Town will make the TIS report for these background developments available.

TRIP GENERATION, DISTRIBUTION & ASSIGNMENT

Trip generation associated with the proposed development will be forecast using the Institute of Transportation Engineers (ITE) Trip Generation Manual 10th Edition. The general trip distribution and assignment of site traffic will be based on the latest Transportation Tomorrow Survey (TTS) data and existing traffic patterns. Trip assignment will reflect the configuration of site accesses, turning restrictions, and logical routings.

FUTURE TRAFFIC SCENARIOS

Future background and future total analyses for the aforementioned intersections within the study area will be over a five (5) year horizon for the year 2026.

REMEDIAL MEASURES

Any movements at the studied intersections that exceed a V/C ratio of 1.00 under future total conditions will be identified. If remedial actions such as signal optimization are unsuccessful this will also be identified. If remedial measures are to be employed, a scenario will be provided demonstrating the change in intersection operations.

PARKING AND LOADING

The site is currently under the jurisdiction of the Town of Caledon Zoning By-law 2006-50. LEA will review the parking and loading provisions and compare to the relevant by-laws. It is understood that the proposed parking will meet the Zoning By-law requirement. As such, a parking justification and loading justification study will not be conducted.



Should you have any comments with our assumptions or have any concerns, please contact the undersigned at ZGeorgis@lea.ca.

Yours truly,

LEA CONSULTING LTD.

A handwritten signature in black ink that reads 'Zara Georgis'.

Zara Georgis, M. Eng., P. Eng
Project Manager

:jw



September 24, 2021

Reference Number: 22142

Jillian Britto

Via Email: Jillian.Britto@caledon.ca

**RE: Terms of Reference
Proposed Retail Development
12100 Creditview Road, Town of Caledon**

Dear Jillian,

We wish to confirm the following work plan for the Transportation Impact Study (TIS) for the proposed retail development located at the municipal address 12100 Creditview Road (herein referred to as the “subject site”) in the Town of Caledon, as illustrated in **Figure 1**. Based on the information received to date, the subject site is currently vacant.

Figure 1: Subject Site Location

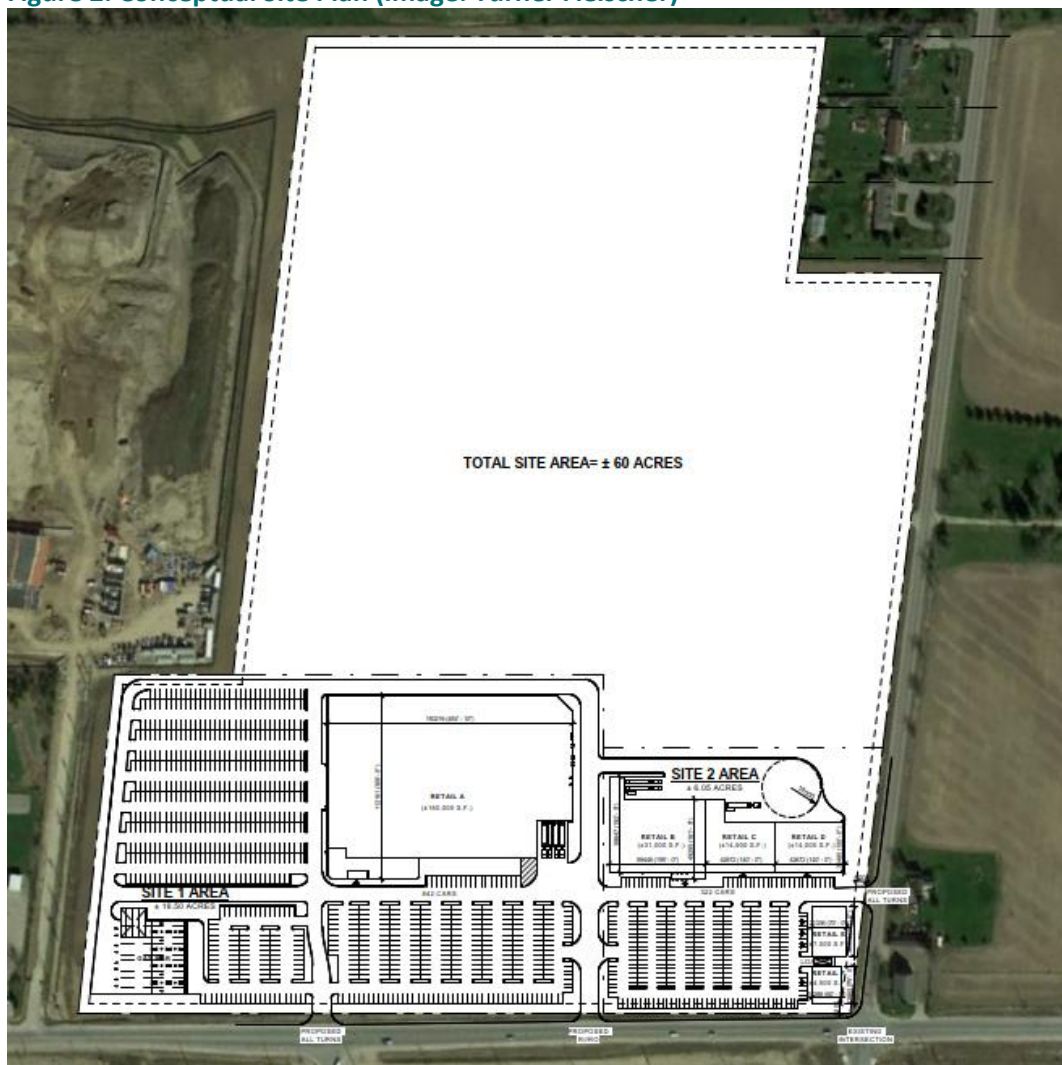




PROPOSED DEVELOPMENT

Based on the information received, it is understood that the development proposal will include six (6) retail areas (A, B, C, D, E and F) providing a total gross floor area (GFA) of 213,000 ft². Accesses are proposed via two (2) full movement driveways on Creditview Road and Mayfield Road, as well as a RI/RO driveway on Creditview Road. The proposed development will include a total of 1,164 parking spaces. The conceptual plan is illustrated in **Figure 2**.

Figure 2: Conceptual Site Plan (Image: Turner Fleischer)



The TIS for the proposed redevelopment will be conducted in accordance with the *Region of Peel Transportation Impact Study Guidelines*. Detailed below are the study assumptions requiring confirmation from Town of Caledon.



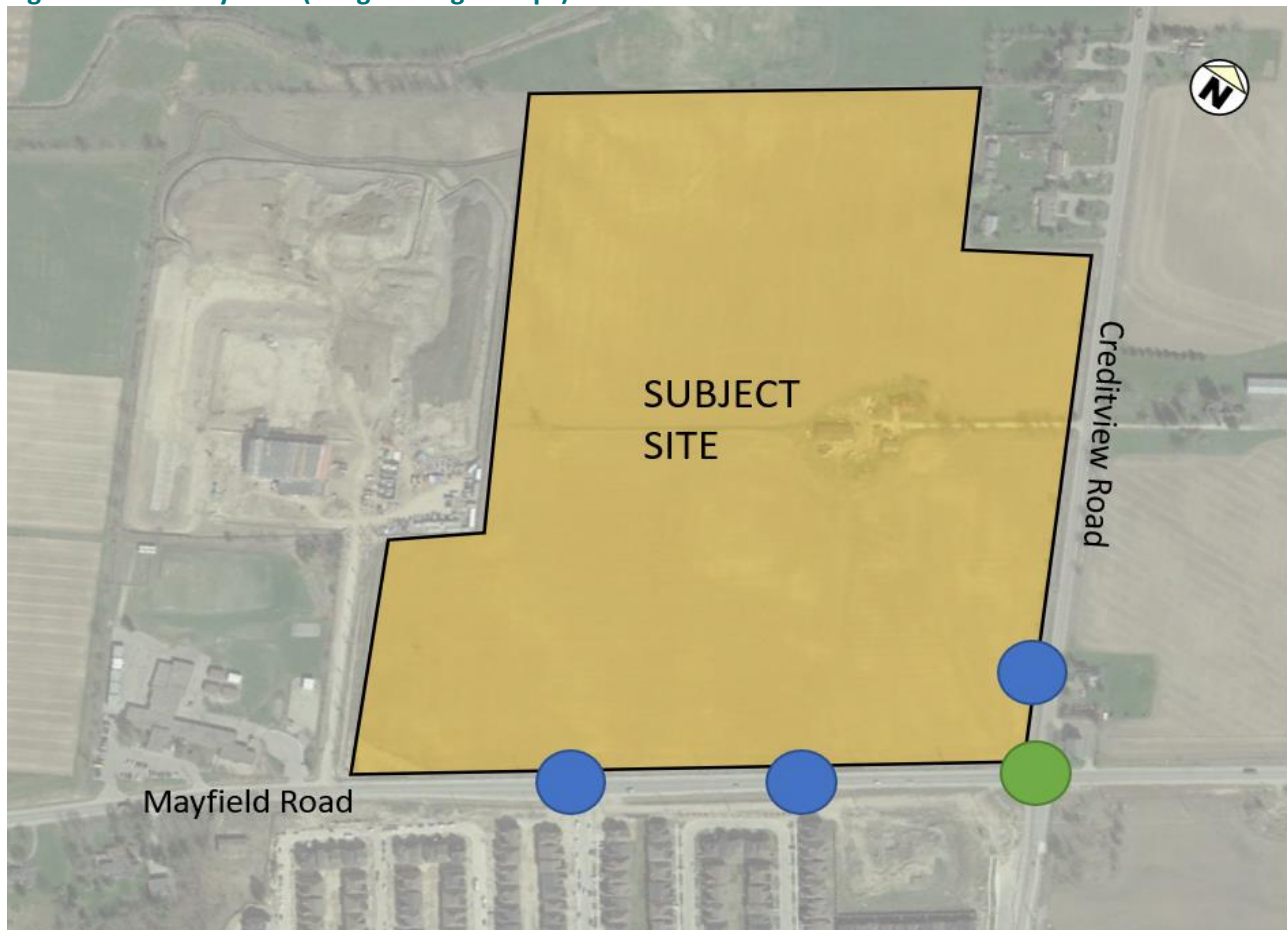
STUDY AREA & TRAFFIC DATA

The study will assess the weekday AM and PM peak hours. The proposed study area will include an analysis of the following intersections:

- ▶ Mayfield Road and Creditview Road (Signalized);
- ▶ Mayfield Road and Robert Parkinson Drive (Unsignalized);
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- ▶ Proposed Site Access and Creditview Road (Unsignalized).

The location of signalized (green) and unsignalized (blue) intersections are provided below in **Figure 3**.

Figure 3: TIS Study Area (Image: Google Maps)



Due to limitations brought forth by the COVID-19 pandemic in capturing accurate traffic data during typical weekday periods, LEA will use the most recent historical turning movement counts (TMC) available for the study area intersections. If the TMC data are not readily available for purchase from the Region of Peel nor Town of Caledon for all study area intersections, LEA proposes to survey the intersections and apply an appropriate adjustment factor to account for COVID-19 related restrictions.



TRAFFIC ASSESSMENT & STUDY HORIZON YEAR

The study will focus on the weekday AM and PM peak hour traffic operations of intersections within the study area. Synchro version 11.0 will be used to assess intersection operations during the weekday peak hours. The analyses will be in accordance with the City's *Synchro 11 Guidelines*. A five (5) year planning horizon year of 2026 will be assessed in this TIS.

BACKGROUND TRAFFIC

General Corridor Growth Rate – LEA will consult with the Region and the Town to obtain historical TMC data in the area for an appropriate growth rate.

Road Network Improvements – LEA will note any anticipated road network improvements identified within the study area and account for any traffic diversions associated with these improvements within our analysis. It is anticipated that there are no major road network improvements planned for the area.

Background Development Traffic – LEA will consult with Staff from Town of Caledon on any background developments to be included in the study area. LEA anticipates that the Town will make the TIS report for these background developments available.

TRIP GENERATION, DISTRIBUTION & ASSIGNMENT

Trip generation associated with the proposed development will be forecast using the Institute of Transportation Engineers (ITE) Trip Generation Manual 10th Edition. The general trip distribution and assignment of site traffic will be based on the latest Transportation Tomorrow Survey (TTS) data and existing traffic patterns. Trip assignment will reflect the configuration of site accesses, turning restrictions, and logical routings.

FUTURE TRAFFIC SCENARIOS

Future background and future total analyses for the aforementioned intersections within the study area will be over a five (5) year horizon for the year 2026.

REMEDIAL MEASURES

Any movements at the studied intersections that exceed a V/C ratio of 1.00 under future total conditions will be identified. If remedial actions such as signal optimization are unsuccessful this will also be identified. If remedial measures are to be employed, a scenario will be provided demonstrating the change in intersection operations.

PARKING AND LOADING

The site is currently under the jurisdiction of the Town of Caledon Zoning By-law 2006-50. LEA will review the parking and loading provisions and compare to the relevant by-laws. It is understood that the proposed parking will meet the Zoning By-law requirement. As such, a parking justification and loading justification study will not be conducted.



Should you have any comments with our assumptions or have any concerns, please contact the undersigned at ZGeorgis@lea.ca.

Yours truly,

LEA CONSULTING LTD.

A handwritten signature in black ink that reads 'Zara Georgis'.

Zara Georgis, M. Eng., P. Eng
Project Manager

:jw

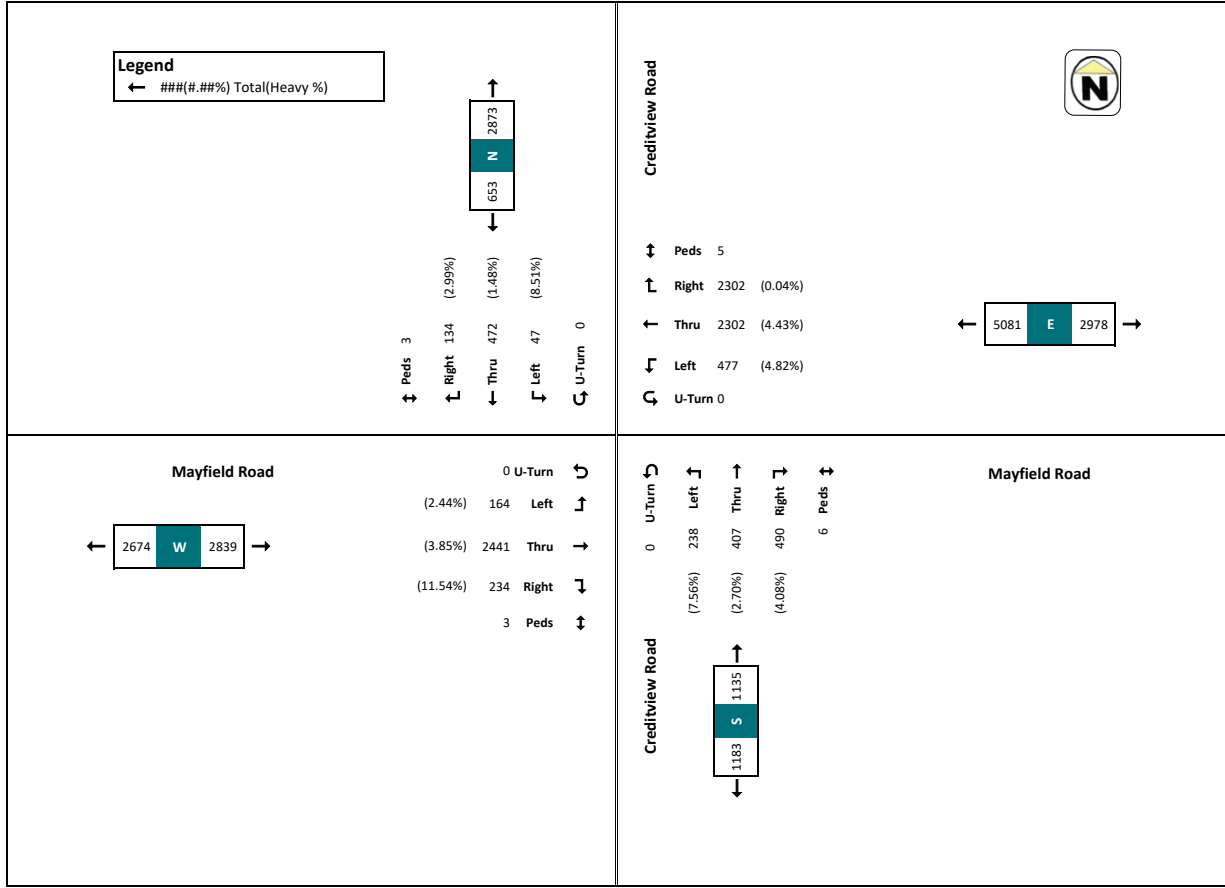


APPENDIX B

Traffic Data & Signal Timing Plan

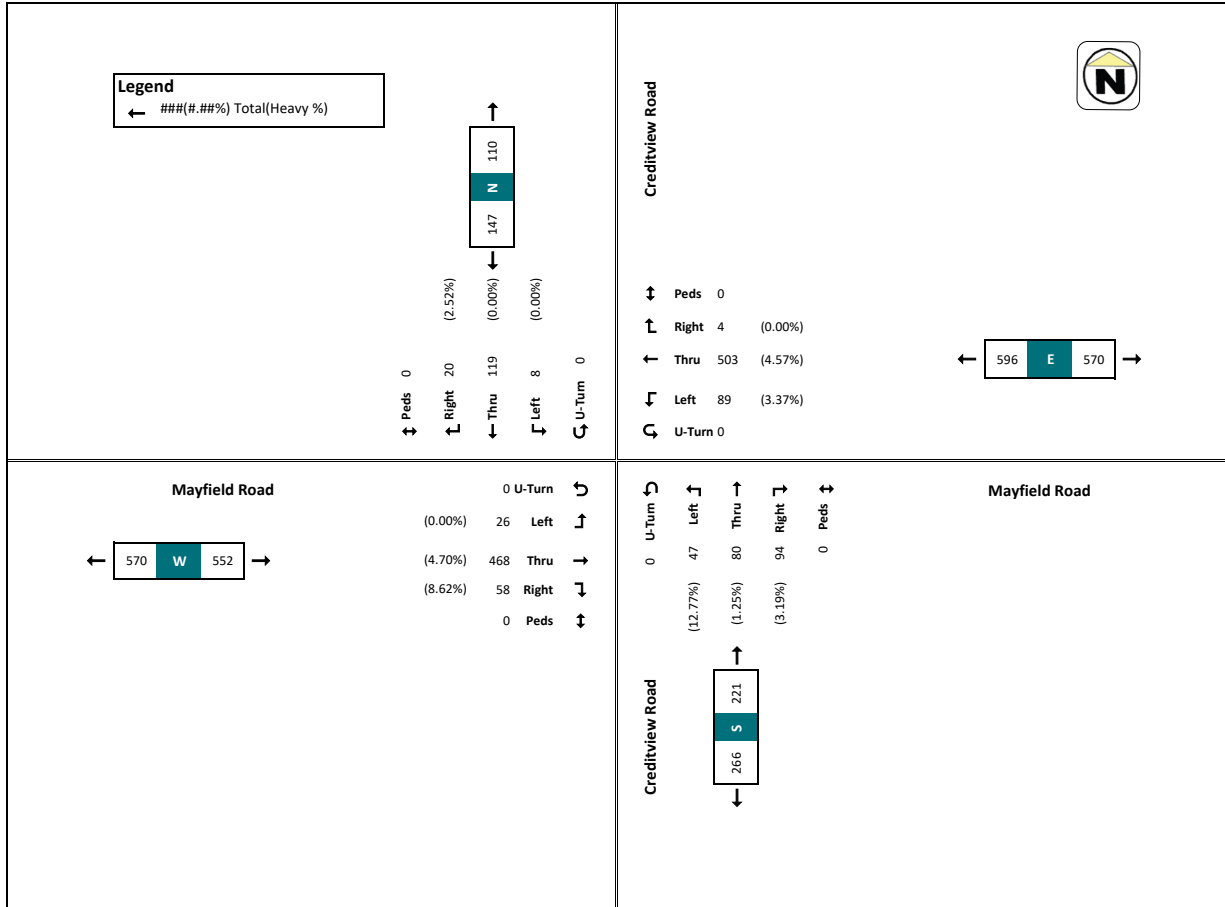
Turning Movement Count - Creditview Road & Mayfield Road

Start Time	Creditview Road Southbound					Mayfield Road Westbound					Creditview Road Northbound					Mayfield Road Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
7:00	0	3	14	4	0	21	0	13	85	1	0	99	0	6	23	15	0	44	0	7	94	6	0	107	271
7:15	0	2	24	4	0	30	0	17	107	1	0	125	0	5	16	11	0	32	0	3	118	5	0	126	313
7:30	0	2	36	4	0	42	0	18	117	1	0	136	0	15	27	19	0	61	0	9	123	14	0	146	385
7:45	0	2	38	1	0	41	0	26	144	0	0	167	0	6	17	25	0	51	0	6	118	14	0	138	397
Hourly Total	0	9	112	13	0	134	0	74	450	3	0	527	0	32	83	73	0	188	0	25	453	39	0	517	1366
8:00	0	2	33	7	0	42	0	20	124	1	0	145	0	14	18	17	0	49	0	6	125	14	0	145	381
8:15	0	2	12	8	0	22	0	25	121	2	0	148	0	12	18	30	0	60	0	5	102	16	0	123	353
8:30	0	0	13	7	0	20	0	23	131	7	0	159	0	11	21	31	0	66	0	6	111	7	0	124	369
8:45	0	4	17	3	2	24	0	16	145	4	3	165	0	11	14	22	0	52	0	3	100	6	0	109	350
Hourly Total	0	8	75	25	2	108	0	84	524	9	3	617	0	51	71	105	0	227	0	20	438	43	0	501	1453
9:00	0	2	4	5	0	11	0	22	143	2	0	167	0	13	17	20	0	50	0	2	95	6	1	103	331
9:15	0	2	7	7	1	16	0	17	129	3	1	149	0	15	12	18	0	45	0	4	129	6	0	139	349
Hourly Total	0	4	11	12	1	27	0	39	272	5	1	316	0	28	29	38	0	95	0	6	224	12	1	242	680
* Break *																									
15:00	0	0	19	2	0	21	0	31	113	1	0	145	0	12	20	31	0	63	0	4	124	13	0	141	370
15:15	0	2	27	6	1	35	0	27	110	3	1	140	0	16	21	18	0	55	0	5	152	10	0	167	397
15:30	0	0	15	8	0	23	0	16	123	0	0	139	0	20	24	35	0	79	0	3	124	17	0	144	385
15:45	0	0	25	5	2	30	0	26	99	0	2	115	0	9	21	23	0	50	0	6	143	10	0	159	354
Hourly Total	0	2	86	21	3	109	0	100	435	4	3	539	0	54	86	107	0	247	0	18	543	50	0	611	1506
16:00	0	2	19	9	0	30	0	26	116	1	1	143	0	12	24	15	2	51	0	2	105	14	0	121	345
16:15	0	1	28	9	0	38	0	17	109	1	0	127	0	16	27	27	0	70	0	4	98	11	0	113	348
16:30	0	3	28	4	0	35	0	26	117	7	0	145	0	11	14	30	0	56	0	3	112	10	0	125	363
16:45	0	2	24	11	0	37	0	35	107	2	0	134	0	14	21	19	1	64	0	8	142	17	0	167	402
Hourly Total	0	8	99	33	0	140	0	94	449	6	1	549	0	56	86	101	3	243	0	17	457	52	0	526	1458
17:00	0	4	31	7	0	42	0	28	113	1	0	142	0	8	20	27	1	55	0	8	129	13	1	150	389
17:15	0	2	35	7	0	44	0	33	83	1	0	117	0	10	28	36	0	74	0	3	159	16	0	178	413
17:30	0	1	27	11	0	39	0	24	114	0	0	138	0	17	20	30	0	67	0	5	154	21	0	180	424
17:45	0	7	35	12	0	54	0	35	101	0	0	139	0	11	20	26	0	57	0	4	133	11	0	148	398
Hourly Total	0	14	128	37	0	179	0	120	411	5	0	536	0	46	88	119	1	253	0	20	575	61	1	656	1624
18:00	0	3	27	8	0	38	0	29	105	2	0	136	0	13	24	32	0	69	0	3	133	16	0	152	395
18:15	0	1	20	6	0	27	0	27	91	0	0	128	0	12	26	22	2	60	0	4	161	11	1	176	391
Hourly Total	0	4	47	14	0	65	0	56	196	2	0	264	0	25	50	54	2	128	0	7	294	27	1	326	786
Grand Total	0	47	472	134	3	653	0	477	2302	30	5	2809	0	238	407	490	6	1135	0	95	2441	234	3	2770	7367
Approach %	0.0%	7.2%	72.3%	20.5%	-	-	0.0%	17.0%	82.0%	1.1%	-	-	0.0%	21.0%	35.9%	43.2%	-	-	0.0%	3.4%	88.1%	8.4%	-	-	-
Total %	0.0%	0.6%	6.4%	1.8%	-	8.9%	0.0%	6.5%	31.2%	0.4%	-	38.1%	0.0%	3.2%	5.5%	6.7%	-	15.4%	0.0%	1.3%	33.1%	3.2%	-	37.6%	-
Lights	0	43	465	130	-	638	0	454	2200	29	-	2683	0	220	396	470	-	1086	0	91	2347	207	-	2645	7052
% Lights	-	91.5%	98.5%	97.0%	-	87.7%	-	95.2%	95.6%	96.7%	-	95.5%	-	92.4%	97.3%	95.9%	-	95.7%	-	95.8%	96.1%	88.5%	-	95.5%	95.7%
Buses	3	7	3	-	-	13	-	18	48	-	-	64	-	18	9	15	-	40	-	2	45	23	-	70	187
% Buses	6.4%	1.5%	3.2%	-	-	2.0%	-	3.8%	2.0%	0.0%	-	2.3%	-	6.7%	2.3%	3.1%	-	3.5%	-	2.1%	1.8%	9.6%	-	2.5%	2.5%
Trucks	1	0	-	-	-	2	-	5	56	-	-	62	-	2	-	5	-	9	-	2	49	4	-	55	128
% Trucks	2.1%	0.0%	-	-	-	0.3%	-	1.0%	2.4%	3.3%	-	2.2%	-	0.8%	0.5%	1.0%	-	0.8%	-	2.1%	2.0%	1.7%	-	2.0%	1.7%
Bicycles	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	0
Pedestrians	-	-	-	-	3	-	-	-	-	-	5	-	-	-	-	-	6	-	-	-	-	3	-	17	



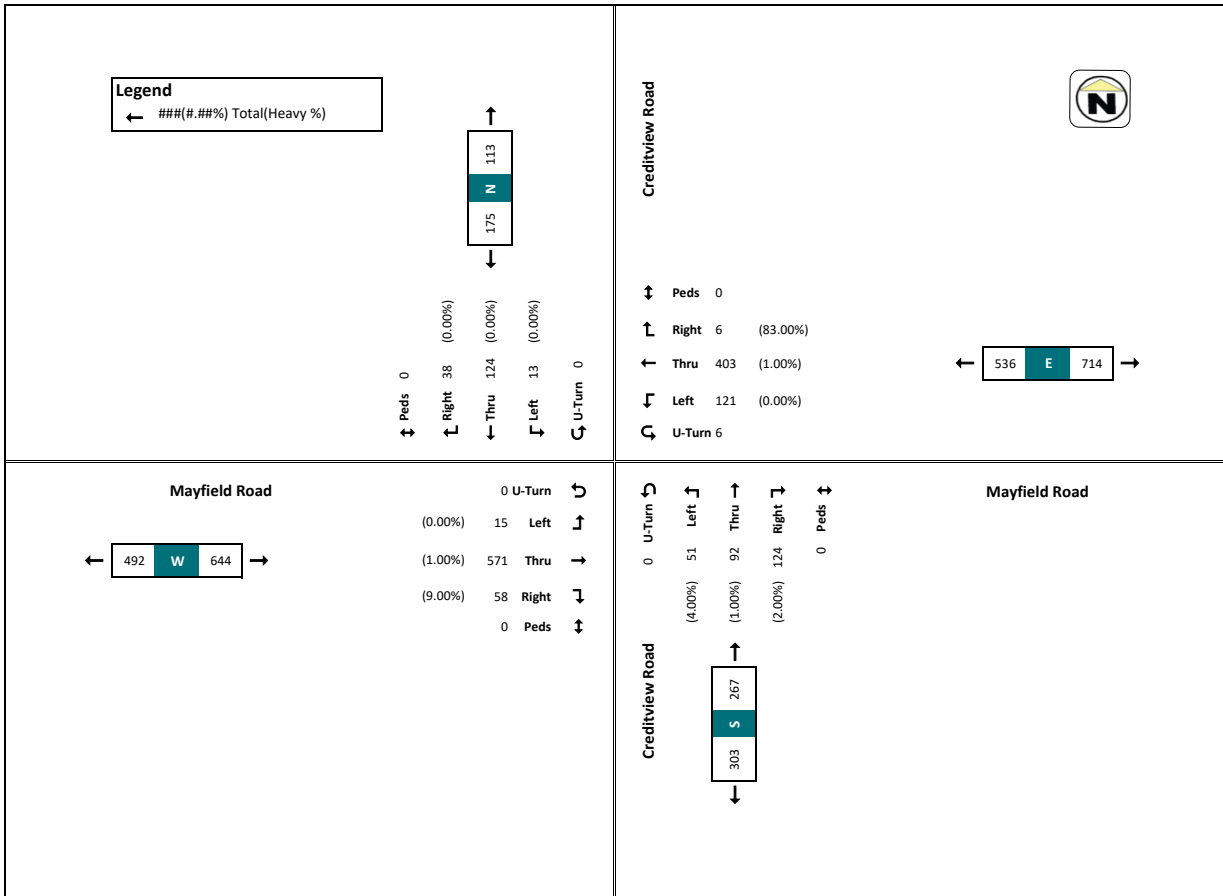
AM Peak Hour - Creditview Road & Mayfield Road

Start Time	Creditview Road Southbound					Mayfield Road Westbound					Creditview Road Northbound					Mayfield Road Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
7:30	0	2	36	8	0	42	0	18	117	1	0	136	0	15	27	19	0	61	0	9	123	14	0	146	355
7:45	0	2	38	1	0	41	0	26	141	0	0	167	0	6	17	28	0	51	0	6	118	14	0	138	397
8:00	0	2	33	7	0	42	0	20	124	1	0	145	0	14	18	17	0	49	0	6	125	14	0	145	381
8:15	0	2	12	8	0	22	0	25	121	2	0	148	0	12	18	30	0	60	0	5	102	16	0	123	353
Hourly Total	0	8	119	20	0	147	0	89	503	4	0	596	0	47	80	94	0	221	0	26	468	58	0	552	1516
Approach %	0.0%	5.4%	81.0%	13.6%	-	-	0.0%	14.5%	84.4%	0.7%	-	-	0.0%	21.3%	36.2%	42.5%	-	-	0.0%	4.7%	84.8%	10.5%	-	-	-
Total %	0.0%	0.5%	7.8%	1.3%	-	9.7%	0.0%	5.9%	33.2%	0.3%	-	39.3%	0.0%	3.1%	5.3%	6.2%	-	14.6%	0.0%	1.7%	30.9%	3.8%	-	36.4%	
PHF	0	1	0.78	0.63	-	0.88	0	0.86	0.89	0.5	-	0.89	0	0.78	0.74	0.78	-	0.91	0	0.72	0.94	0.91	-	0.95	
Light %	0	8	116	19	-	143	0	86	480	4	-	570	0	71	79	91	-	211	0	26	446	58	-	525	
% Lights	100.0%	97.5%	95.0%	97.3%	-	96.6%	95.4%	100.0%	95.6%	87.2%	98.8%	96.8%	-	95.9%	98.8%	96.8%	-	95.9%	100.0%	95.3%	91.4%	95.1%	95.6%	-	95.6%
Bikes	0	3	0	0	-	3	0	0	0	0	-	0	0	2	0	0	-	2	0	7	0	0	-	12	
% Buses	0.0%	2.5%	0.0%	-	2.0%	-	3.4%	1.8%	0.0%	-	2.0%	-	10.6%	0.0%	2.1%	-	3.2%	-	0.0%	1.5%	8.6%	2.2%	-	2.2%	
Trucks	0	0	1	0	-	1	0	14	0	-	14	0	1	1	1	0	-	3	0	15	0	0	-	15	
% Trucks	0.0%	0.0%	5.0%	-	0.7%	-	0.0%	2.8%	0.0%	-	2.3%	-	7.1%	1.3%	1.1%	-	6.4%	-	0.0%	3.2%	0.0%	0.0%	-	2.7%	
Bicycles	-	-	-	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Pedestrians	-	-	-	0	-	0	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0



PM Peak Hour - Creditview Road & Mayfield Road

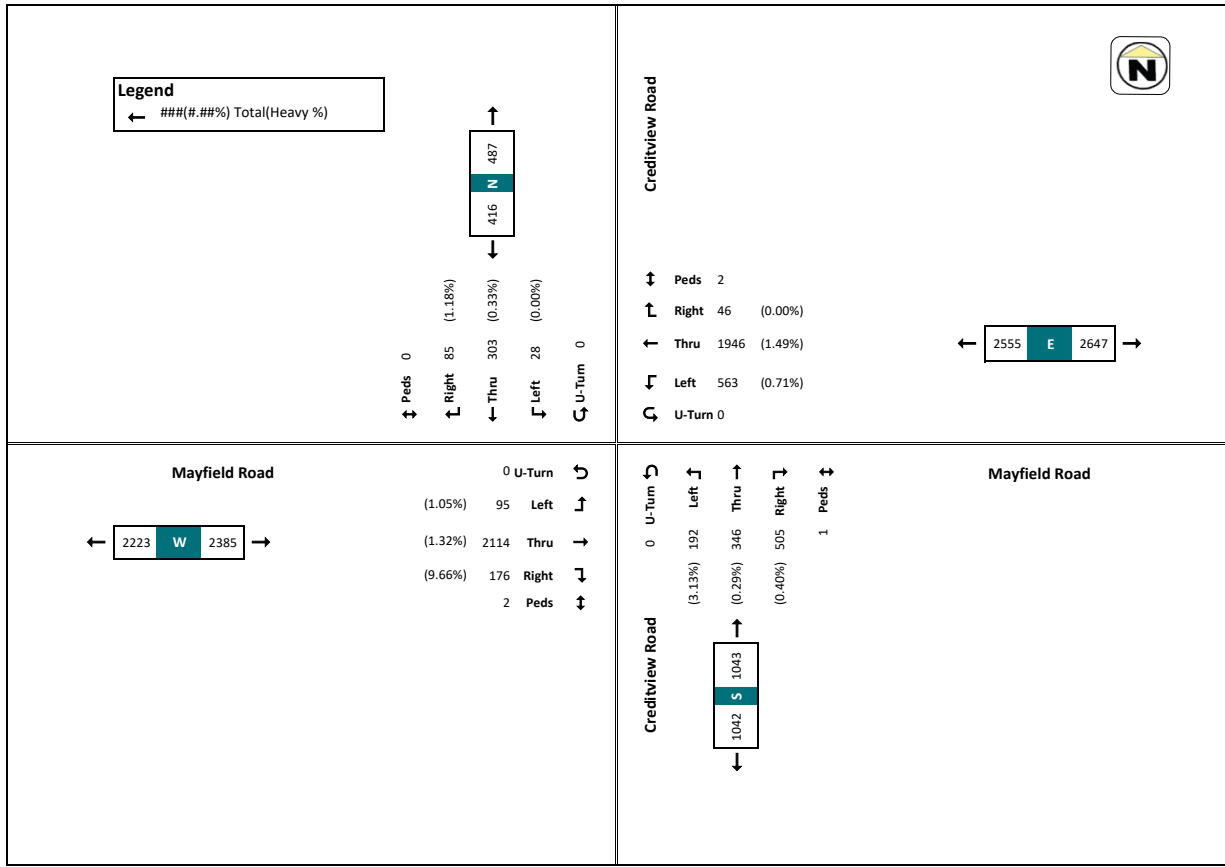
Start Time	Creditview Road Southbound					Mayfield Road Westbound					Creditview Road Northbound					Mayfield Road Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
17:15	0	2	35	7	0	44	0	33	83	1	0	117	0	10	28	36	0	74	0	3	159	16	0	178	413
17:30	0	1	27	11	0	39	0	24	114	0	0	138	0	17	20	30	0	67	0	5	154	21	0	180	424
17:45	0	7	35	12	0	54	0	35	101	2	0	139	0	11	20	26	0	57	0	4	133	11	0	148	358
18:00	0	3	27	8	0	38	0	29	105	2	0	136	0	13	24	32	0	69	0	3	133	16	0	152	395
Hourly Total	0	13	124	38	0	175	0	121	403	6	0	530	0	51	92	124	0	267	0	15	579	64	0	658	1630
Approach %	0.0%	7.4%	70.9%	21.7%	-	0.0%	0.0%	22.8%	76.0%	1.1%	-	-	0.0%	19.1%	34.5%	46.4%	-	0.0%	0.0%	2.3%	88.0%	9.7%	-	-	-
Total %	0.0%	0.8%	7.5%	2.3%	-	10.7%	0.0%	8.0%	26.0%	0.4%	-	31.5%	0.0%	3.4%	6.1%	8.2%	-	16.4%	0.0%	1.0%	38.2%	4.2%	-	40.4%	-
PHE	0	0.4%	0.89	0.79	-	0.81	0	0.86	0.88	0.5	-	0.95	0	0.75	0.82	0.86	-	0.8	0	0.75	0.91	0.7	-	0.91	0.96
Lights	0	13	124	38	-	175	0	120	395	5	-	520	0	49	91	122	-	262	0	15	571	58	-	644	1601
% Lights	100.0%	100.0%	100.0%	100.0%	-	100.0%	-	99.2%	98.0%	83.3%	-	98.1%	-	96.1%	98.9%	98.4%	-	98.1%	-	100.0%	98.6%	90.6%	-	97.9%	98.2%
% Buses	0	0	0	0	-	0	0	0	0	0	-	1	0	0	2	0	-	0	0	0	2	5	-	7	15
% Trucks	0	0	0	0	-	0	0	1	7	1	-	9	0	1	0	0	-	1	0	0	6	1	-	7	17
% Trunks	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	0.8%	1.7%	16.7%	-	1.7%	-	0.0%	1.1%	0.0%	-	0.4%	-	0.0%	1.0%	1.6%	-	1.1%	1.0%
Bicycles	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	0	0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	0





Turning Movement Count - Creditview Road & Mayfield Road

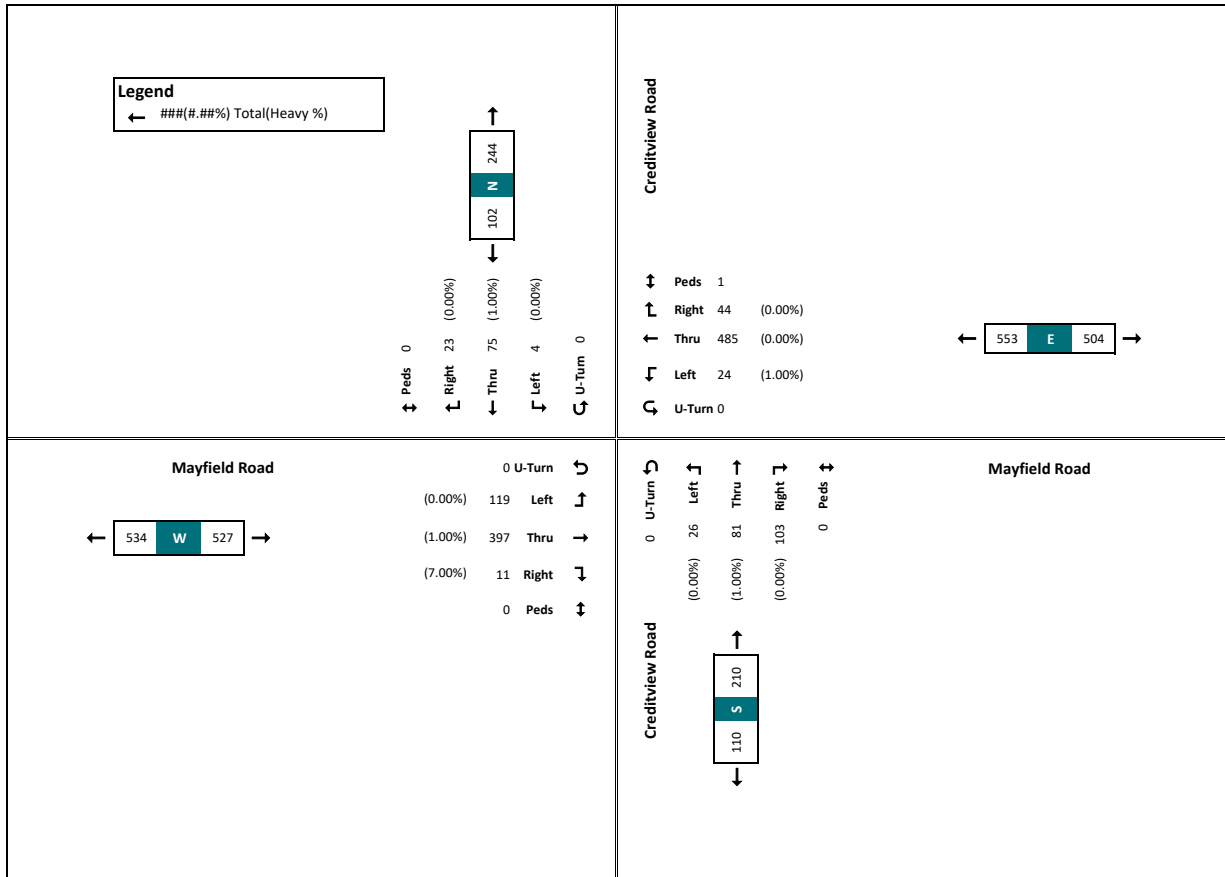
Start Time	Creditview Road Southbound						Mayfield Road Westbound						Creditview Road Northbound						Mayfield Road Eastbound						Grand Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
11:00	0	1	7	2	0	10	0	26	94	1	0	121	10	10	16	25	0	65	0	5	91	7	0	103	259
11:15	0	1	5	3	0	9	0	28	104	1	0	133	17	17	16	25	0	75	0	5	96	8	0	109	326
11:30	0	0	9	6	0	15	0	27	96	3	0	126	10	10	13	25	1	58	0	7	101	7	0	115	314
11:45	0	2	16	2	0	20	0	27	113	4	0	144	10	10	12	18	0	50	0	7	104	5	0	116	330
Hourly Total	0	4	37	13	0	54	0	108	407	9	0	524	0	47	57	97	1	201	0	24	392	27	0	443	1222
12:00	0	4	9	2	0	15	0	24	102	4	0	130	0	12	19	28	0	59	0	7	95	11	0	108	312
12:15	0	1	7	2	0	10	0	30	100	3	0	133	0	5	14	29	0	48	0	5	105	7	0	117	308
12:30	0	0	12	1	0	13	0	31	77	1	1	109	0	6	19	21	0	46	0	4	96	8	0	108	276
12:45	0	3	16	2	0	21	0	25	100	1	0	126	0	15	13	21	0	49	0	4	83	5	0	92	288
Hourly Total	0	8	44	7	0	59	0	110	379	9	1	498	0	38	65	99	0	202	0	15	379	31	0	425	1184
13:00	0	1	16	4	0	21	0	23	90	3	0	116	0	7	16	25	0	48	0	6	98	11	1	115	300
13:15	0	2	17	6	0	25	0	35	104	1	0	140	0	9	20	23	0	52	0	1	103	7	0	111	328
13:30	0	2	16	3	0	21	0	24	104	3	0	131	0	8	11	26	0	45	0	1	80	5	0	86	283
13:45	0	3	22	8	0	33	0	32	93	1	1	126	0	13	25	25	0	63	0	3	126	6	0	135	357
Hourly Total	0	8	71	21	0	100	0	114	394	6	2	513	0	37	72	99	0	208	0	11	407	29	1	447	1268
14:00	0	1	17	2	0	20	0	31	90	2	0	123	0	11	21	29	0	61	0	9	92	8	0	109	313
14:15	0	1	19	6	0	26	0	26	90	2	0	118	0	13	25	23	0	61	0	4	114	10	0	128	333
14:30	0	0	27	6	0	33	0	32	100	2	0	134	0	7	17	28	0	52	0	8	109	8	0	125	344
14:45	0	1	14	7	0	22	0	28	106	1	0	135	0	9	18	27	0	54	0	4	115	10	0	149	360
15:00	0	3	27	21	0	101	0	117	386	7	0	510	0	40	81	107	0	228	0	25	450	36	0	511	1350
Hourly Total	0	3	18	6	0	27	0	25	100	4	0	129	0	1	21	25	0	47	0	6	110	14	1	130	333
15:15	0	0	16	4	0	20	0	34	91	4	0	129	0	9	25	23	0	57	0	6	131	12	0	149	355
15:30	0	0	21	10	0	31	0	23	98	0	0	122	0	15	32	0	0	47	0	2	112	15	0	129	341
15:45	0	2	19	3	0	24	0	32	96	2	0	130	0	8	10	23	0	41	0	6	133	12	0	151	346
Hourly Total	0	5	74	23	0	102	0	114	383	13	0	510	0	30	71	103	0	204	0	20	486	53	1	559	1375
Grand Total	0	28	303	85	0	416	0	563	1946	46	2	2555	0	192	346	505	1	1043	0	95	2114	176	2	2385	6399
Approach %	0.0%	6.7%	72.8%	20.4%	-	0.0%	22.0%	76.2%	1.8%	-	-	0.0%	18.4%	33.2%	48.4%	-	-	0.0%	4.0%	88.6%	7.4%	-	-	-	-
Total %	0.0%	0.4%	4.7%	1.3%	-	6.5%	0.0%	8.8%	30.4%	0.7%	-	99.9%	0.0%	1.6%	5.4%	7.9%	-	16.3%	0.0%	1.5%	33.0%	2.8%	-	37.3%	-
Lights	0	28	302	84	0	414	0	559	1917	46	0	2512	0	186	345	503	0	1024	0	94	2086	159	0	2339	6309
% Lights	100.0%	99.7%	98.8%	-	-	99.5%	-	99.3%	98.5%	100.0%	-	98.7%	-	96.5%	99.6%	99.1%	-	98.9%	98.7%	99.3%	98.1%	98.1%	-	98.1%	98.6%
Buses	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5	0	0	0	15	0	15	21
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Trucks	0	1	1	1	0	3	0	3	13%	0	0	3	0	1	2	0	0	5	0	1	28	1	0	31	69
% Trucks	0.0%	0.3%	1.2%	0.3%	0.0%	0.5%	0.0%	0.5%	1.5%	0.0%	0.0%	1.3%	0.0%	0.5%	0.3%	0.4%	0.0%	0.4%	0.0%	1.1%	1.3%	0.1%	0.0%	1.3%	1.1%
Bicycles	-	-	-	-	0	-	-	-	-	-	2	2	-	-	-	-	-	0	0	-	-	-	1	1	3
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	2	-	5





SAT Peak Hour - Creditview Road & Mayfield Road

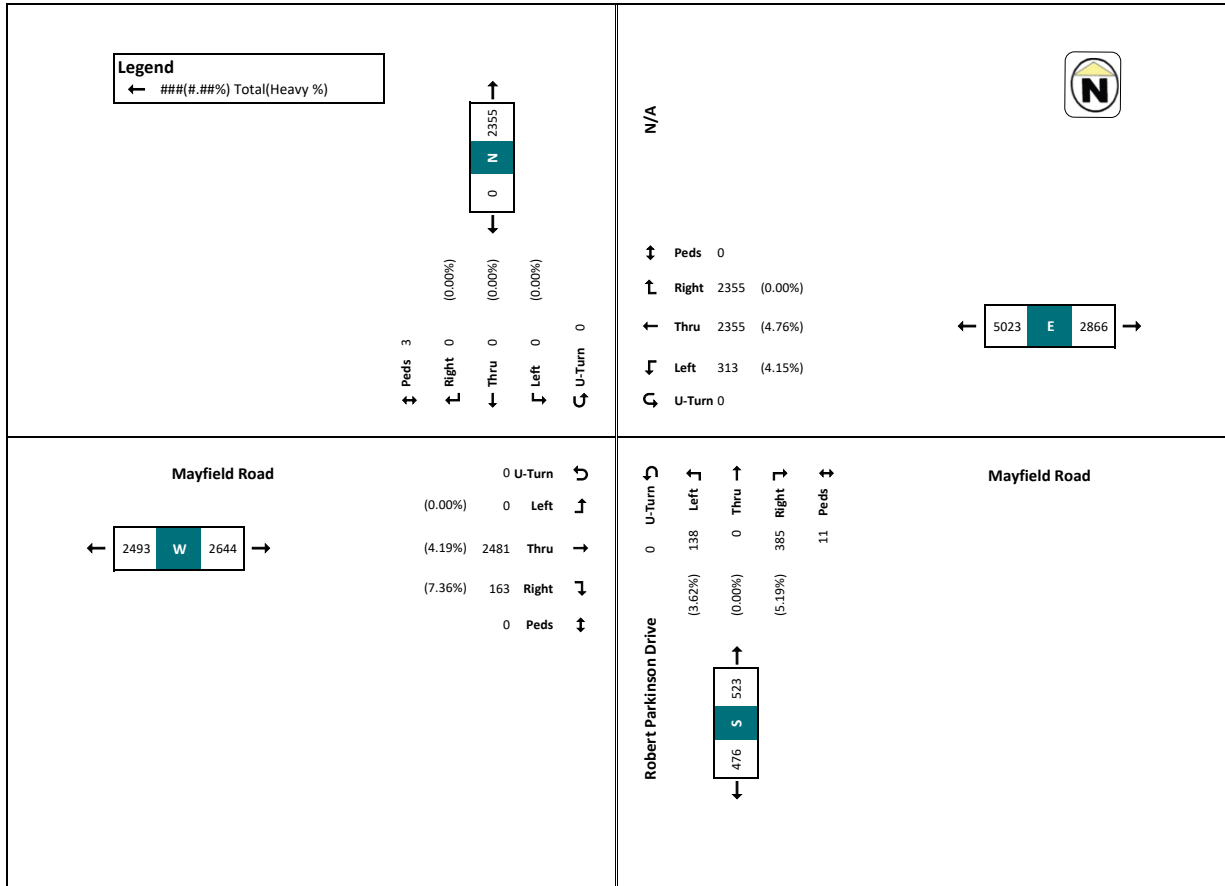
Start Time	Creditview Road Southbound					Mayfield Road Westbound					Creditview Road Northbound					Mayfield Road Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
14:30	0	0	27	6	0	33	0	32	100	7	0	134	0	7	17	28	0	42	0	8	109	8	0	125	344	
14:45	0	1	14	7	0	22	0	38	106	1	0	135	0	8	18	27	0	54	0	4	135	10	0	149	360	
15:00	0	3	18	6	0	27	0	25	100	4	0	129	0	1	21	25	0	47	0	6	110	14	1	130	333	
15:15	0	0	16	4	0	20	0	34	91	4	0	129	0	9	25	23	0	57	0	6	131	12	0	149	355	
Hourly Total	0	4	75	23	0	102	0	119	397	11	0	527	0	26	81	103	0	210	0	24	485	44	1	553	1392	
Approach %	0.0%	3.9%	73.5%	22.5%	-	-	0.0%	22.6%	75.3%	2.1%	-	-	0.0%	12.4%	38.6%	49.0%	-	-	0.0%	4.3%	87.7%	8.0%	-	-	-	
Total %	0.0%	0.3%	5.4%	1.7%	-	-	0.0%	7.8%	26.2%	0.8%	-	37.9%	0.0%	0.7%	5.3%	6.8%	-	-	0.0%	1.6%	32.0%	2.0%	-	-	39.7%	
PHF	0	0.33	0.69	0.82	-	0.77	0	0.88	0.94	0.69	-	0.98	0	0.72	0.81	0.92	-	-	0.92	0	0.75	0.9	0.79	-	-	0.93
Lights	0	4	74	23	-	101	0	118	396	11	-	525	0	26	80	103	-	209	0	24	482	41	-	-	547	
% Lights	0	100.0%	98.7%	100.0%	-	99.0%	-	99.2%	99.7%	100.0%	-	99.6%	0	100.0%	98.8%	100.0%	-	99.5%	0	100.0%	99.4%	93.2%	-	-	98.9%	
Buses	0	0	0	0	-	0	-	1	0	0	-	1	-	0	0	0	-	0	-	0	0	2	-	-	2	
% Buses	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	0.8%	0.0%	0.0%	-	0.2%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	4.5%	-	-	0.4%	
Trucks	0	1	0	-	-	1	-	0	1	0	-	1	-	0	1	0	-	1	-	0	3	1	-	-	4	
% Trucks	0.0%	0.0%	1.3%	0.0%	-	1.0%	-	0.0%	0.3%	0.0%	-	0.2%	-	0.0%	1.2%	0.0%	-	0.5%	-	0.0%	0.6%	2.3%	-	-	0.7%	
Bicycles	-	-	-	-	0	0	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	0	-	-	0
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	-	-	0	-	-	1	-	-	1	





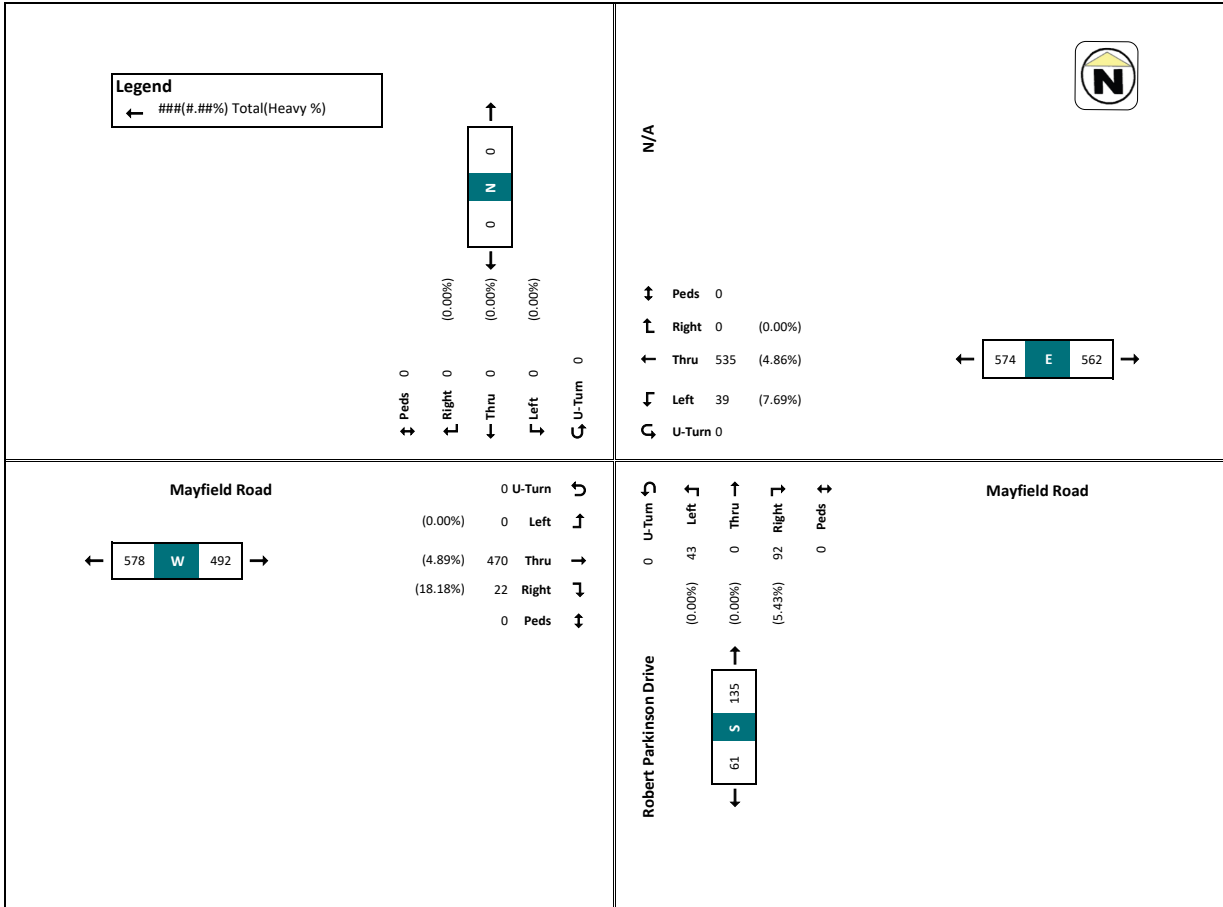
Turning Movement Count - Robert Parkinson Drive & Mayfield Road

Start Time	N/A Southbound					App. Total	Mayfield Road Westbound					App. Total	Robert Parkinson Drive Northbound					App. Total	Mayfield Road Eastbound					Grand Total	
	U-Turn	Left	Thru	Right	Peds		U-Turn	Left	Thru	Right	Peds		U-Turn	Left	Thru	Right	Peds		U-Turn	Left	Thru	Right	Peds		App. Total
7:00	0	0	0	0	0	0	0	5	87	0	0	92	0	9	0	21	0	30	0	0	93	2	0	95	217
7:15	0	0	0	0	0	0	0	4	108	0	0	112	0	5	0	20	0	25	0	0	100	5	0	105	242
7:30	0	0	0	0	0	0	0	8	131	0	0	139	0	13	0	31	0	44	0	0	119	8	0	127	310
7:45	0	0	0	0	0	0	0	7	144	0	0	148	0	11	0	29	0	31	0	0	121	6	0	127	306
Hourly Total	0	0	0	0	0	0	0	24	467	0	0	491	0	38	0	92	0	130	0	0	433	21	0	454	1075
8:00	0	0	0	0	0	0	0	12	127	0	0	139	0	11	0	21	0	32	0	0	117	6	0	123	294
8:15	0	0	0	0	0	0	0	12	136	0	0	148	0	8	0	20	0	28	0	0	113	2	0	115	291
8:30	0	0	0	0	0	0	0	14	131	0	0	145	0	0	0	25	0	20	0	0	99	8	0	107	282
8:45	0	0	0	0	0	0	0	12	158	0	0	170	0	8	0	31	0	39	0	0	83	2	0	85	294
Hourly Total	0	0	0	0	0	0	0	50	552	0	0	602	0	32	0	97	0	129	0	0	412	18	0	430	1161
9:00	0	0	0	0	2	0	0	9	147	0	0	156	0	11	0	10	0	21	0	0	95	4	0	99	276
9:15	0	0	0	0	0	0	0	13	153	0	0	166	0	6	0	20	2	26	0	0	128	7	0	135	327
Hourly Total	0	0	0	0	2	0	0	22	300	0	0	322	0	17	0	30	2	47	0	0	223	11	0	234	603
* Break *																									
15:00	0	0	0	0	0	0	0	10	122	0	0	132	0	6	0	26	0	32	0	0	125	10	0	135	299
15:15	0	0	0	0	0	0	0	17	108	0	0	125	0	6	0	21	0	27	0	0	149	8	0	157	309
15:30	0	0	0	0	0	0	0	20	146	0	0	166	0	3	0	19	0	26	0	0	129	14	0	143	335
15:45	0	0	0	0	0	0	0	13	94	0	0	107	0	3	0	15	0	18	0	0	146	6	0	152	277
Hourly Total	0	0	0	0	0	0	0	60	470	0	0	530	0	22	0	81	0	103	0	0	549	38	0	587	1220
16:00	0	0	0	0	0	0	0	19	109	0	0	128	0	4	0	16	0	20	0	0	108	8	0	116	264
16:15	0	0	0	0	0	0	0	23	112	0	0	135	0	5	0	17	1	22	0	0	105	8	0	114	271
16:30	0	0	0	0	0	0	0	17	117	0	0	134	0	0	0	10	0	16	0	0	118	11	0	129	279
16:45	0	0	0	0	0	0	0	24	111	0	0	135	0	5	0	16	4	21	0	0	158	9	0	167	323
Hourly Total	0	0	0	0	0	0	0	83	449	0	0	532	0	20	0	59	5	79	0	0	490	36	0	526	1137
17:00	0	0	0	0	0	0	0	22	102	0	0	124	0	7	0	11	2	18	0	0	140	13	0	153	295
17:15	0	0	0	0	0	0	0	16	88	0	0	102	0	7	0	23	1	30	0	0	181	14	0	195	327
17:30	0	0	0	0	0	0	0	20	117	0	0	133	0	20	0	20	0	26	0	0	151	15	0	166	325
17:45	0	0	0	0	0	0	0	24	127	0	0	131	0	2	0	21	0	23	0	0	133	14	0	147	301
Hourly Total	0	0	0	0	0	0	0	82	408	0	0	490	0	22	0	75	3	97	0	0	605	56	0	661	1248
18:00	0	0	0	0	0	0	0	33	95	0	0	128	0	6	0	17	1	23	0	0	137	9	0	146	297
18:15	0	0	0	0	0	0	0	19	84	0	0	109	0	3	0	15	0	18	0	0	181	12	0	193	314
Hourly Total	0	0	0	0	0	0	0	52	178	0	0	231	0	8	0	32	1	41	0	0	318	21	0	339	631
Grand Total	0	0	0	0	3	0	0	313	2355	0	0	2668	0	138	0	385	11	523	0	0	2481	163	0	2644	5835
Approach %	-	-	-	-	-	-	0.0%	11.7%	88.3%	0.0%	-	-	0.0%	26.4%	0.0%	73.6%	-	-	0.0%	0.0%	93.8%	6.2%	-	-	
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	40.4%	0.0%	-	45.7%	0.0%	2.4%	0.0%	6.6%	-	9.0%	0.0%	0.0%	42.5%	2.8%	-	45.3%	
Lights	0	0	0	0	0	0	0	300	2243	0	-	2543	0	133	0	365	-	498	0	0	2377	151	-	2528	
% Lights	-	-	-	-	-	-	-	95.8%	95.2%	-	-	95.3%	-	96.4%	-	94.8%	-	95.2%	-	-	95.8%	92.6%	-	95.6%	
% Buses	0	0	0	0	0	0	-	12	93	0	-	63	-	0	0	17	-	22	0	0	51	11	-	62	
% Buses	-	-	-	-	-	-	-	3.8%	7.2%	-	-	2.4%	-	3.6%	-	4.4%	-	4.2%	-	-	2.1%	6.7%	-	2.3%	
% Trucks	0	0	0	0	0	0	-	1	61	0	-	62	-	0	0	3	-	3	0	0	53	1	-	54	
% Trucks	-	-	-	-	-	-	-	0.3%	2.6%	-	-	2.3%	-	0.0%	-	0.8%	-	0.6%	-	-	2.1%	0.6%	-	2.0%	
% Bicycles	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	-	11	-	-	-	-	-	14	



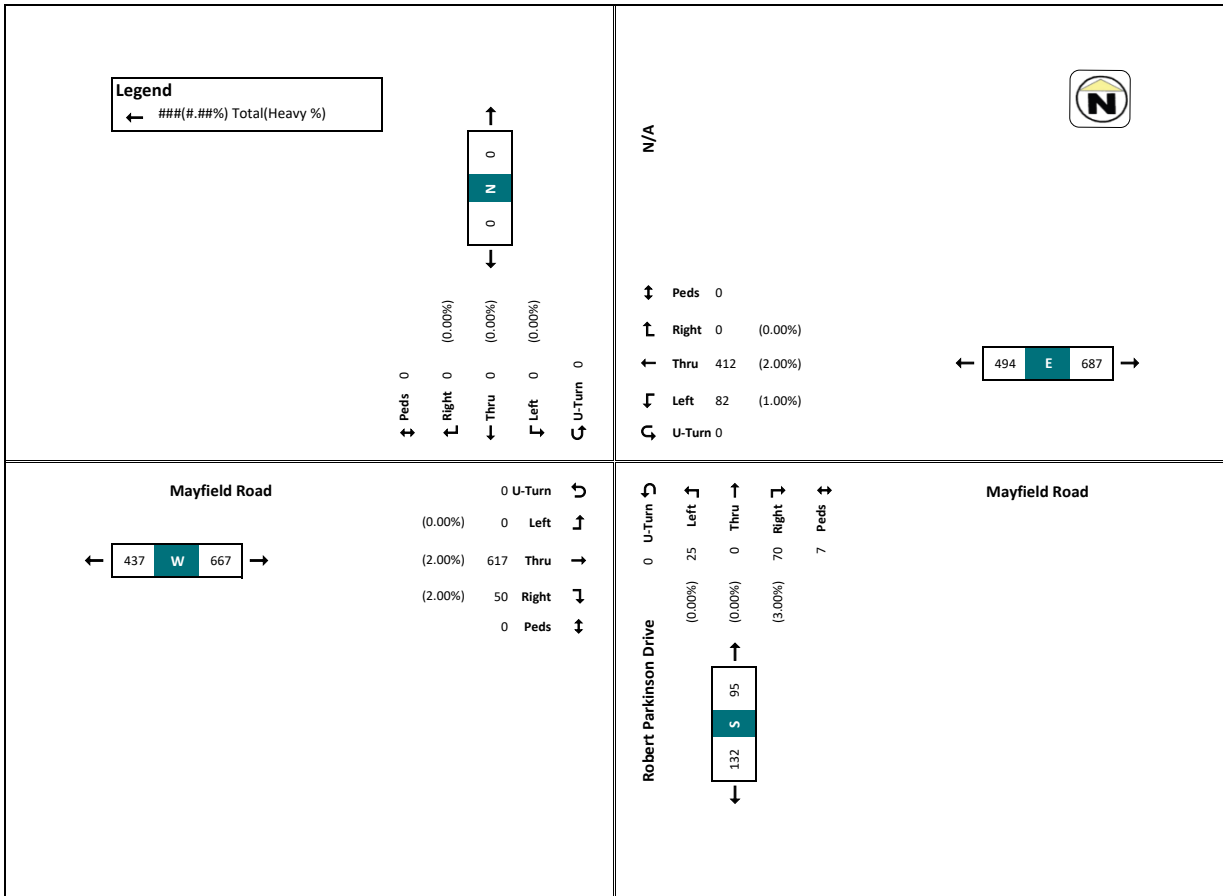
AM Peak Hour - Robert Parkinson Drive & Mayfield Road

Start Time	N/A Southbound					Mayfield Road Westbound					Robert Parkinson Drive Northbound					Mayfield Road Eastbound					Grand Total											
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total							
7:30	0	0	0	0	0	0	8	131	0	0	0	139	0	13	0	38	0	44	0	0	119	8	0	127	0	0	0	0	0	0	310	
7:45	0	0	0	0	0	0	0	7	141	0	0	148	0	11	0	20	0	31	0	0	121	6	0	127	0	0	0	0	0	0	306	
8:00	0	0	0	0	0	0	0	12	127	0	0	139	0	11	0	21	0	32	0	0	117	6	0	123	0	0	0	0	0	0	294	
8:15	0	0	0	0	0	0	0	12	136	0	0	148	0	8	0	20	0	28	0	0	113	2	0	115	0	0	0	0	0	0	291	
Hourly Total	0	0	0	0	0	0	39	535	0	0	574	0	43	0	92	0	135	0	0	420	22	0	492	0	0	0	0	0	0	1201		
Approach %	-	-	-	-	-	0.0%	6.8%	93.2%	0.0%	-	-	0.0%	31.9%	0.0%	68.1%	-	-	0.0%	0.0%	0.0%	95.5%	4.5%	-	-	0.0%	41.0%	-	-	-	-	-	
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	44.5%	0.0%	-	-	47.8%	0.0%	3.6%	0.0%	7.7%	-	11.2%	0.0%	0.0%	39.1%	1.8%	-	-	41.0%	-	-	-	-	-	-	
PHF	0	0	0	0	0	0	0	0.81	0.95	0	-	0.97	0	0.83	0	0.74	-	0.77	0	0	0.97	0.69	-	-	0.97	0	0	0	0	0	0	0.97
Light %	0	0	0	0	0	0	0	36	307	0	-	345	0	83	0	87	-	130	0	0	447	18	-	-	465	0	0	0	0	0	0	1140
% Lights	-	-	-	-	-	-	92.3%	95.1%	-	-	-	94.9%	100.0%	-	94.0%	-	96.3%	-	-	95.1%	81.8%	-	-	94.5%	-	-	-	-	-	-	94.5%	
% Buses	-	-	-	-	-	-	-	3	25	0	-	13	-	0	0	4	-	4	-	-	7	4	-	-	11	-	-	-	-	-	-	28
% Trucks	-	-	-	-	-	-	-	7.7%	1.9%	0	-	2.3%	-	0.0%	-	4.3%	-	3.0%	-	-	1.5%	18.2%	-	-	2.2%	-	-	-	-	-	-	2.3%
% Trucks	0	0	0	0	0	0	0	0	16	0	-	16	0	0	1	-	-	1	0	0	16	0	-	-	16	0	0	0	0	0	0	33
% Bicycles	-	-	-	-	-	-	-	0.0%	3.0%	0	-	2.8%	-	0.0%	-	1.1%	-	0.7%	-	-	3.4%	0.0%	-	-	3.3%	-	-	-	-	-	-	2.7%
Pedestrians	-	-	-	-	0	0	-	-	-	0	-	0	-	-	-	0	-	0	-	-	-	0	-	-	0	-	-	-	-	-	-	0



PM Peak Hour - Robert Parkinson Drive & Mayfield Road

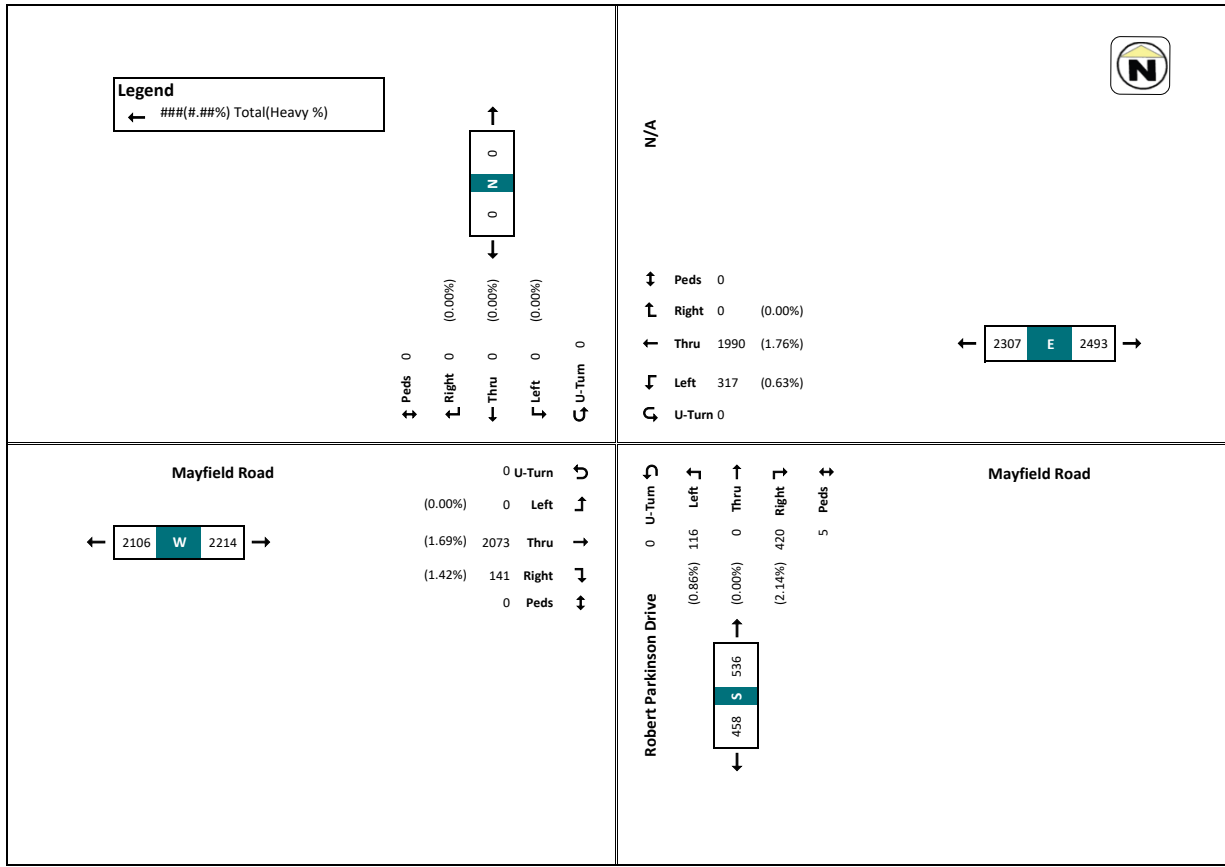
Start Time	N/A					Mayfield Road Westbound					Robert Parkinson Drive Northbound					Mayfield Road Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
16:45	0	0	0	0	0	0	0	24	111	0	0	135	0	5	0	16	4	21	0	0	158	9	0	167	323
17:00	0	0	0	0	0	0	0	22	102	0	0	124	0	7	0	11	2	19	0	0	140	14	0	154	295
17:15	0	0	0	0	0	0	0	16	86	0	0	102	0	7	0	13	1	30	0	0	181	14	0	195	327
17:30	0	0	0	0	0	0	0	20	113	0	0	133	0	6	0	20	0	26	0	0	151	15	0	166	325
Hourly Total	0	0	0	0	0	0	0	82	412	0	0	494	0	25	0	70	7	95	0	0	630	51	0	681	1270
Approach %	-	-	-	-	-	0.0%	16.6%	83.4%	0.0%	-	-	0.0%	26.3%	0.0%	73.7%	-	-	0.0%	0.0%	92.5%	7.5%	-	-	-	-
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	34.3%	0.0%	-	-	38.9%	0.0%	2.1%	0.0%	5.8%	-	7.1%	0.0%	0.0%	52.5%	4.2%	-	-	53.6%
PHE	0	0	0	0	0	0	0.85	0.94	0	-	-	0.91	0	0.85	0	0.76	-	0.75	0	0	0.87	0.85	-	-	0.87
Lights	0	0	0	0	0	0	80	402	0	-	-	482	0	25	0	68	-	93	0	0	617	50	-	-	667
% Lights	-	-	-	-	-	-	97.6%	97.6%	0	-	-	97.6%	-	100.0%	-	97.1%	-	97.9%	-	-	97.9%	98.0%	-	-	97.8%
% Buses	-	-	-	-	-	-	1	2	0	-	-	3	-	0	0	2	-	2	-	-	8	1	-	-	9
% Trucks	-	-	-	-	-	-	1.2%	0.9%	0.6%	-	-	0.6%	-	0.0%	0.0%	2.9%	-	2.1%	-	-	1.3%	2.0%	-	-	3.3%
% Bicycles	-	-	-	-	-	-	1.2%	1.9%	1.8%	-	-	1.8%	-	0.0%	0.0%	0.0%	-	0.0%	-	-	0.8%	0.0%	-	-	0.7%
% Pedestrians	-	-	-	-	-	-	0	0	0	-	-	0	-	0	0	0	-	0	-	-	0	0	-	-	0





Turning Movement Count - Robert Parkinson Drive & Mayfield Road

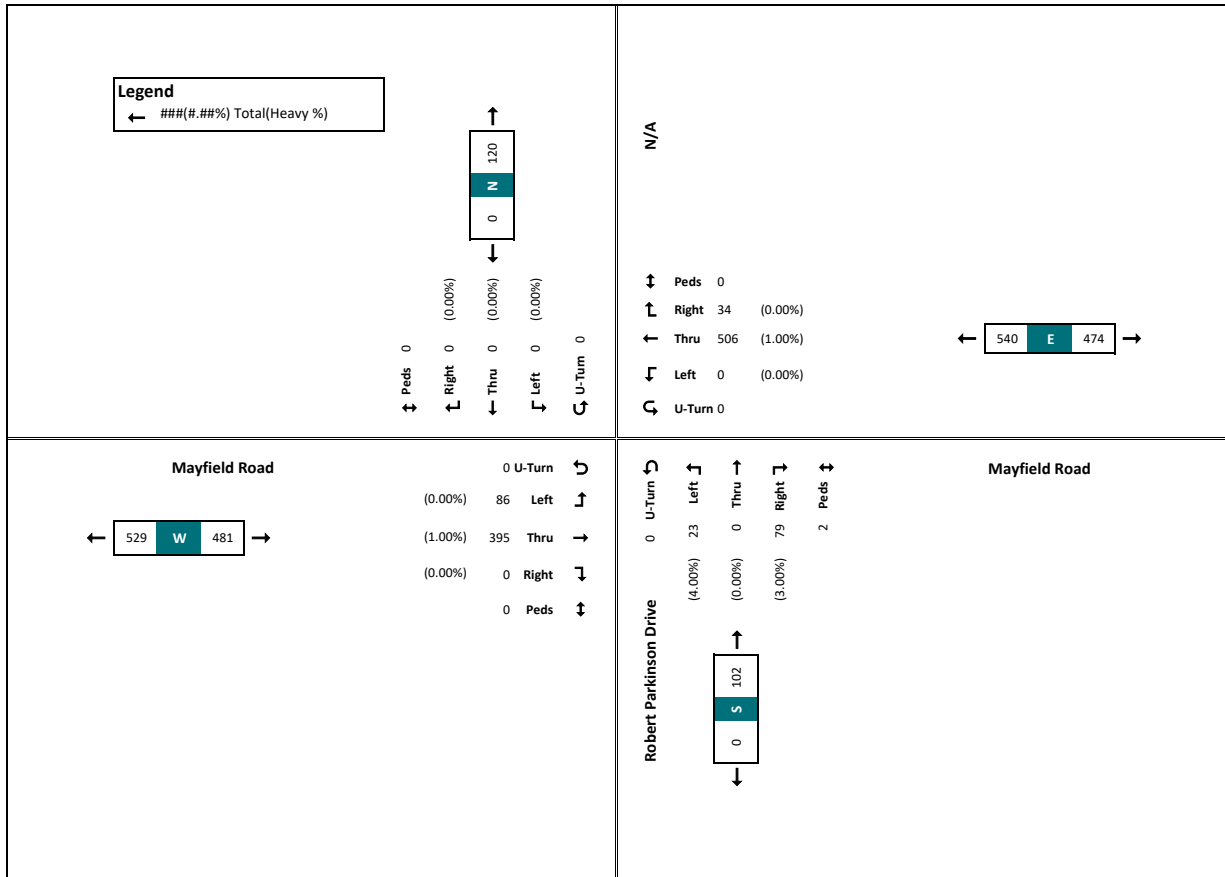
Start Time	N/A Southbound						Mayfield Road Westbound						Robert Parkinson Drive Northbound						Mayfield Road Eastbound						Grand Total	
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total		
11:00	0	0	0	0	0	0	18	86	6	0	0	104	4	4	0	24	0	32	0	0	87	5	0	92	228	
11:15	0	0	0	0	0	0	12	110	0	0	0	122	6	6	0	28	0	40	0	0	88	1	0	89	251	
11:30	0	0	0	0	0	0	0	20	99	0	0	119	7	7	0	27	0	41	0	0	80	6	0	86	246	
11:45	0	0	0	0	0	0	0	12	116	0	0	128	11	11	0	20	0	42	0	0	106	10	0	116	286	
Hourly Total	0	0	0	0	0	0	0	62	411	0	0	473	0	28	0	99	0	127	0	0	361	22	0	383	983	
12:00	0	0	0	0	0	0	17	98	0	0	0	115	0	7	0	21	0	28	0	0	91	8	0	99	242	
12:15	0	0	0	0	0	0	9	113	0	0	0	122	0	3	0	27	0	30	0	0	96	0	0	96	248	
12:30	0	0	0	0	0	0	14	78	0	0	0	92	0	7	0	14	0	21	0	0	92	3	0	95	208	
12:45	0	0	0	0	0	0	0	18	103	0	0	115	0	4	0	13	0	17	0	0	88	11	0	99	231	
Hourly Total	0	0	0	0	0	0	0	52	392	0	0	444	0	21	0	75	0	96	0	0	367	22	0	389	929	
13:00	0	0	0	0	0	0	23	80	0	0	0	103	0	8	0	19	0	27	0	0	97	9	0	106	236	
13:15	0	0	0	0	0	0	15	109	0	0	0	124	0	4	0	15	0	19	0	0	95	5	0	100	243	
13:30	0	0	0	0	0	0	14	106	0	0	0	120	0	6	0	14	0	20	0	0	79	7	0	86	226	
13:45	0	0	0	0	0	0	18	90	0	0	0	108	0	8	0	26	1	34	0	0	120	3	0	123	265	
Hourly Total	0	0	0	0	0	0	0	70	385	0	0	455	0	26	0	78	1	100	0	0	391	24	0	415	970	
14:00	0	0	0	0	0	0	12	110	0	0	0	122	0	6	0	18	1	24	0	0	99	14	0	113	259	
14:15	0	0	0	0	0	0	6	104	0	0	0	110	0	8	0	22	0	30	0	0	117	8	0	125	265	
14:30	0	0	0	0	0	0	15	102	0	0	0	117	0	3	0	25	1	28	0	0	101	5	0	106	251	
14:45	0	0	0	0	0	0	26	108	0	0	0	134	0	4	0	26	2	30	0	0	111	10	0	121	305	
14:55	0	0	0	0	0	0	14	91	0	0	0	105	0	28	0	29	0	57	0	0	111	12	0	123	277	
Hourly Total	0	0	0	0	0	0	0	99	424	0	0	483	0	21	0	91	4	112	0	0	448	37	0	485	1080	
15:00	0	0	0	0	0	0	23	88	0	0	0	111	0	5	0	19	0	24	0	0	118	10	0	128	263	
15:15	0	0	0	0	0	0	17	97	0	0	0	114	0	9	0	20	0	29	0	0	117	8	0	125	288	
15:30	0	0	0	0	0	0	20	107	0	0	0	127	0	3	0	14	0	17	0	0	120	6	0	126	267	
15:45	0	0	0	0	0	0	14	91	0	0	0	105	0	4	0	28	0	32	0	0	111	12	0	123	277	
Hourly Total	0	0	0	0	0	0	0	74	378	0	0	452	0	20	0	81	0	101	0	0	506	36	0	542	1095	
Grand Total	0	0	0	0	0	0	0	317	1990	0	0	2307	0	116	0	420	5	536	0	0	2073	141	0	2214	5057	
Approach %	-	-	-	-	-	-	0.0%	13.7%	86.3%	0.0%	-	-	0.0%	21.6%	0.0%	78.4%	-	-	0.0%	0.0%	93.6%	6.4%	-	-	-	
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	39.4%	0.0%	-	45.8%	0.0%	1.3%	0.0%	8.3%	-	10.6%	0.0%	0.0%	41.0%	2.8%	-	43.8%	-	
Lights	0	0	0	0	0	0	0	315	1955	0	-	2270	0	115	0	411	-	526	0	0	2038	139	-	2177	4973	
% Lights	-	-	-	-	-	-	-	99.4%	98.2%	-	-	98.4%	-	97.1%	-	97.9%	-	98.1%	-	-	98.3%	98.6%	-	98.3%	98.3%	
Buses	0	0	0	0	0	0	0	6	6	0	-	6	0	0	0	8	-	8	0	0	6	0	-	6	20	
% Buses	-	-	-	-	-	-	-	0.0%	0.3%	-	-	0.3%	-	0.0%	-	1.9%	-	1.5%	-	-	0.3%	0.0%	-	0.3%	0.4%	
Trucks	0	0	0	0	0	0	2	15	0	0	-	17	0	1	0	2	-	3	0	0	29	2	-	31	64	
% Trucks	-	-	-	-	-	-	-	0.6%	1.5%	-	-	1.3%	-	0.8%	-	0.2%	-	0.4%	-	-	1.4%	1.4%	-	1.4%	1.3%	
Bicycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	-	0	-	5





SAT Peak Hour - Robert Parkinson Drive & Mayfield Road

Start Time	N/A Southbound					Mayfield Road Westbound					Robert Parkinson Drive Northbound					Mayfield Road Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
14:45	0	0	0	0	0	0	26	108	0	0	0	134	0	0	26	2	26	0	0	131	10	0	0	141	305	
15:00	0	0	0	0	0	0	23	88	0	0	0	111	0	0	5	19	24	0	0	118	10	0	0	128	263	
15:15	0	0	0	0	0	0	17	97	0	0	0	114	0	0	20	0	29	0	0	137	8	0	0	145	288	
15:30	0	0	0	0	0	0	20	102	0	0	0	122	0	5	0	14	0	19	0	120	6	0	0	126	267	
Hourly Total	0	0	0	0	0	0	86	395	0	0	0	481	0	23	0	79	2	102	0	0	506	34	0	0	540	1123
Approach %	-	-	-	-	-	-	0.0%	17.9%	82.1%	0.0%	-	0.0%	22.5%	0.0%	77.5%	-	0.0%	0.0%	93.7%	6.3%	-	-	-	-	-	
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.2%	32.2%	0.0%	-	42.8%	0.0%	6.6%	-	83.5%	0.0%	42.1%	2.0%	-	48.1%	-	-	-	-		
PHF	0	0	0	0	0	0	0.83	0.91	0	-	0.9	0	0.64	0	0.76	-	0.85	0	0.92	0.85	-	-	-	-	0.92	
Lights	0	0	0	0	0	0	86	390	0	-	476	0	22	0	77	-	99	0	0	501	34	0	0	535	1110	
% Lights	-	-	-	-	-	-	100.0%	98.7%	0	-	99.0%	0	95.7%	0	97.5%	-	97.1%	0	0	99.0%	100.0%	-	-	-	99.1%	98.8%
Buses	0	0	0	0	0	0	0	0	0	-	1	0	0	2	-	2	-	2	0	0	0	0	0	0	4	
% Buses	-	-	-	-	-	-	0.0%	0.3%	0	-	0.2%	0	0.0%	0	2.5%	-	2.0%	-	0	0.2%	0.0%	-	-	-	0.2%	0.4%
Trucks	0	0	0	0	0	0	0	4	0	-	4	0	1	0	0	-	1	0	0	4	0	0	0	4	9	
% Trucks	-	-	-	-	-	-	0.0%	1.0%	0	-	0.8%	0	4.3%	0	0.0%	-	1.0%	-	0	0.8%	0.0%	-	-	-	0.7%	0.8%
Bicycles	-	-	-	-	0	0	-	-	0	-	0	-	-	-	0	-	0	-	0	-	-	-	-	0	0	
Pedestrians	-	-	-	-	0	0	-	-	0	-	0	-	-	-	0	-	0	-	0	-	-	-	-	0	0	



REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	October 11, 2022		Prepared Date	October 7, 2024
Database Rev	MaxView		Completed By	N.R.L
Timing Card / Field rev	1		Checked By	N.T

Location **Mayfield Road at Creditview Road**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s) (Green+Amber+All Red)		
			WALK	FDWALK			AM MAX	OFF MAX	PM MAX
			1	Not In Use			-	-	-
2	Mayfield Road - Eastbound	12	12	13	4.6	2.0	40.0	40.0	40.0
3	Not In Use	-	-	-	-	-	-	-	-
4	Creditview Road - Northbound	12	12	13	4.2	2.0	20.0	20.0	20.0
5	Not In Use	-	-	-	-	-	-	-	-
6	Mayfield Road - Westbound	12	12	13	4.6	2.0	40.0	40.0	40.0
7	Not In Use	-	-	-	-	-	-	-	-
8	Creditview Road - Southbound	12	12	13	4.2	2.0	20.0	20.0	20.0

System Control	TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
Yes	FREE	AM	0	0
Semi-Actuated Mode	FREE	OFF	0	0
Yes	FREE	PM	0	0



APPENDIX C

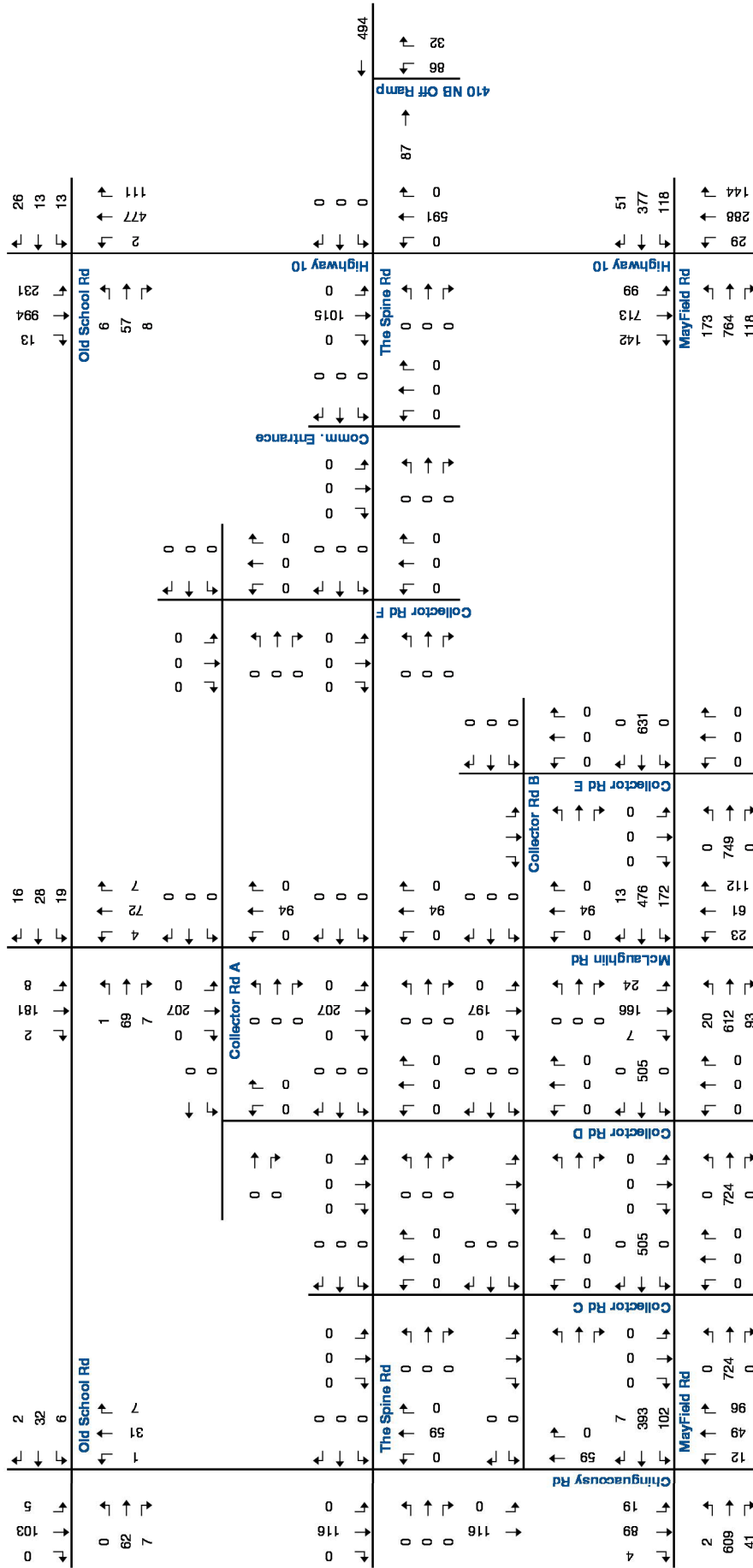
Background Developments



Mayfield West Phase 2 Secondary Plan Transportation Master Plan Final Report

Paradigm Transportation Solutions Limited

December 2015



Future Background Traffic – AM Peak Hour

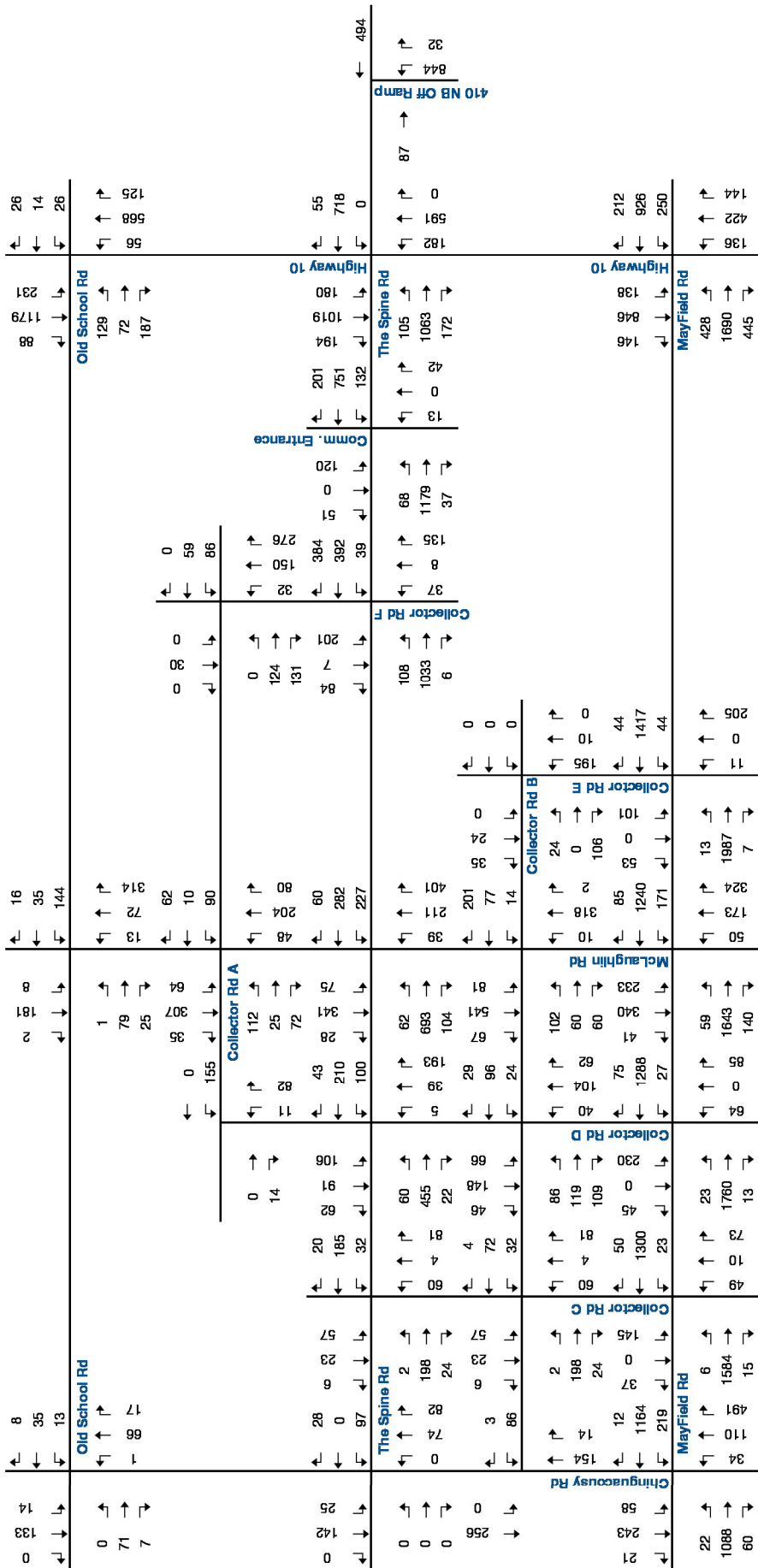
Figure 6.3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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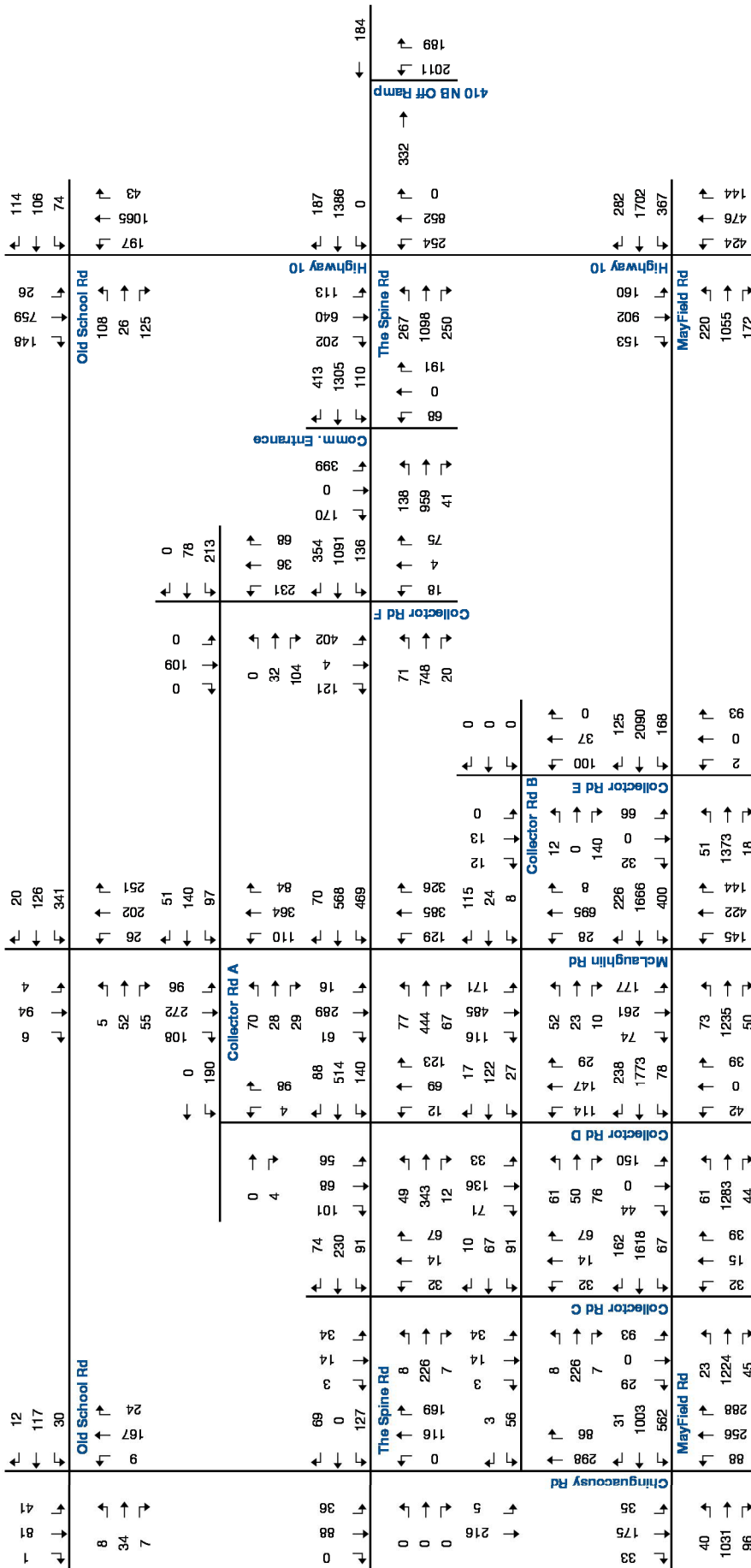
Future Background Traffic – PM Peak Hour

Figure 6.4



Future Total Traffic – AM Peak Hour

Figure 6.5



Future Total Traffic – PM Peak Hour

Figure 6.6

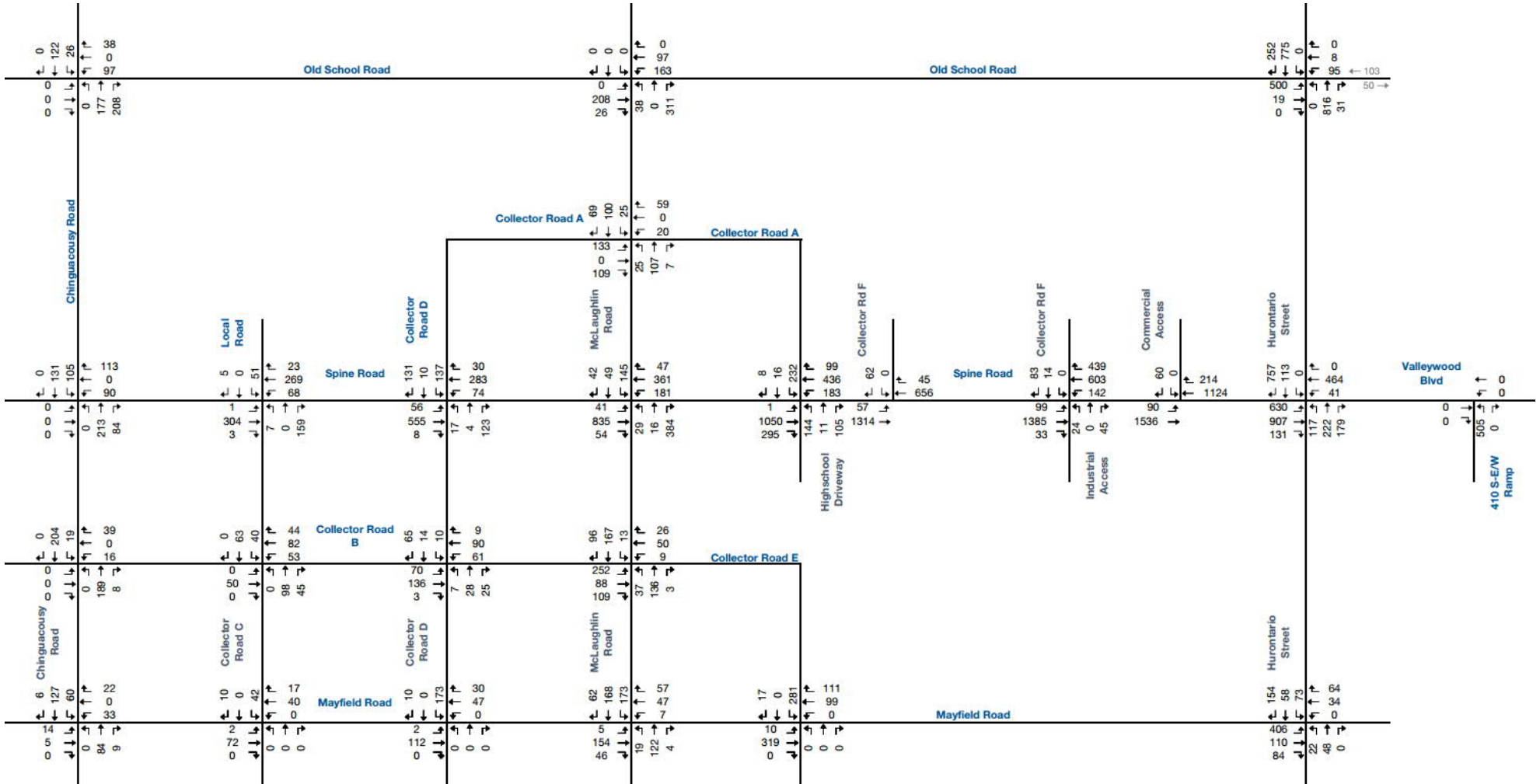


Mayfield West Phase 2 Stage 2 Transportation Assessment

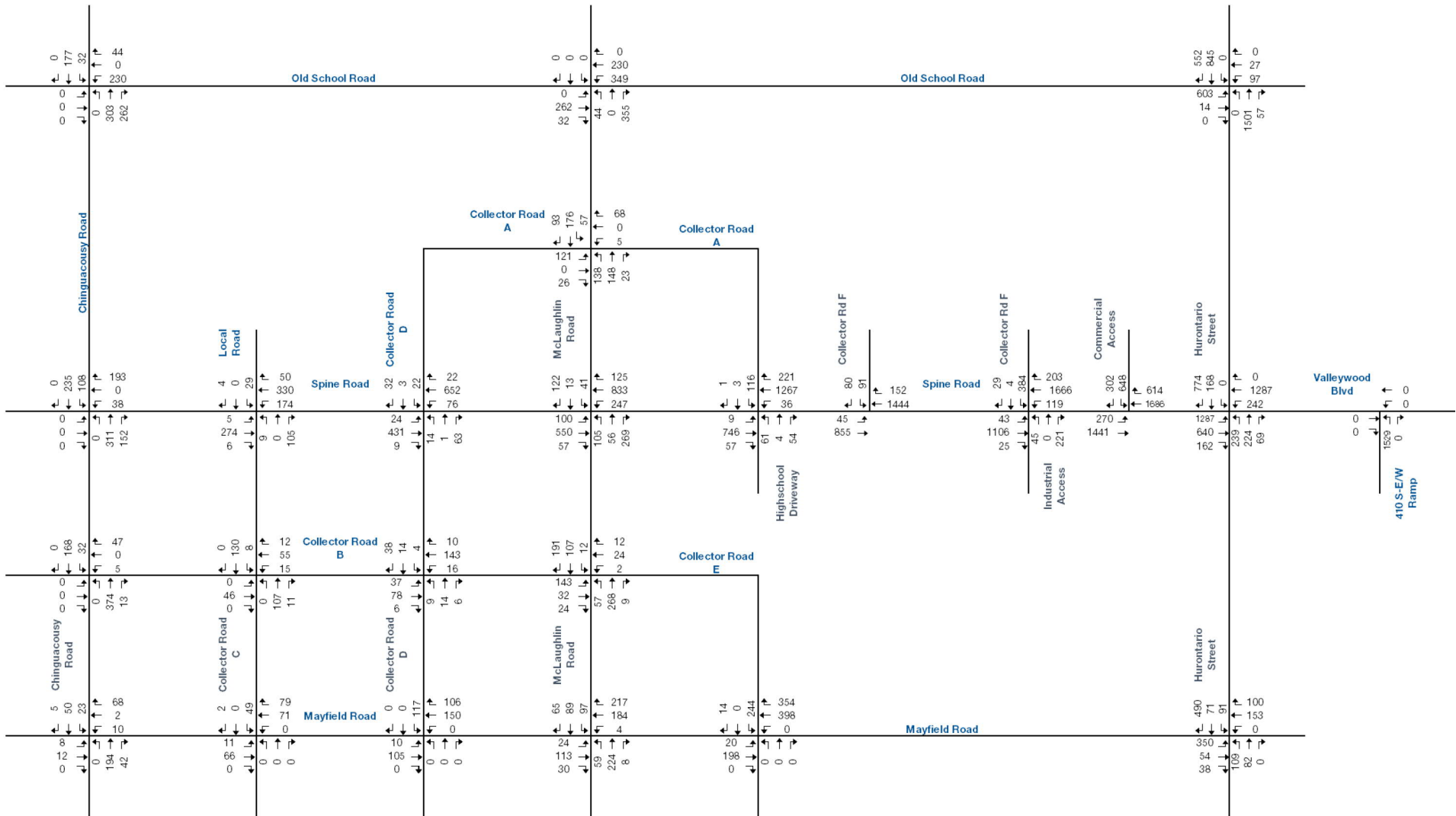
Town of Caledon

Paradigm Transportation Solutions Limited

January 2018



Site Trip Assignment – AM Peak Hour



Site Trip Assignment – PM Peak Hour

Assumptions:
Low Density 210 Single Family Detached
Medium Density 230 Residential Condominium/Townhouse
High Density 220 Apartment

1 square meter = 10,763 910 417 square foot

Based on TRAFFIC ANALYSIS ZONE CALCULATIONS
30-Sep-13

sqm sqft
1 10,764

ITE Land Use Code	Description of Land Use Type	Units	Number of Peak Hour Trips								
			AM			PM			Saturday		
			In	Out	Total	In	Out	Total	In	Out	Total
Zone 1											
LEA Trip Gen	Peel Regional Police Station		167	55	222	137	259	396	152	160	312
210	Single Family Detached	55	12	36	48	39	23	62	31	27	58
230	Residential Condominium/Townhouse	89	8	39	47	37	18	55	37	31	68
Zone 1 Residential Modal Split 5%			1	4	5	4	2	6	3	3	6
Zone 1 Residential Trips			19	71	90	72	39	111	65	55	120
Zone 1 New Trips			186	126	312	209	298	507	217	215	432
Zone 2											
820	Shopping Center	551,117 sq. ft.	336	215	551	1007	1048	2055	1401	1294	2695
Pass-By Reduction - Shopping Center(0% AM, 35% PM, 25% SAT)			0	0	0	352	367	719	350	324	674
Zone 2 Modal Split 5%			17	11	28	50	52	103	70	65	135
Zone 2 New Trips			319	204	523	605	629	1233	981	905	1886
Zone 3											
520	Elementary School	475 students	118	96	214	35	36	71	0	0	0
770	Business Park	1,164 employees	482	85	567	115	407	522	0	0	0
Zone 3 Business Park Modal Split 10%			48	9	57	12	41	53	0	0	0
Zone 3 Business Park Trips			434	76	510	103	366	469	0	0	0
Zone 3 School Modal Split 5%			6	5	11	2	2	4	0	0	0
Zone 3 School Trips			112	91	203	33	34	67	0	0	0
Zone 3 New Trips			546	167	713	136	400	536	0	0	0
Zone 4											
210	Single Family Detached	39	9	28	37	28	17	45	23	21	44
230	Residential Condominium/Townhouse	22	3	13	16	12	6	18	26	23	49
220	Apartment	140	14	58	72	62	33	95	50	27	77
Zone 4 Modal Split 5%			1	5	6	5	3	8	5	4	9
Zone 4 New Trips			25	94	119	97	53	150	94	67	162
Zone 5											
210	Single Family Detached	214	40	120	160	131	77	208	106	94	200
Zone 5 Modal Split 5%			2	6	8	7	4	10	5	5	10
Zone 5 New Trips			38	114	152	124	73	198	101	89	190
Zone 6											
210	Single Family Detached	89	18	54	72	60	35	95	47	42	89
Zone 6 Modal Split 5%			1	3	4	3	2	5	2	2	4
Zone 6 New Trips			17	51	68	57	33	90	45	40	85
Zone 7											
565	Daycare Centre (existing Church used for daycare)	68 students	29	26	55	25	29	54	0	0	0
Zone 7 Modal Split 5%			1	1	2	1	1	2	0	0	0
Zone 7 New Trips			28	25	53	24	28	51	0	0	0
Zone 8											
210	Single Family Detached	164	31	93	124	103	61	164	82	73	155
Zone 8 Modal Split 5%			2	5	7	5	3	8	4	4	8
Zone 8 New Trips			29	88	117	98	58	156	78	69	147
Zone 9											
210	Single Family Detached	72	15	45	60	49	29	78	39	35	74
230	Residential Condominium/Townhouse	109	9	46	55	43	21	64	40	34	74
Zone 9 Modal Split 5%			1	5	6	5	3	7	4	3	7
Zone 9 New Trips			23	86	109	87	48	135	75	66	141
Zone 10											
530	High School	1,500 students	428	202	630	92	103	195	0	0	0
Zone 10 Modal Split 5%			21	10	32	5	5	10	0	0	0
Zone 10 New Trips			407	192	599	87	98	185	0	0	0
Zone 11											
210	Single Family Detached	164	31	93	124	103	61	164	82	73	155
230	Residential Condominium/Townhouse	55	5	27	32	25	12	37	32	27	59
Zone 11 Modal Split 5%			2	6	8	6	4	10	6	5	11
Zone 11 New Trips			34	114	148	122	69	191	108	95	203
Zone 12											
210	Single Family Detached	186	35	105	140	116	68	184	93	82	175
Zone 12 Modal Split 5%			2	5	7	5	3	8	5	4	9
Zone 12 New Trips			33	100	133	110	65	175	88	78	166
Zone 13											
230	Residential Condominium/Townhouse	52	5	25	30	24	12	36	31	27	58
Zone 13 Residential Modal Split 5%			0	1	1	1	1	2	2	1	3
Zone 13 Residential Trips			5	24	29	23	11	34	29	26	55
820	Shopping Center	30,677 sq. ft.	19	12	31	56	58	114	78	72	150
Pass-By Reduction - Shopping Center(0% AM, 35% PM, 25% SAT)			0	0	0	20	20	40	20	18	38
Zone 13 Commercial Modal Split 5%			1	1	2	3	3	6	4	4	8
Zone 13 Commercial Trips			18	11	29	33	35	68	54	50	105
Zone 13 New Trips			23	35	58	56	47	103	84	76	160
Zone 14											
210	Single Family Detached	136	26	79	105	87	51	138	69	61	130
230	Residential Condominium/Townhouse	109	9	46	55	43	21	64	40	34	74
Zone 14 Modal Split 5%			2	6	8	7	4	10	5	5	10
Zone 14 New Trips			33	119	152	124	68	192	104	90	194
Zone 15											
230	Residential Condominium/Townhouse	66	6	31	37	29	14	43	33	28	61
220	Apartment	169	17	69	86	72	39	111	58	31	89
Zone 15 Modal Split 5%			1	5	6	5	3	8	5	3	8
Zone 15 New Trips			22	95	117	96	50	146	86	56	143
Zone 16											
210	Single Family Detached	174	33	99	132	109	64	173	87	77	164
230	Residential Condominium/Townhouse	40	4	21	25	19	9	28	29	25	54
Zone 16 Modal Split 5%			2	6	8	6	4	10	6	5	11
Zone 16 New Trips			35	114	149	122	69	191	110	97	207
Zone 17											
520	Elementary School	750 students	186	152	338	55	57	112	0	0	0
Zone 17 Modal Split 5%			9	8	17	3	3	6	0	0	0
Zone 17 New Trips			177	144	321	52	54	106	0	0	0
Zone 18											
210	Single Family Detached	167	32	95	127	105	62	167	84	74	158
230	Residential Condominium/Townhouse	74	7	34	41	31	15	46	35	29	64
Zone 18 Modal Split 5%			2	6	8	7	4	11	6	5	11
Zone 18 New Trips			37	123	160	129	73	202	113	98	211
Zone 19											
230	Residential Condominium/Townhouse	182	14	69	83	66	32	98	52	44	96
Zone 19 Residential Modal Split 5%			1	3	4	3	2	5	3	2	5
Zone 19 Residential Trips			13	66	79	63	30	93	49	42	91
820	Shopping Center	51,667 sq. ft.	32	20	52	94	98	192	131	121	252
Pass-By Reduction - Shopping Center(0% AM, 35% PM, 25% SAT)			0	0	0	33	34	67	33	30	63
Zone 19 Commercial Modal Split 5%			2	1	3	5	5	10	7	6	13
Zone 19 Commercial Trips			30	19	49	98	99	115	91	85	176
Zone 19 New Trips			44	85	128	119	90	209	141	127	268
Zone 20											
230	Residential Condominium/Townhouse	162	13	63	76	60	29	89	48	41	89
230	Medium Density Work / Live Condos / Towns	83	8	37	45	35	17	52	36	31	67
Work-Live Trip Reduction (25%)			2	9	11	9	4	13	9	8	17
Zone 20 Modal Split 5%			1	5	6	5	2	7	4	4	8
Zone 20 Residential Trips			18	86	104	82	39	121	71	61	131
814	Live-Work Commercial (Specialty Retail)	17,761 sq. ft.	0	0	0	26	36	62	0	0	0
Work-Live Trip Reduction (25%)			0	0	0	7	9	16	0	0	0
Zone 20 Commercial Split 5%			0	0	0	1	2	3	0	0	0
Zone 20 Commercial Trips			0	0	0	18	25	43	0	0	0
Zone 20 New Trips			18	86	104	100	65	164	71	61	131
Zone 21											
210	Single Family Detached	160	30	91	121	101	59	160	81	71	152
230	Residential Condominium/Townhouse	36	4	19	23	17	9	26	29	24	53
Zone 21 Modal Split 5%			2	6	8	6	3	9	6	5	10
Zone 21 New Trips			32	105	137	112	65	177	105	90	195
Zone 22											
210	Single Family Detached	269	50	149	199	161	95	256	132	117	249
Zone 22 Modal Split 5%			3	7	10	8	5	13	7	6	12
Zone 22 New Trips			48	142	189	153	90	243	125	111	237
Zone 23											
210	Single Family Detached	156	30	89	119	99	56	157	79	70	149
230	Residential Condominium/Townhouse	44	5	22	27	21	10	31	30	25	55
Zone 23 Residential Modal Split 5%			2	6	8	6	3	9	5	4	10
Zone 23 Residential Trips			33	105	139	114	65	179	104	90	194
520	Elementary School	750 students	186	152	338	55	57	112	0	0	0
Zone 23 School Modal Split 5%			9	8	17	3	3	6	0	0	0
Zone 23 New Trips			210	250	460	166	119	285	104	90	194
Zone 24											
210	Single Family Detached	30	8	23	31	22	13	35	19	17	36
230	Residential Condominium/Townhouse	138	11	55	66	52	26	78	45	38	83
Zone 24 Modal Split 5%			1	4	5	4	2	6	3	3	6
Zone 24 New Trips			18	74	92	70	37	107	61	52	113
Zone 25											
210	Single Family Detached	56	12	37	49	39	23	62	31	28	59
Zone 25 Modal Split 5%			1	2							

ITE Land Use Code	Description of Land Use Type	Units	Number of Peak Hour Trips					
			AM			PM		
			In	Out	Total	In	Out	Total
Zone 1								
LEA Trip Gen	Peel Regional Police Station		167	55	222	137	259	396
210	Single Family Detached	65	13	38	51	42	25	67
220	Residential Condominium/Townhouse	65	7	25	32	25	15	40
<i>Zone 1 Residential Modal Split 5%</i>			1	3	4	3	2	5
<i>Zone 1 Residential Trips</i>			19	60	79	64	38	102
<i>Zone 1 New Trips</i>			186	115	301	201	297	498
Zone 2								
820	Shopping Center (sq. ft.)	51,200 sq.m.	321	197	518	922	999	1921
<i>Pass-By Reduction - Shopping Center(0% AM, 35% PM, 25% SAT)</i>			0	0	0	290	315	605
<i>Zone 2 Internal Trips (10%)</i>			32	20	52	92	100	192
<i>Zone 2 Internal Modal Split 5%</i>			2	1	3	5	5	10
<i>Zone 2 New Internal Trips</i>			30	19	49	88	95	182
<i>Zone 2 Mode Split External Trips</i>			14	9	23	41	45	86
<i>Zone 2 New External Trips</i>			274	168	443	498	539	1037
<i>Zone 2 New Trips</i>			305	187	492	586	634	1220
Zone 3								
210	Single Family Detached	37	8	23	31	25	14	39
220	Multifamily Housing (Low-Rise)	22	3	8	11	9	6	15
<i>Zone 3 Modal Split 5%</i>			1	2	2	2	1	3
<i>Zone 3 New Trips</i>			10	29	40	32	19	51
Zone 4								
210	Single Family Detached	145	27	81	108	91	54	145
220	Multifamily Housing (Low-Rise)	100	11	37	48	37	22	59
<i>Zone 4 Modal Split 5%</i>			2	6	8	6	4	10
<i>Zone 4 New Trips</i>			36	112	148	122	72	194
Zone 5 & 25								
520	Elementary School	475 students	172	146	318	39	42	81
770	Business Park	1,164 employees	483	85	568	115	407	522
<i>Zone 5 Business Park Modal Split 10%</i>			48	9	57	12	41	53
<i>Zone 5 Business Park Trips</i>			435	76	511	103	366	469
<i>Zone 25 School Internal trips 67%</i>			115	98	213	26	28	54
<i>Zone 25 School Internal Mode Split 5%</i>			6	5	11	1	1	3
<i>Zone 25 School Internal Trips</i>			109	93	202	25	27	51
<i>Zone 25 School Modal Split 5%</i>			3	2	5	1	1	1
<i>Zone 25 New School Trips</i>			54	46	100	12	13	26
<i>Zone 5 & 25 New External Trips</i>			598	215	813	140	406	546
Zone 6								
210	Single Family Detached	214	39	118	157	133	78	211
<i>Zone 6 Modal Split 5%</i>			2	6	8	7	4	11
<i>Zone 6 New Trips</i>			37	112	149	126	74	200
Zone 7								
210	Single Family Detached	60	12	35	47	39	23	62
220	Multifamily Housing (Low-Rise)	26	3	10	13	11	7	18
<i>Zone 7 Modal Split 5%</i>			1	2	3	3	2	4
<i>Zone 7 New Trips</i>			14	43	57	47	28	76
Zone 8								
210	Single Family Detached	88	17	50	67	57	33	90
220	Multifamily Housing (Low-Rise)	112	12	41	53	41	24	65
221	Multifamily Housing (Mid-Rise)	168	16	44	60	45	29	74
<i>Zone 8 Modal Split 5%</i>			2	7	9	7	4	11
<i>Zone 8 New Trips</i>			43	128	171	136	82	218
Zone 9								
530	High School	1,500 students	523	257	780	101	109	210
<i>Zone 9 School Internal trips 67%</i>			350	172	523	68	73	141
<i>Zone 9 School Internal Trip Mode Split 5%</i>			18	9	26	3	4	7
<i>Zone 9 New Internal School Trips</i>			333	163	497	65	69	134
<i>Zone 9 External School Modal Split 5%</i>			9	4	13	2	2	3
<i>Zone 9 New External School Trips</i>			164	81	244	31	34	66
<i>Zone 9 New Trips</i>			497	244	741	96	104	200
Zone 10								
210	Single Family Detached	72	14	42	56	47	27	74
220	Multifamily Housing (Low-Rise)	110	12	40	52	40	24	64
<i>Zone 10 Modal Split 5%</i>			1	4	5	4	3	7
<i>Zone 10 New Trips</i>			25	78	103	83	48	131
Zone 11								
210	Single Family Detached	136	25	76	101	86	50	136
220	Multifamily Housing (Low-Rise)	109	12	40	52	40	24	64
<i>Zone 11 Modal Split 5%</i>			2	6	8	6	4	10
<i>Zone 11 New Trips</i>			35	110	145	120	70	190
Zone 12								
210	Single Family Detached	164	30	91	121	103	60	163
565	Daycare Centre (existing Church used for daycare)	68	28	25	53	25	29	54
<i>Zone 12 Modal Split 5%</i>			5	7	12	8	6	14
<i>Zone 12 New Trips</i>			87	132	219	149	118	267

Zone 13								
210	Single Family Detached	52	11	31	42	34	20	54
820	Shopping Center (sq. ft.)	2850	18	11	29	109	118	227
<i>Pass-By Reduction - Shopping Center(0% AM, 35% PM, 25% SAT)</i>			0	0	0	34	37	71
<i>Zone 13 Residential Modal Split 5%</i>			1	2	2	2	1	3
<i>Zone 13 Residential New Trips</i>			10	29	40	32	19	51
<i>Zone 13 Shopping Centre Internal Trips (10%)</i>			2	1	3	11	12	23
<i>Zone 13 Shopping Centre Internal Trips Mode Split (5%)</i>			0	0	0	1	1	1
<i>Zone 13 Shopping Centre Internal Trips</i>			2	1	3	10	11	22
<i>Zone 13 Shopping Centre External Trips Mode Split (5%)</i>			1	0	1	5	5	10
<i>Zone 13 Shopping Centre External Trips</i>			15	10	25	93	101	194
<i>Zone 13 New Trips</i>			27	40	68	135	131	267
Zone 14								
210	Single Family Detached	134	25	75	100	85	50	135
220	Multifamily Housing (Low-Rise)	36	4	14	18	15	9	24
<i>Zone 14 Modal Split 5%</i>			1	4	6	5	3	8
<i>Zone 14 New Trips</i>			28	85	112	95	56	151
Zone 15								
210	Single Family Detached	26	6	17	23	18	10	28
220	Multifamily Housing (Low-Rise)	142	15	52	67	51	30	81
820	Shopping Center (sq. ft.)	400	2	2	4	25	28	53
<i>Pass-By Reduction - Shopping Center(0% AM, 35% PM, 25% SAT)</i>			0	0	0	9	10	19
<i>Zone 15 Modal Split 5%</i>			1	4	5	5	3	8
<i>Zone 15 New Trips</i>			22	67	89	80	55	135
Zone 16								
220	Multifamily Housing (Low-Rise)	72	8	27	35	28	16	44
820	Shopping Center (sq. ft.)	4800	30	19	49	160	173	333
<i>Pass-By Reduction - Shopping Center(0% AM, 35% PM, 25% SAT)</i>			0	0	0	50	54	104
<i>Zone 16 Residential Modal Split 5%</i>			0	1	2	1	1	2
<i>Zone 16 Residential New Trips</i>			8	26	33	27	15	42
<i>Zone 16 Shopping Centre Internal Trips (10%)</i>			3	2	5	16	17	33
<i>Zone 16 Shopping Centre Internal Trips Mode Split (5%)</i>			0	0	0	1	1	2
<i>Zone 16 Shopping Centre Internal Trips</i>			3	2	5	15	16	31
<i>Zone 16 Shopping Centre External Trips Mode Split (5%)</i>			1	1	2	7	8	15
<i>Zone 16 Shopping Centre External Trips</i>			26	16	42	137	148	285
<i>Zone 16 New Trips</i>			37	44	80	179	179	358
Zone 17								
210	Single Family Detached	167	31	92	123	105	61	166
220	Multifamily Housing (Low-Rise)	55	6	21	27	22	13	35
<i>Zone 17 Modal Split 5%</i>			2	6	8	6	4	10
<i>Zone 17 New Trips</i>			35	107	143	121	70	191
Zone 18								
210	Single Family Detached	30	7	19	26	20	12	32
220	Multifamily Housing (Low-Rise)	40	5	15	20	16	10	26
<i>Zone 18 Modal Split 5%</i>			1	2	2	2	1	3
<i>Zone 18 New Trips</i>			11	32	44	34	21	55
Zone 19								
520	Elementary School	850	172	398	570	39	106	145
<i>Zone 19 School Internal trips 67%</i>			115	267	382	26	71	97
<i>Zone 19 School Internal Trip Mode Split 5%</i>			6	13	19	1	4	5
<i>Zone 19 New Internal School Trips</i>			109	254	363	25	67	92
<i>Zone 19 External School Modal Split 5%</i>			3	7	9	1	2	2
<i>Zone 19 New External School Trips</i>			54	124	179	12	33	46
<i>Zone 19 New Trips</i>			163	378	542	37	101	138
Zone 20								
210	Single Family Detached	174	32	96	128	109	64	173
220	Multifamily Housing (Low-Rise)	40	5	15	20	16	10	26
<i>Zone 20 Modal Split 5%</i>			2	6	7	6	4	10
<i>Zone 20 New Trips</i>			35	105	141	119	70	189
Zone 21								
210	Single Family Detached	198	36	109	145	123	73	196
<i>Zone 21 Modal Split 5%</i>			2	5	7	6	4	10
<i>Zone 21 New Trips</i>			34	104	138	117	69	186
Zone 22								
210	Single Family Detached	56	11	34	45	37	21	58
<i>Zone 22 Modal Split 5%</i>			1	2	2	2	1	3
<i>Zone 22 New Trips</i>			10	32	43	35	20	55
Zone 23								
210	Single Family Detached	199	37	109	146	124	73	197
<i>Zone 23 Modal Split 5%</i>			2	5	7	6	4	10
<i>Zone 23 New Trips</i>			35	104	139	118	69	187
Zone 24								
520	Elementary School	550	172	197	369	39	55	94
<i>Zone 24 School Internal trips 67%</i>			115	132	247	26	37	63
<i>Zone 24 School Internal Modal Split 5%</i>			6	7	12	1	2	3
<i>Zone 24 New Internal School Trips</i>			109	125	235	25	35	60
<i>Zone 24 School External Modal Split 5%</i>			3	3	6	1	1	2
<i>Zone 24 New External School Trips</i>			54	62	116	12	17	29
<i>Zone 24 New Trips</i>			163	187	351	37	52	89
Zone 26								
210	Single Family Detached	86	17	49	66	55	33	88
<i>Zone 26 Modal Split 5%</i>			1	2	3	3	2	4
<i>Zone 26 New Trips</i>			16	47	63	52	31	84

Zone 27								
210	Single Family Detached	125	24	70	94	79	47	126
220	Multifamily Housing (Low-Rise)	97	11	35	46	36	21	57
<i>Zone 27 Modal Split 5%</i>			2	5	7	6	3	9
<i>Zone 27 New Trips</i>			33	100	133	109	65	174
Zone 28								
210	Single Family Detached	252	46	138	184	156	91	247
220	Multifamily Housing (Low-Rise)	32	4	12	16	13	8	21
<i>Zone 28 Modal Split 5%</i>			3	8	10	8	5	13
<i>Zone 28 New Trips</i>			48	143	190	161	94	255
Zone 29								
210	Single Family Detached	155	29	86	115	98	57	155
220	Multifamily Housing (Low-Rise)	67	8	25	33	26	15	41
520	Elementary School	850	172	398	570	39	106	145
<i>Zone 29 Residential Modal Split 5%</i>			2	6	7	6	4	10
<i>Zone 29 New Residential Trips</i>			35	105	141	118	68	186
<i>Zone 29 School Internal trips 67%</i>			115	267	382	26	71	97
<i>Zone 29 School Internal Modal Split 5%</i>			6	13	19	1	4	5
<i>Zone 29 New Internal School Trips</i>			109	254	363	25	67	92
<i>Zone 29 School External Modal Split 5%</i>			3	7	9	1	2	2
<i>Zone 29 New External School Trips</i>			54	124	179	12	33	46
<i>Zone 29 New Trips</i>			199	484	682	155	169	324
Zone 30								
210	Single Family Detached	82	16	47	63	53	31	84
<i>Zone 30 Modal Split 5%</i>			1	2	3	3	2	4
<i>Zone 30 New Trips</i>			15	45	60	50	29	80
Zone 31								
210	Single Family Detached	79	15	46	61	51	30	81
220	Multifamily Housing (Low-Rise)	280	29	98	127	93	55	148
<i>Zone 31 Modal Split 5%</i>			2	7	9	7	4	11
<i>Zone 31 New Trips</i>			42	137	179	137	81	218
Zone 32								
210	Single Family Detached	30	7	19	26	20	12	32
220	Multifamily Housing (Low-Rise)	50	6	19	25	20	12	32
<i>Zone 32 Modal Split 5%</i>			1	2	3	2	1	3
<i>Zone 32 New Trips</i>			12	36	48	38	23	61
Zone 33								
210	Single Family Detached	65	13	38	51	42	25	67
220	Multifamily Housing (Low-Rise)	202	21	72	93	69	41	110
<i>Zone 33 Modal Split 5%</i>			2	6	7	6	3	9
<i>Zone 33 New Trips</i>			32	105	137	105	63	168
Zone 34								
210	Single Family Detached	38	8	24	32	25	15	40
220	Multifamily Housing (Low-Rise)	181	19	65	84	63	37	100
<i>Zone 34 Modal Split 5%</i>			1	4	6	4	3	7
<i>Zone 34 New Trips</i>			26	85	110	84	49	133
Zone 35								
210	Single Family Detached	192	35	106	141	120	70	190
220	Multifamily Housing (Low-Rise)	27	3	11	14	11	7	18
<i>Zone 35 Modal Split 5%</i>			2	6	8	7	4	10
<i>Zone 35 New Trips</i>			36	111	147	124	73	198
Zone 36								
210	Single Family Detached	119	22	67	89	76	44	120
220	Multifamily Housing (Low-Rise)	70	8	26	34	27	16	43
<i>Zone 36 Modal Split 5%</i>			2	5	6	5	3	8
<i>Zone 36 New Trips</i>			29	88	117	98	57	155
Zone 37								
220	Multifamily Housing (Low-Rise)	125	14	45	59	45	27	72
820	Shopping Center (sq. ft.)	5600	35	22	57	180	194	374
<i>Pass-By Reduction - Shopping Center(0% AM, 35% PM, 25% SAT)</i>			0	0	0	57	61	118
<i>Zone 37 Residential Modal Split 5%</i>			1	2	3	2	1	4
<i>Zone 37 Residential New Trips</i>			13	43	56	43	26	68
<i>Zone 37 Shopping Centre Internal Trips (10%)</i>			4	2	6	18	19	37
<i>Zone 37 Shopping Centre Internal Trips Mode Split (5%)</i>			0	0	0	1	1	2
<i>Zone 37 Shopping Centre Internal Trips</i>			4	2	6	17	18	35
<i>Zone 37 Shopping Centre External Trips Mode Split (5%)</i>			2	1	3	8	9	17
<i>Zone 37 Shopping Centre External Trips</i>			30	19	48	154	166	320
<i>Zone 37 New Trips</i>			46	64	110	214	210	423

Total			3,009	4,233	7,243	4,271	3,790	8,063
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TRIP GENERATION RATES (MW2 Stage 2)

Land Uses		
ITE 210		
Single-Family Detach		30
AM		
Equation	$T = 0.71(X)$	26
Average Rate	0.74	22
PM		
Equation	$\ln(T) = 0.96$	32
Average Rate	0.99	30
Saturday		
Equation	$T = 0.84(X)$	43
Average Rate	0.93	28

	Saturday Peak Hour		
	In	Out	Total
Single-Family Detached Housing			
ITE 210	54%	46%	100%
Trip Rate	0.50	0.43	0.93
ITE Trips	23	20	43
96% Person Trip	24	21	45
5% Modal Split	1	1	2
Trips	23	20	43

Land Uses		
ITE 220		
Multifamily Housing		547
AM		
Equation	$\ln(T) = 0.95$	240
Average Rate	0.46	252
PM		
Equation	$\ln(T) = 0.89$	268
Average Rate	0.56	306
Saturday		
Equation	$T = 1.08(X)$	558
Average Rate	0.7	383

	Saturday Peak Hour		
	In	Out	Total
Multifamily Housing (Low-Rise)			
ITE 220	50%	50%	100%
Trip Rate	0.35	0.35	0.70
ITE Trips	279	279	558
96% Person Trip	291	291	582
5% Modal Split	15	15	30
Trips	276	276	552

Land Uses		
ITE 221		
Multifamily Housing		226
AM		
Equation	$\ln(T) = 0.98$	76
Average Rate	0.36	81
PM		
Equation	$\ln(T) = 0.96$	97
Average Rate	0.44	99
Saturday		
Equation	$T = 0.42(X)$	102
Average Rate	0.44	99

	Saturday Peak Hour		
	In	Out	Total
Multifamily Housing (Mid-Rise)			
ITE 221	49%	51%	100%
Trip Rate	0.22	0.22	0.44
ITE Trips	50	52	102
96% Person Trip	52	54	106
5% Modal Split	3	3	6
Trips	-49	-51	-100

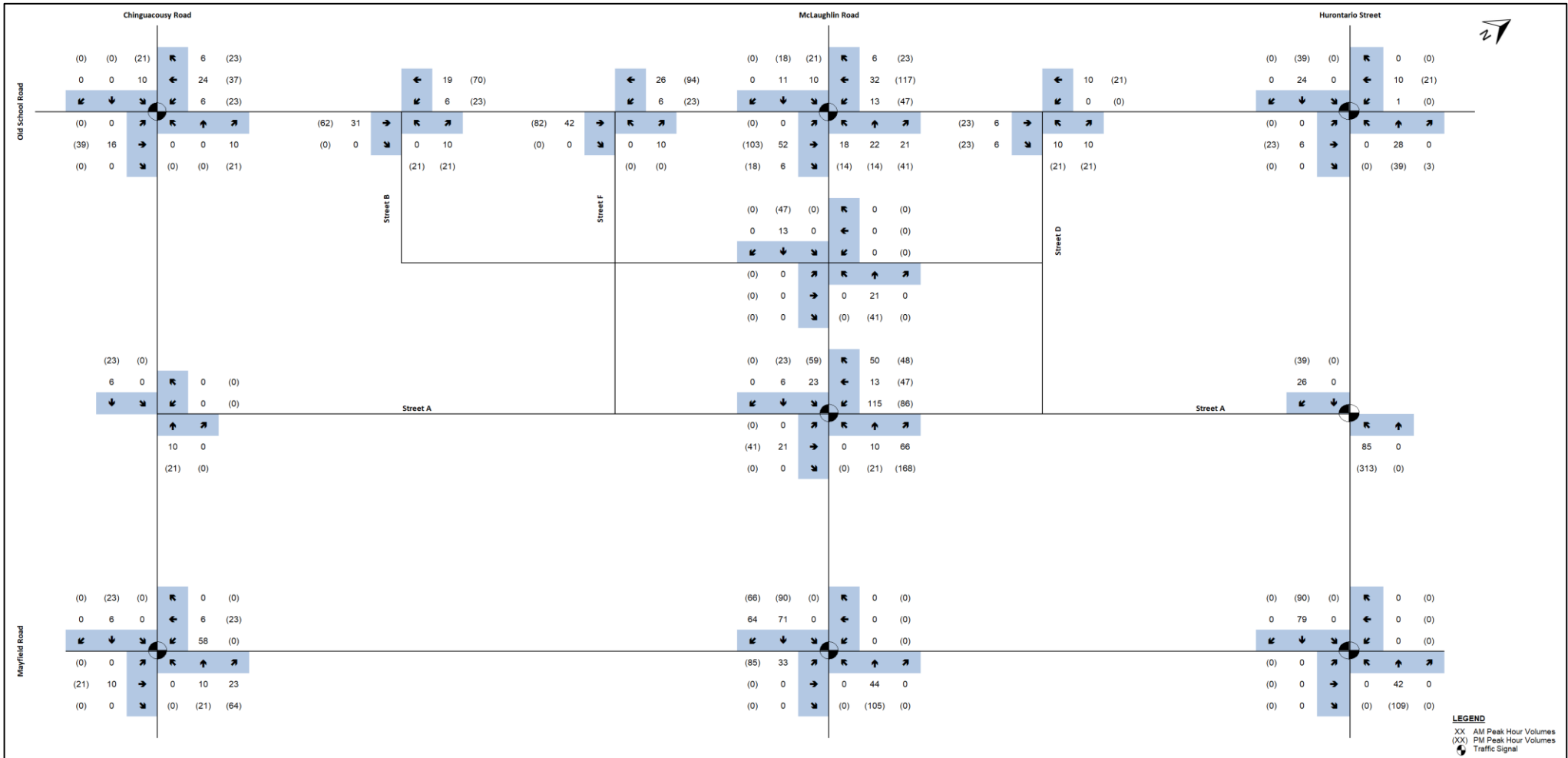
Land Uses		
ITE 520		
Elementary School		550
AM		
Equation		
Average Rate	0.67	369
PM		
Equation		
Average Rate	0.17	94
Saturday		
Equation		
Average Rate		

	Saturday Peak Hour		
	In	Out	Total
Elementary School			
ITE 520	49%	51%	100%
Trip Rate	0.00	0.00	0.00
ITE Trips	0	0	0
5% Modal Split	0	0	0
Trips	0	0	0

Land Uses		
ITE 820		
Shopping Center		146.738
AM		
Equation	$T = 0.50(X)$	225
Average Rate	0.94	138
PM		
Equation	$\ln(T) = 0.74$	722
Average Rate	3.81	559
Saturday		
Equation	$\ln(T) = 0.79$	838
Average Rate	4.5	660

	Saturday Peak Hour		
	In	Out	Total
Shopping Center			
ITE 820	52%	48%	100%
Trip Rate	2.34	2.16	4.50
ITE Trips	436	402	838
5% Modal Split	22	20	42
25% Passby	109	101	210
Trips	-414	-382	-796

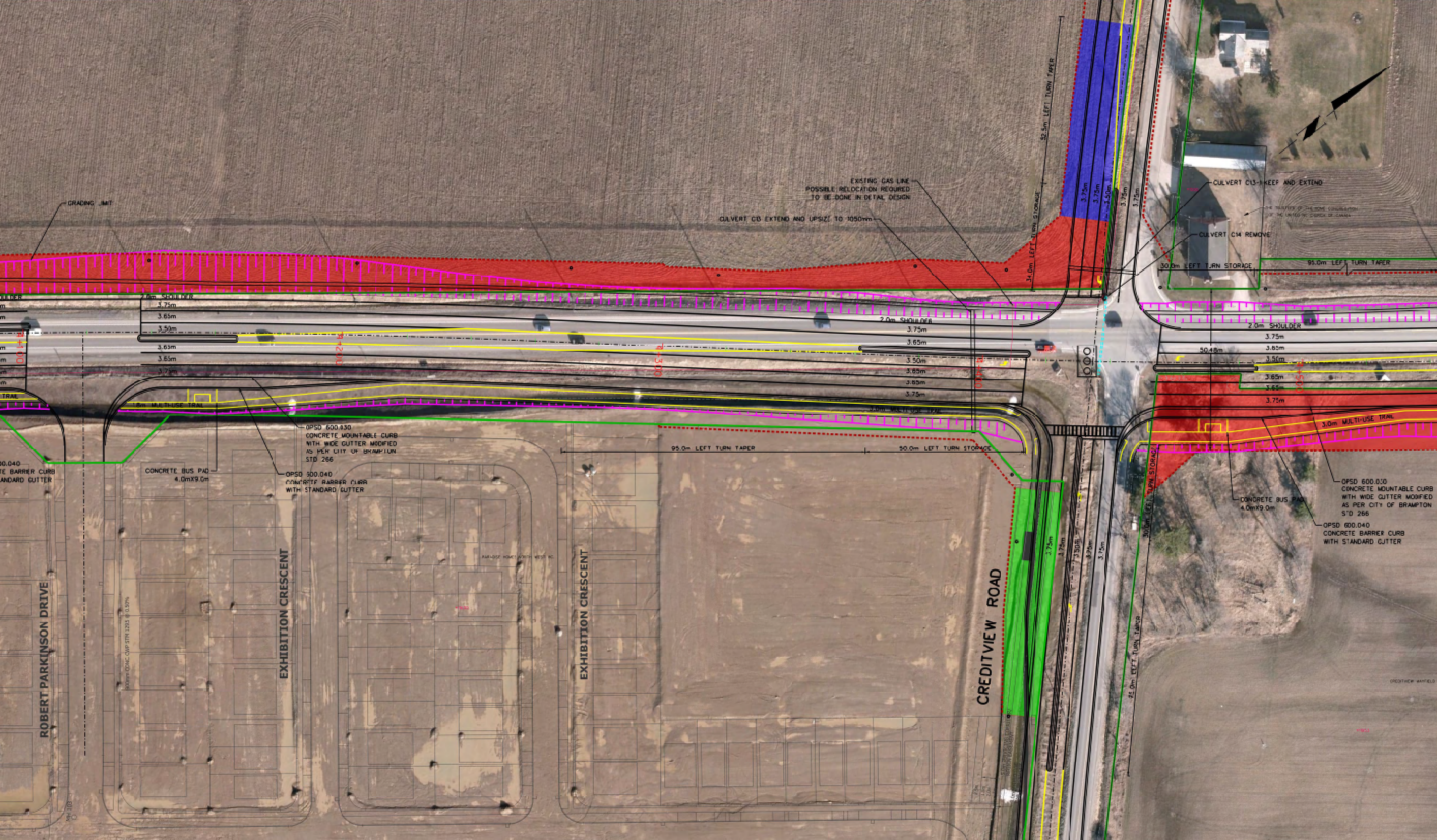
Net Total -164 -137 -301





APPENDIX D

Future Mayfield Road Widening



GRADING LIMIT

EXISTING GAS LINE
POSSIBLE RELOCATION REQUIRED
TO BE DONE IN DETAIL DESIGN

CULVERT C3 EXTEND AND UPSIZE TO 1050mm

CULVERT C13 - KEEP AND EXTEND

CULVERT C14 REMOVE

31.0m LEFT TURN STORAGE

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

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3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

30.0m LEFT TURN STORAGE

95.0m LEFT TURN TAPER

2.0m SHOULDER

3.75m

3.65m

3.50m

3.65m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

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3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.75m

3.0m MULTI-USE TRAIL

CONCRETE BUS PAD
4.0mX9.0m

OPSD 600.040
CONCRETE MOUNTABLE CURB
WITH WIDE GUTTER MODIFIED
AS PER CITY OF BRAMPTON
STD 266

OPSD 600.040
CONCRETE BARRIER CURB
WITH STANDARD GUTTER

OPSD 600.430
CONCRETE MOUNTABLE CURB
WITH WIDE GUTTER MODIFIED
AS PER CITY OF BRAMPTON
STD 266

OPSD 500.040
CONCRETE BARRIER CURB
WITH STANDARD GUTTER

CONCRETE BUS PAD
4.0mX9.0m

EXHIBITION CRESCENT

EXHIBITION CRESCENT

CREDITVIEW ROAD

ROBERT PARKINSON DRIVE

0.00% (0.00% GWP STR 1203 @ 0.00%)

PARKING HOUSE WITH WEST IN

CREDITVIEW ROAD



APPENDIX E

Mode Split & TTS Data

A review of internal trips within the Town indicates that the majority of trips originating within each sub-area of Caledon are internal during the morning peak period. This is particularly evident for trips originating in Bolton, where most trips (approximately 5,500) are internal to the sub-area (i.e., destined to Bolton). While travel between these major sub-areas do not appear to be significant compared to the proportion of internal sub-area trips, a decent portion of trips originating in Caledon East and Mayfield West are destined for Bolton (84 and 135 trips, respectively). The internal trip distribution by sub-area is summarized in **Table 3-9**.

Table 3-9: Internal Trip Distribution by Sub-Area (2016, AM Peak Period, All Modes)

Origin / Destination	Bolton	Mayfield West	Caledon Village	Rural Caledon West	Caledon East	Rural Caledon East	Total
Bolton	5,524	16	32	39	63	986	6,660
Mayfield West	135	735	0	455	78	0	1,403
Caledon Village	0	65	0	76	0	0	141
Rural Caledon West	245	388	7	630	92	193	1,555
Caledon East	84	0	0	45	280	0	409
Rural Caledon East	1,642	76	0	123	249	815	2,905
Total	7,630	1,280	39	1,368	762	1,994	13,073

3.4.3 Mode Splits

Trips with origins or destinations in Caledon consist largely of vehicle trips during the morning peak period. This is especially evident for external trips (i.e., those that start or end outside of the Town), which have a 95% automobile mode share.

Trips with both origin and destination in Caledon, however, have higher non-auto trip use. Approximately one-quarter of the trips internal to the Town are made via a school bus. The most prevalent active transportation mode is walking, which makes up 9% of the mode share for internal trips. Minimal cycling trips were identified during the morning peak period.

The mode share breakdown is shown in **Table 3-10**.

Table 3-10: Mode Share for Caledon Trips (2016, AM Peak Period)

Mode	Internal		External		Total	
	Trips	%	Trips	%	Trips	%
Automobile	8,445	65%	32,233	95%	40,678	87%
Local Transit	18	0%	577	2%	595	1%
GO Rail / Joint GO Rail	0	0%	136	0%	136	0%
School Bus	3,389	26%	1054	3%	4,443	9%
Walk	1,220	9%	64	0%	1,284	3%
Cycle	0	0%	0	0%	0	0%
Other (e.g., Motorcycle)	0	0%	35	0%	35	0%
Total	13,072	100%	34,099	100%	47,171	100%

Column1	Column2	Column3
Mon Oct 04 2021 15:11:21 GMT-0400 (Eastern Daylight Time) - Run Time: 2392ms		
Cross Tabulation Query Form - Trip - 2016 v1.1		
Row: 2006 GTA zone of destination - gta06_dest		
Column: 2006 GTA zone of origin - gta06_orig		
Filters:		
(2006 GTA zone of origin - gta06_orig In 3436		
and		
Start time of trip - start_time In 1600-1900		
and		
Trip purpose of destination - purp_dest In M		
and		
Primary travel mode of trip - mode_prime In D		
M)		
Trip 2016		
ROW : gta06_dest		
COLUMN : gta06_orig		
gta06_dest	gta06_orig	total
3324	3375	4
3342	3375	54
3357	3375	80
3369	3375	5
3375	3375	78
3375	3436	21
3376	3436	38
3381	3375	8
3417	3375	6
3430	3375	60
3436	3375	9
3467	3375	26
3467	3436	45
3482	3436	53
3493	3375	15
3617	3436	27
4158	3375	16

	Creditview (South)	Mayfield (East)	Mississauga (South)	Mayfield (West)	
	4				
	54	54			
	80	80			
	5	5			
	78	78			
	21				
	38	38			
	8	8			
	6	6			
	60		60		
	9				
	26	26			
	45	45			
	53				
	15	15			
	2			2	
	16			16	
Total	170	272	60	18	520
Percentage	33%	52%	12%	3%	100%

PM Out - AM In - Sat Out

Column1	Column2	Column3
Mon Oct 04 2021 15:08:22 GMT-0400 (Eastern Daylight Time) - Run Time: 2959ms		
Cross Tabulation Query Form - Trip - 2016 v1.1		
Row: 2006 GTA zone of origin - gta06_orig		
Column: 2006 GTA zone of destination - gta06_dest		
Filters:		
(2006 GTA zone of destination - gta06_dest In 3436		
and		
Start time of trip - start_time In 1600-1900		
and		
Trip purpose of destination - purp_dest In M		
and		
Primary travel mode of trip - mode_prime In D		
M)		
Trip 2016		
ROW : gta06_orig		
COLUMN : gta06_dest		
gta06_orig	gta06_dest	total
131	3375	32
2026	3375	42
3196	3375	8
3330	3375	10
3334	3436	10
3367	3375	6
3375	3375	78
3375	3436	9
3427	3375	19
3432	3375	18
3432	3436	19
3434	3375	6
3434	3436	36
3436	3375	21
3456	3375	30
3464	3375	27
3482	3375	21
3486	3375	29
3509	3375	12
3612	3375	12
4164	3436	58

	Creditview (South)	Mayfield (East)	Mississauga (South)	Mayfield (West)	
	32				
	42	42			
	8	8			
	10	10			
	10	10			
	6	6			
	78	78			
	9	9			
	19		19		
	18			18	
	19			19	
	6			6	
	36			36	
	21	21			
	30		30		
	27	27			
	21	21			
	29		29		
	12		12		
	12			12	
	58			58	
Total	129	176	49	149	503
Percentage	26%	35%	10%	30%	100%

PM In - AM Out - Sat In

Date: June 30, 2025
Requestor: Jorge Ordenes, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: Mayfield Rd at Creditview Rd

Jorge Ordenes,

See below the forecasted compound annual growth rate values for Mayfield Rd at Creditview Rd.

2011 to 2021	2021 to 2031	2031 to 2041
2.0%	1.5%	1.0%

Please note that these growth rates do not account for the accelerated population and employment targets set out by Bill 23 and 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. It is important to exercise professional judgment when using these values.

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

Regards,

Shuvangkor Shusmoy Roy

Transportation Data & Modelling Advisor,
Transportation Policy & Modelling
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor



APPENDIX F

**Costco & Gas Bar
Proxy Data**

TECHNICAL MEMORANDUM

February 13, 2025

Project# 31287

To: Stephanie Volpentesta
Fieldgate
5400 Yonge Street, 1st Floor
Toronto, ON M2N 5R5

From: Chris Tiesler, P.Eng., PTOE; Becca Hoffman

CC: Louie Loberti – Costco Wholesale
Darryl Bird - WSP

RE: Caledon - Trip Generation Estimate

Kittelison & Associates, Inc. (Kittelison) has prepared this trip generation estimate for a proposed Costco Warehouse and Gas Bar as part of a larger development in the northwest quadrant of the Creditview Road/Mayfield Road intersection in the Town of Caledon, Ontario.

PROJECT BACKGROUND

Fieldgate is proposing a new commercial development located at 12100 Creditview Road, which is planned to include a approximately 158,000 square foot) warehouse with a 24-position gas bar. Costco-specific trip generation data is being provided herein to accurately estimate traffic, as Institute of Transportation Engineers (ITE) rates generally underpredict traffic generated by Costco.

PRELIMINARY TRIP GENERATION ESTIMATE

This section details the trip generation assumptions and estimate for the proposed Costco site.

Costco Trip Generation

For more than 25 years, Kittelison has maintained a database of trip data and travel characteristics for Costco Wholesale. The database contains transportation information such as trip rates and trip type percentages for Costco locations throughout North America. The database is updated periodically when new Costco traffic counts or information becomes available to Kittelison. To best evaluate the anticipated transportation characteristics of the proposed warehouse in Caledon, Ontario, Kittelison used the Costco trip database to develop a trip generation estimated as it provides use-specific data that most accurately represents the anticipated traffic characteristics of the unique development type.

When comparing available Canadian site data to US data, there is not a substantial difference. Canadian sites are found to generate similar levels of traffic and lie well within the overall distribution of trip rates. This comparison confirms the homogeneity of Costco trip generation characteristics regardless of geographic location.

Costco has invested significant time and effort into developing this use-specific trip generation database for both its warehouses and its gas bars. Due to the nature of Costco membership requirements and Costco sales, Costco members have unique travel characteristics and patterns which are different from customers of other retailers. These unique characteristics and patterns exist in the trip generation for Costco warehouses, Costco Gasoline facilities, and the interaction of trips between the two.

The warehouse with gas bar trip rates summarized herein rely on data collection conducted at 60 Costco sites collected across North America (US and Canada). The trip studies were completed using industry standard engineering practices consistent with guidance within the Institute of Transportation Engineers (ITE) standard reference, Trip Generation Manual, 11th Edition. These cordon surveys were conducted between 2011 and 2024 and include 55 surveys of Costco warehouses. The Costco buildings surveyed range in size between 115,707 SF and 235,298 SF, with an average size of 153,917 SF and had gas bars. The gas bars in the dataset have a range of 12 to 32 fueling positions. As a result, the Costco trip generation rates inherently account for Costco gas bar trips within the overall rate (internal trips).

PASS-BY TRIPS

Pass-by trips represent members (and trips) that are currently traveling on the surrounding street network immediately adjacent to the site for some other primary purpose (such as a trip from work to home) and stop into the site enroute during their normal trip. As such, pass-by trips do not result in a net increase in traffic on the surrounding transportation system and their only effect occurs at the immediate intersections and site access driveways where they become turning movements.

DIVERTED TRIPS

Diverted trips are similar to pass-by trips in that they represent members (and trips) that are currently traveling on the surrounding street network for some other primary purpose and stop into the site enroute during their travel. However, as the name indicates, diverted trips divert from roadways that are not immediately adjacent to the Costco site.

Caledon Costco Trip Generation Estimate

Table 1 presents the trip generation rates for the new Costco warehouse and gas bar for the weekday PM, Saturday midday peak hours. **Table 2** presents the proposed trip generation estimate for the new Costco warehouse and gas bar.

Table 1. Costco Trip Generation Rates

Land Use	Weekday Daily Trip Rate (per KSF) ¹	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Midday Peak Hour		
		Trip Rate (per KSF)	Directional Distribution		Trip Rate (per KSF)	Directional Distribution		Trip Rate (per KSF)	Directional Distribution	
			In	Out		In	Out		In	Out
Costco Warehouse & Gas Bar	78.59	2.23	56%	44%	7.41	48%	52%	10.03	50%	50%

Percent Allocation of Trip Type

Net New Trips	52.29%	24.07%	52.29%	60.93%
Pass-By Trips	17.71%	36.20%	17.71%	15.72%
Diverted Trips	30.00%	39.73%	30.00%	23.34%

Source: Kittelson & Associates, Inc. 2025

¹ Weekday PM percentages have been applied to Weekday Daily.

Table 2. Costco Trip Generation Estimate

Trip Type	Size (KSF + FP)	Weekday Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Midday Peak Hour		
			Total	In	Out	Total	In	Out	Total	In	Out
Total External Trips		12,417	353	199	154	1,171	566	605	1,585	794	791
Pass-By Trips	158 +	(2,200)	(128)	(64)	(64)	(208)	(104)	(104)	(250)	(125)	(125)
Diverted Trips	24	(3,725)	(140)	(70)	(70)	(352)	(176)	(176)	(370)	(185)	(185)
Net New Trips		6,492	85	65	20	611	286	325	965	484	481

Source: Kittelson & Associates, Inc. 2025

As shown in Table 2, the Caledon Costco is estimated to generate approximately 85 net new weekday AM peak hour trips (65 inbound / 20 outbound), approximately 611 net new weekday PM peak hour trips (286 inbound / 325 outbound), and 965 net new Saturday midday peak hour trips (484 inbound / 481 outbound). Additionally, the Caledon Costco is estimated to generate approximately 6,492 net new weekday daily trips.

CONCLUSION

The trip generation estimate provided above will accurately reflect the Costco proposed as part of the 12100 Creditview Road development. If you have any questions, please contact Chris Tiesler at ctiesler@kittelson.com or 571.384.2943.



APPENDIX G

Existing Intersection Capacity Analysis Results

Queues
1: Creditview Road & Mayfield Road

Existing 2024
Weekday AM

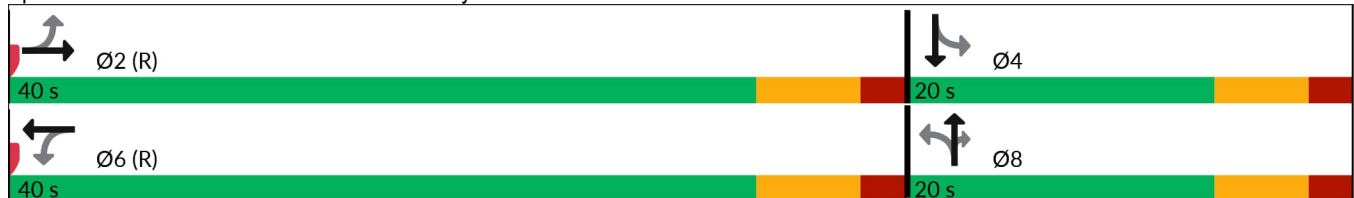


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations		+		+		+	+		+
Traffic Volume (vph)	26	468	89	503	47	80	94	8	119
Future Volume (vph)	26	468	89	503	47	80	94	8	119
Lane Group Flow (vph)	0	581	0	627	0	133	99	0	154
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Perm	NA
Protected Phases		2		6		8			4
Permitted Phases	2		6		8		8	4	
Detector Phase	2	2	6	6	8	8	8	4	4
Switch Phase									
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)		6.6		6.6		6.2	6.2		6.2
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio		0.51		0.62		0.42	0.25		0.41
Control Delay (s/veh)		9.3		12.3		25.2	6.9		22.6
Queue Delay		0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)		9.3		12.3		25.2	6.9		22.6
Queue Length 50th (m)		35.6		44.3		13.6	0.0		14.4
Queue Length 95th (m)		67.0		87.8		27.0	10.0		28.4
Internal Link Dist (m)		308.9		183.6		258.3			276.9
Turn Bay Length (m)							15.0		
Base Capacity (vph)		1138		1013		351	432		414
Starvation Cap Reductn		0		0		0	0		0
Spillback Cap Reductn		0		0		0	0		0
Storage Cap Reductn		0		0		0	0		0
Reduced v/c Ratio		0.51		0.62		0.38	0.23		0.37

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 22.5 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
1: Creditview Road & Mayfield Road

Existing 2024
Weekday AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+	+		+	
Traffic Volume (veh/h)	26	468	58	89	503	4	47	80	94	8	119	20
Future Volume (veh/h)	26	468	58	89	503	4	47	80	94	8	119	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1767	1856	1826	1900	1707	1885	1856	1900	1856	1826
Adj Flow Rate, veh/h	27	493	61	94	529	4	49	84	99	8	125	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	5	9	3	5	0	13	1	3	0	3	5
Cap, veh/h	84	898	108	171	855	6	170	251	314	70	302	49
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	37	1530	184	174	1456	10	439	1257	1572	35	1513	244
Grp Volume(v), veh/h	581	0	0	627	0	0	133	0	99	154	0	0
Grp Sat Flow(s),veh/h/ln	1751	0	0	1640	0	0	1696	0	1572	1792	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.9	0.0	0.0	13.3	0.0	0.0	3.7	0.0	3.2	4.5	0.0	0.0
Prop In Lane	0.05		0.10	0.15		0.01	0.37		1.00	0.05		0.14
Lane Grp Cap(c), veh/h	1091	0	0	1032	0	0	421	0	314	421	0	0
V/C Ratio(X)	0.53	0.00	0.00	0.61	0.00	0.00	0.32	0.00	0.32	0.37	0.00	0.00
Avail Cap(c_a), veh/h	1091	0	0	1032	0	0	469	0	362	474	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.6	0.0	0.0	7.8	0.0	0.0	20.7	0.0	20.5	21.0	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	2.7	0.0	0.0	0.4	0.0	0.6	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.8	0.0	0.0	0.7	0.0	0.6	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.4	0.0	0.0	10.5	0.0	0.0	21.1	0.0	21.1	21.5	0.0	0.0
LnGrp LOS	A			B			C		C	C		
Approach Vol, veh/h		581			627			232				154
Approach Delay, s/veh		9.4			10.5			21.1				21.5
Approach LOS		A			B			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		13.9		6.5		15.3		5.7				
Green Ext Time (p_c), s		4.7		0.5		5.2		0.8				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	12.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	470	22	39	535	43	92
Future Vol, veh/h	470	22	39	535	43	92
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	55	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	5	18	8	5	0	5
Mvmt Flow	470	22	39	535	43	92

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	492	0	1083
Stage 1	-	-	-	-	470
Stage 2	-	-	-	-	613
Critical Hdwy	-	-	4.18	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.272	-	3.5
Pot Cap-1 Maneuver	-	-	1041	-	243
Stage 1	-	-	-	-	633
Stage 2	-	-	-	-	544
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1041	-	234
Mov Cap-2 Maneuver	-	-	-	-	234
Stage 1	-	-	-	-	633
Stage 2	-	-	-	-	524

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.6	16
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	234	587	-	-	1041	-
HCM Lane V/C Ratio	0.184	0.157	-	-	0.037	-
HCM Ctrl Dly (s/v)	23.8	12.3	-	-	8.6	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q (veh)	0.7	0.6	-	-	0.1	-

Queues
1: Creditview Road & Mayfield Road

Existing 2024
Weekday PM

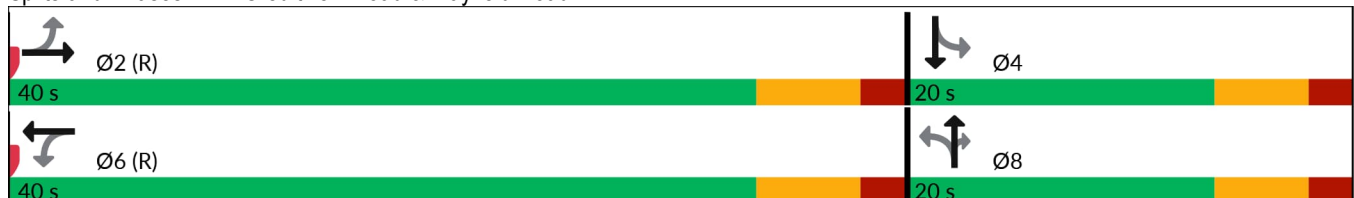


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations		+		+		+	+		+
Traffic Volume (vph)	15	579	121	403	51	92	124	13	124
Future Volume (vph)	15	579	121	403	51	92	124	13	124
Lane Group Flow (vph)	0	686	0	552	0	149	129	0	183
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Perm	NA
Protected Phases		2		6		8			4
Permitted Phases	2		6		8		8	4	
Detector Phase	2	2	6	6	8	8	8	4	4
Switch Phase									
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)		6.6		6.6		6.2	6.2		6.2
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio		0.57		0.60		0.47	0.30		0.47
Control Delay (s/veh)		10.3		12.0		26.3	6.5		22.7
Queue Delay		0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)		10.3		12.0		26.3	6.5		22.7
Queue Length 50th (m)		44.8		38.0		15.5	0.0		16.6
Queue Length 95th (m)		83.5		77.3		30.0	11.4		32.2
Internal Link Dist (m)		308.9		183.6		258.3			276.9
Turn Bay Length (m)							15.0		
Base Capacity (vph)		1202		926		347	459		423
Starvation Cap Reductn		0		0		0	0		0
Spillback Cap Reductn		0		0		0	0		0
Storage Cap Reductn		0		0		0	0		0
Reduced v/c Ratio		0.57		0.60		0.43	0.28		0.43

Intersection Summary

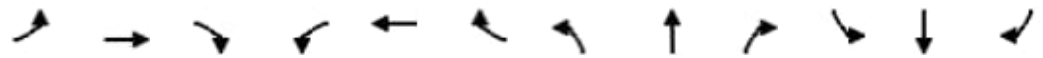
Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 22.5 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Existing 2024
 Weekday PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+	+		+	
Traffic Volume (veh/h)	15	579	64	121	403	6	51	92	124	13	124	38
Future Volume (veh/h)	15	579	64	121	403	6	51	92	124	13	124	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1767	1900	1885	670	1841	1885	1870	1900	1900	1900
Adj Flow Rate, veh/h	16	603	67	126	420	6	53	96	129	14	129	40
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	9	0	1	83	4	1	2	0	0	0
Cap, veh/h	71	964	105	230	727	10	166	258	317	77	268	78
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	16	1643	180	266	1240	17	421	1290	1585	61	1339	392
Grp Volume(v), veh/h	686	0	0	552	0	0	149	0	129	183	0	0
Grp Sat Flow(s),veh/h/ln	1838	0	0	1522	0	0	1712	0	1585	1792	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.6	0.0	0.0	11.8	0.0	0.0	4.1	0.0	4.3	5.3	0.0	0.0
Prop In Lane	0.02		0.10	0.23		0.01	0.36		1.00	0.08		0.22
Lane Grp Cap(c), veh/h	1140	0	0	967	0	0	424	0	317	423	0	0
V/C Ratio(X)	0.60	0.00	0.00	0.57	0.00	0.00	0.35	0.00	0.41	0.43	0.00	0.00
Avail Cap(c_a), veh/h	1140	0	0	967	0	0	471	0	365	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.1	0.0	0.0	7.4	0.0	0.0	20.9	0.0	20.9	21.3	0.0	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	2.4	0.0	0.0	0.5	0.0	0.8	0.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.7	0.0	0.0	0.8	0.0	0.7	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.5	0.0	0.0	9.8	0.0	0.0	21.4	0.0	21.7	22.0	0.0	0.0
LnGrp LOS	B			A			C		C	C		
Approach Vol, veh/h		686			552			278				183
Approach Delay, s/veh		10.5			9.8			21.5				22.0
Approach LOS		B			A			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		16.6		7.3		13.8		6.3				
Green Ext Time (p_c), s		5.4		0.5		4.9		0.9				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				13.3								
HCM 6th LOS				B								

Notes
 User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	630	51	82	412	25	70
Future Vol, veh/h	630	51	82	412	25	70
Conflicting Peds, #/hr	0	7	7	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	30	55	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	1	2	0	3
Mvmt Flow	630	51	82	412	25	70

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	688	0	1213 637
Stage 1	-	-	-	-	637 -
Stage 2	-	-	-	-	576 -
Critical Hdwy	-	-	4.11	-	6.4 6.23
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.209	-	3.5 3.327
Pot Cap-1 Maneuver	-	-	911	-	203 475
Stage 1	-	-	-	-	531 -
Stage 2	-	-	-	-	566 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	906	-	184 472
Mov Cap-2 Maneuver	-	-	-	-	184 -
Stage 1	-	-	-	-	528 -
Stage 2	-	-	-	-	514 -

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1.6	17.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	184	472	-	-	906	-
HCM Lane V/C Ratio	0.136	0.148	-	-	0.091	-
HCM Ctrl Dly (s/v)	27.6	14	-	-	9.4	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q (veh)	0.5	0.5	-	-	0.3	-

Queues
1: Creditview Road & Mayfield Road

Existing 2024
Saturday

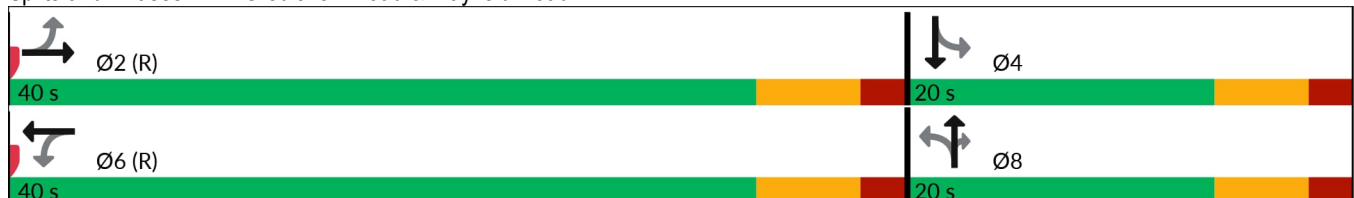


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations		+		+		+	+		+
Traffic Volume (vph)	24	485	119	397	26	81	103	4	75
Future Volume (vph)	24	485	119	397	26	81	103	4	75
Lane Group Flow (vph)	0	570	0	543	0	111	106	0	105
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Perm	NA
Protected Phases		2		6		8			4
Permitted Phases	2		6		8		8	4	
Detector Phase	2	2	6	6	8	8	8	4	4
Switch Phase									
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)		6.6		6.6		6.2	6.2		6.2
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio		0.48		0.56		0.33	0.26		0.28
Control Delay (s/veh)		8.5		10.5		23.5	7.0		18.6
Queue Delay		0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)		8.5		10.5		23.5	7.0		18.6
Queue Length 50th (m)		34.0		36.0		11.1	0.0		8.0
Queue Length 95th (m)		59.6		67.8		23.4	10.5		19.4
Internal Link Dist (m)		308.9		183.6		258.3			276.9
Turn Bay Length (m)							15.0		
Base Capacity (vph)		1198		974		385	448		429
Starvation Cap Reductn		0		0		0	0		0
Spillback Cap Reductn		0		0		0	0		0
Storage Cap Reductn		0		0		0	0		0
Reduced v/c Ratio		0.48		0.56		0.29	0.24		0.24

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 22.5 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Existing 2024
 Saturday



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+	+		+	
Traffic Volume (veh/h)	24	485	44	119	397	11	26	81	103	4	75	23
Future Volume (veh/h)	24	485	44	119	397	11	26	81	103	4	75	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1796	1885	1900	1900	1900	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	25	500	45	123	409	11	27	84	106	4	77	24
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	7	1	0	0	0	1	0	0	1	0
Cap, veh/h	83	967	85	240	762	19	122	307	321	66	273	82
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	35	1647	144	283	1297	33	239	1539	1606	21	1366	411
Grp Volume(v), veh/h	570	0	0	543	0	0	111	0	106	105	0	0
Grp Sat Flow(s),veh/h/ln	1826	0	0	1613	0	0	1778	0	1606	1798	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.0	0.0	0.0	10.1	0.0	0.0	3.0	0.0	3.4	3.0	0.0	0.0
Prop In Lane	0.04		0.08	0.23		0.02	0.24		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	1135	0	0	1021	0	0	429	0	321	421	0	0
V/C Ratio(X)	0.50	0.00	0.00	0.53	0.00	0.00	0.26	0.00	0.33	0.25	0.00	0.00
Avail Cap(c_a), veh/h	1135	0	0	1021	0	0	481	0	369	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.4	0.0	0.0	7.2	0.0	0.0	20.4	0.0	20.6	20.4	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	2.0	0.0	0.0	0.3	0.0	0.6	0.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.6	0.0	0.0	0.6	0.0	0.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.0	0.0	0.0	9.2	0.0	0.0	20.7	0.0	21.2	20.7	0.0	0.0
LnGrp LOS	A			A			C		C	C		
Approach Vol, veh/h		570			543			217				105
Approach Delay, s/veh		9.0			9.2			21.0				20.7
Approach LOS		A			A			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		13.0		5.0		12.1		5.4				
Green Ext Time (p_c), s		4.6		0.3		4.8		0.7				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				11.7								
HCM 6th LOS				B								
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	506	34	86	395	23	79
Future Vol, veh/h	506	34	86	395	23	79
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	30	55	-	0	0
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	4	3
Mvmt Flow	506	34	86	395	23	79

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	542	0	1075 508
Stage 1	-	-	-	-	508 -
Stage 2	-	-	-	-	567 -
Critical Hdwy	-	-	4.1	-	6.44 6.23
Critical Hdwy Stg 1	-	-	-	-	5.44 -
Critical Hdwy Stg 2	-	-	-	-	5.44 -
Follow-up Hdwy	-	-	2.2	-	3.536 3.327
Pot Cap-1 Maneuver	-	-	1037	-	241 563
Stage 1	-	-	-	-	600 -
Stage 2	-	-	-	-	564 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1035	-	221 562
Mov Cap-2 Maneuver	-	-	-	-	221 -
Stage 1	-	-	-	-	599 -
Stage 2	-	-	-	-	517 -

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1.6	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	221	562	-	-	1035	-
HCM Lane V/C Ratio	0.104	0.141	-	-	0.083	-
HCM Ctrl Dly (s/v)	23.2	12.5	-	-	8.8	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q (veh)	0.3	0.5	-	-	0.3	-

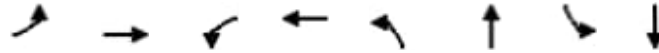


APPENDIX H

**Future Background (2029)
Intersection Capacity Analysis**

Queues
1: Creditview Road & Mayfield Road

Future Background 2029 - Unsig
Weekday AM

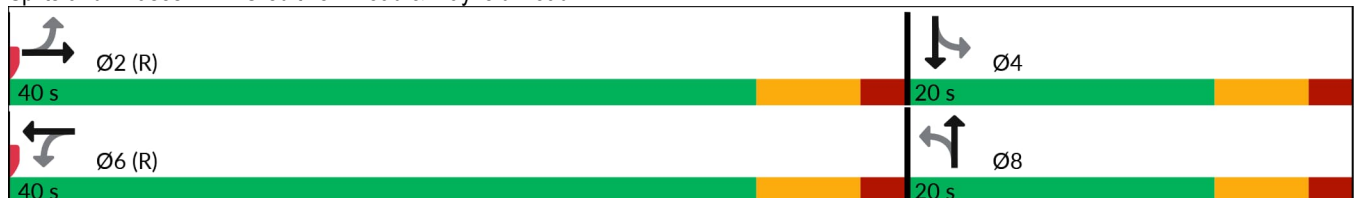


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	29	909	98	1134	52	88	9	131
Future Volume (vph)	29	909	98	1134	52	88	9	131
Lane Group Flow (vph)	31	1024	103	1198	55	202	9	161
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	6.2	6.2
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.15	0.36	0.36	0.60	0.25	0.27	0.04	0.23
Control Delay (s/veh)	7.9	6.7	11.1	9.5	23.7	11.2	19.9	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.9	6.7	11.1	9.5	23.7	11.2	19.9	18.1
Queue Length 50th (m)	1.4	19.1	5.5	40.5	5.4	4.6	0.9	7.0
Queue Length 95th (m)	5.3	26.5	15.5	57.6	14.2	12.4	4.1	14.1
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	208	2868	286	2012	248	831	270	804
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	0.36	0.36	0.60	0.22	0.24	0.03	0.20

Intersection Summary

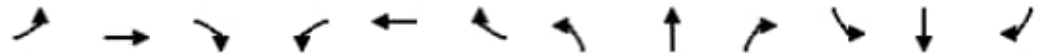
Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
1: Creditview Road & Mayfield Road

Future Background 2029 - Unsig
Weekday AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑		↖	↑↑		↗	↑↑		↖	↑↑	
Traffic Volume (veh/h)	29	909	64	98	1134	4	52	88	104	9	131	22
Future Volume (veh/h)	29	909	64	98	1134	4	52	88	104	9	131	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1767	1856	1826	1900	1707	1885	1856	1900	1856	1826
Adj Flow Rate, veh/h	31	957	67	103	1194	4	55	93	109	9	138	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	5	9	3	5	0	13	1	3	0	3	5
Cap, veh/h	299	2791	195	384	2081	7	300	358	319	289	606	99
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	474	4757	332	546	3546	12	1118	1791	1598	1199	3033	496
Grp Volume(v), veh/h	31	668	356	103	584	614	55	93	109	9	79	82
Grp Sat Flow(s),veh/h/ln	474	1662	1766	546	1735	1824	1118	1791	1598	1199	1763	1766
Q Serve(g_s), s	2.6	6.2	6.3	7.2	12.6	12.6	2.6	2.6	3.5	0.4	2.3	2.3
Cycle Q Clear(g_c), s	15.2	6.2	6.3	13.5	12.6	12.6	4.9	2.6	3.5	3.9	2.3	2.3
Prop In Lane	1.00		0.19	1.00		0.01	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	299	1950	1036	384	1018	1070	300	358	319	289	352	353
V/C Ratio(X)	0.10	0.34	0.34	0.27	0.57	0.57	0.18	0.26	0.34	0.03	0.22	0.23
Avail Cap(c_a), veh/h	299	1950	1036	384	1018	1070	334	412	367	326	405	406
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	6.4	6.4	9.9	7.7	7.7	22.2	20.3	20.6	22.3	20.1	20.1
Incr Delay (d2), s/veh	0.7	0.5	0.9	1.7	2.4	2.2	0.3	0.4	0.6	0.0	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.3	0.3	0.7	0.7	0.4	0.6	0.7	0.1	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.1	6.9	7.3	11.6	10.1	10.0	22.5	20.6	21.2	22.3	20.4	20.5
LnGrp LOS	B	A	A	B	B	A	C	C	C	C	C	C
Approach Vol, veh/h		1055			1301			257			170	
Approach Delay, s/veh		7.2			10.1			21.3			20.6	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		17.2		5.9		15.5		6.9				
Green Ext Time (p_c), s		7.6		0.6		10.2		0.9				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	10.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↘	↗	↘	↗	
Traffic Vol, veh/h	0	920	22	39	1173	0	43	0	92	0	0	0
Future Vol, veh/h	0	920	22	39	1173	0	43	0	92	0	0	0
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	63	-	63	40	-	30	-	-	0	-	-	-
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	5	18	8	5	0	0	0	5	0	0	0
Mvmt Flow	0	920	22	39	1173	0	43	0	92	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1173	0	0	942	0	0	1585	2171	460	1619	2193	587
Stage 1	-	-	-	-	-	-	920	920	-	1251	1251	-
Stage 2	-	-	-	-	-	-	665	1251	-	368	942	-
Critical Hdwy	4.1	-	-	5.46	-	-	6.95	6.5	7.2	6.95	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.7	5.5	-
Follow-up Hdwy	2.2	-	-	3.18	-	-	3.65	4	3.95	3.65	4	3.3
Pot Cap-1 Maneuver	603	-	-	400	-	-	93	47	463	88	46	458
Stage 1	-	-	-	-	-	-	235	352	-	182	246	-
Stage 2	-	-	-	-	-	-	408	246	-	596	344	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	603	-	-	400	-	-	86	42	463	65	42	458
Mov Cap-2 Maneuver	-	-	-	-	-	-	86	42	-	65	42	-
Stage 1	-	-	-	-	-	-	235	352	-	182	222	-
Stage 2	-	-	-	-	-	-	368	222	-	478	344	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0			0.5			36.4			0		
HCM LOS							E			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	86	463	603	-	-	400	-	-	-	-
HCM Lane V/C Ratio	0.5	0.199	-	-	-	0.098	-	-	-	-
HCM Ctrl Dly (s/v)	82.9	14.7	0	-	-	15	-	-	0	0
HCM Lane LOS	F	B	A	-	-	B	-	-	A	A
HCM 95th %tile Q (veh)	2.1	0.7	0	-	-	0.3	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	942	1216	0	0	0
Future Vol, veh/h	0	942	1216	0	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	-	-	-	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	0	942	1216	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1012	1212	0	0	0
Future Vol, veh/h	0	1012	1212	0	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	-	-	-	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	0	1012	1212	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	606
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	445
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	445
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↑↑	↑↑	↗
Traffic Vol, veh/h	0	0	0	121	162	0
Future Vol, veh/h	0	0	0	121	162	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	0	121	162	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	223	81	162	0	-
Stage 1	162	-	-	-	-
Stage 2	61	-	-	-	-
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	751	969	1429	-	-
Stage 1	856	-	-	-	-
Stage 2	960	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	751	969	1429	-	-
Mov Cap-2 Maneuver	751	-	-	-	-
Stage 1	856	-	-	-	-
Stage 2	960	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1429	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	121	162	0
Future Vol, veh/h	0	0	0	121	162	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	0	121	162	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	81	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	969	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	969	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q (veh)	-	-	-	-

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2			
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-
Pot Cap-1 Maneuver	1027	899	1090	1027	899	-	1635	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	899	1090	1027	899	-	1635	-	-	-	-
Mov Cap-2 Maneuver	-	899	-	1027	899	-	-	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↖	↗
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	1	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.2	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	1090	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	1090	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q (veh)	-	-	-	-

Queues
1: Creditview Road & Mayfield Road

Future Background 2029
Weekday AM

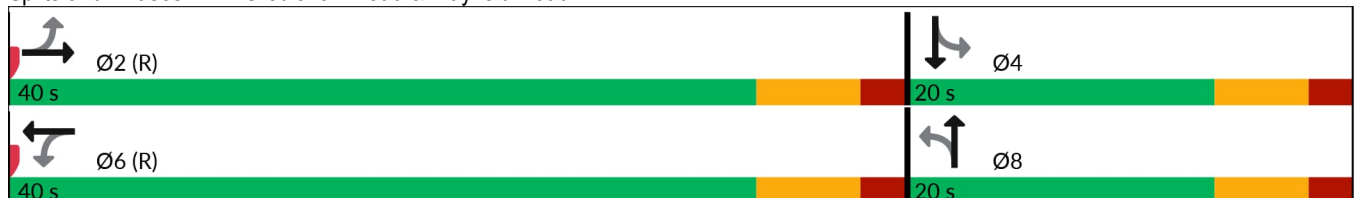


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	29	909	98	1134	52	88	9	131
Future Volume (vph)	29	909	98	1134	52	88	9	131
Lane Group Flow (vph)	31	1024	103	1198	55	202	9	161
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	6.2	6.2
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.15	0.36	0.36	0.60	0.25	0.27	0.04	0.23
Control Delay (s/veh)	6.6	5.5	11.1	9.5	23.7	11.2	19.9	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.6	5.5	11.1	9.5	23.7	11.2	19.9	18.1
Queue Length 50th (m)	1.4	19.1	5.5	40.5	5.4	4.6	0.9	7.0
Queue Length 95th (m)	3.8	22.3	15.5	57.6	14.2	12.4	4.1	14.1
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	208	2868	286	2012	248	831	270	804
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	0.36	0.36	0.60	0.22	0.24	0.03	0.20

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
1: Creditview Road & Mayfield Road

Future Background 2029
Weekday AM



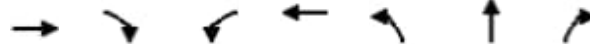
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↘		↖	↗↘		↖	↗↘		↖	↗↘	
Traffic Volume (veh/h)	29	909	64	98	1134	4	52	88	104	9	131	22
Future Volume (veh/h)	29	909	64	98	1134	4	52	88	104	9	131	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1767	1856	1826	1900	1707	1885	1856	1900	1856	1826
Adj Flow Rate, veh/h	31	957	67	103	1194	4	55	93	109	9	138	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	5	9	3	5	0	13	1	3	0	3	5
Cap, veh/h	299	2791	195	384	2081	7	300	358	319	289	606	99
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	474	4757	332	546	3546	12	1118	1791	1598	1199	3033	496
Grp Volume(v), veh/h	31	668	356	103	584	614	55	93	109	9	79	82
Grp Sat Flow(s),veh/h/ln	474	1662	1766	546	1735	1824	1118	1791	1598	1199	1763	1766
Q Serve(g_s), s	2.6	6.2	6.3	7.2	12.6	12.6	2.6	2.6	3.5	0.4	2.3	2.3
Cycle Q Clear(g_c), s	15.2	6.2	6.3	13.5	12.6	12.6	4.9	2.6	3.5	3.9	2.3	2.3
Prop In Lane	1.00		0.19	1.00		0.01	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	299	1950	1036	384	1018	1070	300	358	319	289	352	353
V/C Ratio(X)	0.10	0.34	0.34	0.27	0.57	0.57	0.18	0.26	0.34	0.03	0.22	0.23
Avail Cap(c_a), veh/h	299	1950	1036	384	1018	1070	334	412	367	326	405	406
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	6.4	6.4	9.9	7.7	7.7	22.2	20.3	20.6	22.3	20.1	20.1
Incr Delay (d2), s/veh	0.7	0.5	0.9	1.7	2.4	2.2	0.3	0.4	0.6	0.0	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.3	0.3	0.7	0.7	0.4	0.6	0.7	0.1	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.1	6.9	7.3	11.6	10.1	10.0	22.5	20.6	21.2	22.3	20.4	20.5
LnGrp LOS	B	A	A	B	B	A	C	C	C	C	C	C
Approach Vol, veh/h		1055			1301			257			170	
Approach Delay, s/veh		7.2			10.1			21.3			20.6	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		17.2		5.9		15.5		6.9				
Green Ext Time (p_c), s		7.6		0.6		10.2		0.9				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	10.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

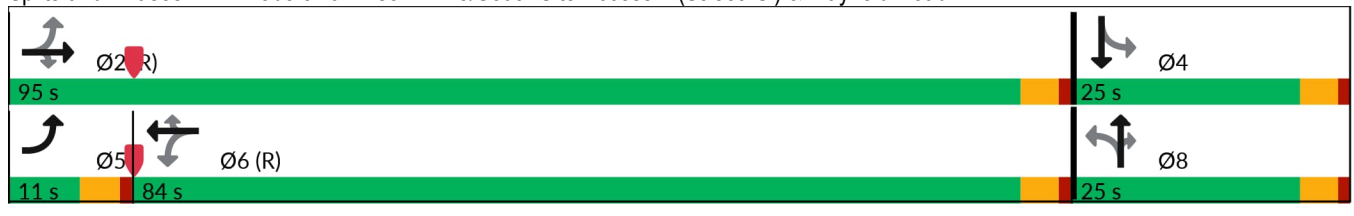


Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	Ø4	Ø5
Lane Configurations	↑↑↑	↑	↑	↑↑		↑	↑		
Traffic Volume (vph)	920	22	39	1173	43	0	92		
Future Volume (vph)	920	22	39	1173	43	0	92		
Lane Group Flow (vph)	920	22	39	1173	0	43	92		
Turn Type	NA	Perm	Perm	NA	Perm	NA	Perm		
Protected Phases	2			6		8		4	5
Permitted Phases		2	6		8		8		
Detector Phase	2	2	6	6	8	8	8		
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	9.5
Total Split (s)	95.0	95.0	84.0	84.0	25.0	25.0	25.0	25.0	11.0
Total Split (%)	79.2%	79.2%	70.0%	70.0%	20.8%	20.8%	20.8%	21%	9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5	4.5		
Lead/Lag			Lag	Lag					Lead
Lead-Lag Optimize?			Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio	0.22	0.02	0.09	0.40		0.40	0.46		
Control Delay (s/veh)	1.9	0.7	4.0	6.1		62.8	17.9		
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay (s/veh)	1.9	0.7	4.0	6.1		62.8	17.9		
Queue Length 50th (m)	11.0	0.0	2.7	64.7		10.4	0.0		
Queue Length 95th (m)	17.5	1.3	m5.4	87.2		22.1	16.0		
Internal Link Dist (m)	81.4			147.0		205.6			
Turn Bay Length (m)		63.0	40.0						
Base Capacity (vph)	4198	1153	440	2921		245	336		
Starvation Cap Reductn	0	0	0	0		0	0		
Spillback Cap Reductn	0	0	0	0		0	0		
Storage Cap Reductn	0	0	0	0		0	0		
Reduced v/c Ratio	0.22	0.02	0.09	0.40		0.18	0.27		

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road





























HCM 6th Signalized Intersection Summary

Future Background 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Weekday AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 							
Traffic Volume (veh/h)	0	920	22	39	1173	0	43	0	92	0	0	0
Future Volume (veh/h)	0	920	22	39	1173	0	43	0	92	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1633	1781	1826	1900	1900	1900	1826	1900	1900	1900
Adj Flow Rate, veh/h	0	920	22	39	1173	0	43	0	92	0	0	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	5	18	8	5	0	0	0	5	0	0	0
Cap, veh/h	435	4224	1173	521	2940	1364	172	0	120	60	148	0
Arrive On Green	0.00	0.85	0.85	0.85	0.85	0.00	0.08	0.00	0.08	0.00	0.00	0.00
Sat Flow, veh/h	1810	4985	1384	567	3469	1610	1440	0	1547	1325	1900	0
Grp Volume(v), veh/h	0	920	22	39	1173	0	43	0	92	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1662	1384	567	1735	1610	1440	0	1547	1325	1900	0
Q Serve(g_s), s	0.0	4.1	0.3	1.7	9.4	0.0	3.4	0.0	7.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.1	0.3	5.8	9.4	0.0	3.4	0.0	7.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	435	4224	1173	521	2940	1364	172	0	120	60	148	0
V/C Ratio(X)	0.00	0.22	0.02	0.07	0.40	0.00	0.25	0.00	0.77	0.00	0.00	0.00
Avail Cap(c_a), veh/h	532	4224	1173	521	2940	1364	306	0	264	183	325	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.7	1.4	2.3	2.1	0.0	52.6	0.0	54.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.3	0.4	0.0	0.8	0.0	9.7	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.2	0.0	1.0	0.0	2.6	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	1.8	1.5	2.5	2.5	0.0	53.4	0.0	63.9	0.0	0.0	0.0
LnGrp LOS		A	A	A	A		D		E			
Approach Vol, veh/h		942			1212			135				0
Approach Delay, s/veh		1.8			2.5			60.6				0.0
Approach LOS		A			A			E				
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		106.2		13.8	0.0	106.2		13.8				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		90.5		20.5	6.5	79.5		20.5				
Max Q Clear Time (g_c+I1), s		6.1		0.0	0.0	11.4		9.0				
Green Ext Time (p_c), s		10.4		0.0	0.0	16.5		0.4				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				5.7								
HCM 6th LOS				A								

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	942	1216	0	0	0
Future Vol, veh/h	0	942	1216	0	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	-	-	-	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	0	942	1216	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	608
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	444
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	444
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1012	1212	0	0	0
Future Vol, veh/h	0	1012	1212	0	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	-	-	-	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	0	1012	1212	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	606
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	445
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	445
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	121	162	0
Future Vol, veh/h	0	0	0	121	162	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	0	121	162	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	223	81	162	0	-
Stage 1	162	-	-	-	-
Stage 2	61	-	-	-	-
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	751	969	1429	-	-
Stage 1	856	-	-	-	-
Stage 2	960	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	751	969	1429	-	-
Mov Cap-2 Maneuver	751	-	-	-	-
Stage 1	856	-	-	-	-
Stage 2	960	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1429	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	121	162	0
Future Vol, veh/h	0	0	0	121	162	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	0	121	162	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	81	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	969	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	969	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q (veh)	-	-	-

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		↑	↑		↑	↑	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2			
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-
Pot Cap-1 Maneuver	1027	899	1090	1027	899	-	1635	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	899	1090	1027	899	-	1635	-	-	-	-
Mov Cap-2 Maneuver	-	899	-	1027	899	-	-	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↖	↗
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	1	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	1090	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	1090	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q (veh)	-	-	-

Queues
1: Creditview Road & Mayfield Road

Future Background 2029 - Unsig
Weekday PM

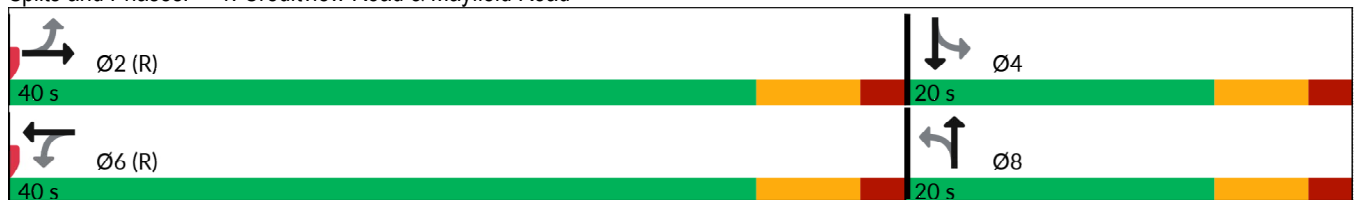


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	17	1196	134	836	56	102	14	137
Future Volume (vph)	17	1196	134	836	56	102	14	137
Lane Group Flow (vph)	18	1320	140	878	58	249	15	187
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	6.2	6.2
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.05	0.44	0.70	0.42	0.25	0.36	0.07	0.26
Control Delay (s/veh)	5.9	7.4	32.8	7.6	23.6	17.8	20.4	16.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.9	7.4	32.8	7.6	23.6	17.8	20.4	16.4
Queue Length 50th (m)	0.8	26.6	9.9	25.6	5.7	10.2	1.4	7.3
Queue Length 95th (m)	3.1	35.3	#40.4	36.6	14.9	19.3	5.7	15.0
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	336	2983	200	2081	263	788	258	835
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	0.44	0.70	0.42	0.22	0.32	0.06	0.22

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
1: Creditview Road & Mayfield Road

Future Background 2029 - Unsig
Weekday PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑		↖	↑↑		↗	↑↑		↖	↑↑	
Traffic Volume (veh/h)	17	1196	71	134	836	7	56	102	137	14	137	42
Future Volume (veh/h)	17	1196	71	134	836	7	56	102	137	14	137	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1767	1900	1885	670	1841	1885	1870	1900	1900	1900
Adj Flow Rate, veh/h	18	1246	74	140	871	7	58	106	143	15	143	44
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	9	0	1	83	4	1	2	0	0	0
Cap, veh/h	413	2915	173	309	2137	17	302	358	319	259	548	163
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	642	4968	295	422	3642	29	1178	1791	1598	1149	2742	816
Grp Volume(v), veh/h	18	860	460	140	428	450	58	106	143	15	92	95
Grp Sat Flow(s),veh/h/ln	642	1716	1832	422	1791	1880	1178	1791	1598	1149	1805	1753
Q Serve(g_s), s	0.9	8.3	8.3	16.4	7.8	7.8	2.6	3.0	4.7	0.7	2.6	2.7
Cycle Q Clear(g_c), s	8.7	8.3	8.3	24.7	7.8	7.8	5.4	3.0	4.7	5.4	2.6	2.7
Prop In Lane	1.00		0.16	1.00		0.02	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	413	2013	1075	309	1051	1103	302	358	319	259	361	351
V/C Ratio(X)	0.04	0.43	0.43	0.45	0.41	0.41	0.19	0.30	0.45	0.06	0.26	0.27
Avail Cap(c_a), veh/h	413	2013	1075	309	1051	1103	337	412	367	294	415	403
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.1	6.8	6.8	13.7	6.7	6.7	22.6	20.4	21.1	23.5	20.2	20.3
Incr Delay (d2), s/veh	0.2	0.7	1.2	4.7	1.2	1.1	0.3	0.5	1.0	0.1	0.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.4	0.7	0.3	0.3	0.4	0.7	0.9	0.1	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.3	7.5	8.1	18.4	7.9	7.9	22.9	20.9	22.1	23.6	20.6	20.7
LnGrp LOS	A	A	A	B	A	A	C	C	C	C	C	C
Approach Vol, veh/h		1338			1018			307			202	
Approach Delay, s/veh		7.7			9.3			21.8			20.9	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		10.7		7.4		26.7		7.4				
Green Ext Time (p_c), s		11.7		0.6		4.2		1.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				10.7								
HCM 6th LOS				B								
Notes												
User approved pedestrian interval to be less than phase max green.												

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	0	1256	51	82	854	0	25	0	70	0	0	0
Future Vol, veh/h	0	1256	51	82	854	0	25	0	70	0	0	0
Conflicting Peds, #/hr	0	0	7	7	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	63	-	63	40	-	30	-	-	0	-	-	-
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	2	2	1	2	0	0	0	3	0	0	0
Mvmt Flow	0	1256	51	82	854	0	25	0	70	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	854	0	0	1314	0	0	1854	2281	635	1520	2332	427
Stage 1	-	-	-	-	-	-	1263	1263	-	1018	1018	-
Stage 2	-	-	-	-	-	-	591	1018	-	502	1314	-
Critical Hdwy	4.1	-	-	5.32	-	-	6.95	6.5	7.16	6.95	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.7	5.5	-
Follow-up Hdwy	2.2	-	-	3.11	-	-	3.65	4	3.93	3.65	4	3.3
Pot Cap-1 Maneuver	794	-	-	278	-	-	61	40	359	103	37	582
Stage 1	-	-	-	-	-	-	135	243	-	252	317	-
Stage 2	-	-	-	-	-	-	451	317	-	494	230	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	794	-	-	276	-	-	47	28	357	64	26	582
Mov Cap-2 Maneuver	-	-	-	-	-	-	47	28	-	64	26	-
Stage 1	-	-	-	-	-	-	134	242	-	252	223	-
Stage 2	-	-	-	-	-	-	317	223	-	397	229	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	2.1	51.8	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	47	357	794	-	-	276	-	-	-	-
HCM Lane V/C Ratio	0.532	0.196	-	-	-	0.297	-	-	-	-
HCM Ctrl Dly (s/v)	147.8	17.5	0	-	-	23.5	-	-	0	0
HCM Lane LOS	F	C	A	-	-	C	-	-	A	A
HCM 95th %tile Q (veh)	2	0.7	0	-	-	1.2	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1307	879	0	0	0
Future Vol, veh/h	0	1307	879	0	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	-	-	-	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	0	1307	879	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1326	936	0	0	0
Future Vol, veh/h	0	1326	936	0	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	-	-	-	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	0	1326	936	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↑↑	↑↑	↗
Traffic Vol, veh/h	0	0	0	126	193	0
Future Vol, veh/h	0	0	0	126	193	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	0	126	193	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	256	97	193	0	0
Stage 1	193	-	-	-	-
Stage 2	63	-	-	-	-
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	716	947	1392	-	-
Stage 1	827	-	-	-	-
Stage 2	958	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	716	947	1392	-	-
Mov Cap-2 Maneuver	716	-	-	-	-
Stage 1	827	-	-	-	-
Stage 2	958	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1392	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	0	0	126	193	0
Future Vol, veh/h	0	0	0	126	193	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	0	126	193	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	97	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	947	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	947	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q (veh)	-	-	-

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2			
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-
Pot Cap-1 Maneuver	1027	899	1090	1027	899	-	1635	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	899	1090	1027	899	-	1635	-	-	-	-
Mov Cap-2 Maneuver	-	899	-	1027	899	-	-	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↖	↗
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	1	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	1090	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	1090	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q (veh)	-	-	-

Queues
1: Creditview Road & Mayfield Road

Future Background 2029
Weekday PM



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↶	↶↶↶	↶	↶↶	↶	↶↶	↶	↶↶
Traffic Volume (vph)	17	1196	134	836	56	102	14	137
Future Volume (vph)	17	1196	134	836	56	102	14	137
Lane Group Flow (vph)	18	1320	140	878	58	249	15	187
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		2		6		8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	7	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	10.0	31.2
Total Split (s)	56.0	56.0	56.0	56.0	33.0	33.0	31.0	64.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	27.5%	27.5%	25.8%	53.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	5.0	6.2
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.04	0.35	0.55	0.33	0.46	0.51	0.09	0.33
Control Delay (s/veh)	5.4	5.5	20.0	6.7	61.5	24.8	38.7	34.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.4	5.5	20.0	6.7	61.5	24.8	38.7	34.2
Queue Length 50th (m)	0.7	18.0	9.9	25.6	13.9	13.1	3.4	17.7
Queue Length 95th (m)	3.4	65.0	#51.4	62.3	27.3	25.5	8.5	24.8
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	422	3758	254	2627	255	836	393	1700
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	0.04	0.35	0.55	0.33	0.23	0.30	0.04	0.11

Intersection Summary

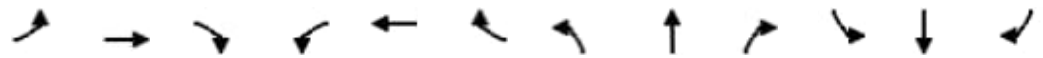
Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
1: Creditview Road & Mayfield Road

Future Background 2029
Weekday PM



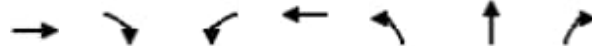
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑		↖	↑↑		↗	↑↑		↖	↑↑	
Traffic Volume (veh/h)	17	1196	71	134	836	7	56	102	137	14	137	42
Future Volume (veh/h)	17	1196	71	134	836	7	56	102	137	14	137	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1767	1900	1885	670	1841	1885	1870	1900	1900	1900
Adj Flow Rate, veh/h	18	1246	74	140	871	7	58	106	143	15	143	44
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	9	0	1	83	4	1	2	0	0	0
Cap, veh/h	464	3565	212	323	2613	21	199	211	188	125	482	143
Arrive On Green	0.72	0.72	0.72	0.72	0.72	0.72	0.12	0.12	0.12	0.02	0.18	0.18
Sat Flow, veh/h	642	4968	295	422	3642	29	1178	1791	1598	1810	2742	816
Grp Volume(v), veh/h	18	860	460	140	428	450	58	106	143	15	92	95
Grp Sat Flow(s),veh/h/ln	642	1716	1832	422	1791	1880	1178	1791	1598	1810	1805	1753
Q Serve(g_s), s	1.3	11.3	11.3	22.4	10.7	10.7	5.5	6.7	10.4	0.9	5.3	5.6
Cycle Q Clear(g_c), s	11.9	11.3	11.3	33.8	10.7	10.7	5.5	6.7	10.4	0.9	5.3	5.6
Prop In Lane	1.00		0.16	1.00		0.02	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	464	2462	1315	323	1285	1349	199	211	188	125	317	308
V/C Ratio(X)	0.04	0.35	0.35	0.43	0.33	0.33	0.29	0.50	0.76	0.12	0.29	0.31
Avail Cap(c_a), veh/h	464	2462	1315	323	1285	1349	323	400	357	488	869	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	6.4	6.4	12.7	6.3	6.3	49.1	49.7	51.3	44.3	43.0	43.1
Incr Delay (d2), s/veh	0.2	0.4	0.7	4.2	0.7	0.7	0.8	1.9	6.2	0.4	0.5	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	1.2	1.3	1.1	1.1	1.4	2.5	3.7	0.3	1.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.7	6.8	7.1	16.9	7.0	7.0	49.9	51.5	57.5	44.7	43.5	43.7
LnGrp LOS	A	A	A	B	A	A	D	D	E	D	D	D
Approach Vol, veh/h		1338			1018			307			202	
Approach Delay, s/veh		6.9			8.3			54.0			43.6	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		92.7		27.3		92.7	7.0	20.3				
Change Period (Y+Rc), s		6.6		6.2		6.6	5.0	6.2				
Max Green Setting (Gmax), s		49.4		57.8		49.4	26.0	26.8				
Max Q Clear Time (g_c+I1), s		13.9		7.6		35.8	2.9	12.4				
Green Ext Time (p_c), s		14.5		1.4		7.2	0.0	1.7				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	15.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	Ø4	Ø5
Lane Configurations	↑↑↑	↗	↖	↑↑		↖	↗		
Traffic Volume (vph)	1256	51	82	854	25	0	70		
Future Volume (vph)	1256	51	82	854	25	0	70		
Lane Group Flow (vph)	1256	51	82	854	0	25	70		
Turn Type	NA	Perm	Perm	NA	Perm	NA	Perm		
Protected Phases	2			6		8		4	5
Permitted Phases		2	6		8		8		
Detector Phase	2	2	6	6	8	8	8		
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	9.5
Total Split (s)	76.0	76.0	46.0	46.0	44.0	44.0	44.0	44.0	30.0
Total Split (%)	63.3%	63.3%	38.3%	38.3%	36.7%	36.7%	36.7%	37%	25%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5	4.5		
Lead/Lag			Lag	Lag					Lead
Lead-Lag Optimize?			Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio	0.28	0.04	0.24	0.27		0.27	0.44		
Control Delay (s/veh)	1.6	0.5	3.4	1.5		59.9	24.2		
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay (s/veh)	1.6	0.5	3.4	1.5		59.9	24.2		
Queue Length 50th (m)	14.3	0.0	2.2	12.2		6.0	1.7		
Queue Length 95th (m)	21.9	1.7	6.3	19.5		15.1	16.3		
Internal Link Dist (m)	81.4			147.0		205.6			
Turn Bay Length (m)		63.0	40.0						
Base Capacity (vph)	4499	1332	340	3131		473	552		
Starvation Cap Reductn	0	0	0	0		0	0		
Spillback Cap Reductn	0	0	0	0		0	0		
Storage Cap Reductn	0	0	0	0		0	0		
Reduced v/c Ratio	0.28	0.04	0.24	0.27		0.05	0.13		

Intersection Summary

Cycle Length: 120

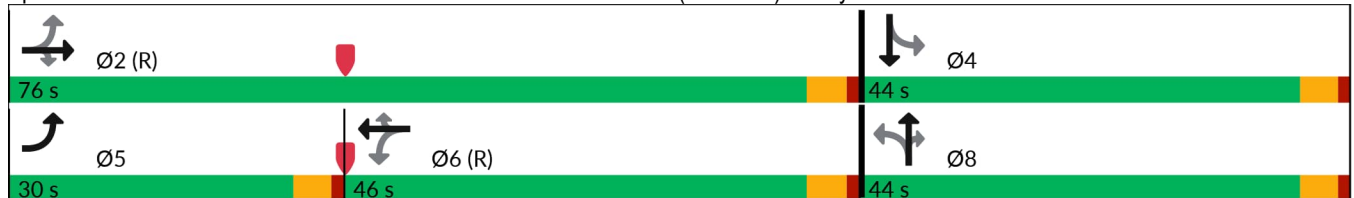
Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Splits and Phases: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road



HCM 6th Signalized Intersection Summary

Future Background 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Weekday PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↖	↗	↘	↗	↘
Traffic Volume (veh/h)	0	1256	51	82	854	0	25	0	70	0	0	0
Future Volume (veh/h)	0	1256	51	82	854	0	25	0	70	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1885	1870	1900	1900	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	0	1256	51	82	854	0	25	0	70	0	0	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	1	2	0	0	0	3	0	0	0
Cap, veh/h	600	4409	1363	407	3069	1390	149	0	97	60	117	0
Arrive On Green	0.00	0.86	0.86	0.86	0.86	0.00	0.06	0.00	0.06	0.00	0.00	0.00
Sat Flow, veh/h	1810	5106	1579	424	3554	1610	1440	0	1572	1352	1900	0
Grp Volume(v), veh/h	0	1256	51	82	854	0	25	0	70	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1702	1579	424	1777	1610	1440	0	1572	1352	1900	0
Q Serve(g_s), s	0.0	5.3	0.5	5.2	5.2	0.0	2.0	0.0	5.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.3	0.5	10.5	5.2	0.0	2.0	0.0	5.2	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	600	4409	1363	407	3069	1390	149	0	97	60	117	0
V/C Ratio(X)	0.00	0.28	0.04	0.20	0.28	0.00	0.17	0.00	0.72	0.00	0.00	0.00
Avail Cap(c_a), veh/h	983	4409	1363	407	3069	1390	534	0	518	422	625	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.5	1.2	2.4	1.5	0.0	53.8	0.0	55.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.1	1.1	0.2	0.0	0.5	0.0	9.8	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.1	0.1	0.0	0.6	0.0	2.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	1.6	1.2	3.5	1.7	0.0	54.3	0.0	65.1	0.0	0.0	0.0
LnGrp LOS		A	A	A	A		D		E			
Approach Vol, veh/h		1307			936			95				0
Approach Delay, s/veh		1.6			1.9			62.3				0.0
Approach LOS		A			A			E				
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		108.1		11.9	0.0	108.1		11.9				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		71.5		39.5	25.5	41.5		39.5				
Max Q Clear Time (g_c+I1), s		7.3		0.0	0.0	12.5		7.2				
Green Ext Time (p_c), s		16.9		0.0	0.0	10.1		0.5				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				4.2								
HCM 6th LOS				A								

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1307	879	0	0	0
Future Vol, veh/h	0	1307	879	0	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	-	-	-	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	0	1307	879	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1326	936	0	0	0
Future Vol, veh/h	0	1326	936	0	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	-	-	-	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	0	1326	936	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	468
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	547
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	547
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	126	193	0
Future Vol, veh/h	0	0	0	126	193	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	0	126	193	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	256	97	193	0	-
Stage 1	193	-	-	-	-
Stage 2	63	-	-	-	-
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	716	947	1392	-	-
Stage 1	827	-	-	-	-
Stage 2	958	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	716	947	1392	-	-
Mov Cap-2 Maneuver	716	-	-	-	-
Stage 1	827	-	-	-	-
Stage 2	958	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1392	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	126	193	0
Future Vol, veh/h	0	0	0	126	193	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	0	126	193	0

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	97	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	947	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	947	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q (veh)	-	-	-	-

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2			
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-
Pot Cap-1 Maneuver	1027	899	1090	1027	899	-	1635	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	899	1090	1027	899	-	1635	-	-	-	-
Mov Cap-2 Maneuver	-	899	-	1027	899	-	-	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↖	↗
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

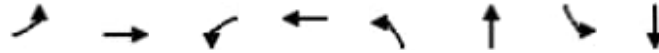
Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	1	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	1090	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	1090	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q (veh)	-	-	-	-

Queues
1: Creditview Road & Mayfield Road

Future Background 2029 - Unsig
Weekend Saturday

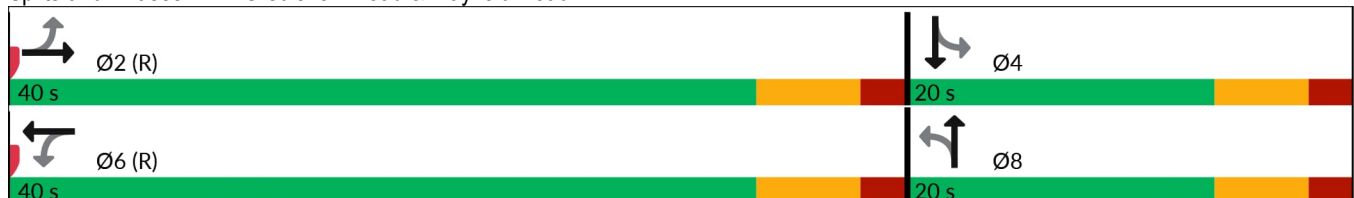


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↗	↗↗↗	↗	↗↗	↗	↗↗	↗	↗↗
Traffic Volume (vph)	26	1017	131	950	29	89	4	83
Future Volume (vph)	26	1017	131	950	29	89	4	83
Lane Group Flow (vph)	27	1099	135	991	30	210	4	112
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	6.2	6.2
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.09	0.37	0.51	0.47	0.12	0.29	0.02	0.16
Control Delay (s/veh)	6.5	6.8	15.7	8.0	21.1	13.2	19.5	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.5	6.8	15.7	8.0	21.1	13.2	19.5	16.5
Queue Length 50th (m)	1.2	21.0	8.0	30.0	2.9	6.1	0.4	4.3
Queue Length 95th (m)	4.2	28.1	24.3	42.2	9.1	14.2	2.5	10.2
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	286	2992	266	2115	294	825	267	812
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	0.09	0.37	0.51	0.47	0.10	0.25	0.01	0.14

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
1: Creditview Road & Mayfield Road

Future Background 2029 - Unsig
Weekend Saturday



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑		↗	↑↑		↗	↑↑		↗	↑↑	
Traffic Volume (veh/h)	26	1017	49	131	950	12	29	89	114	4	83	25
Future Volume (veh/h)	26	1017	49	131	950	12	29	89	114	4	83	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1796	1885	1900	1900	1900	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	27	1048	51	135	979	12	30	92	118	4	86	26
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	7	1	0	0	0	1	0	0	1	0
Cap, veh/h	371	2950	143	367	2143	26	345	358	319	282	547	159
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	577	5028	244	517	3652	45	1300	1791	1595	1189	2737	795
Grp Volume(v), veh/h	27	715	384	135	484	507	30	92	118	4	55	57
Grp Sat Flow(s),veh/h/ln	577	1716	1841	517	1805	1892	1300	1791	1595	1189	1791	1741
Q Serve(g_s), s	1.7	6.5	6.5	11.1	9.1	9.1	1.2	2.6	3.8	0.2	1.5	1.6
Cycle Q Clear(g_c), s	10.7	6.5	6.5	17.6	9.1	9.1	2.8	2.6	3.8	4.0	1.5	1.6
Prop In Lane	1.00		0.13	1.00		0.02	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	371	2013	1080	367	1059	1110	345	358	319	282	358	348
V/C Ratio(X)	0.07	0.36	0.36	0.37	0.46	0.46	0.09	0.26	0.37	0.01	0.15	0.16
Avail Cap(c_a), veh/h	371	2013	1080	367	1059	1110	384	412	367	318	412	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	6.5	6.5	11.1	7.0	7.0	21.0	20.2	20.7	22.5	19.8	19.9
Incr Delay (d2), s/veh	0.4	0.5	0.9	2.8	1.4	1.4	0.1	0.4	0.7	0.0	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.3	0.4	0.4	0.4	0.2	0.6	0.8	0.0	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.4	7.0	7.4	13.9	8.4	8.4	21.1	20.6	21.4	22.5	20.0	20.1
LnGrp LOS	B	A	A	B	A	A	C	C	C	C	C	C
Approach Vol, veh/h		1126			1126			240			116	
Approach Delay, s/veh		7.2			9.1			21.1			20.1	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		12.7		6.0		19.6		5.8				
Green Ext Time (p_c), s		9.2		0.3		7.6		0.9				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	9.8
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road Weekend Saturday

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	1045	34	86	953	0	23	0	79	0	0	0
Future Vol, veh/h	0	1045	34	86	953	0	23	0	79	0	0	0
Conflicting Peds, #/hr	0	0	2	2	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	63	-	63	40	-	30	-	-	0	-	-	-
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	1	0	0	1	0	4	0	3	0	0	0
Mvmt Flow	0	1045	34	86	953	0	23	0	79	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	953	0	0	1081	0	0	1696	2172	525	1543	2206	477
Stage 1	-	-	-	-	-	-	1047	1047	-	1125	1125	-
Stage 2	-	-	-	-	-	-	649	1125	-	418	1081	-
Critical Hdwy	4.1	-	-	5.3	-	-	7.03	6.5	7.16	6.95	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	7.38	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.58	5.5	-	6.7	5.5	-
Follow-up Hdwy	2.2	-	-	3.1	-	-	3.69	4	3.93	3.65	4	3.3
Pot Cap-1 Maneuver	729	-	-	363	-	-	75	47	424	99	45	540
Stage 1	-	-	-	-	-	-	186	308	-	217	283	-
Stage 2	-	-	-	-	-	-	408	283	-	556	296	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	729	-	-	362	-	-	61	36	423	66	34	540
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	36	-	66	34	-
Stage 1	-	-	-	-	-	-	186	307	-	217	216	-
Stage 2	-	-	-	-	-	-	311	216	-	452	295	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	1.5	33.7	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	61	423	729	-	-	362	-	-	-	-
HCM Lane V/C Ratio	0.377	0.187	-	-	-	0.238	-	-	-	-
HCM Ctrl Dly (s/v)	96.1	15.5	0	-	-	18	-	-	0	0
HCM Lane LOS	F	C	A	-	-	C	-	-	A	A
HCM 95th %tile Q (veh)	1.4	0.7	0	-	-	0.9	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1079	976	0	0	0
Future Vol, veh/h	0	1079	976	0	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	-	-	-	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	0	1079	976	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	488
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	531
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	531
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1124	1039	0	0	0
Future Vol, veh/h	0	1124	1039	0	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	-	-	-	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	0	1124	1039	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	127	112	0
Future Vol, veh/h	0	0	0	127	112	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	0	127	112	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	176	56	112	0	-
Stage 1	112	-	-	-	-
Stage 2	64	-	-	-	-
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	803	1005	1490	-	-
Stage 1	906	-	-	-	-
Stage 2	957	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	803	1005	1490	-	-
Mov Cap-2 Maneuver	803	-	-	-	-
Stage 1	906	-	-	-	-
Stage 2	957	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1490	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	127	112	0
Future Vol, veh/h	0	0	0	127	112	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	0	127	112	0

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	56	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	1005	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	1005	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q (veh)	-	-	-	-

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2			
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-
Pot Cap-1 Maneuver	1027	899	1090	1027	899	-	1635	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	899	1090	1027	899	-	1635	-	-	-	-
Mov Cap-2 Maneuver	-	899	-	1027	899	-	-	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↖	↗
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

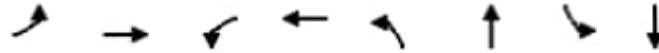
Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	1	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	1090	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	1090	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q (veh)	-	-	-

Queues
1: Creditview Road & Mayfield Road

Future Background 2029
Weekend Saturday

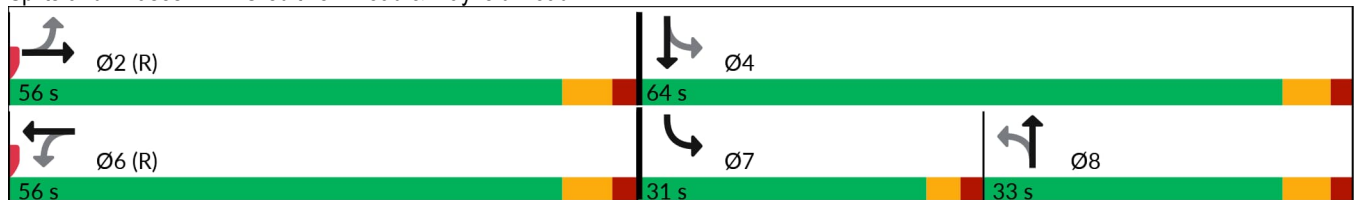


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↶	↶↶↶	↶	↶↶	↶	↶↶	↶	↶↶
Traffic Volume (vph)	26	1017	131	950	29	89	4	83
Future Volume (vph)	26	1017	131	950	29	89	4	83
Lane Group Flow (vph)	27	1099	135	991	30	210	4	112
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		2		6		8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	7	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	10.0	31.2
Total Split (s)	56.0	56.0	56.0	56.0	33.0	33.0	31.0	64.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	27.5%	27.5%	25.8%	53.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	5.0	6.2
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.07	0.28	0.39	0.36	0.23	0.48	0.03	0.26
Control Delay (s/veh)	3.9	3.7	9.3	5.1	54.5	26.4	42.5	36.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.9	3.7	9.3	5.1	54.5	26.4	42.5	36.9
Queue Length 50th (m)	1.0	14.7	8.1	30.0	7.0	11.3	0.9	10.5
Queue Length 95th (m)	3.0	44.6	28.7	60.8	16.9	23.8	4.0	17.6
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	390	3934	346	2785	285	826	386	1673
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	0.28	0.39	0.36	0.11	0.25	0.01	0.07

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



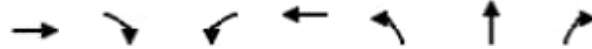
HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Future Background 2029
 Weekend Saturday



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↓		↗	↑↑		↗	↑↑		↗	↑↑	
Traffic Volume (veh/h)	26	1017	49	131	950	12	29	89	114	4	83	25
Future Volume (veh/h)	26	1017	49	131	950	12	29	89	114	4	83	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1796	1885	1900	1900	1900	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	27	1048	51	135	979	12	30	92	118	4	86	26
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	7	1	0	0	0	1	0	0	1	0
Cap, veh/h	434	3735	182	409	2713	33	194	186	165	107	412	120
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.10	0.10	0.10	0.01	0.15	0.15
Sat Flow, veh/h	577	5028	244	517	3652	45	1298	1791	1593	1810	2736	795
Grp Volume(v), veh/h	27	715	384	135	484	507	30	92	118	4	55	57
Grp Sat Flow(s),veh/h/ln	577	1716	1841	517	1805	1892	1298	1791	1593	1810	1791	1740
Q Serve(g_s), s	2.1	8.1	8.1	13.8	11.3	11.3	2.5	5.8	8.6	0.2	3.2	3.4
Cycle Q Clear(g_c), s	13.4	8.1	8.1	21.9	11.3	11.3	2.5	5.8	8.6	0.2	3.2	3.4
Prop In Lane	1.00		0.13	1.00		0.02	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	434	2549	1368	409	1341	1405	194	186	165	107	270	262
V/C Ratio(X)	0.06	0.28	0.28	0.33	0.36	0.36	0.15	0.50	0.71	0.04	0.20	0.22
Avail Cap(c_a), veh/h	434	2549	1368	409	1341	1405	350	400	356	490	863	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.8	5.0	5.0	8.6	5.4	5.4	49.4	50.8	52.1	46.5	44.7	44.8
Incr Delay (d2), s/veh	0.3	0.3	0.5	2.2	0.8	0.7	0.4	2.0	5.7	0.1	0.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.5	0.8	0.7	0.7	0.7	2.2	3.1	0.1	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.0	5.3	5.5	10.7	6.2	6.1	49.7	52.9	57.7	46.6	45.0	45.2
LnGrp LOS	A	A	A	B	A	A	D	D	E	D	D	D
Approach Vol, veh/h		1126			1126			240			116	
Approach Delay, s/veh		5.4			6.7			54.9			45.2	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		95.7		24.3		95.7	5.6	18.6				
Change Period (Y+Rc), s		6.6		6.2		6.6	5.0	6.2				
Max Green Setting (Gmax), s		49.4		57.8		49.4	26.0	26.8				
Max Q Clear Time (g_c+I1), s		15.4		5.4		23.9	2.2	10.6				
Green Ext Time (p_c), s		11.4		0.8		10.9	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				12.3								
HCM 6th LOS				B								
Notes												
User approved pedestrian interval to be less than phase max green.												

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road Weekend Saturday



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	Ø4	Ø5
Lane Configurations	↑↑↑	↑	↑	↑↑		↑	↑		
Traffic Volume (vph)	1045	34	86	953	23	0	79		
Future Volume (vph)	1045	34	86	953	23	0	79		
Lane Group Flow (vph)	1045	34	86	953	0	23	79		
Turn Type	NA	Perm	Perm	NA	Perm	NA	Perm		
Protected Phases	2			6		8		4	5
Permitted Phases		2	6		8		8		
Detector Phase	2	2	6	6	8	8	8		
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	9.5
Total Split (s)	76.0	76.0	46.0	46.0	44.0	44.0	44.0	44.0	30.0
Total Split (%)	63.3%	63.3%	38.3%	38.3%	36.7%	36.7%	36.7%	37%	25%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5	4.5		
Lead/Lag			Lag	Lag					Lead
Lead-Lag Optimize?			Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio	0.23	0.02	0.20	0.30		0.26	0.46		
Control Delay (s/veh)	1.5	0.5	2.5	1.6		60.1	20.3		
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay (s/veh)	1.5	0.5	2.5	1.6		60.1	20.3		
Queue Length 50th (m)	11.0	0.0	2.3	14.9		5.6	0.0		
Queue Length 95th (m)	17.1	1.4	6.2	23.4		14.2	15.4		
Internal Link Dist (m)	81.4			147.0		205.6			
Turn Bay Length (m)		63.0	40.0						
Base Capacity (vph)	4548	1381	435	3165		455	563		
Starvation Cap Reductn	0	0	0	0		0	0		
Spillback Cap Reductn	0	0	0	0		0	0		
Storage Cap Reductn	0	0	0	0		0	0		
Reduced v/c Ratio	0.23	0.02	0.20	0.30		0.05	0.14		

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road



HCM 6th Signalized Intersection Summary

Future Background 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road Weekend Saturday

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1045	34	86	953	0	23	0	79	0	0	0
Future Volume (veh/h)	0	1045	34	86	953	0	23	0	79	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1885	1900	1841	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	0	1045	34	86	953	0	23	0	79	0	0	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	1	0	0	1	0	4	0	3	0	0	0
Cap, veh/h	543	4412	1379	496	3071	1380	157	0	106	60	129	0
Arrive On Green	0.00	0.86	0.86	0.86	0.86	0.00	0.07	0.00	0.07	0.00	0.00	0.00
Sat Flow, veh/h	1810	5147	1608	531	3582	1610	1440	0	1572	1341	1900	0
Grp Volume(v), veh/h	0	1045	34	86	953	0	23	0	79	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1716	1608	531	1791	1610	1440	0	1572	1341	1900	0
Q Serve(g_s), s	0.0	4.4	0.4	4.2	6.2	0.0	1.8	0.0	5.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.4	0.4	8.5	6.2	0.0	1.8	0.0	5.9	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	543	4412	1379	496	3071	1380	157	0	106	60	129	0
V/C Ratio(X)	0.00	0.24	0.02	0.17	0.31	0.00	0.15	0.00	0.74	0.00	0.00	0.00
Avail Cap(c_a), veh/h	926	4412	1379	496	3071	1380	534	0	518	411	625	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.5	1.2	2.3	1.7	0.0	53.0	0.0	54.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.8	0.3	0.0	0.4	0.0	9.7	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.1	0.1	0.0	0.6	0.0	2.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	1.7	1.3	3.1	1.9	0.0	53.4	0.0	64.6	0.0	0.0	0.0
LnGrp LOS		A	A	A	A		D		E			
Approach Vol, veh/h		1079			1039			102			0	
Approach Delay, s/veh		1.6			2.0			62.1			0.0	
Approach LOS		A			A			E				
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		107.4		12.6	0.0	107.4		12.6				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		71.5		39.5	25.5	41.5		39.5				
Max Q Clear Time (g_c+I1), s		6.4		0.0	0.0	10.5		7.9				
Green Ext Time (p_c), s		12.6		0.0	0.0	11.2		0.5				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				4.6								
HCM 6th LOS				A								

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1079	976	0	0	0
Future Vol, veh/h	0	1079	976	0	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	-	-	-	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	0	1079	976	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1124	1039	0	0	0
Future Vol, veh/h	0	1124	1039	0	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	-	-	-	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	0	1124	1039	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	127	112	0
Future Vol, veh/h	0	0	0	127	112	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	0	127	112	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	176	56	112	0	0
Stage 1	112	-	-	-	-
Stage 2	64	-	-	-	-
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	803	1005	1490	-	-
Stage 1	906	-	-	-	-
Stage 2	957	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	803	1005	1490	-	-
Mov Cap-2 Maneuver	803	-	-	-	-
Stage 1	906	-	-	-	-
Stage 2	957	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1490	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	0	0	127	112	0
Future Vol, veh/h	0	0	0	127	112	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	0	127	112	0

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	56	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	1005	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	1005	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q (veh)	-	-	-	-

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2			
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-
Pot Cap-1 Maneuver	1027	899	1090	1027	899	-	1635	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	899	1090	1027	899	-	1635	-	-	-	-
Mov Cap-2 Maneuver	-	899	-	1027	899	-	-	-	-	-	-
Stage 1	1027	899	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1027	899	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↖	↗
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	1	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	1090	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	1090	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q (veh)	-	-	-	-



APPENDIX I

**Future Total (2029)
Intersection Capacity Analysis**

Queues
1: Creditview Road & Mayfield Road

Future Total 2029 - Unsignalized
Weekday AM

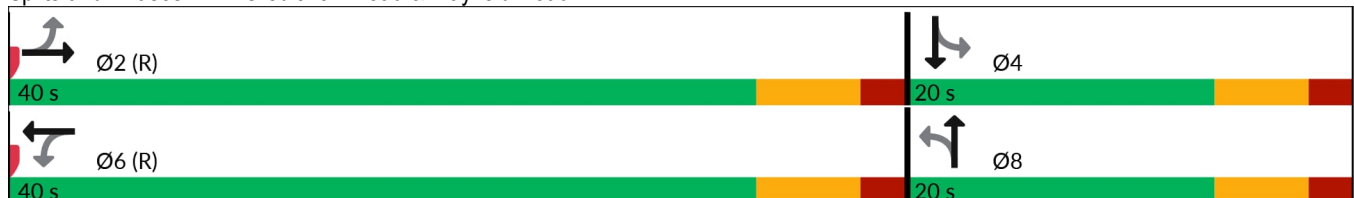


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	29	909	98	1183	52	160	62	176
Future Volume (vph)	29	909	98	1183	52	160	62	176
Lane Group Flow (vph)	31	1024	103	1301	55	277	65	208
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	6.2	6.2
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.18	0.36	0.36	0.65	0.26	0.36	0.29	0.29
Control Delay (s/veh)	9.1	6.9	11.4	10.3	23.8	13.7	24.2	19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.1	6.9	11.4	10.3	23.8	13.7	24.2	19.3
Queue Length 50th (m)	1.5	19.1	5.5	45.6	5.4	8.6	6.5	9.7
Queue Length 95th (m)	5.9	27.4	16.1	67.7	14.1	17.6	16.0	17.6
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	174	2857	284	2002	237	851	251	806
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	0.36	0.36	0.65	0.23	0.33	0.26	0.26

Intersection Summary






















Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Future Total 2029 - Unsignalized
 Weekday AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	909	64	98	1183	53	52	160	104	62	176	22
Future Volume (veh/h)	29	909	64	98	1183	53	52	160	104	62	176	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1767	1856	1826	1900	1707	1885	1856	1900	1856	1826
Adj Flow Rate, veh/h	31	957	67	103	1245	56	55	168	109	65	185	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	5	9	3	5	0	13	1	3	0	3	5
Cap, veh/h	269	2791	195	384	1984	89	280	426	262	263	632	78
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	430	4757	332	546	3381	152	1072	2132	1309	1120	3161	388
Grp Volume(v), veh/h	31	668	356	103	638	663	55	140	137	65	102	106
Grp Sat Flow(s),veh/h/ln	430	1662	1766	546	1735	1799	1072	1791	1650	1120	1763	1786
Q Serve(g_s), s	3.1	6.2	6.3	7.2	14.4	14.5	2.8	4.1	4.4	3.2	3.0	3.0
Cycle Q Clear(g_c), s	17.5	6.2	6.3	13.5	14.4	14.5	5.8	4.1	4.4	7.6	3.0	3.0
Prop In Lane	1.00		0.19	1.00		0.08	1.00		0.79	1.00		0.22
Lane Grp Cap(c), veh/h	269	1950	1036	384	1018	1055	280	358	330	263	353	357
V/C Ratio(X)	0.12	0.34	0.34	0.27	0.63	0.63	0.20	0.39	0.42	0.25	0.29	0.30
Avail Cap(c_a), veh/h	269	1950	1036	384	1018	1055	312	412	379	296	405	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	6.4	6.4	9.9	8.1	8.1	22.9	20.8	20.9	24.3	20.4	20.4
Incr Delay (d2), s/veh	0.9	0.5	0.9	1.7	2.9	2.8	0.3	0.7	0.8	0.5	0.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.3	0.3	0.8	0.8	0.4	0.9	0.9	0.5	0.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	6.9	7.3	11.6	11.0	11.0	23.2	21.5	21.8	24.7	20.8	20.9
LnGrp LOS	B	A	A	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h		1055			1404			332			273	
Approach Delay, s/veh		7.3			11.0			21.9			21.8	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		19.5		9.6		16.5		7.8				
Green Ext Time (p_c), s		6.9		0.6		10.6		1.1				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				11.9								
HCM 6th LOS				B								
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↘	↗	↘	↗	
Traffic Vol, veh/h	66	887	22	39	1172	34	43	0	92	27	0	73
Future Vol, veh/h	66	887	22	39	1172	34	43	0	92	27	0	73
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	63	-	63	40	-	30	-	-	0	-	-	-
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	5	18	8	5	0	0	0	5	0	0	0
Mvmt Flow	66	887	22	39	1172	34	43	0	92	27	0	73

Major/Minor	Major1		Major2		Minor1			Minor2				
Conflicting Flow All	1206	0	0	909	0	0	1683	2303	444	1737	2291	586
Stage 1	-	-	-	-	-	-	1019	1019	-	1250	1250	-
Stage 2	-	-	-	-	-	-	664	1284	-	487	1041	-
Critical Hdwy	4.1	-	-	5.46	-	-	6.95	6.5	7.2	6.95	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.7	5.5	-
Follow-up Hdwy	2.2	-	-	3.18	-	-	3.65	4	3.95	3.65	4	3.3
Pot Cap-1 Maneuver	586	-	-	415	-	-	80	39	474	73	40	459
Stage 1	-	-	-	-	-	-	200	317	-	182	247	-
Stage 2	-	-	-	-	-	-	409	238	-	505	310	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	586	-	-	415	-	-	57	31	474	50	32	459
Mov Cap-2 Maneuver	-	-	-	-	-	-	57	31	-	50	32	-
Stage 1	-	-	-	-	-	-	177	281	-	161	224	-
Stage 2	-	-	-	-	-	-	312	216	-	361	275	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.8	0.5	63.8	48.6
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	57	474	586	-	-	415	-	-	50	459
HCM Lane V/C Ratio	0.754	0.194	0.113	-	-	0.094	-	-	0.54	0.159
HCM Ctrl Dly (s/v)	169.4	14.4	11.9	-	-	14.6	-	-	141.5	14.3
HCM Lane LOS	F	B	B	-	-	B	-	-	F	B
HCM 95th %tile Q (veh)	3.2	0.7	0.4	-	-	0.3	-	-	2.1	0.6

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	975	1280	11	0	0
Future Vol, veh/h	0	975	1280	11	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	-	-	-	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	0	975	1280	11	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	640
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	423
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	423
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1012	1169	92	0	68
Future Vol, veh/h	0	1012	1169	92	0	68
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	0	1012	1169	92	0	68

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	585
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	459
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	459
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	459
HCM Lane V/C Ratio	-	-	-	0.148
HCM Ctrl Dly (s/v)	-	-	-	14.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q (veh)	-	-	-	0.5

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↕↕	↕↕	↗
Traffic Vol, veh/h	16	52	130	111	149	30
Future Vol, veh/h	16	52	130	111	149	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	16	52	130	111	149	30

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	465	75	179	0	0
Stage 1	149	-	-	-	-
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	531	978	1409	-	-
Stage 1	869	-	-	-	-
Stage 2	718	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	482	978	1409	-	-
Mov Cap-2 Maneuver	482	-	-	-	-
Stage 1	789	-	-	-	-
Stage 2	718	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.8	4.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1409	-	482	978	-	-
HCM Lane V/C Ratio	0.092	-	0.033	0.053	-	-
HCM Ctrl Dly (s/v)	7.8	-	12.7	8.9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q (veh)	0.3	-	0.1	0.2	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	61	0	241	196	9
Future Vol, veh/h	0	61	0	241	196	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	61	0	241	196	9

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	98	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	945	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	945	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 945	-	-
HCM Lane V/C Ratio	- 0.065	-	-
HCM Ctrl Dly (s/v)	- 9.1	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q (veh)	- 0.2	-	-

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	3	7	92	9	0	9	0	92	0	0	0
Future Vol, veh/h	0	3	7	92	9	0	9	0	92	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	3	7	97	9	0	9	0	97	0	0	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	72	116	1	73	68	49	1	0	0	97	0	0
Stage 1	1	1	-	67	67	-	-	-	-	-	-	-
Stage 2	71	115	-	6	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	924	778	1090	923	826	1025	1635	-	-	1509	-	-
Stage 1	1027	899	-	948	843	-	-	-	-	-	-	-
Stage 2	944	804	-	1021	899	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	912	773	1090	910	821	1025	1635	-	-	1509	-	-
Mov Cap-2 Maneuver	912	773	-	910	821	-	-	-	-	-	-	-
Stage 1	1021	899	-	942	838	-	-	-	-	-	-	-
Stage 2	928	799	-	1011	899	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Ctrl Dly, s/v	8.7		9.5			0.6			0		
HCM LOS	A		A								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	971	901	1509	-	-
HCM Lane V/C Ratio	0.006	-	-	0.011	0.118	-	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	8.7	9.5	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	0	0.4	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗	↗	↗
Traffic Vol, veh/h	0	6	0	100	95	4
Future Vol, veh/h	0	6	0	100	95	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	6	0	105	100	4

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	100	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	961	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	961	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 961	-	-
HCM Lane V/C Ratio	- 0.007	-	-
HCM Ctrl Dly (s/v)	- 8.8	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q (veh)	- 0	-	-

Queues
1: Creditview Road & Mayfield Road

Future Total 2029
Weekday AM

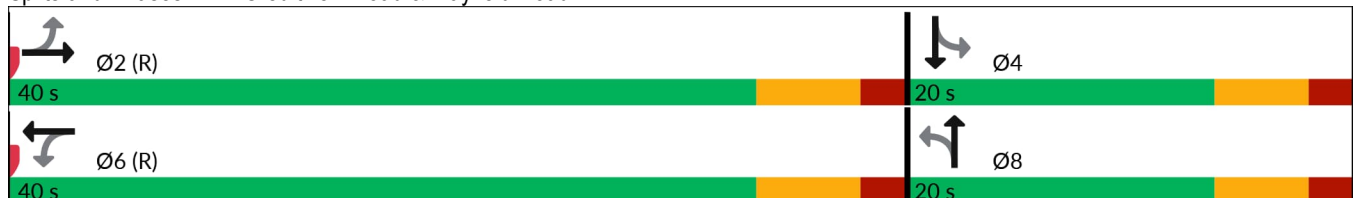


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	29	909	98	1183	52	160	62	176
Future Volume (vph)	29	909	98	1183	52	160	62	176
Lane Group Flow (vph)	31	1024	103	1301	55	277	65	208
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	6.2	6.2
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.18	0.36	0.36	0.65	0.26	0.36	0.29	0.29
Control Delay (s/veh)	7.7	5.7	11.4	10.3	23.8	13.7	24.2	19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.7	5.7	11.4	10.3	23.8	13.7	24.2	19.3
Queue Length 50th (m)	1.4	18.6	5.5	45.6	5.4	8.6	6.5	9.7
Queue Length 95th (m)	3.9	22.3	16.1	67.7	14.1	17.6	16.0	17.6
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	174	2857	284	2002	237	851	251	806
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	0.36	0.36	0.65	0.23	0.33	0.26	0.26

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Future Total 2029
 Weekday AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑		↖	↑↑		↗	↑↑		↖	↑↑	
Traffic Volume (veh/h)	29	909	64	98	1183	53	52	160	104	62	176	22
Future Volume (veh/h)	29	909	64	98	1183	53	52	160	104	62	176	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1767	1856	1826	1900	1707	1885	1856	1900	1856	1826
Adj Flow Rate, veh/h	31	957	67	103	1245	56	55	168	109	65	185	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	5	9	3	5	0	13	1	3	0	3	5
Cap, veh/h	269	2791	195	384	1984	89	280	426	262	263	632	78
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	430	4757	332	546	3381	152	1072	2132	1309	1120	3161	388
Grp Volume(v), veh/h	31	668	356	103	638	663	55	140	137	65	102	106
Grp Sat Flow(s),veh/h/ln	430	1662	1766	546	1735	1799	1072	1791	1650	1120	1763	1786
Q Serve(g_s), s	3.1	6.2	6.3	7.2	14.4	14.5	2.8	4.1	4.4	3.2	3.0	3.0
Cycle Q Clear(g_c), s	17.5	6.2	6.3	13.5	14.4	14.5	5.8	4.1	4.4	7.6	3.0	3.0
Prop In Lane	1.00		0.19	1.00		0.08	1.00		0.79	1.00		0.22
Lane Grp Cap(c), veh/h	269	1950	1036	384	1018	1055	280	358	330	263	353	357
V/C Ratio(X)	0.12	0.34	0.34	0.27	0.63	0.63	0.20	0.39	0.42	0.25	0.29	0.30
Avail Cap(c_a), veh/h	269	1950	1036	384	1018	1055	312	412	379	296	405	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	6.4	6.4	9.9	8.1	8.1	22.9	20.8	20.9	24.3	20.4	20.4
Incr Delay (d2), s/veh	0.9	0.5	0.9	1.7	2.9	2.8	0.3	0.7	0.8	0.5	0.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.3	0.3	0.8	0.8	0.4	0.9	0.9	0.5	0.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	6.9	7.3	11.6	11.0	11.0	23.2	21.5	21.8	24.7	20.8	20.9
LnGrp LOS	B	A	A	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h		1055			1404			332				273
Approach Delay, s/veh		7.3			11.0			21.9				21.8
Approach LOS		A			B			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.8		18.2		41.8		18.2				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		19.5		9.6		16.5		7.8				
Green Ext Time (p_c), s		6.9		0.6		10.6		1.1				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		11.9
HCM 6th LOS		B

Notes

User approved pedestrian interval to be less than phase max green.

Queues

Future Total 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Weekday AM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↖	↗	↘	↗
Traffic Volume (vph)	66	887	22	39	1172	34	43	0	92	27	0
Future Volume (vph)	66	887	22	39	1172	34	43	0	92	27	0
Lane Group Flow (vph)	66	887	22	39	1172	34	0	43	92	27	73
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases	5	2			6			8			4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	6	6	6	8	8	8	4	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	95.0	95.0	84.0	84.0	84.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	9.2%	79.2%	79.2%	70.0%	70.0%	70.0%	20.8%	20.8%	20.8%	20.8%	20.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag	Lag					
Lead-Lag Optimize?	Yes			Yes	Yes	Yes					
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio	0.17	0.21	0.02	0.09	0.44	0.03		0.42	0.46	0.26	0.25
Control Delay (s/veh)	2.7	2.0	0.8	8.3	10.2	3.1		64.3	17.6	56.7	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.7	2.0	0.8	8.3	10.2	3.1		64.3	17.6	56.7	2.1
Queue Length 50th (m)	1.9	10.7	0.0	3.8	76.1	0.5		10.4	0.0	6.4	0.0
Queue Length 95th (m)	4.9	17.3	1.3	m7.1	91.6	m2.0		22.2	16.0	15.8	0.0
Internal Link Dist (m)		81.4			147.0			205.6			59.1
Turn Bay Length (m)	63.0		63.0	40.0		30.0				30.0	
Base Capacity (vph)	403	4188	1150	415	2664	1250		225	336	234	424
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	0.21	0.02	0.09	0.44	0.03		0.19	0.27	0.12	0.17

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

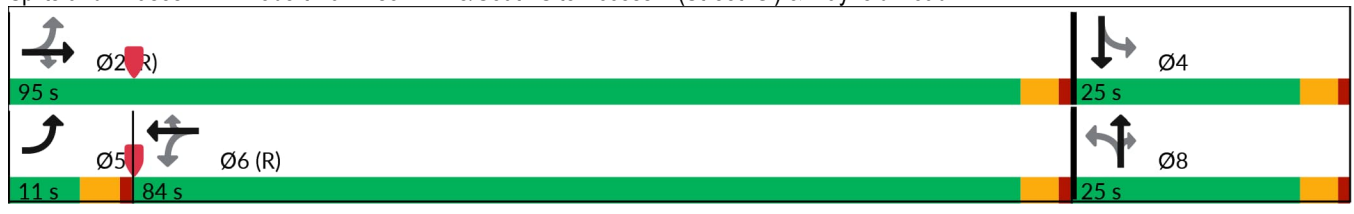
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road





























HCM 6th Signalized Intersection Summary

Future Total 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Weekday AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 							
Traffic Volume (veh/h)	66	887	22	39	1172	34	43	0	92	27	0	73
Future Volume (veh/h)	66	887	22	39	1172	34	43	0	92	27	0	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1633	1781	1826	1900	1900	1900	1826	1900	1900	1900
Adj Flow Rate, veh/h	66	887	22	39	1172	34	43	0	92	27	0	73
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	5	18	8	5	0	0	0	5	0	0	0
Cap, veh/h	412	4056	1126	492	2564	1190	153	0	172	111	0	179
Arrive On Green	0.04	0.81	0.81	0.74	0.74	0.74	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	1810	4985	1384	585	3469	1610	839	0	1547	1325	0	1610
Grp Volume(v), veh/h	66	887	22	39	1172	34	43	0	92	27	0	73
Grp Sat Flow(s),veh/h/ln	1810	1662	1384	585	1735	1610	839	0	1547	1325	0	1610
Q Serve(g_s), s	0.9	4.8	0.4	2.2	16.0	0.7	3.7	0.0	6.7	2.4	0.0	5.1
Cycle Q Clear(g_c), s	0.9	4.8	0.4	2.3	16.0	0.7	8.7	0.0	6.7	11.1	0.0	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	4056	1126	492	2564	1190	153	0	172	111	0	179
V/C Ratio(X)	0.16	0.22	0.02	0.08	0.46	0.03	0.28	0.00	0.53	0.24	0.00	0.41
Avail Cap(c_a), veh/h	443	4056	1126	492	2564	1190	234	0	264	190	0	275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.2	2.5	2.1	4.4	6.2	4.2	53.7	0.0	50.4	56.6	0.0	49.6
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.3	0.6	0.0	1.0	0.0	2.6	1.1	0.0	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.9	0.0	1.1	0.0	2.2	0.7	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.4	2.7	2.1	4.7	6.8	4.2	54.7	0.0	52.9	57.7	0.0	51.1
LnGrp LOS	A	A	A	A	A	A	D		D	E		D
Approach Vol, veh/h		975			1245			135				100
Approach Delay, s/veh		2.8			6.6			53.5				52.9
Approach LOS		A			A			D				D
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		102.2		17.8	8.9	93.2		17.8				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		90.5		20.5	6.5	79.5		20.5				
Max Q Clear Time (g_c+I1), s		6.8		13.1	2.9	18.0		10.7				
Green Ext Time (p_c), s		9.9		0.3	0.0	16.5		0.4				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				9.6								
HCM 6th LOS				A								

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	975	1280	11	0	0
Future Vol, veh/h	0	975	1280	11	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	-	-	-	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	0	975	1280	11	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	640
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	423
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	423
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1012	1169	92	0	68
Future Vol, veh/h	0	1012	1169	92	0	68
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	0	1012	1169	92	0	68

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	585
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	459
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	459
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	459
HCM Lane V/C Ratio	-	-	-	0.148
HCM Ctrl Dly (s/v)	-	-	-	14.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q (veh)	-	-	-	0.5

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↕↕	↕↕	↗
Traffic Vol, veh/h	16	52	130	111	149	30
Future Vol, veh/h	16	52	130	111	149	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	16	52	130	111	149	30

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	465	75	179	0	0
Stage 1	149	-	-	-	-
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	531	978	1409	-	-
Stage 1	869	-	-	-	-
Stage 2	718	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	482	978	1409	-	-
Mov Cap-2 Maneuver	482	-	-	-	-
Stage 1	789	-	-	-	-
Stage 2	718	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.8	4.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1409	-	482	978	-	-
HCM Lane V/C Ratio	0.092	-	0.033	0.053	-	-
HCM Ctrl Dly (s/v)	7.8	-	12.7	8.9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q (veh)	0.3	-	0.1	0.2	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	61	0	241	196	9
Future Vol, veh/h	0	61	0	241	196	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	61	0	241	196	9

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	98	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	945	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	945	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 945	-	-
HCM Lane V/C Ratio	- 0.065	-	-
HCM Ctrl Dly (s/v)	- 9.1	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q (veh)	- 0.2	-	-

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	3	7	92	9	0	9	0	92	0	0	0
Future Vol, veh/h	0	3	7	92	9	0	9	0	92	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	3	7	97	9	0	9	0	97	0	0	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	72	116	1	73	68	49	1	0	0	97	0	0
Stage 1	1	1	-	67	67	-	-	-	-	-	-	-
Stage 2	71	115	-	6	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	924	778	1090	923	826	1025	1635	-	-	1509	-	-
Stage 1	1027	899	-	948	843	-	-	-	-	-	-	-
Stage 2	944	804	-	1021	899	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	912	773	1090	910	821	1025	1635	-	-	1509	-	-
Mov Cap-2 Maneuver	912	773	-	910	821	-	-	-	-	-	-	-
Stage 1	1021	899	-	942	838	-	-	-	-	-	-	-
Stage 2	928	799	-	1011	899	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Ctrl Dly, s/v	8.7		9.5			0.6			0		
HCM LOS	A		A								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	971	901	1509	-	-
HCM Lane V/C Ratio	0.006	-	-	0.011	0.118	-	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	8.7	9.5	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	-	0	0.4	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↖	↗
Traffic Vol, veh/h	0	6	0	100	95	4
Future Vol, veh/h	0	6	0	100	95	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	6	0	105	100	4

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	100	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.2	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	961	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	961	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	961	-
HCM Lane V/C Ratio	-	0.007	-
HCM Ctrl Dly (s/v)	-	8.8	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q (veh)	-	0	-

Queues
1: Creditview Road & Mayfield Road

Future Total 2029 - Unsignalized
Weekday PM

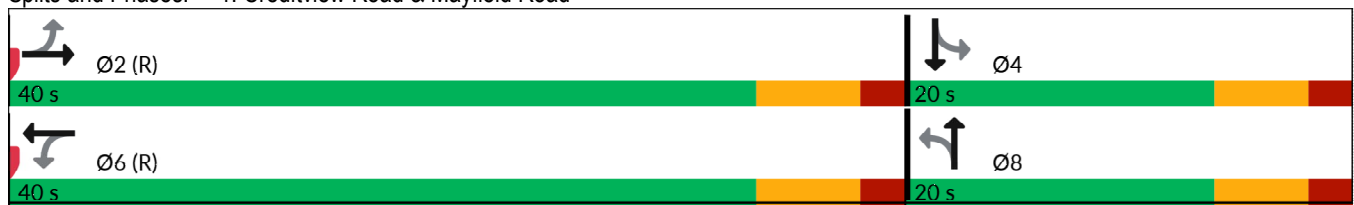


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑↑	↘	↑↑	↘	↑↑	↘	↑↑
Traffic Volume (vph)	17	1196	134	931	56	267	318	362
Future Volume (vph)	17	1196	134	931	56	267	318	362
Lane Group Flow (vph)	18	1320	140	1076	58	421	331	421
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	6.2	6.2
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.08	0.47	0.76	0.59	0.28	0.51	1.55	0.51
Control Delay (s/veh)	7.3	8.5	41.4	10.1	23.4	20.1	292.0	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.3	8.5	41.4	10.1	23.4	20.1	292.0	21.7
Queue Length 50th (m)	0.9	29.1	11.0	37.3	5.6	19.3	~55.8	21.3
Queue Length 95th (m)	3.5	38.6	#42.1	53.5	14.8	31.7	#99.6	33.6
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	231	2834	185	1828	206	819	214	831
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	0.08	0.47	0.76	0.59	0.28	0.51	1.55	0.51

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 ~ 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: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Future Total 2029 - Unsignalized
 Weekday PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑		↖	↑↑		↗	↑↑		↖	↑↑	
Traffic Volume (veh/h)	17	1196	71	134	931	102	56	267	137	318	362	42
Future Volume (veh/h)	17	1196	71	134	931	102	56	267	137	318	362	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1767	1900	1885	670	1841	1885	1870	1900	1900	1900
Adj Flow Rate, veh/h	18	1246	74	140	970	106	58	278	143	331	377	44
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	9	0	1	83	4	1	2	0	0	0
Cap, veh/h	316	2766	164	292	1813	198	242	532	266	239	750	87
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	533	4968	295	422	3256	356	951	2312	1156	981	3259	378
Grp Volume(v), veh/h	18	860	460	140	533	543	58	214	207	331	208	213
Grp Sat Flow(s),veh/h/ln	533	1716	1832	422	1791	1821	951	1791	1677	981	1805	1832
Q Serve(g_s), s	1.3	8.9	8.9	17.6	11.3	11.3	3.4	6.3	6.5	7.3	6.0	6.1
Cycle Q Clear(g_c), s	12.6	8.9	8.9	26.5	11.3	11.3	9.5	6.3	6.5	13.8	6.0	6.1
Prop In Lane	1.00		0.16	1.00		0.20	1.00		0.69	1.00		0.21
Lane Grp Cap(c), veh/h	316	1910	1020	292	997	1014	242	412	386	239	415	421
V/C Ratio(X)	0.06	0.45	0.45	0.48	0.54	0.54	0.24	0.52	0.54	1.38	0.50	0.51
Avail Cap(c_a), veh/h	316	1910	1020	292	997	1014	242	412	386	239	415	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	7.9	7.9	15.7	8.4	8.4	24.3	20.2	20.3	28.2	20.1	20.1
Incr Delay (d2), s/veh	0.3	0.8	1.4	5.5	2.1	2.0	0.5	1.1	1.5	196.9	0.9	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.2	0.4	0.9	0.6	0.6	0.4	1.3	1.3	15.2	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.7	8.6	9.3	21.2	10.5	10.4	24.8	21.3	21.8	225.1	21.0	21.1
LnGrp LOS	B	A	A	C	B	B	C	C	C	F	C	C
Approach Vol, veh/h		1338			1216			479			752	
Approach Delay, s/veh		8.9			11.7			21.9			110.9	
Approach LOS		A			B			C			F	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		40.0		20.0		40.0		20.0				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		14.6		15.8		28.5		11.5				
Green Ext Time (p_c), s		10.5		0.0		3.6		0.8				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				31.7								
HCM 6th LOS				C								
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	59.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↘	↗	↘	↗	
Traffic Vol, veh/h	316	1192	51	82	866	34	25	0	70	68	0	123
Future Vol, veh/h	316	1192	51	82	866	34	25	0	70	68	0	123
Conflicting Peds, #/hr	0	0	7	7	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	63	-	63	40	-	30	-	-	0	-	-	-
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	2	2	1	2	0	0	0	3	0	0	0
Mvmt Flow	316	1192	51	82	866	34	25	0	70	68	0	123

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	900	0	0	1250	0	0	2428	2895	603	2139	2912	433
Stage 1	-	-	-	-	-	-	1831	1831	-	1030	1030	-
Stage 2	-	-	-	-	-	-	597	1064	-	1109	1882	-
Critical Hdwy	4.1	-	-	5.32	-	-	6.95	6.5	7.16	6.95	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.7	5.5	-
Follow-up Hdwy	2.2	-	-	3.11	-	-	3.65	4	3.93	3.65	4	3.3
Pot Cap-1 Maneuver	763	-	-	298	-	-	~ 24	16	377	~ 39	16	576
Stage 1	-	-	-	-	-	-	53	128	-	247	313	-
Stage 2	-	-	-	-	-	-	447	302	-	209	121	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	763	-	-	296	-	-	~ 10	7	375	~ 17	7	576
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 10	7	-	~ 17	7	-
Stage 1	-	-	-	-	-	-	31	74	-	145	226	-
Stage 2	-	-	-	-	-	-	254	218	-	100	70	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.6	1.8	\$ 386.8	\$ 651.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	10	375	763	-	-	296	-	-	17	576
HCM Lane V/C Ratio	2.5	0.187	0.414	-	-	0.277	-	-	4	0.214
HCM Ctrl Dly (s/v)	\$ 1422.9	16.8	13	-	-	21.8	-	-	\$ 1806.5	12.9
HCM Lane LOS	F	C	B	-	-	C	-	-	F	B
HCM 95th %tile Q (veh)	4.1	0.7	2	-	-	1.1	-	-	9.2	0.8

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s
 +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1559	967	28	0	0
Future Vol, veh/h	0	1559	967	28	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	-	-	-	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	0	1559	967	28	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	484
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	534
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	534
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1326	899	133	0	85
Future Vol, veh/h	0	1326	899	133	0	85
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	0	1326	899	133	0	85

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	450
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	562
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	562
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	562
HCM Lane V/C Ratio	-	-	-	0.151
HCM Ctrl Dly (s/v)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q (veh)	-	-	-	0.5

Intersection						
Int Delay, s/veh	7.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↕↕	↕↕	↗
Traffic Vol, veh/h	73	273	278	108	169	57
Future Vol, veh/h	73	273	278	108	169	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	73	273	278	108	169	57

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	779	85	226	0	0
Stage 1	169	-	-	-	-
Stage 2	610	-	-	-	-
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	337	963	1354	-	-
Stage 1	850	-	-	-	-
Stage 2	510	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	268	963	1354	-	-
Mov Cap-2 Maneuver	268	-	-	-	-
Stage 1	676	-	-	-	-
Stage 2	510	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13	6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1354	-	268	963	-	-
HCM Lane V/C Ratio	0.205	-	0.272	0.283	-	-
HCM Ctrl Dly (s/v)	8.3	-	23.4	10.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q (veh)	0.8	-	1.1	1.2	-	-

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	304	0	386	417	23
Future Vol, veh/h	0	304	0	386	417	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	304	0	386	417	23

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	209	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	803	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	803	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 803	-	-
HCM Lane V/C Ratio	- 0.379	-	-
HCM Ctrl Dly (s/v)	- 12.2	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q (veh)	- 1.8	-	-

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	28	24	155	21	0	45	0	305	0	0	0
Future Vol, veh/h	0	28	24	155	21	0	45	0	305	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	29	25	161	22	0	47	0	318	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	265	413	1	281	254	159	1	0	0	318	0	0
Stage 1	1	1	-	253	253	-	-	-	-	-	-	-
Stage 2	264	412	-	28	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	692	532	1090	675	653	892	1635	-	-	1253	-	-
Stage 1	1027	899	-	756	701	-	-	-	-	-	-	-
Stage 2	746	598	-	994	899	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	659	517	1090	618	634	892	1635	-	-	1253	-	-
Mov Cap-2 Maneuver	659	517	-	618	634	-	-	-	-	-	-	-
Stage 1	997	899	-	734	681	-	-	-	-	-	-	-
Stage 2	701	581	-	940	899	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	10.7		13.2		0.9		0	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	683	620	1253	-	-
HCM Lane V/C Ratio	0.029	-	-	0.079	0.296	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	10.7	13.2	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-	0.3	1.2	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗	↗	↗
Traffic Vol, veh/h	0	20	0	351	169	10
Future Vol, veh/h	0	20	0	351	169	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	21	0	366	176	10

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	176	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.2	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	872	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	872	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 872	-	-
HCM Lane V/C Ratio	- 0.024	-	-
HCM Ctrl Dly (s/v)	- 9.2	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q (veh)	- 0.1	-	-

Queues
1: Creditview Road & Mayfield Road

Future Total 2029
Weekday PM

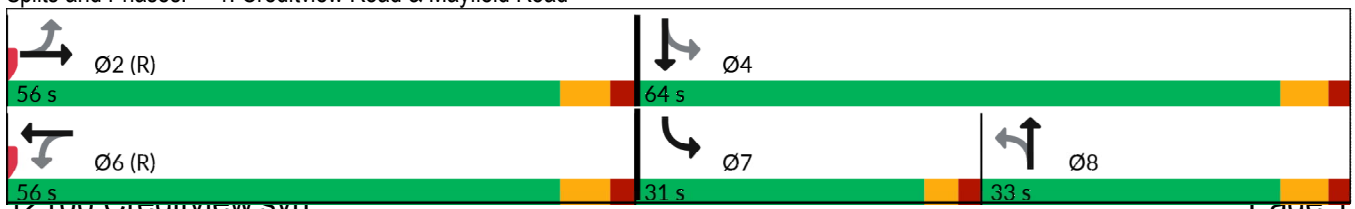


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↶	↶↶↶	↶	↶↶	↶	↶↶	↶	↶↶
Traffic Volume (vph)	17	1196	134	931	56	267	318	362
Future Volume (vph)	17	1196	134	931	56	267	318	362
Lane Group Flow (vph)	18	1320	140	1076	58	421	331	421
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		2		6		8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	7	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	10.0	31.2
Total Split (s)	56.0	56.0	56.0	56.0	33.0	33.0	31.0	64.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	27.5%	27.5%	25.8%	53.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	5.0	6.2
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.11	0.52	1.04	0.66	0.42	0.74	0.74	0.30
Control Delay (s/veh)	20.8	21.8	122.4	25.9	54.4	48.2	36.7	23.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.8	21.8	122.4	25.9	54.4	48.2	36.7	23.8
Queue Length 50th (m)	2.5	83.5	~38.2	103.6	13.2	44.4	57.6	35.0
Queue Length 95th (m)	8.4	108.6	#83.9	142.0	26.1	59.1	79.5	43.2
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	160	2528	135	1628	204	809	465	1718
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	0.11	0.52	1.04	0.66	0.28	0.52	0.71	0.25

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 ~ 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: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Future Total 2029
 Weekday PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑		↖	↑↑		↗	↑↑		↖	↑↑	
Traffic Volume (veh/h)	17	1196	71	134	931	102	56	267	137	318	362	42
Future Volume (veh/h)	17	1196	71	134	931	102	56	267	137	318	362	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1767	1900	1885	670	1841	1885	1870	1900	1900	1900
Adj Flow Rate, veh/h	18	1246	74	140	970	106	58	278	143	331	377	44
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	9	0	1	83	4	1	2	0	0	0
Cap, veh/h	232	2609	155	215	1710	187	209	361	181	405	1200	139
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.16	0.16	0.16	0.17	0.37	0.37
Sat Flow, veh/h	533	4968	295	422	3256	356	951	2312	1156	1810	3259	378
Grp Volume(v), veh/h	18	860	460	140	533	543	58	214	207	331	208	213
Grp Sat Flow(s),veh/h/ln	533	1716	1832	422	1791	1821	951	1791	1677	1810	1805	1832
Q Serve(g_s), s	2.8	19.1	19.1	37.7	24.2	24.2	6.6	13.7	14.3	17.6	9.9	10.0
Cycle Q Clear(g_c), s	27.0	19.1	19.1	56.8	24.2	24.2	6.6	13.7	14.3	17.6	9.9	10.0
Prop In Lane	1.00		0.16	1.00		0.20	1.00		0.69	1.00		0.21
Lane Grp Cap(c), veh/h	232	1802	962	215	940	956	209	280	262	405	665	675
V/C Ratio(X)	0.08	0.48	0.48	0.65	0.57	0.57	0.28	0.76	0.79	0.82	0.31	0.32
Avail Cap(c_a), veh/h	232	1802	962	215	940	956	272	400	375	489	869	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	18.1	18.1	36.1	19.3	19.3	45.5	48.5	48.7	33.2	27.1	27.1
Incr Delay (d2), s/veh	0.6	0.9	1.7	14.4	2.5	2.4	0.7	5.3	7.3	8.9	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.8	5.3	3.6	6.6	6.7	1.3	5.3	5.3	6.6	3.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.1	19.0	19.8	50.5	21.8	21.7	46.2	53.8	56.0	42.1	27.3	27.4
LnGrp LOS	C	B	B	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		1338			1216			479			752	
Approach Delay, s/veh		19.4			25.0			53.9			33.9	
Approach LOS		B			C			D			C	
Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		69.6		50.4		69.6	25.4	24.9				
Change Period (Y+Rc), s		6.6		6.2		6.6	5.0	6.2				
Max Green Setting (Gmax), s		49.4		57.8		49.4	26.0	26.8				
Max Q Clear Time (g_c+I1), s		29.0		12.0		58.8	19.6	16.3				
Green Ext Time (p_c), s		11.0		3.4		0.0	0.8	2.5				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				28.4								
HCM 6th LOS				C								
Notes												
User approved pedestrian interval to be less than phase max green.												

Queues

Future Total 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Weekday PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↖	↗	↘	↗
Traffic Volume (vph)	316	1192	51	82	866	34	25	0	70	68	0
Future Volume (vph)	316	1192	51	82	866	34	25	0	70	68	0
Lane Group Flow (vph)	316	1192	51	82	866	34	0	25	70	68	123
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases	5	2			6			8			4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	6	6	6	8	8	8	4	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	30.0	76.0	76.0	46.0	46.0	46.0	44.0	44.0	44.0	44.0	44.0
Total Split (%)	25.0%	63.3%	63.3%	38.3%	38.3%	38.3%	36.7%	36.7%	36.7%	36.7%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag	Lag					
Lead-Lag Optimize?	Yes			Yes	Yes	Yes					
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio	0.54	0.28	0.04	0.29	0.36	0.03		0.30	0.33	0.52	0.22
Control Delay (s/veh)	6.0	2.6	0.8	18.0	13.1	6.0		58.3	15.5	65.0	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.0	2.6	0.8	18.0	13.1	6.0		58.3	15.5	65.0	1.0
Queue Length 50th (m)	12.1	18.0	0.0	6.7	37.7	0.3		5.9	0.0	16.3	0.0
Queue Length 95th (m)	24.1	28.9	2.4	m19.0	78.6	m2.9		14.7	13.8	30.6	0.0
Internal Link Dist (m)		81.4			147.0			205.6			59.1
Turn Bay Length (m)	63.0		63.0	40.0		30.0				30.0	
Base Capacity (vph)	701	4226	1254	280	2391	1096		293	557	458	825
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	0.45	0.28	0.04	0.29	0.36	0.03		0.09	0.13	0.15	0.15

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

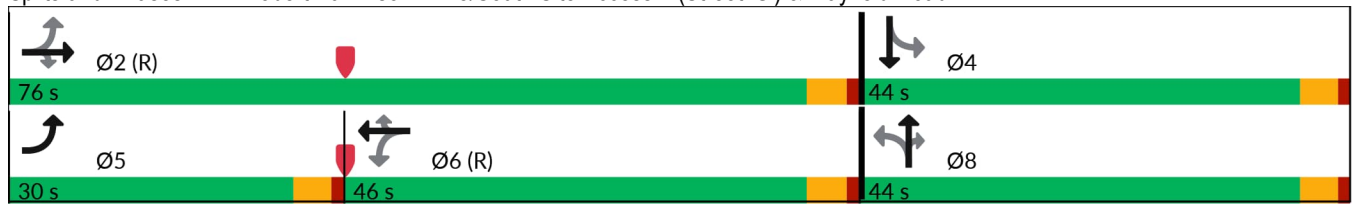
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road





























HCM 6th Signalized Intersection Summary

Future Total 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Weekday PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 							
Traffic Volume (veh/h)	316	1192	51	82	866	34	25	0	70	68	0	123
Future Volume (veh/h)	316	1192	51	82	866	34	25	0	70	68	0	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1885	1870	1900	1900	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	316	1192	51	82	866	34	25	0	70	68	0	123
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	1	2	0	0	0	3	0	0	0
Cap, veh/h	541	3899	1205	350	2288	1031	180	0	254	162	0	260
Arrive On Green	0.08	0.76	0.76	0.64	0.64	0.64	0.16	0.00	0.16	0.16	0.00	0.16
Sat Flow, veh/h	1810	5106	1578	451	3554	1601	740	0	1572	1352	0	1610
Grp Volume(v), veh/h	316	1192	51	82	866	34	25	0	70	68	0	123
Grp Sat Flow(s),veh/h/ln	1810	1702	1578	451	1777	1601	740	0	1572	1352	0	1610
Q Serve(g_s), s	6.5	8.6	0.9	9.5	13.8	0.9	2.2	0.0	4.7	5.9	0.0	8.3
Cycle Q Clear(g_c), s	6.5	8.6	0.9	9.6	13.8	0.9	10.4	0.0	4.7	16.2	0.0	8.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	541	3899	1205	350	2288	1031	180	0	254	162	0	260
V/C Ratio(X)	0.58	0.31	0.04	0.23	0.38	0.03	0.14	0.00	0.28	0.42	0.00	0.47
Avail Cap(c_a), veh/h	777	3899	1205	350	2288	1031	396	0	518	388	0	530
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.9	4.4	3.5	9.3	10.1	7.8	50.4	0.0	44.2	54.0	0.0	45.7
Incr Delay (d2), s/veh	1.0	0.2	0.1	1.6	0.5	0.1	0.4	0.0	0.6	1.7	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.0	0.5	2.4	0.2	0.6	0.0	1.5	1.7	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.9	4.6	3.5	10.9	10.5	7.8	50.7	0.0	44.7	55.8	0.0	47.0
LnGrp LOS	A	A	A	B	B	A	D		D	E		D
Approach Vol, veh/h		1559			982			95				191
Approach Delay, s/veh		5.2			10.5			46.3				50.1
Approach LOS		A			B			D				D
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		96.2		23.8	14.3	81.8		23.8				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		71.5		39.5	25.5	41.5		39.5				
Max Q Clear Time (g_c+I1), s		10.6		18.2	8.5	15.8		12.4				
Green Ext Time (p_c), s		15.4		1.1	1.3	9.8		0.4				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				11.5								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1559	967	28	0	0
Future Vol, veh/h	0	1559	967	28	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	-	-	-	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	0	1559	967	28	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	484
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	534
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	534
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1326	899	133	0	85
Future Vol, veh/h	0	1326	899	133	0	85
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	0	1326	899	133	0	85

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	450
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	562
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	562
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	562
HCM Lane V/C Ratio	-	-	-	0.151
HCM Ctrl Dly (s/v)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q (veh)	-	-	-	0.5

Intersection						
Int Delay, s/veh	7.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↕↕	↕↕	↗
Traffic Vol, veh/h	73	273	278	108	169	57
Future Vol, veh/h	73	273	278	108	169	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	73	273	278	108	169	57

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	779	85	226	0	0
Stage 1	169	-	-	-	-
Stage 2	610	-	-	-	-
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	337	963	1354	-	-
Stage 1	850	-	-	-	-
Stage 2	510	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	268	963	1354	-	-
Mov Cap-2 Maneuver	268	-	-	-	-
Stage 1	676	-	-	-	-
Stage 2	510	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13	6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1354	-	268	963	-	-
HCM Lane V/C Ratio	0.205	-	0.272	0.283	-	-
HCM Ctrl Dly (s/v)	8.3	-	23.4	10.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q (veh)	0.8	-	1.1	1.2	-	-

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	304	0	386	417	23
Future Vol, veh/h	0	304	0	386	417	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	304	0	386	417	23

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	209	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	803	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	803	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 803	-	-
HCM Lane V/C Ratio	- 0.379	-	-
HCM Ctrl Dly (s/v)	- 12.2	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q (veh)	- 1.8	-	-

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		↑	↓		↑	↓	
Traffic Vol, veh/h	0	28	24	155	21	0	45	0	305	0	0	0
Future Vol, veh/h	0	28	24	155	21	0	45	0	305	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	29	25	161	22	0	47	0	318	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	265	413	1	281	254	159	1	0	0	318	0	0
Stage 1	1	1	-	253	253	-	-	-	-	-	-	-
Stage 2	264	412	-	28	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	692	532	1090	675	653	892	1635	-	-	1253	-	-
Stage 1	1027	899	-	756	701	-	-	-	-	-	-	-
Stage 2	746	598	-	994	899	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	659	517	1090	618	634	892	1635	-	-	1253	-	-
Mov Cap-2 Maneuver	659	517	-	618	634	-	-	-	-	-	-	-
Stage 1	997	899	-	734	681	-	-	-	-	-	-	-
Stage 2	701	581	-	940	899	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	10.7		13.2		0.9		0	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	683	620	1253	-	-
HCM Lane V/C Ratio	0.029	-	-	0.079	0.296	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	10.7	13.2	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-	0.3	1.2	0	-	-

HCM 6th TWSC
 8: South Site Access 2 (Street 'G') & South Inner Access (RIRO)

Future Total 2029
 Weekday PM

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗	↗	↗
Traffic Vol, veh/h	0	20	0	351	169	10
Future Vol, veh/h	0	20	0	351	169	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	21	0	366	176	10

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	176	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	872	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	872	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 872	-	-
HCM Lane V/C Ratio	- 0.024	-	-
HCM Ctrl Dly (s/v)	- 9.2	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q (veh)	- 0.1	-	-

Queues
1: Creditview Road & Mayfield Road

Future Total 2029 - Unsignalized
Weekend Saturday

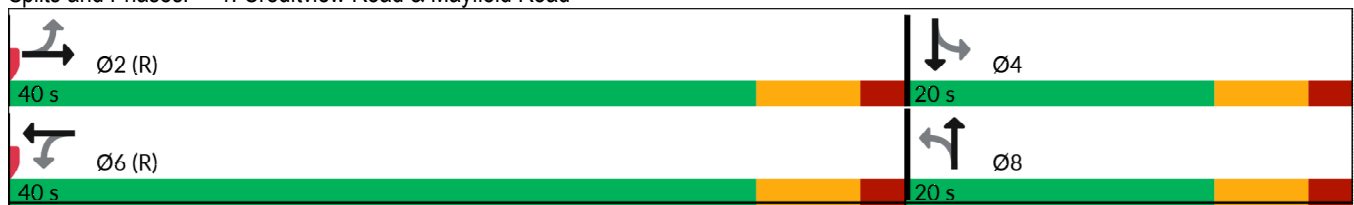


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑	↘	↑↑	↘	↑↑	↘	↑↑
Traffic Volume (vph)	26	1017	131	1092	29	333	416	387
Future Volume (vph)	26	1017	131	1092	29	333	416	387
Lane Group Flow (vph)	27	1099	135	1285	30	461	429	425
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	31.2	31.2
Total Split (s)	40.0	40.0	40.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	6.2	6.2
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.17	0.39	0.54	0.65	0.14	0.54	2.20	0.52
Control Delay (s/veh)	9.7	7.9	18.9	10.8	20.4	19.7	576.1	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.7	7.9	18.9	10.8	20.4	19.7	576.1	22.3
Queue Length 50th (m)	1.4	22.9	8.9	46.5	2.8	20.4	~82.6	22.1
Queue Length 95th (m)	5.4	30.8	#29.1	65.5	8.9	33.5	#131.1	34.6
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	161	2840	248	1989	212	849	195	822
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	0.17	0.39	0.54	0.65	0.14	0.54	2.20	0.52

Intersection Summary

























Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 ~ 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: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Future Total 2029 - Unsignalized
 Weekend Saturday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	26	1017	49	131	1092	154	29	333	114	416	387	25
Future Volume (veh/h)	26	1017	49	131	1092	154	29	333	114	416	387	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1796	1885	1900	1900	1900	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	27	1048	51	135	1126	159	30	343	118	429	399	26
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	7	1	0	0	0	1	0	0	1	0
Cap, veh/h	256	2799	136	347	1769	249	245	604	204	226	785	51
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	437	5028	244	517	3177	447	977	2626	889	945	3414	222
Grp Volume(v), veh/h	27	715	384	135	639	646	30	232	229	429	209	216
Grp Sat Flow(s),veh/h/ln	437	1716	1841	517	1805	1819	977	1791	1724	945	1791	1845
Q Serve(g_s), s	2.7	7.0	7.0	11.9	14.6	14.7	1.7	6.9	7.1	6.7	6.1	6.1
Cycle Q Clear(g_c), s	17.4	7.0	7.0	18.9	14.6	14.7	7.8	6.9	7.1	13.8	6.1	6.1
Prop In Lane	1.00		0.13	1.00		0.25	1.00		0.52	1.00		0.12
Lane Grp Cap(c), veh/h	256	1910	1025	347	1005	1013	245	412	396	226	412	424
V/C Ratio(X)	0.11	0.37	0.37	0.39	0.64	0.64	0.12	0.56	0.58	1.90	0.51	0.51
Avail Cap(c_a), veh/h	256	1910	1025	347	1005	1013	245	412	396	226	412	424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	7.4	7.5	12.7	9.1	9.1	23.6	20.4	20.5	28.4	20.1	20.2
Incr Delay (d2), s/veh	0.8	0.6	1.0	3.3	3.1	3.1	0.2	1.8	2.1	420.5	1.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.3	0.6	0.9	0.9	0.2	1.5	1.5	28.4	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.9	8.0	8.5	16.0	12.2	12.2	23.8	22.2	22.6	448.9	21.1	21.2
LnGrp LOS	B	A	A	B	B	B	C	C	C	F	C	C
Approach Vol, veh/h		1126			1420			491			854	
Approach Delay, s/veh		8.4			12.6			22.5			236.0	
Approach LOS		A			B			C			F	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		40.0		20.0		40.0		20.0				
Change Period (Y+Rc), s		6.6		6.2		6.6		6.2				
Max Green Setting (Gmax), s		33.4		13.8		33.4		13.8				
Max Q Clear Time (g_c+I1), s		19.4		15.8		20.9		9.8				
Green Ext Time (p_c), s		7.4		0.0		8.7		1.2				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				61.6								
HCM 6th LOS				E								
Notes												
User approved pedestrian interval to be less than phase max green.												

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road Weekend Saturday

Intersection

Int Delay, s/veh 133.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↘	↗	↘	↗	
Traffic Vol, veh/h	448	972	34	86	963	54	23	0	79	71	0	164
Future Vol, veh/h	448	972	34	86	963	54	23	0	79	71	0	164
Conflicting Peds, #/hr	0	0	2	2	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	63	-	63	40	-	30	-	-	0	-	-	-
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	1	0	0	1	0	4	0	3	0	0	0
Mvmt Flow	448	972	34	86	963	54	23	0	79	71	0	164

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	1017	0	0	1008
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.1	-	-	5.3
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.2	-	-	3.1
Pot Cap-1 Maneuver	690	-	-	394
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	690	-	-	393
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	6	1.3	\$ 562.4	\$ 1354.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	6	447	690	-	-	393	-	-	8	536
HCM Lane V/C Ratio	3.833	0.177	0.649	-	-	0.219	-	-	8.875	0.306
HCM Ctrl Dly (s/v)	\$ 2443.1	14.8	19.3	-	-	16.7	-	-	\$ 4448.8	14.7
HCM Lane LOS	F	B	C	-	-	C	-	-	F	B
HCM 95th %tile Q (veh)	4.2	0.6	4.8	-	-	0.8	-	-	10.4	1.3

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s
 +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1454	1097	38	0	0
Future Vol, veh/h	0	1454	1097	38	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	-	-	-	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	0	1454	1097	38	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1124	987	194	0	114
Future Vol, veh/h	0	1124	987	194	0	114
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	0	1124	987	194	0	114

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	526
HCM Lane V/C Ratio	-	-	-	0.217
HCM Ctrl Dly (s/v)	-	-	-	13.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q (veh)	-	-	-	0.8

Intersection						
Int Delay, s/veh	10.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↕	↕	↗
Traffic Vol, veh/h	98	359	410	103	87	73
Future Vol, veh/h	98	359	410	103	87	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	98	359	410	103	87	73

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	959	44	160	0	-	0
Stage 1	87	-	-	-	-	-
Stage 2	872	-	-	-	-	-
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	258	1023	1432	-	-	-
Stage 1	932	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	184	1023	1432	-	-	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	374	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	17.8	6.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1432	-	184	1023	-	-
HCM Lane V/C Ratio	0.286	-	0.533	0.351	-	-
HCM Ctrl Dly (s/v)	8.5	-	44.9	10.4	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q (veh)	1.2	-	2.7	1.6	-	-

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	409	0	513	428	19
Future Vol, veh/h	0	409	0	513	428	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	409	0	513	428	19

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	214	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	797	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	797	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 797	-	-
HCM Lane V/C Ratio	- 0.513	-	-
HCM Ctrl Dly (s/v)	- 14.2	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q (veh)	- 3	-	-

Intersection												
Int Delay, s/veh	7.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		+	+		+	+	
Traffic Vol, veh/h	0	38	27	203	34	0	66	0	436	0	0	0
Future Vol, veh/h	0	38	27	203	34	0	66	0	436	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	39	28	209	35	0	68	0	449	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	379	586	1	396	362	225	1	0	0	449	0	0
Stage 1	1	1	-	361	361	-	-	-	-	-	-	-
Stage 2	378	585	-	35	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	582	425	1090	568	569	819	1635	-	-	1122	-	-
Stage 1	1027	899	-	662	629	-	-	-	-	-	-	-
Stage 2	648	501	-	986	899	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	536	407	1090	496	545	819	1635	-	-	1122	-	-
Mov Cap-2 Maneuver	536	407	-	496	545	-	-	-	-	-	-	-
Stage 1	984	899	-	634	603	-	-	-	-	-	-	-
Stage 2	585	480	-	919	899	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	12.5		18.8		1		0	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	550	502	1122	-	-
HCM Lane V/C Ratio	0.042	-	-	0.122	0.487	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	12.5	18.8	0	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-	0.4	2.6	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗	↗	↗
Traffic Vol, veh/h	0	23	0	502	213	17
Future Vol, veh/h	0	23	0	502	213	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	24	0	518	220	18

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	220	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	825	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	825	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 825	-	-
HCM Lane V/C Ratio	- 0.029	-	-
HCM Ctrl Dly (s/v)	- 9.5	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q (veh)	- 0.1	-	-

Queues
1: Creditview Road & Mayfield Road

Future Total 2029
Weekend Saturday

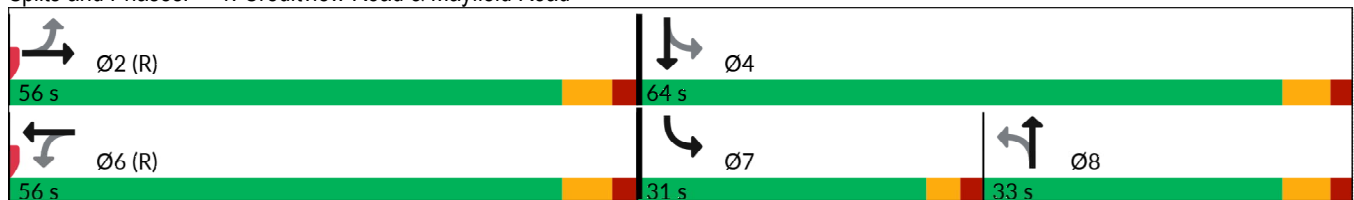


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↶	↶↶↶	↶	↶↶	↶	↶↶	↶	↶↶
Traffic Volume (vph)	26	1017	131	1092	29	333	416	387
Future Volume (vph)	26	1017	131	1092	29	333	416	387
Lane Group Flow (vph)	27	1099	135	1285	30	461	429	425
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		2		6		8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	7	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	5.0	12.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.2	31.2	10.0	31.2
Total Split (s)	56.0	56.0	56.0	56.0	33.0	33.0	31.0	64.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	27.5%	27.5%	25.8%	53.3%
Yellow Time (s)	4.6	4.6	4.6	4.6	4.2	4.2	3.0	4.2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	6.2	6.2	5.0	6.2
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
v/c Ratio	0.34	0.46	0.80	0.78	0.19	0.75	0.91	0.28
Control Delay (s/veh)	37.5	23.2	63.7	31.2	43.8	51.5	52.0	21.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.5	23.2	63.7	31.2	43.8	51.5	52.0	21.9
Queue Length 50th (m)	4.3	68.9	27.7	135.0	6.5	53.5	79.9	34.7
Queue Length 95th (m)	16.0	90.9	#72.3	180.6	15.0	68.2	#130.6	42.6
Internal Link Dist (m)		137.9		183.6		293.9		119.3
Turn Bay Length (m)	50.0		30.0		30.0		34.0	
Base Capacity (vph)	80	2373	169	1658	211	797	474	1709
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	0.34	0.46	0.80	0.78	0.14	0.58	0.91	0.25

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Creditview Road & Mayfield Road



HCM 6th Signalized Intersection Summary
 1: Creditview Road & Mayfield Road

Future Total 2029
 Weekend Saturday



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑		↗	↑↑		↗	↑↑		↗	↑↑	
Traffic Volume (veh/h)	26	1017	49	131	1092	154	29	333	114	416	387	25
Future Volume (veh/h)	26	1017	49	131	1092	154	29	333	114	416	387	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1796	1885	1900	1900	1900	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	27	1048	51	135	1126	159	30	343	118	429	399	26
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	7	1	0	0	0	1	0	0	1	0
Cap, veh/h	143	2401	117	236	1517	214	222	435	147	473	1419	92
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.17	0.17	0.17	0.21	0.42	0.42
Sat Flow, veh/h	437	5028	244	517	3177	447	977	2626	889	1810	3414	222
Grp Volume(v), veh/h	27	715	384	135	639	646	30	232	229	429	209	216
Grp Sat Flow(s),veh/h/ln	437	1716	1841	517	1805	1819	977	1791	1723	1810	1791	1845
Q Serve(g_s), s	6.4	16.5	16.5	28.0	34.3	34.5	3.2	14.9	15.3	22.7	9.2	9.3
Cycle Q Clear(g_c), s	41.0	16.5	16.5	44.5	34.3	34.5	3.2	14.9	15.3	22.7	9.2	9.3
Prop In Lane	1.00		0.13	1.00		0.25	1.00		0.52	1.00		0.12
Lane Grp Cap(c), veh/h	143	1639	879	236	862	869	222	297	285	473	745	767
V/C Ratio(X)	0.19	0.44	0.44	0.57	0.74	0.74	0.14	0.78	0.80	0.91	0.28	0.28
Avail Cap(c_a), veh/h	143	1639	879	236	862	869	278	400	385	488	863	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	20.7	20.7	35.4	25.3	25.4	43.1	48.0	48.2	31.0	23.2	23.2
Incr Delay (d2), s/veh	2.9	0.8	1.6	9.7	5.7	5.7	0.3	7.0	8.5	20.3	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.5	5.0	3.2	10.7	10.9	0.6	5.9	5.9	9.6	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.9	21.5	22.3	45.1	31.0	31.1	43.4	55.0	56.7	51.3	23.4	23.4
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		1126			1420			491			854	
Approach Delay, s/veh		22.3			32.4			55.1			37.4	
Approach LOS		C			C			E			D	
Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		63.9		56.1		63.9	30.0	26.1				
Change Period (Y+Rc), s		6.6		6.2		6.6	5.0	6.2				
Max Green Setting (Gmax), s		49.4		57.8		49.4	26.0	26.8				
Max Q Clear Time (g_c+I1), s		43.0		11.3		46.5	24.7	17.3				
Green Ext Time (p_c), s		4.1		3.4		2.4	0.3	2.4				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				33.5								
HCM 6th LOS				C								
Notes												
User approved pedestrian interval to be less than phase max green.												

Queues

Future Total 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road Weekend Saturday

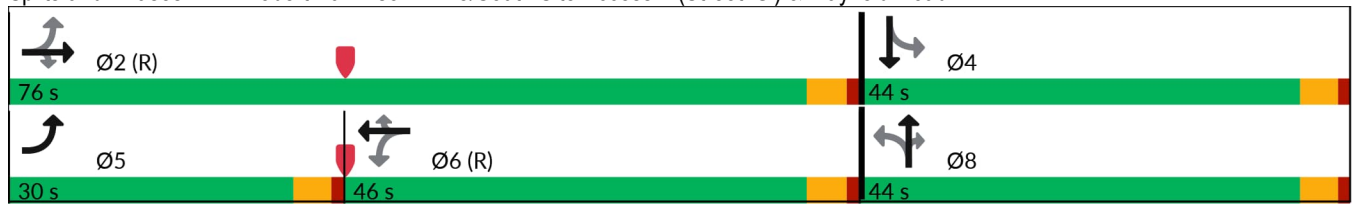


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	448	972	34	86	963	54	23	0	79	71	0
Future Volume (vph)	448	972	34	86	963	54	23	0	79	71	0
Lane Group Flow (vph)	448	972	34	86	963	54	0	23	79	71	164
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases	5	2			6			8			4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	6	6	6	8	8	8	4	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	30.0	76.0	76.0	46.0	46.0	46.0	44.0	44.0	44.0	44.0	44.0
Total Split (%)	25.0%	63.3%	63.3%	38.3%	38.3%	38.3%	36.7%	36.7%	36.7%	36.7%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag	Lag					
Lead-Lag Optimize?	Yes			Yes	Yes	Yes					
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
v/c Ratio	0.65	0.23	0.03	0.31	0.51	0.06		0.38	0.36	0.53	0.30
Control Delay (s/veh)	14.4	2.5	0.9	28.7	24.8	12.7		67.0	15.0	65.1	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.4	2.5	0.9	28.7	24.8	12.7		67.0	15.0	65.1	1.4
Queue Length 50th (m)	33.8	14.1	0.0	10.2	60.8	1.1		5.4	0.0	17.1	0.0
Queue Length 95th (m)	74.5	23.1	2.0	m20.1	103.3	m6.3		14.1	14.5	31.6	0.0
Internal Link Dist (m)		81.4			147.0			205.6			59.1
Turn Bay Length (m)	63.0		63.0	40.0		30.0				30.0	
Base Capacity (vph)	685	4257	1294	278	1881	866		209	563	458	820
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	0.65	0.23	0.03	0.31	0.51	0.06		0.11	0.14	0.16	0.20

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road



HCM 6th Signalized Intersection Summary

Future Total 2029

2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road Weekend Saturday

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	448	972	34	86	963	54	23	0	79	71	0	164
Future Volume (veh/h)	448	972	34	86	963	54	23	0	79	71	0	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1885	1900	1841	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	448	972	34	86	963	54	23	0	79	71	0	164
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	1	0	0	1	0	4	0	3	0	0	0
Cap, veh/h	521	3795	1186	387	2060	924	179	0	295	167	0	302
Arrive On Green	0.12	0.74	0.74	0.58	0.58	0.58	0.19	0.00	0.19	0.19	0.00	0.19
Sat Flow, veh/h	1810	5147	1608	569	3582	1607	636	0	1572	1341	0	1610
Grp Volume(v), veh/h	448	972	34	86	963	54	23	0	79	71	0	164
Grp Sat Flow(s),veh/h/ln	1810	1716	1608	569	1791	1607	636	0	1572	1341	0	1610
Q Serve(g_s), s	11.2	7.3	0.7	9.1	18.7	1.8	2.0	0.0	5.2	6.2	0.0	11.1
Cycle Q Clear(g_c), s	11.2	7.3	0.7	9.2	18.7	1.8	13.0	0.0	5.2	19.1	0.0	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	521	3795	1186	387	2060	924	179	0	295	167	0	302
V/C Ratio(X)	0.86	0.26	0.03	0.22	0.47	0.06	0.13	0.00	0.27	0.43	0.00	0.54
Avail Cap(c_a), veh/h	680	3795	1186	387	2060	924	355	0	518	357	0	530
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	5.1	4.2	12.8	14.8	11.2	50.0	0.0	41.7	53.7	0.0	44.1
Incr Delay (d2), s/veh	8.7	0.2	0.0	1.3	0.8	0.1	0.3	0.0	0.5	1.7	0.0	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.4	0.0	0.8	4.3	0.4	0.5	0.0	1.6	1.8	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.9	5.3	4.3	14.1	15.6	11.3	50.3	0.0	42.2	55.4	0.0	45.6
LnGrp LOS	C	A	A	B	B	B	D		D	E		D
Approach Vol, veh/h		1454			1103			102				235
Approach Delay, s/veh		10.7			15.3			44.0				48.6
Approach LOS		B			B			D				D
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		93.0		27.0	19.5	73.5		27.0				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		71.5		39.5	25.5	41.5		39.5				
Max Q Clear Time (g_c+I1), s		9.3		21.1	13.2	20.7		15.0				
Green Ext Time (p_c), s		11.3		1.4	1.8	9.6		0.5				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				16.7								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1454	1097	38	0	0
Future Vol, veh/h	0	1454	1097	38	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	-	-	-	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	0	1454	1097	38	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	549
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	485
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	485
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q (veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1124	987	194	0	114
Future Vol, veh/h	0	1124	987	194	0	114
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	0	1124	987	194	0	114

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	494
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	526
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	526
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	526
HCM Lane V/C Ratio	-	-	-	0.217
HCM Ctrl Dly (s/v)	-	-	-	13.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q (veh)	-	-	-	0.8

Intersection						
Int Delay, s/veh	10.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↕↕	↕↕	↗
Traffic Vol, veh/h	98	359	410	103	87	73
Future Vol, veh/h	98	359	410	103	87	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	50	-	-	30
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	98	359	410	103	87	73

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	959	44	160	0	0
Stage 1	87	-	-	-	-
Stage 2	872	-	-	-	-
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	258	1023	1432	-	-
Stage 1	932	-	-	-	-
Stage 2	374	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	184	1023	1432	-	-
Mov Cap-2 Maneuver	184	-	-	-	-
Stage 1	665	-	-	-	-
Stage 2	374	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	17.8	6.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1432	-	184	1023	-	-
HCM Lane V/C Ratio	0.286	-	0.533	0.351	-	-
HCM Ctrl Dly (s/v)	8.5	-	44.9	10.4	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q (veh)	1.2	-	2.7	1.6	-	-

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	409	0	513	428	19
Future Vol, veh/h	0	409	0	513	428	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	30
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	409	0	513	428	19

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	214	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	797	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	797	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 797	-	-
HCM Lane V/C Ratio	- 0.513	-	-
HCM Ctrl Dly (s/v)	- 14.2	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q (veh)	- 3	-	-

Intersection												
Int Delay, s/veh	7.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+		↑	↑		↑	↑	
Traffic Vol, veh/h	0	38	27	203	34	0	66	0	436	0	0	0
Future Vol, veh/h	0	38	27	203	34	0	66	0	436	0	0	0
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	-	-	-	-	-	-	50	-	-	15	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	39	28	209	35	0	68	0	449	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	379	586	1	396	362	225	1	0	0	449	0	0
Stage 1	1	1	-	361	361	-	-	-	-	-	-	-
Stage 2	378	585	-	35	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	582	425	1090	568	569	819	1635	-	-	1122	-	-
Stage 1	1027	899	-	662	629	-	-	-	-	-	-	-
Stage 2	648	501	-	986	899	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	536	407	1090	496	545	819	1635	-	-	1122	-	-
Mov Cap-2 Maneuver	536	407	-	496	545	-	-	-	-	-	-	-
Stage 1	984	899	-	634	603	-	-	-	-	-	-	-
Stage 2	585	480	-	919	899	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	12.5		18.8		1		0	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1635	-	-	550	502	1122	-	-
HCM Lane V/C Ratio	0.042	-	-	0.122	0.487	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	12.5	18.8	0	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-	0.4	2.6	0	-	-

HCM 6th TWSC
 8: South Site Access 2 (Street 'G') & South Inner Access (RIRO)

Future Total 2029
 Weekend Saturday

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗	↗	↗
Traffic Vol, veh/h	0	23	0	502	213	17
Future Vol, veh/h	0	23	0	502	213	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	15
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	24	0	518	220	18

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	220	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	825	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	825	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 825	-	-
HCM Lane V/C Ratio	- 0.029	-	-
HCM Ctrl Dly (s/v)	- 9.5	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q (veh)	- 0.1	-	-



APPENDIX J

Signal Warrant Analysis

M.T.O. MINIMUM REQUIREMENTS FOR INSTALLATION OF TRAFFIC SIGNAL

Methodology from Section 4 of *Ontario Traffic Manual Book 12: Traffic Signals*

INTERSECTION: Creditview & East Access 1 (full movement)
HORIZON / DESCRIPTION: Future Total 2029

Number of lanes on main road: ≥ 2
 Flow conditions: Restricted (speeds less than 70 km/h with frequent side friction)
 Number of approach legs: 3 (T-intersection)
 Number of existing roads: 1 (three or fewer existing approach legs)
 Major direction: North-South

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:	900	Value	Percent Met
	Requirement after 150% expansion:	1350	522	39%
B.	Base volume requirement (minor street):	255	Value	Percent Met
	Requirement after 150% expansion:	382.5	200.75	52%

Justification 2: Delay to Cross Traffic

A.	Base volume requirement (major street):	900	Value	Percent Met
	Requirement after 150% expansion:	1350	321.25	24%
B.	Base volume requirement (crossing major):	75	Value	Percent Met
	Requirement after 150% expansion:	112.5	42.75	38%

	Volumes		Sum	Average Hourly
	PM	Sat		
NBL	278	410	688	172
NBT	108	103	211	52.75
NBR	0	0	0	0
SBL	0	0	0	0
SBT	169	87	256	64
SBR	57	73	130	32.5
EBL	73	98	171	42.75
EBT	0	0	0	0
EBR	273	359	632	158
WBL	0	0	0	0
WBT	0	0	0	0
WBR	0	0	0	0
Peds			0	0

Pedestrians crossing major road



M.T.O. MINIMUM REQUIREMENTS FOR INSTALLATION OF TRAFFIC SIGNAL

Methodology from Section 4 of *Ontario Traffic Manual Book 12: Traffic Signals*

INTERSECTION:	Creditview & East Access 2 (RIRO)
HORIZON / DESCRIPTION:	Future Total 2029

Number of lanes on main road:	≥2
Flow conditions:	Restricted (speeds less than 70 km/h with frequent side friction)
Number of approach legs:	3 (T-intersection)
Number of existing roads:	1 (three or fewer existing approach legs)
Major direction:	North-South

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:	900			
	Requirement after 150% expansion:	1350			
			Value	Percent Met	
			624.75	46%	
B.	Base volume requirement (minor street):	255			
	Requirement after 150% expansion:	382.5			
			Value	Percent Met	
			178.25	47%	

Justification 2: Delay to Cross Traffic

A.	Base volume requirement (major street):	900			
	Requirement after 150% expansion:	1350			
			Value	Percent Met	
			446.5	33%	
B.	Base volume requirement (crossing major):	75			
	Requirement after 150% expansion:	112.5			
			Value	Percent Met	
			0	0%	

	Volumes		Sum	Average Hourly
	PM	Sat		
NBL	0	0	0	0
NBT	386	513	899	224.75
NBR	0	0	0	0
SBL	0	0	0	0
SBT	417	428	845	211.25
SBR	23	19	42	10.5
EBL	0	0	0	0
EBT	0	0	0	0
EBR	304	409	713	178.25
WBL	0	0	0	0
WBT	0	0	0	0
WBR	0	0	0	0
Peds			0	0

Pedestrians crossing major road



M.T.O. MINIMUM REQUIREMENTS FOR INSTALLATION OF TRAFFIC SIGNAL

Methodology from Section 4 of *Ontario Traffic Manual Book 12: Traffic Signals*

INTERSECTION:	Mayfield & Street G
HORIZON / DESCRIPTION:	Future Total 2029

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:	4
Number of existing roads:	2 (all approach legs exist)
Major direction:	East-West

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.

Result
Justified by J1
Condition not met
Condition not met

Justification 1: Minimum Vehicle Volume

A.	Base volume requirement:	600					
	Requirement after 120% expansion:	720					
			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #008080; color: white;"> <th>Value</th> <th>Percent Met</th> </tr> <tr> <td style="text-align: center;">1430.25</td> <td style="text-align: center;">100%</td> </tr> </table>	Value	Percent Met	1430.25	100%
Value	Percent Met						
1430.25	100%						
B.	Base volume requirement (minor street):	120					
	Requirement after 120% expansion:	144					
			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #008080; color: white;"> <th>Value</th> <th>Percent Met</th> </tr> <tr> <td style="text-align: center;">155.75</td> <td style="text-align: center;">100%</td> </tr> </table>	Value	Percent Met	155.75	100%
Value	Percent Met						
155.75	100%						

Justification 2: Delay to Cross Traffic

A.	Base volume requirement (major street):	600					
	Requirement after 120% expansion:	720					
			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #008080; color: white;"> <th>Value</th> <th>Percent Met</th> </tr> <tr> <td style="text-align: center;">1274.5</td> <td style="text-align: center;">100%</td> </tr> </table>	Value	Percent Met	1274.5	100%
Value	Percent Met						
1274.5	100%						
B.	Base volume requirement (crossing major):	50					
	Requirement after 120% expansion:	60					
			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #008080; color: white;"> <th>Value</th> <th>Percent Met</th> </tr> <tr> <td style="text-align: center;">46.75</td> <td style="text-align: center;">78%</td> </tr> </table>	Value	Percent Met	46.75	78%
Value	Percent Met						
46.75	78%						

	Volumes		Sum	Average Hourly
	PM	Sat		
NBL	25	23	48	12
NBT	0	0	0	0
NBR	70	79	149	37.25
SBL	68	71	139	34.75
SBT	0	0	0	0
SBR	123	164	287	71.75
EBL	316	448	764	191
EBT	1192	972	2164	541
EBR	51	34	85	21.25
WBL	82	86	168	42
WBT	866	963	1829	457.25
WBR	34	54	88	22
Peds			0	0

Pedestrians crossing major road



LEFT TURN WARRANT

INTERSECTION:

Creditview & East Access 1 (Full Movement)

HORIZON / DESCRIPTION:

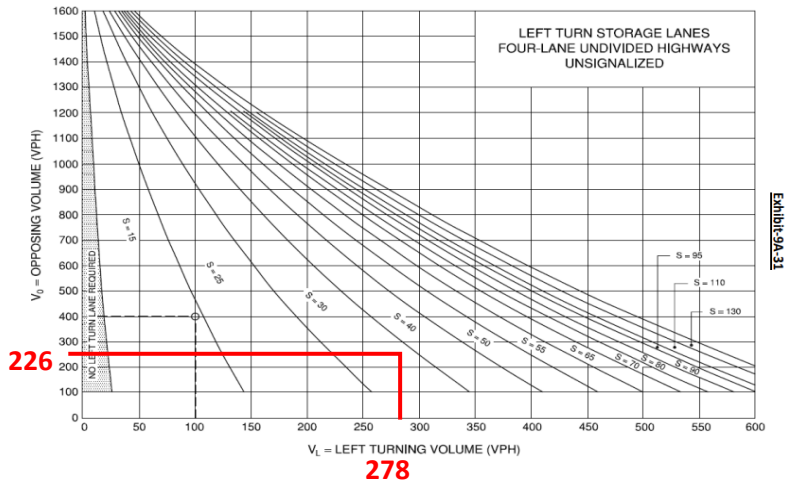
Future Total 2029

	Volumes	
	PM	Sat
NBL	278	410
NBT	108	103
NBR	0	0
SBL	0	0
SBT	169	87
SBR	57	73
EBL	73	98
EBT	0	0
EBR	273	359
WBL	0	0
WBT	0	0
WBR	0	0

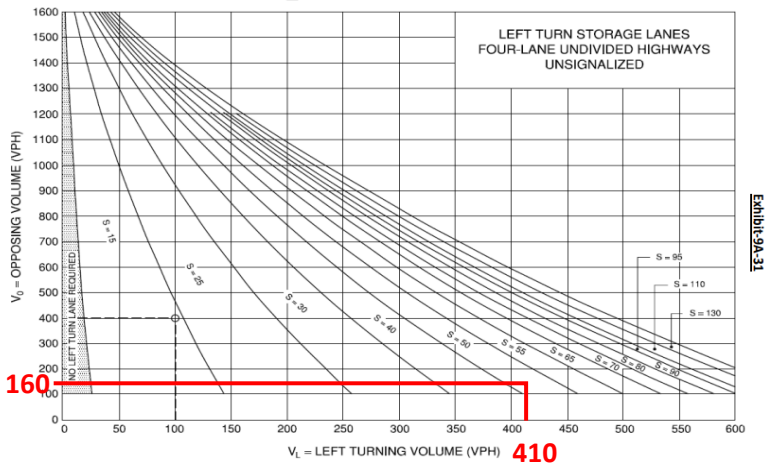
Major Direction: North-South
Turning Lane: Northbound

Criteria / Value	PM	Sat
Design Speed (km/h)		
Advance Volume (vph) (VA)	386	513
Left Turning Volume (vph) (VL)	278	410
% of Left Turning Volume	72%	80%
Opposing Volume (vph) (VO)	226	160
Warrant Met?	yes	yes
Storage Lane (m)	30	50

AM



PM



LEFT TURN WARRANT

INTERSECTION:

Street G & Middle Access (Full Movement)

HORIZON / DESCRIPTION:

Future Total 2029

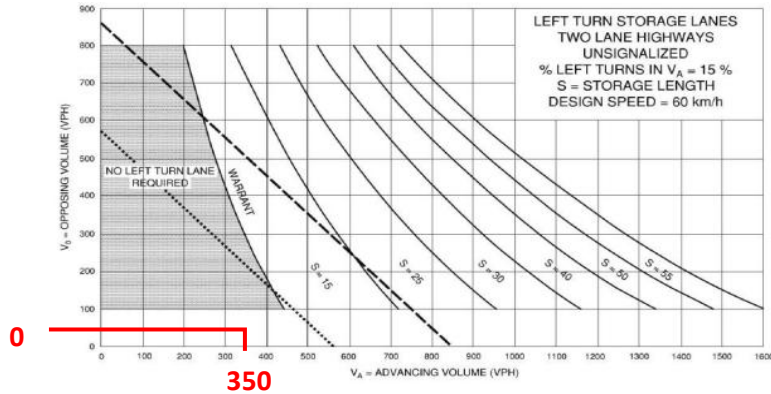
	Volumes	
	PM	Sat
NBL	45	66
NBT	0	0
NBR	305	436
SBL	0	0
SBT	0	0
SBR	0	0
EBL	0	0
EBT	28	38
EBR	24	27
WBL	155	203
WBT	21	34
WBR	0	0

Major Direction: North-South
Turning Lane: Northbound

Criteria / Value	PM	Sat
Design Speed (km/h)		
Advance Volume (vph) (VA)	350	502
Left Turning Volume (vph) (VL)	45	66
% of Left Turning Volume	13%	13%
Opposing Volume (vph) (VO)	0	0
Warrant Met?	no	no
Storage Lane (m)	n/a	n/a

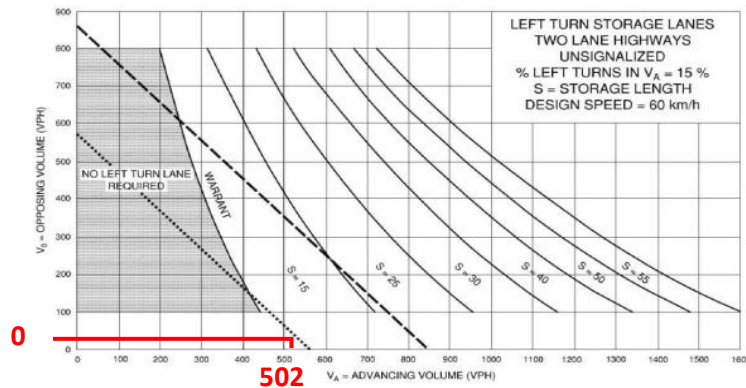
AM

Exhibit-9A-8



PM

Exhibit-9A-8





APPENDIX K

SimTraffic Analysis

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	8:15	8:15	8:15	8:15	8:15	8:15
End Time	9:30	9:30	9:30	9:30	9:30	9:30
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	3493	3621	3571	3617	3465	3553
Vehs Exited	3516	3618	3572	3598	3462	3555
Starting Vehs	76	68	69	53	61	63
Ending Vehs	53	71	68	72	64	65
Travel Distance (km)	2195	2300	2226	2282	2197	2240
Travel Time (hr)	61.6	64.8	62.5	64.0	61.9	63.0
Total Delay (hr)	15.0	15.9	15.3	15.6	15.1	15.4
Total Stops	2266	2360	2274	2292	2242	2289
Fuel Used (l)	193.9	202.1	195.1	200.8	192.5	196.9

Interval #0 Information Seeding

Start Time	8:15
End Time	8:30
Total Time (min)	15
No data recorded this interval.	

Interval #1 Information Recording

Start Time	8:30					
End Time	9:30					
Total Time (min)	60					
Run Number	1	2	3	4	5	Avg
Vehs Entered	3493	3621	3571	3617	3465	3553
Vehs Exited	3516	3618	3572	3598	3462	3555
Starting Vehs	76	68	69	53	61	63
Ending Vehs	53	71	68	72	64	65
Travel Distance (km)	2195	2300	2226	2282	2197	2240
Travel Time (hr)	61.6	64.8	62.5	64.0	61.9	63.0
Total Delay (hr)	15.0	15.9	15.3	15.6	15.1	15.4
Total Stops	2266	2360	2274	2292	2242	2289
Fuel Used (l)	193.9	202.1	195.1	200.8	192.5	196.9

Intersection: 1: Creditview Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	TR	L	T	TR	L	T
Maximum Queue (m)	16.0	39.9	39.4	33.5	37.0	84.1	74.8	31.4	33.7	26.2	24.4	26.6
Average Queue (m)	5.6	21.6	20.8	16.6	17.8	44.9	37.5	10.5	17.2	10.3	11.3	10.9
95th Queue (m)	13.6	34.0	34.1	28.5	35.5	68.4	61.4	24.2	29.2	20.0	22.0	22.2
Link Distance (m)		136.8	136.8	136.8		192.6	192.6		298.8	298.8		120.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	50.0				30.0			30.0			34.0	
Storage Blk Time (%)		0			1	11		1	1			0
Queuing Penalty (veh)		0			7	11		0	0			0

Intersection: 1: Creditview Road & Mayfield Road

Movement	SB
Directions Served	TR
Maximum Queue (m)	28.9
Average Queue (m)	11.7
95th Queue (m)	23.1
Link Distance (m)	120.2
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	LT	R	L
Maximum Queue (m)	22.9	38.9	28.8	24.3	10.4	28.4	61.5	71.7	18.6	24.8	19.3	21.4
Average Queue (m)	10.2	13.4	6.2	2.5	0.7	7.2	22.7	24.9	1.9	7.6	7.8	5.8
95th Queue (m)	19.1	30.2	19.4	12.1	5.3	18.8	54.9	58.4	13.0	18.9	14.9	15.9
Link Distance (m)		84.3	84.3	84.3			149.8	149.8		208.7	208.7	57.4
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	63.0	63.0				40.0	30.0					
Storage Blk Time (%)							2	3	0			
Queuing Penalty (veh)							1	1	0			

Intersection: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Movement	SB
Directions Served	TR
Maximum Queue (m)	20.6
Average Queue (m)	7.9
95th Queue (m)	15.9
Link Distance (m)	57.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Mayfield Road & South Site Access 1

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Mayfield Road & South Site Access 3

Movement	WB	SB
Directions Served	T	R
Maximum Queue (m)	1.5	16.2
Average Queue (m)	0.0	6.4
95th Queue (m)	1.0	12.7
Link Distance (m)	136.8	87.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Creditview Road & East Site Access 1

Movement	EB	EB	NB	SB
Directions Served	L	R	L	R
Maximum Queue (m)	7.5	8.4	21.0	4.0
Average Queue (m)	2.4	4.9	5.8	0.2
95th Queue (m)	8.0	8.7	16.3	2.0
Link Distance (m)	98.7	98.7		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)			50.0	30.0
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Creditview Road & East Site Access 2

Movement	EB
Directions Served	R
Maximum Queue (m)	9.2
Average Queue (m)	5.7
95th Queue (m)	9.5
Link Distance (m)	108.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: South Site Access 2 (Street 'G') & Middle Inner Access

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	9.1	15.0
Average Queue (m)	2.3	9.4
95th Queue (m)	8.7	12.8
Link Distance (m)	69.5	104.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: South Site Access 2 (Street 'G') & South Inner Access (RIRO)

Movement	EB
Directions Served	R
Maximum Queue (m)	8.9
Average Queue (m)	1.5
95th Queue (m)	6.9
Link Distance (m)	59.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 21

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:15	4:15	4:15	4:15	4:15	4:15
End Time	5:30	5:30	5:30	5:30	5:30	5:30
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	4624	4683	4674	4577	4684	4647
Vehs Exited	4660	4666	4646	4564	4688	4646
Starting Vehs	147	124	102	109	124	120
Ending Vehs	111	141	130	122	120	126
Travel Distance (km)	3024	3022	3027	3003	3036	3022
Travel Time (hr)	135.6	130.6	111.8	107.7	111.5	119.4
Total Delay (hr)	69.3	64.1	45.4	41.9	44.8	53.1
Total Stops	4987	5083	4746	4524	4809	4830
Fuel Used (l)	322.0	319.8	298.7	293.9	301.0	307.1

Interval #0 Information Seeding

Start Time	4:15
End Time	4:30
Total Time (min)	15

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:30
End Time	5:30
Total Time (min)	60

Run Number	1	2	3	4	5	Avg
Vehs Entered	4624	4683	4674	4577	4684	4647
Vehs Exited	4660	4666	4646	4564	4688	4646
Starting Vehs	147	124	102	109	124	120
Ending Vehs	111	141	130	122	120	126
Travel Distance (km)	3024	3022	3027	3003	3036	3022
Travel Time (hr)	135.6	130.6	111.8	107.7	111.5	119.4
Total Delay (hr)	69.3	64.1	45.4	41.9	44.8	53.1
Total Stops	4987	5083	4746	4524	4809	4830
Fuel Used (l)	322.0	319.8	298.7	293.9	301.0	307.1

Intersection: 1: Creditview Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	TR	L	T	TR	L	T
Maximum Queue (m)	57.2	89.3	88.6	80.7	37.4	187.4	187.4	37.3	86.3	64.2	41.4	96.4
Average Queue (m)	7.9	58.1	59.4	56.3	31.7	117.3	117.7	13.5	46.2	26.0	36.4	43.7
95th Queue (m)	30.8	81.2	81.2	77.1	45.3	201.7	202.6	34.3	76.0	54.1	48.0	88.1
Link Distance (m)		136.8	136.8	136.8		192.6	192.6		298.8	298.8		120.0
Upstream Blk Time (%)						13	7					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (m)	50.0				30.0			30.0			34.0	
Storage Blk Time (%)		8			38	25		1	30		25	2
Queuing Penalty (veh)		1			175	34		1	17		46	5

Intersection: 1: Creditview Road & Mayfield Road

Movement	SB
Directions Served	TR
Maximum Queue (m)	75.6
Average Queue (m)	36.0
95th Queue (m)	62.8
Link Distance (m)	120.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	LT	R	L
Maximum Queue (m)	53.5	55.8	39.8	30.5	10.8	47.4	81.6	85.9	34.0	21.1	17.4	34.2
Average Queue (m)	25.4	18.6	14.3	6.8	2.6	13.5	36.7	40.6	4.9	5.8	6.9	16.3
95th Queue (m)	42.8	39.2	31.9	19.8	9.1	33.9	68.3	70.8	21.5	15.0	13.4	30.6
Link Distance (m)		84.3	84.3	84.3			149.8	149.8		208.7	208.7	57.4
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	63.0				63.0	40.0			30.0			
Storage Blk Time (%)	0	0				0	7	13	0			
Queuing Penalty (veh)	1	0				2	6	4	0			

Intersection: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Movement	SB
Directions Served	TR
Maximum Queue (m)	23.0
Average Queue (m)	9.8
95th Queue (m)	18.1
Link Distance (m)	57.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Mayfield Road & South Site Access 1

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Mayfield Road & South Site Access 3

Movement	SB
Directions Served	R
Maximum Queue (m)	21.9
Average Queue (m)	7.1
95th Queue (m)	14.7
Link Distance (m)	87.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Creditview Road & East Site Access 1

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	T	R
Maximum Queue (m)	32.6	22.2	44.8	1.3	7.6
Average Queue (m)	9.6	12.0	16.7	0.0	0.5
95th Queue (m)	20.0	20.0	34.3	0.9	3.4
Link Distance (m)	112.0	112.0		233.7	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)			50.0		30.0
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 6: Creditview Road & East Site Access 2

Movement	EB
Directions Served	R
Maximum Queue (m)	36.7
Average Queue (m)	16.6
95th Queue (m)	27.7
Link Distance (m)	103.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: South Site Access 2 (Street 'G') & Middle Inner Access

Movement	EB	WB	NB
Directions Served	LTR	LTR	TR
Maximum Queue (m)	15.9	19.2	6.6
Average Queue (m)	7.7	11.1	0.3
95th Queue (m)	14.4	16.6	2.6
Link Distance (m)	69.5	104.2	91.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: South Site Access 2 (Street 'G') & South Inner Access (RIRO)

Movement	EB
Directions Served	R
Maximum Queue (m)	8.9
Average Queue (m)	4.0
95th Queue (m)	11.2
Link Distance (m)	59.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 293

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	2:15	2:15	2:15	2:15	2:15	2:15
End Time	3:30	3:30	3:30	3:30	3:30	3:30
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	4912	4944	4866	4819	4850	4880
Vehs Exited	4888	4934	4865	4790	4828	4862
Starting Vehs	153	158	132	135	133	140
Ending Vehs	177	168	133	164	155	158
Travel Distance (km)	3300	3329	3274	3201	3256	3272
Travel Time (hr)	169.7	159.6	145.0	181.2	145.7	160.3
Total Delay (hr)	96.6	85.7	72.6	110.3	73.5	87.7
Total Stops	6400	6290	6067	5871	5893	6100
Fuel Used (l)	375.0	367.9	349.4	379.6	349.6	364.3

Interval #0 Information Seeding

Start Time	2:15
End Time	2:30
Total Time (min)	15

No data recorded this interval.

Interval #1 Information Recording

Start Time	2:30
End Time	3:30
Total Time (min)	60

Run Number	1	2	3	4	5	Avg
Vehs Entered	4912	4944	4866	4819	4850	4880
Vehs Exited	4888	4934	4865	4790	4828	4862
Starting Vehs	153	158	132	135	133	140
Ending Vehs	177	168	133	164	155	158
Travel Distance (km)	3300	3329	3274	3201	3256	3272
Travel Time (hr)	169.7	159.6	145.0	181.2	145.7	160.3
Total Delay (hr)	96.6	85.7	72.6	110.3	73.5	87.7
Total Stops	6400	6290	6067	5871	5893	6100
Fuel Used (l)	375.0	367.9	349.4	379.6	349.6	364.3

Intersection: 1: Creditview Road & Mayfield Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	TR	L	T	TR	L	T
Maximum Queue (m)	52.7	79.0	84.0	80.8	37.4	199.8	197.2	37.3	101.0	81.2	41.5	123.1
Average Queue (m)	13.1	52.2	55.6	53.7	31.1	161.6	160.7	10.2	58.5	29.3	40.1	72.0
95th Queue (m)	35.4	71.8	75.7	76.0	45.6	234.9	235.3	32.0	91.2	66.9	45.3	126.7
Link Distance (m)		136.8	136.8	136.8		192.6	192.6		298.8	298.8		119.8
Upstream Blk Time (%)						29	26					2
Queuing Penalty (veh)						0	0					7
Storage Bay Dist (m)	50.0				30.0			30.0			34.0	
Storage Blk Time (%)		6			24	44			42		48	1
Queuing Penalty (veh)		1			132	57			12		93	4

Intersection: 1: Creditview Road & Mayfield Road

Movement	SB
Directions Served	TR
Maximum Queue (m)	92.8
Average Queue (m)	39.8
95th Queue (m)	78.4
Link Distance (m)	119.8
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	LT	R	L
Maximum Queue (m)	69.3	69.1	38.9	26.1	10.8	47.5	98.7	98.0	37.5	17.2	17.4	39.1
Average Queue (m)	39.2	20.1	13.7	4.6	1.5	19.3	60.6	65.8	9.9	4.9	7.4	16.4
95th Queue (m)	63.7	46.9	29.9	16.2	6.7	44.9	95.7	100.2	32.7	13.5	13.7	32.7
Link Distance (m)		84.3	84.3	84.3			149.8	149.8		208.7	208.7	57.4
Upstream Blk Time (%)		0										0
Queuing Penalty (veh)		1										0
Storage Bay Dist (m)	63.0				63.0	40.0			30.0			
Storage Blk Time (%)	1	0				0	21	27	0			
Queuing Penalty (veh)	5	0				0	18	14	0			

Intersection: 2: Robert Parkinson Drive/South Site Access 2 (Street 'G') & Mayfield Road

Movement	SB
Directions Served	TR
Maximum Queue (m)	30.8
Average Queue (m)	14.0
95th Queue (m)	25.2
Link Distance (m)	57.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Mayfield Road & South Site Access 1

Movement	EB
Directions Served	T
Maximum Queue (m)	1.7
Average Queue (m)	0.1
95th Queue (m)	1.2
Link Distance (m)	189.7
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Mayfield Road & South Site Access 3

Movement	SB
Directions Served	R
Maximum Queue (m)	23.9
Average Queue (m)	8.7
95th Queue (m)	17.8
Link Distance (m)	87.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Creditview Road & East Site Access 1

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	T	R
Maximum Queue (m)	29.6	34.2	48.6	1.3	6.9
Average Queue (m)	11.4	13.9	17.7	0.0	1.4
95th Queue (m)	21.8	24.2	37.9	0.9	5.8
Link Distance (m)	121.1	121.1		233.8	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)			50.0		30.0
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 6: Creditview Road & East Site Access 2

Movement	EB	SB	SB
Directions Served	R	T	T
Maximum Queue (m)	66.0	18.7	7.5
Average Queue (m)	24.0	1.0	0.2
95th Queue (m)	48.5	8.9	5.3
Link Distance (m)	110.0	100.1	100.1
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: South Site Access 2 (Street 'G') & Middle Inner Access

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	L	TR
Maximum Queue (m)	19.6	26.8	3.6	10.1
Average Queue (m)	8.9	13.8	0.1	0.8
95th Queue (m)	16.3	22.6	1.8	5.0
Link Distance (m)	69.5	104.2		91.6
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)			50.0	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: South Site Access 2 (Street 'G') & South Inner Access (RIRO)

Movement	EB
Directions Served	R
Maximum Queue (m)	9.0
Average Queue (m)	5.1
95th Queue (m)	12.3
Link Distance (m)	59.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 345



APPENDIX L

ZBL 2024-050

Notice of Passing of Zoning By-law 2024-050

TAKE NOTICE that the Council for The Corporation of the Town of Caledon passed By-law No. 2024-050 on June 25, 2024, under Sections 34 of the *Planning Act*, R.S.O. 1990, c.P.13. This by-law pertains to a Town-Initiated Zoning By-law Amendment application (File No. RZ 2024-0008).

The purpose and effect of By-law 2024-050 is to amend Comprehensive Zoning By-law No. 2006-50, as amended, to rezone lands to provide a range of housing and land uses that aim to advance Caledon's Housing Pledge and the prescribed provincial priority of building 1.5 million new residential units by December 2031.

The basis for this By-law is contained in Staff Report 2024-0370, as received by Council on June 25, 2024.

All oral and written submission relating to the By-law were considered by Council before this decision was made.

The last date for filing a notice of appeal is **July 29, 2024**. Such notice of appeal must be filed with the Town Clerk of the Corporation of the Town of Caledon and must:

1. be in writing;
2. set out the reasons for the appeal;
3. be accompanied by the Ontario Land Tribunal fee in the amount of \$1,100.00, which can only be paid by certified cheque or money order made payable to the Minister of Finance, Province of Ontario; and,
4. be accompanied by the Town's fee in the amount of \$226.17, which can be paid by cheque made payable to The Corporation of the Town of Caledon.

*Note that there is also a fee for cost recovery of preparing the appeal packages for the Ontario Land Tribunal. This portion of the fee is required to be paid upon the Town informing the appellant of such fee.

The appeal form is available from the Ontario Land Tribunal on their website at <https://olt.gov.on.ca/appeals-process/forms/> or by contacting the Town Clerk.

The applicant or specified persons as defined by the Planning Act, R.S.O. 1990, c.P.13, as amended, public bodies as defined by the Planning Act, R.S.O. 1990, c.P.13, as amended and registered owners of land to which the by-law would apply who made oral or written submissions to Council prior to the adoption of the amendment may appeal a decision of the municipality or planning board to the Ontario Land Tribunal.

No person or public body shall be added as a party to the hearing of the appeal unless, before the by-law was adopted, they made oral submissions at a public meeting or written submissions to the council or, in the opinion of the Ontario Land Tribunal, there are reasonable grounds to add the person, public body or registered owner of land to which the by-law would apply as a party.

Additional information in respect of this By-law is available for inspection at the Town of Caledon, Planning & Development Department, weekdays between 8:30 a.m. and 4:30 p.m., by contacting planning@caledon.ca.

DATED at the Town of Caledon
This 9th day of July, 2024.

Kevin Klingenberg
Town Clerk



**THE CORPORATION OF THE TOWN OF CALEDON
BY-LAW NO. 2024-050**

Being a by-law to amend Comprehensive Zoning By-law 2006-50, as amended, with respect to Part of Lots 18, 19, 20, 21, and 22, Concessions 3, and 4, West of Hurontario Street (Chinguacousy), Town of Caledon, Regional Municipality of Peel.

WHEREAS on March 26th, 2024 Council for the Town of Caledon adopted the Future Caledon Official Plan;

AND WHEREAS the Future Caledon Official Plan has not yet been approved by the approval authority, being the Regional Municipality of Peel;

AND WHEREAS the within zoning by-law amendment will conform to the Future Caledon Official Plan once it comes into effect;

AND WHEREAS Subsection 24(2) of the *Planning Act*, R.S.O. c.P.13, provides that Council may pass a By-law that does not conform to the in force Official Plan provided that the By-law will conform to an adopted Official Plan or plan amendment, once it comes into effect;

AND WHEREAS Subsection 24(2.1) of the *Planning Act*, R.S.O. 1990, c.P.13 provides that the By-law comes into force and effect upon the adopted Official Plan or plan amendment coming into effect:

AND WHEREAS pursuant to Subsection 34(17) of the *Planning Act*, R.S.O. 1990, c.P.13 Council has determined that no further notice is required to be given in respect of the proposed by-law;

WHEREAS Section 34 of the *Planning Act*, as amended, permits the councils of local municipalities to pass zoning by-laws for prohibiting the use of land or the erecting, locating or using of buildings or structures for or except for such purposes as may be set out in the by-law;

AND WHEREAS the Council of The Corporation of the Town of Caledon considers it desirable to pass a zoning by-law to permit the use of Part of Lots 18, 19, 20, 21, and 22, Concessions 3 and 4, West of Hurontario Street (Chinguacousy), Town of Caledon, Regional Municipality of Peel, for mixed use purposes.

NOW THEREFORE the Council of The Corporation of the Town of Caledon enacts that By-law 2006-50 as amended, being the Comprehensive Zoning By-law for the Town of Caledon, shall be and is hereby amended as follows:

1. The following is added to Table 13.1:

Zone Prefix	Exception Number	Permitted Uses	Special Standards
RMD	686	<ul style="list-style-type: none"> - Accessory Uses - Adult Day Centre - Amusement Arcade - Animal Hospital - Apartment, Accessory - Art Gallery - Artist Studio and Gallery - Bakery - Bed and Breakfast Establishments - Building, Apartment - Building, Apartment, Senior Citizens - Building, Mixed Use - Business Office - Clinic - Community Centre - Conference Centre - Convenience Store - Crisis Care Facility - Cultural Centre - Day Care, Private Home - Day Nursery - Drive-Through Service 	<p style="text-align: center;">DEFINITIONS</p> <p>Amenity Space For the purposes of this <i>zone</i>, means an outdoor area used exclusively for the enjoyment of the outdoor environment and may include <i>landscaping areas</i>, patios, <i>porches</i>, privacy areas, <i>balconies</i>, terraces, <i>decks</i> and similar areas.</p> <p>Dwelling, Multiplex For the purposes of this <i>zone</i>, means a residential <i>building</i> with up to eight units. In order to qualify as a <i>Multiplex</i>, at least one <i>dwelling unit</i> must be entirely or partially above another. A <i>dwelling unit</i> within a <i>multiplex</i> is not a principal <i>dwelling</i> that can contain an <i>Additional Residential Unit</i>.</p> <p>Dwelling, Stacked Townhouse For the purposes of this <i>zone</i>, means a <i>building</i> containing four or more <i>dwelling units</i> in which each <i>dwelling unit</i> is divided both horizontally and vertically from another <i>dwelling unit</i> by a common wall;</p>

Zone Prefix	Exception Number	Permitted Uses	Special Standards
			<p>A bay, bow or box window with or without foundation or cold cellar (maximum): 1m</p> <p>Into a Yard, Interior Side:</p> <p>A covered or uncovered <i>porch</i> or <i>balcony</i>, canopy or portico, including stairs or steps (maximum):</p> <p>0.6m provided a <i>setback</i> of 0.6m is maintained to the <i>lot line, interior side</i>.</p> <p>A fireplace, chimney or vent (maximum): 0.6m</p> <p>In the case of a Dwelling, Rear-Lane:</p> <p>A bay, bow or box window with or without foundation or cold cellar (maximum): 0.5m</p> <p>Into all Yards:</p> <p>Sills, cornices, parapets, or other similar ornamental architectural features (maximum):</p> <p>0.6m extending from a <i>main building</i> wall or permitted encroachment provided that a minimum <i>setback</i> of 0.5m is maintained to a <i>lot line</i>;</p> <p>Eaves (maximum):</p> <p>0.6m from a <i>main building</i> wall or permitted encroachment provided that a minimum <i>setback</i> of 0.2m is maintained to an <i>interiorside lot line</i>.</p> <p>Within a Private Garage:</p> <p>Steps, Stairs, Landings, Ramp, or barrier-free access feature (maximum):</p> <p>0.25m into a required <i>parking space</i>.</p>
C	687	<ul style="list-style-type: none"> - <i>Animal Hospital</i> - <i>Automotive Store</i> - <i>Bakery</i> - <i>Building, Mixed Use</i> - <i>Business Office</i> - <i>Clinic</i> - <i>Convenience Store</i> - <i>Day Nursery</i> - <i>Department Store</i> - <i>Drive-Through Service Facility</i> - <i>Dry Cleaning or Laundry Outlet</i> - <i>Financial Institution</i> - <i>Fitness Centre</i> - <i>Furniture Showroom</i> - <i>Grocery Store</i> - <i>Home Improvement Centre</i> - <i>Merchandise Service Shop</i> - <i>Motor Vehicle Gas Bar</i> - <i>Motor Vehicle Service Centre</i> - <i>Motor Vehicle Washing Establishment</i> - <i>Outdoor Patio</i> - <i>Outdoor Seasonal Garden Centre</i> - <i>Outside Display or Sales Area, Accessory</i> 	<p style="text-align: center;">DEFINITIONS</p> <p>Finished Grade</p> <p>For the purposes of this zone, <i>Finished Grade</i>, with reference to a <i>building</i>, shall be calculated using the average elevation of the finished surface of the ground where it meets the exterior of the front of such <i>building</i>.</p> <p style="text-align: center;">GENERAL PROVISIONS</p> <p>Convenience Store</p> <p>A <i>Convenience Store</i> shall not exceed 300 m² <i>net floor area</i>.</p> <p>Drive-Through Service Facilities</p> <p>Notwithstanding Section 4.10.5, <i>queuing lanes</i> may be located in a <i>front yard</i>, between a <i>building</i> and a <i>street</i>.</p> <p>Notwithstanding Section 4.10.9, no additional <i>planting strip</i> is required adjacent to a <i>queuing lane</i> where a minimum 2-metre <i>planting strip</i> is provided adjacent to a <i>queuing lane</i>.</p> <p>Dwellings Per Lot</p> <p>Section 4.11 shall only apply to a <i>lot</i> containing a <i>detached dwelling</i>, <i>semi-detached dwelling</i>, and/or a <i>freehold townhouse</i>.</p>

Zone Prefix	Exception Number	Permitted Uses	Special Standards
		<ul style="list-style-type: none"> - <i>Parking Area, Commercial</i> - <i>Personal Service Shop</i> - <i>Place of Entertainment</i> - <i>Private Club</i> - <i>Printing and Processing Service Shop</i> - <i>Restaurant</i> - <i>Retail Store</i> - <i>Retail Warehouse</i> - <i>Sales, Service and Repair Shop</i> - <i>Shopping Centre</i> - <i>Supermarket</i> 	<p>Grocery Store A <i>Grocery Store</i> shall not exceed 2,230 m² <i>net floor area</i>.</p> <p>Illumination No part of a lighting fixture shall be closer than 2.5m to a <i>lot line</i>.</p> <p>Lot Line, Front The <i>lot line</i> abutting Mayfield Road shall be deemed the <i>Lot Line, Front</i>.</p> <p>Outdoor Seasonal Garden Centre, Display or Sales Area, Accessory An <i>Outdoor Seasonal Garden Centre, Accessory or Outdoor Display or Sales Area, Accessory</i> may occupy up to 10% of required <i>parking spaces</i>.</p> <p>Planting Strips A <i>driveway, walkway</i> or retaining wall may extend through a <i>planting strip</i> at any location.</p> <p>Street For the purpose of this <i>zone</i>, a <i>street</i> shall include a <i>private road</i> or <i>lane</i>.</p> <p style="text-align: center;">ZONE STANDARDS</p> <p>Lot Area (Minimum) N/A</p> <p>Lot Frontage (Minimum) N/A</p> <p>Building Area (Maximum) N/A</p> <p>Yard, Front (Minimum) 3m</p> <p>Yard, Exterior Side (Minimum) 3m</p> <p>Yard, Interior Side (Minimum) 3m</p> <p>Yard, Rear (Minimum) 3m</p> <p>Setback to a Lot Line adjacent to another zone (minimum): 6m</p> <p>Building Height (Maximum) N/A</p> <p>Landscaping Area (Minimum) N/A</p> <p>Entrance Width (maximum): N/A</p> <p>Planting Strip (minimum): 3m along a <i>street line</i> or a <i>lot line</i> adjacent to another <i>zone</i>.</p> <p>Driveway Setback (minimum): 3m</p> <p>Parking Requirements (minimum): 1 <i>parking space</i> per 23m² of <i>net floor area</i> or portion thereof</p> <p>Loading A <i>loading space</i> shall not be closer than 6m to a <i>street line</i> or 12m to a residential land use.</p> <p>For a <i>Building, Mixed Use</i>, the definitions, regulations, <i>zone standards</i> and permitted encroachments for the RMD-686 <i>zone</i> shall apply.</p>

2. The following is added to Table 13.3:

The following provisions shall apply to all lands zoned with a Holding Provision (H39A) as shown on Schedule "A" to this By-law until the Holding Provision (H39A) is removed from the lands or a portion thereof pursuant to Subsection 36(3) or (4) of the *Planning Act*:

- a) Only the following *uses* are permitted prior to the removal of the Holding Provision (H39A):
 - a. A *use* legally existing on the lands as of the date of the enactment of this By-law;
 - b. A *use* that was permitted on the Subject Lands, or portion thereof, pursuant to Comprehensive Zoning By-law 2006-50 as of the date of the enactment of this By-law; and,
 - c. *Non-Intensive Recreation Uses and Environmental Management Uses*.
- b) A By-law or By-laws to remove the Holding Provision (H39A) from all or a portion of the lands shall not be enacted until the following conditions, as applicable, have been met to the satisfaction of the Town:
 - i. Approval of a secondary plan in conformity with the Town's Future Caledon Official Plan or an Official Plan Amendment;
 - ii. Approval of Draft Plan of Subdivision has been issued or where the lands are not subject to a Plan of Subdivision, a Site Plan Approval – Final Summary letter has been issued by the Town. Through the Draft Plan of Subdivision or Site Plan approval process, the applicant shall submit an Environmental Impact Study, to the satisfaction of the Town ("EIS"), which among other things, determines the extent of the Natural Environment System as defined in the Future Caledon Official Plan. Any lands that are identified as being within the Natural Environment System through the EIS and protected from development shall either be dedicated to the Town or other appropriate public authority or otherwise protected from development over the long term to the satisfaction of the Town as a condition of draft plan approval or through Site Plan approval.
 - iii. Written confirmation, where required, from the Regional Municipality of Peel and/or the applicable utility, that:
 - i. a development agreement has been executed to implement the required water and sanitary services, which may include payment of fees and posting of required securities; and/or
 - ii. there is sufficient municipal water and sanitary sewer capacity to service the lands.
 - iv. Only with respect to lands in the Focus Analysis Area of the Highway 413 Transportation Corridor (FAA) and the Narrowed Area of Interest of the Northwest GTA Transmission Identification Study (Northwest GTA TIS), the Applicant has provided written confirmation of clearance for the lifting of the holding zone to the Town from the appropriate Ministry with regards to any lands in the FAA and Northwest GTA TIS.

3. The following is added to Table 13.3:

A holding provision (H39B) shall apply to the lands shown on Schedule "A" to this By-law and may be lifted over all or a portion of the lands provided that the following conditions, as applicable, have been met to the satisfaction of the Town:

- a) The submission of an Environmental Impact Study, to the satisfaction of the Town ("EIS"), which among other things, determines the extent of the Natural Environment System as defined in the Future Caledon Official Plan in order to confirm the limits and extent of the Environmental Policy Area 1 Zone (EPA1) as described in the note on Schedule "A" to this By-law. Following the completion of the EIS to the satisfaction of the Town, the holding provision (H39B) shall only be lifted from lands that are already within the EPA1 zone where those lands have been identified to form part of the Natural Environment System and protected from development through the EIS. For clarity, the holding provision (H39B) shall not be lifted from lands that form part of the Natural Environment System and are protected from development as identified through the EIS where lands are zoned for residential or

commercial uses on Schedule "A".

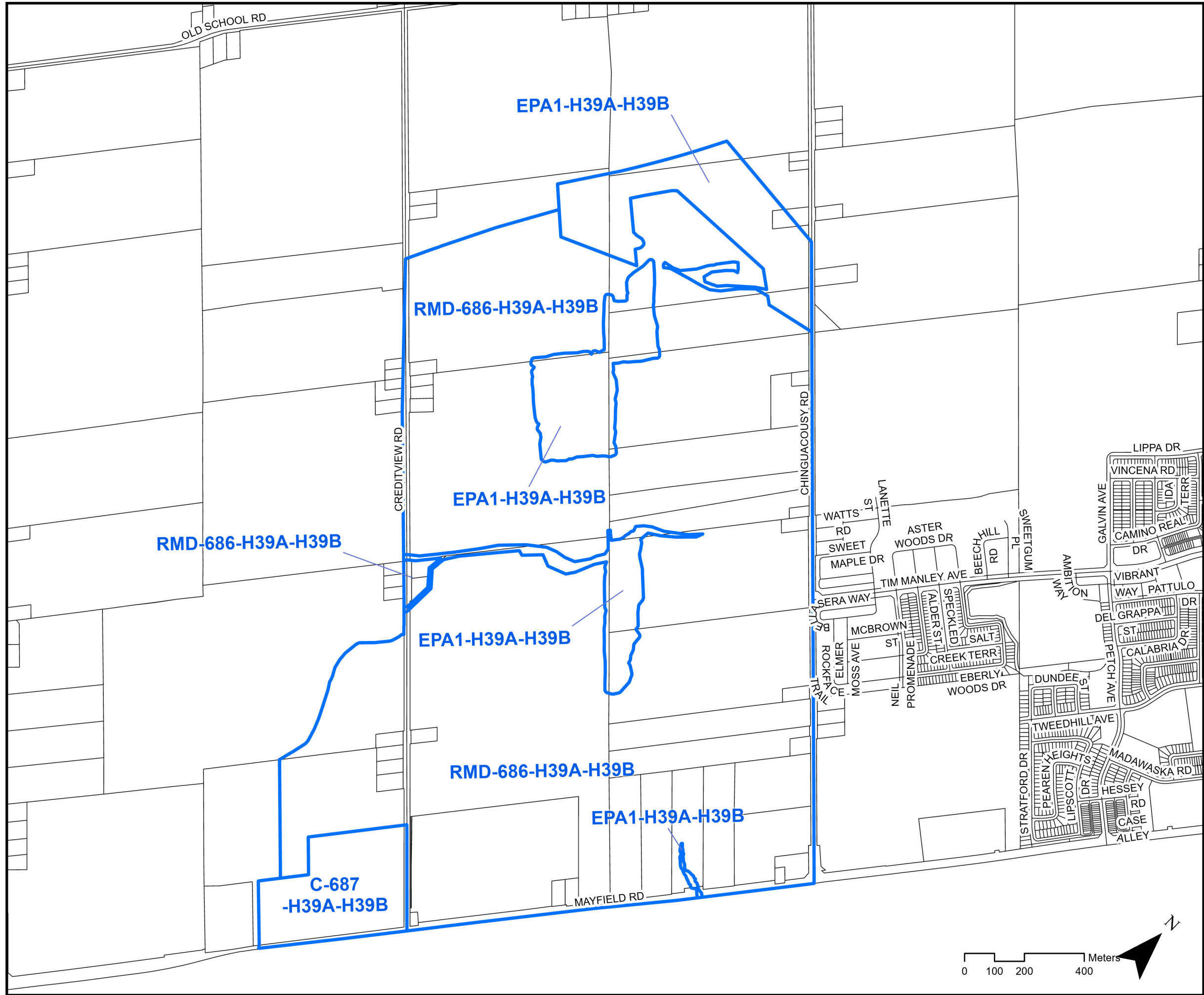
4. Schedule "A", Zone Maps 8 and 9 of By-law 2006-50, as amended is further amended for Part of Lots 18, 19, 20, 21, and 22 Concessions 3 and 4, West of Hurontario Street (Chinguacousy), Town of Caledon, Regional Municipality of Peel from Agricultural Zone (A1), Small Agricultural Holdings Zone (A3) and Environmental Policy Area 2 Zone (EPA2) to Mixed Density Residential Zone – Exception 686 – Holding Provision 39A and Holding Provision 39B (RMD-686-H39A-H39B), General Commercial Zone – Exception 687 – Holding Provision 39A and Holding Provision 39B (C-687-H39A-H39B), and Environmental Policy Area 1 Zone – Holding Provision 39A and Holding Provision 39B (EPA1-H39A-H39B) in accordance with Schedule "A" attached hereto.

Read three times and finally passed in
open Council on the
25th day of June, 2024.


Annette Groves, Mayor


Kevin Klingenberg, Clerk






Schedule A By-law 2024-50

Part of Lots 18, 19, 20, 21 & 22
concessions 3 & 4
(Geographic Township of Chinguacousy)
Town of Caledon,
Regional Municipality of Peel

Legend

 Lands to be rezoned to the zones identified on this Schedule

Key Map



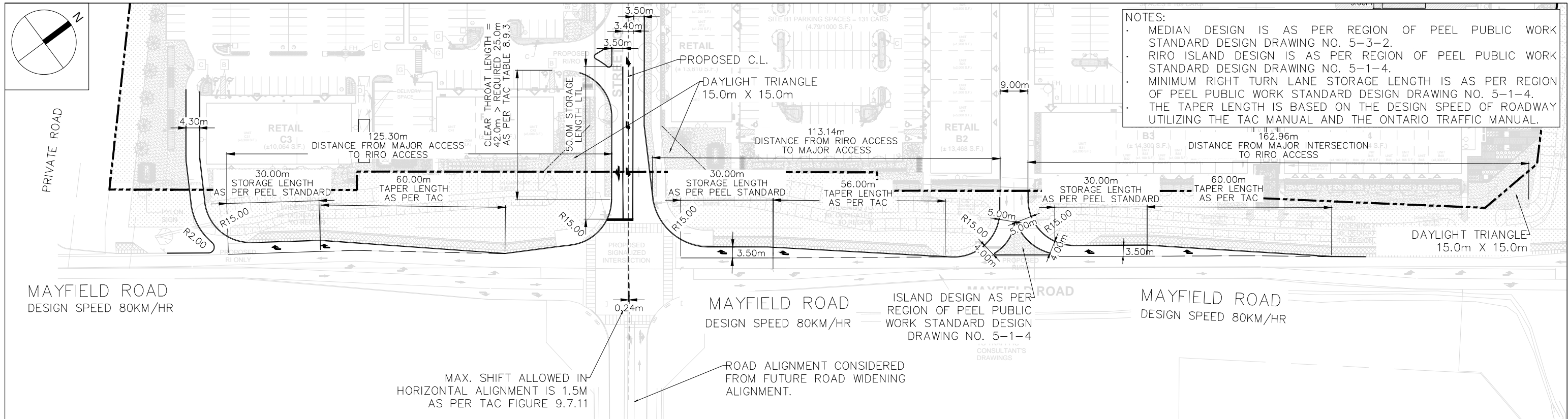
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File: ZB 2024-0008

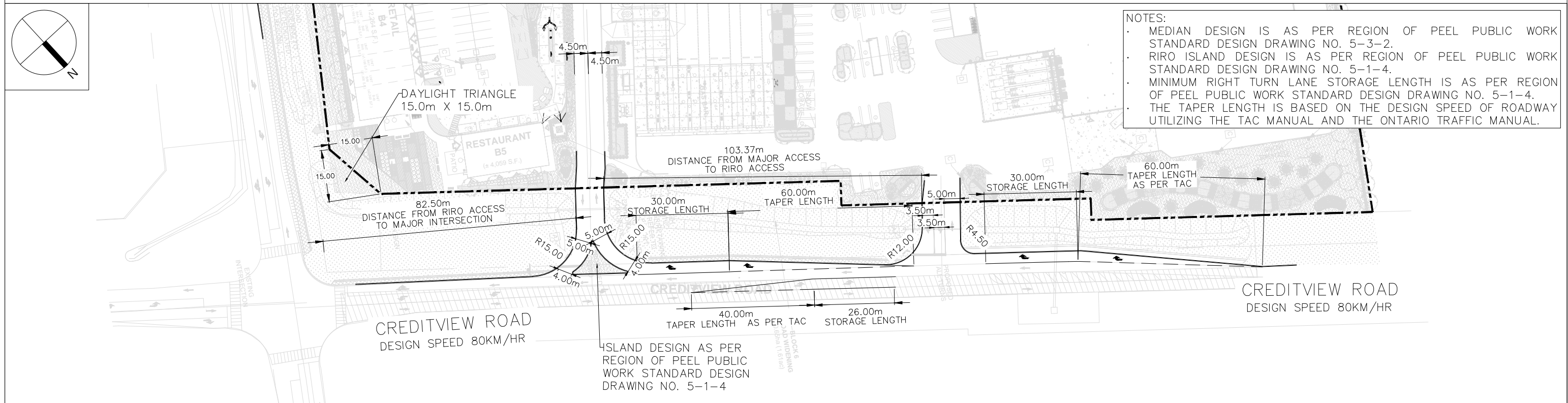


APPENDIX M

Functional Design Review



MAYFIELD ROAD



CREDITVIEW ROAD

DRAWN BY: A.B. PLOT DATE: March 19, 2026

LEA Consulting Ltd.
 Consulting Engineers and Planners
 www.LEA.ca

Project No.
 22142

Date
 MAR 19, 2026

12100 CREDITVIEW ROAD
 CALEDON ONTARIO

1:1250

SITE PLAN
 ACCESS DESIGN REVIEW
 (MAYFIELD ROAD & CREDIT VIEW ROAD)

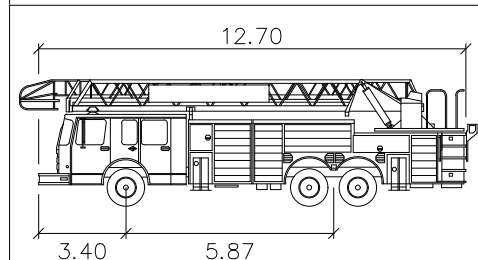
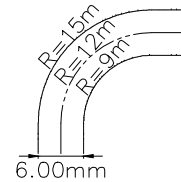
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NOTES:

AS PER THE ONTARIO BUILDING CODE 3.2.5

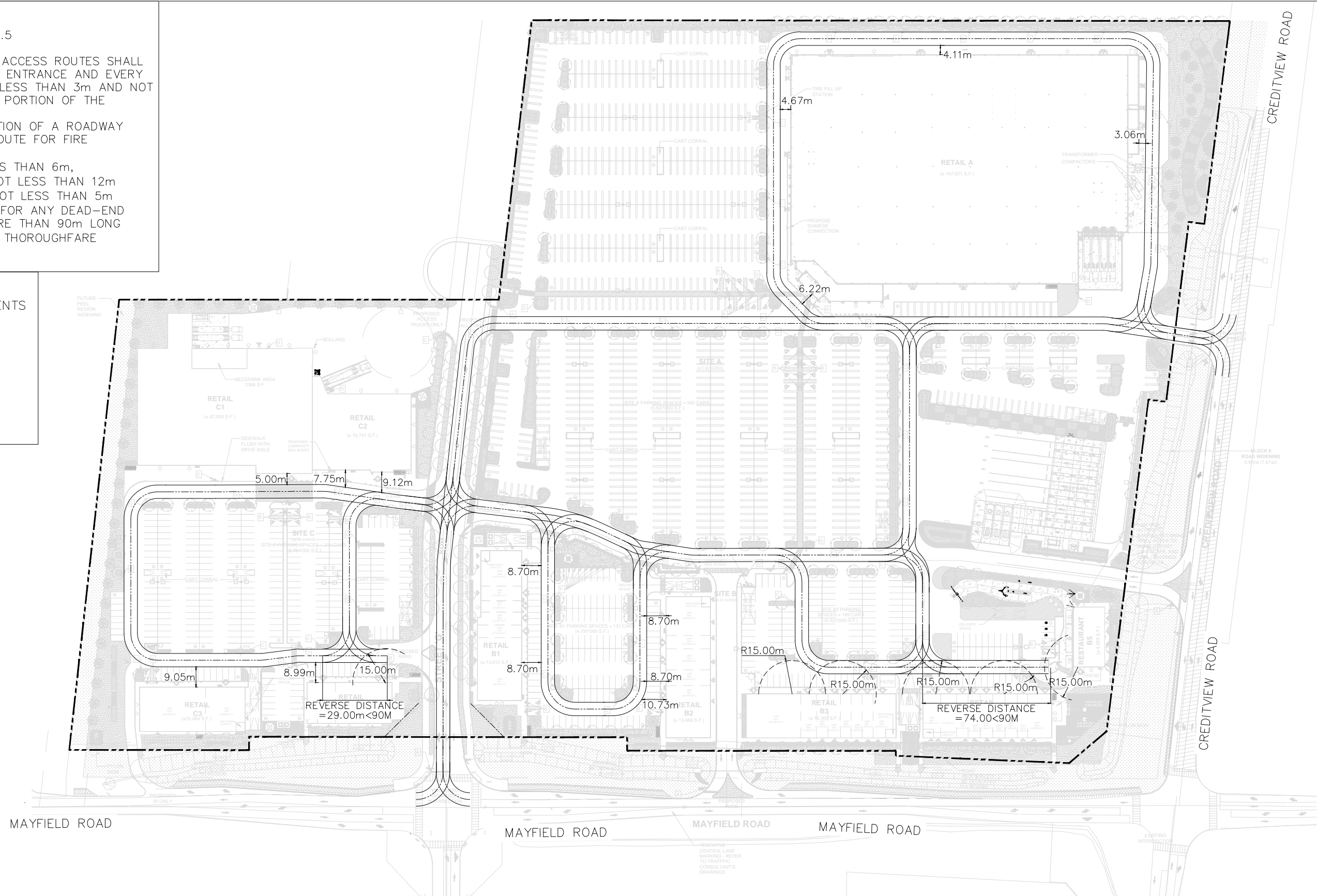
1. 5.1 LOCATION OF ACCESS ROUTES – ACCESS ROUTES SHALL BE LOCATED SO THAT THE PRINCIPAL ENTRANCE AND EVERY ACCESS OPENING ARE LOCATED NOT LESS THAN 3m AND NOT MORE THAN 15m FROM THE CLOSEST PORTION OF THE ACCESS ROUTE
2. 6.1 ACCESS ROUTE DESIGN – A PORTION OF A ROADWAY PROVIDED AS A REQUIRED ACCESS ROUTE FOR FIRE DEPARTMENT USE SHALL:
 - (i) 6.1.a HAVE A CLEAR WIDTH NOT LESS THAN 6m,
 - (ii) 6.1.b HAVE A CENTRELINE RADIUS OF NOT LESS THAN 12m
 - (iii) 6.1.c HAVE AN OH CLEARANCE OF NOT LESS THAN 5m
 - (ii) 6.1.f HAVE TURNAROUND FACILITIES FOR ANY DEAD-END PORTION OF THE ACCESS ROUTE MORE THAN 90m LONG
 - (iv) 6.1.g BE CONNECTED WITH A PUBLIC THOROUGHFARE

MINIMUM CENTERLINE RADIUS OF FIRE ACCESS ROUTE TO FOLLOW REQUIREMENTS AS BELOW:



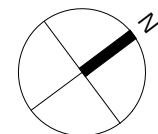
Fire Truck – ON

	meters
Width	: 2.60
Track	: 2.54
Lock to Lock Time	: 6.0
Steering Angle	: 29.2



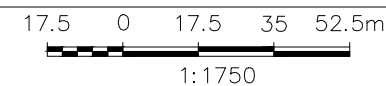
DRAWN BY: A.B. PLOT DATE: March 19, 2026

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Consulting Engineers
and Planners
www.LEA.ca



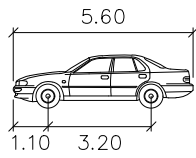
Project No.
22142
Date
MAR 19, 2026

12100 CREDITVIEW ROAD
CALEDON ONTARIO

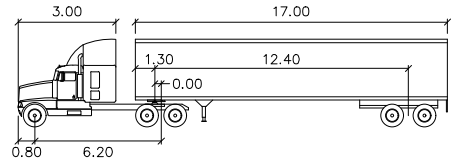


SITE PLAN
FIRE ROUTE REVIEW

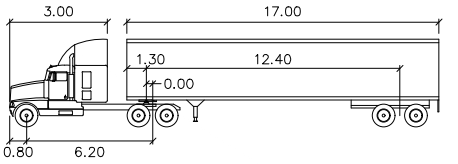
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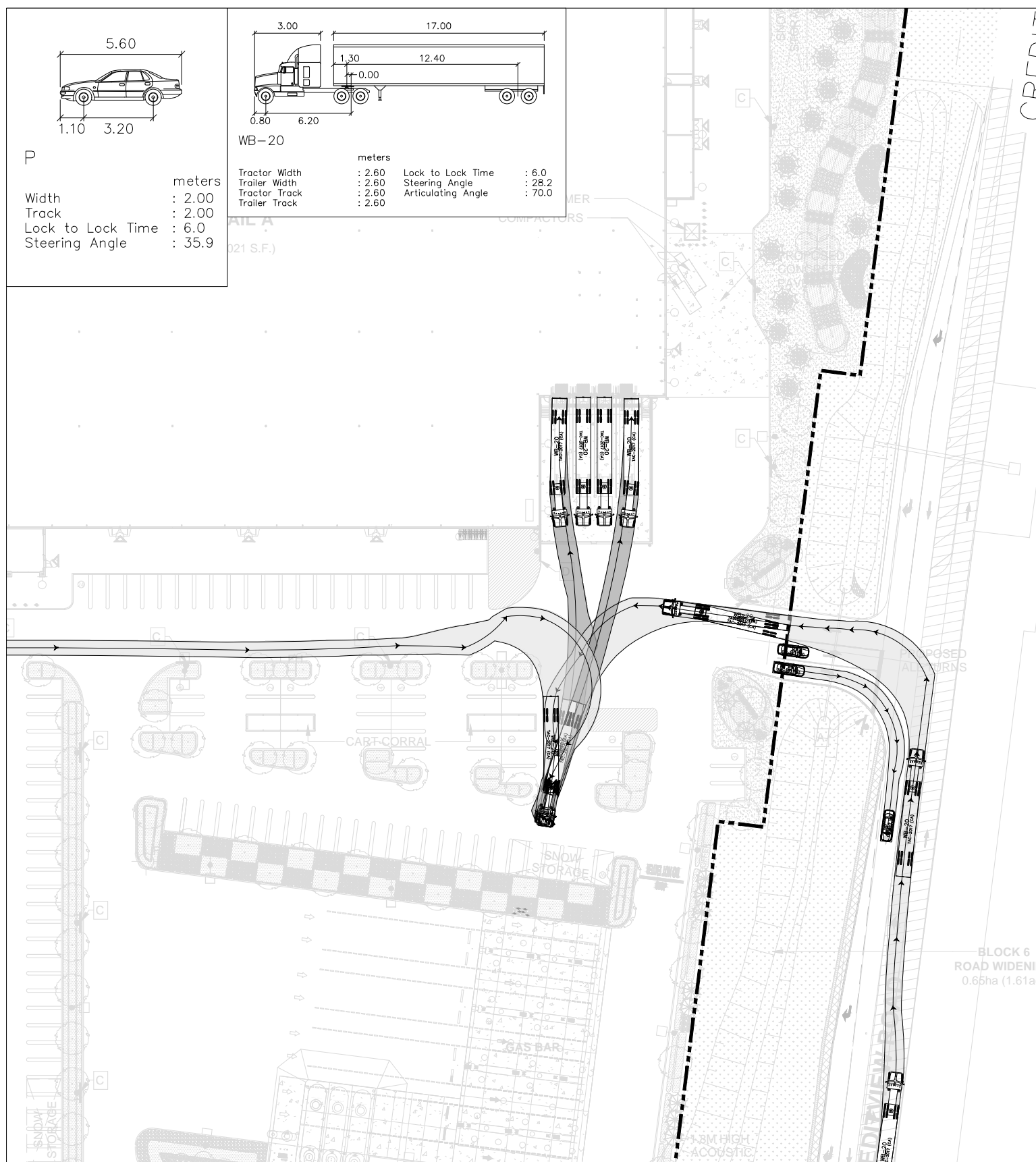
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 Track : 2.00
 Lock to Lock Time : 6.0
 Steering Angle : 35.9



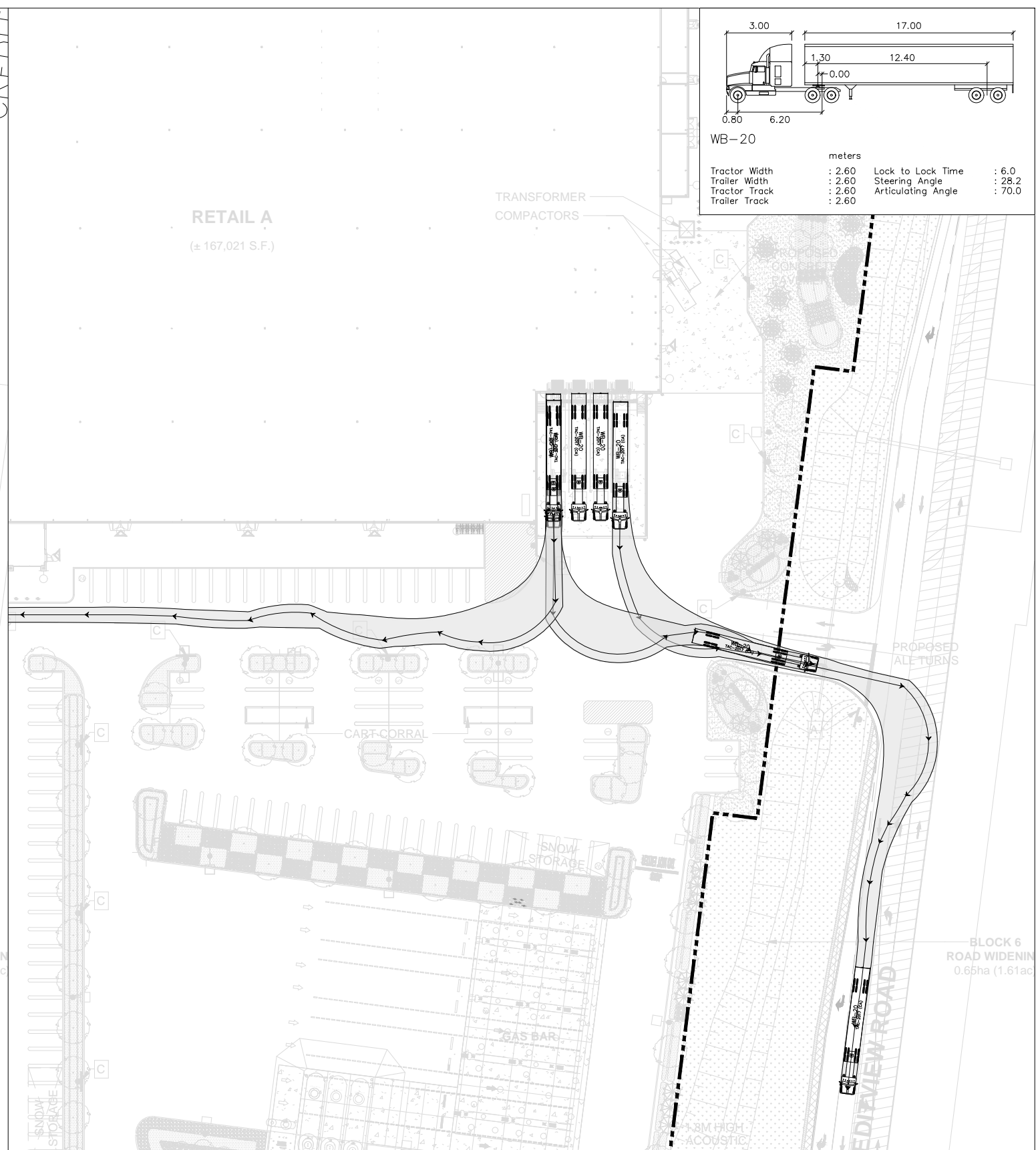
WB-20
 meters
 Tractor Width : 2.60
 Trailer Width : 2.60
 Tractor Track : 2.60
 Trailer Track : 2.60
 Lock to Lock Time : 6.0
 Steering Angle : 28.2
 Articulating Angle : 70.0



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



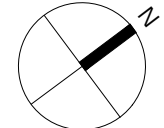
ENTRY PATH



EXIT PATH

DRAWN BY: A.B. PLOT DATE: March 19, 2026

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 and Planners
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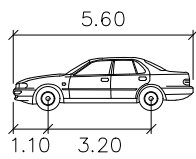
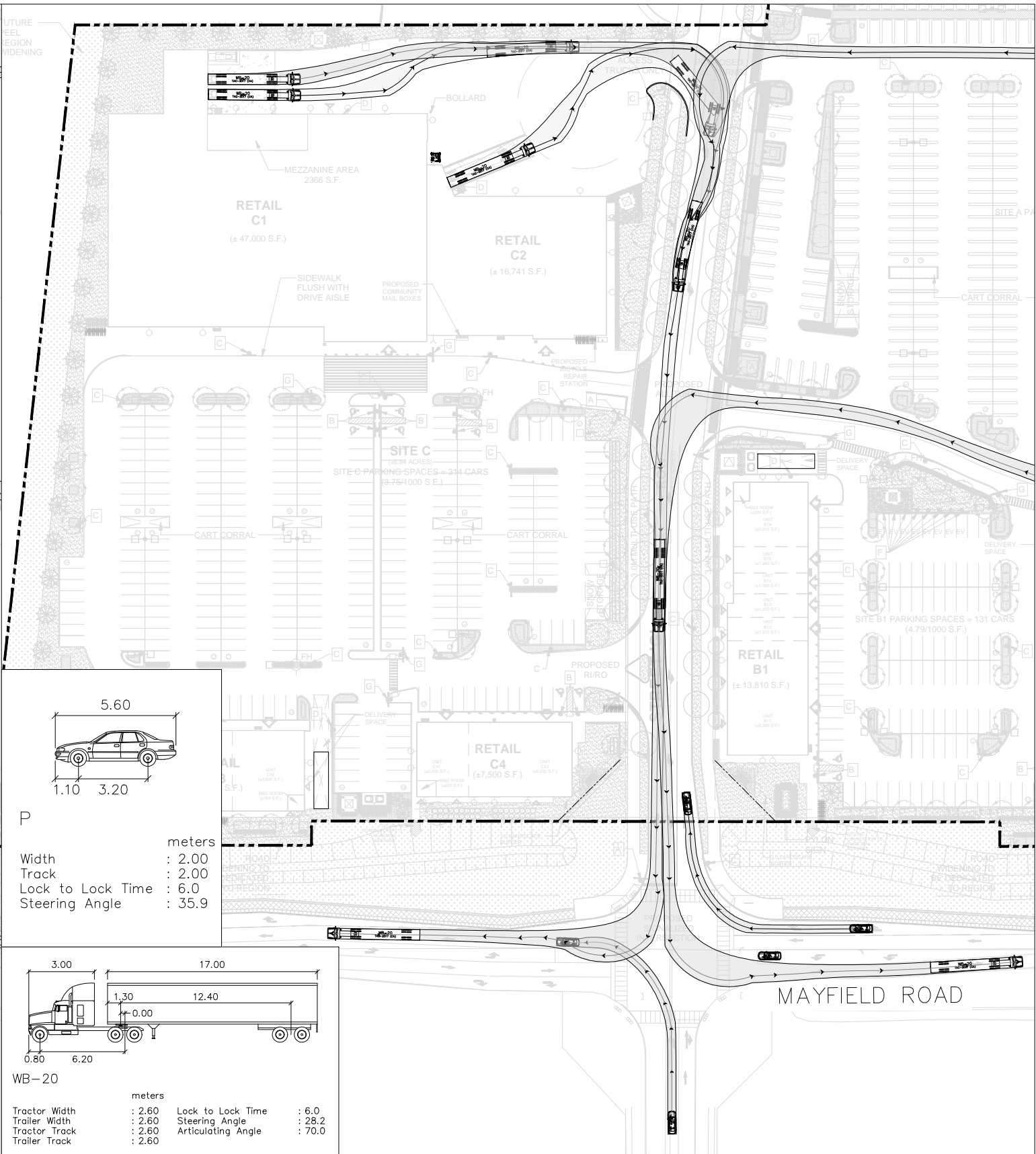
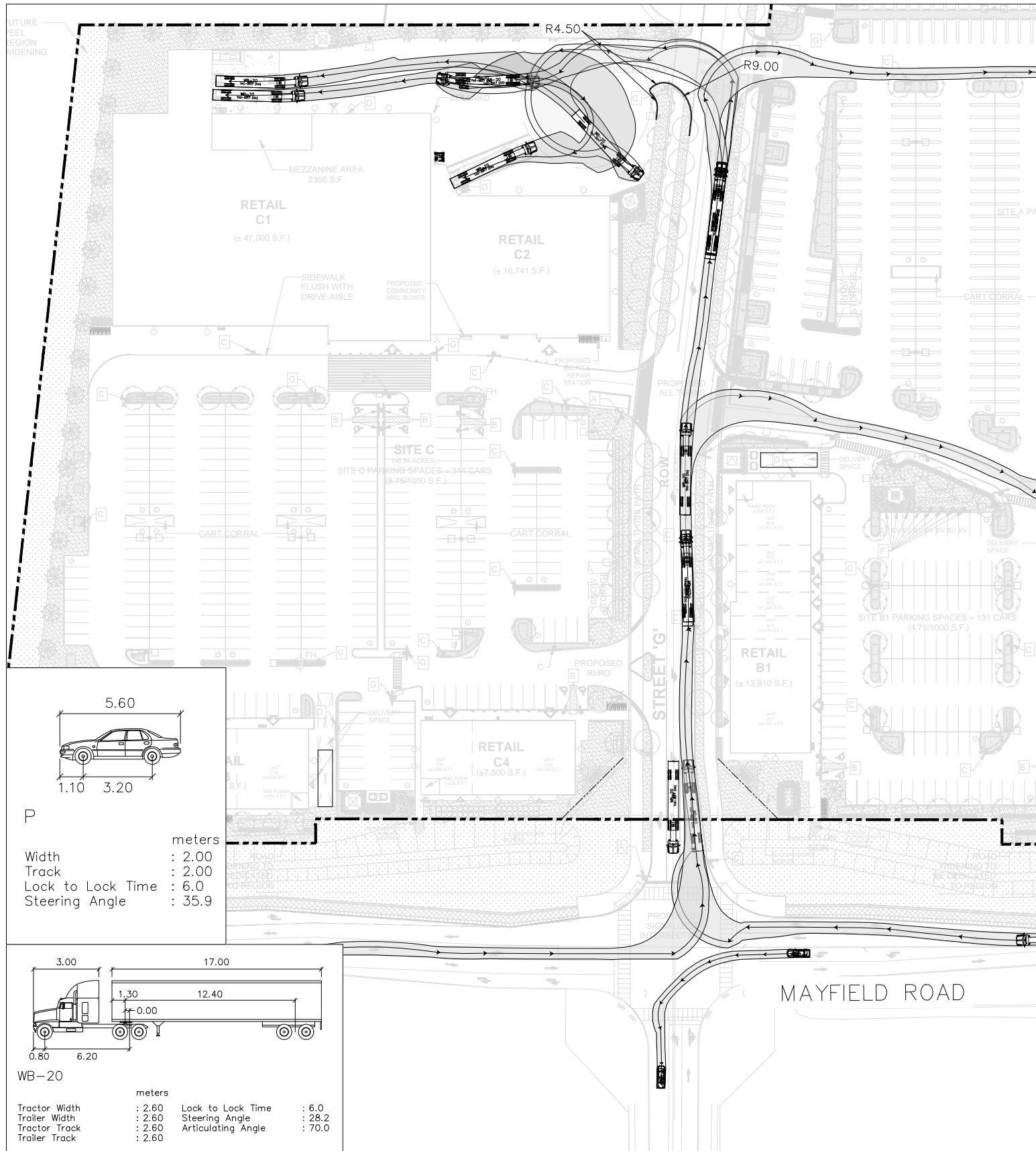


Project No.
 22142
 Date
 MAR 19, 2026

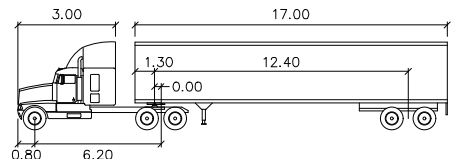
12100 CREDITVIEW ROAD
 CALEDON ONTARIO
 9 0 9 18 27m
 1:900

SITE PLAN
 LOADING REVIEW
 WB-20 (TAC)- RETAIL A
 ENTRY AND EXIT PATH

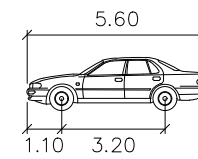
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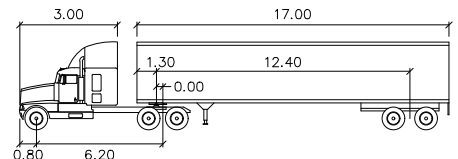
P
 Width : 2.00 meters
 Track : 2.00 meters
 Lock to Lock Time : 6.0
 Steering Angle : 35.9



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



P
 Width : 2.00 meters
 Track : 2.00 meters
 Lock to Lock Time : 6.0
 Steering Angle : 35.9



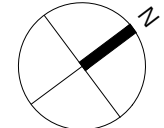
WB-20
 meters
 Tractor Width : 2.60
 Trailer Width : 2.60
 Tractor Track : 2.60
 Trailer Track : 2.60
 Lock to Lock Time : 6.0
 Steering Angle : 28.2
 Articulating Angle : 70.0

ENTRY PATH

EXIT PATH

DRAWN BY: A.B. PLOT DATE: March 19, 2026

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 Consulting Engineers
 and Planners
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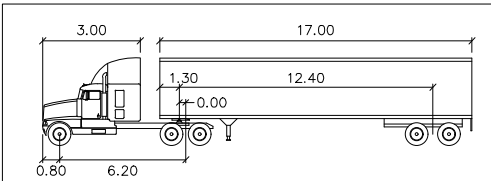
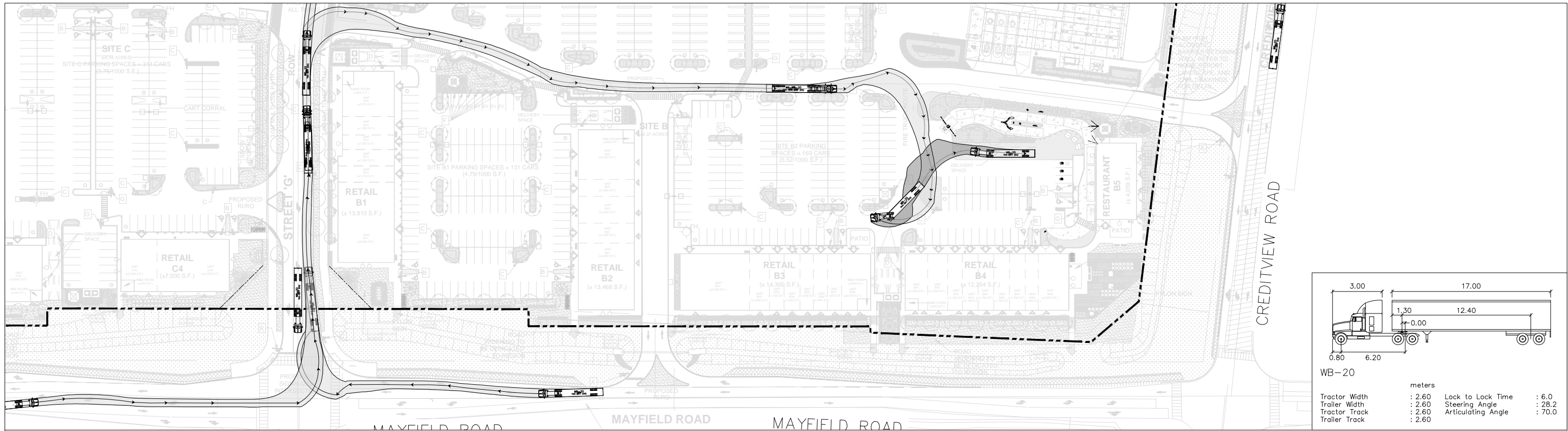


Project No.
 22142
 Date
 MAR 19, 2026

12100 CREDITVIEW ROAD
 CALEDON ONTARIO
 12.5 0 12.5 25 37.5m
 1:1250

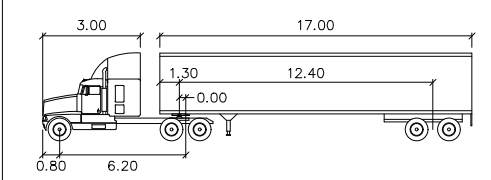
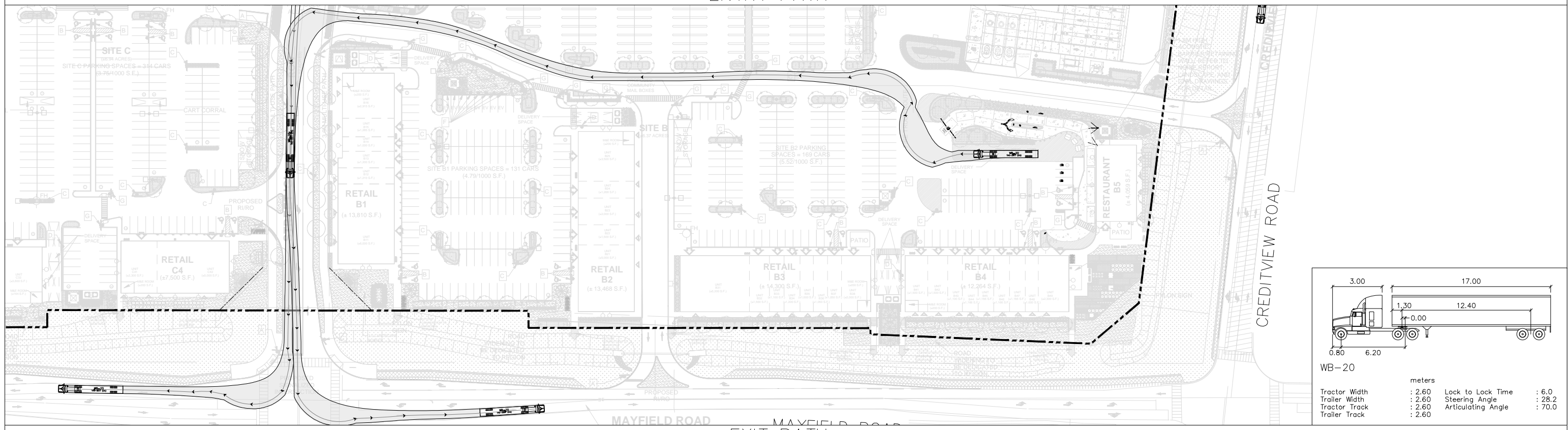
SITE PLAN
 LOADING REVIEW
 WB-20 (TAC)- RETAIL C1
 ENTRY AND EXIT PATH

Drawing No.
 004



WB-20

meters	
Tractor Width	: 2.60
Trailer Width	: 2.60
Tractor Track	: 2.60
Trailer Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 28.2
Articulating Angle	: 70.0

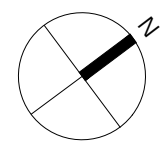


WB-20

meters	
Tractor Width	: 2.60
Trailer Width	: 2.60
Tractor Track	: 2.60
Trailer Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 28.2
Articulating Angle	: 70.0

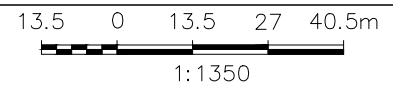
DRAWN BY: A.B. PLOT DATE: March 19, 2026

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Project No.
22142
Date
MAR 19, 2026

12100 CREDITVIEW ROAD
CALEDON ONTARIO



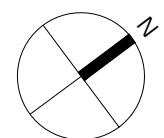
SITE PLAN
LOADING REVIEW
WB-20 (TAC)- RETAIL B5
ENTRY AND EXIT PATH

Drawing No.
005



DRAWN BY: A.B. PLOT DATE: March 19, 2026

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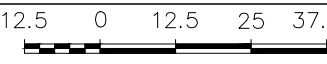



Project No.
22142

Date
MAR 19, 2026

12100 CREDITVIEW ROAD
 CALEDON ONTARIO

12.5 0 12.5 25 37.5m

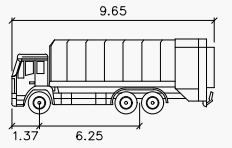


1:1250

SITE PLAN
 TYPE "B" LOADING SPACE REVIEW
 DELIVERY TRUCK – MSU
 ENTRY PATHS

Drawing No.
006

- NOTES:
 AS PER REGION OF PEEL WASTE COLLECTION DESIGN STANDARDS MANUAL 2020:
1. ALL ROADS SHOULD BE DESIGNED TO HAVE A MINIMUM WIDTH OF 6m.
 2. OVERHEAD SPACE ALONG THE ACCESS ROUTE HAS TO BE MINIMUM 4.4m.
 3. OVERHEAD SPACE AT THE COLLECTION POINT HAS TO BE MINIMUM 7.5m.
 4. THE TURNING RADIUS FROM THE CENTRE LINE MUST BE A MINIMUM OF 13m ON ALL TURNS.
 5. IN A SITUATION WHERE A WASTE COLLECTION VEHICLE MUST REVERSE, THE MAXIMUM BACK-UP DISTANCE IS 15m AND MUST NOT INCLUDE REVERSAL ONTO A MUNICIPAL ROAD.



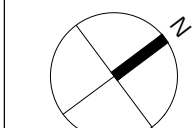
Garbage Miller

Width : 2.60
 Track : 2.60
 Lock to Lock Time : 6.0
 Steering Angle : 30.0



DRAWN BY: H.B. PLOT DATE: March 19, 2026

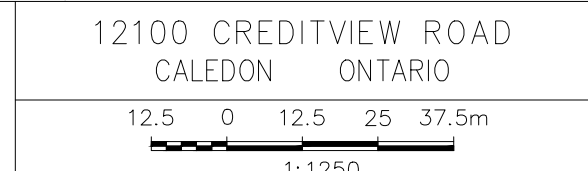
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 22142

Date
 MAR 19, 2026

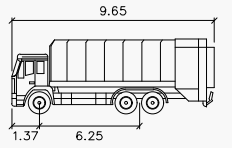
12100 CREDITVIEW ROAD
 CALEDON ONTARIO



LOADING REVIEW
 GARBAGE MILLER (EARTH BINS)
 ENTRY PATHS

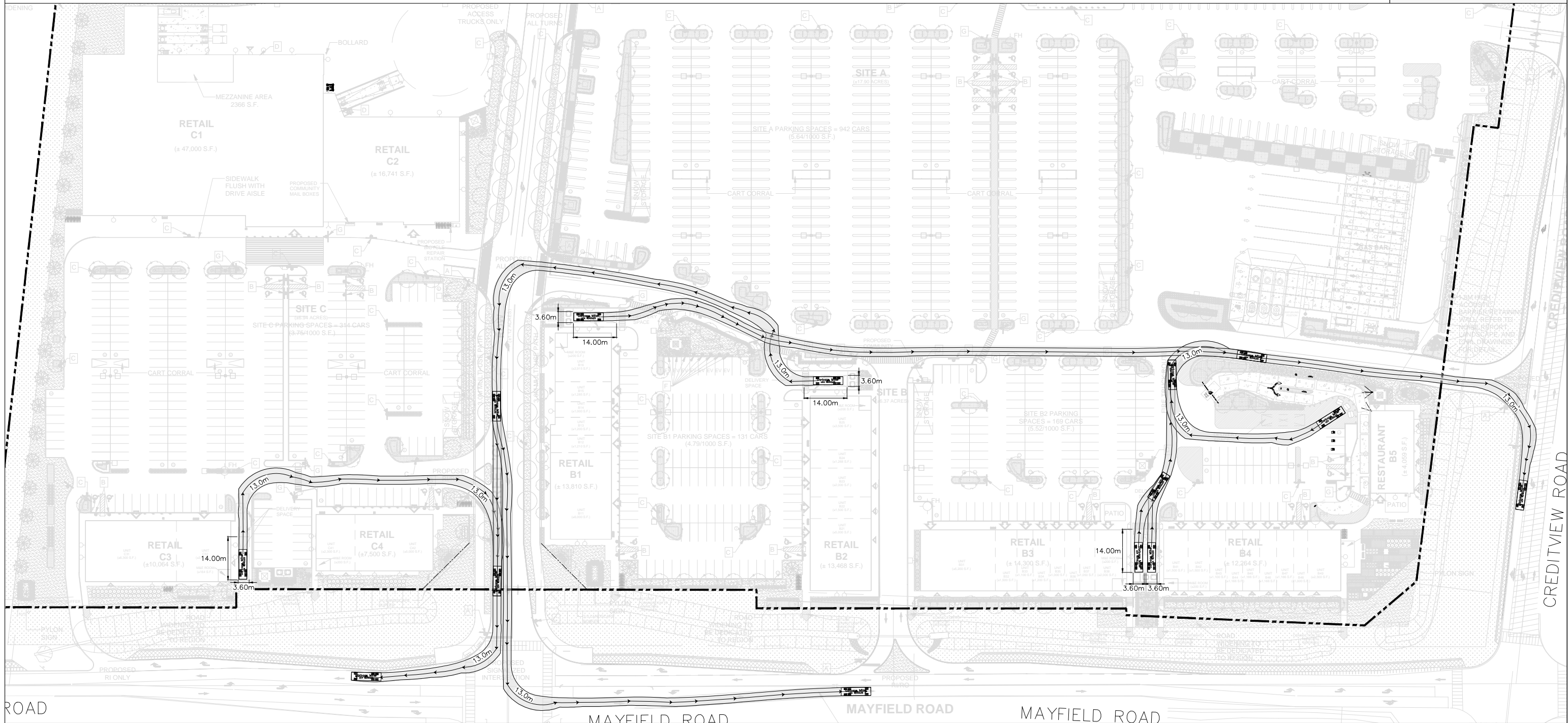
Drawing No.
 008

- NOTES:
 AS PER REGION OF PEEL WASTE COLLECTION DESIGN STANDARDS MANUAL 2020:
1. ALL ROADS SHOULD BE DESIGNED TO HAVE A MINIMUM WIDTH OF 6m.
 2. OVERHEAD SPACE ALONG THE ACCESS ROUTE HAS TO BE MINIMUM 4.4m.
 3. OVERHEAD SPACE AT THE COLLECTION POINT HAS TO BE MINIMUM 7.5m.
 4. THE TURNING RADIUS FROM THE CENTRE LINE MUST BE A MINIMUM OF 13m ON ALL TURNS.
 5. IN A SITUATION WHERE A WASTE COLLECTION VEHICLE MUST REVERSE, THE MAXIMUM BACK-UP DISTANCE IS 15m AND MUST NOT INCLUDE REVERSAL ONTO A MUNICIPAL ROAD.



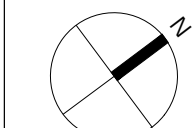
Garbage Miller

Width : 2.60
 Track : 2.60
 Lock to Lock Time : 6.0
 Steering Angle : 30.0



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Date
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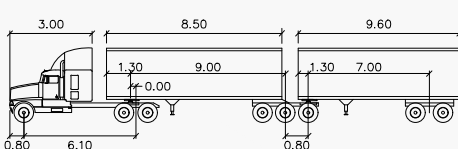
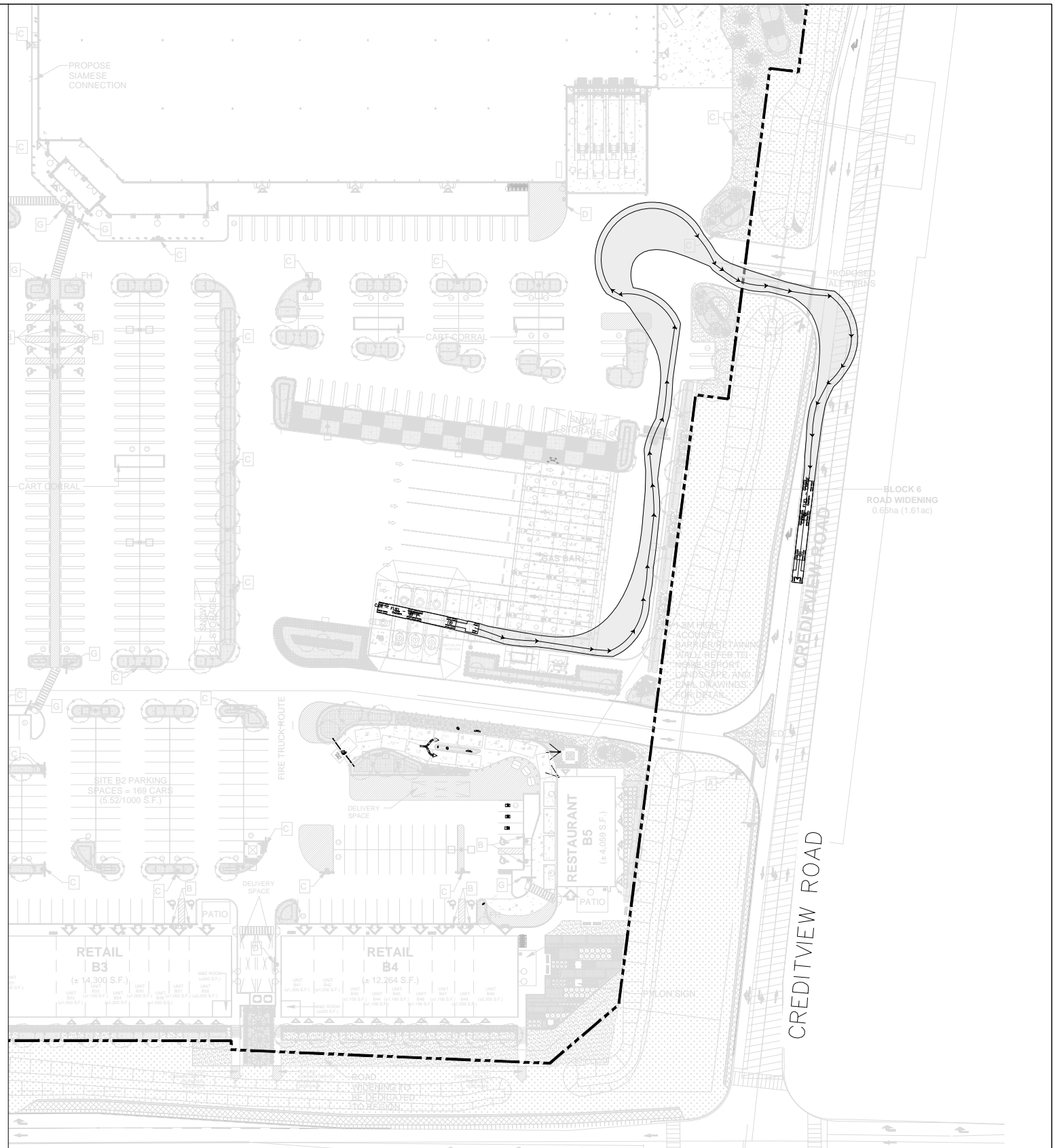
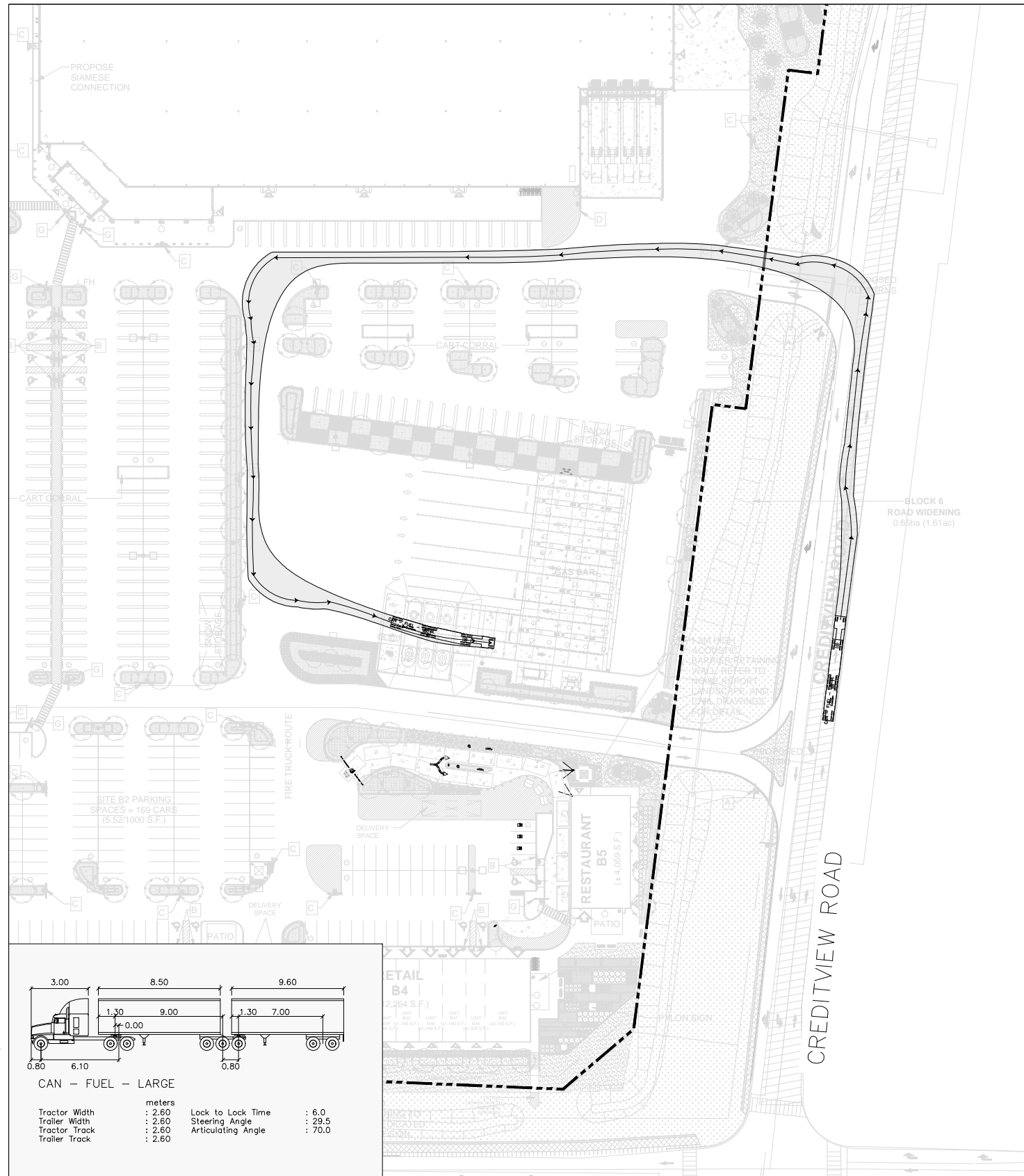
12100 CREDITVIEW ROAD
 CALEDON ONTARIO

12.5 0 12.5 25 37.5m
 1:1250

LOADING REVIEW
 GARBAGE MILLER (EARTH BINS)
 EXIT PATHS

Drawing No.
 009

DRAWN BY: H.B. PLOT DATE: March 19, 2026



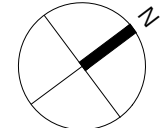
CAN - FUEL - LARGE

Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 29.5
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

ENTRY PATH

EXIT PATH

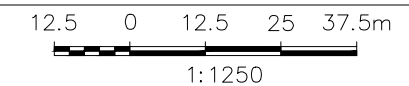
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Project No.
22142

Date
MAR 19, 2026

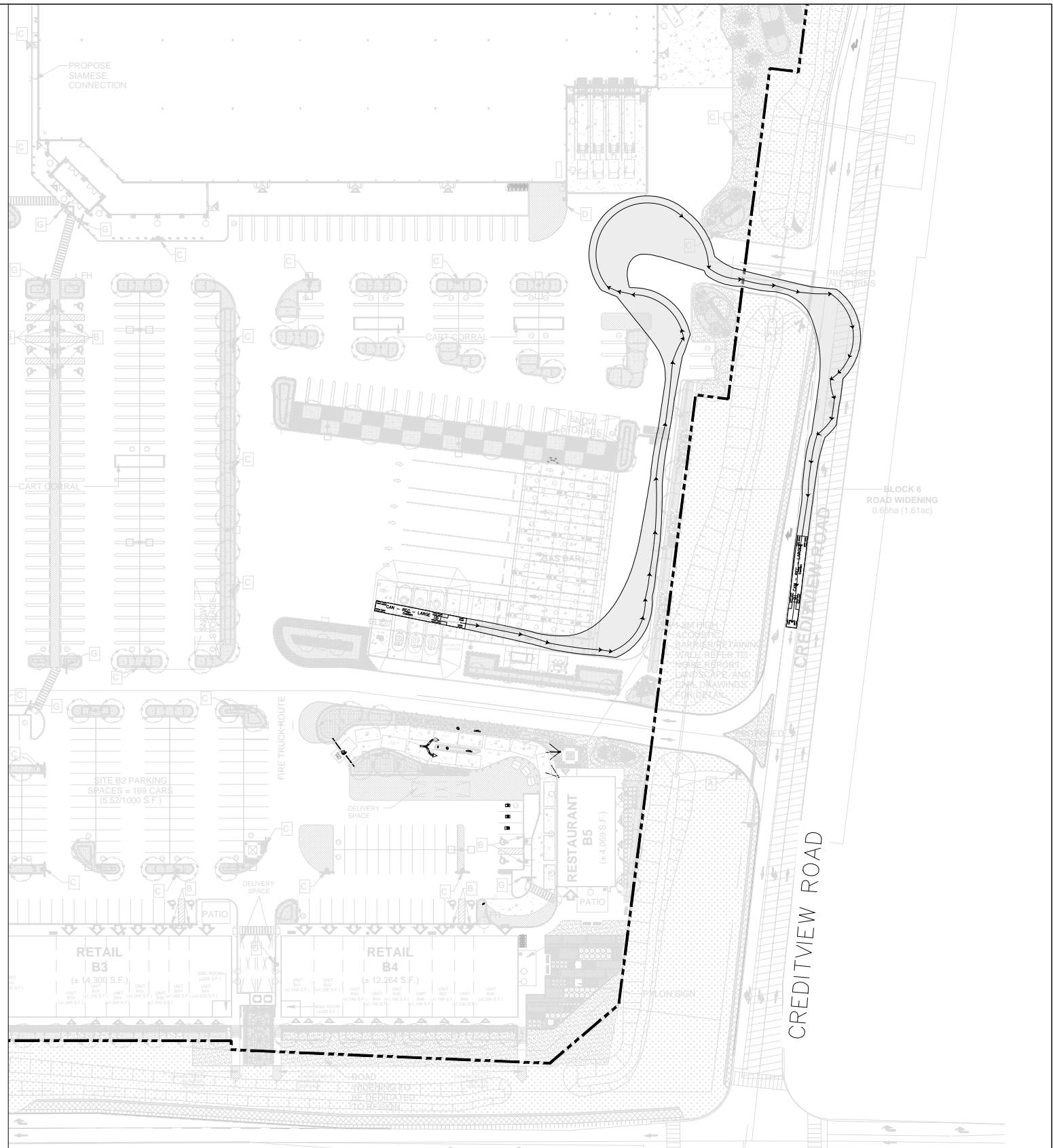
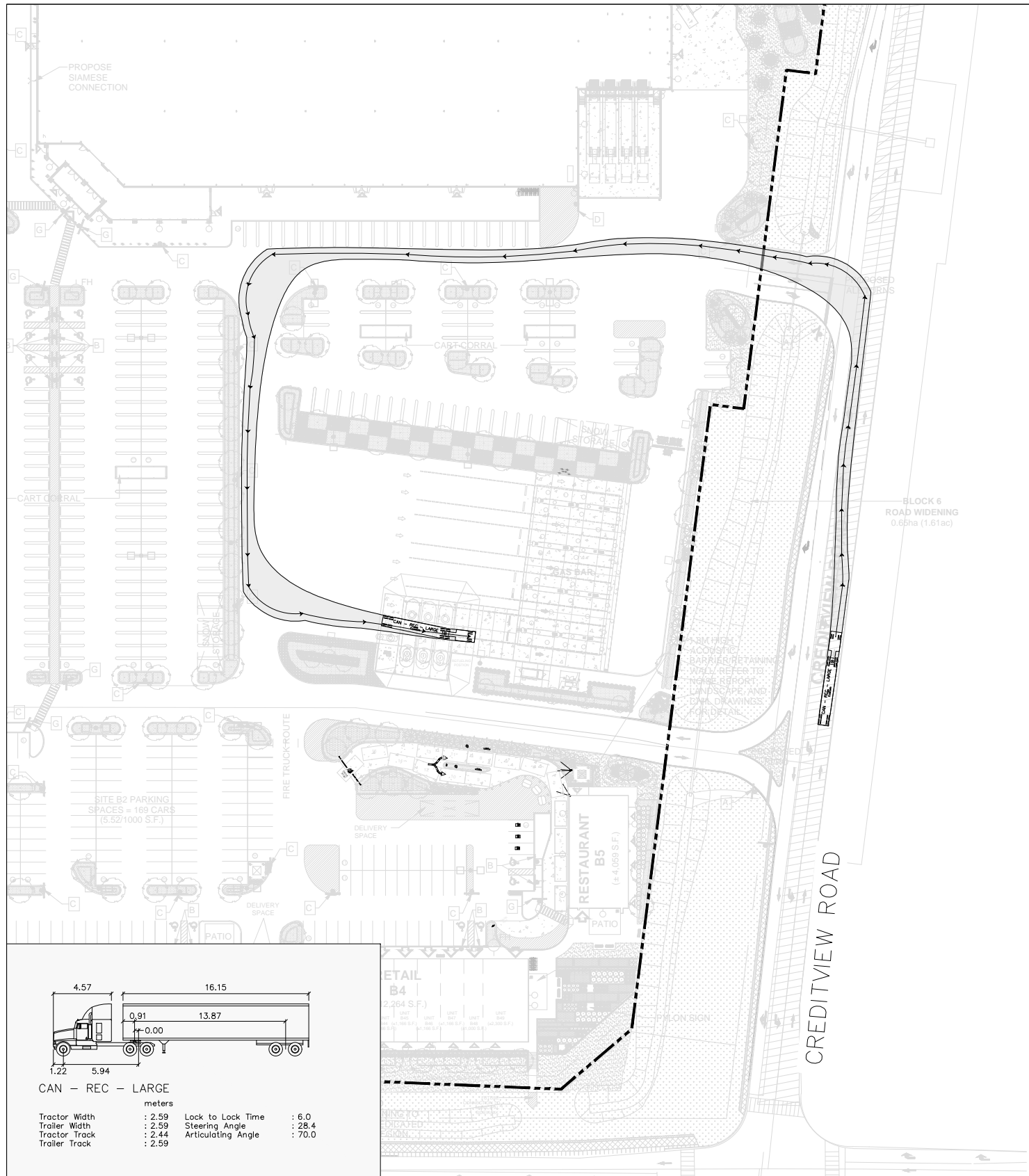
12100 CREDITVIEW ROAD
CALEDON ONTARIO



LOADING REVIEW
B-TRAIN (LARGE FUEL TANKER)
ENTRY AND EXIT PATHS

Drawing No.
010

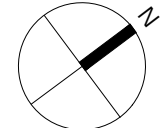
DRAWN BY: H.B. PLOT DATE: March 19, 2026



ENTRY PATH

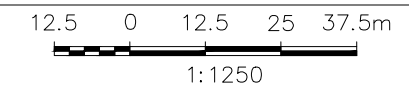
EXIT PATH

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22142
Date
MAR 19, 2026

12100 CREDITVIEW ROAD
CALEDON ONTARIO



LOADING REVIEW
LARGE FUEL TANKER
ENTRY AND EXIT PATHS

Drawing No.
011

NOTES:

AS PER THE TOWN OF CALEDON ZONING SECTION 5: PARKING, LOADING AND DELIVERY STANDARDS:

5.2.11 SIZE OF PARKING SPACES:

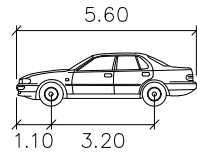
- a) SURFACE PARKING SPACES SHALL HAVE A MINIMUM WIDTH OF 2.75m AND MINIMUM LENGTH OF 6.0m
- b) ENCLOSED OR UNDERGROUND PARKING SPACES SHALL HAVE A MINIMUM WIDTH OF 2.6m AND MINIMUM LENGTH OF 5.8m,
- c) THE WIDTH AND LENGTH OF A PARKING SPACE SHALL BE MEASURED EXCLUSIVE OF THE WIDTH OR LENGTH OF ANY PAINTED LINES MARKING SUCH PARKING SPACE

5.2.12 WIDTH OF AISLES

- a) MINIMUM WIDTH OF AN AISLE PROVIDING ACCESS TO A PARKING SPACE SHALL BE 6.0m EXCEPT IN THE CASE OF ANGLED OFF STREET PARKING BY

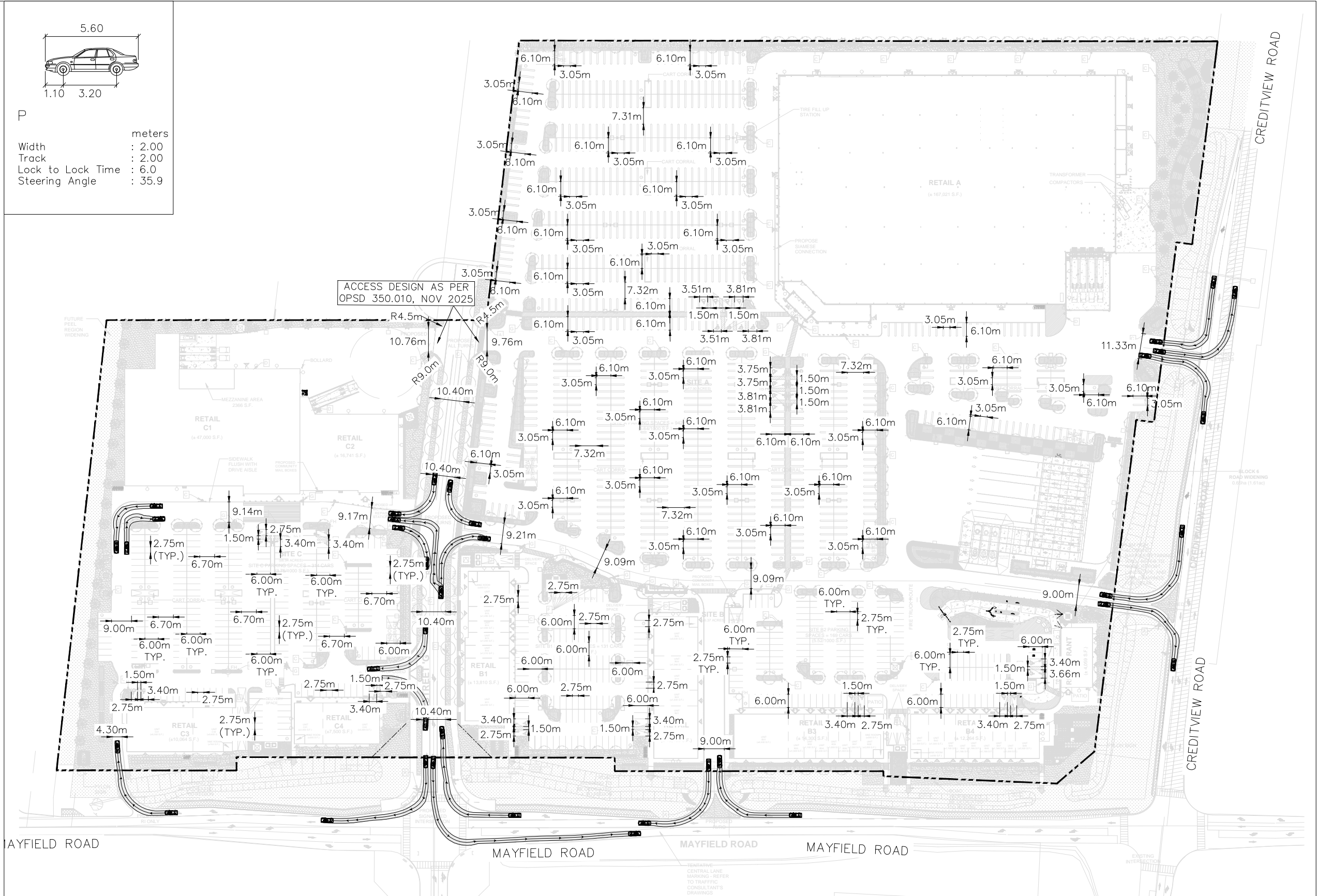
AS PER AODA ACCESSIBLE PARKING REQUIREMENTS:

1. TYPE A:
 - a) BE A MINIMUM OF 3.4 METRES WIDE
2. TYPE B:
 - a) BE A MINIMUM OF 2.4 METRES WIDE
3. ACCESS AISLE
 - a) HAVE AN ACCESS AISLE THAT IS A MINIMUM OF 1.5 METRES WIDE AND EXTEND THE FULL LENGTH OF THE PARKING SPACE



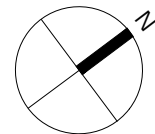
P

	metres
Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.0
Steering Angle	: 35.9



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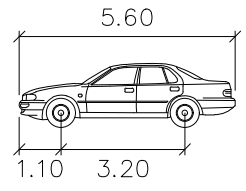
Project No.
22142
Date
MAR 19, 2026

12100 CREDITVIEW ROAD
CALEDON ONTARIO
17.5 0 17.5 35 52.5m
1:1750

SITE PLAN
PARKING & PTAC REVIEW

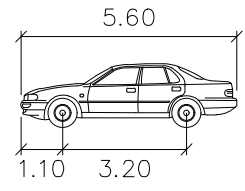
Drawing No.
012

STOPPING SIGHT DISTANCE:
 • PER "TAC" TABLE 9.9.6
 • DESIGN SPEED = 80km/h
 • REQUIRED STOPPING SIGHT DISTANCE = 130m
 • AVAILABLE STOPPING SIGHT DISTANCE => 130m
 • DOES IT MEET THE REQUIREMENT - YES

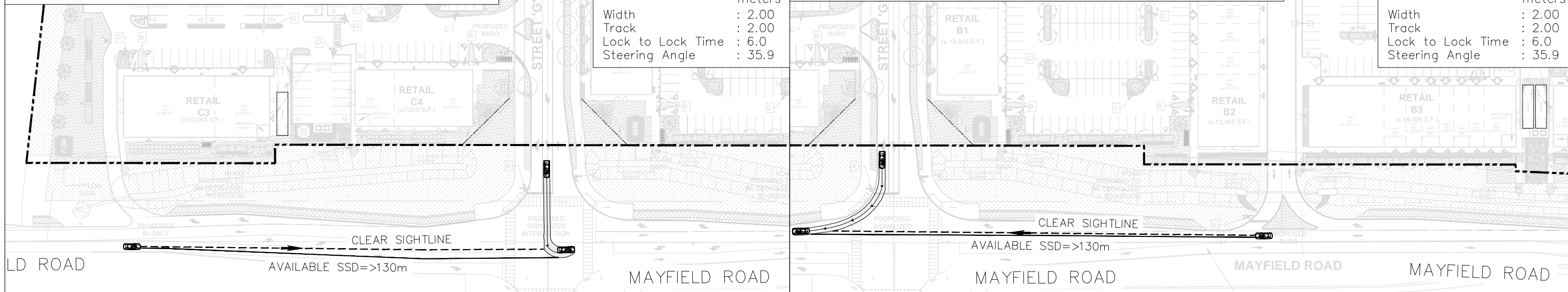


P
 Width : 2.00 meters
 Track : 2.00
 Lock to Lock Time : 6.0
 Steering Angle : 35.9

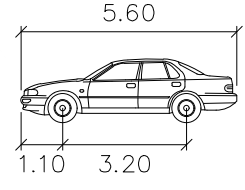
STOPPING SIGHT DISTANCE:
 • PER "TAC" TABLE 9.9.6
 • DESIGN SPEED = 80km/h
 • REQUIRED STOPPING SIGHT DISTANCE = 130m
 • AVAILABLE STOPPING SIGHT DISTANCE => 130m
 • DOES IT MEET THE REQUIREMENT - YES



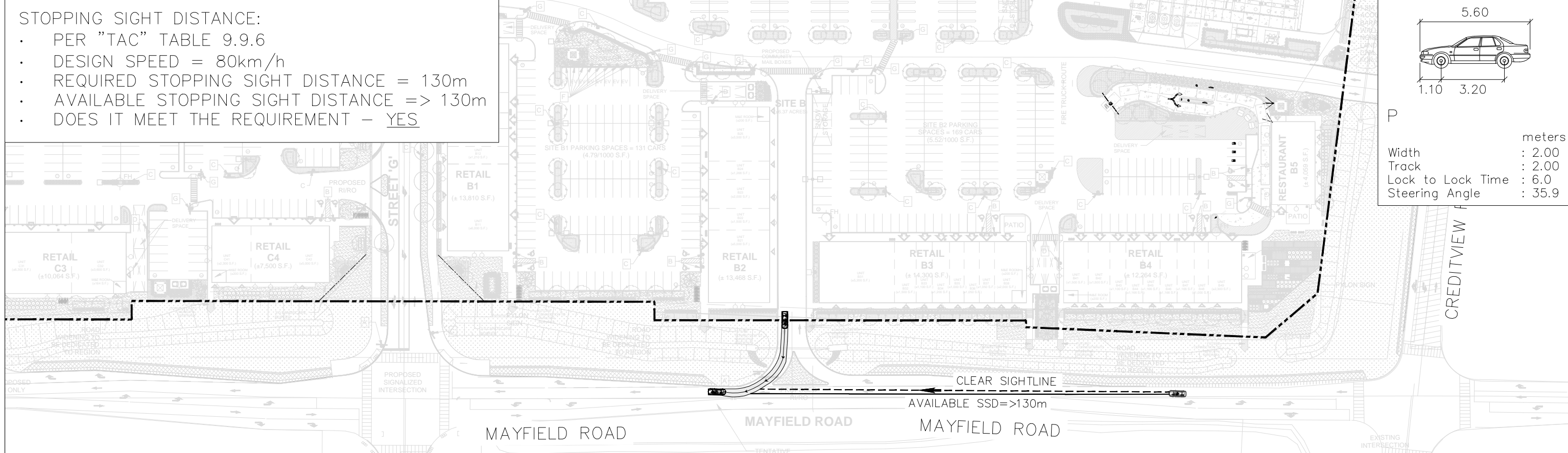
P
 Width : 2.00 meters
 Track : 2.00
 Lock to Lock Time : 6.0
 Steering Angle : 35.9



STOPPING SIGHT DISTANCE:
 • PER "TAC" TABLE 9.9.6
 • DESIGN SPEED = 80km/h
 • REQUIRED STOPPING SIGHT DISTANCE = 130m
 • AVAILABLE STOPPING SIGHT DISTANCE => 130m
 • DOES IT MEET THE REQUIREMENT - YES

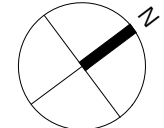


P
 Width : 2.00 meters
 Track : 2.00
 Lock to Lock Time : 6.0
 Steering Angle : 35.9



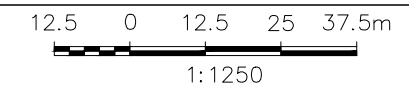
DRAWN BY: H.B. PLOT DATE: March 19, 2026

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 22142
 Date
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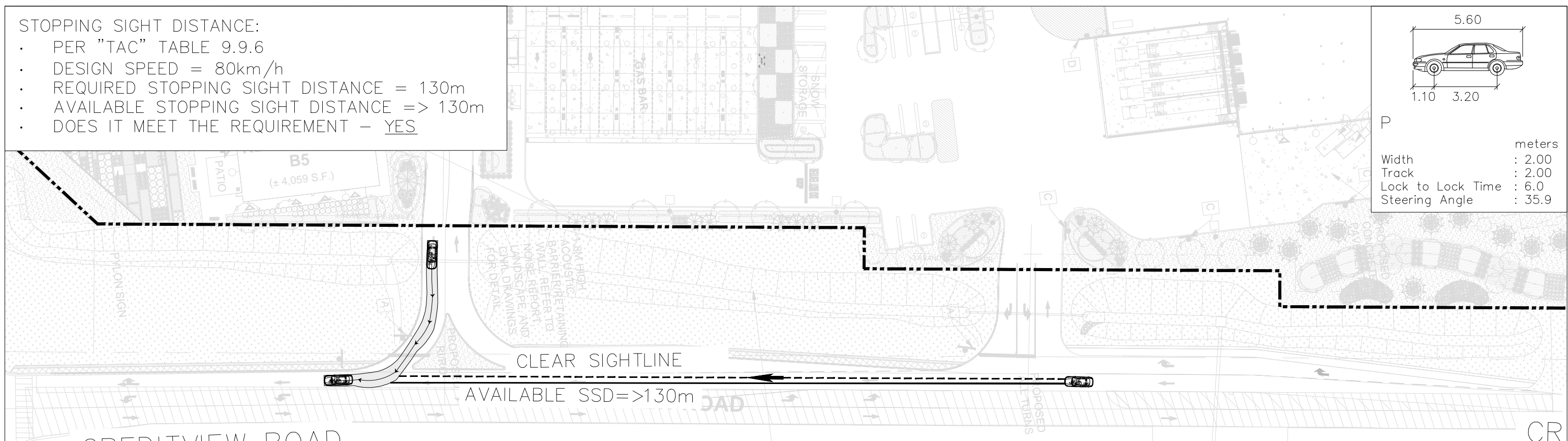
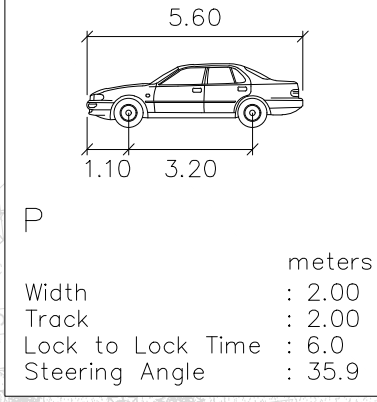
12100 CREDITVIEW ROAD
 CALEDON ONTARIO



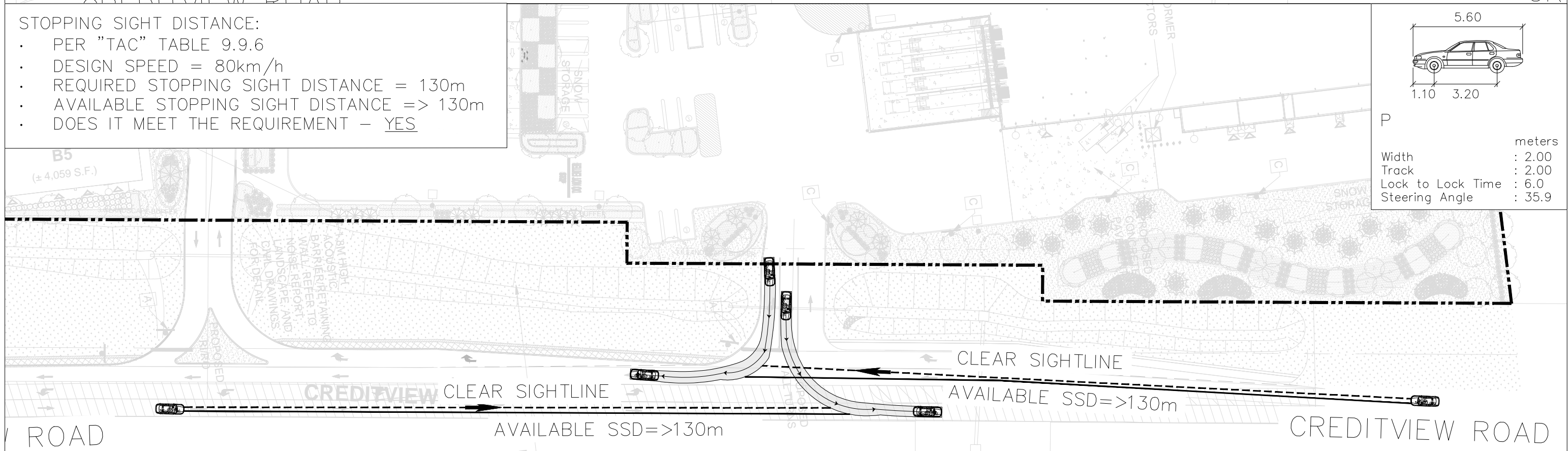
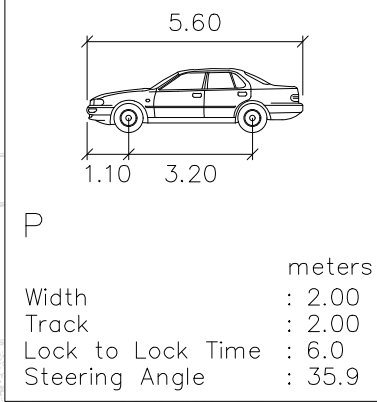
PROPOSED SITE ACCESS
 SIGHTLINE ANALYSIS
 STOPPING SIGHT DISTANCE (SSD)
 MAYFIELD ROAD ACCESS

Drawing No.
 013

STOPPING SIGHT DISTANCE:
 • PER "TAC" TABLE 9.9.6
 • DESIGN SPEED = 80km/h
 • REQUIRED STOPPING SIGHT DISTANCE = 130m
 • AVAILABLE STOPPING SIGHT DISTANCE => 130m
 • DOES IT MEET THE REQUIREMENT - YES

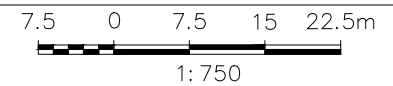


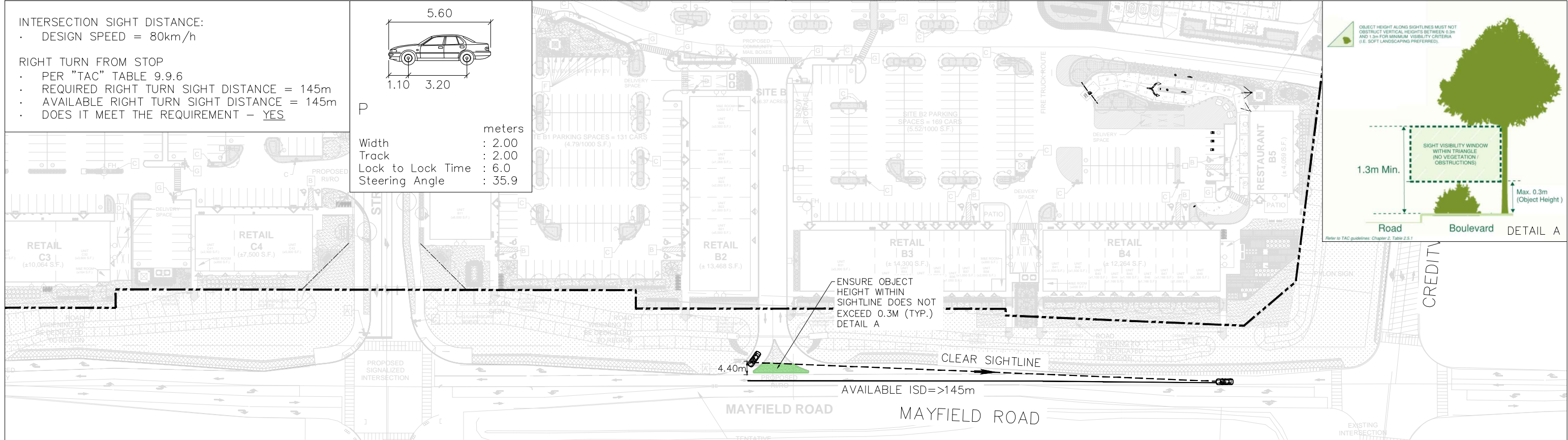
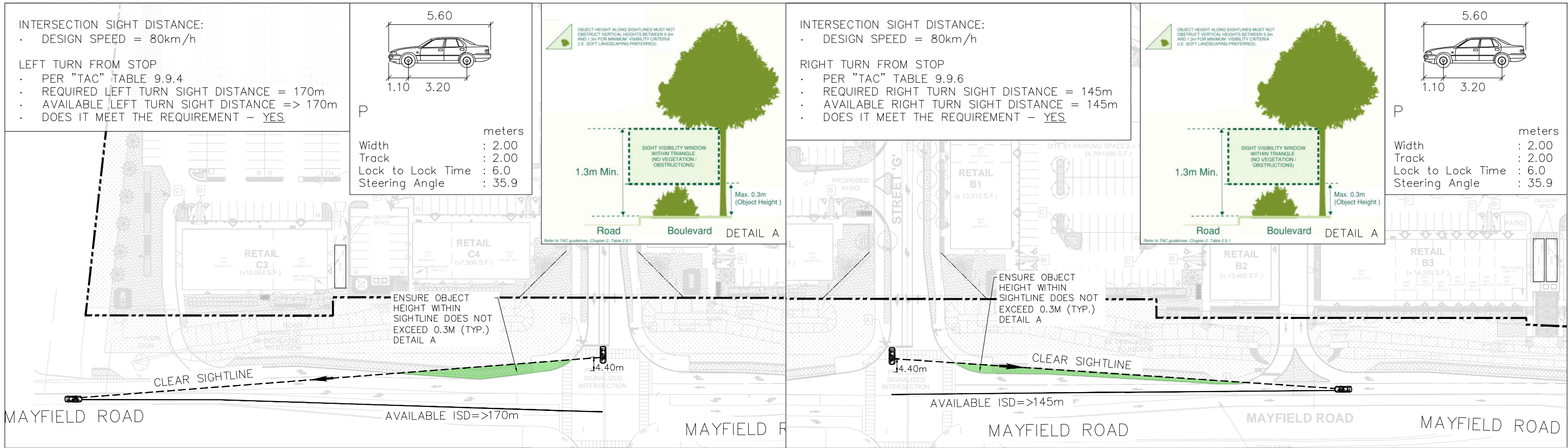
STOPPING SIGHT DISTANCE:
 • PER "TAC" TABLE 9.9.6
 • DESIGN SPEED = 80km/h
 • REQUIRED STOPPING SIGHT DISTANCE = 130m
 • AVAILABLE STOPPING SIGHT DISTANCE => 130m
 • DOES IT MEET THE REQUIREMENT - YES



DRAWN BY: H.B. PLOT DATE: March 19, 2026

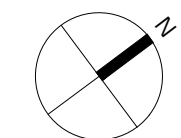
LEA Consulting Ltd. Consulting Engineers and Planners www.LEA.ca			Project No.	12100 CREDITVIEW ROAD	PROPOSED SITE ACCESS SIGHTLINE ANALYSIS STOPPING SIGHT DISTANCE (SSD) CREDITVIEW ROAD ACCESS	Drawing No. 014
			Date	CALEDON ONTARIO		





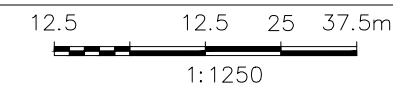
DRAWN BY: H.B. PLOT DATE: March 19, 2026

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Project No.
22142
Date
MAR 19, 2026

12100 CREDITVIEW ROAD
CALEDON ONTARIO



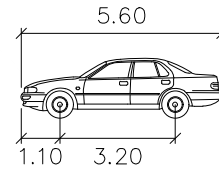
PROPOSED SITE ACCESS
SIGHTLINE ANALYSIS
INTERSECTION SIGHT DISTANCE (ISD)
MAYFIELD ROAD ACCESS

Drawing No.
015

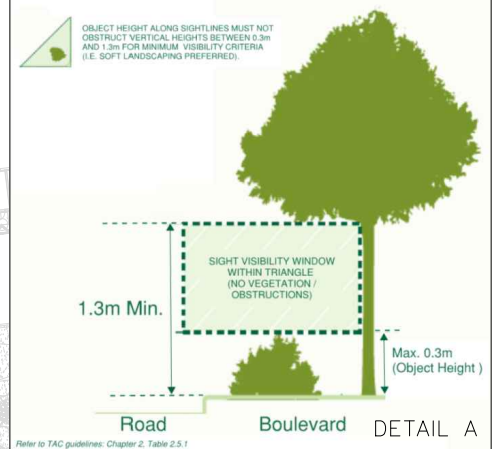
INTERSECTION SIGHT DISTANCE:
 · DESIGN SPEED = 80km/h

LEFT TURN FROM STOP
 · PER "TAC" TABLE 9.9.4
 · REQUIRED LEFT TURN SIGHT DISTANCE = 170m
 · AVAILABLE LEFT TURN SIGHT DISTANCE => 170m
 · DOES IT MEET THE REQUIREMENT - YES

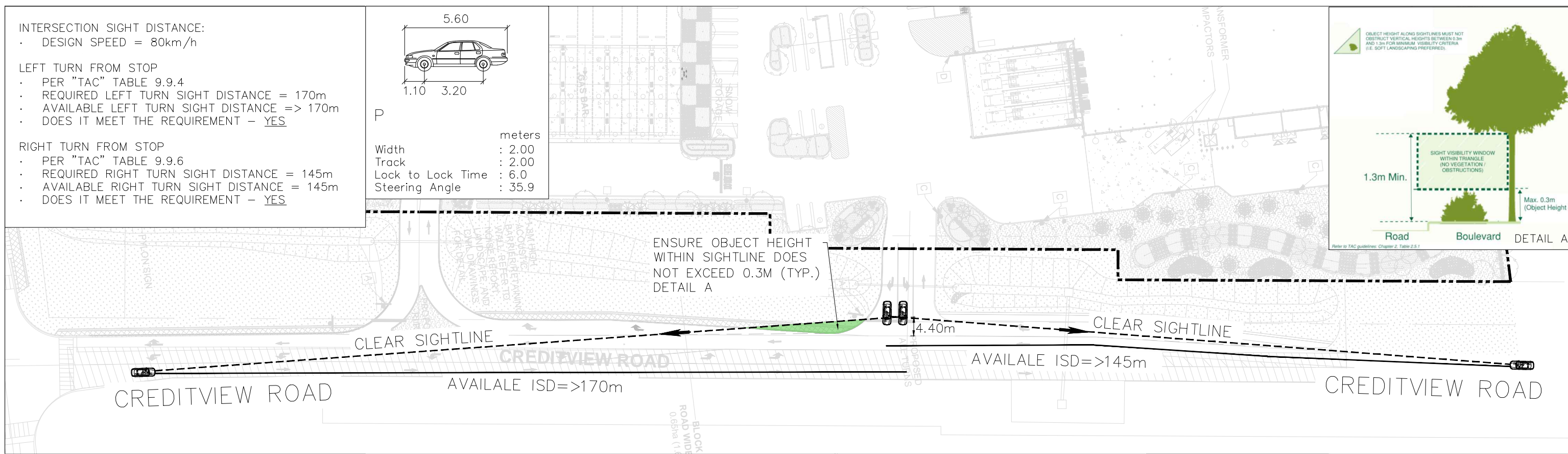
RIGHT TURN FROM STOP
 · PER "TAC" TABLE 9.9.6
 · REQUIRED RIGHT TURN SIGHT DISTANCE = 145m
 · AVAILABLE RIGHT TURN SIGHT DISTANCE = 145m
 · DOES IT MEET THE REQUIREMENT - YES



Width : 2.00
 Track : 2.00
 Lock to Lock Time : 6.0
 Steering Angle : 35.9

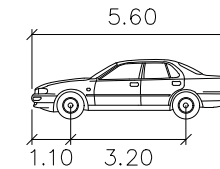


ENSURE OBJECT HEIGHT WITHIN SIGHTLINE DOES NOT EXCEED 0.3M (TYP.)
 DETAIL A

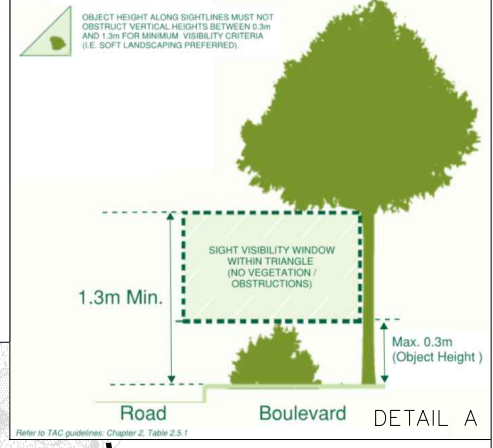


INTERSECTION SIGHT DISTANCE:
 · DESIGN SPEED = 80km/h

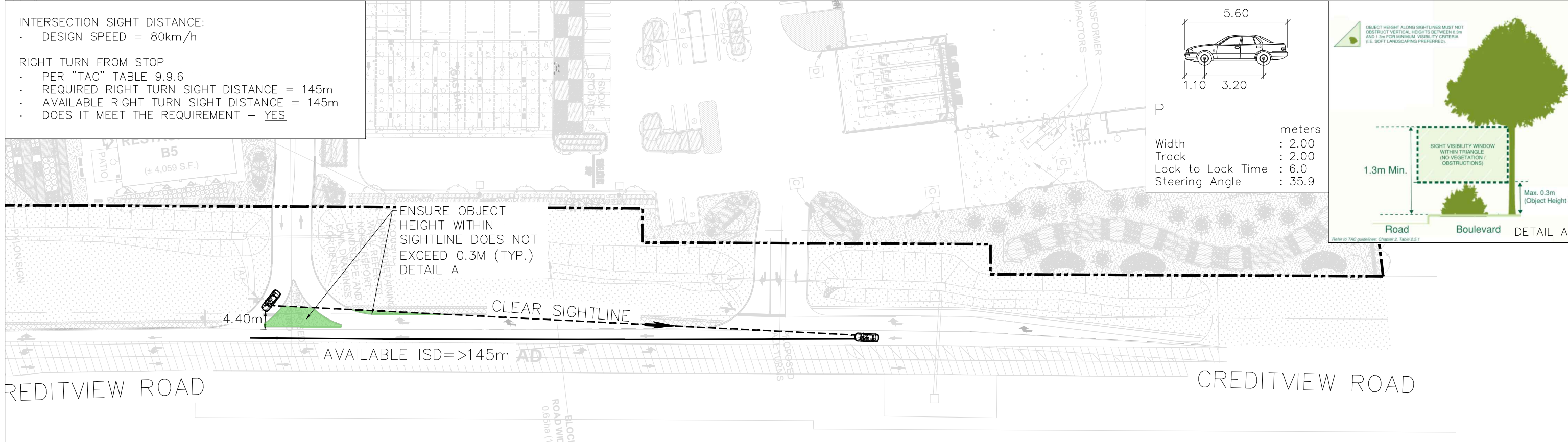
RIGHT TURN FROM STOP
 · PER "TAC" TABLE 9.9.6
 · REQUIRED RIGHT TURN SIGHT DISTANCE = 145m
 · AVAILABLE RIGHT TURN SIGHT DISTANCE = 145m
 · DOES IT MEET THE REQUIREMENT - YES



Width : 2.00
 Track : 2.00
 Lock to Lock Time : 6.0
 Steering Angle : 35.9

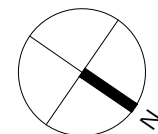


ENSURE OBJECT HEIGHT WITHIN SIGHTLINE DOES NOT EXCEED 0.3M (TYP.)
 DETAIL A



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12100 CREDITVIEW ROAD
 CALEDON ONTARIO
 9 0 9 18 27m
 1:900

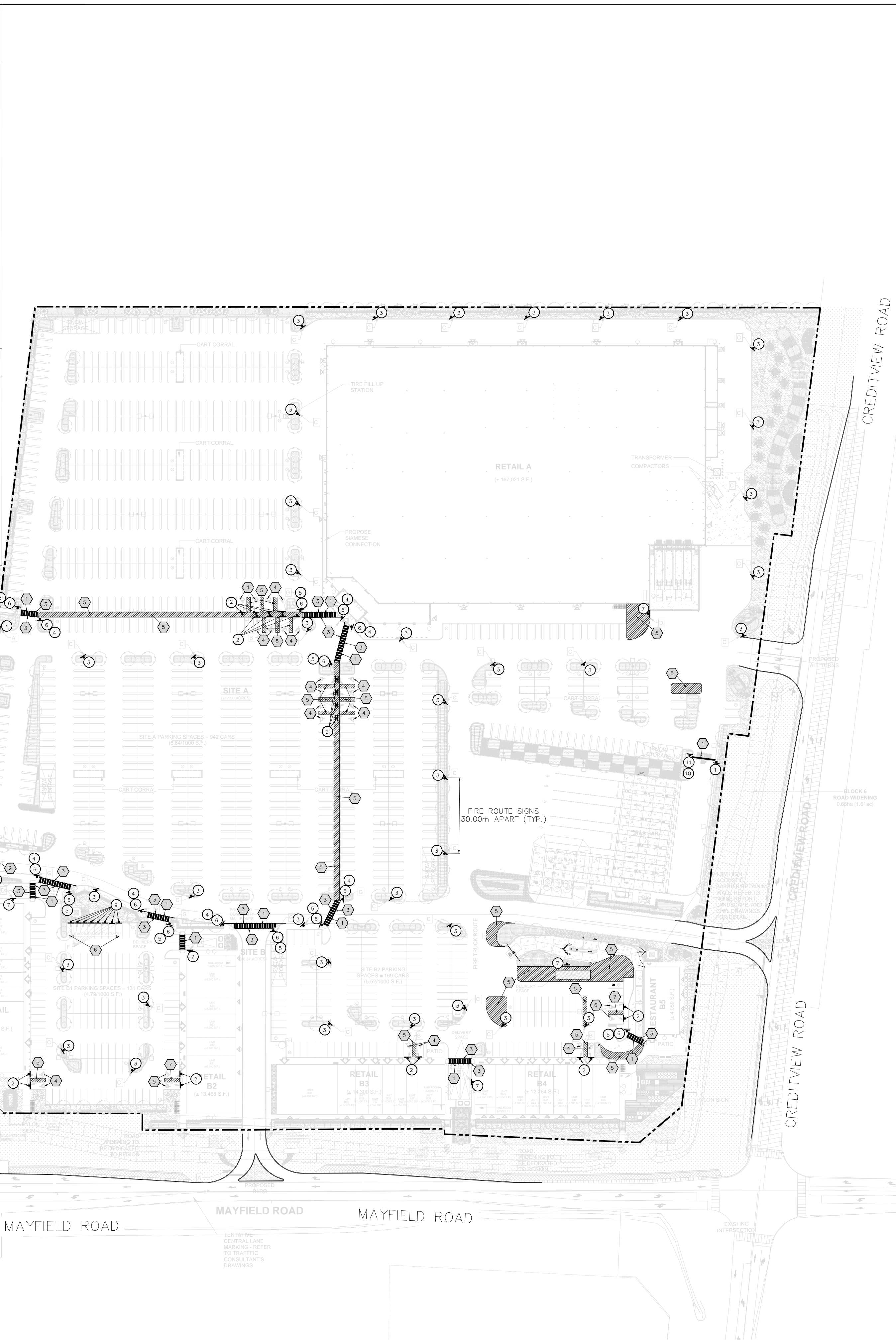
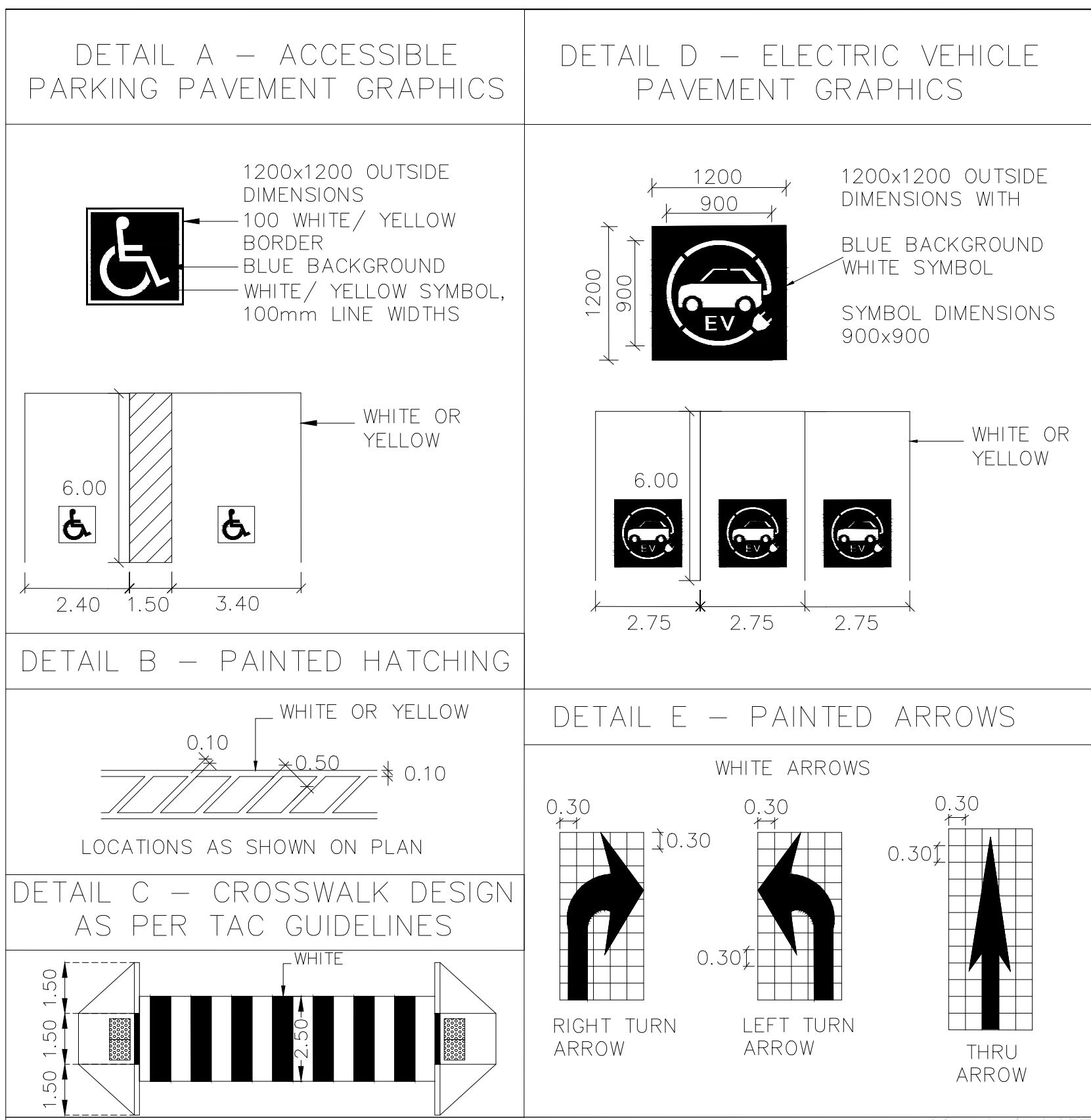
PROPOSED SITE ACCESS
 SIGHTLINE ANALYSIS
 INTERSECTION SIGHT DISTANCE (ISD)
 CREDITVIEW ROAD ACCESS

Drawing No.
 016



APPENDIX N

PMSP & Cost Estimate

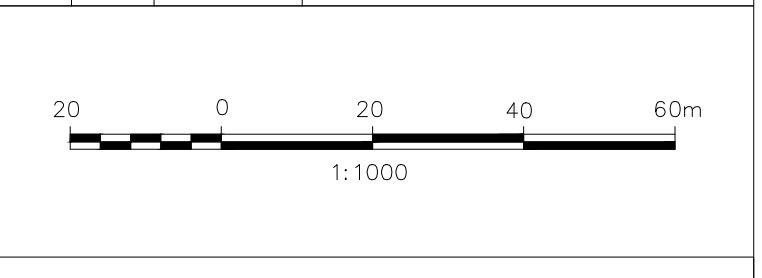


TRAFFIC SIGNS SCHEDULE			
SIGN	SIGN NUMBER	QUANTITY REQUIRED	COLOURS
	1	5	Ra-1 (600x600) LEGEND & BORDER – WHITE REFL. BACKGROUND – RED REFL.
	2	36	Rb-93 (300x450) BLACK LEGEND, BORDER & LETTER P, WHITE REFL. BACKGROUND, INTERDICTIONARY SYMBOL – BLUE REFL. BACKGROUND & OUTLINE
	3	51	(300x450) RED REFL. INTERDICTIONARY SYMBOL BLACK SYMBOL, WHITE REFL. "FIRE ROUTE" ON RED BACKGROUND BLACK LEGEND, RED BORDER WHITE REFL. BACKGROUND
	4	9	Wc-7 (750x750) BLACK SYMBOL & BORDER,, YELLOW REFL. BACKGROUND.
	5	10	Wc-7 (750x750) BLACK SYMBOL & BORDER,, YELLOW REFL. BACKGROUND.
	6	19	Ra-4t (600x450) BLACK LEGEND & BORDER, WHITE REFL. BACKGROUND.
	7	8	Rb-51 MOD. (300x450) RED REFL. INTERDICTIONARY SYMBOL, BLACK LEGEND & BORDER, WHITE REFL. BACKGROUND.
	8	1	Rb-19 MODIFIED (600x900) RED REFL. INTERDICTIONARY SYMBOL, BLACK LEGEND & BORDER, WHITE REFL. BACKGROUND.
	9	8	(600x600) WHITE REFL. LEGEND & BORDER, BLUE REFL. BACKGROUND.
	10	2	Rb-19 (600x600) RED REFL. INTERDICTIONARY SYMBOL, BLACK BORDER, WHITE REFL. BACKGROUND.
	11	2	Rb-19t (60x60cm) BLACK LEGEND & BORDER, WHITE REFL. BACKGROUND.

NOTES:

- ALL SIGNS ARE STEEL POST-MOUNTED, UNLESS OTHERWISE INDICATED.
- UNDERSIDES OF ALL SIGNS TO BE LOCATED MIN. 2.0m ABOVE TOP OF PAVEMENT OR TOP OF SIDEWALK. ALL SIGNS ARE PER "ONTARIO TRAFFIC MANUAL", LATEST EDITION.
- ALL PAVEMENT MARKINGS SHALL BE MADE IN ACCORDANCE WITH ONTARIO TRAFFIC MANUAL, BOOK 5, 11 AND 15.
- SIGN Ra-4t TO BE MOUNTED ON THE SAME POST OF SIGN WC-7, AND BELOW IT.
- CONTRACTOR TO ENSURE FIRE ROUTE SIGNS ARE INSTALLED IN ACCORDANCE WITH TOWN OF CALEDON BY-L
- ENSURE PAVEMENT MARKING FOR ACCESSIBLE PARKING AS PER DETAIL A.
- CROSSWALK TO BE DESIGNED AS PER TAC GUIDELINES. SEE DETAIL C.

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1	H.B.	2024-10-10	SUBMISSION
REV.	Drawn	Date	Description



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PAVEMENT MARKING & SIGNAGE LEGEND	
	WALL MOUNTED SIGN
	POST MOUNTED SIGN
	SIGN NUMBER
	SOLID WHITE, 60cm
	SOLID WHITE, 20cm
	SOLID WHITE, 10cm
	ACCESSIBLE PARKING SYMBOL (TYP.) AS PER DETAIL A
	PAINTED HATCHING (TYP.) AS PER DETAIL B
	"ELECTRIC VEHICLE" PAVEMENT MARKING AS PER DETAIL D

12100 CREDITVIEW ROAD CALEDON ONTARIO	
SITE PLAN PAVEMENT MARKING & SIGNAGE PLAN	
Design By	Date
A.B.	MAR 19, 2026
Drawn By	Checked By
A.B.	M.B.
Project No.	Drawing No.
22142	001

REFER TYLin's EXTERNAL WORK FOR COSTING, PAVEMENT MARKINGS AND SIGNAGES PLAN FOR CREDITVIEW ROAD, MAYFIELD ROAD, AND STREET G.

12100 Creditview Road, Caledon
Preliminary Cost Estimate - Mar 02, 2026
PAVEMENT MARKINGS & SIGNAGE WORKS (WITHIN PRIVATE PROPERTY)

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Pavement Markings				
Pavement Markings Solid White 60cm (Stop Bar/Lines)	m	30.00	\$60.00	\$1,800.00
Pavement Markings Solid White 20cm (Lines)	m	20.00	\$15.00	\$300.00
Pavement Markings Solid White 10cm (Crosswalk Lines)	m	279.00	\$6.00	\$1,674.00
Pavement Markings Solid White 60cm (Crosswalk Lines)	m	474.00	\$60.00	\$28,440.00
Pavement Markings (Hatch Lines- Solid White 10cm)	m	2750.00	\$6.00	\$16,500.00
Pavement Marking Symbols				
Pavement Markings Symbols (Accessible Parking)	each	36.00	\$500.00	\$18,000.00
Pavement Markings Symbols (EV Parking)	each	8.00	\$500.00	\$4,000.00
Signages				
New Signage (Supply and Installation)	each	151.00	\$450.00	\$67,950.00
New Signage Post (Supply and Installation)	each	124.00	\$100.00	\$12,400.00
SUBTOTAL - ROADWAY WORKS				\$151,064.00
HST (13%)				\$19,638.32
Contingency Allowance (20%)				\$30,212.80
TOTAL				\$200,915.00

Note 1: Costs do not include items related to the relocation of existing underground utilities and services.

Note 2: Costs do not include items associated with traffic management.

Note 3: Most of the unit rates are considered from TYLin's external servicing and road costs estimates.

Note 4: Signage quantity account for traffic signs only and does not include wayfinding and other signages.

Note 5: Parking lines are being excluded from the Pavement Marking cost estimate.



