CITY PARK (LAKESHORE) HOMES INC.

TRAFFIC IMPACT AND PARKING STUDY

1381 Lakeshore Road East

Project No. 2019-0263

COLE ENGINEERING GROUP LTD.

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AUGUST 2020

August 20, 2020
Reference No. 2019-0263

Christopher Zeppa
City Park (Lakeshore) Homes Inc.
950 Nashville Road
Kleinburg, ON L0J 1C0

Dear Mr. Zeppa:

Re: Traffic Impact and Parking Study
1381 Lakeshore Road East
City of Mississauga

Cole Engineering Group Ltd. ("COLE") was retained by City Park (Lakeshore) Homes Inc. (the "Owner") to undertake a Traffic Impact and Parking Study (TIPS) in support of a Site Plan Application for a proposed mixed-use development located at 1381 Lakeshore Road East in the City of Mississauga (the "City") and Peel Region (the "Region").

The subject site is currently occupied by a commercial plaza that will be removed. The proposed development will consist of a mixed-use building comprised of 15-storey residential high-rise building with 8 storey residential podium and ground floor retail area.

This TIPS report details the existing and future traffic conditions and the anticipated impact on the surrounding road network as a result of the proposed development. The study has concluded that the proposed development will have minimal impact on the operation of study area intersections throughout the study horizon periods and no mitigation measures will be required as a result of the traffic generated from the site. The access safety analysis concluded that sufficient sightlines are provided at the access locations. Besides, the site provides adequate space for garbage and loading vehicles ingress/egress maneuvering.

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

Yours truly,

COLE ENGINEERING GROUP LTD.

Dumitru Liubeznii, EIT
Traffic Analyst
Urban Development, Traffic

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Issues and Revisions Registry

Identification	Date	Description of Issued and/or Revision
Final Report	June 2020	For Client Review
Final Report	August 2020	For Submission

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1 Introduction

Cole Engineering Group Ltd. ("COLE") was retained by City Park (Lakeshore) Homes Inc. (the "Owner"') to undertake a Traffic Impact and Parking Study in support of Site Plan for a proposed mixed-use development (residential and neighborhood retail on the ground floor), located on the northeast quadrant of Dixie Road and Lakeshore Road East, in the City of Mississauga (the "City"), within the Region of Peel (the "Region"). The site location is shown in **Figure 1-1** following the report**.**

The purpose of this TIPS report is:

- Assess the existing operations of the following study area intersections as well as the existing site accesses during the weekday AM and PM peak hours using traffic volume counts collected in the year of 2020;
  - Lakeshore Road East and Dixie Road (Signalized);
  - Lakeshore Road East and Cherriebell Road (Unsignalized);
  - Dixie Road and St James Avenue (Unsignalized)
  - Dixie Road and Orchard Hill Road (Unsignalized);
  - Cherriebell Road and Proposed Site Access;
  - Dixie Road and Existing Site Access #1 (West);
  - Lakeshore and Existing Site Access #2 (South); and,
  - Cherriebell Road and Existing Site Access #3 (East).
- Assess the future background traffic operations for a five-year (2025) horizon period incorporating traffic growth and traffic generated by adjacent developments;
- Estimate site traffic based on information published in the *Trip Generation Manual, 10th Edition*, by the Institute of Transportation Engineers (ITE);
- Assess the future total traffic operations (including the anticipated site traffic) at the key study area intersections and accesses for the analysis period;
- Recommend improvements, if applicable, should capacity constraints be observed in the existing and future horizons;
- Review the functionality of the internal vehicular circulation to facilitate fire route/emergency services, as well as garbage collection activities related to the proposed development;
- Review the proposed access sightlines;
- Undertake a review of the proposed parking supply and loading spaces in comparison to the City's Zoning By-Law, and,
- Prepare Transportation Demand Management (TDM) Plan to discourage single-occupant vehicles and encourage the transit and active transportation modes.

1.1 Existing Site and Proposed Development

Currently, there are four commercial units and two restaurants located at 1381 Lakeshore Road. Based on the latest Site Plan along with site statistics provided by Graziani + Corazza Architects is illustrated in **Figure 1-2** following the report.

The proposed development will include:

- A total of 242 residential units where:
  - 165 one-bedroom units;
  - 69 two-bedroom units; and,
  - 8 three-bedroom units.
- Two retail units 127 m^2 and 145 m^2 GFA.
- A total of 324 parking spaces, out of which 318 spaces are in the underground parking, while 6 parking spaces are located on the surface level.

The details of parking provided are as below:

- 279 parking spaces including one accessible parking space are provided for residents at P1, P2, and P3 underground parking levels;
- 36 parking spaces, including one accessible parking space are provided for visitors at P1 underground parking level; and,
- 9 parking spaces, where 6 spaces including one accessible parking space provided at ground floor and 3 spaces provided at P1 underground parking level, provided for patrons to commercial units.

The proposed development is planned to connect to Charriebell Road via full move site access located approximately 55 metres from the intersection of Lakeshore Road East and Charriebell Road, and to Dixie Road via right-in-right-out site access located approximately 65 meters from the intersection of Lakeshore Road East and Dixie Road measured center-to-center of the road.

2 Scope and Study Approach

2.1 Study Scope

The scope of the current study is based on the Region's TIS guidelines and City's Signal Timing, Operation, and Capacity Analysis guidelines for Synchro Analysis. The scope of the study is elaborated in **Table 2.1**.

Table 2.1 Summary of Study Scope

Study Area	The site is bounded by other residential developments to the north, Lakeshore Road East to the south, Dixie Road to the west, and other Cherriebell Road to the east.
Analysis Future Horizon	Year 2025 is included as a horizon year in the traffic analysis.
Analyses Time Periods	Weekday AM and PM Peak Hours.
Intersections Analyzed	**Under Existing and Future Background Conditions (3 Existing Intersections):** • Lakeshore Road East and Dixie Road (Signalized); • Lakeshore Road East and Cherriebell Road (Unsignalized); • Dixie Road and St James Avenue (Unsignalized) • Dixie Road and Orchard Hill Road (Unsignalized); • Cherriebell Road and Proposed Site Access • Dixie Road and Existing Site Access #1 – West (retained); • Lakeshore and Existing Site Access #2 – South (removed); and, • Cherriebell Road and Existing Site Access #3 – East (retained). **Additionally, under Future Total Conditions (1 Proposed Intersection):** • Dixie Road and Future RIRO Site Access #1 (West); and, • Cherriebell Road and Future Full Move Site Access #2 (East).

2.2 Study Approach

The study's methodology and analysis reflect the *City's Traffic Impact Study (TIS) Guidelines* and *Region's Guidelines for Using Synchro*. The Terms of Reference (TOR) for this study and feedback from the City is provided in **Appendix A**. Traffic data (i.e. intersection turning movement counts (TMCs)) were collected in 2018 and 2019 for the weekday AM and PM peak periods at all study area existing intersections from COLE commissioned traffic surveys. The growth rate was applied to through movements to simulate existing (2020) traffic conditions. The existing traffic volumes are discussed in **Section 3.4**.

Intersection capacity and queuing analysis were completed using Synchro software (version 9.0) for existing conditions. Analysis and results are further discussed in **Section 3.5**.

Traffic growth rates were provided by the City staff and further discussed in **Section 4.0**.

The details of background development in the vicinity of the proposed development were collected from the City online database and discussed in **Section 4.1**. The proposed roadway, transit and active transportation improvements in the vicinity of the study area were collected from the City's website and further discussed in **Section 4.2**.

Based on City's TIS guidelines, a 5-year (2025) horizon was selected to analyze future traffic conditions. To estimate the future background traffic volumes in the vicinity of the subject site, annual growth rates were acquired from the City and applied to the study area intersections in addition to traffic generated from the background developments.

The intersection capacity and queuing analysis under the future background conditions are discussed in **Section 4.2** of the report.

The site generated traffic was derived using the information contained in the *Trip Generation Manual, 10th Edition* published by the Institute of Transportation Engineers (ITE). Trip distribution for the proposed development was based on the 2016 Transportation Tomorrow Survey (TTS) data analysis. The site trip generation and distribution are discussed in **Section 5.0**.

The future total traffic is estimated by adding the site generated traffic to future background traffic. The traffic analysis under the future total traffic conditions. The traffic analysis under the future total traffic conditions is discussed in **Section 6.0**.

On-site circulation and review of the proposed access sightlines are discussed in **Section 7.0**.

Parking justification explores parking rates for the residents, visitors (residential and commercial), parking requirements using the City's Zoning By-law, proxy site data, and the site-specific By-laws for some of the latest approved high-density residential developments, located in south Mississauga. The details are discussed in **Section 8.0**.

A Transportation Demand Management (TDM) plan was prepared, which refers to a variety of strategies to reduce congestion, minimize the number of single-occupant vehicles, encourage non-auto modes of travel, and reduce vehicle dependency to create a sustainable transportation system. The TDM plan is presented in **Section 9.0**.

The findings of the TIS study for the proposed development are concluded in **Section 10.0**.

2.3 Input Parameters and Assumptions

Analysis of the intersection operations will be conducted using *Synchro 9*.

The signalized and unsignalized intersection analysis is representative of the following assumptions:

- Peak hour factors (PHFs) are calculated based on existing peak hour volumes;
- Heavy Vehicle percentage based on the existing traffic volumes;
- Saturation flow ratio will be based on the Synchro default value of 1,900 vphpl; and,
- Synchro results for the signalized intersections will be provided in the Highway Capacity Manual (HCM) format.

The unsignalized intersections operational analysis in this report will be completed using the *Synchro 9* software, which employs the 2000 Highway Capacity Manual (HCM) Methodology for the intersection analysis. All parameters for the unsignalized intersection analysis are based on *Synchro* default values. *Synchro* results for the unsignalized intersections will be provided in the Highway Capacity Manual (HCM) format.

Trip generation for the proposed development will be based on *Trip Generation Manual, 10th Edition* prepared by the Institute of Transportation Engineers (ITE) for High-Rise Residential with 1st Floor Commercial (land use code 232). Trip distribution and assignments are based on the latest 2016 Transportation Tomorrow Survey (TTS) data and the existing traffic patterns.

2.4 Collected Information

Information used in the preparation of this update includes:

- Weekday AM and PM peak hours turning movement counts conducted at study area intersections; and,
- Signal Timing Plans (STPs).

In addition to data collected above, COLE referred the following guidelines/reports:

- City's Development Standards, Policies, and Guidelines;
- City's Official Plan;
- City's Transportation Master Plan; and,
- Geometric Design Standards for Canadian Roads (TAC) Manual.

3 Existing Traffic Conditions

The overview of existing traffic conditions includes a review of the existing road network, existing transit routes, and the existing active transportation network. Also, it covers traffic operations of the intersection and mitigation measures required to improve congested intersections.

3.1 Existing Road Network

The existing road network, lane configuration, and traffic control for the study intersections are shown in **Figure 3-1** following the report.

The details are described as follows:

- **Lakeshore Road East** is a major arterial road under the jurisdiction of the City. The roadway has four lane undivided with a center two-way lane roadway with a posted speed limit of 50km/h. Development along the roadway consists of residential and commercial units with a sidewalk on the north side and urbanized cross-section within the vicinity of the subject site. There is no dedicated bike lane on both sides.
- **Dixie Road** also is known as Peel Regional Road 4 (and also, as of 2016, Veterans Memorial Roadway) has a posted speed limit of 50km/h. There are sidewalks available on either side of Dixie Road. Development along the roadway consists of only residential units.
- **Cherriebell Road** is a residential two-lane undivided roadway with an unposted speed limit of 50km/h. Development along the roadway consists of only residential units with no sidewalks or curbs along either side within the study area.
- **Orchard Hill Road** is a residential two-lane undivided roadway with an unposted speed limit of 50km/h. Development along the roadway consists of only residential units with no sidewalks or curbs along either side within the study area.

3.2 Existing Transit Routes

Transit services are provided by MiWay and Go Transit. Bus services that operate within the vicinity of the site are described below:

- **MiWay Route 23-Lakeshore** travels mostly in the east-west direction with headways of approximately 8-10 minutes during peak periods. This route can connect the residents to Long Branch GO Station to Clarkson GO Station. Route 23 – Lakeshore connects passengers to Toronto via a looped Streetcar network. The Long Branch GO Station approximately 800 meters east of the subject site. It operates with an approximate 15 minutes headways during the weekday peak commuter times.
- **MiWay Route 5-Dixie** travels mostly in the north-south direction with headways of approximately 8-10 minutes during peak periods. This route can connect the residents to Long Branch GO Station to the South and it travels north up to Cardiff Boulevard.

Existing transit routes are provided in **Appendix B**.

3.3 Cycling Network

Currently, dedicated cycling facilities are provided along Dixie Road in north-south directions that connect to the Waterfront multi-use path (MUP) just south of the proposed development. The existing cycling facilities for the subject area are illustrated in **Figure 3-2** following the report.

The future plans for the active transportation network improvement are discussed in **Section 4.1** of the report.

3.4 Existing Traffic Counts

The traffic volumes are based on intersection turning movement counts (TMCs) collected in 2018 and 2019 at the study area intersections during weekday AM and PM peak hours. The TMC survey information is presented in **Table 3.1**. Traffic volume data and signal timing plan are provided in **Appendix C**. The collected traffic counts are shown in **Figure 3-3.**

Table 3.1 Intersection Turning Movement Count

Intersection	Count Date	Count Hours	Peak Hours
1: Dixie Road & Orchard Hill Road	Thursday, November 28, 2019	7:00 to 9:00	7:45 to 8:45
		16:00 to 18:00	16:45 to 17:45
2: Dixie Road & St James Ave	Thursday, March 06, 2018	7:00 to 9:00	7:45 to 8:45
		16:00 to 18:00	16:30 to 17:30
3: Private Access/Dixie Road & Lakeshore Road East	Thursday, November 28, 2019	7:00 to 9:00	7:30 to 8:30
		16:00 to 18:00	16:45 to 17:45
4: Lakeshore Road East & Cherriebell Road	Thursday, November 28, 2019	7:00 to 9:00	7:30 to 8:30
		16:00 to 18:00	16:45 to 17:45
5: Dixie Road & Existing Site Access #1	Thursday, November 28, 2019	7:00 to 9:00	7:45 to 8:45
		16:00 to 18:00	16:45 to 17:45
6: Lakeshore Road East & Existing Site Access #2	Thursday, November 28, 2019	7:00 to 9:00	7:30 to 8:30
		16:00 to 18:00	16:45 to 17:45
7: Cherriebell Road & Existing Site Access #3	Thursday, November 28, 2019	7:00 to 9:00	8:00 to 9:00
		16:00 to 18:00	16:15 to 17:15

The existing (2020) traffic volumes have been estimated by applying a 1% growth rate to the through movements of all intersections. Intersection counts for Dixie Road through movements at St James Avenue were balanced with respect to adjacent intersection through movements along Dixie Road. The resulting volumes are illustrated in **Figure 3-4** following the report.

3.5 Existing Traffic Analysis

These peak hour volumes were analyzed using the *Synchro 9.0* software which employs the 2000 HCM Methodology for the intersection analysis. The results of the existing intersection operations are summarized in **Table 3.2** with the level of service (LOS) and the volume to capacity (v/c) ratios for overall and individual movements. As per the City's Traffic Impact Study Guidelines, v/c ratios for overall signalized intersection operations, through movements, or shared through / turning movements greater than 0.85, and v/c ratios for exclusive movements greater than 0.90 have been shown in bold**.** The intersection capacity analysis reports under the existing conditions are presented in **Appendix D.**

Table 3.2 Existing Weekday AM and PM Peak Hour Traffic Analysis Summary

Intersection Name	Key Movement	Available		AM Peak Hour				PM Peak Hour			
		Storage Length (m)	Taper Length (m)	LOS (v/c)	Delay (s)	Queue Length 50th PCTL (m)	Queue Length 95th PCTL (m)	LOS (v/c)	Delay (s)	Queue Length 50th PCTL (m)	Queue Length 95th PCTL (m)
1: Dixie Road & Orchard Hill Road	WBL + WBT	-	-	C (0.1)	15.2	-	-	B (0.1)	14.3	-	-
	NBT + NBR	-	-	- (0.46)	0	-	-	- (0.42)	0	-	-
	SBL	25	50	B (0.02)	10.2	-	3	A (0.03)	9.2	-	3
	SBT	-	-	- (0.31)	0	-	-	- (0.37)	0	-	-
2: Dixie Road & St James Ave	EBL + EBT	-	-	C (0.23)	17.4	-	-	C (0.15)	15.6	-	-
	NBL	TWLTL		A (0.02)	10	-	-	A (0)	8.8	-	-
	NBT	-	-	- (0.46)	0	-	-	- (0.41)	0	-	-
	SBT + SBR	-	-	- (0.32)	0	-	-	- (0.37)	0	-	-
3: Private Access/Dixie Road & Lakeshore Road East	Overall	-	-	C **(1.03)**	34.1		-	D **(0.97)**	43.7	-	-
	EBL	60	TWLTL	**F (1.07)**	92.1	90	170	**F (0.98)**	88.1	55	112
	EBT + EBR	-	-	A (0.39)	7.7	45	68	A (0.3)	9.2	36	46
	WBL	20	15	B (0)	15.2	-	1	-	-	-	-
	WBT+WBR	-	-	C (0.74)	26.6	112	154	D **(0.98)**	47.4	207	268
	NBL+ NBT+NBR	-	-	D (0)	36.9	-	3	C (0.01)	34.8	1	4
	SBL	27	20	**E** (0.81)	59.8	49	78	**E** (0.85)	66.1	68	116
	SBT + SBR	-	-	D (0.22)	38.9	-	39	D (0.3)	39.6	9	36
4: Lakeshore Road East & Cherriebell Road	EBL	10	30	B (0.01)	11.3	-	-	C (0.03)	15.1	-	1
	EBT	-	-	- (0.36)	0	-	-	- (0.29)	0	-	-
	WBT + WBR	-	-	- (0.24)	0	-	-	- (0.34)	0	-	-
	SBL + SBT	-	-	C (0.04)	19.9	-	-	D (0.05)	26.2	-	-
5: Dixie Road & Existing Site Access #1	WBL + WBT	-	-	B (0)	13.9	-	-	B (0.01)	13.1	-	-
	NBT + NBR	-	-	- (0.45)	0	-	-	- (0.38)	0	-	-
	SBL	10	25	A (0)	9.4	-	-	A (0)	8.9	-	-
	SBT	-	-	- (0.32)	0	-	-	- (0.34)	0	-	-
6: Lakeshore Road East & Existing Site Access #2	EBL	5	12	- (0)	0	-	-	- (0)	0	-	-
	EBT	-	-	- (0.35)	0	-	-	- (0.29)	0	-	-
	WBT + WBR	-	-	- (0.23)	0	-	-	- (0.33)	0	-	-
	SBL + SBT	-	-	C (0.01)	16.8	-	-	A (0)	0	-	-
7: Cherriebell Road & Existing Site Access #3	EBL + EBT	-	-	A (0)	8.8	-	-	A (0)	8.3	-	-
	NBL + NBT	-	-	A (0)	0.4	-	-	A (0)	0.8	-	-
	SBT + SBR	-	-	- (0.01)	0	-	-	- (0)	0	-	-

The results of the analysis of the existing (2020) traffic conditions indicate that all intersections will operate at acceptable LOS with v/c ratios below capacity level with the exception of:

1. The overall v/c ratio for the intersection of Dixie Road & Lakeshore Road East in the morning peak hour will be over capacity; and,
2. The eastbound left-turn movement at the intersection of Dixie Road & Lakeshore Road East will operate over capacity during AM peak hour of traffic operation.

Soft mitigation measures were implemented to improve the operation of the congested movements at the intersection of Dixie Road & Lakeshore Road East.

3.5.1 Existing Traffic Analysis with Mitigation

Soft mitigation measures were implemented by adjusting the signal timing total splits to improve the operation of the congested movements at the intersection of Dixie Road & Lakeshore Road East. The resulting The results of the existing intersection operations are summarized in **Table 3.3** with the level of service (LOS) and the volume to capacity (v/c) ratios for overall and individual movements.

Table 3.3 Existing Weekday AM Peak Hour Traffic Analysis with Mitigation Summary

Intersection Name	Key Movement	Available		AM Peak Hour			
		Storage Length (m)	Taper Length (m)	LOS (v/c)	Delay (s)	Queue Length 50th PCTL (m)	Queue Length 95th PCTL (m)
3: Private Access/Dixie Road & Lakeshore Road East	Overall	-	-	C **(0.92)**	32.1	-	-
	EBL	60	TWLTL	**D (0.91)**	53.4	86	148
	EBT + EBR	-	-	A (0.39)	7.5	47	62
	WBL	20	15	B (0)	19	-	-
	WBT + WBR	-	-	D (0.83)	35.3	138	187
	NBL + NBT + NBR	-	-	D (0)	38.3	-	-
	SBL	27	20	**E (0.83)**	65.1	51	86
	SBT + SBR	-	-	D (0.22)	40.4	-	-

The intersection capacity analysis reports under the existing conditions with mitigation measures are presented in **Appendix D-1.** The results of the analysis of the existing conditions with mitigations indicate that intersection will operate at acceptable LOS with v/c ratios below capacity level.

4 Future Background Traffic

The future background traffic volumes consist of the following components:

- Background traffic growth from outside the study area; and,
- Traffic generated from other proposed developments in the vicinity of the study area.

Based on the information provided by the City, a 2% (westbound during morning peak hour) and 2% (eastbound during afternoon peak hour) growth rate per annum along Lakeshore Road East were applied. According to the conversation with City, the growth rate provided includes future traffic generated by the potential development of Lakeview Village located south-west of the proposed development as shown in **Figure 4-1** following the report. It was communicated to the City, that no growth rate is applied to Dixie Road and other local roads in the study area. The correspondence with the City is provided in **Appendix E**.

The following are the two active background development immediately east and west of the proposed site.

The first background development is a proposed mixed-use development at 1345 Lakeshore Road East. This development will have 8 and 12 storey buildings. Together these two buildings will have a total of 397 condominium units and approximately 310m^2 of commercial/retail space fronting onto Lakeshore Road East. A Traffic Impact Study for this development was prepared by the BA Group.

The second background development is a proposed mixed-use development at 1407 Lakeshore Road East. According to the information found on City's Development Applications Map, the development will have a total of 24 stacked townhouse units and approximately 139m^2 of commercial/retail space. No study was conducted for this site. Background trip generation was calculated and assigned to the network based on the proposed development trip distribution discussed in **Section 5.2**.

The background development generated trips are provided in **Appendix F.**

4.1 Future Planned Roadway Improvements

The road improvements are outlined in the *Lakeshore Connecting Communities Transportation Master Plan* prepared by HDR in partnership with the City in May 2019. According to the study, Lakeshore Road East will be widened from 26m to 45.5m right-of-way (ROW) in the vicinity of the proposed development, also referred to as Segment 7 in the TMP. The proposed widening is designed to accommodate Express Bus exclusive lanes in east-west directions at the center of the roadway. According to the Implementation and Phasing section of the TMP, the transit service improvements will take place in Phase 1 (2019-2025), multi-modal road work and further transit improvements will take place in Phase 2A (2025 to 2030) and Phase 2B (2031-2041), and protection for extension of TTC streetcar services will take place in Phase 3 (beyond 2041). Also, the future roadway improvements will accommodate exclusive bicycle lanes.

It must be noted that the physical widening of Lakeshore Road East ROW will take place beyond the proposed development study horizons and, therefore, not considered in the future traffic analysis.

For reference, specific pages were extracted from the study in support of the information provided above and are supplied in **Appendix G**.

4.2 Future (2025) Background Traffic Analysis

The future (2025) background traffic volumes are illustrated in **Figure 4-2** following the report**.** The future (2025) background traffic volumes were analyzed using the *Synchro 9.0* software which employs the 2000 HCM Methodology for the intersection analysis. The results are summarized in **Table 4.1.** As per the City's Traffic Impact Study Guidelines, v/c ratios for overall signalized intersection operations, through movements, or shared through / turning movements greater than 0.85, and v/c ratios for exclusive movements greater than 0.90 have been shown in bold. Detailed calculations are provided in **Appendix H.**

Table 4.1 Future (2025) Background Weekday AM and PM Peak Hour Analysis Summary

Intersection Name	Key Movement	Available		AM Peak Hour				PM Peak Hour			
		Storage Length (m)	Taper Length (m)	LOS (v/c)	Delay (s)	Queue Length 50th PCTL (m)	Queue Length 95th PCTL (m)	LOS (v/c)	Delay (s)	Queue Length 50th PCTL (m)	Queue Length 95th PCTL (m)
1: Dixie Road & Orchard Hill Road	WBL + WBT	-	-	C (0.11)	16.3	-	3	B (0.1)	14.9	-	3
	NBT + NBR	-	-	- (0.5)	0	-	-	- (0.44)	0	-	-
	SBL	25	50	B (0.02)	10.5	-	1	A (0.03)	9.3	-	1
	SBT	-	-	- (0.32)	0	-	-	- (0.41)	0	-	-
2: Dixie Road & St James Ave	EBL + EBT	-	-	D (0.51)	27.5	-	22	C (0.4)	24.8	-	15
	NBL	TWLTL		B (0.08)	10.4	-	2	A (0.11)	9.5	-	3
	NBT	-	-	- (0.46)	0	-	-	- (0.41)	0	-	-
	SBT + SBR	-	-	- (0.33)	0	-	-	- (0.41)	0	-	-
3: Private Access/Dixie Road & Lakeshore Road East	Overall	-	-	D **(0.95)**	37.9	-	-	D **(1.02)**	46	-	-
	EBL	60	TWLTL	**E (0.95)**	62.6	96	159	**F (1.03)**	102.6	63	121
	EBT + EBR	-	-	A (0.39)	7.8	50	62	A (0.34)	9.6	42	52
	WBL	20	15	B (0)	19.6	-	-	()		-	-
	WBT + WBR	-	-	D **(0.93)**	45.1	171	223	D **(0.99)**	49.5	211	272
	NBL + NBT + NBR	-	-	D (0)	38.1	-	-	C (0.01)	34.8	-	4
	SBL	27	20	**E** (0.85)	67.5	54	3	**E (0.88)**	70.5	71	123
	SBT + SBR	-	-	D (0.23)	40.3	-	-	D (0.33)	40.2	11	39
4: Lakeshore Road East & Cherriebell Road	EBL	10	30	B (0.01)	12.2	-	-	C (0.05)	15.4	-	1
	EBT	-	-	- (0.36)	0	-	-	- (0.33)	0	-	-
	WBT + WBR	-	-	- (0.27)	0	-	-	- (0.35)	0	-	-
	SBL + SBT	-	-	C (0.09)	22.4	-	2	D (0.08)	25.5	-	2

The results of the analysis of the future (2025) background traffic conditions indicate that all intersections will operate at acceptable LOS with v/c ratios below capacity level with exception of:

1. The overall v/c ratio for the intersection of Dixie Road & Lakeshore Road East in the PM peak hour will be over capacity; and,
2. The eastbound left-turn movement at the intersection of Dixie Road & Lakeshore Road East will operate over capacity during PM peak hour of traffic operation.

Soft mitigation measures were implemented to improve the operation of the congested movements at the intersection of Dixie Road & Lakeshore Road East.

4.2.1 Future (2025) Background Traffic Analysis with Mitigation

Soft mitigation measures were implemented by adjusting the signal timing total splits and lost time adjustment of (-1) second to improve the operation of the congested movements at the intersection of Dixie Road & Lakeshore Road East. The resulting The results of the existing intersection operations are summarized in **Table 4.2** with the level of service (LOS) and the volume to capacity (v/c) ratios for overall and individual movements.

Table 4.2 Future (2025) Background Weekday PM Peak Hour Analysis with Mitigation Summary

Intersection Name	Key Movement	Available		AM Peak Hour			
		Storage Length (m)	Taper Length (m)	LOS (v/c)	Delay (s)	Queue Length 50th PCTL (m)	Queue Length 95th PCTL (m)
3: Private Access/Dixie Road & Lakeshore Road East	Overall	-	-	D (0.95)	40.1	-	-
	EBL	60	TWLTL	**E (0.94)**	77.1	58	114
	EBT + EBR	-	-	A (0.33)	8.2	38	48
	WBL	20	15	-	-	-	-
	WBT + WBR	-	-	D (0.96)	41.5	203	264
	NBL + NBT + NBR	-	-	D (0.01)	36.4	-	-
	SBL	27	20	**E (0.91)**	77.2	72	126
	SBT + SBR	-	-	D (0.32)	41.5	126	28

The intersection capacity analysis reports under the existing conditions with mitigation measures are presented in **Appendix H-1.** The results of the analysis of the existing conditions with mitigations indicate that intersection will operate at acceptable LOS with v/c ratios below capacity level.

5 Future Total Traffic

The future total traffic analysis covers sections with regards to site trip generation and assignment as well as a cumulative total traffic operation which consists of future background traffic and site-related traffic.

5.1 Site Generated Traffic

Trip generation was undertaken using information contained in the *Trip Generation Manual, 10th Edition* published by the Institute of Transportation Engineers (ITE). Vehicle trips during the weekday AM and PM peak hours for the *High-Rise Residential with 1st Floor Commercial* (ITE LUC 232) for the proposed residential land uses were used.

In order to recognize the multi-modal supportive environment near the Site, the information on primary modes of transportation was extracted from the 2016 TTS for traffic zones 3643, 3649, 3648, and 3642 the modes of transportation within the study area are provided in **Table 5.1** and **Table 5.2**.

Table 5.1 Non-Auto Modal Split Calculation – AM Peak Hour

Primary Travel Mode	TTS Zones					
	3642	3643	3648	3649	sum	Percentage
Transit excluding GO rail	131	125	138	95	489	5%
Cycle	38	0	0	0	38	0%
Auto driver	1496	1746	2185	2944	8371	77%
GO rail only	49	138	164	143	494	5%
Joint GO rail and local transit	102	16	19	75	212	2%
Auto passenger	126	122	98	296	642	6%
Taxi passenger	0	12	0	0	12	0%
Walk	31	146	161	230	568	5%
Total	1973	2305	2765	3783	10826	100%
Non-Auto (AM Peak Hour)						**12%**

Table 5.2 Non-Auto Modal Split Calculation – PM Peak Hour

Primary Travel Mode	TTS Zones					
	3642	3643	3648	3649	sum	Percentage
Transit excluding GO rail	146	91	162	173	572	4%
Cycle	1661	1807	2946	3916	10330	79%
Auto driver	82	149	133	187	551	4%
GO rail only	78	28	32	68	206	2%
Joint GO rail and local transit	195	214	363	342	1114	8%
Auto passenger	0	12	0	0	12	0%
Taxi passenger	40	0	11	0	51	0%
Walk	39	49	77	109	274	2%
Total	2241	2350	3724	4795	13110	100%
Non-Auto (PM Peak Hour)						**8%**

The trip generation from the proposed development is summarized in **Table 5.3** below. It must be noted, that directional distribution is not available for the ITE LUC 232. Therefore, for the analysis purposes, the directional distribution of ITE LUC 222 (Multifamily Housing – High-Rise) was applied.

Table 5.3 Site Trip Generation

Land Use	Parameter	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Two-Way Trips	In	Out	Two-Way Trips
High-Rise Residential with 1st Floor Commercial (ITE LUC 232)	Gross Vehicular Trips	19	57	76	32	29	51
	Gross Trip Rates (trips/unit)	0.08	0.23	0.31	0.13	0.08	0.21
	Non-auto split reduction	3	7	10	4	1	5
	Net New Trips	**16**	**50**	**66**	**28**	**18**	**46**
	Net Trip Rate (trips/unit)	0.07	0.21	0.28	0.13	0.07	0.20

The proposed development is expected to generate 66 new vehicular two-way trips in the morning peak hour (16 trips in and 50 trips out), 46 new vehicular two-way trips in the afternoon peak hour (28 trips in and 18 trips out).

5.2 Site Trip Distribution

The trip distribution was based on existing turning movements in the vicinity of the site along with the 2016 TTS data analysis and presented in **Table 5.4**. Site trip distribution is shown in **Figure 5-1** following the report.

Table 5.4 Site Trip Distribution

Direction (From / To)		Trip Distribution
North	Via Dixie Road	55%
West	Via North Service Road	15%
East	Via Sherway Drive	30%

5.3 Future (2025) Total Traffic Analysis

The future total traffic consists of future background traffic plus site-related traffic. The future total traffic volumes in the weekday AM and PM peak hours for the horizon year 2025 are illustrated in **Figure 5-2** following the report.

Intersection capacity analysis under the future (2025) total traffic conditions was completed using *Synchro 9* software which employs the 2000 HCM Methodology for the intersection analysis. The traffic analysis results for future (2025) total traffic are summarized in **Table 5.5**. As per the City's Traffic Impact Study Guidelines, v/c ratios for overall signalized intersection operations, through movements, or shared through / turning movements greater than 0.85, and v/c ratios for exclusive movements greater than 0.90 have been shown in bold. The intersection capacity analysis under the future (2025) total traffic conditions are presented in **Appendix I**.

Table 5.5 Future (2025) Total Weekday AM and PM Peak Hour Traffic Analysis

Intersection Name	Key Movement	Available		AM Peak Hour				PM Peak Hour			
		Storage Length (m)	Taper Length (m)	LOS (v/c)	Delay (s)	Queue Length 50th PCTL (m)	Queue Length 95th PCTL (m)	LOS (v/c)	Delay (s)	Queue Length 50th PCTL (m)	Queue Length 95th PCTL (m)
1: Dixie Road & Orchard Hill Road	WBL + WBT	-	-	C (0.11)	16.8	-	3	C (0.1)	15	-	3
	NBT + NBR	-	-	- (0.52)	0	-	-	- (0.45)	0	-	-
	SBL	25	50	B (0.02)	10.7	-	-	A (0.03)	9.3	-	-
	SBT	-	-	- (0.32)	0	-	-	- (0.42)	0	-	-
2: Dixie Road & St James Ave	EBL + EBT	-	-	D (0.53)	29	-	23	D (0.41)	25.3	-	15
	NBL	TWLTL		B (0.08)	10.4	-	-	A (0.12)	9.6	9.6	-
	NBT	-	-	- (0.48)	0	-	-	- (0.42)	0	-	-
	SBT + SBR	-	-	- (0.34)	0	-	-	- (0.42)	0	-	-
3: Private Access/Dixie Road & Lakeshore Road East	Overall	-	-	D **(0.95)**	39.3	-	-	D **(0.96)**	41.8	-	-
	EBL	60	TWLTL	**E (0.95)**	63.1	97	160	**F (0.96)**	81.2	60	117
	EBT + EBR	-	-	A (0.39)	8	50	62	A (0.33)	8.2	38	48
	WBL	20	15	B (0)	19.9	-	-	()		-	-
	WBT + WBR	-	-	D **(0.95)**	47.6	180	225	D **(0.96)**	41.8	204	265
	NBL + NBT + NBR	-	-	D (0)	37.9	-	-	D (0.01)	36.4	-	-
	SBL	27	20	**E (0.88)**	71.1	57	100	**F (0.96)**	87.1	77	135
	SBT + SBR	-	-	D (0.23)	40.1	-	-	D (0.32)	41.5	9	38
4: Lakeshore Road East & Cherriebell Road	EBL	10	30	B (0.03)	12.4	-	-	C (0.09)	16	-	3
	EBT	-	-	- (0.36)	0	-	-	- (0.33)	0	-	-
	WBT + WBR	-	-	- (0.27)	0	-	-	- (0.35)	0	-	-
	SBL + SBT	-	-	D (0.22)	27.1	-	7	D (0.15)	29.2	-	4
5: Dixie Road & Proposed West Site Access	WBR	-	-	B (0.07)	14.8	-	2	B (0.02)	13.1	-	-
	NBT + NBR	-	-	- (0.46)	0	-	-	- (0.4)	0	-	-
	SBT	-	-	- (0.34)	0	-	-	- (0.36)	0	-	-
7: Cherriebell Road & Proposed East Site Access	EBL + EBT	-	-	A (0.01)	8.4	-	-	A (0.02)	8.4	-	-
	NBL + NBT	-	-	A (0.01)	2.4	-	-	A (0.02)	3.2	-	-
	SBT + SBR	-	-	- (0.01)	0	-	-	- (0)	0	-	-

Based on the analysis conducted for the future (2025) total traffic conditions in the AM and PM peak hours, all intersections are performing at a good level of service and v/c ratios. No road network improvements are recommended or required in these conditions in the vicinity of the subject site.

6 Site Access Operations and Safety Review

The assessment of operations and safety of the site accesses and drive aisles was reviewed using maneuvering diagrams and sightline analysis.

6.1 Loading Spaces Review

Region's *Waste Collection Design Manual* provides garbage and recycling receptacle requirements. As per the Region's requirements, a loading area of 18.0 m depth and 6.0 m width is proposed on the site plan that will serve both commercial and residential uses.

6.2 On-Site Circulation Review

To ensure heavy vehicles maneuver throughout the subject site, a typical garbage truck was used as per Regions Waste Collection Design Guidelines. Access routes were assessed using *AutoTURN 10.0* analysis depicting the swept path of vehicles in relation to the proposed driveway system utilizing the Transportation Association of Canada's (TAC) design vehicles.

The maneuvering diagrams showing the assessment for the garbage truck **(Figure 6-1 and Figure 6-2)** and passenger vehicle **(Figure 6-3, Figure 6-4, and Figure 6-5)** are provided following the report. As illustrated in the diagrams, adequate space is available for the trucks to circulate in the site access egress to/from the proposed site.

6.3 Sightline Analysis

Sightlines and available sight distances were reviewed based on the *Geometric Design Guide for Canadian Roads*, published by the *Transportation Association of Canada (TAC)*, and dated June 2017. *Chapter 9*, *Section 9.9* was reviewed to identify the appropriate cases applicable to the proposed site. *Case B*, which refers to intersections with stop control on the minor road was reviewed. *Table 9.9.4* along with *Table 9.9.6*, which covers stopping sight distance and turning distances for left and right turns, as well, as crossing maneuver was also reviewed.

The summary of intersection sight distance is illustrated in **Table 6.1**. Available sight distances provide the minimum distances required for a driver, at a stop, to navigate an intersection safely. The sight distances requiring consideration for this case are:

1. Stopping Sight Distance (SSD) – the minimum sight distance criterion for vehicles approaching the intersection that allows the passengers to carry out the actions needed to negotiate the intersection safely;
2. Intersection Sight Distance (ISD) - the longer sight distance that allows the intersection to operate smoothly under left turn, right turn, and crossing maneuvers without forcing a major-road vehicle to slow down to less than 70% of their initial speed; and,
3. Decision Sight Distance (DSD) – the criteria applied in critical locations in evaluating the suitability of the sightlines. An example of such is the limitation due to horizontal or vertical road curvature. Traffic control devices are required that provide advance warning of conditions to be encountered.

Table 6.1 Safe, Intersection and Decision Sight Distances Requirement

Posted Speed	Design Speed	Movement	SSD (m)	ISD (m)	DSD (m)
50 km/h	70 km/h	Left from Stop	105	150	200
		Right from Stop		130	
		Crossing Maneuver		130	

The SSD, ISD for the left-turning vehicle from the stop and DSD along Cherriebell Rd with a current posted speed limit of 50 km/h are 105 m, 150 m, and 200 m, respectively.

Considering the maximum speed of turning vehicle from Lakeshore Rd E to Cherriebell Rd as 15 km/h and the critical gap for the left-turning vehicle at site access as 6.5 seconds, 1.5 seconds for perception time and 1.0 second for reaction time, the distance required to safely stop the vehicle (SSD) is approximately 38m.

The available sight distance at the proposed site access was plotted in **Figure 6-6** following the report shows that the available sight distance for the vehicle approaching from the left and right of the proposed site access are 200 m and 46 m, respectively. The review concludes that the available sight distance from the current proposed site access location meets TAC requirements.

7 Parking Review

This section reviews the parking requirement for bicycle and vehicle users based on By-law standards, desktop research, and proxy site data.

7.1 Bicycle Parking

Currently, City's Zoning By-law 0225-2007 does not require the development to provide dedicated bicycle parking. However, the site plan and site statistics indicate a total of 46 bicycle parking spaces (16 spaces for residents and 30 spaces for visitors) allocated within development boundaries.

7.2 Vehicular Parking

The following sections under review contain parking rates for the residents, visitors (residential and commercial), parking requirements using the City's Zoning By-law, proxy site data, and the site-specific By-laws for some of the latest approved high-density residential developments, located in south Mississauga.

7.2.1 Review of City's Zoning By-law 0225-2007 Parking Requirement

While reviewing the parking requirements using the City's Zoning By-law, the parking rates of the condominium apartment and retail center were used. The City agreed using a parking rate of 0.15 space/unit for the residential visitors without supporting survey data.

Based on the revised site stats provided, the parking requirement as per the City Zoning By-law 0225-2007 is summarized in **Table 7.1**.

Table 7.1 Parking Requirement – City's Zoning By-law 0225-2007

Land Use (Unit/Size)	No. of Units/ GFA	Parking Rate – Zoning By-law	Required Parking Spaces	Composite Parking Rate for Residents
1. Residents Parking:				1.31 spaces/unit
• One-Bedroom	165	1.25 space/unit	207	
• Two-Bedroom	69	1.4 spaces/unit	97	
• Three-Bedroom	8	1.75 spaces/unit	14	
2. Visitors Parking	242	0.15 spaces/unit	36	
3. Commercial/Retail Parking	272 m^2	4.3 spaces/100m^2	12	
		Total	**366**	

In the case of mixed-use developments, the City's Zoning By-law allows a shared parking formula. Based on the proposed land uses, the shared parking formula provided in Table 3.1.2.3 in the City's Zoning By-law is applied and the results are summarized in **Table 7.2**.

Table 7.2 Total Mixed-Use Building Shared Parking Requirement – City's Zoning By-law 0225-2007

Type of Use	Spaces	Morning		Noon		Afternoon		Evening	
		%	Spaces	%	Spaces	%	Spaces	%	Spaces
Residential	318	90%	286	65%	207	90%	286	100%	318
Visitor	36	20%	7	20%	7	60%	22	100%	36
Retail	12	80%	10	100%	12	100%	12	70%	8
Total			303		226		320		362

Applying the City's Zoning By-law, the composite parking rate for the residents is 1.31 spaces/unit. A total of 362 parking spaces (318 spaces for residents, 36 spaces for residential visitors, and 8 spaces for commercial visitors) will be required as per the City's Zoning By-law. This will result in a parking deficiency of 38 spaces.

7.2.2 Review of Proxy Site Parking Demand Data

The results of the parking utilization surveys conducted at two proxy sites conclude that the proxy site parking demand observed for the residents is 1.05 space/unit. Applying the City's Zoning By-law parking rate for commercial visitors and agreed parking rate for the residential visitors, the parking requirement is summarized in **Table 7.3**.

Table 7.3 Parking Requirement – Based on Proxy Sites Data

Land Use (Unit/Size)	No. of Units/GFA	Parking Rate – Proxy Site and Zoning By-law (Parking Space/Dwelling Unit)	Required Parking Spaces
1. Residents Parking: • One-Bedroom • Two-Bedroom • Three-Bedroom	 165 69 8	1.05	254
2. Visitors Parking	242	0.15	36
3. Commercial/Retail Parking	272 m^2	4.3/100m^2	12
		Total	**303**

Applying the shared parking formula, the parking requirement is summarized in **Table 7.4**.

Table 7.4 Total Mixed-Use Building Shared Parking Requirement – Based on Proxy Sites Data

Type of Use	Spaces	Morning		Noon		Afternoon		Evening	
		%	Spaces	%	Spaces	%	Spaces	%	Spaces
Residential	255	90%	230	65%	166	90%	230	100%	255
Visitor	37	20%	7	20%	7	60%	22	100%	36
Retail	12	80%	10	100%	12	100%	12	70%	8
Total			247		185		264		299

Using the proxy site parking demand rate of 1.05 spaces/unit and applying the City's Zoning By-law parking rate for commercial visitors and agreed parking rate for the residential visitors, the parking requirement will be 299 parking spaces (255 spaces for residents, 36 spaces for residential visitors, and 8 spaces for commercial visitors). This will result in a parking surplus of 25 spaces.

7.2.3 Parking Review of Approved High-Density Residential Developments

As part of the parking review, site-specific By-laws for a list of approved developments both densely stacked townhouses and high-density residential developments, located in the south Mississauga, are collated. Of the 11 developments collected, 6 developments are not considered in this review as these developments include densely stacked townhouses, which don't match with the current development.

Using the information collected, key comparable information, such as site statistics, accessibility to GO transit, and amended parking rates, are summarized in **Table 7.5**. The detail of missing information these developments are included in the comments column of the table shows the comparison summary of high-density residential developments with the proposed development parameters.

Table 7.5 Comparison Between High-Density Residential Developments and Proposed Development Parameters

#	Property Title	Site Statistics	Distance from Port Credit GO Station	Parking Rates	Composite Parking Rate for Residents	Comments
1	Benson Holding Apartments Lakeshore West Located at the northeast quadrant of Benson Avenue and Lakeshore Road West intersection	Dwelling units=325 Townhouses=16 Non-Residential (Office/Retail) = 775 m^2	1.800 Km.	Residents 1 or 2 Bedroom - 1.00 space/unit Visitor - 0.19 space/unit Non-Residential (Office/Retail) - 1.0 space/unit	1.00	The parking rate for 3-Bedroom is not available, therefore, 1 or 2 Bedroom parking rate is used to calculate the composite parking rate.
2	Edenshaw Apartment Ann Street Located at the northwest quadrant of Ann Street and Park Street East intersection	1-Bedroom=91 2-Bedroom=206 3-Bedroom=16 Live-Work=3 Total=316	0.25 Km.	Residents 1-Bedroom - 0.75 space/unit 2-Bedroom - 0.90 space/unit 3-Bedroom - 1.10 space/unit Visitor - 0.10 space/unit	0.92	Commercial land use is not available.
3	Edenshaw Apartment Park Street Located at the southeast quadrant of Stavebank Road and Park Street East intersection		0.5 Km.	Residents 1-Bedroom - 0.80 space/unit 2-Bedroom - 1.00 space/unit 3-Bedroom - 1.30 space/unit Visitor - 0.10 space/unit	1.03	Unit mix statistics is not available for comparison with the proposed development.
4	FRAM Apartments	Dwelling Units=69 Semi-Detached=2		Residents - 0.80 space/unit Visitor - 0.10 space/unit	0.80	Bedroom wise parking rates are not available and property location is also not available for comparison with the proposed development.
5	Plazacorp condo Located at 420 Lakeshore Road East	Condominium Units – 172 Units Commercial-Site statistics not available	1.9 Km.	Residents - 1.00 space/unit Visitor - 0.15 space/unit Commercial – 1.00 space/100m^2	1.00	Unit mix statistics and commercial area are not available for comparison with the proposed development.

Based on the comparison provided in the table above, Developments #1, #2, and #5 look similar to the current proposed development. Since Development #4 has a significantly lower number of dwelling units, it is not considered in the comparison.

Based on the available data, composite parking rates for the residents range from 0.92 spaces/unit to 1.03 spaces/unit.

By using the City's Zoning By-law parking rate for the commercial visitors, agreed parking rate for the residential visitors, parking rates for the residents from the approved site-specific By-laws, and applying the shared parking formula, the total parking spaces required for the proposed development will range from 271 to 297 parking spaces.

7.2.4 Comparison of Parking Requirement

The following **Table 7.6** summarized the parking requirements noted in **Sections 7.1**, **7.2,** and **7.3**.

Table 7.6 Comparison of Required and Provided Parking Spaces

Land Use	Zoning By-law 0225-2007	Proxy Site Parking Demand	Site-Specific Parking Rates
Residential + Commercial	366	299	271 to 298

By using the site-specific parking rates, the total parking spaces required for the proposed development will range from 271 to 298 parking spaces, whereas, using proxy site parking demand, the parking requirement will result in 299 parking spaces.

7.2.5 Proposed Parking

Based on the latest site plan dated August 14, 2020, a parking rate of 1.15 space/unit for the residents can be justified based on the approved site-specific By-laws of the developments similar to the current proposed development and proximity to the Port Credit GO station.

Applying the City's Zoning By-law parking rates for the commercial visitors and agreed parking rate for the residential visitors, the parking requirement is summarized in **Table 7.7**.

Table 7.7 Proposed Parking Based on Individual Land Uses

Land Use (Unit/Size)	No. of Units/ GFA	Parking Rate – Zoning By-law (Parking Space/Dwelling Unit)	Required Parking Spaces
1. Residents Parking • One-Bedroom • Two-Bedroom • Three-Bedroom	 165 69 8	1.15 space/unit	279
2. Visitors Parking	242	0.15	36
3. Commercial/Retail Parking	272 m^2	4.3 space/100m^2	12
		Total	**326**

Applying the shared parking formula, the parking requirement is summarized in **Table 7.8**.

Table 7.8 Total Mixed-Use Development Shared Parking Requirement

Type of Use	Spaces	Morning		Noon		Afternoon		Evening	
		%	Spaces	%	Spaces	%	Spaces	%	Spaces
Residential	279	90%	251	65%	181	90%	251	**100%**	**279**
Visitor	36	20%	7	20%	7	60%	22	**100%**	**36**
Retail	12	80%	10	100%	12	100%	12	**70%**	**9**
Total			268		200		285		**324**

Using a parking rate of 1.15 space/unit for the residents and applying the City's Zoning By-law parking rate for commercial visitors and agreed parking rate for the residential visitors, the parking requirement will be 324 parking spaces (279 spaces for residents, 36 spaces for residential visitors, and 9 spaces for commercial visitors). Based on survey data and past approved applications, it is our opinion that the proposed parking provision is sufficient to support the needs of the development. Parking study supporting documentation is provided in **Appendix J.**

8 Transportation Demand Management Plan

Transportation Demand Management (TDM) refers to a variety of strategies to reduce congestion, minimize the number of single-occupant vehicles, encourage non-auto modes of travel, and reduce vehicle dependency to create a sustainable transportation system. In short, TDM works to change how, when, where, and why people travel.

The TDM measures have been prepared to address the following required transportation demand management objectives:

- Provision of facilities/operations to minimize single-occupant vehicle (SOV) access to the study area and encourage the use of alternate transportation modes, particularly transit; and,
- Identify the operational and financial roles and responsibilities of the landowner including program development, implementation, and ongoing management and operations of the travel demand management plan/program.

TDM education and promotion related strategies support mobility by making the public aware of the options available and actively encourages the use of alternative transportation. These marketing initiatives may take the form of general marketing to targeted outreach. TDM marketing and promotion approaches include:

- Area marketing campaigns – Promoting transit services, carpooling or other TDM;
- Education Programs – Campaigns to inform the public about the specifics of services; and,
- Employer-Based Outreach – Partnerships with employers to support TDM.

8.1 TDM Programs

8.1.1 Area Marketing Campaigns

Area marketing campaigns are premised on the objective of behavioral change. The methods of persuasion include conveying messages of:

- Personal benefit;
- Social benefit, and,
- Adhering to the “social norm”.

It is recognized that individuals are more likely to change their current behavior or continue that behavior if it is the social norm amongst their peers.

One of the first area marketing TDM campaigns within the GTA was established by Metropolitan Toronto in 1994. The Diamond Lane Campaign was implemented in coordination with the expansion of the High Occupancy Lane network. The campaign included billboards, transit vehicles, radio, and newspaper ads. Transportation Management Association (TMA)’s can help facilitate TDM directives by developing promotional materials, advocate for funding, conduct transportation fairs, and many other things.

8.1.2 Education Programs and Information Services

The effectiveness of transportation systems to provide mobility to the public is only as good as the awareness of the public to the services provided. Education programs and information services (such as call-lines and internet-based route planners) can supplement marketing campaigns, increasing the commuter’s understanding of their mobility options.

Miway provides http://www.mississauga.ca/portal/miway a map-based navigator. Progressive trip planners including web-based trip data can add to the commuter’s understanding of travel options by providing real-time information.

A Denver, Colorado TMA (Transportation Solutions) managed a program designed to improve ridership. Before-and-after surveys were to gauge the impact of the efforts. The results clearly demonstrated the direct impact of the project on improved perceptions of bus transportation in the area. The results showed an increase in awareness:

- 17% increase in those who “know which bus routes to take to work/school”; and,
- 19% increase in those who feel they have “the information I need to ride the bus”.

8.1.3 Walking / Cycling

The City has a long-standing commitment to an off-road trail system, having built over 250km of pathways and trails in parks and green spaces across the City. Pathways in the neighborhood parks provide cycling and walking-friendly connections to schools, community centers, and libraries. Also, cycling safety programs were offered such as CAN-BIKE courses and community safety workshops. The Road Safety Handbook was published and includes a chapter on cycling safety.

As identified in the Regions of Peel's Active Transportation Plan Implementation Strategy 2014 Program Update, Hanlan Feedermain Water Project and the City to improve walking and cycling facilities along Dixie Road, as a component of the Preferred Plan, MTO will be accommodating the Peel Region's request to extend their multi-use trail along Dixie Road from south of Kendall Road southerly through the study limits to the newly relocate Dixie Outlet Mall south entrance. As a result, a sidewalk on the east side and multi-use pedestrian/cyclist trail on the west side.

Based on the COLE's previously submitted TIS reports, a parking rate of 0.08 bicycle parking space per unit was used for short-term bicycle parking and a rate of 0.7 parking space per unit was used for long-term parking space. The long-term bicycle parking for common-element is been assumed to be covered with the provided garages. For short-term bicycle parking, two parking spots are required. It is recommended that one on-site bike rack, which can park two bicycles, be provided for the detached dwellings and common element condominium detached dwellings.

8.1.4 Carpooling

The Smart Commute program has been established in the form of 10 transportation management associations (TMAs) across the GTHA. The Smart Commute TMAs are supported by Metrolinx to coordinate and implement TDM initiatives.

Smart Commute – the City is a TMA committed to reducing traffic congestion, improving air quality, and advocating for sustainable transportation within the study area. Since inception in 2001, Smart Commute has collectively reduced approximately 1.2 million single-occupant vehicles (SOV) trips, which avoided more than 61 million vehicle kilometers traveled (VKT) and prevented the emission of over 14,000 tonnes of greenhouse gases (GHG) and 88 tonnes of smog-causing air pollutants.

Smart Commute works to:

- Implement employee trip reduction programs at local workplaces;
- Decrease traffic congestion, and improve air quality and health by reducing vehicle emissions;
- Improve employee productivity and morale, and reduce employee turnover;
- Advocate for improved transit service, and increased local transportation infrastructure;
- Bus-only and cycling lanes, and a wider network of subway and light rapid transit;
- Promote the benefits of transit-supportive development and smart-growth strategies;
- Encourage legislative flexibility in support of high-value, cost-effective transportation strategies such as vanpools, telework, transit subsidies, and shuttle services; and,
- Increase opportunities for TMA collaboration with business and government.

Smart Commute offers one-on-one support for staff to use sustainable modes of transportation and provides promotions and incentives on an on-going basis. A web-based car matching tool is provided to allow carpoolers to easily identify ride-matching options among a large membership base and form carpooling arrangements.

9 Conclusions

The findings and conclusions of our analysis are represented as follows:

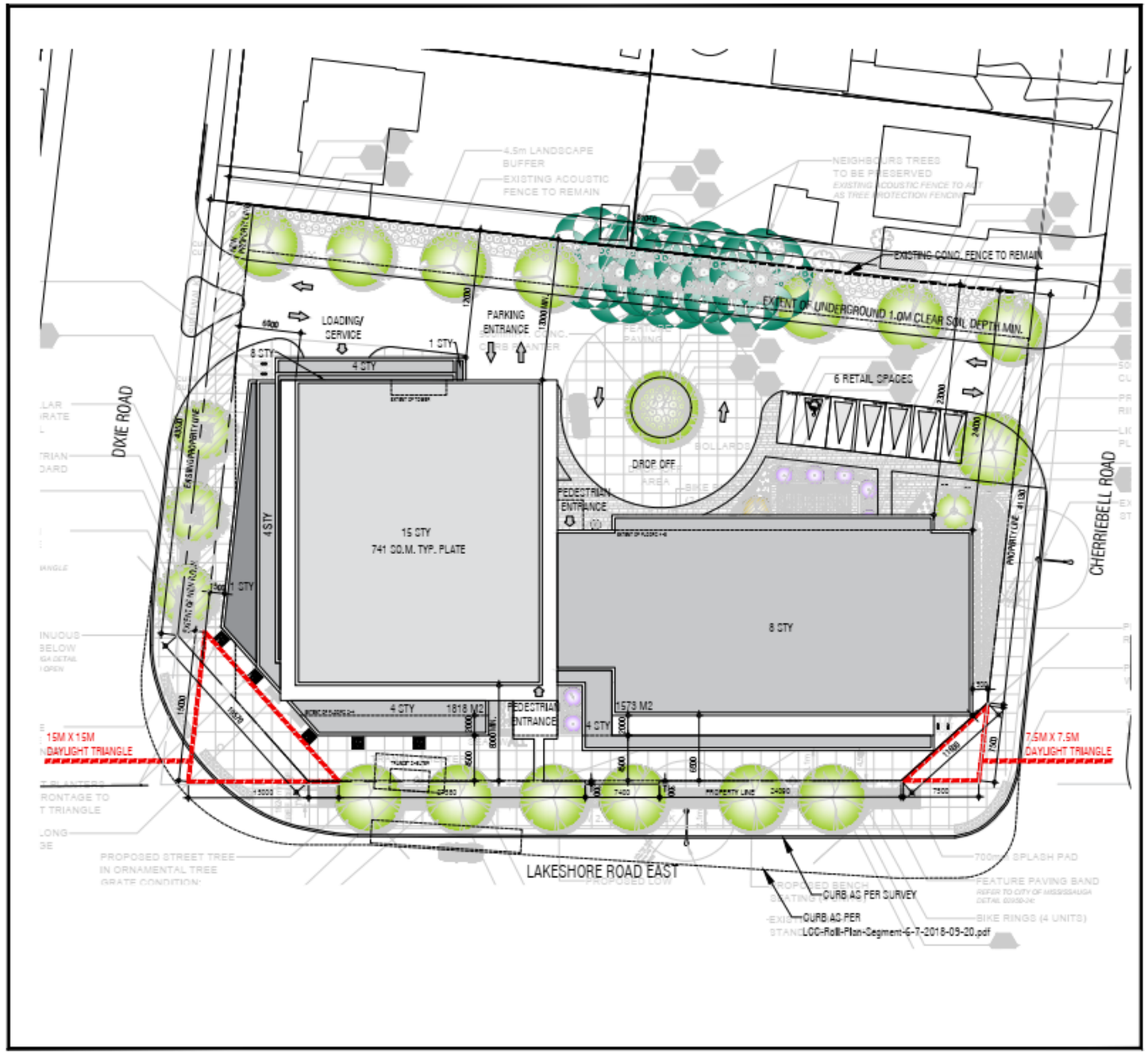
- The study area intersection of Dixie Road & Lakeshore Road East is operating over-capacity in the existing traffic conditions during both the AM peak hour. Soft mitigation measures were implemented by adjusting the signal timing total splits are sufficient to improve the operation of the congested movements.
- The proposed development is expected to generate 66 new vehicular two-way trips in the morning peak hour (16 trips in and 50 trips out), 46 new vehicular two-way trips in the afternoon peak hour (28 trips in and 18 trips out).
- The review of access operations and safety concludes that design vehicles can safely maneuver within the site and there is sufficient sightlines at Cherriebell Road full moves access.
- The proposed accesses from Dixie Road and Cherriebell Road will function from the traffic circulation perspective and represents a suitable location for entry/exit means.
- The proposed development is expected to have a negligible impact on the surrounding road network as future total traffic is expected to operate similarly to the future background scenario (below-capacity and with an acceptable level of service) in 2025 horizon year;
- The site plan and site statistics indicate a total provision of 46 bicycle parking spaces (16 spaces for residents and 30 spaces for visitors) is sufficient for development needs.
- The parking justification concludes that the proposed total parking supply of 324 parking spaces (279 spaces for residents, 36 spaces for residential visitors, and 9 spaces for commercial visitors) is sufficient for development needs.

Based on the traffic analysis presented in this report, it is concluded that the existing road network has sufficient capacity to accommodate both the roadway growth and new traffic generated from the proposed development throughout the study horizon periods and no physical improvements to the study intersections is required.

COLE

SITE LOCATION
PROPOSED MIXED-USE DEVELOPMENT
1381 LAKESHORE ROAD
CITY OF MISSISSAUGA

DATE:	JUNE 2020	PROJECT No.:	2019-0263
SCALE:	N.T.S.	FIGURE No.:	1-1



PROJECT STATISTICS

PROJECT STATISTICS
JOB No: 1629.18 - 1381 Lakeshore Road East

	PROVIDED				PERMITTED/REQUIRED
01. SITE AREA	(m2)	(ha)	(ft2)	(ac)	
GROSS SITE AREA	4204.76	0.43	45259.62	1.07	
NET SITE AREA	4084.47	0.41	43964.83	1.01	
LAND AREA DEDICATION	120.29	0.01	1294.79	0.03	

02.COVERAGE*	(m2)	(ft2)	PERCENTAGE%	
LOT COVERAGE	1909.1	17619.00	47%	
LANDSCAPE AREA	1271.49	10312.00	31%	40%

03. G.F.A. (m2)		
RESIDENTIAL	17317.20	
COMMERCIAL	272	
TOTAL	17589.20	

04. F.S.I		
GROSS RESIDENTIAL	4.31	

05. SETBACKS ** (m)			
BELOW GRADE	NORTH	4.50	
	EAST	0.00	
	SOUTH	0.00	
	WEST	0.00	
TOWER SETBACKS	NORTH	13.00 min.	
	EAST	40.00 min.	
	SOUTH	8.00 min.	
	WEST	6.00	

06. UNIT BREAKDOWN***				
RESIDENTIAL UNITS	Studio	0	0%	
	1 Bedroom	165	68%	
	2 Bedroom	69	29%	
	3 Bedroom	8	3%	
TOTAL		242	100%	

07. BARRIER FREE UNIT BREAKDOWN			
RESIDENTIAL UNITS	Studio	0	15% min
	1 Bedroom	25	15% min
	2 Bedroom	10	15% min
	3 Bedroom	1	15% min
TOTAL		36	

08. PARKING				
RESIDENTIAL	GF		0	
	P1	1.18	64	
	P2		106	(1 B.F.)
	P3		109	
VISITOR	P1	0.15	36	(1 B.F.)
RETAIL	GF	4.3/100M2	6	(1 B.F.)
	P1		3	
TOTAL			318	

09. BICYCLE PARKING	
RESIDENTIAL	16
VISITOR	30

10. BUILDING HEIGHT (STY)	
PODIUM	8 STY (27.0M)
TOWER	15 STY (53.4M)

11.AMENITY (m2)			
INDOOR	492		5.6M2/UNIT
OUTDOOR	863		
TOTAL	1355		1355

NOTES:
*coverage is based on net site area
** setbacks to main building face from new property line
*** actual unit count may vary depeding on market demand

COLE

SITE PLAN
PROPOSED MIXED-USE DEVELOPMENT
1381 LAKESHORE ROAD
CITY OF MISSISSAUGA

DATE:	JUNE 2020	PROJECT No.:	2019-0263
SCALE:	N.T.S.	FIGURE No.:	1-2

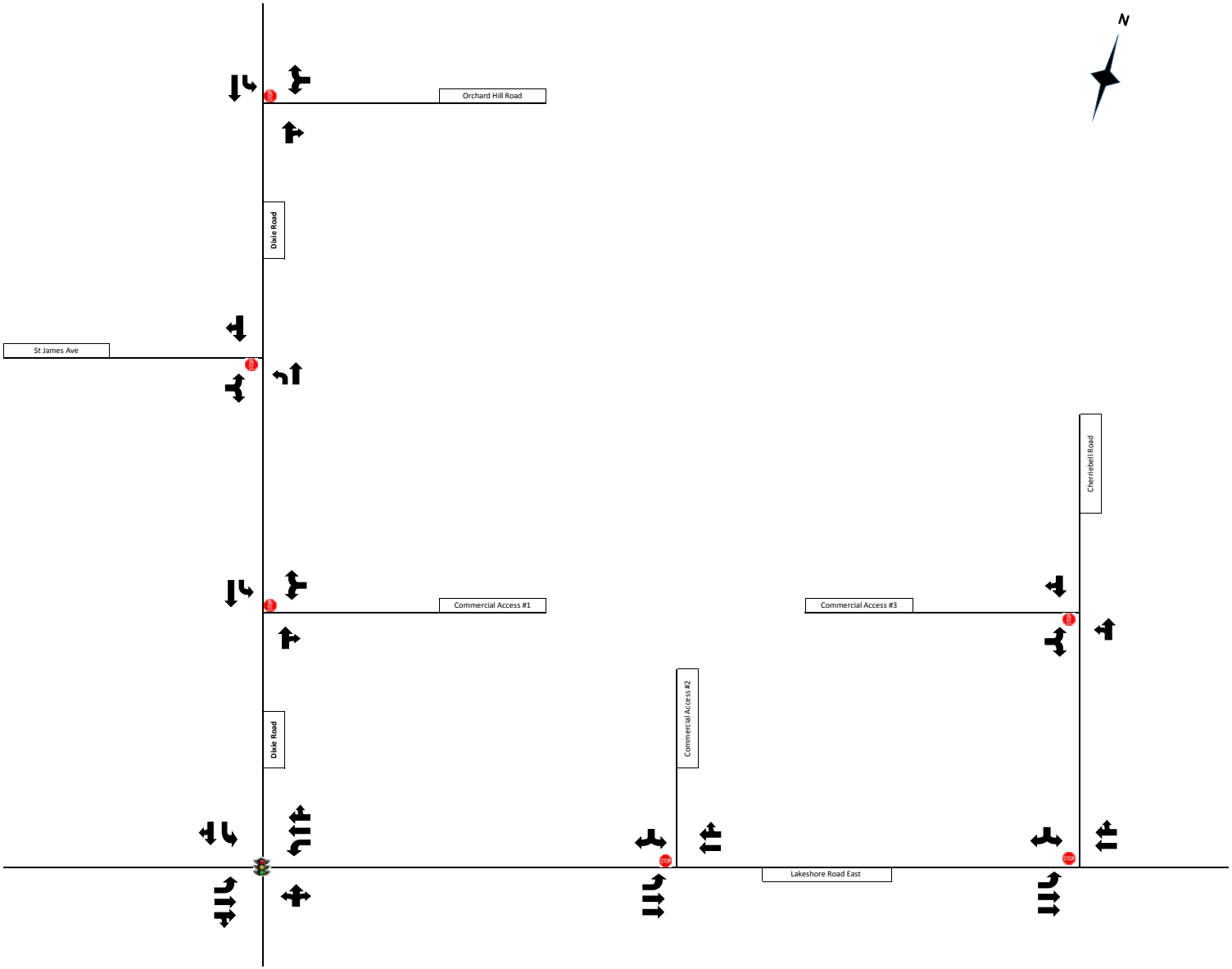


Figure 3-1: Study Intersections and Lane Configuration
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

COLE

Figure 3-2: Cycling Network
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

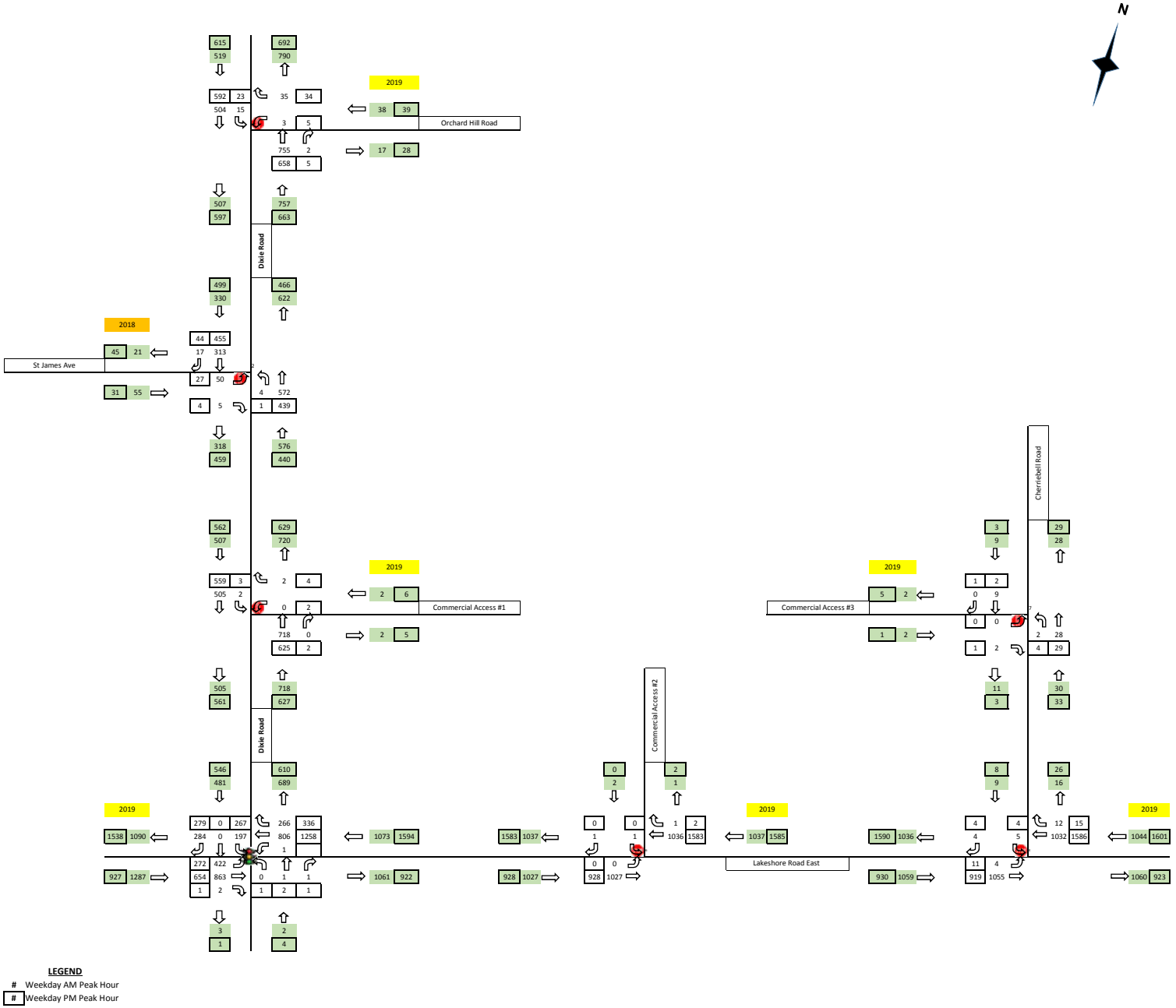


Figure 3-3: 2018-2019 Traffic Survey Volumes
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

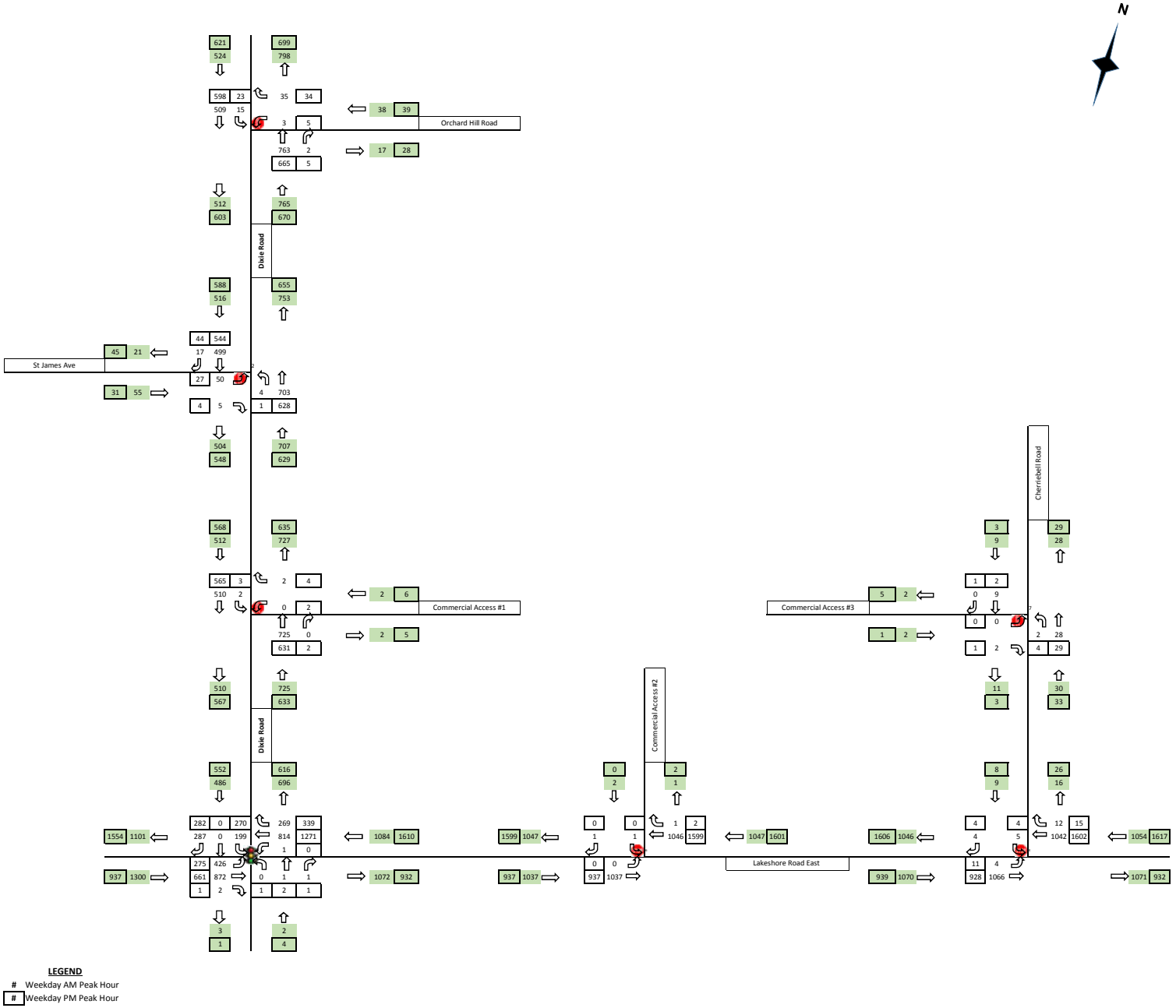


Figure 3-4: Existing (2020) Balanced Traffic Volumes
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

Figure 4-1: Future Background Development - Lakeview Village
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

COLE

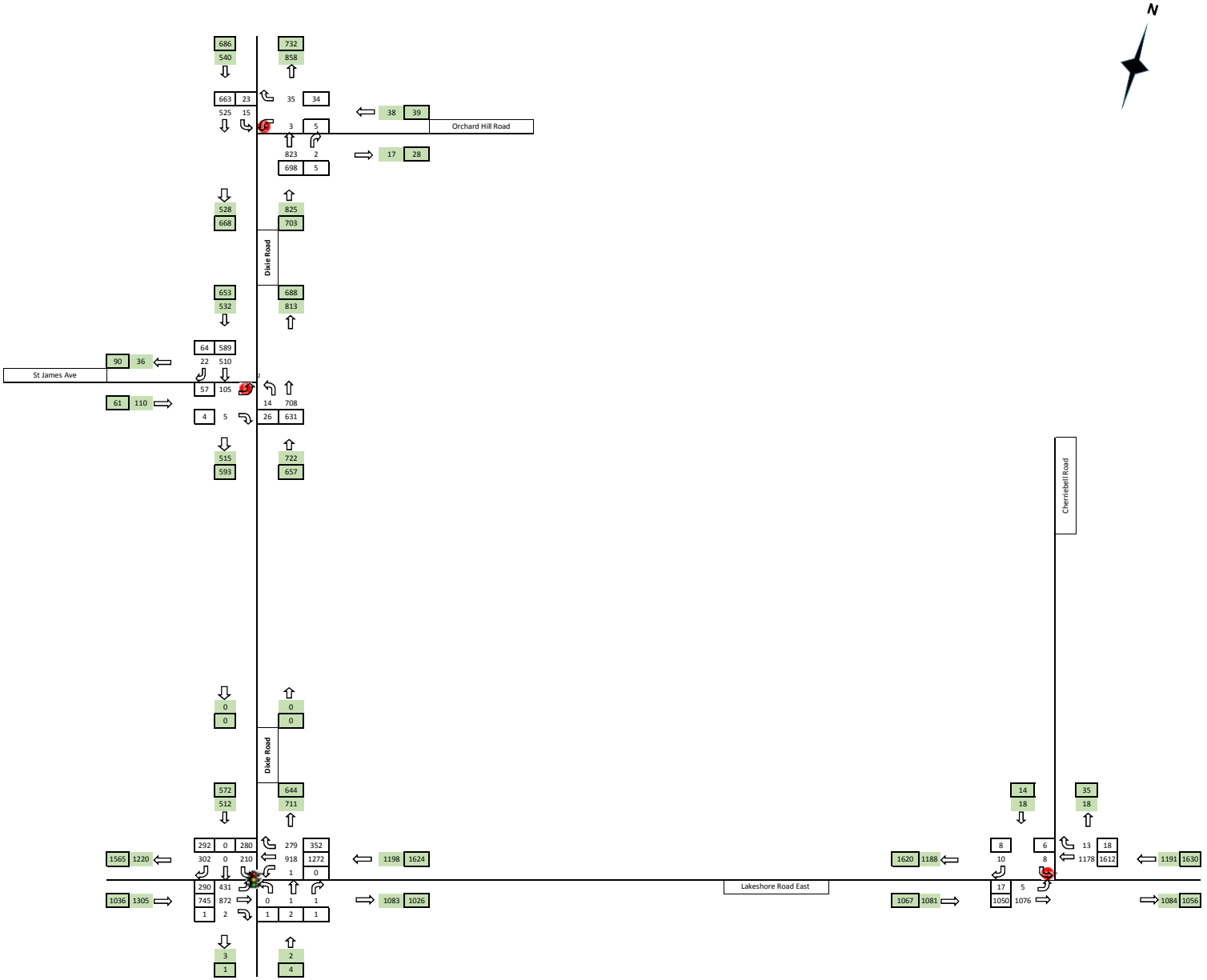


Figure 4-2: Future (2025) Background Traffic Volumes
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

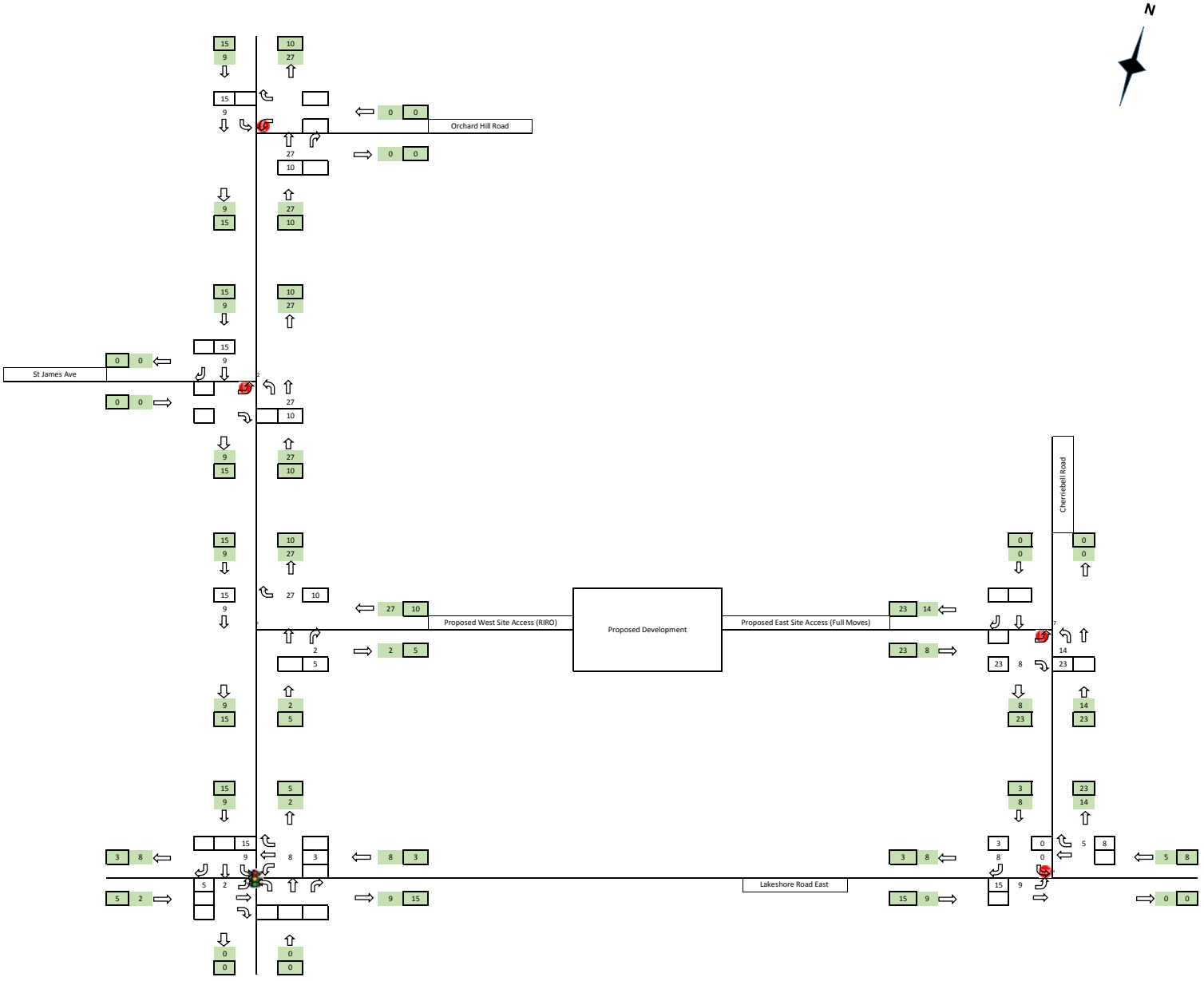


Figure 5-1: Site Generated Traffic Volumes
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

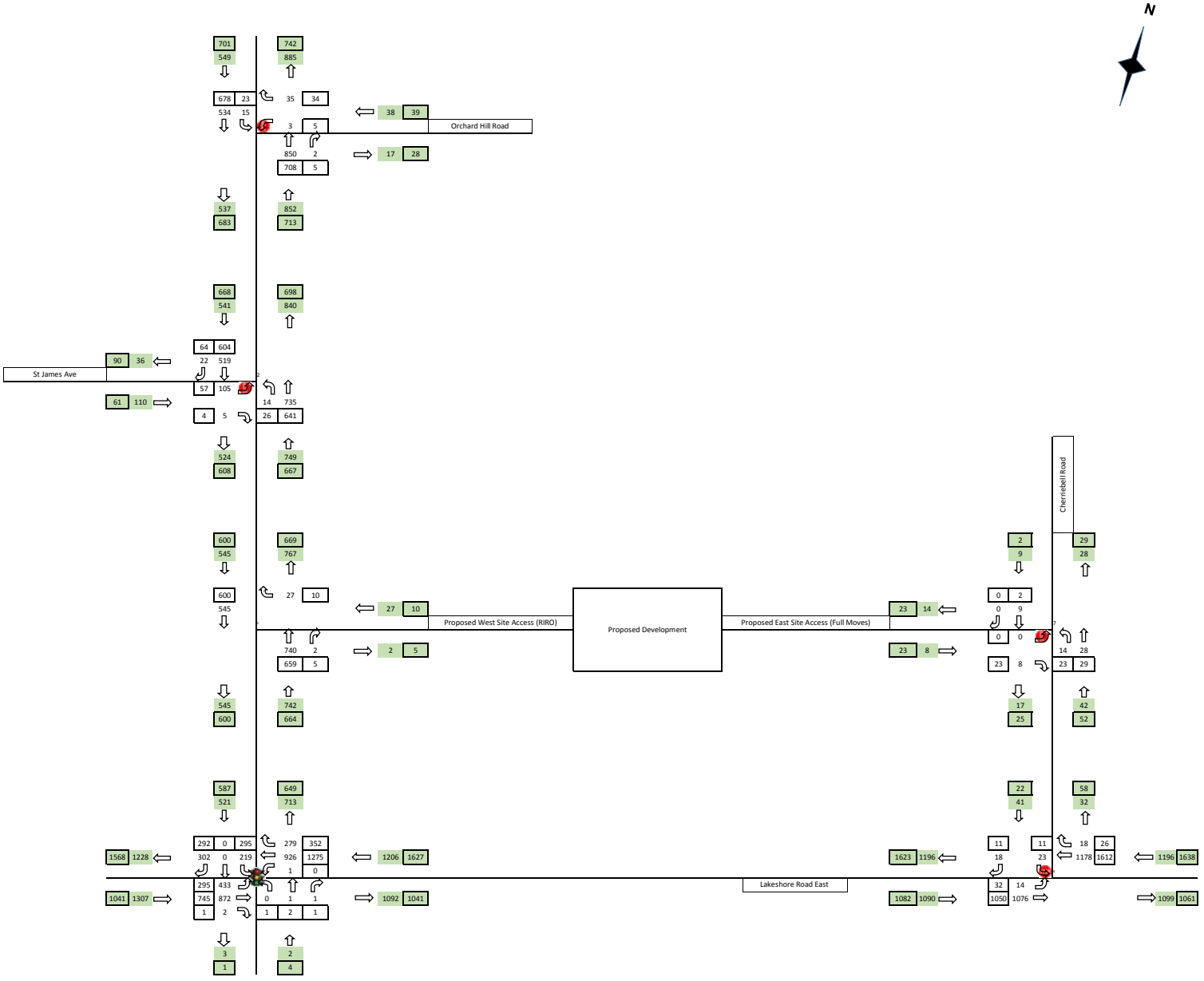
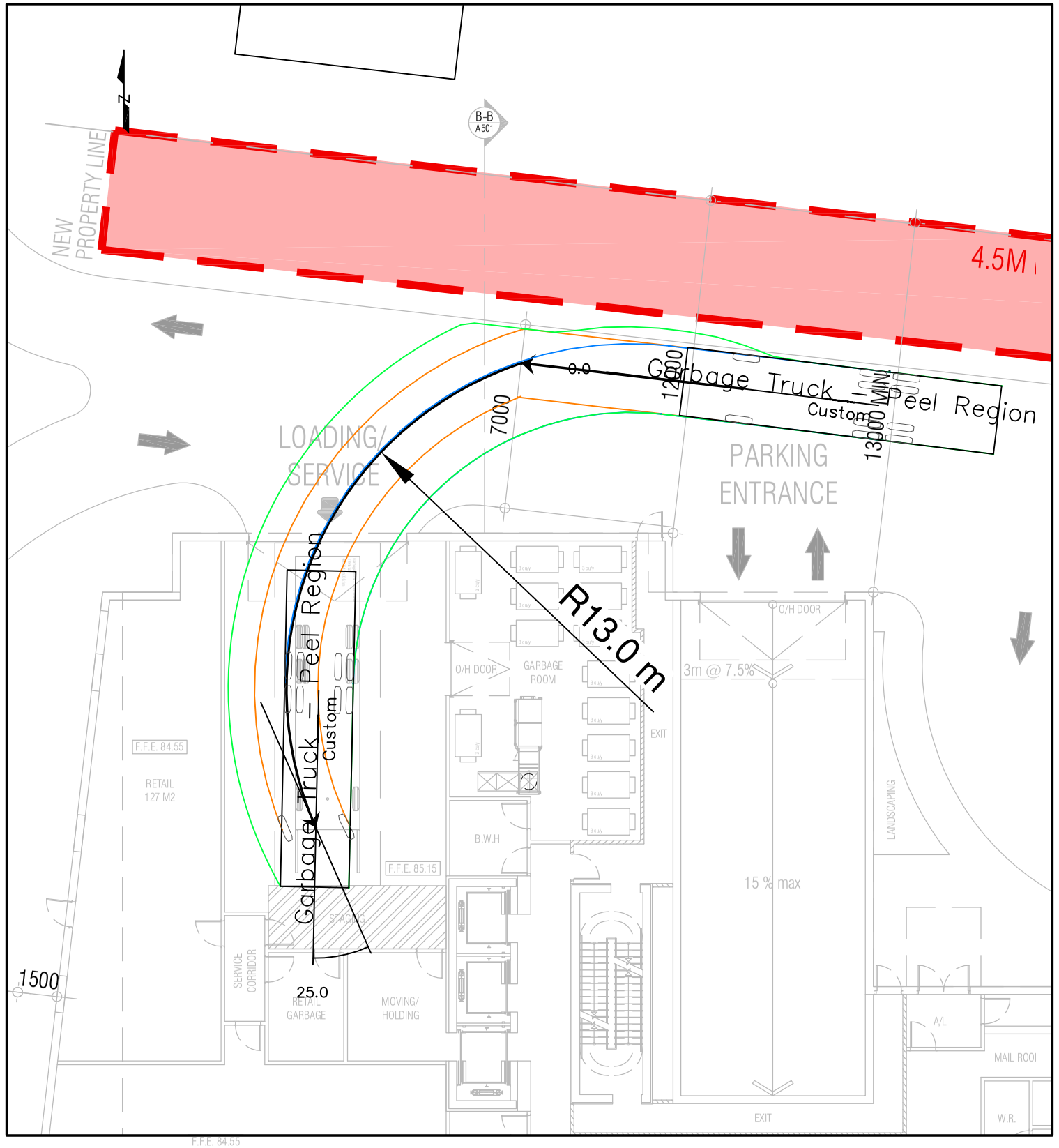
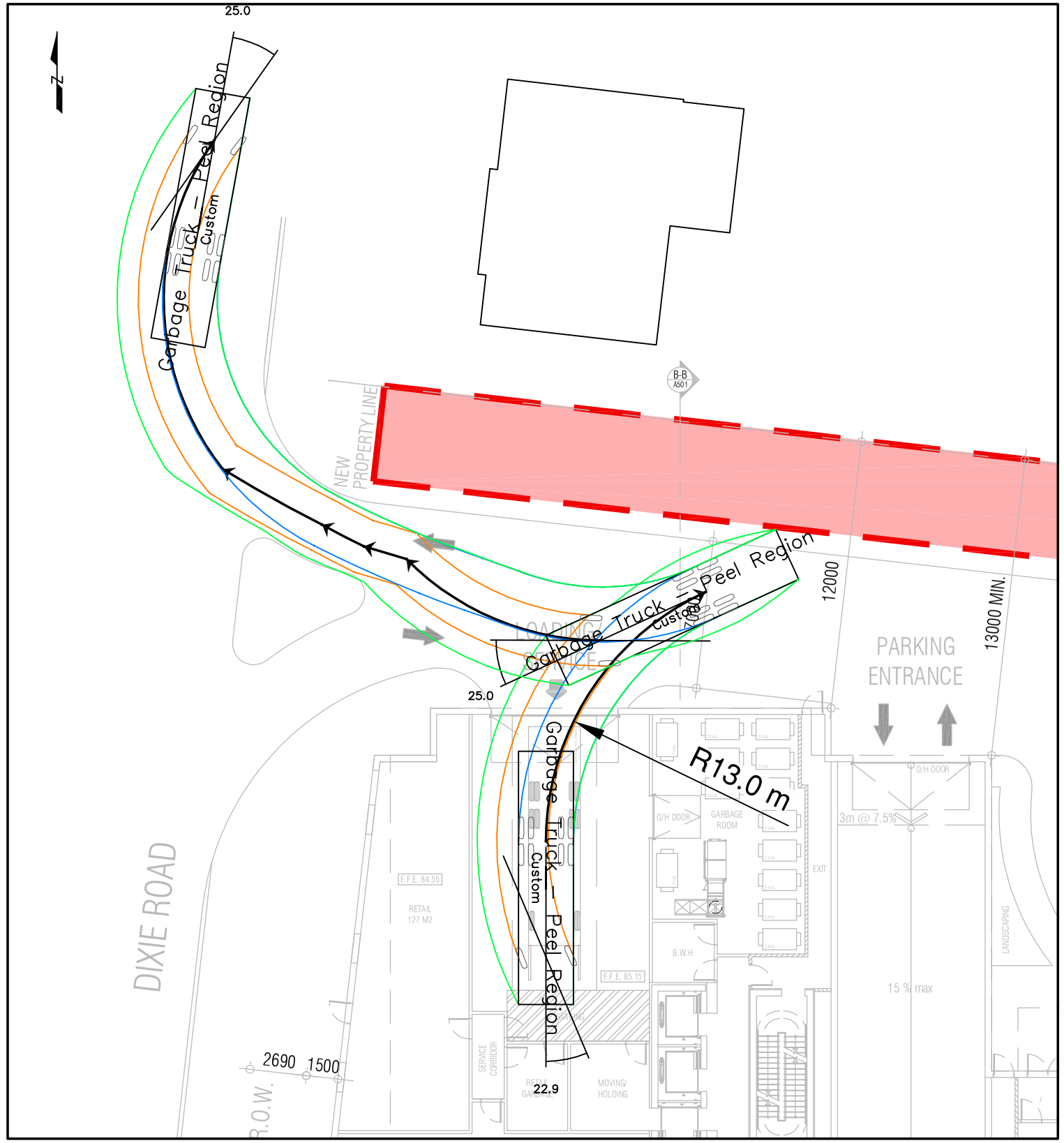


Figure 5-2: Future (2025) Total Traffic Volumes
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

EAST INGRESS



WEST EGRESS

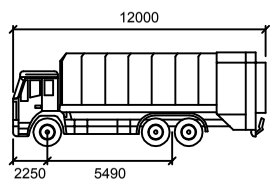


COLE

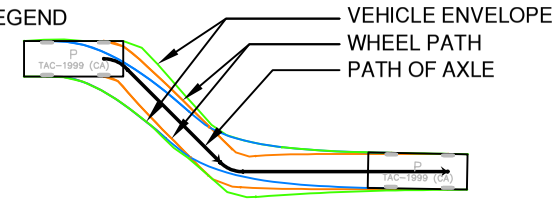
DESIGN VEHICLE

Garbage Truck - Peel Region

	mm
Width	: 2600
Track	: 2600
Lock to Lock Time	: 6.0
Steering Angle	: 28.3



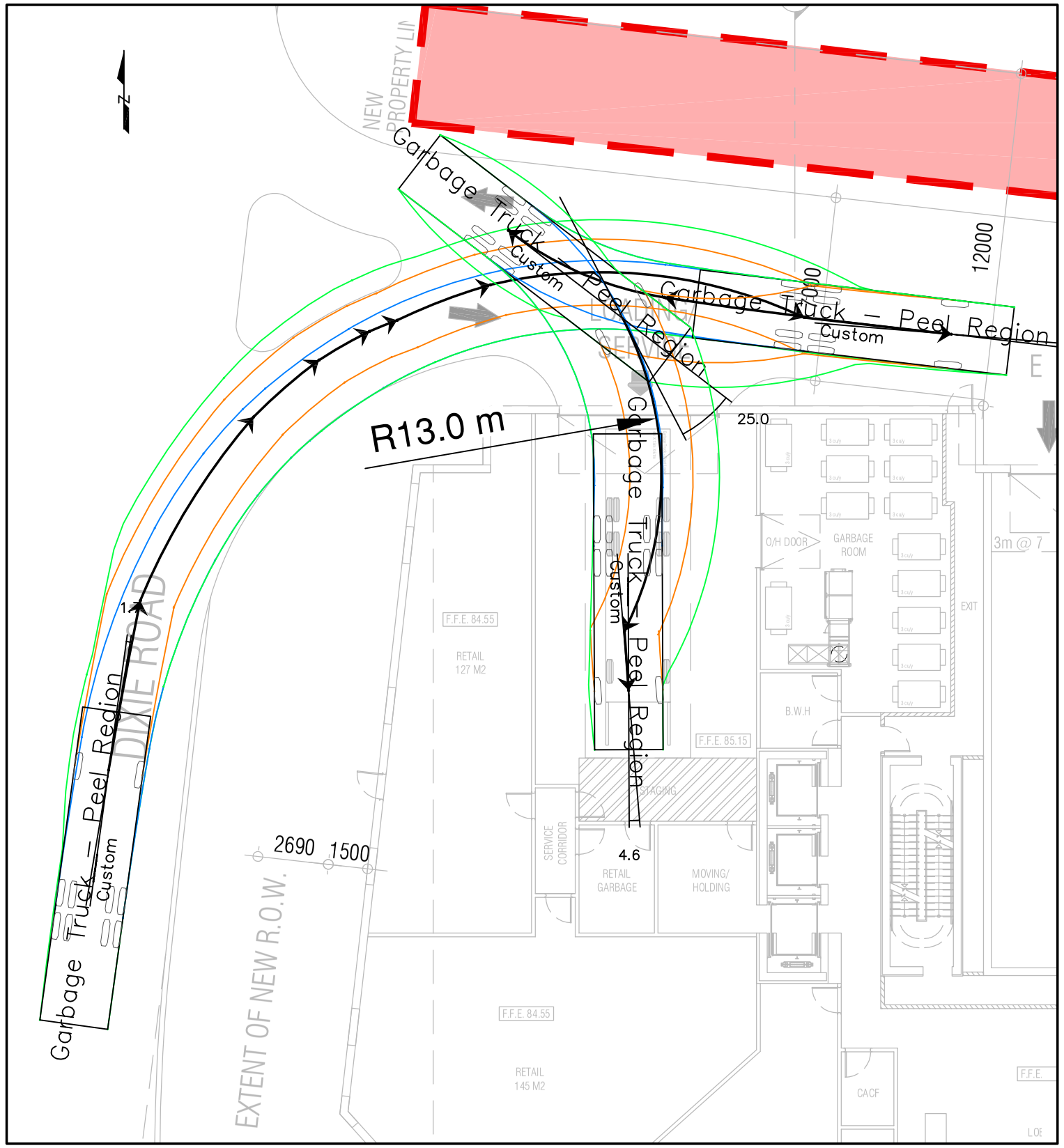
LEGEND



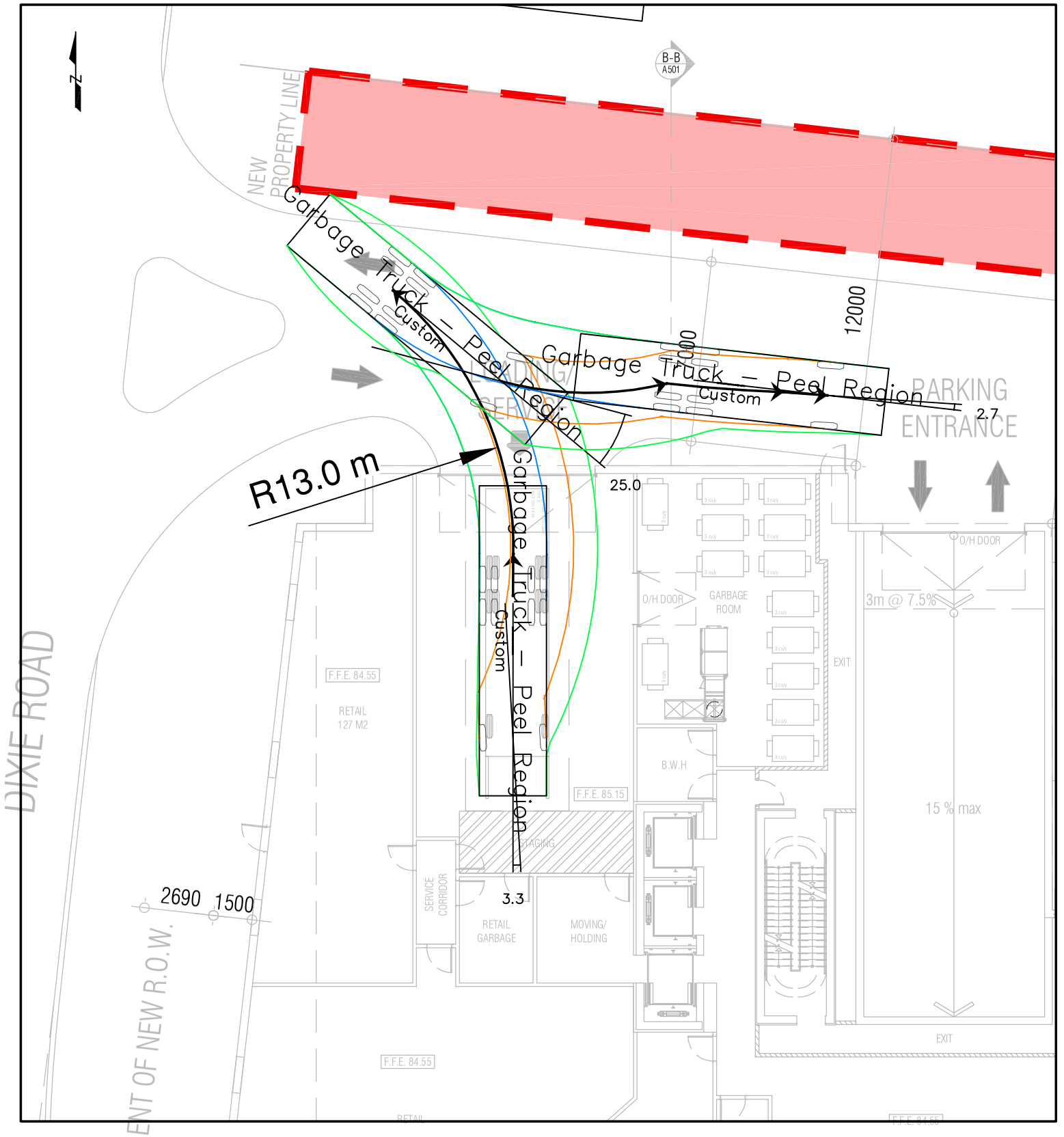
GARBAGE TRUCK MANEUVERING - EAST INGRESS / WEST EGRESS
PROPOSED MIXED-USE DEVELOPMENT
1381 LAKESHORE ROAD
CITY OF MISSISSAUGA

DATE:	MAY 2020	PROJECT No.:	2019-0263
SCALE:	N.T.S.	FIGURE No.:	6-1

WEST INGRESS



EAST EGRESS

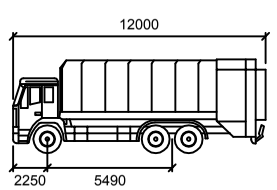


COLE

DESIGN VEHICLE

Garbage Truck - Peel Region

	mm
Width	: 2600
Track	: 2600
Lock to Lock Time	: 6.0
Steering Angle	: 28.3



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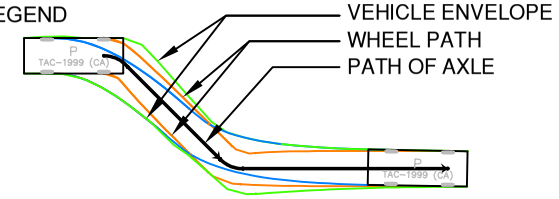
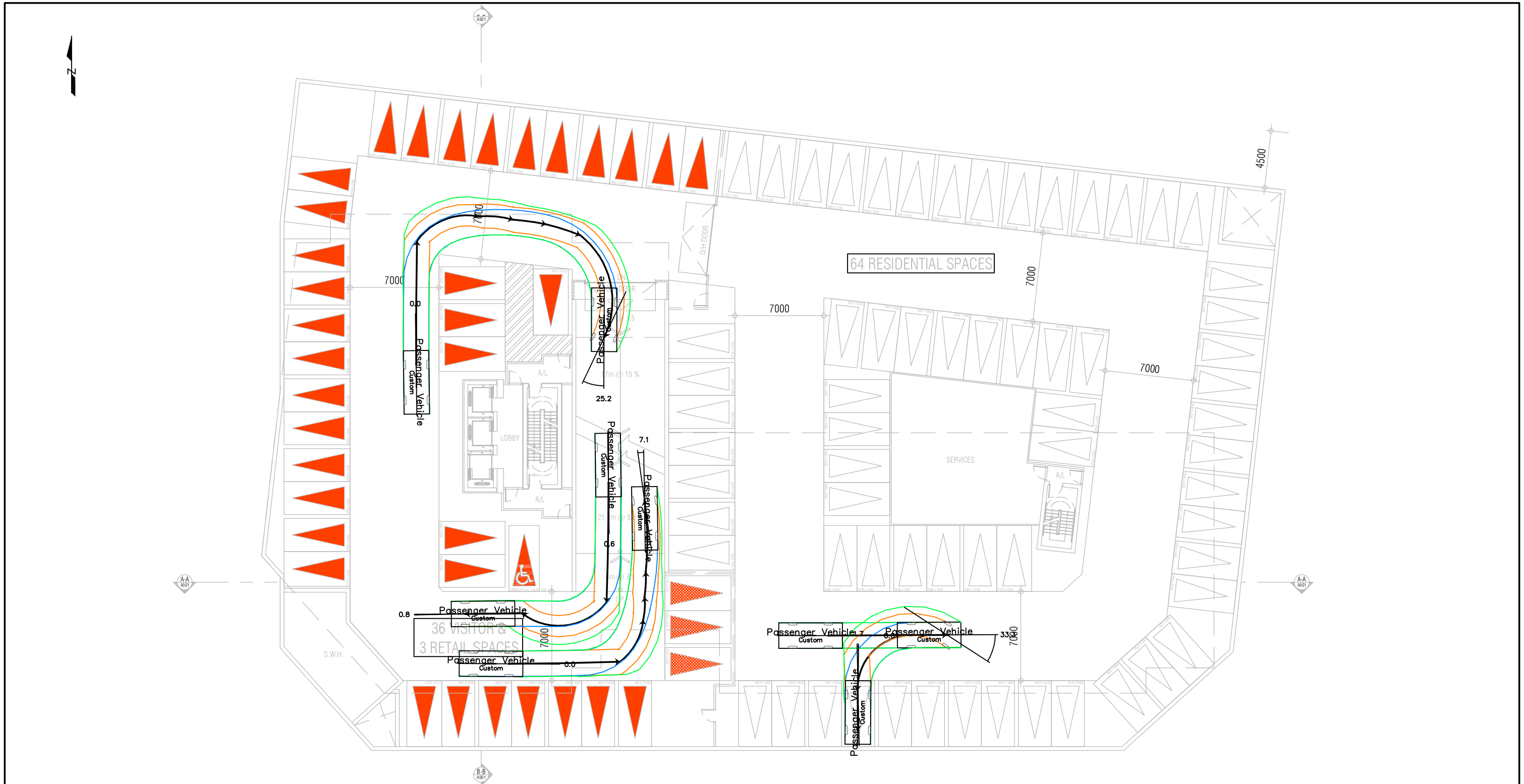


GARBAGE TRUCK MANEUVERING - WEST INGRESS / EAST EGRESS
PROPOSED MIXED-USE DEVELOPMENT
1381 LAKESHORE ROAD
CITY OF MISSISSAUGA

DATE:	MAY 2020	PROJECT No.:	2019-0263
SCALE:	N.T.S.	FIGURE No.:	6-2

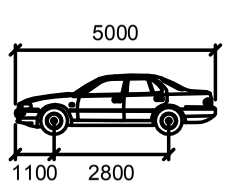


COLE

DESIGN VEHICLE

Passenger Vehicle

		mm
Width	:	2000
Track	:	2000
Lock to Lock Time	:	6.0
Steering Angle	:	36.2



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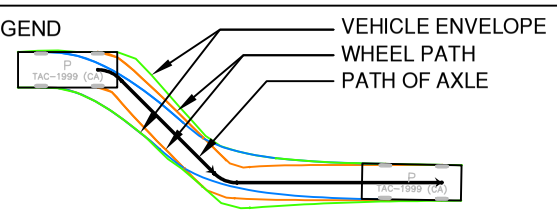
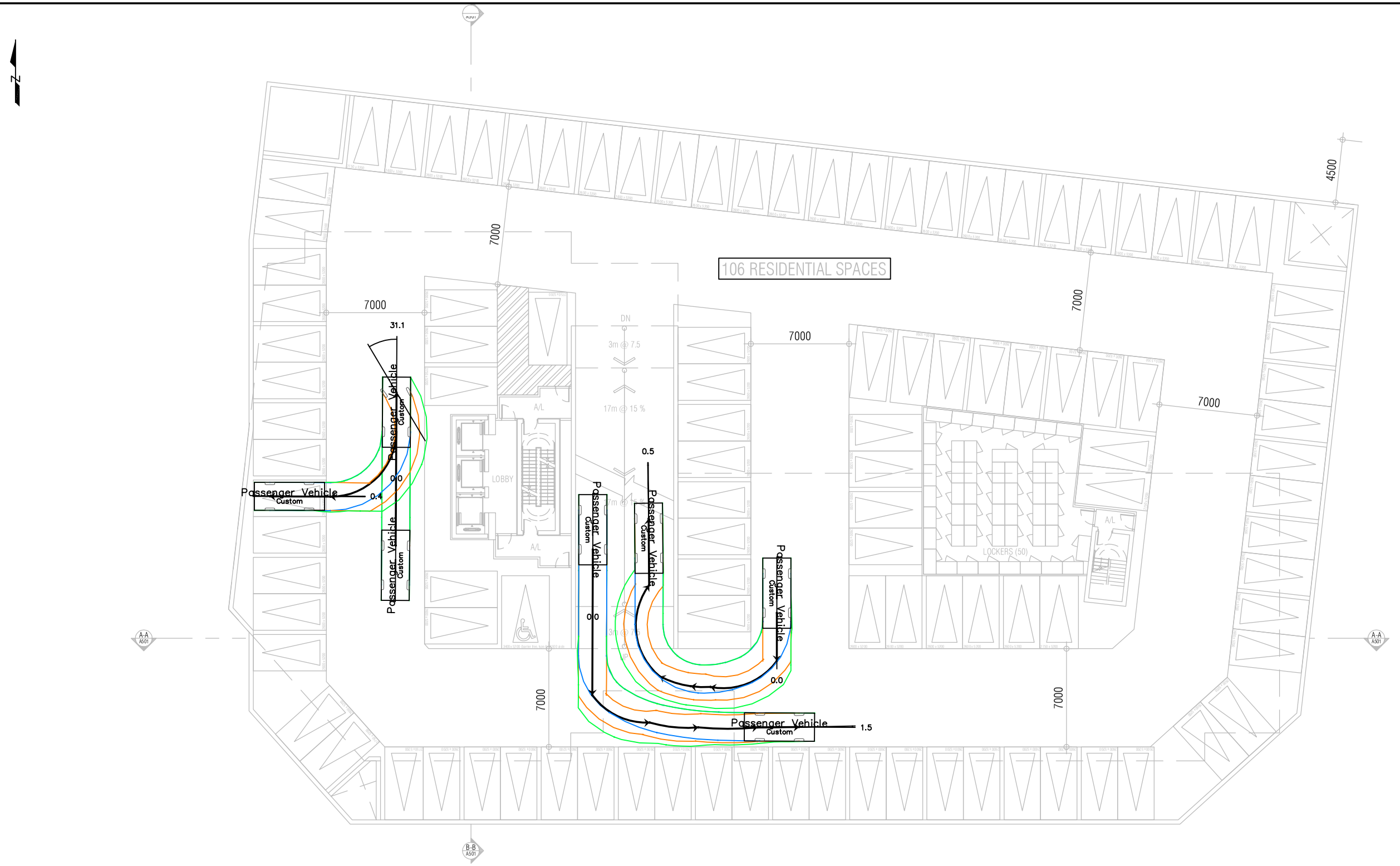


PASSENGER VEHICLE MANEUVERING - P1
PROPOSED MIXED-USE DEVELOPMENT
1381 LAKESHORE ROAD
CITY OF MISSISSAUGA

DATE:	MAY 2020	PROJECT No.:	2019-0263
SCALE:	N.T.S.	FIGURE No.:	6-3

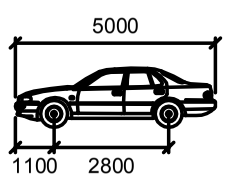


COLE

DESIGN VEHICLE

Passenger Vehicle

		mm
Width	:	2000
Track	:	2000
Lock to Lock Time	:	6.0
Steering Angle	:	36.2



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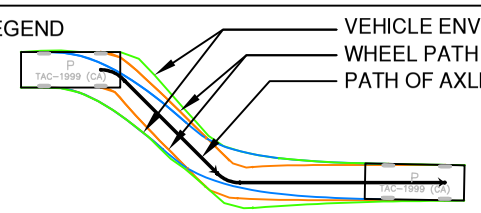
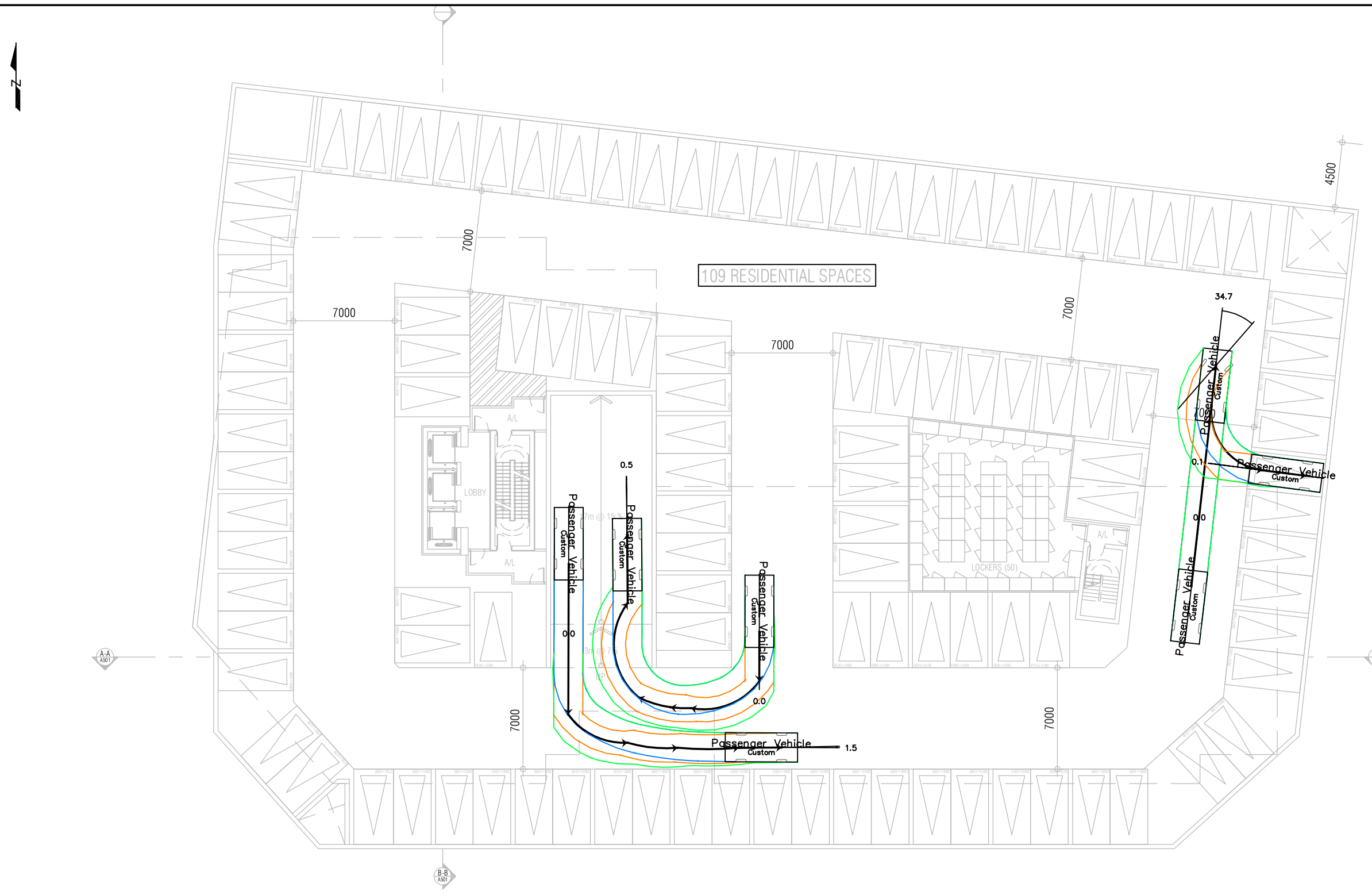


PASSENGER VEHICLE MANEUVERING - P2
PROPOSED MIXED-USE DEVELOPMENT
1381 LAKESHORE ROAD
CITY OF MISSISSAUGA

DATE:	MAY 2020	PROJECT No.:	2019-0263
SCALE:	N.T.S.	FIGURE No.:	6-4

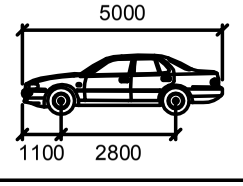


COLE

DESIGN VEHICLE

Passenger Vehicle

		mm
Width	:	2000
Track	:	2000
Lock to Lock Time	:	6.0
Steering Angle	:	36.2



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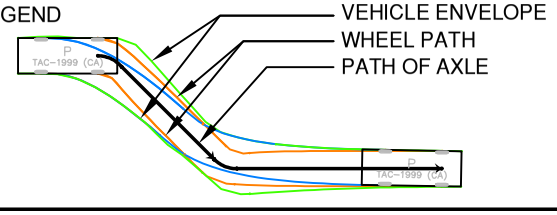
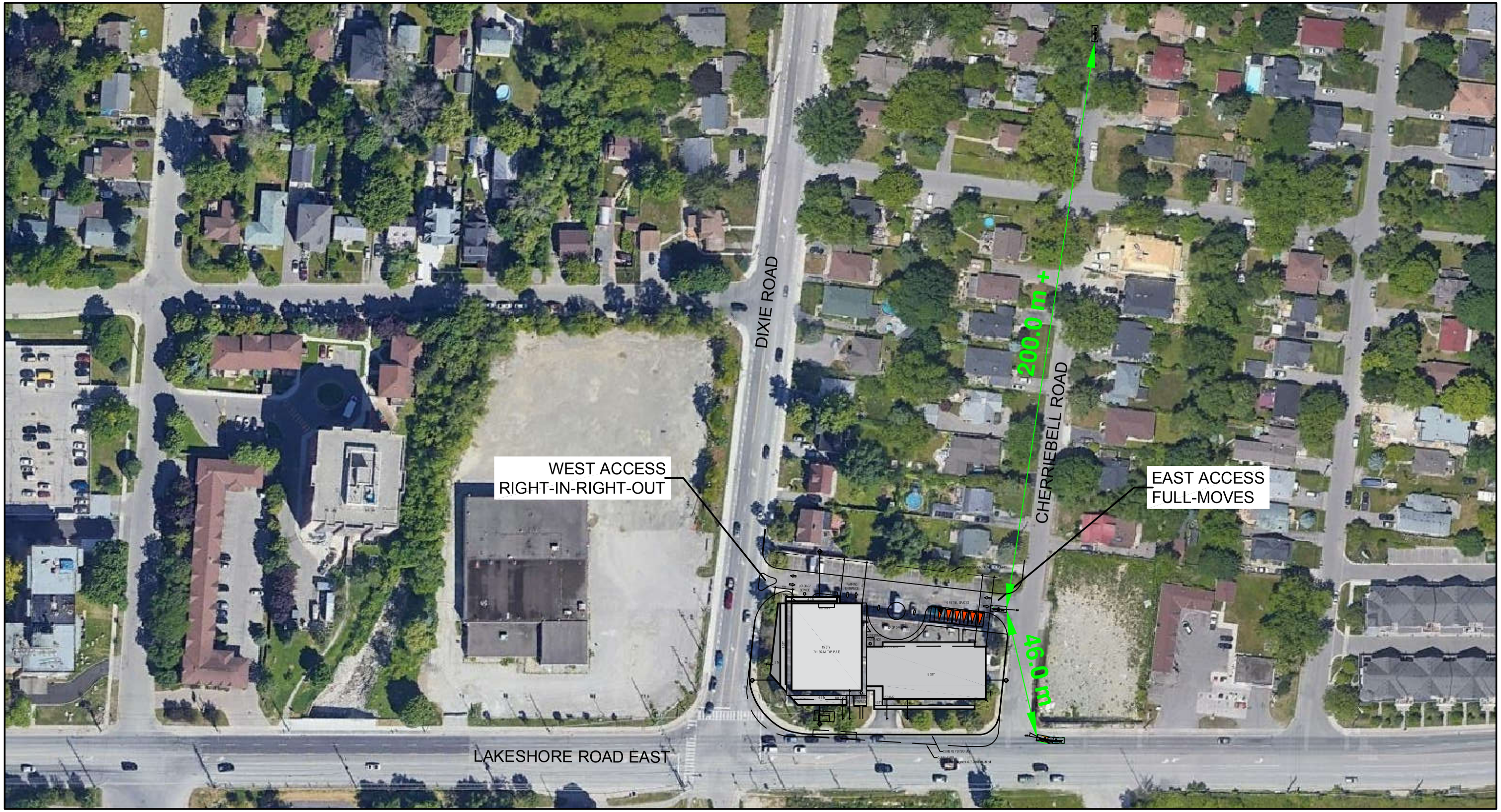


PASSENGER VEHICLE MANEUVERING - P3
PROPOSED MIXED-USE DEVELOPMENT
1381 LAKESHORE ROAD
CITY OF MISSISSAUGA

DATE:	MAY 2020	PROJECT No.:	2019-0263
SCALE:	N.T.S.	FIGURE No.:	6-5



COLE

SIGHTLINE ANALYSIS
PROPOSED MIXED-USE DEVELOPMENT
1381 LAKESHORE ROAD
CITY OF MISSISSAUGA

DATE:	JUNE 2020	PROJECT No.:	2019-0263
SCALE:	N.T.S.	FIGURE No.:	6-6

APPENDIX A
Correspondence with the City

June 27, 2019
Our Ref: 2019-0263

Gregory Borys, C.E.T.
City of Mississauga
300 City Centre Drive
Mississauga, ON L5C 3C1

Attention: Mr. Borys
Traffic Planning Technologist

Re: Terms of Reference for Traffic Impact and Parking Study
1381 Lakeshore Road East
City of Mississauga

Cole Engineering Group Ltd. (COLE) has been retained to undertake a Traffic Impact and Parking Study in support of an Official Plan Amendment, and Zoning By-law Amendment application for the above noted development located in the northwest quadrant of the Lakeshore Road East and Dixie Road intersection in the City of Mississauga (the "City").

The subject site consists of one (1) property, municipally known as 1381 Lakeshore Road West, in the City. Based on the attached preliminary Conceptual Site Plan, the intention is to provide a 12 story mixed-use building consisting of 175 residential units and 1,000 m^2 of neighborhood retail on the ground floor. Vehicular access to the subject site will be provided by full access via Cherriebell Road. A total of 193 parking spaces are provided on the preliminary Conceptual Site Plan.

If available we would like to obtain weekday AM (7:00 – 9:00), and PM (4:00 – 6:00) traffic turning movement counts and signal timing plans at the following key intersections:

- Lakeshore Road East and Dixie Road (Signalized);
- Lakeshore Road East and Cherriebell Road (Unsignalized); and,
- Dixie Road and Orchard Hill Road (Unsignalized).

Trip generation for the proposed development will be based on *Trip Generation Manual, 10th Edition* prepared by the Institute of Transportation Engineers (ITE) for Multifamily Housing (Mid-Rise) (land use code 221) and Shopping Center (land use code 820). We will evaluate the development in a five (5) and 10-year horizons from the full-built out year (2026 and 2036). AM and PM peak hours will be analyzed using the *Synchro 9.0* analysis package and *Highway Capacity Manual* procedures for the level of service, volume to capacity ratio, and queue analysis. A 15 m by 15 m daylight triangle at the intersection of Dixie Road and Lakeshore Road and a 7.5m by 7.5m daylight triangle at the northwest corner of

COLE ENGINEERING GROUP LTD.
HEAD OFFICE
70 Valleywood Drive, Markham, ON Canada L3R 4T5
T. 905 940 6161 | 416 987 6161 F. 905 940 2064
www.coleengineering.ca

Lakeshore Road and Cherriebell Road will be provided. Using the information contained in the 2016 Transportation Tomorrow Survey (TTS) for zones 3643, 3649, 3648 and 3642 the modes of transportation within the study area are provided in **Table 1** and **Table 2**.

Table 1 Non – Auto Modal Split Calculation (AM Peak Hour)

Primary Travel Mode	TTS Zones					
	3642	3643	3648	3649	sum	Percentage
Transit excluding GO rail	131	125	138	95	489	5%
Cycle	38	0	0	0	38	0%
Auto driver	1496	1746	2185	2944	8371	77%
GO rail only	49	138	164	143	494	5%
Joint GO rail and local transit	102	16	19	75	212	2%
Auto passenger	126	122	98	296	642	6%
Taxi passenger	0	12	0	0	12	0%
Walk	31	146	161	230	568	5%
Total	1973	2305	2765	3783	10826	100%
Non-Auto (AM Peak Hour)						12%

Table 2 Non-Auto Modal Split Calculation (PM Peak Hour)

Primary Travel Mode	TTS Zones					
	3642	3643	3648	3649	sum	Percentage
Transit excluding GO rail	146	91	162	173	572	4%
Auto driver	1661	1807	2946	3916	10330	79%
GO rail only	82	149	133	187	551	4%
Joint GO rail and local transit	78	28	32	68	206	2%
Auto passenger	195	214	363	342	1114	8%
Taxi passenger	0	12	0	0	12	0%
Paid rideshare	40	0	11	0	51	0%
Walk	39	49	77	109	274	2%
Total	2241	2350	3724	4795	13110	100%
Non-Auto (PM Peak Hour)						8%

The subject zone and adjacent TTS Zones have an existing non-auto modal split of approximately 12% and 8% during the AM and PM peak hours, respectively. We will apply appropriate transit mode split reduction to the residential trip generation calculations.

The trip distribution will be based on the latest 2016 Transportation Tomorrow Survey (TTS) and existing traffic patterns.

Please provide traffic growth rates for Dixie Road and Lakeshore Road East in the vicinity of the subject site.

In our study, we are considering the following developments in **Table 3** as future background developments in the vicinity of the subject site.

Table 3 Future Background Developments

Location	Land Use
1345 Lakeshore Road East	4-12 Storeys, Condominium apartments, townhouses and 308 m^2 commercial space (Rezoning Application In process)
1407 Lakeshore Road East	Stacked Townhouses proposal with 24 residential units and 139 m2 retail space (Site Plan application in process)

If there are any traffic studies available for the above sites, we would like to obtain the associated site traffic figures.

The proposed vehicle and bicycle supply for residential uses will be compared to the requirements per the City Zoning By-laws. Accessible and secure short term and long term bicycle storage facilities will be provided as per **Table 4**.

Table 4 Bicycle Parking Requirements

Type	Long Term (space/100m2)	Short Term (space/100m2)
Residential	0.70	0.08
Retail	0.10	0.25

A parking utilization study will be provided with the TIPS to justify the parking reduction. Parking surveys will be conducted two days per week for two consecutive weeks. The survey will be conducted from 6 pm to 12 am in 30 minute intervals for existing parking demand (occupied/unoccupied space) during weekdays (Tuesday, Wednesday or Thursday).

The internal site circulation and the functionality of the fire route/emergency service access, loading, and parking activities will be analyzed using *AutoTurn 10*, to confirm the turning radius requirements and site circulation for both passenger and heavy vehicles related to the proposed development. A sight line analysis will be provided about ingress and egress as per the TAC Guidelines.

We would also like to know if there any planned road improvements within the next five (5) years in the subject area.

We trust this terms of reference is to your satisfaction, and should you have any questions or comments, or require a meeting to discuss other matters; please do not hesitate to contact the undersigned. We thank you for your assistance.

Yours truly,

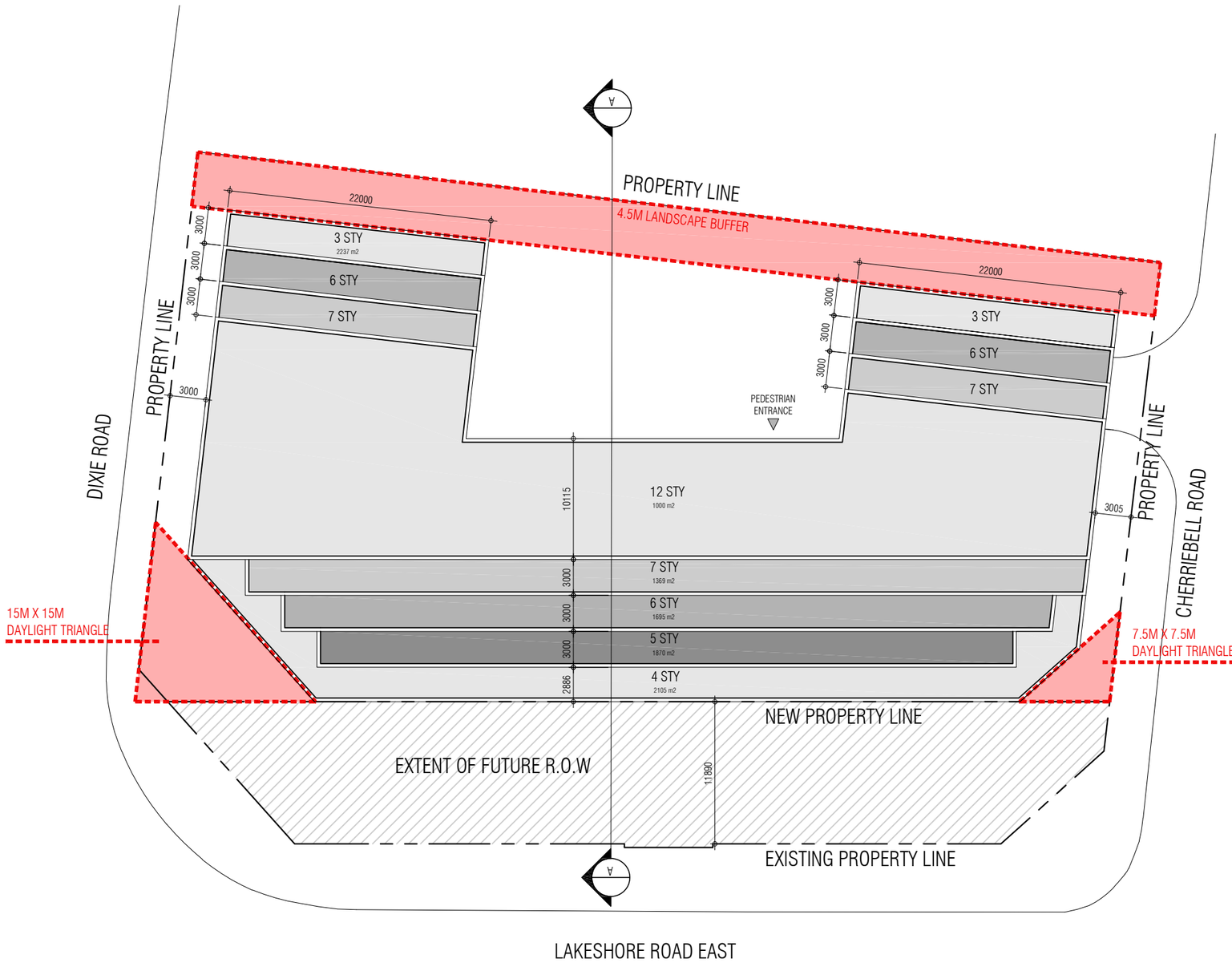
COLE ENGINEERING GROUP LTD.

Kim Nystrom, L.E.L., C.E.T.
Principal
Urban Development, Traffic

Sevim Coskun, C.E.T.
Senior Transportation Analyst
Urban Development, Traffic

SC:

Encls. Conceptual Site Plan, dated March 27, 2019



PROJECT STATISTICS	MID-RISE
SITE AREA	3,363m2
G.C.A (above grade)	18,294m2
F.S.I (based on G.C.A)	5.44
UNIT COUNT	175
PARKING (based on 2 lvls)	1.1/U 193
BLDG HEIGHT (STY)	12

SITE PLAN CONCEPT – OPTION 02

▪CITY PARK HOMES ▪Lakeshore rd E & Dixie Rd ▪1629.18 ▪Mar. 27, 2019

1:400

GRAZIANI + CORAZZA ARCHITECTS

Dumitru Liubeznii

From: Teresa Kerr <Teresa.Kerr@mississauga.ca>
Sent: Monday, October 28, 2019 5:05 PM
To: Sevim Coskun
Cc: David Ferro; Kim Nystrom; Greg Borys; Anthony Fotino; Teresa Kerr
Subject: RE: 2019-0263 1381 Lakeshore Rd E Terms of Reference - Parking Utilization Study

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Sevim,

Thank you for the information regarding your plans to conduct a parking utilization study for the above noted proposal. The information provided indicates that the proposal is for a 12-storey mixed-use building consisting of 175 residential units and 1,000 m^2 of retail on the ground floor. Also from the information provided it appears that the study is being conducted for the purpose of justifying reduced parking for the resident component of the proposal.

Staff support the two proxy locations; 25 Agnes St and 2929 Aquitaine Ave. Please note that there appears to be a discrepancy with regard to the number of existing units at 2929 Aquitaine Ave. Our records indicate that there are 176 units on the site vs 554 units noted in your information.

Staff support the general methodology proposed, conducting the surveys two days/week for two consecutive weeks, but would like to suggest minor revisions to the days and times. For the first week we suggest surveying a Sunday and Monday evening; for the second week, resurvey the day which yielded the greatest demand from the first week, and an additional day such as Tuesday or Wednesday. We also suggest shifting the survey time from 6 pm to 12 am, to 7 pm to 1 am.

Further, the proposed parking standards should be per number of bedrooms. To help with this analysis the following information on the survey sites is provided:
25 Agnes St – 95 one bedroom units, 2 two bedroom units.
2929 Aquitaine Ave – 22 one bedroom units, 88 two bedroom units, 66 two bedroom and den units.

Should you have any questions please call me.

Teresa

MISSISSAUGA

Teresa Kerr
Planner, Community Relations
T 905-615-3200 ext. 5521
teresa.kerr@mississauga.ca

City of Mississauga | Planning and Building Department,
City Planning Strategies

From: Sevim Coskun [mailto:SCoskun@coleengineering.ca]
Sent: Wednesday, October 23, 2019 2:54 PM
To: Teresa Kerr

Cc: David Ferro; Kim Nystrom; Greg Borys
Subject: FW: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Hi Teresa,

It was nice talking with you over the phone. Further to our conversation, please find the attached Terms of Reference for the proposed 1381 Lakeshore Road mixed-use development.

As stated in our Terms of Reference, on page 3, COLE will be conducting a parking utilization study to justify the parking reduction. Parking surveys will be conducted two days per week for two consecutive weeks. The survey will be conducted from 6 pm to 12 am in 30-minute intervals for existing parking demand (occupied/unoccupied space) during weekdays (Tuesday, Wednesday or Thursday).

We have contacted condo cooperations in the City of Mississauga if they would allow us to conduct a parking survey on their property, so we can get a better idea of parking demands at similar condominium developments, and find out if it is feasible to provide fewer parking spaces for the proposed development. We have the below list that allowed us to conduct the survey. Please kindly review the list and let us know that we can go ahead get the counts done.

"Waterford" at 25 Agnes St, Mississauga	102 Units	Mereka Properties (2000) Ltd
2929 Aquitaine Ave, Mississauga	554 Units	360 Community Management Ltd.

Regards,

Sevim Coskun, C.E.T.
Senior Transportation Analyst, Urban Development
Industrial, Commercial, Institutional & Traffic

Cole Engineering Group Ltd.
151 Superior Boulevard, Unit 1 & 2, Mississauga, ON L5T 2L1
T: 905-754-8060 Ext: 618 Tor. Line: 416-987-6161
F: 905-364-6162
E: scoskun@ColeEngineering.ca
www.ColeEngineering.ca

From: David Ferro [mailto:David.Ferro@mississauga.ca]
Sent: October-23-19 1:30 PM
To: Sevim Coskun <SCoskun@coleengineering.ca>
Subject: RE: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Hi Sevim, please contact Teresa Kerr x 5521.

Thanks

David

David Ferro **BURPL MCIP RPP**
Development Planner – Mississauga South
City of Mississauga | Planning and Building Department,
Development and Design

From: David Ferro
Sent: October 23, 2019 12:00 PM
To: 'Sevim Coskun'
Cc: Greg Borys
Subject: RE: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Hi Sevim,

I am still in the process of confirming the appropriateness of those sites with our Policy Division whom review the PUS reports. You can come in an any time to review the site plan at 1041 Lakeshore Road East.

Thanks

David

David Ferro **BURPL MCIP RPP**
Development Planner – Mississauga South
City of Mississauga | Planning and Building Department,
Development and Design

From: Sevim Coskun [mailto:SCoskun@coleengineering.ca]
Sent: October 23, 2019 11:51 AM
To: David Ferro
Cc: Greg Borys
Subject: RE: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Hi David,

I am following up with the below email. I was wondering if you had a chance look into and have any questions or feedback. We would like to go ahead and get the proxy survey completed.

Looking to hearing from you.

Regards,

Sevim Coskun, C.E.T.
Senior Transportation Analyst, Urban Development
Industrial, Commercial, Institutional & Traffic

Cole Engineering Group Ltd.
151 Superior Boulevard, Unit 1 & 2, Mississauga, ON L5T 2L1
T: 905-754-8060 Ext: 618 Tor. Line: 416-987-6161
F: 905-364-6162
E: scoskun@ColeEngineering.ca

www.ColeEngineering.ca

From: Sevim Coskun
Sent: October-18-19 4:30 PM
To: 'David Ferro' <David.Ferro@mississauga.ca>
Cc: Greg Borys <Gregory.Borys@mississauga.ca>
Subject: RE: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Hi David,

I hope this email finds you well and thank you for your reply and for sending through the concept plan and TIS. Yes, I would like to come in and take a look at the latest concept plan.

Also, as stated in our Terms of Reference, COLE will be conducting a parking utilization study to justify the parking reduction. Parking surveys will be conducted two days per week for two consecutive weeks. The survey will be conducted from 6 pm to 12 am in 30-minute intervals for existing parking demand (occupied/unoccupied space) during weekdays (Tuesday, Wednesday or Thursday).

We have contacted condo cooperation in the City of Mississauga if they would allow us to conduct a parking survey on their property, so we can get a better idea of parking demands at similar condominium developments, and find out if it is feasible to provide fewer parking spaces for proposed development. We have the below list that allowed us to conduct the survey. Please kindly review the list and let us know that we can go ahead get the counts done.

"Waterford" at 25 Agnes St, Mississauga	102 Units	Mereka Propertie
2929 Aquitaine Ave, Mississauga	554 Units	360 Community M

Regards,

Sevim Coskun, C.E.T.
Senior Transportation Analyst, Urban Development
Industrial, Commercial, Institutional & Traffic

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T: 905-754-8060 Ext: 618 Tor. Line: 416-987-6161
F: 905-364-6162
E: scoskun@ColeEngineering.ca
www.ColeEngineering.ca

From: David Ferro [mailto:David.Ferro@mississauga.ca]
Sent: October-04-19 9:43 AM
To: Sevim Coskun <SCoskun@coleengineering.ca>
Cc: Greg Borys <Gregory.Borys@mississauga.ca>
Subject: FW: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Hi Sevim,

I cant provide comments on a TIS as im not a traffic engineer. I see that you have Greg from our Traffic Planning section cc'd on this email. I will defer to him.

For 1345 Lakeshore Road East – attached is the most up to date concept plan and TIS.

For 1407 Lakeshore Road East – the proposed development is going through a site plan and as such, no TIS was required. The application has been inactive for 3 years and we recently learned that there is a new purchaser for the site, which means the proposal will most likely change. I only have hard copies of the current Site Plan so you will have to come in and view them.

Thanks

David

David Ferro **BURPL MCIP RPP**
Development Planner – Mississauga South
City of Mississauga | Planning and Building Department,
Development and Design

MISSISSAUGA

From: Sevim Coskun [mailto:SCoskun@coleengineering.ca]
Sent: October 3, 2019 5:29 PM
To: David Ferro
Cc: Kim Nystrom; Greg Borys
Subject: RE: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Hi David,

I hope this email finds you well.

Cole has been retained to undertake a Traffic Impact and Parking Study in support of an Official Plan Amendment, and Zoning By-law Amendment application for the above-noted development located in the northwest quadrant of the Lakeshore Road East and Dixie Road intersection in the City.

I am writing to obtain your feedback regarding the attached Terms of Reference for the proposed site.

Also, I would like to come in and review the associated Traffic Impact Studies and Site Plans for 1345 Lakeshore Road East and 1407 Lakeshore Road East which will be the future background developments to the 1381 Lakeshore Road East site.

Looking to hear from you.

Regards,

Sevim Coskun, C.E.T.
Senior Transportation Analyst, Urban Development
Industrial, Commercial, Institutional & Traffic

Cole Engineering Group Ltd.
151 Superior Boulevard, Unit 1 & 2, Mississauga, ON L5T 2L1
T: 905-754-8060 Ext: 618 Tor. Line: 416-987-6161
F: 905-364-6162
E: scoskun@ColeEngineering.ca
www.ColeEngineering.ca

From: Greg Borys [mailto:Gregory.Borys@mississauga.ca]
Sent: July-05-19 2:56 PM
To: Sevim Coskun <SCoskun@coleengineering.ca>
Cc: Kim Nystrom <KNystrom@coleengineering.ca>
Subject: RE: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Good afternoon Sevim,

Thank you for providing the Terms of Reference for the proposed development at Lakeshore Road East. Please find some additional comments below:

- The historical AADT data and Turning Movement Count can be obtained from William Wright (William.Wright@mississauga.ca, Ext. 3221). If the data is older than 2 years, than consultant is responsible to conduct the latest counts;
- Please contact Tyler Xuereb <tyler.xuereb@mississauga.ca> to confirm growth rates;
- The signal timing plan for signalized intersections can be obtained from Jim Kartsomaniz (Jim.Kartsomanis@mississauga.ca, Ext. 3964)
- Internal Road System Driveway Locations - Please include the truck turning templates for the proposed Car Wash/Jiffy Lube and Tanker Trucks;
- Safety & Operational Analysis required under the TIS, site line analysis to be included;
- Any Site Plan that will be included in the TIS will require to show required land dedication and sight triangles;
- TIS to include Lakeshore Connecting Communities, City Council endorsed Transportation Master Plan;
- Please review Mississauga TIS Guidelines (http://www.mississauga.ca/file/COM/Traffic-Impact-Study-Guidelines.pdf)

Note: Parking Utilization Study ToR will require to be reviewed and approved by the Planner on file, the study will not be reviewed by this department.

Additional information: I will check if any previous TIS have been complete for the proposed developments as outlined in Table 3.

If you have any other questions or concerns please feel free to contact me.

Regards,

Gregory Borys, C.E.T.
Traffic Planning Technologist, Transportation & Works
T 905-615-3200 ext.3597
gregory.borys@mississauga.ca

City of Mississauga | Transportation and Works Department
Transportation and Infrastructure Planning Division

Please consider the environment before printing.

From: Sevim Coskun [mailto:SCoskun@coleengineering.ca]
Sent: 2019/06/27 3:14 PM
To: Greg Borys
Cc: Kim Nystrom
Subject: 2019-0263 1381 Lakeshore Rd E Terms of Reference (TIPS)

Hi Gregory,

Please find the attached Terms of Reference for the proposed 1381 Lakeshore Road mixed-use development.

Should you have any questions let us know.

Regards,

Sevim Coskun, C.E.T.
Senior Transportation Analyst, Urban Development
Industrial, Commercial, Institutional & Traffic

Cole Engineering Group Ltd.
151 Superior Boulevard, Unit 1 & 2, Mississauga, ON L5T 2L1
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APPENDIX B
Exisitng Transit Routes

APPENDIX C
Existing Traffic Movement Counts and Signal Timing Plans

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

Municipality: Mississauga
Site #: 1920200001
Intersection: Dixie Rd & Orchard Hill Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

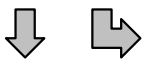
Major Road: Dixie Rd runs N/S

North Leg Total: 1313
North Entering: 523
North Peds: 0
Peds Cross: ⋈

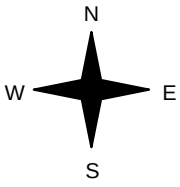
Heavys	20	4	24
Trucks	13	0	13
Cars	471	15	486
Totals	504	19	

Heavys	16
Trucks	8
Cars	766
Totals	790

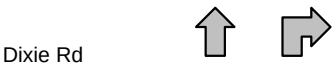
East Leg Total: 60
East Entering: 39
East Peds: 1
Peds Cross: ⋈



Cars	Trucks	Heavys	Totals
35	0	0	35
3	0	1	4
38	0	1	



Cars	Trucks	Heavys	Totals
17	0	4	21



Cars	474		
Trucks	13		
Heavys	21		
Totals	508		

Cars	731	2	733
Trucks	8	0	8
Heavys	16	0	16
Totals	755	2	

Peds Cross: ⋈
South Peds: 0
South Entering: 757
South Leg Total: 1265

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Mississauga
Site #: 1920200001
Intersection: Dixie Rd & Orchard Hill Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Dixie Rd runs N/S

North Leg Total: 1307
North Entering: 615
North Peds: 0
Peds Cross: ⋈

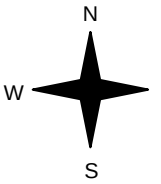
Heavys	3	0	3
Trucks	1	0	1
Cars	588	23	611
Totals	592	23	

Heavys	6
Trucks	8
Cars	678
Totals	692

East Leg Total: 67
East Entering: 39
East Peds: 0
Peds Cross: ⋈

Dixie Rd

	Cars	Trucks	Heavys	Totals
	34	0	0	34
	5	0	0	5
	39	0	0	



Orchard Hill Rd

Cars	Trucks	Heavys	Totals
28	0	0	28

Dixie Rd

Cars	593		
Trucks	1		
Heavys	3		
Totals	597		

Cars	644	5	649
Trucks	8	0	8
Heavys	6	0	6
Totals	658	5	

Peds Cross: ⋈
South Peds: 2
South Entering: 663
South Leg Total: 1260

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Mississauga
Site #: 1920200001
Intersection: Dixie Rd & Orchard Hill Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Dixie Rd runs N/S

North Leg Total: 4837
North Entering: 2102
North Peds: 0
Peds Cross: ⋈

Heavys	39	7	46
Trucks	29	0	29
Cars	1963	64	2027
Totals	2031	71	

Heavys	40
Trucks	29
Cars	2666
Totals	2735

East Leg Total: 221
East Entering: 142
East Peds: 5
Peds Cross: ⋈

Dixie Rd

Cars	Trucks	Heavys	Totals
126	0	2	128
13	0	1	14
139	0	3	

N
W E
S

Orchard Hill Rd

Cars	Trucks	Heavys	Totals
71	0	8	79

Dixie Rd

Cars	1976		
Trucks	29		
Heavys	40		
Totals	2045		

Cars	2540	7	2547
Trucks	29	0	29
Heavys	38	1	39
Totals	2607	8	

Peds Cross: ⋈
South Peds: 3
South Entering: 2615
South Leg Total: 4660

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Dixie Rd & Orchard Hill Rd | **Count Date:** 28-Nov-19 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*14*	*385*	*0*	*399*	*0*
9:00:00	*13*	*492*	*0*	*505*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*18*	*577*	*0*	*595*	*0*
18:00:00	*26*	*577*	*0*	*603*	*0*
Totals:	71	2031	0	2102	0

North/South Total Approaches: 4717

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*603*	*2*	*605*	*0*
9:00:00	*0*	*734*	*0*	*734*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*628*	*2*	*630*	*3*
18:00:00	*0*	*642*	*4*	*646*	*0*
S Totals:	0	2607	8	2615	3

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*2*	*0*	*22*	*24*	*1*
9:00:00	*5*	*0*	*36*	*41*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*2*	*0*	*43*	*45*	*3*
18:00:00	*5*	*0*	*27*	*32*	*0*
Totals:	14	0	128	142	5

East/West Total Approaches: 142

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
W Totals:	0	0	0	0	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*2*	*5*	*0*	*5*	*5*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200001

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	62	62	0	0	0	0	3	3	0	0	0	0	2	2	0	0	0	0
7:30:00	6	4	136	74	0	0	0	0	3	0	0	0	0	0	3	1	0	0	0	0
7:45:00	6	0	248	112	0	0	0	0	6	3	0	0	0	0	5	2	0	0	0	0
8:00:00	12	6	368	120	0	0	0	0	9	3	0	0	2	2	8	3	0	0	0	0
8:15:00	14	2	483	115	0	0	0	0	13	4	0	0	3	1	14	6	0	0	0	0
8:30:00	20	6	600	117	0	0	0	0	17	4	0	0	3	0	19	5	0	0	0	0
8:45:00	21	1	719	119	0	0	0	0	19	2	0	0	4	1	25	6	0	0	0	0
9:00:00	22	1	822	103	0	0	0	0	21	2	0	0	5	1	34	9	0	0	0	0
9:15:00	22	0	822	0	0	0	0	0	21	0	0	0	5	0	34	0	0	0	0	0
16:00:00	22	0	822	0	0	0	0	0	21	0	0	0	5	0	34	0	0	0	0	0
16:15:00	26	4	967	145	0	0	0	0	23	2	0	0	6	1	35	1	0	0	0	0
16:30:00	31	5	1092	125	0	0	0	0	24	1	0	0	7	1	36	1	0	0	0	0
16:45:00	34	3	1232	140	0	0	0	0	27	3	0	0	7	0	36	0	0	0	0	0
17:00:00	38	4	1389	157	0	0	0	0	27	0	0	0	7	0	38	2	0	0	0	0
17:15:00	44	6	1535	146	0	0	0	0	27	0	0	0	7	0	38	0	0	0	0	0
17:30:00	51	7	1680	145	0	0	0	0	27	0	0	0	7	0	39	1	0	0	0	0
17:45:00	57	6	1820	140	0	0	0	0	28	1	0	0	7	0	39	0	0	0	0	0
18:00:00	64	7	1963	143	0	0	0	0	29	1	0	0	7	0	39	0	0	0	0	0
18:15:00	64	0	1963	0	0	0	0	0	29	0	0	0	7	0	39	0	0	0	0	0
18:15:15	64	0	1963	0	0	0	0	0	29	0	0	0	7	0	39	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200001

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30:00	2	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45:00	2	0	0	0	12	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00:00	2	0	0	0	22	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15:00	2	0	0	0	30	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30:00	5	3	0	0	39	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:45:00	5	0	0	0	47	8	0	0	0	0	0	0	1	1	0	0	0	0	2	1
9:00:00	6	1	0	0	57	10	0	0	0	0	0	0	1	0	0	0	1	1	2	0
9:15:00	6	0	0	0	57	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
16:00:00	6	0	0	0	57	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
16:15:00	6	0	0	0	64	7	0	0	0	0	0	0	1	0	0	0	1	0	4	2
16:30:00	7	1	0	0	76	12	0	0	0	0	0	0	1	0	0	0	2	1	4	0
16:45:00	7	0	0	0	89	13	0	0	0	0	0	0	1	0	0	0	2	0	5	1
17:00:00	8	1	0	0	99	10	0	0	0	0	0	0	1	0	0	0	2	0	5	0
17:15:00	9	1	0	0	109	10	0	0	0	0	0	0	1	0	0	0	2	0	5	0
17:30:00	12	3	0	0	120	11	0	0	0	0	0	0	1	0	0	0	2	0	5	0
17:45:00	12	0	0	0	123	3	0	0	0	0	0	0	1	0	0	0	2	0	5	0
18:00:00	13	1	0	0	126	3	0	0	0	0	0	0	1	0	0	0	2	0	5	0
18:15:00	13	0	0	0	126	0	0	0	0	0	0	0	1	0	0	0	2	0	5	0
18:15:15	13	0	0	0	126	0	0	0	0	0	0	0	1	0	0	0	2	0	5	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200001

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	114	114	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	246	132	0	0	0	0	3	2	0	0	0	0	2	2	0	0	0	0
7:45:00	0	0	404	158	0	0	0	0	3	0	0	0	0	0	3	1	0	0	0	0
8:00:00	0	0	591	187	2	2	0	0	4	1	0	0	0	0	8	5	0	0	0	0
8:15:00	0	0	789	198	2	0	0	0	7	3	0	0	0	0	9	1	0	0	0	0
8:30:00	0	0	964	175	2	0	0	0	8	1	0	0	0	0	13	4	0	0	0	0
8:45:00	0	0	1135	171	2	0	0	0	11	3	0	0	0	0	19	6	0	0	0	0
9:00:00	0	0	1305	170	2	0	0	0	12	1	0	0	0	0	20	1	0	0	0	0
9:15:00	0	0	1305	0	2	0	0	0	12	0	0	0	0	0	20	0	0	0	0	0
16:00:00	0	0	1305	0	2	0	0	0	12	0	0	0	0	0	20	0	0	0	0	0
16:15:00	0	0	1471	166	2	0	0	0	15	3	0	0	0	0	28	8	0	0	0	0
16:30:00	0	0	1603	132	2	0	0	0	19	4	0	0	0	0	29	1	1	1	0	0
16:45:00	0	0	1740	137	2	0	0	0	21	2	0	0	0	0	32	3	1	0	1	1
17:00:00	0	0	1908	168	3	1	0	0	23	2	0	0	0	0	34	2	1	0	3	2
17:15:00	0	0	2057	149	4	1	0	0	25	2	0	0	0	0	36	2	1	0	3	0
17:30:00	0	0	2236	179	4	0	0	0	27	2	0	0	0	0	37	1	1	0	3	0
17:45:00	0	0	2384	148	7	3	0	0	29	2	0	0	0	0	38	1	1	0	3	0
18:00:00	0	0	2540	156	7	0	0	0	29	0	0	0	0	0	38	0	1	0	3	0
18:15:00	0	0	2540	0	7	0	0	0	29	0	0	0	0	0	38	0	1	0	3	0
18:15:15	0	0	2540	0	7	0	0	0	29	0	0	0	0	0	38	0	1	0	3	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200001

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

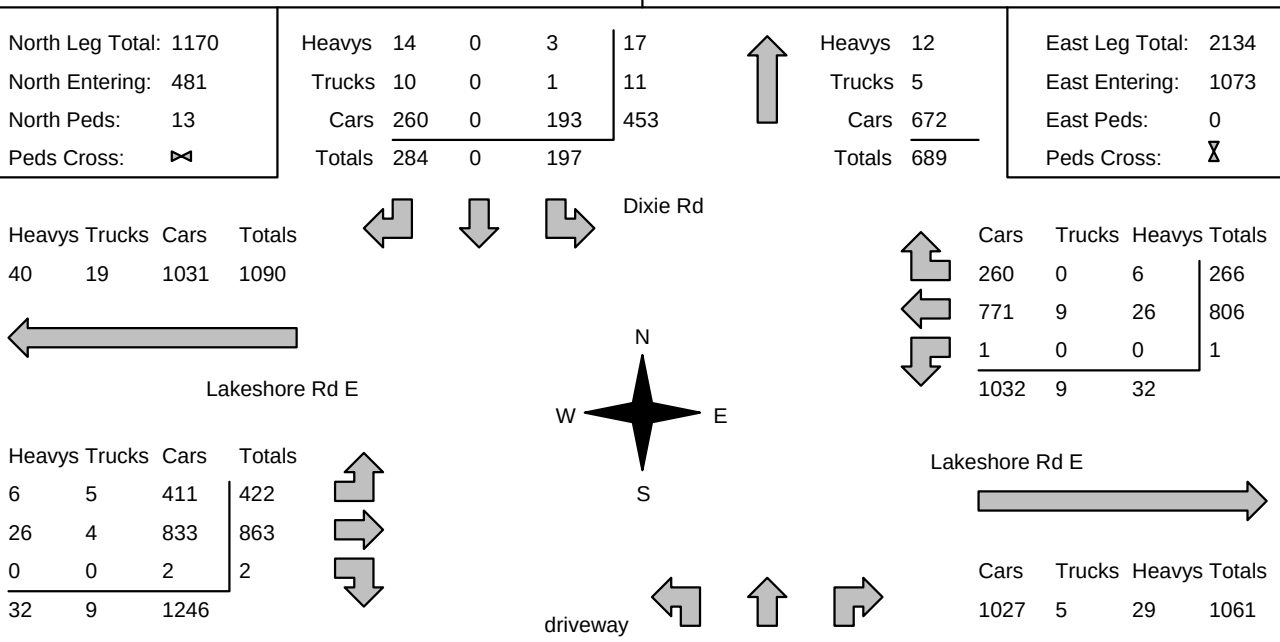
Municipality: Mississauga
Site #: 1920200002
Intersection: Lakeshore Rd E & Dixie Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Lakeshore Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Mississauga
Site #: 1920200002
Intersection: Lakeshore Rd E & Dixie Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Lakeshore Rd E runs W/E

North Leg Total: 1156
North Entering: 546
North Peds: 8
Peds Cross: ⋈

Heavys	1	0	2	3
Trucks	2	0	0	2
Cars	276	0	265	541
Totals	279	0	267	

Heavys	3
Trucks	8
Cars	599
Totals	610

East Leg Total: 2516
East Entering: 1594
East Peds: 1
Peds Cross: ⧖

Dixie Rd

Heavys	Trucks	Cars	Totals
14	5	1519	1538

Cars	Trucks	Heavys	Totals
332	3	1	336
1242	3	13	1258
0	0	0	0
1574	6	14	

Lakeshore Rd E

N
W E
S

Heavys	Trucks	Cars	Totals
2	5	265	272
12	5	637	654
0	0	1	1
14	10	903	

Lakeshore Rd E

Cars	Trucks	Heavys	Totals
903	5	14	922

driveway

Peds Cross: ⧖
West Peds: 6
West Entering: 927
West Leg Total: 2465

Cars	1
Trucks	0
Heavys	0
Totals	1

Cars	1	2	1	4
Trucks	0	0	0	0
Heavys	0	0	0	0
Totals	1	2	1	

Peds Cross: ⋈
South Peds: 0
South Entering: 4
South Leg Total: 5

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

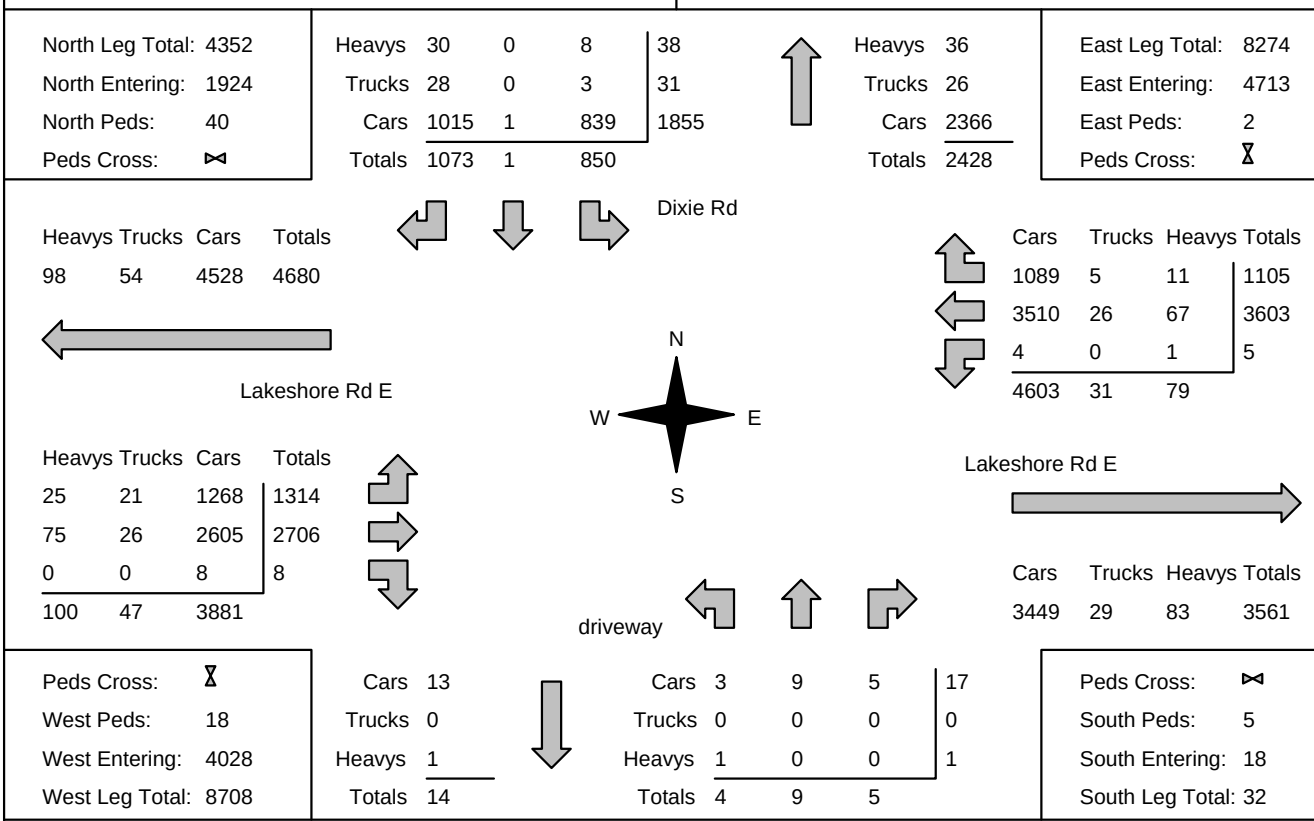
Municipality: Mississauga
Site #: 1920200002
Intersection: Lakeshore Rd E & Dixie Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Lakeshore Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Lakeshore Rd E & Dixie Rd | **Count Date:** 28-Nov-19 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*157*	*0*	*236*	*393*	*10*
9:00:00	*205*	*0*	*271*	*476*	*14*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*224*	*1*	*294*	*519*	*11*
18:00:00	*264*	*0*	*272*	*536*	*5*
Totals:	850	1	1073	1924	40

North/South Total Approaches: 1942

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*1*	*0*	*2*	*2*
9:00:00	*0*	*0*	*1*	*1*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*2*	*8*	*4*	*14*	*2*
18:00:00	*1*	*0*	*0*	*1*	*0*
S Totals:	4	9	5	18	5

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*563*	*204*	*768*	*0*
9:00:00	*1*	*683*	*251*	*935*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*3*	*1146*	*306*	*1455*	*1*
18:00:00	*0*	*1211*	*344*	*1555*	*1*
Totals:	5	3603	1105	4713	2

East/West Total Approaches: 8741

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*355*	*720*	*2*	*1077*	*3*
9:00:00	*429*	*768*	*2*	*1199*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*274*	*554*	*4*	*832*	*8*
18:00:00	*256*	*664*	*0*	*920*	*6*
W Totals:	1314	2706	8	4028	18

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*162*	*206*	*0*	*243*	*272*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200002

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	28	28	0	0	37	37	0	0	0	0	4	4	1	1	0	0	2	2	5	5
7:30:00	58	30	0	0	86	49	1	1	0	0	6	2	1	0	0	0	3	1	6	1
7:45:00	99	41	0	0	155	69	1	0	0	0	9	3	1	0	0	0	5	2	10	4
8:00:00	154	55	0	0	217	62	1	0	0	0	12	3	2	1	0	0	7	2	10	0
8:15:00	204	50	0	0	283	66	1	0	0	0	14	2	3	1	0	0	13	6	14	4
8:30:00	251	47	0	0	346	63	2	1	0	0	16	2	4	1	0	0	17	4	19	5
8:45:00	315	64	0	0	403	57	2	0	0	0	18	2	4	0	0	0	22	5	21	2
9:00:00	354	39	0	0	459	56	3	1	0	0	20	2	5	1	0	0	28	6	24	3
9:15:00	354	0	0	0	459	0	3	0	0	0	20	0	5	0	0	0	28	0	24	0
16:00:00	354	0	0	0	459	0	3	0	0	0	20	0	5	0	0	0	28	0	24	0
16:15:00	413	59	1	1	536	77	3	0	0	0	21	1	5	0	0	0	29	1	26	2
16:30:00	461	48	1	0	600	64	3	0	0	0	23	2	6	1	0	0	29	0	28	2
16:45:00	516	55	1	0	675	75	3	0	0	0	25	2	6	0	0	0	29	0	32	4
17:00:00	576	60	1	0	746	71	3	0	0	0	25	0	7	1	0	0	30	1	35	3
17:15:00	653	77	1	0	818	72	3	0	0	0	26	1	7	0	0	0	30	0	36	1
17:30:00	711	58	1	0	881	63	3	0	0	0	26	0	8	1	0	0	30	0	39	3
17:45:00	781	70	1	0	951	70	3	0	0	0	27	1	8	0	0	0	30	0	40	1
18:00:00	839	58	1	0	1015	64	3	0	0	0	28	1	8	0	0	0	30	0	40	0
18:15:00	839	0	1	0	1015	0	3	0	0	0	28	0	8	0	0	0	30	0	40	0
18:15:15	839	0	1	0	1015	0	3	0	0	0	28	0	8	0	0	0	30	0	40	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200002

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	69	69	26	26	0	0	1	1	0	0	1	1	2	2	0	0	0	0
7:30:00	0	0	149	80	68	42	0	0	1	0	0	0	1	0	6	4	1	1	0	0
7:45:00	0	0	313	164	123	55	0	0	2	1	0	0	1	0	10	4	1	0	0	0
8:00:00	0	0	543	230	199	76	0	0	5	3	0	0	1	0	15	5	5	4	0	0
8:15:00	0	0	728	185	266	67	0	0	6	1	0	0	1	0	23	8	5	0	0	0
8:30:00	1	1	920	192	328	62	0	0	10	4	0	0	1	0	32	9	7	2	0	0
8:45:00	1	0	1058	138	392	64	0	0	14	4	0	0	1	0	35	3	7	0	0	0
9:00:00	1	0	1191	133	448	56	0	0	15	1	0	0	1	0	40	5	7	0	0	0
9:15:00	1	0	1191	0	448	0	0	0	15	0	0	0	1	0	40	0	7	0	0	0
16:00:00	1	0	1191	0	448	0	0	0	15	0	0	0	1	0	40	0	7	0	0	0
16:15:00	1	0	1417	226	532	84	0	0	16	1	1	1	1	0	43	3	9	2	1	1
16:30:00	2	1	1721	304	597	65	0	0	19	3	2	1	1	0	47	4	9	0	1	0
16:45:00	4	2	1983	262	657	60	0	0	19	0	2	0	1	0	50	3	10	1	1	0
17:00:00	4	0	2321	338	747	90	0	0	19	0	4	2	1	0	52	2	10	0	1	0
17:15:00	4	0	2588	267	810	63	0	0	20	1	4	0	1	0	58	6	11	1	1	0
17:30:00	4	0	2927	339	908	98	0	0	21	1	5	1	1	0	61	3	11	0	2	1
17:45:00	4	0	3225	298	989	81	0	0	22	1	5	0	1	0	63	2	11	0	2	0
18:00:00	4	0	3510	285	1089	100	0	0	26	4	5	0	1	0	67	4	11	0	2	0
18:15:00	4	0	3510	0	1089	0	0	0	26	0	5	0	1	0	67	0	11	0	2	0
18:15:15	4	0	3510	0	1089	0	0	0	26	0	5	0	1	0	67	0	11	0	2	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200002

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
7:45:00	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
8:00:00	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	1
8:15:00	0	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	3	1
8:30:00	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
8:45:00	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
9:00:00	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
9:15:00	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
16:00:00	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
16:15:00	0	0	2	1	3	2	0	0	0	0	0	0	1	0	0	0	0	0	4	1
16:30:00	1	1	4	2	4	1	0	0	0	0	0	0	1	0	0	0	0	0	4	0
16:45:00	2	1	7	3	4	0	0	0	0	0	0	0	1	0	0	0	0	0	5	1
17:00:00	2	0	9	2	5	1	0	0	0	0	0	0	1	0	0	0	0	0	5	0
17:15:00	2	0	9	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0
17:30:00	3	1	9	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0
17:45:00	3	0	9	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0
18:00:00	3	0	9	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0
18:15:00	3	0	9	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0
18:15:15	3	0	9	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200002

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	74	74	102	102	0	0	1	1	2	2	0	0	0	0	7	7	0	0	1	1
7:30:00	155	81	256	154	0	0	3	2	6	4	0	0	1	1	12	5	0	0	1	0
7:45:00	252	97	454	198	1	1	3	0	6	0	0	0	2	1	16	4	0	0	3	2
8:00:00	346	94	689	235	2	1	4	1	8	2	0	0	5	3	23	7	0	0	3	0
8:15:00	467	121	909	220	2	0	7	3	9	1	0	0	5	0	29	6	0	0	3	0
8:30:00	566	99	1089	180	2	0	8	1	10	1	0	0	7	2	38	9	0	0	4	1
8:45:00	661	95	1260	171	3	1	10	2	13	3	0	0	14	7	42	4	0	0	4	0
9:00:00	758	97	1425	165	4	1	11	1	14	1	0	0	15	1	49	7	0	0	4	0
9:15:00	758	0	1425	0	4	0	11	0	14	0	0	0	15	0	49	0	0	0	4	0
16:00:00	758	0	1425	0	4	0	11	0	14	0	0	0	15	0	49	0	0	0	4	0
16:15:00	828	70	1550	125	5	1	13	2	16	2	0	0	19	4	53	4	0	0	7	3
16:30:00	892	64	1663	113	6	1	15	2	16	0	0	0	20	1	59	6	0	0	10	3
16:45:00	954	62	1804	141	7	1	16	1	18	2	0	0	23	3	61	2	0	0	10	0
17:00:00	1018	64	1960	156	8	1	16	0	18	0	0	0	24	1	64	3	0	0	12	2
17:15:00	1096	78	2119	159	8	0	18	2	20	2	0	0	25	1	67	3	0	0	13	1
17:30:00	1163	67	2286	167	8	0	19	1	21	1	0	0	25	0	70	3	0	0	16	3
17:45:00	1219	56	2441	155	8	0	21	2	23	2	0	0	25	0	73	3	0	0	16	0
18:00:00	1268	49	2605	164	8	0	21	0	26	3	0	0	25	0	75	2	0	0	18	2
18:15:00	1268	0	2605	0	8	0	21	0	26	0	0	0	25	0	75	0	0	0	18	0
18:15:15	1268	0	2605	0	8	0	21	0	26	0	0	0	25	0	75	0	0	0	18	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

Municipality: Mississauga
Site #: 1920200003
Intersection: Lakeshore Rd E & Cherriebell Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Lakeshore Rd E runs W/E

North Leg Total: 25
North Entering: 9
North Peds: 12
Peds Cross: ⋈

Heavys	1	1	2
Trucks	0	0	0
Cars	3	4	7
Totals	4	5	

Heavys	0
Trucks	0
Cars	16
Totals	16

East Leg Total: 2149
East Entering: 1089
East Peds: 0
Peds Cross: ⧖

Cherriebell Rd

Heavys	Trucks	Cars	Totals
33	13	1035	1081

Cars	Trucks	Heavys	Totals
12	0	0	12
1032	13	32	1077
1044	13	32	

Lakeshore Rd E

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	4	4
27	6	1022	1055
27	6	1026	

Lakeshore Rd E

Cars	Trucks	Heavys	Totals
1026	6	28	1060

Peds Cross: ⧖
West Peds: 0
West Entering: 1059
West Leg Total: 2140

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Mississauga
Site #: 1920200003
Intersection: Lakeshore Rd E & Cherriebell Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Lakeshore Rd E runs W/E

North Leg Total: 34
North Entering: 8
North Peds: 10
Peds Cross: ⋈

Heavys	0	0	0
Trucks	0	0	0
Cars	4	4	8
Totals	4	4	

Heavys	0
Trucks	0
Cars	26
Totals	26

East Leg Total: 2524
East Entering: 1601
East Peds: 0
Peds Cross: ⧖

Cherriebell Rd

Heavys	Trucks	Cars	Totals
15	5	1570	1590

Cars	Trucks	Heavys	Totals
15	0	0	15
1566	5	15	1586
1581	5	15	

Lakeshore Rd E

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	11	11
14	6	899	919
14	6	910	

Lakeshore Rd E

Cars	Trucks	Heavys	Totals
903	6	14	923

Peds Cross: ⧖
West Peds: 0
West Entering: 930
West Leg Total: 2520

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Mississauga
Site #: 1920200003
Intersection: Lakeshore Rd E & Cherriebell Rd
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Lakeshore Rd E runs W/E

North Leg Total: 126
North Entering: 31
North Peds: 44
Peds Cross: ⋈

Heavys	2	1	3
Trucks	0	0	0
Cars	14	14	28
Totals	16	15	

Heavys	3
Trucks	0
Cars	92
Totals	95

East Leg Total: 8367
East Entering: 4791
East Peds: 0
Peds Cross: ⧗

Cherriebell Rd

Heavys	Trucks	Cars	Totals
81	33	4624	4738

Lakeshore Rd E

Cars	Trucks	Heavys	Totals
66	0	3	69
4610	33	79	4722
4676	33	82	

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	26	26
87	27	3447	3561
87	27	3473	

Lakeshore Rd E

Cars	Trucks	Heavys	Totals
3461	27	88	3576

Peds Cross: ⧗
West Peds: 0
West Entering: 3587
West Leg Total: 8325

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Lakeshore Rd E & Cherriebell Rd | **Count Date:** 28-Nov-19 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*5*	*0*	*1*	*6*	*12*
9:00:00	*4*	*0*	*7*	*11*	*11*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*4*	*4*	*14*
18:00:00	*6*	*0*	*4*	*10*	*7*
Totals:	15	0	16	31	44

North/South Total Approaches: 31

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
S Totals:	0	0	0	0	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*781*	*8*	*789*	*0*
9:00:00	*0*	*941*	*23*	*964*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*1449*	*25*	*1474*	*0*
18:00:00	*0*	*1551*	*13*	*1564*	*0*
Totals:	0	4722	69	4791	0

East/West Total Approaches: 8378

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*873*	*0*	*874*	*0*
9:00:00	*8*	*982*	*0*	*990*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*9*	*780*	*0*	*789*	*0*
18:00:00	*8*	*926*	*0*	*934*	*0*
W Totals:	26	3561	0	3587	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*5*	*4*	*0*	*0*	*6*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200003

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
7:30:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2
7:45:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	4
8:00:00	5	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12	0
8:15:00	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	16	4
8:30:00	6	1	0	0	3	2	0	0	0	0	0	0	1	1	0	0	1	0	20	4
8:45:00	7	1	0	0	5	2	0	0	0	0	0	0	1	0	0	0	1	0	22	2
9:00:00	8	1	0	0	7	2	0	0	0	0	0	0	1	0	0	0	1	0	23	1
9:15:00	8	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	1	0	23	0
16:00:00	8	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	1	0	23	0
16:15:00	8	0	0	0	9	2	0	0	0	0	0	0	1	0	0	0	2	1	28	5
16:30:00	8	0	0	0	10	1	0	0	0	0	0	0	1	0	0	0	2	0	29	1
16:45:00	8	0	0	0	10	0	0	0	0	0	0	0	1	0	0	0	2	0	34	5
17:00:00	8	0	0	0	10	0	0	0	0	0	0	0	1	0	0	0	2	0	37	3
17:15:00	9	1	0	0	11	1	0	0	0	0	0	0	1	0	0	0	2	0	38	1
17:30:00	10	1	0	0	11	0	0	0	0	0	0	0	1	0	0	0	2	0	42	4
17:45:00	12	2	0	0	14	3	0	0	0	0	0	0	1	0	0	0	2	0	44	2
18:00:00	14	2	0	0	14	0	0	0	0	0	0	0	1	0	0	0	2	0	44	0
18:15:00	14	0	0	0	14	0	0	0	0	0	0	0	1	0	0	0	2	0	44	0
18:15:15	14	0	0	0	14	0	0	0	0	0	0	0	1	0	0	0	2	0	44	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200003

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	98	98	0	0	0	0	1	1	0	0	0	0	3	3	1	1	0	0
7:30:00	0	0	230	132	1	1	0	0	1	0	0	0	0	0	8	5	1	0	0	0
7:45:00	0	0	453	223	2	1	0	0	3	2	0	0	0	0	13	5	1	0	0	0
8:00:00	0	0	752	299	7	5	0	0	8	5	0	0	0	0	21	8	1	0	0	0
8:15:00	0	0	1010	258	9	2	0	0	10	2	0	0	0	0	29	8	1	0	0	0
8:30:00	0	0	1262	252	13	4	0	0	14	4	0	0	0	0	40	11	1	0	0	0
8:45:00	0	0	1458	196	21	8	0	0	18	4	0	0	0	0	43	3	2	1	0	0
9:00:00	0	0	1655	197	29	8	0	0	19	1	0	0	0	0	48	5	2	0	0	0
9:15:00	0	0	1655	0	29	0	0	0	19	0	0	0	0	0	48	0	2	0	0	0
16:00:00	0	0	1655	0	29	0	0	0	19	0	0	0	0	0	48	0	2	0	0	0
16:15:00	0	0	1966	311	36	7	0	0	21	2	0	0	0	0	54	6	2	0	0	0
16:30:00	0	0	2318	352	43	7	0	0	25	4	0	0	0	0	57	3	3	1	0	0
16:45:00	0	0	2665	347	50	7	0	0	25	0	0	0	0	0	61	4	3	0	0	0
17:00:00	0	0	3081	416	53	3	0	0	27	2	0	0	0	0	63	2	3	0	0	0
17:15:00	0	0	3421	340	59	6	0	0	27	0	0	0	0	0	70	7	3	0	0	0
17:30:00	0	0	3851	430	63	4	0	0	29	2	0	0	0	0	73	3	3	0	0	0
17:45:00	0	0	4231	380	65	2	0	0	30	1	0	0	0	0	76	3	3	0	0	0
18:00:00	0	0	4610	379	66	1	0	0	33	3	0	0	0	0	79	3	3	0	0	0
18:15:00	0	0	4610	0	66	0	0	0	33	0	0	0	0	0	79	0	3	0	0	0
18:15:15	0	0	4610	0	66	0	0	0	33	0	0	0	0	0	79	0	3	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200003

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200003

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	133	133	0	0	0	0	1	1	0	0	0	0	9	9	0	0	0	0
7:30:00	0	0	316	183	0	0	0	0	5	4	0	0	0	0	15	6	0	0	0	0
7:45:00	1	1	559	243	0	0	0	0	5	0	0	0	0	0	19	4	0	0	0	0
8:00:00	1	0	840	281	0	0	0	0	6	1	0	0	0	0	27	8	0	0	0	0
8:15:00	3	2	1113	273	0	0	0	0	8	2	0	0	0	0	33	6	0	0	0	0
8:30:00	4	1	1338	225	0	0	0	0	11	3	0	0	0	0	42	9	0	0	0	0
8:45:00	8	4	1574	236	0	0	0	0	15	4	0	0	0	0	47	5	0	0	0	0
9:00:00	9	1	1782	208	0	0	0	0	16	1	0	0	0	0	57	10	0	0	0	0
9:15:00	9	0	1782	0	0	0	0	0	16	0	0	0	0	0	57	0	0	0	0	0
16:00:00	9	0	1782	0	0	0	0	0	16	0	0	0	0	0	57	0	0	0	0	0
16:15:00	11	2	1974	192	0	0	0	0	17	1	0	0	0	0	62	5	0	0	0	0
16:30:00	13	2	2129	155	0	0	0	0	17	0	0	0	0	0	69	7	0	0	0	0
16:45:00	15	2	2326	197	0	0	0	0	19	2	0	0	0	0	71	2	0	0	0	0
17:00:00	18	3	2541	215	0	0	0	0	19	0	0	0	0	0	75	4	0	0	0	0
17:15:00	19	1	2778	237	0	0	0	0	22	3	0	0	0	0	78	3	0	0	0	0
17:30:00	24	5	3001	223	0	0	0	0	23	1	0	0	0	0	82	4	0	0	0	0
17:45:00	26	2	3225	224	0	0	0	0	25	2	0	0	0	0	85	3	0	0	0	0
18:00:00	26	0	3447	222	0	0	0	0	27	2	0	0	0	0	87	2	0	0	0	0
18:15:00	26	0	3447	0	0	0	0	0	27	0	0	0	0	0	87	0	0	0	0	0
18:15:15	26	0	3447	0	0	0	0	0	27	0	0	0	0	0	87	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

Municipality: Mississauga
Site #: 1920200004
Intersection: Dixie Rd & Access#1
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

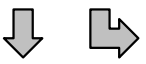
Major Road: Dixie Rd runs N/S

North Leg Total: 1227
North Entering: 507
North Peds: 0
Peds Cross: ⋈

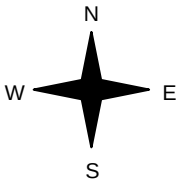
Heavys	19	0	19
Trucks	12	0	12
Cars	474	2	476
Totals	505	2	

Heavys	16
Trucks	7
Cars	697
Totals	720

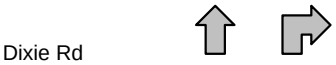
East Leg Total: 4
East Entering: 2
East Peds: 1
Peds Cross: ⋈



	Cars	Trucks	Heavys	Totals
	2	0	0	2
	0	0	0	0
	2	0	0	



	Cars	Trucks	Heavys	Totals
	2	0	0	2



Cars	474	Cars	695	0	695
Trucks	12	Trucks	7	0	7
Heavys	19	Heavys	16	0	16
Totals	505	Totals	718	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 718
South Leg Total: 1223

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Mississauga
Site #: 1920200004
Intersection: Dixie Rd & Access#1
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

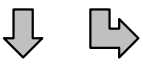
Major Road: Dixie Rd runs N/S

North Leg Total: 1195
North Entering: 566
North Peds: 0
Peds Cross: ⋈

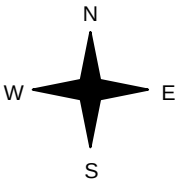
Heavys	3	0	3
Trucks	1	0	1
Cars	559	3	562
Totals	563	3	

Heavys	3
Trucks	8
Cars	618
Totals	629

East Leg Total: 11
East Entering: 6
East Peds: 0
Peds Cross: ⋈



Dixie Rd



	Cars	Trucks	Heavys	Totals
	4	0	0	4
	2	0	0	2
	6	0	0	

Access#1

Cars	Trucks	Heavys	Totals
5	0	0	5

Dixie Rd

Cars	561		
Trucks	1		
Heavys	3		
Totals	565		

Cars	614	2	616
Trucks	8	0	8
Heavys	3	0	3
Totals	625	2	

Peds Cross: ⋈
South Peds: 0
South Entering: 627
South Leg Total: 1192

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Mississauga
Site #: 1920200004
Intersection: Dixie Rd & Access#1
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

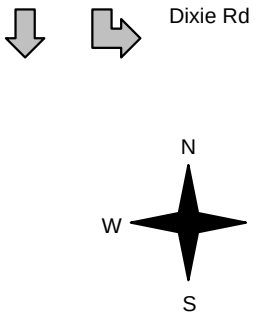
Major Road: Dixie Rd runs N/S

North Leg Total: 4467
North Entering: 1986
North Peds: 0
Peds Cross: ⋈

Heavys	36	0	36
Trucks	30	0	30
Cars	1912	8	1920
Totals	1978	8	

Heavys	33
Trucks	26
Cars	2422
Totals	2481

East Leg Total: 25
East Entering: 15
East Peds: 4
Peds Cross: ⋈



	Cars	Trucks	Heavys	Totals
	11	0	0	11
	4	0	0	4
	15	0	0	

Access#1

	Cars	Trucks	Heavys	Totals
	10	0	0	10

Dixie Rd

Cars	1916		
Trucks	30		
Heavys	36		
Totals	1982		

Cars	2411	2	2413
Trucks	26	0	26
Heavys	33	0	33
Totals	2470	2	

Peds Cross: ⋈
South Peds: 0
South Entering: 2472
South Leg Total: 4454

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Dixie Rd & Access#1 | **Count Date:** 28-Nov-19 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*392*	*0*	*392*	*0*	*964*
9:00:00	*2*	*495*	*0*	*497*	*0*	*1189*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*3*	*542*	*0*	*545*	*0*	*1135*
18:00:00	*3*	*549*	*0*	*552*	*0*	*1170*
Totals:	8	1978	0	1986	0	4458

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*572*	*0*	*572*	*0*
9:00:00	*0*	*692*	*0*	*692*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*589*	*1*	*590*	*0*
18:00:00	*0*	*617*	*1*	*618*	*0*
S Totals:	0	2470	2	2472	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*2*	*2*	*1*	*2*
9:00:00	*0*	*0*	*1*	*1*	*1*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*3*	*0*	*6*	*9*	*2*	*9*
18:00:00	*1*	*0*	*2*	*3*	*0*	*3*
Totals:	4	0	11	15	4	15

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
W Totals:	0	0	0	0	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*0*	*0*	*0*	*3*	*1*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200004

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	64	64	0	0	0	0	3	3	0	0	0	0	2	2	0	0	0	0
7:30:00	0	0	142	78	0	0	0	0	5	2	0	0	0	0	3	1	0	0	0	0
7:45:00	0	0	254	112	0	0	0	0	8	3	0	0	0	0	5	2	0	0	0	0
8:00:00	0	0	373	119	0	0	0	0	11	3	0	0	0	0	8	3	0	0	0	0
8:15:00	0	0	489	116	0	0	0	0	15	4	0	0	0	0	14	6	0	0	0	0
8:30:00	2	2	606	117	0	0	0	0	18	3	0	0	0	0	19	5	0	0	0	0
8:45:00	2	0	728	122	0	0	0	0	20	2	0	0	0	0	24	5	0	0	0	0
9:00:00	2	0	833	105	0	0	0	0	23	3	0	0	0	0	31	7	0	0	0	0
9:15:00	2	0	833	0	0	0	0	0	23	0	0	0	0	0	31	0	0	0	0	0
16:00:00	2	0	833	0	0	0	0	0	23	0	0	0	0	0	31	0	0	0	0	0
16:15:00	3	1	970	137	0	0	0	0	25	2	0	0	0	0	32	1	0	0	0	0
16:30:00	3	0	1093	123	0	0	0	0	26	1	0	0	0	0	33	1	0	0	0	0
16:45:00	5	2	1223	130	0	0	0	0	28	2	0	0	0	0	33	0	0	0	0	0
17:00:00	5	0	1366	143	0	0	0	0	28	0	0	0	0	0	35	2	0	0	0	0
17:15:00	6	1	1514	148	0	0	0	0	28	0	0	0	0	0	35	0	0	0	0	0
17:30:00	7	1	1644	130	0	0	0	0	28	0	0	0	0	0	36	1	0	0	0	0
17:45:00	8	1	1782	138	0	0	0	0	29	1	0	0	0	0	36	0	0	0	0	0
18:00:00	8	0	1912	130	0	0	0	0	30	1	0	0	0	0	36	0	0	0	0	0
18:15:00	8	0	1912	0	0	0	0	0	30	0	0	0	0	0	36	0	0	0	0	0
18:15:15	8	0	1912	0	0	0	0	0	30	0	0	0	0	0	36	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200004

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:45:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:45:00	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1
9:00:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:15:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:00:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15:00	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	3	1
16:30:00	2	2	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	4	1
16:45:00	2	0	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:00:00	3	1	0	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:15:00	3	0	0	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:30:00	4	1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:45:00	4	0	0	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
18:00:00	4	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
18:15:00	4	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
18:15:15	4	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200004

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	101	101	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	228	127	0	0	0	0	2	1	0	0	0	0	2	2	0	0	0	0
7:45:00	0	0	381	153	0	0	0	0	2	0	0	0	0	0	3	1	0	0	0	0
8:00:00	0	0	560	179	0	0	0	0	3	1	0	0	0	0	9	6	0	0	0	0
8:15:00	0	0	748	188	0	0	0	0	6	3	0	0	0	0	9	0	0	0	0	0
8:30:00	0	0	914	166	0	0	0	0	7	1	0	0	0	0	13	4	0	0	0	0
8:45:00	0	0	1076	162	0	0	0	0	9	2	0	0	0	0	19	6	0	0	0	0
9:00:00	0	0	1234	158	0	0	0	0	10	1	0	0	0	0	20	1	0	0	0	0
9:15:00	0	0	1234	0	0	0	0	0	10	0	0	0	0	0	20	0	0	0	0	0
16:00:00	0	0	1234	0	0	0	0	0	10	0	0	0	0	0	20	0	0	0	0	0
16:15:00	0	0	1387	153	0	0	0	0	13	3	0	0	0	0	26	6	0	0	0	0
16:30:00	0	0	1518	131	0	0	0	0	16	3	0	0	0	0	27	1	0	0	0	0
16:45:00	0	0	1644	126	0	0	0	0	18	2	0	0	0	0	30	3	0	0	0	0
17:00:00	0	0	1802	158	1	1	0	0	20	2	0	0	0	0	31	1	0	0	0	0
17:15:00	0	0	1944	142	1	0	0	0	22	2	0	0	0	0	33	2	0	0	0	0
17:30:00	0	0	2116	172	2	1	0	0	24	2	0	0	0	0	33	0	0	0	0	0
17:45:00	0	0	2258	142	2	0	0	0	26	2	0	0	0	0	33	0	0	0	0	0
18:00:00	0	0	2411	153	2	0	0	0	26	0	0	0	0	0	33	0	0	0	0	0
18:15:00	0	0	2411	0	2	0	0	0	26	0	0	0	0	0	33	0	0	0	0	0
18:15:15	0	0	2411	0	2	0	0	0	26	0	0	0	0	0	33	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200004

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

Municipality: Mississauga
Site #: 1920200005
Intersection: Lakeshore Rd E & Access#2
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Lakeshore Rd E runs W/E

North Leg Total: 3
North Entering: 2
North Peds: 8
Peds Cross: ⋈

Heavys	0	0	0
Trucks	0	0	0
Cars	1	1	2
Totals	1	1	

Heavys	0
Trucks	0
Cars	1
Totals	1

East Leg Total: 2142
East Entering: 1079
East Peds: 0
Peds Cross: ⧖

Access#2

Heavys	Trucks	Cars	Totals
31	11	1037	1079

Cars	Trucks	Heavys	Totals
1	0	0	1
1036	11	31	1078
1037	11	31	

Lakeshore Rd E

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	0	0
28	7	1027	1062
28	7	1027	

Lakeshore Rd E

Cars	Trucks	Heavys	Totals
1028	7	28	1063

Peds Cross: ⧖
West Peds: 0
West Entering: 1062
West Leg Total: 2141

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Mississauga
Site #: 1920200005
Intersection: Lakeshore Rd E & Access#2
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

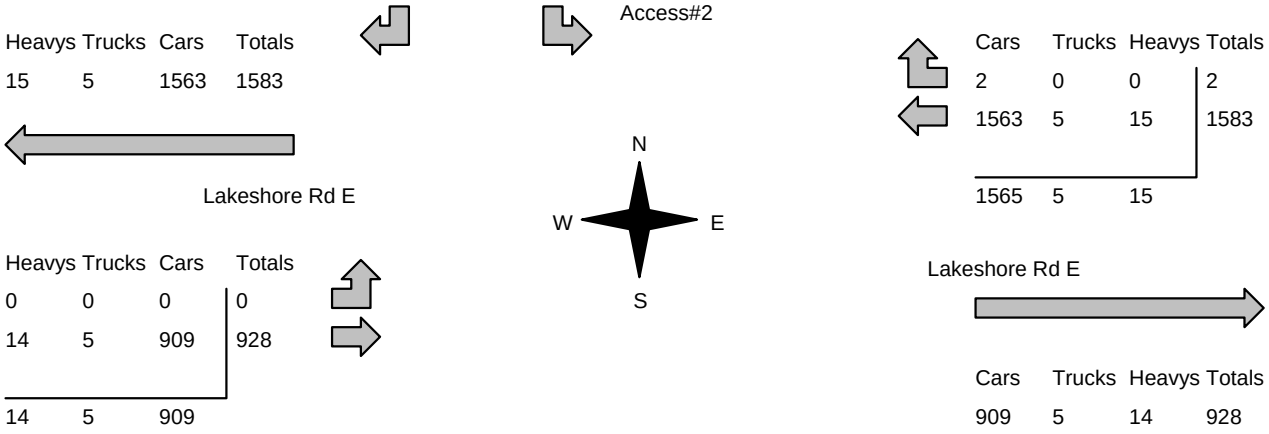
Major Road: Lakeshore Rd E runs W/E

North Leg Total: 2
North Entering: 0
North Peds: 4
Peds Cross: ⋈

Heavys	0	0	0
Trucks	0	0	0
Cars	0	0	0
Totals	0	0	

Heavys	0
Trucks	0
Cars	2
Totals	2

East Leg Total: 2513
East Entering: 1585
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 928
West Leg Total: 2511

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Mississauga
Site #: 1920200005
Intersection: Lakeshore Rd E & Access#2
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Lakeshore Rd E runs W/E

North Leg Total: 11
North Entering: 7
North Peds: 23
Peds Cross: ⋈

Heavys	0	0	0
Trucks	0	0	0
Cars	3	4	7
Totals	3	4	

Heavys	0
Trucks	0
Cars	4
Totals	4

East Leg Total: 8320
East Entering: 4728
East Peds: 0
Peds Cross: ⧖

Access#2

Heavys	Trucks	Cars	Totals
78	31	4618	4727

Cars	Trucks	Heavys	Totals
4	0	0	4
4615	31	78	4724
4619	31	78	

Lakeshore Rd E

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	0	0
83	31	3474	3588
83	31	3474	

Lakeshore Rd E

Cars	Trucks	Heavys	Totals
3478	31	83	3592

Peds Cross: ⧖
West Peds: 0
West Entering: 3588
West Leg Total: 8315

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Lakeshore Rd E & Access#2 | **Count Date:** 28-Nov-19 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*8*
9:00:00	*1*	*0*	*1*	*2*	*5*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*3*	*0*	*1*	*4*	*6*
18:00:00	*0*	*0*	*1*	*1*	*4*
Totals:	4	0	3	7	23

North/South Total Approaches: 7

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
S Totals:	0	0	0	0	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*779*	*0*	*779*	*0*
9:00:00	*0*	*944*	*1*	*945*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*1449*	*0*	*1449*	*0*
18:00:00	*0*	*1552*	*3*	*1555*	*0*
Totals:	0	4724	4	4728	0

East/West Total Approaches: 8316

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*876*	*0*	*876*	*0*
9:00:00	*0*	*988*	*0*	*988*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*792*	*0*	*792*	*0*
18:00:00	*0*	*932*	*0*	*932*	*0*
W Totals:	0	3588	0	3588	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*0*	*1*	*0*	*3*	*0*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200005

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2
8:30:00	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12	2
8:45:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
9:00:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
9:15:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
16:00:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
16:15:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15	2
16:30:00	2	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	16	1
16:45:00	4	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19	3
17:00:00	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0
17:15:00	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20	1
17:30:00	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	22	2
17:45:00	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23	1
18:00:00	4	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	23	0
18:15:00	4	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0
18:15:15	4	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200005

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	98	98	0	0	0	0	1	1	0	0	0	0	3	3	0	0	0	0
7:30:00	0	0	226	128	0	0	0	0	1	0	0	0	0	0	8	5	0	0	0	0
7:45:00	0	0	449	223	0	0	0	0	3	2	0	0	0	0	12	4	0	0	0	0
8:00:00	0	0	753	304	0	0	0	0	6	3	0	0	0	0	20	8	0	0	0	0
8:15:00	0	0	1007	254	0	0	0	0	8	2	0	0	0	0	28	8	0	0	0	0
8:30:00	0	0	1262	255	1	1	0	0	12	4	0	0	0	0	39	11	0	0	0	0
8:45:00	0	0	1461	199	1	0	0	0	16	4	0	0	0	0	42	3	0	0	0	0
9:00:00	0	0	1659	198	1	0	0	0	17	1	0	0	0	0	47	5	0	0	0	0
9:15:00	0	0	1659	0	1	0	0	0	17	0	0	0	0	0	47	0	0	0	0	0
16:00:00	0	0	1659	0	1	0	0	0	17	0	0	0	0	0	47	0	0	0	0	0
16:15:00	0	0	1971	312	1	0	0	0	19	2	0	0	0	0	53	6	0	0	0	0
16:30:00	0	0	2327	356	1	0	0	0	23	4	0	0	0	0	56	3	0	0	0	0
16:45:00	0	0	2671	344	1	0	0	0	23	0	0	0	0	0	60	4	0	0	0	0
17:00:00	0	0	3085	414	1	0	0	0	25	2	0	0	0	0	62	2	0	0	0	0
17:15:00	0	0	3424	339	2	1	0	0	25	0	0	0	0	0	69	7	0	0	0	0
17:30:00	0	0	3854	430	2	0	0	0	27	2	0	0	0	0	72	3	0	0	0	0
17:45:00	0	0	4234	380	3	1	0	0	28	1	0	0	0	0	75	3	0	0	0	0
18:00:00	0	0	4615	381	4	1	0	0	31	3	0	0	0	0	78	3	0	0	0	0
18:15:00	0	0	4615	0	4	0	0	0	31	0	0	0	0	0	78	0	0	0	0	0
18:15:15	0	0	4615	0	4	0	0	0	31	0	0	0	0	0	78	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200005

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200005

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	132	132	0	0	0	0	2	2	0	0	0	0	8	8	0	0	0	0
7:30:00	0	0	317	185	0	0	0	0	6	4	0	0	0	0	13	5	0	0	0	0
7:45:00	0	0	557	240	0	0	0	0	6	0	0	0	0	0	17	4	0	0	0	0
8:00:00	0	0	843	286	0	0	0	0	8	2	0	0	0	0	25	8	0	0	0	0
8:15:00	0	0	1117	274	0	0	0	0	10	2	0	0	0	0	31	6	0	0	0	0
8:30:00	0	0	1344	227	0	0	0	0	13	3	0	0	0	0	41	10	0	0	0	0
8:45:00	0	0	1584	240	0	0	0	0	17	4	0	0	0	0	45	4	0	0	0	0
9:00:00	0	0	1791	207	0	0	0	0	19	2	0	0	0	0	54	9	0	0	0	0
9:15:00	0	0	1791	0	0	0	0	0	19	0	0	0	0	0	54	0	0	0	0	0
16:00:00	0	0	1791	0	0	0	0	0	19	0	0	0	0	0	54	0	0	0	0	0
16:15:00	0	0	1984	193	0	0	0	0	21	2	0	0	0	0	58	4	0	0	0	0
16:30:00	0	0	2146	162	0	0	0	0	21	0	0	0	0	0	65	7	0	0	0	0
16:45:00	0	0	2343	197	0	0	0	0	23	2	0	0	0	0	67	2	0	0	0	0
17:00:00	0	0	2562	219	0	0	0	0	23	0	0	0	0	0	71	4	0	0	0	0
17:15:00	0	0	2798	236	0	0	0	0	25	2	0	0	0	0	74	3	0	0	0	0
17:30:00	0	0	3026	228	0	0	0	0	26	1	0	0	0	0	78	4	0	0	0	0
17:45:00	0	0	3252	226	0	0	0	0	28	2	0	0	0	0	81	3	0	0	0	0
18:00:00	0	0	3474	222	0	0	0	0	31	3	0	0	0	0	83	2	0	0	0	0
18:15:00	0	0	3474	0	0	0	0	0	31	0	0	0	0	0	83	0	0	0	0	0
18:15:15	0	0	3474	0	0	0	0	0	31	0	0	0	0	0	83	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

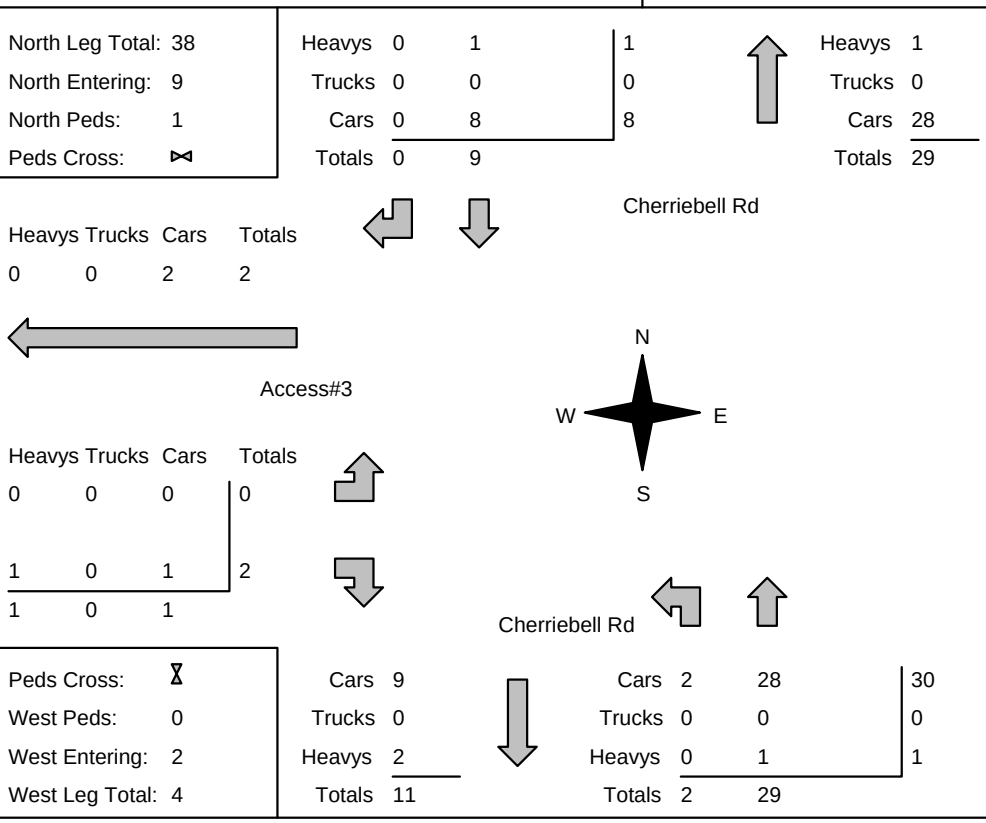
Municipality: Mississauga
Site #: 1920200006
Intersection: Cherriebell Rd & Access#3
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Cherriebell Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:15:00
To: 17:15:00

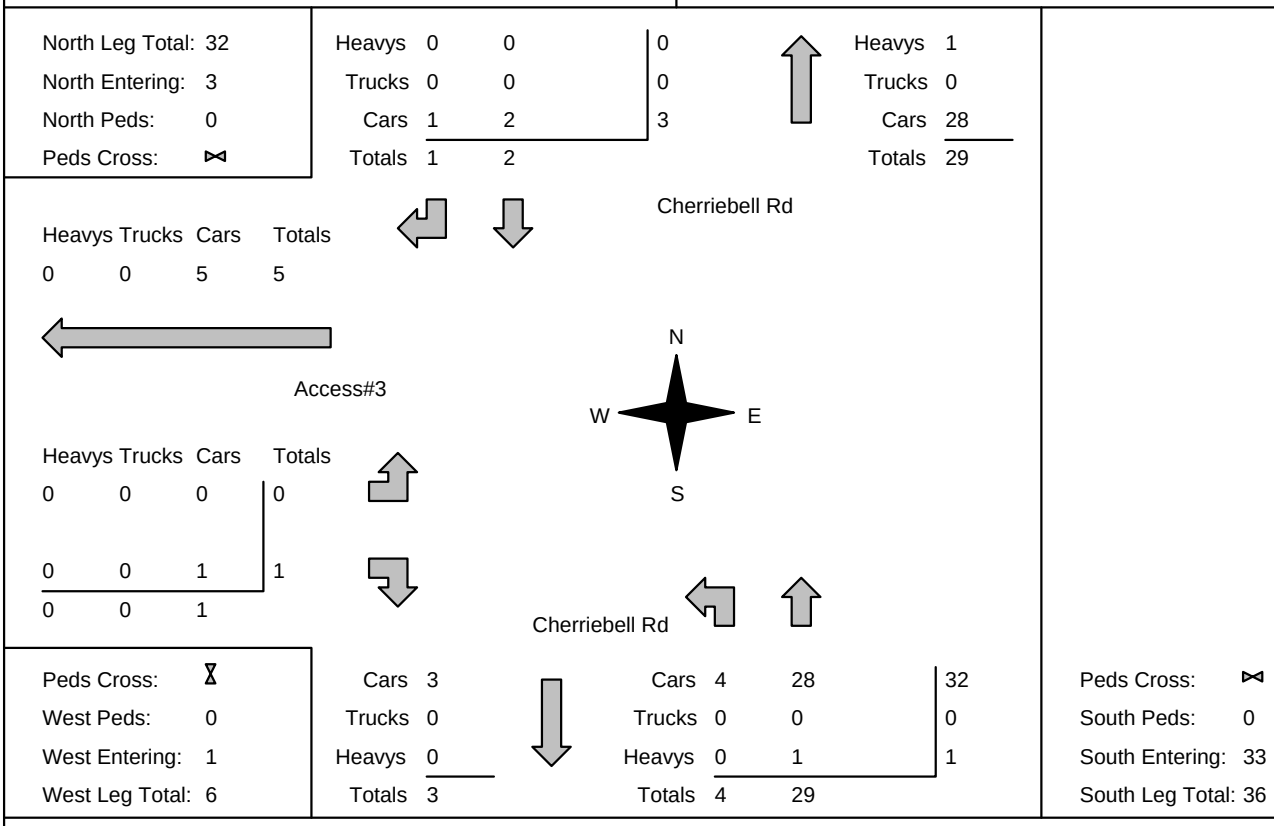
Municipality: Mississauga
Site #: 1920200006
Intersection: Cherriebell Rd & Access#3
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Cherriebell Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

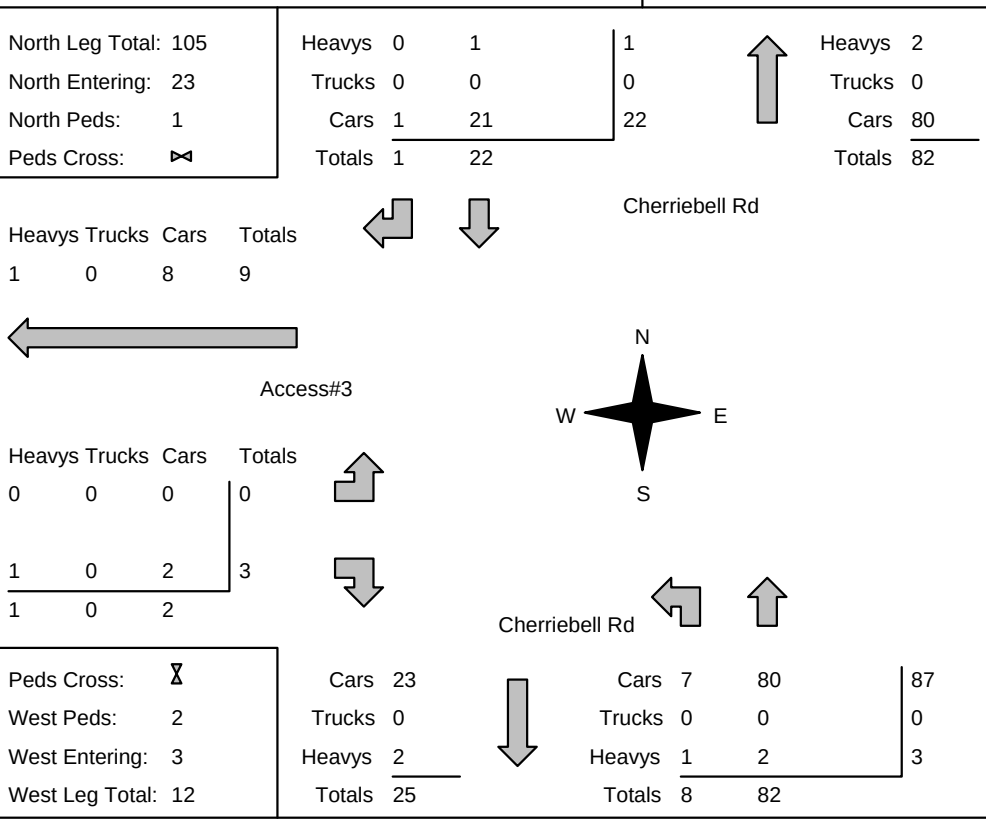
Municipality: Mississauga
Site #: 1920200006
Intersection: Cherriebell Rd & Access#3
TFR File #: 1
Count date: 28-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Cherriebell Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Cherriebell Rd & Access#3 | **Count Date:** 28-Nov-19 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*6*	*0*	*6*	*0*
9:00:00	*0*	*9*	*0*	*9*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*2*	*1*	*3*	*0*
18:00:00	*0*	*5*	*0*	*5*	*0*
Totals:	0	22	1	23	1

North/South Total Approaches

0
15
40
0
33
25
113

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*2*	*7*	*0*	*9*	*0*
9:00:00	*2*	*29*	*0*	*31*	*2*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*2*	*28*	*0*	*30*	*0*
18:00:00	*2*	*18*	*0*	*20*	*0*
S Totals:	8	82	0	90	2

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
Totals:	0	0	0	0	0

East/West Total Approaches

0
0
2
0
0
1
3

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*1*
9:00:00	*0*	*0*	*2*	*2*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*1*	*1*	*1*
W Totals:	0	0	3	3	2

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*0*	*3*	*0*	*0*	*0*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200006

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	6	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
8:30:00	0	0	9	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
8:45:00	0	0	11	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
9:00:00	0	0	14	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
9:15:00	0	0	14	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:00:00	0	0	14	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:15:00	0	0	15	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:30:00	0	0	16	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:45:00	0	0	16	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:00:00	0	0	16	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:15:00	0	0	17	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:30:00	0	0	17	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:45:00	0	0	20	3	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
18:00:00	0	0	21	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
18:15:00	0	0	21	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
18:15:15	0	0	21	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200006

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200006

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
7:30:00	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
7:45:00	1	1	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
8:00:00	1	0	7	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
8:15:00	1	0	12	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	2
8:30:00	1	0	18	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0
8:45:00	3	2	26	8	0	0	0	0	0	0	0	0	1	0	1	1	0	0	2	0
9:00:00	3	0	35	9	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0
9:15:00	3	0	35	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0
16:00:00	3	0	35	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0
16:15:00	3	0	40	5	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0
16:30:00	4	1	48	8	0	0	0	0	0	0	0	0	1	0	2	1	0	0	2	0
16:45:00	5	1	56	8	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0
17:00:00	5	0	62	6	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0
17:15:00	7	2	68	6	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0
17:30:00	7	0	76	8	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0
17:45:00	7	0	78	2	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0
18:00:00	7	0	80	2	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0
18:15:00	7	0	80	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0
18:15:15	7	0	80	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-Nov-19 Site #: 1920200006

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0
8:45:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
9:00:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
9:15:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
16:00:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
16:15:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
16:30:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
16:45:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
17:00:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
17:15:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0
17:30:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1
17:45:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
18:00:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
18:15:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
18:15:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0

Turning Movement Count (3 . DIXIE RD & ST JAMES AVE) CustID: SPEC_INSTRUC MioID: 501036

Start Time	N Approach DIXIE RD					S Approach DIXIE RD					W Approach ST JAMES AVE					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	U-Turn N:N	Peds N:	Approach Total	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Left W:N	U-Turn W:W	Peds W:	Approach Total		
07:00:00	6	53	0	0	59	69	0	0	0	69	0	9	0	0	9	137	
07:15:00	1	59	0	0	60	109	0	0	0	109	0	15	0	0	15	184	
07:30:00	3	56	0	0	59	105	0	0	0	105	2	13	0	0	15	179	
07:45:00	4	69	0	0	73	141	0	0	0	141	4	13	0	0	17	231	731
08:00:00	5	87	0	0	92	166	2	0	0	168	0	12	0	0	12	272	866
08:15:00	2	78	0	0	80	137	0	0	0	137	0	15	0	0	15	232	914
08:30:00	6	79	0	0	85	128	2	1	0	131	1	10	0	0	11	227	962
08:45:00	6	59	0	0	65	120	1	0	0	121	1	11	0	0	12	198	929
BREAK																	
16:00:00	9	99	0	0	108	122	2	0	0	124	1	7	0	0	8	240	
16:15:00	6	81	0	0	87	91	1	0	0	92	1	4	0	1	5	184	
16:30:00	10	105	0	0	115	110	0	0	0	110	0	8	0	0	8	233	
16:45:00	9	120	0	0	129	122	1	0	0	123	2	4	0	0	6	258	915
17:00:00	14	111	0	0	125	113	0	0	0	113	1	5	0	0	6	244	919
17:15:00	11	119	0	0	130	94	0	0	0	94	1	10	0	0	11	235	970
17:30:00	12	108	0	0	120	105	1	0	0	106	0	5	0	1	5	231	968
17:45:00	22	114	0	1	136	99	1	0	0	100	0	8	0	0	8	244	954
Grand Total	126	1397	0	1	1523	1831	11	1	0	1843	14	149	0	2	163	**3529**	-
Approach%	8.3%	91.7%	0%		-	99.3%	0.6%	0.1%		-	8.6%	91.4%	0%		-	-	-
Totals %	3.6%	39.6%	0%		43.2%	51.9%	0.3%	0%		52.2%	0.4%	4.2%	0%		4.6%	-	-
Heavy	1	48	0		-	41	4	0		-	1	1	0		-	-	-
Heavy %	0.8%	3.4%	0%		-	2.2%	36.4%	0%		-	7.1%	0.7%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: DIXIE RD & ST JAMES AVE
Date: Thu, Mar 08, 2018 Deployment Lead: Theo Daglis

BA Group
45 St. Clair Avenue West, Suite 300
Toronto ON, CANADA, M4V 1K9

Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast (-3.4 °C)

Start Time	N Approach DIXIE RD					S Approach DIXIE RD					W Approach ST JAMES AVE					Int. Total (15 min)
	Right	Thru	U-Turn	Peds	Approach Total	Thru	Left	U-Turn	Peds	Approach Total	Right	Left	U-Turn	Peds	Approach Total	
07:45:00	4	69	0	0	73	141	0	0	0	141	4	13	0	0	17	231
08:00:00	5	87	0	0	92	166	2	0	0	168	0	12	0	0	12	272
08:15:00	2	78	0	0	80	137	0	0	0	137	0	15	0	0	15	232
08:30:00	6	79	0	0	85	128	2	1	0	131	1	10	0	0	11	227
Grand Total	17	313	0	0	330	572	4	1	0	577	5	50	0	0	55	**962**
Approach%	5.2%	94.8%	0%		-	99.1%	0.7%	0.2%		-	9.1%	90.9%	0%		-	-
Totals %	1.8%	32.5%	0%		34.3%	59.5%	0.4%	0.1%		60%	0.5%	5.2%	0%		5.7%	-
PHF	0.71	0.9	0		0.9	0.86	0.5	0.25		0.86	0.31	0.83	0		0.81	-
Heavy	0	24	0		24	15	3	0		18	0	1	0		1	-
Heavy %	0%	7.7%	0%		7.3%	2.6%	75%	0%		3.1%	0%	2%	0%		1.8%	-
Lights	17	289	0		306	557	1	1		559	5	49	0		54	-
Lights %	100%	92.3%	0%		92.7%	97.4%	25%	100%		96.9%	100%	98%	0%		98.2%	-
Single-Unit Trucks	0	19	0		19	7	0	0		7	0	0	0		0	-
Single-Unit Trucks %	0%	6.1%	0%		5.8%	1.2%	0%	0%		1.2%	0%	0%	0%		0%	-
Buses	0	4	0		4	3	3	0		6	0	1	0		1	-
Buses %	0%	1.3%	0%		1.2%	0.5%	75%	0%		1%	0%	2%	0%		1.8%	-
Articulated Trucks	0	1	0		1	5	0	0		5	0	0	0		0	-
Articulated Trucks %	0%	0.3%	0%		0.3%	0.9%	0%	0%		0.9%	0%	0%	0%		0%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-

Peak Hour: 04:30 PM - 05:30 PM Weather: Snow (-0.4 °C)

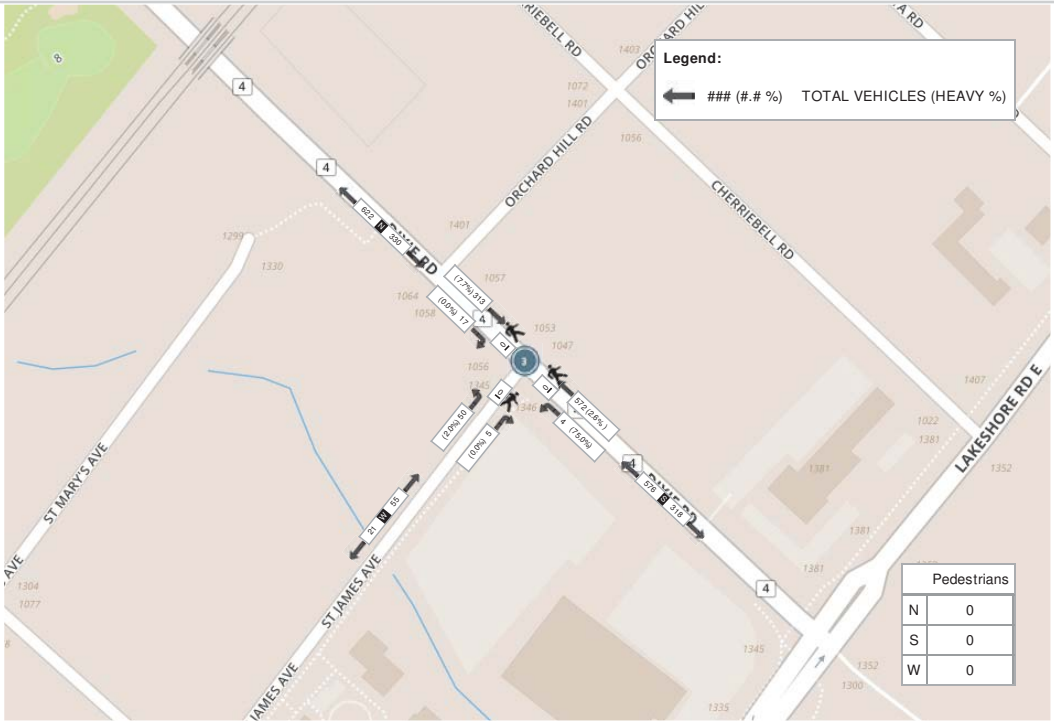
Start Time	N Approach DIXIE RD					S Approach DIXIE RD					W Approach ST JAMES AVE					Int. Total (15 min)
	Right	Thru	U-Turn	Peds	Approach Total	Thru	Left	U-Turn	Peds	Approach Total	Right	Left	U-Turn	Peds	Approach Total	
16:30:00	10	105	0	0	115	110	0	0	0	110	0	8	0	0	8	233
16:45:00	9	120	0	0	129	122	1	0	0	123	2	4	0	0	6	258
17:00:00	14	111	0	0	125	113	0	0	0	113	1	5	0	0	6	244
17:15:00	11	119	0	0	130	94	0	0	0	94	1	10	0	0	11	235
Grand Total	44	455	0	0	499	439	1	0	0	440	4	27	0	0	31	**970**
Approach%	8.8%	91.2%	0%		-	99.8%	0.2%	0%		-	12.9%	87.1%	0%		-	-
Totals %	4.5%	46.9%	0%		51.4%	45.3%	0.1%	0%		45.4%	0.4%	2.8%	0%		3.2%	-
PHF	0.79	0.95	0		0.96	0.9	0.25	0		0.89	0.5	0.68	0		0.7	-
Heavy	0	3	0		3	7	0	0		7	0	0	0		0	-
Heavy %	0%	0.7%	0%		0.6%	1.6%	0%	0%		1.6%	0%	0%	0%		0%	-
Lights	44	452	0		496	432	1	0		433	4	27	0		31	-
Lights %	100%	99.3%	0%		99.4%	98.4%	100%	0%		98.4%	100%	100%	0%		100%	-
Single-Unit Trucks	0	2	0		2	3	0	0		3	0	0	0		0	-
Single-Unit Trucks %	0%	0.4%	0%		0.4%	0.7%	0%	0%		0.7%	0%	0%	0%		0%	-
Buses	0	1	0		1	1	0	0		1	0	0	0		0	-
Buses %	0%	0.2%	0%		0.2%	0.2%	0%	0%		0.2%	0%	0%	0%		0%	-
Articulated Trucks	0	0	0		0	3	0	0		3	0	0	0		0	-
Articulated Trucks %	0%	0%	0%		0%	0.7%	0%	0%		0.7%	0%	0%	0%		0%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-

Spectrum

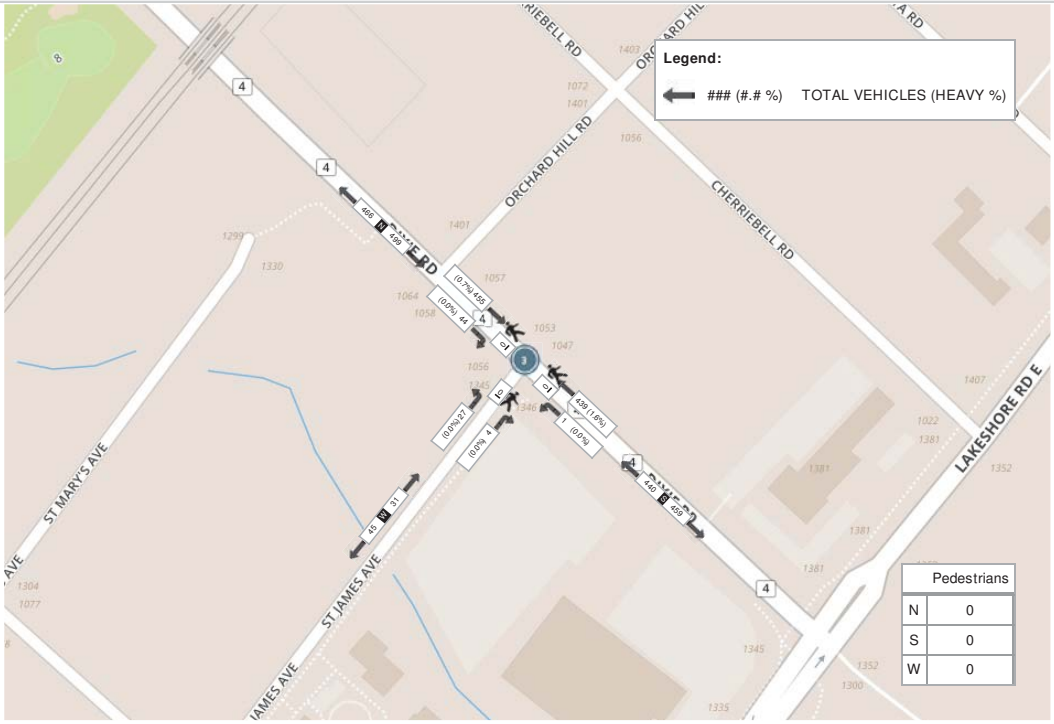
Turning Movement Count
Location Name: DIXIE RD & ST JAMES AVE
Date: Thu, Mar 08, 2018 Deployment Lead: Theo Daglis

BA Group
45 St. Clair Avenue West, Suite 300
Toronto ON, CANADA, M4V 1K9

Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast (-3.4 °C)



Peak Hour: 04:30 PM - 05:30 PM Weather: Snow (-0.4 °C)



Turning Movement Count (4 . FERGUS AVE & LAKESHORE RD E) CustID: SPEC_INSTRUC MioID: 501039

Start Time	N Approach FERGUS AVE						E Approach LAKESHORE RD E						S Approach FERGUS AVE						W Approach LAKESHORE RD E						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
07:00:00	7	0	2	0	0	9	3	101	6	0	0	110	0	0	3	0	0	3	4	177	2	0	0	183	305	
07:15:00	3	0	3	0	2	6	0	114	6	0	0	120	1	0	2	0	0	3	5	243	3	0	0	251	380	
07:30:00	9	0	2	0	2	11	1	109	3	0	0	113	1	0	2	0	0	3	13	264	2	0	0	279	406	
07:45:00	12	0	0	0	3	12	1	140	12	0	0	153	4	0	3	0	0	7	9	314	4	0	0	327	499	1590
08:00:00	17	0	2	0	2	19	1	146	14	0	0	161	3	0	3	0	0	6	9	288	3	0	0	300	486	1771
08:15:00	10	0	3	0	0	13	1	197	9	0	0	207	5	0	6	0	0	11	7	280	4	0	1	291	522	1913
08:30:00	12	0	1	0	1	13	4	150	11	0	0	165	5	0	7	0	0	12	5	248	6	0	0	259	449	1956
08:45:00	19	0	4	0	0	23	1	136	8	0	0	145	8	0	8	0	1	16	10	241	5	0	0	256	440	1897
BREAK																										
16:00:00	3	0	0	0	1	3	3	264	0	0	1	267	9	0	9	0	0	18	6	182	11	0	1	199	487	
16:15:00	1	0	0	0	4	1	6	298	4	0	0	308	9	0	5	0	0	14	2	129	5	0	0	136	459	
16:30:00	11	0	2	0	3	13	6	310	0	0	0	316	10	0	6	0	0	16	2	132	11	0	0	145	490	
16:45:00	6	0	1	0	1	7	2	321	0	1	0	324	8	0	1	0	0	9	4	176	4	0	1	184	524	1960
17:00:00	10	0	3	0	0	13	4	353	1	0	0	358	4	0	8	0	0	12	0	165	9	0	0	174	557	2030
17:15:00	10	0	3	0	3	13	4	314	1	0	0	319	4	0	3	0	0	7	1	164	6	0	1	171	510	2081
17:30:00	6	0	1	0	2	7	4	328	1	0	0	333	0	0	2	0	0	2	2	161	7	0	0	170	512	2103
17:45:00	8	0	3	0	3	11	3	252	1	0	0	256	1	0	2	0	0	3	0	148	6	0	0	154	424	2003
Grand Total	144	0	30	0	27	174	44	3533	77	1	1	3655	72	0	70	0	1	142	79	3312	88	0	4	3479	**7450**	-
Approach%	82.8%	0%	17.2%	0%		-	1.2%	96.7%	2.1%	0%		-	50.7%	0%	49.3%	0%		-	2.3%	95.2%	2.5%	0%		-	-	-
Totals %	1.9%	0%	0.4%	0%		2.3%	0.6%	47.4%	1%	0%		49.1%	1%	0%	0.9%	0%		1.9%	1.1%	44.5%	1.2%	0%		46.7%	-	-
Heavy	8	0	0	0		-	1	103	31	0		-	27	0	26	0		-	28	100	3	0		-	-	-
Heavy %	5.6%	0%	0%	0%		-	2.3%	2.9%	40.3%	0%		-	37.5%	0%	37.1%	0%		-	35.4%	3%	3.4%	0%		-	-	-
Bicycles	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	0	1	0	0		-	-	-
Bicycle %	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	-	-

APPENDIX D-1
Synchro HCM and Queuing Reports
Existing (2020) Traffic Conditions

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	35	763	2	15	509
Future Volume (Veh/h)	3	35	763	2	15	509
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	3	36	787	2	15	525
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type			TWLTL			None
Median storage veh)			2			
Upstream signal (m)			206			
pX, platoon unblocked	0.91	0.91			0.91	
vC, conflicting volume	1344	789			790	
vC1, stage 1 conf vol	789					
vC2, stage 2 conf vol	555					
vCu, unblocked vol	1328	715			716	
tC, single (s)	6.4	6.2			4.4	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.4	
p0 queue free %	99	91			98	
cM capacity (veh/h)	368	393			706	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	39	789	15	525
Volume Left	3	0	15	0
Volume Right	36	2	0	0
cSH	391	1700	706	1700
Volume to Capacity	0.10	0.46	0.02	0.31
Queue Length 95th (m)	2.6	0.0	0.5	0.0
Control Delay (s)	15.2	0.0	10.2	0.0
Lane LOS	C		B	
Approach Delay (s)	15.2	0.0	0.3	
Approach LOS	C			

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	5	4	703	499	17
Future Volume (Veh/h)	50	5	4	703	499	17
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.68	0.50	0.25	0.90	0.95	0.79
Hourly flow rate (vph)	74	10	16	781	525	22
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				156		
pX, platoon unblocked	0.89					
vC, conflicting volume	1349	536	547			
vC1, stage 1 conf vol	536					
vC2, stage 2 conf vol	813					
vCu, unblocked vol	1331	536	547			
tC, single (s)	6.4	6.2	4.8			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.9			
p0 queue free %	79	98	98			
cM capacity (veh/h)	357	549	740			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	84	16	781	547
Volume Left	74	16	0	0
Volume Right	10	0	0	22
cSH	373	740	1700	1700
Volume to Capacity	0.23	0.02	0.46	0.32
Queue Length 95th (m)	6.8	0.5	0.0	0.0
Control Delay (s)	17.4	10.0	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	17.4	0.2		0.0
Approach LOS	C			

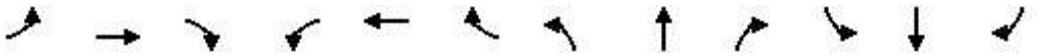
Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	468	960	1	1191	2	219	315
v/c Ratio	1.05	0.39	0.00	0.74	0.01	0.81	0.56
Control Delay	84.3	8.4	18.0	27.0	30.0	66.0	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.3	8.4	18.0	27.0	30.0	66.0	6.7
Queue Length 50th (m)	~90.5	45.5	0.1	111.8	0.2	49.2	0.0
Queue Length 95th (m)	#170.4	67.6	1.2	153.8	2.5	77.7	16.1
Internal Link Dist (m)		142.5		28.0	29.3		38.7
Turn Bay Length (m)	15.0		20.0			27.0	
Base Capacity (vph)	445	2435	270	1601	446	354	623
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.39	0.00	0.74	0.00	0.62	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

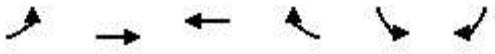
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	426	872	2	1	814	269	0	1	1	199	0	287
Future Volume (vph)	426	872	2	1	814	269	0	1	1	199	0	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	6.3		6.3	6.3			6.3		6.3	6.3	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.97			0.99		1.00	0.96	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		0.99	1.00	
Frt	1.00	1.00		1.00	0.96			0.93		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1752	3504		1786	3267			1758		1758	1438	
Flt Permitted	0.12	1.00		0.30	1.00			1.00		0.76	1.00	
Satd. Flow (perm)	226	3504		561	3267			1758		1400	1438	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	468	958	2	1	895	296	0	1	1	219	0	315
RTOR Reduction (vph)	0	0	0	0	25	0	0	1	0	0	254	0
Lane Group Flow (vph)	468	960	0	1	1166	0	0	1	0	219	61	0
Confl. Peds. (#/hr)	40		18	18		40	18		2	2		18
Heavy Vehicles (%)	3%	3%	0%	0%	4%	2%	0%	0%	0%	2%	0%	8%
Turn Type	pm+pt	NA		Perm	NA			NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	78.9	78.9		54.9	54.9			22.0		22.0	22.0	
Effective Green, g (s)	78.9	78.9		54.9	54.9			22.0		22.0	22.0	
Actuated g/C Ratio	0.70	0.70		0.48	0.48			0.19		0.19	0.19	
Clearance Time (s)	3.0	6.3		6.3	6.3			6.3		6.3	6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	439	2435		271	1580			340		271	278	
v/s Ratio Prot	c0.20	0.27			0.36			0.00			0.04	
v/s Ratio Perm	c0.54			0.00						c0.16		
v/c Ratio	1.07	0.39		0.00	0.74			0.00		0.81	0.22	
Uniform Delay, d1	30.5	7.3		15.2	23.5			36.9		43.7	38.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	61.6	0.5		0.0	3.1			0.0		16.0	0.4	
Delay (s)	92.1	7.7		15.2	26.6			36.9		59.8	38.9	
Level of Service	F	A		B	C			D		E	D	
Approach Delay (s)		35.4			26.6			36.9			47.5	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	113.5	Sum of lost time (s)	15.6
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	1066	1042	12	5	4
Future Volume (Veh/h)	4	1066	1042	12	5	4
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	5	1211	1184	14	6	5
Pedestrians					12	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (m)		96				
pX, platoon unblocked					0.88	
vC, conflicting volume	1210				1818	611
vC1, stage 1 conf vol					1203	
vC2, stage 2 conf vol					616	
vCu, unblocked vol	1210				1664	611
tC, single (s)	4.1				7.2	7.4
tC, 2 stage (s)					6.2	
tF (s)	2.2				3.7	3.5
p0 queue free %	99				97	99
cM capacity (veh/h)	578				198	381

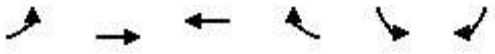
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	5	606	606	789	409	11
Volume Left	5	0	0	0	0	6
Volume Right	0	0	0	0	14	5
cSH	578	1700	1700	1700	1700	253
Volume to Capacity	0.01	0.36	0.36	0.46	0.24	0.04
Queue Length 95th (m)	0.2	0.0	0.0	0.0	0.0	1.1
Control Delay (s)	11.3	0.0	0.0	0.0	0.0	19.9
Lane LOS	B					C
Approach Delay (s)	0.0			0.0		19.9
Approach LOS						C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	2	725	0	2	510
Future Volume (Veh/h)	0	2	725	0	2	510
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	2	763	0	2	537
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (m)			63			
pX, platoon unblocked	0.89	0.89			0.89	
vC, conflicting volume	1305	764			764	
vC1, stage 1 conf vol	764					
vC2, stage 2 conf vol	541					
vCu, unblocked vol	1281	672			672	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	381	408			824	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	763	2	537
Volume Left	0	0	2	0
Volume Right	2	0	0	0
cSH	408	1700	824	1700
Volume to Capacity	0.00	0.45	0.00	0.32
Queue Length 95th (m)	0.1	0.0	0.1	0.0
Control Delay (s)	13.9	0.0	9.4	0.0
Lane LOS	B		A	
Approach Delay (s)	13.9	0.0	0.0	
Approach LOS	B			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1037	1046	1	1	1
Future Volume (Veh/h)	0	1037	1046	1	1	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	0	1178	1189	1	1	1
Pedestrians					8	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		None	TWLTL			
Median storage veh)			2			
Upstream signal (m)		52				
pX, platoon unblocked					0.88	
vC, conflicting volume	1198				1786	603
vC1, stage 1 conf vol					1198	
vC2, stage 2 conf vol					589	
vCu, unblocked vol	1198				1628	603
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	586				235	444

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	0	589	589	793	397	2
Volume Left	0	0	0	0	0	1
Volume Right	0	0	0	0	1	1
cSH	1700	1700	1700	1700	1700	308
Volume to Capacity	0.00	0.35	0.35	0.47	0.23	0.01
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.2
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	16.8
Lane LOS						C
Approach Delay (s)	0.0			0.0		16.8
Approach LOS						C

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2	2	28	9	0
Future Volume (Veh/h)	0	2	2	28	9	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	0	2	2	35	11	0
Pedestrians				2	1	
Lane Width (m)				3.6	3.6	
Walking Speed (m/s)				1.2	1.2	
Percent Blockage				0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	51	13	11			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	51	13	11			
tC, single (s)	6.4	6.7	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.8	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	961	942	1621			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	2	37	11
Volume Left	0	2	0
Volume Right	2	0	0
cSH	942	1621	1700
Volume to Capacity	0.00	0.00	0.01
Queue Length 95th (m)	0.1	0.0	0.0
Control Delay (s)	8.8	0.4	0.0
Lane LOS	A	A	
Approach Delay (s)	8.8	0.4	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	34	665	5	23	598
Future Volume (Veh/h)	5	34	665	5	23	598
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	5	36	707	5	24	636
Pedestrians			2			
Lane Width (m)			3.6			
Walking Speed (m/s)			1.2			
Percent Blockage			0			
Right turn flare (veh)						
Median type			TWLTL			None
Median storage veh)			2			
Upstream signal (m)			206			
pX, platoon unblocked	0.95	0.95			0.95	
vC, conflicting volume	1396	710			712	
vC1, stage 1 conf vol	710					
vC2, stage 2 conf vol	686					
vCu, unblocked vol	1390	671			673	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	92			97	
cM capacity (veh/h)	366	439			884	

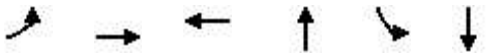
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	41	712	24	636
Volume Left	5	0	24	0
Volume Right	36	5	0	0
cSH	428	1700	884	1700
Volume to Capacity	0.10	0.42	0.03	0.37
Queue Length 95th (m)	2.5	0.0	0.7	0.0
Control Delay (s)	14.3	0.0	9.2	0.0
Lane LOS	B		A	
Approach Delay (s)	14.3	0.0	0.3	
Approach LOS	B			

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	45.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	4	1	628	544	44
Future Volume (Veh/h)	27	4	1	628	544	44
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.68	0.25	0.90	0.95	0.79
Hourly flow rate (vph)	54	6	4	698	573	56
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				156		
pX, platoon unblocked	0.94					
vC, conflicting volume	1307	601	629			
vC1, stage 1 conf vol	601					
vC2, stage 2 conf vol	706					
vCu, unblocked vol	1295	601	629			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	86	99	100			
cM capacity (veh/h)	391	504	963			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	60	4	698	629
Volume Left	54	4	0	0
Volume Right	6	0	0	56
cSH	400	963	1700	1700
Volume to Capacity	0.15	0.00	0.41	0.37
Queue Length 95th (m)	4.2	0.1	0.0	0.0
Control Delay (s)	15.6	8.8	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	15.6	0.0		0.0
Approach LOS	C			

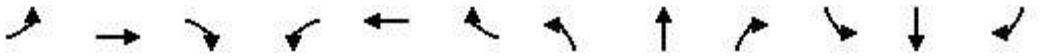
Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	289	697	1695	4	284	297
v/c Ratio	0.97	0.30	0.98	0.01	0.85	0.55
Control Delay	79.5	9.3	47.0	31.8	67.0	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.5	9.3	47.0	31.8	67.0	12.0
Queue Length 50th (m)	54.7	35.8	207.2	0.6	67.6	8.8
Queue Length 95th (m)	#111.9	45.7	#267.9	3.7	#115.8	36.0
Internal Link Dist (m)		142.5	28.0	29.3		38.7
Turn Bay Length (m)	15.0				27.0	
Base Capacity (vph)	298	2298	1727	412	335	541
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	0.97	0.30	0.98	0.01	0.85	0.55

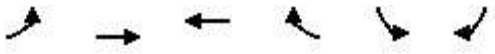
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	661	1	0	1271	339	1	2	1	270	0	282
Future Volume (vph)	275	661	1	0	1271	339	1	2	1	270	0	282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	6.3			6.3			6.3		6.3	6.3	
Lane Util. Factor	1.00	0.95			0.95			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00			0.99			1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	1.00			0.97			0.97		1.00	0.85	
Flt Protected	0.95	1.00			1.00			0.99		0.95	1.00	
Satd. Flow (prot)	1752	3504			3433			1805		1763	1464	
Flt Permitted	0.06	1.00			1.00			0.94		0.76	1.00	
Satd. Flow (perm)	118	3504			3433			1724		1402	1464	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	289	696	1	0	1338	357	1	2	1	284	0	297
RTOR Reduction (vph)	0	0	0	0	20	0	0	1	0	0	192	0
Lane Group Flow (vph)	289	697	0	0	1675	0	0	3	0	284	105	0
Confl. Peds. (#/hr)	8					8	6		1	1		6
Heavy Vehicles (%)	3%	3%	0%	0%	1%	1%	0%	0%	0%	2%	0%	8%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	78.7	78.7			59.7			28.7		28.7	28.7	
Effective Green, g (s)	78.7	78.7			59.7			28.7		28.7	28.7	
Actuated g/C Ratio	0.66	0.66			0.50			0.24		0.24	0.24	
Clearance Time (s)	3.0	6.3			6.3			6.3		6.3	6.3	
Lane Grp Cap (vph)	295	2298			1707			412		335	350	
v/s Ratio Prot	c0.13	0.20			0.49						0.07	
v/s Ratio Perm	c0.51							0.00		c0.20		
v/c Ratio	0.98	0.30			0.98			0.01		0.85	0.30	
Uniform Delay, d1	40.6	8.9			29.6			34.8		43.6	37.4	
Progression Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2	47.5	0.3			17.8			0.0		22.5	2.2	
Delay (s)	88.1	9.2			47.4			34.8		66.1	39.6	
Level of Service	F	A			D			C		E	D	
Approach Delay (s)		32.3			47.4			34.8			52.6	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	928	1602	15	4	4
Future Volume (Veh/h)	11	928	1602	15	4	4
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	12	987	1704	16	4	4
Pedestrians					8	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (m)		96				
pX, platoon unblocked					0.92	
vC, conflicting volume	1728				2238	868
vC1, stage 1 conf vol					1720	
vC2, stage 2 conf vol					518	
vCu, unblocked vol	1728				2168	868
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	97				97	99
cM capacity (veh/h)	368				127	298

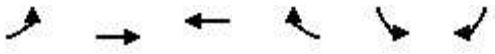
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	12	494	494	1136	584	8
Volume Left	12	0	0	0	0	4
Volume Right	0	0	0	0	16	4
cSH	368	1700	1700	1700	1700	178
Volume to Capacity	0.03	0.29	0.29	0.67	0.34	0.05
Queue Length 95th (m)	0.8	0.0	0.0	0.0	0.0	1.1
Control Delay (s)	15.1	0.0	0.0	0.0	0.0	26.2
Lane LOS	C					D
Approach Delay (s)	0.2			0.0		26.2
Approach LOS						D

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	54.8%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	4	631	2	3	565
Future Volume (Veh/h)	2	4	631	2	3	565
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	2	4	651	2	3	582
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (m)			63			
pX, platoon unblocked	0.93	0.93			0.93	
vC, conflicting volume	1240	652			653	
vC1, stage 1 conf vol	652					
vC2, stage 2 conf vol	588					
vCu, unblocked vol	1222	592			593	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	410	476			927	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	6	653	3	582
Volume Left	2	0	3	0
Volume Right	4	2	0	0
cSH	452	1700	927	1700
Volume to Capacity	0.01	0.38	0.00	0.34
Queue Length 95th (m)	0.3	0.0	0.1	0.0
Control Delay (s)	13.1	0.0	8.9	0.0
Lane LOS	B		A	
Approach Delay (s)	13.1	0.0	0.0	
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	937	1599	2	0	0
Future Volume (Veh/h)	0	937	1599	2	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	997	1701	2	0	0
Pedestrians					4	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	TWLTL			
Median storage veh)			2			
Upstream signal (m)		52				
pX, platoon unblocked					0.92	
vC, conflicting volume	1707				2204	856
vC1, stage 1 conf vol					1706	
vC2, stage 2 conf vol					498	
vCu, unblocked vol	1707				2131	856
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	376				130	304

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	0	498	498	1134	569	0
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	2	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.29	0.29	0.67	0.33	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS						A
Approach Delay (s)	0.0			0.0		0.0
Approach LOS						A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1	4	29	2	1
Future Volume (Veh/h)	0	1	4	29	2	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1	4	32	2	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	42	2	3			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	42	2	3			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	971	1087	1632			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	1	36	3
Volume Left	0	4	0
Volume Right	1	0	1
cSH	1087	1632	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.1	0.0
Control Delay (s)	8.3	0.8	0.0
Lane LOS	A	A	
Approach Delay (s)	8.3	0.8	0.0
Approach LOS	A		

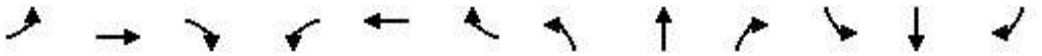
Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	14.9%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX D-2
Synchro HCM and Queuing Reports
Existing (2020) Traffic Conditions with Mitigation

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	468	960	1	1191	2	219	315
v/c Ratio	0.91	0.39	0.00	0.83	0.01	0.83	0.49
Control Delay	51.8	8.0	23.0	36.2	31.5	71.3	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.8	8.0	23.0	36.2	31.5	71.3	2.6
Queue Length 50th (m)	86.3	47.4	0.2	138.2	0.2	50.9	0.0
Queue Length 95th (m)	#148.1	61.8	1.4	#187.4	2.6	#86.2	0.0
Internal Link Dist (m)		142.5		28.0	29.3		38.7
Turn Bay Length (m)	15.0		20.0			27.0	
Base Capacity (vph)	561	2465	240	1427	389	309	680
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.39	0.00	0.83	0.01	0.71	0.46

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	426	872	2	1	814	269	0	1	1	199	0	287
Future Volume (vph)	426	872	2	1	814	269	0	1	1	199	0	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	6.3		6.3	6.3			6.3		6.3	6.3	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.97			0.99		1.00	0.96	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		0.99	1.00	
Frt	1.00	1.00		1.00	0.96			0.93		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1752	3504		1785	3265			1758		1757	1437	
Flt Permitted	0.09	1.00		0.30	1.00			1.00		0.76	1.00	
Satd. Flow (perm)	172	3504		560	3265			1758		1399	1437	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	468	958	2	1	895	296	0	1	1	219	0	315
RTOR Reduction (vph)	0	0	0	0	25	0	0	1	0	0	256	0
Lane Group Flow (vph)	468	960	0	1	1166	0	0	1	0	219	59	0
Confl. Peds. (#/hr)	40		18	18		40	18		2	2		18
Heavy Vehicles (%)	3%	3%	0%	0%	4%	2%	0%	0%	0%	2%	0%	8%
Turn Type	pm+pt	NA		Perm	NA			NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	81.8	81.8		50.0	50.0			21.9		21.9	21.9	
Effective Green, g (s)	81.8	81.8		50.0	50.0			21.9		21.9	21.9	
Actuated g/C Ratio	0.70	0.70		0.43	0.43			0.19		0.19	0.19	
Clearance Time (s)	3.0	6.3		6.3	6.3			6.3		6.3	6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	512	2464		240	1403			331		263	270	
v/s Ratio Prot	c0.23	0.27			0.36			0.00			0.04	
v/s Ratio Perm	c0.42			0.00						c0.16		
v/c Ratio	0.91	0.39		0.00	0.83			0.00		0.83	0.22	
Uniform Delay, d1	32.6	7.0		18.9	29.4			38.3		45.4	40.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	20.8	0.5		0.0	5.9			0.0		19.7	0.4	
Delay (s)	53.4	7.5		19.0	35.3			38.3		65.1	40.4	
Level of Service	D	A		B	D			D		E	D	
Approach Delay (s)		22.6			35.2			38.3			50.5	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	116.3	Sum of lost time (s)	15.6
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX E
Correspondence with the City
Background Traffic Growth Rate

Dumitru Liubeznii

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: Tuesday, November 26, 2019 10:32 AM
To: Dumitru Liubeznii
Subject: RE: [COLE#2019-0263] 1381 Lakeshore Road East - Future Traffic Growth Inquiry

Hi Dumitru,

Using the City's Travel Demand Model and supporting Traffic count data, the City's Transportation Planning section has determined the projected growth on Lakeshore Road to be used as part of your study. The recommended projected growth is shown below:

Lakeshore Road

	Compounded Annual Growth from Existing to 2026	
	EB	WB
Time		
AM Peak Hour	0.0%	2.0%
PM Peak Hour	2.0%	0.0%

-Note that this analysis assumes the Lakeview Development

Regards,

Tyler

From: Dumitru Liubeznii [mailto:dliubeznii@coleengineering.ca]
Sent: 2019/11/26 9:38 AM
To: Tyler Xuereb
Subject: RE: [COLE#2019-0263] 1381 Lakeshore Road East - Future Traffic Growth Inquiry

Hi,

I have also attached the a copy of TOR circulated to the city for your reference. The traffic analysis will be conducted for following horizons:

- Existing (2019) traffic conditions; and,
- Future (2026) traffic conditions, which corresponds to 5-year after development full build out in year 2021.

Let me know if you have any further questions.

Kind regards,

Dumitru Liubeznii, EIT
Traffic Analyst

Urban Development (ICI&T)

Cole Engineering Group Ltd.
70 Valleywood Dr., Markham, ON L3R 4T5
T. 905-940-6161 Ext 295
F: 905-940-2064
Email: dliubeznii@coleengineering.ca
Website: www.ColeEngineering.ca

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: Tuesday, November 26, 2019 9:31 AM
To: Dumitru Liubeznii <dliubeznii@coleengineering.ca>
Subject: RE: [COLE#2019-0263] 1381 Lakeshore Road East - Future Traffic Growth Inquiry

Thanks for this Dumitru!

What is the horizon years for your development?

Thanks,

Tyler

From: Dumitru Liubeznii [mailto:dliubeznii@coleengineering.ca]
Sent: 2019/11/26 9:21 AM
To: Tyler Xuereb
Cc: Sevim Coskun
Subject: RE: [COLE#2019-0263] 1381 Lakeshore Road East - Future Traffic Growth Inquiry

Hi Tyler,

I have attached the email correspondence in support of TOR circulation. It was suggested by Gregory Borys, C.E.T., to confirm the growth rates with you. As a reference, we used a study submitted in May 11, 2018 by BA Group for the proposed development at 1345 Lakeshore Road located just across the street from our site.

Please confirm if you are in agreement with the traffic growth rates we plan to use in our study, as described in email dated November 22, 2019 in beginning of this email chain.

Kind regards,

Dumitru Liubeznii, EIT
Traffic Analyst
Urban Development (ICI&T)

Cole Engineering Group Ltd.
70 Valleywood Dr., Markham, ON L3R 4T5
T. 905-940-6161 Ext 295
F: 905-940-2064
Email: dliubeznii@coleengineering.ca
Website: www.ColeEngineering.ca

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: Tuesday, November 26, 2019 9:03 AM
To: Dumitru Liubeznii <dliubeznii@coleengineering.ca>
Subject: RE: [COLE#2019-0263] 1381 Lakeshore Road East - Future Traffic Growth Inquiry

Good Morning Dumitru,

Sorry for the late response as I was out of the office yesterday. Can you just confirm that a TOR has been submitted and that you have received comments back from city staff?

Thanks,

Tyler

From: Dumitru Liubeznii [mailto:dliubeznii@coleengineering.ca]
Sent: 2019/11/26 8:54 AM
To: Tyler Xuereb
Cc: Sevim Coskun
Subject: RE: [COLE#2019-0263] 1381 Lakeshore Road East - Future Traffic Growth Inquiry

Good morning Tyler,

Following the email we sent you earlier last week, we will proceed under the assumption that you are in agreement with proposed traffic growth rates that will be used in our study.

Kind regards,

Dumitru Liubeznii, EIT
Traffic Analyst
Urban Development (ICI&T)

Cole Engineering Group Ltd.
70 Valleywood Dr., Markham, ON L3R 4T5
T. 905-940-6161 Ext 295
F: 905-940-2064
Email: dliubeznii@coleengineering.ca
Website: www.ColeEngineering.ca

From: Dumitru Liubeznii
Sent: Friday, November 22, 2019 2:17 PM

To: 'tyler.xuereb@mississauga.ca' <tyler.xuereb@mississauga.ca>
Cc: Sevim Coskun <SCoskun@coleengineering.ca>
Subject: [COLE#2019-0263] 1381 Lakeshore Road East - Future Traffic Growth Inquiry [Filed 22 Nov 2019 14:17]

Good afternoon Tyler,

We are conducting TIS for proposed residential development at 1381 Lakeshore Road with following major intersections being considered in the analysis:

- Dixie Road and Orchard Hill Road;
- Lakeshore Road East and Dixie Road; and,
- Lakeshore Road East and Cherriebell Road.

Based on preliminary research for similar development applications submitted in the area, we plan to use annual corridor traffic growth rate of 0.5% for the weekday morning and 2.0% for the afternoon peak hour in the eastbound direction along Lakeshore Road East. Similarly, a growth rate of 4.0% for the weekday morning and 0.0% for the afternoon peak hour per annum in the westbound direction along Lakeshore Road East morning. No growth rate will be applied to Dixie Road and other local roads.

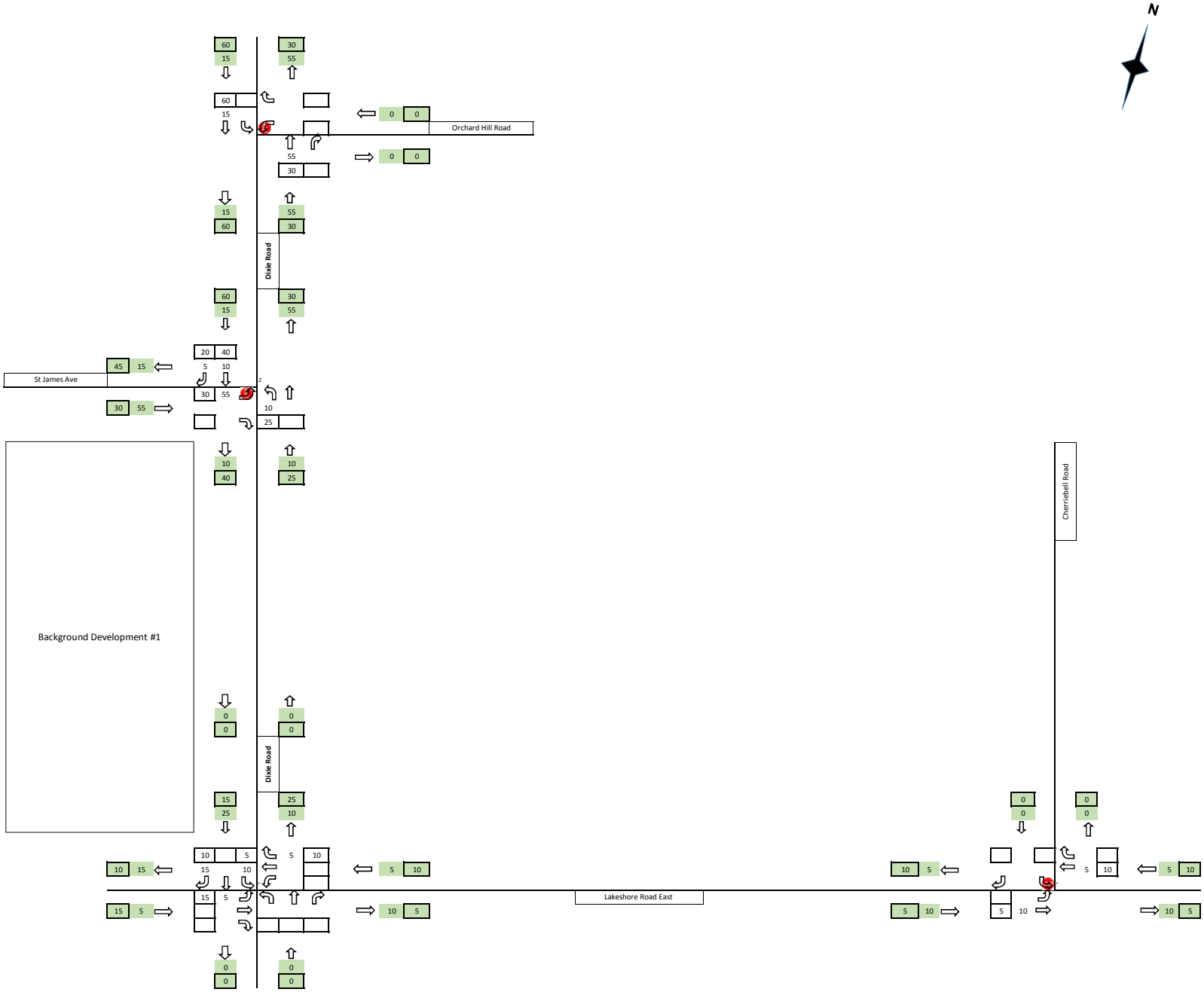
Please confirm if you are in agreement with the aforementioned statement so we can proceed accordingly.

Kind regards,

Dumitru Liubeznii, EIT
Traffic Analyst, Urban Development
Industrial, Commercial, Institutional & Traffic

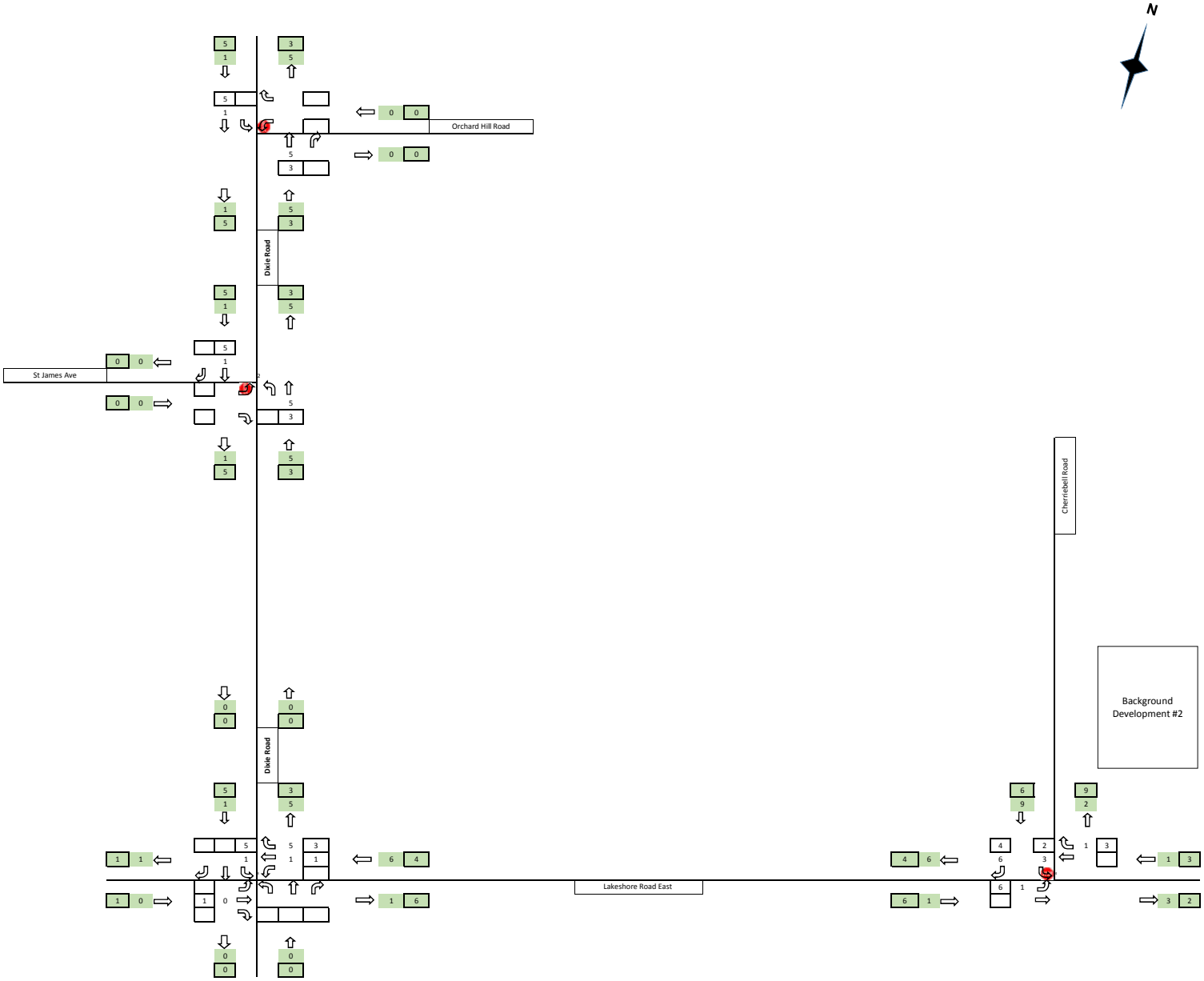
Cole Engineering Group Ltd.
70 Valleywood Dr., Markham, ON L3R 4T5
T. 905-940-6161 Ext 295
F: 905-940-2064
Email: dliubeznii@coleengineering.ca
Website: www.ColeEngineering.ca

APPENDIX F
Background Development Traffic Volumes



Background Development #1: 1345 Lakeshore Road East
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

COLE



LEGEND

\# Weekday AM Peak Hour

\# Weekday PM Peak Hour

Background Development #2: 1407 Lakeshore Road East
Traffic Impact Study - Mixed-Use Development
1381 Lakeshore Road East, City of Mississauga
2019-0263

COLE

APPENDIX G
Future Planned Roadway Improvements
Supporting Documents

Lakeshore Road Transportation Master Plan and Implementation Strategy

DRAFT Final Report

May 2019

Lakeshore Connecting Communities

MISSISSAUGA

HDR

Acknowledgements

City of Mississauga Steering Committee
Andy Harvey
Geoff Marinoff
Helen Noehammer
Jason Bevan
Jodi Robillos
Joe Perrotta
Lesley Pavan
Mickey Frost

City of Mississauga Core Team
Mark VanderSluis
Susan Tanabe
Norbert Orzel
Pauline Craig
Fred Sandoval
Jane Darragh
Yang Huang
Ben Philips
Romas Juknevicius
Yvonne Gwyn

HDR
Tyrone Gan
Tara Erwin
Nico Malfara
Michelle Mascarenhas
Juan Rodriguez
Rhys Wolff
Kareem Kobeissi
Charlotte Yuen
Carl Wong
Liming Sun
Norman Walker
Soheil Kashi
Yang Cheang

DTAH
Brent Raymond
Tanya Brown

Cumming+Company
Sue Cumming

Golder
Lynnette Dagenais
Heather Melcher
Henry Cary
Hugh Daechsel

MSH
Elizabeth Howson
Dave Yauk

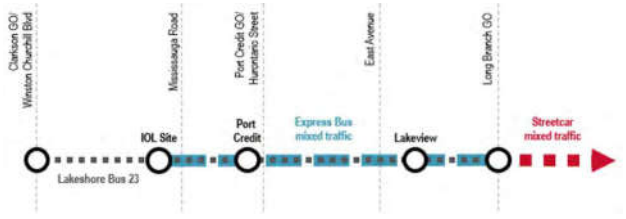
Implementation and Phasing

Implementation of improvements is dependent on administrative prioritization. Depending on available funding and municipal priorities, the timing for this project to proceed with environmental assessment approvals, detailed design and construction may vary. The implementation strategy of the interim recommendation and ultimate recommendation follows a phased approach. For all phases of implementation the existing local service (Route 23) will be maintained to complement express bus service between Clarkson GO Station and Long Branch GO Station, via Port Credit GO Station. Changes to transit service concepts are at the discretion of MiWay.

Phase 1

Transit Service Improvements

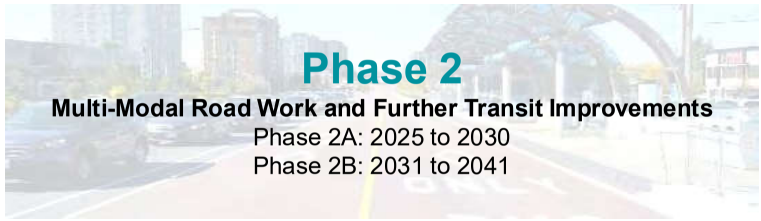
2019 to 2025



Phase 1 of the implementation strategy makes transit service improvements along the Study Corridor between 2019 and 2025 with minimal infrastructure requirements. Phase 1 will be realized in three sub-phases as follows:

A. Increase local bus service by doubling the peak frequency of the local bus
B. Upgrade local bus service from 40 ft to 60 ft buses to increase capacity
C. Introduce express bus service layered on top of the local bus service

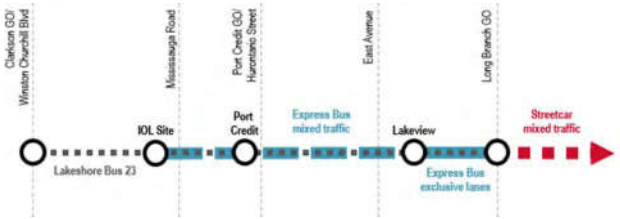
New transit stop infrastructure (i.e. bus shelters) would be required to implement this phase; however, no new major transportation infrastructure would be required (i.e. road widening or re-construction).



Phase 2

Multi-Modal Road Work and Further Transit Improvements

Phase 2A: 2025 to 2030
Phase 2B: 2031 to 2041



Phase 2 of the implementation strategy builds on Phase 1 and includes multi-modal road work improvements and further transit service improvements. Phase 2 will be realized in two sub-phases as follows:

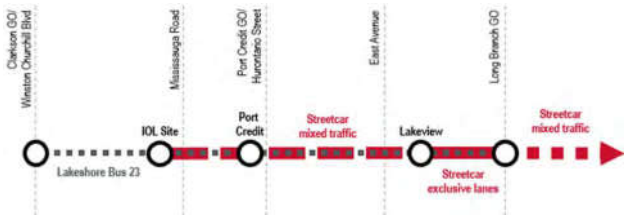
A. Multi-modal road work (Shawnmarr Road to the Etobicoke Creek) and more frequent express bus service (70 Mississauga Road to Long Branch GO Station) to be implemented between 2025 and 2030. This phase involves constructing exclusive median transit lanes between East Avenue and the Etobicoke Creek. This should be completed with the development of the Lakeview Village development site to support transit oriented development and facilitate direct, fast, and reliable transit trips to and from the site to the Long Branch GO station and future regional express rail (RER) service on the Lakeshore West GO Line. In addition to the exclusive transit lanes, multi-modal road work improvements (as shown in the preferred corridor design for Segments 4 to 7) between Shawnmarr Road and East Avenue are also implemented during this phase. Transit signal priority at intersections along the route can also be implemented to provide travel time reliability in the mixed traffic section.

B. Multi-modal road work (Winston Churchill Boulevard to Shawnmarr Road) to be implemented following the completion of Phase 2A between 2031 and 2041. This phase includes multi-modal road work improvements (as shown in the preferred corridor design for Segments 1-3) between Winston Churchill Boulevard and Shawnmarr Road.

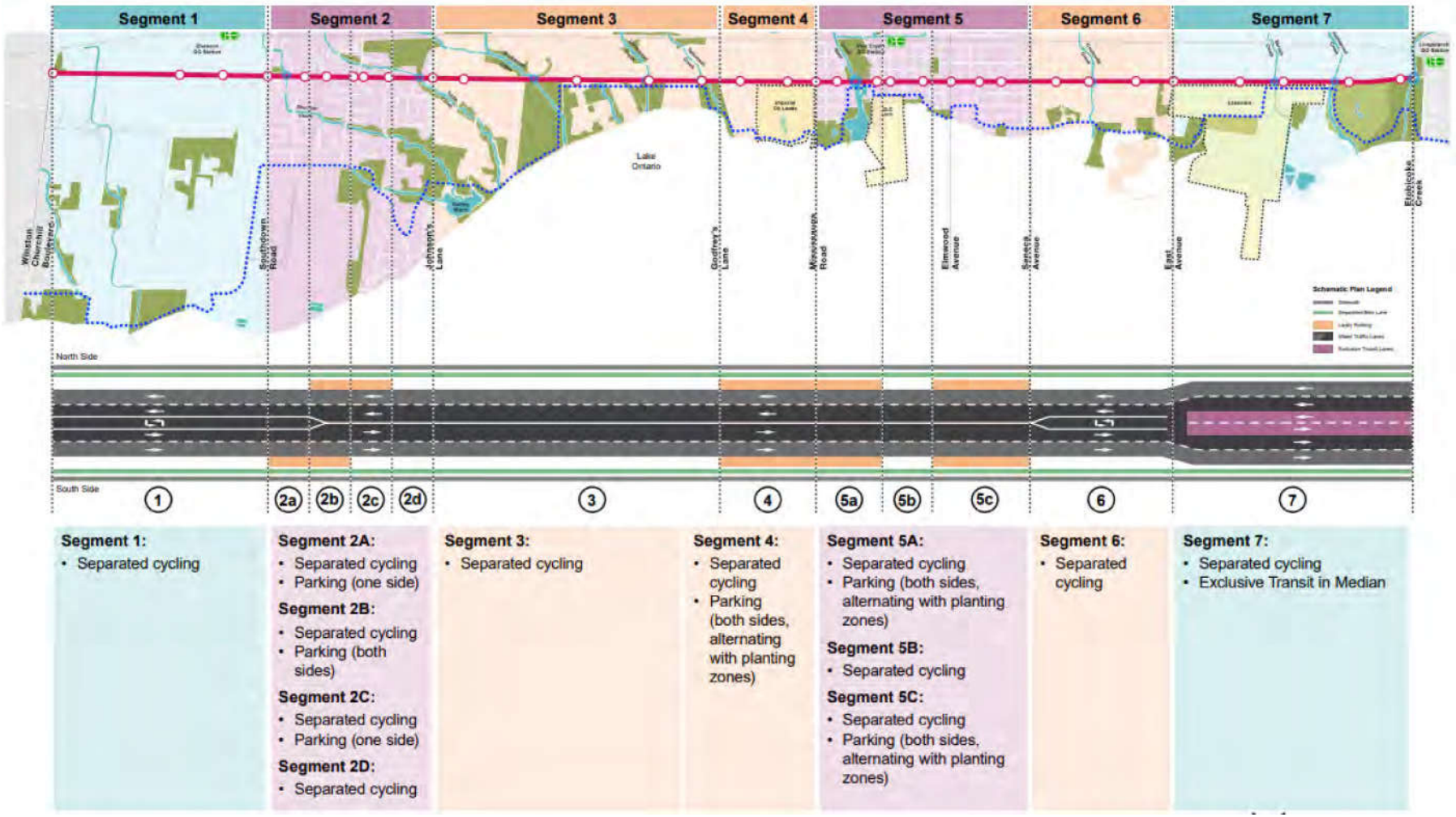
Phase 3

Protection for Extension of TTC Streetcar

Beyond 2041



Phase 3 (i.e. the final phase of implementation and ultimate transit configuration) involves the conversion of the express bus based transit service to an extension of the Toronto streetcar service operating in mixed traffic between Mississauga Road and East Avenue, and in exclusive lanes between East Avenue and the Etobicoke Creek to Long Branch GO Station.
In the fullness of time (i.e. beyond 2041), the Study Corridor has been designed such that the extension of the TTC streetcar into Mississauga from the Long Branch GO Station is protected for, subject to discussions with the City of Toronto. The extension of the TTC streetcar will allow for seamless transit travel between Toronto and Mississauga by eliminating a forced transfer and additional fare at the border.



Segment 1:
- Separated cycling

Segment 2A:
- Separated cycling
- Parking (one side)

Segment 2B:
- Separated cycling
- Parking (both sides)

Segment 2C:
- Separated cycling
- Parking (one side)

Segment 2D:
- Separated cycling

Segment 3:
- Separated cycling

Segment 4:
- Separated cycling
- Parking (both sides, alternating with planting zones)

Segment 5A:
- Separated cycling
- Parking (both sides, alternating with planting zones)

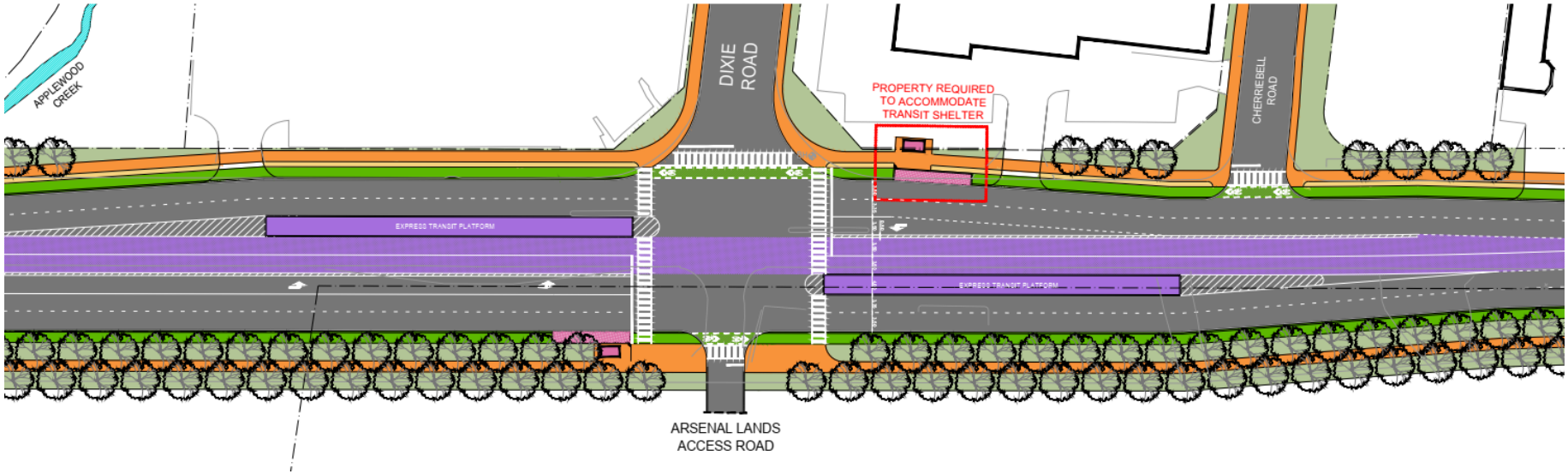
Segment 5B:
- Separated cycling

Segment 5C:
- Separated cycling
- Parking (both sides, alternating with planting zones)

Segment 6:
- Separated cycling

Segment 7:
- Separated cycling
- Exclusive Transit in Median

Exhibit 5-55: Summary of the Preferred Alternative Solution



LEGEND

- ROADWAY
- PROTECTED BIKE LANE & BIKE CROSSING
- SIDEWALK & UTILITY ZONE
- PAVED / PLANTED FURNISHING ZONES
- DEDICATED TRANSITWAY & MEDIAN TRANSIT STOPS
- CURBSIDE TRANSIT STOPS & SHELTERS (WHERE SPACE PERMITS) *
- ADDITIONAL PROPERTY REQUIRED

* EXACT LOCATION OF STOPS AND SHELTERS ARE SUBJECT TO CHANGE. PROPERTY MAY BE REQUIRED TO ACCOMMODATE TRANSIT SHELTERS. TO BE CONFIRMED DURING DETAILED DESIGN."

5.2.11.11 SEGMENT 7: LAKEVIEW EMPLOYMENT AREA

Segment 7 has a 44.5 m right-of-way; therefore, dedicated transit options were considered. Option 3 was selected as the preferred alternative as shown in **Exhibit 5-54**. This option has six (6) lanes including two (2) exclusive transit lanes with separated cycling facilities on both sides. This option provides exclusive transit lanes in the median.

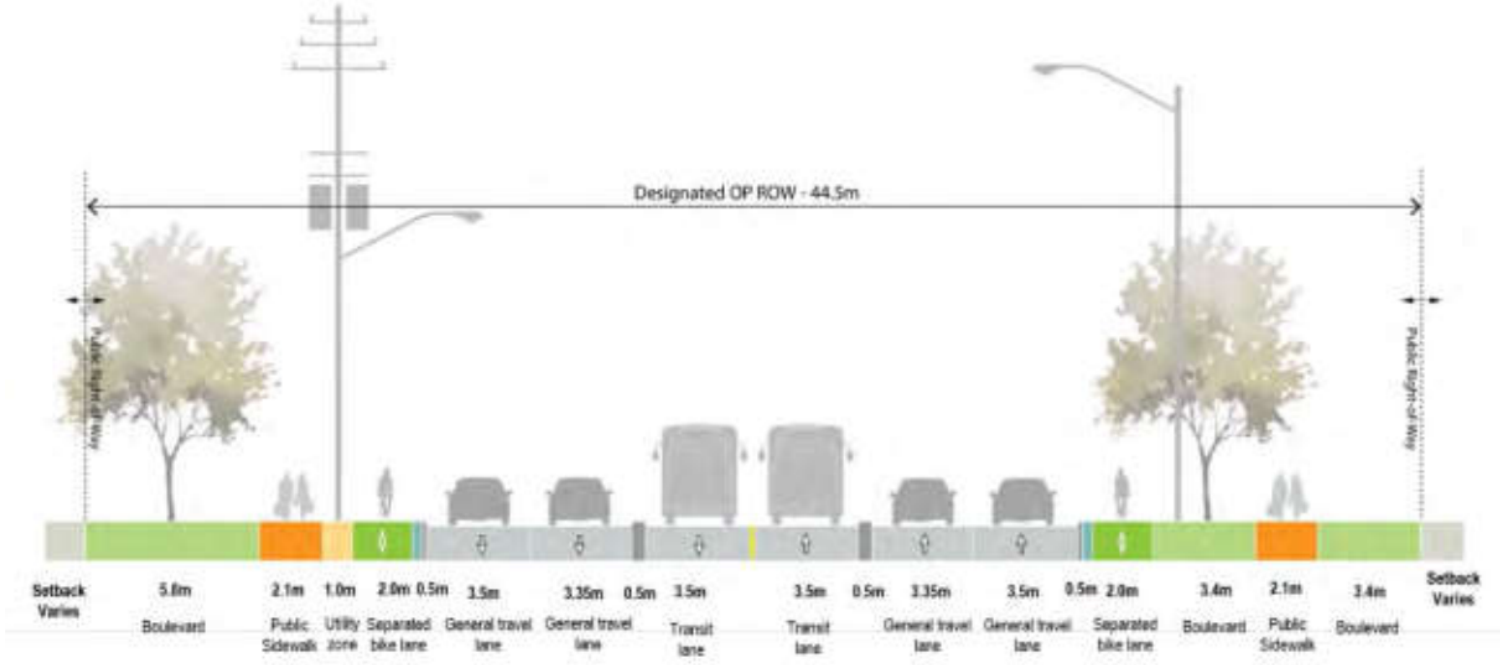


Exhibit 5-54 Preferred ROW Alternative (Segment 7)

APPENDIX H-1
Synchro HCM and Queuing Reports
Future (2025) Background Traffic Conditions

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	35	823	2	15	525
Future Volume (Veh/h)	3	35	823	2	15	525
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	3	36	848	2	15	541
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type			TWLTL			None
Median storage veh)			2			
Upstream signal (m)			206			
pX, platoon unblocked	0.91	0.91			0.91	
vC, conflicting volume	1421	850			851	
vC1, stage 1 conf vol	850					
vC2, stage 2 conf vol	571					
vCu, unblocked vol	1414	789			790	
tC, single (s)	6.4	6.2			4.4	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.4	
p0 queue free %	99	90			98	
cM capacity (veh/h)	347	360			666	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	39	850	15	541
Volume Left	3	0	15	0
Volume Right	36	2	0	0
cSH	359	1700	666	1700
Volume to Capacity	0.11	0.50	0.02	0.32
Queue Length 95th (m)	2.9	0.0	0.6	0.0
Control Delay (s)	16.3	0.0	10.5	0.0
Lane LOS	C		B	
Approach Delay (s)	16.3	0.0	0.3	
Approach LOS	C			

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	105	5	14	708	510	22
Future Volume (Veh/h)	105	5	14	708	510	22
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.68	0.50	0.25	0.90	0.95	0.79
Hourly flow rate (vph)	154	10	56	787	537	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				156		
pX, platoon unblocked	0.90					
vC, conflicting volume	1450	551	565			
vC1, stage 1 conf vol	551					
vC2, stage 2 conf vol	899					
vCu, unblocked vol	1444	551	565			
tC, single (s)	6.4	6.2	4.8			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.9			
p0 queue free %	51	98	92			
cM capacity (veh/h)	312	538	727			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	164	56	787	565
Volume Left	154	56	0	0
Volume Right	10	0	0	28
cSH	320	727	1700	1700
Volume to Capacity	0.51	0.08	0.46	0.33
Queue Length 95th (m)	22.1	2.0	0.0	0.0
Control Delay (s)	27.5	10.4	0.0	0.0
Lane LOS	D	B		
Approach Delay (s)	27.5	0.7		0.0
Approach LOS	D			

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	474	960	1	1316	2	231	332
v/c Ratio	0.94	0.39	0.00	0.94	0.01	0.85	0.51
Control Delay	60.8	8.2	23.0	45.8	31.5	73.4	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.8	8.2	23.0	45.8	31.5	73.4	2.9
Queue Length 50th (m)	95.6	49.8	0.2	~171.3	0.2	54.3	0.0
Queue Length 95th (m)	#158.7	61.8	1.4	#222.7	2.6	#93.4	0.0
Internal Link Dist (m)		142.5		28.0	29.3		38.7
Turn Bay Length (m)	15.0		20.0			27.0	
Base Capacity (vph)	542	2447	236	1407	387	307	672
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.39	0.00	0.94	0.01	0.75	0.49

Intersection Summary

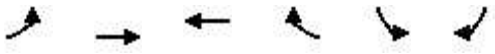
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	431	872	2	1	918	279	0	1	1	210	0	302
Future Volume (vph)	431	872	2	1	918	279	0	1	1	210	0	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	6.3		6.3	6.3			6.3		6.3	6.3	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.97			0.99		1.00	0.96	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		0.99	1.00	
Frt	1.00	1.00		1.00	0.97			0.93		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1752	3504		1785	3277			1758		1757	1437	
Flt Permitted	0.08	1.00		0.30	1.00			1.00		0.76	1.00	
Satd. Flow (perm)	141	3504		560	3277			1758		1399	1437	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	474	958	2	1	1009	307	0	1	1	231	0	332
RTOR Reduction (vph)	0	0	0	0	23	0	0	1	0	0	268	0
Lane Group Flow (vph)	474	960	0	1	1293	0	0	1	0	231	64	0
Confl. Peds. (#/hr)	40		18	18		40	18		2	2		18
Heavy Vehicles (%)	3%	3%	0%	0%	4%	2%	0%	0%	0%	2%	0%	8%
Turn Type	pm+pt	NA		Perm	NA			NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	81.8	81.8		49.5	49.5			22.7		22.7	22.7	
Effective Green, g (s)	81.8	81.8		49.5	49.5			22.7		22.7	22.7	
Actuated g/C Ratio	0.70	0.70		0.42	0.42			0.19		0.19	0.19	
Clearance Time (s)	3.0	6.3		6.3	6.3			6.3		6.3	6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	501	2447		236	1385			340		271	278	
v/s Ratio Prot	c0.24	0.27			0.39			0.00			0.04	
v/s Ratio Perm	c0.43			0.00						c0.17		
v/c Ratio	0.95	0.39		0.00	0.93			0.00		0.85	0.23	
Uniform Delay, d1	35.6	7.3		19.5	32.2			38.1		45.6	39.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	27.0	0.5		0.0	12.8			0.0		21.9	0.4	
Delay (s)	62.6	7.8		19.6	45.1			38.1		67.5	40.3	
Level of Service	E	A		B	D			D		E	D	
Approach Delay (s)		25.9			45.1			38.1			51.4	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	15.6
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	1076	1178	13	8	10
Future Volume (Veh/h)	5	1076	1178	13	8	10
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	6	1223	1339	15	9	11
Pedestrians					12	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (m)		96				
pX, platoon unblocked					0.89	
vC, conflicting volume	1366				1982	689
vC1, stage 1 conf vol					1358	
vC2, stage 2 conf vol					624	
vCu, unblocked vol	1366				1851	689
tC, single (s)	4.1				7.2	7.4
tC, 2 stage (s)					6.2	
tF (s)	2.2				3.7	3.5
p0 queue free %	99				94	97
cM capacity (veh/h)	504				163	336

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	6	612	612	893	461	20
Volume Left	6	0	0	0	0	9
Volume Right	0	0	0	0	15	11
cSH	504	1700	1700	1700	1700	227
Volume to Capacity	0.01	0.36	0.36	0.53	0.27	0.09
Queue Length 95th (m)	0.3	0.0	0.0	0.0	0.0	2.3
Control Delay (s)	12.2	0.0	0.0	0.0	0.0	22.4
Lane LOS	B					C
Approach Delay (s)	0.1			0.0		22.4
Approach LOS						C

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	34	698	5	23	663
Future Volume (Veh/h)	5	34	698	5	23	663
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	5	36	743	5	24	705
Pedestrians			2			
Lane Width (m)			3.6			
Walking Speed (m/s)			1.2			
Percent Blockage			0			
Right turn flare (veh)						
Median type			TWLTL			None
Median storage veh)			2			
Upstream signal (m)			206			
pX, platoon unblocked	0.97	0.97			0.97	
vC, conflicting volume	1500	746			748	
vC1, stage 1 conf vol	746					
vC2, stage 2 conf vol	755					
vCu, unblocked vol	1501	721			724	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	91			97	
cM capacity (veh/h)	342	417			860	

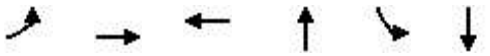
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	41	748	24	705
Volume Left	5	0	24	0
Volume Right	36	5	0	0
cSH	406	1700	860	1700
Volume to Capacity	0.10	0.44	0.03	0.41
Queue Length 95th (m)	2.7	0.0	0.7	0.0
Control Delay (s)	14.9	0.0	9.3	0.0
Lane LOS	B		A	
Approach Delay (s)	14.9	0.0	0.3	
Approach LOS	B			

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	57	4	26	631	589	64
Future Volume (Veh/h)	57	4	26	631	589	64
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.68	0.25	0.90	0.95	0.79
Hourly flow rate (vph)	114	6	104	701	620	81
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				156		
pX, platoon unblocked	0.95					
vC, conflicting volume	1570	660	701			
vC1, stage 1 conf vol	660					
vC2, stage 2 conf vol	909					
vCu, unblocked vol	1573	660	701			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	61	99	89			
cM capacity (veh/h)	295	466	905			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	120	104	701	701
Volume Left	114	104	0	0
Volume Right	6	0	0	81
cSH	300	905	1700	1700
Volume to Capacity	0.40	0.11	0.41	0.41
Queue Length 95th (m)	14.8	3.1	0.0	0.0
Control Delay (s)	24.8	9.5	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	24.8	1.2		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

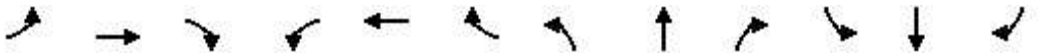


Lane Group	EBL	EBT	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	305	785	1710	4	295	307
v/c Ratio	1.02	0.34	0.99	0.01	0.88	0.57
Control Delay	93.2	9.7	49.1	31.8	71.4	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.2	9.7	49.1	31.8	71.4	13.0
Queue Length 50th (m)	~63.1	41.8	210.9	0.6	70.8	10.8
Queue Length 95th (m)	#121.3	52.4	#272.4	3.7	#122.5	39.6
Internal Link Dist (m)		142.5	28.0	29.3		38.7
Turn Bay Length (m)	15.0				27.0	
Base Capacity (vph)	298	2298	1726	412	335	541
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	1.02	0.34	0.99	0.01	0.88	0.57

Intersection Summary

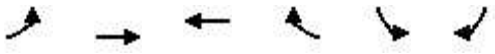
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	745	1	0	1272	352	1	2	1	280	0	292
Future Volume (vph)	290	745	1	0	1272	352	1	2	1	280	0	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	6.3			6.3			6.3		6.3	6.3	
Lane Util. Factor	1.00	0.95			0.95			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00			0.99			1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	1.00			0.97			0.97		1.00	0.85	
Flt Protected	0.95	1.00			1.00			0.99		0.95	1.00	
Satd. Flow (prot)	1752	3504			3429			1805		1763	1464	
Flt Permitted	0.06	1.00			1.00			0.94		0.76	1.00	
Satd. Flow (perm)	118	3504			3429			1722		1402	1464	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	305	784	1	0	1339	371	1	2	1	295	0	307
RTOR Reduction (vph)	0	0	0	0	21	0	0	1	0	0	192	0
Lane Group Flow (vph)	305	785	0	0	1689	0	0	3	0	295	115	0
Confl. Peds. (#/hr)	8					8	6		1	1		6
Heavy Vehicles (%)	3%	3%	0%	0%	1%	1%	0%	0%	0%	2%	0%	8%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	78.7	78.7			59.7			28.7		28.7	28.7	
Effective Green, g (s)	78.7	78.7			59.7			28.7		28.7	28.7	
Actuated g/C Ratio	0.66	0.66			0.50			0.24		0.24	0.24	
Clearance Time (s)	3.0	6.3			6.3			6.3		6.3	6.3	
Lane Grp Cap (vph)	295	2298			1705			411		335	350	
v/s Ratio Prot	c0.14	0.22			0.49						0.08	
v/s Ratio Perm	c0.54							0.00		c0.21		
v/c Ratio	1.03	0.34			0.99			0.01		0.88	0.33	
Uniform Delay, d1	41.1	9.2			29.9			34.8		44.0	37.7	
Progression Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2	61.5	0.4			19.7			0.0		26.5	2.5	
Delay (s)	102.6	9.6			49.5			34.8		70.5	40.2	
Level of Service	F	A			D			C		E	D	
Approach Delay (s)		35.6			49.5			34.8			55.1	
Approach LOS		D			D			C			E	

Intersection Summary			
HCM 2000 Control Delay	46.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

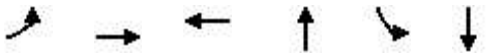


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	1050	1612	18	6	8
Future Volume (Veh/h)	17	1050	1612	18	6	8
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	18	1117	1715	19	6	9
Pedestrians					8	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (m)		96				
pX, platoon unblocked					0.90	
vC, conflicting volume	1742				2327	875
vC1, stage 1 conf vol					1732	
vC2, stage 2 conf vol					594	
vCu, unblocked vol	1742				2254	875
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	95				95	97
cM capacity (veh/h)	363				124	295

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	18	558	558	1143	591	15
Volume Left	18	0	0	0	0	6
Volume Right	0	0	0	0	19	9
cSH	363	1700	1700	1700	1700	190
Volume to Capacity	0.05	0.33	0.33	0.67	0.35	0.08
Queue Length 95th (m)	1.2	0.0	0.0	0.0	0.0	2.0
Control Delay (s)	15.4	0.0	0.0	0.0	0.0	25.5
Lane LOS	C					D
Approach Delay (s)	0.2			0.0		25.5
Approach LOS						D

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

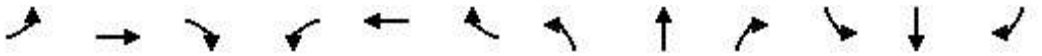
APPENDIX H-2
Synchro HCM and Queuing Reports
Future (2025) Background Traffic Conditions
with Mitigation



Lane Group	EBL	EBT	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	305	785	1710	4	295	307
v/c Ratio	0.93	0.33	0.96	0.01	0.91	0.58
Control Delay	69.8	8.3	41.4	33.2	78.0	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.8	8.3	41.4	33.2	78.0	12.6
Queue Length 50th (m)	57.9	38.2	202.9	0.6	71.7	8.8
Queue Length 95th (m)	#113.6	47.9	#264.4	3.7	#125.5	37.5
Internal Link Dist (m)		142.5	28.0	29.3		38.7
Turn Bay Length (m)	15.0				27.0	
Base Capacity (vph)	327	2386	1782	382	323	530
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	0.93	0.33	0.96	0.01	0.91	0.58

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	745	1	0	1272	352	1	2	1	280	0	292
Future Volume (vph)	290	745	1	0	1272	352	1	2	1	280	0	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	5.3			5.3			6.3		5.3	6.3	
Lane Util. Factor	1.00	0.95			0.95			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00			0.99			1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	1.00			0.97			0.97		1.00	0.85	
Flt Protected	0.95	1.00			1.00			0.99		0.95	1.00	
Satd. Flow (prot)	1752	3504			3429			1805		1763	1464	
Flt Permitted	0.06	1.00			1.00			0.94		0.76	1.00	
Satd. Flow (perm)	116	3504			3429			1717		1402	1464	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	305	784	1	0	1339	371	1	2	1	295	0	307
RTOR Reduction (vph)	0	0	0	0	21	0	0	1	0	0	204	0
Lane Group Flow (vph)	305	785	0	0	1689	0	0	3	0	295	103	0
Confl. Peds. (#/hr)	8					8	6		1	1		6
Heavy Vehicles (%)	3%	3%	0%	0%	1%	1%	0%	0%	0%	2%	0%	8%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	80.7	80.7			60.7			26.7		26.7	26.7	
Effective Green, g (s)	81.7	81.7			61.7			26.7		27.7	26.7	
Actuated g/C Ratio	0.68	0.68			0.51			0.22		0.23	0.22	
Clearance Time (s)	3.0	6.3			6.3			6.3		6.3	6.3	
Lane Grp Cap (vph)	324	2385			1763			382		323	325	
v/s Ratio Prot	c0.14	0.22			c0.49						0.07	
v/s Ratio Perm	0.50							0.00		c0.21		
v/c Ratio	0.94	0.33			0.96			0.01		0.91	0.32	
Uniform Delay, d1	40.1	7.9			27.9			36.3		45.0	39.0	
Progression Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2	37.1	0.4			13.6			0.0		32.2	2.5	
Delay (s)	77.1	8.2			41.5			36.4		77.2	41.5	
Level of Service	E	A			D			D		E	D	
Approach Delay (s)		27.5			41.5			36.4			59.0	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.6
Intersection Capacity Utilization	97.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX I
Synchro HCM and Queuing Reports
Future (2025) Total Traffic Conditions

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	35	850	2	15	534
Future Volume (Veh/h)	3	35	850	2	15	534
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	3	36	876	2	15	551
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type			TWLTL			None
Median storage veh)			2			
Upstream signal (m)			206			
pX, platoon unblocked	0.91	0.91			0.91	
vC, conflicting volume	1459	878			879	
vC1, stage 1 conf vol	878					
vC2, stage 2 conf vol	581					
vCu, unblocked vol	1455	818			819	
tC, single (s)	6.4	6.2			4.4	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.4	
p0 queue free %	99	90			98	
cM capacity (veh/h)	336	345			648	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	39	878	15	551
Volume Left	3	0	15	0
Volume Right	36	2	0	0
cSH	345	1700	648	1700
Volume to Capacity	0.11	0.52	0.02	0.32
Queue Length 95th (m)	3.0	0.0	0.6	0.0
Control Delay (s)	16.8	0.0	10.7	0.0
Lane LOS	C		B	
Approach Delay (s)	16.8	0.0	0.3	
Approach LOS	C			

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	105	5	14	735	519	22
Future Volume (Veh/h)	105	5	14	735	519	22
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.68	0.50	0.25	0.90	0.95	0.79
Hourly flow rate (vph)	154	10	56	817	546	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				156		
pX, platoon unblocked	0.89					
vC, conflicting volume	1489	560	574			
vC1, stage 1 conf vol	560					
vC2, stage 2 conf vol	929					
vCu, unblocked vol	1488	560	574			
tC, single (s)	6.4	6.2	4.8			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.9			
p0 queue free %	49	98	92			
cM capacity (veh/h)	301	532	720			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	164	56	817	574
Volume Left	154	56	0	0
Volume Right	10	0	0	28
cSH	310	720	1700	1700
Volume to Capacity	0.53	0.08	0.48	0.34
Queue Length 95th (m)	23.3	2.0	0.0	0.0
Control Delay (s)	29.0	10.4	0.0	0.0
Lane LOS	D	B		
Approach Delay (s)	29.0	0.7		0.0
Approach LOS	D			

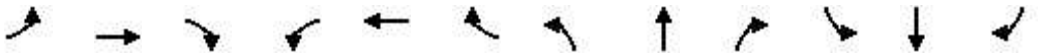
Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	476	960	1	1325	2	241	332
v/c Ratio	0.94	0.39	0.00	0.95	0.01	0.88	0.51
Control Delay	61.2	8.4	23.0	48.1	31.5	76.3	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.2	8.4	23.0	48.1	31.5	76.3	2.9
Queue Length 50th (m)	96.6	50.0	0.2	~180.2	0.2	57.2	0.0
Queue Length 95th (m)	#160.3	61.8	1.4	#225.2	2.6	#99.6	0.0
Internal Link Dist (m)		142.5		28.0	29.3		38.7
Turn Bay Length (m)	15.0		20.0			27.0	
Base Capacity (vph)	540	2438	234	1396	385	306	672
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.39	0.00	0.95	0.01	0.79	0.49

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

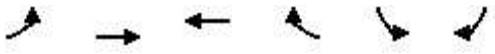
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	433	872	2	1	926	279	0	1	1	219	0	302
Future Volume (vph)	433	872	2	1	926	279	0	1	1	219	0	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	6.3		6.3	6.3			6.3		6.3	6.3	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.97			0.99		1.00	0.96	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		0.99	1.00	
Frt	1.00	1.00		1.00	0.97			0.93		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1752	3504		1785	3278			1758		1757	1437	
Flt Permitted	0.08	1.00		0.30	1.00			1.00		0.76	1.00	
Satd. Flow (perm)	141	3504		560	3278			1758		1399	1437	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	476	958	2	1	1018	307	0	1	1	241	0	332
RTOR Reduction (vph)	0	0	0	0	23	0	0	1	0	0	267	0
Lane Group Flow (vph)	476	960	0	1	1302	0	0	1	0	241	65	0
Confl. Peds. (#/hr)	40		18	18		40	18		2	2		18
Heavy Vehicles (%)	3%	3%	0%	0%	4%	2%	0%	0%	0%	2%	0%	8%
Turn Type	pm+pt	NA		Perm	NA			NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	81.8	81.8		49.3	49.3			23.2		23.2	23.2	
Effective Green, g (s)	81.8	81.8		49.3	49.3			23.2		23.2	23.2	
Actuated g/C Ratio	0.70	0.70		0.42	0.42			0.20		0.20	0.20	
Clearance Time (s)	3.0	6.3		6.3	6.3			6.3		6.3	6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	502	2437		234	1374			346		275	283	
v/s Ratio Prot	c0.24	0.27			0.40			0.00			0.05	
v/s Ratio Perm	c0.42			0.00						c0.17		
v/c Ratio	0.95	0.39		0.00	0.95			0.00		0.88	0.23	
Uniform Delay, d1	35.8	7.5		19.9	32.9			37.9		45.8	39.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	27.3	0.5		0.0	14.7			0.0		25.3	0.4	
Delay (s)	63.1	8.0		19.9	47.6			37.9		71.1	40.1	
Level of Service	E	A		B	D			D		E	D	
Approach Delay (s)		26.3			47.5			37.9			53.1	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	117.6	Sum of lost time (s)	15.6
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	14	1076	1178	18	23	18
Future Volume (Veh/h)	14	1076	1178	18	23	18
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	16	1223	1339	20	26	20
Pedestrians					12	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (m)		96				
pX, platoon unblocked					0.89	
vC, conflicting volume	1371				2004	692
vC1, stage 1 conf vol					1361	
vC2, stage 2 conf vol					644	
vCu, unblocked vol	1371				1875	692
tC, single (s)	4.1				7.2	7.4
tC, 2 stage (s)					6.2	
tF (s)	2.2				3.7	3.5
p0 queue free %	97				84	94
cM capacity (veh/h)	502				162	334

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	16	612	612	893	466	46
Volume Left	16	0	0	0	0	26
Volume Right	0	0	0	0	20	20
cSH	502	1700	1700	1700	1700	208
Volume to Capacity	0.03	0.36	0.36	0.53	0.27	0.22
Queue Length 95th (m)	0.8	0.0	0.0	0.0	0.0	6.5
Control Delay (s)	12.4	0.0	0.0	0.0	0.0	27.1
Lane LOS	B					D
Approach Delay (s)	0.2			0.0		27.1
Approach LOS						D

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	27	740	2	0	545
Future Volume (Veh/h)	0	27	740	2	0	545
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	28	779	2	0	574
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (m)			63			
pX, platoon unblocked	0.89	0.89			0.89	
vC, conflicting volume	1355	781			780	
vC1, stage 1 conf vol	781					
vC2, stage 2 conf vol	574					
vCu, unblocked vol	1336	688			687	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	93			100	
cM capacity (veh/h)	369	398			811	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	28	781	574
Volume Left	0	0	0
Volume Right	28	2	0
cSH	398	1700	1700
Volume to Capacity	0.07	0.46	0.34
Queue Length 95th (m)	1.8	0.0	0.0
Control Delay (s)	14.7	0.0	0.0
Lane LOS	B		
Approach Delay (s)	14.7	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	8	14	28	9	0
Future Volume (Veh/h)	0	8	14	28	9	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	0	10	17	35	11	0
Pedestrians				2	1	
Lane Width (m)				3.6	3.6	
Walking Speed (m/s)				1.2	1.2	
Percent Blockage				0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	81	13	11			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	81	13	11			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	99			
cM capacity (veh/h)	916	1065	1621			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	10	52	11
Volume Left	0	17	0
Volume Right	10	0	0
cSH	1065	1621	1700
Volume to Capacity	0.01	0.01	0.01
Queue Length 95th (m)	0.2	0.3	0.0
Control Delay (s)	8.4	2.4	0.0
Lane LOS	A	A	
Approach Delay (s)	8.4	2.4	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	19.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	34	708	5	23	678
Future Volume (Veh/h)	5	34	708	5	23	678
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	5	36	753	5	24	721
Pedestrians			2			
Lane Width (m)			3.6			
Walking Speed (m/s)			1.2			
Percent Blockage			0			
Right turn flare (veh)						
Median type			TWLTL			None
Median storage veh)			2			
Upstream signal (m)			206			
pX, platoon unblocked	0.97	0.97			0.97	
vC, conflicting volume	1526	756			758	
vC1, stage 1 conf vol	756					
vC2, stage 2 conf vol	771					
vCu, unblocked vol	1527	735			738	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	91			97	
cM capacity (veh/h)	337	411			854	

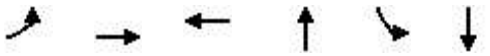
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	41	758	24	721
Volume Left	5	0	24	0
Volume Right	36	5	0	0
cSH	401	1700	854	1700
Volume to Capacity	0.10	0.45	0.03	0.42
Queue Length 95th (m)	2.7	0.0	0.7	0.0
Control Delay (s)	15.0	0.0	9.3	0.0
Lane LOS	C		A	
Approach Delay (s)	15.0	0.0	0.3	
Approach LOS	C			

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	57	4	26	641	604	64
Future Volume (Veh/h)	57	4	26	641	604	64
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.68	0.25	0.90	0.95	0.79
Hourly flow rate (vph)	114	6	104	712	636	81
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (m)				156		
pX, platoon unblocked	0.95					
vC, conflicting volume	1596	676	717			
vC1, stage 1 conf vol	676					
vC2, stage 2 conf vol	920					
vCu, unblocked vol	1601	676	717			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	61	99	88			
cM capacity (veh/h)	290	457	893			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	120	104	712	717
Volume Left	114	104	0	0
Volume Right	6	0	0	81
cSH	295	893	1700	1700
Volume to Capacity	0.41	0.12	0.42	0.42
Queue Length 95th (m)	15.1	3.2	0.0	0.0
Control Delay (s)	25.3	9.6	0.0	0.0
Lane LOS	D	A		
Approach Delay (s)	25.3	1.2		0.0
Approach LOS	D			

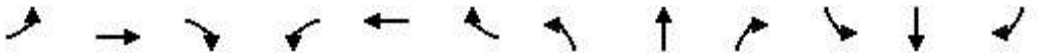
Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	311	785	1713	4	311	307
v/c Ratio	0.95	0.33	0.96	0.01	0.96	0.58
Control Delay	73.7	8.3	41.5	33.2	87.8	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.7	8.3	41.5	33.2	87.8	12.6
Queue Length 50th (m)	59.7	38.2	203.5	0.6	76.7	8.8
Queue Length 95th (m)	#117.3	47.9	#264.7	3.7	#134.8	37.5
Internal Link Dist (m)		142.5	28.0	29.3		38.7
Turn Bay Length (m)	15.0				27.0	
Base Capacity (vph)	327	2386	1784	382	323	530
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	0.95	0.33	0.96	0.01	0.96	0.58

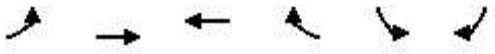
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	745	1	0	1275	352	1	2	1	295	0	292
Future Volume (vph)	295	745	1	0	1275	352	1	2	1	295	0	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	5.3			5.3			6.3		5.3	6.3	
Lane Util. Factor	1.00	0.95			0.95			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00			0.99			1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	1.00			0.97			0.97		1.00	0.85	
Flt Protected	0.95	1.00			1.00			0.99		0.95	1.00	
Satd. Flow (prot)	1752	3504			3429			1805		1763	1464	
Flt Permitted	0.06	1.00			1.00			0.94		0.76	1.00	
Satd. Flow (perm)	116	3504			3429			1717		1402	1464	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	311	784	1	0	1342	371	1	2	1	311	0	307
RTOR Reduction (vph)	0	0	0	0	21	0	0	1	0	0	204	0
Lane Group Flow (vph)	311	785	0	0	1692	0	0	3	0	311	103	0
Confl. Peds. (#/hr)	8					8	6		1	1		6
Heavy Vehicles (%)	3%	3%	0%	0%	1%	1%	0%	0%	0%	2%	0%	8%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	80.7	80.7			60.7			26.7		26.7	26.7	
Effective Green, g (s)	81.7	81.7			61.7			26.7		27.7	26.7	
Actuated g/C Ratio	0.68	0.68			0.51			0.22		0.23	0.22	
Clearance Time (s)	3.0	6.3			6.3			6.3		6.3	6.3	
Lane Grp Cap (vph)	324	2385			1763			382		323	325	
v/s Ratio Prot	c0.14	0.22			c0.49						0.07	
v/s Ratio Perm	0.51							0.00		c0.22		
v/c Ratio	0.96	0.33			0.96			0.01		0.96	0.32	
Uniform Delay, d1	40.4	7.9			28.0			36.3		45.6	39.0	
Progression Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2	40.8	0.4			13.8			0.0		41.5	2.5	
Delay (s)	81.2	8.2			41.8			36.4		87.1	41.5	
Level of Service	F	A			D			D		F	D	
Approach Delay (s)		29.0			41.8			36.4			64.5	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	41.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.6
Intersection Capacity Utilization	99.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	32	1050	1612	26	11	11
Future Volume (Veh/h)	32	1050	1612	26	11	11
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	34	1117	1715	28	12	12
Pedestrians					8	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (m)		96				
pX, platoon unblocked					0.91	
vC, conflicting volume	1751				2364	880
vC1, stage 1 conf vol					1737	
vC2, stage 2 conf vol					626	
vCu, unblocked vol	1751				2301	880
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	91				90	96
cM capacity (veh/h)	360				123	293

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	34	558	558	1143	600	24
Volume Left	34	0	0	0	0	12
Volume Right	0	0	0	0	28	12
cSH	360	1700	1700	1700	1700	173
Volume to Capacity	0.09	0.33	0.33	0.67	0.35	0.14
Queue Length 95th (m)	2.5	0.0	0.0	0.0	0.0	3.8
Control Delay (s)	16.0	0.0	0.0	0.0	0.0	29.2
Lane LOS	C					D
Approach Delay (s)	0.5			0.0		29.2
Approach LOS						D

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	10	659	5	0	600
Future Volume (Veh/h)	0	10	659	5	0	600
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	10	679	5	0	619
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (m)			63			
pX, platoon unblocked	0.93	0.93			0.93	
vC, conflicting volume	1300	682			679	
vC1, stage 1 conf vol	682					
vC2, stage 2 conf vol	619					
vCu, unblocked vol	1286	623			620	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	394	457			905	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	10	684	619
Volume Left	0	0	0
Volume Right	10	5	0
cSH	457	1700	1700
Volume to Capacity	0.02	0.40	0.36
Queue Length 95th (m)	0.5	0.0	0.0
Control Delay (s)	13.1	0.0	0.0
Lane LOS	B		
Approach Delay (s)	13.1	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	23	23	29	2	0
Future Volume (Veh/h)	0	23	23	29	2	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	25	25	32	2	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	84	2	2			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	84	2	2			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	98			
cM capacity (veh/h)	908	1088	1634			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	25	57	2
Volume Left	0	25	0
Volume Right	25	0	0
cSH	1088	1634	1700
Volume to Capacity	0.02	0.02	0.00
Queue Length 95th (m)	0.6	0.4	0.0
Control Delay (s)	8.4	3.2	0.0
Lane LOS	A	A	
Approach Delay (s)	8.4	3.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	19.5%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX J
Parking Justification Supporting Documents

ONTARIO TRAFFIC INC - PARKING SURVEY

Location: 25 Agnes Street, Mississauga

			Sunday, November 17, 2019								Monday, November 18, 2019							
			Surface						Underground		Surface						Underground	
			Visitor		Tenant		Reserved Disables		Tenant		Visitor		Tenant		Reserved Disables		Tenant	
			17		6		2		100		17		6		2		100	
Time			Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available
19:00	to	19:30	15	2	1	5	0	2	57	43	13	4	2	4	1	1	65	35
19:30	to	20:00	15	2	1	5	0	2	59	41	14	3	2	4	1	1	67	33
20:00	to	20:30	16	1	1	5	0	2	65	35	15	2	1	5	1	1	70	30
20:30	to	21:00	14	3	2	4	1	1	66	34	14	3	1	5	0	2	74	26
21:00	to	21:30	14	3	2	4	1	1	67	33	13	4	2	4	1	1	77	23
21:30	to	22:00	13	4	1	5	1	1	79	21	15	2	2	4	1	1	79	21
22:00	to	22:30	12	5	1	5	1	1	76	24	17	0	2	4	1	1	79	21
22:30	to	23:00	15	2	2	4	1	1	89	11	16	1	2	4	1	1	80	20
23:00	to	23:30	16	1	3	3	2	0	87	13	16	1	2	4	1	1	80	20
23:30	to	00:00	16	1	3	3	1	1	85	15	15	2	3	3	1	1	81	19
00:00	to	00:30	15	2	3	3	1	1	83	17	15	2	3	3	1	1	81	19
00:30	to	01:00	14	3	2	4	2	0	83	17	13	4	3	3	1	1	81	19

			Monday, November 25, 2019								Wednesday, November 27, 2019							
			Surface						Underground		Surface						Underground	
			Visitor		Tenant		Reserved Disables		Tenant		Visitor		Tenant		Reserved Disables		Tenant	
			17		6		2		100		17		6		2		100	
Time			Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available
19:00	to	19:30	15	2	1	5	0	2	67	33	14	3	1	5	0	2	67	33
19:30	to	20:00	15	2	1	5	0	2	71	29	13	4	1	5	0	2	76	24
20:00	to	20:30	17	0	1	5	1	1	77	23	14	3	1	5	1	1	78	22
20:30	to	21:00	12	5	2	4	0	2	76	24	13	4	1	5	0	2	88	12
21:00	to	21:30	13	4	3	3	1	1	78	22	12	5	2	4	1	1	89	11
21:30	to	22:00	14	3	3	3	1	1	80	20	14	3	1	5	1	1	87	13
22:00	to	22:30	15	2	3	3	1	1	83	17	17	0	1	5	0	2	88	12
22:30	to	23:00	14	3	3	3	0	2	83	17	17	0	1	5	0	2	89	11
23:00	to	23:30	13	4	3	3	1	1	86	14	14	3	1	5	1	1	86	14
23:30	to	00:00	12	5	4	2	1	1	83	17	13	4	3	3	1	1	84	16
00:00	to	00:30	13	4	4	2	1	1	82	18	13	4	3	3	2	0	83	17
00:30	to	01:00	12	5	1	5	0	2	83	17	14	3	1	5	2	0	82	18

ONTARIO TRAFFIC INC - PARKING SURVEY

Location: 2929 Aquitaine Avenue, Mississauga

			Sunday, November 17, 2019										Monday, November 18, 2019									
			Surface						Underground				Surface						Underground			
			A.C.C.		Tenant		Commercial		R.W.I.		Tenant		A.C.C.		Tenant		Commercial		R.W.I.		Tenant	
			5		11		8		7		207		5		11		8		7		207	
Time			Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available
19:00	to	19:30	5	0	10	1	6	2	6	1	139	68	3	2	7	4	5	3	4	3	133	74
19:30	to	20:00	5	0	10	1	6	2	6	1	138	69	4	1	8	3	5	3	5	2	139	68
20:00	to	20:30	5	0	10	1	5	3	5	2	137	70	4	1	9	2	4	4	6	1	144	63
20:30	to	21:00	5	0	10	1	5	3	5	2	139	68	4	1	9	2	4	4	7	0	147	60
21:00	to	21:30	5	0	11	0	6	2	6	1	141	66	5	0	10	1	4	4	5	2	149	58
21:30	to	22:00	5	0	11	0	6	2	6	1	142	65	5	0	10	1	4	4	5	2	150	57
22:00	to	22:30	5	0	11	0	7	1	7	0	145	62	5	0	10	1	4	4	5	2	153	54
22:30	to	23:00	5	0	9	2	6	2	6	1	147	60	5	0	10	1	5	3	6	1	154	53
23:00	to	23:30	5	0	9	2	6	2	6	1	148	59	5	0	10	1	5	3	6	1	155	52
23:30	to	00:00	5	0	10	1	6	2	6	1	149	58	5	0	10	1	5	3	6	1	155	52
00:00	to	00:30	5	0	11	0	7	1	7	0	151	56	5	0	10	1	5	3	6	1	156	51
00:30	to	01:00	5	0	11	0	7	1	7	0	151	56	5	0	10	1	5	3	6	1	156	51

			Monday, November 25, 2019										Wednesday, November 27, 2019									
			Surface						Underground				Surface						Underground			
			A.C.C.		Tenant		Commercial		R.W.I.		Tenant		A.C.C.		Tenant		Commercial		R.W.I.		Tenant	
			5		11		8		7		207		5		11		8		7		207	
Time			Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available	Parked	Available
19:00	to	19:30	4	1	8	3	4	4	3	4	156	51	2	3	6	5	4	4	3	4	154	53
19:30	to	20:00	4	1	8	3	4	4	4	3	154	53	2	3	8	3	6	2	3	4	155	52
20:00	to	20:30	5	0	8	3	4	4	4	3	167	40	2	3	8	3	6	2	3	4	156	51
20:30	to	21:00	4	1	10	1	5	3	4	3	166	41	3	2	11	0	6	2	4	3	155	52
21:00	to	21:30	4	1	10	1	4	4	5	2	165	42	2	3	11	0	7	1	5	2	155	52
21:30	to	22:00	4	1	11	0	5	3	5	2	156	51	3	2	11	0	6	2	5	2	156	51
22:00	to	22:30	3	2	11	0	6	2	5	2	155	52	4	1	10	1	6	2	5	2	149	58
22:30	to	23:00	4	1	11	0	6	2	5	2	165	42	4	1	10	1	5	3	6	1	149	58
23:00	to	23:30	4	1	11	0	6	2	4	3	156	51	4	1	9	2	5	3	7	0	151	56
23:30	to	00:00	4	1	10	1	5	3	4	3	148	59	4	1	9	2	5	3	7	0	152	55
00:00	to	00:30	3	2	9	2	5	3	5	2	147	60	5	0	9	2	6	2	7	0	153	54
00:30	to	01:00	3	2	9	2	4	4	5	2	145	62	4	1	9	2	5	3	7	0	153	54

6.2.5.59	Exception: C4-59	Map # 08	By-law: 0281-2015, 0174-2017, 0130-2018, 0181-2018/LPAT Order 2019 February 15

In a C4-59 zone the applicable regulations shall be as specified for a C4 zone except that the following **uses**/regulations shall apply:

Permitted Uses

6.2.5.59.1 Lands zoned C4-59 shall only be used for the following:

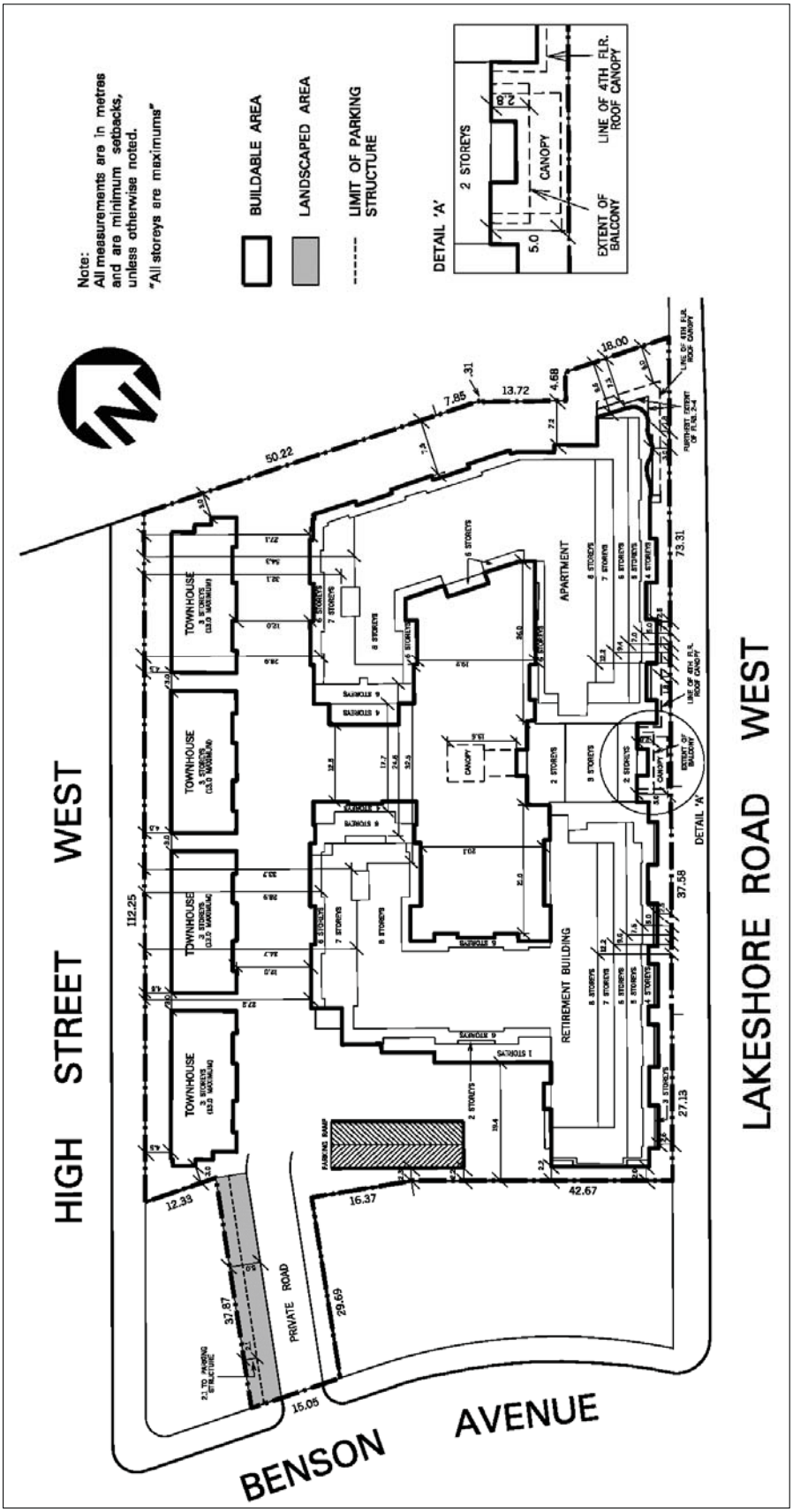
(1) **Apartment**
(2) **Retirement Building**
(3) Assisted Living Dwelling Unit
(4) **Townhouse**
(5) **Financial Institution**
(6) **Office**
(7) **Medical Office**
(8) **Personal Service Establishment**
(9) **Repair Establishment**
(10) **Retail Store**
(11) **Restaurant**
(12) **Take-out Restaurant**
(13) Outdoor patio accessory to a **restaurant** or **take-out restaurant**

Regulations

6.2.5.59.2	The provisions contained in Subsections 2.1.2, 2.1.25 and the regulations of Lines 12.3, 12.4, 14.0 and 16.0 contained in Table 6.2.1 of this By-law shall not apply	
6.2.5.59.3	Maximum number of **dwelling units**	325
6.2.5.59.4	Maximum number of townhouse **dwelling units**	16
6.2.5.59.5	For the purposes of this By-law, all lands zoned C4-59 shall be considered one **lot**	
6.2.5.59.6	Maximum **floor space index - apartment zone**	2.4
6.2.5.59.7	Maximum **gross floor area - non- residential** used for an **office**, **medical office**, **financial institution**, **personal service establishment**, **repair establishment**, **restaurant**, **take-out restaurant** or **retail store**, or any combination thereof	775 m^2
6.2.5.59.8	An **office**, **medical office**, **financial institution**, **personal service establishment**, **repair establishment**, **restaurant**, **take-out restaurant** or **retail store**, or any combination thereof, shall be located within the **first storey** of a **retirement building** and/or **apartment** along Lakeshore Road West	
6.2.5.59.9	Stairwells and elevator enclosures providing direct access to a roof top terrace shall not be included in the number of **storeys** for a **townhouse**	
6.2.5.59.10	Minimum **landscaped area**	35%
6.2.5.59.11	The **lot line** abutting Lakeshore Road West shall be deemed to be the **front lot line**	
6.2.5.59.12	Minimum number of resident **parking spaces** per one-bedroom or two-bedroom apartment **dwelling unit**	1.0
6.2.5.59.13	Minimum number of visitor **parking spaces** per apartment **dwelling unit**	0.19
6.2.5.59.14	Minimum number of **parking spaces** per **retirement dwelling unit**	0.40
6.2.5.59.15	Minimum number of **parking spaces** per assisted living dwelling unit	0.33

Exception C4-59 continued on next page

6.2.5.59	Exception: C4-59	Map # 08	By-law: 0281-2015, 0174-2017, 0130-2018, 0181-2018/LPAT Order 2019 February 15
Exception C4-59 continued from previous page			
6.2.5.59.16	Minimum number of **parking spaces** per 100 m^2 **gross floor area - non-residential** for an **office**, **medical office**, **financial institution**, **personal service establishment**, **repair establishment**, **take-out restaurant** or **retail store**		1.0
6.2.5.59.17	Minimum number of **parking spaces** per 100 m^2 **gross floor area - non-residential** for a **restaurant**		7.65
6.2.5.59.18	Minimum number of **loading spaces**		1
6.2.5.59.19	Minimum setback from a **parking structure** completely below or above finished grade to a **lot line** unless otherwise identified on Schedule C4-59 of this Exception		0.0 m
6.2.5.59.20	The maximum projections permitted beyond the buildable area shall be in compliance with the following:		
	(1) **porch**		1.5 m
	(2) awnings		1.5 m
	(3) window projections and other architectural elements, with or without a foundation, such as but not limited to fireplaces, pilasters and corbel		1.0 m
	(4) **balcony**		1.8 m
6.2.5.59.21	Stairs, walkways, planters and ventilation shafts are permitted to encroach into a required **landscaped area** and are permitted outside the buildable area identified on Schedule C4-59 of this Exception		
6.2.5.59.22	"Assisted Living Dwelling Unit" means a **retirement dwelling unit** within a **retirement building** occupied by persons with memory and/or cognitive impairment where a higher level of supervised support and care is provided compared to the rest of the **retirement building**, but whose residents do not require the services and support provided in a **long-term care building**		
6.2.5.59.23	All site development plans shall comply with Schedule C4-59 of this Exception		



Schedule C4-59
Map 08

THE CORPORATION OF THE CITY OF MISSISSAUGA

BY-LAW NUMBER 0054-2020

A by-law to amend By-law Number 0225-2007, as amended.

WHEREAS pursuant to sections 34 and 36 of the *Planning Act*, R.S.O. 1990, c.P.13, as amended, the council of a local municipality may, respectively, pass a zoning by-law and enact a by-law to impose a holding provision;

NOW THEREFORE the Council of The Corporation of the City of Mississauga ENACTS as follows:

1. By-law Number 0225-2007, as amended, being a City of Mississauga Zoning By-law, is amended by adding the following Exception Table:

4.15.6.53	Exception: RA5-53	Map # 08	By-law:
In a RA5-53 zone the permitted **uses** and applicable regulations shall be as specified for a RA5 zone except that the following **uses**/regulations shall apply:			
Additional Permitted Uses			
4.15.6.53.1	(1) **Uses** permitted in a C4 zone as contained in Table 6.2.1 of this By-law		
Regulations			
4.15.6.53.2	The provisions of Article 2.1.30.1 contained in Subsection 2.1.30 and Lines 11.1, 11.2, 13.3, 15.5 contained in Table 4.15.1 of this By-law shall not apply		
4.15.6.53.3	The **uses** contained in Sentence 4.15.6.53.1 of this Exception shall only be permitted on the **first storey** of an **apartment**		
4.15.6.53.4	Maximum **floor space index - apartment zone**		9.2
4.15.6.53.5	Minimum **gross floor area - non-residential**		250 m^2
4.15.6.53.6	Maximum **gross floor area - apartment zone** for each of the 13th and 14th **storeys**		1 150 m^2
4.15.6.53.7	Maximum projection of all **balconies** located above the **first storey** measured from the outermost faces of the **building**		2.0 m
4.15.6.53.8	Notwithstanding Sentence 4.15.6.53.7 of this Exception, maximum projection of a rooftop **balcony** on the second **storey** measured from the outermost face of the **building**		6.0 m
4.15.6.53.9	Notwithstanding Sentence 4.15.6.53.7 of this Exception, maximum projection of a rooftop **balcony** located on the seventh **storey** measured from the outermost face of the **building**		4.5 m

4.15.6.53	Exception: RA5-53	Map # 08	By-law:
4.15.6.53.10	Notwithstanding Sentence 4.15.6.53.7 of this Exception, maximum projection of a rooftop **balcony** located on the ninth **storey** measured from the outermost face of the **building**		6.0 m
4.15.6.53.11	Notwithstanding Sentence 4.15.6.53.7 of this Exception, maximum projection of a rooftop **balcony** located on the 15th **storey** measured from the outermost face of the **building**		29.5 m
4.15.6.53.12	Maximum projection of an architectural feature located above the sixth **storey** measured from the outermost face of the **building**		2.3 m
4.15.6.53.13	External access stairwell and ventilation shafts shall be permitted to extend beyond the limit of the completely below grade **parking structure**		
4.15.6.53.14	Notwithstanding Sentence 4.15.6.53.24 of this Exception, maximum projection of a canopy facing Park Street East from the building face		2.2 m
4.15.6.53.15	Notwithstanding Sentence 4.15.6.53.24 of this Exception, maximum projection of a canopy facing Ann Street from the building faces		2.2 m
4.15.6.53.16	Notwithstanding Sentence 4.15.6.53.24 of this Exception, stairs and ramps shall be permitted outside of the buildable area and encroachments into a required yard		
4.15.6.53.17	Minimum number of resident **parking spaces** per one-bedroom apartment **dwelling unit**		0.75
4.15.6.53.18	Minimum number of resident **parking spaces** per two-bedroom apartment **dwelling unit**		0.90
4.15.6.53.19	Minimum number of resident **parking spaces** per three-bedroom apartment **dwelling unit**		1.10
4.15.6.53.20	Minimum number of shared visitor and non-residential **parking spaces** per **dwelling unit**		0.10
4.15.6.53.21	Minimum **aisle** width		6.6 m
4.15.6.53.22	Minimum **landscaped area**		380 m^2
4.15.6.53.23	Minimum **amenity area**		1 300 m^2
4.15.6.53.24	All site development plans shall comply with Schedule RA5-53 of this Exception		

4.15.6.53	Exception: RA5-53	Map # 08	By-law:

Holding Provision

The holding symbol H is to be removed from the whole or any part of the lands zoned H-RA5-53 by further amendment to Map 08 of Schedule B contained in Part 13 of this By-law, as amended, upon satisfaction of the following requirements:

(1) delivery of an executed Development Agreement in a form and on terms satisfactory to the City of Mississauga (the City);
(2) submission of grading and servicing drawings to City standards and specifications satisfactory to the City;
(3) submission of an updated Functional Servicing Report and Traffic Impact Study satisfactory to the City;
(4) submission of a Phase II Environmental Site Assessment Reports and all supporting documents, including a Letter of Reliance, satisfactory to the City;
(5) submission of Final Remediation Report, Site Remediation Securities and a Dewatering Plan, including a Letter of Reliance, satisfactory to the Transportation and Works Department;
(6) Record of Site Condition for lands to be dedicated to the City and all supporting documents, including Letter of Reliance
(7) satisfactory arrangements with the Region of Peel for Waste Collection subject to the most recent Waste Collection Design Standards;
(8) confirmation by the Region of Peel that satisfactory arrangements have been made for water and waste water services to the site;
(9) a letter from the Planning and Building Department indicating satisfactory arrangements have been made with respect to addressing the City's Housing Strategy; and,
(10) delivery of an executed agreement for community benefits pursuant to section 37 of the *Planning Act,* as amended, in a form and on terms satisfactory to the City.

2. Map Number 08 of Schedule "B" to By-law Number 0225-2007, as amended, being a City of Mississauga Zoning By-law, is amended by changing thereon from "H-RA2-48" to "H-RA5-53", the zoning of Part of the Town Plot of Port Credit, in the City of Mississauga, PROVIDED HOWEVER THAT the "H-RA5-53" zoning shall only apply to the lands which are shown on the attached Schedule "A", which is deemed to be an integral part of this By-law, outlined in the heaviest broken line with the "H-RA5-53" zoning indicated thereon.

ENACTED and PASSED this 25 day of March 2020.

Bonnie Crombie

MAYOR

CLERK

APPROVED
AS TO FORM
City Solicitor
MISSISSAUGA
MEM
Date 2020 03 13

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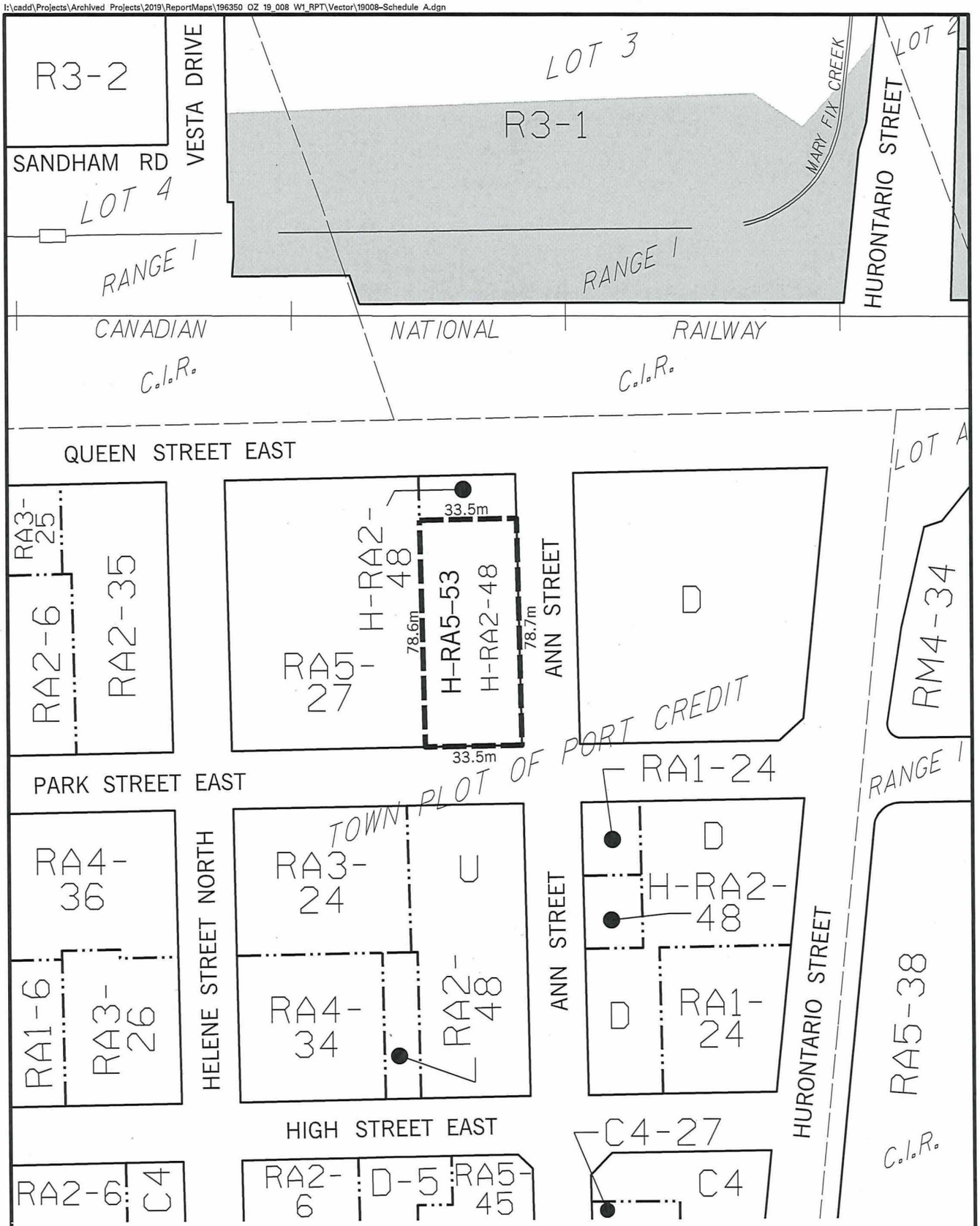

GREENLANDS OVERLAY

0 25 50 75 100
metres

This is not a Plan of Survey. Dimensions shown taken from Survey prepared by Tarasick McMillan Kubicki Limited dated December 5, 2018 (File No. A.010 – SURVEY PLAN.DWG)

THIS IS SCHEDULE "A" TO

BY-LAW 0054-2020

PASSED BY COUNCIL ON

March 25, 2020

CITY OF MISSISSAUGA

Z-8 M.P.

OZ 19008 W1

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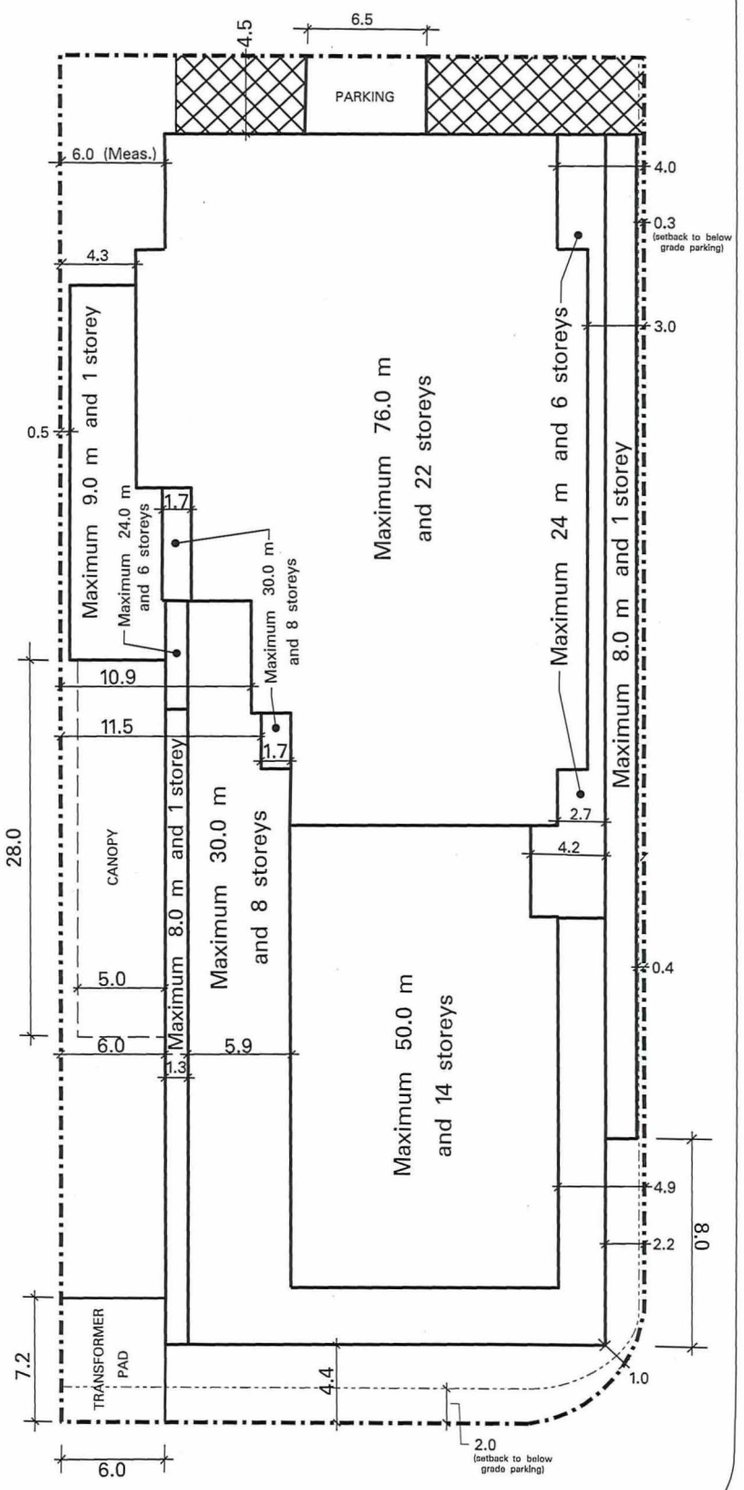


BUILDABLE AREA

UNDERGROUND PARKING LIMITS

LANDSCAPED BUFFER

Note:
All measurements are in metres and are minimum setbacks, unless otherwise noted.

This is not a Plan of Survey.

THIS IS SCHEDULE "RA5-53"

AS ATTACHED TO BY-LAW 0054-2020

PASSED BY COUNCIL ON March 25, 2020

Z-8 M.P.

OZ 19/008 W1

APPENDIX "A" TO BY-LAW NUMBER 0054-2020

Explanation of the Purpose and Effect of the By-law

The purpose of this By-law is to permit a 22 storey apartment building with ground floor commercial uses and a FSI of 9.2.

This By-law amends the zoning of the property outlined on the attached Schedule "A" from "H-RA2-48" (Apartment – Exception with a Holding Provision) to "H-RA5-53" (Apartment – Exception with a Holding Provision).

"H-RA2-48" permits an 8 storey apartment building with an FSI of 1.0.

Upon removal of the "H" provision, the "RA5-53" zone will permit a 22 storey apartment building with ground floor commercial uses and a FSI of 9.2

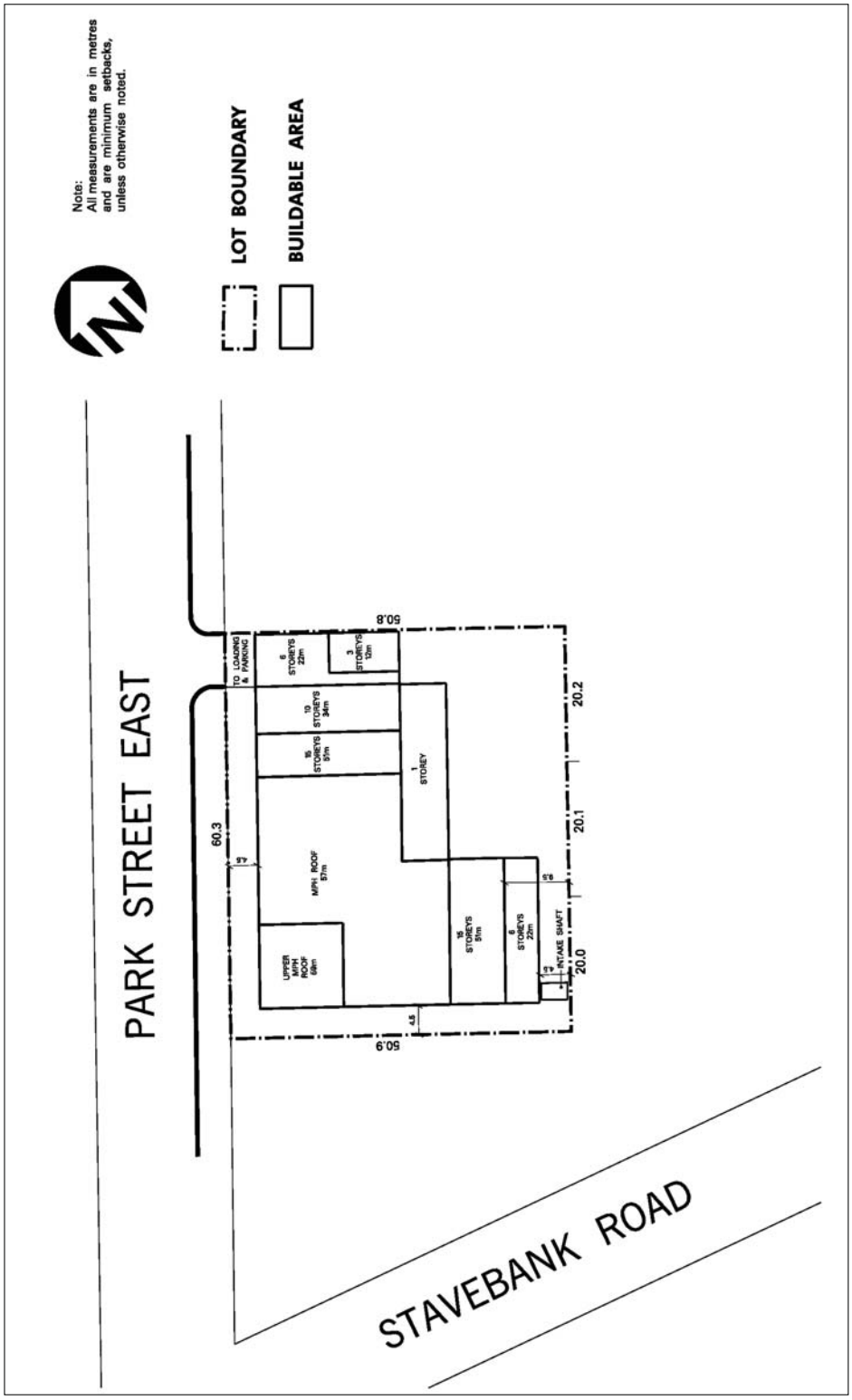
Location of Lands Affected

Northwest corner of Ann Street and Park Street East, in the City of Mississauga, as shown on the attached Map designated as Schedule "A".

Further information regarding this By-law may be obtained from David Ferro of the City Planning and Building Department at 905-615-3200 ext. 4554.

http://teamsites.mississauga.ca/sites/18/bylaws/oz 19 008 w1.by-law.df.fs.docx

4.15.5.48	Exception: RA4-48	Map # 08	By-law: 0174-2018, 0142-2019
In a RA4-48 zone the permitted **uses** and applicable regulations shall be as specified for a RA4 zone except that the following **uses**/regulations shall apply:			
Regulations			
4.15.5.48.1	The provisions of Article 4.1.15.3 and the regulations of Lines 11.2, 13.5, 15.1, 15.2, 15.3 and 15.5 contained in Table 4.15.1 of this By-law shall not apply		
4.15.5.48.2	Maximum **floor space index**		6.3
4.15.5.48.3	Maximum **gross floor area** - **apartment zone** per **storey** for each **storey** above 12 **storeys**		1 200 m^2
4.15.5.48.4	Minimum **front yard**		4.5 m
4.15.5.48.5	Stairs, ramps, planters, canopies and patios shall be permitted to encroach into a required **front yard**		
4.15.5.48.6	Minimum number of resident **parking spaces** per one-bedroom apartment **dwelling unit**		0.8
4.15.5.48.7	Minimum number of resident **parking spaces** per two-bedroom apartment **dwelling unit**		1.0
4.15.5.48.8	Minimum number of resident **parking spaces** per three-bedroom apartment **dwelling unit**		1.3
4.15.5.48.9	Minimum number of **parking spaces** per grade related apartment **dwelling unit**		1.3
4.15.5.48.10	Minimum number of visitor **parking spaces** per apartment **dwelling unit**		0.1
4.15.5.48.11	Minimum setback from a **parking structure** completely below finished grade, inclusive of external access stairwells, to an OS1 zone		4.5 m
4.15.5.48.12	Minimum **landscaped area**		780 m^2
4.15.5.48.13	Minimum depth of a **landscaped buffer** abutting an OS1 zone		4.5 m
4.15.5.48.14	Minimum central **amenity area**		930 m^2
4.15.5.48.15	All site development plans shall comply with Schedule RA4-48 of this Exception		



Schedule RA4-48
Map 08

4.15.6.45	Exception: RA5-45	Map # 08	By-law: 0103-2017, 0174-2017

In a RA5-45 zone the permitted **uses** and applicable regulations shall be as specified for a RA5 zone except that the following **uses**/regulations shall apply:

Additional Permitted Use		
4.15.6.45.1	(1) **Semi-Detached**	
Regulations		
4.15.6.45.2	Minimum **lot frontage**	25.0 m
4.15.6.45.3	Maximum **floor space index - apartment zone**	4.3
4.15.6.45.4	Maximum **height**	15 **storeys**
4.15.6.45.5	Maximum number of apartment **dwelling units**	69
4.15.6.45.6	Maximum number of semi-detached **dwelling units**	2
4.15.6.45.7	Minimum **front yard**	4.0 m
4.15.6.45.8	Minimum **exterior side yard**	2.9 m
4.15.6.45.9	Minimum **interior side yard** to a **semi-detached**	2.9 m
4.15.6.45.10	Minimum **interior side yard** to an **apartment**	3.2 m
4.15.6.45.11	Minimum **rear yard**	6.9 m
4.15.6.45.12	Maximum projection of a **balcony** located above the **first storey** measured from the outermost face or faces of the **building** from which the **balcony** projects	1.8 m
4.15.6.45.13	Maximum projection of a **balcony** located above the **first storey** measured from the outermost face or faces of the **building** from which the **balcony** projects into a required **rear yard**	1.8 m
4.15.6.45.14	Stairs, landings, planters, canopies, ventilation shafts and bicycle racks shall be permitted to encroach into a required **yard** and **landscaped buffer**	
4.15.6.45.15	Minimum separation between **buildings**	5.9 m
4.15.6.45.16	Minimum number of resident **parking spaces** per **dwelling unit**	1.0
4.15.6.45.17	Minimum number of visitor **parking spaces** per **dwelling unit**	0.15
4.15.6.45.18	Minimum setback from a **parking structure** completely below finished grade to any **lot line**	0.2 m
4.15.6.45.19	Minimum **landscaped area**	30%
4.15.6.45.20	Minimum depth of a **landscaped buffer** abutting High Street East	4.0 m
4.15.6.45.21	Minimum depth of a **landscaped buffer** abutting Ann Street	2.9 m
4.15.6.45.22	Minimum depth of a **landscaped buffer** along an **interior side lot line**	0.0 m
4.15.6.45.23	Minimum depth of a **landscaped buffer** along a **rear lot line**	0.5 m
4.15.6.45.24	Minimum **amenity area**	340 m^2

Exception RA5-45 continued on next page

4.15.6.45	Exception: RA5-45	Map # 08	By-law: 0103-2017, 0174-2017

Exception RA5-45 continued from previous page

Section 37 Public Benefits Contribution

Pursuant to section 37(3) of the *Planning Act* R.S.O, 1990, c.P13, as amended, the height and density of development provided by this Exception shall be permitted where:

(1) the owner of the lands zoned RA5-45 enters into an agreement with The Corporation of the City of Mississauga (the City) for the provision of certain facilities, services or matters in return for the increased height and density of the development;

(2) the agreement is registered on title to the lands zoned RA5-45;

(3) the owner pays the City the sum of $300,000 to be used toward the redevelopment of the Port Credit Cenotaph Park and/or renovations to the West Bank Totem Pole and/or the installation of a commemorative statue relating to the history of Port Credit at J.J. Plaus Park.

4.15.6.46	Exception: RA5-46	Map # 22	By-law: 0155-2016/ OMB Order 2017 January 11, 0174-2017, 0179-2018

In a RA5-46 zone the permitted **uses** and applicable regulations shall be as specified for a RA5 zone except that the following **uses**/regulations shall apply:

Additional Permitted Uses

4.15.6.46.1	(1) **Day Care** (2) **Retail Store**	
Regulations		
4.15.6.46.2	The provisions contained in Subsection 2.1.14, Articles 2.1.9.4, 4.1.15.1 and Lines 11.1, 15.2 and 15.3 in Table 4.15.1 of this By-law shall not apply	
4.15.6.46.3	For the purposes of this By-law, all lands zoned RA5-46 shall be considered one **lot**	
4.15.6.46.4	The **uses** contained in Sentence 4.15.6.46.1 shall only be located within a **building**, **structure** or part thereof, used for an **apartment**, **long-term care building**, **retirement building**, or any combination thereof	
4.15.6.46.5	Maximum total number of **dwelling units** in Buildable Area 'A' identified on Schedule RA5-46 of this Exception	350
4.15.6.46.6	Maximum total number of **dwelling units** in Buildable Area 'B' identified on Schedule RA5-46 of this Exception	411
4.15.6.46.7	Maximum total number of **dwelling units** in Buildable Areas 'C1' and 'C2' identified on Schedule RA5-46 of this Exception	522
4.15.6.46.8	Maximum **floor space index - apartment zone**, measured over the **lot area** prior to road widening(s)	8.2
4.15.6.46.9	Maximum total **gross floor area - apartment zone** in Buildable Area 'A' identified on Schedule RA5-46 of this Exception	24 450 m^2
4.15.6.46.10	Maximum total **gross floor area - apartment zone** in Buildable Area 'B' identified on Schedule RA5-46 of this Exception	28 500 m^2

Exception RA5-46 continued on next page

Dumitru Liubeznii

From: Jim Levac <jiml@gsai.ca>
Sent: Tuesday, May 12, 2020 10:51 AM
To: Rao Marthi; chriszeppa; Bruce McCall-Richmond; Berardo Graziani; Rob Lincoln
Subject: RE: Lakeshore

Rao:

I don't have the plan in front of me but I think we were pretty much using the same standard that is being proposed on the Plazacorp condo at 420 Lakeshore. See below.

	PARKING REQUESTED (1)(2)(3)	
	RATIO	SPACE
RESIDENTIAL	1 / UNIT	172
COMMERCIAL		3
VISITOR(CONDO APARTMENT)	0.15/UNIT	26
TOTAL		201

PARKING # PROVIDED

SURFACE	7
U//G1	97
U/G 2	97
	201

NOTE:
1)ASSUMING RETAIL PARKING RATE REQUEST =1/100M2
2)ASSUMING RESIDENTIAL PARKING RATE=1/UNIT
3)ASSUMING VISITOR PARKING =8 SPACES

FSI: **5.17**

UNITS: **172**

TOTAL GFA: **19,382m²**

Jim Levac, MCIP, RPP | Partner