

DILLON
CONSULTING

1495754 ONTARIO INC.

0 Esplanade Drive, Windsor

Transportation Impact Study

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1.0 Introduction

1.1 Purpose

Dillon Consulting Limited (Dillon) has been retained by 1495754 Ontario Inc. to undertake a transportation impact study (TIS) which reviews the impact of a proposed residential development on vacant lands in the city of Windsor, Ontario. This proposed residential development would be located on the north side of Esplanade Drive just east of the Ganatchio Trail.

This report documents the anticipated change to traffic volumes and intersection operations associated with the proposed development and identifies any modification to traffic controls or infrastructure that may be necessary to mitigate the impacts from the additional traffic.

1.2 Proposed Development

Located on the north side of Esplanade Drive just east of the Ganatchio Trail, the residential development is proposed to have 54 apartment units. One access point to the road network is proposed via Esplanade Drive.

Figure 1 illustrates the concept plan for the development. A detailed version can be found in **Appendix A**.



Figure 1: Development Concept Plan

1.3

Scope of Analyses

The report documents the following:

- Existing traffic volumes, and traffic projections for the study area intersections and the site access;
- Intersection capacity analyses under existing conditions, future background conditions, and total future conditions;
- Future mode shares and non-auto trips that may be generated by the site; and
- Identification of potential modifications to transportation infrastructure (roads, intersection traffic control or geometry) that may be required.

Traffic data collection, forecasts and operational analyses have been completed at:

- Esplanade Drive and Lilac Lane (unsignalized);
- Esplanade Drive and Scarsdale Road / School Drop-off (unsignalized); and
- Esplanade Drive and Sherway Drive (unsignalized).

Traffic projections and intersection analyses were completed for a weekday AM peak hour, aligning with school arrival times, and a weekday mid-afternoon (PM) peak hour, aligning with school dismissal times. Traffic data was collected and analyzed during the school arrival and dismissal peak hours as there are two elementary schools located along Esplanade Drive, near the site. These peak hours would capture the busiest time periods along Esplanade Drive.

The development is anticipated to be constructed by 2026. For the purposes of this study, the final horizon year has been identified as 2031 (five years following the complete build-out).

2.0 Existing (2024) Conditions

2.1 Existing Transportation Network Characteristics

The following describes the existing road network in the immediate study area:

Esplanade Drive is an east-west local street that is under the jurisdiction of the City of Windsor. It extends westerly from Forest Glade Drive before turning into a north-south roadway at Lilac Lane. The street provides access to residential properties, two elementary schools, and the Ganatchio Trail, which extends northerly to Tecumseh Road East. The street features a two-lane cross-section (one lane per direction) with sidewalks on both sides of the road. A cycling route and two 'Playground Ahead' advance warning signs are located along Esplanade Drive. The 'Playground Ahead' signs are located between Scarsdale Road and Forest Glade Public School - Primary Learning Center. This type of sign warns drivers that children maybe playing in the area. There is no regulatory speed limit signage along Esplanade Drive. Therefore, the speed limit would default to the statutory limit of 50 km/h.

Lilac Lane is an east-west local road that is under the jurisdiction of the City of Windsor. The road extends westerly 200 metres from Esplanade Drive before ending at Lauzon Road. The road features a two-lane cross-section (one lane per direction) and a sidewalk on the north side of the road. A cycling route is located along the roadway. As no speed limit signage is present, the speed limit would default to the statutory limit of 50 km/h.

Scarsdale Road is a north-south local road that is under the jurisdiction of the City of Windsor. The north leg of the intersection is named "Scarsdale Road" and the south leg consists of the exit lane which forms part of the Forest Glade Public School pick-up/drop-off facility. Scarsdale Road is not a through roadway, extending northerly only 135 metres, and can only be accessed using Esplanade Drive. The road features a two-lane cross-section (one lane per direction) with sidewalks on both sides of the road. As no speed limit signage is present, the speed limit would default to the statutory limit of 50 km/h.

Sherway Drive is a north-south local road that is under the jurisdiction of the City of Windsor. The road extends 270 metres before ending at Ridge Road. The road features a two-lane cross-section (one lane per direction) and a sidewalk on the west side of the road. As no speed limit signage is present, the speed limit would default to the statutory limit of 50 km/h.

Figure 2 illustrates the current lane configurations and traffic controls at the study area intersections.

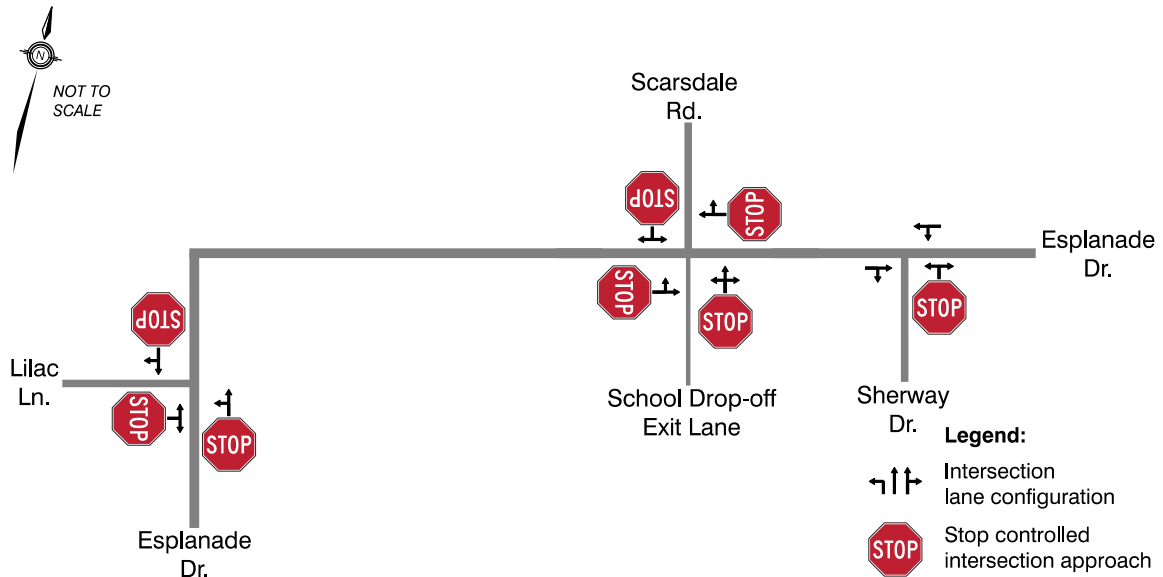


Figure 2: Existing Laning and Traffic Control

2.2 Traffic Data Collection

Turning movement count (TMC) data was collected at the three existing study area intersections on Tuesday, April 23, 2024. The TMC data is provided in **Appendix B**.

The data collected was inclusive of the following periods:

- Weekday morning between 7:00 AM and 10:00 AM (covering the school arrival time); and
- Weekday afternoon between 2:00 PM and 5:00 PM (covering the school dismissal time).

2.3 Existing (2024) Traffic Volumes

Figure 3 illustrates the existing (2024) traffic volumes at the three study area intersections during the weekday AM peak hour and the PM peak hour.

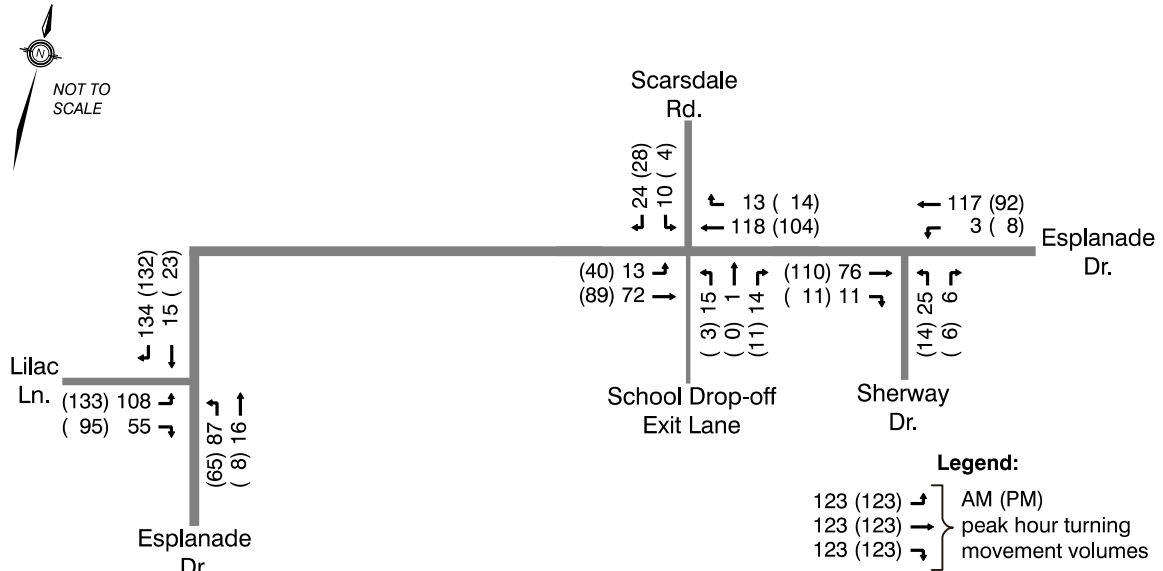


Figure 3: Existing (2024) Traffic Volumes

2.4 Existing (2024) Operational Analyses

Existing (2024) peak hour operations were determined based on the methodology outlined in the *Highway Capacity Manual* (HCM) and facilitated using Synchro (version 11) analysis software. The intersection analyses are based on existing lane configurations.

For each movement, the v/c ratio, delay, level of service, and 95th percentile queue were noted. The level of service definitions are provided in **Appendix C**. The Synchro analysis worksheets are provided in **Appendix D**. The results were reviewed to identify any critical movements, defined as follows:

- Any through lane/movement with a v/c ratio of 0.85 or higher;
- Any exclusive turning lane/movement with a v/c ratio of 1.00 or higher;
- Any movement operating at LOS E or LOS F; and/or
- Any turning movement with a 95th percentile queue exceeding the available storage.

Table 1 summarizes the intersection operations under existing (2024) peak hour traffic volumes.

Table 1: Existing (2024) Intersection Operations

Intersection	Movement	Weekday AM Peak Hour				Weekday PM Peak Hour			
		v/c	LOS	Delay (s/veh)	95th %ile queue (m)	v/c	LOS	Delay (s/veh)	95th %ile queue (m)
Esplanade Drive and Lilac Lane (AWSC)	EB approach	0.22	A	8.8	0	0.30	A	9.3	0
	NB approach	0.15	A	8.6	0	0.11	A	8.6	0
	SB approach	0.18	A	7.9	0	0.19	A	8.1	0
Esplanade Drive and Scarsdale Road/ School Drop-off Exit Lane (AWSC)	EB approach	0.11	A	7.8	0	0.16	A	8.0	0
	WB approach	0.16	A	8.0	0	0.15	A	7.9	0
	NB approach	0.04	A	8.1	0	0.02	A	8.2	0
	SB approach	0.04	A	7.3	0	0.04	A	7.2	0
Esplanade Drive and Sherway Drive (TWSC)	NB approach	0.04	A	9.8	1	0.03	A	10.0	1

Under existing (2024) conditions, all stop-controlled approaches during the weekday AM and PM peak hours currently operate at LOS A with minimal delay and essentially no queuing.

3.0 Future Background Conditions

The future background traffic volumes reflect the volume of traffic that is anticipated to be on the road network during both the 2026 and 2031 horizon years without the subject development in place.

Typically, this is comprised of two components:

- The application of site-specific traffic volumes for any background developments near the site; and
- The application of a growth rate to reflect general background traffic growth on the road network.

The City of Windsor waived the requirement to include other development impacts in the TIS. Therefore, no background developments were assessed in the analysis. **Appendix E** provides further details.

3.1 Background Growth

As for traffic growth that would not be associated with a specific development, Dillon reviewed a city-wide historical traffic growth rate chart of the relative traffic volumes from 1967 to 2017. It was observed that the City of Windsor's relative traffic growth has been decreasing or stagnant within the past 15 years (2002 – 2017). However, given the time forecast between the base year (2024) and the final horizon year (2031), and considering the size, scope and location of the subject development, a 1.0% per annum background growth rate has been applied to most movements within the study area.

Traffic volumes were not grown for movements entering or exiting the north and south legs of the Scarsdale Road intersection. The north leg of the intersection is not a through roadway and the south leg of the intersection contains the exit lane for the school drop-off area. Therefore, no background traffic growth would be shown on the north and south legs of the intersection.

3.2 Future Background Traffic Volumes

3.2.1 Future Background (2026) Traffic Volumes

The future background (2026) traffic volumes are illustrated in **Figure 4**.

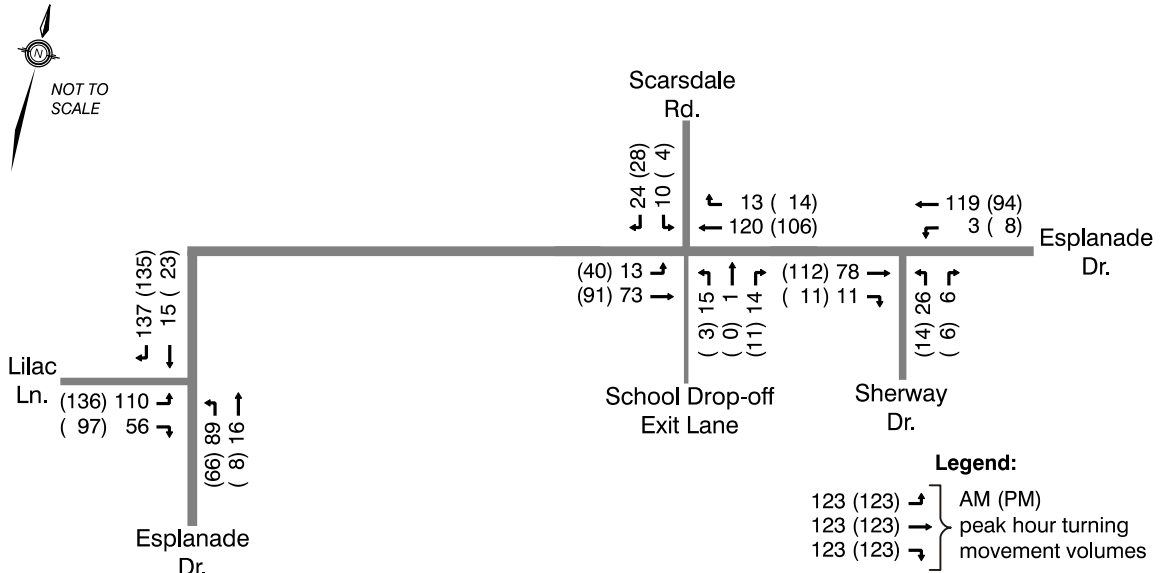


Figure 4: Future Background (2026) Traffic Volumes

3.2.2 Future Background (2031) Traffic Volumes

The future background (2031) traffic volumes are illustrated in **Figure 5**.

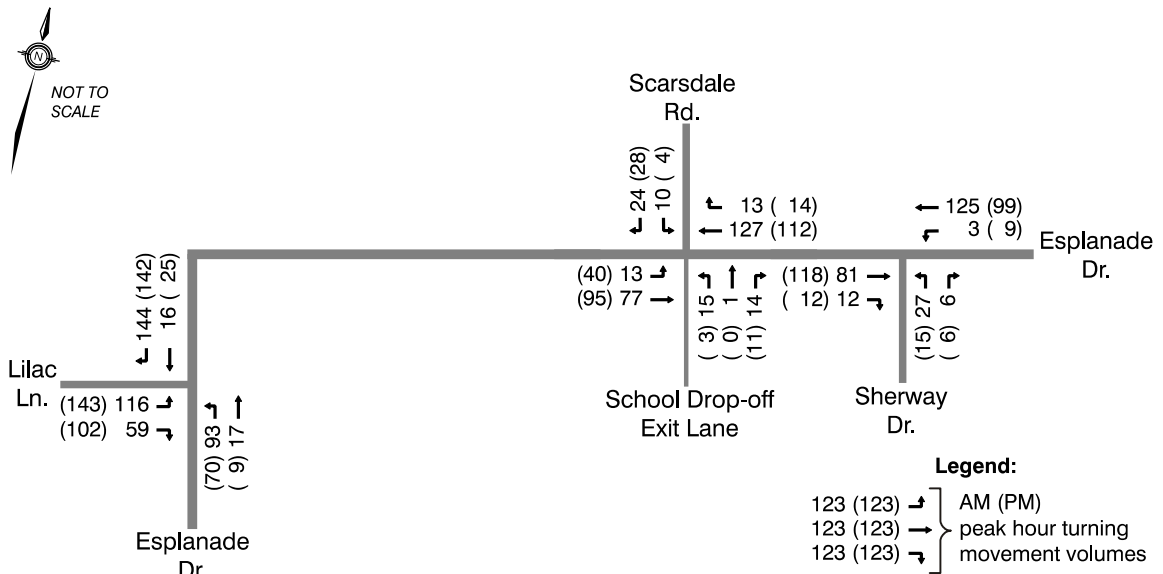


Figure 5: Future Background (2031) Traffic Volumes

3.3 Future Background Operational Analyses

Future background intersection operations for both the 2026 and 2031 horizon years were assessed using the same methodology that was applied in the existing conditions analysis.

3.3.1 Future Background (2026) Intersection Operations

Table 2 summarizes the intersection operations under future background (2026) peak hour traffic volumes.

Table 2: Future Background (2026) Intersection Operations

Intersection	Movement	Weekday AM Peak Hour				Weekday PM Peak Hour			
		v/c	LOS	Delay (s/veh)	95th %ile queue (m)	v/c	LOS	Delay (s/veh)	95th %ile queue (m)
Esplanade Drive and Lilac Lane (AWSC)	EB approach	0.23	A	8.8	0	0.31	A	9.4	0
	NB approach	0.15	A	8.7	0	0.11	A	8.7	0
	SB approach	0.18	A	7.9	0	0.20	A	8.1	0
Esplanade Drive and Scarsdale Road/ School Drop-off Exit Lane (AWSC)	EB approach	0.11	A	7.8	0	0.17	A	8.0	0
	WB approach	0.17	A	8.0	0	0.15	A	7.9	0
	NB approach	0.04	A	8.1	0	0.02	A	8.2	0
	SB approach	0.04	A	7.3	0	0.04	A	7.2	0
Esplanade Drive and Sherway Drive (TWSC)	NB approach	0.04	A	9.8	1	0.03	A	10.0	1

Compared to existing (2024) operations, all stop-controlled approaches are anticipated to continue operating at LOS A during the AM and PM peak hours.

3.3.2 Future Background (2031) Intersection Operations

Table 3 summarizes the intersection operations under future background (2031) peak hour traffic volumes.

Table 3: Future Background (2031) Intersection Operations

Intersection	Movement	Weekday AM Peak Hour				Weekday PM Peak Hour			
		v/c	LOS	Delay (s/veh)	95th %ile queue (m)	v/c	LOS	Delay (s/veh)	95th %ile queue (m)
Esplanade Drive and Lilac Lane (AWSC)	EB approach	0.24	A	9.0	0	0.33	A	9.6	0
	NB approach	0.16	A	8.8	0	0.12	A	8.8	0
	SB approach	0.20	A	8.0	0	0.21	A	8.3	0
Esplanade Drive and Scarsdale Road/ School Drop-off Exit Lane (AWSC)	EB approach	0.12	A	7.9	0	0.17	A	8.1	0
	WB approach	0.18	A	8.1	0	0.16	A	8.0	0
	NB approach	0.04	A	8.1	0	0.02	A	8.2	0
	SB approach	0.04	A	7.3	0	0.04	A	7.2	0
Esplanade Drive and Sherway Drive (TWSC)	NB approach	0.05	A	9.9	1	0.03	B	10.1	1

Compared to future background (2026) operations, all stop-controlled approaches are anticipated to operate at LOS A during the AM and PM peak hours, with the exception of the northbound approach to the Sherway Drive and Esplanade Drive intersection during the PM peak hour (which will operate at LOS B).

4.0

Proposed Development

As noted earlier, the proposed residential development will be located on vacant lands on the north side of Esplanade Drive just east of the Ganatchio Trail. It will include a single four-storey apartment building with 54 units. The site will be accessed via a single driveway to Esplanade Drive. This driveway will be located east of the existing school drop-off area.

4.1

Trip Distribution

The vehicle trips generated by the proposed development were distributed to the road network based on travel and demographic characteristics published in the 2005 *Essex-Windsor Regional Transportation Master Plan* (EWRTMP). The EWRTMP included a geographic distribution of projected 2021 population and employment throughout the city of Windsor and county of Essex, as well as an estimate of the trips made in the Windsor-Essex region during the PM peak period according to the purpose of the trip (e.g., trips from work to home; trips from home to shopping, etc.).

Table 4 lists the overall trip distribution applied to the vehicle trips generated by the proposed development.

Table 4: Overall Trip Distribution

To/From:	Trip Distribution %
East: Esplanade Drive towards Forest Glade Drive	40%
West: Esplanade Drive towards Lilac Lane	60%
TOTAL	100%

4.2

Trip Generation

The development proposes a four-storey residential building with 54 dwelling units. The number of vehicle trips that are expected to be generated by the development was estimated based on trip generation rates published within the Institute of Transportation Engineers' document *Trip Generation Manual* (11th edition).

Although the traffic data was collected during a mid-day afternoon time frame, the PM peak hour trip rate was used to be conservative.

Table 5 summarizes the number of vehicle trips anticipated to be generated by the development during the AM and PM peak hours. Given the nature of this parcel, ITE Land Use Code 221 (Multifamily Housing (Mid-Rise)) was used.

Table 5: Trip Generation

	Weekday AM Peak Hour			Weekday PM Peak Hour		
	In	Out	Total	In	Out	Total
Four-Storey Residential Building – 54 units						
In/Out/Rate	23%	77%	0.37	61%	39%	0.39
Vehicle Trips	5	15	20	13	8	21

The development is forecast to generate 20 vehicle trips (5 inbound, 15 outbound) in the AM peak hour and 21 vehicle trips (13 inbound, 8 outbound) in the PM peak hour.

4.3 Trip Assignment

Table 6 lists the trip assignment applied to the vehicle trips generated by the development within the study area.

Table 6: Trip Assignment

Trip Distribution	Trip Distribution %	Via:	Trip Assignment %
East	40%	Forest Glade Drive via Esplanade Drive	100%
West	60%	Lilac Lane via Esplanade Drive	100%
TOTAL	100%	-	-

4.4 Site-Generated Vehicle Trips

Figure 6 illustrates how the vehicle trips generated by the development were distributed and assigned through the study area intersections.

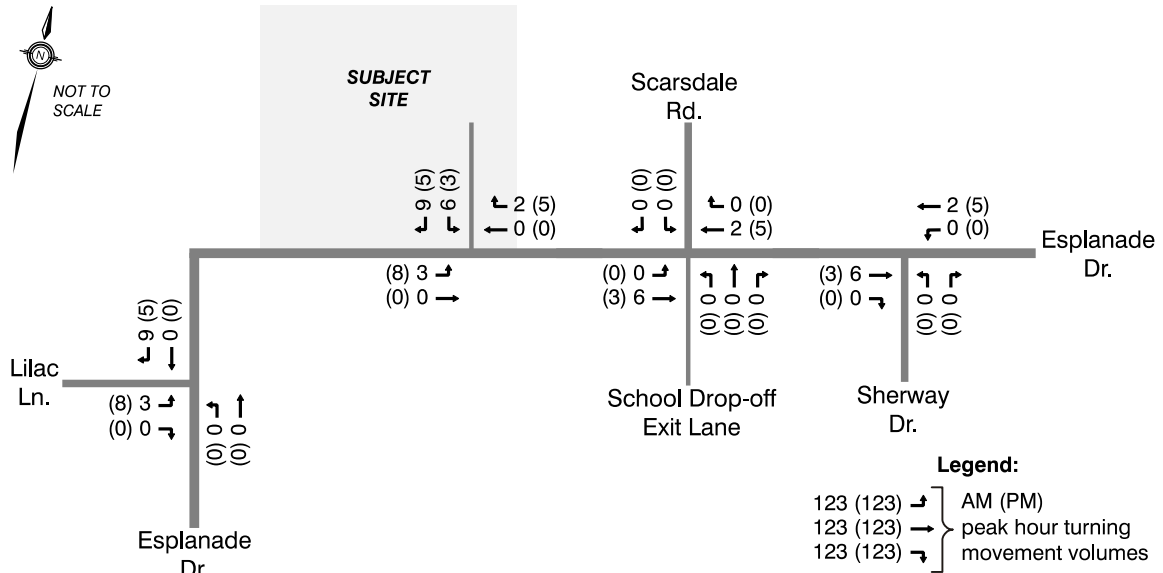


Figure 6: Site-Generated Trips

4.5 Non-Auto Travel

Three sources were reviewed in order to estimate existing modal splits in the Windsor area:

- The Essex-Windsor Regional Transportation Master Plan (EWRTMP) included a travel survey that recorded respondents' mode of travel for trips made during the PM peak period;
- The 2016 Census included questions about the typical mode of travel for the trip to work. This data was available both for the Windsor metropolitan area and for individual census dissemination areas;
- The 2019 Active Transportation Master Plan which notes target mode shares for 2041 for various areas within the city of Windsor:
 - For newer communities, the targeted non-auto mode share in 2041 has been identified as 14%.

Given the location of the development and the land use proposed, the non-auto mode share (14%) was broken down as follows:

- 5% for transit;
- 5% for walking; and
- 4% for cycling.

Given that the development is forecast to generate low traffic volumes, the non-auto mode share was broken down evenly to account for all modal splits.

Table 7 summarizes the assumed modal split for the subject development, noting that the modal split is in line with the 2041 target mode shares as noted within the City of Windsor’s *2019 Active Transportation Master Plan*.

Table 7: Projected Site Development Modal Split

Mode	Weekday AM peak hour trips	Weekday PM peak hour trips	Modal Split
Auto ¹	20	21	86%
Transit	1	1	5%
Walking	1	1	5%
Cycling	1	1	4%
TOTAL	23	24	100%

When considering both auto and non-auto modes and a 14% non-auto mode share, the proposed residential development is projected to generate 23 total trips (i.e., person trips) during the AM peak hour and 24 total trips during the PM peak hour.

¹ The number of vehicles being generated by the site as noted in **Section 4.2**.

5.0 Total Future Conditions

5.1 Total Future Traffic Volumes

The total future traffic volumes were calculated by adding the site-generated trips as distributed and assigned to the future background traffic volumes.

5.1.1 Total Future (2026) Traffic Volumes

Figure 7 illustrates the total future (2026) traffic volumes.

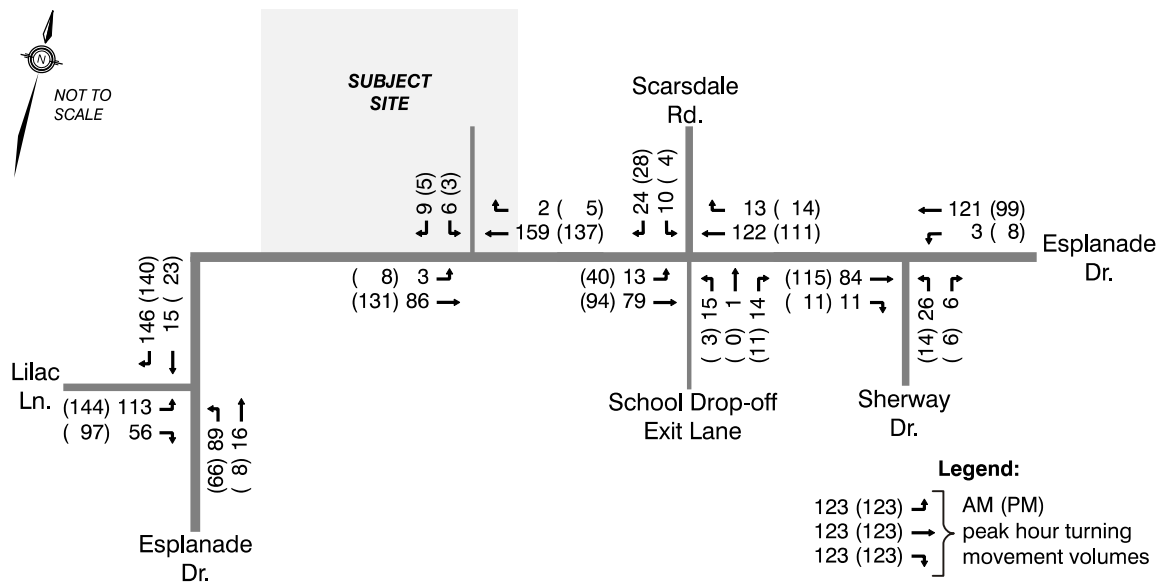


Figure 7: Total Future (2026) Traffic Volumes

5.1.2 Total Future (2031) Traffic Volumes

Figure 8 illustrates the total future (2031) traffic volumes.

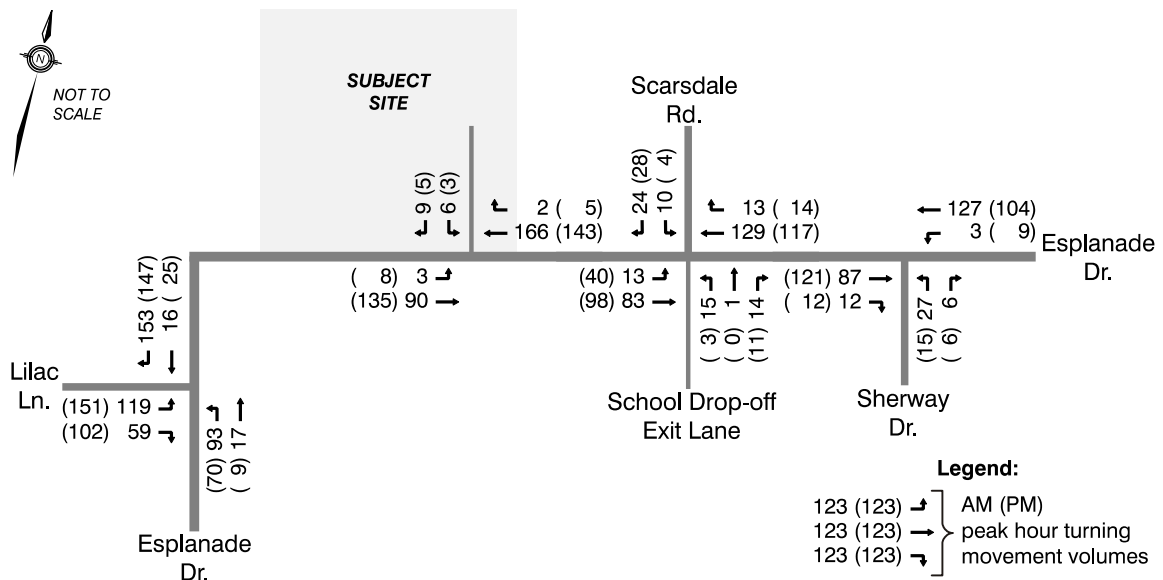


Figure 8: Total Future (2031) Traffic Volumes

5.2 Total Future Operational Analyses

5.2.1 Total Future (2026) Intersection Operations

Table 8 summarizes the intersection operations under total future (2026) peak hour traffic volumes.

Table 8: Total Future (2026) Intersection Operations

Intersection	Movement	Weekday AM Peak Hour				Weekday PM Peak Hour			
		v/c	LOS	Delay (s/veh)	95th %ile queue (m)	v/c	LOS	Delay (s/veh)	95th %ile queue (m)
Esplanade Drive and Lilac Lane (AWSC)	EB approach	0.23	A	8.9	0	0.32	A	9.5	0
	NB approach	0.15	A	8.7	0	0.11	A	8.7	0
	SB approach	0.20	A	8.0	0	0.20	A	8.2	0
Esplanade Drive and Scarsdale Road/ School Drop-off Exit Lane (AWSC)	EB approach	0.12	A	7.9	0	0.17	A	8.1	0
	WB approach	0.17	A	8.0	0	0.16	A	8.0	0
	NB approach	0.04	A	8.1	0	0.02	A	8.2	0
	SB approach	0.04	A	7.3	0	0.04	A	7.2	0
Esplanade Drive and Sherway Drive (TWSC)	NB approach	0.05	A	9.9	1	0.03	B	10.0	1
Site Driveway (TWSC)	SB approach	0.02	A	9.6	1	0.01	A	9.5	0

Compared to future background (2026) operations, all stop-controlled approaches at the existing study area intersections are expected to operate in a similar fashion during the AM and PM peak hours.

The proposed site driveway is projected to operate at LOS A with negligible 95th percentile queues.

5.2.2 Total Future (2031) Intersection Operations

Table 9 summarizes the intersection operations under total future (2031) peak hour traffic volumes.

Table 9: Total Future (2031) Intersection Operations

Intersection	Movement	Weekday AM Peak Hour				Weekday PM Peak Hour			
		v/c	LOS	Delay (s/veh)	95th %ile queue (m)	v/c	LOS	Delay (s/veh)	95th %ile queue (m)
Esplanade Drive and Lilac Lane (AWSC)	EB approach	0.25	A	9.0	0	0.34	A	9.7	0
	NB approach	0.16	A	8.8	0	0.12	A	8.8	0
	SB approach	0.21	A	8.1	0	0.22	A	8.4	0
Esplanade Drive and Scarsdale Road/ School Drop-off Exit Lane (AWSC)	EB approach	0.12	A	7.9	0	0.18	A	8.1	0
	WB approach	0.18	A	8.1	0	0.17	A	8.0	0
	NB approach	0.04	A	8.1	0	0.02	A	8.2	0
	SB approach	0.04	A	7.3	0	0.04	A	7.2	0
Esplanade Drive and Sherway Drive (TWSC)	NB approach	0.05	A	10.0	1	0.03	B	10.1	1
Site Driveway (TWSC)	SB approach	0.02	A	9.6	1	0.01	A	9.6	0

Compared to future background (2031) operations, all stop-controlled approaches are anticipated to continue operating at similar levels of service during the AM and PM peak hours.

Compared to the total future (2026) operations, the site driveway is projected to continue operating at LOS A with negligible 95th percentile queues.

6.0

Summary

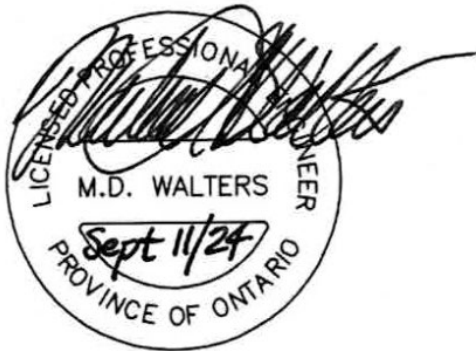
Dillon Consulting Limited (Dillon) was retained by 1495754 Ontario Inc. to undertake a transportation impact study which reviewed the impact of a proposed residential development on vacant lands on Esplanade Drive (just east of the Ganatchio Trail) in the city of Windsor, Ontario.

The development consists of a single four-storey apartment building with 54 units and proposes a single site driveway to Esplanade Drive.

The development is forecast to generate 20 vehicle trips (5 inbound, 15 outbound) in the AM peak hour and 21 vehicle trips (13 inbound, 8 outbound) in the PM peak hour.

The three existing study area intersections currently operate at LOS A with minimal delay and essentially no queuing during the weekday AM and PM peak hours. Under future background and total future conditions, the stop-controlled movements are expected to operate at similar levels of service through to 2031, the final horizon year.

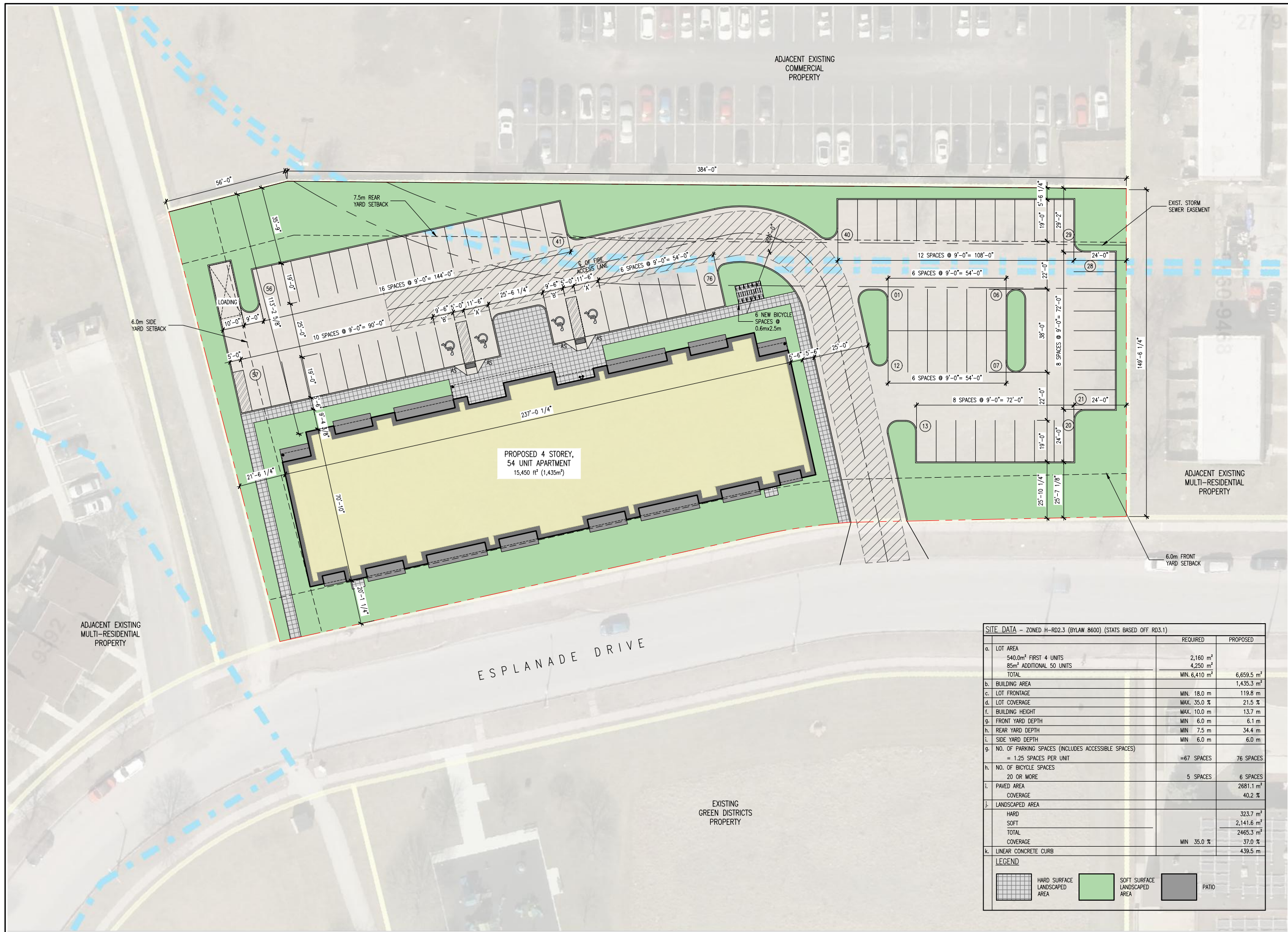
The site driveway is projected to operate at LOS A with negligible 95th percentile queues.



Mike Walters, P.Eng.
Transportation Engineer

Appendix A

Conceptual Development Plan



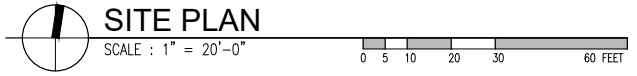
PROPOSED 4 STOREY,
54 UNIT APARTMENT
15,450 ft² (1,435m²)

ESPLANADE DRIVE

SITE DATA - ZONED H-RD2.3 (BYLAW 8600) (STATS BASED OFF RD3.1)		
	REQUIRED	PROPOSED
a. LOT AREA		
540.0m² FIRST 4 UNITS	2,160 m²	
85m² ADDITIONAL 50 UNITS	4,250 m²	
TOTAL	MIN. 6,410 m²	6,659.5 m²
b. BUILDING AREA		1,435.3 m²
c. LOT FRONTAGE	MIN. 18.0 m	119.8 m
d. LOT COVERAGE	MAX. 35.0 %	21.5 %
f. BUILDING HEIGHT	MAX. 10.0 m	13.7 m
g. FRONT YARD DEPTH	MIN. 6.0 m	6.1 m
h. REAR YARD DEPTH	MIN. 7.5 m	34.4 m
i. SIDE YARD DEPTH	MIN. 6.0 m	6.0 m
g. NO. OF PARKING SPACES (INCLUDES ACCESSIBLE SPACES)		
= 1.25 SPACES PER UNIT	=67 SPACES	76 SPACES
h. NO. OF BICYCLE SPACES		
20 OR MORE	5 SPACES	6 SPACES
i. PAVED AREA		
COVERAGE		2681.1 m²
		40.2 %
j. LANDSCAPED AREA		
HARD		323.7 m²
SOFT		2,141.6 m²
TOTAL		2,465.3 m²
COVERAGE	MIN 35.0 %	37.0 %
k. LINEAR CONCRETE CURB		439.5 m

LEGEND

	HARD SURFACE LANDSCAPED AREA		SOFT SURFACE LANDSCAPED AREA		PATIO
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SITE PLAN

2024/08/28 PRE-CONSULTATION

date (yyyy/mm/dd): issued for:

- general notes:
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 - DRAWINGS SHALL NOT BE SCALED.
 - CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND THIS OFFICE MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS.
 - ATTENTION IS DIRECTED TO PROVISIONS IN THE GENERAL CONDITIONS REGARDING CONTRACTOR'S RESPONSIBILITIES IN REGARD TO SUBMISSION OF SHOP DRAWINGS.
 - IN THE EVENT THE ARCHITECT IS RETAINED TO REVIEW SHOP DRAWINGS, SUCH REVIEW IS ONLY TO CHECK FOR CONFORMANCE WITH DESIGN CONCEPT AND WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS.
 - CONTRACTORS SHALL PROMPTLY NOTIFY THE ARCHITECT IN WRITING OF THE EXISTENCE OF ANY OBSERVED VARIATIONS BETWEEN THE CONTRACT DOCUMENTS AND ANY APPLICABLE CODES OR BY-LAWS.
 - THE ARCHITECT IS NOT RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS AND OR TECHNIQUES IN THE CONSTRUCTION OF THIS FACILITY.

stamp:



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project:
RESIDENTIAL DEVELOPMENT
WINDSOR, ON

client:
RAFIH GROUP
DEVELOPMENTS

title:
SITE PLAN

scale: AS SHOWN

drawn by: JT

checked by: JBK

date: 2023-09-12

comm. no.: 2023-088

sheet no.:

A1.0

Appendix B

Traffic Volume Data



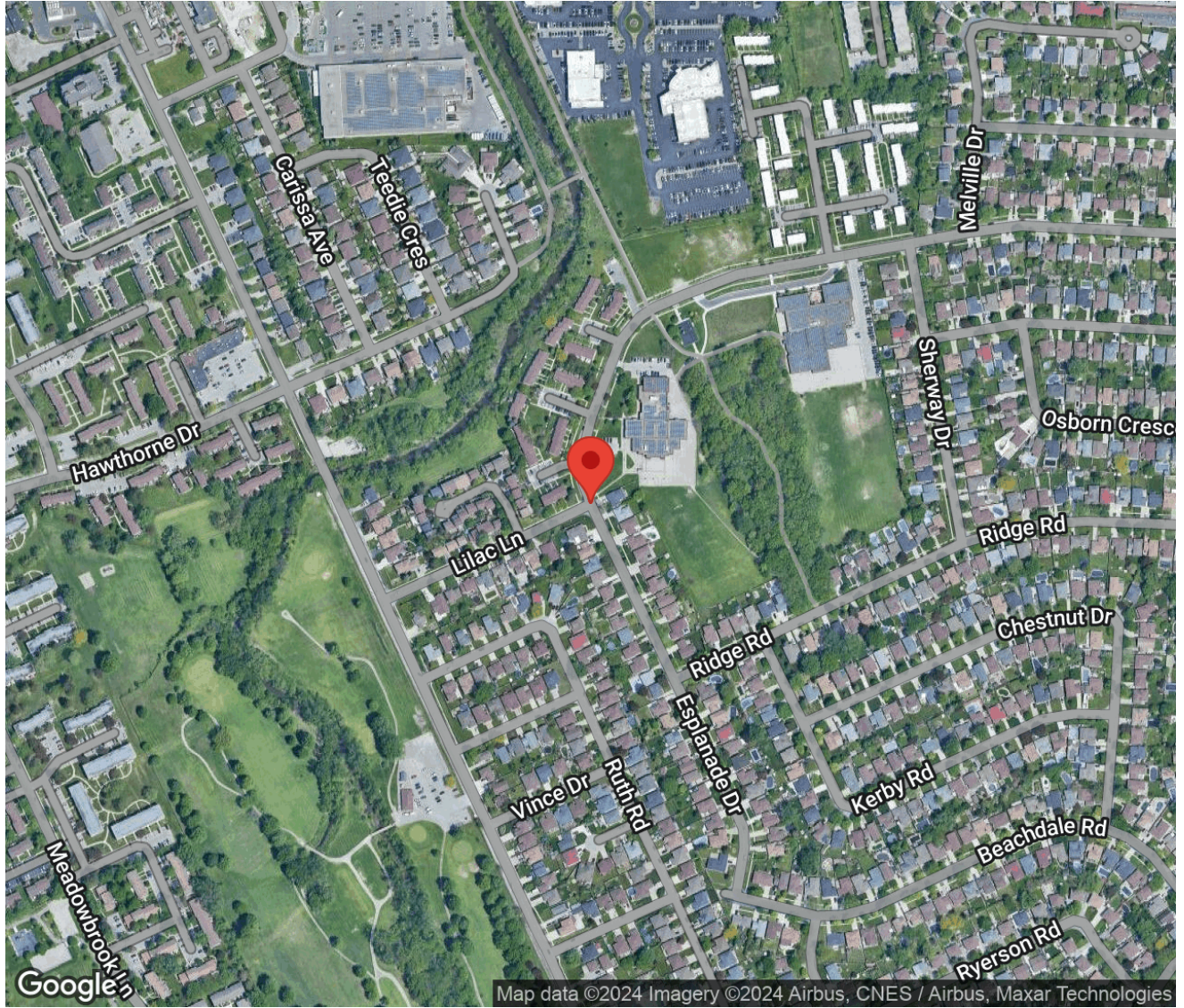
Project #24-171 - Dillon Consulting

Intersection Count Report

Intersection: Esplanade Dr & Lilac Ln
Municipality: Windsor
Count Date: Tuesday, Apr 23, 2024
Site Code: 2417100002
Count Categories: Cars, Trucks, Bicycles, Pedestrians
Count Period: 07:00-10:00, 14:00-17:00
Weather: Clear
Comments:

Traffic Count Map

Intersection: Esplanade Dr & Lilac Ln
Site Code: 2417100002
Municipality: Windsor
Count Date: Apr 23, 2024





Traffic Count Summary

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Municipality: Windsor
 Count Date: Apr 23, 2024

Esplanade Dr - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	3	59	0	62	3	71	5	0	0	76	0	138
08:00 - 09:00	0	3	106	0	109	24	93	12	0	0	105	0	214
09:00 - 10:00	0	16	95	0	111	20	69	9	0	0	78	0	189
BREAK													
14:00 - 15:00	0	7	71	0	78	4	80	11	0	0	91	0	169
15:00 - 16:00	0	23	132	0	155	26	65	8	0	0	73	0	228
16:00 - 17:00	0	6	80	0	86	0	73	3	0	0	76	0	162
GRAND TOTAL	0	58	543	0	601	77	451	48	0	0	499	0	1100



Traffic Count Summary

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Municipality: Windsor
 Count Date: Apr 23, 2024

Lilac Ln - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	0	0	0	0	0	31	0	24	0	55	0	55
08:00 - 09:00	0	0	0	0	0	0	80	0	63	0	143	0	143
09:00 - 10:00	0	0	0	0	0	0	76	0	49	0	125	0	125
BREAK													
14:00 - 15:00	0	0	0	0	0	0	91	0	99	0	190	0	190
15:00 - 16:00	0	0	0	0	0	0	133	0	95	0	228	0	228
16:00 - 17:00	0	0	0	0	0	0	95	0	131	0	226	0	226
GRAND TOTAL	0	0	0	0	0	0	506	0	461	0	967	0	967



Traffic Count Data

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Municipality: Windsor
 Count Date: Apr 23, 2024

North Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	0	11	0	11	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	17	0	17	0	0	1	0	1	0	0	0	0	0	1
07:30	0	0	12	0	12	0	0	1	0	1	0	0	0	0	0	1
07:45	0	3	16	0	19	0	0	1	0	1	0	0	0	0	0	1
08:00	0	1	17	0	18	0	0	0	0	0	0	0	0	0	0	1
08:15	0	1	27	0	28	0	0	1	0	1	0	0	0	0	0	1
08:30	0	1	29	0	30	0	0	0	0	0	0	0	0	0	0	2
08:45	0	0	31	0	31	0	0	1	0	1	0	0	0	0	0	20
09:00	0	11	43	0	54	0	2	2	0	4	0	0	0	0	0	15
09:15	0	2	17	0	19	0	0	0	0	0	0	0	0	0	0	5
09:30	0	1	22	0	23	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	11	0	11	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	20	253	0	273	0	2	7	0	9	0	0	0	0	0	47



Traffic Count Data

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Municipality: Windsor
 Count Date: Apr 23, 2024

North Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
14:00	0	3	13	0	16	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	1	15	0	16	0	0	1	0	1	0	0	0	0	0	0	0
14:30	0	2	14	0	16	0	0	2	0	2	0	0	0	0	0	0	4
14:45	0	1	26	0	27	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	4	23	0	27	0	0	1	0	1	0	0	0	0	0	0	0
15:15	0	7	22	0	29	0	0	1	0	1	0	0	0	0	0	0	16
15:30	0	12	58	0	70	0	0	0	0	0	0	0	0	0	0	0	10
15:45	0	0	27	0	27	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	2	19	0	21	0	1	0	0	1	0	0	0	0	0	0	0
16:15	0	2	21	0	23	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	1	16	0	17	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	24	0	24	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	35	278	0	313	0	1	5	0	6	0	0	0	0	0	0	30
GRAND TOTAL	0	55	531	0	586	0	3	12	0	15	0	0	0	0	0	0	77



Traffic Count Data

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Municipality: Windsor
 Count Date: Apr 23, 2024

South Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	7	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0
07:15	17	1	0	0	18	2	0	0	0	2	0	0	0	0	0	0
07:30	22	1	0	0	23	3	0	0	0	3	0	0	0	0	0	0
07:45	19	2	0	0	21	1	0	0	0	1	0	0	0	0	0	0
08:00	25	3	0	0	28	1	0	0	0	1	0	0	0	0	0	0
08:15	19	1	0	0	20	1	0	0	0	1	0	0	0	0	0	0
08:30	27	1	0	0	28	1	0	0	0	1	0	0	0	0	0	0
08:45	17	5	0	0	22	2	2	0	0	4	0	0	0	0	0	0
09:00	19	7	0	0	26	1	0	0	0	1	0	0	0	0	0	0
09:15	14	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0
09:30	14	2	0	0	16	1	0	0	0	1	0	0	0	0	0	0
09:45	18	0	0	0	18	2	0	0	0	2	0	0	0	0	0	0
SUBTOTAL	218	24	0	0	242	15	2	0	0	17	0	0	0	0	0	0



Traffic Count Data

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Municipality: Windsor
 Count Date: Apr 23, 2024

South Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
14:00	18	3	0	0	21	2	0	0	0	2	0	0	0	0	0	0
14:15	18	2	0	0	20	1	0	0	0	1	0	0	0	0	0	0
14:30	25	5	0	0	30	1	0	0	0	1	0	0	0	0	0	0
14:45	14	1	0	0	15	1	0	0	0	1	0	0	0	0	0	0
15:00	14	1	0	0	15	1	1	0	0	2	0	0	0	0	0	0
15:15	10	2	0	0	12	2	0	0	0	2	0	0	0	0	0	0
15:30	15	2	0	0	17	1	0	0	0	1	0	0	0	0	0	0
15:45	20	2	0	0	22	2	0	0	0	2	0	0	0	0	0	0
16:00	17	0	0	0	17	1	0	0	0	1	0	0	0	0	0	0
16:15	20	1	0	0	21	0	0	0	0	0	0	0	0	0	0	0
16:30	12	1	0	0	13	1	0	0	0	1	0	0	0	0	0	0
16:45	21	1	0	0	22	1	0	0	0	1	0	0	0	0	0	0
SUBTOTAL	204	21	0	0	225	14	1	0	0	15	0	0	0	0	0	0
GRAND TOTAL	422	45	0	0	467	29	3	0	0	32	0	0	0	0	0	0



Traffic Count Data

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Municipality: Windsor
 Count Date: Apr 23, 2024

West Approach - Lilac Ln

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	3	0	5	0	8	0	0	0	0	0	0	0	0	0	0	0
07:15	8	0	4	0	12	1	0	1	0	2	0	0	0	0	0	0
07:30	8	0	7	0	15	2	0	0	0	2	0	0	0	0	0	0
07:45	9	0	7	0	16	0	0	0	0	0	0	0	0	0	0	0
08:00	11	0	16	0	27	1	0	2	0	3	0	0	0	0	0	0
08:15	26	0	13	0	39	0	0	0	0	0	0	0	0	0	0	0
08:30	22	0	14	0	36	1	0	0	0	1	0	0	0	0	0	0
08:45	17	0	17	0	34	2	0	1	0	3	0	0	0	0	0	0
09:00	39	0	10	0	49	1	0	0	0	1	0	0	0	0	0	0
09:15	21	0	9	0	30	0	0	1	0	1	0	0	0	0	0	0
09:30	9	0	13	0	22	1	0	1	0	2	0	0	0	0	0	0
09:45	5	0	15	0	20	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	178	0	130	0	308	9	0	6	0	15	0	0	0	0	0	0



Traffic Count Data

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Municipality: Windsor
 Count Date: Apr 23, 2024

West Approach - Lilac Ln

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
14:00	11	0	21	0	32	0	0	1	0	1	0	0	0	0	0	0
14:15	18	0	24	0	42	1	0	1	0	2	0	0	0	0	0	0
14:30	27	0	26	0	53	2	0	0	0	2	0	0	0	0	0	0
14:45	28	0	26	0	54	4	0	0	0	4	0	0	0	0	0	0
15:00	39	0	24	0	63	0	0	2	0	2	0	0	0	0	0	0
15:15	39	0	26	0	65	4	0	0	0	4	0	0	0	0	0	0
15:30	23	0	16	0	39	0	0	1	0	1	0	0	0	0	0	0
15:45	28	0	26	0	54	0	0	0	0	0	0	0	0	0	0	0
16:00	29	0	33	0	62	0	0	1	0	1	0	0	0	0	0	0
16:15	22	0	35	0	57	0	0	0	0	0	0	0	0	0	0	0
16:30	21	0	31	0	52	0	0	0	0	0	0	0	0	0	0	0
16:45	23	0	31	0	54	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	308	0	319	0	627	11	0	6	0	17	0	0	0	0	0	0
GRAND TOTAL	486	0	449	0	935	20	0	12	0	32	0	0	0	0	0	0

Peak Hour Diagram

Specified Period

From: 07:00:00
To: 10:00:00

One Hour Peak

From: 08:15:00
To: 09:15:00




Intersection: Esplanade Dr & Lilac Ln
Site Code: 2417100002
Count Date: Apr 23, 2024

Weather conditions: Clear




**** Unsignalized Intersection ****

Major Road: Esplanade Dr runs N/S

North Approach

	Out	In	Total
	143	118	261
	6	6	12
	0	0	0
Totals	149	124	273







Esplanade Dr

	0	0	0
	4	2	0
	130	13	0
Totals	134	15	0



Peds: 38

Lilac Ln

				Totals	
0	0	0	0	0	
0	4	104	108	108	
0	1	54	55	55	




Peds: 0









Peds: 0

Peds: 0




West Approach

	Out	In	Total
	158	212	370
	5	9	14
	0	0	0
Totals	163	221	384


Totals			
	82	14	0
	5	2	0
	0	0	0

Esplanade Dr

South Approach

	Out	In	Total
	96	67	163
	7	3	10
	0	0	0
Totals	103	70	173

 - Cars

 - Trucks

 - Bicycles

Comments



Peak Hour Summary

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Count Date: Apr 23, 2024
 Period: 07:00 - 10:00

Peak Hour Data (08:15 - 09:15)

Start Time	North Approach Esplanade Dr						South Approach Esplanade Dr						East Approach						West Approach Lilac Ln						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
08:15		1	28	0	1	29	20	1		0	0	21					0		26		13	0	0	39	89
08:30		1	29	0	2	30	28	1		0	0	29					0		23		14	0	0	37	96
08:45		0	32	0	20	32	19	7		0	0	26					0		19		18	0	0	37	95
09:00		13	45	0	15	58	20	7		0	0	27					0		40		10	0	0	50	135
Grand Total		15	134	0	38	149	87	16		0	0	103					0	0	108		55	0	0	163	415
Approach %		10.1	89.9	0	-	-	84.5	15.5		0	-	-					-	-	66.3		33.7	0	-	-	
Totals %		3.6	32.3	0	35.9		21	3.9		0	24.8						0		26		13.3	0	39.3		
PHF		0.29	0.74	0	0.64		0.78	0.57		0	0.89						0		0.68		0.76	0	0.82	0.77	
Cars		13	130	0	143		82	14		0	96						0		104		54	0	158	397	
% Cars		86.7	97	0	96		94.3	87.5		0	93.2						0		96.3		98.2	0	96.9	95.7	
Trucks		2	4	0	6		5	2		0	7						0		4		1	0	5	18	
% Trucks		13.3	3	0	4		5.7	12.5		0	6.8						0		3.7		1.8	0	3.1	4.3	
Bicycles		0	0	0	0		0	0		0	0						0		0		0	0	0	0	
% Bicycles		0	0	0	0		0	0		0	0						0		0		0	0	0	0	
Peds					38	-				0	-						0	-			0	-		38	
% Peds					100	-				0	-						0	-			0	-			

Peak Hour Diagram

Specified Period

From: 14:00:00
To: 17:00:00

One Hour Peak

From: 15:00:00
To: 16:00:00

Intersection: Esplanade Dr & Lilac Ln
Site Code: 2417100002
Count Date: Apr 23, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Esplanade Dr runs N/S

North Approach

	Out	In	Total
	153	136	289
	2	5	7
	0	0	0
Totals	155	141	296

Esplanade Dr

	0	0	0
	2	0	0
	130	23	0
Totals	132	23	0

Peds: 26



Peds: 0

Peds: 0

Peds: 0

Lilac Ln

			Totals	
0	0	0	0	
0	4	129	133	
0	3	92	95	

West Approach

	Out	In	Total
	221	189	410
	7	8	15
	0	0	0
Totals	228	197	425

Totals	65	8	0
	59	7	0
	6	1	0
	0	0	0

Esplanade Dr

South Approach

	Out	In	Total
	66	115	181
	7	3	10
	0	0	0
Totals	73	118	191

- Cars

- Trucks

- Bicycles

Comments



Peak Hour Summary

Intersection: Esplanade Dr & Lilac Ln
 Site Code: 2417100002
 Count Date: Apr 23, 2024
 Period: 14:00 - 17:00

Peak Hour Data (15:00 - 16:00)

Start Time	North Approach Esplanade Dr						South Approach Esplanade Dr						East Approach						West Approach Lilac Ln						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
15:00		4	24	0	0	28	15	2		0	0	17					0		39		26	0	0	65	110
15:15		7	23	0	16	30	12	2		0	0	14					0		43		26	0	0	69	113
15:30		12	58	0	10	70	16	2		0	0	18					0		23		17	0	0	40	128
15:45		0	27	0	0	27	22	2		0	0	24					0		28		26	0	0	54	105
Grand Total		23	132	0	26	155	65	8		0	0	73					0	0	133		95	0	0	228	456
Approach %		14.8	85.2	0	-	-	89	11		0	-	-					-	-	58.3		41.7	0	-	-	
Totals %		5	28.9	0	34	14.3	1.8		0	16		0					29.2	20.8	0	50					
PHF		0.48	0.57	0	0.55	0.74	1		0	0.76		0					0	0.77	0.91	0	0.83	0.89	0.89	0.89	
Cars		23	130	0	153	59	7		0	66		0					0	0	129		92	0	0	221	440
% Cars		100	98.5	0	98.7	90.8	87.5		0	90.4		0					0	0	97		96.8	0	0	96.9	96.5
Trucks		0	2	0	2	6	1		0	7		0					0	0	4		3	0	0	7	16
% Trucks		0	1.5	0	1.3	9.2	12.5		0	9.6		0					0	0	3		3.2	0	0	3.1	3.5
Bicycles		0	0	0	0	0	0		0	0		0					0	0	0		0	0	0	0	0
% Bicycles		0	0	0	0	0	0		0	0		0					0	0	0		0	0	0	0	0
Peds					26	-				0	-						0	-			0	-		0	26
% Peds					100	-				0	-						0	-			0	-		0	-



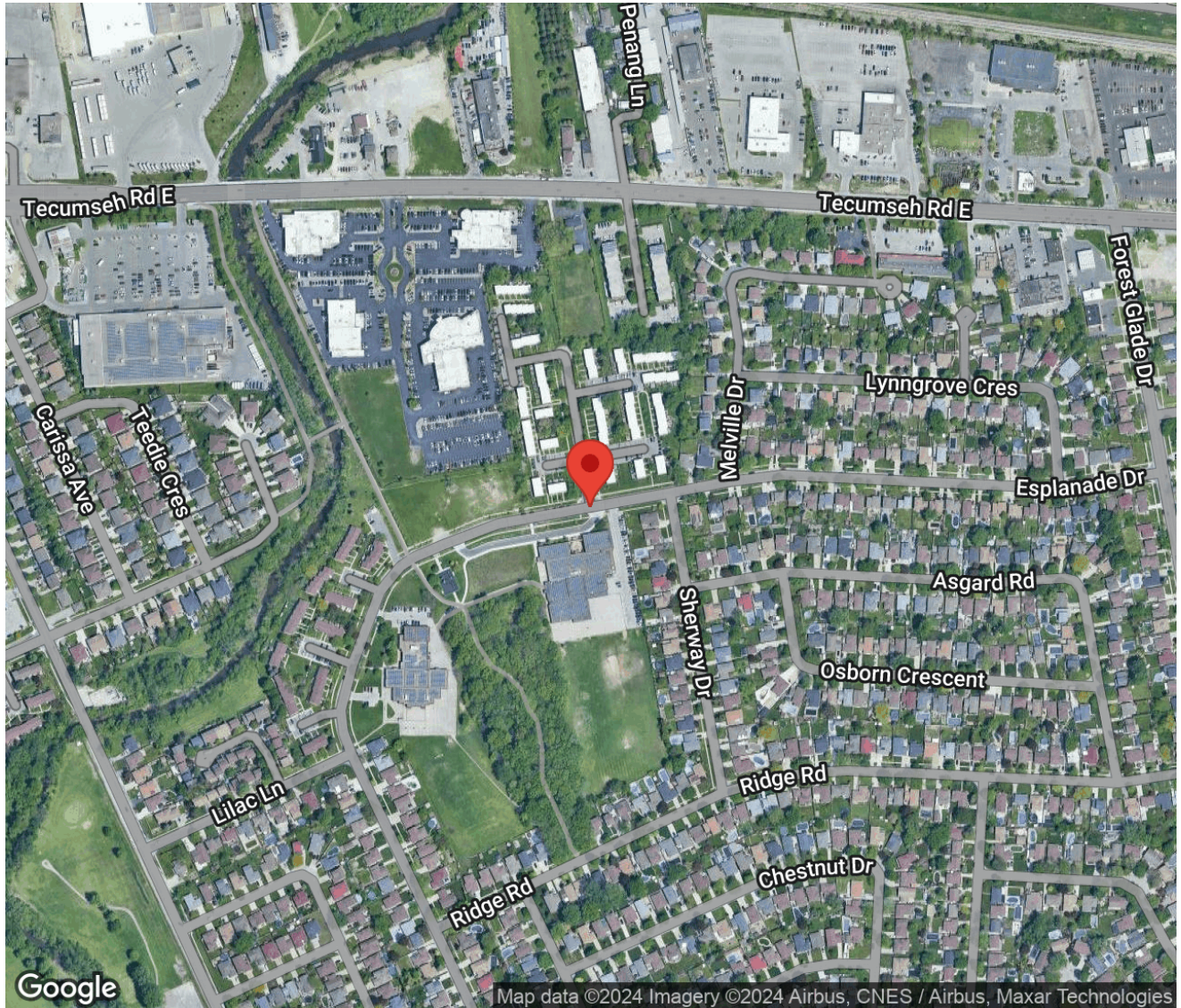
Project #24-171 - Dillon Consulting

Intersection Count Report

Intersection: Esplanade Dr & Scarsdale Rd
Municipality: Windsor
Count Date: Tuesday, Apr 23, 2024
Site Code: 2417100001
Count Categories: Cars, Trucks, Bicycles, Pedestrians
Count Period: 07:00-10:00, 14:00-17:00
Weather: Clear
Comments:

Traffic Count Map

Intersection: Esplanade Dr & Scarsdale Rd
Site Code: 2417100001
Municipality: Windsor
Count Date: Apr 23, 2024



Traffic Count Summary

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Municipality: Windsor
 Count Date: Apr 23, 2024

Scarsdale Rd - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	7	0	15	0	22	3	0	0	0	0	0	1	22
08:00 - 09:00	14	0	15	0	29	10	4	1	2	0	7	3	36
09:00 - 10:00	4	0	21	0	25	11	15	1	18	0	34	19	59
BREAK													
14:00 - 15:00	8	0	20	0	28	4	3	0	4	0	7	7	35
15:00 - 16:00	4	0	28	0	32	26	3	0	11	0	14	29	46
16:00 - 17:00	10	0	17	0	27	2	0	0	0	0	0	1	27
GRAND TOTAL	47	0	116	0	163	56	25	2	35	0	62	60	225



Traffic Count Summary

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Municipality: Windsor
 Count Date: Apr 23, 2024

Esplanade Dr - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	43	1	0	44	4	8	24	0	0	32	1	76
08:00 - 09:00	0	86	9	0	95	43	6	48	0	0	54	0	149
09:00 - 10:00	0	80	8	0	88	55	10	62	1	0	73	1	161
BREAK													
14:00 - 15:00	0	52	11	0	63	4	18	64	0	0	82	0	145
15:00 - 16:00	0	104	14	0	118	92	40	89	0	0	129	3	247
16:00 - 17:00	0	56	11	0	67	0	22	65	0	0	87	0	154
GRAND TOTAL	0	421	54	0	475	198	104	352	1	0	457	5	932



Traffic Count Data

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Municipality: Windsor
 Count Date: Apr 23, 2024

North Approach - Scarsdale Rd

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
14:00	2	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0	2
14:15	4	0	7	0	11	0	0	0	0	0	0	0	0	0	0	0	0
14:30	2	0	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	2
15:00	1	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	15
15:30	2	0	11	0	13	0	0	0	0	0	0	0	0	0	0	0	9
15:45	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0	2
16:00	3	0	4	0	7	0	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	5	0	6	1	0	0	0	1	0	0	0	0	0	0	2
16:30	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
16:45	2	0	8	0	10	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	21	0	65	0	86	1	0	0	0	1	0	0	0	0	0	0	32
GRAND TOTAL	46	0	116	0	162	1	0	0	0	1	0	0	0	0	0	0	56



Traffic Count Data

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Municipality: Windsor
 Count Date: Apr 23, 2024

South Approach - School Driveway

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:45	2	0	1	0	3	1	1	1	0	3	0	0	0	0	0	1
09:00	9	0	7	0	16	2	0	5	0	7	0	0	0	0	0	16
09:15	4	0	4	0	8	0	0	0	0	0	0	0	0	0	0	1
09:30	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	2
09:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	16	1	14	0	31	3	1	6	0	10	0	0	0	0	0	23



Traffic Count Data

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Municipality: Windsor
 Count Date: Apr 23, 2024

South Approach - School Driveway

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
14:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
14:15	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	4
14:30	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3
14:45	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
15:00	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	4
15:15	1	0	2	0	3	0	0	2	0	2	0	0	0	0	0	10
15:30	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	15
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	6	0	7	0	13	0	0	8	0	8	0	0	0	0	0	37
GRAND TOTAL	22	1	21	0	44	3	1	14	0	18	0	0	0	0	0	60



Traffic Count Data

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Municipality: Windsor
 Count Date: Apr 23, 2024

East Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
14:00	0	12	2	0	14	0	0	0	0	0	0	0	0	0	0	0	1
14:15	0	10	6	0	16	0	1	0	0	1	0	0	0	0	0	0	3
14:30	0	11	2	0	13	0	1	0	0	1	0	0	0	0	0	0	0
14:45	0	16	1	0	17	0	1	0	0	1	0	0	0	0	0	0	0
15:00	0	25	5	0	30	0	1	0	0	1	0	0	0	0	0	0	2
15:15	0	33	3	0	36	0	4	0	0	4	0	0	0	0	0	0	42
15:30	0	24	3	0	27	0	0	0	0	0	0	0	0	0	0	0	46
15:45	0	16	3	0	19	0	1	0	0	1	0	0	0	0	0	0	2
16:00	0	17	6	0	23	0	1	0	0	1	0	0	0	0	0	0	0
16:15	0	13	1	0	14	0	0	1	0	1	0	0	0	0	0	0	0
16:30	0	10	1	0	11	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	15	2	0	17	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	202	35	0	237	0	10	1	0	11	0	0	0	0	0	0	96
GRAND TOTAL	0	401	53	0	454	0	20	1	0	21	0	0	0	0	0	0	198



Traffic Count Data

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Municipality: Windsor
 Count Date: Apr 23, 2024

West Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
07:00	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
07:15	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0	1
07:30	2	7	0	0	9	0	2	0	0	2	0	0	0	0	0	0	0
07:45	2	8	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	7	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
08:15	2	14	0	0	16	0	1	0	0	1	0	0	0	0	0	0	0
08:30	2	13	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	12	0	0	13	0	1	0	0	1	0	0	0	0	0	0	0
09:00	8	31	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0
09:15	1	10	0	0	11	0	0	0	0	0	0	0	0	0	0	0	1
09:30	1	16	1	0	18	0	1	0	0	1	0	0	0	0	0	0	0
09:45	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	24	129	1	0	154	0	5	0	0	5	0	0	0	0	0	0	2



Traffic Count Data

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Municipality: Windsor
 Count Date: Apr 23, 2024

West Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
14:00	1	11	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
14:15	4	12	0	0	16	0	1	0	0	1	0	0	0	0	0	0	0
14:30	8	20	0	0	28	0	2	0	0	2	0	0	0	0	0	0	0
14:45	5	14	0	0	19	0	4	0	0	4	0	0	0	0	0	0	0
15:00	5	23	0	0	28	0	0	0	0	0	0	0	0	0	0	0	2
15:15	14	17	0	0	31	0	0	0	0	0	0	0	0	0	0	0	1
15:30	13	29	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0
15:45	8	20	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0
16:00	5	25	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0
16:15	3	14	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0
16:30	6	10	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0
16:45	8	16	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	80	211	0	0	291	0	7	0	0	7	0	0	0	0	0	0	3
GRAND TOTAL	104	340	1	0	445	0	12	0	0	12	0	0	0	0	0	0	5

Peak Hour Diagram

Specified Period

From: 07:00:00
To: 10:00:00

One Hour Peak

From: 08:15:00
To: 09:15:00

Intersection: Esplanade Dr & Scarsdale Rd
Site Code: 2417100001
Count Date: Apr 23, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Esplanade Dr runs E/W

North Approach

	Out	In	Total
	34	26	60
	0	1	1
	0	0	0
Totals	34	27	61

Scarsdale Rd

	0	0	0	0
	0	0	0	0
	24	0	10	0
Totals	24	0	10	0

East Approach

	Out	In	Total
	125	88	213
	6	8	14
	0	0	0
Totals	131	96	227

Esplanade Dr

				Totals
	0	0	0	0
	0	0	13	13
	0	2	70	72
	0	0	0	0

Peds: 17

Peds: 0



Peds: 94

Esplanade Dr

Totals			
	0	0	0
	13	13	0
	118	112	6
	0	0	0

Peds: 18

West Approach

	Out	In	Total
	83	148	231
	2	9	11
	0	0	0
Totals	85	157	242

Totals				
	15	1	14	0
	12	0	8	0
	3	1	6	0
	0	0	0	0

School Driveway

South Approach

	Out	In	Total
	20	0	20
	10	0	10
	0	0	0
Totals	30	0	30

- Cars

- Trucks

- Bicycles

Comments



Peak Hour Summary

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Count Date: Apr 23, 2024
 Period: 07:00 - 10:00

Peak Hour Data (08:15 - 09:15)

Start Time	North Approach Scarsdale Rd						South Approach School Driveway						East Approach Esplanade Dr						West Approach Esplanade Dr						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
08:15	3	0	5	0	0	8	0	0	0	0	0	0	0	14	6	0	0	20	2	15	0	0	0	17	45
08:30	1	0	5	0	0	6	1	0	0	0	1	1	0	19	1	0	0	20	2	13	0	0	0	15	42
08:45	5	0	3	0	9	8	3	1	2	0	1	6	0	41	1	0	42	42	1	13	0	0	0	14	70
09:00	1	0	11	0	8	12	11	0	12	0	16	23	0	44	5	0	52	49	8	31	0	0	0	39	123
Grand Total	10	0	24	0	17	34	15	1	14	0	18	30	0	118	13	0	94	131	13	72	0	0	0	85	280
Approach %	29.4	0	70.6	0	-	-	50	3.3	46.7	0	-	-	0	90.1	9.9	0	-	-	15.3	84.7	0	0	-	-	-
Totals %	3.6	0	8.6	0	12.1	12.1	5.4	0.4	5	0	10.7	10.7	0	42.1	4.6	0	46.8	46.8	4.6	25.7	0	0	30.4	30.4	30.4
PHF	0.5	0	0.55	0	0.71	0.71	0.34	0.25	0.29	0	0.33	0.33	0	0.67	0.54	0	0.67	0.67	0.41	0.58	0	0	0.54	0.54	0.57
Cars	10	0	24	0	34	34	12	0	8	0	20	20	0	112	13	0	125	125	13	70	0	0	83	83	262
% Cars	100	0	100	0	100	100	80	0	57.1	0	66.7	66.7	0	94.9	100	0	95.4	95.4	100	97.2	0	0	97.6	97.6	93.6
Trucks	0	0	0	0	0	0	3	1	6	0	10	10	0	6	0	0	6	6	0	2	0	0	2	2	18
% Trucks	0	0	0	0	0	0	20	100	42.9	0	33.3	33.3	0	5.1	0	0	4.6	4.6	0	2.8	0	0	2.4	2.4	6.4
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds					17	-					18	-					94	-					0	-	129
% Peds					13.2	-					14	-					72.9	-					0	-	-

Peak Hour Diagram

Specified Period

From: 14:00:00
To: 17:00:00

One Hour Peak

From: 15:00:00
To: 16:00:00

Intersection: Esplanade Dr & Scarsdale Rd
Site Code: 2417100001
Count Date: Apr 23, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Esplanade Dr runs E/W

North Approach

	Out	In	Total
	32	54	86
	0	0	0
	0	0	0
Totals	32	54	86

Scarsdale Rd

	0	0	0	0
	0	0	0	0
	28	0	4	0
Totals	28	0	4	0

East Approach

	Out	In	Total
	112	96	208
	6	8	14
	0	0	0
Totals	118	104	222

Esplanade Dr

				Totals
	0	0	0	0
	0	0	40	40
	0	0	89	89
	0	0	0	0

Peds: 26

Peds: 3



Peds: 92

Esplanade Dr

Totals			
0	0	0	0
14	14	0	0
104	98	6	0
0	0	0	0

Peds: 29

West Approach

	Out	In	Total
	129	129	258
	0	6	6
	0	0	0
Totals	129	135	264

Totals				
3	0	11	0	
	3	0	3	0
	0	0	8	0
	0	0	0	0

School Driveway

South Approach

Out	In	Total	
	6	0	6
	8	0	8
	0	0	0
Totals	14	0	14

- Cars

- Trucks

- Bicycles

Comments



Peak Hour Summary

Intersection: Esplanade Dr & Scarsdale Rd
 Site Code: 2417100001
 Count Date: Apr 23, 2024
 Period: 14:00 - 17:00

Peak Hour Data (15:00 - 16:00)

Start Time	North Approach Scarsdale Rd						South Approach School Driveway						East Approach Esplanade Dr						West Approach Esplanade Dr						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
15:00	1	0	7	0	0	8	2	0	1	0	4	3	0	26	5	0	2	31	5	23	0	0	2	28	70
15:15	0	0	7	0	15	7	1	0	4	0	10	5	0	37	3	0	42	40	14	17	0	0	1	31	83
15:30	2	0	11	0	9	13	0	0	6	0	15	6	0	24	3	0	46	27	13	29	0	0	0	42	88
15:45	1	0	3	0	2	4	0	0	0	0	0	0	0	17	3	0	2	20	8	20	0	0	0	28	52
Grand Total	4	0	28	0	26	32	3	0	11	0	29	14	0	104	14	0	92	118	40	89	0	0	3	129	293
Approach %	12.5	0	87.5	0	-	-	21.4	0	78.6	0	-	-	0	88.1	11.9	0	-	-	31	69	0	0	-	-	
Totals %	1.4	0	9.6	0	10.9	4.8	1	0	3.8	0	4.8	4.8	0	35.5	4.8	0	40.3	40.3	13.7	30.4	0	0	4.8	4.8	44
PHF	0.5	0	0.64	0	0.62	0.38	0	0	0.46	0	0.58	0.58	0	0.7	0.7	0	0.74	0.74	0.71	0.77	0	0	0.77	0.77	0.83
Cars	4	0	28	0	32	32	3	0	3	0	6	6	0	98	14	0	112	112	40	89	0	0	3	129	279
% Cars	100	0	100	0	100	100	100	0	27.3	0	42.9	42.9	0	94.2	100	0	94.9	94.9	100	100	0	0	100	100	95.2
Trucks	0	0	0	0	0	0	0	0	8	0	8	8	0	6	0	0	6	6	0	0	0	0	0	0	14
% Trucks	0	0	0	0	0	0	0	0	72.7	0	57.1	57.1	0	5.8	0	0	5.1	5.1	0	0	0	0	0	0	4.8
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds					26	-					29	-					92	-					3	-	150
% Peds					17.3	-					19.3	-					61.3	-					2	-	



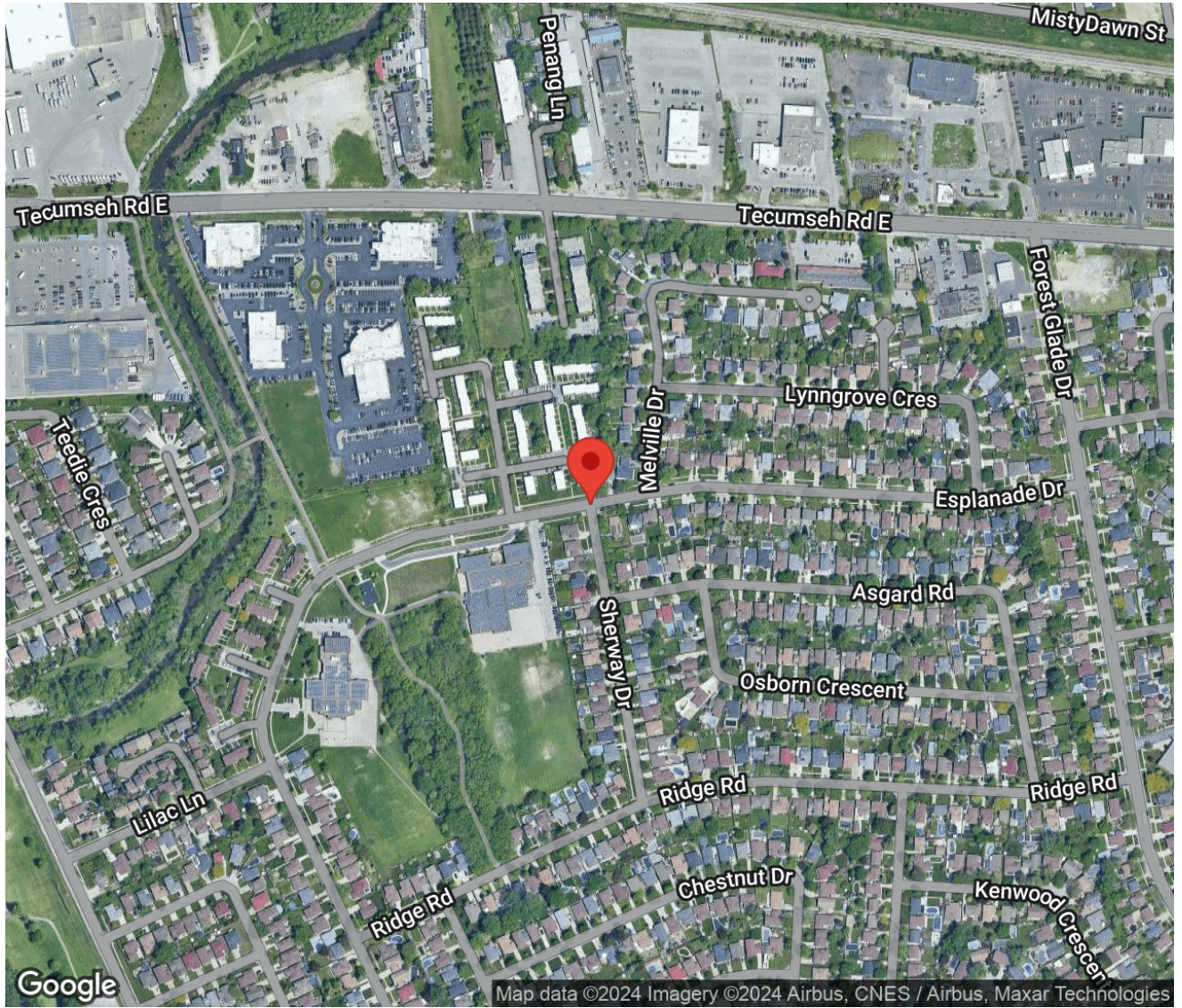
Project #24-171 - Dillon Consulting

Intersection Count Report

Intersection: Esplanade Dr & Sherway Dr
Municipality: Windsor
Count Date: Tuesday, Apr 23, 2024
Site Code: 2417100003
Count Categories: Cars, Trucks, Bicycles, Pedestrians
Count Period: 07:00-10:00, 14:00-17:00
Weather: Clear
Comments:

Traffic Count Map

Intersection: Esplanade Dr & Sherway Dr
Site Code: 2417100003
Municipality: Windsor
Count Date: Apr 23, 2024





Traffic Count Summary

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Municipality: Windsor
 Count Date: Apr 23, 2024

Sherway Dr - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	0	0	0	0	0	8	0	1	0	9	2	9
08:00 - 09:00	0	0	0	0	0	0	19	0	6	0	25	7	25
09:00 - 10:00	0	0	0	0	0	0	14	0	5	0	19	10	19
BREAK													
14:00 - 15:00	0	0	0	0	0	0	17	0	5	0	22	7	22
15:00 - 16:00	0	0	0	0	0	0	14	0	6	0	20	16	20
16:00 - 17:00	0	0	0	0	0	0	12	0	3	0	15	2	15
GRAND TOTAL	0	0	0	0	0	0	84	0	26	0	110	44	110



Traffic Count Summary

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Municipality: Windsor
 Count Date: Apr 23, 2024

Esplanade Dr - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	2	39	0	0	41	3	0	27	3	0	30	8	71
08:00 - 09:00	6	94	0	0	100	1	0	50	3	0	53	1	153
09:00 - 10:00	6	71	0	0	77	1	0	71	12	1	84	1	161
BREAK													
14:00 - 15:00	4	48	0	0	52	0	0	64	12	0	76	0	128
15:00 - 16:00	8	92	0	2	102	1	0	110	11	2	123	8	225
16:00 - 17:00	6	50	0	0	56	0	0	61	20	0	81	0	137
GRAND TOTAL	32	394	0	2	428	6	0	383	61	3	447	18	875



Traffic Count Data

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Municipality: Windsor
 Count Date: Apr 23, 2024

South Approach - Sherway Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:15	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	2
08:00	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	2
08:15	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0
08:30	5	0	2	0	7	0	0	0	0	0	0	0	0	0	0	0
08:45	10	0	1	0	11	0	0	0	0	0	0	0	0	0	0	5
09:00	7	0	2	0	9	0	0	0	0	0	0	0	0	0	0	4
09:15	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	2
09:30	4	0	2	0	6	0	0	0	0	0	0	0	0	0	0	2
09:45	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	2
SUBTOTAL	40	0	12	0	52	0	0	0	0	0	1	0	0	0	1	19



Traffic Count Data

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Municipality: Windsor
 Count Date: Apr 23, 2024

South Approach - Sherway Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
14:00	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0
14:15	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1
14:30	4	0	2	0	6	0	0	0	0	0	0	0	0	0	0	1
14:45	4	0	2	0	6	0	0	0	0	0	0	0	0	0	0	5
15:00	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
15:15	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	8
15:30	2	0	4	0	6	0	0	0	0	0	0	0	0	0	0	2
15:45	3	0	1	0	4	0	0	1	0	1	0	0	0	0	0	1
16:00	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	1
16:30	3	0	1	0	4	0	0	0	0	0	0	1	0	1	0	1
16:45	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	42	0	12	0	54	1	0	1	0	2	0	0	1	0	1	25
GRAND TOTAL	82	0	24	0	106	1	0	1	0	2	1	0	1	0	2	44



Traffic Count Data

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Municipality: Windsor
 Count Date: Apr 23, 2024

East Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	7	0	0	7	0	1	0	0	1	0	0	0	0	0	0
07:15	0	11	0	0	11	0	0	0	0	0	0	0	0	0	0	0
07:30	1	8	0	0	9	0	1	0	0	1	0	0	0	0	0	2
07:45	1	10	0	0	11	0	1	0	0	1	0	0	0	0	0	1
08:00	4	15	0	0	19	0	1	0	0	1	0	0	0	0	0	1
08:15	0	21	0	0	21	0	0	0	0	0	0	0	0	0	0	0
08:30	0	17	0	0	17	0	0	0	0	0	0	0	0	0	0	0
08:45	1	36	0	0	37	1	3	0	0	4	0	1	0	0	1	0
09:00	1	38	0	0	39	0	2	0	0	2	0	0	0	0	0	0
09:15	0	14	0	0	14	0	0	0	0	0	0	0	0	0	0	1
09:30	3	6	0	0	9	0	0	0	0	0	0	0	0	0	0	0
09:45	2	10	0	0	12	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	13	193	0	0	206	1	10	0	0	11	0	1	0	0	1	5



Traffic Count Data

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Municipality: Windsor
 Count Date: Apr 23, 2024

East Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
14:00	1	12	0	0	13	0	0	0	0	0	0	0	0	0	0	0
14:15	0	9	0	0	9	0	1	0	0	1	0	0	0	0	0	0
14:30	1	11	0	0	12	0	2	0	0	2	0	1	0	0	1	0
14:45	2	11	0	0	13	0	1	0	0	1	0	0	0	0	0	0
15:00	1	30	0	0	31	0	1	0	0	1	0	0	0	0	0	0
15:15	1	34	0	1	36	0	4	0	0	4	0	0	0	0	0	1
15:30	1	13	0	1	15	0	0	0	0	0	0	0	0	0	0	0
15:45	5	9	0	0	14	0	1	0	0	1	0	0	0	0	0	0
16:00	3	17	0	0	20	0	1	0	0	1	0	0	0	0	0	0
16:15	1	9	0	0	10	0	0	0	0	0	0	0	0	0	0	0
16:30	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
16:45	2	14	0	0	16	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	18	178	0	2	198	0	11	0	0	11	0	1	0	0	1	1
GRAND TOTAL	31	371	0	2	404	1	21	0	0	22	0	2	0	0	2	6



Traffic Count Data

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Municipality: Windsor
 Count Date: Apr 23, 2024

West Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	7	1	0	8	0	0	0	0	0	0	0	0	0	0	2
07:15	0	5	0	0	5	0	1	0	0	1	0	0	0	0	0	0
07:30	0	5	2	0	7	0	2	0	0	2	0	0	0	0	0	6
07:45	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
08:00	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0
08:15	0	9	2	0	11	0	1	0	0	1	0	0	0	0	0	0
08:30	0	10	0	0	10	0	0	0	0	0	0	1	0	0	1	1
08:45	0	15	1	0	16	0	4	0	0	4	0	0	0	0	0	0
09:00	0	33	7	1	41	0	4	1	0	5	0	0	0	0	0	0
09:15	0	12	3	0	15	0	0	0	0	0	0	0	0	0	0	0
09:30	0	17	1	0	18	0	0	0	0	0	0	0	0	0	0	0
09:45	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	1
SUBTOTAL	0	135	17	1	153	0	12	1	0	13	0	1	0	0	1	10



Traffic Count Data

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Municipality: Windsor
 Count Date: Apr 23, 2024

West Approach - Esplanade Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
14:00	0	12	2	0	14	0	0	0	0	0	0	0	1	0	1	0
14:15	0	14	3	0	17	0	1	0	0	1	0	0	0	0	0	0
14:30	0	19	3	0	22	0	2	0	0	2	0	0	0	0	0	0
14:45	0	12	3	0	15	0	4	0	0	4	0	0	0	0	0	0
15:00	0	22	1	0	23	0	0	0	0	0	0	0	0	0	0	3
15:15	0	18	5	1	24	0	1	0	0	1	0	0	0	0	0	2
15:30	0	36	4	0	40	0	7	0	0	7	0	0	0	0	0	3
15:45	0	26	1	1	28	0	0	0	0	0	0	0	0	0	0	0
16:00	0	19	12	0	31	0	0	0	0	0	0	0	0	0	0	0
16:15	0	14	2	0	16	0	1	0	0	1	0	0	0	0	0	0
16:30	0	12	1	0	13	0	0	0	0	0	0	1	0	0	1	0
16:45	0	14	5	0	19	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	218	42	2	262	0	16	0	0	16	0	1	1	0	2	8
GRAND TOTAL	0	353	59	3	415	0	28	1	0	29	0	2	1	0	3	18

Peak Hour Diagram

Specified Period

From: 07:00:00
To: 10:00:00

One Hour Peak

From: 08:15:00
To: 09:15:00

Intersection: Esplanade Dr & Sherway Dr
Site Code: 2417100003
Count Date: Apr 23, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Esplanade Dr runs E/W

East Approach

	Out	In	Total
	114	73	187
	6	9	15
	1	1	2
Totals	121	83	204

Esplanade Dr

			Totals
0	0	1	1
1	9	67	77
0	1	10	11

Peds: 0

Peds: 1



Peds: 0

Esplanade Dr

Totals			
0	0	0	0
118	112	5	1
3	2	1	0

Peds: 9

West Approach

	Out	In	Total
	78	138	216
	10	5	15
	1	1	2
Totals	89	144	233

Totals	25	6	0
	25	6	0
	0	0	0
	0	0	0

Sherway Dr

South Approach

	Out	In	Total
	31	12	43
	0	2	2
	0	0	0
Totals	31	14	45

- Cars

- Trucks

- Bicycles

Comments



Peak Hour Summary

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Count Date: Apr 23, 2024
 Period: 07:00 - 10:00

Peak Hour Data (08:15 - 09:15)

Start Time	North Approach				South Approach Sherway Dr				East Approach Esplanade Dr				West Approach Esplanade Dr				Total Vehicles									
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻		Peds	Total							
08:15					0		3		1	0	0	4	0	21			0	0	21		10	2	0	0	12	37
08:30					0		5		2	0	0	7	0	17			0	0	17		11	0	0	1	11	35
08:45					0		10		1	0	5	11	2	40			0	0	42		19	1	0	0	20	73
09:00					0		7		2	0	4	9	1	40			0	0	41		37	8	1	0	46	96
Grand Total					0	0	25	6	0	9	31	3	118	0	0	121	77	11	1	1	89	241				
Approach %					-		80.6	19.4	0	-		2.5	97.5	0	-		86.5	12.4	1.1	-						
Totals %					0		10.4	2.5	0	12.9		1.2	49	0	50.2		32	4.6	0.4	36.9						
PHF					0	0.63	0.75	0	0.7	0.38	0.74	0	0.72	0.52	0.34	0.25	0.48	0.63								
Cars					0	25	6	0	31	2	112	0	114	67	10	1	78	223								
% Cars					0	100	100	0	100	66.7	94.9	0	94.2	87	90.9	100	87.6	92.5								
Trucks					0	0	0	0	0	1	5	0	6	9	1	0	10	16								
% Trucks					0	0	0	0	0	33.3	4.2	0	5	11.7	9.1	0	11.2	6.6								
Bicycles					0	0	0	0	0	0	1	0	1	1	0	0	1	2								
% Bicycles					0	0	0	0	0	0	0.8	0	0.8	1.3	0	0	1.1	0.8								
Peds					0	-			9	-			0	-			1	-	10							
% Peds					0	-			90	-			0	-			10	-								

Peak Hour Diagram

Specified Period

From: 14:00:00
To: 17:00:00

One Hour Peak

From: 15:00:00
To: 16:00:00

Intersection: Esplanade Dr & Sherway Dr
Site Code: 2417100003
Count Date: Apr 23, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Esplanade Dr runs E/W

East Approach

	Out	In	Total
	96	109	205
	6	9	15
	0	0	0
Totals	102	118	220

Esplanade Dr

			Totals
0	0	2	2
0	8	102	110
0	0	11	11

Peds: 0

Peds: 8



Peds: 1

Esplanade Dr

Totals			
2	2	0	0
92	86	6	0
8	8	0	0

Peds: 16

West Approach

Out	In	Total
115	102	217
8	6	14
0	0	0
123	108	231

Totals	14	6	0
	14	5	0
	0	1	0
	0	0	0

South Approach

Out	In	Total
19	19	38
1	0	1
0	0	0
20	19	39

Sherway Dr

- Cars

- Trucks

- Bicycles

Comments



Peak Hour Summary

Intersection: Esplanade Dr & Sherway Dr
 Site Code: 2417100003
 Count Date: Apr 23, 2024
 Period: 14:00 - 17:00

Peak Hour Data (15:00 - 16:00)

Start Time	North Approach				South Approach Sherway Dr				East Approach Esplanade Dr				West Approach Esplanade Dr				Total Vehicles									
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻		Peds	Total							
15:00					0		5				5				1	31					22	1	0	3	23	60
15:15					0		4				0	0	8	4	1	38					1	1	1	2	25	69
15:30					0		2				4	0	2	6	1	13					1	0	3	3	47	68
15:45					0		3				2	0	1	5	5	10					0	0	1	0	28	48
Grand Total					0	0	14	6	0	16	20	8	92	2	1	102	110	11	2	8	123	245				
Approach %					-		70	30	0	-		7.8	90.2	2	-		89.4	8.9	1.6	-						
Totals %					0		5.7	2.4	0	8.2		3.3	37.6	0.8	41.6		44.9	4.5	0.8	50.2						
PHF					0		0.7	0.38	0	0.83		0.4	0.61	0.5	0.64		0.64	0.55	0.5	0.65		0.89				
Cars					0		14	5	0	19		8	86	2	96		102	11	2	115		230				
% Cars					0		100	83.3	0	95		100	93.5	100	94.1		92.7	100	100	93.5		93.9				
Trucks					0		0	1	0	1		0	6	0	6		8	0	0	8		15				
% Trucks					0		0	16.7	0	5		0	6.5	0	5.9		7.3	0	0	6.5		6.1				
Bicycles					0		0	0	0	0		0	0	0	0		0	0	0	0		0				
% Bicycles					0		0	0	0	0		0	0	0	0		0	0	0	0		0				
Peds					0	-				16					1	-				8		25				
% Peds					0	-				64					4	-				32		-				

Appendix C

Level of Service (LOS) Definitions

LEVEL OF SERVICE¹

Level of Service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. This concept was introduced in the 1965 *Highway Capacity Manual* as a criteria for interrupted flow conditions. The 2000 *Highway Capacity Manual* changed the basis for measuring Level of Service at intersections to control delay².

Six Levels of Service are defined with LOS A representing the best operating conditions, and LOS F the worst (briefly described below). It should be noted that there is often significant variability in the amount of delay experienced by individual drivers.

- LOS A:** This Level of Service describes the highest quality of traffic flow and is referred to as free flow. The approach appears open, turning movements are easily made and drivers have freedom of operation. Control delay is less than 10 seconds/vehicle.
- LOS B:** This Level of Service is referred to as a stable flow. Drivers feel somewhat restricted and occasionally may have to wait to complete the minor movement. Control delay is 10-15 seconds/vehicle for unsignalized intersections and 10-20 seconds/vehicle for signalized intersections.
- LOS C:** At this level, the operation is stable. Drivers feel more restricted and may have to wait, with queues developing for short periods. Control delay is 15-25 seconds/vehicle at unsignalized intersections and 20-35 seconds/vehicle at signalized intersections.
- LOS D:** At this level, traffic is approaching unstable flow. The motorist experiences increasing restriction and instability of flow. There are substantial delays to approaching vehicles during short peaks within the peak period, but there are enough gaps to lower demand to permit occasional clearance of developing queues and prevent excessive back-ups. Control delay is 25-35 seconds/vehicle at unsignalized intersections and 35-55 seconds/vehicle at signalized intersections.
- LOS E:** At this level capacity occurs. Long queues of vehicles exist and delays to vehicles may extend. Control delay is 35-50 seconds/vehicle at unsignalized intersections and 55-80 seconds/vehicle at signalized intersections.
- LOS F:** At this Level of Service, the intersection has failed. Capacity of the intersection has been exceeded. Control delay exceeds 50 seconds/vehicle at unsignalized intersections and exceeds 80 seconds/vehicle at signalized intersections.

¹

Transportation Research Board: Highway Capacity Manual 1965, 2000

²

Control delay is defined as the component of delay that results when a control signal causes a lane group to reduce speed or to stop; it is measured by comparison with the uncontrolled condition.

Appendix D

Synchro Analysis Worksheets

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

















AM Peak Hour
 2024 Existing Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	108	55	87	16	15	134
Future Volume (vph)	108	55	87	16	15	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	117	60	95	17	16	146
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	177	112	162			
Volume Left (vph)	117	95	0			
Volume Right (vph)	60	0	146			
Hadj (s)	-0.01	0.29	-0.47			
Departure Headway (s)	4.5	4.8	4.0			
Degree Utilization, x	0.22	0.15	0.18			
Capacity (veh/h)	752	716	851			
Control Delay (s)	8.8	8.6	7.9			
Approach Delay (s)	8.8	8.6	7.9			
Approach LOS	A	A	A			
Intersection Summary						
Delay			8.4			
Level of Service			A			
Intersection Capacity Utilization			34.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive

AM Peak Hour
 2024 Existing Conditions

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	72	0	0	118	13	15	1	14	10	0	24
Future Volume (vph)	13	72	0	0	118	13	15	1	14	10	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	78	0	0	128	14	16	1	15	11	0	26
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	92	142	32	37								
Volume Left (vph)	14	0	16	11								
Volume Right (vph)	0	14	15	26								
Hadj (s)	0.07	0.02	0.38	-0.36								
Departure Headway (s)	4.3	4.2	4.8	4.1								
Degree Utilization, x	0.11	0.16	0.04	0.04								
Capacity (veh/h)	819	843	701	827								
Control Delay (s)	7.8	8.0	8.1	7.3								
Approach Delay (s)	7.8	8.0	8.1	7.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.9									
Level of Service			A									
Intersection Capacity Utilization			34.5%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 120: Sherway Drive & Esplanade Drive

AM Peak Hour
 2024 Existing Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (veh/h)	76	11	3	117	25	6
Future Volume (Veh/h)	76	11	3	117	25	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	83	12	3	127	27	7
Pedestrians	1			9		
Lane Width (m)	3.6			3.6		
Walking Speed (m/s)	1.2			1.2		
Percent Blockage	0			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			104		232	98
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			104		232	98
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.5		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			1305		753	956
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	95	130	34			
Volume Left	0	3	27			
Volume Right	12	0	7			
cSH	1700	1305	787			
Volume to Capacity	0.06	0.00	0.04			
Queue Length 95th (m)	0.0	0.1	1.1			
Control Delay (s)	0.0	0.2	9.8			
Lane LOS			A			
Approach Delay (s)	0.0	0.2	9.8			
Approach LOS			A			
Intersection Summary						
Average Delay			1.4			
Intersection Capacity Utilization			18.6%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

















PM Peak Hour
 2024 Existing Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	133	95	65	8	23	132
Future Volume (vph)	133	95	65	8	23	132
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	145	103	71	9	25	143
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	248	80	168			
Volume Left (vph)	145	71	0			
Volume Right (vph)	103	0	143			
Hadj (s)	-0.08	0.34	-0.48			
Departure Headway (s)	4.4	5.0	4.1			
Degree Utilization, x	0.30	0.11	0.19			
Capacity (veh/h)	777	675	819			
Control Delay (s)	9.3	8.6	8.1			
Approach Delay (s)	9.3	8.6	8.1			
Approach LOS	A	A	A			
Intersection Summary						
Delay			8.8			
Level of Service			A			
Intersection Capacity Utilization			36.6%	ICU Level of Service		A
Analysis Period (min)			15			

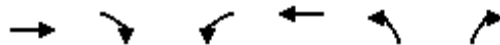
HCM Unsignalized Intersection Capacity Analysis
 110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive

PM Peak Hour
 2024 Existing Conditions

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	89	0	0	104	14	3	0	11	4	0	28
Future Volume (vph)	40	89	0	0	104	14	3	0	11	4	0	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	97	0	0	113	15	3	0	12	4	0	30
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	140	128	15	34								
Volume Left (vph)	43	0	3	4								
Volume Right (vph)	0	15	12	30								
Hadj (s)	0.06	0.02	0.55	-0.51								
Departure Headway (s)	4.2	4.2	5.1	4.0								
Degree Utilization, x	0.16	0.15	0.02	0.04								
Capacity (veh/h)	839	846	665	830								
Control Delay (s)	8.0	7.9	8.2	7.2								
Approach Delay (s)	8.0	7.9	8.2	7.2								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.9									
Level of Service			A									
Intersection Capacity Utilization			33.2%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
120: Sherway Drive & Esplanade Drive

PM Peak Hour
2024 Existing Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Traffic Volume (veh/h)	110	11	8	92	14	6
Future Volume (Veh/h)	110	11	8	92	14	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	12	9	100	15	7
Pedestrians	8			1	16	
Lane Width (m)	3.6			3.6	3.6	
Walking Speed (m/s)	1.2			1.2	1.2	
Percent Blockage	1			0	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			148		268	143
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			148		268	143
tC, single (s)			4.1		6.4	6.4
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.5
p0 queue free %			99		98	99
cM capacity (veh/h)			1427		707	854
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	132	109	22			
Volume Left	0	9	15			
Volume Right	12	0	7			
cSH	1700	1427	748			
Volume to Capacity	0.08	0.01	0.03			
Queue Length 95th (m)	0.0	0.2	0.7			
Control Delay (s)	0.0	0.7	10.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.7	10.0			
Approach LOS			A			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			21.8%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

AM Peak Hour
 2026 Future Background Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	110	56	89	16	15	137
Future Volume (vph)	110	56	89	16	15	137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	61	97	17	16	149
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	181	114	165			
Volume Left (vph)	120	97	0			
Volume Right (vph)	61	0	149			
Hadj (s)	-0.01	0.29	-0.47			
Departure Headway (s)	4.5	4.8	4.0			
Degree Utilization, x	0.23	0.15	0.18			
Capacity (veh/h)	749	713	848			
Control Delay (s)	8.8	8.7	7.9			
Approach Delay (s)	8.8	8.7	7.9			
Approach LOS	A	A	A			
Intersection Summary						
Delay			8.5			
Level of Service			A			
Intersection Capacity Utilization			34.5%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

AM Peak Hour

110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive 2026 Future Background Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	73	0	0	120	13	15	1	14	10	0	24
Future Volume (vph)	13	73	0	0	120	13	15	1	14	10	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	79	0	0	130	14	16	1	15	11	0	26

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	93	144	32	37
Volume Left (vph)	14	0	16	11
Volume Right (vph)	0	14	15	26
Hadj (s)	0.07	0.02	0.38	-0.36
Departure Headway (s)	4.3	4.2	4.9	4.1
Degree Utilization, x	0.11	0.17	0.04	0.04
Capacity (veh/h)	819	843	699	815
Control Delay (s)	7.8	8.0	8.1	7.3
Approach Delay (s)	7.8	8.0	8.1	7.3
Approach LOS	A	A	A	A

Intersection Summary

Delay	7.9
Level of Service	A
Intersection Capacity Utilization	34.6%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

120: Sherway Drive & Esplanade Drive

AM Peak Hour
2026 Future Background Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↘	↙
Traffic Volume (veh/h)	78	11	3	119	26	6
Future Volume (Veh/h)	78	11	3	119	26	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	85	12	3	129	28	7
Pedestrians	1				9	
Lane Width (m)	3.6				3.6	
Walking Speed (m/s)	1.2				1.2	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			106		236	100
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			106		236	100
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.5		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			1303		749	954
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	97	132	35			
Volume Left	0	3	28			
Volume Right	12	0	7			
cSH	1700	1303	782			
Volume to Capacity	0.06	0.00	0.04			
Queue Length 95th (m)	0.0	0.1	1.1			
Control Delay (s)	0.0	0.2	9.8			
Lane LOS			A			
Approach Delay (s)	0.0	0.2	9.8			
Approach LOS			A			
Intersection Summary						
Average Delay			1.4			
Intersection Capacity Utilization			18.7%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

PM Peak Hour
 2026 Future Background Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	136	97	66	8	23	135
Future Volume (vph)	136	97	66	8	23	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	148	105	72	9	25	147
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	253	81	172			
Volume Left (vph)	148	72	0			
Volume Right (vph)	105	0	147			
Hadj (s)	-0.08	0.34	-0.48			
Departure Headway (s)	4.4	5.0	4.1			
Degree Utilization, x	0.31	0.11	0.20			
Capacity (veh/h)	775	671	816			
Control Delay (s)	9.4	8.7	8.1			
Approach Delay (s)	9.4	8.7	8.1			
Approach LOS	A	A	A			
Intersection Summary						
Delay			8.8			
Level of Service			A			
Intersection Capacity Utilization			37.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

PM Peak Hour

110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive 2026 Future Background Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	91	0	0	106	14	3	0	11	4	0	28
Future Volume (vph)	40	91	0	0	106	14	3	0	11	4	0	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	99	0	0	115	15	3	0	12	4	0	30

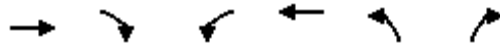
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	142	130	15	34
Volume Left (vph)	43	0	3	4
Volume Right (vph)	0	15	12	30
Hadj (s)	0.06	0.02	0.55	-0.51
Departure Headway (s)	4.2	4.2	5.1	4.0
Degree Utilization, x	0.17	0.15	0.02	0.04
Capacity (veh/h)	839	845	663	828
Control Delay (s)	8.0	7.9	8.2	7.2
Approach Delay (s)	8.0	7.9	8.2	7.2
Approach LOS	A	A	A	A

Intersection Summary

Delay	7.9
Level of Service	A
Intersection Capacity Utilization	33.3%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
120: Sherway Drive & Esplanade Drive

PM Peak Hour
2026 Future Background Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↘	↙
Traffic Volume (veh/h)	112	11	8	94	14	6
Future Volume (Veh/h)	112	11	8	94	14	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	122	12	9	102	15	7
Pedestrians	8			1	16	
Lane Width (m)	3.6			3.6	3.6	
Walking Speed (m/s)	1.2			1.2	1.2	
Percent Blockage	1			0	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			150		272	145
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			150		272	145
tC, single (s)			4.1		6.4	6.4
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.5
p0 queue free %			99		98	99
cM capacity (veh/h)			1424		703	852
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	134	111	22			
Volume Left	0	9	15			
Volume Right	12	0	7			
cSH	1700	1424	744			
Volume to Capacity	0.08	0.01	0.03			
Queue Length 95th (m)	0.0	0.2	0.7			
Control Delay (s)	0.0	0.7	10.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.7	10.0			
Approach LOS			A			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			21.9%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

AM Peak Hour
 2031 Future Background Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	116	59	93	17	16	144
Future Volume (vph)	116	59	93	17	16	144
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	126	64	101	18	17	157

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	190	119	174
Volume Left (vph)	126	101	0
Volume Right (vph)	64	0	157
Hadj (s)	-0.01	0.29	-0.47
Departure Headway (s)	4.5	4.8	4.0
Degree Utilization, x	0.24	0.16	0.20
Capacity (veh/h)	743	707	840
Control Delay (s)	9.0	8.8	8.0
Approach Delay (s)	9.0	8.8	8.0
Approach LOS	A	A	A

Intersection Summary			
Delay		8.6	
Level of Service		A	
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

AM Peak Hour

110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive 2031 Future Background Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	77	0	0	127	13	15	1	14	10	0	24
Future Volume (vph)	13	77	0	0	127	13	15	1	14	10	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	84	0	0	138	14	16	1	15	11	0	26

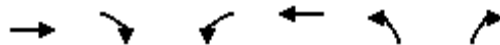
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	98	152	32	37
Volume Left (vph)	14	0	16	11
Volume Right (vph)	0	14	15	26
Hadj (s)	0.07	0.02	0.38	-0.36
Departure Headway (s)	4.3	4.2	4.9	4.1
Degree Utilization, x	0.12	0.18	0.04	0.04
Capacity (veh/h)	817	841	694	807
Control Delay (s)	7.9	8.1	8.1	7.3
Approach Delay (s)	7.9	8.1	8.1	7.3
Approach LOS	A	A	A	A

Intersection Summary

Delay	7.9
Level of Service	A
Intersection Capacity Utilization	34.8%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
120: Sherway Drive & Esplanade Drive

AM Peak Hour
2031 Future Background Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (veh/h)	81	12	3	125	27	6
Future Volume (Veh/h)	81	12	3	125	27	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	88	13	3	136	29	7
Pedestrians	1			9		
Lane Width (m)	3.6			3.6		
Walking Speed (m/s)	1.2			1.2		
Percent Blockage	0			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			110		246	104
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			110		246	104
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.5		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			1298		738	950
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	101	139	36			
Volume Left	0	3	29			
Volume Right	13	0	7			
cSH	1700	1298	772			
Volume to Capacity	0.06	0.00	0.05			
Queue Length 95th (m)	0.0	0.1	1.2			
Control Delay (s)	0.0	0.2	9.9			
Lane LOS			A			
Approach Delay (s)	0.0	0.2	9.9			
Approach LOS			A			
Intersection Summary						
Average Delay			1.4			
Intersection Capacity Utilization			19.0%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

PM Peak Hour
 2031 Future Background Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	143	102	70	9	25	142
Future Volume (vph)	143	102	70	9	25	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	155	111	76	10	27	154
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	266	86	181			
Volume Left (vph)	155	76	0			
Volume Right (vph)	111	0	154			
Hadj (s)	-0.08	0.34	-0.48			
Departure Headway (s)	4.4	5.1	4.2			
Degree Utilization, x	0.33	0.12	0.21			
Capacity (veh/h)	769	664	806			
Control Delay (s)	9.6	8.8	8.3			
Approach Delay (s)	9.6	8.8	8.3			
Approach LOS	A	A	A			
Intersection Summary						
Delay			9.0			
Level of Service			A			
Intersection Capacity Utilization			38.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

PM Peak Hour

110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive 2031 Future Background Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	95	0	0	112	14	3	0	11	4	0	28
Future Volume (vph)	40	95	0	0	112	14	3	0	11	4	0	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	103	0	0	122	15	3	0	12	4	0	30

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	146	137	15	34
Volume Left (vph)	43	0	3	4
Volume Right (vph)	0	15	12	30
Hadj (s)	0.06	0.03	0.55	-0.51
Departure Headway (s)	4.2	4.2	5.1	4.0
Degree Utilization, x	0.17	0.16	0.02	0.04
Capacity (veh/h)	838	843	659	821
Control Delay (s)	8.1	8.0	8.2	7.2
Approach Delay (s)	8.1	8.0	8.2	7.2
Approach LOS	A	A	A	A

Intersection Summary

Delay	7.9
Level of Service	A
Intersection Capacity Utilization	40.9%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 120: Sherway Drive & Esplanade Drive

PM Peak Hour
 2031 Future Background Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	118	12	9	99	15	6
Future Volume (Veh/h)	118	12	9	99	15	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	128	13	10	108	16	7
Pedestrians	8			1	16	
Lane Width (m)	3.6			3.6	3.6	
Walking Speed (m/s)	1.2			1.2	1.2	
Percent Blockage	1			0	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			157		286	152
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			157		286	152
tC, single (s)			4.1		6.4	6.4
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.5
p0 queue free %			99		98	99
cM capacity (veh/h)			1416		689	845
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	141	118	23			
Volume Left	0	10	16			
Volume Right	13	0	7			
cSH	1700	1416	730			
Volume to Capacity	0.08	0.01	0.03			
Queue Length 95th (m)	0.0	0.2	0.8			
Control Delay (s)	0.0	0.7	10.1			
Lane LOS	A		B			
Approach Delay (s)	0.0	0.7	10.1			
Approach LOS	B					
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			23.0%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

AM Peak Hour
 2026 Total Future Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	113	56	89	16	15	146
Future Volume (vph)	113	56	89	16	15	146
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	123	61	97	17	16	159
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	184	114	175			
Volume Left (vph)	123	97	0			
Volume Right (vph)	61	0	159			
Hadj (s)	-0.01	0.29	-0.48			
Departure Headway (s)	4.5	4.8	4.0			
Degree Utilization, x	0.23	0.15	0.20			
Capacity (veh/h)	744	709	847			
Control Delay (s)	8.9	8.7	8.0			
Approach Delay (s)	8.9	8.7	8.0			
Approach LOS	A	A	A			
Intersection Summary						
Delay			8.5			
Level of Service			A			
Intersection Capacity Utilization			35.3%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive

AM Peak Hour
 2026 Total Future Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶			↷			↶↷			↶↷	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	79	0	0	122	13	15	1	14	10	0	24
Future Volume (vph)	13	79	0	0	122	13	15	1	14	10	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	86	0	0	133	14	16	1	15	11	0	26
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	100	147	32	37								
Volume Left (vph)	14	0	16	11								
Volume Right (vph)	0	14	15	26								
Hadj (s)	0.07	0.02	0.38	-0.36								
Departure Headway (s)	4.3	4.2	4.9	4.1								
Degree Utilization, x	0.12	0.17	0.04	0.04								
Capacity (veh/h)	818	841	695	809								
Control Delay (s)	7.9	8.0	8.1	7.3								
Approach Delay (s)	7.9	8.0	8.1	7.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.9									
Level of Service			A									
Intersection Capacity Utilization			34.8%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 120: Sherway Drive & Esplanade Drive

AM Peak Hour
 2026 Total Future Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (veh/h)	84	11	3	121	26	6
Future Volume (Veh/h)	84	11	3	121	26	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	91	12	3	132	28	7
Pedestrians	1			9		
Lane Width (m)	3.6			3.6		
Walking Speed (m/s)	1.2			1.2		
Percent Blockage	0			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			112		245	106
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			112		245	106
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.5		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			1296		740	947
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	103	135	35			
Volume Left	0	3	28			
Volume Right	12	0	7			
cSH	1700	1296	774			
Volume to Capacity	0.06	0.00	0.05			
Queue Length 95th (m)	0.0	0.1	1.1			
Control Delay (s)	0.0	0.2	9.9			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.2	9.9			
Approach LOS			A			
Intersection Summary						
Average Delay			1.4			
Intersection Capacity Utilization			18.8%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 200: Esplanade Drive & Site Access

AM Peak Hour
 2026 Total Future Conditions



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	86	159	2	6	9
Future Volume (Veh/h)	3	86	159	2	6	9
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	93	173	2	7	10
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	175				273	174
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	175				273	174
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1414				719	875
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	96	175	17			
Volume Left	3	0	7			
Volume Right	0	2	10			
cSH	1414	1700	803			
Volume to Capacity	0.00	0.10	0.02			
Queue Length 95th (m)	0.1	0.0	0.5			
Control Delay (s)	0.3	0.0	9.6			
Lane LOS	A		A			
Approach Delay (s)	0.3	0.0	9.6			
Approach LOS			A			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization		18.5%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

PM Peak Hour
 2026 Total Future Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	144	97	66	8	23	140
Future Volume (vph)	144	97	66	8	23	140
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	157	105	72	9	25	152
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	262	81	177			
Volume Left (vph)	157	72	0			
Volume Right (vph)	105	0	152			
Hadj (s)	-0.07	0.34	-0.49			
Departure Headway (s)	4.4	5.1	4.1			
Degree Utilization, x	0.32	0.11	0.20			
Capacity (veh/h)	771	666	811			
Control Delay (s)	9.5	8.7	8.2			
Approach Delay (s)	9.5	8.7	8.2			
Approach LOS	A	A	A			
Intersection Summary						
Delay			8.9			
Level of Service			A			
Intersection Capacity Utilization			37.8%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive

PM Peak Hour
 2026 Total Future Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	94	0	0	111	14	3	0	11	4	0	28
Future Volume (vph)	40	94	0	0	111	14	3	0	11	4	0	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	102	0	0	121	15	3	0	12	4	0	30

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	145	136	15	34
Volume Left (vph)	43	0	3	4
Volume Right (vph)	0	15	12	30
Hadj (s)	0.06	0.02	0.55	-0.51
Departure Headway (s)	4.2	4.2	5.1	4.0
Degree Utilization, x	0.17	0.16	0.02	0.04
Capacity (veh/h)	838	844	660	822
Control Delay (s)	8.1	8.0	8.2	7.2
Approach Delay (s)	8.1	8.0	8.2	7.2
Approach LOS	A	A	A	A

Intersection Summary			
Delay		7.9	
Level of Service		A	
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
 120: Sherway Drive & Esplanade Drive

PM Peak Hour
 2026 Total Future Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	115	11	8	99	14	6
Future Volume (Veh/h)	115	11	8	99	14	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	125	12	9	108	15	7
Pedestrians	8			1	16	
Lane Width (m)	3.6			3.6	3.6	
Walking Speed (m/s)	1.2			1.2	1.2	
Percent Blockage	1			0	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			153		281	148
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			153		281	148
tC, single (s)			4.1		6.4	6.4
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.5
p0 queue free %			99		98	99
cM capacity (veh/h)			1421		695	848
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	137	117	22			
Volume Left	0	9	15			
Volume Right	12	0	7			
cSH	1700	1421	737			
Volume to Capacity	0.08	0.01	0.03			
Queue Length 95th (m)	0.0	0.2	0.7			
Control Delay (s)	0.0	0.6	10.0			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	10.0			
Approach LOS			B			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			22.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 200: Esplanade Drive & Site Access

PM Peak Hour
 2026 Total Future Conditions



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	131	137	5	3	5
Future Volume (Veh/h)	8	131	137	5	3	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	142	149	5	3	5
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	154				312	152
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	154				312	152
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	99
cM capacity (veh/h)	1439				681	900
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	151	154	8			
Volume Left	9	0	3			
Volume Right	0	5	5			
cSH	1439	1700	803			
Volume to Capacity	0.01	0.09	0.01			
Queue Length 95th (m)	0.2	0.0	0.2			
Control Delay (s)	0.5	0.0	9.5			
Lane LOS	A		A			
Approach Delay (s)	0.5	0.0	9.5			
Approach LOS			A			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			23.4%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

AM Peak Hour
 2031 Total Future Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	119	59	93	17	16	153
Future Volume (vph)	119	59	93	17	16	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	129	64	101	18	17	166
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	193	119	183			
Volume Left (vph)	129	101	0			
Volume Right (vph)	64	0	166			
Hadj (s)	-0.01	0.29	-0.48			
Departure Headway (s)	4.6	4.9	4.0			
Degree Utilization, x	0.25	0.16	0.21			
Capacity (veh/h)	739	703	839			
Control Delay (s)	9.0	8.8	8.1			
Approach Delay (s)	9.0	8.8	8.1			
Approach LOS	A	A	A			
Intersection Summary						
Delay			8.6			
Level of Service			A			
Intersection Capacity Utilization			36.5%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive

AM Peak Hour
 2031 Total Future Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	83	0	0	129	13	15	1	14	10	0	24
Future Volume (vph)	13	83	0	0	129	13	15	1	14	10	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	90	0	0	140	14	16	1	15	11	0	26

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	104	154	32	37
Volume Left (vph)	14	0	16	11
Volume Right (vph)	0	14	15	26
Hadj (s)	0.07	0.02	0.38	-0.36
Departure Headway (s)	4.3	4.2	4.9	4.2
Degree Utilization, x	0.12	0.18	0.04	0.04
Capacity (veh/h)	817	840	690	802
Control Delay (s)	7.9	8.1	8.1	7.3
Approach Delay (s)	7.9	8.1	8.1	7.3
Approach LOS	A	A	A	A

Intersection Summary

Delay	8.0
Level of Service	A
Intersection Capacity Utilization	35.0%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 120: Sherway Drive & Esplanade Drive

AM Peak Hour
 2031 Total Future Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (veh/h)	87	12	3	127	27	6
Future Volume (Veh/h)	87	12	3	127	27	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	95	13	3	138	29	7
Pedestrians	1			9		
Lane Width (m)	3.6			3.6		
Walking Speed (m/s)	1.2			1.2		
Percent Blockage	0			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			117		256	110
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			117		256	110
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.5		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			1290		730	941
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	108	141	36			
Volume Left	0	3	29			
Volume Right	13	0	7			
cSH	1700	1290	763			
Volume to Capacity	0.06	0.00	0.05			
Queue Length 95th (m)	0.0	0.1	1.2			
Control Delay (s)	0.0	0.2	10.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.2	10.0			
Approach LOS			A			
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			19.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 200: Esplanade Drive & Site Access

AM Peak Hour
 2031 Total Future Conditions



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Volume (veh/h)	3	90	166	2	6	9
Future Volume (Veh/h)	3	90	166	2	6	9
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	98	180	2	7	10
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	182				285	181
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	182				285	181
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1405				708	867
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	101	182	17			
Volume Left	3	0	7			
Volume Right	0	2	10			
cSH	1405	1700	794			
Volume to Capacity	0.00	0.11	0.02			
Queue Length 95th (m)	0.1	0.0	0.5			
Control Delay (s)	0.2	0.0	9.6			
Lane LOS	A		A			
Approach Delay (s)	0.2	0.0	9.6			
Approach LOS			A			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization		18.9%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis
 100: Esplanade Drive & Lilac Lane

PM Peak Hour
 2031 Total Future Conditions



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	151	102	70	9	25	147
Future Volume (vph)	151	102	70	9	25	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	164	111	76	10	27	160
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total (vph)	275	86	187			
Volume Left (vph)	164	76	0			
Volume Right (vph)	111	0	160			
Hadj (s)	-0.07	0.34	-0.48			
Departure Headway (s)	4.5	5.1	4.2			
Degree Utilization, x	0.34	0.12	0.22			
Capacity (veh/h)	764	658	800			
Control Delay (s)	9.7	8.8	8.4			
Approach Delay (s)	9.7	8.8	8.4			
Approach LOS	A	A	A			
Intersection Summary						
Delay			9.1			
Level of Service			A			
Intersection Capacity Utilization			39.3%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 110: School Drop-off Exit Lane/Scarsdale Road & Esplanade Drive

PM Peak Hour
 2031 Total Future Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	98	0	0	117	14	3	0	11	4	0	28
Future Volume (vph)	40	98	0	0	117	14	3	0	11	4	0	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	107	0	0	127	15	3	0	12	4	0	30
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	150	142	15	34								
Volume Left (vph)	43	0	3	4								
Volume Right (vph)	0	15	12	30								
Hadj (s)	0.06	0.03	0.55	-0.51								
Departure Headway (s)	4.2	4.2	5.1	4.1								
Degree Utilization, x	0.18	0.17	0.02	0.04								
Capacity (veh/h)	837	842	655	816								
Control Delay (s)	8.1	8.0	8.2	7.2								
Approach Delay (s)	8.1	8.0	8.2	7.2								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.0									
Level of Service			A									
Intersection Capacity Utilization			41.1%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
120: Sherway Drive & Esplanade Drive

PM Peak Hour
2031 Total Future Conditions



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	121	12	9	104	15	6
Future Volume (Veh/h)	121	12	9	104	15	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	132	13	10	113	16	7
Pedestrians	8			1	16	
Lane Width (m)	3.6			3.6	3.6	
Walking Speed (m/s)	1.2			1.2	1.2	
Percent Blockage	1			0	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			161		296	156
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			161		296	156
tC, single (s)			4.1		6.4	6.4
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.5
p0 queue free %			99		98	99
cM capacity (veh/h)			1411		681	840
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	145	123	23			
Volume Left	0	10	16			
Volume Right	13	0	7			
cSH	1700	1411	723			
Volume to Capacity	0.09	0.01	0.03			
Queue Length 95th (m)	0.0	0.2	0.8			
Control Delay (s)	0.0	0.7	10.1			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.7	10.1			
Approach LOS			B			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			23.2%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 200: Esplanade Drive & Site Access

PM Peak Hour
 2031 Total Future Conditions



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	135	143	5	3	5
Future Volume (Veh/h)	8	135	143	5	3	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	147	155	5	3	5
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	160				322	158
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	160				322	158
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	99
cM capacity (veh/h)	1432				671	893
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	156	160	8			
Volume Left	9	0	3			
Volume Right	0	5	5			
cSH	1432	1700	795			
Volume to Capacity	0.01	0.09	0.01			
Queue Length 95th (m)	0.2	0.0	0.2			
Control Delay (s)	0.5	0.0	9.6			
Lane LOS	A		A			
Approach Delay (s)	0.5	0.0	9.6			
Approach LOS			A			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			23.6%		ICU Level of Service	A
Analysis Period (min)			15			

Appendix E

Background Development Details



Groskurth, Caylah <cgroskurth@dillon.ca>

0 Esplanade Drive - Background Development Location

3 messages

Groskurth, Caylah <cgroskurth@dillon.ca>
To: CAmicarelli@citywindsor.ca
Cc: Amy Farkas <afarkas@dillon.ca>, "Kooistra, Tim" <tkooistra@dillon.ca>

Wed, May 1, 2024 at 1:33 PM

Hi Clare,
My name is Caylah Groskurth, and I am working with Tim Kooistra on the transportation impact study (TIS) for the proposed residential development at 0 Esplanade Drive in Windsor.
I am following up on your discussion regarding a background development located in the nearby area. You identified a 6-storey residential building with 77 units north of the subject site, on the south side of Tecumseh Road East.
Would this background development be found on the vacant lot off Scarsdale Road? Please confirm.
Thank you, and I look forward to your email,
Caylah Groskurth




Caylah Groskurth
Dillon Consulting Limited
12 James St. N Suite 401
Hamilton, Ontario, L8R 2J9
T - 905.901.2912 ext. 3462
F - 905.901.2918
cgroskurth@dillon.ca
www.dillon.ca



Amicarelli, Clare <CAmicarelli@citywindsor.ca>
To: "cgroskurth@dillon.ca" <cgroskurth@dillon.ca>, "Mehrilou, Elara" <EMehrilou@citywindsor.ca>
Cc: "Farkas, Amy" <afarkas@dillon.ca>, "Kooistra, Tim" <tkooistra@dillon.ca>

Thu, May 2, 2024 at 9:15 AM

Good morning Caylah,

Thank you for following up. The inquiry was forwarded to our new Transportation Planner I, Ellie (cc'd) as she is overseeing the development applications.

Ellie, would you be able to provide Caylah with an update?

Thank you,

CLARE AMICARELLI, EIT, CAPM | TRANSPORTATION PLANNING COORDINATOR



Transportation Planning Services
350 City Hall Square | Suite 320 | Windsor, ON | N9A 7K6
(519)-255-6100 ext. 6463
www.citywindsor.ca

From: Groskurth, Caylah [mailto:cgroskurth@dillon.ca]
Sent: May 1, 2024 1:34 PM
To: Amicarelli, Clare <CAmicarelli@citywindsor.ca>
Cc: Amy Farkas <afarkas@dillon.ca>; Kooistra, Tim <tkooistra@dillon.ca>
Subject: 0 Esplanade Drive - Background Development Location

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Clare,
My name is Caylah Groskurth, and I am working with Tim Kooistra on the transportation impact study (TIS) for the proposed residential development at 0 Esplanade Drive in Windsor.
I am following up on your discussion regarding a background development located in the nearby area. You identified a 6-storey residential building with 77 units north of the subject site, on the south side of Tecumseh Road East.
Would this background development be found on the vacant lot off Scarsdale Road? Please confirm.
Thank you, and I look forward to your email,
Caylah Groskurth

Caylah Groskurth
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 www.dillon.ca

[Redacted]

This message is directed in confidence solely to the person(s) named above and may contain privileged, confidential or private information which is not to be disclosed. If you are not the addressee or an authorized representative thereof, please contact the undersigned and then destroy this message.

Ce message est destiné uniquement aux personnes indiquées dans l'entête et peut contenir une information privilégiée, confidentielle ou privée et ne pouvant être divulguée. Si vous n'êtes pas le destinataire de ce message ou une personne autorisée à le recevoir, veuillez communiquer avec le soussigné et ensuite détruire ce message.

Mehrilou, Elara <EMehrilou@citywindsor.ca>
 To: "cgroskurth@dillon.ca" <cgroskurth@dillon.ca>
 Cc: "Farkas, Amy" <afarkas@dillon.ca>, "Kooistra, Tim" <tkooistra@dillon.ca>

Fri, May 3, 2024 at 1:33 PM

Good afternoon,

I appreciate your patience while I was gathering some information and feedbacks in regards to including/excluding the impact of the other development in the TIS scopes.

Transportation Planning has waived the requirement of including other development impacts in your TIS.

Sincerely,

Elara Mehr L (Elie)

Elara MehriLou MEng. | Transportation Planner I



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