CGH TRANSPORTATION

SEPTEMBER 30, 2024

1720 Sherwood Forrest Circle Scoped Transportation Impact Assessment

Sherwood Forrest Limited Partnership

1720 Sherwood Forrest Scoped TIA

Prepared for:

Sherwood Forrest Limited Partnership

Prepared by:

628 Haines Road
Newmarket, ON
L3Y 6V5

30 September 2024

PN: 2023-078

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September 30, 2024 Ref: 2023-078

Sherwood Forrest Limited Partnership
c/o Tony Vella
4900 Palladium Way, Suite 105
Burlington, ON, L7M 0W7
By email: Tony@ARGOLand.ca

Re: 1720 Sherwood Forrest Scoped TIA

Dear Tony:

CGH Transportation Inc. is pleased to present the findings of our revised Scoped Transportation Impact Assessment for the proposed residential development located at 1720 Sherwood Forrest in the City of Mississauga. The Scoped TIA has been prepared in support of a Zoning By-law Amendment and Draft Plan of Subdivision for the subject site. The report concludes that the proposed development will function within the study area road network. It is recommended that, from a transportation perspective, the proposed development application process proceeds.

Please do not hesitate to contact the undersigned should you have any additional questions or concerns.

Yours truly,

CGH TRANSPORTATION INC.

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1 Introduction

This study has been prepared according to the City of Mississauga's 2022 Transportation Impact Study Guidelines (Version 5.1). Accordingly, a Pre-Study Consultation Checklist has been prepared and is included as Appendix A, along with the Certification Form for the TIA Study PM. As shown in the Pre-Study Consultation Checklist, a Scoped TIA is required including Access Review, a TDM Statement, and a Pedestrian Circulation Plan. This study has been prepared to support a Zoning By-law Amendment and Draft Plan of Subdivision for the subject site. As part of the application resubmission process, the site plan and the Access Review have undergone revisions to reflect the City of Mississauga's comments. A Transportation Comment Response Matrix is provided in Appendix B.

The subject property is located at 1720 Sherwood Forrest Circle and is zoned as a Greenlands (G1) and Residential (R1-48) zones. Currently, the site includes a former seniors' residence which will be removed as part of the proposed redevelopment. The proposed development includes a common element condominium consisting of 56 single detached homes. The proposed site plan provides 14 visitor parking spaces, including one accessible parking space.

The proposed development will use an existing site access which forms the fourth leg of Sherwood Forrest Circle and Deers Wold intersection. The development will maintain the existing access. For the purposes of this study, the AM and PM peak hour will be considered for analysis, and the projected full build-out and occupancy horizon is 2028. Figure 1 illustrates the site context. Figure 2 illustrates the proposed site plan.

Figure 1: Site Context

LAND USE SUMMARY

1720 Sherwood Forrest Circle	4.63 ha.	11.44 ac.	
Block F (to be acquired from City of Mississauga)	0.05 ha.	0.12 ac.	
Total Site Area	4.68 ha.	11.56 ac.	
NON-DEVELOPABLE			
NHS	2.34 ha.	5.78 ac.	
Road Widening	0.09 ha.	0.22 ac.	
Net Area	2.25 ha.	5.56 ac.	100.0%
DEVELOPABLE			
Residential (see 'UNIT SUMMARY')	1.45 ha.	3.58 ac.	64.4%
Open Space	0.22 ha.	0.54 ac.	9.8%
Condo Roads	0.58 ha.	1.43 ac.	25.8%
TOTAL (Net Developable)	2.25 ha.	5.56 ac.	100.0%

UNIT SUMMARY

	Unit width		Unit Depth	Unit Count	Lot Mix	Frontage (m)	Area		% Net Res
Condo Block									
Detached Homes	(33) 10.00	x	23.0	50	89%	500.0	1.22 ha.	3.01 ac.	84.4%
Detached Homes (custom)	(33) 10.00	x	23.0	1	2%	10.0	0.03 ha.	0.08 ac.	2.4%
Custom Homes (approximately)	(57) 12.80	x	23.0	1	2%	12.8	0.03 ha.	0.08 ac.	2.4%
Custom Homes (approximately)	(57) 17.37	x	N/A	3	5%	52.1	0.12 ha.	0.31 ac.	8.6%
Custom Homes (approximately)	(57) 17.37	x	N/A	1	2%	17.4	0.03 ha.	0.08 ac.	2.4%
TOTAL				56	100%	592.3	1.45 ha.	3.57 ac.	100.0%

ROW SCHEDULE

	(m) width	(lin.m)	(lin.m) Half
Condo Road	9.4	511.2	0.0
Existing driveway to Sherwood Forrest Circle (Block F)		37.4	0.0
Condo Road	7.4	20.1	0.0
Condo Road	6.4	22.1	0.0
ROW TOTAL		590.7	0.0

PARKING

	Reqd	Provided
Resident- 2 spaces per unit	112	112
Visitor - 0.25 spaces per unit	14	14
TOTAL PARKING	126	126

DRAFT

- All Units In Metric Unless Otherwise Noted.
- Base Information Obtained From Various Sources And Is Approximate.
- Schedule / Plan Information Is Conceptual And Requires Verification by Appropriate Agency.
- Aerial Photo: Google Earth, Approx. Spring 2015

GERRARD DESIGN

1720 SHERWOOD FORREST CIRCLE | Mississauga, Ontario

PRELIMINARY DEVELOPMENT CONCEPT

APR 29, 2024
PROJECT 20108
SCALE 1:750

CP-22

1.1 Area Road Network

Sherwood Forrest Circle

Sherwood Forrest Circle is a City of Mississauga local road with a two-lane urban cross-section. A boulevard-separated sidewalk is provided on the west side of the road. No cycling facilities are provided. An unposted speed limit of 40 km/h applies for neighbourhood roads. The City of Mississauga protects for a 20 m right-of-way along this road.

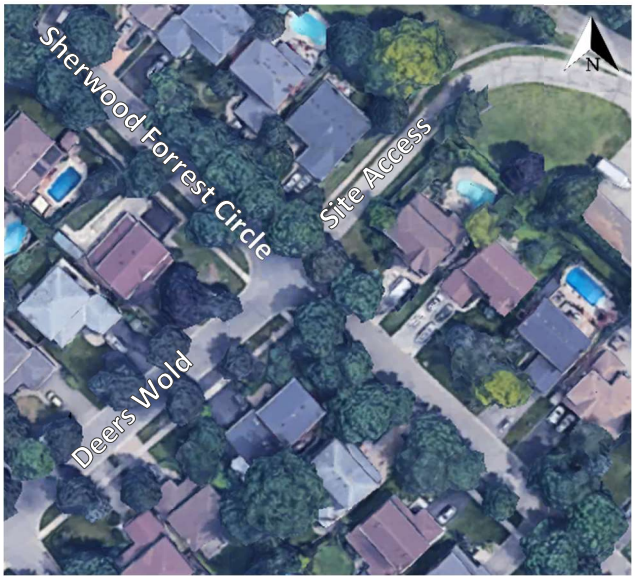
Deers Wold

Deers Wold is an east-west City of Mississauga local road with a two-lane urban cross-section. A boulevard-separated sidewalk is provided on the south side of the road. No cycling facilities are provided. An unposted speed limit of 40 km/h applies for neighbourhood roads. The City of Mississauga protects for a 20 m right-of-way along this road.

1.2 Existing Intersections

Sherwood Forrest Circle at Deers Wold/Site Access

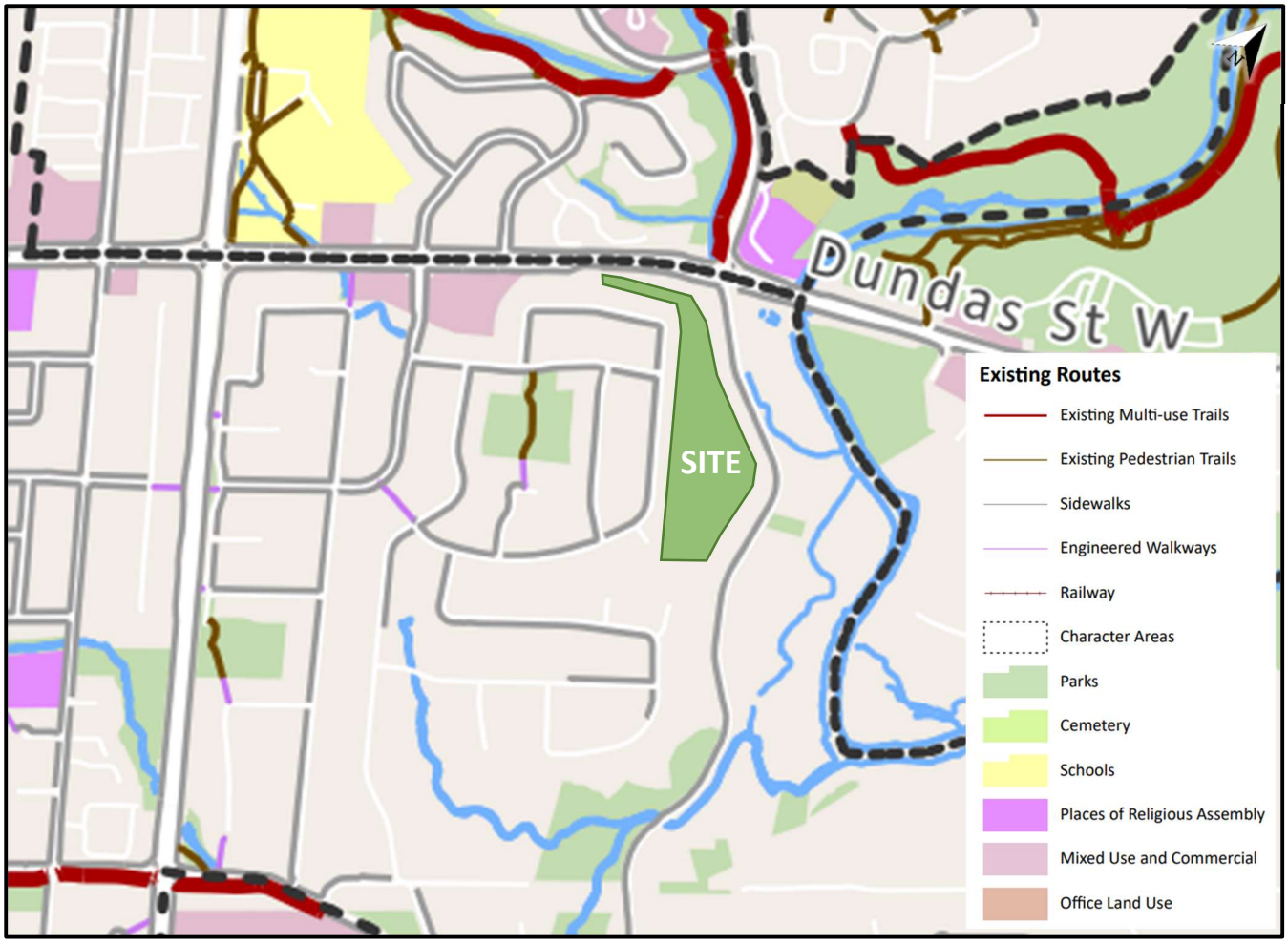
The unsignalized intersection of Sherwood Forrest Circle at Deers Wold has four approaches. Each approach has a single shared left-turn/through/right-turn lane. There are stop signs on the eastbound and westbound approaches. There are no road markings or signage that indicates any restrictions at this intersection. The westbound approach is a site access to 1720 Sherwood Forrest Circle and will be maintained as the access for the proposed development.



1.3 Cycling and Pedestrian Facilities

Boulevard-separated sidewalks are provided along one side of all roads in the Sherwood Forrest neighbourhood. There are boulevard-separated sidewalks on both sides of Dundas Street West. On Mississauga Road there is a boulevard-separated sidewalk on the west side of the road south of Dundas Street West. On the north side of Dundas Street West, Mississauga Road includes a multi-use trail on the west side of the road, and a boulevard-separated sidewalk on the east side. Figure 3 illustrates an excerpt from the City of Mississauga Pedestrian Master Plan (2021) showing the existing pedestrian facilities in the Study Area.

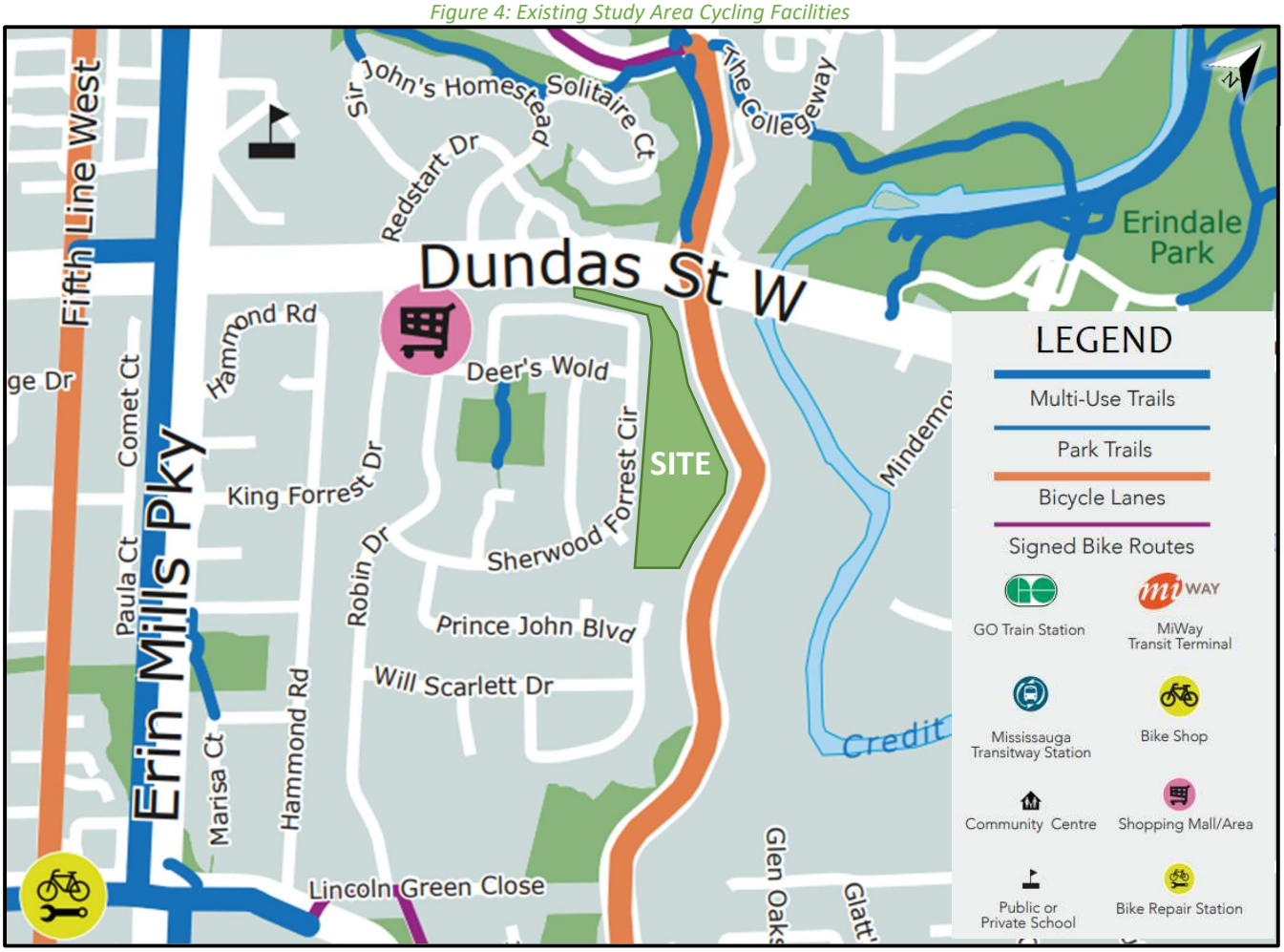
Figure 3: Existing Study Area Pedestrian Facilities



Note: Excerpt from City of Mississauga Pedestrian Master Plan (2021) accessed at: https://www.mississauga.ca/projects-and-strategies/city-projects/building-the-pedestrian-master-plan/ Accessed: June 9, 2023

Cycling facilities in the study area include bike lanes along Mississauga Road and a muti-use trail on the west side of Mississauga Road, north of Dundas Street West. There are also additional multi-use trails and a signed bike route that split off from Mississauga Road leading into parks and green spaces north of Dundas Street West. Figure 4 illustrates an excerpt from the Mississauga Cycling Map (2021) that demonstrates the existing cycling facilities within the Study Area.

Figure 4: Existing Study Area Cycling Facilities



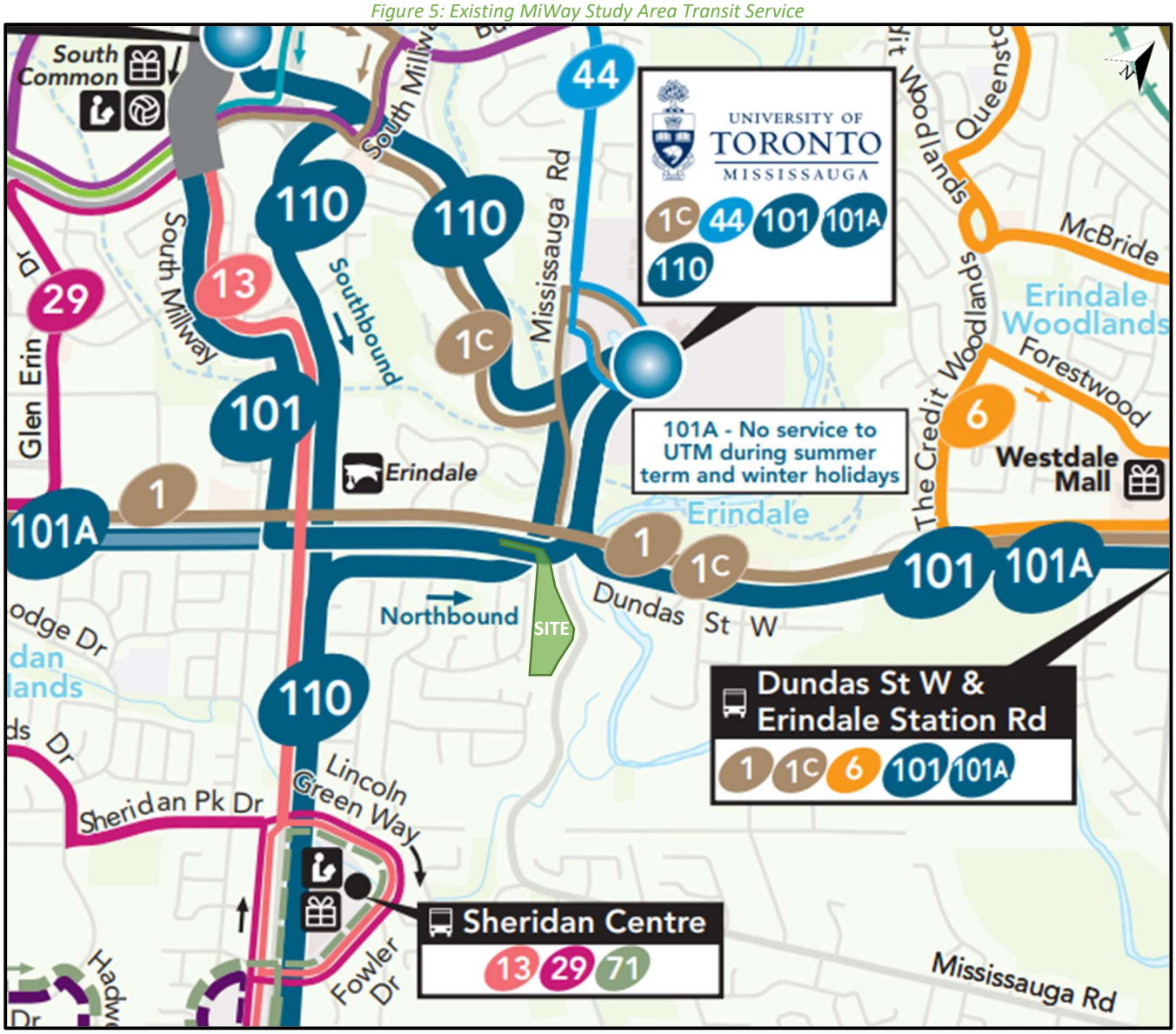
Note: Excerpt from Mississauga Cycling Map (2021) accessed at: https://www.mississauga.ca/services-and-programs/transportation-and-streets/cycling/cycling-map/ Accessed: June 9, 2023

1.4 Transit

As of June 2023, MiWay routes within the Study Area include Route #1 – Dundas, Express Route #101 – Dundas Express, and Express Route #110 – University Express. Although the Express Routes #101 and #110 operate within the Study Area, the closest bus stops are over 1 km away from the site access. These express routes also only operate from Monday to Friday. The existing Study Area MiWay transit service is presented in Figure 5.

Route #1 – Dundas is an east-west MiWay local route, which operates from Laird Road west of Ridgeway Drive (west terminus) to the Kipling Terminal Platform 16 (east terminus) on all days of the week. The eastbound route operates from 3:45 AM to 1:10 AM with an average headway of 20 minutes, up to 35 minutes in the off-peak hours. The westbound route operates from 3:45 AM to 12:55 AM with an average headway of 10-15 minutes.

Figure 5: Existing MiWay Study Area Transit Service



Source: https://www.mississauga.ca/miway-transit/maps/transit-system-maps/ Accessed: June 9th, 2023

1.5 Existing Peak Hour Travel Demand

To understand the existing AM and PM peak hour traffic volumes, weekday turning movement counts (TMC) at the existing site access have been collected for both the AM and PM peak hours. These counts included the counts for vehicles, pedestrians, and cyclists. Table 1 summarizes the date and data source of the turning movement counts used as part of this study. Turning movement count data is included in Appendix C.

Table 1: Turning Movement Count Data Date and Source

Intersection	Count Date	Data Source
Sherwood Forrest Circle at Deers Wold	Wednesday, June 14th, 2023	Ontario Traffic Inc.

The collected data was analysed at the existing horizon and the intersection operations were determined using HCM methodology. Figure 6 shows the balanced existing traffic volumes, including the trips in and out of the existing site. Figure 7 illustrates the existing pedestrian volumes. There were no cyclist volumes during the peak hours at the study intersection. Table 2 includes a summary of existing peak hour intersection operations, and the detailed Synchro report is included in Appendix D.

Figure 6: Existing Traffic Volumes

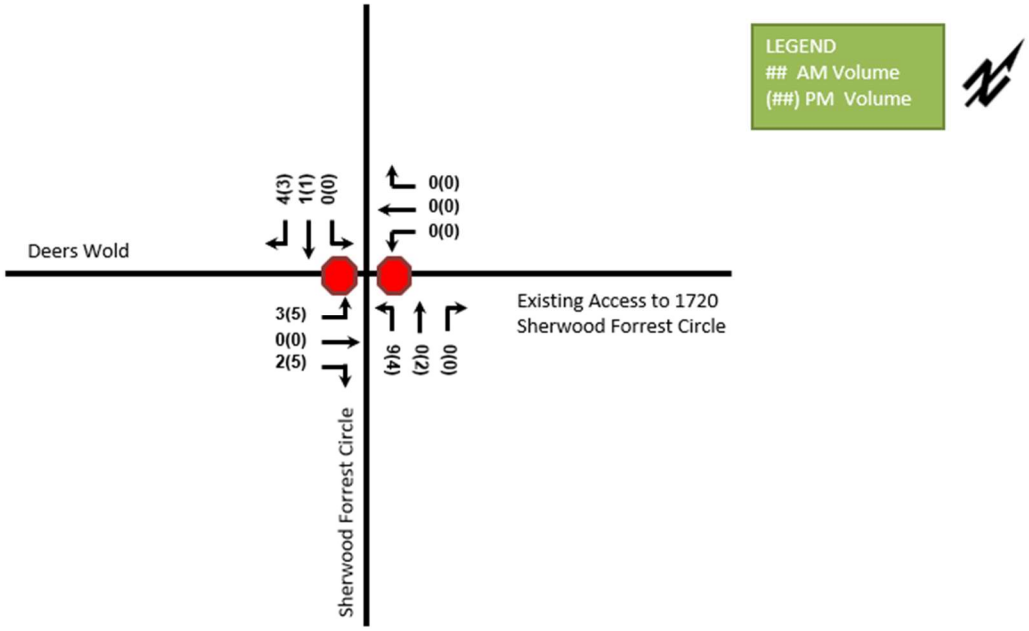


Figure 7: Existing Pedestrian Volumes

Table 2: Existing Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay (s)	Q (95th)	LOS	V/C	Delay (s)	Q (95th)
Sherwood Forrest Circle & Deers Wold / Site Access *(Unsignalized)*	WBL/T/R	A	0.00	0	0	A	0.00	0	0
	EBL/T/R	A	0.00	9	<1	A	0.01	9	<1
	NBL/T/R	A	0.01	7	<1	A	0.00	5	<1
	SBL/T/R	-	0.00	0	0	-	0.00	0	0
	Overall	**A**	**-**	**6**	**-**	**A**	**-**	**6**	**-**

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 0.90
Delay = average vehicle delay in seconds
m = metered queue
# = volume for the 95th %ile cycle exceeds capacity

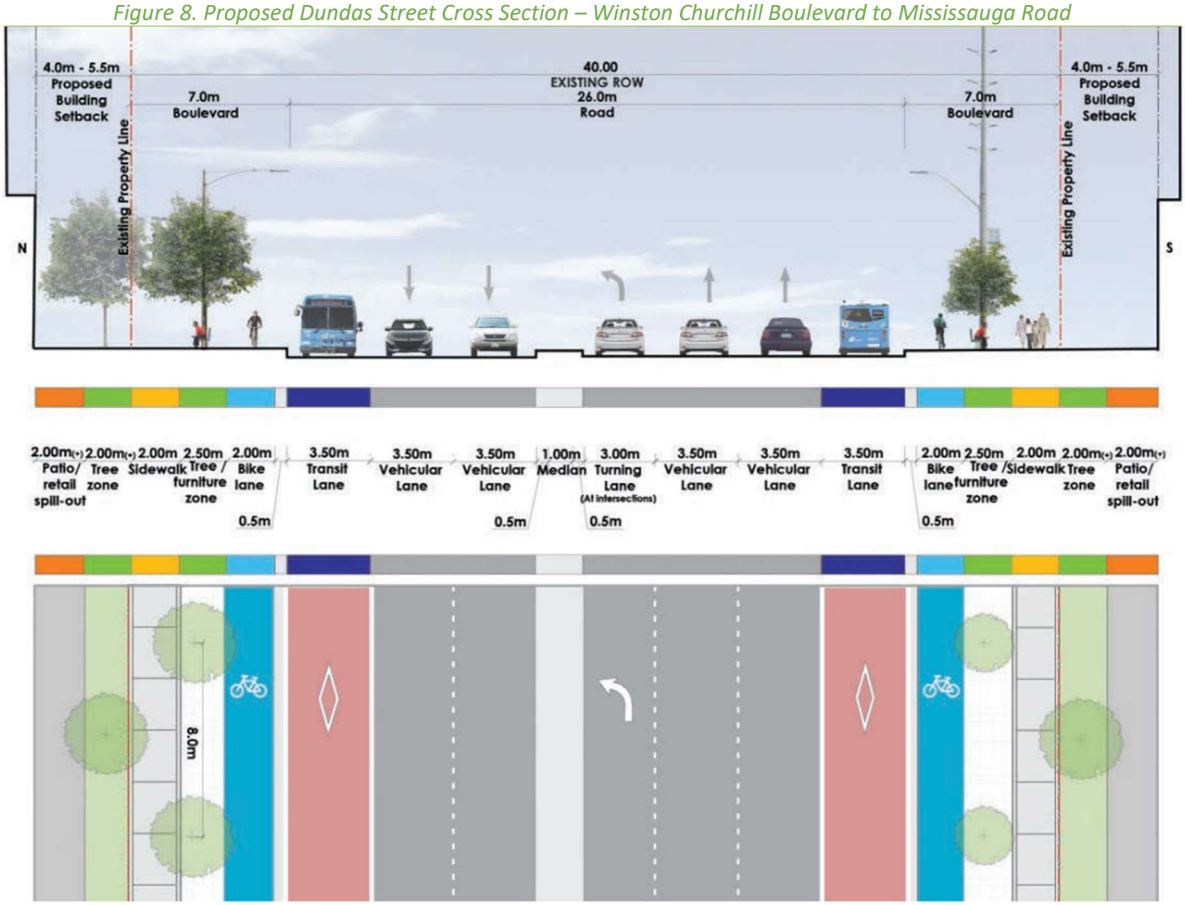
During both the AM and PM peak hours, the studied intersection operates well, and no capacity issues were noted. According to the City of Mississauga Transportation Impact Study Guidelines, the threshold criteria for unsignalized intersections is LOS E, and a 95th percentile queue below the available storage length. As shown in Table 2 above, the required operational thresholds are met.

1.6 Planned Conditions

1.6.1 Dundas Street BRT

Dundas Street is envisioned as an interregional BRT corridor, and will run between Kipling TTC station to the east, and Hamilton Waterdown terminal to the west. The BRT operations are expected to begin no earlier than 2025 and may occur beyond the horizons of this study. The intersection of Dundas Street and Mississauga Road is outlined as one of the key areas along the proposed BRT corridor, and considerations are being made for the addition of a curbside northbound transit lane on Mississauga Road to the UTM campus. Figure 8 shows the proposed Dundas Street cross-section with the proposed BRT west of Mississauga Road.

Figure 8. Proposed Dundas Street Cross Section – Winston Churchill Boulevard to Mississauga Road



Source: Dundas Connects Master Plan (2018)

1.7 All-Way Stop Control Warrant

The existing Sherwood Forrest Circle & Deers Wold / Site Access intersection was evaluated to determined if an all-way stop is warranted at the intersection based on the City of Mississauga's All-Way Stops Policy. The policy specifies that for local roadways, all-way stops are warranted based on collisions frequency and/or traffic volumes as follows:

- **Collision Frequency:** Five or more collisions within a 12-month period, provided the type of collisions are considered correctable by the installation of an all-way stop.
- **Volume of Traffic:** There are two sections which must be satisfied.
    - Section 1: The total traffic volume entering the intersections is greater than 180 vehicles per hour during the four hours of the day that represent the AM & PM peak periods.
    - Section 2: At a four-way intersection, traffic volume entering from the minor street must be at least one-third of the total volume. At a three-way intersection, it must equal one-quarter.

At the time of submission, collision data was not able to be obtained from the City. Therefore, the warrant has been evaluated based on volume of traffic only. Table 3 summarizes the all-way stop warrant based on volume of traffic for the existing conditions. Note that volumes provided in the table are for the AM and PM peak hours, which is more conservative than using the four peak hour hours of the day and allows for a consistent approach for evaluating the warrants between existing and future conditions since site traffic will be generated for the peak hour only.

Table 3: All-Way Stop Warrant – Existing Conditions

Intersection Leg	Vol. Entering (Peak Hour)		Total Vol. Entering (Peak Hour)		Section 1 Warrant Met	Volume Split	Section 2 Warrant Met	Sections 1 & 2 Met
	AM	PM	AM	PM				
North Leg (Sherwood Forrest Circle)	5	4	16	20	No (less than 180 veh/h)	58%	Yes	No
South Leg (Sherwood Forrest Circle)	6	6						
West Leg (Deers Wold)	5	10				42%		
East Leg (Site Access)	0	0						

As shown in Table 3, the existing traffic volumes are too low to meet the warrant for an all-way stop.

2 Development-Generated Travel Demand

The ITE Trip Generation Manual 11th Edition has been reviewed to determine the appropriate trip generation rate equations for the proposed land use. The fitted curve equations were used to determine appropriate vehicle trip generation rates for the residential development. The land use code for the proposed development is Single-Family Detached Housing (210). Table 4 summarizes the ITE Trip Generation Equations and directional splits.

Table 4: ITE Equations and Directional Splits

Land Use (LUC)	AM Peak Hour			PM Peak Hour		
	Equation	In %	Out %	Equation	In %	Out %
Single-Family Detached Housing (210)	$\ln(T) = 0.91\ln(T) + 0.12$	25%	75%	$\ln(T) = 0.94\ln(T) + 0.27$	63%	37%

To address a comment from the City of Mississauga that requested auto passenger trips not be included in the mode split, person trip rates were calculated with and without considering auto passenger trip mode share. The more conservative result will be taken as the site volumes used for the analysis of future conditions.

Using the above equations, the vehicle trip rates for the development were calculated. Considering auto passenger mode share, these are converted to person trips using a 1.28 adjustment factor assuming a default 10% non-automobile mode share and an average vehicle occupancy rate of 1.15. Without auto passenger mode share,

the adjustment factor is 1.11, assuming a default 10% non-automobile mode share only, Table 5 summarizes the person trip rates for the proposed development.

Table 5: ITE Trip Generation Person Trip Rates

Dwelling Type	Auto Passenger Mode Share	ITE LUC	Unit Count	Peak Hour	Vehicle Trip Rate	Adjustment Factor	Person Trip Rate
Single Family Detached	Included	210	56	AM	0.78	1.28	1.00
				PM	1.03		1.32
Single Family Detached	Not Included	210	56	AM	0.78	1.11	0.87
				PM	1.03		1.14

LUC – Land Use Code

Using the above Person Trip rates, the total person trip generation has been estimated with and without including auto passenger mode share. Table 6 below illustrates the total person trip generation of the proposed development.

Table 6: Total Person Trip Generation

Land Use	Auto Passenger Mode Share	Units	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Single Family Detached	Included	57	14	42	56	47	27	74
Single Family Detached	Not Included	57	12	37	49	40	24	64

As shown, total of 56 AM and 74 PM peak hour bi-directional person trips are projected considering auto passenger trips and 49 AM and 64 PM peak hour bi-directional person trips are projected not considering auto passenger trips as a result of the proposed development. Thus, based on Table 2.2 of the City of Mississauga's 2022 Transportation Impact Study Guidelines, a Scoped TIA, including Access Review, a TDM Statement, and a Pedestrian Circulation Plan is required to support the proposed development.

The existing mode shares in the Study Area were obtained from the 2016 Transportation Tomorrow Survey (TTS) Summary by Ward for the Regional Municipality of Peel. The Study Area is located in the City of Mississauga Ward 8. In accordance with comments from the City, the mode shares from the 2016 TTS were used for the analysis of the future traffic volumes. Table 7 summarizes the 2016 TTS mode shares with and without including the auto passenger mode share. To determine the mode shares without the auto passenger share, the share of each travel mode was divided by the sum of all the travel modes excluding the auto passenger share. For example, for the auto driver mode share, 67 / (67+7+4+5+5) = 76%.

Table 7: Mode Shares

Travel Mode	2016 TTS Mode Shares (Auto Passenger Share Included)	2016 TTS Mode Shares (Auto Passenger Share Not Included)
Auto Driver	67%	76%
Auto Passenger	13%	0%
Transit	7%	8%
GO Train	4%	5%
Walk & Cycle	5%	6%
Other	5%	6%
Total	100%	100%

Table 8 summarizes the site trip generation by mode including auto passenger mode share and Table 9 summarizes the site trip generation by mode non including auto passenger mode share.

Table 8: Trip Generation by Mode (Including Auto Passenger Mode Share)

Travel Mode	Mode Share	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto Driver	67%	9	28	37	32	18	50
Auto Passenger	13%	2	5	7	6	4	10
Transit	7%	1	3	4	3	2	5
GO Train	4%	0	2	2	2	1	3
Walk & Cycle	5%	1	2	3	2	1	3
Other	5%	1	2	3	2	1	3
Total	**100%**	**14**	**42**	**56**	**47**	**27**	**74**

Table 9: Trip Generation by Mode (Not Including Auto Passenger Mode Share)

Travel Mode	Mode Share	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto Driver	**76%**	9	28	37	31	18	49
Auto Passenger	**0%**	0	0	0	0	0	0
Transit	**8%**	1	3	4	3	2	5
GO Train	**5%**	0	2	2	2	1	3
Walk & Cycle	**6%**	1	2	3	2	2	4
Other	**6%**	1	2	3	2	1	3
Total	**100%**	**12**	**37**	**49**	**40**	**24**	**64**

Including auto passenger mode share, the proposed development is expected to generate 37 AM and 50 PM bi-directional peak hour auto trips, 7 AM and 10 PM bi-directional peak hour auto passenger trips, 6 AM and 8 PM bi-directional peak hour transit trips (including GO train), and 3 AM and 3 PM bi-directional peak hour walking and cycling trips. Other modes also make up 3 AM and 3 PM bi-directional peak hour trips. Per TTS, other modes may include motorcycle, school bus, taxi passenger, and paid rideshare trips.

Not including auto passenger mode share, the proposed development is expected to generate 37 AM and 49 PM bi-directional peak hour auto trips, 6 AM and 8 PM bi-directional peak hour transit trips (including GO train), and 3 AM and 4 PM bi-directional peak hour walking and cycling trips. Other modes also make up 3 AM and 3 PM bi-directional peak hour trips.

Since the proposed development is expected to generate more bi-directional peak hour auto trips with the auto passenger mode share included in the trip generation, the values listed in Table 8 (37 AM and 50 PM) will be used as the site-generated traffic volumes as a conservative assumption.

3 Future Traffic Demand

The proposed development will utilize the existing access that forms the fourth leg of Sherwood Forrest and Deers Wold intersection. The proposed land use, a low-rise common element condominium, is consistent with the existing surrounding land uses. It is expected that residents of the proposed development will utilize Deers Wold to reach the City's arterial network as it is the most direct route to the nearby arterial roads. Thus, for the purposes of this study, it was assumed that all site traffic to and from the site will use Deers Wold at the intersection of Deers Wold / Site Access and Sherwood Forrest Circle. This is a conservative assumption, as some of the site traffic may use Sherwood Forrest Circle to travel southbound. Further, it was assumed that the study intersection will not experience any general background growth due to its location and surrounding build-out. Therefore, the 2028 Future Background volumes are expected to be equal to the existing volumes at the studied intersection. The 2028

Future Background volumes and the forecasted site-generated auto volumes are shown in Figure 9 and Figure 10 respectively.

Figure 9: 2028 Future Background Traffic Volumes

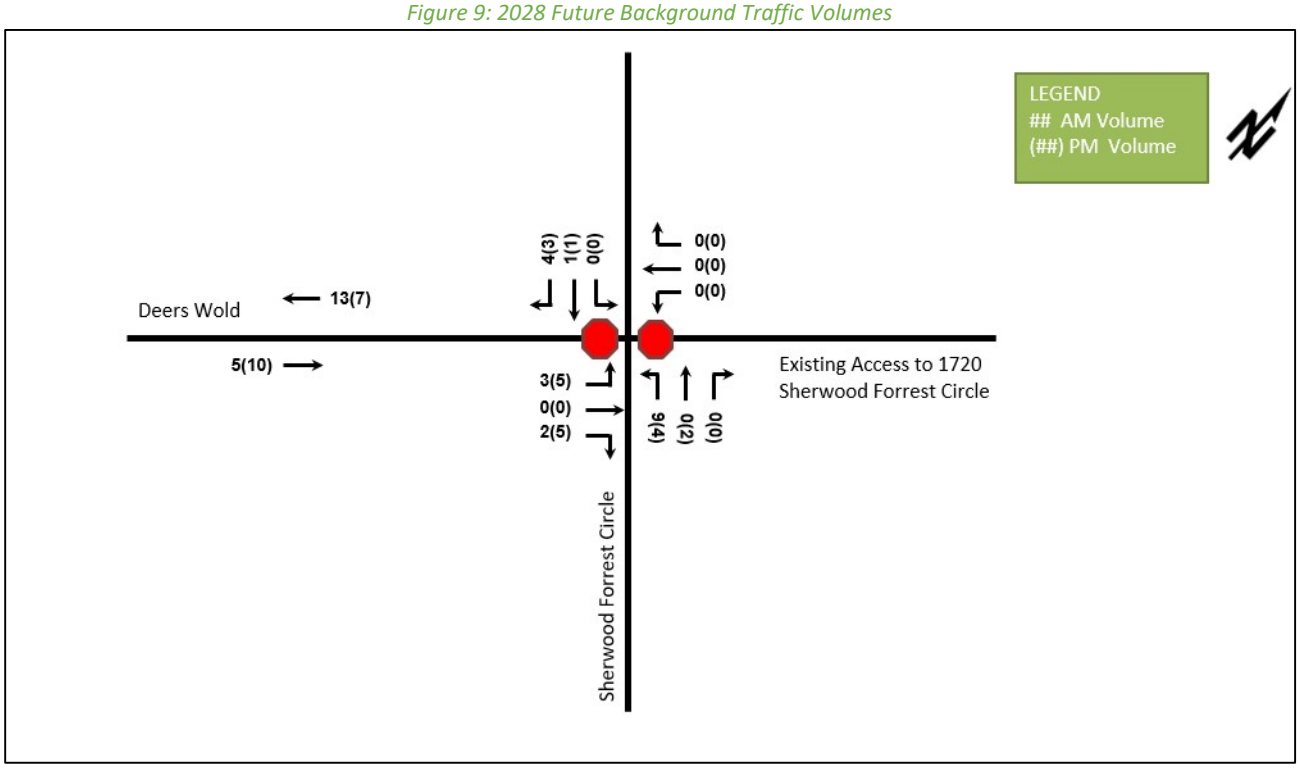
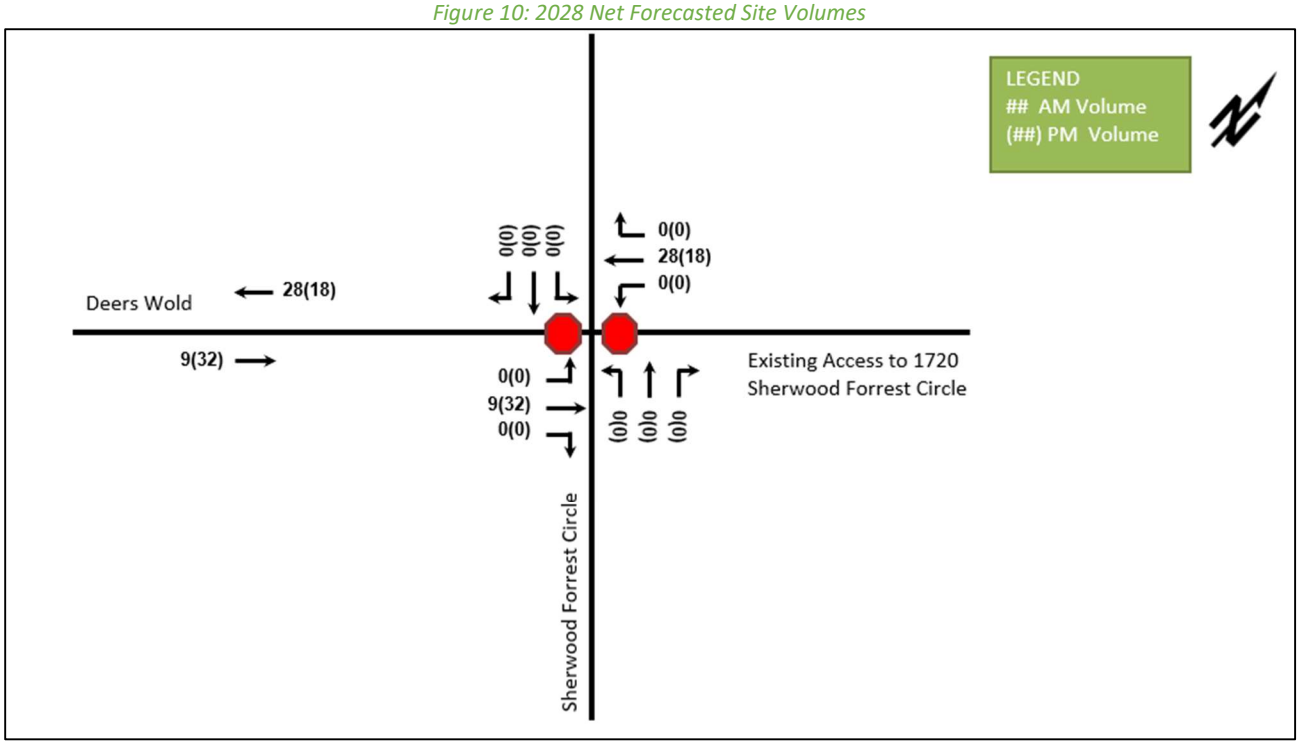
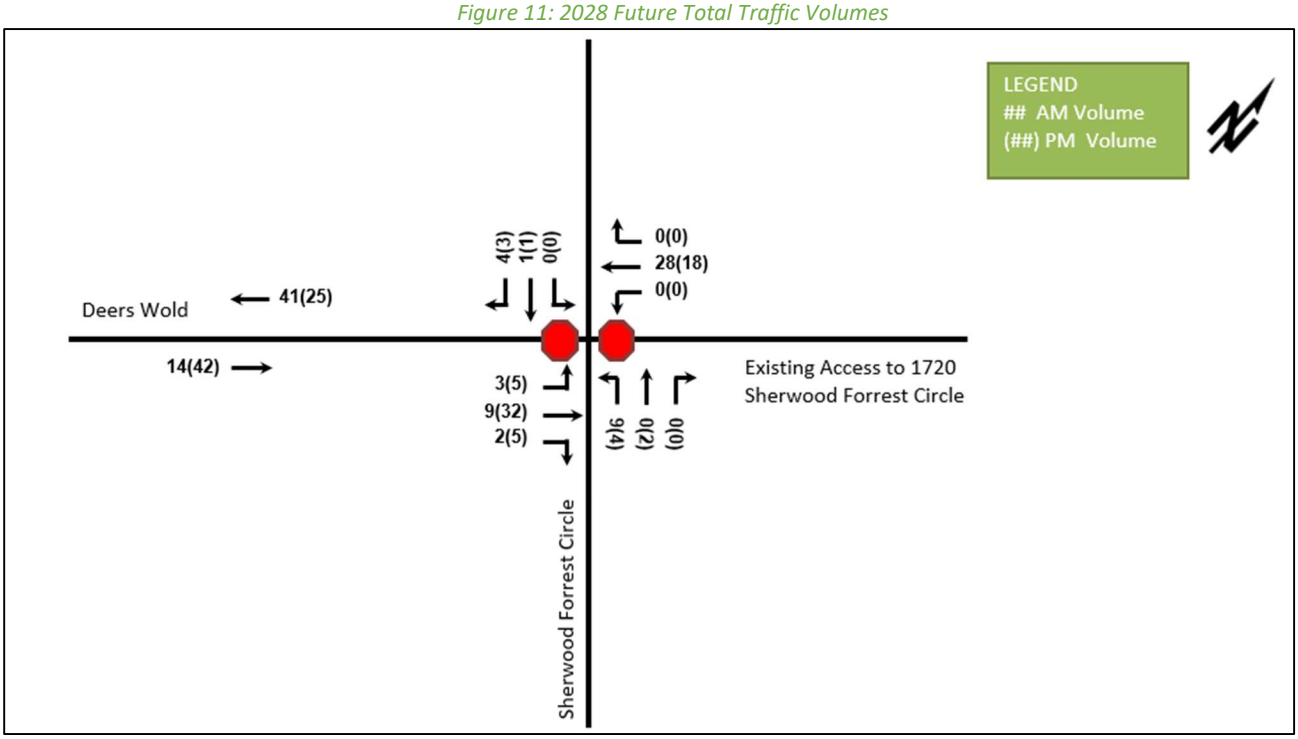


Figure 10: 2028 Net Forecasted Site Volumes



The site-generated traffic volumes have been added to the 2028 Future Background traffic volumes to estimate the 2028 Future Total traffic volumes, shown in Figure 11.

Figure 11: 2028 Future Total Traffic Volumes



3.1 Future Traffic All Way Stop Control Warrant

Using the 2028 Future Total traffic volumes, the Sherwood Forrest Circle & Deers Wold / Site Access intersection was evaluated to determined if an all-way stop is warranted at the intersection based on the City of Mississauga's All-Way Stops Policy. The warrant thresholds are described in Section 1.7. At the time of submission, collision data was not able to be obtained from the City. Therefore, the warrant has been evaluated based on volume of traffic only.

Table 10 summarizes the all-way stop warrant based on volume of traffic for the 2028 Future Total conditions. Note that volumes provided in the table are for the AM and PM peak hours, which is more conservative than using the peak hour hours of the day and allows for a consistent approach for evaluating the warrants between existing and future conditions since site traffic will be generated for the peak hour only.

Table 10: All-Way Stop Warrant – Existing Conditions

Intersection Leg	Vol. Entering (Peak Hour)		Total Vol. Entering (Peak Hour)		Section 1 Warrant Met	Volume Split	Section 2 Warrant Met	Sections 1 & 2 Met
	AM	PM	AM	PM				
North Leg (Sherwood Forrest Circle)	5	4	56	70	No (less than 180 veh/h)	19%	No	No
South Leg (Sherwood Forrest Circle)	9	6						
West Leg (Deers Wold)	14	42				81%		
East Leg (Site Access)	28	18						

As shown in Table 10, the existing traffic volumes are too low to meet the warrant for an all-way stop. Despite the site traffic resulting in a higher volume split for the east-west direction during future conditions, it would not be appropriate switch the stop signs to the west and east legs of the intersection given that the site access is designed as a driveway and the existing stop signs provide the right-of-way to pedestrians walking on the sidewalk that runs

along the west side of Sherwood Forrest Circle. Therefore, no change to the traffic control is recommended at the intersection.

4 Operational Analysis

To understand the operational characteristics of the Sherwood Forrest Circle & Deers Wold / Site Access intersection during the 2028 Future Total scenario, *Trafficware's Synchro (Version 11)* was used to analyse the peak hour volumes using HCM methodology and the same parameters as the existing conditions traffic operations analysis presented in Section 1.5. Table 11 summarizes the 2028 Future Total traffic operations at the proposed site access. Synchro reports are provided in Appendix E.

Table 11: 2028 Future Total Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay (s)	Q (95th)	LOS	V/C	Delay (s)	Q (95th)
Sherwood Forrest Circle & Deers Wold / Site Access *(Unsignalized)*	WBL/T/R	A	0.04	9	1	A	0.02	9	1
	EBL/T/R	A	0.02	9	<1	A	0.05	9	1
	NBL/T/R	A	0.01	7	<1	A	0.00	5	<1
	SBL/T/R	-	0.00	0	0	-	0.00	0	0
	Overall	**A**	**-**	**8**	**-**	**A**	**-**	**8**	**-**

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 0.90
Delay = average vehicle delay in seconds
m = metered queue
# = volume for the 95th %ile cycle exceeds capacity

As shown in Table 11, the intersection is expected to operate well in the future total horizon with a level of service A for all movements during the AM and PM peak hours. According to the City of Mississauga Transportation Impact Study Guidelines, the threshold criteria for unsignalized intersections is LOS E, and a 95th percentile queue below the available storage length. Therefore, the required operational thresholds are met.

The Synchro reports provided in Appendix D & Appendix E report the capacity of each lane approaching the site access intersection. Table 12, presents the peak hour site traffic as a percentage of the existing and 2028 Future Total capacity of the east and west intersection approaches. As discussed, site traffic is not anticipated to use the north or south approaches of the intersection.

Table 12: Site Generated Traffic Contribution to Existing Intersection Capacity

Scenario	Lane	AM Peak Hour			PM Peak Hour		
		Site Traffic (veh/h)	Capacity (veh/h)	Site Traffic Contribution (%)	Site Traffic (veh/h)	Capacity (veh/h)	Site Traffic Contribution (%)
Existing Capacity	WBL/T/R	28	1700	1.6%	18	1700	1.1%
	EBL/T/R	9	1005	0.9%	32	1012	3.2%
2028 Future Total Capacity	WBL/T/R	28	852	3.3%	18	874	2.1%
	EBL/T/R	9	890	1.0%	32	903	3.5%

As shown in Table 12, the site traffic is less than five percent of the existing and future capacity of each intersection approach. It is reasonable to assume that there are no adjacent or downstream intersections where site traffic will comprise five percent or more of the existing capacity of an intersection approach. Therefore, further operational analysis is not required.

5 Community Impacts

Located at the far end of Sherwood Forrest neighbourhood, the proposed subdivision is surrounded by an existing low-density residential community. The subject site utilizes the existing access to the former land use (seniors' residence) and does not include any new access points to the Sherwood Forrest neighbourhood via arterial roads. The current volumes at the intersection of Deers Wold and Sherwood Forrest are low and the intersection operates well. The operational analysis of the 2028 Future Total conditions shows that the intersection of Deers Wold and Sherwood Forrest will continue to operate at level of service A for all approaches and that the site traffic comprises less than five percent of the existing and future capacity of each approach at the intersection. Further, the proposed land use is such that the site will only generate local traffic. No cut-through traffic is expected as a result of the proposed development as it does not include any accesses to the arterial road network. Thus, no traffic capacity issues are anticipated as a result of the subject site, and the proposed development is expected to align well with the existing area context.

6 Development Design

6.1 Development Access

Elevated potential for operational or safety concerns was not noted at the site access. The site access is a part of an existing intersection and forms a perpendicular crossroad to Sherwood Forrest Circle, aligned directly opposite to Deers Wold. Each intersection approach includes one shared movement lane, which precludes weaving or merging movements. The majority of pedestrians accessing the site are expected to use Deers Wold as the major route to enter and exit the development. Additionally, there are no existing school or transit routes that operate near the site access intersection.

The location of the site access was checked against the suggested minimum spacing between driveways along the same side of the road in Figure 8.9.2 in the *2017 Transportation Association of Canada's Geometric Design Guide for Canadian Roads (TAC)*. A minimum spacing between driveways of one metre is suggested for residential properties along local roadways. The distance between the site access and the adjacent driveways to the north and south are approximately 5 metres and 13 metres respectively. Thus, the site access meets the suggested minimum spacing between driveways along the same side of the road as outlined in TAC.

6.1.1 Throat Length

The throat length is defined as the length from the end of the driveway curb radius to the point of the first conflict within a site. The TAC Geometric Design Guide does not include minimum throat lengths for local roads as the purpose of local roads is primarily centered around access rather than vehicular throughput. However, the subject site access was compared against the suggested road throat length for a collector road in TAC, which is conservative. According to Table 8.9.3, the suggested minimum clear throat length for major driveways, a residential development of this size would require a throat length of 8.0 metres on a collector roadway. Since Table 8.9.3 does not provide a land use for detached houses, the land use of apartments was used.

As shown in Figure 12, the proposed clear throat length is greater than 44 metres, which exceeds the conservative collector road requirement of 8 metres.

Figure 12: Site Access Throat Length

6.1.2 Vehicle Sightlines

Vehicular sightline analysis has been conducted at the site access. Since Sherwood Forrest Circle is a local residential road, the assumed design speed is 50 km/h, 10 km/h above the 40 km/h speed limit. The design vehicle used was a passenger car as per TAC standards. Vehicular sightlines were measures 4.4 metres from the edge of the curb per the 2017 TAC Geometric Design Guide Chapter 9 requirement, which represents the typical position of the minor road driver's eye when a vehicle is stopped relatively close to the major road. Using the guidance in Section 9.9.2.3, the intersection sight distance for a vehicle required to make a left turn from stop is 105 metres and the intersection sight distance for a vehicle required to make a right turn from stop or crossing maneuver is 95 metres. The required stopping sight distance on Sherwood Forrest Circle is 65 metres. The roadway profiles of Sherwood Forrest Circle, Deers Wold, and the site access are relatively flat and do not present any vertical sight distance issues. Figure 13 illustrates the available sight distance for a vehicle exiting the site access. Table 13 summarizes the required and available sight distances at the site access.

Figure 13: Available Vehicular Sight Distance

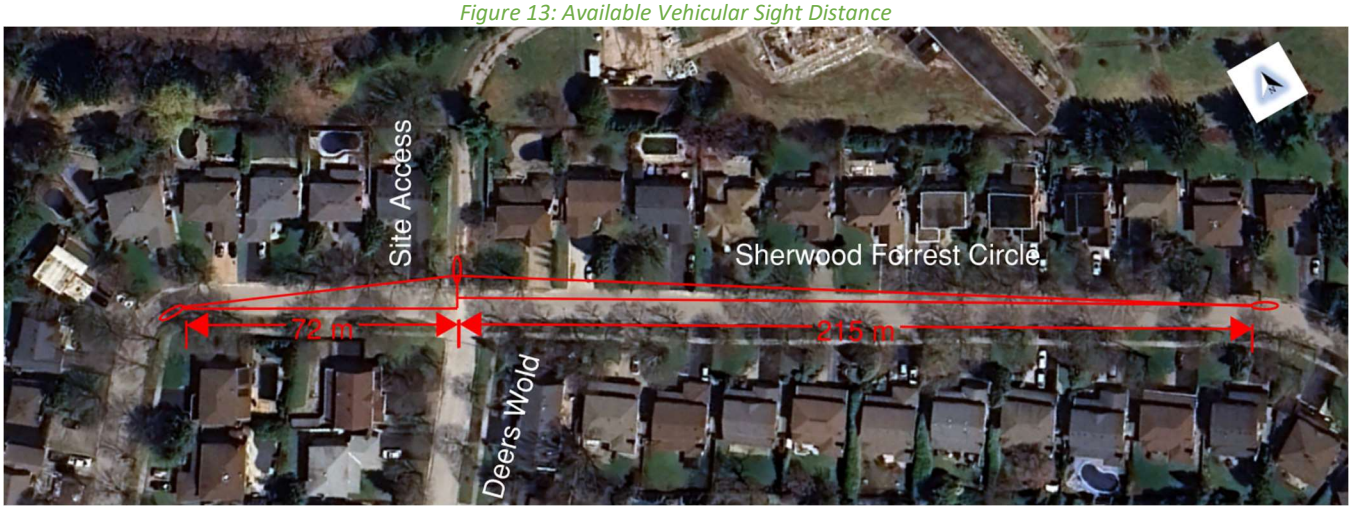


Table 13: Sightline Calculations – Site Access

Sightline Type	Design Speed	Departure Sight Distance (left-turn scenario) (m)	Departure Sight Distance (right-turn scenario) (m)	Stopping Sight Distance (m)	Available Sight Distance – North (m)	Available Sight Distance – South (m)
Vehicular	50 km/h	105	95	65	72	>110

As shown in Figure 13, vehicles exiting the site should be able to clearly see from the site access to the curves in the roadway on Sherwood Forrest Circle to the north and south. For a vehicle approaching from the south, the available vehicular sight distance exceeds the stopping sight distance and departure sight distance requirements. For a vehicle approaching from the north the required departure sight distance extends beyond the curve in the roadway. While the available departure sight distance is less than required, the available stopping sight distance for vehicles travelling southbound on Sherwood Forrest Circle is sufficient. Additionally, vehicles navigating the curve will be travelling slower than the 50 km/h design speed and will be able to observe any activity at the site access. Likewise, a vehicle at the site access will be able to see a vehicle as it is rounding the curve. Therefore, there are no issues identified with the available sight distance at the site access.

It is acknowledged that driver sightlines at the site access may be obstructed by trees adjacent to the driveway. However, should these trees obstruct their view, drivers are expected to be able to slowly advance towards the roadway to be able to see clearly in both directions (see Figure 14 and Figure 15). Given the residential nature of the road and the lack of conflict with pedestrians, there are no anticipated safety issues associated with this maneuver.

6.1.3 Pedestrian Sightlines

Pedestrians travelling to and from the site are expected to use the sidewalk beside the site access and cross Sherwood Forrest Circle and use the sidewalks on the west side of Sherwood Forrest Circle (the side opposite to the site access) or the south side of Deers Wold. As discussed, the vehicular volumes are too low for an All-Way Stop to be warranted at the intersection. Pedestrian sightlines have been evaluated qualitatively for a pedestrian looking to cross Sherwood Forrest Circle from the site access. Figure 14 presents the sightline for a pedestrian looking north and Figure 15 presents the sightline for a pedestrian looking south.

Figure 14: Pedestrian Sightline from Site Access (Looking North)

Note: Image accessed from Google Maps: https://www.google.ca/maps/ Accessed: August 28, 2024

Figure 15: Pedestrian Sightline from Site Access (Looking South)

Note: Image accessed from Google Maps: https://www.google.ca/maps/ Accessed: August 28, 2024

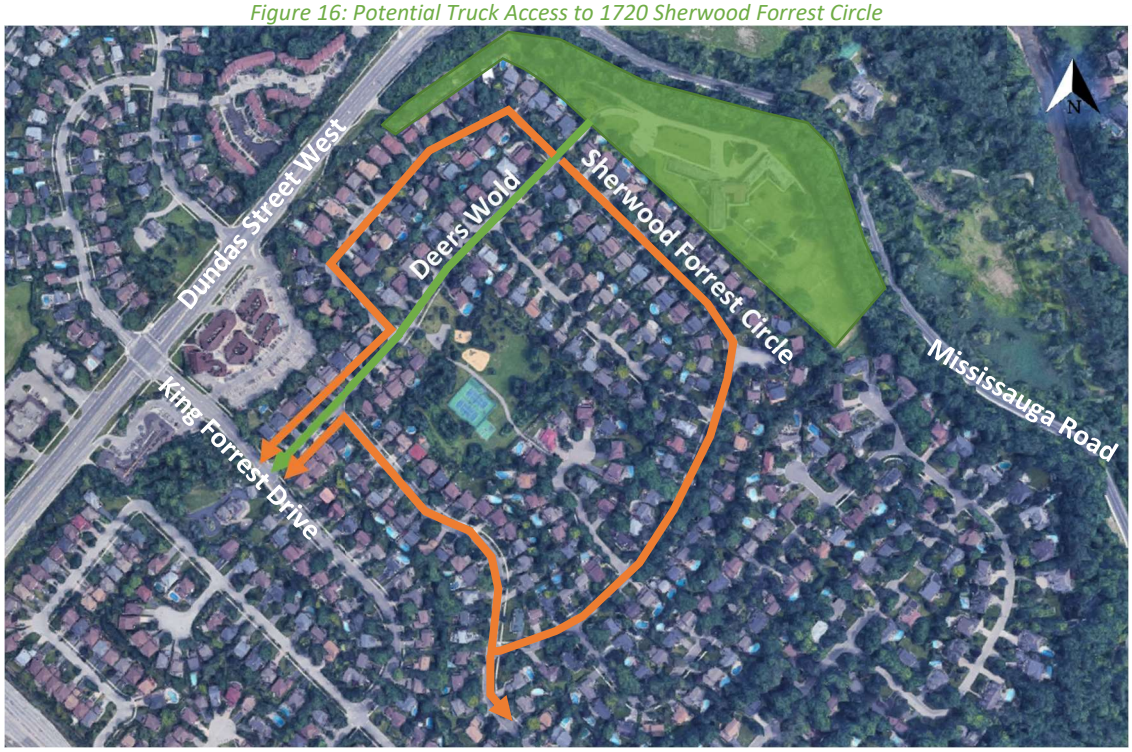
As shown, a pedestrian should be able to clearly see from the site access to the curves in the roadway on Sherwood Forrest Circle to the north and south. This provides ample visibility of the roadway for a pedestrian to determine if it is safe for them to cross. Given the low vehicular volumes at the intersection and low vehicle speeds, pedestrian delay to safely find a gap to cross is expected to be minimal. Therefore, risky crossing by pedestrians will be rare. If a parked car is partially obstructed the pedestrian's view, as shown in Figure 15, adjusting their view by taking a step back should allow them to see all the way down the road.

6.1.4 Site Access Turning Template Analysis

The proposed access to 1720 Sherwood Forrest Circle is via the existing driveway. The driveway aligns with the intersection of Deers Wold and forms the fourth leg of the existing intersection. The existing driveway does not include curb radii to accommodate vehicle movements. Turning templates have been prepared to assist with the design of the access. It has been assumed that all truck movements would utilize Deers Wold to enter or exit the site. Three potential routing patterns to and from the subject site have been illustrated in Figure 16. It is clear that the route highlighted in green, along Deers Wold, is the shortest and most direct route to King Forrest Drive, and out to the nearest Arterial Road, Dundas Street West. As a result, the access has been designed to allow trucks of all types to access the site from Deers Wold. This results in no truck turning movements to or from the proposed access to the site. To provide minimum radii at the site access a TAC Passenger (Type P) design vehicle has been selected. See Appendix F for vehicle maneuvering diagrams. This exercise has concluded that a minimum 2.0 metre radius should be provided on both the north and south side of the access. This would also allow the curb radii to be constructed within the projection of the existing property lines, minimizing the impact on the adjacent properties.

At the time of a detailed engineering submission for the subject site, appropriate signage and pavement marking should be provided to alert truck drivers to the turning restrictions and allow them to proceed straight onto Deers Wold.

Figure 16: Potential Truck Access to 1720 Sherwood Forrest Circle



It should be noted that the City of Mississauga has requested that the access be constructed in adherence with OPSD 350.010. This will generally be carried forward into the future design submissions. However, it should be noted that, the OPSD specifies driveway dimensions for Light Industrial, Commercial, Apartment, and Heavy Industrial uses. The proposed land-use is low-rise detached housing, which does not fit into any of these categories. However, for the purposes of this report, the requirements for Apartment uses will be discussed. The OPSD driveway dimensions suggest a minimum 4.5 metre curb radius. The proposed curb radius is less than this minimum. This is as a result of the proposed truck route, testing the curb radius with a TAC Passenger vehicle, to limit the curb radii to be within the projection of the property line, and the specific land-use proposed is not covered by this standard. Therefore, while this access does not meet all of the requirements for an Apartment Driveway, the provided turning templates and truck route are adequate to support the proposed development.

6.2 Parking

6.2.1 Vehicular Parking

The City of Mississauga Zoning By-Law 0225-2007 parking requirements for visitor and accessible spaces with their respective provisions for this development based on the proposed land uses are summarized in Table 14.

Table 14: Vehicle Parking Zoning By-Law Requirement

Type	Units	Parking Rate	Parking Spaces Required	Parking Spaces Provided
Condominium Detached Dwelling	56	Visitor: 0.25 / unit	14	14
		Accessible: 4% of the total for parking supply of 13 – 100	1	1

As shown in Table 14 above, the proposed development meets the Zoning By-Law parking requirements.

6.3 Site Circulation

6.3.1 Internal Turning Template Analysis

The proposed site plan has been reviewed using three design vehicles, including a heavy single-unit truck (HSU), a pumper fire truck, and the Region of Peel waste collection vehicle. All the vehicle paths are accommodated by the proposed curbs and driveways for both inbound and outbound movements. Snow storage will be located within all green spaces indicated in the attached site plan. The turning template diagrams are provided in Appendix F.

When considering existing site constraints such as the location of natural features to the east and residential properties to the west, which are especially restrictive within the southern limits of the site, an alternative hammerhead vehicle turnaround space was proposed. This turnaround space exceeds the width and turning radius requirements illustrated in Appendix 3 of the Region of Peel Waste Collection Design Standards Manual (2020) and allows for similar maneuverability as the standard T-shaped hammerhead turnaround space, also accommodating the site constraints discussed above. As shown in Appendix F, the distance that a Region of Peel Waste Collection vehicle is required to reverse using the proposed configuration is in line with the Region's maximum threshold of 15 meters. Additionally, the turnaround space is located near a dead end of the proposed subdivision where resident familiarity with the waste vehicle operations and minimal pedestrian traffic is expected. As a result, it is anticipated that the waste collection vehicles can be accommodated without further site modifications.

6.3.2 Pedestrian Circulation

There are numerous pedestrian destinations within one superblock of the proposed development. This includes sheltered bus stops, Sherwood Green Park, Sherwood Forrest Shopping Village, King Forrest Shoppes Plaza, and Erindale Secondary School. Additionally, the proposed improvements to the study area network include a Dundas BRT station at Dundas Street and Erin Mills Parkway within 900 metres walk from the site, as well as bike lanes and pedestrian realm enhancements along Dundas Street. Pedestrians can access the mentioned destinations and facilities via King Forrest Drive and Deers Wold which lead to 1720 Sherwood Forrest from Dundas Street West.

Within the site, a two-meter-wide concrete sidewalk is provided throughout the development on one side of the road. Protective measures such as tactile plates and stop controls on minor approaches will be provided where a major pedestrian path crosses the road. Additionally, pedestrian crossings will be designed to provide a visual separation between pedestrians and vehicular traffic.

Figure 17 illustrates pedestrian linkages throughout the site as well as connections to the nearby facilities. Pedestrian Circulation Checklist is provided in Appendix G.

Figure 17: Pedestrian Circulation Plan

6.3.3 TDM Statement

The proposed development is located in the Sherwood Forrest neighbourhood. Geographically, the site is also located at the southwest corner of the Dundas Street and Mississauga Road intersection, however it is mostly separated from Dundas Street and Mississauga Road by a natural heritage system and a steep grade. As the subject site is located in the far end of the Sherwood Forrest Neighbourhood, it is also surrounded by the existing low-rise dwellings to the west and to the south.

The Transportation Demand Management Checklist was reviewed while considering the aforementioned constraints and with the proposed land use in mind. Where a TDM measure was considered not applicable, a note on applicability was provided within the TDM Checklist. The TDM Checklist is attached in Appendix G.

Transportation Demand Management measures at the subject site are centered around improvements to the proposed site design. The majority of sustainable travel to and from the proposed development is expected to be made along Dundas Street, with major pedestrian / cyclist route along Deers Wold and King Forrest. This path enables site residents to access nearby pedestrian and cycling infrastructure, existing and future transit stops, parks, and shopping areas discussed in Section 1.

Within the site, a 2-meter-wide sidewalk is provided throughout the development on one side of the road. Protective measures such as tactile plates and textured pedestrian crosswalks are proposed where a road intersects a sidewalk.

Table 15 provides the proposed TDM measures, the expected effectiveness, estimated implementation and ongoing costs, party responsible for implementation, target audience as well as an indication on how the measures will support the overall strategy. The resulting TDM score of the proposed measures is 71%, which meets the City of Mississauga's requirement. A detailed breakdown of the TDM score can be found in Appendix G.

Table 15: Proposed TDM Measures

ID	Proposed TDM Features	Location / Description	Est. Impl. and Ongoing Costs	Responsible Party	Target Audience	Impact on Sustainable Modes
A1	Development located within 800 m walking distance of residential (if employment) or employment (if residential) uses	Sherwood Forrest Shopping Village, King Forrest Shoppes	N/A	N/A	Pedestrians	Enables walking trips for employees destined to nearby shopping plazas
A3	At least one functional building entrance oriented towards public space (i.e., street, park, square)	All buildings on site	N/A	Developer		Provides safer pedestrian environment, encouraging pedestrian trips
A4	At least one functional building entrance located close to on-site or adjacent street transit stop	All buildings on site	N/A	Developer		Encourages first and last mile travel by walking to and from transit
A5	Nearest functional building entrance located within 50 m of (and connected to) public street with sidewalk	All buildings on site	N/A	Developer		Ensures pedestrians have direct access to pedestrian network
A6	Accessible on-site pedestrian routes provided and connected to surrounding network and transit	Sidewalks, and 10 tactile plates at crossings provided	Tactile plate implementation $30,600 See below for sidewalk costs	Developer		Ensures all users can utilize the major pedestrian routes between the site and the nearby destinations
A7	Continuous sidewalks (1.5 m min. width) provided along all on-site roads and both sides of adjacent public streets	2.0-meter-wide concrete sidewalk provided on site, 1.5 meter sidewalk provided on one side of Deers Wold (local road with low traffic) and both sides of King Forrest Drive and Dundas Street	Sidewalk Implementation $189,000	Developer (on-site), City (public ROW)		Ensures that no pedestrian network gaps are present that may discourage pedestrian travel
A9	Adequate and properly designed pedestrian crossings provided on-site	Textured pedestrian crossings provided to visually separate pedestrian route and vehicle traffic	$23,500	Developer		Provides safer pedestrian environment
A11	Amenities provided along pedestrian routes (i.e., benches, street furniture)	Four benches are proposed within the common element areas	Bench and concrete pad implementation $10,000	Developer		Provides safer pedestrian environment, and an opportunity for users who may find walking challenging to take a break
A11	Shelters and benches provided at transit stops	Benches and shelters provided at nearest transit stops	N/A	City		Provides an opportunity for users who may find standing for extended periods of time challenging to take a break, makes wait time during bad weather conditions more manageable
A12	Wayfinding provided to guide pedestrians	Wayfinding signage provided at the site access	Implementation of one sign $900	Developer		Allows users who would not typically choose walking to use the most direct route to nearby destinations

A13	Lighting provided along pedestrian routes	Lighting provided along all on-site sidewalks	LED light fixture implementation $82,500	Developer		Provides safer pedestrian environment
B1	On-site cycling routes provided and connected to the surrounding network	Connection provided to Dundas Street via Deers Wold and King Forrest Drive, leading to bike lanes along Mississauga Road and future bike lanes along Dundas Street	N/A	Developer	Cyclists	Enables walking trips for patrons and students destined to transit, shopping, school, or nearby cycling facilities
B2	Class A (long-term) and Class B (short-term) bicycle parking spaces provided per City of Mississauga Zoning By-law (reproduced at end of this checklist for reference)	Resident and visitor bike parking can happen within each resident's home	N/A	Developer		Ensures cyclists have a safe place to park their bicycle
B4	Wayfinding provided to guide cyclists	Wayfinding signage provided at site access	Implementation of one sign $900	Developer		Allows users who would not typically choose cycling to use the most direct route to nearby destinations
C3	Sufficient capacity available to accommodate transit riders generated by development	The proposed development is expected to generate negligible number of transit trips due to the size of the proposed development (a maximum of 5 trips per hour in peak direction)	N/A	N/A	Transit	Ensures MiWay is informed of any sizeable impacts to transit demand
E7	Building owner/tenant will become a member of a local TMA and appoint a TDM Coordinator to oversee and coordinate promotional opportunities and events on site	The condominium manager will be responsible for liaising with a local MTA	N/A / part of condo manager's salary	Condo management / TMA	All Non-Auto Modes	Ensures residents are informed of local TMA promotions and incentives

7 Conclusions and Recommendations

This Scoped Traffic Impact Assessment has examined the trip generation and design of the proposed development at 1720 Sherwood Forrest Circle in Mississauga. The study has shown the following:

A. The proposed development includes 56 single detached homes.
B. The proposed site will utilize the existing full movement access to the former retirement home, which forms the fourth leg of the Sherwood Forrest Circle and Deers Wold intersection.
C. The existing Study Area is currently served by MiWay Route #1.
D. The proposed development is projected to result in 37 AM and 50 PM peak hour two-way auto trips and will have a minimal impact on the adjacent road network.
E. The results of the traffic operations analysis for the Sherwood Forrest Circle & Deers Wold / Site Access intersection show that the intersection operates well, and the required operational thresholds are met for both the existing and future conditions scenarios.
F. Based on evaluation of the existing and future traffic volumes at Sherwood Forrest Circle & Deers Wold / Site Access intersection, an all-stop is not warranted based on the City of Mississauga's All-Way Stops policy. Additionally, the volumes are low enough for pedestrians to be able to safely find a gap to cross Sherwood Forrest Circle from the site access to the connecting sidewalks. Therefore, no change to the existing traffic control at the intersection is recommended.
G. The site access comprises the east leg of an existing intersection with Sherwood Forrest Circle (cross street) and Deers Wold (west leg). As part of the site access review the following was determined.
    i. The site access is aligned directly opposite to Deers Wold.
    ii. The site access meets the suggested minimum spacing between driveways along the same side of the road as outlined in the TAC *Geometric Design Guide*.
    iii. The clear throat length exceeds the conservative TAC collector road requirement of 8 metres.
    iv. Despite the required departure sight distance for a vehicle approaching from the north not being met, there are no issues identified with the available vehicular sight distance at the site access due the available stopping sight distance being met and that due to the curve in the road, vehicles approaching from the north will be traveling slower than the design speed.
    v. Following a qualitative review, Available pedestrian sightlines at the subject site access were deemed to be adequate.
H. The proposed access has been reviewed using truck and passenger vehicle design vehicles. It was found that the most direct route to the arterial road network for trucks is via Deers Wold. As a result, a TAC Passenger vehicle was used as a design vehicle for the proposed access. The proposed 2.0 metre radii curbs would also not exceed the projection of the property lines, limiting impacts to the adjacent landowners. During a future detailed design submission, a pavement marking and signage drawing should be prepared that includes appropriate signage to limit the truck movements.
I. Site circulation throughout the site was reviewed using three design vehicles, including an HSU truck, a MSU truck, and the Region of Peel waste collection vehicle. All design vehicle turning paths are accommodated by the proposed curbs and driveways.
J. Pedestrian facilities proposed within the site will provide safe, direct, convenient connections from the site leading to municipal sidewalks, transit stops, green spaces, commercial areas, and more.
K. The proposed site meets the City of Mississauga By-Law visitor parking and accessible parking requirements.
L. The proposed TDM measures result in 71% TDM Score, which meets the City of Mississauga's requirements. Proposed TDM measures include, but are not limited to providing 2.0-metre-wide concrete

sidewalks on-site, wayfinding signage for pedestrians and cyclists, tactile plates at pedestrian crossings, benches within on-site common element areas and lighting along on-site pedestrian routes

M. No off-site roadway improvements are recommended to support the proposed development.

The proposed development at 1720 Sherwood Forrest Circle will function within the study area road network. It is recommended that, from a transportation perspective, the proposed development application process proceeds.

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Appendix A

Pre-Study Consultation Checklist and Certification Form

Appendix B

Pre-Study Consultation Checklist

Description	Information	Section Reference
Development Information		
Development Description (land use, size, and number of phases of development)	• Phase 1: 55 Common Element Condo Single Detached Homes • Phase 2: • Phase 3:	2.3.6
Transportation Impact Assessment		
Step 1 – Screening		
Type of Application (attach a drawing)	☐ Official Plan Amendment ☐ Zoning Amendment ☐ Site Plan Control Application ☐ Plan of Subdivision ☒ Other: Common Element Condo	2.3.5
Screening Criteria	☒ Trip Generation Trigger Satisfied ☐ Location Trigger Satisfied ☐ Operational/Safety Trigger Satisfied	2.2.1
Type of Study	☐ Transportation Impact Study ☒ Access Review ☐ No Additional Study Required	2.2.1
Step 2 – Scoping		
Study Area (intersections to be analyzed) Note: The Transportation Consultant is responsible to identify any further intersections impacted as the study progresses.	• Due to the fact that the subject site is a redevelopment and the proposed unit count is only 5 units above the minimum threshold of trip generation trigger, it is recommended that the Study Area includes the existing site access at Deers Wold and Sherwood Forrest Circle for the purpose of examining existing conditions at the site access only. This is in line with requirements outlined in Table 2.2 of the Mississauga TIS Guidelines.	2.3.8
Horizon Years	☐ 5 years from date of TIS	2.3.9

Description	Information	Section Reference
	☐ Interim years_____ ☒ Other___N/A for Access Reviews_____	
Analysis Periods	☒ AM weekday peak hour of adjacent roadway ☒ PM weekday peak hour of adjacent roadway ☐ Saturday peak hour of adjacent roadway ☐ AM weekday peak hour of development ☐ PM weekday peak hour of development ☐ Saturday peak hour of development ☐ Other _____	2.3.10
Input Parameters and Assumptions (potential deviations)	•	2.3.13
Existing Transportation Conditions	☐ City data sources ☒ New data collection TMCs at Sherwood Forrest Cir and Deers Wold to be counted by Ontario Traffic Inc. ☐ Other _____	2.3.14
Planned Network Improvements (with timing)	• N/A for Access Reviews	2.3.16
Other Planned Developments (per City's Website)	• N/A for Access Reviews • the need for NTMP will be determined at a later stage once the % difference in AADT can be calculated using existing traffic counts and the development trip generation	2.3.17
Identification of Mitigation Improvement Measures	☐ Neighbourhood Traffic Management Plan ☐ Other_____	2.3.23
Safety Analysis (any special issues)	• Elevated potential for operational or safety concern was not noted at the site access. The proposed development utilizes existing TWSC four-legged intersection as an access.	2.3.25
Site Access and Circulation (design vehicles)	☐ Passenger Car (P) ☐ Light Single Unit Truck (LSU) ☐ Medium Single Unit Truck (MSU) ☒ Heavy Single Unit Truck (HSU) ☒ Pumper Fire Truck ☐ WB-20 Tractor Semi-Trailer Truck ☐ Other_____	2.3.26
Impacts During Construction (any special issues)	• No special construction issues have been noted for this site. Sufficient space is available within the site to accommodate contractor parking during construction.	2.3.27

Description	Information	Section Reference
Step 3 – Forecasting		
Growth Rate	☐ Obtained from City ☐ Historical traffic counts ☐ Travel demand forecasts ☒ Proposed Growth Rate: N/A for Access Reviews	2.3.15
Site Trip Generation	☒ ITE Trip Generation Manual ☐ "First Principles" ☐ Observed rates for similar developments in area ☐ Other _____	2.3.19
Trip Reductions	☐ Internal capture reductions for mixed-use developments ☐ Pass-by reductions ☒ Other none	2.3.19
Trip Distribution	☐ Local traffic patterns ☐ TTS ☐ Travel demand model ☐ Population and employment distribution ☐ Market analysis of catchment area ☒ Other N/A for Access Reviews	2.3.20
Trip Assignment	☐ Local traffic patterns ☐ Shortest distance ☐ Site layout, access design and logical routing ☐ Existing turning movements ☒ Other N/A for Access Reviews	2.3.21
Transportation Demand Management Plan		
Format	☒ Within a TIA Report ☐ Standalone	3.2.1
Type of Transportation Demand Management Plan	☒ TDM Statement ☐ TDM Scheme	3.2.2
Pedestrian Circulation Plan		
Format	☒ Within a TIA Report ☐ Standalone	4.2.1
Additional Comments		

Appendix A

Certification Form

Individuals submitting reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Mississauga's Official Plan, Transportation Master Plan, and Transportation Impact Study Guidelines.

By submitting the attached report (and any associated documents) and signing this document, I acknowledge that:

- I have reviewed and have a sound understanding of the objectives, needs, and requirements of the City of Mississauga's Official Plan, Transportation Master Plan, and the Transportation Impact Study Guidelines as they apply to this submission;
- I have sound knowledge of industry standard practices pertaining to the preparation of development-related transportation study reports;
- I have substantial experience (more than five years) in completing development-related transportation studies and strong background knowledge of the transportation planning and engineering principles underpinning these studies; and
- I am registered as a Professional Engineer (P.Eng.), Licensed Engineering Technologist (LET), Certified Engineering Technologist (C.E.T.), or Registered Professional Planner (RPP) in good standing in the Province of Ontario with specific training in transportation planning and engineering.

Dated at Newmarket (City) this 02 day of May, 2023.

Name: Mark Crockford

Professional Title: Professional Engineer

Signature: 

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Appendix B

Comment Response Matrix

Project Number	2023-078
Project	1720 Sherwood Forrest Circle Mississauga
Document	1720 Sherwood Forrest Circle Scoped Traffic Impact Assessment - ZBA & DPS Comment Response Matrix
Date	September 30, 2024

Comment #	Comment	Response	Action
Traffic Impact Assessment			
1	(A) SITE TRAFFIC (i) Trip Generation -The trips reported in table 7 of the report (Trip Generation by Mode) are not correctly reported (ex. AM Peak Auto Driver and Auto Passenger trips do not add up correctly). The values will need to be updated to report the correct volumes.	The trips reported in the Trip Generation by Mode table will be updated as required based on the City's mode split comments as part of the TIA resubmission. Discrepancies in the table were due to rounding error during the analysis. Rounding adjustments will be made to ensure trips add up correctly.	Resolved
2	(ii) Mode Split -The rationale for the modal split proposed in 2028 was not confirmed by the City. The modal split designated by 2016 TTS should be used for future conditions at this time.	The study will be revised to use the modal split indicated by 2016 TTS as part of the TIA resubmission. It is our opinion that the proposed 2028 mode share targets outlined in the initial submission were reasonable given the guidance provided in the City's *Transportation Impact Study Guidelines,* Section 2.3.19, Part 4. By 2028, the TTS data will be 12 years old and it is reasonable to assume some shift to more sustainable modes of transportation.	Resolved
3	(ii) Mode Split -Auto Passenger trips should not be included as a modal split reduction. Only Non-Auto modes shall be considered towards The modal split reduction.	The trip generation will be revised as part of the TIA resubmission. To address this comments, site-generated traffic will be determined with and without including auto passenger trips. The more conservative result will be taken as the site volumes used for the analysis of future conditions. We would like to note that the City's Transportation Impact Study Guidelines, Section 2.3.19, Parts 4 & 5, includes auto passenger trips in the mode share.	Resolved
4	B) TURNING TEMPLATE ANALYSIS (i) Updated Turning Movement diagrams are required to assess turning movements at the proposed Sherwood Forrest access point. Illustrate truck turning movements with one continuous path with AutoTURN and insert the design vehicles on the plan.	Turning Movement diagrams to assess turning movements at the proposed site access and Sherwood Forrest Circle intersection will be provided as part of the TIA resubmission.	Resolved
5	(C) COMMUNITY CONCERNS / FUTURE TOTAL CONDITIONS; -The 2028 future total traffic volumes were not fully analyzed. Based on community concerns and the trip generation threshold being exceeded, a synchro analysis for the future total conditions must be completed and discussed in the report.	Synchro analysis for the future total condition will be provided and discussed as part of the TIA resubmission.	Resolved
6	(D) ADDITIONAL COMMENTS (i) Access Review - Ensure that the proposed site access conforms to all TAC standards (e.g. corner clearances, clear throat lengths, veh & ped sight line distances for ingress/egress, proximity/alignment to other driveways/roads, etc.); Provide confirmation and technical justification of whether the site access location and design are safe for all roadway users and why.	A Site Access review section shall be provided as part of the TIA resubmission.	Resolved
7	(ii) AWS Warrant Please provide All-Way Stop Warrants at the proposed site access for both the Existing and Future scenarios using Mississauga AWS warrant methodology.	All-Way Stop Warrants at the proposed site access for both the existing and future scenarios using the City of Mississauga warrant methodology will be provided as part of the TIA resubmission.	Resolved
8	(iii) Study Area As noted in the ToR Checklist, The Transportation Consultant is responsible to identify any further intersections impacted as the study progresses. Please confirm if there are any other adjacent/area intersections through which peak hour site traffic comprises at least five percent of the existing capacity on an intersection approach. If so, these must be evaluated under both existing and future conditions.	As part of the TIA submission, the capacity of each approach of the Sherwood Forrest Circle & Deers Wold / Site Access intersection (from the Synchro output reports of the existing and future conditions) shall be reviewed to determine if the peak hour site traffic comprises at least five percent of the capacity on any intersection approach. Since the traffic is less than five percent of the existing and future capacity of each approach at the intersection, it is reasonable to assume that there are no adjacent or downstream intersections where site traffic will comprise five percent or more of the existing capacity of an intersection approach. Therefore, further operational analysis is not required. Due to the low number of trips that are being generated, it is not anticipated that there will be a significant impact to the downstream intersections. We also would like to note that the number of person trips generated by the site is less than 100 and therefore does not satisfy the trigger for a Transportation Impact Study.	Resolved
9	(iv) Recommendations - Detailed Recommendations regarding on-site/off-site roadway improvements, site access, site circulation, and TDM measures shall be made.	A more comprehensive summary of the study recommendations will be provided as part of the TIA resubmission.	Resolved
10	(v) Updated TIS - Please provide an updated TIS addressing the aforementioned comments in PDF.	Noted. An updated TIA will be provided addressing the comments.	Resolved
11	[INTERNAL SITE CIRCULATION] Updated Turning Movement diagrams are required to assess turning movements at the proposed Sherwood Forrest access point. Illustrate truck turning movements with one continuous path with AutoTURN and insert the design vehicles on the plan	Turning Movement diagrams to assess turning movements at the proposed site access and Sherwood Forrest Circle intersection will be provided as part of the TIA resubmission.	Resolved
12	[ACCESS MODIFICATION DETAILS] (e) Proposed driveway and entrance curb radii dimensions shall be in accordance with OPSD 350.010.	See section 6.1.4 of the updated TIS for details relating to the access and justification for the curb radii, which do not meet OPSD 350.010.	Resolved

Appendix C

Turning Movement Count Data

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Project #23-181 - CGH Transportation

Intersection Count Report

Intersection:	Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Municipality:	Mississauga
Count Date:	Wednesday, Jun 14, 2023
Site Code:	2318100001
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 16:00-19:00
Weather:	Clear
Comments:	

Ontario Traffic Inc.
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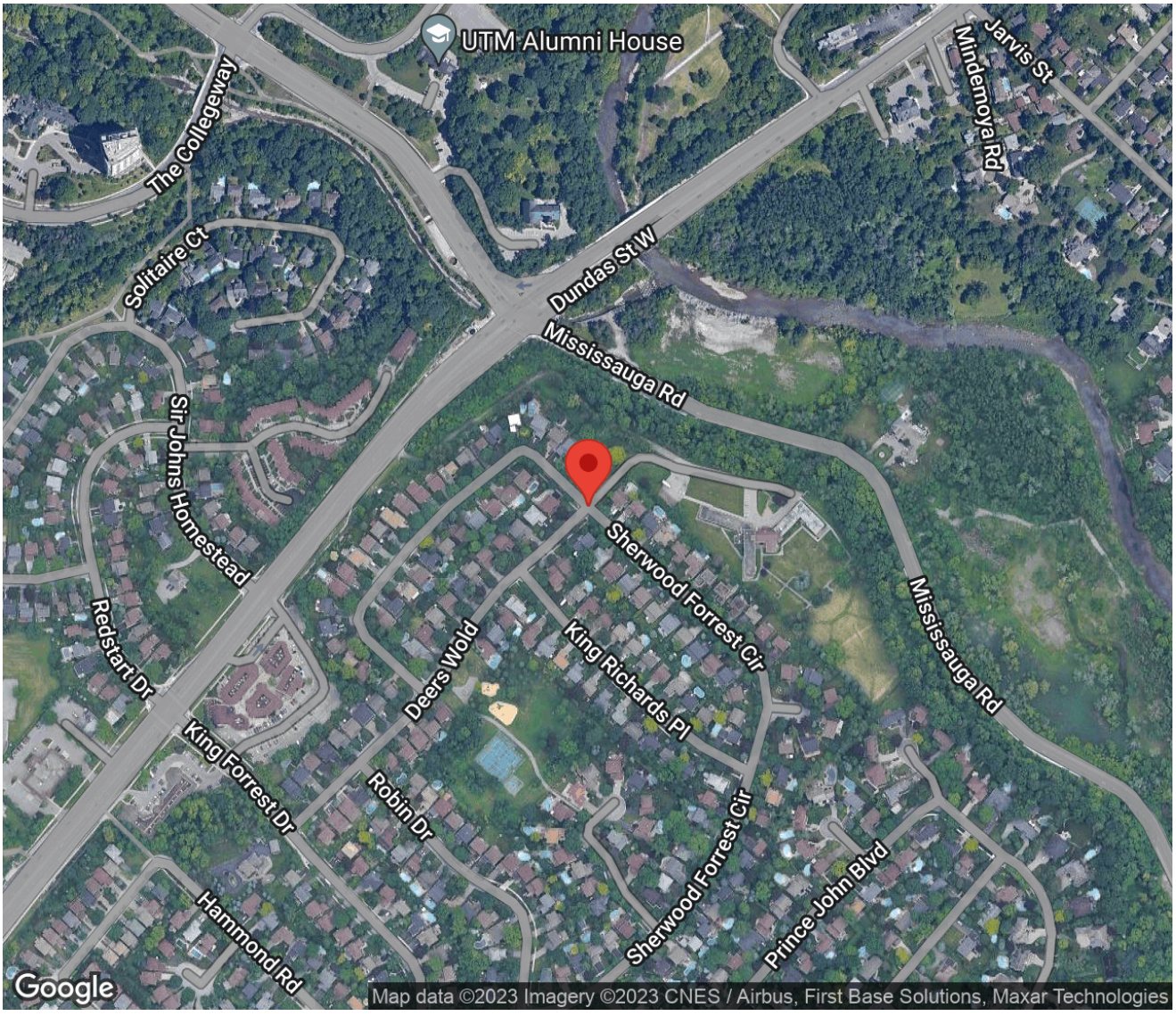
Traffic Count Map

Intersection:	Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code:	2318100001
Municipality:	Mississauga
Count Date:	Jun 14, 2023



Ontario Traffic Inc.
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Traffic Count Summary

Intersection:	Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code:	2318100001
Municipality:	Mississauga
Count Date:	Jun 14, 2023

Sherwood Forrest Circle - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	0	1	1	0	2	0	4	0	0	0	4	4	6
08:00 - 09:00	0	0	4	0	4	0	9	0	0	0	9	1	13
09:00 - 10:00	0	2	1	0	3	0	5	2	0	0	7	0	10
BREAK													
16:00 - 17:00	0	1	1	0	2	0	4	2	0	0	6	1	8
17:00 - 18:00	0	1	2	0	3	0	4	0	0	0	4	0	7
18:00 - 19:00	0	1	1	0	2	1	8	1	0	0	9	0	11
GRAND TOTAL	**0**	**6**	**10**	**0**	**16**	**1**	**34**	**5**	**0**	**0**	**39**	**6**	**55**

Ontario Traffic Inc.
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Traffic Count Summary

Intersection:	Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code:	2318100001
Municipality:	Mississauga
Count Date:	Jun 14, 2023

Private Access - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	0	0	0	0	0	2	1	0	1	0	2	4	2
08:00 - 09:00	0	0	0	0	0	1	2	0	2	0	4	3	4
09:00 - 10:00	0	0	0	0	0	0	3	0	2	0	5	2	5
BREAK													
16:00 - 17:00	0	1	0	0	1	0	5	0	4	0	9	1	10
17:00 - 18:00	0	0	0	0	0	3	1	0	6	0	7	3	7
18:00 - 19:00	0	0	0	0	0	2	1	0	6	0	7	6	7
GRAND TOTAL	**0**	**1**	**0**	**0**	**1**	**8**	**13**	**0**	**21**	**0**	**34**	**19**	**35**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Municipality: Mississauga
Count Date: Jun 14, 2023

North Approach - Sherwood Forrest Circle

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	1	0	1	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	3	6	0	9	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Municipality: Mississauga
Count Date: Jun 14, 2023

North Approach - Sherwood Forrest Circle

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
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	0
16:30	0	1	1	0	2	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
17:00	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	3	4	0	7	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTAL	0	6	10	0	16	0	0	0	0	0	0	0	0	0	0	1

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Municipality: Mississauga
Count Date: Jun 14, 2023

South Approach - Sherwood Forrest Circle

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	2
07:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
08:00	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	1
08:15	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:30	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:00	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
09:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	17	2	0	0	19	1	0	0	0	1	0	0	0	0	0	5

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Traffic Count Data

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Municipality: Mississauga
Count Date: Jun 14, 2023

South Approach - Sherwood Forrest Circle

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
16:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	2	1	0	0	3	1	0	0	0	1	0	0	0	0	0	1
17:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17:15	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
18:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
18:15	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
18:30	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
18:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	15	3	0	0	18	1	0	0	0	1	0	0	0	0	0	1
GRAND TOTAL	32	5	0	0	37	2	0	0	0	2	0	0	0	0	0	6

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Traffic Count Data

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Municipality: Mississauga
Count Date: Jun 14, 2023

East Approach - Private Access

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	2
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	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

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Traffic Count Data

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Municipality: Mississauga
Count Date: Jun 14, 2023

East Approach - Private Access

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
16:00	0	1	0	0	1	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	0
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
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5
GRAND TOTAL	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	8

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Traffic Count Data

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Municipality: Mississauga
Count Date: Jun 14, 2023

West Approach - Deers Wold (east leg)

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
07:00	0	0	1	0	1	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	1
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
08:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
08:15	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	1
09:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
SUBTOTAL	5	0	5	0	10	1	0	0	0	1	0	0	0	0	0	9

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Municipality: Mississauga
Count Date: Jun 14, 2023

West Approach - Deers Wold (east leg)

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
16:00	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	1
16:15	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
16:30	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:00	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
17:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
17:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	4
18:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
18:30	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	1
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	6	0	16	0	22	1	0	0	0	1	0	0	0	0	0	10
GRAND TOTAL	11	0	21	0	32	2	0	0	0	2	0	0	0	0	0	19

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Peak Hour Diagram

Specified Period		One Hour Peak	
From:	07:00:00	From:	07:45:00
To:	10:00:00	To:	08:45:00

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Count Date: Jun 14, 2023

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Sherwood Forrest Circle runs N/S

North Approach

	Out	In	Total
Cars	5	3	8
Trucks	0	0	0
Bicycles	0	0	0
	5	**3**	**8**

Sherwood Forrest Circle

Bicycles	0	0	0	0
Trucks	0	0	0	0
Cars	4	1	0	0
Totals	**4**	**1**	**0**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	0	0	0
Trucks	0	0	0
Bicycles	0	0	0
	0	**0**	**0**

Deers Wold (east leg)

			Totals
0	0	0	**0**
0	0	3	**3**
0	0	0	**0**
0	0	2	**2**

Peds: 5

Peds: 1

Private Access

Totals			
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Peds: 3

West Approach

	Out	In	Total
Cars	5	12	17
Trucks	0	1	1
Bicycles	0	0	0
	5	**13**	**18**

Sherwood Forrest Circle

Totals	**9**	**0**	**0**	**0**
Cars	8	0	0	0
Trucks	1	0	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	8	3	11
Trucks	1	0	1
Bicycles	0	0	0
	9	**3**	**12**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Count Date: Jun 14, 2023
Period: 07:00 - 10:00

Peak Hour Data (07:45 - 08:45)

Start Time	North Approach Sherwood Forrest Circle						South Approach Sherwood Forrest Circle						East Approach Private Access						West Approach Deers Wold (east leg)						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:45	0	1	0	0	0	1	1	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	3	1	3
08:00	0	0	1	0	0	1	3	0	0	0	1	3	0	0	0	0	1	0	1	0	0	0	2	1	5
08:15	0	0	1	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	2	5
08:30	0	0	2	0	0	2	3	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	6
Grand Total	**0**	**1**	**4**	**0**	**0**	**5**	**9**	**0**	**0**	**0**	**3**	**9**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**2**	**0**	**5**	**5**	**19**
Approach %	0	20	80	0		-	100	0	0	0		-	0	0	0	0		-	60	0	40	0		-	
Totals %	0	5.3	21.1	0		26.3	47.4	0	0	0		47.4	0	0	0	0		0	15.8	0	10.5	0		26.3	
PHF	**0**	**0.25**	**0.5**	**0**		**0.63**	**0.75**	**0**	**0**	**0**		**0.75**	**0**	**0**	**0**	**0**		**0**	**0.75**	**0**	**0.5**	**0**		**0.63**	**0.79**
Cars	0	1	4	0		5	8	0	0	0		8	0	0	0	0		0	3	0	2	0		5	18
% Cars	0	100	100	0		100	88.9	0	0	0		88.9	0	0	0	0		0	100	0	100	0		100	94.7
Trucks	0	0	0	0		0	1	0	0	0		1	0	0	0	0		0	0	0	0	0		0	1
% Trucks	0	0	0	0		0	11.1	0	0	0		11.1	0	0	0	0		0	0	0	0	0		0	5.3
Bicycles	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
Peds					0	-					3	-					1	-					5	-	9
% Peds					0	-					33.3	-					11.1	-					55.6	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	16:00:00	From:	16:15:00
To:	19:00:00	To:	17:15:00

Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Count Date: Jun 14, 2023

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Sherwood Forrest Circle runs N/S

North Approach

	Out	In	Total
Cars	4	6	10
Trucks	0	1	1
Bicycles	0	0	0
	4	**7**	**11**

Sherwood Forrest Circle

Bicycles	0	0	0	0
Trucks	0	0	0	0
Cars	3	1	0	0
Totals	**3**	**1**	**0**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	0	0	0
Trucks	0	0	0
Bicycles	0	0	0
	0	**0**	**0**

Deers Wold (east leg)

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	1	4	**5**
0	0	0	**0**
0	0	5	**5**

Peds: 1

N
W E
S

Peds: 1

Private Access

Totals	Cars	Trucks	Bicycles
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Peds: 1

West Approach

	Out	In	Total
Cars	9	6	15
Trucks	1	1	2
Bicycles	0	0	0
	10	**7**	**17**

Totals	4	2	0	0
Cars	3	2	0	0
Trucks	1	0	0	0
Bicycles	0	0	0	0

Sherwood Forrest Circle

South Approach

	Out	In	Total
Cars	5	6	11
Trucks	1	0	1
Bicycles	0	0	0
	6	**6**	**12**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

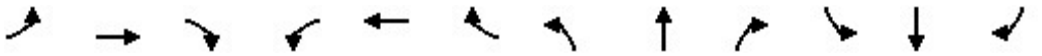
Intersection: Sherwood Forrest Circle & Deers Wold (east leg) - Private Access
Site Code: 2318100001
Count Date: Jun 14, 2023
Period: 16:00 - 19:00

Peak Hour Data (16:15 - 17:15)

Start Time	North Approach Sherwood Forrest Circle						South Approach Sherwood Forrest Circle						East Approach Private Access						West Approach Deers Wold (east leg)						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:15	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	2	3
16:30	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	5
16:45	0	0	0	0	0	0	3	1	0	0	1	4	0	0	0	0	0	0	0	0	1	0	0	1	5
17:00	0	0	2	0	0	2	1	0	0	0	0	1	0	0	0	0	1	0	1	0	3	0	1	4	7
Grand Total	**0**	**1**	**3**	**0**	**0**	**4**	**4**	**2**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**	**5**	**0**	**1**	**10**	**20**
Approach %	0	25	75	0		-	66.7	33.3	0	0		-	0	0	0	0		-	50	0	50	0		-	
Totals %	0	5	15	0		20	20	10	0	0		30	0	0	0	0		0	25	0	25	0		50	
PHF	**0**	**0.25**	**0.38**	**0**		**0.5**	**0.33**	**0.5**	**0**	**0**		**0.38**	**0**	**0**	**0**	**0**		**0**	**0.63**	**0**	**0.42**	**0**		**0.63**	**0.71**
Cars	0	1	3	0		4	3	2	0	0		5	0	0	0	0		0	4	0	5	0		9	18
% Cars	0	100	100	0		100	75	100	0	0		83.3	0	0	0	0		0	80	0	100	0		90	90
Trucks	0	0	0	0		0	1	0	0	0		1	0	0	0	0		0	1	0	0	0		1	2
% Trucks	0	0	0	0		0	25	0	0	0		16.7	0	0	0	0		0	20	0	0	0		10	10
Bicycles	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
Peds					0	-					1	-					1	-					1	-	3
% Peds					0	-					33.3	-					33.3	-					33.3	-	

Appendix D

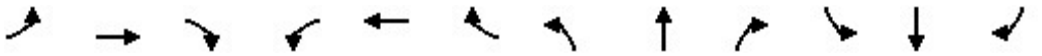
2023 Existing Synchro Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	2	0	0	0	9	0	0	0	1	4
Future Volume (Veh/h)	3	0	2	0	0	0	9	0	0	0	1	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	2	0	0	0	10	0	0	0	1	4
Pedestrians		5			1			3				
Lane Width (m)		3.5			3.5			3.5				
Walking Speed (m/s)		1.2			1.2			1.2				
Percent Blockage		0			0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	28	29	11	29	31	1	10			1		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	28	29	11	29	31	1	10			1		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	100	100	100	100	100	100	99			100		
cM capacity (veh/h)	969	854	1063	967	852	1083	1546			1620		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	0	10	5
Volume Left	3	0	10	0
Volume Right	2	0	0	4
cSH	1005	1700	1546	1620
Volume to Capacity	0.00	0.00	0.01	0.00
Queue Length 95th (m)	0.1	0.0	0.1	0.0
Control Delay (s)	8.6	0.0	7.3	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	0.0	7.3	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	5.8			
Intersection Capacity Utilization	18.3%	ICU Level of Service	A	
Analysis Period (min)	15			



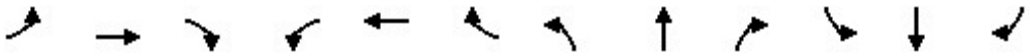
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	5	0	0	0	4	2	0	0	1	3
Future Volume (Veh/h)	5	0	5	0	0	0	4	2	0	0	1	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	6	0	6	0	0	0	4	2	0	0	1	3
Pedestrians		1			1			1				
Lane Width (m)		3.5			3.5			3.5				
Walking Speed (m/s)		1.2			1.2			1.2				
Percent Blockage		0			0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	14	14	4	20	16	3	5			3		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	14	14	4	20	16	3	5			3		
tC, single (s)	7.3	6.5	6.2	7.1	6.5	6.2	4.3			4.1		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.3	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	99	100	99	100	100	100	100			100		
cM capacity (veh/h)	954	876	1077	982	874	1080	1477			1618		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	0	6	4
Volume Left	6	0	4	0
Volume Right	6	0	0	3
cSH	1012	1700	1477	1618
Volume to Capacity	0.01	0.00	0.00	0.00
Queue Length 95th (m)	0.3	0.0	0.1	0.0
Control Delay (s)	8.6	0.0	5.0	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	0.0	5.0	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	6.0			
Intersection Capacity Utilization	14.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Appendix E

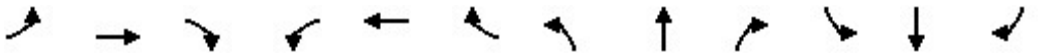
2028 Future Total Synchro Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	9	2	0	28	0	9	0	0	0	1	4
Future Volume (Veh/h)	3	9	2	0	28	0	9	0	0	0	1	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	10	2	0	31	0	10	0	0	0	1	4
Pedestrians		5			1			3				
Lane Width (m)		3.5			3.5			3.5				
Walking Speed (m/s)		1.2			1.2			1.2				
Percent Blockage		0			0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	44	29	11	34	31	1	10			1		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	44	29	11	34	31	1	10			1		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	100	99	100	100	96	100	99			100		
cM capacity (veh/h)	921	854	1063	951	852	1083	1546			1620		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	15	31	10	5
Volume Left	3	0	10	0
Volume Right	2	0	0	4
cSH	890	852	1546	1620
Volume to Capacity	0.02	0.04	0.01	0.00
Queue Length 95th (m)	0.4	0.9	0.1	0.0
Control Delay (s)	9.1	9.4	7.3	0.0
Lane LOS	A	A	A	
Approach Delay (s)	9.1	9.4	7.3	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	8.2			
Intersection Capacity Utilization	18.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	32	5	0	18	0	4	2	0	0	1	3
Future Volume (Veh/h)	5	32	5	0	18	0	4	2	0	0	1	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	6	36	6	0	20	0	4	2	0	0	1	3
Pedestrians		1			1			1				
Lane Width (m)		3.5			3.5			3.5				
Walking Speed (m/s)		1.2			1.2			1.2				
Percent Blockage		0			0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	24	14	4	38	16	3	5			3		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	24	14	4	38	16	3	5			3		
tC, single (s)	7.3	6.5	6.2	7.1	6.5	6.2	4.3			4.1		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.3	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	99	96	99	100	98	100	100			100		
cM capacity (veh/h)	924	876	1077	926	874	1080	1477			1618		

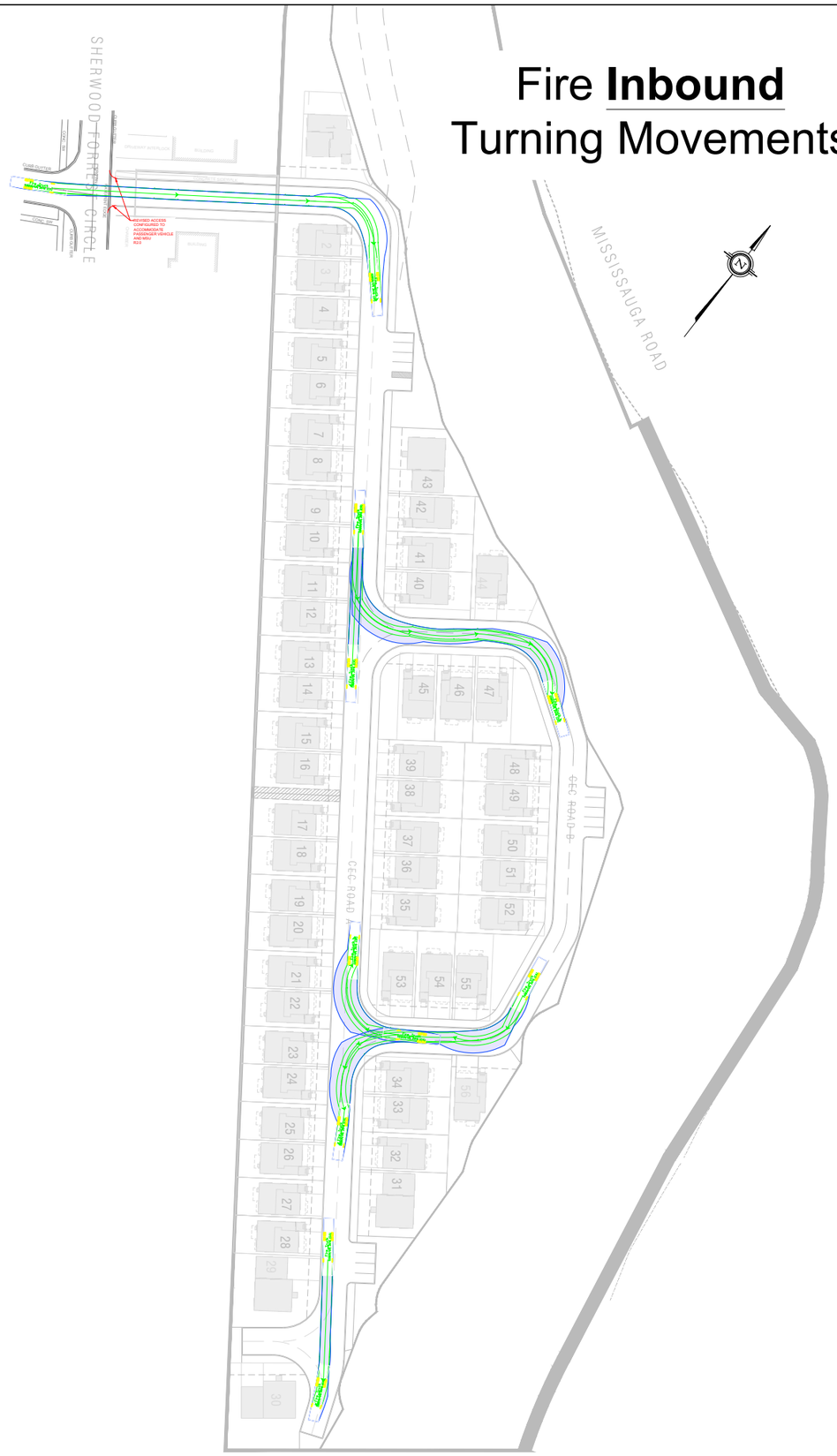
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	48	20	6	4
Volume Left	6	0	4	0
Volume Right	6	0	0	3
cSH	903	874	1477	1618
Volume to Capacity	0.05	0.02	0.00	0.00
Queue Length 95th (m)	1.3	0.5	0.1	0.0
Control Delay (s)	9.2	9.2	5.0	0.0
Lane LOS	A	A	A	
Approach Delay (s)	9.2	9.2	5.0	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	8.4			
Intersection Capacity Utilization	17.7%	ICU Level of Service	A	
Analysis Period (min)	15			

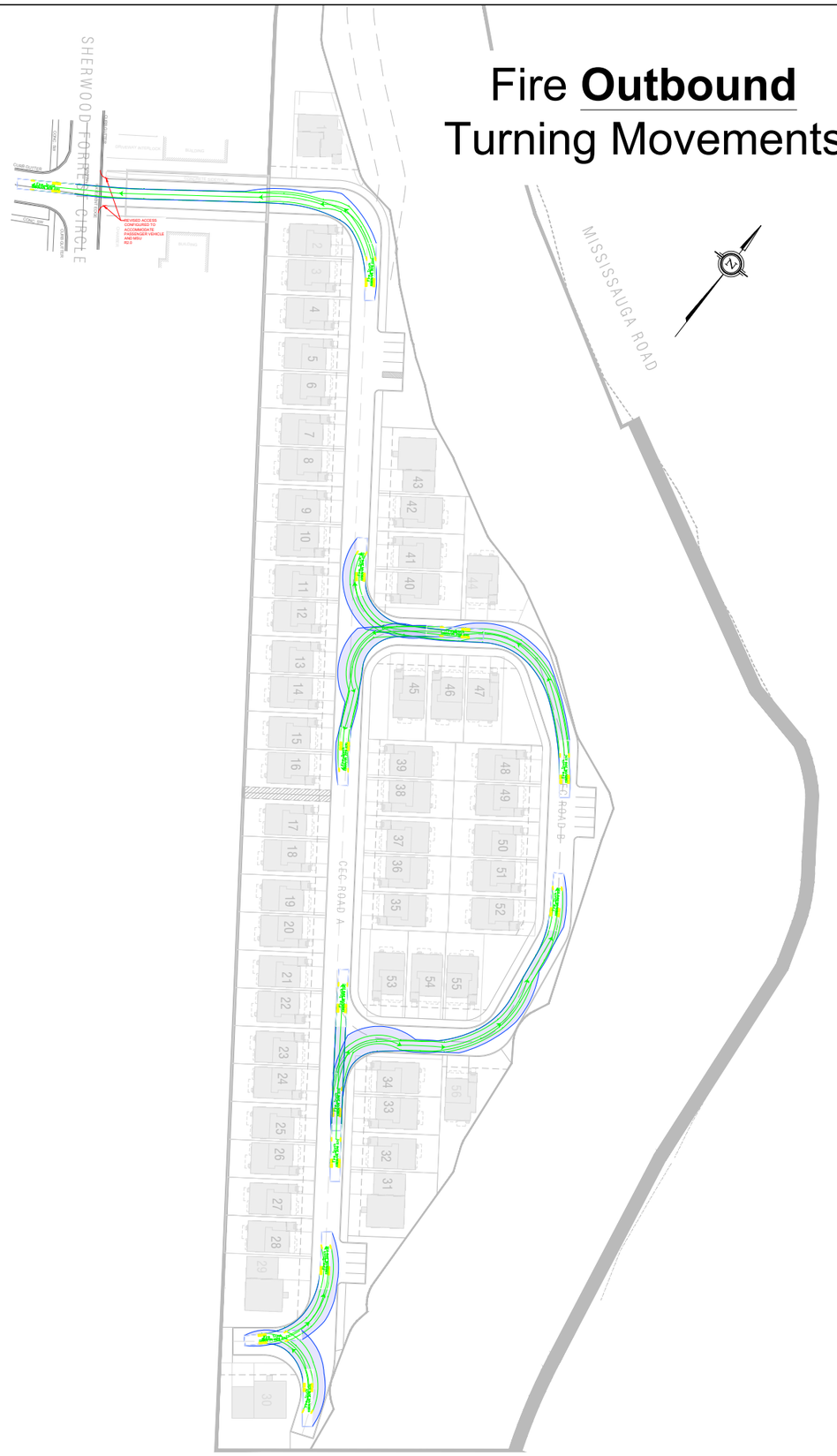
Appendix F

Turning Template Analysis

Fire **Inbound** Turning Movements



Fire **Outbound** Turning Movements



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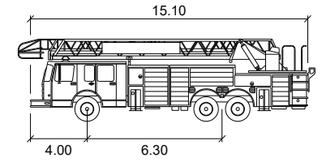


Fire Truck

	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 32.6

REV:	DESCRIPTION:	BY:	DATE:
01	Issued for Review	AN	2024-09-27

STATUS:

CGH Transportation
628 Haines Road
Newmarket, ON
L3Y 6V5
(905) 251-4070

CLIENT: ARGO Development Corp.

ARCHITECT:

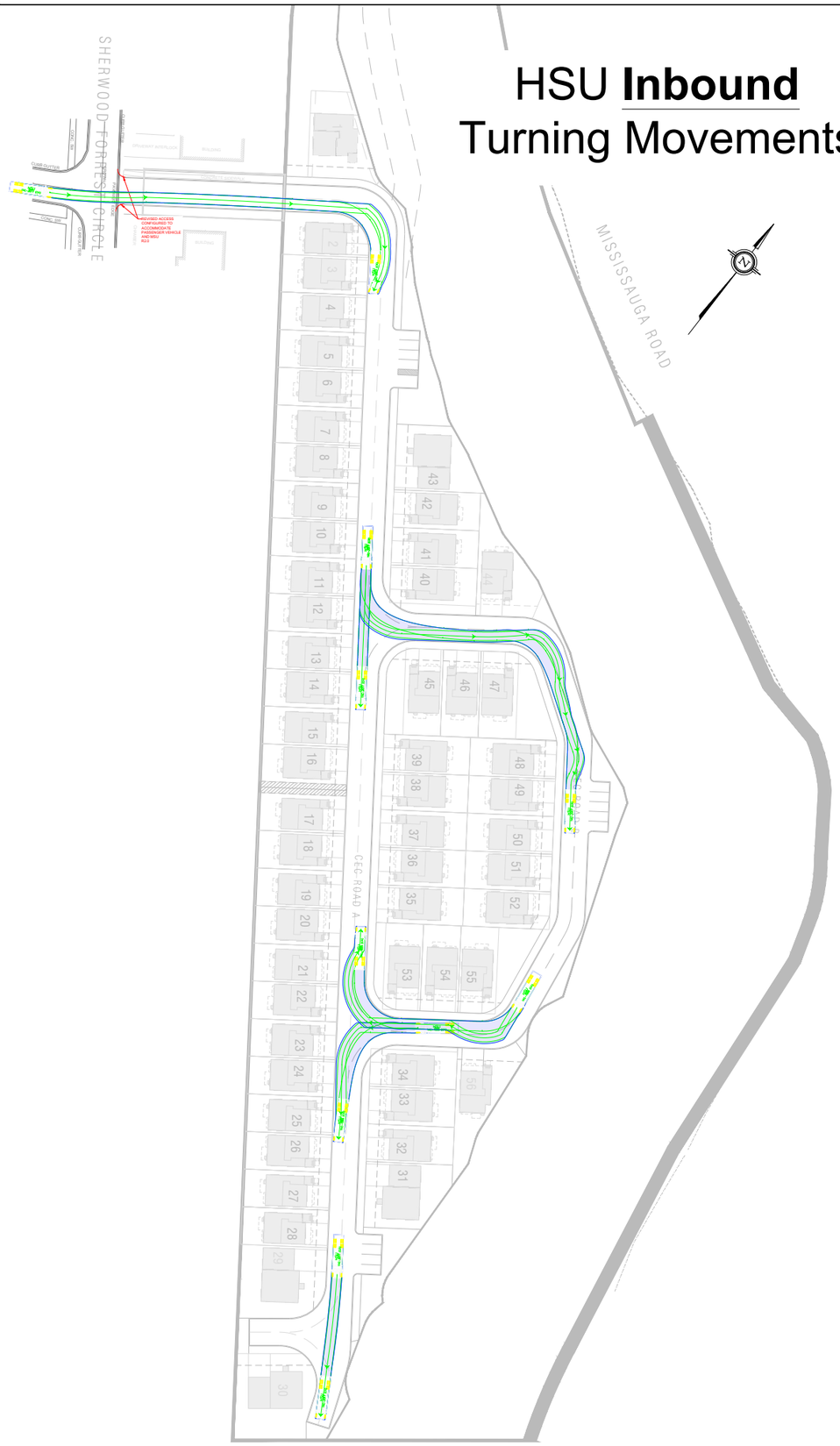
SITE: 1720 Sherwood Forrest Circle Mississauga

TITLE: Turning Movement Analysis Fire Turning Movements

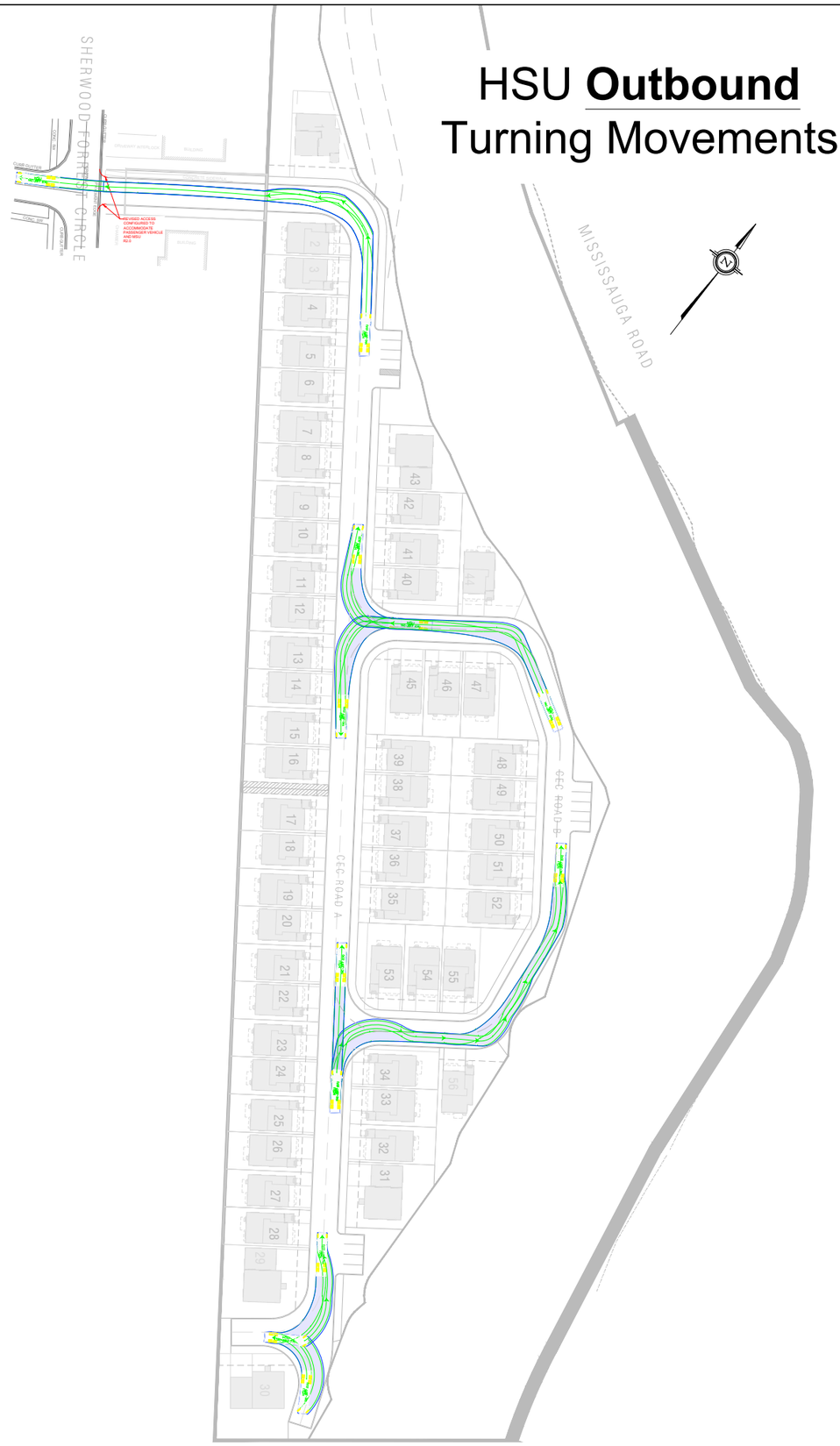
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2024-09-27	EA	MC

PROJECT NO:	DRAWING NO:	REVISION:
2023-078	001	01

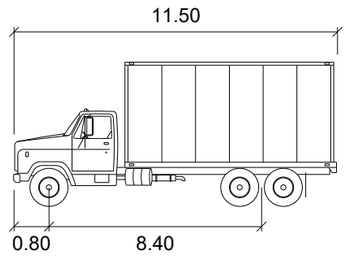
HSU **Inbound** Turning Movements



HSU **Outbound** Turning Movements



Notes:



HSU

	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

REV:	DESCRIPTION:	BY:	DATE:
01	Issued for Review	AN	2023-09-16

STATUS:

CGH Transportation
628 Haines Road
Newmarket, ON
L3Y 6V5
(905) 251-4070

CLIENT: ARGO Development Corp.

ARCHITECT:

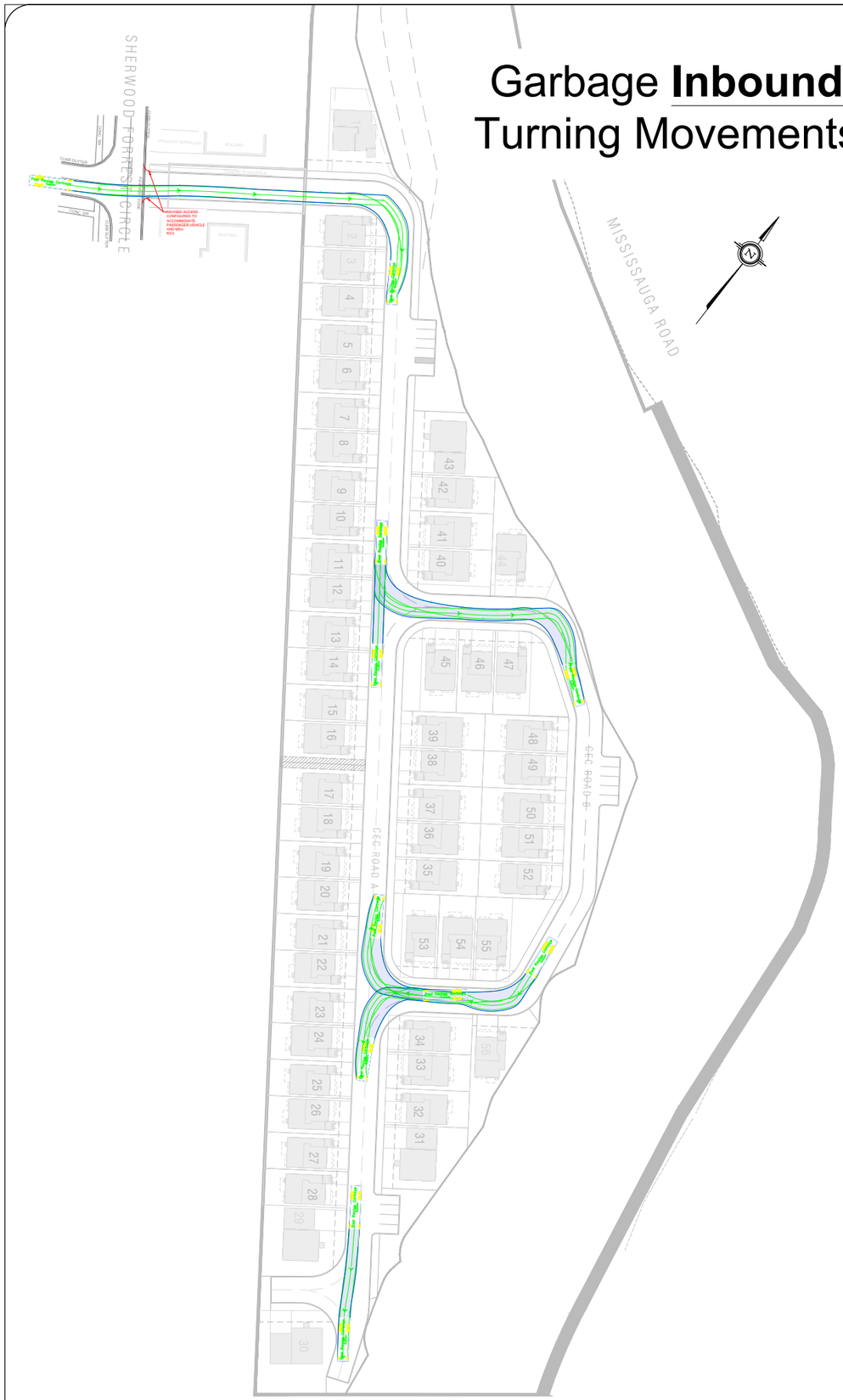
SITE: 1720 Sherwood Forrest Circle Mississauga

TITLE: Turning Movement Analysis HSU Turning Movements

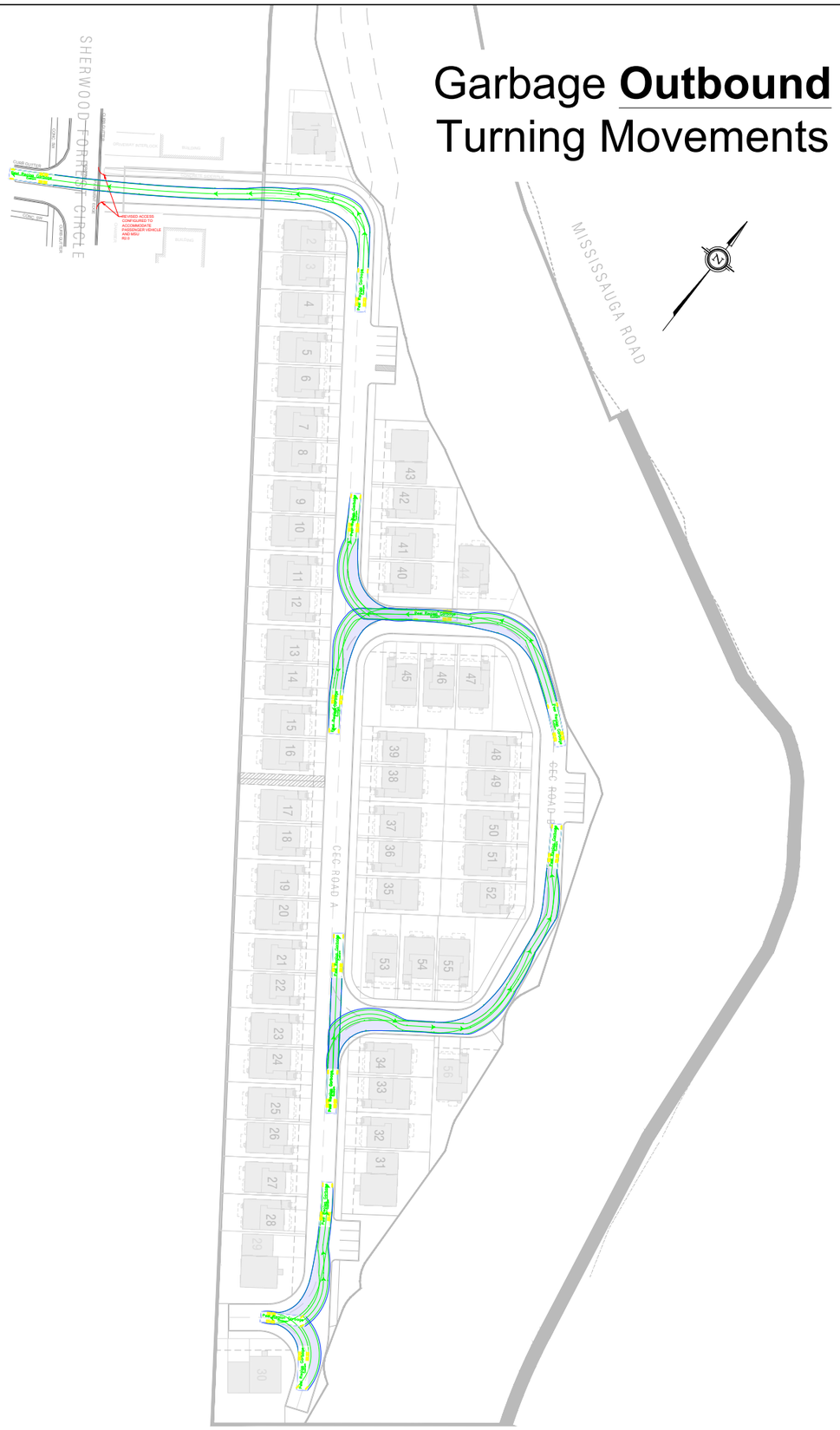
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2023-09-27	EA	MC

PROJECT NO:	DRAWING NO:	REVISION:
2023-078	002	01

Garbage **Inbound** Turning Movements



Garbage **Outbound** Turning Movements



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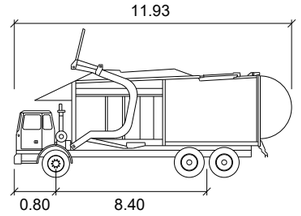


Peel Region Garbage

	meters
Width	: 2.77
Track	: 2.77
Lock to Lock Time	: 6.0
Steering Angle	: 40.3

REV:	DESCRIPTION:	BY:	DATE:
01	Issued for Review	AN	2023-08-29

STATUS:

CGH Transportation
628 Haines Road
Newmarket, ON
L3Y 6V5
(905) 251-4070

CLIENT: ARGO Development Corp.

ARCHITECT:

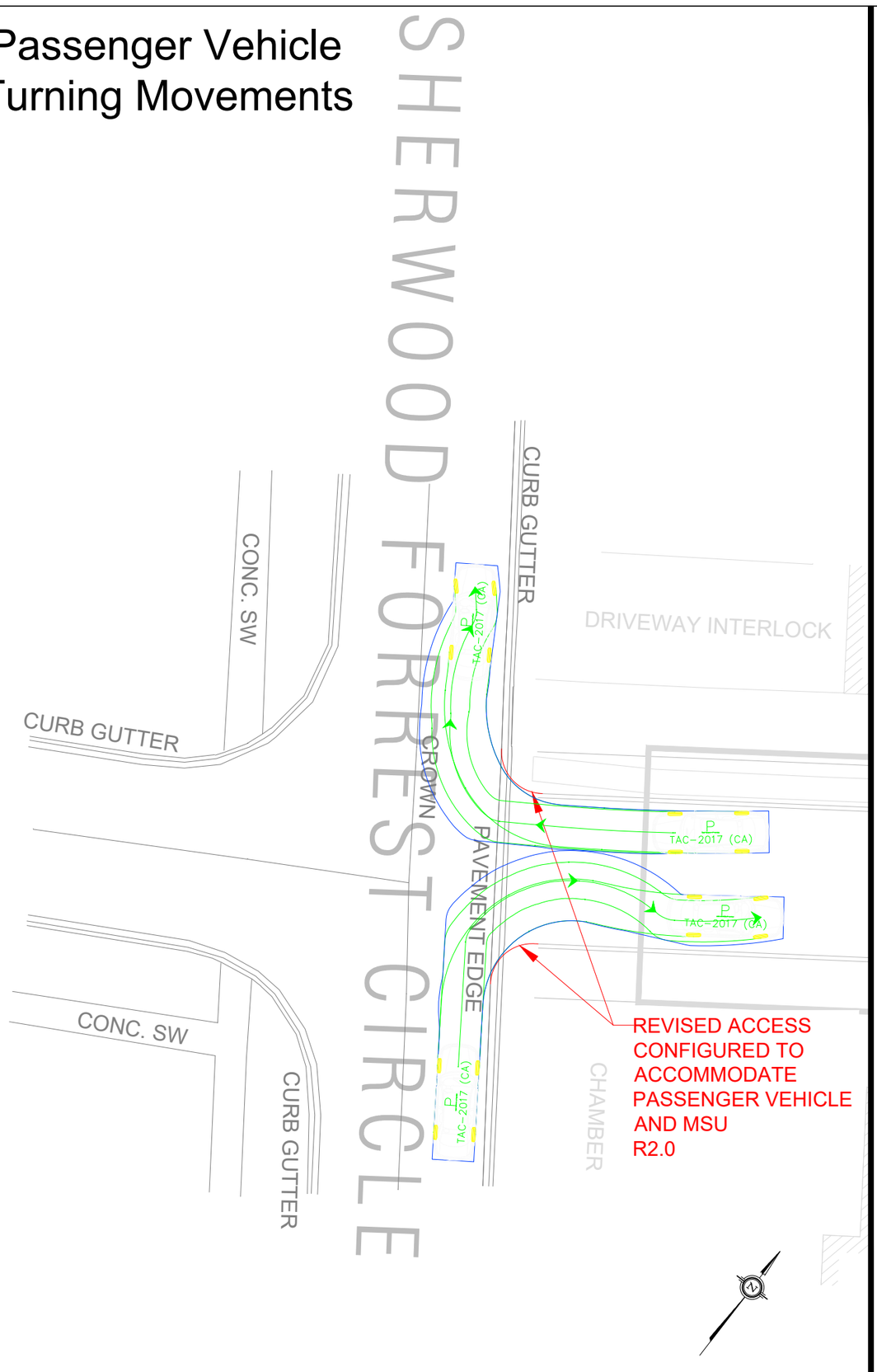
SITE: 1720 Sherwood Forrest Circle Mississauga

TITLE: Turning Movement Analysis Garbage Turning Movements

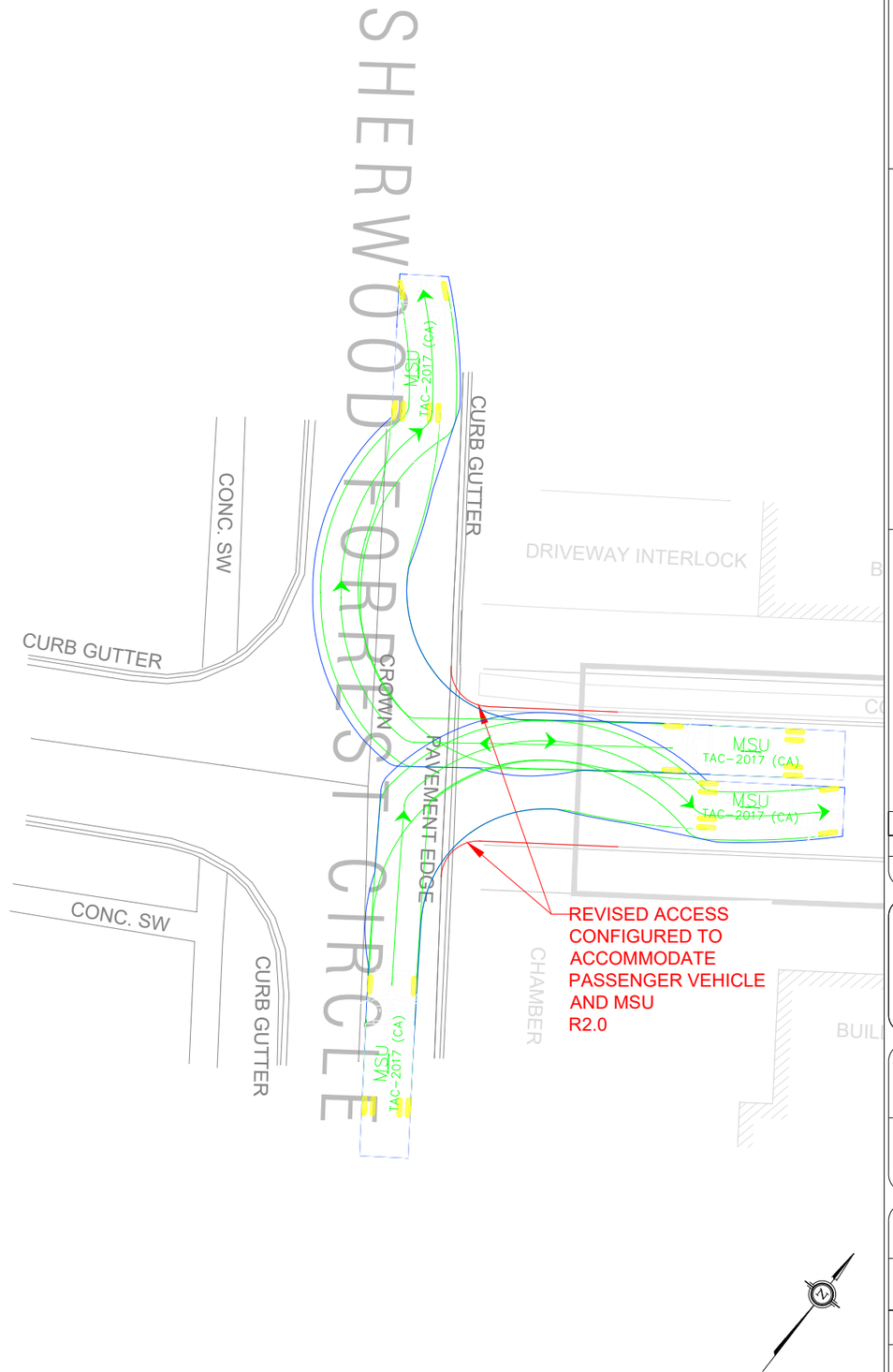
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2023-09-27	EA	MC

PROJECT NO:	DRAWING NO:	REVISION:
2023-078	003	01

Passenger Vehicle Turning Movements



MSU Turning Movements



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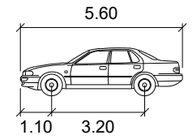
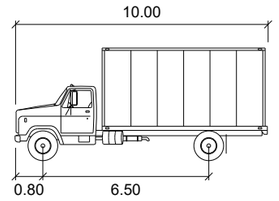


P

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



MSU

	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.2

REV:	DESCRIPTION:	BY:	DATE:
01	Issued for Review	AN	2023-09-27

STATUS:

CGH Transportation
628 Haines Road
Newmarket, ON
L3Y 6V5
(905) 251-4070

CLIENT: ARGO Development Corp.

ARCHITECT:

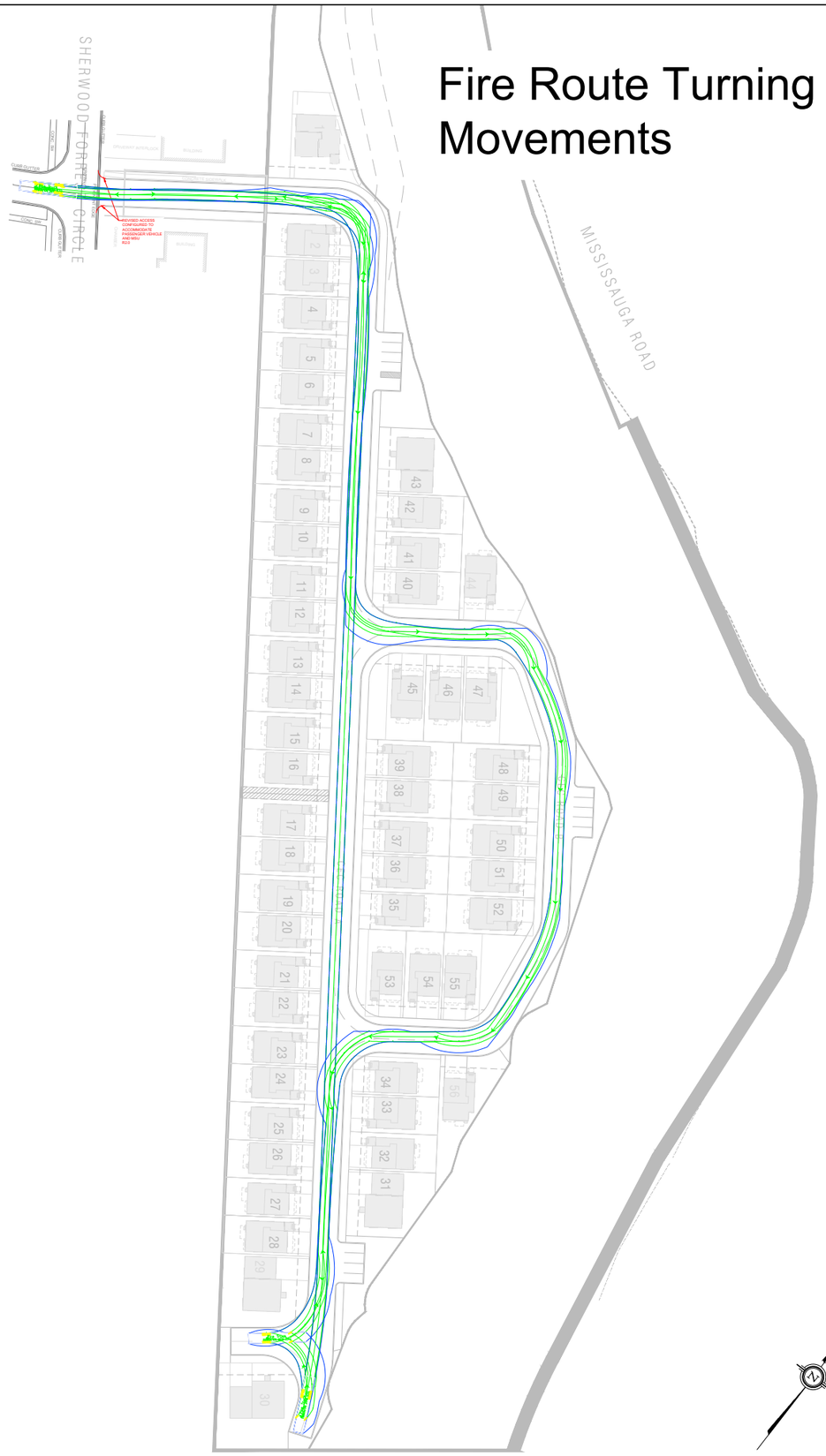
SITE: 1720 Sherwood Forrest Circle Mississauga

TITLE: Turning Movement Analysis Entrance Analysis

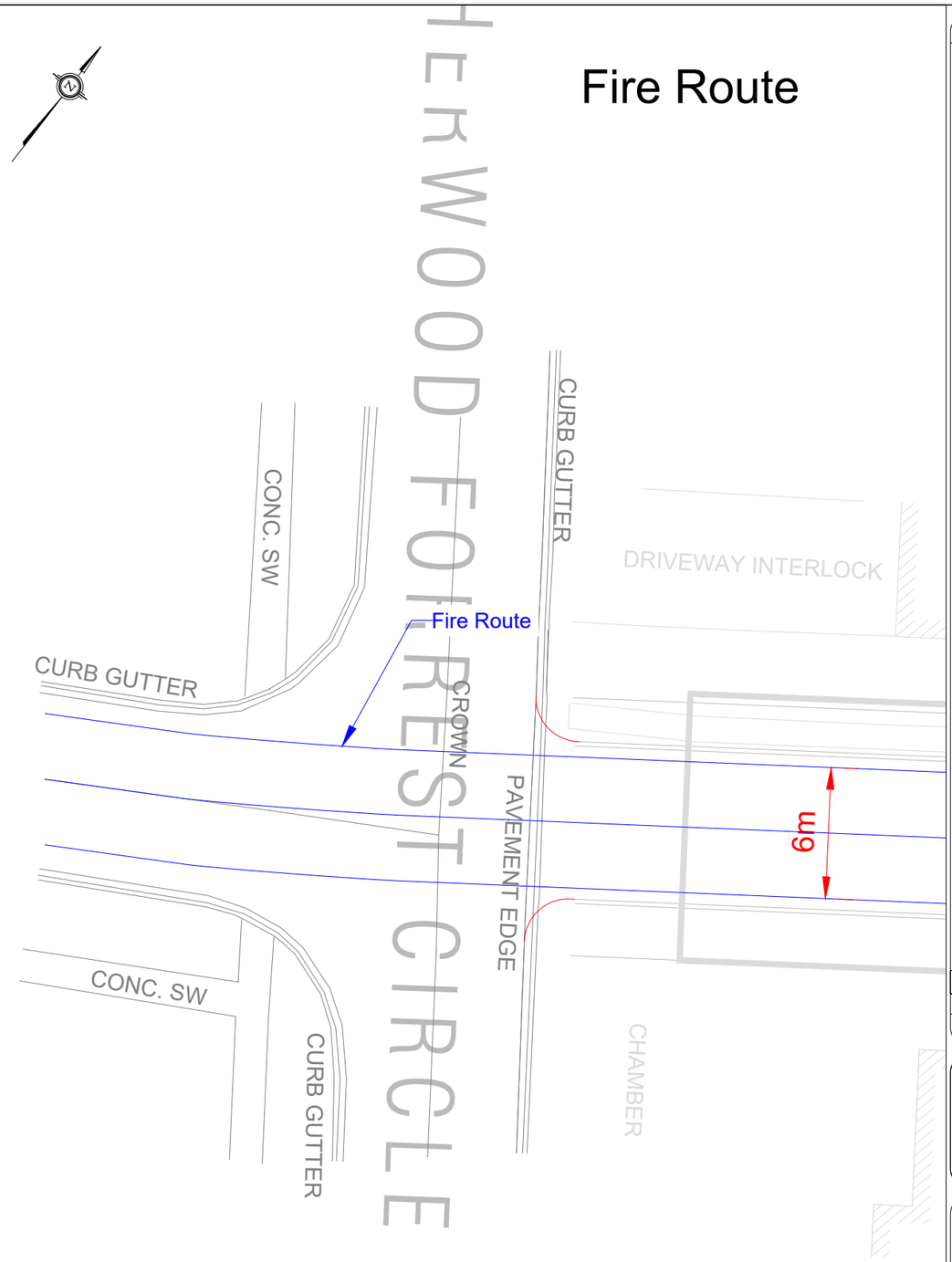
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2023-09-27	EA	MC

PROJECT NO:	DRAWING NO:	REVISION:
2023-078	004	01

Fire Route Turning Movements



Fire Route



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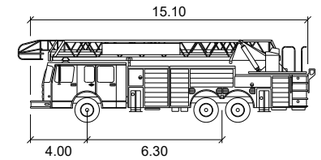

Fire Truck

	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 32.6

REV:	DESCRIPTION:	BY:	DATE:
01	Issued for Review	AN	2023-09-27

STATUS:

CGH Transportation
628 Haines Road
Newmarket, ON
L3Y 6V5
(905) 251-4070

CLIENT: ARGO Development Corp.

ARCHITECT:

SITE: 1720 Sherwood Forrest Circle Mississauga

TITLE: Turning Movement Analysis Fire Route

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2023-09-27	EA	MC

PROJECT NO:	DRAWING NO:	REVISION:
2023-078	005	01

Appendix G

TDM and Pedestrian Circulation Checklist

Appendix E

Transportation Demand Management and Pedestrian Circulation Checklist

This checklist is designed to evaluate the incorporation of Transportation Demand Management (TDM) measures, including pedestrian circulation techniques, into development proposals. The template is modelled on the prototype Class 2: Medium Density/Moderate Congestion (TDM Moderate) checklist contained in *TDM Supportive Guidelines for Development Approvals* (ACT Canada, 2008).

The applicant must complete and return this checklist with their **Transportation Demand Management Plan** (TDMP) and/or **Pedestrian Circulation Plan** (PCP).

Application Summary

Development Application No: _____

Date: _____

Applicant: _____

Staff: _____

SCORE AND RATING: _____

TDM SUPPORTIVE?

Yes _____ No _____

Scorecard

Use the scorecard below to determine the TDM rating and supportiveness of the development proposal based on the final score calculated on page E-5. If the proposal does not satisfy the minimum threshold, review and enhance the TDM measures.

Final Score	Rating	TDM Supportive?
91% - 100%	***** (5 Star)	YES
81% - 90%	**** (4 Star)	
71% - 80%	*** (3 Star)	
61% - 70%	** (2 Star)	NO (Review and Enhance TDM Measures)
50% - 60%	* (1 Star)	
Less than 50%	(None)	

CATEGORY A – Pedestrian Circulation					
In creating an environment that facilitates and supports pedestrian activity, the public realm needs to be accessible, safe, and comfortable to encourage movement on the street and in the surrounding area(s).					
	Features	**Yes**	**No**	**N/A**	**Comments**
A1	Development located within 800 m walking distance of residential (if employment) or employment (if residential) uses	X			
A2	Development located within 400 m walking distance of retail, restaurant, or other pedestrian-oriented uses or similar services provided on-site		X		
A3	At least one functional building entrance oriented towards public space (i.e., street, park, square)	X			
A4	At least one functional building entrance located close to on-site or adjacent street transit stop	X			
A5	Nearest functional building entrance located within 50 m of (and connected to) public street with sidewalk	X			
A6	Accessible on-site pedestrian routes provided and connected to surrounding network and transit	X			
A7	Continuous sidewalks (1.5 m min. width) provided along all on-site roads and both sides of adjacent public streets	X			
A8	No conflict points between pedestrians and other users (i.e., vehicles, cyclists)		X		
A9	Adequate and properly designed pedestrian crossings provided on-site	X			
A10	Off-site road works designed to maximize pedestrian safety and minimize pedestrian crossing distances (e.g., no right turn channelization)			X	No off-site road works are proposed as part of the proposed development.
A11	Amenities provided along pedestrian routes (i.e., benches, street furniture)	X			
A11	Shelters and benches provided at transit stops	X			
A12	Wayfinding provided to guide pedestrians	X			
A13	Lighting provided along pedestrian routes	X			
A14	Weather protection provided along pedestrian routes			X	This feature is more applicable to multi-story buildings where canopies may be provided.
A15	Vehicle parking areas located away from street and pedestrian routes			X	This feature is more applicable to developments that have large parking lots and front arterial and collector roads.
A16	Protected pedestrian routes provided through vehicle parking lots and linked to building(s)			X	This feature is more applicable to commercial developments with large parking lots.

CATEGORY A – Pedestrian Circulation					
In creating an environment that facilitates and supports pedestrian activity, the public realm needs to be accessible, safe, and comfortable to encourage movement on the street and in the surrounding area(s).					
	Features	**Yes**	**No**	**N/A**	**Comments**
A17	Passenger pick-up and drop-off areas located to side or rear of buildings, downstream from major building entrance points, but no more than 30 m away			X	This measure is not applicable to a low-rise residential development.
A18	Loading areas located away from street and pedestrian routes			X	There is no centralized waste collection area at this site, however the waste collection turnaround area has been provided away from pedestrian routes.
	Sub-Total	11	2	6	

CATEGORY B – Cycling Orientation					
In creating an environment that facilitates and supports cycling activity, the public realm needs to be accessible, safe, and comfortable to encourage movement on the street and in the surrounding area(s).					
	Features	**Yes**	**No**	**N/A**	**Comments**
B1	On-site cycling routes provided and connected to surrounding network	X			Deer Wold and King Forrest Drive will connect residents to the future bike lanes along Dundas Street.
B2	Class A (long-term) and Class B (short-term) bicycle parking spaces provided per City of Mississauga Zoning By-law (reproduced at end of this checklist for reference)	X			Residents and visitors may park their bicycles within each unit's yard / garage.
B3	Bicycle repair station provided at-grade or within underground structure close to long-term bicycle parking			X	This feature is more applicable to employment, commercial or high-rise residential land uses where bicycle repair station can be provided in close proximity to centralized bike parking.
B4	Wayfinding provided to guide cyclists	X			
B5	Other amenities provided for cyclists (e.g., showers, change rooms)			X	This feature is more applicable to employment, commercial or high-rise residential land uses.
	Sub-Total	3	0	2	

CATEGORY C – Transit Service					
The availability and proximity of convenient public transit service with direct pedestrian linkages to the building expands the range of viable travel options for employees, visitors, and residents.					
	Features	**Yes**	**No**	**N/A**	**Comments**
C1	Development located within 800 m walking distance of a rapid transit station (existing or planned) or within 400 m of two or more public bus routes with minimum 15-minute headway service during peak commuter periods and every 30 minutes throughout the remainder of the day		X		
C2	Information about public transit routes, schedules, and fares provided in accessible and visible location on-site and in adjacent bus stops			X	This feature is more applicable to higher density developments with common entrances where transit map / schedule information can be displayed.
C3	Sufficient capacity available to accommodate transit riders generated by development	X			The proposed development is expected to generate negligible number of transit trips (a maximum of 4 trips per hour in peak direction)
	Sub-Total	1	1	1	

CATEGORY D – Motor Vehicle Parking					
The location and design of motor vehicle parking facilities can affect the character and cost of a development. Avoiding the oversupply of parking can also help reduce single occupant vehicle travel.					
	Features	**Yes**	**No**	**N/A**	**Comments**
D1	No more than the minimum number of parking spaces required by the Zoning By-law provided	X			
D2	Priority parking equivalent to 10% of employee spaces provided for carpooling/vanpooling			X	This feature is more applicable to employment land uses.
D3	Priority parking equivalent to 3% of full-time building occupants provided for auto share and hybrid/alternative fuel vehicles			X	This feature is more applicable to high-rise residential developments.
D4	Priority parking equivalent to 1% of the parking stalls provided for mopeds, motorcycles, and minicars			X	This feature is more applicable to high-rise residential developments.
D5	Parking shared for different uses on-site and/or adjoining properties			X	This feature is more applicable to non-homogeneous land uses.
D6	50% of parking located underground or in structured parking			X	This feature is more applicable to high-rise developments.
	Sub-Total	1	0	5	

CATEGORY E – Incentives

Building owners and tenants can offer occupants Transportation Demand Management incentives that help reduce single occupant vehicle travel.

	Features	Yes	No	N/A	Comments
E1	TDM Plan prepared that targets a 10% reduction in peak hour trips using forecast trip generation with status quo travel characteristics		X		
E2	Building owner/tenant will provide a ride matching service for car/vanpooling			X	This feature is more applicable to employment land uses.
E3	Building owner/tenant will provide emergency ride home options			X	This feature is more applicable to employment land uses.
E4	Building owner/tenant will provide subsidized transit passes for all occupants for a period of at least two years		X		
E5	Building owner/tenant will charge for parking as an unbundled cost to occupants			X	Not applicable to single family homes where parking is provided within each unit.
E6	Building owner/tenant will reduce cost for users of car/van pool, bicycle, moped/motorcycle/minicar spaces			X	Not applicable to single family homes where parking is provided within each unit
E7	Building owner/tenant will become a member of a local TMA and appoint a TDM Coordinator to oversee and coordinate promotional opportunities and events on site	X			
	Sub-Total	1	2	4	

SCORING SUMMARY

Count the number of applicable features for each category (items not assigned "N/A") and enter under the column "Applicable" in the table below.

Assign 1 point to each "Yes" answer, except for Category A (Pedestrian Circulation) where each "Yes" answer is worth ½ a point and Category C (Transit Service) where each "Yes" answer is worth 2 points. Award 0 points for a "No" answer. Tally the points for each category under the column "Points" in the table below.

Calculate "Final Score" as a percentage by dividing total "Points" by the total "Applicable" and enter in the table below and in the "SCORE AND RATING" field on page E-1.

Category	Possible	Applicable	Points	Comments
A – Pedestrian Circulation	9 (18/2)	6.5	5.5	
B – Cyclist Orientation	5	3	3	
C – Transit Service	6 (3x2)	4	2	
D – Motor Vehicle Parking	6	1	1	
E – Incentives	7	3	1	
TOTAL	**33**	17.5	12.5	
Score% (Points/Applicable)			71%	

Appendix F

Pedestrian-Oriented Site Design Prompt List

The following list is a convenient reminder for site designers and reviewers of important considerations in designing pedestrian-oriented development. The template is based on guidance contained in *Promoting Sustainable Transportation Through Site Design* (Institute of Transportation Engineers, 2010).

Site Planning	
☐	Locate highest density land uses closest to activity nodes such as transit stops and intersections
☐	Use retail, restaurant, and other pedestrian-oriented land uses to animate street frontage
Building Placement	
☐	Locate buildings close to the street but allow for pedestrian activities along street frontage
Building Entrances	
☐	Orient functional building entrances towards public spaces (i.e., street, park, square)
☐	Locate functional building entrances close to public streets with direct pedestrian access
☐	Locate functional building entrances close to on-site or adjacent street transit stops
☐	Locate short-term bicycle parking close to functional building entrances
☐	Locate preferential parking for sustainable modes (i.e., carshare, carpool) close to functional building entrances
☐	Avoid vehicle paths crossing major building entrance points
Pedestrian Routes	
☐	Provide safe, direct, continuous, and clearly defined pedestrian routes along desire lines. Routes should be accessible, wide, and unobstructed.
☐	Provide safe, direct, continuous, and clearly defined pedestrian routes to transit stops. Walking distances to stops should not exceed 800 m for rapid transit stations (existing or planned) or 400 m for public bus routes.
☐	Connect on-site pedestrian routes with surrounding networks
☐	Provide continuous sidewalks along all on-site roads and both sides of adjacent public streets
☐	Minimize conflict points between pedestrians and other users (i.e., vehicles, cyclists)
Pedestrian Crossings	
☐	Minimize block lengths where possible or provide midblock crosswalks if needed
☐	Design intersections to provide safe pedestrian crossings
☐	Provide properly signed crossings wherever a route crosses a road
☐	Warn pedestrians of upcoming crossings through physical treatment and/or accessible signals
☐	Design off-site road works to maximize pedestrian safety and minimize pedestrian crossing distances (e.g., no right-turn channelization)

Pedestrian Amenities	
☐	Provide benches, street furniture, and other amenities along pedestrian routes
☐	Provide wayfinding signs and other physical features to guide pedestrians
☐	Provide safe, well-lit, and visible shelters and benches at transit stops
☐	Provide lighting along pedestrian routes where possible
☐	Provide weather protection along pedestrian routes where possible
Vehicle Parking Layout	
☐	Locate off-street vehicle parking away from street, preferably behind buildings or underground
☐	Separate vehicle access to parking lots from pedestrian access
☐	Avoid vehicle access and egress controls to parking lots from blocking pedestrian routes
☐	Minimize vehicle parking lot area and design to prevent speeding
☐	Provide protected pedestrian routes through vehicle parking lots and link to buildings
Passenger Pick-up and Drop-off Areas	
☐	Locate passenger pick-up and drop-off areas to side or rear of buildings, downstream from major building entrance points, but no more than 30 m away
Loading Areas	
☐	Locate loading areas away from street, preferably behind buildings or underground
☐	Avoid severing pedestrian routes with loading area access
Site Grading	
☐	Maintain relatively level terrain along pedestrian routes
☐	Provide ramps wherever stairs necessary
☐	Design slopes along pedestrian routes to avoid ponding of slush and water