

TOWN OF CALEDON  
PLANNING  
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# WILDFIELD VILLAGE CAVALLINO ESTATES

Draft Plan of Subdivision Application  
Town of Caledon



Prepared For: Cavallino Estates Inc. c/o Trinison Management Corporation

October 2025

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Date	Application	Revision
2025-10-31	Draft Plan of Application	First Submission

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# 1.0 INTRODUCTION

BA Group has been retained by Cavallino Estates Inc. c/o Trinison Management Corporation to provide transportation consulting services in support of a Draft Plan of Subdivision application to a parcel located in the Town of Caledon, Ontario. This parcel (the “site”) is legally described as Part of Lot 2, Concession 3 in the geographic Township of Albion, bounded by Centreville Creek Road to the west and other Wildfield Village Secondary Plan lands to the north, east and south.

The site location is illustrated in **Figure 1**. The existing site is mostly underdeveloped.

## 1.1 Conceptual Development Plan

The current development proposal features the construction of the following housing types:

- Townhouses: 195 units
- Medium-Density Apartment Units: TBD (final unit count to be determined at Site Plan Approval)
- **Total Residential Units: 195 units** (final unit count to be determined at Site Plan Approval)

The draft plan of subdivision is illustrated in **Figure 3**. The preliminary draft plan and development statistics are attached in **Appendix A**.

## 1.2 Background

The site is located in the Wildfield Village Secondary Plan (“WVSP”) Area. The Official Plan Amendment (“OPA”) application (POPA 2024-0010) was first submitted on December 23, 2024. As part of this application, BA Group prepared a transportation report titled “Wildfield Community Transportation Study” dated November 2024.

The OPA application for the WVSP Area was resubmitted on May 30, 2025. As part of this application, BA Group prepared a transportation report titled “Wildfield Village Secondary Plan – Transportation Study” dated May 2025 (the “May 2025 BA Report”).

The OPA application has been subsequently endorsed by the Town Council on July 8, 2025. The site location relative to the approved community structure and land use plan is illustrated in **Figure 2**.

## 1.3 This Report

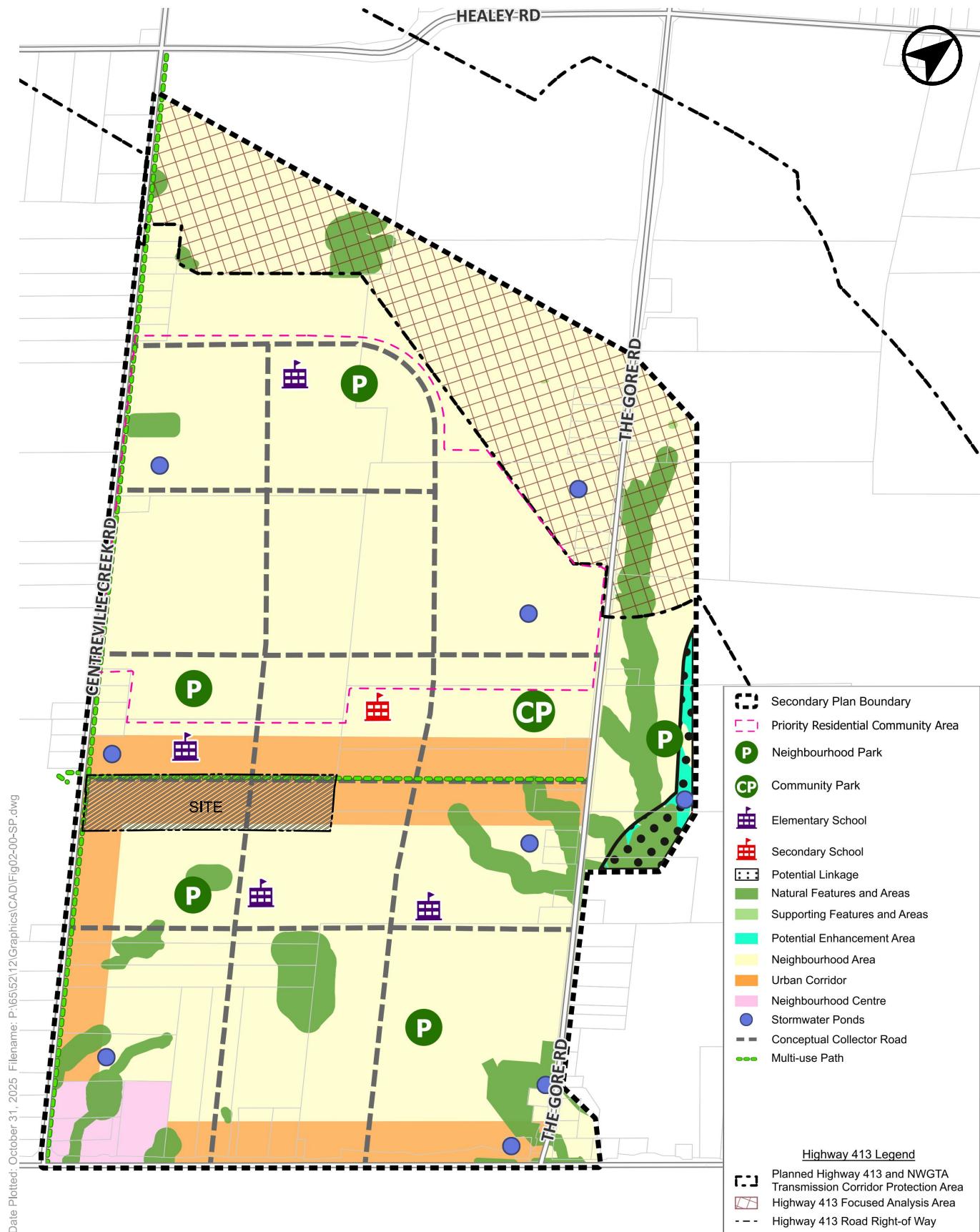
The purpose of this report is to provide a traffic review of the development proposal. The draft plan will be updated as the development progresses.



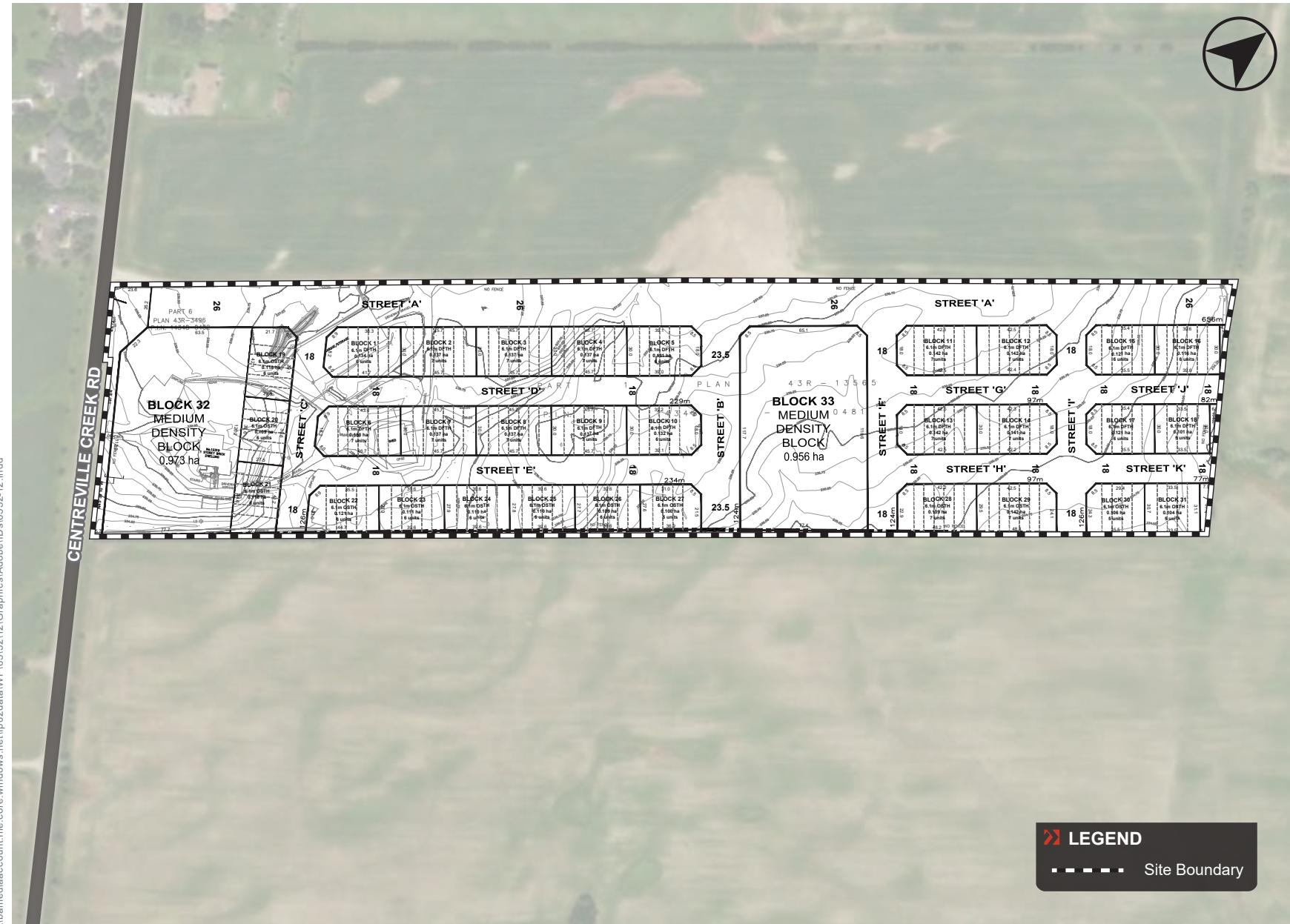


Aerial maps provided courtesy of: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, the GIS User Community and/or Google Earth/Maps.

**FIGURE 1 SITE LOCATION**



**FIGURE 2 APPROVED WILDFIELD VILLAGE SECONDARY PLAN**



**FIGURE 3 SITE CONCEPT PLAN**

## 2.0 POLICY CONTEXT AND DESIGN PRINCIPLES

### 2.1 Wildfield Village Secondary Plan

#### 2.1.1 Overview

The site is located in the Wildfield Village Secondary Plan Area. The WVSP established a detailed planning framework to facilitate the development of a complete community. The WVSP will govern the development and redevelopment of lands in the Secondary Plan Area to accommodate growth to 2051. The WVSP will create a well-connected, compact and complete community. The Secondary Plan Area will offer a range of housing opportunities, commercial and community uses and access to greenspace. Wildfield Village will be designed to achieve excellence in community design and will strive to integrate a high-quality public realm.

#### 2.1.2 Community-Wide Transportation Study

Transportation infrastructure in the WVSP Area will be developed as multi-modal transportation corridors that are designed to safely, conveniently and efficiently accommodate a blend of vehicular, transit, bicycle, and pedestrian movement and connectivity.

The WVSP stipulates that prior to the approval of the first Draft Plan of Subdivision, Draft Plan of Condominium or Site Plan Approval, a Community-Wide Transportation Study must be completed to the satisfaction of the Town, Region of Peel and Toronto Region Conservation Authority. Development within the Secondary Plan Area will implement the recommendations of the Town-approved Community-Wide Transportation Study.

The Community-Wide Transportation Study in support of the Secondary Plan is required to include the following:

1. transportation capacity analysis and modelling, identifying:
  - a. internal road, intersection, and lane configurations and traffic controls required to support the full build-out of the Secondary Plan Area, based on the planning horizons of the Official Plan; and,
  - b. external boundary road, intersection, and lane configurations and traffic control improvements required to support the full build-out of the Secondary Plan Area, based on the planning horizons of the Official Plan.
2. a Transportation Demand Management Plan;
3. a Transit Plan identifying proposed transit routes and stops to provide access to transit within 400 metres throughout the entire Secondary Plan community;
4. a Pedestrian and Cycling Plan, identifying cycling and pedestrian infrastructure and connectivity throughout the Secondary Plan, and along the Boundary Road network;
5. a Traffic Safety and Calming Plan; and,
6. an assessment of land requirements needed to accommodate the planned transportation infrastructure and improvements.

Notwithstanding the above, it is important to note that the proposed development density is consistent with the WVSP. The May 2025 report, submitted as part of the draft Secondary Plan application, includes:



- a) preliminary transportation capacity analysis and modelling of both external and internal roads, intersections, lane configurations and traffic control improvements that support the full build-out of the Secondary Plan Area, assuming a 2051 planning horizon;
- b) a preliminary transit plan that identifies potential transit routes and stops within 400 metres of the WVSP Area; and
- c) a preliminary active transportation plan that identifies potential cycling and pedestrian infrastructure and connectivity throughout the WVSP Area and along boundary roads.

The transit plan, active transportation plan and transportation capacity analysis will be refined in the Community-Wide Transportation Study that will be submitted at a later stage. The Community-Wide Transportation Study will also include a transportation demand management plan and an assessment of land dedication required to accommodate the planned transportation infrastructure and improvements.

## **2.2 Town of Caledon Multi-Modal Transportation Master Plan**

The Town of Caledon's *Multi-Modal Transportation Master Plan* (MMTMP) was developed in conjunction with the Town of Caledon's new Official Plan (OP), *Future Caledon*, and provides direction on transportation improvements within Caledon to 2051.

### **2.2.1 New Midblock Collector**

The MMTMP is presently being updated, with the key change being the introduction of a new mid-block collector road, of which the planned urban corridor will be one link, between Highway 410 in the west and Bolton in the east. The site is located adjacent to the new midblock collector road. The majority of the land that the site is situated on is designated as the Urban Corridor in the WVSP, as illustrated in **Figure 1**.

### **2.2.2 Boundary Road Widening**

The MMTMP recommends the widening of Centreville Creek Road from Mayfield Road to Healey Road from 2 to 4 lanes.

### **2.2.3 Active Transportation Plan**

The MMTMP includes active transportation recommendations that were developed as part of the Caledon Active Transportation Master Plan process, as well as new road cross-sections which accommodate different types of cycling infrastructure.

## **2.3 Town of Caledon *Future Caledon* Official Plan**

The Town of Caledon's new Official Plan (OP), *Future Caledon*, was adopted on March 6, 2024. It is still subject to approval by the Ministry of Municipal Affairs and Housing and is not yet in force and effect. Although not yet in force, the Town's OP represents the direction and vision of Council for growth in the Town. It replaces a majority of the in-force Town of Caledon Official Plan, which was first implemented in 1978. Future phases of the Official Plan Review process will continue to update the new OP until all aspects of the previous Official Plan are replaced.

*Future Caledon* includes land dedication requirements at intersections for daylight triangles, as summarized in **Table 1**.



**Table 1 Daylight Triangle Land Dedication Requirements**

Intersection	Land Dedication
Local Road to Local Road	5m x 5m
Local Road to Collector Road	7.5m x 7.5m
Collector Road to Collector Road	10m x 10m
Local Road to Arterial Road	15m x 15m
Collector Road to Arterial Road	15m x 15m
Arterial Road to Arterial Road	15m x 15m
Any Town Road intersecting Regional Road	15m x 15m

Notwithstanding the above, *Future Caledon* permits the reduction of Town-wide Road Right-of-Way widths and daylight triangle requirements on a site-specific basis.

## 2.4 Town of Caledon Active Transportation Master Plan

The Town of Caledon's Active Transportation Master Plan (ATMP), dated June 2024, was developed to provide a framework to develop and manage a community that includes more active transportation in a cost-effective manner that will connect, integrate, enhance, and expand on our existing facilities.

### 2.4.1 Active Transportation Network

The active transportation network improvements identified in the ATMP are generally consistent with the MMTMP. In proximity to the site, the following active transportation infrastructures are recommended:

- Multi-use path along Centreville Creek Road between Mayfield Road and Healey Road; and
- Multi-use path along a midblock new east-west corridor (i.e. the SABE east-west corridor) between Torbram Road and The Gore Road.

### 2.4.2 Pedestrian Facilities

Additionally, the ATMP recommends that pedestrian facilities (sidewalks or multi-use paths) be provided on:

- Both sides of urban arterial roads;
- Both sides of urban collector roads;
- At least one side of local roads; and,
- Both sides of local roads for streets that serve a transit route or are located within 800 metres of a school, 400 metres of a community facility or 500 metres of parks.

### 2.4.3 Policy Recommendations

The ATMP provides recommendations on policies and best practices to target the Town's approaches to support active transportation. Key policy recommendations include:

- Sidewalks should be a minimum of 1.8 metres to 2 metres wide;



- All new and reconstructed urban arterial and collector roads should include protected intersections, linear cycling, and pedestrian facilities on both sides of the roadway and consider crossings that will service the multi-use trails system;
- A “protected intersection” type design shall be the preferred intersection and driveway treatment for pedestrians and cyclists in urban areas; and
- Adopt updated standard cross-sections outlined in MMTMP, subject to the context, for new development.



## 3.0 TRANSPORTATION CONTEXT

### 3.1 Area Street Network

#### 3.1.1 Existing Street Network

A description of the existing area road network is provided in **Table 2**. The existing area road network is illustrated in **Figure 4**.

**Table 2 Summary of Existing Area Street Network**

Street Name		Cross-Section	Parking Regulation	Speed Limit	Description
Regional Arterial	<b>Mayfield Road</b>	2 lanes with auxiliary turn lanes at major intersections	No parking is permitted in the vicinity of the study area.	60 km/h	Mayfield Road is an Arterial Road operated by the Region of Peel, which extends generally in an east-west direction along the south boundary of Caledon and Brampton between Highway 50 in the east and Winston Churchill Boulevard in the west.  East of Highway 50, Mayfield Road continues into Vaughan as Albion-Vaughan Road. West of Winston Churchill Boulevard, Mayfield Road continues into Halton Hills as Side Road 17.
Collector	<b>Centreville Creek Road</b>	2 lanes	No parking is permitted in the vicinity of the study area.	60 km/h	Centreville Creek Road is a Collector Road operated by the Town of Caledon, which extends generally in a north-south direction between Highway 9 in the north and Mayfield Road in the south.  North of Highway 9, Centreville Creek Road continues as Adjala Concession Road 2. South of Mayfield Road, Centreville Creek Road continues in Brampton as McVean Drive

#### 3.1.2 Future Street Network

##### HIGHWAY 413

Highway 413 (GTA West Transportation Corridor) is a proposed highway and transit corridor running through York, Peel and Halton Regions. The proposed 52-kilometre highway is proposed to extend generally in an east-west direction from Highway 400 between Kirby Road and King-Vaughan Road in Vaughan to the area of the Highway 401 & Highway 407 interchange in Halton Hills. The Highway will also connect to Highway 410, Highway 427 and Highway 27. The Highway 413 Project is following Ontario's process for Individual Environmental Assessment under the Environmental Assessment Act. The preferred route for the Highway 413 project is shown in **Figure 5**.

Relevant to the site, interchanges are proposed in proximity to the site on The Gore Road, just south of Healey Road.

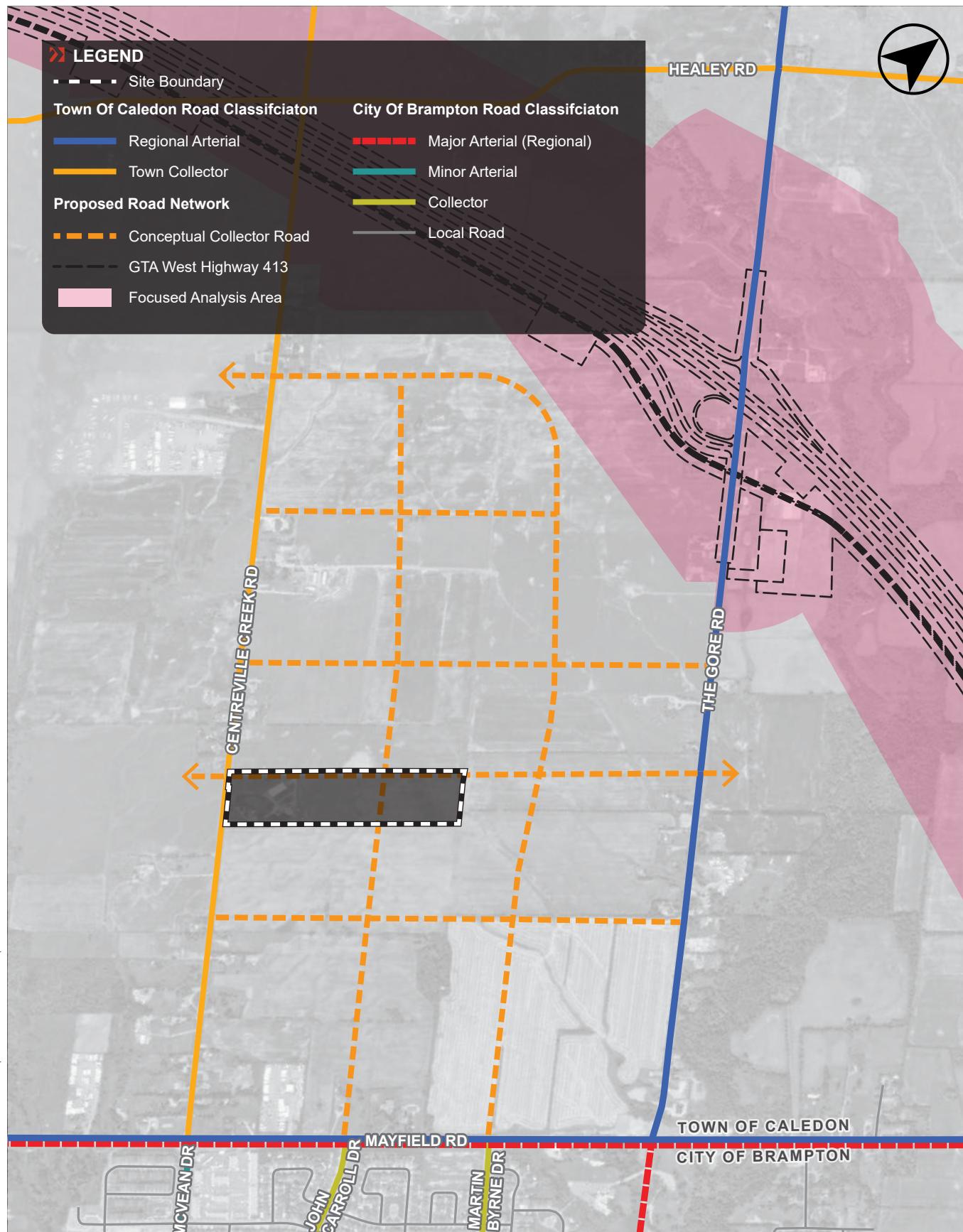


## ROAD NETWORK IMPROVEMENTS

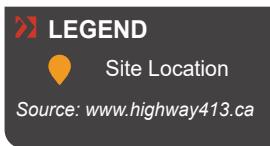
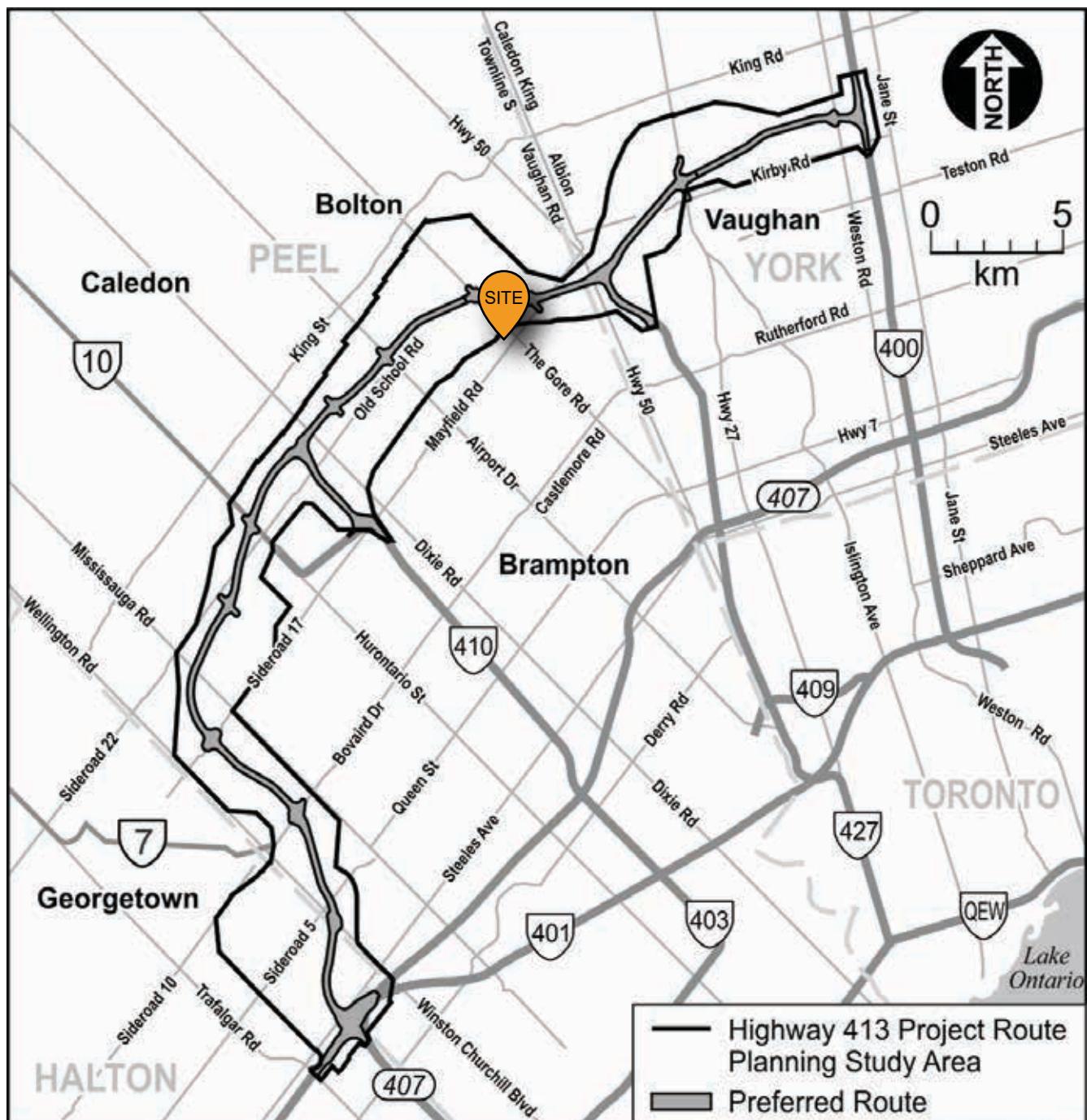
The MMTMP recommends the widening of Centreville Creek Road from Mayfield Road to Healey Road from 2 to 4 lanes. For this analysis, it was assumed that Centreville Creek Road would be urbanized while remaining as a 2-lane road, and auxiliary turn lanes would be introduced at intersections. The widening of Centreville Creek Road was not assumed to occur prior to the completion and full occupancy of the proposed development.

Existing and future lane configurations and traffic controls are illustrated in **Figure 6** and **Figure 7**, respectively.

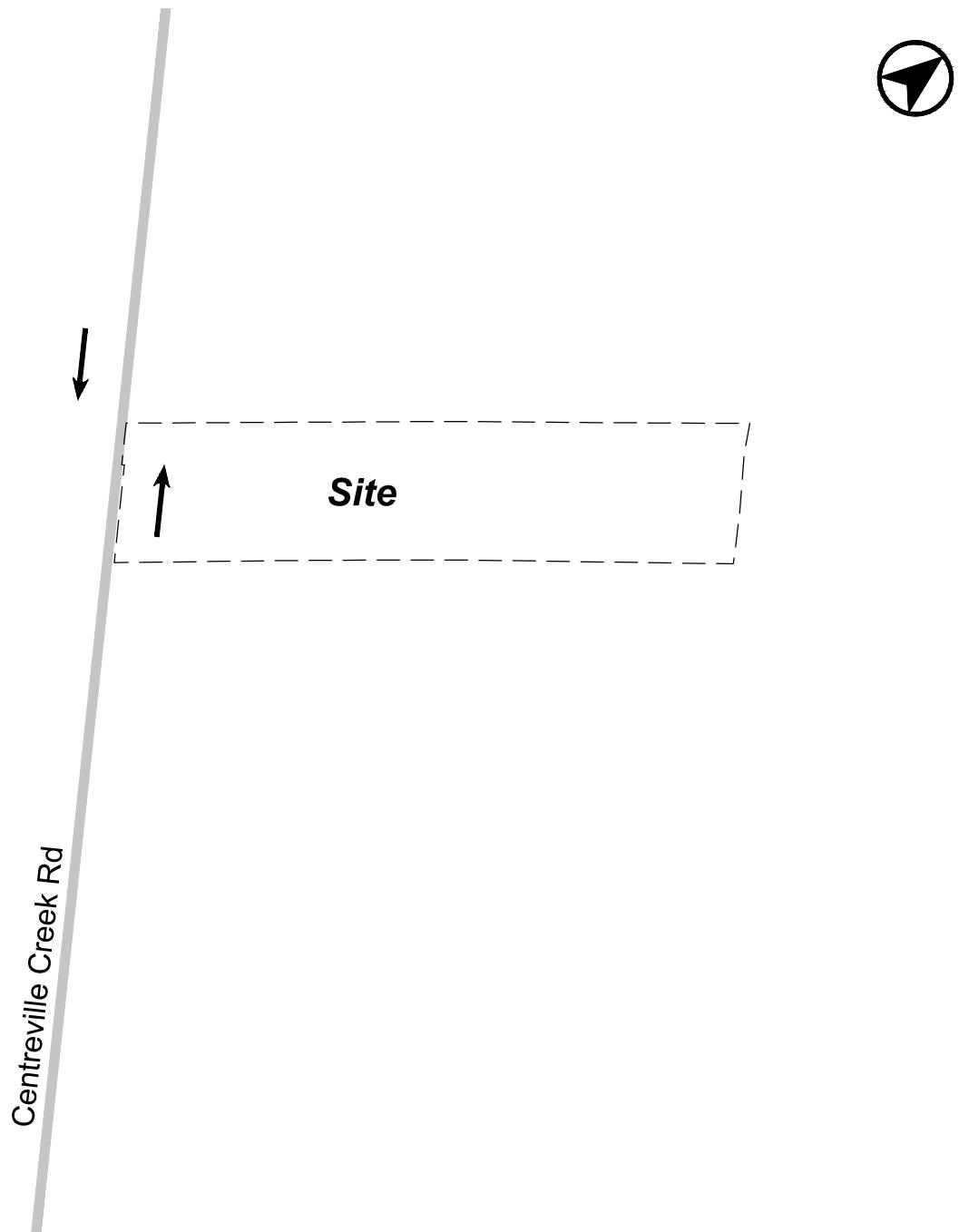




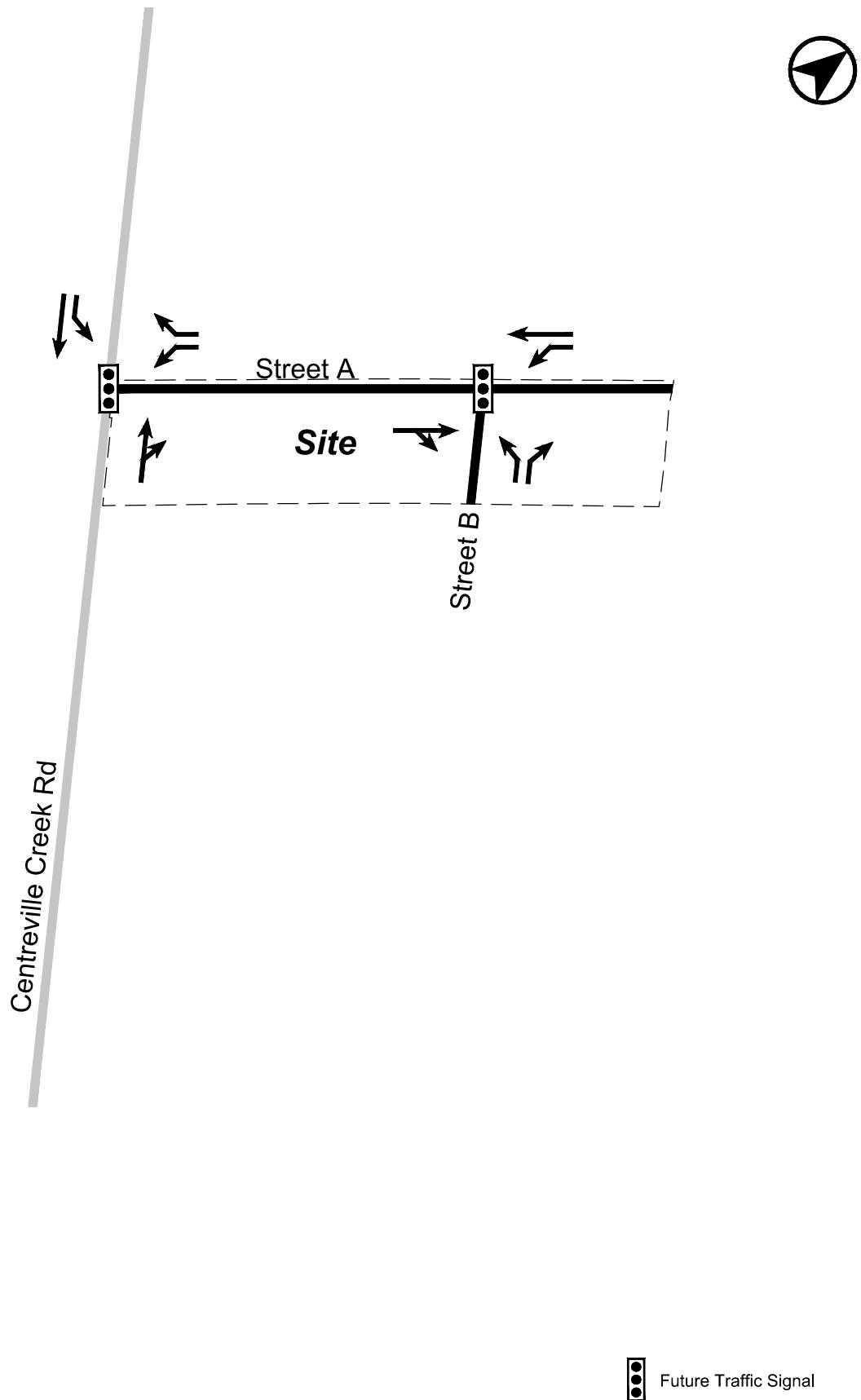
**FIGURE 4 AREA STREET NETWORK**



**FIGURE 5 HIGHWAY 413 (GTA WEST TRANSPORTATION CORRIDOR) PREFERRED ROUTE**



**FIGURE 6 EXISTING STREET LANE CONFIGURATION AND TRAFFIC CONTROL**



**FIGURE 7 FUTURE STREET LANE CONFIGURATION AND TRAFFIC CONTROL**

## 4.0 PROPOSED TRANSPORTATION FEATURES

The transportation infrastructure proposed as part of this development is informed by current design guidelines and standards in the WVSP, MMTMP and ATMP. The design parameters for local roads, resident collector roads and the urban corridor (i.e. the new east-west midblock collector) are summarized in **Table 3**. The design parameters for intersections are summarized in **Table 4**.

**Table 3** Road Network Design Features

Design Feature	Local Road	Resident Collector	Urban Corridor
Applicable Streets	Streets 'C' to 'K'	Street 'B'	Street 'A'
Right-of-Way	18 metres	23.5 metres	26 metres
Pavement Width	8.5 metres	11 metres	11 metres
Pedestrian Infrastructure	1.8-metre-wide sidewalks on both sides of the road	3.0-metre-wide multi-use paths on both sides of the road	1.8-metre-wide sidewalks on both sides of the road
Cycling Infrastructure	None		1.8-metre-wide cycle tracks on both sides of the road

**Table 4** Intersection Design Features

Design Feature	Collector to Collector	Local to Collector	Local to Local
Applicable Intersections	Street 'A' & Street 'B'	Street 'A' & Street 'C' Street 'A' & Street 'G' Street 'A' & Street 'H' Street 'A' & Street 'J'	All other intersections
Daylight Triangle	10m x 10m	7.5m x 7.5m	5m x 5m

The road network plan will be further refined as the Draft Plan of Subdivision application progresses. Based on discussions with the Town of Caledon's transportation staff, curb extensions and protected intersections are not proposed within the subdivision.



## 5.0 TRAVEL DEMAND ASSESSMENT

### 5.1 Analysis Scenarios and Horizons

The site is expected to be built out between 2030 and 2032. Therefore, traffic analyses have been completed for the following weekday morning and afternoon peak hour scenarios:

- **2025 Existing Traffic** – traffic volumes on the road network under existing conditions.
- **2037 Future Background Traffic** – traffic volumes in the future prior to the build-out of the site, which considers area growth.
- **2037 Future Total Traffic (5-year Post-Build-Out)** – traffic volumes in the future after the build-out of the site, inclusive of area background growth.

The analysis considers the interim condition that assesses the full build-out of the site prior to the full development of the remainder of the Wildfield Village Secondary Plan. The analysis assumes that Highway 413 would not open by the 2037 horizon.

### 5.2 Existing Traffic Volumes

Base existing traffic volumes were established for the weekday morning and afternoon peak hours (the busiest hour of traffic between 7:30-9:30 am and 4:00-6:00 pm, respectively) for intersections within the study area, based upon historical traffic count information collected by Spectrum Traffic Inc. on behalf of BA Group. The traffic count information adopted as the basis for the traffic operations analysis undertaken to assess the operational impacts of the proposed development is summarized in **Table 5**. Turning movement counts are attached in **Appendix B**.

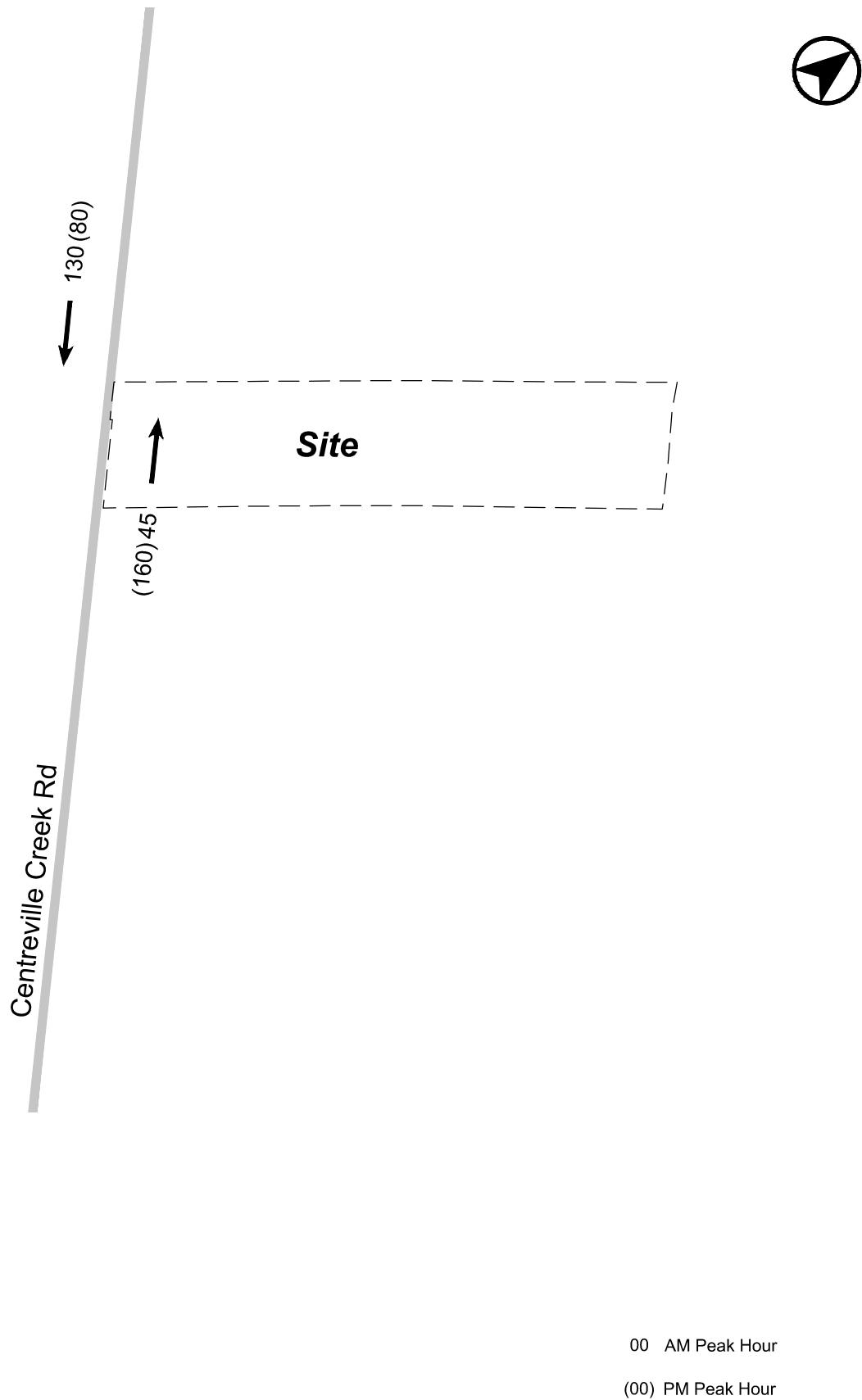
**Table 5 Existing Turning Movement Counts Summary**

Intersection	Control Type	Date of Count	Source
Mayfield Road & Centreville Creek Road / McVean Drive	Signal	Wednesday, March 26, 2025	Spectrum Traffic Data Inc.

The existing turning movement volumes were rounded to the nearest 5 vehicles and reviewed in detail to ensure general consistency in the traffic volumes on links between intersections. Where necessary and appropriate, minor volume adjustments were made to conservatively balance (i.e. balance eastwards) traffic volumes between intersections to provide a balanced and representative traffic volume base for the purposes of the traffic operations analyses.

Rounded and balanced existing traffic volumes during the weekday morning and afternoon peak hours are illustrated in **Figure 8**.





**FIGURE 8 EXISTING TRAFFIC VOLUMES**

### 5.2.1 Corridor Growth

Traffic volumes from the Region of Peel's 2031, 2041 and 2051 EMME models were reviewed for the intersection of Mayfield Road & Centreville Creek Road to:

- Project traffic volume changes along these corridors from 2025 to 2051; and
- Determine appropriate allowances for future traffic growth.

Adopted corridor growth rates are summarized in **Table 6**. Projected trends are detailed in **Appendix C**.

**Table 6 Adopted Corridor Growth Rates**

Corridor	Direction	Growth Rate
<b>Mayfield Road</b>	Eastbound	3%
	Westbound	3%
<b>Centreville Creek Road / McVean Drive</b>	Northbound	4%
	Southbound	4%

Corridor growth traffic volumes are illustrated in **Figure 10**.

### 5.2.2 Background Developments

Allowances have been made to account for new traffic activity related to other developments in the vicinity of the site that are under construction, approved but not constructed, or in the City's approval process. A total of 7 development proposals has been considered, which represent approximately 2,028 residential units, 7,249 m<sup>2</sup> commercial GFA and 144,091 m<sup>2</sup> industrial GFA. Background developments included in this analysis are summarized in **Table 7**.

Traffic allowances associated with these developments were generally established based upon assignment information incorporated into traffic impact studies (TIS) prepared as part of the approval processes for these developments. Where no traffic volumes and distributions were available for a specific background development, trip generation rates and traffic distribution assumptions have been adopted consistent with this development application. Background development traffic volumes are shown in **Figure 9**.

This analysis does not consider the full build-out of the Wildfield Village Secondary Plan and its associated collector street network. A complete analysis of the secondary plan's full development will be undertaken in the Community-Wide Transportation Study.



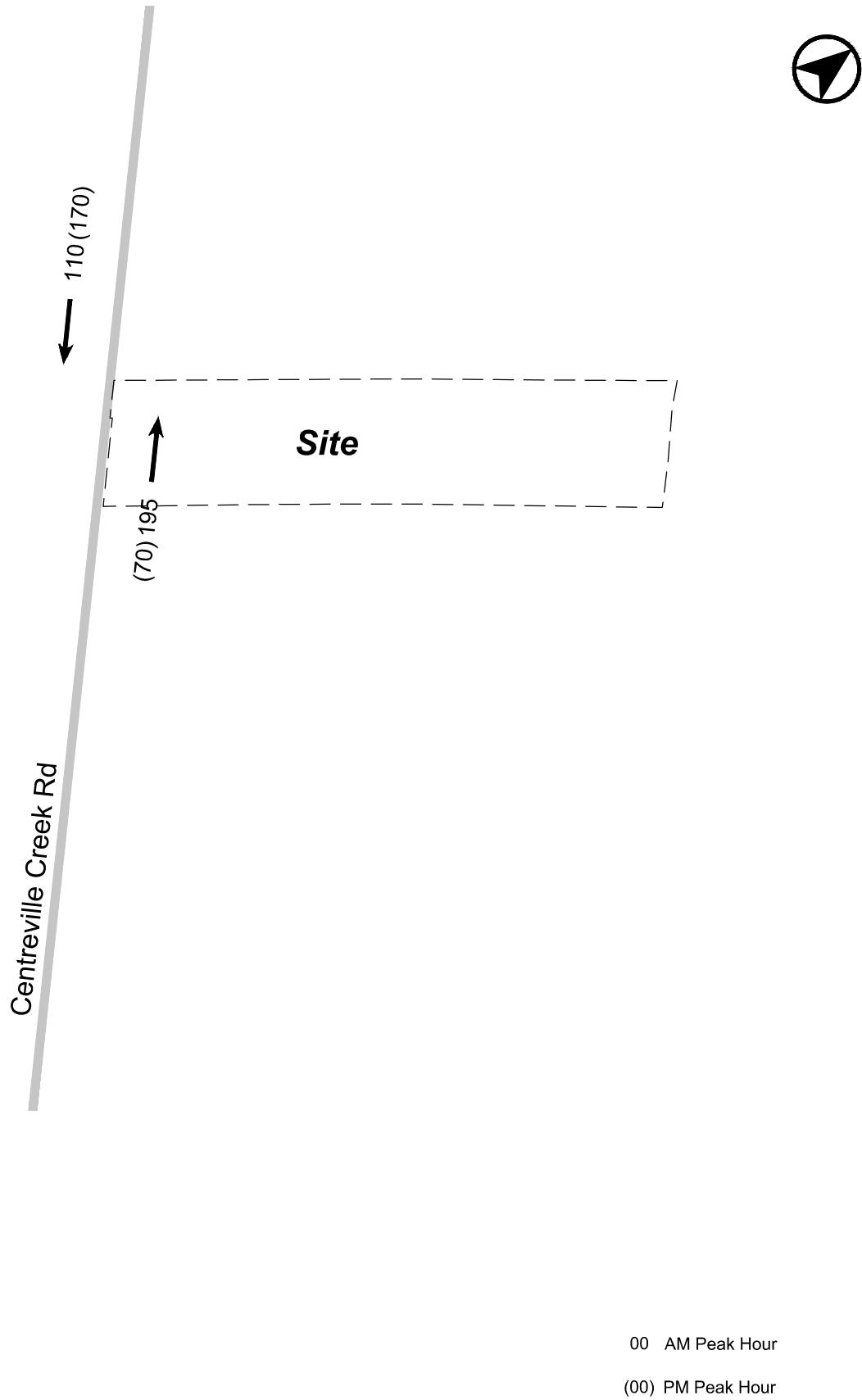
**Table 7 Background Developments Summary**

Development	Development Statistics	Source	Date	Status
<b>Town of Caledon Developments</b>				
12561 & 12735 Centreville Creek Rd 12706 & 12494 The Gore Rd (Phase 1)	214 detached units 632 attached units 391 townhouse units	Paradigm	Jan 2025	DPOS Under Review
12519-12713 Humber Station Rd	144,091 m <sup>2</sup> industrial GFA 175 m <sup>2</sup> office GFA	LEA	Aug 2025	ZBA & DPOS Under Review
Trinison Wildfield - Trinity Field	345 detached units 221 townhouse units TBD apartment units	BA Group		DPOS Under Review
<b>City of Brampton Developments</b>				
6539 Mayfield Rd 11937 Goreway Drive	4,947 m <sup>2</sup> commercial GFA	NexTrans	Mar 2023	OPA & ZBA Under Review
6875 & 6889 Mayfield Rd	178 townhouse units	CGH	Jan 2024	OPA & ZBA Under Review
McVean Dr & Carl Finlay Dr	47 detached units	No TIS	--	DPOS Draft Approved
4037 Countryside Dr	1,489 m <sup>2</sup> retail GFA 638 m <sup>2</sup> office GFA	Crozier	Aug 2024	OPA & ZBA Under Review

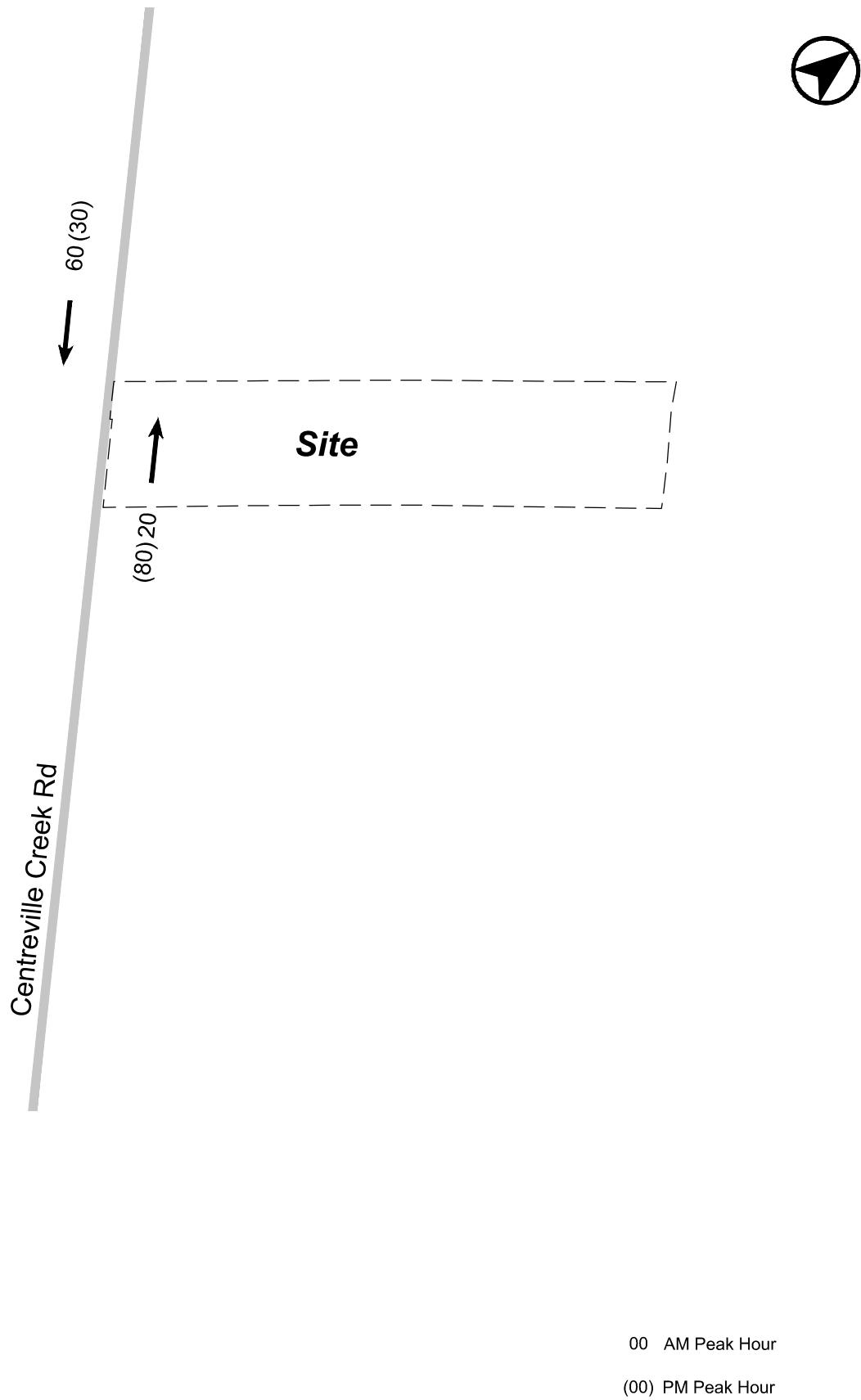
### 5.2.3 Future Background Traffic Volumes

Future background traffic volumes, representing the sum of existing traffic volumes, corridor growth volumes and background development traffic volumes, are illustrated in **Figure 11**.

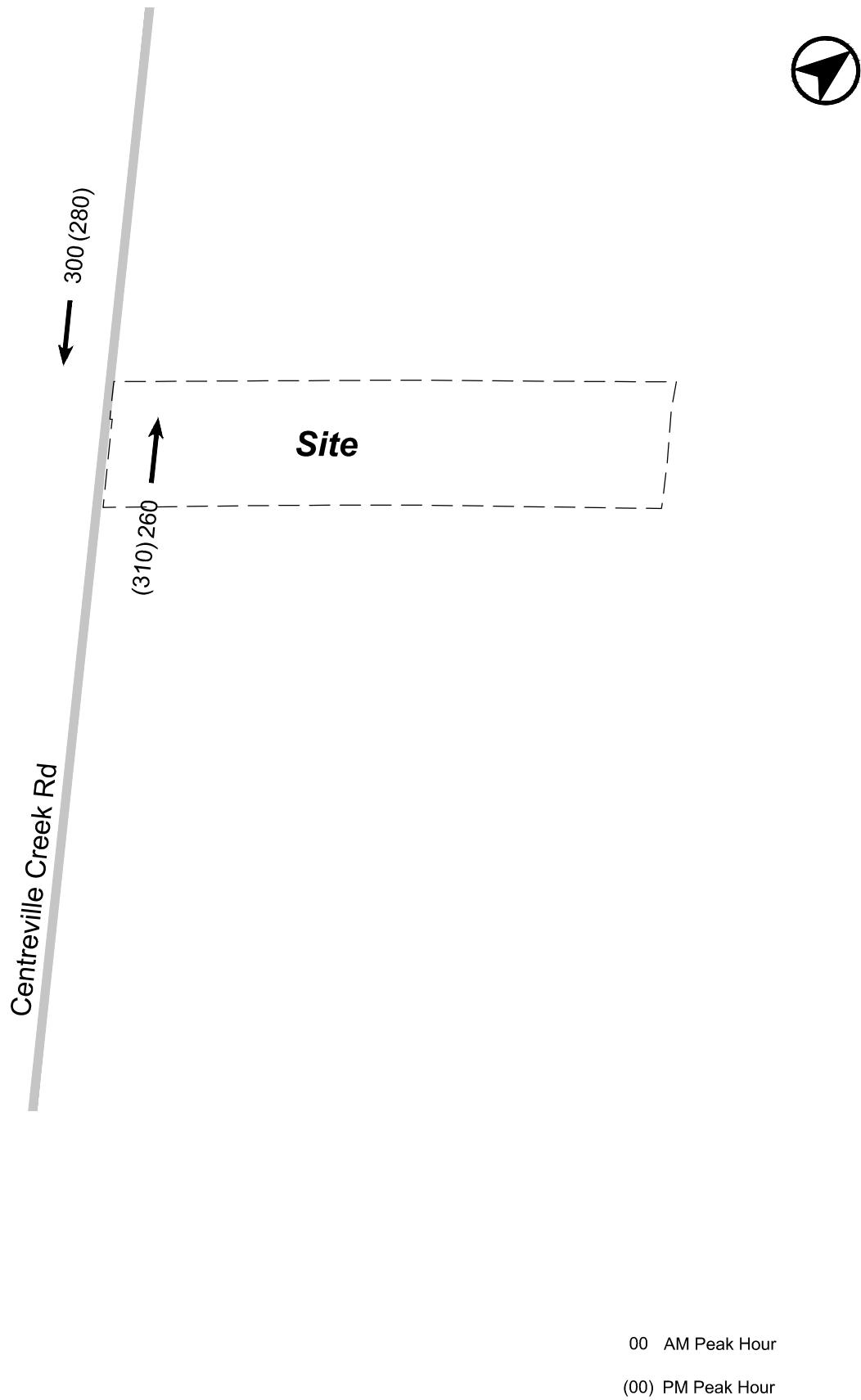




**FIGURE 9 BACKGROUND DEVELOPMENTS TRAFFIC VOLUMES**



**FIGURE 10 CORRIDOR GROWTH TRAFFIC VOLUMES**



**FIGURE 11 FUTURE BACKGROUND TRAFFIC VOLUMES**

## 5.2.4 New Site Traffic Volumes

### 5.2.4.1 Vehicle Trip Generation

Site vehicle trip generation for the proposed development was established based on a review of the ITE Trip Generation Manual (11<sup>th</sup> Edition).

**Table 8 Site Vehicle Trip Generation**

	Units	AM Peak Hour			PM Peak Hour		
		In	Out	2-Way	In	Out	2-Way
<b>LUC215 – Single-Family Attached Housing (General Urban/Suburban)</b>							
Adopted Trip Rate (Trips/Unit)	195 units	0.12	0.37	0.49	0.34	0.24	0.58
<b>Site Vehicle Trips</b>		<b>25</b>	<b>70</b>	<b>95</b>	<b>65</b>	<b>45</b>	<b>110</b>
<b>LUC221 – Multifamily Housing (Mid-Rise) (General Urban/Suburban)<sup>[1]</sup></b>							
Adopted Trip Rate (Trips/Unit)	518 units	0.10	0.32	0.42	0.24	0.15	0.39
<b>Site Vehicle Trips</b>		<b>50</b>	<b>165</b>	<b>215</b>	<b>125</b>	<b>80</b>	<b>205</b>
<b>Total Site</b>							
<b>Total Site Vehicle Trips</b>	<b>713 units</b>	<b>75</b>	<b>235</b>	<b>310</b>	<b>190</b>	<b>125</b>	<b>315</b>

Notes:

1. The height and the number of units within the mid-density blocks are advised by Bousfields. The site statistics for the mid-density blocks are preliminary and used for traffic analysis purposes only.

The proposed development is expected to generate approximately 310 and 315 two-way vehicle trips during the AM and PM peak hours, respectively.

### 5.2.4.2 Vehicle Trip Distribution

Site traffic has been assigned to the area road network based on a review of travel information provided by the 2022 Transportation for Tomorrow Survey (TTS) and existing road network traffic patterns and connectivity. The site traffic distribution is summarized in **Table 9**. Detailed output TTS data and distribution assumptions are included in **Appendix D**.

The site traffic assignment does not assume the full build-out of the collector road network within the Wildfield Village Secondary Plan. Both Street 'A' and Street 'B' are assumed to be terminated at the site boundary. Additionally, the site traffic assignment does not assume the completion and opening of Highway 413. Traffic assessment that considers the full build-out of the Wildfield Village Secondary Plan and the opening of Highway 413 will be provided in the Community-Wide Transportation Study.



**Table 9 Site Traffic Distribution**

Corridor	Direction	Inbound <sup>[1]</sup>	Outbound <sup>[2]</sup>
Centreville Creek Road	North	12%	11%
	South	88%	89%

Notes:

1. Based on the morning peak period residential outbound trips
2. Based on the afternoon peak period residential inbound trips
3. Based on trips to/from households in TTS Traffic Analysis Zones (TAZs) 3015, 3442, 3443 and 3469

New site traffic generated by the proposed development was assigned to the area road network based on the directional distribution summarized in **Table 9**. Projected new site traffic volumes during the AM and PM peak hours are illustrated in **Figure 12**.

### 5.2.5 Future Total Traffic Volumes

Future total traffic volumes, determined by adding the future background volumes and the site traffic volumes, are illustrated in **Figure 13**.



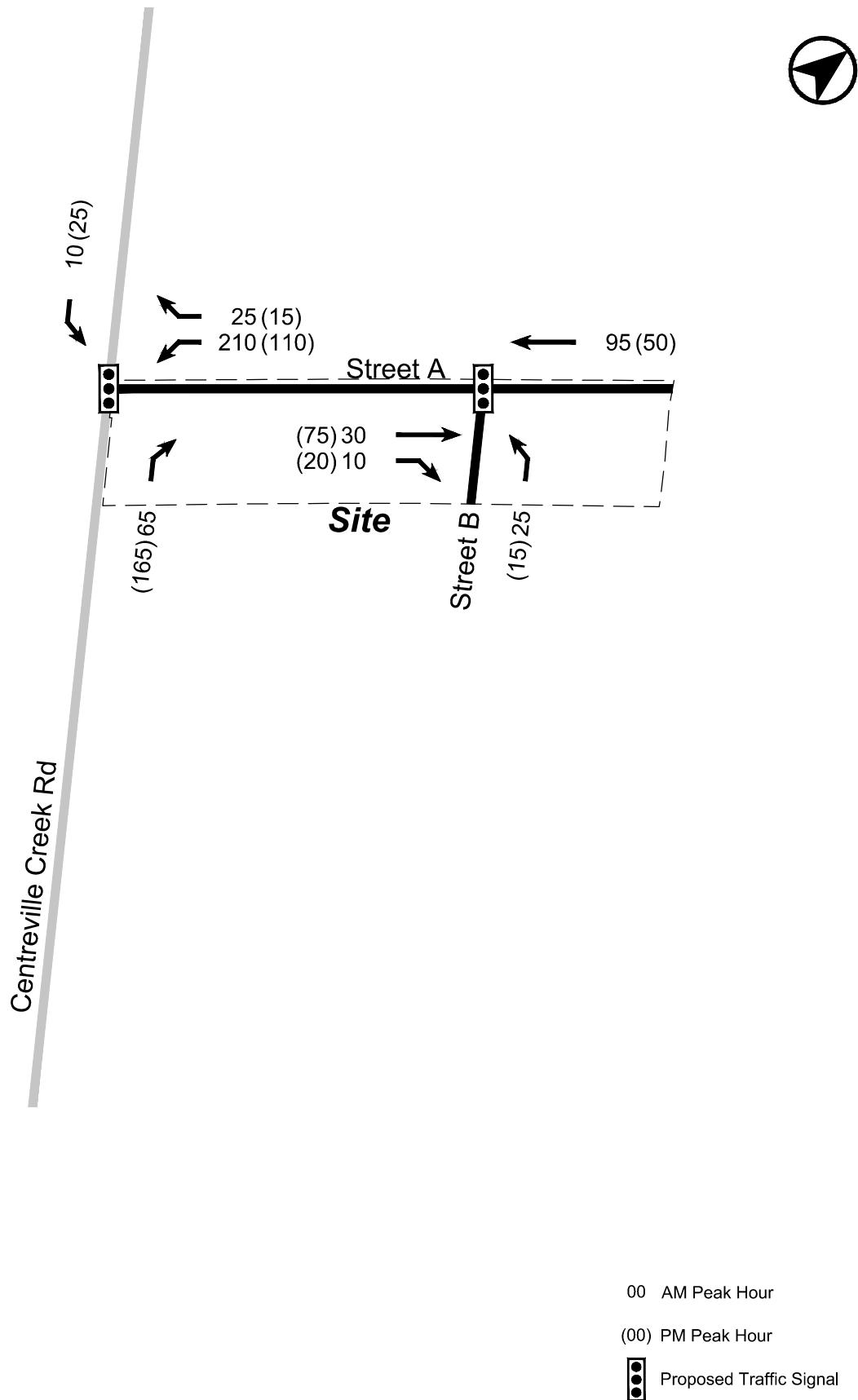
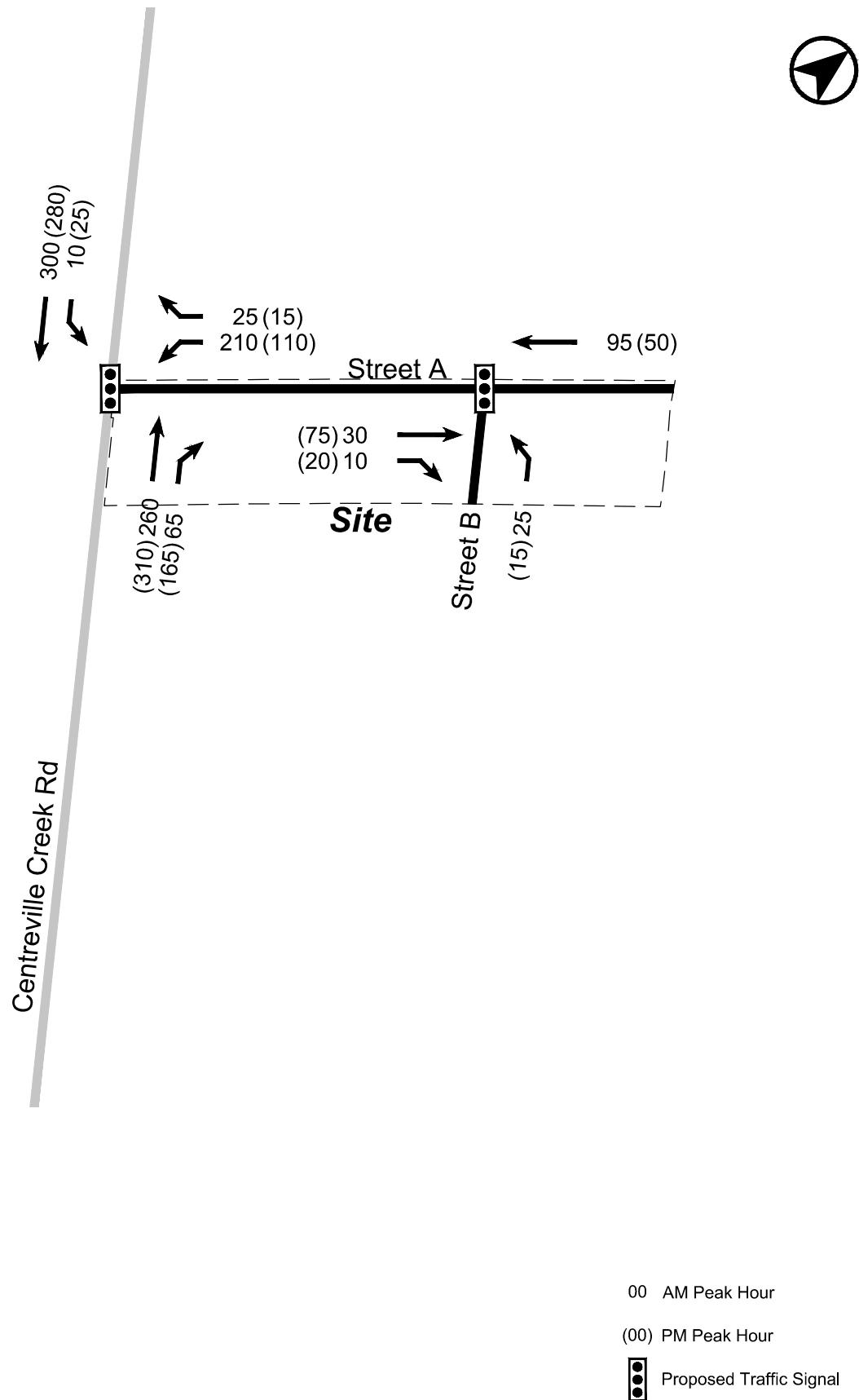


FIGURE 12 SITE TRAFFIC VOLUMES



**FIGURE 13 FUTURE TOTAL TRAFFIC VOLUMES**

## 6.0 TRAFFIC OPERATIONS ANALYSIS

### 6.1 Methodology

Traffic operations analyses have been undertaken at the area intersections using standard capacity analysis procedures as follows.

#### SIGNALIZED INTERSECTIONS:

Analyses undertaken at intersections operating under traffic signal control have been undertaken using the methodologies and procedures outlined in the Highway Capacity Manual (HCM) 2000 and in accordance with the City of Toronto's guidelines for analyses undertaken using Synchro 11.0 software. The product of the signalized intersection evaluation is an intersection performance index (volume to capacity ratio or v/c) and a level of service (LOS) designation. A v/c ratio of 1.00 indicates 'at or near capacity' conditions.

HCM level of service (LOS) criteria for signalized intersections are as follows:

- LOS A: Control Delay  $\leq$  10s
- LOS B: 10s  $<$  Control Delay  $\leq$  20s
- LOS C: 20s  $<$  Control Delay  $\leq$  35s
- LOS D: 35s  $<$  Control Delay  $\leq$  55s
- LOS E: 55s  $<$  Control Delay  $\leq$  80s
- LOS F: Control Delay  $>$  80s

#### UNSIGNALIZED INTERSECTIONS:

Unsignalized intersection analyses have been carried out using standard capacity procedures for intersections operating under "Two-way" and "All-Way" STOP control and in accordance with the methodologies outlined in the Highway Capacity Manual (HCM) 2000.

The product of these analyses is a level of service (LOS) designation, ranging from LOS A to F, which provides a relative indication of the level of delay experienced by motorists completing a turning manoeuvre at an intersection. LOS A represents conditions under which motorists would experience little delay, and LOS F reflects conditions where more extended delays can be expected.

HCM level of service (LOS) criteria for unsignalized intersections are as follows:

- LOS A: Control Delay  $\leq$  10s
- LOS B: 10s  $<$  Control Delay  $\leq$  15s
- LOS C: 15s  $<$  Control Delay  $\leq$  25s
- LOS D: 25s  $<$  Control Delay  $\leq$  35s
- LOS E: 35s  $<$  Control Delay  $\leq$  50s
- LOS F: Control Delay  $>$  50s



## 6.2 Model Parameters

Key analysis parameters were assumed based on requirements contained in the Region of Peel's *Regional Guidelines for Using Synchro* (December 2010), summarized as follows:

### TRAFFIC SIGNAL TIMINGS

Signals are proposed at the intersections of Centreville Creek Road & Street 'A' and Street 'A' & Street 'B'. The signal timing parameters (e.g. amber and all-red times) were assumed based on adjacent signals.

### BASE SATURATION FLOW RATES

The Region of Peel's *Regional Guidelines for Using Synchro* (December 2010) specifies a base saturation flow rate of 1,900 passenger cars per hour of green time per lane (pcphgpl) for all movements. These default rates were adopted in the analysis.

### HEAVY VEHICLE ASSUMPTIONS

Heavy and medium truck percentages incorporated into the analysis were based on information provided as part of intersection turning movement counts.

### LOST TIME ADJUSTMENTS

The Region of Peel's *Regional Guidelines for Using Synchro* (December 2010) specifies a base lost time adjustment factor of 0.0 seconds (i.e. a total loss time per phase equal to the amber plus all-red time). This default value was adopted in the analysis.

### PEAK HOUR FACTORS

The Region of Peel's *Regional Guidelines for Using Synchro* (December 2010) specifies that the peak hour factor should be 1.00 for all movements. This default value was adopted in the analysis.

### LANE UTILIZATION FACTORS

The lane utilization factor considers the distribution of individual lane usage within each movement group. Synchro's default lane utilization factors were adopted for all movements in the study area.

## 6.3 Network Assumptions

The MMTMP recommends the widening of Centreville Creek Road from Mayfield Road to Healey Road from 2 to 4 lanes. For this analysis, it was assumed that Centreville Creek Road would be urbanized while remaining as a 2-lane road, and auxiliary turn lanes would be introduced at intersections. The widening of Centreville Creek Road was not assumed to occur prior to the completion and full occupancy of the proposed development. The street lane configuration will be further studied in the Community-Wide Transportation Study.

Existing and future lane configurations and traffic controls are illustrated in **Figure 6** and **Figure 7**, respectively.



## 6.4 Signalized Intersections Analysis Results

Traffic operations analysis results and discussion for the area signalized intersections are summarized in **Table 10**. Detailed capacity analysis reports are provided in **Appendix E**. It is proposed to introduce new traffic signals at all new collector-to-collector and collector-to-arterial intersections. The cycle length, pedestrian walk time, flash don't walk time and minimum initial time were informed based on existing signals in the area.

**Table 10 Signalized Intersection Capacity Analysis Results**

Lane Group	Existing		Future Background		Future Total	
	v/c	LOS	v/c	LOS	v/c	LOS
<b>Centreville Creek Road &amp; Street 'A'</b>						
WBL	The intersection does not exist under existing or future background.				0.72 (0.53)	E (D)
WBR					0.02 (0.01)	D (D)
NBT					0.19 (0.21)	A (A)
NBR					0.04 (0.10)	A (A)
SBL					0.01 (0.03)	A (A)
SBT					0.22 (0.19)	A (A)
Overall					0.31 (0.25)	B (B)
<b>Street 'A' &amp; Street 'B'</b>						
EBTR	The intersection does not exist under existing or future background.				0.03 (0.07)	A (A)
WBL					0.00 (0.00)	A (A)
WBTR					0.07 (0.04)	A (A)
NBL					0.33 (0.20)	C (C)
NBTR					0.00 (0.00)	A (A)
Overall					0.08 (0.07)	A (A)

Notes:

1. 00 (00): Weekday AM Peak Hour (Weekday PM Peak Hour)

Based on the foregoing, all signalized intersections in the study area are expected to operate under acceptable conditions under the 2037 future total conditions.



## 6.5 Overall Traffic Operations Summary

Based on the analysis conducted by BA Group, site traffic generated by the proposed development can be appropriately accommodated at all intersections in the study area. With improvements planned in the MMTMP and ATMP and proposed as part of the development of the site, all intersections in the study area are expected to operate acceptably under future total conditions. The following improvements are recommended in the May 2025 BA Report prepared for the approved Wildfield Village Secondary Plan. These improvements are continued to be recommended in this report:

- Introduce a new east-west collector road (i.e. Street 'A') along the northern boundary of the site that will form a T-intersection at Centreville Creek Road;
- Introduce a new north-south collector road (i.e. Street 'B') between the new Street 'A' and the southern boundary of the site;
- Implement dedicated left-turn lanes at all collector-to-collector and collector-to-arterial intersections; and
- Introduce new traffic signals at all collector-to-collector and collector-to-arterial intersections.

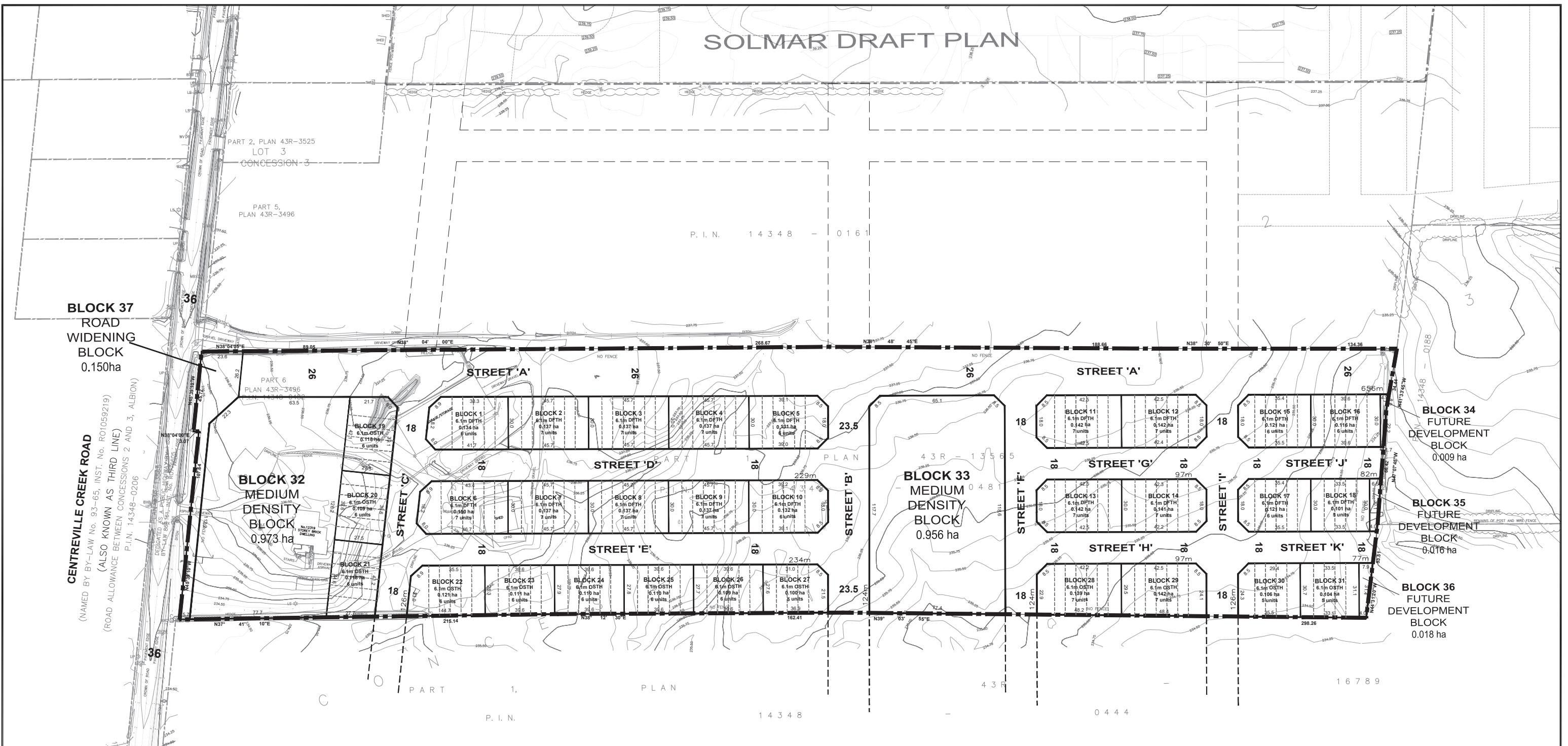
It is recommended that these improvements be studied and potentially implemented in conjunction with planned road improvements along Centreville Creek Road.



## **Appendix A: Draft Plan of Subdivision**



# SOLMAR DRAFT PLAN



## **Appendix B: Turning Movement Counts**





Turning Movement Count (3 . MAYFIELD RD & CENTREVILLE CREEK RD) CustID: 01405488

Start Time	N Approach CENTREVILLE CREEK RD						E Approach MAYFIELD RD						S Approach MCVEAN DR						W Approach MAYFIELD RD						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	Uturn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	Uturn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	Uturn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	Uturn W:W	Peds W:	Approach Total		
2025-03-26 07:30:00	7	21	2	0	0	30	1	65	3	0	1	69	4	7	15	0	0	26	24	115	9	0	0	148	273	
2025-03-26 07:45:00	3	24	5	0	0	32	1	61	4	0	0	66	2	8	15	0	0	25	24	146	2	0	0	172	295	
2025-03-26 08:00:00	5	26	4	0	0	35	1	86	4	0	0	91	9	5	20	0	0	34	16	132	3	0	0	151	311	
2025-03-26 08:15:00	2	29	6	0	0	37	3	83	4	0	0	90	4	6	15	0	0	25	17	126	3	0	0	146	298	1177
2025-03-26 08:30:00	3	19	2	0	0	24	2	88	3	0	0	93	5	10	15	0	0	30	20	150	4	0	0	174	321	1225
2025-03-26 08:45:00	6	19	3	0	0	28	1	78	12	0	0	91	4	12	15	0	0	31	16	117	5	0	0	138	288	1218
2025-03-26 09:00:00	6	17	3	0	0	26	2	71	4	0	0	77	2	10	19	0	0	31	18	98	1	0	0	117	251	1158
2025-03-26 09:15:00	2	19	2	0	0	23	2	65	5	0	0	72	4	5	19	0	0	28	16	120	5	0	0	141	264	1124
***BREAK***																										
2025-03-26 16:00:00	3	13	5	0	0	21	0	129	9	0	0	138	8	30	31	0	0	69	19	104	7	0	0	130	358	
2025-03-26 16:15:00	5	11	1	0	0	17	4	121	9	0	0	134	10	20	36	0	0	66	23	111	8	0	0	142	359	
2025-03-26 16:30:00	7	10	2	0	0	19	3	132	4	0	0	139	7	37	35	0	2	79	35	100	4	0	0	139	376	
2025-03-26 16:45:00	4	14	1	0	0	19	1	129	8	0	0	138	13	26	21	0	0	60	22	110	3	0	0	135	352	1445
2025-03-26 17:00:00	5	17	1	0	0	23	3	108	9	0	1	120	10	30	29	0	0	69	22	112	6	0	0	140	352	1439
2025-03-26 17:15:00	4	11	6	0	0	21	5	141	14	0	0	160	16	35	33	0	0	84	28	124	7	0	0	159	424	1504
2025-03-26 17:30:00	6	16	1	0	0	23	4	122	5	0	0	131	10	30	43	0	0	83	28	96	7	0	1	131	368	1496
2025-03-26 17:45:00	13	17	3	0	0	33	4	136	7	0	0	147	10	25	32	0	0	67	25	81	2	0	0	108	355	1499
<b>Grand Total</b>	81	283	47	0	0	411	37	1615	104	0	2	1756	118	296	393	0	2	807	353	1842	76	0	1	2271	5245	-
Approach%	19.7%	68.9%	11.4%	0%	-	2.1%	92%	5.9%	0%	-	14.6%	36.7%	48.7%	0%	-	15.5%	81.1%	3.3%	0%	-	-	-	-	-	-	-
Totals %	1.5%	5.4%	0.9%	0%	7.8%	0.7%	30.8%	2%	0%	33.5%	2.2%	5.6%	7.5%	0%	15.4%	6.7%	35.1%	1.4%	0%	43.3%	-	-	-	-	-	-
<b>Heavy</b>	23	3	13	0	-	10	341	5	0	-	8	4	24	0	-	-	13	325	15	0	-	-	-	-	-	-
<b>Heavy %</b>	28.4%	1.1%	27.7%	0%	-	27%	21.1%	4.8%	0%	-	6.8%	1.4%	6.1%	0%	-	3.7%	17.6%	19.7%	0%	-	-	-	-	-	-	-
<b>Bicycles</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Bicycle %</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**Peak Hour: 07:45 AM - 08:45 AM Weather: Broken Clouds (-2 °C)**

Start Time	N Approach CENTREVILLE CREEK RD						E Approach MAYFIELD RD						S Approach MCVEAN DR						W Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
2025-03-26 07:45:00	3	24	5	0	0	32	1	61	4	0	0	66	2	8	15	0	0	25	24	146	2	0	0	172	295
2025-03-26 08:00:00	5	26	4	0	0	35	1	86	4	0	0	91	9	5	20	0	0	34	16	132	3	0	0	151	311
2025-03-26 08:15:00	2	29	6	0	0	37	3	83	4	0	0	90	4	6	15	0	0	25	17	126	3	0	0	146	298
2025-03-26 08:30:00	3	19	2	0	0	24	2	88	3	0	0	93	5	10	15	0	0	30	20	150	4	0	0	174	321
<b>Grand Total</b>	13	98	17	0	0	128	7	318	15	0	0	340	20	29	65	0	0	114	77	554	12	0	0	643	<b>1225</b>
Approach%	10.2%	76.6%	13.3%	0%	-	-	2.1%	93.5%	4.4%	0%	-	-	17.5%	25.4%	57%	0%	-	-	12%	86.2%	1.9%	0%	-	-	-
Totals %	1.1%	8%	1.4%	0%	10.4%	0.6%	26%	1.2%	0%	27.8%	1.6%	2.4%	5.3%	0%	9.3%	6.3%	45.2%	1%	0%	52.5%	-	-	-	-	-
PHF	0.65	0.84	0.71	0	0.86	0.58	0.9	0.94	0	0.91	0.56	0.73	0.81	0	0.84	0.8	0.92	0.75	0	0.92	0.95	-	-	-	-
Heavy	7	0	8	0	15	1	80	2	0	83	1	0	6	0	7	6	91	1	0	98	203	-	-	-	-
Heavy %	53.8%	0%	47.1%	0%	11.7%	14.3%	25.2%	13.3%	0%	24.4%	5%	0%	9.2%	0%	6.1%	7.8%	16.4%	8.3%	0%	15.2%	16.6%	-	-	-	-
Lights	6	98	9	0	113	6	238	13	0	257	19	29	59	0	107	71	463	11	0	545	1022	-	-	-	-
Lights %	46.2%	100%	52.9%	0%	88.3%	85.7%	74.8%	86.7%	0%	75.6%	95%	100%	90.8%	0%	93.9%	92.2%	83.6%	91.7%	0%	84.8%	83.4%	-	-	-	-
Single-Unit Trucks	1	0	0	0	1	0	27	1	0	28	0	0	1	0	1	1	35	0	0	36	66	-	-	-	-
Single-Unit Trucks %	7.7%	0%	0%	0%	0.8%	0%	8.5%	6.7%	0%	8.2%	0%	0%	1.5%	0%	0.9%	1.3%	6.3%	0%	0%	5.6%	5.4%	-	-	-	-
Buses	2	0	2	0	4	0	6	1	0	7	1	0	5	0	6	5	5	0	0	10	27	-	-	-	-
Buses %	15.4%	0%	11.8%	0%	3.1%	0%	1.9%	6.7%	0%	2.1%	5%	0%	7.7%	0%	5.3%	6.5%	0.9%	0%	0%	1.6%	2.2%	-	-	-	-
Articulated Trucks	4	0	6	0	10	1	47	0	0	48	0	0	0	0	0	0	51	1	0	52	110	-	-	-	-
Articulated Trucks %	30.8%	0%	35.3%	0%	7.8%	14.3%	14.8%	0%	0%	14.1%	0%	0%	0%	0%	0%	0%	9.2%	8.3%	0%	8.1%	9%	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	0	-	-	-	-	-	
Pedestrians%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	0%	-	-	-	-	-	



Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (2 °C)

Start Time	N Approach CENTREVILLE CREEK RD						E Approach MAYFIELD RD						S Approach MCVEAN DR						W Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
2025-03-26 16:30:00	7	10	2	0	0	19	3	132	4	0	0	139	7	37	35	0	2	79	35	100	4	0	0	139	376
2025-03-26 16:45:00	4	14	1	0	0	19	1	129	8	0	0	138	13	26	21	0	0	60	22	110	3	0	0	135	352
2025-03-26 17:00:00	5	17	1	0	0	23	3	108	9	0	1	120	10	30	29	0	0	69	22	112	6	0	0	140	352
2025-03-26 17:15:00	4	11	6	0	0	21	5	141	14	0	0	160	16	35	33	0	0	84	28	124	7	0	0	159	424
<b>Grand Total</b>	<b>20</b>	<b>52</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>12</b>	<b>510</b>	<b>35</b>	<b>0</b>	<b>1</b>	<b>557</b>	<b>46</b>	<b>128</b>	<b>118</b>	<b>0</b>	<b>2</b>	<b>292</b>	<b>107</b>	<b>446</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>573</b>	<b>1504</b>
Approach%	24.4%	63.4%	12.2%	0%	-	2.2%	91.6%	6.3%	0%	-	15.8%	43.8%	40.4%	0%	-	18.7%	77.8%	3.5%	0%	-	-	-	-	-	
Totals %	1.3%	3.5%	0.7%	0%	5.5%	0.8%	33.9%	2.3%	0%	37%	3.1%	8.5%	7.8%	0%	19.4%	7.1%	29.7%	1.3%	0%	38.1%	-	-	-	-	
PHF	0.71	0.76	0.42	0	0.89	0.6	0.9	0.63	0	0.87	0.72	0.86	0.84	0	0.87	0.76	0.9	0.71	0	0.9	0.89	-	-	-	
Heavy	1	1	0	0	2	4	90	1	0	95	2	1	3	0	6	1	77	5	0	83	186	-	-	-	
Heavy %	5%	1.9%	0%	0%	2.4%	33.3%	17.6%	2.9%	0%	17.1%	4.3%	0.8%	2.5%	0%	2.1%	0.9%	17.3%	25%	0%	14.5%	12.4%	-	-	-	
Lights	19	51	10	0	80	8	420	34	0	462	44	127	115	0	286	106	369	15	0	490	1318	-	-	-	
Lights %	95%	98.1%	100%	0%	97.6%	66.7%	82.4%	97.1%	0%	82.9%	95.7%	99.2%	97.5%	0%	97.9%	99.1%	82.7%	75%	0%	85.5%	87.6%	-	-	-	
Single-Unit Trucks	0	1	0	0	1	0	41	1	0	42	2	1	0	0	3	1	31	1	0	33	79	-	-	-	
Single-Unit Trucks %	0%	1.9%	0%	0%	1.2%	0%	8%	2.9%	0%	7.5%	4.3%	0.8%	0%	0%	1%	0.9%	7%	5%	0%	5.8%	5.3%	-	-	-	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	
Buses %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2.5%	0%	1%	0%	0%	0%	0%	0%	0%	0.2%	0%	-	
Articulated Trucks	1	0	0	0	1	4	49	0	0	53	0	0	0	0	0	0	0	46	4	0	50	104	-	-	-
Articulated Trucks %	5%	0%	0%	0%	1.2%	33.3%	9.6%	0%	0%	9.5%	0%	0%	0%	0%	0%	0%	10.3%	20%	0%	8.7%	6.9%	-	-	-	
Pedestrians	-	-	-	-	0	-	-	-	-	1	-	-	-	-	2	-	-	-	-	0	-	-	-	-	
Pedestrians%	-	-	-	-	0%	-	-	-	-	33.3%	-	-	-	-	66.7%	-	-	-	-	0%	-	-	-	-	

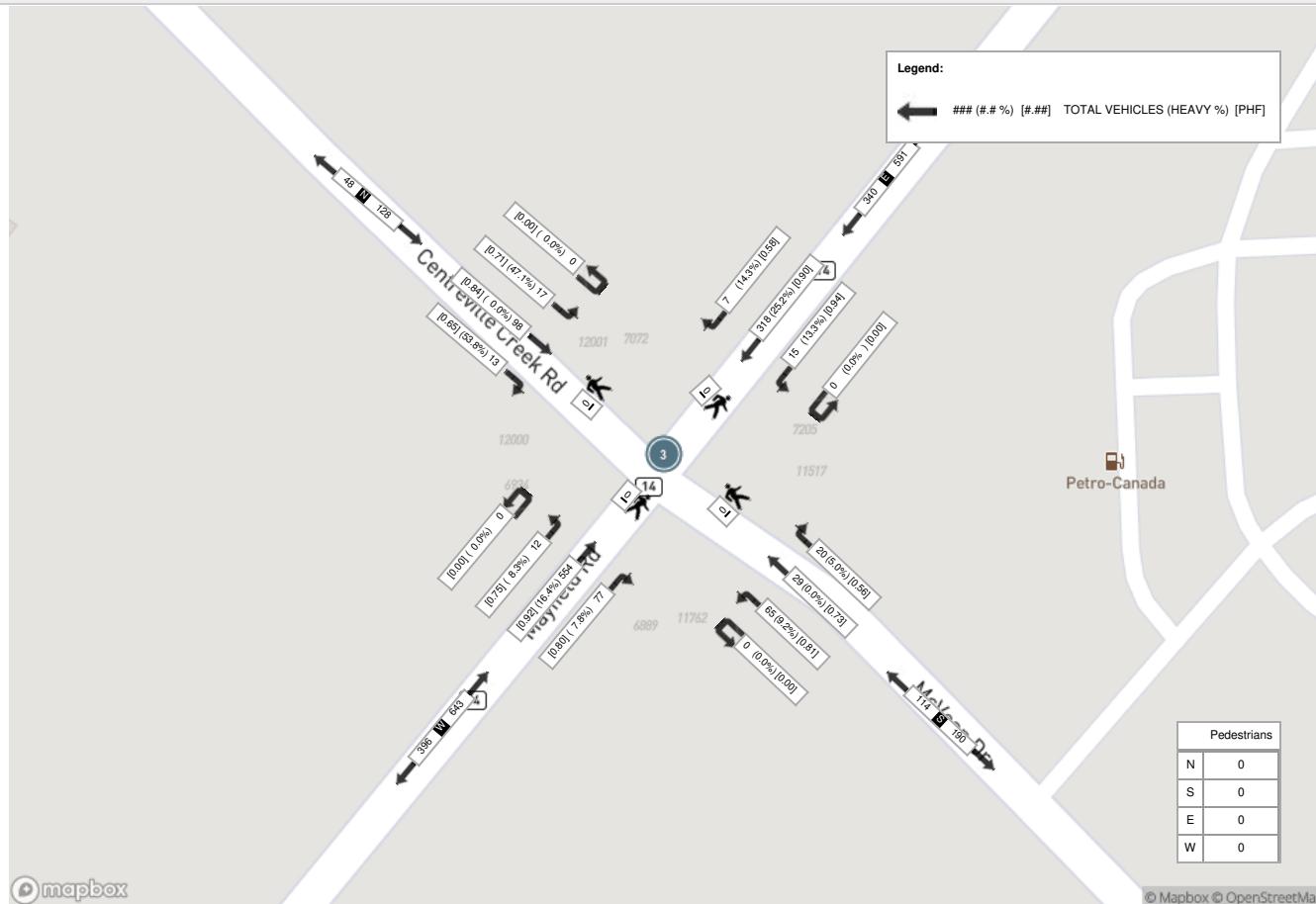


## Spectrum

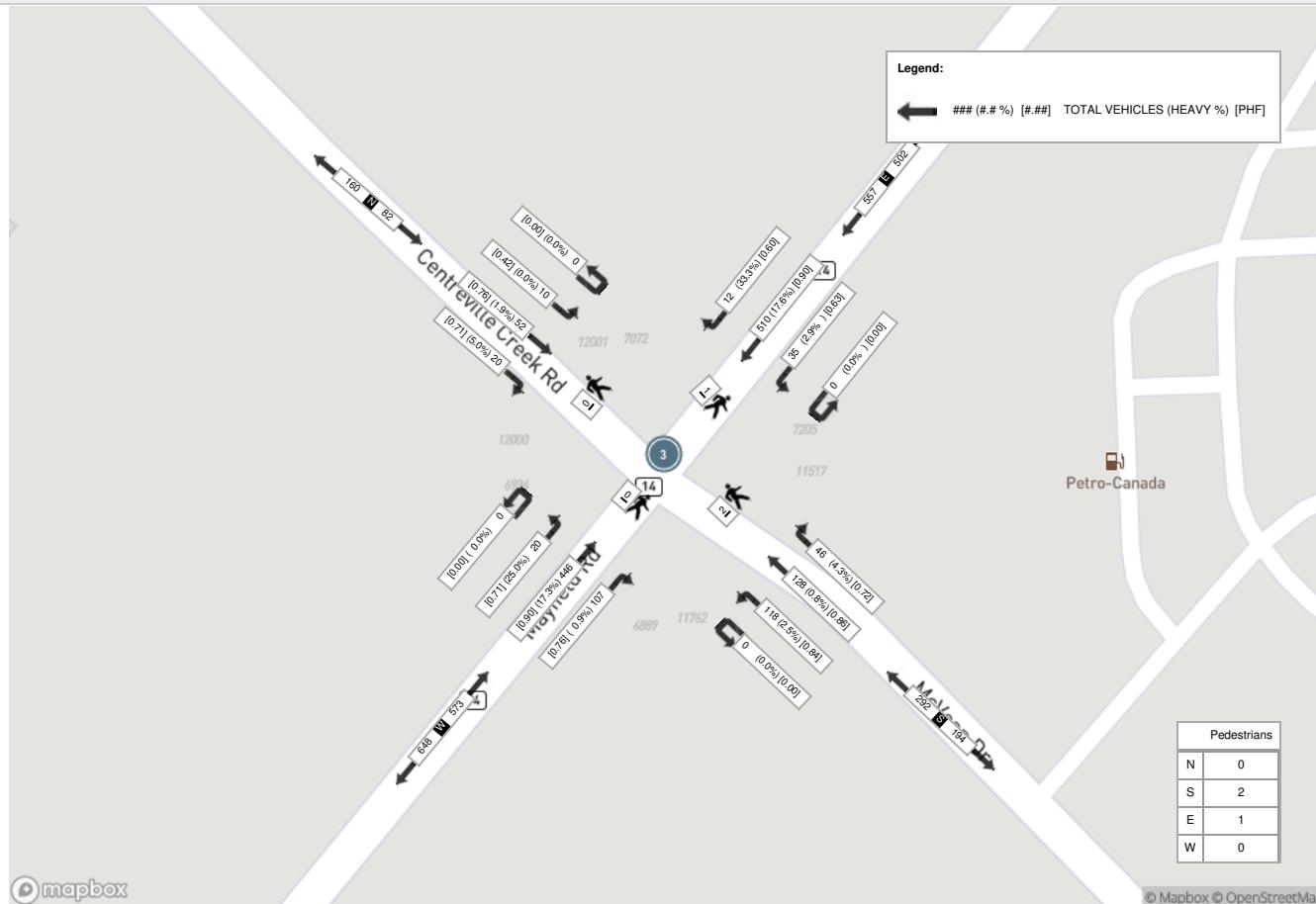
Turning Movement Count  
Location Name: MAYFIELD RD & CENTREVILLE CREEK RD  
Date: Wed, Mar 26, 2025 Deployment Lead: Rey Fernandez

BA Group  
1000 95 ST. CLAIR AVE W  
TORONTO ONTARIO, M4V 1N6  
CANADA

Peak Hour: 07:45 AM - 08:45 AM Weather: Broken Clouds (-2 °C)



Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (2 °C)

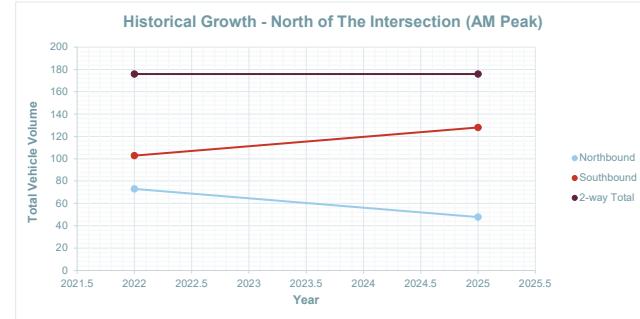


## **Appendix C: Corridor Growth**

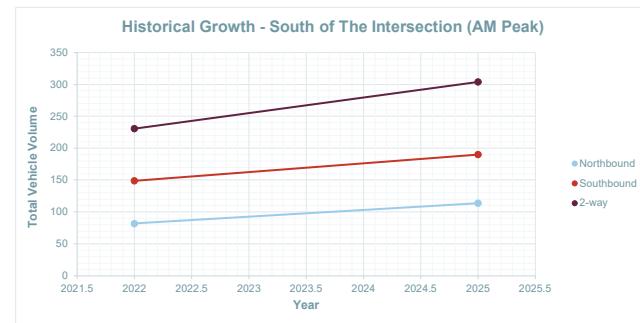


Project: Wildfield  
 Project ID: 8155-03  
 Intersection: Mayfield Rd & Centreville Creek Rd  
 Peak Hour: AM Peak Period

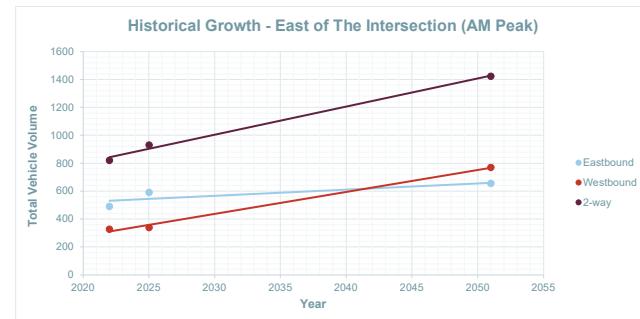
Count Information Date	Year	North of Mayfield Rd & Centreville Creek Rd		
		Northbound	Southbound	2-way
2025-03-26	2025	48	128	176
2022-06-01	2022	73	103	176
Base	2025	48	128	176
Slope		-8.33	8.33	0.00
Growth		-17.36%	6.51%	0.00%



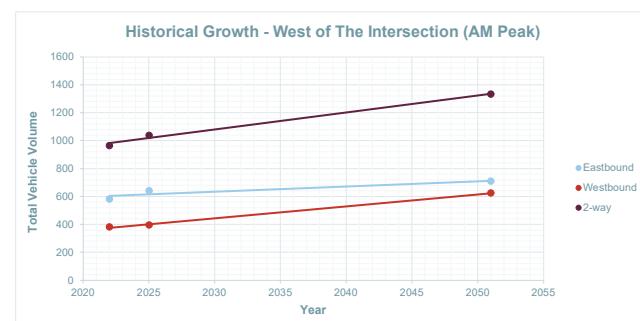
Count Information Date	Year	South of Mayfield Rd & Centreville Creek Rd		
		Northbound	Southbound	2-way
2025-03-26	2025	114	190	304
2022-06-01	2022	82	149	231
Base	2025	114	190	304
Slope		10.67	13.67	24.33
Growth		9.36%	7.19%	8.00%



Count Information Date	Year	East of Mayfield Rd & Centreville Creek Rd		
		Eastbound	Westbound	2-way
2051-01-01	2051	655	770	1425
2025-03-26	2025	591	340	931
2022-06-01	2022	491	329	820
Base	2025	591	340	931
Slope		4.40	15.73	20.13
Growth		0.75%	4.63%	2.16%



Count Information Date	Year	West of Mayfield Rd & Centreville Creek Rd		
		Eastbound	Westbound	2-way
2051-01-01	2051	710	625	1335
2025-03-26	2025	643	396	1039
2022-06-01	2022	582	383	965
Base	2025	643	396	1039
Slope		3.69	8.53	12.22
Growth		0.57%	2.15%	1.18%



## **Appendix D: Transportation Tomorrow Survey Data**





**Cavallino Estates**
**6552-12**

Residential Vehicular Site Traffic Distribution (PM Peak Hour)

Inbound

BA Group - EFS

2025-10-31

Thu Oct 16 2025 16:39:21 GMT-0400 (Eastern Daylight Time) - Run Time: 3000ms

Thu Oct 16 2025 16:40:07 GMT-0400 (Eastern Daylight Time) - Run Time: 3044ms

Cross Tabulation Query Form - Trip - 2022

Cross Tabulation Query Form - Trip - 2022

Row: Planning district of origin - pd\_orig

Row: 2006 GTA zone of origin - gta06\_orig

Column: 2006 GTA zone of destination - gta06\_dest

Column: 2006 GTA zone of destination - gta06\_dest

Filters:

Start time of trip - start\_time In 1500-1759

and

Trip Purpose of Destination - purp\_dest In H,

and

Primary travel mode of trip - mode\_prime In D, M, P, T, U,

and

2006 GTA zone of destination - gta06\_dest In 3015,3442,3443,3469

Filters:

Start time of trip - start\_time In 1500-1759

and

Trip Purpose of Destination - purp\_dest In H,

and

Primary travel mode of trip - mode\_prime In D, M, P, T, U,

and

2006 GTA zone of destination - gta06\_dest In 3015,3442,3443,3469

and

Planning district of origin - pd\_orig In 34, 35,

Trip 2022

Table:

	3015	3442	3443	3469	Total
PD 1 of Toronto	0	17	66	0	83
PD 3 of Toronto	0	34	0	0	34
PD 7 of Toronto	0	9	0	0	9
PD 9 of Toronto	5	101	0	37	143
PD 10 of Toronto	0	0	0	16	16
PD 13 of Toronto	0	25	0	7	32
Ajax	0	21	0	0	21
Aurora	0	0	0	69	69
Markham	0	0	116	0	116
Vaughan	5	91	195	357	648
Caledon	37	526	112	54	729
Brampton	32	857	1302	408	2599
3002	0	0	32	0	32
3004	0	0	55	0	55
3005	0	436	0	0	436
3012	0	0	0	54	54
3016	28	0	0	0	28
3017	0	26	0	0	26
3191	0	54	0	0	54
3193	9	0	25	0	34
3196	0	9	0	0	9
3326	0	0	92	0	92
3331	0	35	0	0	35
3332	0	0	92	0	92
3334	0	0	0	75	75
3335	0	0	45	0	45
3337	0	0	0	28	28
3338	0	0	0	26	26
3339	0	0	0	23	23
3340	0	0	0	23	23
3341	0	0	0	23	23
3343	0	0	0	133	133
3345	0	54	0	0	54
3346	0	0	0	28	28
3368	0	0	0	66	66
3372	0	0	0	50	50
3373	0	11	0	0	11
3377	0	0	0	11	11
3378	0	0	0	64	64
3380	0	0	0	47	47
3381	0	0	0	142	142
3382	0	0	0	0	0
3383	0	0	0	0	0
3384	0	0	0	189	189
3385	0	0	0	0	0
3386	0	0	0	83	83
3387	0	0	0	0	0
3388	0	0	0	83	83
3389	0	0	0	0	0
3390	0	0	0	31	31
3391	0	0	0	0	0
3392	0	0	0	117	117
3393	0	0	0	0	0
3394	0	0	0	21	21
3395	0	0	0	0	0
3396	0	0	0	62	62
3397	0	0	0	0	0
3398	0	0	0	7	7
3399	0	0	0	0	0
3400	0	0	0	50	50
3401	0	0	0	64	64
3402	0	0	0	31	31
3403	0	0	0	0	0
3404	0	0	0	117	117
3405	0	0	0	0	0
3406	0	0	0	151	151
3407	0	0	0	0	0
3408	0	0	0	21	21
3409	0	0	0	21	21
3410	0	0	0	62	62
3411	0	0	0	0	0
3412	0	0	0	7	7
3413	0	0	0	0	0
3414	0	0	0	32	32
3415	0	0	0	0	0
3416	0	0	0	142	142
3417	0	0	0	0	0
3418	0	0	0	83	83
3419	0	0	0	0	0
3420	0	0	0	31	31
3421	0	0	0	0	0
3422	0	0	0	117	117
3423	0	0	0	0	0
3424	0	0	0	0	0
3425	0	0	0	0	0
3426	0	0	0	0	0
3427	0	0	0	0	0
3428	0	0	0	0	0
3429	0	0	0	0	0
3430	0	0	0	0	0
3431	0	0	0	0	0
3432	0	0	0	0	0
3433	0	0	0	0	0
3434	0	0	0	0	0
3435	0	0	0	0	0
3436	0	0	0	0	0
3437	0	0	0	0	0
3438	0	0	0	0	0
3439	0	0	0	0	0
3440	0	0	0	0	0
3441	0	0	0	0	0
3442	0	0	0	0	0
3443	0	0	0	0	0
3444	0	0	0	0	0
3445	0	0	0	0	0
3446	0	0	0	0	0
3447	0	0	0	0	0
3448	0	0	0	0	0
3449	0	0	0	0	0
3450	0	0	0	0	0
3451	0	0	0	0	0
3452	0	0	0	0	0
3453	0	0	0	0	0
3454	0	0	0	0	0
3455	0	0	0	0	0
3456	0	0	0	0	0
3457	0	0	0	0	0
3458	0	0	0	0	0
3459	0	0	0	0	0
3460	0	0	0	0	0
3461	0	0	0	0	0
3462	0	0	0	0	0
3463	0	0	0	0	0
3464	0	0	0	0	0
3465	0	0	0	0	0
3466	0	0	0	0	0
3467	0	0	0	0	0
3468	0	0	0	0	0
3469	0	0	0	0	0
3470	0	0	0	0	0
3471	0	0	0	0	0
3472	0	0	0	0	0
3473	0	0	0	0	0
3474	0	0	0	0	0
3475	0	0	0	0	0
3476	0	0	0	0	0
3477	0	0	0	0	0
3478	0	0	0	0	0
3479	0	0	0	0	0
3480	0	0	0	0	0
3481	0	0	0	0	0
3482	0	0	0	0	0
3483	0	0	0	0	0
3484	0	0	0	0	0
3485	0	0	0	0	0
3486	0	0	0	0	0
3487	0	0	0	0	0
3488	0	0	0	0	0
3489	0	0	0	0	0
3490	0	0	0	0	0
3491	0	0	0	0	0
3492	0	0	0	0	0
3493	0	0	0	0	0
3494	0	0	0	0	0
3495	0	0	0	0	0
3496	0	0	0	0	0
3497	0	0	0	0	0
3498	0	0	0	0	0
3499	0	0	0	0	0
3500	0	0	0	0	0
3501	0	0	0	0	0
3502	0	0	0	0	0
3503	0	0	0	0	0
3504	0	0	0	0	0
3505	0	0	0	0	0
3506	0	0	0	0	0
3507	0	0	0	0	0
3508	0	0	0	0	0
3509	0	0	0	0	0
3510	0	0	0	0	0
3511	0	0	0	0	0
3512	0	0	0	0	0
3513	0	0	0	0	0
3514	0	0	0	0	0
3515	0	0	0	0	0
3516	0	0	0	0	0
3517	0	0	0	0	0
3518	0	0	0	0	0
3519	0	0	0	0	0
3520	0	0	0	0	0
3521	0	0	0	0	0
3522	0	0	0	0	0
3523	0	0	0	0	0
3524	0	0	0	0	0
3525	0	0	0	0	0
3526	0	0	0	0	0
3527	0	0	0	0	0
3528	0	0	0	0	0
3529	0	0	0	0	0
3530	0	0	0	0	0
3531	0	0	0	0	0
3532	0	0	0	0	0
3533	0	0	0	0	0
3534	0	0	0	0	0
3535	0	0	0	0	0
3536	0	0	0	0	0
3537	0	0	0	0	0
3538	0	0	0	0	0
3539	0	0	0	0	0
3540	0	0	0	0	0
3541	0	0	0	0	0
3542	0	0	0	0	0
3543	0	0	0	0	0
3544	0	0	0	0	0
3545	0	0	0	0	0
3546	0	0	0	0	0
3547	0	0	0	0	0
3548	0	0	0	0	0
3549	0	0	0	0	0
3550	0	0	0	0	0
3551	0	0	0	0	0
3552	0	0	0	0	0
3553	0	0	0	0	0
3554	0	0	0	0	0
3555	0	0	0	0	0
3556	0	0	0	0	0
3557	0	0	0	0	0
3558	0	0	0	0	0
3559	0	0	0	0	0
3560	0	0	0	0	0
3561	0	0			

**Cavallino Estates**
**6552-12**

Residential Vehicular Site Traffic Distribution (AM Peak Hour)

Outbound

BA Group - EFS

2025-10-31

			Traffic Volume Allocation				
Zone	Trips	%	NORTH Centreville Creek Rd	SOUTH Centreville Creek Rd	EAST Mayfield Rd	WEST Mayfield Rd	TOTAL
PD 1 of Toronto	118	2%		70%	30%		100%
PD 3 of Toronto	34	1%		70%	30%		100%
PD 4 of Toronto	39	1%		70%	30%		100%
PD 7 of Toronto	9	0%		70%	30%		100%
PD 9 of Toronto	117	2%		70%	30%		100%
PD 10 of Toronto	165	3%		70%	30%		100%
PD 12 of Toronto	28	0%		70%	30%		100%
PD 13 of Toronto	7	0%		70%	30%		100%
Ajax	21	0%		70%	30%		100%
Richmond Hill	81	1%		70%	30%		100%
Markham	71	1%		70%	30%		100%
Vaughan	227	4%		70%	30%		100%
3005	436	8%	100%				100%
3012	161	3%	50%		50%		100%
3017	26	0%	50%		50%		100%
3191	104	2%	50%		50%		100%
3196	9	0%	100%				100%
3197	17	0%	100%				100%
3332	92	2%		80%	20%		100%
3339	56	1%		50%	50%		100%
3340	30	1%		50%	50%		100%
3341	23	0%		50%	50%		100%
3343	59	1%		50%	50%		100%
3352	61	1%		50%	50%		100%
3364	28	0%		50%	50%		100%
3368	37	1%		50%	50%		100%
3372	136	2%		50%	50%		100%
3378	41	1%		50%	50%		100%
3380	189	3%		50%	50%		100%
3383	19	0%		50%	50%		100%
3419	57	1%		50%	50%		100%
3420	179	3%		50%	50%		100%
3421	113	2%		50%	50%		100%
3422	62	1%		50%	50%		100%
3439	32	1%		0%	100%		100%
3442	394	7%		0%	100%		100%
3443	1601	28%		30%	40%	30%	100%
3471	54	1%		100%			100%
3496	110	2%		50%		50%	100%
3505	45	1%		50%		50%	100%
3508	50	1%		100%			100%
3515	28	0%		50%		50%	100%
3517	43	1%		100%			100%
Mississauga	402	7%		20%		80%	100%
Milton	21	0%				100%	100%
Oakville	77	1%				100%	100%
External	23	0%				100%	100%
<b>TOTAL TRIPS</b>	<b>5732</b>	<b>100%</b>					

Assumed Split

Route Split Totals				
NORTH	SOUTH	EAST	WEST	TOTAL
The Gore Rd	The Gore Rd	Mayfield Rd	Mayfield Rd	
0.00%	1.44%	0.62%	0.00%	2.1%
0.00%	0.42%	0.18%	0.00%	0.6%
0.00%	0.48%	0.20%	0.00%	0.7%
0.00%	0.11%	0.05%	0.00%	0.2%
0.00%	1.43%	0.61%	0.00%	2.0%
0.00%	2.02%	0.86%	0.00%	2.9%
0.00%	0.34%	0.15%	0.00%	0.5%
0.00%	0.09%	0.04%	0.00%	0.1%
0.00%	0.26%	0.11%	0.00%	0.4%
0.00%	0.99%	0.42%	0.00%	1.4%
0.00%	0.87%	0.37%	0.00%	1.2%
0.00%	2.77%	1.19%	0.00%	4.0%
7.61%	0.00%	0.00%	0.00%	7.6%
1.40%	0.00%	0.00%	1.40%	2.8%
0.23%	0.00%	0.23%	0.00%	0.5%
0.91%	0.00%	0.91%	0.00%	1.8%
0.16%	0.00%	0.00%	0.00%	0.2%
0.30%	0.00%	0.00%	0.00%	0.3%
0.00%	1.28%	0.00%	0.32%	1.6%
0.00%	0.49%	0.00%	0.49%	1.0%
0.00%	0.26%	0.00%	0.26%	0.5%
0.00%	0.20%	0.00%	0.20%	0.4%
0.00%	0.51%	0.00%	0.51%	1.0%
0.00%	0.53%	0.00%	0.53%	1.1%
0.00%	0.24%	0.00%	0.24%	0.5%
0.00%	0.32%	0.00%	0.32%	0.6%
0.00%	1.19%	0.00%	1.19%	2.4%
0.00%	0.36%	0.00%	0.36%	0.7%
0.00%	1.65%	0.00%	1.65%	3.3%
0.00%	0.17%	0.00%	0.17%	0.3%
0.00%	0.50%	0.00%	0.50%	1.0%
0.00%	1.56%	0.00%	1.56%	3.1%
0.00%	0.99%	0.00%	0.99%	2.0%
0.00%	0.54%	0.00%	0.54%	1.1%
0.00%	0.00%	0.00%	0.56%	0.6%
0.00%	0.00%	0.00%	6.87%	6.9%
0.00%	8.38%	11.17%	8.38%	27.9%
0.00%	0.94%	0.00%	0.00%	0.9%
0.00%	0.96%	0.00%	0.96%	1.9%
0.00%	0.39%	0.00%	0.39%	0.8%
0.00%	0.87%	0.00%	0.00%	0.9%
0.00%	0.24%	0.00%	0.24%	0.5%
0.00%	0.75%	0.00%	0.00%	0.8%
0.00%	1.40%	0.00%	5.61%	7.0%
0.00%	0.00%	0.00%	0.37%	0.4%
0.00%	0.00%	0.00%	1.34%	1.3%
0.00%	0.00%	0.00%	0.40%	0.4%
<b>10.6%</b>	<b>35.9%</b>	<b>17.1%</b>	<b>36.4%</b>	<b>100.0%</b>

11%	36%	17%	36%	100%
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**Cavallino Estates**
**6552-12**

Residential Vehicular Site Traffic Distribution (PM Peak Hour)

Inbound

BA Group - EFS

2025-10-31

			Traffic Volume Allocation				
Zone	Trips	%	NORTH Centreville Creek Rd	SOUTH Centreville Creek Rd	EAST Mayfield Rd	WEST Mayfield Rd	TOTAL
PD 1 of Toronto	83	2%		70%	30%		100%
PD 3 of Toronto	34	1%		70%	30%		100%
PD 7 of Toronto	9	0%		70%	30%		100%
PD 9 of Toronto	143	3%		70%	30%		100%
PD 10 of Toronto	16	0%		70%	30%		100%
PD 13 of Toronto	32	1%		70%	30%		100%
Ajax	21	0%		70%	30%		100%
Aurora	69	1%		70%	30%		100%
Markham	116	2%		70%	30%		100%
Vaughan	648	12%		70%	30%		100%
3002	32	1%	100%				100%
3004	55	1%	50%		50%		100%
3005	436	8%	100%				100%
3012	54	1%	50%		50%		100%
3016	28	1%	100%				100%
3017	26	0%	50%		50%		100%
3191	54	1%	50%		50%		100%
3193	34	1%	100%				100%
3196	9	0%	100%				100%
3326	92	2%		60%	40%		100%
3331	35	1%		80%	20%		100%
3332	92	2%		80%	20%		100%
3334	75	1%		80%	20%		100%
3335	45	1%		80%	20%		100%
3337	11	0%		50%	50%		100%
3340	30	1%		60%	40%		100%
3341	23	0%		60%	40%		100%
3343	133	2%		60%	40%		100%
3352	54	1%		60%	40%		100%
3364	28	1%		60%	40%		100%
3368	66	1%		60%	40%		100%
3372	50	1%		60%	40%		100%
3378	64	1%		60%	40%		100%
3380	189	3%		60%	40%		100%
3418	83	2%		60%	40%		100%
3419	31	1%		60%	40%		100%
3420	151	3%		60%	40%		100%
3421	21	0%		60%	40%		100%
3422	62	1%		60%	40%		100%
3424	7	0%		60%	40%		100%
3439	32	1%			100%		100%
3440	54	1%			100%		100%
3442	311	6%			100%		100%
3443	624	11%		30%	40%		100%
3508	28	1%		100%			100%
3515	28	1%		60%	40%		100%
3517	43	1%		100%			100%
3519	136	2%		100%			100%
Mississauga	857	16%		20%	80%		100%
Milton	21	0%			100%		100%
Oakville	37	1%			100%		100%
Guelph	9	0%			100%		100%
Orangeville	14	0%			100%		100%
External	23	0%			100%		100%
<b>TOTAL TRIPS</b>	<b>5458</b>	<b>100%</b>					

Assumed Split

Route Split Totals				
NORTH Centreville Creek Rd	SOUTH Centreville Creek Rd	EAST Mayfield Rd	WEST Mayfield Rd	TOTAL
0.00%	1.06%	0.46%	0.00%	1.5%
0.00%	0.44%	0.19%	0.00%	0.6%
0.00%	0.12%	0.05%	0.00%	0.2%
0.00%	1.83%	0.79%	0.00%	2.6%
0.00%	0.21%	0.09%	0.00%	0.3%
0.00%	0.41%	0.18%	0.00%	0.6%
0.00%	0.27%	0.12%	0.00%	0.4%
0.00%	0.88%	0.38%	0.00%	1.3%
0.00%	1.49%	0.64%	0.00%	2.1%
0.00%	8.31%	3.56%	0.00%	11.9%
0.59%	0.00%	0.00%	0.00%	0.6%
0.50%	0.00%	0.00%	0.50%	1.0%
7.99%	0.00%	0.00%	0.00%	8.0%
0.49%	0.00%	0.00%	0.49%	1.0%
0.51%	0.00%	0.00%	0.00%	0.5%
0.24%	0.00%	0.24%	0.00%	0.5%
0.49%	0.00%	0.49%	0.00%	1.0%
0.62%	0.00%	0.00%	0.00%	0.6%
0.16%	0.00%	0.00%	0.00%	0.2%
0.00%	1.01%	0.00%	0.67%	1.7%
0.00%	0.51%	0.00%	0.13%	0.6%
0.00%	1.35%	0.00%	0.34%	1.7%
0.00%	1.10%	0.00%	0.27%	1.4%
0.00%	0.66%	0.00%	0.16%	0.8%
0.00%	0.10%	0.10%	0.00%	0.2%
0.00%	0.33%	0.00%	0.22%	0.5%
0.00%	0.25%	0.00%	0.17%	0.4%
0.00%	1.46%	0.00%	0.97%	2.4%
0.00%	0.59%	0.00%	0.40%	1.0%
0.00%	0.31%	0.00%	0.21%	0.5%
0.00%	0.73%	0.00%	0.48%	1.2%
0.00%	0.55%	0.00%	0.37%	0.9%
0.00%	0.70%	0.00%	0.47%	1.2%
0.00%	2.08%	0.00%	1.39%	3.5%
0.00%	0.91%	0.00%	0.61%	1.5%
0.00%	0.34%	0.00%	0.23%	0.6%
0.00%	1.66%	0.00%	1.11%	2.8%
0.00%	0.23%	0.00%	0.15%	0.4%
0.00%	0.68%	0.00%	0.45%	1.1%
0.00%	0.08%	0.00%	0.05%	0.1%
0.00%	0.00%	0.00%	0.59%	0.6%
0.00%	0.00%	0.00%	0.99%	1.0%
0.00%	0.00%	0.00%	5.70%	5.7%
0.00%	3.43%	4.57%	3.43%	11.4%
0.00%	0.51%	0.00%	0.00%	0.5%
0.00%	0.31%	0.00%	0.21%	0.5%
0.00%	0.79%	0.00%	0.00%	0.8%
0.00%	2.49%	0.00%	0.00%	2.5%
0.00%	3.14%	0.00%	12.56%	15.7%
0.00%	0.00%	0.00%	0.38%	0.4%
0.00%	0.00%	0.00%	0.68%	0.7%
0.00%	0.00%	0.00%	0.16%	0.2%
0.00%	0.00%	0.00%	0.26%	0.3%
0.00%	0.00%	0.00%	0.42%	0.4%
<b>11.6%</b>	<b>41.3%</b>	<b>11.8%</b>	<b>35.2%</b>	<b>100.0%</b>
12%	41%	12%	35%	100%

## **Appendix E: Synchro Analysis Worksheets**



Timings  
11: Centreville Creek Road & Street 'A'

Future Total AM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↓
Traffic Volume (vph)	210	25	260	65	10	300
Future Volume (vph)	210	25	260	65	10	300
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases				2		6
Permitted Phases	8	8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (s)	53.0	53.0	67.0	67.0	67.0	67.0
Total Split (%)	44.2%	44.2%	55.8%	55.8%	55.8%	55.8%
Maximum Green (s)	47.0	47.0	61.0	61.0	61.0	61.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	C-Min	C-Min	C-Min	C-Min
Walk Time (s)	12.0	12.0	12.0	12.0	12.0	12.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0

Intersection Summary

Cycle Length: 120

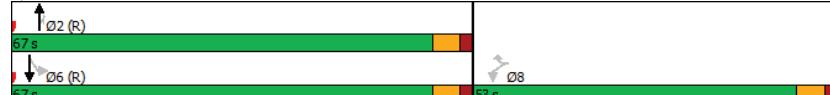
Actuated Cycle Length: 120

Offset: 19 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Splits and Phases: 11: Centreville Creek Road & Street 'A'



Queues

11: Centreville Creek Road & Street 'A'

Future Total AM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	210	25	260	65	10	300
v/c Ratio	0.72	0.09	0.19	0.05	0.01	0.22
Control Delay	61.2	16.5	5.9	1.6	5.6	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.2	16.5	5.9	1.6	5.6	6.1
Queue Length 50th (m)	47.8	0.3	17.2	0.0	0.6	20.4
Queue Length 95th (m)	76.7	8.5	33.1	4.5	2.6	38.4
Internal Link Dist (m)	429.9		386.4			319.0
Turn Bay Length (m)	50.0			100.0		50.0
Base Capacity (vph)	699	640	1382	1192	827	1382
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	0.30	0.04	0.19	0.05	0.01	0.22

Intersection Summary

HCM Signalized Intersection Capacity Analysis  
11: Centreville Creek Road & Street 'A'

Future Total AM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	210	25	260	65	10	300
Future Volume (vph)	210	25	260	65	10	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Frt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1785	1597	1879	1597	1785	1879
Frt Permitted	0.95	1.00	1.00	1.00	0.60	1.00
Satd. Flow (perm)	1785	1597	1879	1597	1125	1879
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	210	25	260	65	10	300
RTOR Reduction (vph)	0	21	0	17	0	0
Lane Group Flow (vph)	210	4	260	48	10	300
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	8		2		6
Actuated Green, G (s)	19.7	19.7	88.3	88.3	88.3	88.3
Effective Green, g (s)	19.7	19.7	88.3	88.3	88.3	88.3
Actuated g/C Ratio	0.16	0.16	0.74	0.74	0.74	0.74
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	293	262	1382	1175	827	1382
v/s Ratio Prot			0.14			c0.16
v/s Ratio Perm	c0.12	0.00		0.03	0.01	
v/c Ratio	0.72	0.02	0.19	0.04	0.01	0.22
Uniform Delay, d1	47.5	42.0	4.9	4.3	4.2	5.0
Progression Factor	1.01	1.16	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	0.0	0.3	0.1	0.0	0.4
Delay (s)	56.1	48.6	5.2	4.4	4.3	5.3
Level of Service	E	D	A	A	A	A
Approach Delay (s)	55.3		5.0			5.3
Approach LOS	E		A			A
Intersection Summary						
HCM 2000 Control Delay	18.7		HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.31					
Actuated Cycle Length (s)	120.0		Sum of lost time (s)	12.0		
Intersection Capacity Utilization	37.4%		ICU Level of Service	A		
Analysis Period (min)	15					
c Critical Lane Group						

Timings  
12: Street 'B' & Street 'A'

Future Total AM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Lane Group	EBT	WBT	NBL	Ø4
Lane Configurations	↑	↑	↑	
Traffic Volume (vph)	30	95	25	
Future Volume (vph)	30	95	25	
Turn Type	NA	NA	Perm	
Protected Phases	2	6		4
Permitted Phases				8
Detector Phase	2	6	8	
Switch Phase				
Minimum Initial (s)	12.0	12.0	12.0	12.0
Minimum Split (s)	29.0	29.0	29.0	29.0
Total Split (s)	31.0	31.0	29.0	29.0
Total Split (%)	51.7%	51.7%	48.3%	48%
Maximum Green (s)	25.0	25.0	23.0	23.0
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	
Lead/Lag				
Lead-Lag Optimize?				
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0
Recall Mode	C-Min	C-Min	None	None
Walk Time (s)	12.0	12.0	12.0	12.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0
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: 60				
Control Type: Actuated-Coordinated				
Splits and Phases: 12: Street 'B' & Street 'A'				
Ø2 (R)	31 s	29 s	Ø4	
Ø6 (R)	31 s	29 s	Ø3	

Queues  
12: Street 'B' & Street 'A'

Future Total AM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	40	95	25
v/c Ratio	0.02	0.05	0.07
Control Delay	1.3	2.2	20.1
Queue Delay	0.0	0.0	0.0
Total Delay	1.3	2.2	20.1
Queue Length 50th (m)	0.0	0.0	2.4
Queue Length 95th (m)	3.3	8.8	7.8
Internal Link Dist (m)	429.9	421.3	
Turn Bay Length (m)			50.0
Base Capacity (vph)	1663	1729	720
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.02	0.05	0.03
<b>Intersection Summary</b>			

HCM Signalized Intersection Capacity Analysis  
12: Street 'B' & Street 'A'

Future Total AM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	0	30	10	0	95	0	25	0	0	0	0	0
Future Volume (vph)	0	30	10	0	95	0	25	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0					
Lane Util. Factor		1.00			1.00		1.00					
Frt		0.96			1.00		1.00					
Flt Protected		1.00			1.00		0.95					
Satd. Flow (prot)		1808			1879		1785					
Flt Permitted		1.00			1.00		1.00					
Satd. Flow (perm)		1808			1879		1879					
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	30	10	0	95	0	25	0	0	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	38	0	0	95	0	25	0	0	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2			6		8		4			
Permitted Phases	2			6			8		4			
Actuated Green, G (s)		45.6			45.6		2.4					
Effective Green, g (s)		45.6			45.6		2.4					
Actuated g/C Ratio		0.76			0.76		0.04					
Clearance Time (s)		6.0			6.0		6.0					
Vehicle Extension (s)		3.0			3.0		3.0					
Lane Grp Cap (vph)		1374			1428		75					
v/s Ratio Prot		0.02			c0.05							
v/s Ratio Perm							c0.01					
v/c Ratio		0.03			0.07		0.33					
Uniform Delay, d1		1.8			1.8		28.0					
Progression Factor		0.70			1.00		1.00					
Incremental Delay, d2		0.0			0.1		2.6					
Delay (s)		1.3			1.9		30.6					
Level of Service		A			A		C					
Approach Delay (s)		1.3			1.9			30.6		0.0		
Approach LOS		A			A		C		A			
<b>Intersection Summary</b>												
HCM 2000 Control Delay		6.2			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.08										
Actuated Cycle Length (s)		60.0			Sum of lost time (s)		12.0					
Intersection Capacity Utilization		30.0%			ICU Level of Service		A					
Analysis Period (min)					15							
c Critical Lane Group												

## Timings

11: Centreville Creek Road &amp; Street 'A'

Future Total PM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↓
Traffic Volume (vph)	110	15	310	165	25	280
Future Volume (vph)	110	15	310	165	25	280
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases				2		6
Permitted Phases	8	8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (s)	47.0	47.0	73.0	73.0	73.0	73.0
Total Split (%)	39.2%	39.2%	60.8%	60.8%	60.8%	60.8%
Maximum Green (s)	41.0	41.0	67.0	67.0	67.0	67.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	C-Min	C-Min	C-Min	C-Min
Walk Time (s)	12.0	12.0	12.0	12.0	12.0	12.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0

## Intersection Summary

Cycle Length: 120

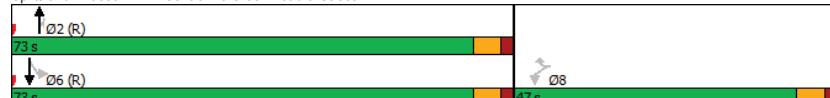
Actuated Cycle Length: 120

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

Natural Cycle: 60

Control Type: Actuated-Coordinated

Splits and Phases: 11: Centreville Creek Road &amp; Street 'A'



## Queues

11: Centreville Creek Road &amp; Street 'A'

Future Total PM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	110	15	310	165	25	280
v/c Ratio	0.53	0.08	0.21	0.13	0.03	0.19
Control Delay	59.7	21.8	3.9	0.8	3.4	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	21.8	3.9	0.8	3.4	3.8
Queue Length 50th (m)	25.1	0.2	15.4	0.0	1.1	13.7
Queue Length 95th (m)	45.4	6.8	28.9	4.9	3.6	25.9
Internal Link Dist (m)	429.9		386.4			319.0
Turn Bay Length (m)	50.0			100.0	50.0	
Base Capacity (vph)	609	555	1474	1288	843	1474
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	0.18	0.03	0.21	0.13	0.03	0.19

## Intersection Summary

HCM Signalized Intersection Capacity Analysis  
11: Centreville Creek Road & Street 'A'

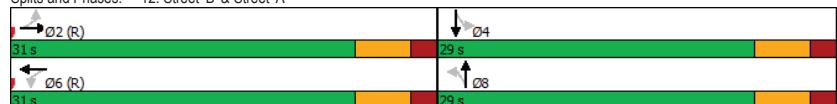
Future Total PM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	110	15	310	165	25	280
Future Volume (vph)	110	15	310	165	25	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Frt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1785	1597	1879	1597	1785	1879
Frt Permitted	0.95	1.00	1.00	1.00	0.57	1.00
Satd. Flow (perm)	1785	1597	1879	1597	1074	1879
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	110	15	310	165	25	280
RTOR Reduction (vph)	0	13	0	36	0	0
Lane Group Flow (vph)	110	2	310	129	25	280
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	8		2		6
Actuated Green, G (s)	13.9	13.9	94.1	94.1	94.1	94.1
Effective Green, g (s)	13.9	13.9	94.1	94.1	94.1	94.1
Actuated g/C Ratio	0.12	0.12	0.78	0.78	0.78	0.78
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	206	184	1473	1252	842	1473
v/s Ratio Prot	c0.06	0.00		0.08	0.02	
v/s Ratio Perm	0.53	0.01	0.21	0.10	0.03	0.19
v/c Ratio	50.0	47.0	3.3	3.0	2.9	3.3
Uniform Delay, d1	1.01	1.07	1.00	1.00	1.00	1.00
Progression Factor	2.6	0.0	0.3	0.2	0.1	0.3
Incremental Delay, d2	52.9	50.4	3.7	3.2	2.9	3.6
Delay (s)	D	D	A	A	A	A
Level of Service	52.6	3.5			3.5	
Approach Delay (s)	D	A			A	
Approach LOS						
Intersection Summary						
HCM 2000 Control Delay	10.3		HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.25					
Actuated Cycle Length (s)	120.0		Sum of lost time (s)	12.0		
Intersection Capacity Utilization	40.8%		ICU Level of Service	A		
Analysis Period (min)	15					
c Critical Lane Group						

Timings  
12: Street 'B' & Street 'A'

Future Total PM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Lane Group	EBT	WBT	NBL	Ø4
Lane Configurations	↑	↑	↑	
Traffic Volume (vph)	75	50	15	
Future Volume (vph)	75	50	15	
Turn Type	NA	NA	Perm	
Protected Phases	2	6		4
Permitted Phases				8
Detector Phase	2	6	8	
Switch Phase				
Minimum Initial (s)	12.0	12.0	12.0	12.0
Minimum Split (s)	29.0	29.0	29.0	29.0
Total Split (s)	31.0	31.0	29.0	29.0
Total Split (%)	51.7%	51.7%	48.3%	48%
Maximum Green (s)	25.0	25.0	23.0	23.0
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	
Lead/Lag				
Lead-Lag Optimize?				
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0
Recall Mode	C-Min	C-Min	None	None
Walk Time (s)	12.0	12.0	12.0	12.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0
Intersection Summary				
Cycle Length: 60				
Actuated Cycle Length: 60				
Offset: 30 (50%), Referenced to phase 2:EBTL and 6:WBT, Start of Green				
Natural Cycle: 60				
Control Type: Actuated-Coordinated				
Splits and Phases: 12: Street 'B' & Street 'A'				



Queues  
12: Street 'B' & Street 'A'

Future Total PM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	95	50	15
v/c Ratio	0.06	0.03	0.04
Control Delay	1.4	2.3	19.8
Queue Delay	0.0	0.0	0.0
Total Delay	1.4	2.3	19.8
Queue Length 50th (m)	0.0	0.0	1.4
Queue Length 95th (m)	6.4	5.4	5.6
Internal Link Dist (m)	429.9	421.3	
Turn Bay Length (m)			50.0
Base Capacity (vph)	1675	1729	720
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.06	0.03	0.02
<b>Intersection Summary</b>			

HCM Signalized Intersection Capacity Analysis  
12: Street 'B' & Street 'A'

Future Total PM  
Cavallino Estates (6552-12) & Trinity Field (6552-13)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	0	75	20	0	50	0	15	0	0	0	0	0
Future Volume (vph)	0	75	20	0	50	0	15	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0			6.0				
Lane Util. Factor		1.00				1.00			1.00			
Frt		0.97				1.00			1.00			
Flt Protected		1.00				1.00			0.95			
Satd. Flow (prot)		1820				1879			1785			
Flt Permitted		1.00				1.00			1.00			
Satd. Flow (perm)		1820				1879			1879			
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	75	20	0	50	0	15	0	0	0	0	0
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	90	0	0	50	0	15	0	0	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2				6			8			4
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		45.6			45.6			2.4				
Effective Green, g (s)		45.6			45.6			2.4				
Actuated g/C Ratio		0.76			0.76			0.04				
Clearance Time (s)		6.0			6.0			6.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		1383			1428			75				
v/s Ratio Prot	c0.05			0.03								
v/s Ratio Perm							c0.01					
v/c Ratio	0.07			0.04			0.20					
Uniform Delay, d1	1.8			1.8			27.9					
Progression Factor	0.86			1.00			1.00					
Incremental Delay, d2	0.1			0.0			1.3					
Delay (s)	1.7			1.8			29.2					
Level of Service	A			A			C					
Approach Delay (s)	1.7			1.8			29.2			0.0		
Approach LOS	A			A			C			A		
<b>Intersection Summary</b>												
HCM 2000 Control Delay		4.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.07										
Actuated Cycle Length (s)		60.0			Sum of lost time (s)			12.0				
Intersection Capacity Utilization		30.0%			ICU Level of Service			A				
Analysis Period (min)				15								
c Critical Lane Group												