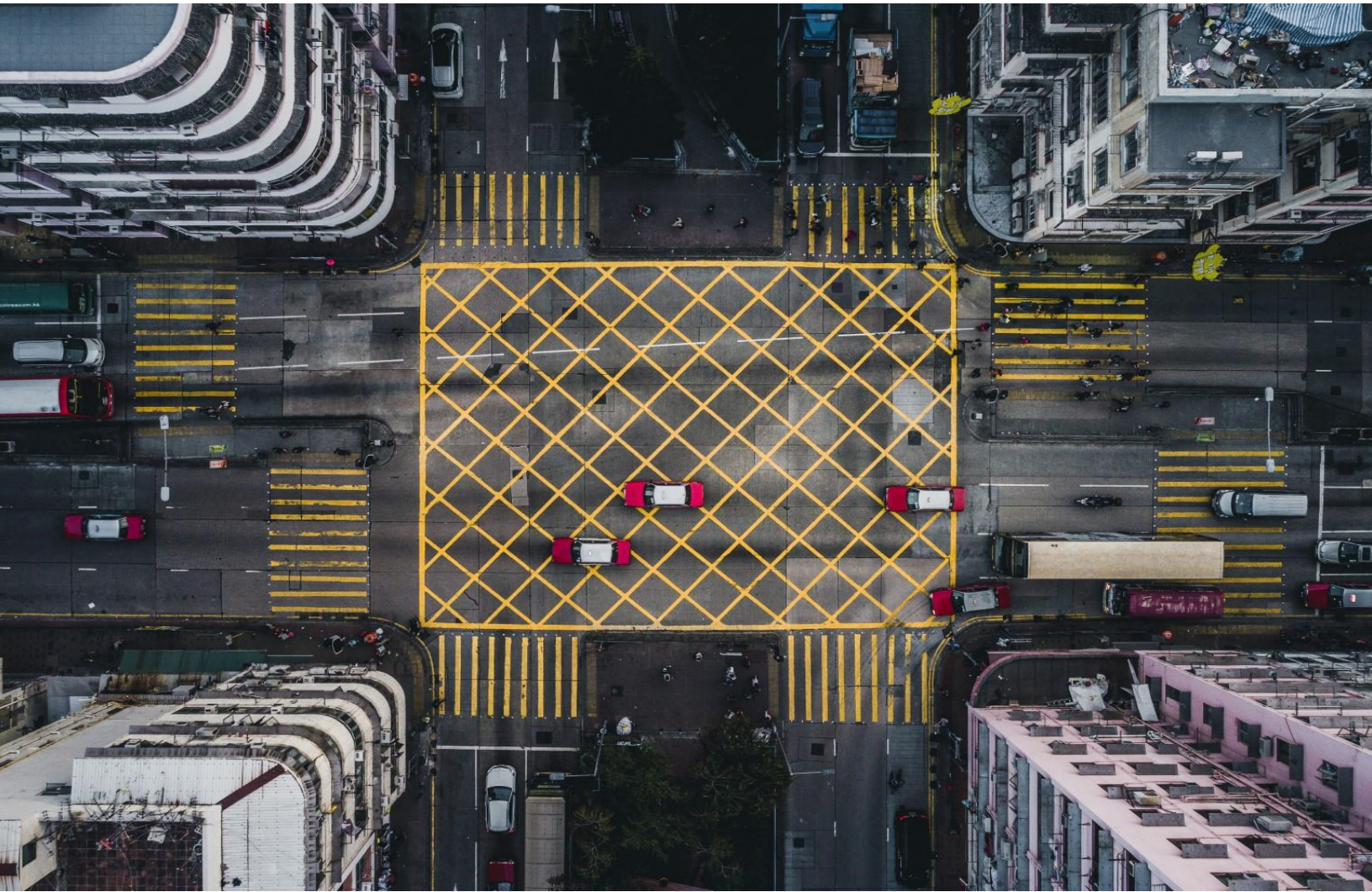
Traffic Impact Study

30 Queen Street East

Edenshaw Queen Developments Limited

07 March 2022

→ **The Power of Commitment**



Executive summary

GHD Limited was retained by Edenshaw Queen Developments Limited to prepare a Traffic Impact Study report for the proposed mixed-use development located at 30 Queen Street East in the City of Mississauga.

This report determines the site related traffic and subsequent traffic related impacts on the adjacent road network during the weekday a.m. and p.m. peak hours. These impacts are based on the projected future background traffic and road network conditions derived for a 2026 future planning horizon year.

The proposed site plan prepared by Core Architects, dated February 2022, consists of two separate mixed-use buildings with the following characteristics:

- In total, the mixed-use development proposes 1,139 mixed-use units and 1,765 m^2 of commercial GFA.
  - Tower A, a 40-storey mixed-use building with 551 residential units;
  - Tower B, a 42-storey mixed-use building with 588 residential units;

Access to the development is proposed via a full-move driveway located on Ann Street, North of Park Street East.

The subject site is expected to generate a total of 261 new two-way trips consisting of 109 inbound and 152 outbound trips during the weekday a.m. peak hour and 336 new two-way trips consisting of 177 inbound and 159 outbound trips during the weekday p.m. peak hour.

The overall impact of the development generated traffic is negligible to the operation of the study area intersections and traffic flow along Hurontario Street, Park Street East and Ann Street with no geometric improvements required to accommodate the proposed development.

Under future total traffic conditions, the signal timings for the intersection of Hurontario Street and Park Street East were optimized as needed to reduce v/c ratios and delays. An eastbound left-turn phase was also added during all future a.m. peak scenarios and only the p.m. future total scenario to reduce v/c ratios and delays for that approach.

Application of the current City of Mississauga By-Law parking rates to the subject site results in a requirement of 1,795 parking spaces. The subject site provides a total of 474 spaces resulting in a deficit of 1,321 parking spaces.

Recognizing the transit-supportive vision for the Port Credit Community, the recommendation in the City's Transportation Master Plan to provide reduced transit supportive parking rates and reduced parking rates that have been approved for other developments in the recent past, the subject site is proposing a parking supply of 0.32 spaces per unit for residents and 0.10 spaces per unit for visitor which will be shared with the commercial GFA.

The proposed parking supply is based on the expected future market demand for the area and is meant to provide an opportunity to introduce transit-oriented development in the area as transit becomes more attractive and convenient. Reducing the parking supply at time of construction will lead to households and individuals making residential location and travel choice decisions jointly at time of purchase and is therefore expected to help the city achieve the envisioned transportation context for this area including future transit modal split targets.

We trust that this satisfies your requirements, but do not hesitate to contact the undersigned if you have any questions.

Sincerely,

GHD

William Maria, P. Eng.

Transportation Planning Lead

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1. Introduction

1.1 Retainer and Objective

GHD Limited was retained by Edenshaw Queen Developments Limited to prepare a Transportation Impact Study in support of a proposed mixed-use development located at 30 Queen Street East in the City of Mississauga.

The site location is illustrated in **Figure 1**.

The purpose of this study is to:

- Establish baseline traffic conditions for the study area in 2021 and determine future background operating conditions for a future planning horizon in 2026.
- Utilizing Institute of Transportation Engineer's (ITE) Trip Generation data and first principles to estimate the site trips generated by the proposed development and distribute the traffic to the adjacent road network.
- Determine future operating traffic conditions during the weekday peek periods through intersection capacity analysis.
- Analyze and review the number of proposed parking spaces

1.2 Study Team

The GHD team involved in the preparation of the study are:

- William Maria, P. Eng., Transportation Planning Lead
- Rafael Andrenacci, B.Eng., Transportation Planner

Figure 1 Site Location

2. Site Characteristics

2.1 Study Area

The following intersections were included in the study area:

- Hurontario Street and Park Street East
- Park Street East and Ann Street
- Ann Street and the site driveway

2.2 Proposed Development Content

A site plan prepared by Core Architects, dated February 2022, is shown in **Figure 2** and provided in **Appendix C**. It consists of two buildings with the following characteristics:

- In total, the mixed-use development proposes 1,139 residential units and 1,765 m^2 of commercial GFA.
  - Tower A, a 40-storey mixed-use building with 551 residential units;
  - Tower B, a 42-storey mixed-use building with 588 residential units;

Access to the subject site is proposed via a full-move driveway on Ann Street, north of Park Street East.

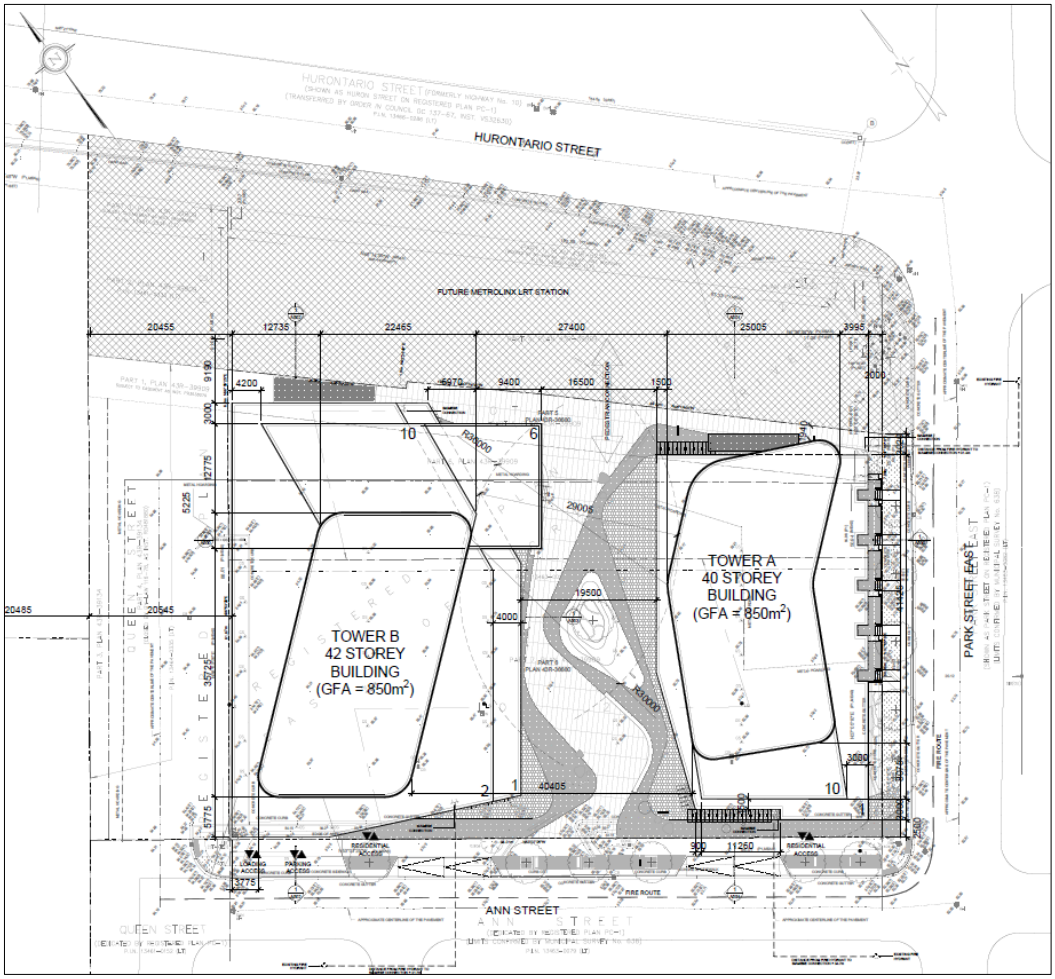


Figure 2 Site Plan

3. Existing Conditions

3.1 Existing Road Network

Hurontario Street is a north-south arterial road under the jurisdiction of the City of Mississauga. In the study area it has a four-lane urban cross section. The intersection of Hurontario Street and Park Street East is signalized, with a left-turn, through lane and a right-turn lane in the both the northbound and southbound directions. The posted speed limit on Hurontario Street is 50 km/h.

Ann Street is an east-west minor collector road under the jurisdiction of the City of Mississauga. In the study area it has a two-lane urban cross section and its intersection with Park Street East is unsignalized. The assumed posted speed limit on Ann Street is 50 km/h.

Park Street East is an east-west local road under the jurisdiction of the City of Mississauga. In the study area it has a two-lane urban cross section. Its intersection with Ann Street is unsignalized, with a through-left and a right-turn lane in the westbound direction. Its intersection with Hurontario Street is signalized, with a through-right and a left-turn lane in both the eastbound and westbound directions. The assumed posted speed limit on Park Street East is 50 km/h.

3.2 Pedestrian and Bicycle Routes

Pedestrian sidewalks are available on both sides of all roads throughout the study area with the exception of the west side of Hurontario Street due to the ongoing Hurontario LRT construction.

There are no bicycle provisions on any of the roads within the study area. South of the study area, the Waterfront trail connects a series of park trails, signed bike routes and multi-use trails, and is part of the Great Lakes Waterfront Trail. This trail continues to the east into the City of Toronto, and to the west into the Town of Oakville. A signed bike route along Elizabeth Street North is part of the “Trail-to-GO” network, described as a route connecting the GO Train Lakeshore Line to the Waterfront Trail

3.3 Transit Services

Within the study area, GO Transit and MiWay Transit operate the following routes:

GO Transit’s Port Credit Station operates trains along the **Lakeshore West Line**. During weekdays, the eastern terminus of the train line is Union Station and various western terminuses (Oakville, Aldershot and West Harbour). Trains operate with a 15-minute headway in both eastbound and westbound directions. The 15-minute headway in the westbound direction is shared amongst the trips towards the three terminal stations. Trains travelling towards Oakville GO Station have a 30-minute headway and trains travelling towards the West Harbour and Aldershot GO stations have an hour headway. GO Transit also offers one round-trip to Niagara Falls per day (1 outbound during the a.m. peak and 1 inbound during the p.m. peak) and four trips in a day on weekends. The Lakeshore West map is provided in **Figure 4**

Bus Route 2 (Hurontario) operates both ways along Hurontario Street between the Port Credit GO Station and City Centre Transit Terminal at Square One. The route runs on a 10-minute headway from 6 a.m. to 10 p.m. and a 20-minute or better headway outside of that period.

Bus Route 8 (Cawthra) operates generally along Cawthra Road between Port Credit GO Station and the City Centre Transit Terminal at Square One. The route runs with a 30-minute headway from 5 a.m. to 5 p.m.

Bus Route 14 (Lorne Park) operates generally in the east-west direction along Indian Road and Truscott Drive between Port Credit and Clarkson GO Stations. The route runs on a 45-minute headway from 5 a.m. to 4 p.m.

Bus Route 14A (Lorne Park - Industrial) operates during the Rush Hour period only and follows the same route as Route 14. However, it continues south from the Clarkson GO Station along Southdown Road and continues along

Lakeshore Road West, Winston Churchill Boulevard and Royal Windsor Drive before arriving at Clarkson GO Station again.

Bus Route 23 (Lakeshore) operates in both directions along Lakeshore Road West between Clarkson and Long Branch GO Stations. The route runs on a 20-minute or better headway from 4 a.m. to 9 p.m.

The GO Transit Port Credit Station and the MiWay bus stops are located within walking distance of the proposed development, approximately 150 metres and 200 metres respectively from the proposed site driveway. The transit map with the bus routes operating within the study area is provided in **Figure 3**.

Figure 3 MiWay Transit Map within the Study and Surrounding Areas (MiWay)

Figure 4 Lakeshore West Train Map (GO Transit)

3.4 Existing Traffic Data

Historic turning movement counts were provided to GHD from previous traffic impact studies completed within the surrounding area. Turning movement counts for the intersection of Hurontario Street and Park Street East, conducted in December 2019, were extracted from the Transportation Impact Study prepared for the proposed residential development at 42-46 Park Street East & 23 Elizabeth Street North by LEA Consulting Ltd. dated May 2020. Turning movement counts for the intersection of Ann Street at Park Street East were conducted in November 2018 and were extracted from the report for the proposed residential development at 22-28 Ann Street & 78 Park Street East completed by LEA Consulting Ltd in April 2019. Traffic volumes along Hurontario Street were grown by the growth rates provided by the City, and further discussed in **Section 5.2.**

The projected baseline 2021 traffic volumes for the a.m. and p.m. peak hours are summarized in **Figure 5,** with the most recent turning movement count data from LEA Consulting Ltd. provided in **Appendix A**. The signal timing plan was also extracted from the Transportation Impact Study completed in May 2020 and provided in **Appendix A.**

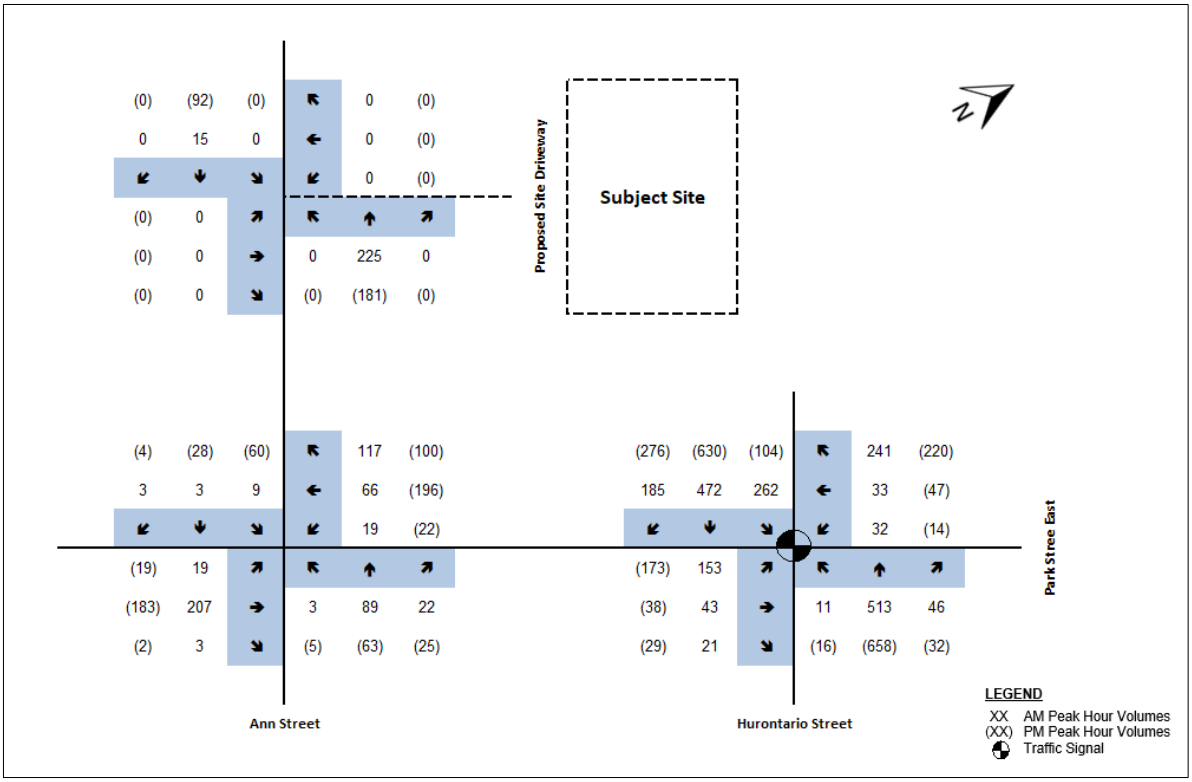


Figure 5 Projected 2021 Traffic Volumes

4. Network Improvements

4.1 Future Hurontario LRT Line

The future Hurontario LRT, with an expected completion of Fall 2024, will have its southern terminus at Port Credit Station located in the northwest corner of Hurontario Street and Park Street East (as seen in **Figure 7** below). The Hurontario LRT will include 19 stations (four major transit hubs) and run 18 kilometers from the Port Credit Station to the Brampton Gateway Terminal at Hurontario Street and Steeles Avenue. The future LRT map is provided in **Figure 6.**

Figure 6 Future Hurontario LRT Map (Metrolinx)

4.2 Pedestrian and Cycling Network

According to AECOM's Road Plan map, dated February 2017, and provided in **Figure 7**, the sidewalk that was located on the west side of Hurontario Street will be relocated to the west side of the proposed LRT tracks and Port Credit LRT Station.

In addition to the relocation of the sidewalk, a multi-use trail will be provided on the east side of Hurontario Street. The City of Mississauga Cycling Master Plan includes this road segment as a proposed multi-use trail as well, connecting it to the existing multi-use trail that runs along Hurontario Street from Inglewood Drive to North Service Road. The City's Cycling Master Plan proposes extending the multi-use trail north to the Queensway and transition into a Cycle Track/Separated Bike Lane all the way to the northern limit of Hurontario Street within the City of Mississauga. The extension of the cycling network along Hurontario will allow for greater and safer access to the rest of the City of Mississauga's existing and proposed cycling facilities

Within the study area, Park Street East is proposed to be a Shared Route and will provide connection to the Waterfront Trail via other local roads classified as Shared Routes. Lakeshore Road is also proposed to be a Cycle

Track/Separated Bike Lane along the entirety of the road within the City of Mississauga and can serve as an alternative to the existing Waterfront Trail.

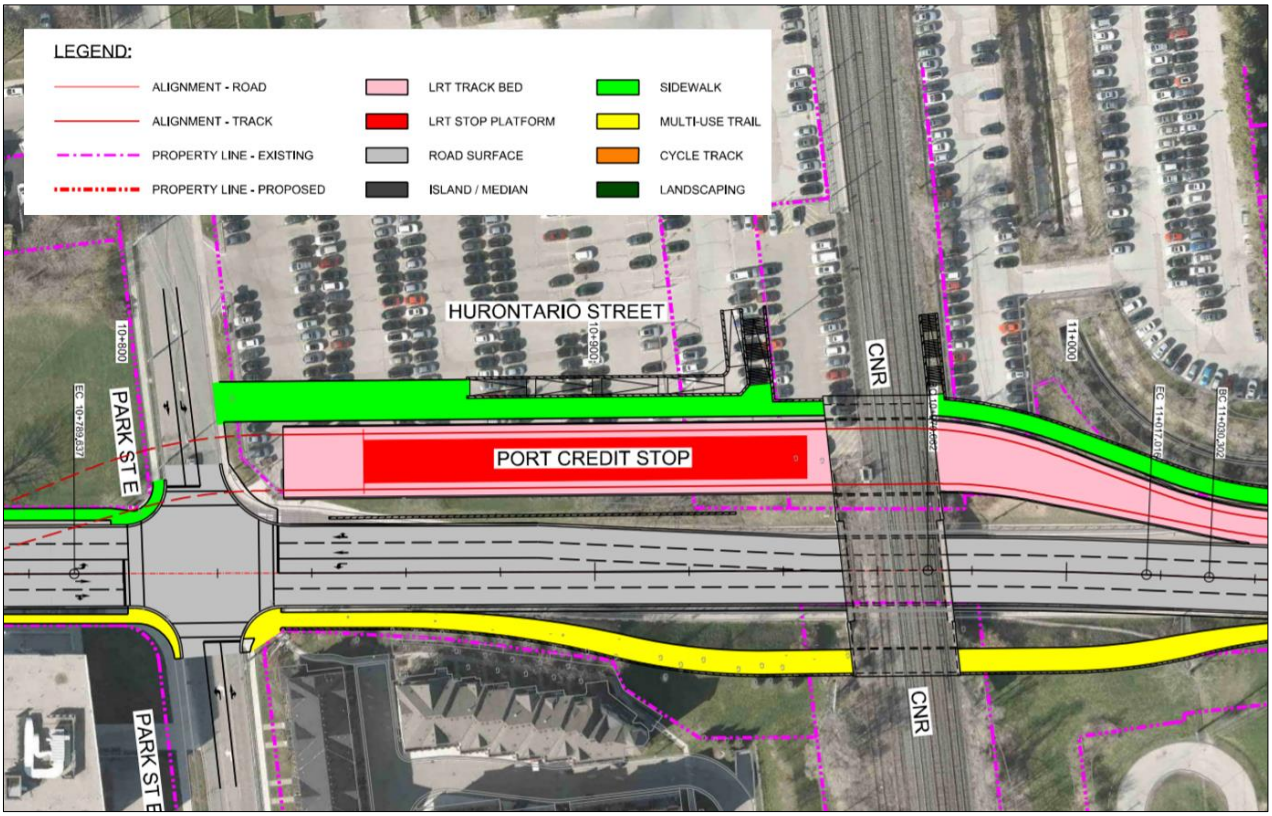


Figure 7 Hurontario LRT – Road Plan (AECOM, February 2017)

5. Future Background Traffic

5.1 Study Horizon Year

A future horizon year of 2026 was selected for the analysis of future traffic conditions, corresponding with the City's Transportation Impact Study Guidelines of a five-year period from the date of the Transportation Impact Study Report.

5.2 Corridor Growth

GHD applied the following growth rates to the study area roads depending on the peak period and direction of travel, consistent with traffic impact studies previously completed in the surrounding area. During the a.m. peak hour, no growth rate was applied to northbound volumes on Hurontario Street and a 1.5% compounded annually growth rate was applied to southbound movements. During the p.m. peak hour, a 0.5% growth rate was applied to northbound movements and a 1% growth rate was applied for southbound movements, compounded annually.

5.3 Background Development Traffic

GHD reviewed the city's development application web portal to determine which planned or approved background developments located near the subject site would contribute to traffic volumes at the study intersections. GHD located three sites including:

- 42-46 Park Street East & 23 Elizabeth Street North
- 22-28 Ann Street & 78 Park Street East
- 6, 8, 10 Ann Street

The proposed trip generation from each background development is summarized in the table below, with the trip distribution for each site provided in **Appendix F**. The total site trips from each of the three background developments are provided in **Figure 8.**

Table 1 Background Development Traffic

Background Development	GFA	Year	Peak Hour Trips					
			Weekday AM			Weekday PM		
			In	Out	Total	In	Out	Total
42-46 Park Street East & 23 Elizabeth Street North (LEA Consulting)	258 Residential Units	2020	13	50	63	45	28	73
22-28 Ann Street & 78 Park Street East (LEA Consulting)	316 Residential Units	2019	18	59	77	52	26	78
6, 8, 10 Ann Street (GHD)	69 Residential Units	2014	5	24	29	22	11	33

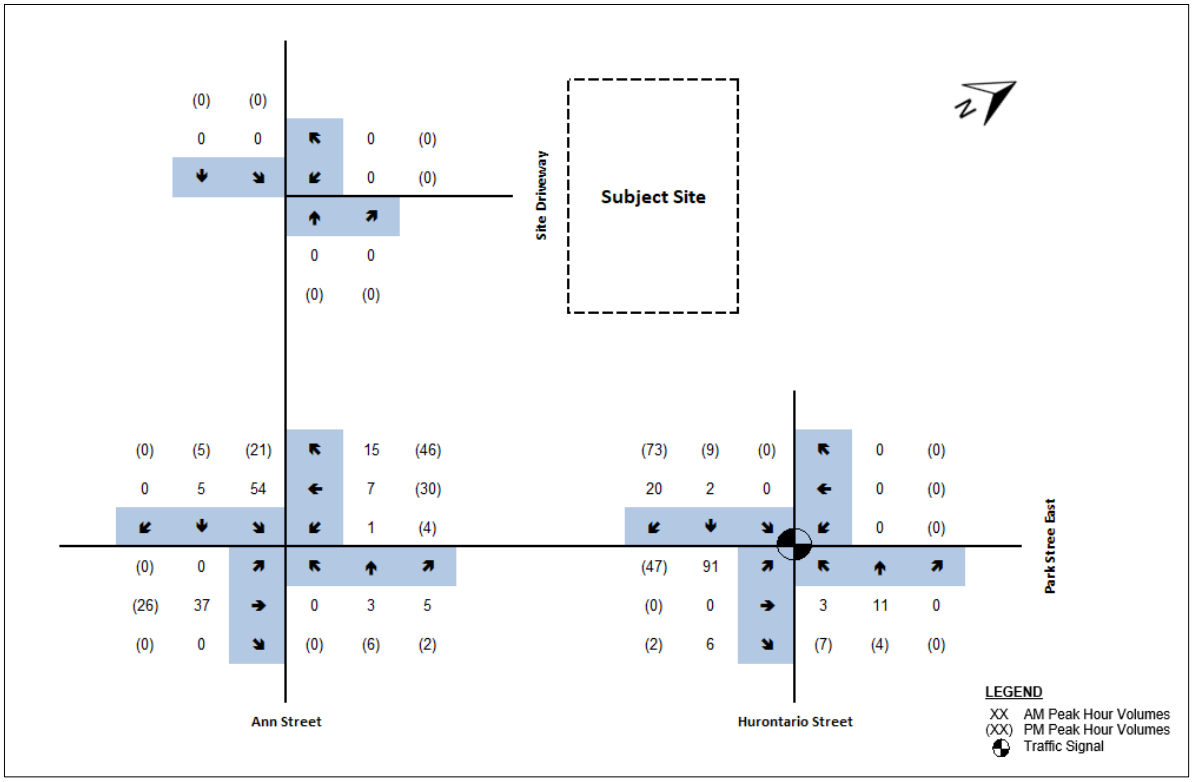


Figure 8 Total Background Development Site Traffic

5.4 Future Background Traffic Volumes

The background traffic volumes for the 2026 horizon year were derived by applying the respective growth rates to Hurontario Street and adding the total background development site traffic from **Figure 8**. The resulting 2026 future background traffic volumes are summarized in **Figure 9.**

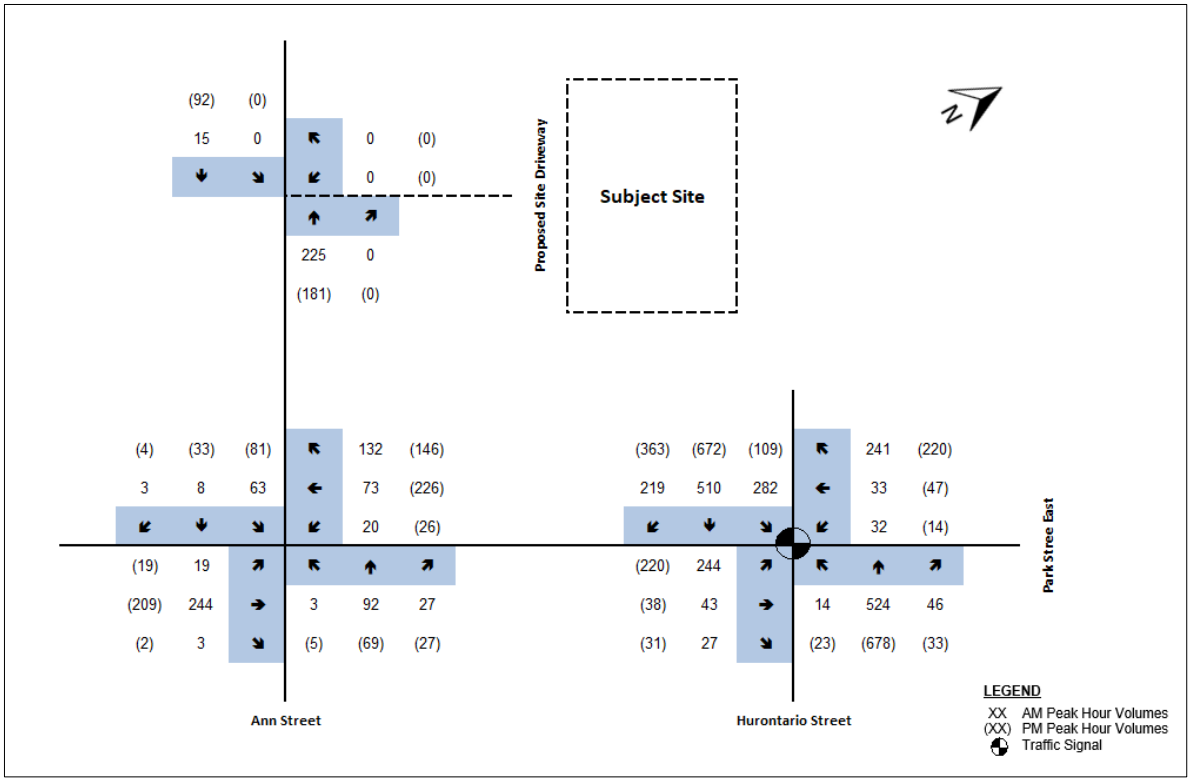


Figure 9 2026 Future Background Traffic Volumes

6. Site Generated Traffic

6.1 Site Traffic Generation

The subject site consists of two buildings, a 40-storey mixed-use building with 551 residential units and a 42-storey mixed-use building with 588 residential units. The subject site also includes 1,756 m^2 (18,998 ft^2) of commercial GFA.

The trip generation for the residential uses was calculated using rates provided in the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 11th Edition using Land Use Code (LUC) 222 (Multifamily Housing – High-Rise) for the residential portion of the proposed development and LUC 822 Strip Retail Plaza for the commercial portion.

A transit modal split was applied only to site trips generated by the residential portion of the development. With the Hurontario LRT having expected completion in Fall 2024, the transit modal split was applied to the estimated residential site trips using data from both the 2016 Transportation Tomorrow Survey (TTS) (**Table 2**) and the 2015 and 2031 Modal Split/Non-Auto Trip Reduction provided in the Port Credit GO Station Southeast Area Master Plan Study dated October 2015 (**Table 3**).

A base transit modal split was set for 2016 using the data extracted from the Transportation Tomorrow Survey and included data only from apartment buildings within the planning district of the proposed development (3877), along with two neighbouring planning districts (3642 and 3878). The data was also generated using only trips starting during the a.m. (7:00-9:00) and p.m. (16:00-19:00) peak periods Monday through Friday. The modal split for 2016 can be found in **Table 2**

A linear interpolation was derived from the 2015 and 2031 Modal Split provided in the area's Transportation Master Plan, provided in **Table 3**, to determine the projected modal split in 2026. With the splits provided in the Master Plan, it was determined that non-auto trips would increase by 0.94% a year during the a.m. peak hour and 1.25% during the p.m. peak hour for the 2026 Horizon period. The projected 2026 modal split is provided in **Table 4.**

No modal split reductions were applied to the commercial development with the assumption that only local trips will be generated by this portion of the proposed development.

Table 2 2016 TTS Modal Split Data for Planning Districts 3642, 3877, and 3878

Transportation Mode	Percentage Split			
	AM		PM	
	in	out	in	out
Transit	2%	21%	16%	2%
Auto driver	67%	62%	67%	71%
Auto passenger	22%	13%	9%	9%
Walk	9%	4%	7%	18%
TOTAL	100%	100%	100%	100%

Table 3 2015 and 2031 Modal Split/Non-Auto Trip Reduction (Port Credit Go Station TMP)

Peak Period	Primary Mode of Travel in 2015		Primary Mode of Travel in 2031	
	Auto Driver	Non-Auto Trip	Auto Driver	Non-Auto Trip
AM Peak	65%	35%	50%	50%
PM Peak	75%	25%	55%	45%

Table 4 Projected 2026 Modal Split

Transportation Mode	Percentage Split			
	AM		PM	
	in	out	in	out
Transit	11%	30%	29%	15%
Auto driver	57%	53%	54%	59%
Auto passenger	22%	13%	9%	9%
Walk	9%	4%	7%	18%
TOTAL	100%	100%	100%	100%

Table 5 below summarizes the estimated trip generation for the proposed development.

Table 5 Estimated Site Trips

Land Uses	GFA (Dwelling Units)	Parameters	Peak Hour					
			Weekday AM			Weekday PM		
			In	Out	Total	In	Out	Total
Multifamily Housing (High-Rise) (LUC 222)	1,139 units	Trip Ratio	34%	66%	100%	56%	44%	100%
		Gross Trips	104	203	307	179	140	319
		Modal Split	20%	34%	-	36%	33%	-
		Modal Split Reduction	21	70	91	65	46	111
		Total New Trips	83	133	216	114	94	208
Strip Retail Plaza (<40k) (LUC 822)	18,998 ft^2	Trip Ratio	60%	40%	100%	50%	50%	100%
		Total New Trips	26	19	45	63	62	125
Total Primary Trips			***109***	***152***	***261***	***177***	***159***	***336***

The residential and commercial uses proposed at the subject site are expected to generate a total of 261 new two-way trips consisting of 109 inbound and 152 outbound trips during weekday a.m. peak hour and 336 new two-way trips consisting of 177 inbound and 159 outbound trips during the weekday p.m. peak hour.

6.2 Site Traffic Distribution and Assignment

The site generated traffic for the residential development was primarily distributed based on a review of the 2016 Transportation Tomorrow Survey (TTS) and the existing traffic patterns. Trips were assigned to the study area intersections based on reasonable routes for vehicles to minimize the travel time and distance under the existing road network.

The site generated traffic for the commercial development within the subject site was assumed to have a more local trip distribution, with trips assigned more evenly throughout the study area roads.

The directional split based on the 2016 Transportation Tomorrow Survey date for the residential site traffic distribution is provided in **Table 6** with the full calculation sheets provided in **Appendix B**. The site traffic distribution percentages for passenger vehicles for both land uses within the subject site are provided in **Figure 10** and **Figure 11** with the site generated traffic assignment to the study area road network for the weekday a.m. and p.m. peak hours provided in **Figure 12** and **Figure 13**.

Table 6 2016 TTS Data Directional Split

Peak Period	Direction	North	South	East	West
AM	Inbound	65%	0%	17%	18%
	Outbound	70%	0%	15%	15%
PM	Inbound	71%	0%	15%	14%
	Outbound	66%	0%	16%	18%

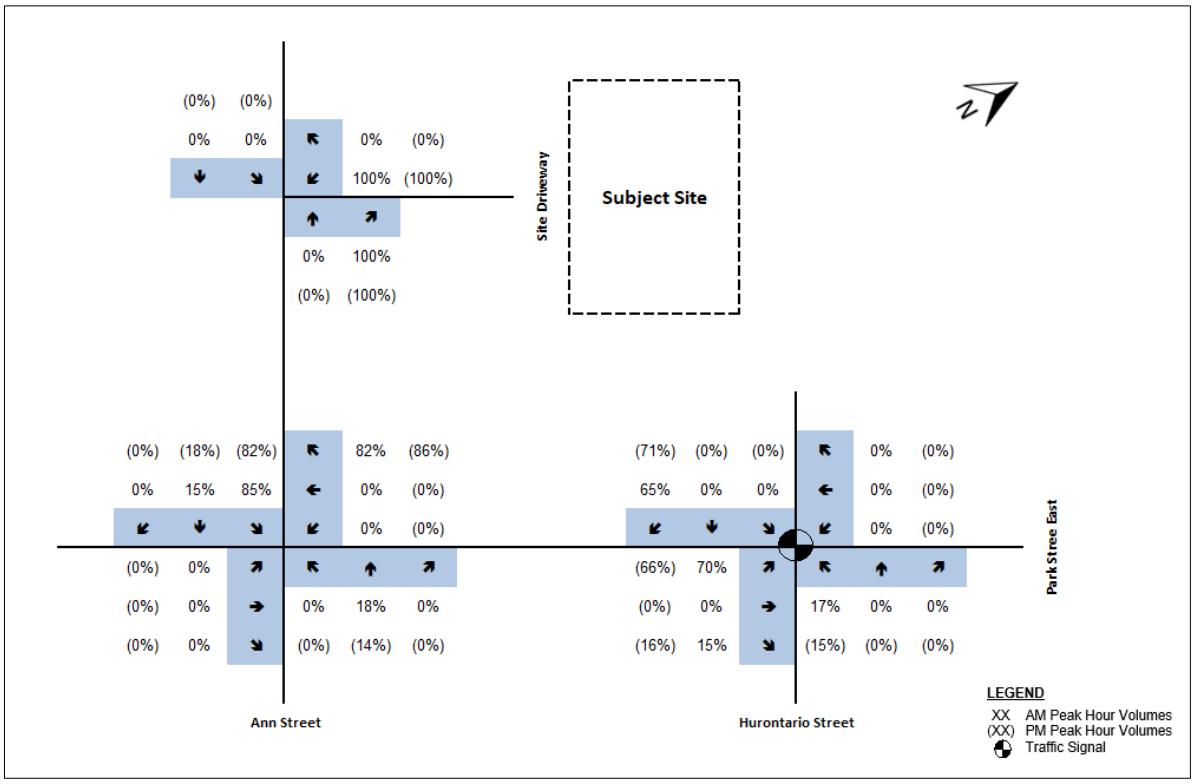


Figure 10 Trip Distribution - Residential

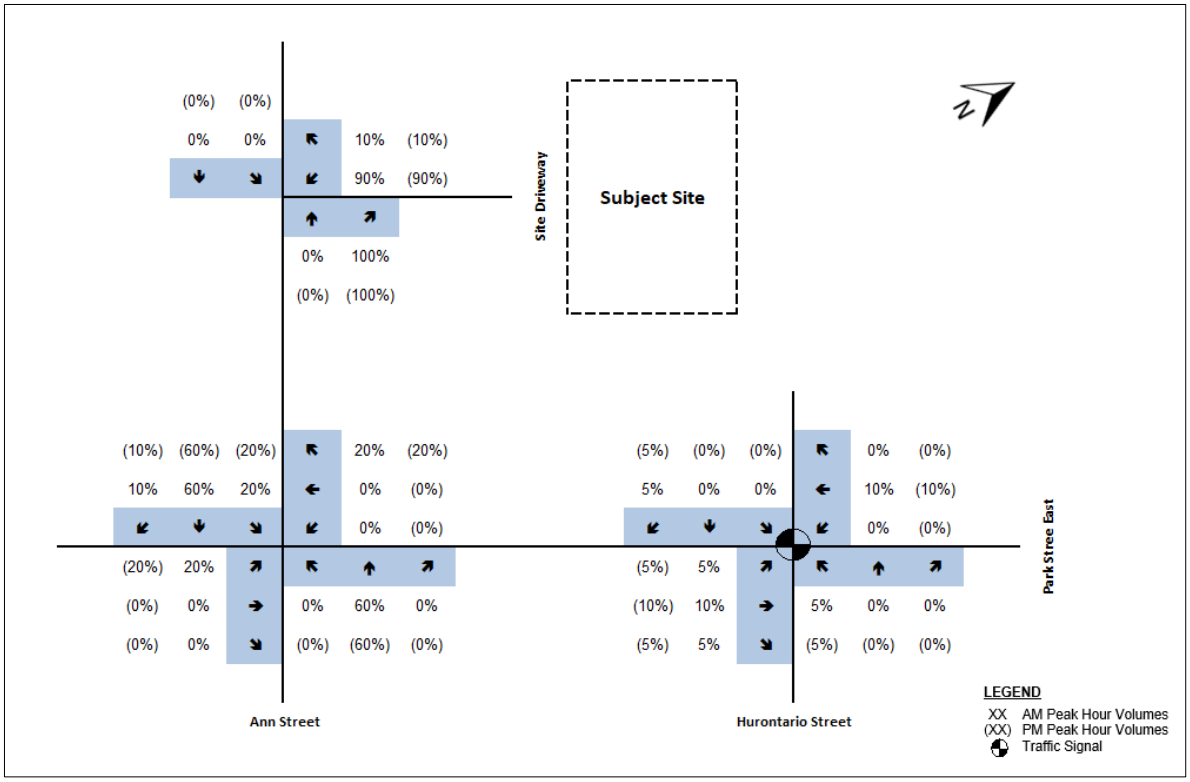


Figure 11 Trip Distribution – Commercial

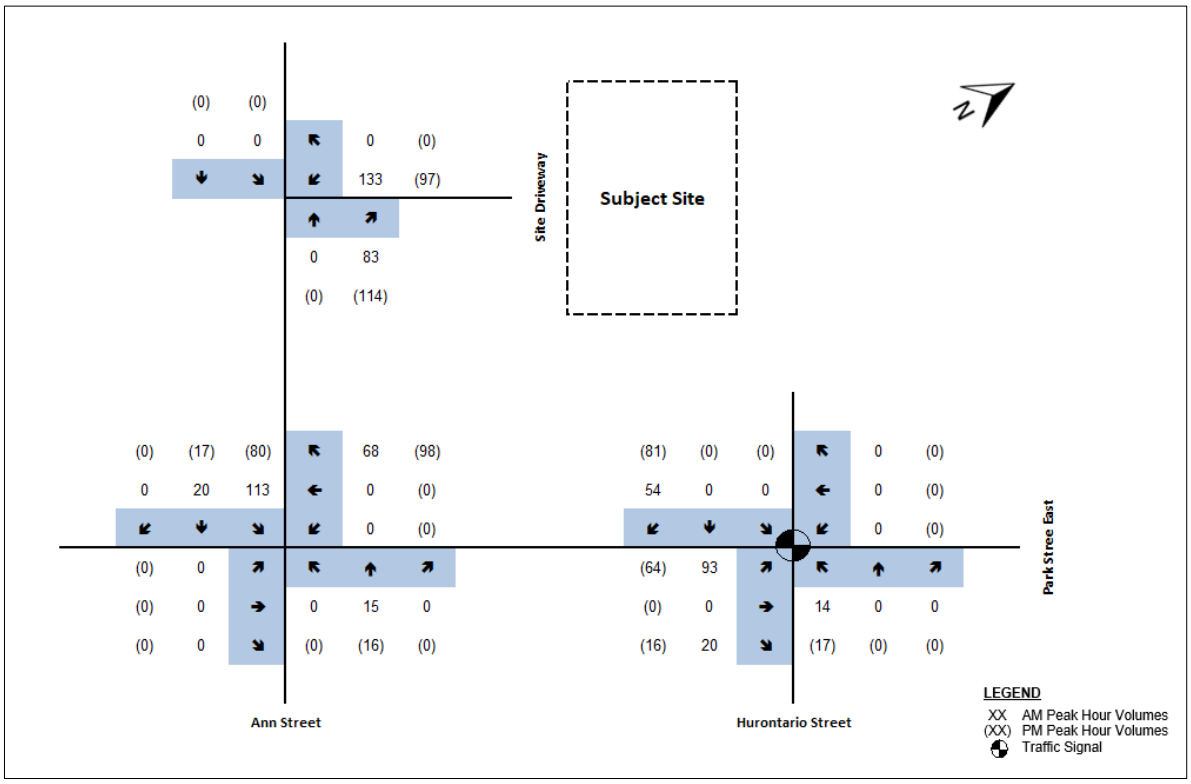


Figure 12 Total Site Trips – Residential

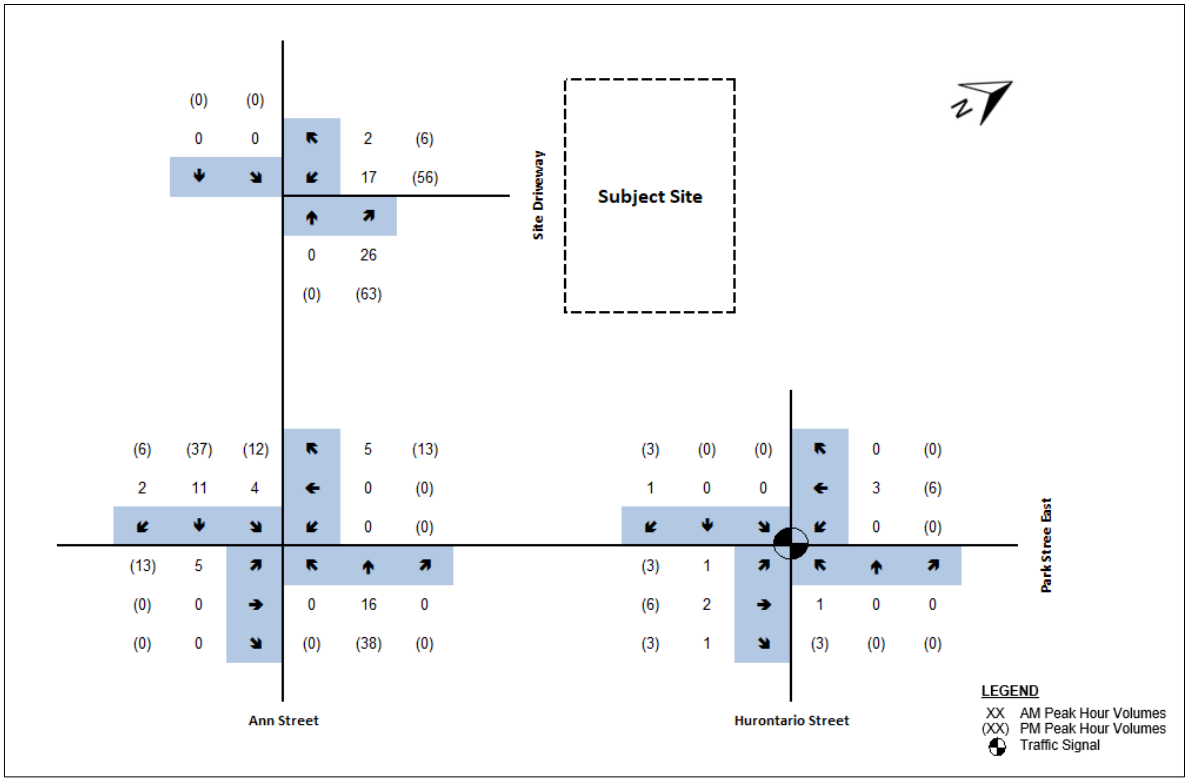


Figure 13 Total Site Trips - Commercial

7. Future Total Traffic

The future total traffic conditions in the weekday a.m. and p.m. peak hours for the 2026 planning horizon was derived by combining the projected future background traffic with the corresponding estimated site generated traffic. The resulting traffic volumes are presented in **Figure 14**

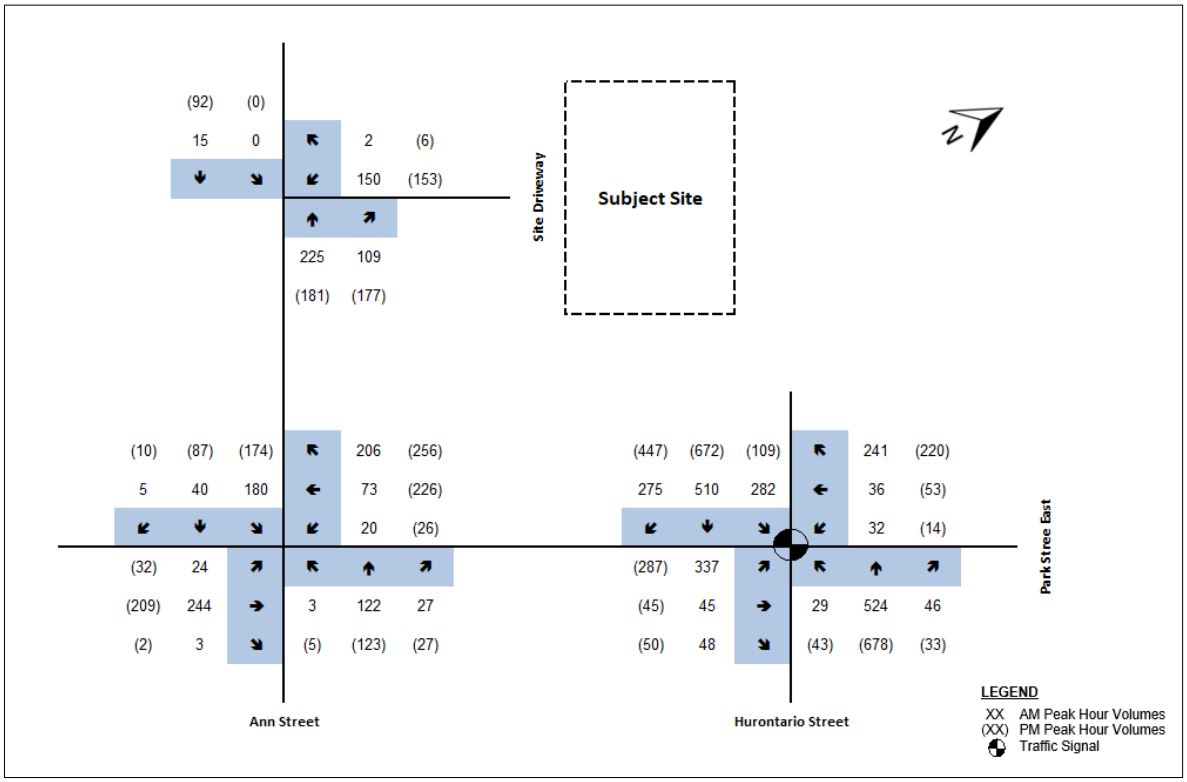


Figure 14 2026 Future Total Traffic Volumes

8. Capacity Analysis

The capacity analysis identifies how well the intersections and driveways are operating. The analysis contained within this report utilized the Highway Capacity Manual (HCM) 2000 procedure within the Synchro Version 10 Software package. The reported intersection volume-to-capacity ratios (v/c) are a measure of the saturation volume for each turning movement, while the levels-of-service (LOS) are a measure of the average delay for each turning movement. Queuing characteristics are reported as the predicted 95th percentile queue for each turning movement. Both pedestrian crossing volumes and heavy vehicle proportions are included in the analyses. The peak hour factors from the historic counts were used to analyze existing and future traffic conditions.

The analysis includes identification and required modifications and improvements (if any) at intersections where the addition of background growth or background growth plus site-generated traffic volumes causes the following:

'Critical' intersections and movements for a signalized intersection include:

- V/C ratios for overall intersections operations, through movements, or shared through/turning movements increase to 0.85 or above;
- V/C ratios for exclusive movements increase to 0.90 or above; or

- 95th percentile queue length for individual movements that are projected to, or exceed, the storage length.

'Critical' intersections and movements for an unsignalized intersection include:

- Level of Services (LOS), based on average delay per vehicle, on individual movements is LOS "E" or greater; or
- Queue length for individual movements that exceeds the lesser of 5 vehicles or the available queue storage.

The following tables summarize the HCM capacity results for the study intersections during the weekday a.m. and p.m. peak hours under existing (2021), future background (2026) and future total (2026) traffic conditions. The detailed calculation sheets are provided in **Appendix C**.

8.1 Hurontario Street and Park Street East

Capacity analysis at this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 7 Capacity analysis of Hurontario Street and Park Street East

Scenario	Am Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Existing 2021	Overall: 0.77 (C) 30 EBL = **1.00** (F) 116 EBTR = 0.12 (D) 37 WBL = 0.10 (D) 37 WBTR = 0.33 (D) 40 NBL = 0.05 (C) 20 NBTR = 0.42 (C) 25 SBL = 0.63 (B) 16 SBTR = 0.40 (B) 14	 EBL = **90 m** EBTR = 25 m WBL = 15 m WBTR = 30 m NBL = 10 m NBTR = 80 m SBL = **50 m** SBTR = 60 m	Overall: 0.62 (C) 20 EBL = **0.95** (F) 87 EBTR = 0.11 (C) 29 WBL = 0.04 (C) 28 WBTR = 0.46 (C) 32 NBL = 0.06 (A) 8 NBTR = 0.36 (B) 10 SBL = 0.30 (B) 12 SBTR = 0.47 (B) 12	 EBL = **65 m** EBTR = 15 m WBL = 5 m WBTR = 45 m NBL = 5 m NBTR = 65 m SBL = **30 m** SBTR = 80 m
Future Background 2026	Overall: 0.59 (C) 27 EBL = 0.71 (D) 50 EBTR = 0.11 (D) 39 WBL = 0.28 (E) 61 WBTR = 0.42 (E) 63 NBL = 0.05 (B) 18 NBTR = 0.34 (C) 21 SBL = 0.51 (B) 13 SBTR = 0.36 (B) 13	 EBL = **70 m** EBTR = 20 m WBL = 20 m WBTR = 40 m NBL = 10 m NBTR = 80 m SBL = **55 m** SBTR = 70 m	Overall: 0.63 (B) 20 EBL = **0.92** (E) 74 EBTR = 0.10 (C) 28 WBL = 0.04 (C) 27 WBTR = 0.36 (C) 30 NBL = 0.09 (A) 10 NBTR = 0.34 (B) 11 SBL = 0.28 (B) 12 SBTR = 0.50 (B) 13	 EBL = **70 m** EBTR = 15 m WBL = 5 m WBTR = 35 m NBL = 10 m NBTR = 60 m SBL = **25 m** SBTR = 85 m
Future Total 2026	Overall: 0.68 (C) 32 EBL = **0.91** (E) 70 EBTR = 0.12 (D) 37 WBL = 0.27 (E) 60 WBTR = 0.51 (E) 63 NBL = 0.11 (C) 21 NBTR = 0.35 (C) 24 SBL = 0.53 (B) 14 SBTR = 0.4 (B) 15	 EBL = **105 m** EBTR = 20 m WBL = 20 m WBTR = 45 m NBL = 15 m NBTR = 80 m SBL = **55 m** SBTR = 75 m	Overall: 0.71 (C) 23 EBL = **0.94** (E) 69 EBTR = 0.11 (C) 24 WBL = 0.03 (C) 23 WBTR = 0.32 (C) 26 NBL = 0.23 (B) 15 NBTR = 0.38 (B) 14 SBL = 0.32 (B) 16 SBTR = 0.58 (B) 17	 EBL = **100 m** EBTR = 20 m WBL = 5 m WBTR = 40 m NBL = 15 m NBTR = 60 m SBL = **25 m** SBTR = 85 m

Scenario	Am Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Future Total 2026 (Further Optimized)	Overall: 0.67 (C) 31 EBL = 0.88 (E) 64 EBTR = 0.11 (D) 36 WBL = 0.27 (E) 60 WBTR = 0.49 (E) 63 NBL = 0.11 (C) 21 NBTR = 0.36 (C) 24 SBL = 0.53 (B) 15 SBTR = 0.40 (B) 15	EBL = **100 m** EBTR = 20 m WBL = 20 m WBTR = 45 m NBL = 15 m NBTR = 85 m SBL = **60 m** SBTR = 75 m	Overall: 0.71 (C) 23 EBL = 0.87 (D) 50 EBTR = 0.11 (C) 25 WBL = 0.07 (D) 37 WBTR = 0.74 (D) 53 NBL = 0.22 (B) 14 NBTR = 0.37 (B) 13 SBL = 0.31 (B) 15 SBTR = 0.58 (B) 16	EBL = **65 m** EBTR = 15 m WBL = 10 m WBTR = 55 m NBL = 15 m NBTR = 60 m SBL = **30 m** SBTR = 95 m

Under existing traffic conditions, the overall intersection has a reported v/c ratio of 0.77 LOS C and 0.62 LOS C during the a.m. and p.m. peak hours respectively. The intersection is operating with acceptable levels of delay for all individual movements with the exception of a critical movement in the eastbound left-turn approach during both peak periods. The approach is reporting a v/c ratio of 1.00 LOS F (116 seconds of delay) during the a.m. peak hour and 0.95 LOS F (87 seconds of delay) during the p.m. peak hour.

With the addition of corridor growth along Hurontario Street and the background developments during the 2026 future background horizon period and signal optimization, the overall reported v/c of the intersection is expected to decrease to 0.59 LOS C during the a.m. peak hour and increase to 0.63 LOS B during the p.m. peak hour. The eastbound left-turn approach remains a critical movement only during the p.m. peak hour (0.92 LOS E).

Under the 2026 future total traffic condition, with the addition of site traffic, the intersection continues to operate at satisfactory levels with the overall v/c ratio of the intersection increasing to 0.68 LOS C and 0.71 LOS C during the a.m. and p.m. peak hour respectively. The eastbound left-turn is once again critical during both peak periods, reporting a v/c ratio of 0.91 LOS E during the a.m. peak hour and 0.94 LOS E during the p.m. peak hour. With further signal timing improvements, there are only improvements to the overall v/c ratio in the a.m. peak (0.68 to 0.67 LOS C) with the eastbound left-turn approach reported to be below critical levels. During the a.m. peak hour, the v/c ratio is reduced from 0.91 LOS E to 0.88 LOS E and reduced from 0.92 LOS E to 0.87 LOS D during the p.m. peak hour.

No geometric improvements were identified at this intersection to accommodate the proposed development, with only the signal timing improvements and the addition of an eastbound left-turn phase..

8.2 Ann Street and Park Street East

Capacity analysis for this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 8 Capacity analysis of Ann Street and Park Street East

Scenario	Am Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Existing 2021	EBTLR = 0.35 (B) 10 WBTL = 0.15 (A) 8 WBR = 0.17 (A) 7 NBTLR = 0.19 (A) 10 SBTLR = 0.02 (A) 8	EBTLR = 0 m WBTL = 0 m WBR = 0 m NBTLR = 0 m SBTLR = 0 m	EBTLR = 0.33 (B) 11 WBTL = 0.38 (A) 11 WBR = 0.21 (A) 8 NBTLR = 0.18 (B) 10 SBTLR = 0.20 (B) 10	EBTLR = 0 m WBTL = 0 m WBR = 0 m NBTLR = 0 m SBTLR = 0 m

Scenario	Am Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Future Background 2026	EBTLR = 0.36 (B) 11 WBTL = 0.14 (A) 8 WBR = 0.17 (A) 7 NBTLR = 0.18 (A) 10 SBTLR = 0.11 (A) 9	EBTLR = 0 m WBTL = 0 m WBR = 0 m NBTLR = 0 m SBTLR = 0 m	EBTLR = 0.33 (B) 11 WBTL = 0.39 (A) 11 WBR = 0.19 (A) 8 NBTLR = 0.16 (B) 10 SBTLR = 0.19 (A) 10	EBTLR = 0 m WBTL = 0 m WBR = 0 m NBTLR = 0 m SBTLR = 0 m
Future Total 2026	EBTLR = 0.43 (B) 13 WBTL = 0.16 (A) 9 WBR = 0.31 (A) 10 NBTLR = 0.26 (B) 11 SBTLR = 0.36 (B) 12	EBTLR = 0 m WBTL = 0 m WBR = 0 m NBTLR = 0 m SBTLR = 0 m	EBTLR = 0.42 (B) 14 WBTL = 0.45 (B) 14 WBR = 0.40 (A) 11 NBTLR = 0.3 (B) 13 SBTLR = 0.48 (C) 15	EBTLR = 0 m WBTL = 0 m WBR = 0 m NBTLR = 0 m SBTLR = 0 m

Under the existing condition, the intersection of Park Street East and Ann Street operates at satisfactory levels with a delay of 10 seconds or less for each approach during the a.m. peak and 11 seconds or less during the p.m. peak hour.

With the addition of background traffic during the 2026 future background traffic condition there are marginal increases and decreases for each approach, with the largest increase occurring in the southbound approach with a reported v/c ratio increasing from 0.02 LOS A to 0.11 LOS A. All approaches now operate with an 11 second or less delay during both peak periods.

With the addition of site traffic under the 2026 future total traffic condition, the v/c ratio for all approaches continue to increase but remain well below critical levels.

No improvements are recommended at this intersection as a result of the proposed development.

8.3 Ann Street and the Proposed Site Access

Capacity analysis for this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 9 Capacity analysis of Ann Street and the Proposed Site Access

Scenario	Am Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Future Background 2026	NBTR = 0.13 (A) 0 SBTL = 0 (A) 0	NBTR = 0 m SBTL = 0 m	NBTR = 0.11 (A) 0 SBTL = 0 (A) 0	NBTR = 0 m SBTL = 0 m
Future Total 2026	WBLR = 0.22 (B) 12 NBTR = 0.20 (A) 0 SBTL = 0 (A) 0	WBLR = 10 m NBTR = 0 m SBTL = 0 m	WBLR = 0.25 (B) 12 NBTR = 0.21 (A) 0 SBTL = 0 (A) 0	WBLR = 10 m NBTR = 0 m SBTL = 0 m

Under all future traffic conditions, this intersection is expected to continue to operate satisfactorily with LOS A on Ann Street and only a 12 second delay for vehicles exiting the site driveway. No improvements are recommended at this intersection as a result of the proposed development.

9. Vehicle Swept Path Analysis

GHD undertook a Vehicle Swept Path Analysis to assess the proposed site plan's ability to accommodate the required turning movements of a Medium Sized Unit (MSU) Loading Vehicle, TAC Passenger Vehicle, Waste Collection Truck, and Emergency Vehicle. The results of the analysis, which are provided in **Appendix E,** illustrate that the site can sufficiently accommodate the aforementioned design vehicles.

10. Parking Review

10.1 Existing City of Mississauga Zoning By-law

The subject site is governed by the City of Mississauga's Zoning By-law 0225-2007, with the minimum parking requirement found in Section 3.1.2.1 for Condominium Apartments and 3.1.2.2 for the commercial land use. The minimum By-law requirement for each land use is as follows:

- Condominium, Apartment
    - 1.00 resident space per studio unit
    - 1.25 resident space per one-bedroom unit
    - 1.40 resident space per two-bedroom unit
    - 1.75 resident space per three-bedroom unit
    - 0.20 visitor space per unit
- Retail Store
    - 5.4 spaces per 100 m^2 GFA

The minimum parking required for the proposed development is as follow:

- 813 one-bedroom units x (1.25 spaces/unit) = 1,016 spaces
- 326 two-bedroom units x (1.40 spaces/unit) = 456 spaces
- 1,139 units x (0.2 spaces/unit) = 228 spaces
- 1,765 m2 x (5.4 spaces per 100 m^2 GFA) = 95 spaces

In total, 1,795 spaces are required under the City's By-law 0225-2007.

10.2 Proposed Site Parking

The following parking supply is proposed for the 1,139 residential units and 1,765 m^2 of commercial GFA:

- Resident parking spaces provided: 360 spaces. (0.32 spaces/unit)
- Shared residential visitor and commercial parking spaces provided: 114 spaces. (0.1 spaces/unit).

The development is proposing a total of 474 vehicular parking spaces, which is a shortfall of 1,321 parking spaces compared to the By-law requirement,

10.3 Mississauga Parking Regulations Study

The Parking Regulations, Draft Policy Directions for Consultation Study, dated May 2021, a study that followed the City of Mississauga's first Parking Master Plan and Implementation Strategy that was completed and approved by City Council in June 2019 aimed to adjust the minimum required parking for different areas of the city based on context and a price responsive approach in the most urbanized areas. The report evaluated areas based on a set of criteria and assigned them to one of four precincts based on how they scored on the criteria evaluation. The criteria evaluated elements related to Transit (rapid transit terminal/station locations, rapid transit interconnectivity), Public Parking, Planning Area (being an urban growth centre or intensification area), Land Use and Density (a mix of land uses as well as high density uses), and Active Transportation (walkability, cycling facilities and public bike share potential). With the area surrounding the proposed development answering yes to the criteria, as well as the high walkability score and being highly accessible to cyclist, it was assigned to Precinct 1. Within Precinct 1, the following minimum parking rates are proposed:

- Apartment
    - 0.80 Resident spaces per unit
    - 0.15 Visitor spaces per unit
- Retail Store
    - 3.0 spaces per 100 m^2 GFA
        - For visitor parking, a shared arrangement between the visitor/non-residential parking can be used with the greater of the two being the required number of spaces to be provided.

The minimum parking required for the proposed development based on the proposed rate is as follow:

- 1,139 units x (0.8 spaces/unit) = 911 spaces
- 1,139 units x (0.15 spaces/unit) = 171 spaces
- 1,765 m2 x (3.0 spaces per 100 m^2 GFA) = 53 spaces

In total, 1,082 spaces are required under the City's Draft Parking Regulations Study, a reduction of 713 spaces in comparison to the number of spaces required under the current City of Mississauga's Zoning By-law.

The subject site is deficient by 608 parking spaces compared to the rates provided in Parking Regulations Study report for a development in Precinct 1.

10.4 Approved Rates at Surrounding Developments

The following table summarizes the proposed parking rate at 28 Ann Street (formerly 22-28 Ann Street & 78 Park Street East).

Table 10 Approved Parking Rates in Surrounding Developments

Location	Unit Type	Approved Rate
22-28 Ann Street & 78 Park Street East	1-Bedroom	0.5
	2-Bedroom	0.8
	Visitor and Retail	0.1

The minimum parking required for the subject site as per the approved rates for 22-28 Ann Street & 78 Park Street is as follows:

- 813 one-bedroom units x (0.5 spaces/unit) = 407 spaces

- 326 two-bedroom units x (0.8 spaces/unit) = 261 spaces
- 1,139 units x (0.1 spaces/unit) = 114 spaces

In total, 782 spaces are required using reduced rates recently approved in the area, a reduction of 1,013 spaces in comparison to the number of spaces required under the current City of Mississauga's Zoning By-law.

The subject site is deficient by 308 parking spaces compared to the rates approved for 28 Ann Street.

10.5 Approved Parking Rates Near High Order Transit

City of Ottawa

The City of Ottawa in December of 2019 officially opened the Confederation Line which runs through the downtown area. The City's Zoning By-Law parking requirements were revised to eliminate minimum parking requirements for developments within 600 metres of an LRT station and instead adopt a maximum parking allowance. As a result, residential developments near LRT stations are not required to provide any resident parking and are required to only provide visitor parking at a rate of 0.10 spaces per unit.

City of Brampton

In April of 2021 the City of Brampton passed By-Law 45-2021 for Parking Requirements in the Downtown, Central Area and a portion of the Hurontario-Main Corridor to amend the parking requirements and eliminate minimum parking requirements for specific uses. In recognition of Queen Street being the busiest transit corridor in Brampton and population and employment anticipated to grow by 40 to 50 percent over the next 25 years, the city is planning for rapid transit on Queen Street which aligns with their overall regional transportation plan. The passing of this By-Law is the first step in supporting the future rapid transit system and transit mode targets by allowing developers to provide parking based on market research and to market units to prospective residents who are looking to live in a walkable transit-oriented community where vehicle ownership is not required.

City of Toronto

In December of 2021 the City of Toronto adopted a new Zoning Bylaw Amendment that will remove most minimum parking requirements for new developments, including mixed-use buildings, and instead replaced it with a maximum parking space requirement. These changes are in alignment with the City's climate action strategy that will encourage residents to use alternative travel modes to the car, such as walking, cycling and public transit. The maximum parking rates in the draft Zoning By-Law for areas in Parking Zone A, which include areas near public transit, are as follows:

- 0.3 spaces per bachelor unit up to 45 ft^2,
- 1.0 per bachelor unit greater than 45 ft^2,
- 0.5 per one-bedroom unit
- 0.8 per two-bedroom units
- 1.0 per three or more bedroom units

North Oakville (Town of Oakville)

The Town of Oakville passed Zoning By-Law 2009-189, which provides parking requirements for the area of North Oakville. Included in this By-Law is a maximum requirement rate for parking spaces in certain residential land uses, such as apartment buildings with more than 4 storeys (up to 1.25 spaces per dwelling unit for residents, 0.2 for visitors). This By-Law is in line with the North Oakville Parking Strategy study, prepared in November 2009, which provided the Town with a strategy to create a pedestrian friendly and a more transit oriented suburb by encouraging a more efficient use of private and public parking resources and provide a reduced parking requirement to reflect transit planning goals.

10.6 Parking Assessment

Providing off-street residential parking influences a commuter choice on whether to drive or choose alternate forms of transportation. Providing more parking in general leads to a higher percentage of auto ownership and auto usage as well. Changing travel behaviour is best done when a prospective buyer is looking to purchase a unit and providing the opportunity for a prospective buyer to easily purchase a parking space either through making it affordable, at no additional cost, or having an excess in number of spaces available to purchase can introduce travel behaviour into an area that once established is hard to change.

As demonstrated in sections above, municipalities including Mississauga have begun to assist developers in helping to change travel behaviour by reducing or eliminating minimum parking requirements altogether for areas adjacent to high order transit stations. This approach is supportive of City of Mississauga policies to provide less parking than required given future envisioned built form and anticipating that those who choose to live in the Port Credit areas will use GO Transit, MiWay and the future Hurontario LRT services instead of a personal vehicle.

The proposed development will be heavily marketed to prospective purchasers who are looking to live in a walkable transit-oriented community where a vehicle is not required for commuting or discretionary trips and the limited number of parking spaces will be explicitly noted in any promotional material. Consequently, the subject site provides an excellent opportunity to introduce a significant population to the Port Credit area that is transit-oriented and supportive of the expected non-auto mode share of 50% for the a.m. peak hour and 45% for the p.m. peak hour in 2031 identified in the Port Credit GO Station Southeast Area Master Plan Study.

The development is proposing Travel Demand Management (TDM), as outlined in Section 11 of the report including planning and design, walking and cycling, transit, parking, carshare/bikeshare, wayfinding and trip planning, education and promotion that can be adopted to make alternatives more competitive to driving, reducing the dependency on auto trips, and the need to provide an excessive supply of parking.

11. Travel Demand Management

11.1 Travel Demand Management

Travel 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. TDM strategies have multiple benefits including the following:

- Reduced auto-related emissions to improve air quality;
- Decreased traffic congestion to reduce travel time;
- Increased travel options for businesses and commuters;
- Reduced personal transportation costs and energy consumptions; and
- Support Provincial smart growth objectives.

The combined benefits listed above will assist in creating a more active and livable community through improvements to overall active transportation standards for the local businesses and surrounding community.

11.2 Existing TDM Opportunities

11.2.1 Walking

Sidewalks are currently provided throughout the study area and the surrounding neighbourhood. Signalized pedestrian crosswalks are currently provided on all approaches along Hurontario Street at Park Street East, High Street East and Lakeshore Road East. These pedestrian crosswalks allow for a safer crossing for pedestrians to access the various amenities east of Hurontario Street (institutional and recreational). Pedestrian crossings are also provided along Lakeshore Road East at Hurontario Street and Elizabeth Street giving access to the many day to day amenities, shops, resturants and parks located along Lakeshore and to the waterfront.

MiWay Transit bus stops and the Port Credit GO Station are all within walking distance to the proposed development, reducing the need for a car to drive to the nearest public transit.

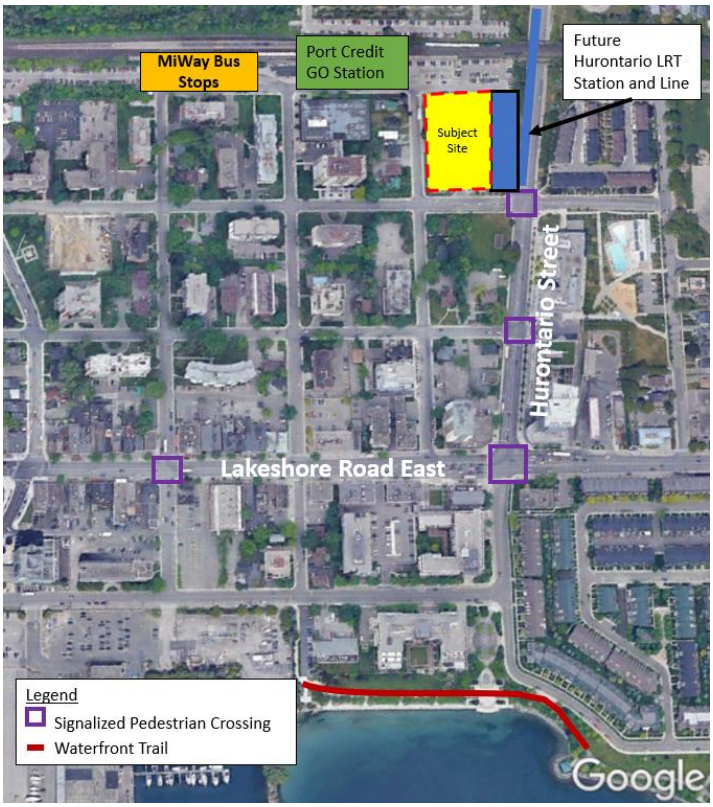


Figure 15 Transit Stops and Pedestrian Routes

11.2.2 Transit

GO Transit offers train service eastbound towards Union Station with a 15-minute headway from 5:00 a.m. until 7:30 p.m. A 15-minute headway train service is also offered in the westbound direction, with various terminal stations (Oakville GO, Aldershot GO and West Harbour GO).

MiWay Transit also offers bus service along various roads near the study area, with all buses servicing the stop at the Port Credit GO station. These routes include bus route 2 (to the north along Hurontario Street), 8 (to the north along Cawthra Road), 14 (to the west towards Clarkson GO Station along various collector roads) and 23 (east towards Clarkson GO and West towards Long Branch Go Station along Lakeshore Road East).

11.3 Future TDM Opportunities

11.3.1 Cycling Strategy

A minimum of 0.6 long-term bicycle parking spaces and 0.05 short-term bicycle parking spaces (with a minimum of 6 spaces being provided) per unit are required for the subject site. An additional 0.1 long-term and 0.2 short term parking spaces are required for every 100 m^2 of retail space are proposed for the subject site. The proposed development is providing 683 long-term and 57 short-term bicycle parking spaces for the residential development and 3 long-term and 4 short-term parking spaces for the retail portion of the development.

The City of Mississauga has outlined in their TDM Strategy and Implementation Plan a recommended minimum bike parking requirement based on land use. They state that many municipalities have established bicycle parking (both short-term and long-term parking) requirements to ensure that site user's have access to bike parking. The TDM Plan recommends a bike parking rate of 0.8 long-term parking spaces per unit and a minimum of 6 spaces for visitors (short-term) for residential uses and 0.5 a space and 1 space per 500 m^2 for long-term and short-term respectively for retail land uses. It also mentions that the City may wish to consider offering incentives to developers who wish to offer bicycle parking above and beyond this rate in lieu of conventional vehicle parking.

Bicycle repair stations can also be provided in a secure area and can provide residents the necessary bicycle maintenance tools and supplies (i.e., bicycle pumps, wrenches, lubricant, wrenches, screwdrivers, etc.).

As identified in the City of Mississauga's Parking Regulations Study as well as the city's Cycling Master Plan, Port Credit has been recommended as an area for Mississauga's Bike Share program. The many benefits of bike share programs include the access to a bicycle without having to worry about maintenance and theft, the flexibility of only using a bike for a portion of the trip and can help address the "first and last mile" challenges that public transit faces. As mentioned in the city's Cycling Master Plan, the success of a bike share program helps to build and promote a culture of cycling in the city.

The proposed development is located near many existing and proposed cycling routes within Mississauga. For example, the existing Waterfront Trail and the future Cycle Track/Separated Bike Lane proposed for Lakeshore Road will serve as a cycling arterial connecting Toronto and Burlington. A multi-use trail is also proposed on Hurontario Street that will connect the subject site to the existing and proposed cycling infrastructure that will run all along Hurontario Street from the waterfront to the northern limit of the city. The cycling infrastructure along Hurontario Street will provide a connection to the rest of the City of Mississauga's existing and proposed facilities provided in the city's Cycling Master Plan. The combination of more bicycle infrastructure along with a bike share program will only help to increase the cycling culture in the city and further promote a more active lifestyle

11.3.2 Transit Strategy

The proposed development is immediately adjacent to the future Port Credit Hurontario LRT station, which has an expected completion for Fall 2024. The LRT will travel 18 kilometers from the Port Credit LRT Station to the Brampton Gateway Terminal at Hurontario Street and Steeles Avenue. The line will service 19 stations, including stops at Cooksville GO Station and Mississauga City Centre (near Square One Shopping Centre). The proposed development is also adjacent to the Port Credit GO Station and will provide a pedestrian connection to the GO Station. Service along the Lakeshore West Line will allow residents to travel between the subject site and Downtown Toronto in approximately 30 minutes.

Transit screens can be placed in the building lobby to provide them information on the next bus/train at the nearby transit stops and would allow them to wait indoors until their preferred mode of public transit is nearby. This strategy will allow residents and visitors to stay in the lobby when the weather is not favourable (rain, snow, cold, windy, humid, etc.).

Transit maps and signage indicating where the local public transit stops are located can also be placed in the lobby to inform residents and visitors about the various public transit options available for shorter trips instead of using a car.

11.3.3 Parking Strategy

Unbundled parking can be used to separate the purchase of a property from a parking space to provide residents with the true cost of the parking space. Unbundled parking gives residents the choice between paying for a parking space or using another mode of transportation, with the latter encouraging other modes of transportation.

The subject site is also considering to provide 10% of parking spaces as EV Charger Ready Spaces within the parking spaces provided.

11.3.4 Carshare/Bikeshare Strategy

Carshare programs allow members to have access to various vehicles provided by the company without the financial and maintenance responsibilities that comes with car-ownership. Carshare companies offer their services at various rates (i.e., hourly, daily, etc.). These programs are seen as an alternative to car ownership or the need to purchase a second car and can be a benefit to the residents of the building and for the surrounding community as well. The provision of car share spaces will be explored in the future.

Bikeshare programs provide a more sustainable mode of transportation to residents and the community for short distance trips by encouraging people to find an alternative to car-use for shorter trips. The participation in bikeshare programs will also be explored in the future.

11.3.5 Wayfinding and Travel Planning Strategy

Information packages can be given out to new residents, including the GO Transit and MiWay maps and schedules along with cycling maps and other active transportation opportunities in the surrounding area. A map of the future Hurontario LRT line can also be handed out to new residents as an opportunity to promote this new mode of transportation in the surrounding area.

12. Conclusion

The proposed site plan prepared by Core Architects, dated February 2022, consists of two separate mixed-use buildings with the following characteristics:

- In total, the mixed-use development proposes 1,139 residential units and 1,765 m^2 of commercial GFA.
  - Tower A, a 40-storey mixed-use building with 551 residential units;
  - Tower B, a 42-storey mixed-use building with 588 residential units;

Access to the development is proposed via a full-move driveway located on Ann Street, north of Park Street East.

The subject site is expected to generate a total of 261 new two-way trips consisting of 109 inbound and 152 outbound trips during weekday a.m. peak hour and 336 new two-way trips consisting of 177 inbound and 159 outbound trips during the weekday p.m. peak hour.

The overall impact of the development generated traffic is negligible to the operation of the study area intersections and traffic flow along Hurontario Street, Park Street East and Ann Street with no geometric improvements required to accommodate the proposed development.

Under future total traffic conditions, the signal timings for the intersection of Hurontario Street and Park Street East were optimized as needed to reduce v/c ratios and delays. An eastbound left-turn phase was also added during all future a.m. peak scenarios and only the p.m. future total scenario to reduce v/c ratios and delays for that approach.

Application of the current City of Mississauga By-Law parking rates to the subject site results in a requirement of 1,795 parking spaces. The subject site provides a total of 474 spaces resulting in a deficit of 1,321 parking spaces.

The proposed site will be within walking distance to both the Port Credit GO station as well as the Port Credit transit stop on the future Hurontario LRT line, as such, providing parking based on market research and promoting multimodal alternatives through the proposed TDM measures to increase transit, walking and biking in the city will encourage residents to choose transit as an alternative to owning a vehicle.

Recognizing the growing trend within the GTA and within the Port Credit Area to reduce auto dependency as evidenced by the recommendations of the Mississauga Parking Regulations Study, reduced parking rates approved within the area and the intent to market these units to people place a high importance on transit and walking accessibility when choosing a place to live, it is our opinion that the reduced parking rates provided for the proposed site is adequate to meet the future resident demand of the site.

Appendices

Appendix A

Traffic Data

LEA CONSULTING LTD

625 Cochrane Drive 9th Floor
Markham, Ontario, L3R 9R9

Project No.: 19244
Location: Ann St & Park St E
Weather: Light Rain / Snow
Surveyor(s): Natalie Law

File Name : Ann&Park-AM
Site Code : 19244016
Start Date : 11/21/2018
Page No : 1

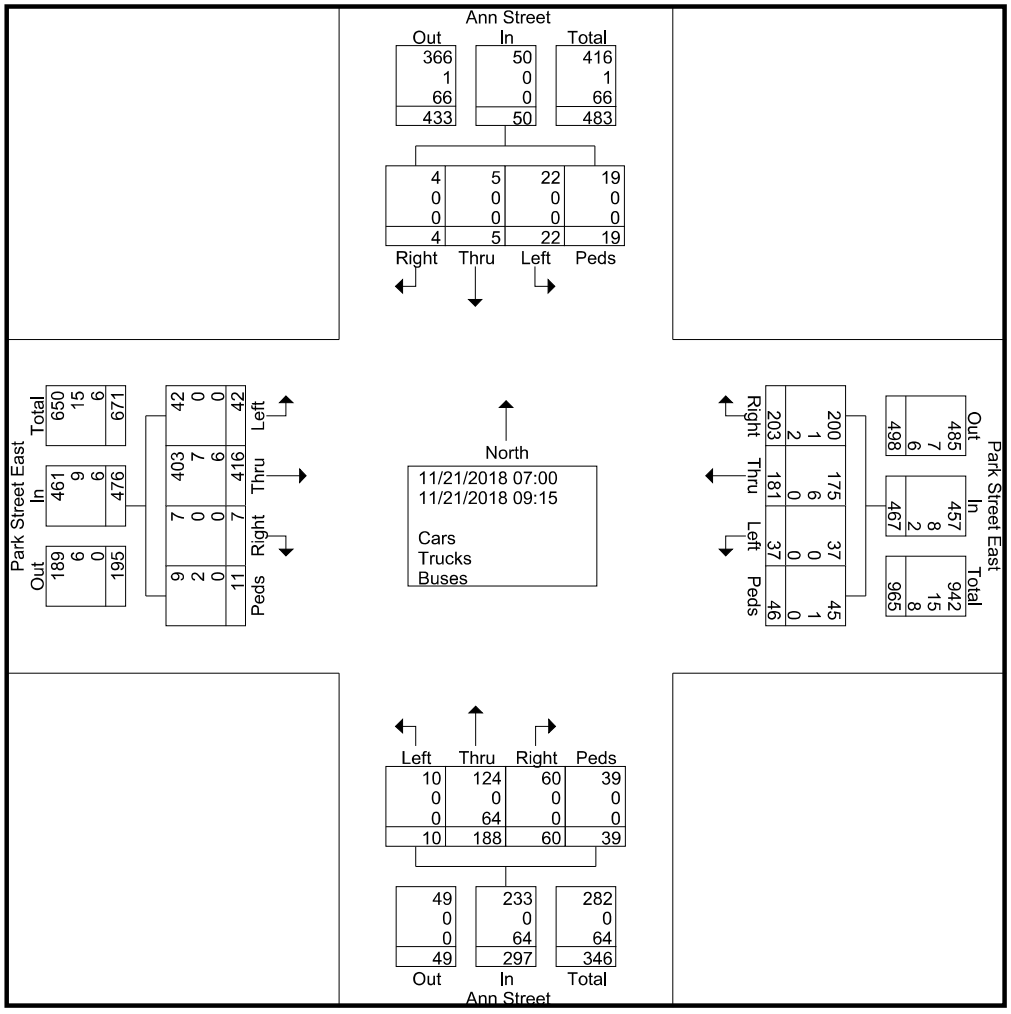
Groups Printed- Cars - Trucks - Buses

	Ann Street Southbound					Park Street East Westbound					Ann Street Northbound					Park Street East Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	1	0	0	0	1	8	3	20	3	34	1	30	5	3	39	8	38	0	2	48	122
07:15	1	0	0	2	3	1	8	7	4	20	0	15	15	3	33	4	45	0	1	50	106
07:30	1	0	1	2	4	4	17	34	9	64	0	24	8	3	35	5	52	2	0	59	162
07:45	1	1	0	1	3	9	17	30	5	61	0	23	4	2	29	3	51	0	1	55	148
Total	4	1	1	5	11	22	45	91	21	179	1	92	32	11	136	20	186	2	4	212	538
08:00	2	1	0	6	9	3	23	31	9	66	2	29	6	1	38	8	53	0	3	64	177
08:15	5	1	2	0	8	3	9	22	7	41	1	13	4	4	22	3	51	1	0	55	126
08:30	0	0	0	3	3	1	25	21	3	50	3	14	8	1	26	4	27	3	2	36	115
08:45	4	0	1	4	9	2	32	17	3	54	1	11	4	12	28	2	39	0	1	42	133
Total	11	2	3	13	29	9	89	91	22	211	7	67	22	18	114	17	170	4	6	197	551
09:00	4	2	0	1	7	3	23	14	2	42	2	17	4	9	32	4	26	0	1	31	112
09:15	3	0	0	0	3	3	24	7	1	35	0	12	2	1	15	1	34	1	0	36	89
Grand Total	22	5	4	19	50	37	181	203	46	467	10	188	60	39	297	42	416	7	11	476	1290
Apprch %	44	10	8	38		7.9	38.8	43.5	9.9		3.4	63.3	20.2	13.1		8.8	87.4	1.5	2.3		
Total %	1.7	0.4	0.3	1.5	3.9	2.9	14	15.7	3.6	36.2	0.8	14.6	4.7	3	23	3.3	32.2	0.5	0.9	36.9	
Cars	22	5	4	19	50	37	175	200	45	457	10	124	60	39	233	42	403	7	9	461	1201
% Cars	100	100	100	100	100	100	96.7	98.5	97.8	97.9	100	66	100	100	78.5	100	96.9	100	81.8	96.8	93.1
Trucks	0	0	0	0	0	0	6	1	1	8	0	0	0	0	0	0	7	0	2	9	17
% Trucks	0	0	0	0	0	0	3.3	0.5	2.2	1.7	0	0	0	0	0	0	1.7	0	18.2	1.9	1.3
Buses	0	0	0	0	0	0	0	2	0	2	0	64	0	0	64	0	6	0	0	6	72
% Buses	0	0	0	0	0	0	0	1	0	0.4	0	34	0	0	21.5	0	1.4	0	0	1.3	5.6

LEA CONSULTING LTD

625 Cochrane Drive 9th Floor
Markham, Ontario, L3R 9R9

File Name : Ann&Park-AM
Site Code : 19244016
Start Date : 11/21/2018
Page No : 2

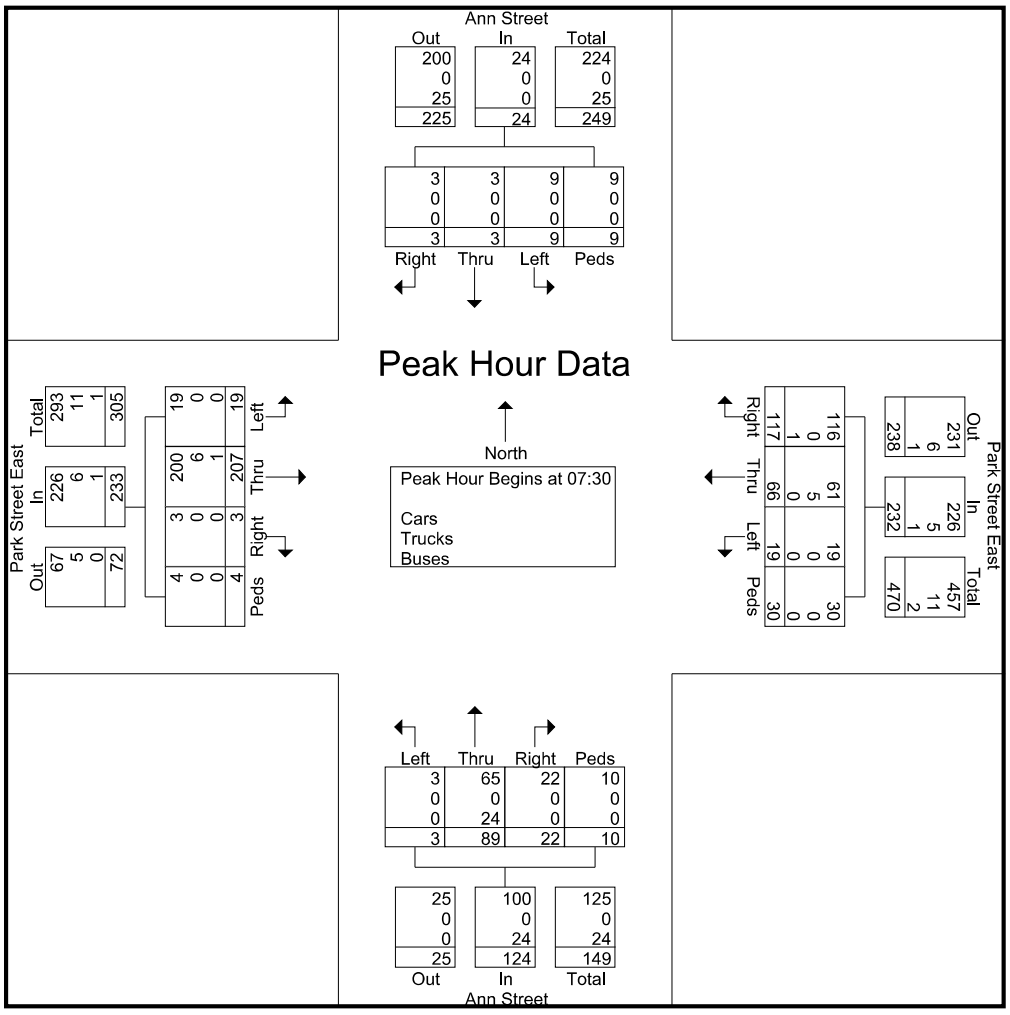


LEA CONSULTING LTD

625 Cochrane Drive 9th Floor
Markham, Ontario, L3R 9R9

File Name : Ann&Park-AM
Site Code : 19244016
Start Date : 11/21/2018
Page No : 3

	Ann Street Southbound					Park Street East Westbound					Ann Street Northbound					Park Street East Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 09:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	1	0	1	2	4	4	17	**34**	**9**	64	0	24	**8**	3	35	5	52	**2**	0	59	162
07:45	1	**1**	0	1	3	**9**	17	30	5	61	0	23	4	2	29	3	51	0	1	55	148
08:00	2	1	0	**6**	**9**	3	**23**	31	9	**66**	**2**	**29**	6	1	**38**	**8**	**53**	0	**3**	**64**	**177**
08:15	**5**	1	**2**	0	8	3	9	22	7	41	1	13	4	**4**	22	3	51	1	0	55	126
Total Volume	9	3	3	9	24	19	66	117	30	232	3	89	22	10	124	19	207	3	4	233	613
% App. Total	37.5	12.5	12.5	37.5		8.2	28.4	50.4	12.9		2.4	71.8	17.7	8.1		8.2	88.8	1.3	1.7		
PHF	.450	.750	.375	.375	.667	.528	.717	.860	.833	.879	.375	.767	.688	.625	.816	.594	.976	.375	.333	.910	.866
Cars	9	3	3	9	24	19	61	116	30	226	3	65	22	10	100	19	200	3	4	226	576
% Cars	100	100	100	100	100	100	92.4	99.1	100	97.4	100	73.0	100	100	80.6	100	96.6	100	100	97.0	94.0
Trucks	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	11
% Trucks	0	0	0	0	0	0	7.6	0	0	2.2	0	0	0	0	0	0	2.9	0	0	2.6	1.8
Buses	0	0	0	0	0	0	0	1	0	1	0	24	0	0	24	0	1	0	0	1	26
% Buses	0	0	0	0	0	0	0	0.9	0	0.4	0	27.0	0	0	19.4	0	0.5	0	0	0.4	4.2



LEA CONSULTING LTD

625 Cochrane Drive 9th Floor
Markham, Ontario, L3R 9R9

Project No.: 19244
Location: Ann St & Park St E
Weather: Light Rain / Snow
Surveyor(s): Natalie Law

File Name : Ann&Park-PM
Site Code : 19244016
Start Date : 11/21/2018
Page No : 1

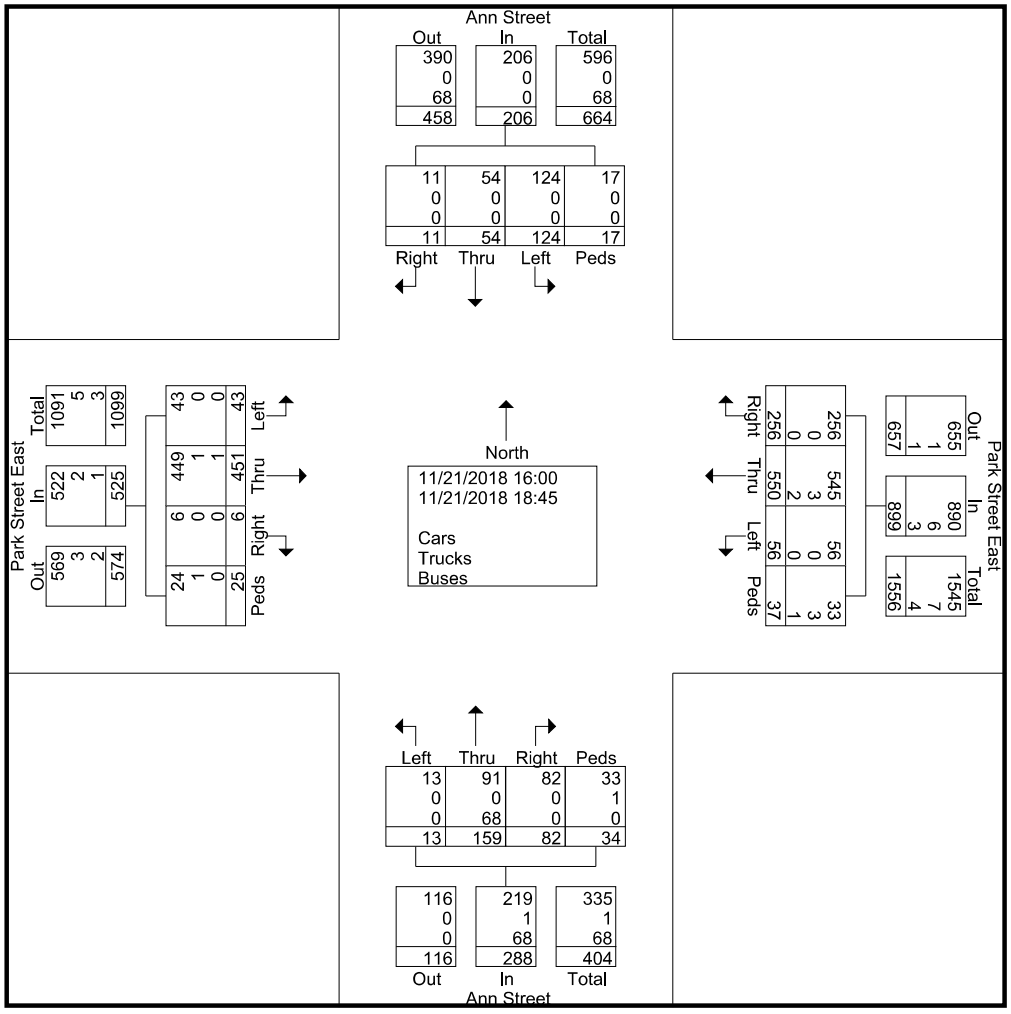
Groups Printed- Cars - Trucks - Buses

	Ann Street Southbound					Park Street East Westbound					Ann Street Northbound					Park Street East Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	5	6	1	2	14	7	41	14	3	65	0	12	5	3	20	6	40	0	1	47	146
16:15	7	1	1	1	10	3	38	19	2	62	0	11	10	3	24	2	28	1	1	32	128
16:30	4	0	0	0	4	2	35	19	4	60	1	10	19	1	31	0	45	1	0	46	141
16:45	14	3	3	3	23	7	50	17	1	75	0	13	5	0	18	4	29	0	0	33	149
Total	30	10	5	6	51	19	164	69	10	262	1	46	39	7	93	12	142	2	2	158	564
17:00	12	5	2	3	22	5	55	20	7	87	3	14	7	5	29	2	33	0	4	39	177
17:15	14	4	1	2	21	4	55	16	5	80	1	8	6	3	18	3	42	1	1	47	166
17:30	15	6	0	2	23	4	50	31	3	88	1	17	9	4	31	4	39	1	8	52	194
17:45	12	5	2	1	20	9	38	17	1	65	1	18	1	4	24	3	46	0	0	49	158
Total	53	20	5	8	86	22	198	84	16	320	6	57	23	16	102	12	160	2	13	187	695
18:00	16	11	1	3	31	4	42	30	6	82	2	16	8	1	27	8	45	0	4	57	197
18:15	6	4	0	0	10	4	47	18	3	72	2	13	4	5	24	3	34	0	2	39	145
18:30	1	2	0	0	3	5	63	29	1	98	1	18	3	3	25	2	23	0	3	28	154
18:45	18	7	0	0	25	2	36	26	1	65	1	9	5	2	17	6	47	2	1	56	163
Total	41	24	1	3	69	15	188	103	11	317	6	56	20	11	93	19	149	2	10	180	659
Grand Total	124	54	11	17	206	56	550	256	37	899	13	159	82	34	288	43	451	6	25	525	1918
Apprch %	60.2	26.2	5.3	8.3		6.2	61.2	28.5	4.1		4.5	55.2	28.5	11.8		8.2	85.9	1.1	4.8		
Total %	6.5	2.8	0.6	0.9	10.7	2.9	28.7	13.3	1.9	46.9	0.7	8.3	4.3	1.8	15	2.2	23.5	0.3	1.3	27.4	
Cars	124	54	11	17	206	56	545	256	33	890	13	91	82	33	219	43	449	6	24	522	1837
% Cars	100	100	100	100	100	100	99.1	100	89.2	99	100	57.2	100	97.1	76	100	99.6	100	96	99.4	95.8
Trucks	0	0	0	0	0	0	3	0	3	6	0	0	0	1	1	0	1	0	1	2	9
% Trucks	0	0	0	0	0	0	0.5	0	8.1	0.7	0	0	0	2.9	0.3	0	0.2	0	4	0.4	0.5
Buses	0	0	0	0	0	0	2	0	1	3	0	68	0	0	68	0	1	0	0	1	72
% Buses	0	0	0	0	0	0	0.4	0	2.7	0.3	0	42.8	0	0	23.6	0	0.2	0	0	0.2	3.8

LEA CONSULTING LTD

625 Cochrane Drive 9th Floor
Markham, Ontario, L3R 9R9

File Name : Ann&Park-PM
Site Code : 19244016
Start Date : 11/21/2018
Page No : 2

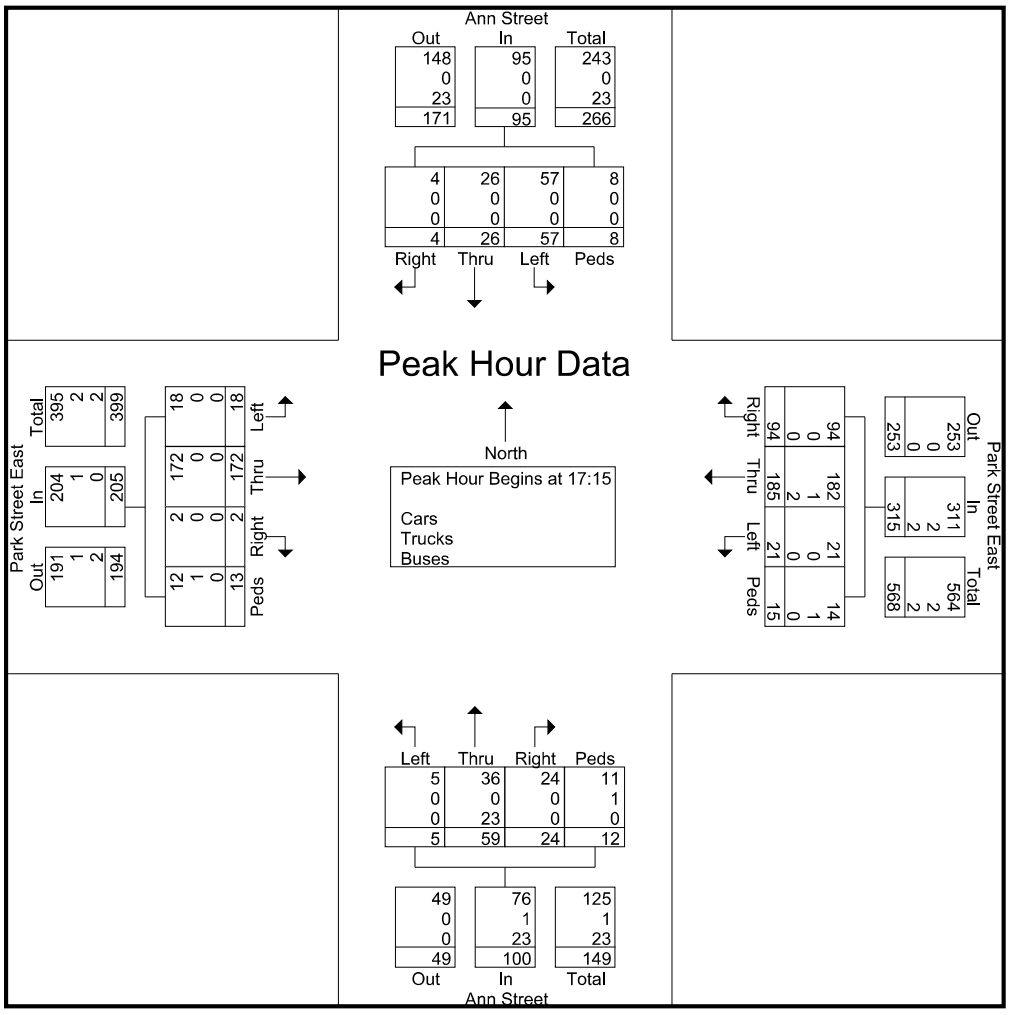


LEA CONSULTING LTD

625 Cochrane Drive 9th Floor
Markham, Ontario, L3R 9R9

File Name : Ann&Park-PM
Site Code : 19244016
Start Date : 11/21/2018
Page No : 3

	Ann Street Southbound					Park Street East Westbound					Ann Street Northbound					Park Street East Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:15																					
17:15	14	4	1	2	21	4	**55**	16	5	80	1	8	6	3	18	3	42	**1**	1	47	166
17:30	15	6	0	2	23	4	50	**31**	3	**88**	1	17	**9**	**4**	**31**	4	39	1	**8**	52	194
17:45	12	5	**2**	1	20	**9**	38	17	1	65	1	**18**	1	4	24	3	**46**	0	0	49	158
18:00	**16**	**11**	1	**3**	**31**	4	42	30	**6**	82	**2**	16	8	1	27	**8**	45	0	4	**57**	**197**
Total Volume	57	26	4	8	95	21	185	94	15	315	5	59	24	12	100	18	172	2	13	205	715
% App. Total	60	27.4	4.2	8.4		6.7	58.7	29.8	4.8		5	59	24	12		8.8	83.9	1	6.3		
PHF	.891	.591	.500	.667	.766	.583	.841	.758	.625	.895	.625	.819	.667	.750	.806	.563	.935	.500	.406	.899	.907
Cars	57	26	4	8	95	21	182	94	14	311	5	36	24	11	76	18	172	2	12	204	686
% Cars	100	100	100	100	100	100	98.4	100	93.3	98.7	100	61.0	100	91.7	76.0	100	100	100	92.3	99.5	95.9
Trucks	0	0	0	0	0	0	1	0	1	2	0	0	0	1	1	0	0	0	1	1	4
% Trucks	0	0	0	0	0	0	0.5	0	6.7	0.6	0	0	0	8.3	1.0	0	0	0	7.7	0.5	0.6
Buses	0	0	0	0	0	0	2	0	0	2	0	23	0	0	23	0	0	0	0	0	25
% Buses	0	0	0	0	0	0	1.1	0	0	0.6	0	39.0	0	0	23.0	0	0	0	0	0	3.5



LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 Klo@LEA.ca

Count Name: 20248_HurontarioSt&ParkStE-AM
Site Code: 20248
Start Date: 12/05/2019

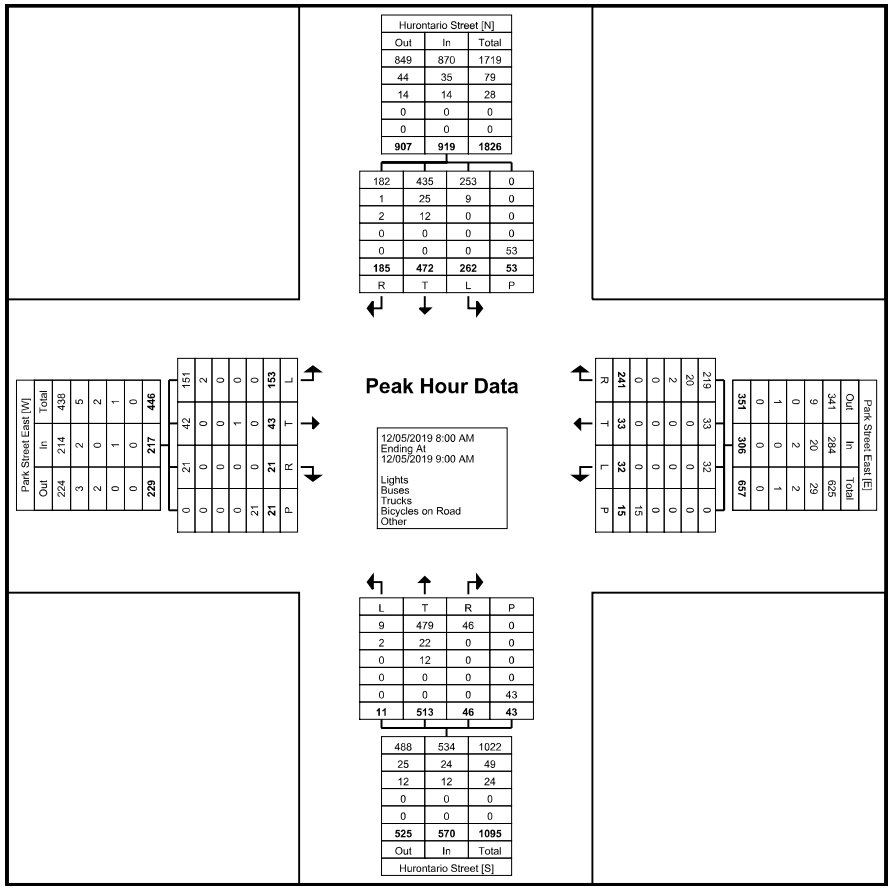
Turning Movement Peak Hour Data (8:00 AM)

Start Time	Hurontario Street Southbound					Park Street East Westbound					Hurontario Street Northbound					Park Street East Eastbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
8:00 AM	44	95	44	16	183	0	9	31	5	40	3	141	6	8	150	36	13	5	10	54	427
8:15 AM	74	91	49	17	214	5	5	66	4	76	1	115	12	12	128	50	14	3	6	67	485
8:30 AM	109	147	52	9	308	13	7	87	2	107	4	114	23	6	141	32	10	7	3	49	605
8:45 AM	35	139	40	11	214	14	12	57	4	83	3	143	5	17	151	35	6	6	2	47	495
Total	262	472	185	53	919	32	33	241	15	306	11	513	46	43	570	153	43	21	21	217	2012
Approach %	28.5	51.4	20.1	-	-	10.5	10.8	78.8	-	-	1.9	90.0	8.1	-	-	70.5	19.8	9.7	-	-	-
Total %	13.0	23.5	9.2	-	45.7	1.6	1.6	12.0	-	15.2	0.5	25.5	2.3	-	28.3	7.6	2.1	1.0	-	10.8	-
PHF	0.601	0.803	0.889	-	0.746	0.571	0.688	0.693	-	0.715	0.688	0.897	0.500	-	0.944	0.765	0.768	0.750	-	0.810	0.831
Lights	253	435	182	-	870	32	33	219	-	284	9	479	46	-	534	151	42	21	-	214	1902
% Lights	96.6	92.2	98.4	-	94.7	100.0	100.0	90.9	-	92.8	81.8	93.4	100.0	-	93.7	98.7	97.7	100.0	-	98.6	94.5
Buses	9	25	1	-	35	0	0	20	-	20	2	22	0	-	24	2	0	0	-	2	81
% Buses	3.4	5.3	0.5	-	3.8	0.0	0.0	8.3	-	6.5	18.2	4.3	0.0	-	4.2	1.3	0.0	0.0	-	0.9	4.0
Trucks	0	12	2	-	14	0	0	2	-	2	0	12	0	-	12	0	0	0	-	0	28
% Trucks	0.0	2.5	1.1	-	1.5	0.0	0.0	0.8	-	0.7	0.0	2.3	0.0	-	2.1	0.0	0.0	0.0	-	0.0	1.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	1	0	-	1	1
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	2.3	0.0	-	0.5	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	53	-	-	-	-	15	-	-	-	-	43	-	-	-	-	21	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 Klo@LEA.ca

Count Name: 20248_HurontarioSt&ParkStE-AM
Site Code: 20248
Start Date: 12/05/2019



Turning Movement Peak Hour Data Plot (8:00 AM)

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 Klo@LEA.ca

Count Name: 20248_HurontarioSt&ParkStE-PM
Site Code: 20248
Start Date: 12/05/2019

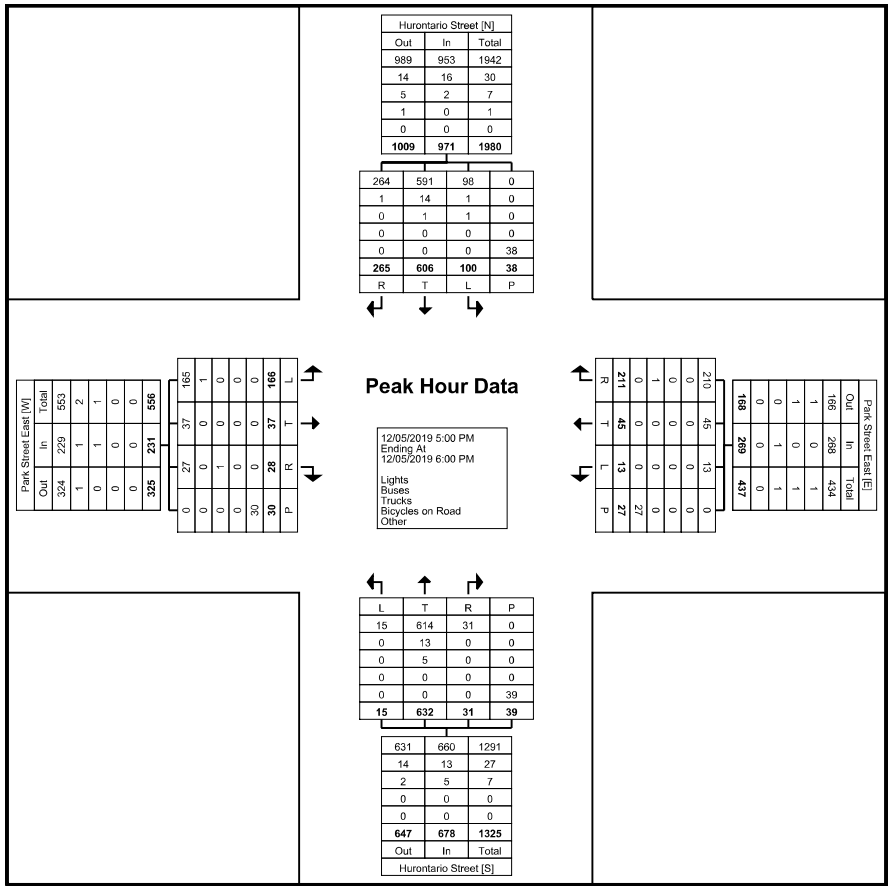
Turning Movement Peak Hour Data (5:00 PM)

Start Time	Hurontario Street Southbound					Park Street East Westbound					Hurontario Street Northbound					Park Street East Eastbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
5:00 PM	24	152	58	9	234	4	10	66	3	80	3	158	9	9	170	31	5	4	9	40	524
5:15 PM	31	153	75	6	259	3	16	47	10	66	2	188	9	9	199	50	12	3	10	65	589
5:30 PM	23	162	64	6	249	4	10	46	7	60	3	134	5	7	142	20	4	2	2	26	477
5:45 PM	22	139	68	17	229	2	9	52	7	63	7	152	8	14	167	65	16	19	9	100	559
Total	100	606	265	38	971	13	45	211	27	269	15	632	31	39	678	166	37	28	30	231	2149
Approach %	10.3	62.4	27.3	-	-	4.8	16.7	78.4	-	-	2.2	93.2	4.6	-	-	71.9	16.0	12.1	-	-	-
Total %	4.7	28.2	12.3	-	45.2	0.6	2.1	9.8	-	12.5	0.7	29.4	1.4	-	31.5	7.7	1.7	1.3	-	10.7	-
PHF	0.806	0.935	0.883	-	0.937	0.813	0.703	0.799	-	0.841	0.536	0.840	0.861	-	0.852	0.638	0.578	0.368	-	0.578	0.912
Lights	98	591	264	-	953	13	45	210	-	268	15	614	31	-	660	165	37	27	-	229	2110
% Lights	98.0	97.5	99.6	-	98.1	100.0	100.0	99.5	-	99.6	100.0	97.2	100.0	-	97.3	99.4	100.0	96.4	-	99.1	98.2
Buses	1	14	1	-	16	0	0	0	-	0	0	13	0	-	13	1	0	0	-	1	30
% Buses	1.0	2.3	0.4	-	1.6	0.0	0.0	0.0	-	0.0	0.0	2.1	0.0	-	1.9	0.6	0.0	0.0	-	0.4	1.4
Trucks	1	1	0	-	2	0	0	0	-	0	0	5	0	-	5	0	0	1	-	1	8
% Trucks	1.0	0.2	0.0	-	0.2	0.0	0.0	0.0	-	0.0	0.0	0.8	0.0	-	0.7	0.0	0.0	3.6	-	0.4	0.4
Bicycles on Road	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.5	-	0.4	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	2	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	5.3	-	-	-	-	3.7	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	36	-	-	-	-	26	-	-	-	-	39	-	-	-	-	30	-	-
% Pedestrians	-	-	-	94.7	-	-	-	-	96.3	-	-	-	-	100.0	-	-	-	-	100.0	-	-

LEA Consulting Ltd.
625 Cochrane Drive

Markam, Ontario, Canada L3R 9R9
905-470-0015 x240 Klo@LEA.ca

Count Name: 20248_HurontarioSt&ParkStE-PM
Site Code: 20248
Start Date: 12/05/2019



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

Signal Timing Report

Runtime: 2019-11-28 13:42:19

Device: 0704

Region: Mississauga **Signal ID:** 0704 **Location:** HURONTARIO STREET N at Park Street

Phase	Units	1	2	3	4	5	6	7	8
Walk	Sec	0	9	0	10	0	9	0	10
Ped Clear	Sec	0	17	0	21	0	17	0	21
Min Green	Sec	0	8	0	8	5	8	0	8
Passage	Sec	0.0	3.0	0.0	3.0	2.0	3.0	0.0	3.0
Maximum 1	Sec	0	30	0	30	15	30	0	30
Maximum 2	Sec	0	30	0	30	15	30	0	30
Yellow Change	Sec	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Red Clearance	Sec	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0
Red Revert	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before	Sec	0	0	0	0	0	0	0	0
Cars Before	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[P2] Start Up	Enum	other	redClear	other	phaseNotOn	phaseNotOn	redClear	other	phaseNotOn
[P2] Options	Bit	0	Enabled Non-Actuated 1 Max Veh Recall Ped Recall Dual Entry Act Rest In Walk	0	Enabled Non Lock Det Dual Entry	Enabled Non Lock Det	Enabled Non-Actuated 1 Max Veh Recall Ped Recall Dual Entry Act Rest In Walk	0	Enabled Non Lock Det Dual Entry
[P2] Ring	Ring	0	1	0	1	2	2	0	2
[P2] Concurrency	Phase (,)	()	(5,6)	()	(8)	(2)	(2)	()	(4)

Coord Pattern	Units	1	2	3	4	5	6	7	8
Cycle Time	Sec	105	100	100	140	100	0	0	0
Offset	Sec	2	16	96	97	19	0	0	0
Split	Split	1	2	3	4	5	0	0	0
Sequence	Sequence	1	1	1	1	1	0	0	0

Coord Split	Units	1	2	3	4	5	6	7	8
Split 1 - Mode	Enum	none	none	none	none	phaseOmitted	none	none	none
Split 1 - Time	Sec	0	63	0	42	0	63	0	42
Split 1 - Coord	Enum	false	true	false	false	false	true	false	false
Split 2 - Mode	Enum	none	none	none	none	phaseOmitted	none	none	none
Split 2 - Time	Sec	0	62	0	38	0	62	0	38
Split 2 - Coord	Enum	false	true	false	false	false	true	false	false
Split 3 - Mode	Enum	none	none	none	none	phaseOmitted	none	none	none
Split 3 - Time	Sec	0	57	0	43	0	57	0	43
Split 3 - Coord	Enum	false	true	false	false	false	true	false	false
Split 4 - Mode	Enum	none	none	none	pedRecall	none	none	none	none
Split 4 - Time	Sec	0	91	0	49	25	66	0	49
Split 4 - Coord	Enum	false	true	false	false	false	true	false	false
Split 5 - Mode	Enum	none	none	none	pedRecall	none	none	none	none
Split 5 - Time	Sec	0	60	0	40	23	37	0	40
Split 5 - Coord	Enum	false	true	false	false	false	true	false	false

TB Schedule	Units	1	2	3	4	5	6	7	8
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J----------	-F----------	---A--------	----M-------	------J-----
Day of Week	Bit	-MTWTF-	S------	------S	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
Day of Month	Bit	12345678901234567890123456789012345678901	12345678901234567890123456789012345678901	12345678901234567890123456789012345678901	1----------	----------8-----	----------9---	----------0----	1----------
Day Plan	Number	1	3	2	3	3	3	3	3

TB Schedule	Units	9	10	11	12	13	14	15	16
Month	Bit	-------A----	--------S---	---------O--	----------D	----------D	----------D	0	0
Day of Week	Bit	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
Day of Month	Bit	----5----------	-2----------	----------4----------	----------	----------	----------	0	0
Day Plan	Number	3	3	3	3	3	3	0	0

TB Dayplan	Units	1	2	3	4	5	6	7	8
Plan 1 Hour	Hour	0	6	7	9	15	16	19	3
Plan 1 Minute	Min	0	0	0	30	0	30	30	0
Plan 1 Action	Number	8	1	4	2	5	3	2	7
Plan 2 Hour	Hour	0	7	3	0	0	0	0	0
Plan 2 Minute	Min	0	0	0	0	0	0	0	0
Plan 2 Action	Number	8	2	7	0	0	0	0	0
Plan 3 Hour	Hour	0	8	23	3	0	0	0	0
Plan 3 Minute	Min	0	0	0	0	0	0	0	0
Plan 3 Action	Number	8	2	8	7	0	0	0	0

TB Action	Units	1	2	3	4	5	6	7	8
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Aux. Functions	Bit	0	0	0	0	0	0	0	0
Spec. Functions	Bit	0	0	0	0	0	0	0	0

Signal Timing Report

Runtime: 2019-11-28 13:44:54

Device: 0808

Region: Mississauga **Signal ID:** 0808 **Location:** LAKESHORE ROAD E at Elizabeth Street

Phase	Units	1	2	3	4	5	6	7	8
Walk	Sec	0	8	0	8	0	0	0	0
Ped Clear	Sec	0	13	0	13	0	0	0	0
Min Green	Sec	5	8	0	8	0	0	0	0
Passage	Sec	2.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0
Maximum 1	Sec	10	80	0	30	0	0	0	0
Maximum 2	Sec	10	80	0	30	0	0	0	0
Yellow Change	Sec	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Red Clearance	Sec	0.0	2.0	0.0	2.5	0.0	0.0	0.0	0.0
Red Revert	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before	Sec	0	0	0	0	0	0	0	0
Cars Before	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[P2] Start Up	Enum	phaseNotOn	redClear	other	phaseNotOn	other	other	other	other
[P2] Options	Bit	Enabled	Enabled Non-Actuated 1 Max Veh Recall Ped Recall Act Rest In Walk	0	Enabled Non Lock Det	0	0	0	0
[P2] Ring	Ring	1	1	0	1	0	0	0	0
[P2] Concurrency	Phase (,)	()	()	()	()	()	()	()	()

Coord Pattern	Units	1	2	3	4	5	6	7	8
Cycle Time	Sec	140	120	120	120	0	0	0	0
Offset	Sec	104	116	47	47	0	0	0	0
Split	Split	1	2	3	4	0	0	0	0
Sequence	Sequence	1	1	1	1	0	0	0	0

Coord Split	Units	1	2	3	4	5	6	7	8
Split 1 - Mode	Enum	maxVehRecall	none	none	none	none	none	none	none
Split 1 - Time	Sec	10	98	0	32	0	0	0	0
Split 1 - Coord	Enum	false	true	false	false	false	false	false	false
Split 2 - Mode	Enum	maxVehRecall	none	none	none	none	none	none	none
Split 2 - Time	Sec	10	80	0	30	0	0	0	0
Split 2 - Coord	Enum	false	true	false	false	false	false	false	false
Split 3 - Mode	Enum	maxVehRecall	none	none	none	none	none	none	none
Split 3 - Time	Sec	10	80	0	30	0	0	0	0
Split 3 - Coord	Enum	false	true	false	false	false	false	false	false
Split 4 - Mode	Enum	none	none	none	pedRecall	none	none	none	none
Split 4 - Time	Sec	0	90	0	30	0	0	0	0
Split 4 - Coord	Enum	false	true	false	false	false	false	false	false

TB Schedule	Units	1	2	3	4	5	6	7	8
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J----------	-F---------	---A-------	----M------	------J-----
Day of Week	Bit	-MTWTF-	S------	------S	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
Day of Month	Bit	12345678901234 56789012345678 901	12345678901234 56789012345678 901	12345678901234 56789012345678 901	1---------- ------	----------8----- -------	----------9--- ---------	----------0----- ------	1---------- ------
Day Plan	Number	1	3	2	3	3	3	3	3

TB Schedule	Units	9	10	11	12	13	14	15	16
Month	Bit	-------A----	--------S---	---------O--	----------D	----------D	----------D	0	0
Day of Week	Bit	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
Day of Month	Bit	----5---------- ------	-2---------- -------	----------4---------- ------	---------- 5------	---------- 6-----	---------- 4-------	0	0
Day Plan	Number	3	3	3	3	3	3	0	0

TB Dayplan	Units	1	2	3	4	5	6	7	8
Plan 1 Hour	Hour	0	6	9	15	16	18	19	3
Plan 1 Minute	Min	0	0	30	0	30	0	30	0
Plan 1 Action	Number	8	1	2	3	4	3	2	7
Plan 2 Hour	Hour	0	7	3	0	0	0	0	0
Plan 2 Minute	Min	0	0	0	0	0	0	0	0
Plan 2 Action	Number	8	2	7	0	0	0	0	0
Plan 3 Hour	Hour	0	8	23	3	0	0	0	0
Plan 3 Minute	Min	0	0	0	0	0	0	0	0
Plan 3 Action	Number	8	2	8	7	0	0	0	0

TB Action	Units	1	2	3	4	5	6	7	8
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Aux. Functions	Bit	0	0	0	0	0	0	0	0
Spec. Functions	Bit	0	0	0	0	0	0	0	0

Appendix B

Transportation Tomorrow Survey 2016

AM outbound

Fri Dec 10 2021 11:18:46 GMT-0500 (Eastern Standard Time) - Run Time: 2658ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of destination - pd_dest

Column: 2006 GTA zone of origin - gta06_orig

RowG:

ColG:(3642,3877,3878)

TblG:

Filters:

Start time of trip - start_time In 600-900

Trip 2016

Table:

	N	S	E	W	N Trips	S Trips	E Trips	W Trips
PD 1 of Toronto	779	1			779	0	0	0
PD 2 of Toronto	66	1			66	0	0	0
PD 3 of Toronto	68	1			68	0	0	0
PD 4 of Toronto	196	1			196	0	0	0
PD 6 of Toronto	33	1			33	0	0	0
PD 7 of Toronto	95	0.5		0.5	47.5	0	47.5	0
PD 8 of Toronto	422	1			422	0	0	0
PD 9 of Toronto	62	1			62	0	0	0
PD 10 of Toron	100	1			100	0	0	0
Newmarket	27	1			27	0	0	0
Richmond Hill	18	1			18	0	0	0
King	23	1			23	0	0	0
Vaughan	35	1			35	0	0	0
Caledon	41	1			41	0	0	0
Brampton	120	1			120	0	0	0
Mississauga	3266	0.5		0.25	0.25	1633	0	816.5	816.5
Oakville	97	0.5			0.5	48.5	0	0	48.5
Glanbrook	138	1			138	0	0	0
Hamilton	47	1			47	0	0	0
Grey	23	1			23	0	0	0
Brantford	22	1			22	0	0	0
					3949	**0**	**864**	**865**
					70%	0%	15%	15%

AM inbound

Fri Dec 10 2021 11:21:24 GMT-0500 (Eastern Standard Time) - Run Time: 3778ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of origin - pd_orig

Column: 2006 GTA zone of destination - gta06_dest

RowG:

ColG:(3642,3877,3878)

TblG:

Filters:

Start time of trip - start_time In 600-900

Trip 2016

Table:

	N	S	E	W	N Trips	S Trips	E Trips	W Trips
PD 1 of Toronto	62	1			62	0	0	0
PD 2 of Toronto	47	1			47	0	0	0
PD 3 of Toronto	7	1			7	0	0	0
PD 5 of Toronto	23	1			23	0	0	0
PD 6 of Toronto	20	1			20	0	0	0
PD 7 of Toronto	95	0.5		0.5	48	0	48	0
PD 8 of Toronto	158	1			158	0	0	0
PD 11 of Toron	19	1			19	0	0	0
PD 16 of Toron	15	1			15	0	0	0
Richmond Hill	10	1			10	0	0	0
Markham	33	1			33	0	0	0
Vaughan	31	1			31	0	0	0
Brampton	301	1			301	0	0	0
Mississauga	3117	0.66		0.25	0.25	2057	0	779	779
Halton Hills	56	1			56	0	0	0
Milton	34	1			34	0	0	0
Oakville	148	0.5			0.5	74	0	0	74
Burlington	73	1			73	0	0	0
Flamborough	33	1			33	0	0	0
Stoney Creek	16	1			16	0	0	0
Centre Wellingt	20	1			20	0	0	0
Orangeville	17	1			17	0	0	0
Brantford	26	1			26	0	0	0
					3180	**0**	**827**	**853**
					65%	0%	17%	18%

PM outbound

Fri Dec 10 2021 11:22:15 GMT-0500 (Eastern Standard Time) - Run Time: 2518ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of destination - pd_dest

Column: 2006 GTA zone of origin - gta06_orig

RowG:

ColG:(3642,3877,3878)

TblG:

Filters:

Start time of trip - start_time In 1600-1900

Trip 2016

Table:

	N	S	E	W	N Trips	S Trips	E Trips	W Trips
PD 1 of Toronto	181	1			181	0	0	0
PD 2 of Toronto	11	1			11	0	0	0
PD 3 of Toronto	7	1			7	0	0	0
PD 5 of Toronto	9	1			9	0	0	0
PD 7 of Toronto	106	0.5		0.5	53	0	53	0
PD 8 of Toronto	223	1			223	0	0	0
PD 9 of Toronto	10	1			10	0	0	0
PD 11 of Toron	100	1			100	0	0	0
PD 16 of Toron	15	1			15	0	0	0
Whitby	39	1			39	0	0	0
Richmond Hill	43	1			43	0	0	0
Vaughan	31	1			31	0	0	0
Caledon	17	1			17	0	0	0
Brampton	273	1			273	0	0	0
Mississauga	3205	0.66		0.25	0.25	2115	0	801	801
Halton Hills	15	1			15	0	0	0
Milton	34	1			34	0	0	0
Oakville	239	0.5			0.5	120	0	0	120
Burlington	9	1			9	0	0	0
Flamborough	33	1			33	0	0	0
Stoney Creek	16	1			16	0	0	0
Orangeville	17	1			17	0	0	0
Peterborough	31	1			31	0	0	0
					3402	**0**	**854**	**921**
					66%	0%	16%	18%

PM inbound

Fri Dec 10 2021 11:22:46 GMT-0500 (Eastern Standard Time) - Run Time: 2345ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of origin - pd_orig

Column: 2006 GTA zone of destination - gta06_dest

RowG:

ColG:(3642,3877,3878)

TblG:

Filters:

Start time of trip - start_time In 1600-1900

Trip 2016

Table:

	N	S	E	W	N Trips	S Trips	E Trips	W Trips
PD 1 of Toronto	854	1			854	0	0	0
PD 2 of Toronto	67	1			67	0	0	0
PD 3 of Toronto	66	1			66	0	0	0
PD 4 of Toronto	192	1			192	0	0	0
PD 5 of Toronto	22	1			22	0	0	0
PD 6 of Toronto	33	1			33	0	0	0
PD 7 of Toronto	262	0.5		0.5	131	0	131	0
PD 8 of Toronto	520	1			520	0	0	0
PD 9 of Toronto	43	1			43	0	0	0
PD 10 of Toron	56	1			56	0	0	0
PD 11 of Toron	13	1			13	0	0	0
Newmarket	27	1			27	0	0	0
King	23	1			23	0	0	0
Vaughan	49	1			49	0	0	0
Brampton	259	1			259	0	0	0
Mississauga	3993	0.66		0.25	0.25	2635	0	998	998
Oakville	182	0.5			0.5	91	0	0	91
Burlington	54	1			54	0	0	0
Hamilton	185	1			185	0	0	0
Grey	48	1			48	0	0	0
Perth	6	1			6	0	0	0
Brantford	35	1			35	0	0	0
					5409	**0**	**1129**	**1089**
					71%	0%	15%	14%

2016 TTS Trip Distribution

		North	South	East	West
AM	INBOUND	65%	0%	17%	18%
	OUTBOUN	70%	0%	15%	15%
PM	INBOUND	71%	0%	15%	14%
	OUTBOUN	66%	0%	16%	18%

AM Inbound

Mon Dec 13 2021 23:18:18 GMT-0500 (Eastern Standard Time) - Run Time: 2756ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Primary travel mode of trip - mode_prime
Column: 2006 GTA zone of destination - gta06_dest

RowG:
ColG:(3642,3877,3878)
TblG:

Filters:
Start time of trip - start_time In 700-900
and
Type of dwelling unit - dwell_type In 2
and
Day of week trip data were collected - trip_day In 1, 2, 3, 4, 5,

Trip 2016
Table:

,1		
Transit excludir	17	2%
Auto driver	673	67%
		0%
		0%
Auto passenger	181	18%
School bus	45	4%
		0%
Walk	96	9%
	1012	1

AM Outbound

Mon Dec 13 2021 23:17:47 GMT-0500 (Eastern Standard Time) - Run Time: 2682ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Primary travel mode of trip - mode_prime
Column: 2006 GTA zone of origin - gta06_orig

RowG:
ColG:(3642,3877,3878)
TblG:

Filters:
Start time of trip - start_time In 700-900
and
Type of dwelling unit - dwell_type In 2
and
Day of week trip data were collected - trip_day In 1, 2, 3, 4, 5,

Trip 2016
Table:

,1		
Transit excludir	306	9%
Auto driver	2130	62%
GO rail only	225	7%
Joint GO rail an	188	5%
Auto passenger	370	11%
School bus	72	2%
		0%
Walk	144	4%
	3435	1

PM Inbound

Mon Dec 13 2021 23:12:08 GMT-0500 (Eastern Standard Time) - Run Time: 2465ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Primary travel mode of trip - mode_prime
Column: 2006 GTA zone of destination - gta06_dest

RowG:
ColG:(3642,3877,3878)
TblG:

Filters:
Start time of trip - start_time In 1600-1900
and
Type of dwelling unit - dwell_type In 2
and
Day of week trip data were collected - trip_day In 1, 2, 3, 4, 5,

Trip 2016
Table:

,1		
Transit excludir	315	7%
Auto driver	3005	67%
GO rail only	314	7%
Joint GO rail an	157	4%
Auto passenger	299	7%
School bus	40	1%
Paid rideshare	56	1%
Walk	286	6%
	4472	1

PM Outbound

Mon Dec 13 2021 23:16:50 GMT-0500 (Eastern Standard Time) - Run Time: 2844ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Primary travel mode of trip - mode_prime
Column: 2006 GTA zone of origin - gta06_orig

RowG:
ColG:(3642,3877,3878)
TblG:

Filters:
Start time of trip - start_time In 1600-1900
and
Type of dwelling unit - dwell_type In 2
and
Day of week trip data were collected - trip_day In 1, 2, 3, 4, 5,

Trip 2016
Table:

,1		
Transit excludir	23	1%
Auto driver	1467	72%
		0%
Joint GO rail ar	65	3%
Auto passenger	205	10%
		0%
		0%
Walk	286	14%
	2046	1

From Transportation Master Plan 2015

2015

Peak period	Auto Driver
AM	65%
PM	75%

2031

Peak period	Auto Driver
AM	50%
PM	55%

Non-Auto Growth/Year

Peak period	Auto Driver
AM	0.94%
PM	1.25%

TTS 2016 Modal Split

Transportation Mode	Percentage Split			
	AM		PM	
	in	out	in	out
Transit	2%	21%	18%	4%
Auto driver	67%	62%	67%	72%
Auto passenger	22%	13%	9%	10%
Walk	9%	4%	6%	14%
TOTAL	100%	100%	100%	100%

Projected 2026 Modal Split

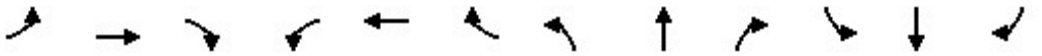
Transportation Mode	Percentage Split			
	AM		PM	
	in	out	in	out
Transit	11%	30%	30%	17%
Auto driver	57%	53%	55%	59%
Auto passenger	22%	13%	9%	10%
Walk	9%	4%	6%	14%
TOTAL	100%	100%	100%	100%

2026 Non-Auto Modal split

AM		PM	
in	out	in	out
21%	34%	36%	31%

Appendix C

Synchro Outputs

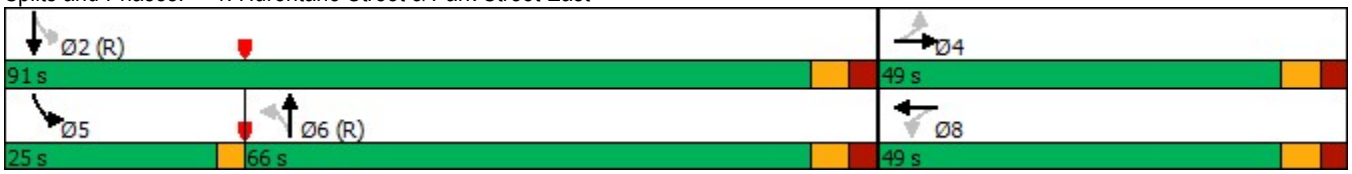


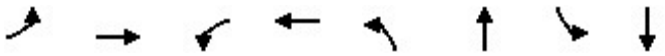
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	43	21	32	33	241	11	513	46	262	472	185
Future Volume (vph)	153	43	21	32	33	241	11	513	46	262	472	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	39.0		0.0	37.0		0.0	33.0		0.0	19.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.97	0.97		0.95	0.99		0.97	0.95	
Frt		0.951			0.868			0.988			0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	1803	0	1825	1502	0	1547	3352	0	1772	3141	0
Flt Permitted	0.344			0.707			0.352			0.316		
Satd. Flow (perm)	648	1803	0	1324	1502	0	546	3352	0	571	3141	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			266			8			74	
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		100.6			74.4			99.5			177.7	
Travel Time (s)		7.5			5.6			7.5			13.3	
Confl. Peds. (#/hr)	15		21	21		15	53		43	43		53
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	1%	0%	0%	0%	0%	9%	18%	7%	0%	3%	8%	2%
Adj. Flow (vph)	184	52	25	39	40	290	13	618	55	316	569	223
Shared Lane Traffic (%)												
Lane Group Flow (vph)	184	77	0	39	330	0	13	673	0	316	792	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		5	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		4.0	8.0	
Minimum Split (s)	38.0	38.0		38.0	38.0		33.0	33.0		8.0	33.0	
Total Split (s)	49.0	49.0		49.0	49.0		66.0	66.0		25.0	91.0	
Total Split (%)	35.0%	35.0%		35.0%	35.0%		47.1%	47.1%		17.9%	65.0%	
Maximum Green (s)	42.0	42.0		42.0	42.0		59.0	59.0		22.0	84.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
Walk Time (s)	10.0	10.0		10.0	10.0		9.0	9.0			9.0	
Flash Dont Walk (s)	21.0	21.0		21.0	21.0		17.0	17.0			17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)	39.9	39.9		39.9	39.9		66.5	66.5		90.1	86.1	
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.48	0.48		0.64	0.62	
v/c Ratio	1.00	0.15		0.10	0.53		0.05	0.42		0.62	0.40	
Control Delay	115.3	28.2		36.4	12.0		23.7	26.0		17.0	13.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	115.3	28.2		36.4	12.0		23.7	26.0		17.0	13.4	
LOS	F	C		D	B		C	C		B	B	
Approach Delay		89.6			14.6			25.9			14.4	
Approach LOS		F			B			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 97 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 25.8		Intersection LOS: C	
Intersection Capacity Utilization 86.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Hurontario Street & Park Street East





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	184	77	39	330	13	673	316	792
v/c Ratio	1.00	0.15	0.10	0.53	0.05	0.42	0.62	0.40
Control Delay	115.3	28.2	36.4	12.0	23.7	26.0	17.0	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.3	28.2	36.4	12.0	23.7	26.0	17.0	13.4
Queue Length 50th (m)	50.0	11.9	7.8	13.0	2.0	64.3	37.3	52.7
Queue Length 95th (m)	#86.1	22.1	15.7	30.9	6.1	77.9	47.8	58.6
Internal Link Dist (m)		76.6		50.4		75.5		153.7
Turn Bay Length (m)	39.0		37.0		33.0		19.0	
Base Capacity (vph)	194	553	397	636	259	1595	556	1959
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.14	0.10	0.52	0.05	0.42	0.57	0.40

Intersection Summary

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

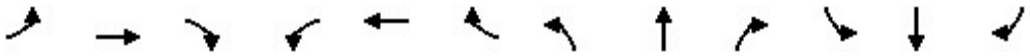
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	43	21	32	33	241	11	513	46	262	472	185
Future Volume (vph)	153	43	21	32	33	241	11	513	46	262	472	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.97		1.00	0.99		1.00	0.95	
Flpb, ped/bikes	0.99	1.00		0.97	1.00		0.95	1.00		0.99	1.00	
Frt	1.00	0.95		1.00	0.87		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1790	1804		1778	1502		1473	3351		1755	3140	
Flt Permitted	0.34	1.00		0.71	1.00		0.35	1.00		0.32	1.00	
Satd. Flow (perm)	647	1804		1323	1502		546	3351		584	3140	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	184	52	25	39	40	290	13	618	55	316	569	223
RTOR Reduction (vph)	0	13	0	0	190	0	0	4	0	0	28	0
Lane Group Flow (vph)	184	64	0	39	140	0	13	669	0	316	764	0
Confl. Peds. (#/hr)	15		21	21		15	53		43	43		53
Heavy Vehicles (%)	1%	0%	0%	0%	0%	9%	18%	7%	0%	3%	8%	2%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			6		5	2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)	39.9	39.9		39.9	39.9		66.5	66.5		86.1	86.1	
Effective Green, g (s)	39.9	39.9		39.9	39.9		66.5	66.5		86.1	86.1	
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.48	0.48		0.61	0.61	
Clearance Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	184	514		377	428		259	1591		498	1931	
v/s Ratio Prot		0.04			0.09			0.20		c0.08	0.24	
v/s Ratio Perm	c0.28			0.03			0.02			c0.32		
v/c Ratio	1.00	0.12		0.10	0.33		0.05	0.42		0.63	0.40	
Uniform Delay, d1	50.0	37.1		36.9	39.5		19.8	24.1		13.9	13.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	66.3	0.1		0.1	0.4		0.4	0.8		2.6	0.6	
Delay (s)	116.4	37.2		37.0	39.9		20.1	24.9		16.5	14.3	
Level of Service	F	D		D	D		C	C		B	B	
Approach Delay (s)		93.0			39.6			24.8			14.9	
Approach LOS		F			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	207	3	19	66	117	3	89	22	9	3	3
Future Volume (vph)	19	207	3	19	66	117	3	89	22	9	3	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		10.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998				0.850		0.974			0.975	
Flt Protected		0.996			0.989			0.999			0.970	
Satd. Flow (prot)	0	1859	0	0	1785	1617	0	1543	0	0	1817	0
Flt Permitted		0.996			0.989			0.999			0.970	
Satd. Flow (perm)	0	1859	0	0	1785	1617	0	1543	0	0	1817	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		36.6			100.6			45.4			96.7	
Travel Time (s)		2.7			7.5			3.4			7.3	
Confl. Peds. (#/hr)	30		4	4		30	9		10	10		9
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	3%	0%	1%	8%	1%	0%	27%	0%	0%	0%	0%
Adj. Flow (vph)	22	238	3	22	76	134	3	102	25	10	3	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	263	0	0	98	134	0	130	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	19	207	3	19	66	117	3	89	22	9	3	3
Future Volume (vph)	19	207	3	19	66	117	3	89	22	9	3	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	22	238	3	22	76	134	3	102	25	10	3	3

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	263	98	134	130	16
Volume Left (vph)	22	22	0	3	10
Volume Right (vph)	3	0	134	25	3
Hadj (s)	0.06	0.22	-0.68	0.25	0.01
Departure Headway (s)	4.7	5.4	4.5	5.3	5.3
Degree Utilization, x	0.35	0.15	0.17	0.19	0.02
Capacity (veh/h)	738	642	772	628	606
Control Delay (s)	10.2	8.1	7.1	9.6	8.4
Approach Delay (s)	10.2	7.5		9.6	8.4
Approach LOS	B	A		A	A

Intersection Summary				
Delay	9.1			
Level of Service	A			
Intersection Capacity Utilization	42.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	225	0	0	15
Future Volume (vph)	0	0	225	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1883	0	1883	0	0	1883
Flt Permitted						
Satd. Flow (perm)	1883	0	1883	0	0	1883
Link Speed (k/h)	48		48			48
Link Distance (m)	27.4		96.7			28.3
Travel Time (s)	2.1		7.3			2.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	245	0	0	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	245	0	0	16
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	225	0	0	15
Future Volume (Veh/h)	0	0	225	0	0	15
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	0	245	0	0	16
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	261	245			245	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	261	245			245	
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)	728	794			1321	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	245	16
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1321
Volume to Capacity	0.00	0.14	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	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	15.2%	ICU Level of Service	A
Analysis Period (min)	15		

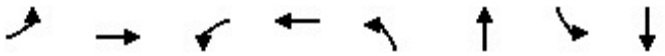
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	172	38	29	13	46	219	15	657	32	104	630	275
Future Volume (vph)	172	38	29	13	46	219	15	657	32	104	630	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	39.0		0.0	37.0		0.0	33.0		0.0	19.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98	0.98		0.97	0.97		0.99	1.00		0.98	0.97	
Frt		0.935			0.876			0.993			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	1735	0	1825	1632	0	1825	3509	0	1789	3343	0
Flt Permitted	0.413			0.709			0.244			0.339		
Satd. Flow (perm)	774	1735	0	1326	1632	0	463	3509	0	624	3343	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			132			7			98	
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		100.6			74.4			99.5			177.7	
Travel Time (s)		7.5			5.6			7.5			13.3	
Confl. Peds. (#/hr)	26		30	30		26	36		39	39		36
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	1%	0%	4%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Adj. Flow (vph)	189	42	32	14	51	241	16	722	35	114	692	302
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	74	0	14	292	0	16	757	0	114	994	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	43.0	43.0		43.0	43.0		57.0	57.0		57.0	57.0	
Total Split (s)	43.0	43.0		43.0	43.0		57.0	57.0		57.0	57.0	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	36.0	36.0		36.0	36.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	10.0	10.0		10.0	10.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	21.0	21.0		21.0	21.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	25.6	25.6		25.6	25.6		60.4	60.4		60.4	60.4	
Actuated g/C Ratio	0.26	0.26		0.26	0.26		0.60	0.60		0.60	0.60	
v/c Ratio	0.95	0.16		0.04	0.57		0.06	0.36		0.30	0.48	
Control Delay	88.8	16.2		23.8	20.1		12.1	11.8		14.9	12.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	88.8	16.2		23.8	20.1		12.1	11.8		14.9	12.1	
LOS	F	B		C	C		B	B		B	B	
Approach Delay		68.4			20.3			11.8			12.3	
Approach LOS		E			C			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 96 (96%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 19.2 Intersection LOS: B
Intersection Capacity Utilization 89.2% ICU Level of Service E
Analysis Period (min) 15

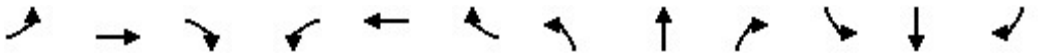
Splits and Phases: 1: Hurontario Street & Park Street East



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	189	74	14	292	16	757	114	994
v/c Ratio	0.95	0.16	0.04	0.57	0.06	0.36	0.30	0.48
Control Delay	88.8	16.2	23.8	20.1	12.1	11.8	14.9	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	88.8	16.2	23.8	20.1	12.1	11.8	14.9	12.1
Queue Length 50th (m)	35.9	6.2	2.0	26.0	1.2	36.1	10.0	47.2
Queue Length 95th (m)	#62.3	14.5	5.8	44.3	5.2	61.0	26.8	80.2
Internal Link Dist (m)		76.6		50.4		75.5		153.7
Turn Bay Length (m)	39.0		37.0		33.0		19.0	
Base Capacity (vph)	278	645	477	672	279	2120	376	2056
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.11	0.03	0.43	0.06	0.36	0.30	0.48

Intersection Summary

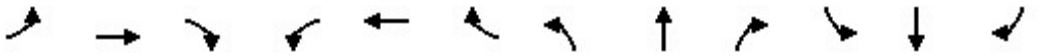
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	172	38	29	13	46	219	15	657	32	104	630	275
Future Volume (vph)	172	38	29	13	46	219	15	657	32	104	630	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	1.00		1.00	0.97	
Flpb, ped/bikes	0.99	1.00		0.97	1.00		0.99	1.00		0.98	1.00	
Frt	1.00	0.94		1.00	0.88		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1780	1735		1777	1632		1799	3509		1746	3344	
Flt Permitted	0.41	1.00		0.71	1.00		0.24	1.00		0.34	1.00	
Satd. Flow (perm)	774	1735		1326	1632		463	3509		623	3344	
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)	189	42	32	14	51	241	16	722	35	114	692	302
RTOR Reduction (vph)	0	24	0	0	98	0	0	3	0	0	39	0
Lane Group Flow (vph)	189	50	0	14	194	0	16	754	0	114	955	0
Confl. Peds. (#/hr)	26		30	30		26	36		39	39		36
Heavy Vehicles (%)	1%	0%	4%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)	25.6	25.6		25.6	25.6		60.4	60.4		60.4	60.4	
Effective Green, g (s)	25.6	25.6		25.6	25.6		60.4	60.4		60.4	60.4	
Actuated g/C Ratio	0.26	0.26		0.26	0.26		0.60	0.60		0.60	0.60	
Clearance Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	198	444		339	417		279	2119		376	2019	
v/s Ratio Prot		0.03			0.12			0.21			c0.29	
v/s Ratio Perm	c0.24			0.01			0.03			0.18		
v/c Ratio	0.95	0.11		0.04	0.46		0.06	0.36		0.30	0.47	
Uniform Delay, d1	36.6	28.5		28.0	31.4		8.1	10.0		9.6	11.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	50.6	0.1		0.1	0.8		0.4	0.5		2.1	0.8	
Delay (s)	87.2	28.6		28.0	32.2		8.5	10.5		11.7	11.8	
Level of Service	F	C		C	C		A	B		B	B	
Approach Delay (s)		70.7			32.0			10.4			11.8	
Approach LOS		E			C			B			B	

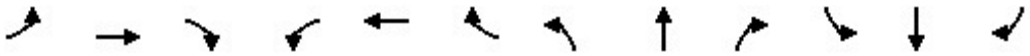
Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	182	2	22	196	99	5	62	25	60	27	4
Future Volume (vph)	19	182	2	22	196	99	5	62	25	60	27	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		10.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999				0.850		0.964			0.995	
Flt Protected		0.995			0.995			0.998			0.968	
Satd. Flow (prot)	0	1910	0	0	1878	1633	0	1461	0	0	1850	0
Flt Permitted		0.995			0.995			0.998			0.968	
Satd. Flow (perm)	0	1910	0	0	1878	1633	0	1461	0	0	1850	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		36.6			100.6			45.4			96.7	
Travel Time (s)		2.7			7.5			3.4			7.3	
Confl. Peds. (#/hr)	15		13	13		15	8		12	12		8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	39%	0%	0%	0%	0%
Adj. Flow (vph)	21	200	2	24	215	109	5	68	27	66	30	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	223	0	0	239	109	0	100	0	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	19	182	2	22	196	99	5	62	25	60	27	4
Future Volume (vph)	19	182	2	22	196	99	5	62	25	60	27	4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	21	200	2	24	215	109	5	68	27	66	30	4

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	223	239	109	100	100
Volume Left (vph)	21	24	0	5	66
Volume Right (vph)	2	0	109	27	4
Hadj (s)	0.01	0.08	-0.70	0.30	0.11
Departure Headway (s)	5.0	5.4	4.6	5.7	5.5
Degree Utilization, x	0.31	0.36	0.14	0.16	0.15
Capacity (veh/h)	676	640	745	570	584
Control Delay (s)	10.3	10.2	7.2	9.8	9.5
Approach Delay (s)	10.3	9.2		9.8	9.5
Approach LOS	B	A		A	A

Intersection Summary				
Delay	9.7			
Level of Service	A			
Intersection Capacity Utilization	44.3%	ICU Level of Service	A	
Analysis Period (min)	15			

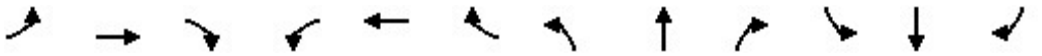
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	181	0	0	92
Future Volume (vph)	0	0	181	0	0	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1883	0	1883	0	0	1883
Flt Permitted						
Satd. Flow (perm)	1883	0	1883	0	0	1883
Link Speed (k/h)	48		48			48
Link Distance (m)	27.4		96.7			28.3
Travel Time (s)	2.1		7.3			2.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	197	0	0	100
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	197	0	0	100
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	12.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	181	0	0	92
Future Volume (Veh/h)	0	0	181	0	0	92
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	0	197	0	0	100
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	297	197			197	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	297	197			197	
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)	694	844			1376	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	197	100
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1376
Volume to Capacity	0.00	0.12	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	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	12.9%	ICU Level of Service	A
Analysis Period (min)	15		

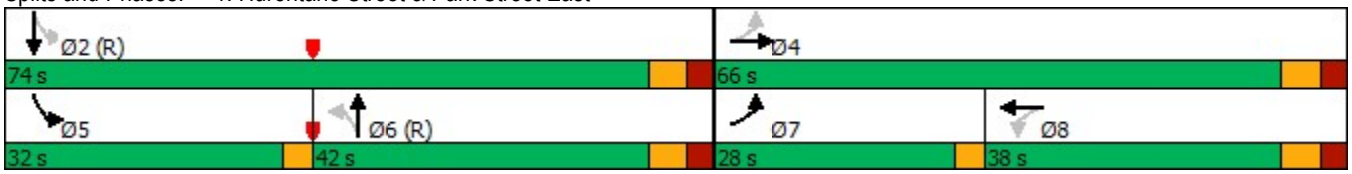


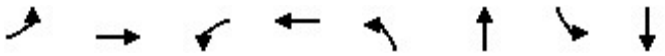
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	244	43	27	32	33	241	14	524	46	282	510	219
Future Volume (vph)	244	43	27	32	33	241	14	524	46	282	510	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	39.0		0.0	37.0		0.0	33.0		0.0	19.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.98		0.97	0.97		0.95	0.99		0.96	0.95	
Frt		0.942			0.868			0.988			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	1782	0	1825	1502	0	1547	3352	0	1772	3125	0
Flt Permitted	0.267			0.711			0.375			0.379		
Satd. Flow (perm)	503	1782	0	1331	1502	0	579	3352	0	682	3125	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			241			6			65	
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		100.6			74.4			99.5			177.7	
Travel Time (s)		7.5			5.6			7.5			13.3	
Confl. Peds. (#/hr)	15		21	21		15	53		43	43		53
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	0%	0%	0%	9%	18%	7%	0%	3%	8%	2%
Adj. Flow (vph)	244	43	27	32	33	241	14	524	46	282	510	219
Shared Lane Traffic (%)												
Lane Group Flow (vph)	244	70	0	32	274	0	14	570	0	282	729	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	7	4		8	8		6	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	8.0		8.0	8.0		8.0	8.0		4.0	8.0	
Minimum Split (s)	8.0	38.0		38.0	38.0		33.0	33.0		8.0	33.0	
Total Split (s)	28.0	66.0		38.0	38.0		42.0	42.0		32.0	74.0	
Total Split (%)	20.0%	47.1%		27.1%	27.1%		30.0%	30.0%		22.9%	52.9%	
Maximum Green (s)	25.0	59.0		31.0	31.0		35.0	35.0		29.0	67.0	
Yellow Time (s)	3.0	4.0		4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	3.0		3.0	3.0		3.0	3.0		0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lead/Lag	Lead			Lag	Lag		Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
Walk Time (s)		10.0		10.0	10.0		9.0	9.0			9.0	
Flash Dont Walk (s)		21.0		21.0	21.0		17.0	17.0			17.0	
Pedestrian Calls (#/hr)		0		0	0		0	0			0	
Act Effct Green (s)	41.6	37.6		12.0	12.0		70.4	70.4		92.4	88.4	
Actuated g/C Ratio	0.30	0.27		0.09	0.09		0.50	0.50		0.66	0.63	
v/c Ratio	0.68	0.14		0.28	0.79		0.05	0.34		0.50	0.37	
Control Delay	48.7	23.2		63.8	27.0		24.5	23.5		14.1	12.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	48.7	23.2		63.8	27.0		24.5	23.5		14.1	12.7	
LOS	D	C		E	C		C	C		B	B	
Approach Delay		43.0			30.9			23.5			13.1	
Approach LOS		D			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 90.2%		ICU Level of Service E	
Analysis Period (min) 15			

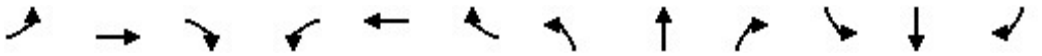
Splits and Phases: 1: Hurontario Street & Park Street East





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	244	70	32	274	14	570	282	729
v/c Ratio	0.68	0.14	0.28	0.79	0.05	0.34	0.50	0.37
Control Delay	48.7	23.2	63.8	27.0	24.5	23.5	14.1	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.7	23.2	63.8	27.0	24.5	23.5	14.1	12.7
Queue Length 50th (m)	55.3	9.0	8.7	8.9	1.9	47.1	29.2	42.8
Queue Length 95th (m)	70.9	18.8	17.9	37.2	7.6	78.7	54.0	68.6
Internal Link Dist (m)		76.6		50.4		75.5		153.7
Turn Bay Length (m)	39.0		37.0		33.0		19.0	
Base Capacity (vph)	382	766	294	520	291	1687	675	1997
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.09	0.11	0.53	0.05	0.34	0.42	0.37

Intersection Summary



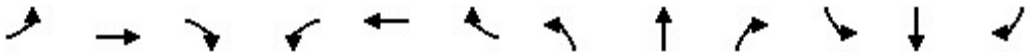
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	244	43	27	32	33	241	14	524	46	282	510	219
Future Volume (vph)	244	43	27	32	33	241	14	524	46	282	510	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	0.99		1.00	0.95	
Flpb, ped/bikes	1.00	1.00		0.97	1.00		0.95	1.00		0.99	1.00	
Frt	1.00	0.94		1.00	0.87		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1803	1782		1778	1502		1466	3351		1746	3125	
Flt Permitted	0.27	1.00		0.71	1.00		0.37	1.00		0.38	1.00	
Satd. Flow (perm)	506	1782		1331	1502		578	3351		696	3125	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	244	43	27	32	33	241	14	524	46	282	510	219
RTOR Reduction (vph)	0	20	0	0	220	0	0	3	0	0	24	0
Lane Group Flow (vph)	244	50	0	32	54	0	14	567	0	282	705	0
Confl. Peds. (#/hr)	15		21	21		15	53		43	43		53
Heavy Vehicles (%)	1%	0%	0%	0%	0%	9%	18%	7%	0%	3%	8%	2%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			6		5	2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)	37.6	37.6		12.0	12.0		70.4	70.4		88.4	88.4	
Effective Green, g (s)	37.6	37.6		12.0	12.0		70.4	70.4		88.4	88.4	
Actuated g/C Ratio	0.27	0.27		0.09	0.09		0.50	0.50		0.63	0.63	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	345	478		114	128		290	1685		551	1973	
v/s Ratio Prot	c0.11	0.03			0.04			0.17		c0.05	0.23	
v/s Ratio Perm	c0.08			0.02			0.02			c0.27		
v/c Ratio	0.71	0.11		0.28	0.42		0.05	0.34		0.51	0.36	
Uniform Delay, d1	43.8	38.5		60.0	60.7		17.7	20.8		11.9	12.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.5	0.1		1.3	2.2		0.3	0.5		0.8	0.5	
Delay (s)	50.3	38.6		61.3	62.9		18.0	21.4		12.7	12.8	
Level of Service	D	D		E	E		B	C		B	B	
Approach Delay (s)		47.7			62.7			21.3			12.8	
Approach LOS		D			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	90.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	244	3	20	73	132	3	92	27	63	8	3
Future Volume (vph)	19	244	3	20	73	132	3	92	27	63	8	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		10.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998				0.850		0.970			0.995	
Flt Protected		0.996			0.989			0.999			0.959	
Satd. Flow (prot)	0	1858	0	0	1784	1617	0	1547	0	0	1833	0
Flt Permitted		0.996			0.989			0.999			0.959	
Satd. Flow (perm)	0	1858	0	0	1784	1617	0	1547	0	0	1833	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		36.6			100.6			45.4			96.7	
Travel Time (s)		2.7			7.5			3.4			7.3	
Confl. Peds. (#/hr)	30		4	4		30	9		10	10		9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	0%	1%	8%	1%	0%	27%	0%	0%	0%	0%
Adj. Flow (vph)	19	244	3	20	73	132	3	92	27	63	8	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	266	0	0	93	132	0	122	0	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	19	244	3	20	73	132	3	92	27	63	8	3
Future Volume (vph)	19	244	3	20	73	132	3	92	27	63	8	3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	19	244	3	20	73	132	3	92	27	63	8	3

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	266	93	132	122	74
Volume Left (vph)	19	20	0	3	63
Volume Right (vph)	3	0	132	27	3
Hadj (s)	0.05	0.22	-0.68	0.22	0.15
Departure Headway (s)	4.9	5.5	4.6	5.4	5.4
Degree Utilization, x	0.36	0.14	0.17	0.18	0.11
Capacity (veh/h)	700	617	736	610	597
Control Delay (s)	10.6	8.3	7.4	9.6	9.1
Approach Delay (s)	10.6	7.7		9.6	9.1
Approach LOS	B	A		A	A

Intersection Summary				
Delay	9.3			
Level of Service	A			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A	
Analysis Period (min)	15			

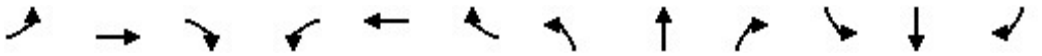
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	225	0	0	15
Future Volume (vph)	0	0	225	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1883	0	1883	0	0	1883
Flt Permitted						
Satd. Flow (perm)	1883	0	1883	0	0	1883
Link Speed (k/h)	48		48			48
Link Distance (m)	27.4		96.7			28.3
Travel Time (s)	2.1		7.3			2.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	225	0	0	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	225	0	0	15
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	225	0	0	15
Future Volume (Veh/h)	0	0	225	0	0	15
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	225	0	0	15
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	240	225			225	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	240	225			225	
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)	748	814			1344	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	225	15
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1344
Volume to Capacity	0.00	0.13	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	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	15.2%	ICU Level of Service	A
Analysis Period (min)	15		

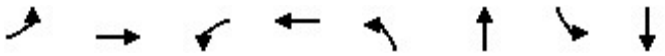


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	38	31	13	46	219	23	678	33	109	671	362
Future Volume (vph)	219	38	31	13	46	219	23	678	33	109	671	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	39.0		0.0	37.0		0.0	33.0		0.0	19.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98	0.98		0.97	0.97		0.99	1.00		0.98	0.97	
Frt		0.933			0.876			0.993			0.947	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	1729	0	1825	1632	0	1825	3508	0	1789	3307	0
Flt Permitted	0.471			0.712			0.227			0.357		
Satd. Flow (perm)	881	1729	0	1332	1632	0	431	3508	0	656	3307	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			149			7			143	
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		100.6			74.4			99.5			177.7	
Travel Time (s)		7.5			5.6			7.5			13.3	
Confl. Peds. (#/hr)	26		30	30		26	36		39	39		36
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	4%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Adj. Flow (vph)	219	38	31	13	46	219	23	678	33	109	671	362
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	69	0	13	265	0	23	711	0	109	1033	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	43.0	43.0		43.0	43.0		57.0	57.0		57.0	57.0	
Total Split (s)	43.0	43.0		43.0	43.0		57.0	57.0		57.0	57.0	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	36.0	36.0		36.0	36.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	10.0	10.0		10.0	10.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	21.0	21.0		21.0	21.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	26.9	26.9		26.9	26.9		59.1	59.1		59.1	59.1	
Actuated g/C Ratio	0.27	0.27		0.27	0.27		0.59	0.59		0.59	0.59	
v/c Ratio	0.92	0.14		0.04	0.48		0.09	0.34		0.28	0.51	
Control Delay	76.6	15.5		23.1	14.8		13.0	12.1		14.8	12.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	76.6	15.5		23.1	14.8		13.0	12.1		14.8	12.4	
LOS	E	B		C	B		B	B		B	B	
Approach Delay		61.9			15.2			12.2			12.6	
Approach LOS		E			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 96 (96%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 95.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Hurontario Street & Park Street East



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	219	69	13	265	23	711	109	1033
v/c Ratio	0.92	0.14	0.04	0.48	0.09	0.34	0.28	0.51
Control Delay	76.6	15.5	23.1	14.8	13.0	12.1	14.8	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.6	15.5	23.1	14.8	13.0	12.1	14.8	12.4
Queue Length 50th (m)	40.8	5.4	1.9	17.5	1.8	34.9	9.9	50.0
Queue Length 95th (m)	#69.1	13.7	5.6	35.0	6.9	56.6	25.1	81.4
Internal Link Dist (m)		76.6		50.4		75.5		153.7
Turn Bay Length (m)	39.0		37.0		33.0		19.0	
Base Capacity (vph)	317	642	479	682	254	2074	387	2011
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.11	0.03	0.39	0.09	0.34	0.28	0.51

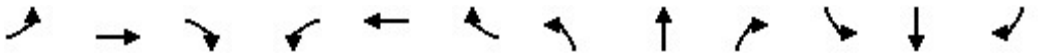
Intersection Summary

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)	219	38	31	13	46	219	23	678	33	109	671	362
Future Volume (vph)	219	38	31	13	46	219	23	678	33	109	671	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	1.00		1.00	0.97	
Flpb, ped/bikes	0.98	1.00		0.97	1.00		0.99	1.00		0.97	1.00	
Frt	1.00	0.93		1.00	0.88		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1778	1728		1777	1632		1801	3509		1743	3309	
Flt Permitted	0.47	1.00		0.71	1.00		0.23	1.00		0.36	1.00	
Satd. Flow (perm)	882	1728		1332	1632		431	3509		655	3309	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	219	38	31	13	46	219	23	678	33	109	671	362
RTOR Reduction (vph)	0	23	0	0	109	0	0	3	0	0	58	0
Lane Group Flow (vph)	219	46	0	13	156	0	23	708	0	109	975	0
Confl. Peds. (#/hr)	26		30	30		26	36		39	39		36
Heavy Vehicles (%)	1%	0%	4%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)	26.9	26.9		26.9	26.9		59.1	59.1		59.1	59.1	
Effective Green, g (s)	26.9	26.9		26.9	26.9		59.1	59.1		59.1	59.1	
Actuated g/C Ratio	0.27	0.27		0.27	0.27		0.59	0.59		0.59	0.59	
Clearance Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	237	464		358	439		254	2073		387	1955	
v/s Ratio Prot		0.03			0.10			0.20			c0.29	
v/s Ratio Perm	c0.25			0.01			0.05			0.17		
v/c Ratio	0.92	0.10		0.04	0.36		0.09	0.34		0.28	0.50	
Uniform Delay, d1	35.6	27.5		27.0	29.5		8.8	10.5		10.0	11.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	38.1	0.1		0.0	0.5		0.7	0.4		1.8	0.9	
Delay (s)	73.7	27.6		27.0	30.0		9.5	10.9		11.8	12.8	
Level of Service	E	C		C	C		A	B		B	B	
Approach Delay (s)		62.6			29.9			10.9			12.7	
Approach LOS		E			C			B			B	

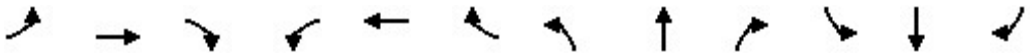
Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	208	2	26	226	145	5	68	27	81	32	4
Future Volume (vph)	19	208	2	26	226	145	5	68	27	81	32	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		10.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999				0.850		0.964			0.995	
Flt Protected		0.996			0.995			0.998			0.967	
Satd. Flow (prot)	0	1912	0	0	1878	1633	0	1461	0	0	1848	0
Flt Permitted		0.996			0.995			0.998			0.967	
Satd. Flow (perm)	0	1912	0	0	1878	1633	0	1461	0	0	1848	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		36.6			100.6			45.4			96.7	
Travel Time (s)		2.7			7.5			3.4			7.3	
Confl. Peds. (#/hr)	15		13	13		15	8		12	12		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	39%	0%	0%	0%	0%
Adj. Flow (vph)	19	208	2	26	226	145	5	68	27	81	32	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	252	145	0	100	0	0	117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	19	208	2	26	226	145	5	68	27	81	32	4
Future Volume (vph)	19	208	2	26	226	145	5	68	27	81	32	4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	19	208	2	26	226	145	5	68	27	81	32	4

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	229	252	145	100	117
Volume Left (vph)	19	26	0	5	81
Volume Right (vph)	2	0	145	27	4
Hadj (s)	0.01	0.08	-0.70	0.30	0.12
Departure Headway (s)	5.2	5.5	4.7	5.9	5.7
Degree Utilization, x	0.33	0.39	0.19	0.16	0.19
Capacity (veh/h)	659	630	732	542	570
Control Delay (s)	10.7	10.7	7.6	10.1	10.0
Approach Delay (s)	10.7	9.6		10.1	10.0
Approach LOS	B	A		B	A

Intersection Summary				
Delay	10.0			
Level of Service	A			
Intersection Capacity Utilization	46.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	181	0	0	92
Future Volume (vph)	0	0	181	0	0	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1883	0	1883	0	0	1883
Flt Permitted						
Satd. Flow (perm)	1883	0	1883	0	0	1883
Link Speed (k/h)	48		48			48
Link Distance (m)	27.4		96.7			28.3
Travel Time (s)	2.1		7.3			2.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	181	0	0	92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	181	0	0	92
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 12.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	181	0	0	92
Future Volume (Veh/h)	0	0	181	0	0	92
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	181	0	0	92
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	273	181			181	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	273	181			181	
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)	716	862			1394	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	181	92
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1394
Volume to Capacity	0.00	0.11	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

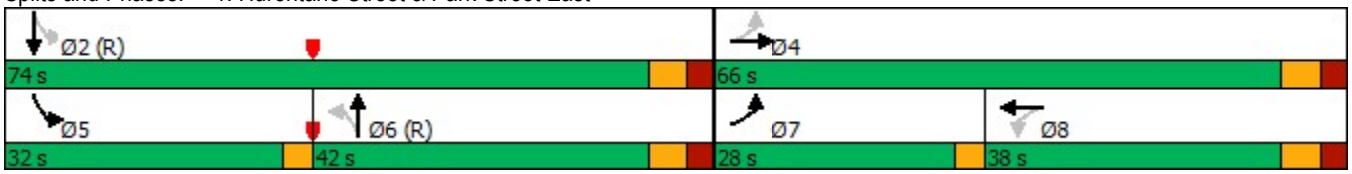
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	12.9%	ICU Level of Service	A
Analysis Period (min)	15		

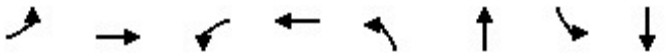
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Future Volume (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	39.0		0.0	37.0		0.0	33.0		0.0	19.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.98		0.97	0.97		0.95	0.99		0.96	0.94	
Frt		0.922			0.869			0.988			0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	1734	0	1825	1505	0	1547	3352	0	1772	3085	0
Flt Permitted	0.252			0.697			0.355			0.371		
Satd. Flow (perm)	474	1734	0	1305	1505	0	550	3352	0	668	3085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		48			227			6			97	
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		100.6			74.4			99.5			177.7	
Travel Time (s)		7.5			5.6			7.5			13.3	
Confl. Peds. (#/hr)	15		21	21		15	53		43	43		53
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	0%	0%	0%	9%	18%	7%	0%	3%	8%	2%
Adj. Flow (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Shared Lane Traffic (%)												
Lane Group Flow (vph)	337	92	0	32	276	0	29	570	0	282	784	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	7	4		8	8		6	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	8.0		8.0	8.0		8.0	8.0		4.0	8.0	
Minimum Split (s)	8.0	38.0		38.0	38.0		33.0	33.0		8.0	33.0	
Total Split (s)	28.0	66.0		38.0	38.0		42.0	42.0		32.0	74.0	
Total Split (%)	20.0%	47.1%		27.1%	27.1%		30.0%	30.0%		22.9%	52.9%	
Maximum Green (s)	25.0	59.0		31.0	31.0		35.0	35.0		29.0	67.0	
Yellow Time (s)	3.0	4.0		4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	3.0		3.0	3.0		3.0	3.0		0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lead/Lag	Lead			Lag	Lag		Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
Walk Time (s)		10.0		10.0	10.0		9.0	9.0			9.0	
Flash Dont Walk (s)		21.0		21.0	21.0		17.0	17.0			17.0	
Pedestrian Calls (#/hr)		0		0	0		0	0			0	
Act Effct Green (s)	44.5	40.5		12.9	12.9		67.0	67.0		89.5	85.5	
Actuated g/C Ratio	0.32	0.29		0.09	0.09		0.48	0.48		0.64	0.61	
v/c Ratio	0.88	0.17		0.27	0.80		0.11	0.35		0.51	0.41	
Control Delay	63.3	18.1		61.8	30.4		26.6	25.4		15.4	13.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	63.3	18.1		61.8	30.4		26.6	25.4		15.4	13.6	
LOS	E	B		E	C		C	C		B	B	
Approach Delay		53.6			33.6			25.4			14.1	
Approach LOS		D			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 95.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Hurontario Street & Park Street East





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	337	92	32	276	29	570	282	784
v/c Ratio	0.88	0.17	0.27	0.80	0.11	0.35	0.51	0.41
Control Delay	63.3	18.1	61.8	30.4	26.6	25.4	15.4	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.3	18.1	61.8	30.4	26.6	25.4	15.4	13.6
Queue Length 50th (m)	79.9	9.1	8.5	13.2	4.2	48.5	30.3	47.0
Queue Length 95th (m)	#102.5	20.1	17.7	42.2	13.5	80.7	55.7	74.8
Internal Link Dist (m)		76.6		50.4		75.5		153.7
Turn Bay Length (m)	39.0		37.0		33.0		19.0	
Base Capacity (vph)	388	758	288	509	263	1606	655	1921
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.12	0.11	0.54	0.11	0.35	0.43	0.41

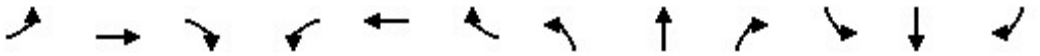
Intersection Summary

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)	337	44	48	32	35	241	29	524	46	282	510	274
Future Volume (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	0.99		1.00	0.94	
Flpb, ped/bikes	1.00	1.00		0.97	1.00		0.95	1.00		0.99	1.00	
Frt	1.00	0.92		1.00	0.87		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1803	1734		1779	1505		1472	3351		1747	3084	
Flt Permitted	0.25	1.00		0.70	1.00		0.35	1.00		0.37	1.00	
Satd. Flow (perm)	477	1734		1306	1505		550	3351		683	3084	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	337	44	48	32	35	241	29	524	46	282	510	274
RTOR Reduction (vph)	0	34	0	0	206	0	0	3	0	0	38	0
Lane Group Flow (vph)	337	58	0	32	70	0	29	567	0	282	746	0
Confl. Peds. (#/hr)	15		21	21		15	53		43	43		53
Heavy Vehicles (%)	1%	0%	0%	0%	0%	9%	18%	7%	0%	3%	8%	2%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			6		5	2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)	40.5	40.5		12.9	12.9		67.0	67.0		85.5	85.5	
Effective Green, g (s)	40.5	40.5		12.9	12.9		67.0	67.0		85.5	85.5	
Actuated g/C Ratio	0.29	0.29		0.09	0.09		0.48	0.48		0.61	0.61	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	370	501		120	138		263	1603		534	1883	
v/s Ratio Prot	c0.16	0.03			0.05			0.17		c0.06	0.24	
v/s Ratio Perm	c0.10			0.02			0.05			c0.26		
v/c Ratio	0.91	0.12		0.27	0.51		0.11	0.35		0.53	0.40	
Uniform Delay, d1	44.1	36.6		59.1	60.5		20.1	22.9		13.3	14.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	25.9	0.1		1.2	2.9		0.8	0.6		0.9	0.6	
Delay (s)	70.0	36.7		60.3	63.4		20.9	23.5		14.2	14.6	
Level of Service	E	D		E	E		C	C		B	B	
Approach Delay (s)		62.8			63.1			23.4			14.5	
Approach LOS		E			E			C			B	

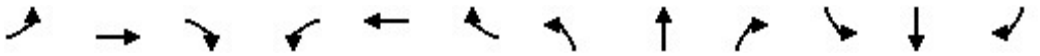
Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Future Volume (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		10.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999				0.850		0.976			0.998	
Flt Protected		0.996			0.989			0.999			0.961	
Satd. Flow (prot)	0	1861	0	0	1784	1617	0	1540	0	0	1842	0
Flt Permitted		0.996			0.989			0.999			0.961	
Satd. Flow (perm)	0	1861	0	0	1784	1617	0	1540	0	0	1842	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		36.6			100.6			45.4			96.7	
Travel Time (s)		2.7			7.5			3.4			7.3	
Confl. Peds. (#/hr)	30		4	4		30	9		10	10		9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	0%	1%	8%	1%	0%	27%	0%	0%	0%	0%
Adj. Flow (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	271	0	0	93	205	0	152	0	0	222	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Future Volume (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	24	244	3	20	73	205	3	122	27	179	39	4

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	271	93	205	152	222
Volume Left (vph)	24	20	0	3	179
Volume Right (vph)	3	0	205	27	4
Hadj (s)	0.06	0.22	-0.68	0.27	0.15
Departure Headway (s)	5.7	6.3	5.4	6.1	5.9
Degree Utilization, x	0.43	0.16	0.31	0.26	0.36
Capacity (veh/h)	591	534	623	520	561
Control Delay (s)	12.9	9.3	9.5	11.3	12.2
Approach Delay (s)	12.9	9.5		11.3	12.2
Approach LOS	B	A		B	B

Intersection Summary				
Delay	11.4			
Level of Service	B			
Intersection Capacity Utilization	53.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	150	1	225	109	0	15
Future Volume (vph)	150	1	225	109	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999		0.956			
Flt Protected	0.953					
Satd. Flow (prot)	1793	0	1801	0	0	1883
Flt Permitted	0.953					
Satd. Flow (perm)	1793	0	1801	0	0	1883
Link Speed (k/h)	48		48			48
Link Distance (m)	27.4		96.7			28.3
Travel Time (s)	2.1		7.3			2.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	150	1	225	109	0	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	151	0	334	0	0	15
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	150	1	225	109	0	15
Future Volume (Veh/h)	150	1	225	109	0	15
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	150	1	225	109	0	15
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	294	280			334	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	294	280			334	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	78	100			100	
cM capacity (veh/h)	696	759			1225	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	151	334	15
Volume Left	150	0	0
Volume Right	1	109	0
cSH	697	1700	1225
Volume to Capacity	0.22	0.20	0.00
Queue Length 95th (m)	6.2	0.0	0.0
Control Delay (s)	11.6	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.6	0.0	0.0
Approach LOS	B		

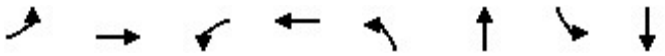
Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Future Volume (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	39.0		0.0	37.0		0.0	33.0		0.0	19.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98	0.98		0.97	0.97		0.99	1.00		0.98	0.96	
Frt		0.920			0.879			0.993			0.940	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	1693	0	1825	1639	0	1825	3508	0	1789	3271	0
Flt Permitted	0.501			0.696			0.181			0.344		
Satd. Flow (perm)	938	1693	0	1303	1639	0	344	3508	0	632	3271	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50			149			7			226	
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		100.6			74.4			99.5			177.7	
Travel Time (s)		7.5			5.6			7.5			13.3	
Confl. Peds. (#/hr)	26		30	30		26	36		39	39		36
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	4%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Adj. Flow (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Shared Lane Traffic (%)												
Lane Group Flow (vph)	286	94	0	13	272	0	43	711	0	109	1117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	43.0	43.0		38.0	38.0		33.0	33.0		33.0	33.0	
Total Split (s)	43.0	43.0		43.0	43.0		57.0	57.0		57.0	57.0	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	36.0	36.0		36.0	36.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	10.0	10.0		10.0	10.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	21.0	21.0		21.0	21.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	32.5	32.5		32.5	32.5		53.5	53.5		53.5	53.5	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.54	0.54		0.54	0.54	
v/c Ratio	0.94	0.16		0.03	0.43		0.23	0.38		0.32	0.60	
Control Delay	71.8	12.2		21.2	13.0		18.4	14.9		17.9	14.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	71.8	12.2		21.2	13.0		18.4	14.9		17.9	14.6	
LOS	E	B		C	B		B	B		B	B	
Approach Delay		57.1			13.3			15.1			14.9	
Approach LOS		E			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 20.8		Intersection LOS: C	
Intersection Capacity Utilization 102.6%		ICU Level of Service G	
Analysis Period (min) 15			

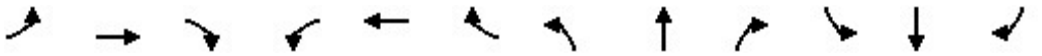
Splits and Phases: 1: Hurontario Street & Park Street East



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	286	94	13	272	43	711	109	1117
v/c Ratio	0.94	0.16	0.03	0.43	0.23	0.38	0.32	0.60
Control Delay	71.8	12.2	21.2	13.0	18.4	14.9	17.9	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.8	12.2	21.2	13.0	18.4	14.9	17.9	14.6
Queue Length 50th (m)	50.5	5.6	1.6	16.3	4.6	43.0	12.2	63.7
Queue Length 95th (m)	#97.0	16.0	5.6	36.6	12.6	56.6	25.4	85.0
Internal Link Dist (m)		76.6		50.4		75.5		153.7
Turn Bay Length (m)	39.0		37.0		33.0		19.0	
Base Capacity (vph)	337	641	469	685	184	1880	338	1855
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.15	0.03	0.40	0.23	0.38	0.32	0.60

Intersection Summary

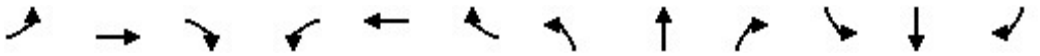
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Future Volume (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	1.00		1.00	0.96	
Flpb, ped/bikes	0.98	1.00		0.97	1.00		0.99	1.00		0.97	1.00	
Frt	1.00	0.92		1.00	0.88		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1778	1694		1779	1639		1806	3509		1744	3272	
Flt Permitted	0.50	1.00		0.70	1.00		0.18	1.00		0.34	1.00	
Satd. Flow (perm)	937	1694		1303	1639		344	3509		632	3272	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	286	44	50	13	53	219	43	678	33	109	671	446
RTOR Reduction (vph)	0	34	0	0	101	0	0	3	0	0	105	0
Lane Group Flow (vph)	286	60	0	13	171	0	43	708	0	109	1012	0
Confl. Peds. (#/hr)	26		30	30		26	36		39	39		36
Heavy Vehicles (%)	1%	0%	4%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)	32.5	32.5		32.5	32.5		53.5	53.5		53.5	53.5	
Effective Green, g (s)	32.5	32.5		32.5	32.5		53.5	53.5		53.5	53.5	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.54	0.54		0.54	0.54	
Clearance Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	304	550		423	532		184	1877		338	1750	
v/s Ratio Prot		0.04			0.10			0.20			c0.31	
v/s Ratio Perm	c0.31			0.01			0.13			0.17		
v/c Ratio	0.94	0.11		0.03	0.32		0.23	0.38		0.32	0.58	
Uniform Delay, d1	32.8	23.6		23.0	25.4		12.4	13.5		13.1	15.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	36.1	0.1		0.0	0.4		3.0	0.6		2.5	1.4	
Delay (s)	68.9	23.7		23.0	25.8		15.3	14.1		15.6	17.1	
Level of Service	E	C		C	C		B	B		B	B	
Approach Delay (s)		57.7			25.7			14.2			16.9	
Approach LOS		E			C			B			B	

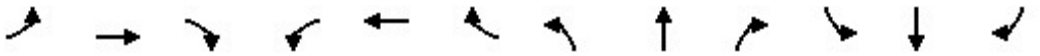
Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	208	2	26	226	256	5	122	27	173	87	10
Future Volume (vph)	31	208	2	26	226	256	5	122	27	173	87	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		10.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999				0.850		0.976			0.995	
Flt Protected		0.994			0.995			0.998			0.969	
Satd. Flow (prot)	0	1908	0	0	1878	1633	0	1430	0	0	1852	0
Flt Permitted		0.994			0.995			0.998			0.969	
Satd. Flow (perm)	0	1908	0	0	1878	1633	0	1430	0	0	1852	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		36.6			100.6			45.4			96.7	
Travel Time (s)		2.7			7.5			3.4			7.3	
Confl. Peds. (#/hr)	15		13	13		15	8		12	12		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	39%	0%	0%	0%	0%
Adj. Flow (vph)	31	208	2	26	226	256	5	122	27	173	87	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	241	0	0	252	256	0	154	0	0	270	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.6%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	31	208	2	26	226	256	5	122	27	173	87	10
Future Volume (vph)	31	208	2	26	226	256	5	122	27	173	87	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	31	208	2	26	226	256	5	122	27	173	87	10

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	241	252	256	154	270
Volume Left (vph)	31	26	0	5	173
Volume Right (vph)	2	0	256	27	10
Hadj (s)	0.02	0.08	-0.70	0.43	0.11
Departure Headway (s)	6.3	6.5	5.7	7.0	6.4
Degree Utilization, x	0.42	0.45	0.40	0.30	0.48
Capacity (veh/h)	528	532	606	458	524
Control Delay (s)	13.8	13.5	11.3	12.9	15.1
Approach Delay (s)	13.8	12.4		12.9	15.1
Approach LOS	B	B		B	C

Intersection Summary				
Delay	13.4			
Level of Service	B			
Intersection Capacity Utilization	64.6%	ICU Level of Service	C	
Analysis Period (min)	15			

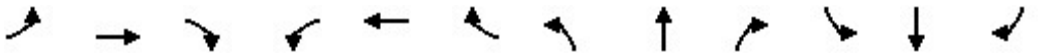
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	152	6	181	177	0	92
Future Volume (vph)	152	6	181	177	0	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.995		0.933			
Flt Protected	0.954					
Satd. Flow (prot)	1788	0	1757	0	0	1883
Flt Permitted	0.954					
Satd. Flow (perm)	1788	0	1757	0	0	1883
Link Speed (k/h)	48		48			48
Link Distance (m)	27.4		96.7			28.3
Travel Time (s)	2.1		7.3			2.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	152	6	181	177	0	92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	158	0	358	0	0	92
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	152	6	181	177	0	92
Future Volume (Veh/h)	152	6	181	177	0	92
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	152	6	181	177	0	92
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	362	270			358	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	362	270			358	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	76	99			100	
cM capacity (veh/h)	638	769			1201	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	158	358	92
Volume Left	152	0	0
Volume Right	6	177	0
cSH	642	1700	1201
Volume to Capacity	0.25	0.21	0.00
Queue Length 95th (m)	7.3	0.0	0.0
Control Delay (s)	12.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	12.4	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

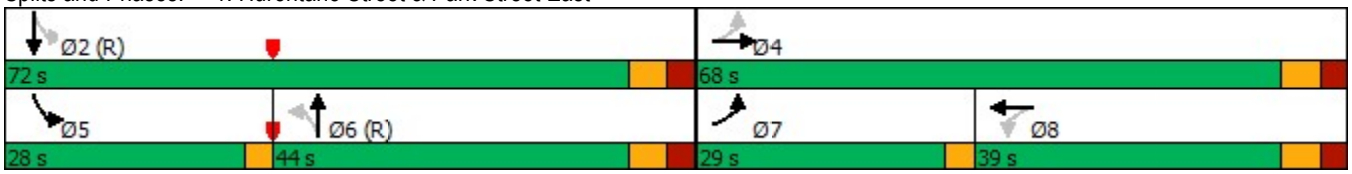


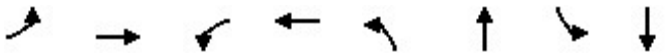
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Future Volume (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	39.0		0.0	37.0		0.0	33.0		0.0	19.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.98		0.97	0.97		0.95	0.99		0.96	0.94	
Frt		0.922			0.869			0.988			0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	1734	0	1825	1505	0	1547	3352	0	1772	3085	0
Flt Permitted	0.253			0.697			0.355			0.370		
Satd. Flow (perm)	476	1734	0	1305	1505	0	550	3352	0	665	3085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		48			230			6			95	
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		100.6			74.4			99.5			177.7	
Travel Time (s)		7.5			5.6			7.5			13.3	
Confl. Peds. (#/hr)	15		21	21		15	53		43	43		53
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	0%	0%	0%	9%	18%	7%	0%	3%	8%	2%
Adj. Flow (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Shared Lane Traffic (%)												
Lane Group Flow (vph)	337	92	0	32	276	0	29	570	0	282	784	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	7	4		8	8		6	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	8.0		8.0	8.0		8.0	8.0		4.0	8.0	
Minimum Split (s)	8.0	38.0		38.0	38.0		33.0	33.0		8.0	33.0	
Total Split (s)	29.0	68.0		39.0	39.0		44.0	44.0		28.0	72.0	
Total Split (%)	20.7%	48.6%		27.9%	27.9%		31.4%	31.4%		20.0%	51.4%	
Maximum Green (s)	26.0	61.0		32.0	32.0		37.0	37.0		25.0	65.0	
Yellow Time (s)	3.0	4.0		4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	3.0		3.0	3.0		3.0	3.0		0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lead/Lag	Lead			Lag	Lag		Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
Walk Time (s)		10.0		10.0	10.0		9.0	9.0			9.0	
Flash Dont Walk (s)		21.0		21.0	21.0		17.0	17.0			17.0	
Pedestrian Calls (#/hr)		0		0	0		0	0			0	
Act Effct Green (s)	45.1	41.1		12.8	12.8		66.2	66.2		88.9	84.9	
Actuated g/C Ratio	0.32	0.29		0.09	0.09		0.47	0.47		0.64	0.61	
v/c Ratio	0.86	0.17		0.27	0.80		0.11	0.36		0.52	0.41	
Control Delay	59.6	17.8		62.3	29.7		27.2	25.9		15.7	14.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	59.6	17.8		62.3	29.7		27.2	25.9		15.7	14.0	
LOS	E	B		E	C		C	C		B	B	
Approach Delay		50.7			33.1			26.0			14.5	
Approach LOS		D			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 26.2		Intersection LOS: C	
Intersection Capacity Utilization 95.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Hurontario Street & Park Street East

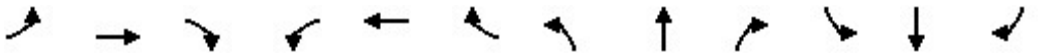




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	337	92	32	276	29	570	282	784
v/c Ratio	0.86	0.17	0.27	0.80	0.11	0.36	0.52	0.41
Control Delay	59.6	17.8	62.3	29.7	27.2	25.9	15.7	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.6	17.8	62.3	29.7	27.2	25.9	15.7	14.0
Queue Length 50th (m)	79.2	9.0	8.6	12.4	4.2	49.2	30.8	47.7
Queue Length 95th (m)	#99.3	20.0	17.7	41.3	13.7	81.6	56.5	75.9
Internal Link Dist (m)		76.6		50.4		75.5		153.7
Turn Bay Length (m)	39.0		37.0		33.0		19.0	
Base Capacity (vph)	400	782	298	521	260	1589	619	1907
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.12	0.11	0.53	0.11	0.36	0.46	0.41

Intersection Summary

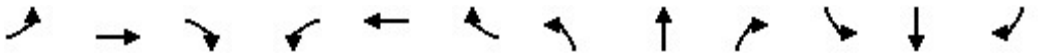
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Future Volume (vph)	337	44	48	32	35	241	29	524	46	282	510	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	0.99		1.00	0.94	
Flpb, ped/bikes	1.00	1.00		0.97	1.00		0.95	1.00		0.99	1.00	
Frt	1.00	0.92		1.00	0.87		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1803	1734		1779	1505		1472	3351		1747	3084	
Flt Permitted	0.25	1.00		0.70	1.00		0.35	1.00		0.37	1.00	
Satd. Flow (perm)	480	1734		1306	1505		550	3351		680	3084	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	337	44	48	32	35	241	29	524	46	282	510	274
RTOR Reduction (vph)	0	34	0	0	209	0	0	3	0	0	37	0
Lane Group Flow (vph)	337	58	0	32	67	0	29	567	0	282	747	0
Confl. Peds. (#/hr)	15		21	21		15	53		43	43		53
Heavy Vehicles (%)	1%	0%	0%	0%	0%	9%	18%	7%	0%	3%	8%	2%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			6		5	2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)	41.2	41.2		12.8	12.8		66.2	66.2		84.8	84.8	
Effective Green, g (s)	41.2	41.2		12.8	12.8		66.2	66.2		84.8	84.8	
Actuated g/C Ratio	0.29	0.29		0.09	0.09		0.47	0.47		0.61	0.61	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		3.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	381	510		119	137		260	1584		530	1868	
v/s Ratio Prot	c0.16	0.03			0.04			0.17		c0.06	0.24	
v/s Ratio Perm	c0.10			0.02			0.05			c0.26		
v/c Ratio	0.88	0.11		0.27	0.49		0.11	0.36		0.53	0.40	
Uniform Delay, d1	43.5	36.1		59.2	60.5		20.5	23.4		13.6	14.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	20.9	0.1		1.2	2.7		0.9	0.6		1.0	0.6	
Delay (s)	64.3	36.2		60.5	63.2		21.4	24.0		14.6	15.0	
Level of Service	E	D		E	E		C	C		B	B	
Approach Delay (s)		58.3			62.9			23.9			14.9	
Approach LOS		E			E			C			B	

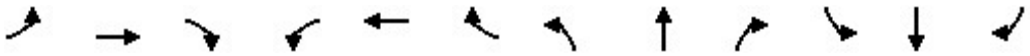
Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Future Volume (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		10.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999				0.850		0.976			0.998	
Flt Protected		0.996			0.989			0.999			0.961	
Satd. Flow (prot)	0	1861	0	0	1784	1617	0	1540	0	0	1842	0
Flt Permitted		0.996			0.989			0.999			0.961	
Satd. Flow (perm)	0	1861	0	0	1784	1617	0	1540	0	0	1842	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		36.6			100.6			45.4			96.7	
Travel Time (s)		2.7			7.5			3.4			7.3	
Confl. Peds. (#/hr)	30		4	4		30	9		10	10		9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	0%	1%	8%	1%	0%	27%	0%	0%	0%	0%
Adj. Flow (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	271	0	0	93	205	0	152	0	0	222	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Future Volume (vph)	24	244	3	20	73	205	3	122	27	179	39	4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	24	244	3	20	73	205	3	122	27	179	39	4

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	271	93	205	152	222
Volume Left (vph)	24	20	0	3	179
Volume Right (vph)	3	0	205	27	4
Hadj (s)	0.06	0.22	-0.68	0.27	0.15
Departure Headway (s)	5.7	6.3	5.4	6.1	5.9
Degree Utilization, x	0.43	0.16	0.31	0.26	0.36
Capacity (veh/h)	591	534	623	520	561
Control Delay (s)	12.9	9.3	9.5	11.3	12.2
Approach Delay (s)	12.9	9.5		11.3	12.2
Approach LOS	B	A		B	B

Intersection Summary				
Delay	11.4			
Level of Service	B			
Intersection Capacity Utilization	53.3%	ICU Level of Service	A	
Analysis Period (min)	15			

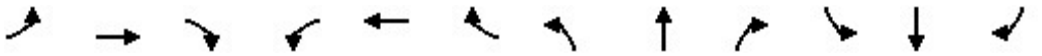
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	150	1	225	109	0	15
Future Volume (vph)	150	1	225	109	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999		0.956			
Flt Protected	0.953					
Satd. Flow (prot)	1793	0	1801	0	0	1883
Flt Permitted	0.953					
Satd. Flow (perm)	1793	0	1801	0	0	1883
Link Speed (k/h)	48		48			48
Link Distance (m)	27.4		96.7			28.3
Travel Time (s)	2.1		7.3			2.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	150	1	225	109	0	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	151	0	334	0	0	15
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	150	1	225	109	0	15
Future Volume (Veh/h)	150	1	225	109	0	15
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	150	1	225	109	0	15
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	294	280			334	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	294	280			334	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	78	100			100	
cM capacity (veh/h)	696	759			1225	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	151	334	15
Volume Left	150	0	0
Volume Right	1	109	0
cSH	697	1700	1225
Volume to Capacity	0.22	0.20	0.00
Queue Length 95th (m)	6.2	0.0	0.0
Control Delay (s)	11.6	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.6	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		

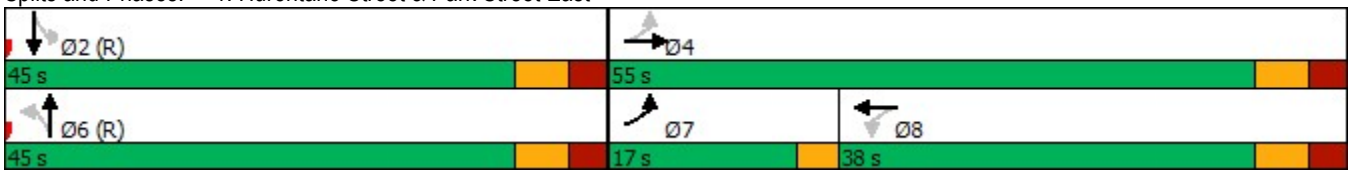


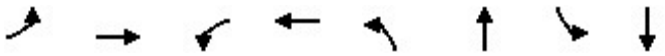
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Future Volume (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	39.0		0.0	37.0		0.0	33.0		0.0	19.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.98		0.97	0.97		0.99	1.00		0.98	0.96	
Frt		0.920			0.879			0.993			0.940	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	1693	0	1825	1639	0	1825	3508	0	1789	3271	0
Flt Permitted	0.231			0.696			0.185			0.347		
Satd. Flow (perm)	433	1693	0	1303	1639	0	353	3508	0	639	3271	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50			114			6			182	
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		100.6			74.4			99.5			177.7	
Travel Time (s)		7.5			5.6			7.5			13.3	
Confl. Peds. (#/hr)	26		30	30		26	36		39	39		36
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	4%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Adj. Flow (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Shared Lane Traffic (%)												
Lane Group Flow (vph)	286	94	0	13	272	0	43	711	0	109	1117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	7	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	4.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	8.0	43.0		38.0	38.0		33.0	33.0		33.0	33.0	
Total Split (s)	17.0	55.0		38.0	38.0		45.0	45.0		45.0	45.0	
Total Split (%)	17.0%	55.0%		38.0%	38.0%		45.0%	45.0%		45.0%	45.0%	
Maximum Green (s)	14.0	48.0		31.0	31.0		38.0	38.0		38.0	38.0	
Yellow Time (s)	3.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)		10.0		10.0	10.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)		21.0		21.0	21.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	35.3	31.3		14.3	14.3		54.7	54.7		54.7	54.7	
Actuated g/C Ratio	0.35	0.31		0.14	0.14		0.55	0.55		0.55	0.55	
v/c Ratio	0.83	0.17		0.07	0.82		0.22	0.37		0.31	0.60	
Control Delay	45.4	12.3		34.3	43.0		17.9	14.3		17.3	14.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	45.4	12.3		34.3	43.0		17.9	14.3		17.3	14.9	
LOS	D	B		C	D		B	B		B	B	
Approach Delay		37.2			42.6			14.5			15.1	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 100.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Hurontario Street & Park Street East

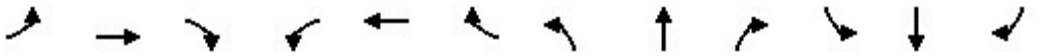




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	286	94	13	272	43	711	109	1117
v/c Ratio	0.83	0.17	0.07	0.82	0.22	0.37	0.31	0.60
Control Delay	45.4	12.3	34.3	43.0	17.9	14.3	17.3	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	12.3	34.3	43.0	17.9	14.3	17.3	14.9
Queue Length 50th (m)	42.5	6.1	2.2	30.4	4.0	38.0	10.8	59.3
Queue Length 95th (m)	#61.8	15.1	6.9	53.5	13.3	60.8	27.2	95.6
Internal Link Dist (m)		76.6		50.4		75.5		153.7
Turn Bay Length (m)	39.0		37.0		33.0		19.0	
Base Capacity (vph)	344	838	403	586	193	1922	349	1872
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.11	0.03	0.46	0.22	0.37	0.31	0.60

Intersection Summary

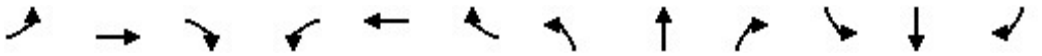
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Future Volume (vph)	286	44	50	13	53	219	43	678	33	109	671	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	1.00		1.00	0.96	
Flpb, ped/bikes	1.00	1.00		0.97	1.00		0.99	1.00		0.97	1.00	
Frt	1.00	0.92		1.00	0.88		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1802	1694		1779	1639		1806	3509		1744	3272	
Flt Permitted	0.23	1.00		0.70	1.00		0.19	1.00		0.35	1.00	
Satd. Flow (perm)	439	1694		1303	1639		352	3509		637	3272	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	286	44	50	13	53	219	43	678	33	109	671	446
RTOR Reduction (vph)	0	34	0	0	98	0	0	3	0	0	82	0
Lane Group Flow (vph)	286	60	0	13	174	0	43	708	0	109	1035	0
Confl. Peds. (#/hr)	26		30	30		26	36		39	39		36
Heavy Vehicles (%)	1%	0%	4%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)	31.3	31.3		14.3	14.3		54.7	54.7		54.7	54.7	
Effective Green, g (s)	31.3	31.3		14.3	14.3		54.7	54.7		54.7	54.7	
Actuated g/C Ratio	0.31	0.31		0.14	0.14		0.55	0.55		0.55	0.55	
Clearance Time (s)	3.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	328	530		186	234		192	1919		348	1789	
v/s Ratio Prot	c0.12	0.04			0.11			0.20			c0.32	
v/s Ratio Perm	c0.15			0.01			0.12			0.17		
v/c Ratio	0.87	0.11		0.07	0.74		0.22	0.37		0.31	0.58	
Uniform Delay, d1	28.9	24.5		37.1	41.1		11.7	12.9		12.4	15.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	21.5	0.1		0.2	12.1		2.7	0.5		2.3	1.4	
Delay (s)	50.4	24.6		37.3	53.2		14.4	13.4		14.7	16.4	
Level of Service	D	C		D	D		B	B		B	B	
Approach Delay (s)		44.0			52.5			13.5			16.2	
Approach LOS		D			D			B			B	

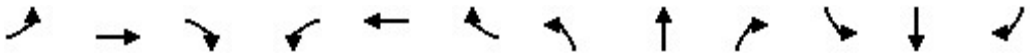
Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	182	2	26	196	256	5	122	27	173	87	10
Future Volume (vph)	31	182	2	26	196	256	5	122	27	173	87	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		10.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999				0.850		0.976			0.995	
Flt Protected		0.993			0.994			0.998			0.969	
Satd. Flow (prot)	0	1906	0	0	1876	1633	0	1430	0	0	1852	0
Flt Permitted		0.993			0.994			0.998			0.969	
Satd. Flow (perm)	0	1906	0	0	1876	1633	0	1430	0	0	1852	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		36.6			100.6			45.4			96.7	
Travel Time (s)		2.7			7.5			3.4			7.3	
Confl. Peds. (#/hr)	15		13	13		15	8		12	12		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	39%	0%	0%	0%	0%
Adj. Flow (vph)	31	182	2	26	196	256	5	122	27	173	87	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	215	0	0	222	256	0	154	0	0	270	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.7%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	31	182	2	26	196	256	5	122	27	173	87	10
Future Volume (vph)	31	182	2	26	196	256	5	122	27	173	87	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	31	182	2	26	196	256	5	122	27	173	87	10

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	215	222	256	154	270
Volume Left (vph)	31	26	0	5	173
Volume Right (vph)	2	0	256	27	10
Hadj (s)	0.02	0.09	-0.70	0.43	0.11
Departure Headway (s)	6.2	6.4	5.6	6.8	6.2
Degree Utilization, x	0.37	0.39	0.39	0.29	0.46
Capacity (veh/h)	533	538	615	474	541
Control Delay (s)	12.8	12.2	10.9	12.5	14.4
Approach Delay (s)	12.8	11.5		12.5	14.4
Approach LOS	B	B		B	B

Intersection Summary				
Delay	12.6			
Level of Service	B			
Intersection Capacity Utilization	62.7%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	152	6	181	177	0	92
Future Volume (vph)	152	6	181	177	0	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.995		0.933			
Flt Protected	0.954					
Satd. Flow (prot)	1788	0	1757	0	0	1883
Flt Permitted	0.954					
Satd. Flow (perm)	1788	0	1757	0	0	1883
Link Speed (k/h)	48		48			48
Link Distance (m)	27.4		96.7			28.3
Travel Time (s)	2.1		7.3			2.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	152	6	181	177	0	92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	158	0	358	0	0	92
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

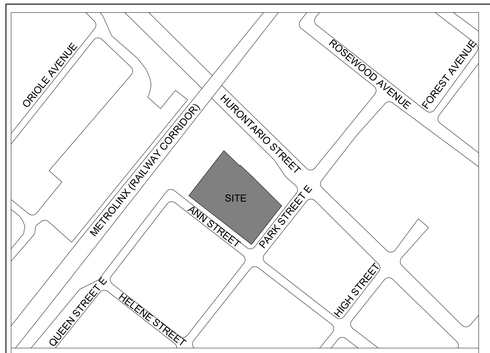
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	152	6	181	177	0	92
Future Volume (Veh/h)	152	6	181	177	0	92
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	152	6	181	177	0	92
Pedestrians						
Lane 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	362	270			358	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	362	270			358	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	76	99			100	
cM capacity (veh/h)	638	769			1201	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	158	358	92
Volume Left	152	0	0
Volume Right	6	177	0
cSH	642	1700	1201
Volume to Capacity	0.25	0.21	0.00
Queue Length 95th (m)	7.3	0.0	0.0
Control Delay (s)	12.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	12.4	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay		3.2	
Intersection Capacity Utilization		35.8%	ICU Level of Service
Analysis Period (min)		15	

Appendix D

Site Plan



KEYPLAN SCALE 1:3000

CITY OF MISSISSAUGA STANDARD NOTES:

i) I HEREBY CERTIFY THAT THIS DRAWING CONFIRMS IN ALL RESPECTS TO THE SITE DEVELOPMENT PLANS ARCHITECT OR ENGINEER'S SIGNATURE (IF APPLICABLE) AND PROFESSIONAL SEAL.
ii) THE CITY OF MISSISSAUGA REQUIRES THAT ALL WORKING DRAWINGS SUBMITTED TO THE BUILDING DIVISION AS PART OF AN APPLICATION FOR THE ISSUANCE OF A BUILDING PERMIT SHALL BE CERTIFIED BY THE ARCHITECT OR ENGINEER AS BEING IN CONFORMITY WITH THE SITE DEVELOPMENT PLAN AS APPROVED BY THE CITY OF MISSISSAUGA.
iii) ALL EXTERIOR LIGHTING WILL BE DIRECTED ONTO THE SITE AND WILL NOT INFRINGE UPON THE ADJACENT PROPERTIES.
iv) ALL ROOFTOP MECHANICAL UNITS SHALL BE SCREENED FROM VIEW BY THE APPLICANT.
v) PARKING SPACES RESERVED FOR PEOPLE WITH DISABILITIES MUST BE IDENTIFIED BY A SIGN, INSTALLED AT THE APPLICANT'S EXPENSE, IN ACCORDANCE WITH THE BY-LAW REQUIREMENTS AND BUILDING CORE REQUIREMENTS.
vi) THE APPLICANT WILL BE RESPONSIBLE FOR ENSURING THAT ALL PLANS CONFORM TO TRANSPORT CANADA'S RESTRICTIONS.
vii) GRADES WILL BE MET WITH 33% MAXIMUM SLOPE AT THE PROPERTY LINES AND WITHIN THE SITE.
viii) ALL DAMAGED AREAS ARE TO BE REINSTATED WITH TOPSOIL AND SOD PRIOR TO THE RELEASE OF SECURITIES.
ix) SIGNAGE SHOWN ON THE SITE DEVELOPMENT PLANS IS FOR INFORMATION PURPOSES ONLY. ALL SIGNS WILL BE SUBJECT TO THE PROVISIONS OF SIGN BY-LAW 0054-2002, AS AMENDED, AND A SEPARATE SIGN APPLICATION WILL BE REQUIRED THROUGH THE BUILDING DIVISION.
x) ANY FENCING ADJACENT TO MUNICIPAL LANDS IS TO BE LOCATED 15cm (6.0 in.) INSIDE THE PROPERTY LINE.
xi) ONLY "SHEILDED" LIGHTING FIXTURES ARE PERMITTED FOR ALL DEVELOPMENT, EXCEPT FOR DETACHED AND SEMI-DETACHED DWELLINGS WITHIN 60m (196.8 ft.) OF A RESIDENTIALLY ZONED PROPERTY AND MUST CONFIRM TO THE ENGINEER CERTIFIED LIGHTING PLAN.
xii) THE OWNER COVENANTS AND AGREES TO CONSTRUCT AND INSTALL "SHEILDED" LIGHTING FIXTURES ON THE SUBJECT LANDS, IN CONFORMITY WITH THE SITE PLAN AND ENGINEER CERTIFIED LIGHTING PLAN TO THE STATISFACTION OF THE CITY OF MISSISSAUGA.
xv) WHERE PLANTING IS TO BE LOCATED IN LANDSCAPED AREAS ON TOP OF AN UNDERGROUND PARKING STRUCTURE, IT IS THE RESPONSIBILITY OF THE APPLICANT TO ARRANGE THE COORDINATION OF THE DESIGN OF THE UNDERGROUND PARKING STRUCTURE WITH THE LANDSCAPE ARCHITECT AND THE CONSULTING ENGINEER. UNDERGROUND PARKING STRUCTURES WITH LANDSCAPING AREA TO BE CAPABLE OF SUPPORTING THE FOLLOWING LOADS:

- 15 cm OF DRAINAGE GRAVEL PLUS 40 cm TOPSOIL FOR SOD
- 15 cm OF DRAINAGE GRAVEL PLUS 60 cm TOPSOIL FOR SHRUBS
- 15 cm OF DRAINAGE GRAVEL PLUS 90 cm TOPSOIL FOR TREES

OR

- PREFABRICATED SHEET DRAIN SYSTEM* WITH A COMPRESSIVE STRENGTH OF 1003 KPA PLUS 40 cm TOPSOIL FOR SOD
- PREFABRICATED SHEET DRAIN SYSTEM* WITH A COMPRESSIVE STRENGTH OF 1003 KPA PLUS 40 cm TOPSOIL FOR SCRUBS
- PREFABRICATED SHEET DRAIN SYSTEM* WITH A COMPRESSIVE STRENGTH OF 1003 KPA PLUS 40 cm TOPSOIL FOR TREES

*TERRADRAIN 900 OR APPROVED EQUAL

xvi) THE STRUCTURAL DESIGN OF ANY RETAINING WALL OVER 0.6m IN HEIGHT OR ANY RETAINING WALL LOCATED ON A PROPERTY LINE IS TO BE SHOWN ON THE SITE GRADING PLAN FOR THIS PROJECT AND IS TO BE APPROVED BY THE CONSULTING ENGINEER FOR THE PROJECT.
xvii) CONTINUOUS 15 cm HIGH BARRIER TYPE POURED CONCRETE CURBING WILL BE PROVIDED BETWEEN ASPHALT AND LANDSCAPED AREAS THROUGHOUT THE SITE.
xviii) ALL UTILITY COMPANIES WILL BE NOTIFIED FOR LOCATES PRIOR TO THE INSTALLATION OF THE HOARDING THAT LIES WITHIN THE SITE AND WITHIN THE LIMIT OF THE CITY BOULEVARD AREA.

MISSISSAUGA

Site Plan Application Process Guidelines

2.4.6 Condominium Declaration for Multiple Facility Residential Developments

The following note should be on the site plan drawing for all multiple residential developments.

Standard Signed Condominium Declaration for Multiple Family Residential Developments:

I hereby certify that the Landscape Plan conforms to the Site Grading and Drainage Plan for this application.

As follows:

DOMINIUM OF CANADA) IN THE MATTER OF A
PROVINCE OF ONTARIO) MULTIPLE RESIDENTIAL
) BUILDING DEVELOPMENT

REGIONAL MUNICIPALITY) ON THE PROPERTY LOCATED IN
OF PEEL) THE CITY OF MISSISSAUGA
) BEING KNOWN AS
TO WIT:) _____
) _____
) _____
) _____

I, _____

MAKE OATH AND SAY AS FOLLOWS:

1. I AM THE PRESIDENT OF _____ WHICH IS THE OWNER AND BUILDER OF MULTI RESIDNIAL BUILDING(S) ON THE PROPERTY DESCRIBED ABOVE.

2. THAT THE SAID MULTI RESIDENTIAL BUILDING(S) IS BEING BUILT TO BE SOLD / RENTED AS CONDOMNIUM / RENTAL TOWNHOUSES / APARTMENTS (AS APPLICABLE).

AND I MAKE THIS SOLEMN DECLARATION CONSCIENTIOUSLY BELIEVING IT TO BE TRUE AND KNOWING THAT IT IS ON THE SAME FORCE AND EFFECT AS IF I MAKE IT UNDER OATH.

DECLARED BEFORE ME AT THE) _____
_____) _____
) _____
IN THE MUNICIPALITY OF) _____
_____) _____
THIS_____, DAY OF _____) _____
20 _____.) _____
) _____
_____
A COMMISSIONER ETC. _____

WASTE COLLECTION NOTE:

1. THE BINS SHOULD BE PROPERLY POSITIONED IN THE COLLECTION AREA ON THE DAY OF COLLECTION BEFORE 7AM.
2. THE DRIVER IS NOT REQUIRED TO EXIT THE COLLECTION VEHICLE TO FACILITATE COLLECTION.
3. PROPERTY MANAGEMENT IS RESPONSIBLE FOR MOVING BINS DURING COLLECTION.
4. THE REGION WILL NOT BE RESPONSIBLE FOR EMPTYING BINS THAT ARE INACCESSIBLE TO THE COLLECTION VEHICLE.
5. PROPERTY MANAGEMENT MUST BE VISIBLE TO WASTE COLLECTION VEHICLE ON APPROACH TO THE COLLECTION POINT, OTHERWISE THE WASTE COLLECTION VEHICLE WILL NOT ENTER THE SITE.
6. THE GROUND OF THE COLLECTION POINT WILL BE MARKED TO SHOW PROPERTY MANAGEMENT STAFF AND WASTE COLLECTION VEHICLE DRIVERS WHERE BINS MUST BE STAGED TO BE LIFTED FOR COLLECTION.

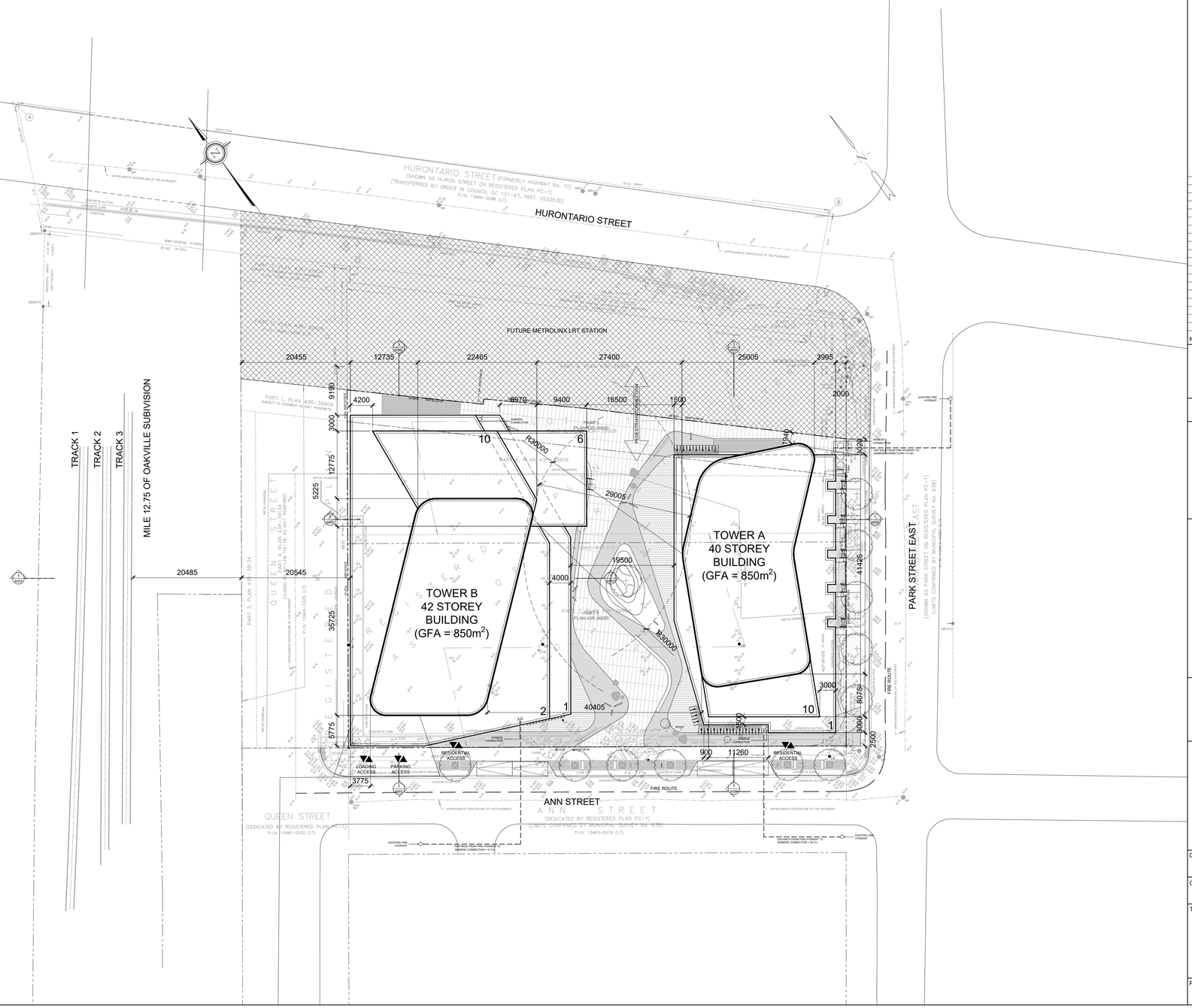
TREE PROTECTION NOTE:

THE APPLICANT IS RESPONSIBLE FOR ENSURING THAT TREE PROTECTION HOARDING IS MAINTAINED THROUGHOUT ALL PHASES OF DEMOLITION AND CONSTRUCTION IN THE LOCATION AND CONDITION AS APPROVED BY THE PLANNING AND BUILDING DEPARTMENT. NO MATERIALS (BUILDING MATERIALS, SOIL, ETC.) MAY BE STOCKPILED WITHIN THE AREA OF HOARDING. FAILURE TO MAINTAIN THE HOARDING AS ORIGINALLY APPROVED OR THE STORAGE OF MATERIALS WITHIN THE HOARDING WILL BE CAUSE FOR THE LETTER OF CREDIT TO BE HELD FOR TWO YEARS FOLLOWING COMPLETION OF ALL SITE WORKS. HOARDING MUST BE INSPECTED PRIOR TO THE REMOVAL OF ANY TREE HOARDING FROM THE SITE.

OWNER'S SIGNATURE: _____
DATE: _____

STATISTICS

LOT AREA - .59 HA
FLOOR AREA - 3,595m^2
PROPOSED GFA - 75,540m^2
REQUIRED LANDSCAPE AREA - 40% (2,379.30m^2)
PROPOSED LANDSCAPE AREA - 28% (1,672.56m^2)
PAVED AREA - 2,038.49m^2
REQUIRED PARKING SPACES - 1,795
PROVIDED PARKING SPACES - 474
REQUIRED LOADING SPACES - 1 TYPE 'G'
PROPOSED LOADING SPACES - 1 TYPE 'G' AND 2 TYPE 'C'
SUITE SCHEDULE;
1BEDROOMS = 813
2 BEDROOMS = 326
SUITE SIZES;
1 BEDROOM AVERAGE = 51.4m^2 (553ft^2)
2 BEDROOM AVERAGE = 68.7m^2 (739ft^2)



NOTES:

1. REFER TO SITE GRADING PLAN PREPARED BY WSP C102, DATED 28 JANUARY 2022, FOR THE PURPOSES OF OBTAINING SITE GRADING INFORMATION.
2. REFER TO LANDSCAPE PLANS FOR PLANTING AND PAVING LOCATIONS, MATERIALS AND DETAILS.
3. REFER TO THE TRAFFIC REPORT FOR ALL VEHICLE MOVEMENT DIAGRAMS.
4. CURB AND SIDEWALK AT THE VEHICULAR ACCESS POINT WILL BE BUILT AS PER CITY OF MISSISSAUGA STANDARDS.

NO.	REVISIONS	DATE
1	ISSUED FOR ZBA/OPA	4 FEBRUARY 2022

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS ON THE JOB.

COREARCHITECTS
CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 343 0400 ○ F +1 416 343 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

SITE PLAN APPLICATION FILE NO.:
PROJECT NAME:
30 QUEEN STREET EAST
42 STOREY MIXED-USE (RESIDENTIAL & RETAIL) BUILDING
PROJECT ADDRESS:
30 QUEEN STREET E, MISSISSAUGA
LEGAL DESCRIPTION:
PART OF LOTS 1 AND , REGISTERED PLAN PC-2, CITY OF MISSISSAUGA, REGIONAL MUNICIPALITY OF PEEL
OWNER:
EDENSHAW QUEEN DEVELOPMENTS LIMITED
OWNER'S ADDRESS:
129 LAKESHORE ROAD EAST, 2ND FLOOR MISSISSAUGA, ON, L5G 1E5 P: 905-990-3500 F:905-890-9501

30 QUEEN
STREET EAST
MISSUSSAUGA, ON

PROJECT NORTH
TRUE NORTH

ONTARIO ASSOCIATION OF ARCHITECTS
DEN POLETTI
LICENCE
4957

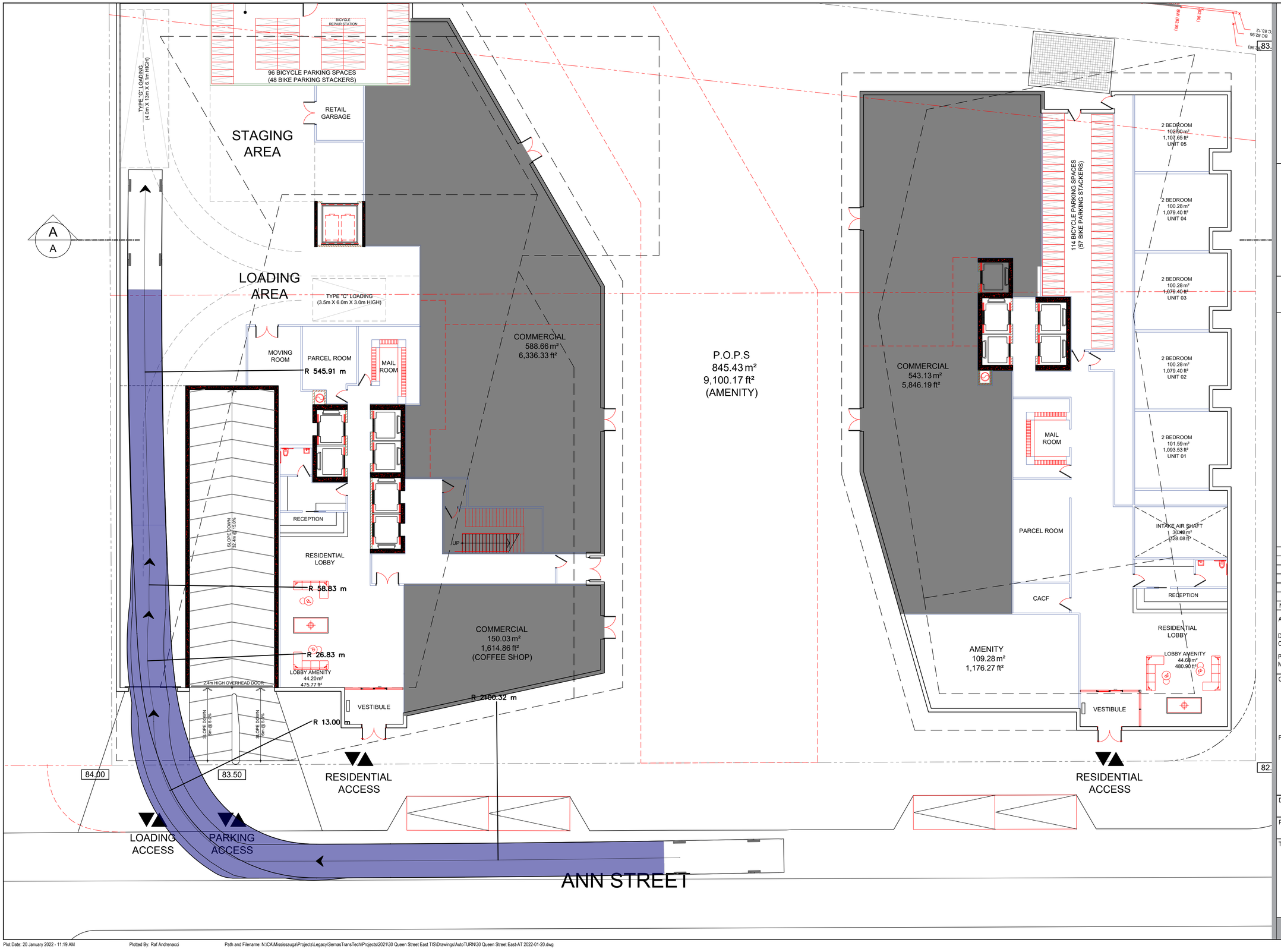
DRAWN	SCALE
G.S.	1:400
CHECKED	DATE
G.S.	DECEMBER 2021

TITLE
SITE PLAN

PROJECT NO.	DRAWING NO.
21-231	A100

Appendix E

AutoTURN Circulation Review



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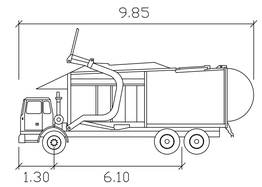
LICENSED PROFESSIONAL ENGINEER
Dec. 16, 2021
W.C. MARIA
PROVINCE OF ONTARIO

Bar is 25mm on original size sheet
0 25mm



Peel Garbage Front
meters
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Track : 2.77
Lock to Lock Time 6.0
Steering Angle : 28.0

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	1/20/22

Author	J.E	Designer	J.E
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client
-

Project
30 Queen Street East

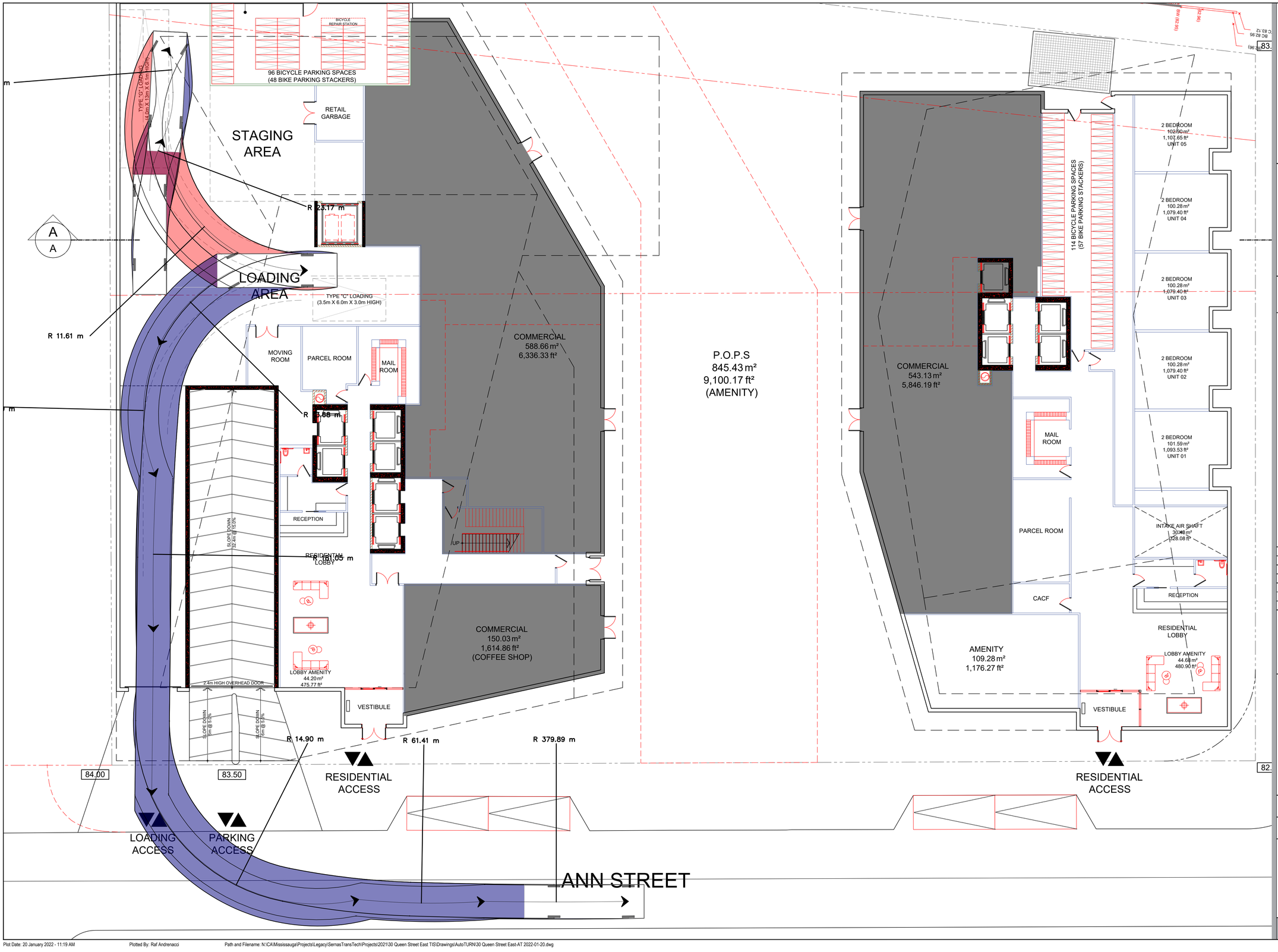
Date: January 20, 2022
Scale: NTS

Project No.
-

Title
VEHICLE MANEUVERING DIAGRAM - WASTE TRUCK (INBOUND)

Size
ANSI D

Sheet No.
AT-101



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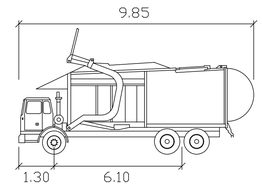
0 25mm



Peel Garbage Front
meters
Width : 2.77
Track : 2.77
Lock to Lock Time 6.0
Steering Angle : 28.0

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	1/20/22

Author	J.E	Designer	J.E
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client
-

Project
30 Queen Street East

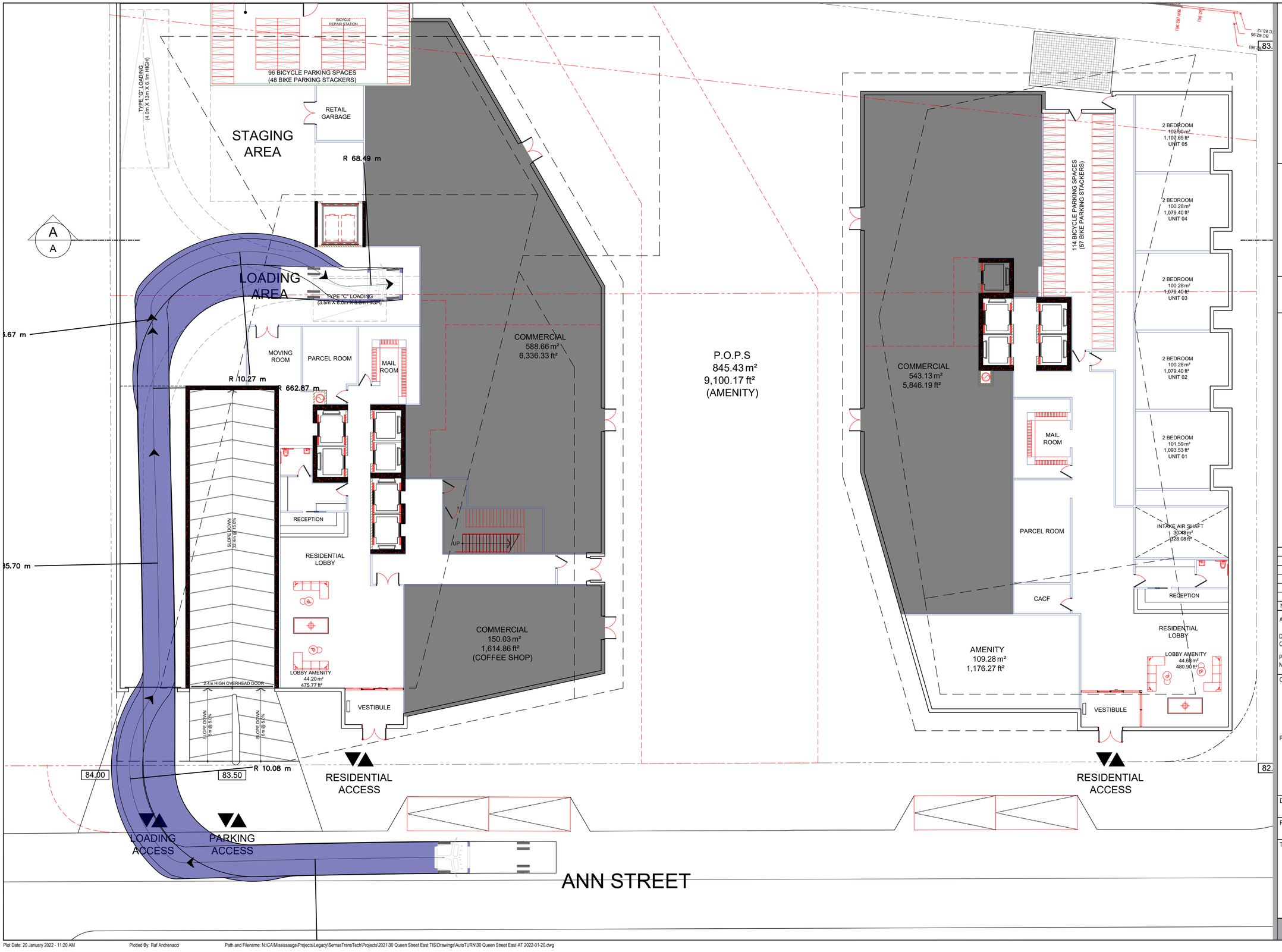
Date: January 20, 2022
Scale: NTS

Project No.
-

Title
VEHICLE MANEUVERING DIAGRAM - WASTE TRUCK (OUTBOUND)

Size
ANSI D

Sheet No.
AT-102



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PROVINCE OF ONTARIO

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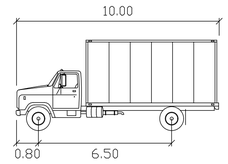
0 25mm



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Steering Angle	: 40.2

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	1/20/22

Author	J.E	Designer	J.E
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client
-

Project
30 Queen Street East

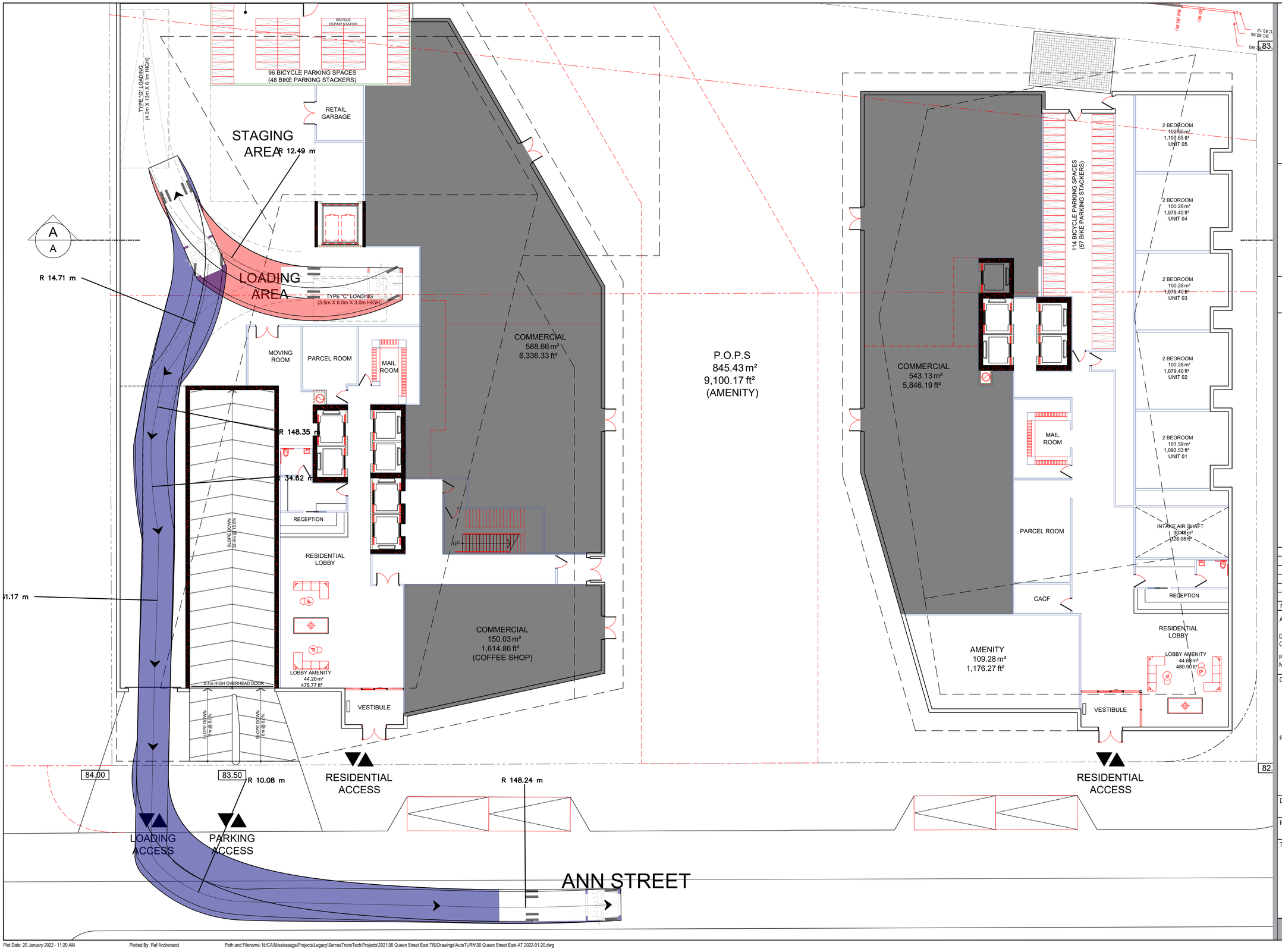
Date: January 20, 2022
Scale: NTS

Project No.
-

Title
VEHICLE MANEUVERING DIAGRAM - MSU TRUCK (INBOUND)

Size
ANSI D

Sheet No.
AT-103



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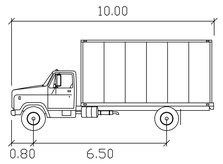

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Steering Angle	: 40.2

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	1/20/22

Author	J.E	Designer	J.E
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client
-

Project
30 Queen Street East

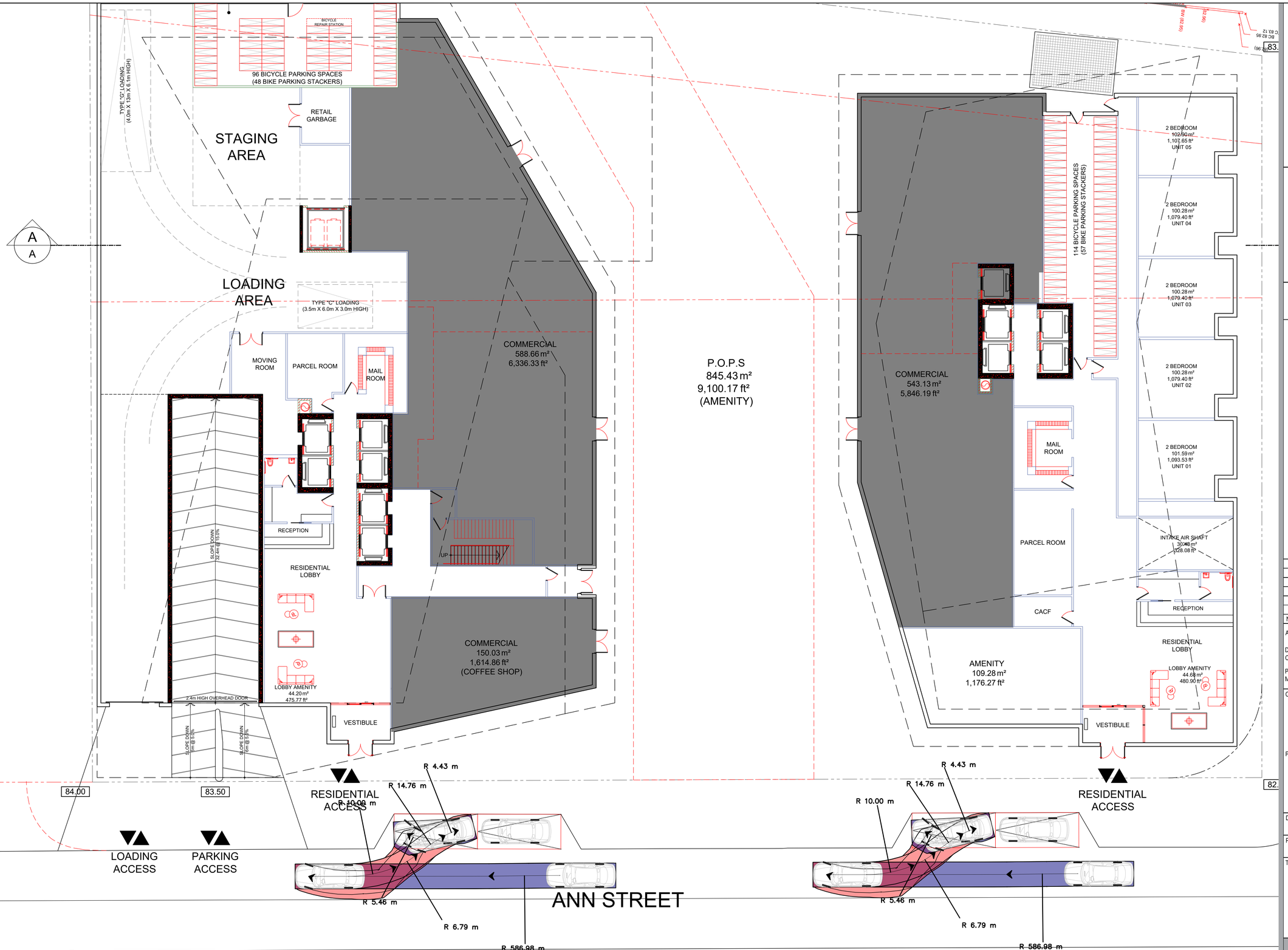
Date: January 20, 2022
Scale: NTS

Project No.
-

Title
VEHICLE MANEUVERING DIAGRAM - MSU TRUCK (OUTBOUND)

Size
ANSI D

Sheet No.
AT-104



A
A

5.60
1.10 3.20

P

	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	6.0
Steering Angle	: 35.9

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PROVINCE OF ONTARIO

Bar is 25mm on original size sheet
0 25mm

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	1/20/22

Author	J.E	Designer	J.E
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client
-

Project
30 Queen Street East

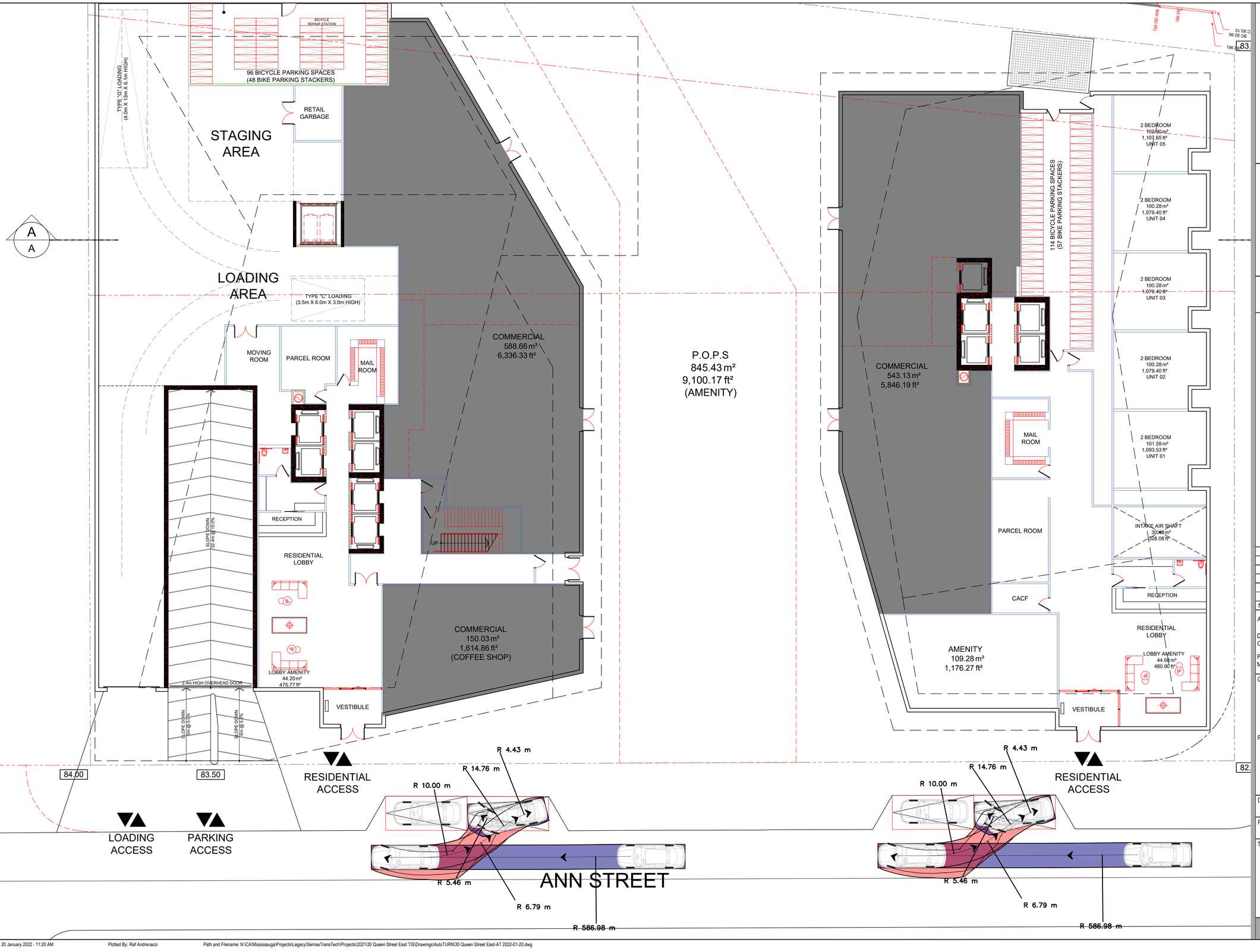
Date: January 20, 2022
Scale: NTS

Project No.
-

Title
VEHICLE MANEUVERING DIAGRAM - PTAC VEHICLE (INBOUND FRONT)

Size
ANSI D

Sheet No.
AT-105



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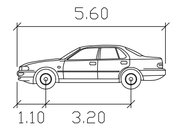

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	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	6.0
Steering Angle	: 35.9

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	1/20/22

Author	J.E	Designer	J.E
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client
-

Project
30 Queen Street East

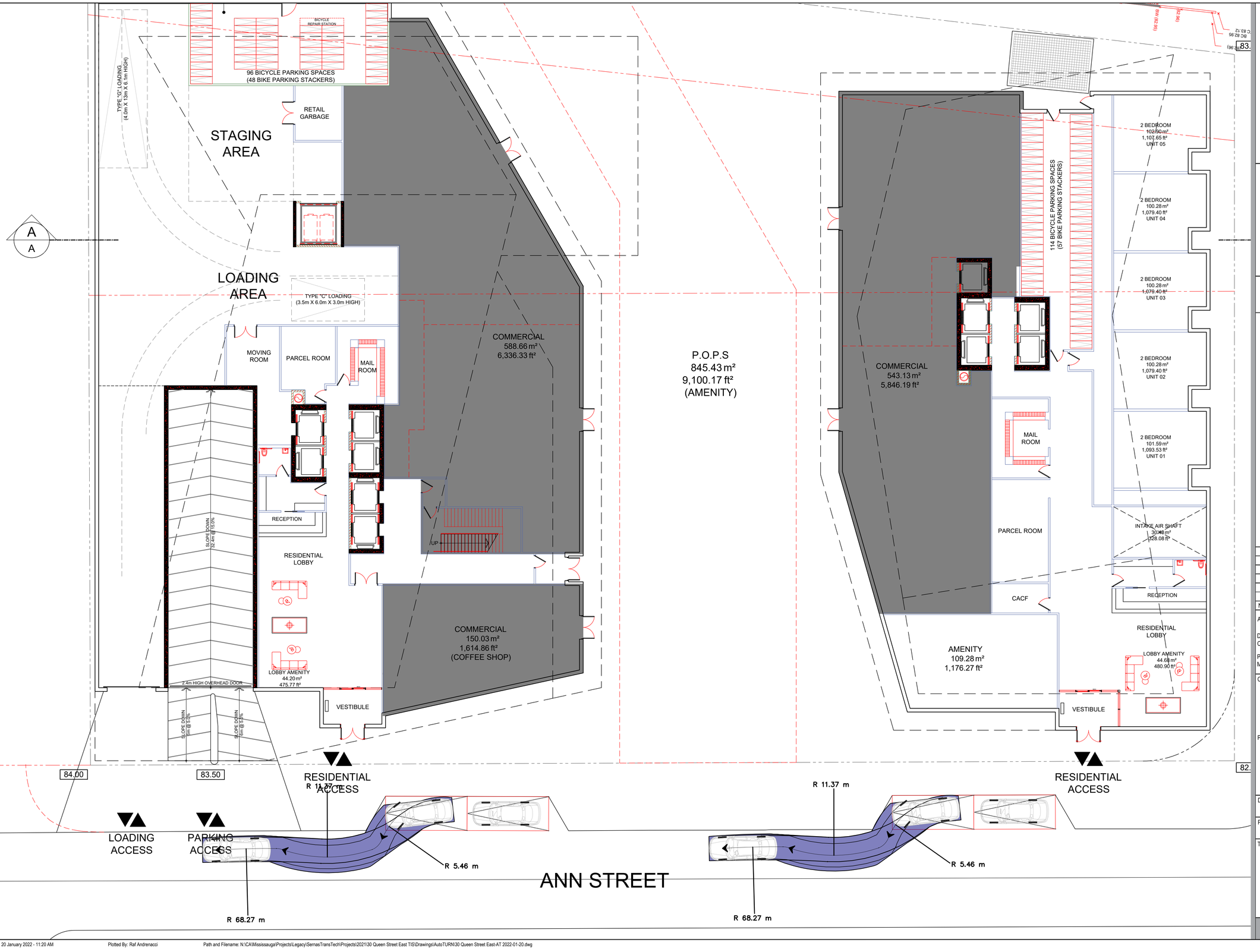
Date: January 20, 2022
Scale: NTS

Project No.: -

Title
VEHICLE MANEUVERING DIAGRAM - PTAC VEHICLE (INBOUND BACK)

Size: ANSI D

Sheet No.
AT-106



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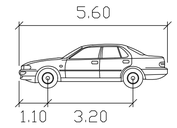

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Width	: 2.00
Track	: 2.00
Lock to Lock Time	6.0
Steering Angle	: 35.9

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	1/20/22

Author	J.E	Designer	J.E
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client
-

Project
30 Queen Street East

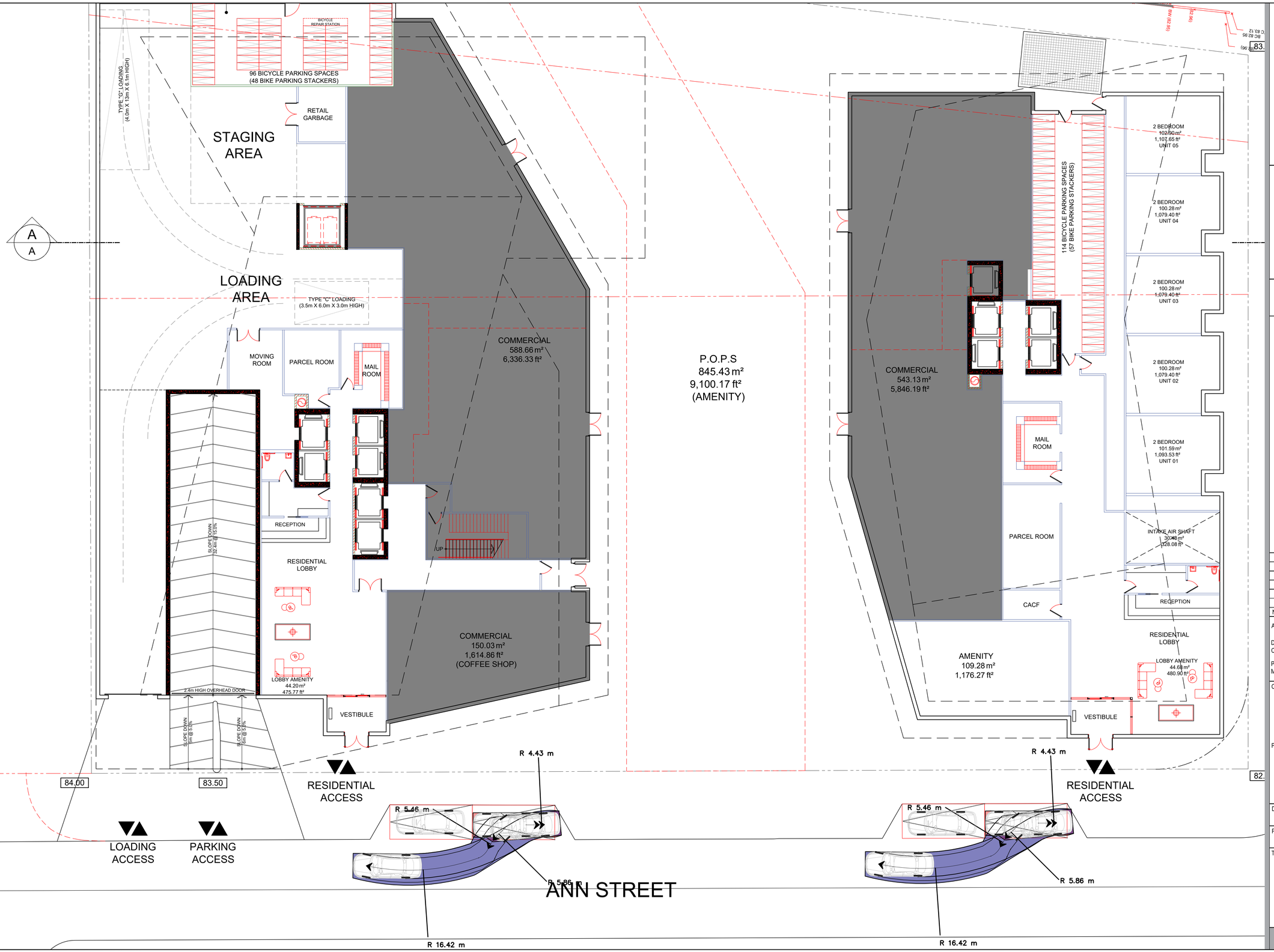
Date: January 20, 2022
Scale: NTS

Project No.
-

Title
VEHICLE MANEUVERING DIAGRAM - PTAC VEHICLE (OUTBOUND FRONT)

Size
ANSI D

Sheet No.
AT-107



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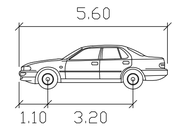

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Steering Angle	: 35.9

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	1/20/22

Author	J.E	Designer	J.E
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client
-

Project
30 Queen Street East

Date: January 20, 2022
Scale: NTS

Project No.
-

Title
VEHICLE MANEUVERING DIAGRAM - PTAC VEHICLE (OUTBOUND BACK)

Size
ANSI D

Sheet No.
AT-108

Appendix F

Background Developments

Figure 1 Background Development Locations

Table 1 42-46 Park Street East & 23 Elizabeth Street North Site Trips

Background Development	Units	Year	Peak Hour Trips					
			Weekday AM			Weekday PM		
			In	Out	Total	In	Out	Total
42-46 Park Street East & 23 Elizabeth Street North (LEA Consulting)	258 Residential Units	2020	13	50	63	45	28	73

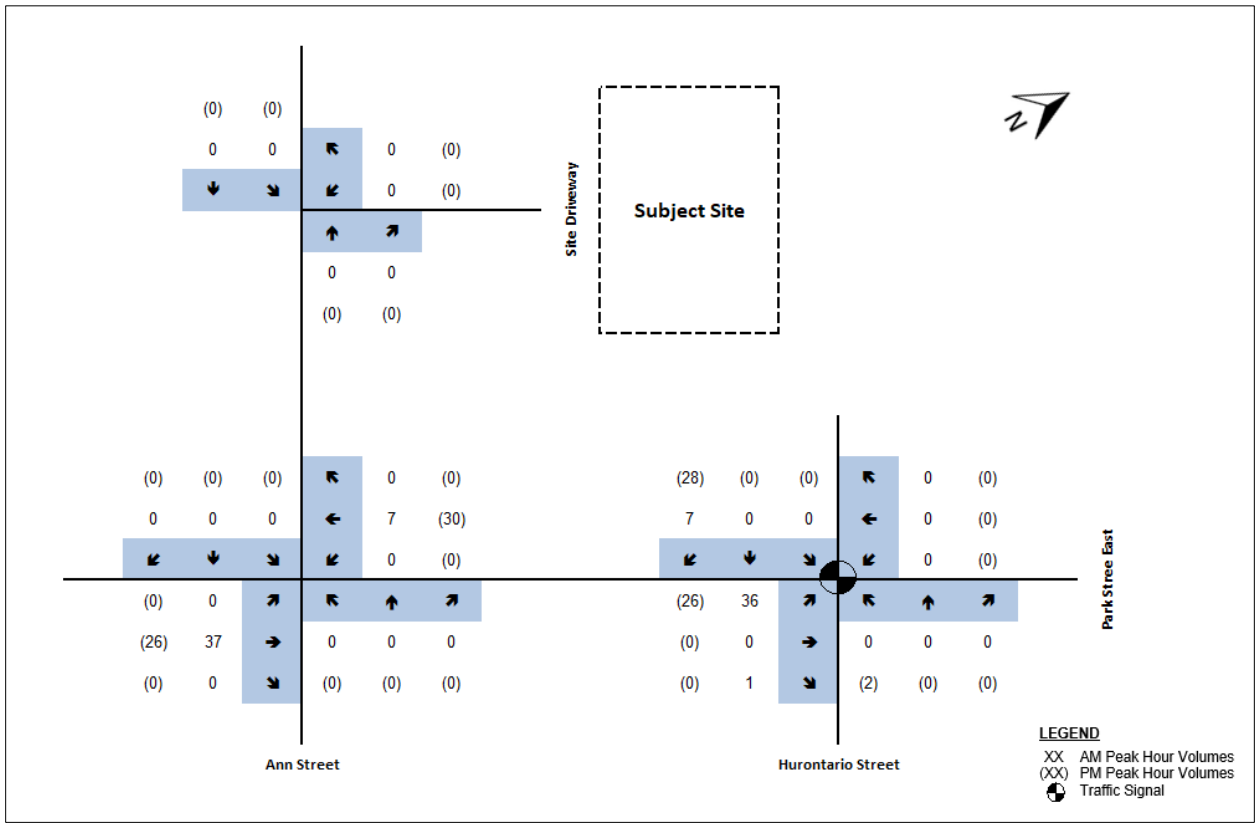

Figure 2 42-46 Park Street East & 23 Elizabeth Street North Site Trips within Study Area

Table 2 22-28 Ann Street & 78 Park Street East Site Trips

Background Development	Units	Year	Peak Hour Trips					
			Weekday AM			Weekday PM		
			In	Out	Total	In	Out	Total
22-28 Ann Street & 78 Park Street East (LEA Consulting)	316 Residential Units	2019	18	59	77	52	26	78

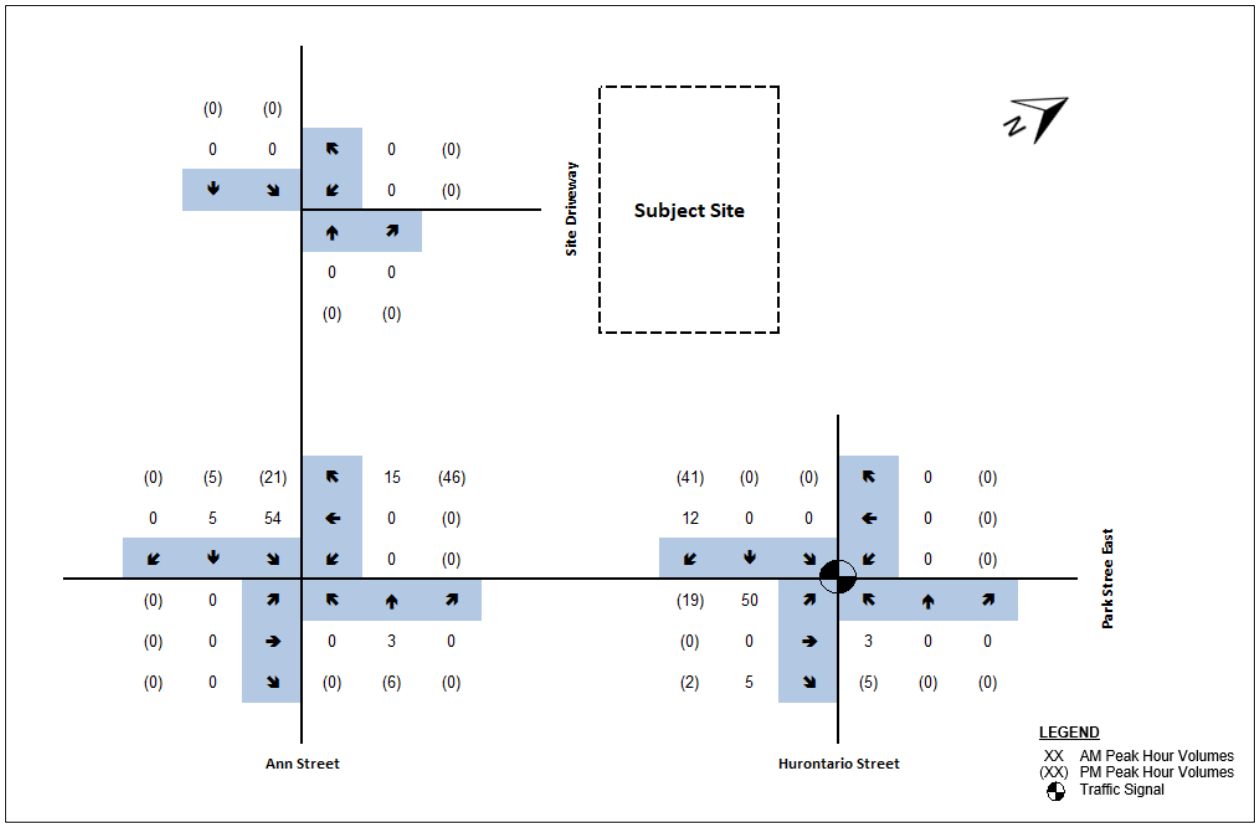

Figure 3 22-28 Ann Street & 78 Park Street East Site Trips within Study Area

Table 3 6, 8, 10 Ann Street Site Trips

Background Development	Units	Year	Peak Hour Trips					
			Weekday AM			Weekday PM		
			In	Out	Total	In	Out	Total
6, 8, 10 Ann Street (GHD)	69 Residential Units	2014	5	24	29	22	11	33

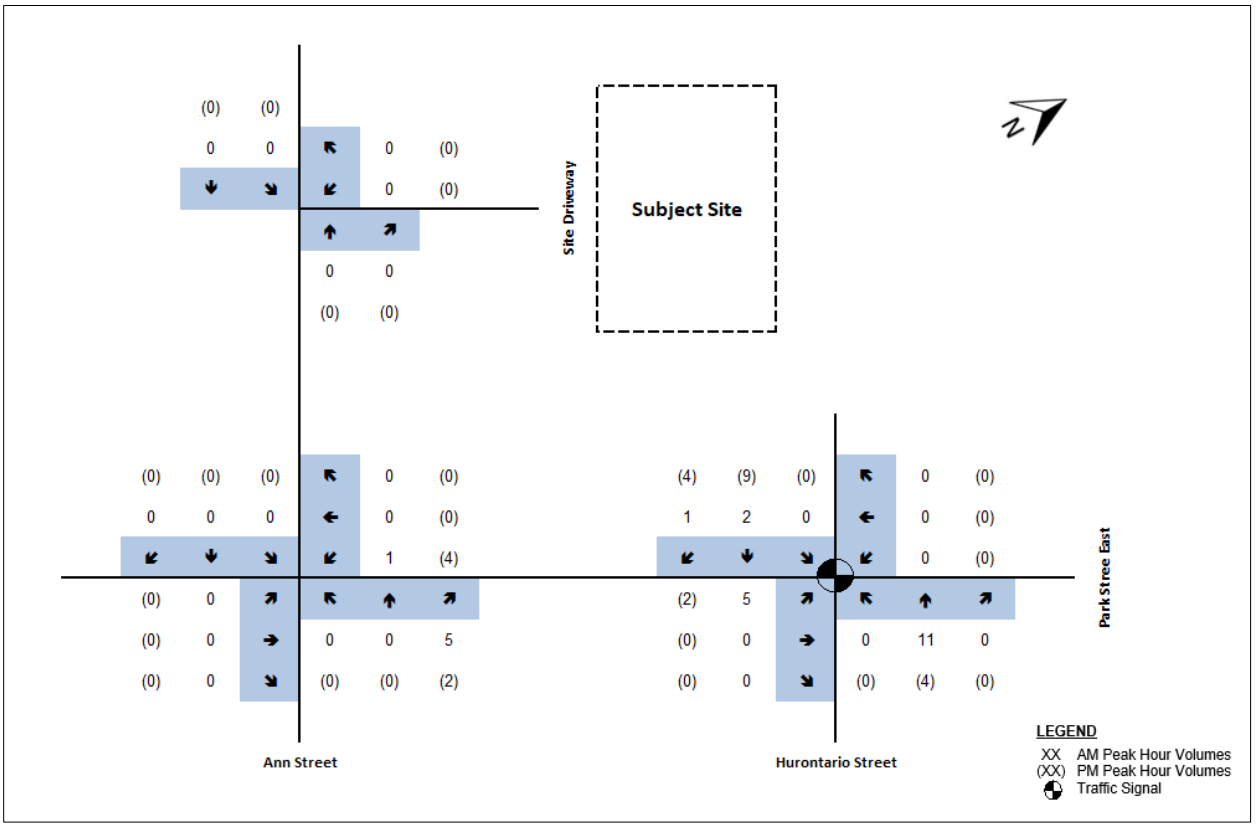

Figure 4 6, 8, 10 Ann Street Site Trips within Study Area

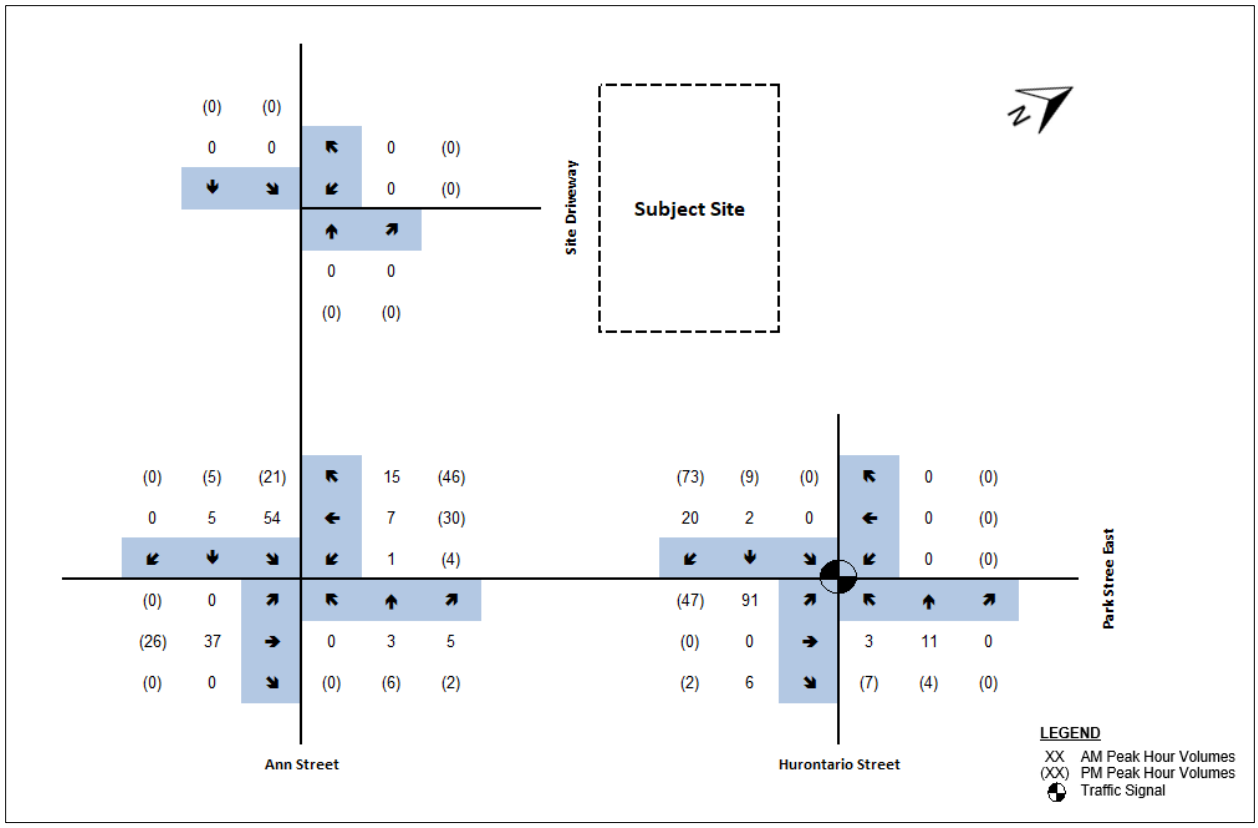

Figure 5 Total Background Development Traffic


GHD