2455 Mer Bleue Road

Transportation Impact Assessment

Step 1 Screening Report

Step 2 Scoping Report

Step 3 Strategy Report

Prepared for:

Ottawa Catholic School Board
570 West Hunt Club Road
Ottawa, ON K2G 3R4

Prepared by:

CGH TRANSPORTATION

6 Plaza Court
Ottawa, ON K2H 7W1

March 2026

PN: 2025-211

Table of Contents

List of Figures

Table of Tables

List of Appendices

1 Screening

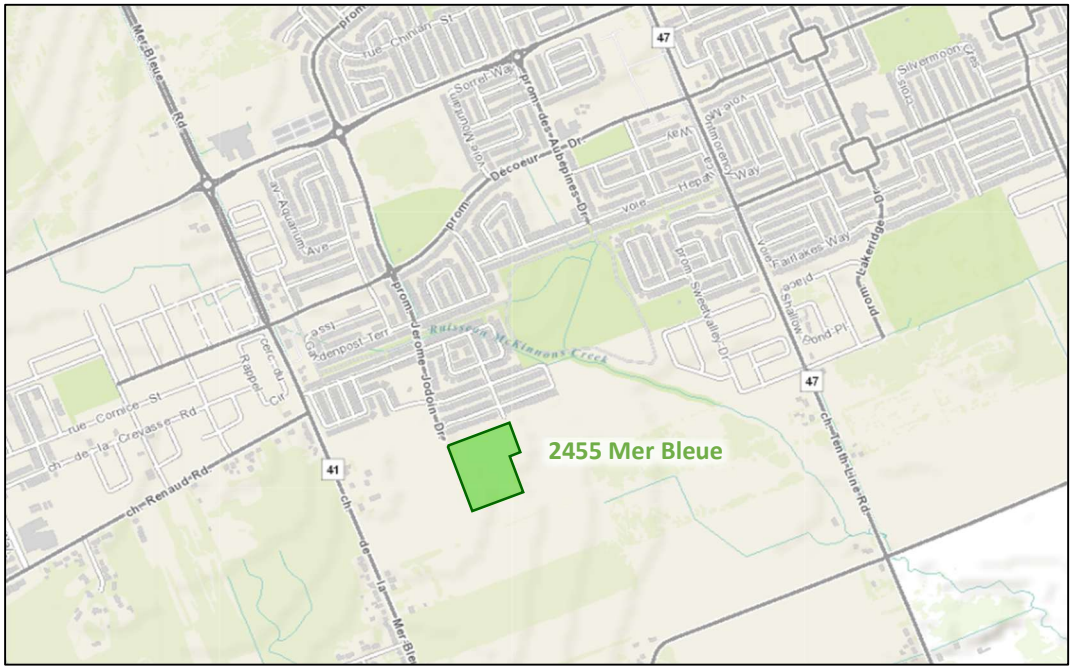
This study has been prepared according to the City of Ottawa's 2017 Transportation Impact Assessment (TIA) Guidelines, incorporating the 2023 Revision to Transportation Impact Assessment Guidelines. Accordingly, a Step 1 Screening Form has been prepared and is included as Appendix A, along with the Certification Form for the TIA Study PM. As shown in the Screening Form, a TIA is required, and this study has been prepared to support a site plan application.

2 Existing and Planned Conditions

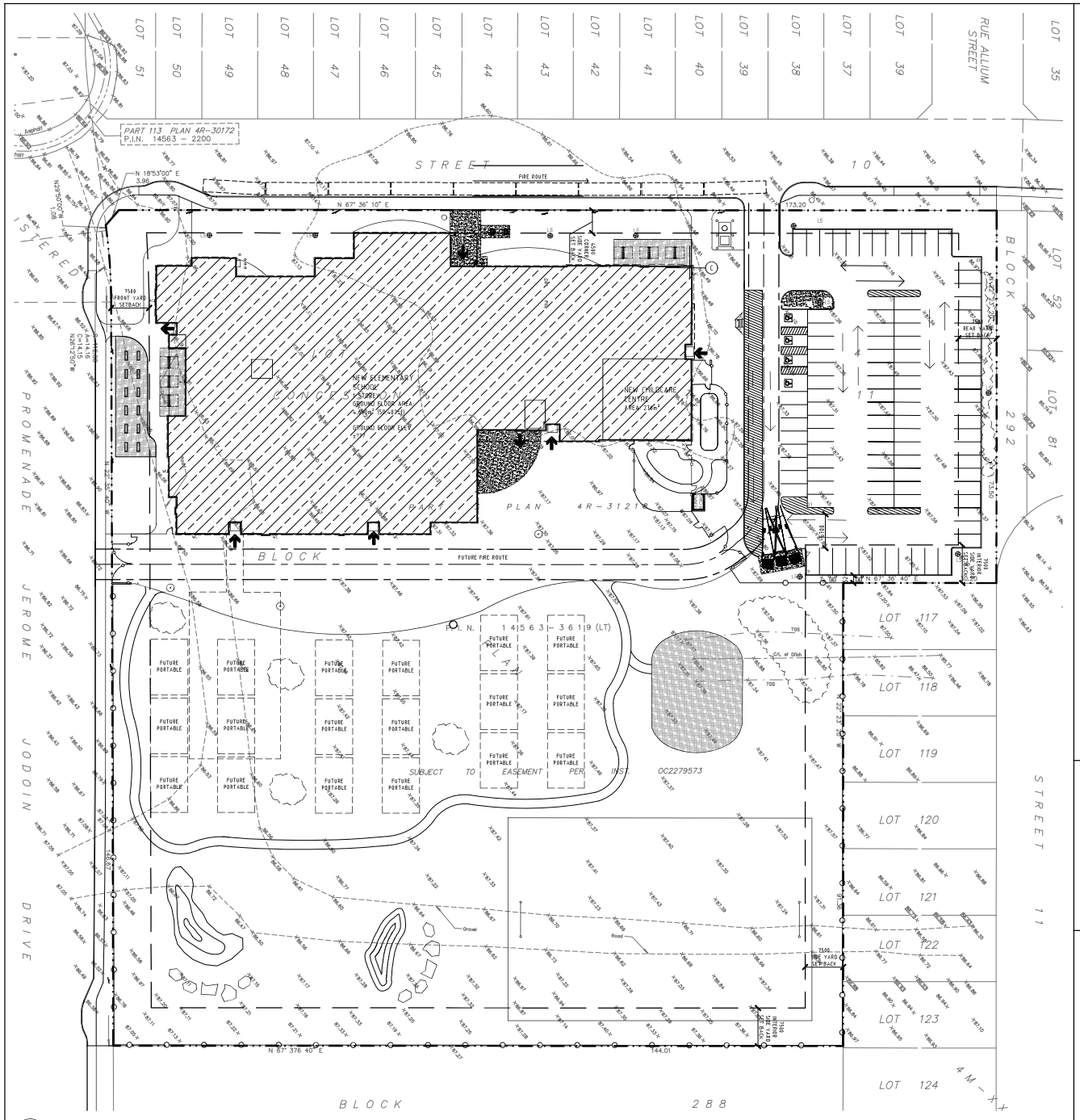
2.1 Proposed Development

The proposed site is located at 2455 Mer Bleue Road, and it is currently zoned as Minor Institutional Zone (I1A / R3YY[2590]). The proposed development includes an elementary school accommodating 524 students, 66 staff members, a 2,971 sq. ft childcare centre, and 104 parking spaces. The proposed access configuration consists of a two-way full-movement access located on the subdivision roadway (Street 10). The school bus lay-bys are proposed along the school frontage on the south side of Street 10. Parent drop-offs will be provided along the east side of the extension of Jerome Jodoin Drive along the school frontage, which will be constructed in the future. The subject school is part of a subdivision, and this TIA has been prepared to assess the interim conditions for the school component and the new roadway, Street 10, connecting to Allium Street and Jerome Jodoin Drive. The plan of subdivision application will consider the ultimate conditions for both the residential and school components. The anticipated build-out year is 2027. The site is located within the Mer Bleue Urban Expansion Area Community Design Plan and the Mer Bleue Developing Neighborhood Secondary Plan. Figure 1 illustrates the study area context. Figure 2 illustrates the proposed concept plan.

Figure 1: Area Context Plan



Source: http://maps.ottawa.ca/geoOttawa/ Accessed: February 09, 2026



1 A100 SITE PLAN 1:400

0 1 5 10 20M

OTTAWA CATHOLIC SCHOOL BOARD

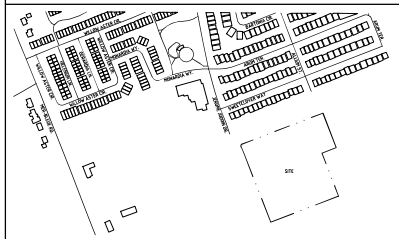
570 WEST HUNT CLUB ROAD, NEPEAN, ON, K2G 3K4 (613)224-4455

SITE LEGEND

FH	FIRE HYDRANT – SEE MECH
DC	DEPRESSED CURB – SEE CIVIL
	CONCRETE CURB – SEE CIVIL
	CONCRETE SIDEWALK – SEE CIVIL
	ASPHALT – SEE CIVIL
	TACTILE WALKING SURFACE INDICATOR (TWSI)
	ENGINEERED WOOD FIBRE – SEE LANDSCAPE
CB	CATCH BASIN, NEW – SEE CIVIL
MH	MAN HOLE, NEW – SEE CIVIL
OC	OC TRANSPO BUS STOP SIGN
HC	HANDICAP PARKING SIGN
FR	FIRE ROUTE SIGN RX512 @ 25m SPACING
OW	ONE WAY TRAFFIC SIGN
DN	DO NOT ENTER SIGN
NP	NO PARKING SIGN (RB-52) @ 25M SPACING
NP(2)	NO PARKING SIGN (RB-55R)
NP(3)	NO PARKING SIGN (RB-51)
SB	SCHOOL BUS STOPPING ZONE SIGN (RB89R)
PDO	PARENT DROP-OFF ZONE/NO IDLING SIGN –
PR	PARKING RESTRICTED 30 MIN. MON-FRI 7:00AM-4PM SIGN (RB-53R/RB-53L) @25M SPACING
R	RESERVED FOR DAYCARE SIGN
BH	BORE HOLE
TP	TEST PIT
LS	LIGHT STANDARD – SEE ELECTRICAL
WL	WALL MOUNT LIGHT FIXTURE – SEE ELEC.
FP	FLAG POLE
89.00	EXISTING GRADE
	18m HT. GALVANIZED CHAIN LINK FENCE UNLESS OTHERWISE NOTED
	12m HT. GALVANIZED CHAIN LINK FENCE
G	GAS METER
	ENTRANCE ARROW
	PAINTED LINES / NO PARKING

GENERAL NOTES:

1. SEE SITE SERVICES, ELECTRICAL & MECHANICAL DRAWINGS FOR UNDERGROUND UTILITIES LINES AND FOR NEW GRADING, EXCAVATE BACKFILL & PROVIDE CONCRETE TO REQUIREMENTS OF MECHANICAL, ELECTRICAL & SITE SERVICES DRAWINGS AND SPECIFICATIONS AND TO REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
2. PROVIDE 0.5M RADIUS FOR CONCRETE CURBS UNLESS OTHERWISE NOTED.
3. PERFORM LANDSCAPE & SITE WORKS INCLUDING WALKWAYS TIE INS WITHIN THE ROAD ALLOWANCE & SITE SERVICES AS INDICATED.
4. CONTRACTOR SHALL CONSTRUCT BUS LAY BY & CAR LAY BY, INCLUDING CURBS, WALKS, ASPHALT, PAVING, GRAN. BASES, TOPSOIL & SOD.
5. CONTRACTOR TO PROVIDE TEMPORARY CONSTRUCTION FENCING ALONG PROPERTY LINE TO PROTECT THE PUBLIC DURING CONSTRUCTION.
6. CONTRACTOR TO REPORT ANY ERRORS, OMISSIONS OR DISCREPANCIES ON SITE PLAN WITH ACTUAL SITE CONDITIONS TO THE ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.
7. CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AND AUTHORITIES PRIOR TO ANY EXCAVATION AND ASCERTAIN LOCATIONS OF UNDERGROUND SERVICES.
8. CONTRACTOR IS TO COMPLY WITH ALL PERTINENT CODES AND BY-LAWS.
9. CONTRACTOR TO MAINTAIN POSITIVE SURFACE RUN-OFF THROUGHOUT ENTIRE CONSTRUCTION PERIOD.



LOCATION PLAN
NTS

REV.	DESCRIPTION	DATE
01	ISSUED FOR CLIENT REVIEW	16/NOV/2025

SEAL

Not for construction unless SEALED and SIGNED

PROJECT NORTH

PYE & RICHARDS - TEMPRANO & YOUNG ARCHITECTS INC.
824 Heath St. Suite 200 | 613. 724. 7700
Ottawa, ON K1Z 6S8 | info@prty.ca

PROJECT

OCSB MER BLEUE ELEMENTARY SCHOOL

?????? OTTAWA, ON

DRAWING

SITE PLAN
ZONING MATRIX

PROJECT NO.	24032	DRAWING NO.	A100
SCALE -	1:400		
DRAWN -	WY		
CHECKED -	IR		
PLOT DATE -	24/11/2025	PLOTTED BY:	IRICHER

2.2 Existing Conditions

2.2.1 Area Road Network

Mer Bleue Road: Mer Bleue Road is a City of Ottawa arterial road transitioning from a four-lane divided cross-section to a two-lane undivided rural cross-section with paved shoulders on both sides of the road south of Decoeur Drive. South of Renaud Road, Mer Bleue Road is classified as a collector road where the rural cross-section continues. The posted speed limit is 60 km/h north of Renaud Road and 50 km/h to the south, and the City-protected right of way is 37.5 metres, subject to varying widening requirements of the Mer Bleue ESR.

Jerome Jodoin Drive: Jerome Jodoin Drive is a City of Ottawa collector road with a two-lane urban cross-section, including sidewalks on both sides of the road. The posted speed limit is 50 km/h, and the existing right of way is 24.0 metres.

Decoeur Drive: Decoeur Drive is a City of Ottawa collector road with a two-lane urban cross-section, including sidewalks on both sides of the road. The unposted speed limit is assumed to be 50 km/h, and the existing right of way is 26.0 metres.

Willow Aster Cricle: Willow Aster Cricle is a City of Ottawa local road with a two-lane urban cross-section, including a sidewalk on the north side of the road. The posted speed limit is 40 km/h, and the existing right of way is 18.0 metres.

Allium Street: Allium Street is a City of Ottawa local road with a two-lane urban cross-section, including a sidewalk on the east side of the road. The unposted speed limit is assumed to be 40 km/h, and the existing right of way is 18.0 metres.

2.2.2 Existing Intersections

The key study area intersections within one kilometre of the site have been summarized below:

Jerome Jodoin Drive at Decoeur Drive	The intersection of Jerome Jodoin Drive at Decoeur Drive is a four-legged roundabout intersection with pedestrian crossovers on all approaches. All approaches each consists of a shared all-movement lane. No turn restrictions were noted.
Mer Bleue Road at Willow Aster Circle	The intersection of Mer Bleue Road at Willow Aster Circle is a T-intersection with stop-control on the minor approach of Willow Aster Circle. The northbound approach consists of a shared through/right-turn lane, and the southbound approach consists of an auxiliary left-turn lane and a through lane. The westbound approach consists of a shared left-turn/right-turn lane. No turn restrictions were noted.

2.2.3 Existing Driveways

Within 200 metres of the site access, there are no existing driveways. Future driveways serving residential land uses will be located on both sides of Street 10.

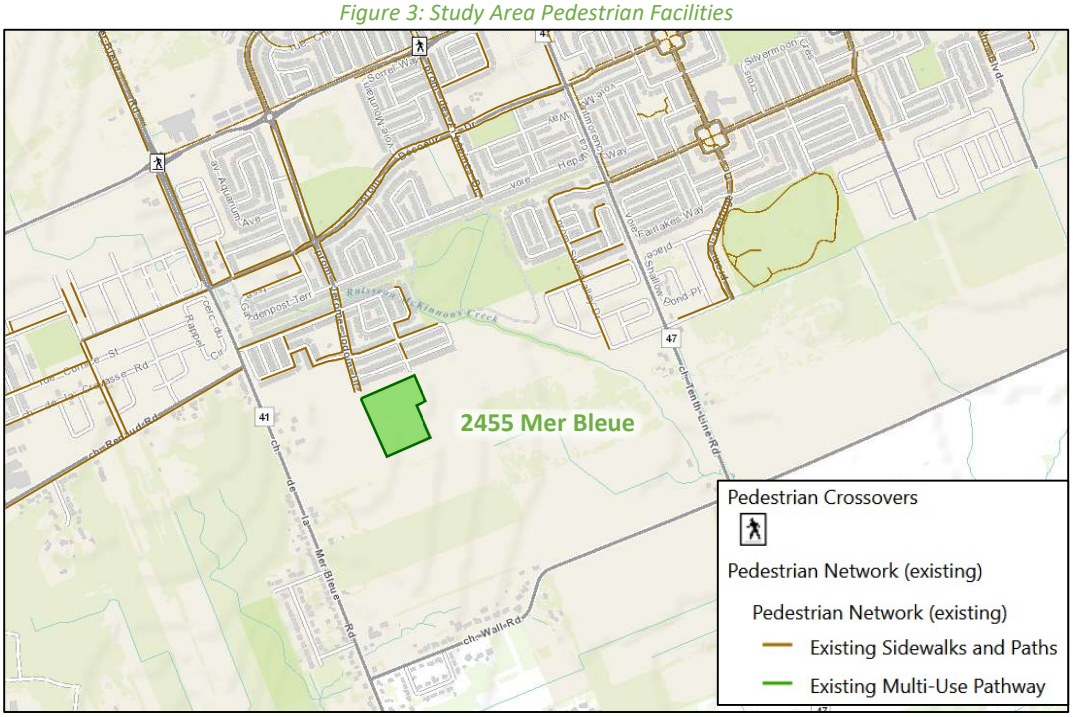
2.2.4 Cycling and Pedestrian Facilities

Figure 3 illustrates the pedestrian facilities in the study area and Figure 4 illustrates the cycling facilities.

Sidewalks are provided along both sides of Jerome Jodoin Drive, Decoeur Drive, Mer Bleue Road north of Decoeur Drive, Monardia Way for approximately 100 metres west of Jerome Jodin Drive, along the north side of Willow Aster Circle, Arum Terrace, and along the south and west, and east sides of Monardia Way.

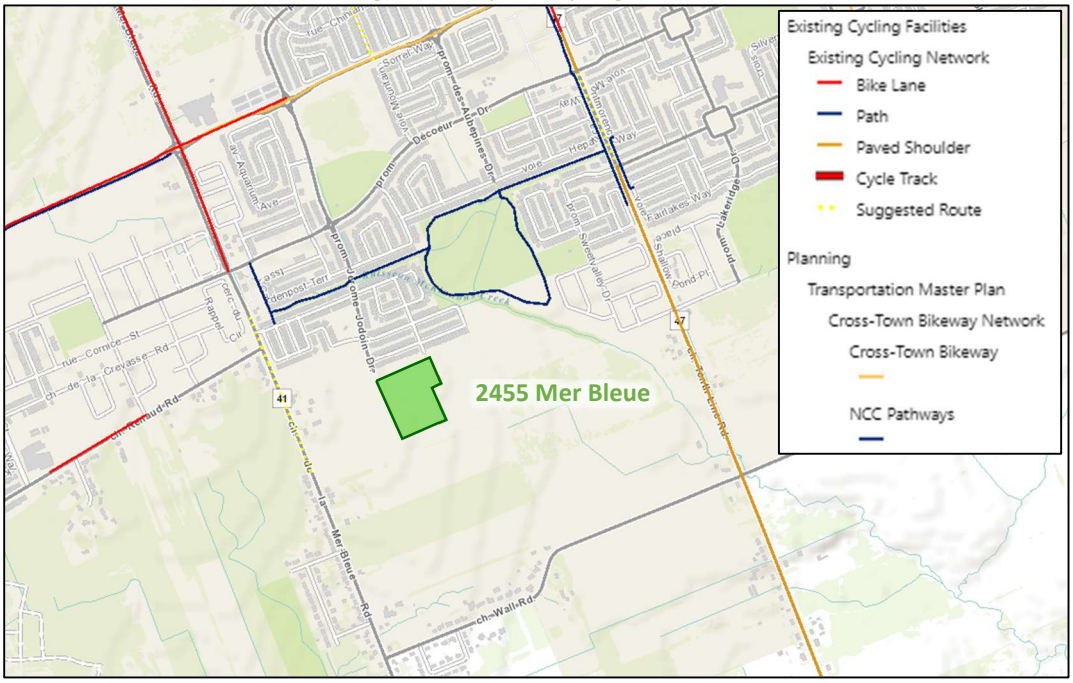
Cycling facilities include a bike lane on the east side of Mer Bleue Road north of Decoeur Drive and a pathway that circulates around Summerside West Pond and connects Decoeur Drive and Willow Aster Circle to Tenth Line Road.

Figure 3: Study Area Pedestrian Facilities



Source: http://maps.ottawa.ca/geoOttawa/ Accessed: February 09, 2026

Figure 4: Study Area Cycling Facilities

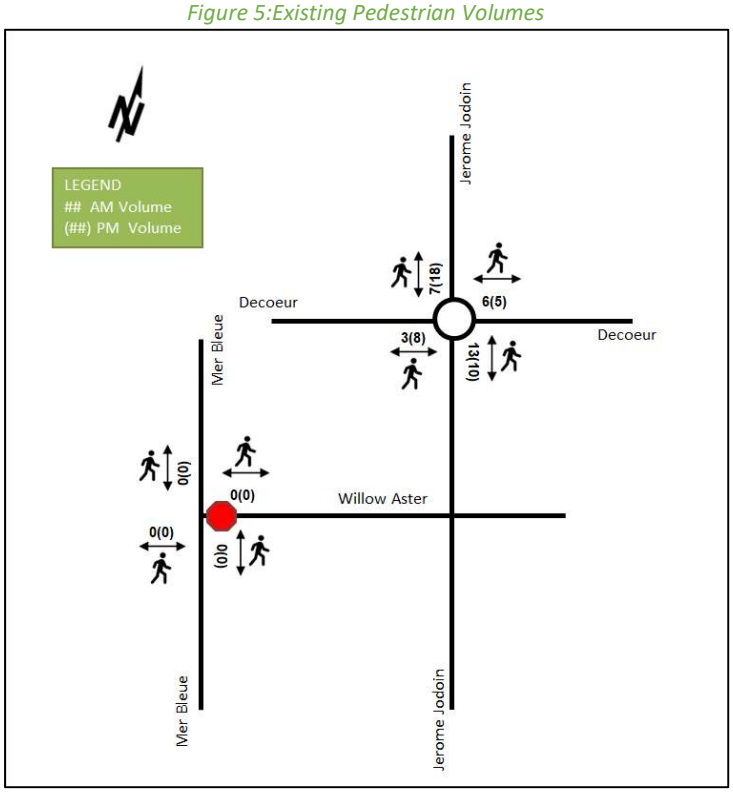


Source: http://maps.ottawa.ca/geoOttawa/ Accessed: February 09, 2026

Pedestrian volumes included in study area intersection counts, presented in Section 2.2.7, have been compiled and are illustrated in Figure 5. No cyclist volumes are noted in the study area intersection counts. The City of

Ottawa notes that the active mode volumes collected in winter may be lower than summer conditions, although this cannot be confirmed.

Figure 5:Existing Pedestrian Volumes



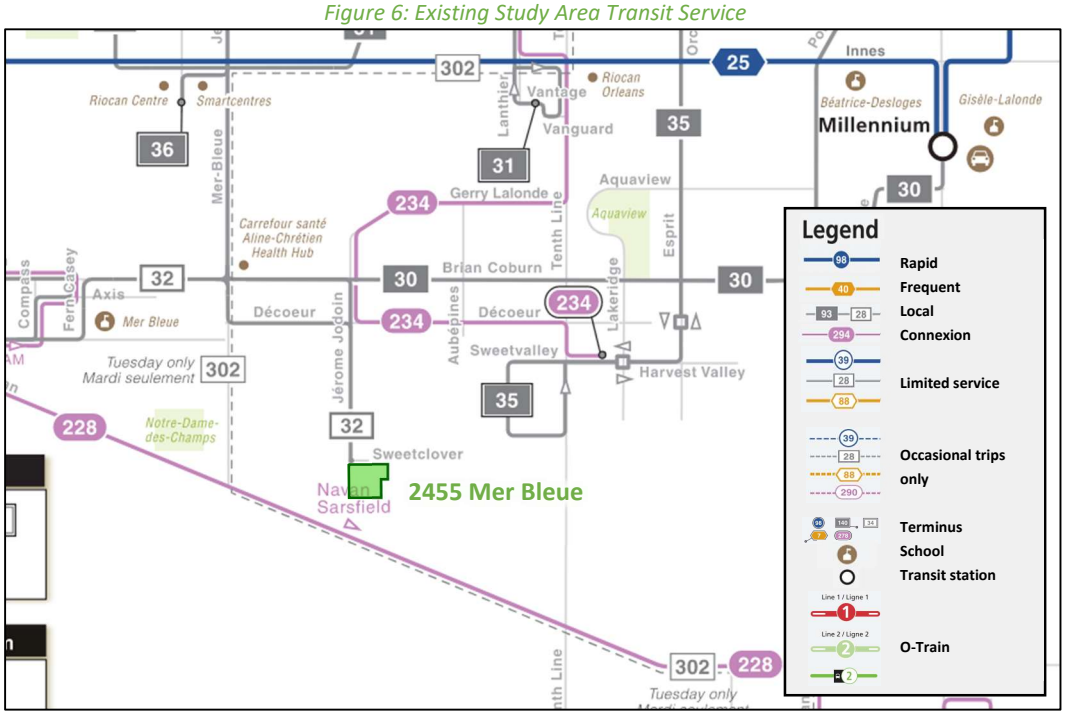
2.2.5 Existing Transit

Figure 6 illustrates the transit system map in the study area and Figure 7 illustrates nearby transit stops. All transit information is from February 09, 2026 and is included for general information purposes and context to the surrounding area.

Within the study area, the route #32 travels along Jerome Jodoin Drive, Decoeur Drive, and Mer Bleue Road, route #234 travels along Jerome Jodoin Drive and Decoeur Drive, and route #302 travels along Mer Bleue Road. The frequency of these routes within proximity of the proposed site based on February 09, 2026 service levels are:

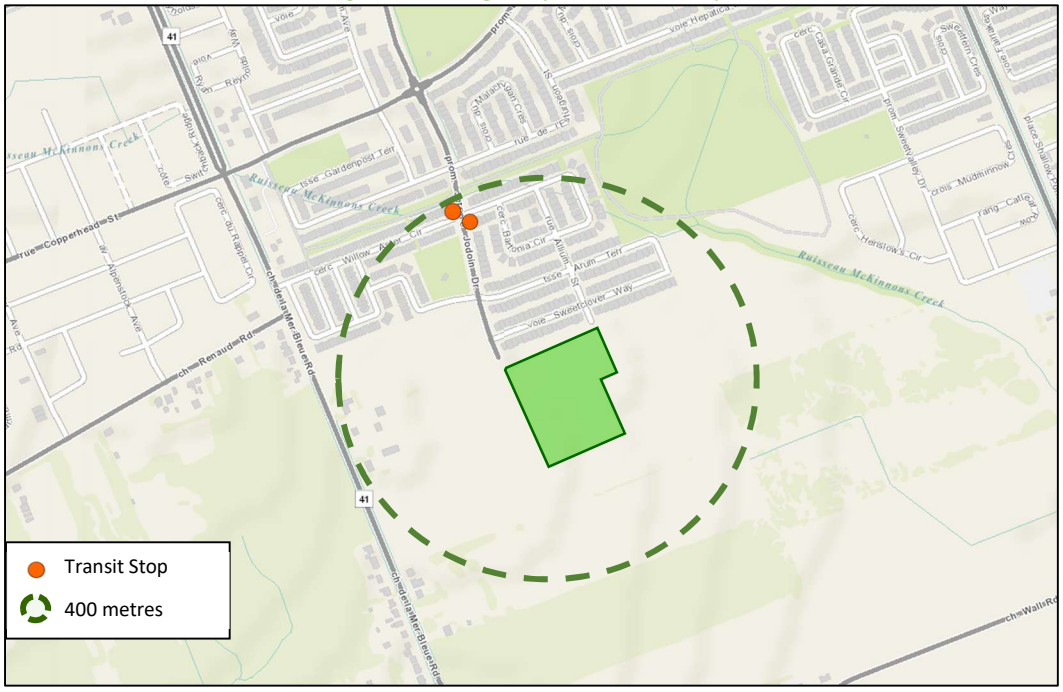
- Route #32 – 30-minute service in the peak period/direction
- Route #234 – 30-minute service in the peak period/direction
- Route #302 – One morning bus and one afternoon bus on Tuesday in the peak direction

Figure 6: Existing Study Area Transit Service



Source: http://www.octranspo.com/ Accessed: February 09, 2026

Figure 7: Existing Study Area Transit Stops



Source: http://www.octranspo.com/ Accessed: February 09, 2026

2.2.6 Existing Area Traffic Management Measures

There are no existing area traffic management measures within the study area. Traffic management measures include bulb-outs to narrow approaches to intersections (e.g. reduced crossing distance), speed humps, and raised crossings are planned to be implemented on Street 10 as part of the proposed school site.

2.2.7 Existing Peak Hour Travel Demand

Existing turning movement counts were acquired from J & S Traffic Services for the existing study area intersections. Table 1 summarizes the intersection count dates.

Table 1: Intersection Count Date

Intersection	Count Date
Jerome Jodoin Drive at Decoeur Drive	Thursday, February 12, 2026
Mer Bleue Road at Willow Aster Circle	

Figure 8 illustrates the existing traffic counts and Table 2 summarizes the existing intersection operations. Synchro 11 was used to model the stop-controlled intersection and Sidra 9 to model the study area roundabout. The level of service is based on HCM 2010 delay for stop controlled intersections and roundabouts. Detailed turning movement count data is included in Appendix B and the Synchro and Sidra worksheets are provided in Appendix C.

Figure 8: Existing Traffic Counts

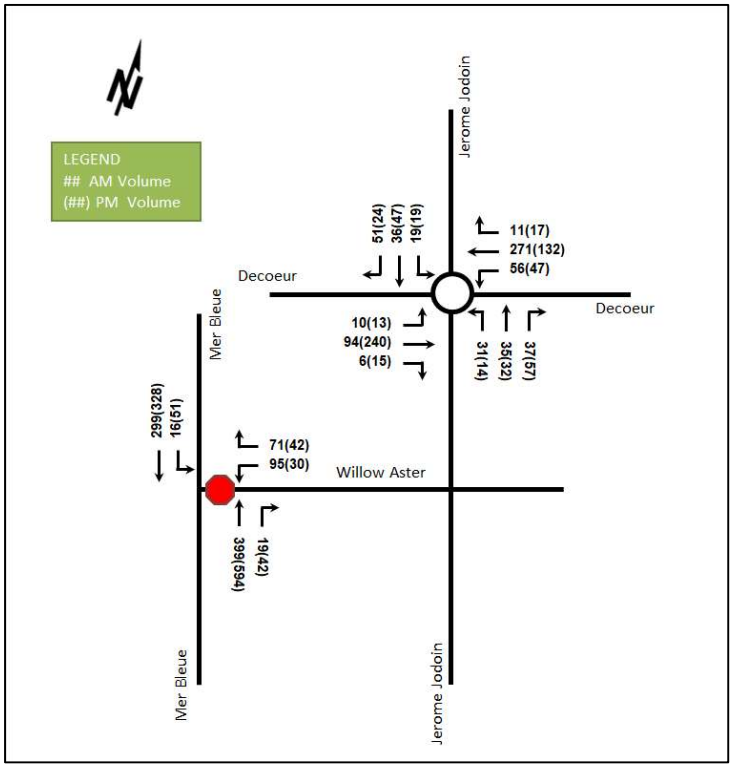


Table 2: Existing Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay (s)	Q (95th)	LOS	V/C	Delay (s)	Q (95th)
Jerome Jodoin Drive at Decoeur Drive *Roundabout*	EB	A	0.13	4.8	3.4	A	0.30	6.7	9.7
	WB	A	0.37	7.2	13.2	A	0.21	5.3	6.1
	NB	A	0.12	4.9	3.2	A	0.14	6.0	3.7
	SB	A	0.16	6.6	4.1	A	0.11	5.1	2.9
	Overall	**A**	**0.37**	**6.4**	**-**	**A**	**0.30**	**5.9**	**-**
Mer Bleue Road at Willow Aster Circle *Unsignalized*	WB	C	0.44	20.4	16.5	C	0.27	21.5	8.3
	NB	-	-	-	-	-	-	-	-
	SBL	A	0.02	8.3	0.0	A	0.06	9.3	1.5
	SBT	-	-	-	-	-	-	-	-
	Overall	**A**	**-**	**3.9**	**-**	**A**	**-**	**1.9**	**-**

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 study area intersections operate well. No capacity issues are noted.

2.2.8 Collision Analysis

Collision data have been acquired from the City of Ottawa open data website (data.ottawa.ca) for five years prior to the commencement of this TIA for the surrounding study area road network (2018-2022). Table 3 summarizes the collision types and conditions in the study area, Figure 9 illustrates the area collisions, and Table 4 summarizes the total collisions for each of the locations analyzed. Collision data are included in Appendix D.

Table 3: Study Area Collision Summary, 2018-2022

		Number	%
Total Collisions		**7**	**100%**
Classification	**Fatality**	0	0%
	Non-Fatal Injury	0	0%
	Property Damage Only	7	100%
Initial Impact Type	**Approaching**	0	0%
	Angle	1	14%
	Rear end	0	0%
	Sideswipe	0	0%
	Turning Movement	1	14%
	SMV Unattended	4	57%
	SMV Other	0	0%
	Other	1	14%
Road Surface Condition	**Dry**	5	71%
	Wet	1	14%
	Loose Snow	0	0%
	Slush	0	0%
	Packed Snow	0	0%
	Ice	0	0%
	Loose sand and gravel	1	14%
	Unknown	0	0%
Pedestrian Involved		0	0%
Cyclists Involved		0	0%

Figure 9: Study Area Collision Records

Table 4: Summary of Collision Locations, 2018-2022

	Number	%
Intersections / Segments	**7**	**100%**
Willow Aster Circle between Jerome Jodoin Drive and Willow Aster Circle	4	57%
Jerome Jodoin Drive at Decoeur Drive	1	14%
Helenium Lane at Willow Aster Circle	1	14%
Jerome Jodoin Drive between De L'esturgeon Street/Gardenpost Terrace and Decoeur Drive	1	14%
Mer Bleue Road at Willow Aster Circle	0	0%

Within the study area, the segment of Willow Aster Circle between Jerome Jodoin Drive and Willow Aster Circle experienced four collisions and the remining locations each experienced one collision during the 2018-2022 time period; all involved property damage only. The collision types are represented by the SMV unattended with four collisions, and angle, turning movement, and other with one collision each. Weather conditions are not considered to affect collisions at these locations. No further collision review is required as part of this study.

2.3 Planned Conditions

2.3.1 Changes to the Area Transportation Network

2.3.1.1 Transportation Master Plan (2025)

The recently approved Transportation Master Plan includes the Capital Infrastructure Plan identifying transportation investments to support the forecasted growth and strategic connectivity and livability targets for the City. It also identifies committed projects, and a subset of priority projects that are expected to be implemented by 2046 based on current affordability assumptions. Area projects anticipated to impact travel in the study area that are included within the Capital Infrastructure Plan are:

- Active Transportation Network
    - Cycling Projects with Prioritization

        - Eastbound multiuse path on Brian Coburn Boulevard from Mer Bleue Road to Portobello Boulevard and westbound bike lane from Montmere Avenue to Mer Bleue Road where feasible
- Transit Network
    - Priority Network
        - Transit Priority Corridors along:
            - Mer Bleue Road between Innes Road and Future Cumberland Transitway
        - Dedicated bus rapid transit from Blair Road to Chapel Hill Station (Cumberland Transitway)
        - Dedicated bus rapid transit from Chapel Hill Station to Esprit Drive (Cumberland Transitway)
    - Needs-Based Network
        - Dedicated bus rapid transit from Blair Station to Millennium Station (Cumberland Transitway)
- Road Network
    - Committed
        - Brian Coburn Boulevard Widening from two to four lanes between Mer Bleue Road and Tenth Line Road
    - Priority Network
        - Brian Coburn Boulevard Widening from two to four lanes between Navan Road and Mer Bleue Road
    - Needs-Based Network
        - Mer Bleue Road Extension between Renaud Road and Navan Road as a two-lane arterial to the west of existing Mer Bleue Road

2.3.1.2 Mer Bleue Road at Decoeur Drive Intersection Modification

The study of Mer Bleue Road at Decoeur Drive intersection modification includes four lane widening of Mer Bleue Road from Decoeur Drive to just north of Willow Aster Circle, signalized protected intersection at Mer Bleue Road at Decoeur Drive with upgraded pedestrian and cycling facilities, raised cycletracks along Mer Bleue Road with the project limits transitioning back to existing on road cycling lanes and shoulders, minor road and sidewalk modifications on Decoeur Drive and Copperhead Street within the vicinity of the intersection, and new sidewalk and multi-use pathway on the east side of Mer Bleue Road at Renaud Road, connecting to the new Ecole Secondaire Publique, Orleans South. The estimated timeline for these improvements is November 2026, with final paving in Spring 2027.

2.3.2 Other Study Area Developments

2503, 2559 Mer Bleue Road and 2666 Tenth Line Road (Mer Bleue Phase 1)

The proposed development application includes a plan of subdivision for the construction of 274 single family homes, 370 townhomes, and 2,100 sq. m shopping centre. The development was initially anticipated to be built out by 2025 and to generate 376 new AM peak hour two-way vehicle trips and 430 new PM peak hour two-way vehicle trips. The development will be assumed to be built out by 2032. (Arcadis, 2026)

2666 Tenth Line Road (Catholique Elementary School – Secteur Orleans (Avalon III))

The proposed development application includes a site plan application for the construction of an elementary school accommodating 412 students along with eight portables, approximately 40 staff members, and a daycare centre. With the addition of the portables, the school will have space for 604 students. The development is

expected to generate 165 new AM peak hour two-way vehicle trips and 115 new PM peak hour two-way vehicle trips and eight two-way school bus trips during the AM and PM peak hours. The development is currently being constructed and will be assumed to be built out by 2027. (Dillon Consulting, 2024)

2405 & 2419 Mer Bleue Road
The proposed development application includes a site plan application for the construction of a high school accommodating 793 students and 65 staff members. The development is expected build out by 2027 and to generate 216 new AM peak hour two-way vehicle trips. (J.L.Richards & Associates Limited, 2025)

2564 Tenth Line Road (Summerside West Phase 4-6)
The proposed development application includes a plan of subdivision for the construction of 336 townhomes and 402 single family homes in three phases. Phase 4 consists of 145 townhomes and 100 single family homes, Phase 5 consists of 257 single family homes, and Phase 6 consists of 236 townhomes. The development was initially anticipated to be built out by 2024 and to generate 463 new AM peak hour two-way vehicle trips and 433 new PM peak hour two-way vehicle trips. The subject development is included in this TIA as part of the broader plan of subdivision. It should be noted that this TIA has not been included in the study analysis, and the future plan of subdivision application will consider the subject development as background development. (Parsons, 2018)

191 Rappel Circle, 6615 &6635 Renaud Road
The proposed development application includes a zoning by-law amendment to rezone the site and permit six detached dwellings and six townhomes. No TIA is available for this development.

2345 & 2351 Mer Bleue Road
The proposed development application includes a zoning by-law amendment to rezone the site and permit two three-storey buildings, each with 15 units. No TIA is available for this development.

2275 Mer Bleue Road
The proposed development application includes a plan of subdivision for the construction of 123 townhouses and 170 mid-rise units and 15,000 sq. ft commercial retail. The development is expected to generate 251 new AM peak hour two-way vehicle trips and 359 new PM peak hour two-way vehicle trips. The development is currently being constructed and will be assumed to be built out by 2032. (CGH Transportation, 2021)

Trailsedge Phase 4
The proposed development application includes a plan of subdivision for the construction of 142 single family homes, 167 townhomes, 116 back-to-back townhomes, 352 apartment units, and office/commercial area. The development is anticipated to be built out by 2036 and to generate 529 new AM peak hour two-way vehicle trips and 810 new PM peak hour two-way vehicle trips. (Castleglenn Consultation Inc., 2021)

Trailsedge East
The proposed development application includes a plan of subdivision for the construction of 343 single family homes and 712 townhomes to be built by 2029. No TIA is available for this development, and the development is currently being constructed.

3 Study Area and Time Periods

3.1 Study Area

The study area will include the intersections of:

- Jerome Jodoin Drive at Decoeur Drive

- Mer Bleue Road at Willow Aster Circle
- Street 10 at Site Access (future conditions)

The boundary road will be Jerome Jodoin Drive and Street 10 and Screenline 45 is present within proximity to the site although it will not be assessed.

3.2 Time Periods

As the proposed development is composed of an elementary school, the AM and PM peak hours will be examined. School dismissal is expected to occur prior to the PM peak hour, and the PM peak hour traffic primarily consists of staff departures and after school program.

3.3 Horizon Years

The anticipated build-out year is 2027. As a result, the full build-out plus five years horizon year is 2032.

4 Development-Generated Travel Demand

4.1 Mode Shares

Examining the mode shares recommended in the TRANS Trip Generation Manual (2020) for the subject district, derived from the most recent National Capital Region Origin-Destination survey (OD Survey), the existing average district mode shares by land use for Orleans have been summarized in Table 5.

Table 5: TRANS Trip Generation Manual Recommended Mode Shares – Orleans

Travel Mode	Elementary and High School (Ottawa)	Proposed Elementary and High School (Ottawa)	Employment Generator
	AM and PM	AM and PM	AM and PM
Auto Driver	0%	0%	71%
Auto Passenger	24%	30%	7%
School Bus	48%	48%	0%
Transit	6%	0%	13%
Cycling	2%	2%	1%
Walking	20%	20%	8%
Total	**100%**	**100%**	**100%**

4.2 Trip Generation

This TIA has been prepared using a first principal approach to estimate the number of school-generated trips, taking into account the specific characteristics of the school, including required school bus services, the daycare centre and related components.

It should be noted that the start times for OCSB elementary schools typically varies between 8:00 and 9:15 AM and dismissal times range between 2:30 and 3:45 PM. For a conservative assessment, the school peak hours are assumed to be 8:00 to 9:00 AM and 2:30 to 3:30 PM. The adjacent roadway peak hours are 7:45 to 8:45 AM and 4:00 to 5:00 PM. Therefore, the school AM peak hour is assumed to align with the adjacent road peak hour for analysis purposes.

The elementary school is expected to accommodate 524 students, 66 staff members, and daycare centre accommodating 39 children. It is assumed that 15% of students will arrive outside the peak hours due to early drop-offs, late arrivals, or participating in before/after-school activities, and an additional 5% reduction is considered to account for student absences. This results in 419 students arriving during the AM peak hour. Given the auto driver and auto passenger ratio outlined in TRANS2020 for residential uses in Orleans, a rate of 1.3

students per vehicle has been assumed. It should be noted that during the interim condition, until the reminder of the subdivision is developed, the school will likely operate with a higher auto mode share. To estimate the number of required school buses, an average occupancy of 30 students per bus has been assumed for a conservative assessment. Given that the school PM peak hour occurs prior to the network PM peak hour, it is assumed that 20% of the AM peak trips occur during the network PM peak hour for a conservative assessment, based on ITE Trip Generation Manual 12th Edition (2025).

It is assumed that all staff members would be presents and all daycare drop-off trips would be by car. Given the flexibility of drop-offs and pick-up activities associated with the daycare centre, 50% of parent drop-offs has been considered during the peak hours, equating to 20 vehicle trips.

Using the above mode share targets, the person trips by mode have been projected. Table 6 summarizes the school trip generation by mode and peak hour.

Table 6: Trip Generation by Mode

Travel Mode		AM Peak Hour				PM Peak Hour			
		Mode Share	In	Out	Total	Mode Share	In	Out	Total
Students	Auto Driver	-	97	97	194	-	19	19	38
	Auto Passenger	30%	126	0	126	-	0	25	25
	School Bus Driver	-	7	7	14	-	0	0	0
	School Bus Passenger	48%	201	0	201	-	0	0	0
	Transit	0%	0	0	0	-	0	0	0
	Cycling	2%	8	0	8	-	0	2	2
	Walking	20%	84	0	84	-	0	17	17
	Total	**100%**	**523**	**104**	**627**	**-**	**19**	**63**	**82**
Staff	Auto Driver	71%	47	0	47	71%	0	47	47
	Auto Passenger	7%	5	0	5	7%	0	5	5
	Transit	13%	9	0	9	13%	0	9	9
	Cycling	1%	1	0	1	1%	0	1	1
	Walking	8%	5	0	5	8%	0	5	5
	Total	**100%**	**67**	**0**	**67**	**100%**	**0**	**67**	**67**
Daycare Centre	Auto Driver	100%	20	20	40	100%	20	20	40
	Auto Passenger	0%	20	0	20	0%	0	20	20
	Transit	0%	0	0	0	0%	0	0	0
	Cycling	0%	0	0	0	0%	0	0	0
	Walking	0%	0	0	0	0%	0	0	0
	Total	**100%**	**40**	**20**	**60**	**100%**	**20**	**40**	**60**
Total	Auto Driver	-	164	117	281	-	39	86	125
	Auto Passenger	-	151	0	151	-	0	50	50
	School Bus Driver	-	7	7	14	-	0	0	0
	School Bus Passenger	-	201	0	201	-	0	0	0
	Transit	-	9	0	9	-	0	9	9
	Cycling	-	9	0	9	-	0	3	3
	Walking	-	89	0	89	-	0	22	22
	Total	**-**	**630**	**124**	**754**	**-**	**39**	**170**	**209**

As shown above, a total of 281 AM and 125 PM new peak hour two-way vehicle trips are projected as a result of the proposed development.

4.3 Trip Distribution

Based on the existing coverage of Catholic elementary schools in the area, and population density and distribution within the local area, the trip distribution have been proposed and summarized in Table 7.

Table 7: Trip Distribution

To/From	% of Trips
North	25%
South	5%
East	5%
West	65%
Total	**100%**

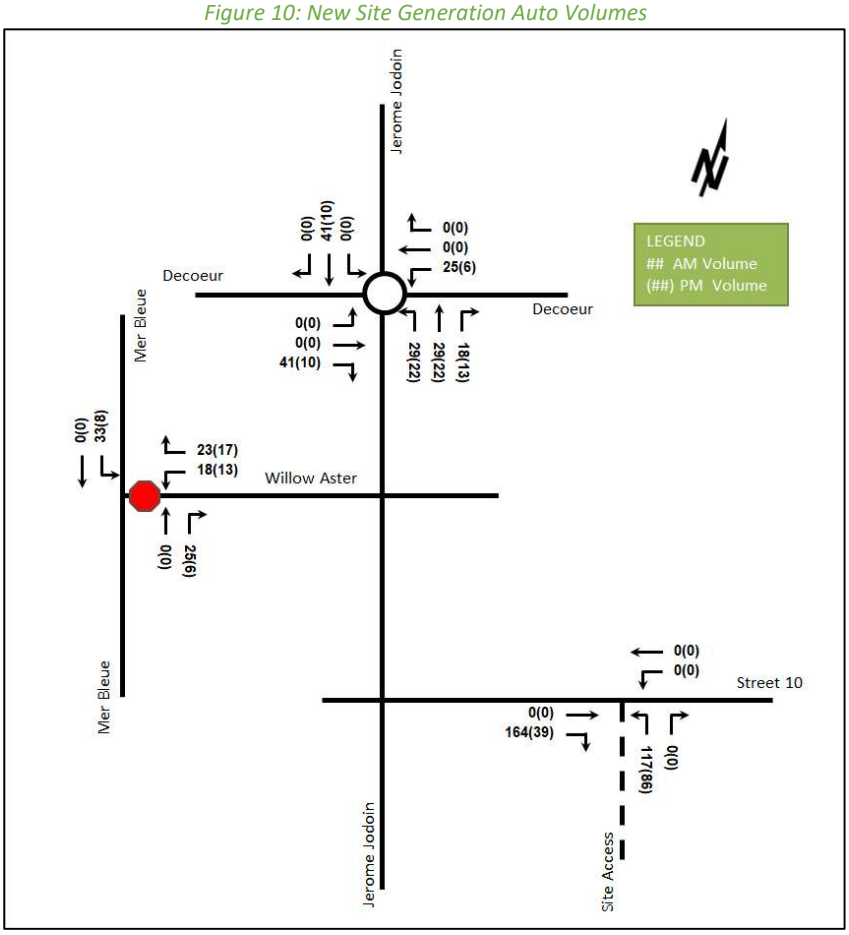
4.4 Trip Assignment

Using the distribution outlined above, turning movement splits, and access to major transportation infrastructure, the trips generated by the site have been assigned to the study area road network. Table 8 summarizes the proportional assignment to the study area roadways and Figure 10 illustrates the new site generated volumes.

Table 8: Trip Assignment

To/From	Via
North	10% Decoeur Dr (E) 15% Jerome Jodoin Dr (N)
South	5% Willow Aster
East	5% Decoeur Dr (E)
West	25% Decoeur Dr (W) 30% Willow Aster 10% Jerome Jodoin Dr (N)
Total	**100%**

Figure 10: New Site Generation Auto Volumes



5 Exemption Review

Table 9 summarizes the exemptions for this TIA.

Table 9: Exemption Review

Module	Element	Explanation	Exempt/Required
Site Design and TDM			
Development Design	4.1.2 Circulation and Access	Only required for site plan and zoning by-law applications	Required
	4.1.3 New Street Networks	Only required for plans of subdivision	Exempt
Parking	4.2.1 Parking Supply	Only required for site plan and zoning by-law applications	Required
Boundary Street Design		All applications	Required
Transportation Demand Management	All Elements	Only required when the development generates more than 60 person-trips	Required
Network Impact			
Background Network Travel Demand	All Elements	Only required when one or more other Network Impact Modules are triggered when the development generates more than 75 auto or transit trips	Required

Module	Element	Explanation	Exempt/Required
Demand Rationalization		Only required when one or more other Network Impact Modules when the development generates more than 75 auto trips	Required
Neighbourhood Traffic Calming	4.6.1 Adjacent Neighbourhoods	If the development meets all of the following criteria along the route(s) site generated traffic is expected to utilize between an arterial road and the site's access: 1. Access to Collector or Local; 2. "Significant sensitive land use presence" exists, where there is at least two of the following adjacent to the subject street segment: • School (within 250m walking distance); • Park; • Retirement / Older Adult Facility (i.e. long-term care and retirement homes); • Licenced Child Care Centre; • Community Centre; or • 50%, or greater, of adjacent property along the route(s) is occupied by residential lands and a minimum of 10 occupied residential units are present on the route. 3. Application is for Zoning By-Law Amendment or Draft Plan of Subdivision; 4. At least 75 site-generated auto trips; 5. Site Trip Infiltration is expected. Site traffic will increase peak hour vehicle volumes along the route by 50% or more.	Exempt
Transit	4.7.1 Transit Route Capacity	Only required when the development generates more than 75 transit trips	Exempt
	4.7.2 Transit Priority Requirements	Only required when the development generates more than 75 auto trips	Required
Network Concept		Only required when proposed development generates more than 200 person-trips during the peak hour in excess of equivalent volume permitted by established zoning	Exempt
Intersection Design	4.4.1-2/4.9.1 Intersection Control	Only required when the development generates more than 75 auto trips	Required
	4.4.3/4.9.2 Intersection Design	Only required when the development generates more than 75 auto trips	Required

6 Development Design

6.1 Design for Sustainable Modes

The proposed development is an elementary school that includes a childcare centre. A 1.8-metre sidewalk and school bus lay-bys are proposed along the school frontage on Street 10. The main school entrance is located on Street 10 with hard surface connection to the sidewalk.

Bicycle parking spaces are located in surface racks along the north and south sides of the school.

Additional pedestrian connections are planned within the subdivision to be constructed in the future, including a pedestrian pathway east of the school connecting to the sidewalk along Street 10 where a pedestrian crossover is proposed. A pedestrian pathway is provided south of the parking area, connecting to the future subdivision. A 2.0-metre sidewalk will be proposed along both sides of Jerome Jodoin Drive, and parent drop-off lay-bys will also be provided along the site frontage.

The infrastructure TDM checklist is provided in Appendix E.

6.2 New Street Networks

A new street, Street 10, is proposed to connect Jerome Jodoin Drive to Allium Street. The road is proposed to be 18.0-metre-wide local road with 1.8-metre-wide sidewalks on both sides of the road and 2.5-metre-wide school bus lay-bys on the south side of the road. The proposed speed limit will be 30 km/h.

Beyond the scope of this application, the extension of Jerome Jodoin Drive will be constructed in the ultimate condition. The road is proposed to be 24.0-metre-wide collector road with 2.0-metre cycletracks and 2.0-metre-wide sidewalks on both sides of the road. Parent drop-off lay-bys are proposed on the east side of the road, and the proposed speed limit will be 40 km/h.

To support the pedestrian and cycling connectivity, traffic calming elements have been illustrated on the traffic calming plan, adhering to the philosophies of the Traffic Calming Guidelines and preliminary input from the City. Features proposed on the future roads include bulb-outs to narrow approaches to intersections (e.g. reduced crossing distance), speed humps, midblock narrowing to reduce vehicle speeds, and raised crossings. A conceptual traffic calming plan has been provided in Appendix F.

6.3 Circulation and Access

Vehicular access is provided via a 6.85-metre wide two-way full-movement access on Street 10. The access connects to a one-way loop within the surface parking area, which includes the childcare drop-off and pick-up area. On-street school lay-bys for school buses are provided along Street 10 providing approximately 125 metres storage space.

Garbage trucks and fire trucks can be accommodated on site and garbage collection will occur on the drive aisle south side of the parking area. Turning templates are provided in Appendix G.

7 Parking

7.1 Parking Supply

The site is proposed to include 98 vehicle parking spaces and 54 bicycle parking spaces.

According to the Zoning By-Law for Area C, 1.5 parking spaces per classroom including portables for school and 2 spaces per 100 m^2 of gross floor area for childcare centre are required resulting in the minimum need for 57 vehicle parking spaces. Therefore, the site meets the minimum requirements.

According to the Zoning By-Law, the minimum bicycle parking provision is 1 space per 100 m^2 of gross floor for school and 1 space per 250 m^2 of gross floor area for childcare are required resulting in a total of 48 bicycle parking spaces. Therefore, the site meets the minimum bicycle parking requirements.

A total of four accessible parking spaces are required for the site, including two Type A and two Type B. There have been provided.

8 Boundary Street Design

Table 10 summarizes the MMLOS analysis for the boundary streets of Jerome Jodoin Drive and the new local road (Street 10). Both roadways are "Within 300 metres of school". The MMLOS worksheets has been provided in Appendix H.

Table 10: Boundary Street MMLOS Analysis

Segment	Pedestrian LOS		Bicycle LOS		Transit LOS		Public Realm LOS	
	PLOS	Target	BLOS	Target	TLOS	Target	TrLOS	Target
Jerome Jodoin Drive	B	B	A	C	-	-	C	C
Street 10	A	B	C	C	-	-	B	B

Jerome Jodoin Drive and Street 10 will meet the pedestrian, bicycle, and Public Realm LOS targets in the future conditions.

9 Transportation Demand Management

9.1 Context for TDM

The mode shares used within the TIA represent typical elementary school mode shares. Overall, these modal shares are likely to be achieved and supporting TDM measures should be provided.

The subject site is within the Mer Bleue Urban Expansion Area Community Design Plan and the Mer Bleue Developing Neighborhood Secondary Plan.

9.2 Need and Opportunity

The subject site has been assumed to rely predominantly on auto travel, and those assumptions have been carried through the analysis. Given the high auto mode share, there is negligible risk of not meeting the applied modal shares.

9.3 TDM Program

The "suite of post occupancy TDM measures" has been summarized in the TDM checklists for the non-residential land uses (institutional). The checklist is provided in Appendix E. The key TDM measures recommended include:

- Designate an internal coordinator, or contract with an external coordinator
- Display local area maps with walking/cycling access routes and key destinations at major entrances
- Provide a multimodal travel option information package to new/relocating employees and students

10 Background Network Travel Demands

10.1 Transportation Network Plans

The transportation network plans were discussed in Section 2.3 and will be considered in the analysis.

10.2 Background Growth

A review of the background projections from the City's TRANS Regional Model for the 2022 and 2046 horizons was completed to determine the background growth for the study area roadway. As growth within the City is not a linear process, a comparison of the existing volumes to the forecasted 2046 volumes has been included to determine how regional development has occurred and the impact on the study area. Table 11 summarizes the result of the model, and the projections are provided in Appendix I.

Table 11: TRANS Regional Model Projections – Study Area Growth Rates

Street	Direction Growth % from 2022 to 2046		Direction Growth % from Existing to 2046	
	Eastbound	**Westbound**	**Eastbound**	**Westbound**
Decoeur Dr	7.32%	1.64%	-4.76%	1.37%
	Northbound	**Southbound**	**Northbound**	**Southbound**
Mer Bleue Rd	7.42%	1.76%	1.32%	-2.97%
Jerome Jodoin Dr	8.28%	1.63%	-3.18%	-0.95%

In general, the growth rates in the study area derived from the two TRANS model horizons are projected to be positive along all roadways. When compared to the existing volumes, some movements exceed the 2046 forecasted volumes. Given that the roadways have finite capacity and cannot grow unconstrained, the growth rates from the existing volumes to 2046 will be used to generate the study area growth rates. Growth rates will be applied to the mainline and major turning movements for the appropriate roads during the AM peak hour, rounded to the nearest 0.25%, and reversed for the PM peak hour. Table 12 summarizes the recommended growth rates to be considered within the study area.

Table 12: Recommended Area Growth Rates

Street	AM Peak Hour		PM Peak Hour	
	Eastbound	**Westbound**	**Eastbound**	**Westbound**
Decoeur Dr	0.00%	1.25%	1.25%	0.00%
	Northbound	**Southbound**	**Northbound**	**Southbound**
Mer Bleue Rd	1.25%	0.00%	0.00%	1.25%
Jerome Jodoin Dr	0.00%	0.00%	0.00%	0.00%

10.3 Other Developments

The background developments explicitly considered in the background conditions (Section 10.2) include:

- 2503, 2559 Mer Bleue Road and 2666 Tenth Line Road
- 2666 Tenth Line Road
- 2405 & 2419 Mer Bleue Road
- 2275 Mer Bleue Road

The trip generation for the developments at 2503, 2559 Mer Bleue Road and 2666 Tenth Line Road and 2275 Mer Bleue Road have been updated to the TRANS 2020 methodology. The background development volumes within the study area have been provided in Appendix J.

11 Demand Rationalization

11.1 2027 Future Background Intersection Operations

Figure 11 illustrates the 2027 background volumes and Table 13 summarizes the 2027 background intersection operations. The level of service is based on HCM 2010 delay for stop controlled intersections and roundabouts. The Synchro and Sidra worksheets for the 2027 future background horizon are provided in Appendix K.

Figure 11: 2027 Future Background Volumes

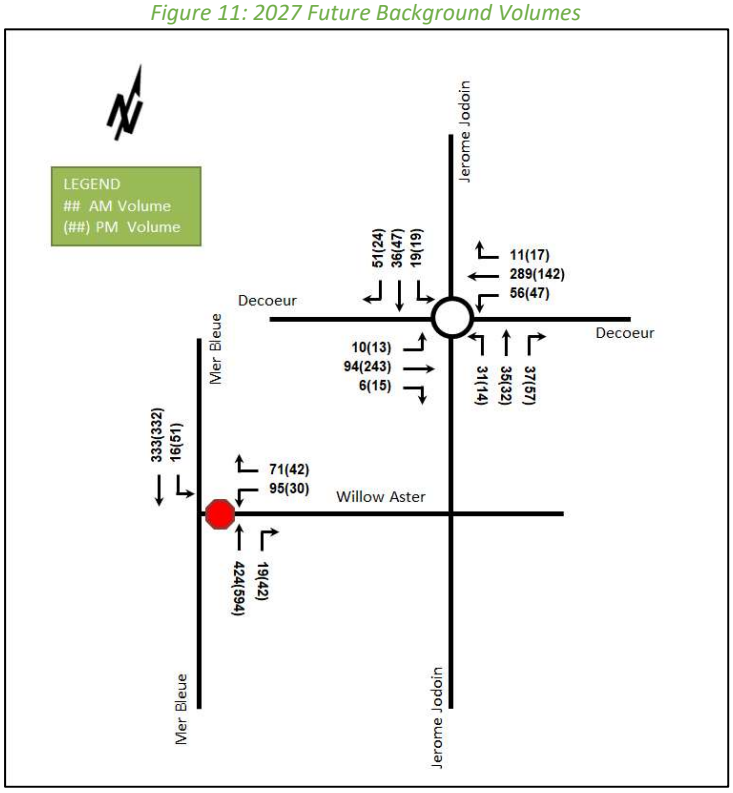


Table 13: 2027 Future Background Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay (s)	Q (95th)	LOS	V/C	Delay (s)	Q (95th)
Jerome Jodoin Drive at Decoeur Drive *Roundabout*	EB	A	0.11	4.6	2.9	A	0.27	6.3	8.5
	WB	A	0.35	6.9	12.1	A	0.20	5.1	5.7
	NB	A	0.11	4.7	2.8	A	0.13	5.6	3.2
	SB	A	0.14	6.2	3.6	A	0.10	5.0	2.6
	Overall	**A**	**0.35**	**6.1**	**-**	**A**	**0.27**	**5.6**	**-**
Mer Bleue Road at Willow Aster Circle *Unsignalized*	WB	C	0.39	18.6	13.5	C	0.21	18.5	6.0
	NB	-	-	-	-	-	-	-	-
	SBL	A	0.01	8.3	0.0	A	0.05	9.0	1.5
	SBT	-	-	-	-	-	-	-	-
	Overall	**A**	**-**	**3.4**	**-**	**A**	**-**	**1.6**	**-**

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 1.00
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 study area intersections at the 2027 future background horizon operate similarly to the existing conditions. The incremental improvement to the intersection operations is predominantly a result of the peak hour factor adjustment to 1.00 for forecasted conditions. No capacity issues were noted.

11.2 2032 Future Background Intersection Operations

Figure 12 illustrates the 2032 background volumes and Table 14 summarizes the 2032 background intersection operations. The level of service is based on HCM 2010 delay for stop controlled intersections and roundabouts. The Synchro and Sidra worksheets the 2032 future background horizon are provided in Appendix L.

Figure 12: 2032 Future Background Volumes

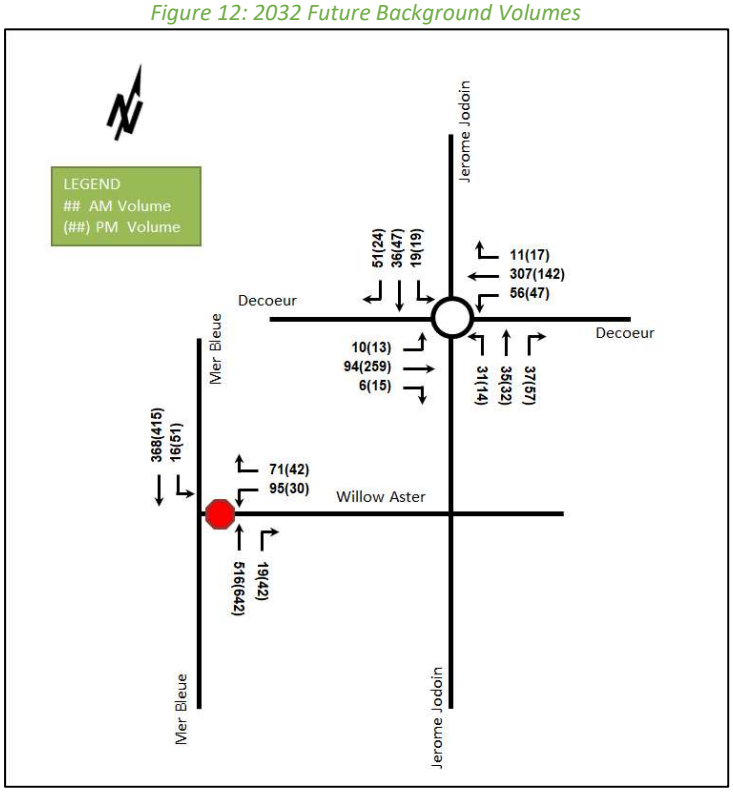


Table 14: 2032 Future Background Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay (s)	Q (95th)	LOS	V/C	Delay (s)	Q (95th)
Jerome Jodoin Drive at Decoeur Drive ***Roundabout***	EB	A	0.11	4.6	2.9	A	0.29	6.4	9.2
	WB	A	0.36	7.1	13.0	A	0.20	5.1	5.7
	NB	A	0.11	4.7	2.8	A	0.13	5.7	3.3
	SB	A	0.14	6.4	3.6	A	0.10	5.0	2.6
	Overall	**A**	**0.36**	**6.2**	**-**	**A**	**0.29**	**5.7**	**-**
Mer Bleue Road at Willow Aster Circle ***Unsignalized***	WB	C	0.45	22.7	17.3	C	0.24	21.0	6.8
	NB	-	-	-	-	-	-	-	-
	SBL	A	0.02	8.5	0.8	A	0.06	9.2	1.5
	SBT	-	-	-	-	-	-	-	-
	Overall	**A**	**-**	**3.6**	**-**	**A**	**-**	**1.6**	**-**

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 1.00
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 study area intersections at the 2032 future background horizon operate similarly to the 2027 future background conditions. No capacity issues were noted.

12 Transit

12.1 Transit Priority

Site traffic is anticipated to have negligible impact on transit movements throughout the study area. All intersections' transit LOS scores will be the same between the background and total conditions.

13 Access Intersection Design

13.1 Location and Design of Access

The site access is proposed to be two-way and to permit full movements. The access is located approximately 43.0 metres from the eastern property line, and approximately 134.0 metres from Jerome Jodoin Drive and approximately 36.0 metres from Allium Street. The Geometric Design Guide for Canadian Roads (TAC, 2017) suggests minimum corner clearance value for driveways of 15.0 metres along local road and thus the site access meets this guideline. The access meets the 3.0-metre offset requirement from the adjacent property line, and 30-metre offset requirement from the adjacent road right-of-way from the Private Approach By-Law.

The access is proposed to be 6.85-metre-wide at its typical dimension and 18.85 metres at the curb line with corner radius 5.0 meters on the east side and 7.0 metres on the west side. The maximum width of a two-way access from the private Approach By-Law is 9.0 meters, applied to both the street (right-of-way) line as well as the roadway edge. However, the application of this standard is not possible at the roadway edge given the minimum driveway width (6.0 metres from the Zoning By-Law) and minimum curb radii (standard 5.0 metres) would exceed this dimension. Therefore, the proposed driveway width is recommended to be approved.

The throat length to the first on-site conflicts is approximately 9.0 metres. No minimum clear throat length is provided in the TAC Geometric Design Guidelines for accesses onto local roads. However, the provision of 8.0 metres to allow a car to queue on the private approach is recommended and the proposed throat length satisfies that recommendation. Therefore, the proposed throat length is considered sufficient.

13.2 Intersection Control

The site access will have a stop-control on the minor approach.

13.3 Access Intersection Design

13.3.1 2027 Future Total Access Intersection Operations

The 2027 future total intersection volumes are illustrated in Figure 13 and the intersection operations are summarized below in Table 15. The level of service is based on HCM 2010 delay for stop controlled intersections and roundabouts. The Synchro and Sidra worksheets have been provided in Appendix M.

Figure 13: 2027 Future Total Volumes

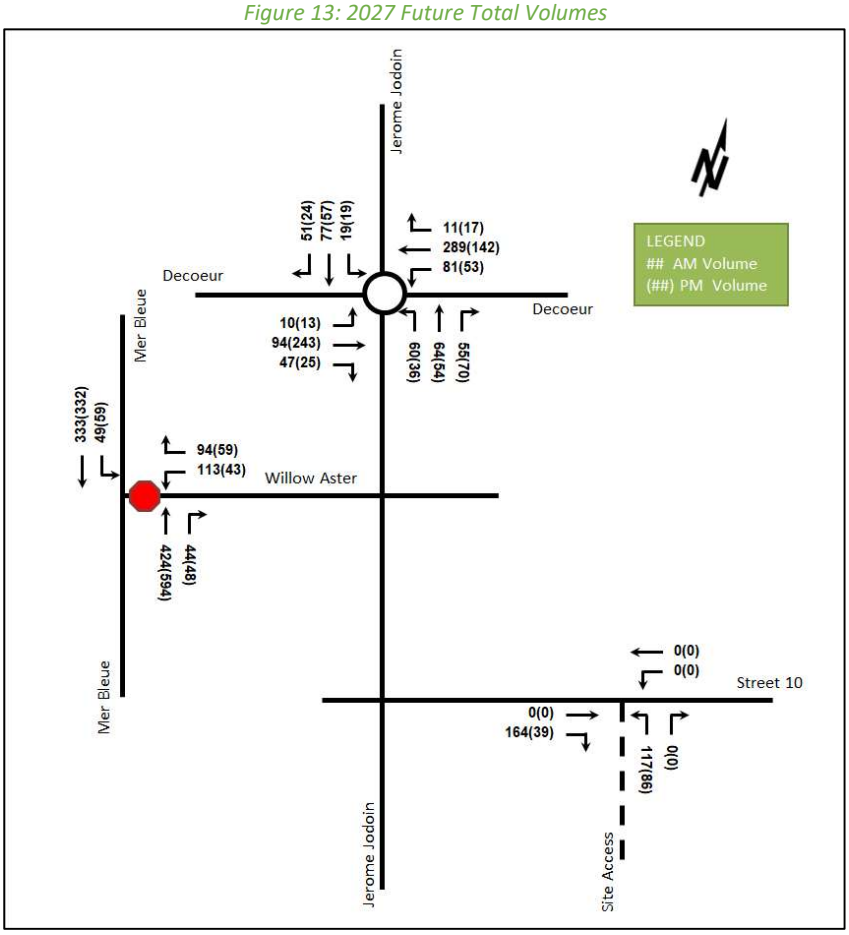


Table 15: 2027 Future Total Access Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay (s)	Q (95th)	LOS	V/C	Delay (s)	Q (95th)
Street 10 at Site Access ***Unsignalized***	EBT/R	-	-	-	-	-	-	-	-
	WBL/T	A	-	0.0	0.0	A	-	0.0	0.0
	NBL/R	A	0.13	9.5	3.0	A	0.09	9.0	2.3
	Overall	**A**	**-**	**3.9**	**-**	**A**	**-**	**6.1**	**-**

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 1.00
Delay = average vehicle delay in seconds
m = metered queue
# = volume for the 95th %ile cycle exceeds capacity

The access intersection is anticipated to operated well at the 2027 future total horizon. No capacity, delay, or queuing issues are forecast.

13.3.2 2032 Future Access Total Intersection Operations

The 2032 future total intersection volumes are illustrated in Figure 14 and the intersection operations are summarized below in Table 16. The level of service is based on HCM 2010 delay for stop controlled intersections and roundabouts. The Synchro and Sidra worksheets have been provided in Appendix N.

Figure 14: 2032 Future Total Volumes

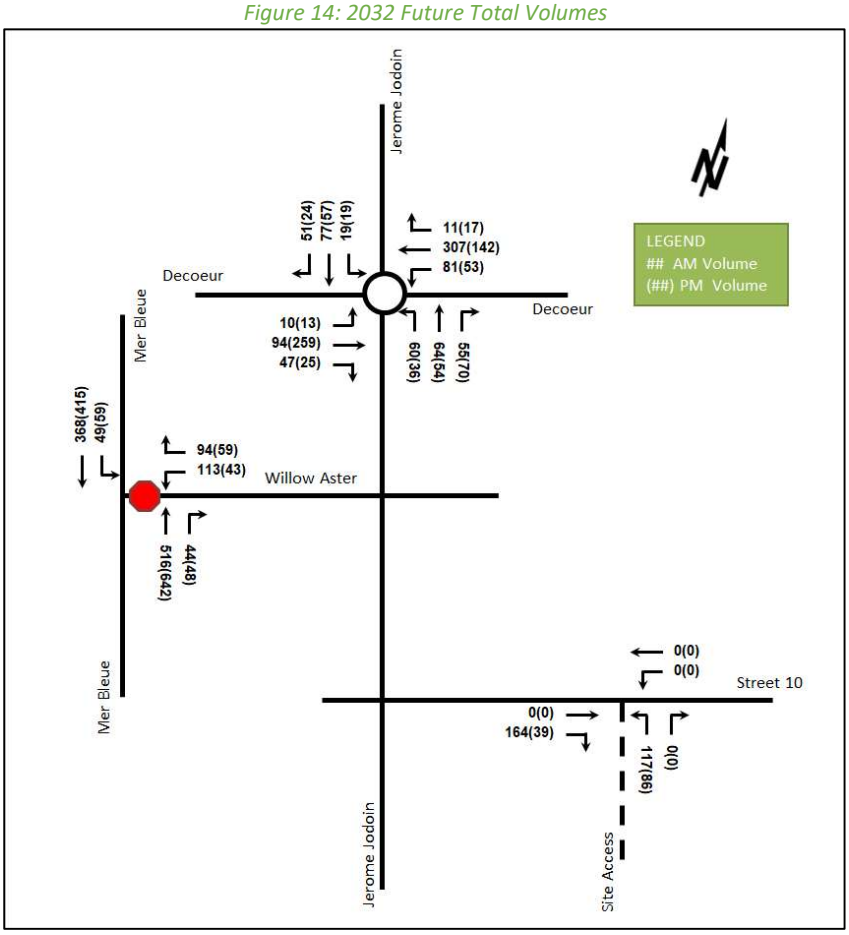


Table 16: 2032Future Total Access Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay (s)	Q (95th)	LOS	V/C	Delay (s)	Q (95th)
Street 10 at Site Access *Unsignalized*	EBT/R	-	-	-	-	-	-	-	-
	WBL/T	A	-	0.0	0.0	A	-	0.0	0.0
	NBL/R	A	0.13	9.5	3.0	A	0.09	9.0	2.3
	Overall	**A**	**-**	**3.9**	**-**	**A**	**-**	**6.1**	**-**

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 1.00
Delay = average vehicle delay in seconds
m = metered queue
# = volume for the 95th %ile cycle exceeds capacity

The access intersection is anticipated to operation well at the 2032 future total horizon and similar to the 2032 future background conditions.

13.3.3 Access Intersection MMLOS

Based upon the projected volumes, the site access will have stop-control on the minor approach.

13.3.4 Recommended Design Elements

The access is recommended to comply with the City standard SC7.1.

14 Intersection Design

14.1 Intersection Control

No change to the existing intersection control is recommended for the network intersections.

14.2 Intersection Design

14.2.1 2027 Future Total Intersection Operations

The intersection operations are summarized below in Table 17. The level of service is based on HCM 2010 delay for stop controlled intersections and roundabouts. The Synchro and Sidra worksheets have been provided in Appendix M.

Table 17: 2027 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)
Jerome Jodoin Drive at Decoeur Drive *Roundabout*	EB	A	0.17	5.8	4.8	A	0.29	6.5	9.1
	WB	A	0.40	8.0	14.1	A	0.21	5.5	6.1
	NB	A	0.19	5.5	5.3	A	0.20	6.4	5.3
	SB	A	0.21	7.4	5.4	A	0.12	5.2	3.0
	Overall	**A**	**0.40**	**7.0**	**-**	**A**	**0.29**	**6.1**	**-**
Mer Bleue Road at Willow Aster Circle *Unsignalized*	WB	C	0.53	23.8	21.8	C	0.31	20.6	9.8
	NB	-	-	-	-	-	-	-	-
	SBL	A	0.05	8.4	0.8	A	0.06	9.1	1.5
	SBT	-	-	-	-	-	-	-	-
	Overall	**A**	**-**	**5.1**	**-**	**A**	**-**	**2.3**	**-**

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 1.00
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 study area intersections at the 2027 future total horizon operate similarly to the 2027 future background conditions. No capacity issues were noted.

14.2.2 2032 Future Total Intersection Operations

The intersection operations are summarized below in Table 18. The level of service is based on HCM 2010 delay for stop controlled intersections and roundabouts. The Synchro and Sidra worksheets have been provided in Appendix N.

Table 18: 2032 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)
Jerome Jodoin Drive at Decoeur Drive *Roundabout*	EB	A	0.17	5.8	4.8	A	0.31	6.7	9.8
	WB	A	0.41	8.2	15.2	A	0.21	5.5	6.1
	NB	A	0.19	5.5	5.3	A	0.20	6.5	5.4
	SB	A	0.21	7.5	5.5	A	0.12	5.2	3.0
	Overall	**A**	**0.41**	**7.1**	**-**	**A**	**0.31**	**6.2**	**-**
Mer Bleue Road at Willow Aster Circle *Unsignalized*	WB	D	0.62	31.7	29.3	C	0.35	24.2	11.3
	NB	-	-	-	-	-	-	-	-
	SBL	A	0.05	8.7	1.5	A	0.07	9.3	1.5
	SBT	-	-	-	-	-	-	-	-
	Overall	**A**	**-**	**5.9**	**-**	**A**	**-**	**2.4**	**-**

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 1.00
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 study area intersections at the 2032 future total horizon operate similarly to the 2032 future background conditions.

14.2.3 Intersection MMLOS

As the study area intersections are not signalized, no intersection MMLOS is required.

15 Summary of Improvements Indicated and Modifications Options

The following summarizes the analysis and results presented in this TIA report:

Proposed Site and Screening

- The proposed site includes an elementary school accommodating 524 students, 66 staff members, a 2,971 sq. ft childcare centre
- The proposed access configuration consists of a two-way full-movement access located on the subdivision roadway (Street 10)
- The subject school is part of a subdivision, and this TIA has been prepared to assess the interim conditions for the school component and the new roadway, Street 10, connecting to Allium Street and Jerome Jodoin Drive, and the plan of subdivision application will consider the ultimate conditions for both the residential and school components
- The anticipated build-out year is 2027

TIA Screening and Exemptions

- The TIA Screening form indicated a full TIA was required due to trip generation trigger
- The exemption review for the TIA did not require neighbourhood traffic calming review, transit review, network concept review

Existing Conditions

- Mer Bleue Road is an arterial road, and Jerome Jodoin Drive and Decoeur Drive are collector roads, and Willow Aster Cricle and Allium Street are local roads in the study area
- Future roadways include Street 10 as a local road
- Sidewalks are generally provided along both sides of Jerome Jodoin Drive, Decoeur Drive, Mer Bleue Road north of Decoeur Drive, Monardia Way for approximately 100 metres west of Jerome Jodin Drive, along the north side of Willow Aster Circle, Arum Terrace, and along the south and west, and east sides of Monardia Way
- A bike lane is present on the east side of Mer Bleue Road north of Decoeur Drive and a pathway circulates around Summerside West Pond and connects Decoeur Drive and Willow Aster Circle to Tenth Line Road
- During both the AM and PM peak hours, the study area intersections operate well

Planned Conditions

- Eastbound multiuse path on Brian Coburn Boulevard from Mer Bleue Road to Portobello Boulevard and westbound bike lane from Montmere Avenue to Mer Bleue Road where feasible are identified as priority projects within the TMP Active Transportation Network
- Transit priority corridor along Mer Bleue Road between Innes Road and Future Cumberland Transitway, dedicated bus rapid transit from Blair Road to Esprit Drive (Cumberland Transitway) are identified as transit priority projects within the TMP Transit Network

- Brian Coburn Boulevard Widening from two to four lanes between Mer Bleue Road and Tenth Line Road is identified as a committed project, and Brian Coburn Boulevard Widening from two to four lanes between Navan Road and Mer Bleue Road is identified as a road priority project, and Mer Bleue Road Extension between Renaud Road and Navan Road as a two-lane arterial to the west of existing Mer Bleue Road is identified as a needs-based project within the TMP Road Network

Development Generated Travel Demand

- The proposed development is forecasted produce 754 two-way people trips during the AM peak hour and 209 two-way people trips during the PM peak hour
- Of the forecasted people trips, 281 two-way trips will be vehicle trips during the AM peak hour, and 125 two-way trips will be vehicle trips during the PM peak hour
- Of the forecasted trips, 25% are anticipated to travel north, 5% to both the east and south, and 65% to both the west

Development Design

- The proposed development is an elementary school that includes a childcare centre
- Sidewalk and school bus lay-bys are proposed along the school frontage on Street 10
- Bicycle parking spaces are located in surface racks along the north and south sides of the school
- Additional pedestrian connections are planned within the subdivision to be constructed in the future
- Garbage trucks and fire trucks can be accommodated on site and garbage collection will occur on the drive aisle south side of the parking area

New Street Network

- A new 18.0-metre-wide local road (Street 10) is proposed with 1.8-metre-wide sidewalks on both sides of the road and 2.5-metre-wide school bus lay-bys on the south side of the road
- Beyond the scope of this application, a new 24.0-metre-wide collector road (the extension of Jerome Jodoin Drive) is proposed with 2.0-metre cycletracks and 2.0-metre-wide sidewalks on both sides of the road, and parent drop-off lay-bys on the east side of the road to be constructed in the future
- Features proposed on the future roads include bulb-outs to narrow approaches to intersections (e.g. reduced crossing distance), speed humps, midblock narrowing to reduce vehicle speeds, and raised crossings

Parking

- The site is proposed to include 98 vehicle parking spaces and 54 bicycle parking spaces
- The proposed parking rates meet the vehicle and bicycle parking requirements

Boundary Street Design

- Jerome Jodoin Drive and Street 10 will meet the pedestrian, cycling, and public realm LOS targets

TDM

- Supportive TDM measures to be included within the proposed development should include:
  - Designate an internal coordinator, or contract with an external coordinator
  - Display local area maps with walking/cycling access routes and key destinations at major entrances
  - Provide a multimodal travel option information package to new/relocating employees and students

Background Conditions

- Growth rates from the existing volumes to 2046 TRANS model have been peak directionally applied to mainline volumes throughout the study area along with explicit background development volumes
- The study area intersections at the 2027 future background horizon are forecast to operate similarly to the existing conditions with incremental improvements resulting from the peak hour factor increasing to 1.00 for modeled conditions
- The study area intersections at the 2032 future background horizon are forecast to operate similarly the
- 2027 background conditions

Transit

- No specific transit priority measures were considered as part of this development

Intersection Design

- The access is proposed to be 6.85-metre-wide at its typical dimension and 18.85 metres at the curb line with corner radius 5.0 meters on the east side and 7.0 metres on the west side
- The access meets the offset requirement from the adjacent property line and from the adjacent road right-of-way from the Private Approach By-Law
- Throat length is considered adequate, and corner clearance meets the TAC suggested minimum values
- The site access will have a stop-control on the minor approach and is anticipated to operate well in the future total conditions
- The study area intersections at both future total horizons operate similarly to their corresponding future background horizons

16 Conclusion

It is recommended that, from a transportation perspective, the proposed development applications proceed.

Prepared By:

Reihaneh Azhdar
Transportation Engineering, Intern

Reviewed By:

Andrew Harte, P.Eng.
Senior Transportation Engineer

Appendix A

TIA Screening Form and PM Certification Form

CGH TRANSPORTATION

6 Plaza Court
Ottawa, ON K2H 7W1

City of Ottawa 2023 Revisions to 2017 TIA Guidelines
Step 1 - Screening Form

Date: 2026-03-18
Project Number: 2025-211
Project Reference: Mer Bleue Elementary

1.1 Description of Proposed Development	
Municipal Address	2455 Mer Bleue Road
Description of Location	Elementary school site within new subdivision
Land Use Classification	Minor Institutional Zone (I1A / R3YY[2590])
Development Size	An elementary school accommodating 524 students, 66 staff members, a 2,971 sq. ft childcare centre
Accesses	A two-way full-movement access located on the subdivision roadway (Street 10)
Phase of Development	Single
Buildout Year	2027
TIA Requirement	Full TIA Required

1.2 Trip Generation Trigger		
Land Use Type	Other	
Development Size		G.F.A.
Trip Generation Trigger	Enter Size	

1.3 Location Triggers	
Does the development propose a new driveway to a boundary street that is designated as part of the Transit Priority Network, Rapid Transit network or Cross-Town Bikeways?	No
Is the development in a Hub, a Protected Major Transit Station Area (PMTSA), or a Design Priority Area (DPA)?	No
Location Trigger	No

1.4. Safety Triggers	
Are posted speed limits on a boundary street 80 km/hr or greater?	No
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?	No
Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)?	No
Is the proposed driveway within auxiliary lanes of an intersection?	No
Does the proposed driveway make use of an existing median break that serves an existing site?	No
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?	No
Does the development include a drive-thru facility?	No
Safety Trigger	No

Certification Form for TIA Study PM

TIA Plan Reports

On April 14, 2022, the Province's Bill 109 received Royal Assent providing legislative direction to implement the More Homes for Everyone Act, 2022 aiming to increase the supply of a range of housing options to make housing more affordable. Revisions have been made to the TIA guidelines to comply with Bill 109 and streamline the process for applicants and staff.

Individuals submitting TIA 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 Ottawa's Official Plan, the Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines.

By submitting the attached TIA report (and any associated documents) and signing this document, the individual acknowledges that they meet the four criteria listed below.

CERTIFICATION

- ☑ I have reviewed and have a sound understanding of the objectives, needs and requirements of the City of Ottawa's Official Plan, Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines; (Update effective July 2023)
- ☑ I have a sound knowledge of industry standard practice with respect to the preparation of transportation impact assessment reports, including multi modal level of service review;
- ☑ I have substantial experience (more than 5 years) in undertaking and delivering transportation impact studies (analysis, reporting and geometric design) with strong background knowledge in transportation planning, engineering or traffic operations; and
- ☑ I am either a licensed or registered[1] professional in good standing, whose field of expertise
  - ☑ is either transportation engineering
  - ☐ or transportation planning.

[1] License of registration body that oversees the profession is required to have a code of conduct and ethics guidelines that will ensure appropriate conduct and representation for transportation planning and/or transportation engineering works.

City Of Ottawa
Planning, Real Estate and Economic Development
110 Laurier Avenue West, 4th fl.
Ottawa, ON
K1P 1J1
Tel. : 613-580-2424
Fax: 613-560-6006

Revision Date: June 2023

Dated at Ottawa (City) this 17 day of August , 20 23 .

Name : Andrew Harte

Professional title: Senior Transportation Engineer / Vice-President Ottawa

Signature of individual certifier that s/he/they meet the above criteria

Office Contact Information (Please Print)
Address: 6 Plaza Court
City / Postal Code: Ottawa, K2H 7W1
Telephone / Extension: 613-697-3797
Email Address: andrew.harte@cghtransportation.com

Stamp

LICENSED PROFESSIONAL ENGINEER
A. J. HARTE
100149314
PROVINCE OF ONTARIO

Revision Date: June 2023

Appendix B

Turning Movement Counts

Turning Movement Count

Summary Report Including Peak Hours, AADT and Expansion Factors

All Vehicles Except Bicycles and Personal E-Transportation

Décoeur Drive & Jerome Jodoin Drive (Roundabout) — Orléans, ON

Survey Date: Thursday, February 12, 2026 **Start Time:** 0700 **AADT Factor:** 0.9

Weather AM: Mostly Sunny -10° C **Survey Duration:** 8 Hrs. **Survey Hours:** 0700-1000, 1130-1330 & 1500-1800

Weather PM: Mostly Sunny -5° C **Surveyor(s):** J. Mousseau

	Décoeur Dr. Eastbound					Décoeur Dr. Westbound						Jerome Jodoin Dr. Northbound					Jerome Jodoin Dr. Southbound						
Time Period	LT	ST	RT	UT	E/B Tot	LT	ST	RT	UT	W/B Tot	Street Total	LT	ST	RT	UT	N/B Tot	LT	ST	RT	UT	S/B Tot	Street Total	Grand Total
0700-0800	4	62	7	0	**73**	47	357	9	0	**413**	**486**	27	26	35	0	**88**	10	31	35	0	**76**	**164**	**650**
0800-0900	14	96	10	1	**121**	36	251	10	0	**297**	**418**	28	34	42	0	**104**	17	31	51	0	**99**	**203**	**621**
0900-1000	8	58	5	1	**72**	11	113	4	1	**129**	**201**	20	18	19	0	**57**	6	23	17	0	**46**	**103**	**304**
1130-1230	8	69	7	2	**86**	13	107	8	0	**128**	**214**	10	18	11	0	**39**	6	22	9	0	**37**	**76**	**290**
1230-1330	5	63	10	0	**78**	14	79	10	2	**105**	**183**	13	10	17	0	**40**	9	27	16	0	**52**	**92**	**275**
1500-1600	7	171	16	1	**195**	36	109	23	3	**171**	**366**	13	27	39	0	**79**	23	27	14	0	**64**	**143**	**509**
1600-1700	12	240	15	1	**268**	47	132	17	0	**196**	**464**	14	32	57	0	**103**	19	47	24	0	**90**	**193**	**657**
1700-1800	18	234	24	0	**276**	36	120	10	0	**166**	**442**	19	24	33	0	**76**	19	46	26	0	**91**	**167**	**609**
Totals	**76**	**993**	**94**	**6**	**1169**	**240**	**1268**	**91**	**6**	**1605**	**2774**	**144**	**189**	**253**	**0**	**586**	**109**	**254**	**192**	**0**	**555**	**1141**	**3915**

Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor Applicable to the Day and Month of the Turning Movement Count

Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h

Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 ➡12 expansion factor of 1.39

Equ. 12 Hr	106	1380	131	8	**1625**	334	1763	126	8	**2231**	**3856**	200	263	352	0	**815**	152	353	267	0	**771**	**1586**	**5442**

Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 0.9

AADT 12-hr	95	1242	118	8	**1462**	300	1586	114	8	**2008**	**3470**	180	236	317	0	**733**	136	318	240	0	**694**	**1427**	**4898**

24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 ➡24 expansion factor of 1.31

AADT 24 Hr	125	1627	154	10	**1916**	393	2078	149	10	**2630**	**4546**	236	310	415	0	**960**	179	416	315	0	**910**	**1870**	**6416**

AADT and expansion factors provided by the City of Ottawa

AM Peak Hour Factor ➡ 0.90												Highest Hourly Vehicle Volume Between 0700h & 1000h											
AM Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
0745-0845	9	94	6	1	**110**	56	271	11	0	**338**	**448**	31	35	37	0	**103**	19	36	51	0	**106**	**209**	**657**
OFF Peak Hour Factor ➡ 0.89												**Highest Hourly Vehicle Volume Between 1130h & 1330h**											
OFF Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
1145-1245	8	77	7	0	**92**	13	95	7	2	**117**	**209**	8	22	12	0	**42**	5	26	12	0	**43**	**85**	**294**
PM Peak Hour Factor ➡ 0.93												**Highest Hourly Vehicle Volume Between 1500h & 1800h**											
PM Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
1600-1700	12	240	15	1	**268**	47	132	17	0	**196**	**464**	14	32	57	0	**103**	19	47	24	0	**90**	**193**	**657**

Comments:

OC Transpo and Para Transpo buses, private buses and school buses comprise 57.03% of the heavy vehicle traffic. Other than buses, the majority of the heavy vehicle activity consisted on snow removal equipment, garbage trucks and FedEx type delivery vehicles.

Notes:

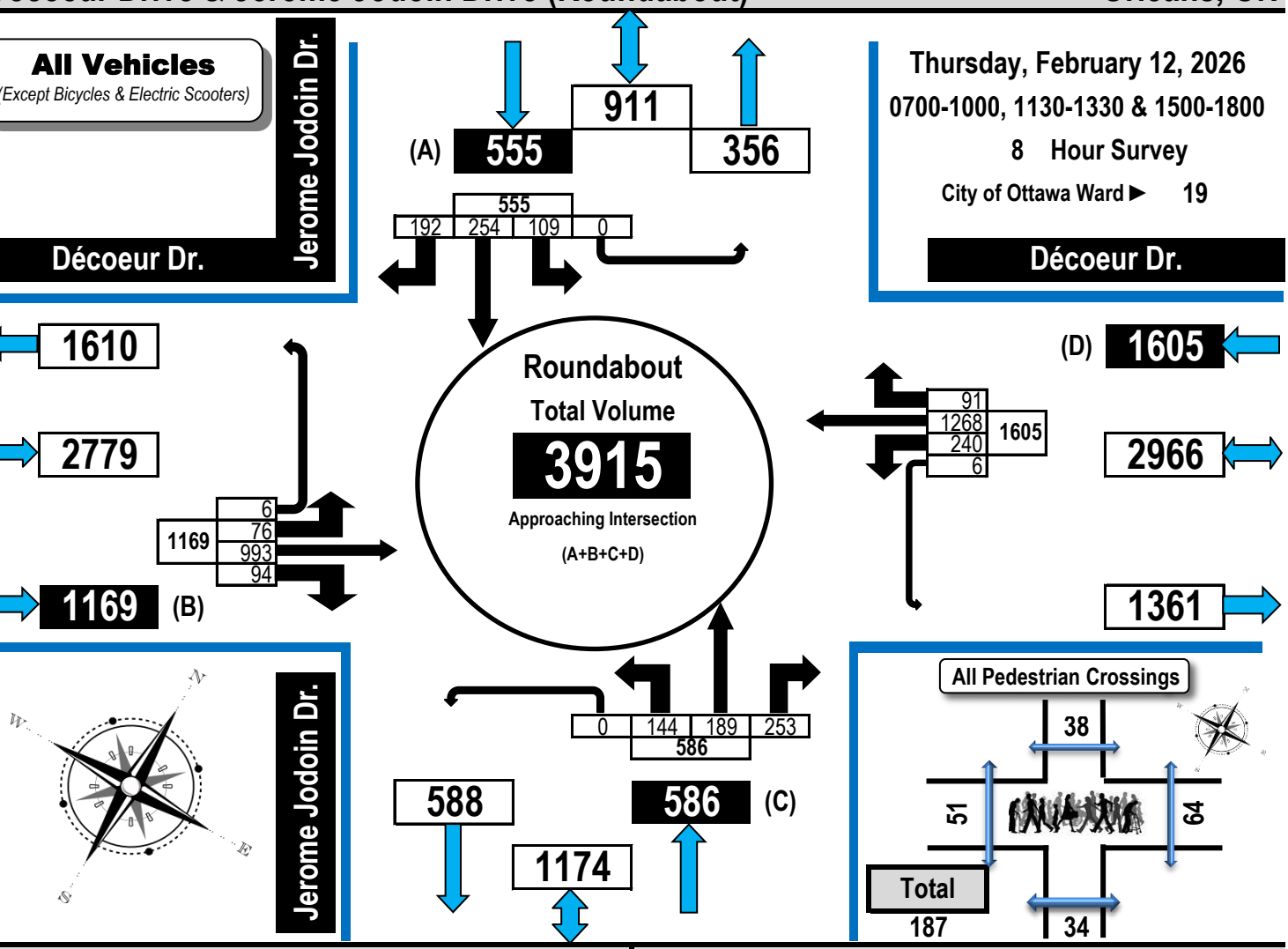
1. Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.

Turning Movement Count
Summary, AM and PM Peak Hour Flow Diagrams
All Vehicles Except Bicycles and Personal E-Transportation

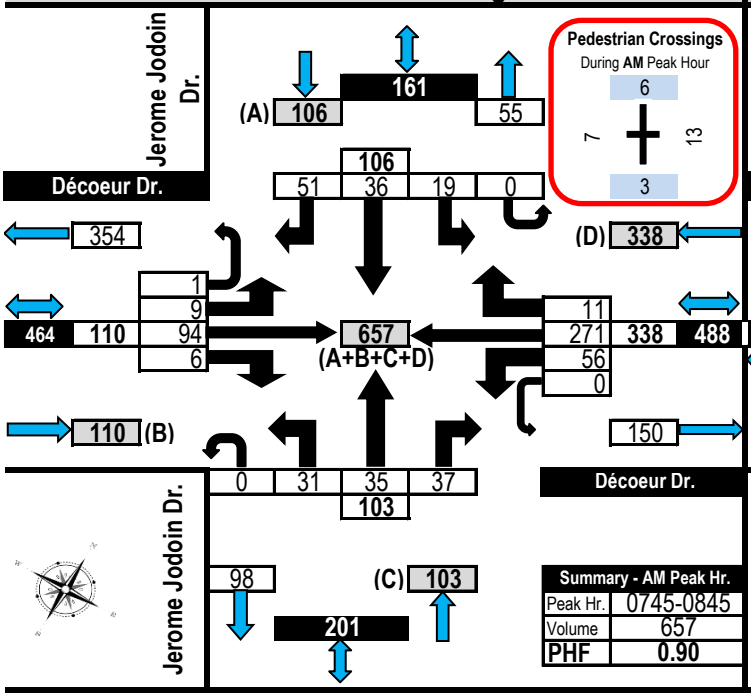
Décoeur Drive & Jerome Jodoin Drive (Roundabout) — Orléans, ON

All Vehicles
(Except Bicycles & Electric Scooters)

Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► 19

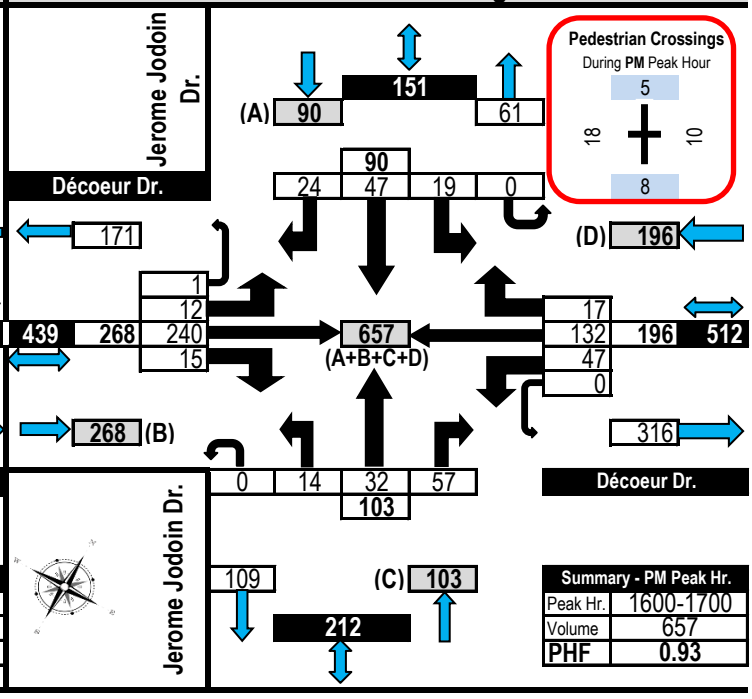


AM Peak Hour Flow Diagram



Summary - AM Peak Hr.	
Peak Hr.	0745-0845
Volume	657
PHF	0.90

PM Peak Hour Flow Diagram



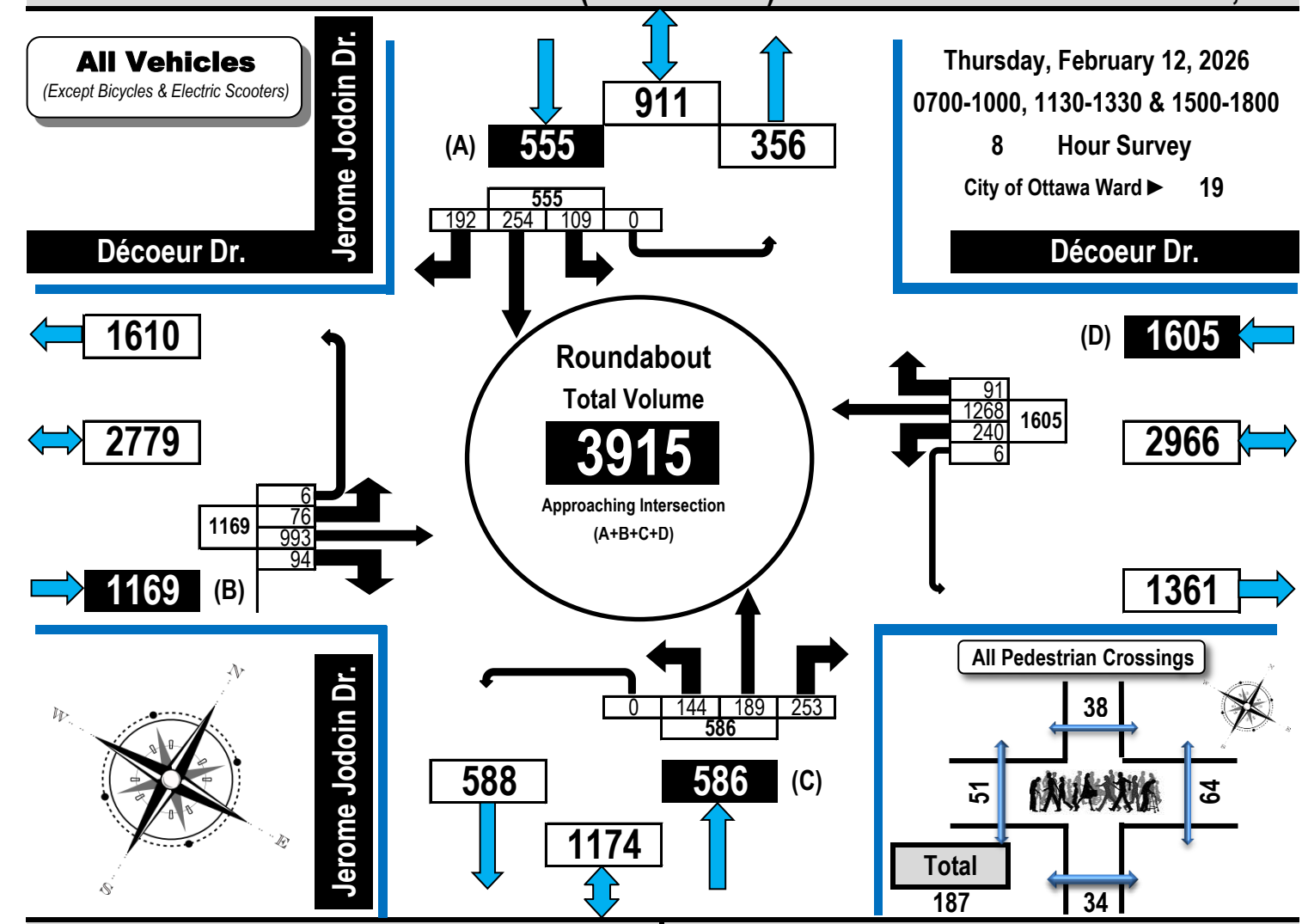
Summary - PM Peak Hr.	
Peak Hr.	1600-1700
Volume	657
PHF	0.93

Turning Movement Count
Summary, OFF and EVENING Peak Hour Flow Diagrams
All Vehicles Except Bicycles and Personal E-Transportation

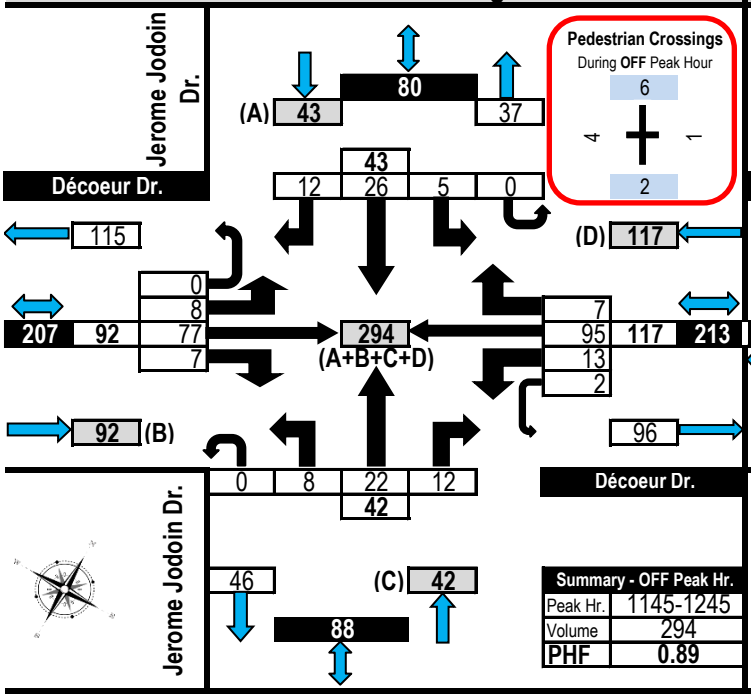
Décoeur Drive & Jerome Jodoin Drive (Roundabout) — Orléans, ON

All Vehicles
(Except Bicycles & Electric Scooters)

Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ▶ 19

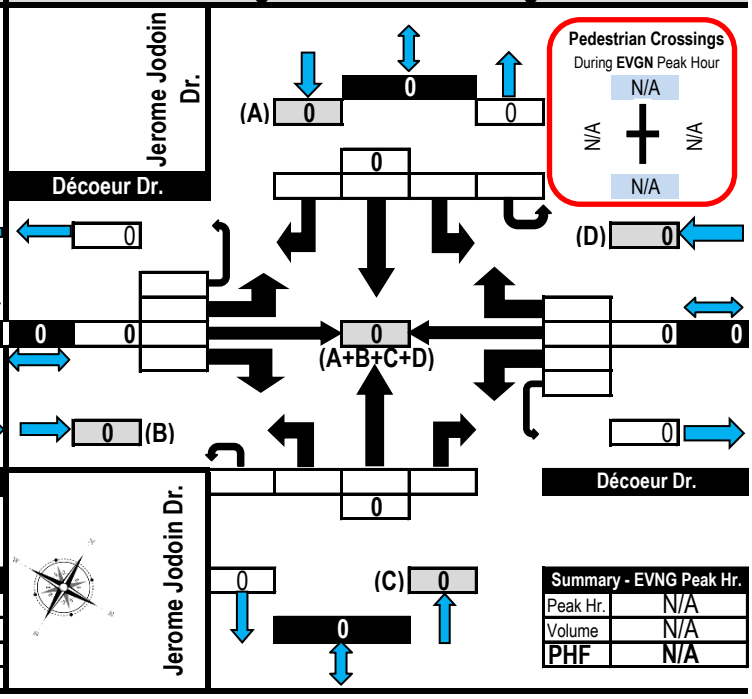


Off Peak Hour Flow Diagram



Summary - OFF Peak Hr.	
Peak Hr.	1145-1245
Volume	294
PHF	0.89

Evening Peak Hour Flow Diagram



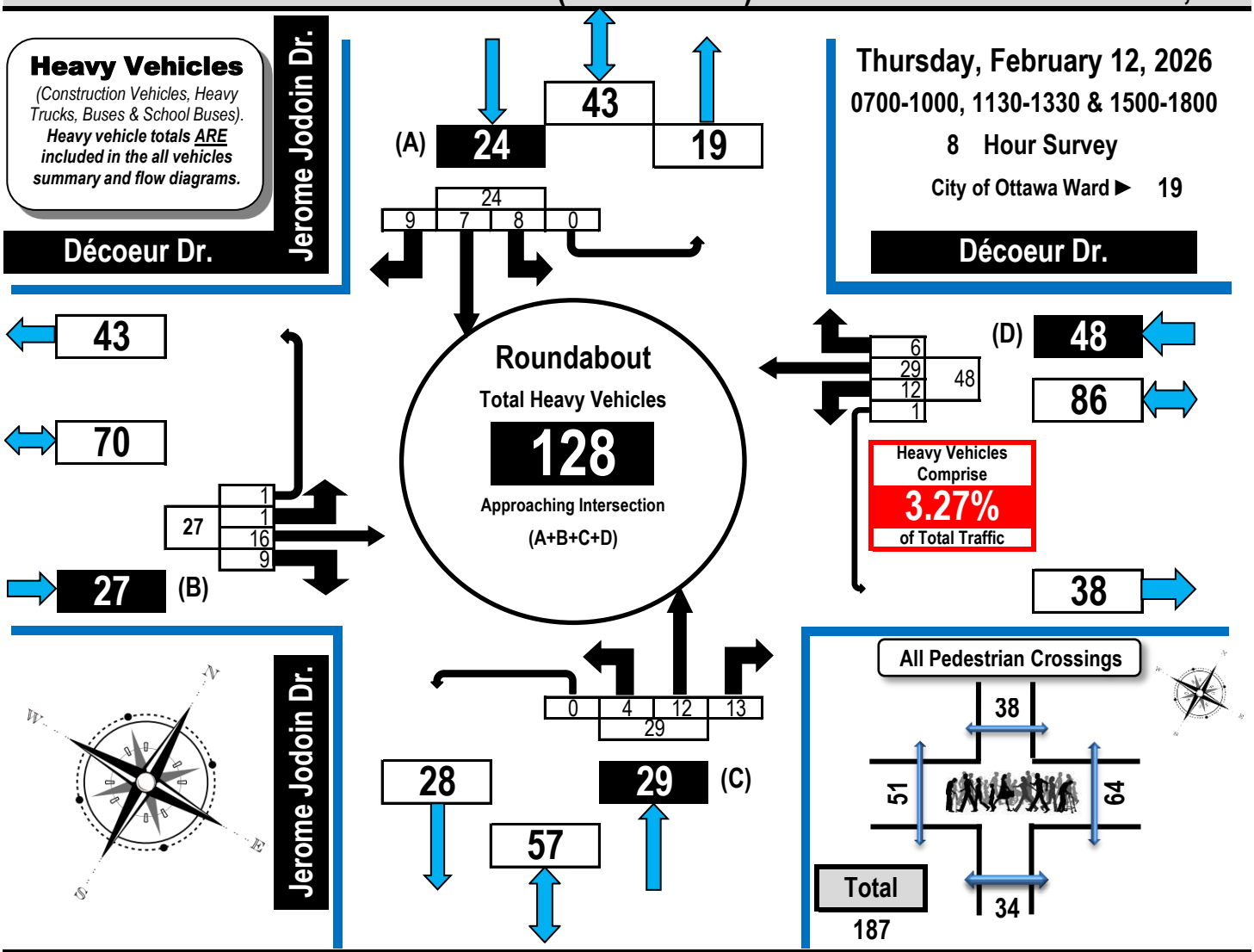
Summary - EVNG Peak Hr.	
Peak Hr.	N/A
Volume	N/A
PHF	N/A

Turning Movement Count
Heavy Vehicle Summary (FHWA Class 4-13)
Flow Diagram

Décoeur Drive & Jerome Jodoin Drive (Roundabout) — Orléans, ON

Heavy Vehicles
(Construction Vehicles, Heavy Trucks, Buses & School Buses).
Heavy vehicle totals ARE included in the all vehicles summary and flow diagrams.

Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► 19



	Décoeur Dr. Eastbound					Décoeur Dr. Westbound					Jerome Jodoin Dr. Northbound					Jerome Jodoin Dr. Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
0700-0800	0	2	1	0	3	2	8	3	0	13	0	2	1	0	3	0	2	2	0	4	23
0800-0900	0	3	2	0	5	2	5	2	0	9	2	2	2	0	6	1	1	1	0	3	23
0900-1000	0	1	0	0	1	0	1	1	0	2	0	0	0	0	0	0	2	1	0	3	6
1130-1230	0	7	0	1	8	1	5	0	0	6	0	0	3	0	3	1	0	2	0	3	20
1230-1330	0	1	1	0	2	1	4	0	0	5	0	0	1	0	1	1	0	1	0	2	10
1500-1600	1	1	2	0	4	4	3	0	1	8	2	2	5	0	9	0	1	1	0	2	23
1600-1700	0	0	1	0	1	1	1	0	0	2	0	4	0	0	4	2	1	1	0	4	11
1700-1800	0	1	2	0	3	1	2	0	0	3	0	2	1	0	3	3	0	0	0	3	12
Totals	1	16	9	1	27	12	29	6	1	48	4	12	13	0	29	8	7	9	0	24	128

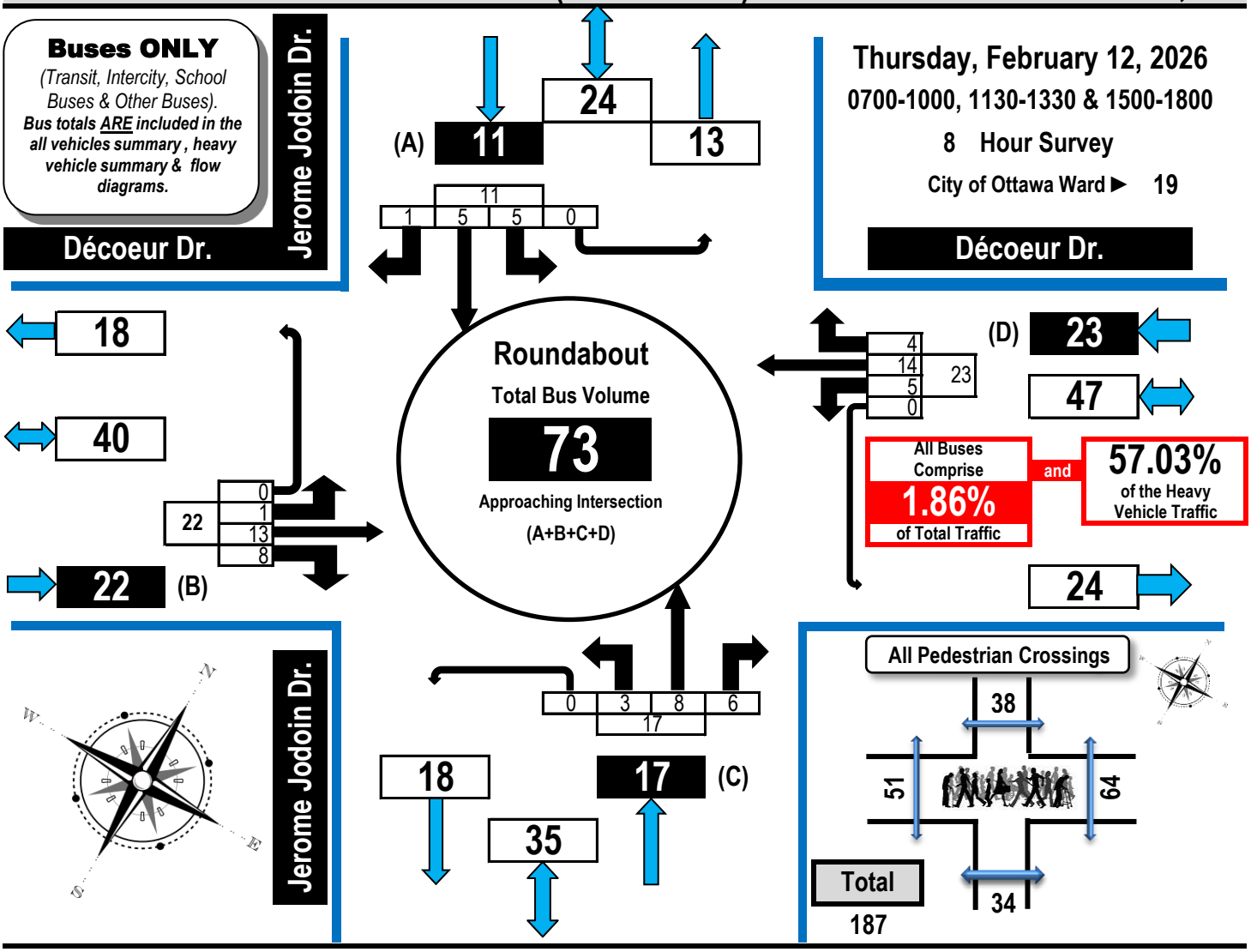
Comments:
OC Transpo and Para Transpo buses, private buses and school buses comprise 57.03% of the heavy vehicle traffic. Other than buses, the majority of the heavy vehicle activity consisted on snow removal equipment, garbage trucks and FedEx type delivery vehicles.

Turning Movement Count
All Buses Summary (FHWA Class 4 ONLY)
Flow Diagram

Décoeur Drive & Jerome Jodoin Drive (Roundabout) — Orléans, ON

Buses ONLY
(Transit, Intercity, School Buses & Other Buses).
Bus totals ARE included in the all vehicles summary , heavy vehicle summary & flow diagrams.

Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► 19



	Décoeur Dr. Eastbound					Décoeur Dr. Westbound					Jerome Jodoin Dr. Northbound					Jerome Jodoin Dr. Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
0700-0800	0	2	1	0	3	2	7	3	0	12	0	2	1	0	3	0	2	1	0	3	21
0800-0900	0	3	2	0	5	2	3	1	0	6	2	2	1	0	5	0	1	0	0	1	17
0900-1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1130-1230	0	7	0	0	7	0	3	0	0	3	0	0	2	0	2	1	0	0	0	1	13
1230-1330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500-1600	1	0	2	0	3	1	1	0	0	2	1	1	2	0	4	0	1	0	0	1	10
1600-1700	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	2	1	0	0	3	5
1700-1800	0	1	2	0	3	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	7
Totals	1	13	8	0	22	5	14	4	0	23	3	8	6	0	17	5	5	1	0	11	73

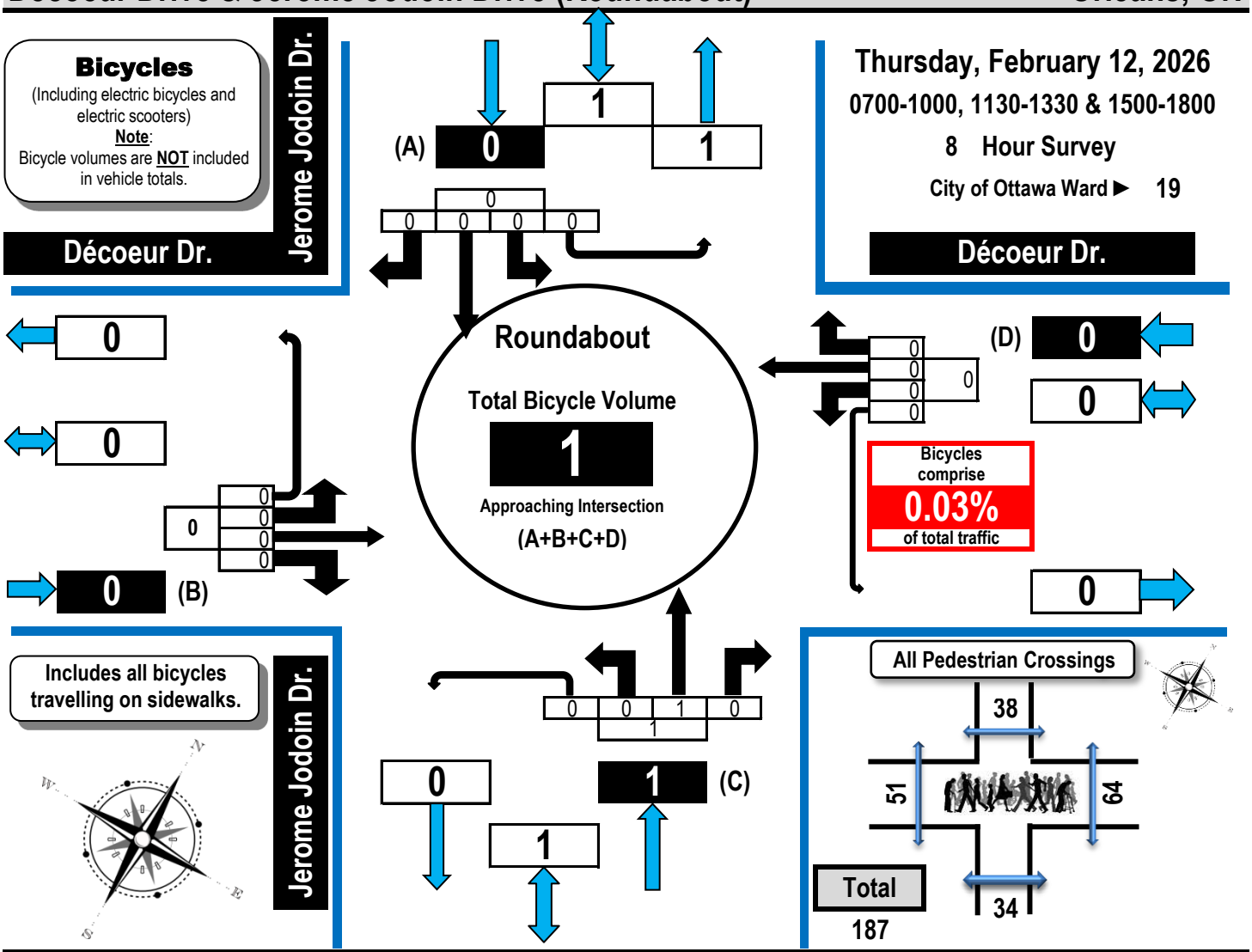
Comments:
OC Transpo and Para Transpo buses, private buses and school buses comprise 57.03% of the heavy vehicle traffic. Other than buses, the majority of the heavy vehicle activity consisted on snow removal equipment, garbage trucks and FedEx type delivery vehicles.

Turning Movement Count
Bicycles and Personal E-Transportation Summary
Flow Diagram

Décoeur Drive & Jerome Jodoin Drive (Roundabout) — Orléans, ON

Bicycles
(Including electric bicycles and electric scooters)
Note:
Bicycle volumes are NOT included in vehicle totals.

Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► 19



Includes all bicycles travelling on sidewalks.

	Décoeur Dr. Eastbound					Décoeur Dr. Westbound					Jerome Jodoin Dr. Northbound					Jerome Jodoin Dr. Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
0700-0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800-0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900-1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1130-1230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1230-1330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500-1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600-1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700-1800	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Totals	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1

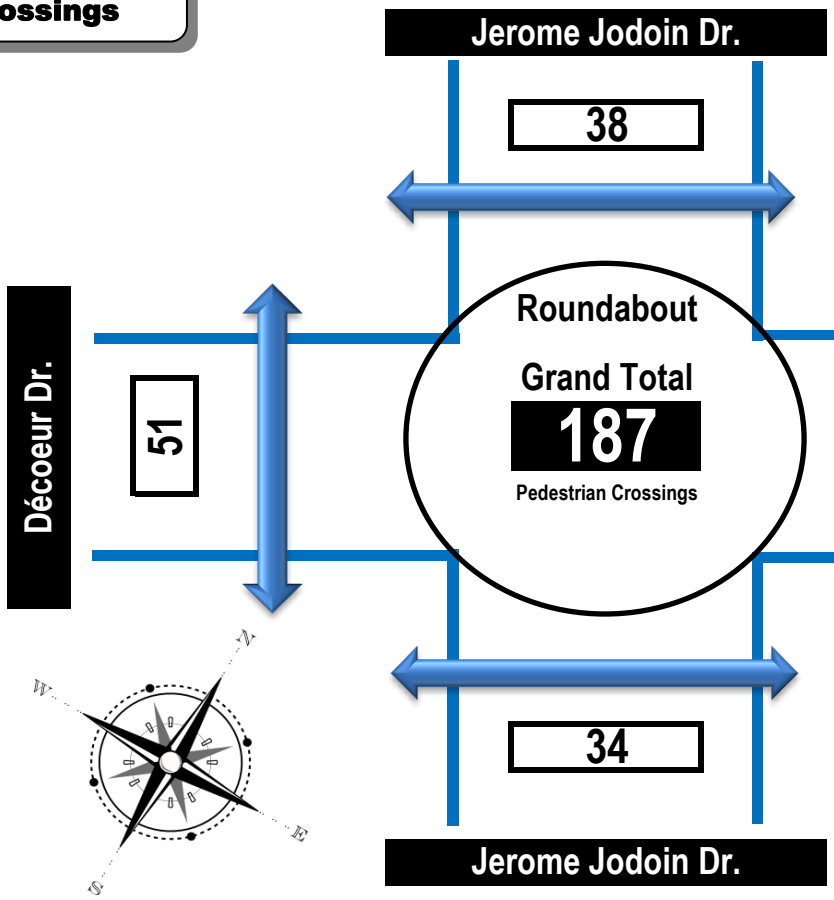
Comments:
OC Transpo and Para Transpo buses, private buses and school buses comprise 57.03% of the heavy vehicle traffic. Other than buses, the majority of the heavy vehicle activity consisted on snow removal equipment, garbage trucks and FedEx type delivery vehicles.

Turning Movement Count
Pedestrian Crossings Summary and Flow Diagram

Décoeur Drive & Jerome Jodoin Drive (Roundabout) — Orléans, ON

Pedestrian Crossings

Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► 19



Note
*The values in the summary table below and the flow diagram represent the number of pedestrian crossing**s** **NOT** the number of individual pedestrian**s** crossing. For example, some pedestrians will cross one approach, then another to reach their destination. Accordingly, one pedestrian crossing two approaches will be recorded as two crossings.*

Time Period	West Side Crossing Décoeur Dr.	East Side Crossing Décoeur Dr.	Street Total	South Side Crossing Jerome Jodoin Dr.	North Side Crossing Jerome Jodoin Dr.	Street Total	Grand Total
0700-0800	3	13	16	4	2	6	22
0800-0900	7	10	17	2	6	8	25
0900-1000	1	5	6	0	2	2	8
1130-1230	2	1	3	3	3	6	9
1230-1330	6	11	17	5	6	11	28
1500-1600	6	10	16	5	8	13	29
1600-1700	18	10	28	8	5	13	41
1700-1800	8	4	12	7	6	13	25
Totals	**51**	**64**	**115**	**34**	**38**	**72**	**187**

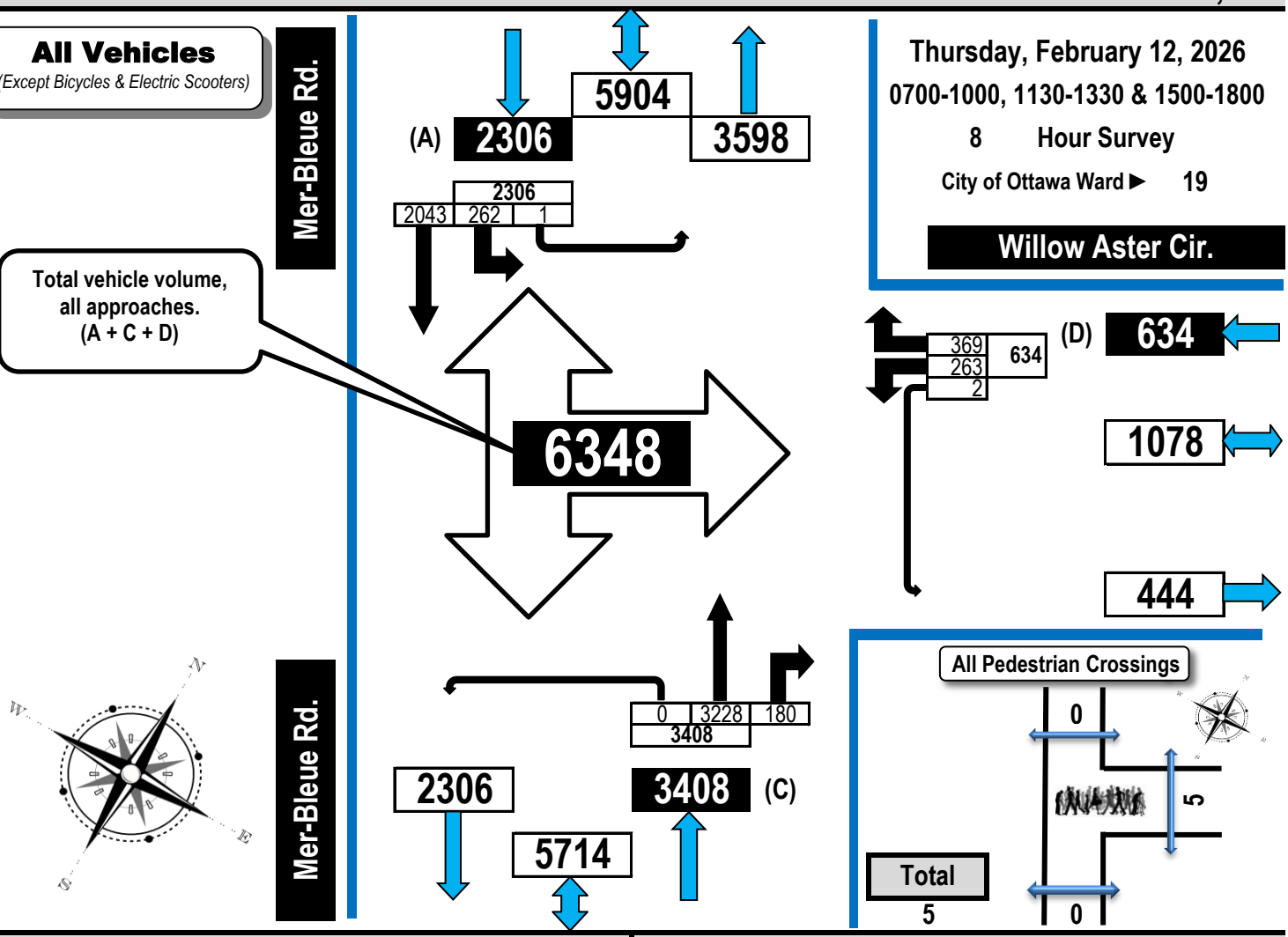
Comments:
OC Transpo and Para Transpo buses, private buses and school buses comprise 57.03% of the heavy vehicle traffic. Other than buses, the majority of the heavy vehicle activity consisted on snow removal equipment, garbage trucks and FedEx type delivery vehicles.

Turning Movement Count
Summary, AM and PM Peak Hour Flow Diagrams
All Vehicles Except Bicycles and Personal E-Transportation

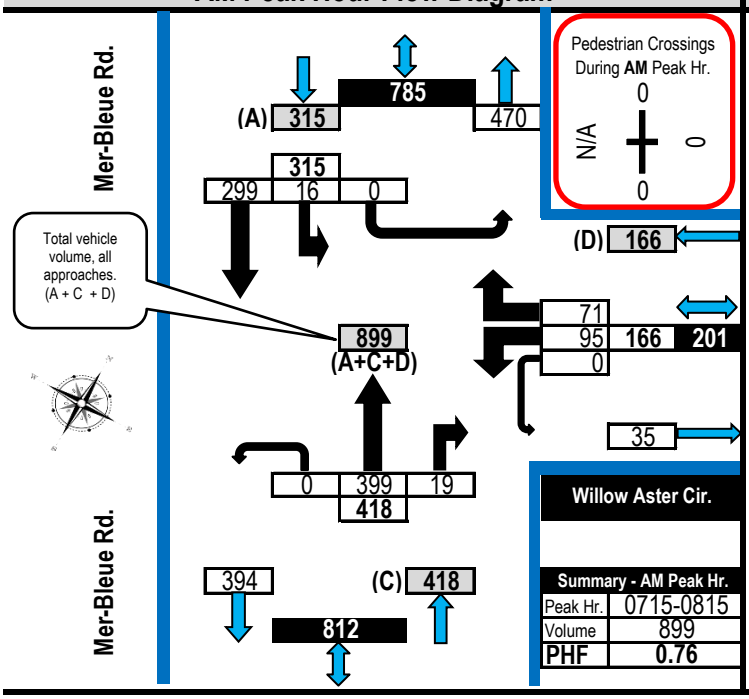
Mer-Bleue Road & Willow Aster Circle — Orléans, ON

All Vehicles
(Except Bicycles & Electric Scooters)

Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ▶ 19

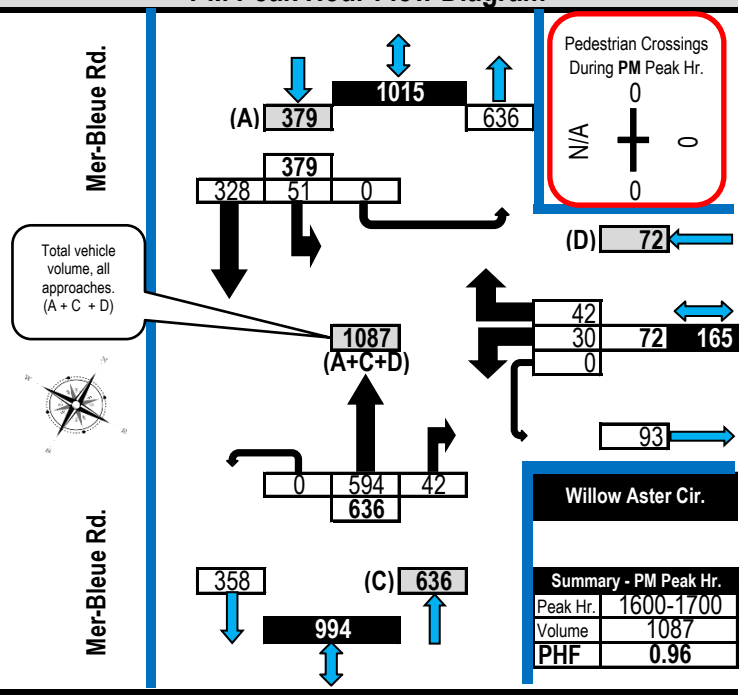


AM Peak Hour Flow Diagram



Summary - AM Peak Hr.	
Peak Hr.	0715-0815
Volume	899
PHF	0.76

PM Peak Hour Flow Diagram



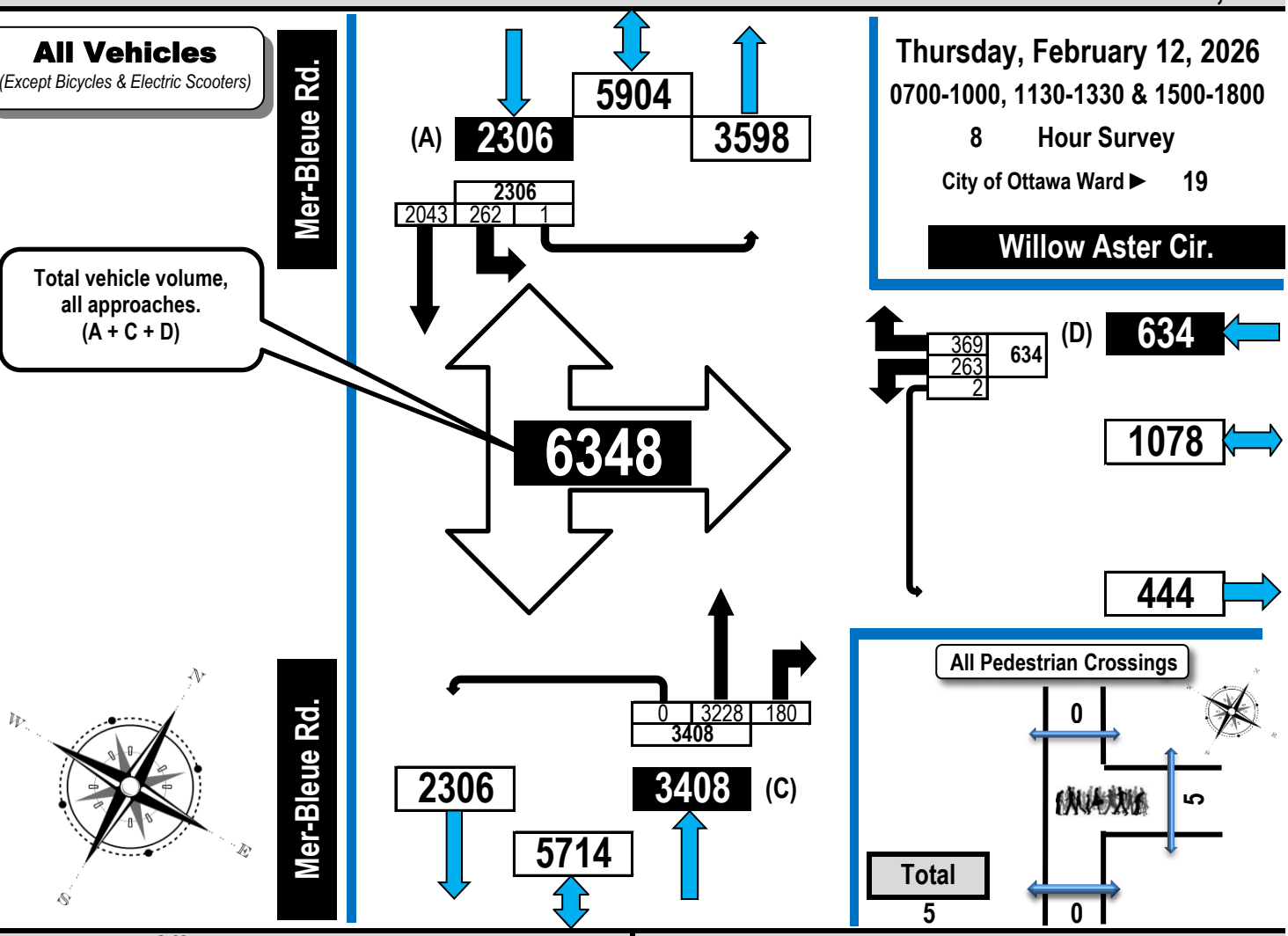
Summary - PM Peak Hr.	
Peak Hr.	1600-1700
Volume	1087
PHF	0.96

Turning Movement Count
Summary, OFF and EVENING Peak Hour Flow Diagrams
All Vehicles Except Bicycles and Personal E-Transportation

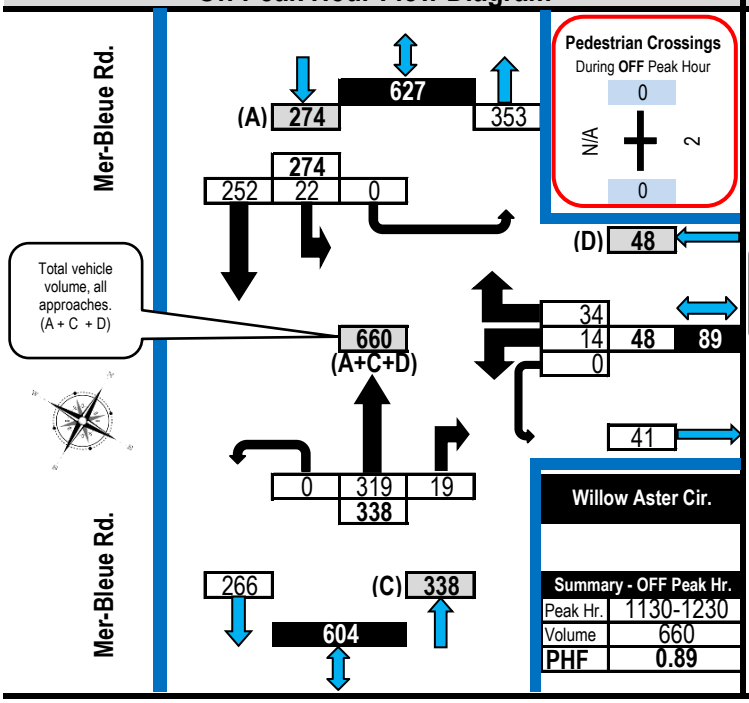
Mer-Bleue Road & Willow Aster Circle — Orléans, ON

All Vehicles
(Except Bicycles & Electric Scooters)

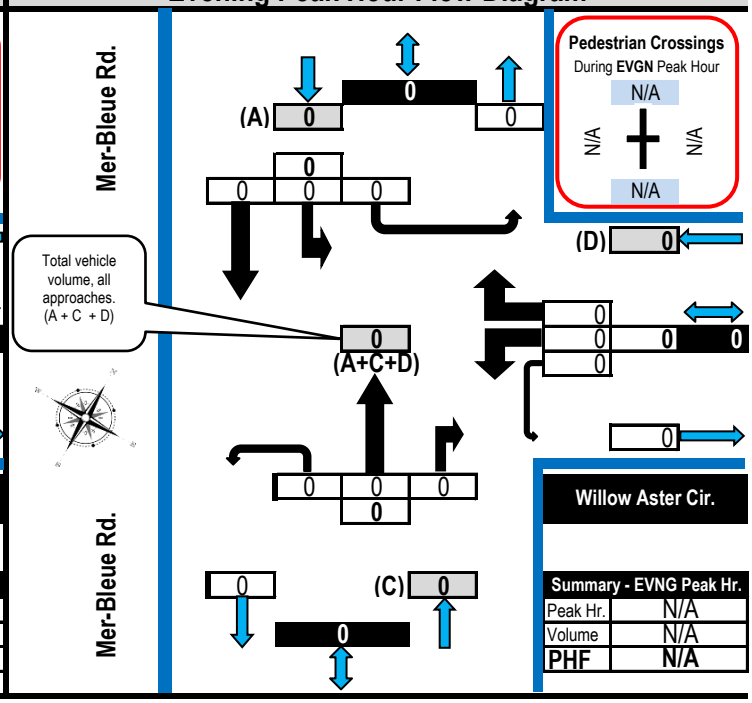
Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► 19



Off Peak Hour Flow Diagram



Evening Peak Hour Flow Diagram



Turning Movement Count
Summary Report Including Peak Hours, AADT and Expansion Factors
All Vehicles Except Bicycles and Personal E-Transportation

Mer-Bleue Road & Willow Aster Circle — Orléans, ON

Survey Date: Thursday, February 12, 2026 **Start Time:** 0700 **AADT Factor:** 0.9
Weather AM: Mostly Sunny -10° C **Survey Duration:** 8 Hrs. **Survey Hours:** 0700-1000, 1130-1330 & 1500-1800
Weather PM: Mostly Sunny -5° C **Surveyor(s):** J. Mousseau

	N/A				Willow Aster Cir.						Mer-Bleue Rd.					Mer-Bleue Rd.						
	Eastbound					Westbound						Northbound					Southbound						
Time Period	LT	ST	RT	UT	E/B Tot	LT	ST	RT	UT	W/B Tot	Street Total	LT	ST	RT	UT	N/B Tot	LT	ST	RT	UT	S/B Tot	Street Total	Grand Total
0700-0800						93		65	0	158	158		347	12	0	359	13	282		0	295	654	812
0800-0900						54		72	0	126	126		339	19	0	358	19	235		0	254	612	738
0900-1000						12		50	0	62	62		301	12	0	313	16	159		0	175	488	550
1130-1230						14		34	0	48	48		319	19	0	338	22	252		0	274	612	660
1230-1330						15		41	2	58	58		273	14	0	287	36	226		1	263	550	608
1500-1600						17		26	0	43	43		479	26	0	505	38	275		0	313	818	861
1600-1700						30		42	0	72	72		594	42	0	636	51	328		0	379	1015	1087
1700-1800						28		39	0	67	67		576	36	0	612	67	286		0	353	965	1032
Totals						263		369	2	634	634		3228	180	0	3408	262	2043		1	2306	5714	6348

Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor Applicable to the Day and Month of the Turning Movement Count

Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h

Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 ➡12 expansion factor of 1.39

Equ. 12 Hr	0	0	0	0	0	366	0	513	3	881	881	0	4487	250	0	4737	364	2840	0	1	3205	7942	8824

Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 0.9

AADT 12-hr	0	0	0	0	0	329	0	462	3	793	793	0	4038	225	0	4263	328	2556	0	1	2885	7148	7941

24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 ➡24 expansion factor of 1.31

AADT 24 Hr	0	0	0	0	0	431	0	605	3	1039	1039	0	5290	295	0	5585	429	3348	0	2	3779	9364	10403

AADT and expansion factors provided by the City of Ottawa

AM Peak Hour Factor ➡ 0.76												Highest Hourly Vehicle Volume Between 0700h & 1000h										
AM Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
0715-0815	0	0	0	0	0	95	0	71	0	166	166	0	399	19	0	418	16	299	0	0	315	733	899
OFF Peak Hour Factor ➡ 0.89												Highest Hourly Vehicle Volume Between 1130h & 1330h										
OFF Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
1130-1230	0	0	0	0	0	14	0	34	0	48	48	0	319	19	0	338	22	252	0	0	274	612	660
PM Peak Hour Factor ➡ 0.96												Highest Hourly Vehicle Volume Between 1500h & 1800h										
PM Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
1600-1700	0	0	0	0	0	30	0	42	0	72	72	0	594	42	0	636	51	328	0	0	379	1015	1087

Comments:

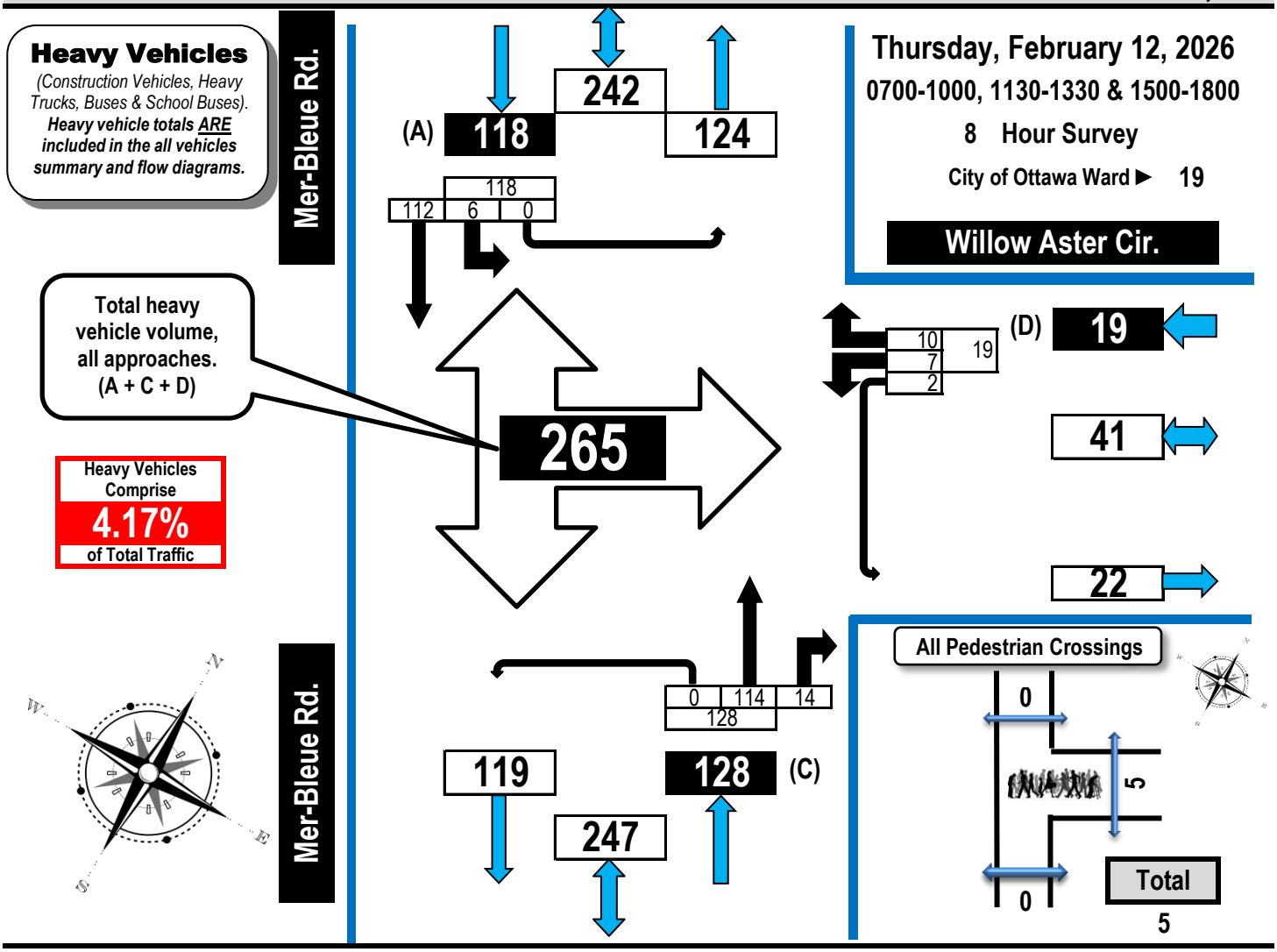
School buses comprise 38.11% of the heavy vehicle traffic. Much of the heavy vehicle traffic consisted of snow removal tractors. No cyclists were observed.

Notes:

1. Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.

Turning Movement Count
Heavy Vehicle Summary (FHWA Class 4 to 13)
Flow Diagram

Mer-Bleue Road & Willow Aster Circle — Orléans, ON



	N/A					Willow Aster Cir.					Mer-Bleue Rd.					Mer-Bleue Rd.					
	Eastbound					Westbound					Northbound					Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
0700-0800						3		2	0	5		24	3	0	27	0	23		0	23	55
0800-0900						1		4	0	5		12	4	0	16	0	18		0	18	39
0900-1000						1		2	0	3		19	3	0	22	0	16		0	16	41
1130-1230						0		0	0	0		21	3	0	24	0	10		0	10	34
1230-1330						0		0	2	2		10	0	0	10	2	17		0	19	31
1500-1600						1		1	0	2		15	0	0	15	3	14		0	17	34
1600-1700						1		1	0	2		10	1	0	11	1	9		0	10	23
1700-1800						0		0	0	0		3	0	0	3	0	5		0	5	8
Totals						7		10	2	19		114	14	0	128	6	112		0	118	265

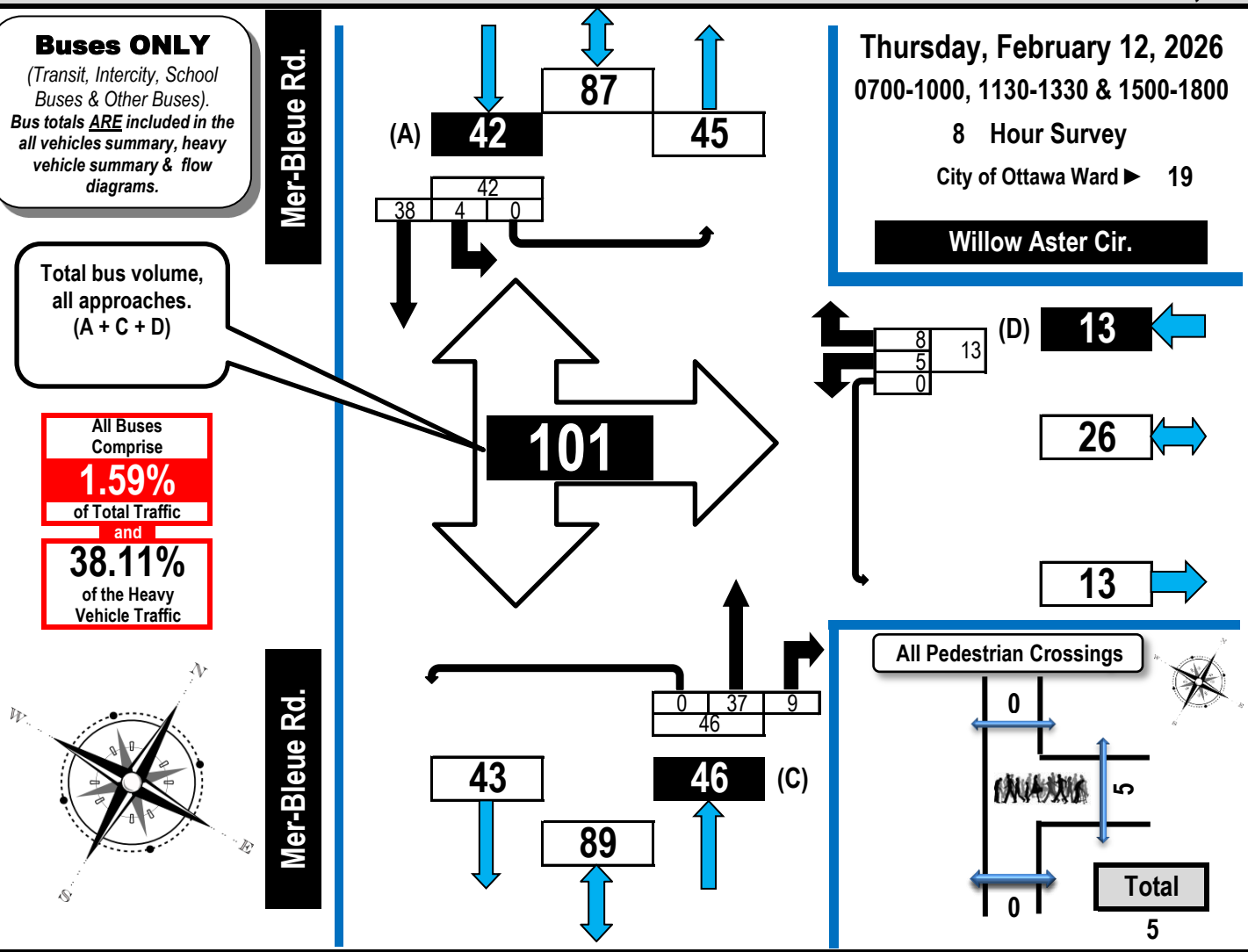
Comments:

School buses comprise 38.11% of the heavy vehicle traffic. Much of the heavy vehicle traffic consisted of snow removal tractors. No cyclists were observed.

Turning Movement Count
All Buses Summary (FHWA Class 4 ONLY)
Flow Diagram

Mer-Bleue Road & Willow Aster Circle — Orléans, ON

Buses ONLY
(Transit, Intercity, School Buses & Other Buses).
Bus totals ARE included in the all vehicles summary, heavy vehicle summary & flow diagrams.



	N/A					Willow Aster Cir.					Mer-Bleue Rd.					Mer-Bleue Rd.					
	Eastbound					Westbound					Northbound					Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
0700-0800						3		1	0	4		11	3	0	14	0	12		0	12	30
0800-0900						0		4	0	4		5	2	0	7	0	10		0	10	21
0900-1000						0		1	0	1		3	1	0	4	0	6		0	6	11
1130-1230						0		0	0	0		12	3	0	15	0	2		0	2	17
1230-1330						0		0	0	0		1	0	0	1	0	0		0	0	1
1500-1600						1		1	0	2		3	0	0	3	3	2		0	5	10
1600-1700						1		1	0	2		2	0	0	2	1	6		0	7	11
1700-1800						0		0	0	0		0	0	0	0	0	0		0	0	0
Totals						5		8	0	13		37	9	0	46	4	38		0	42	101

Comments:

School buses comprise 38.11% of the heavy vehicle traffic. Much of the heavy vehicle traffic consisted of snow removal tractors. No cyclists were observed.

Turning Movement Count
Bicycles and All Forms of Personal E-Transportation
Summary Flow Diagram

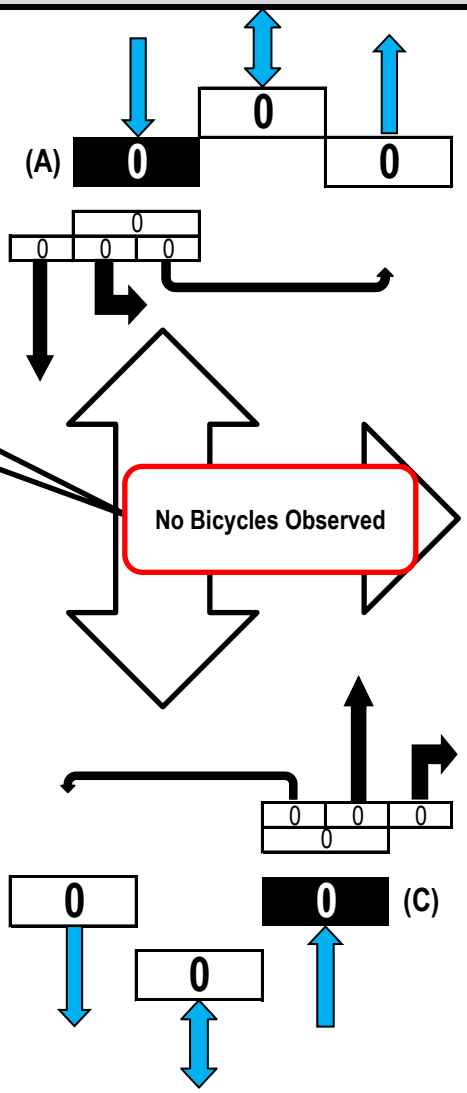
Mer-Bleue Road & Willow Aster Circle — Orléans, ON

Bicycles
(Including electric bicycles and electric scooters)
Note:
Bicycle volumes are NOT included in vehicle totals.

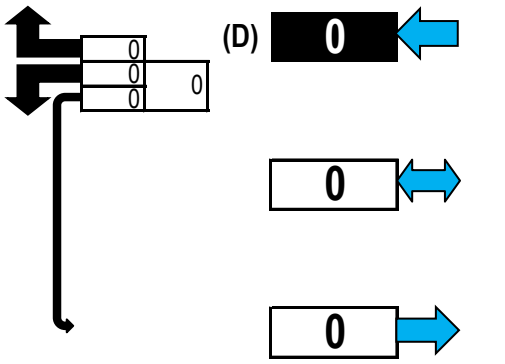
Total bicycle volume, all approaches. (A + C + D)

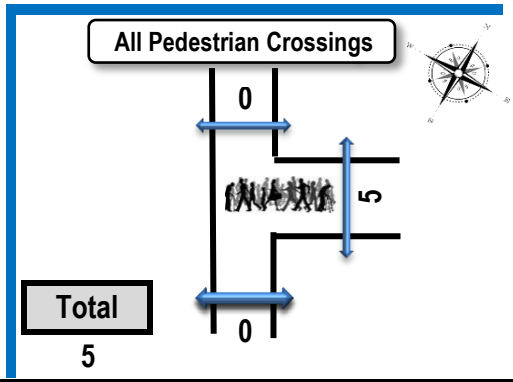
Bicycles comprise **0.00%** of total traffic

Includes all bicycles travelling on sidewalks.



Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► 19





	N/A					Willow Aster Cir.					Mer-Bleue Rd.					Mer-Bleue Rd.					
	Eastbound					Westbound					Northbound					Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
0700-0800						0		0	0	0		0	0	0	0	0	0		0	0	0
0800-0900						0		0	0	0		0	0	0	0	0	0		0	0	0
0900-1000						0		0	0	0		0	0	0	0	0	0		0	0	0
1130-1230	No Bicycles Observed					0		0	0	0		0	0	0	0	0	0		0	0	0
1230-1330						0		0	0	0		0	0	0	0	0	0		0	0	0
1500-1600						0		0	0	0		0	0	0	0	0	0		0	0	0
1600-1700						0		0	0	0		0	0	0	0	0	0		0	0	0
1700-1800						0		0	0	0		0	0	0	0	0	0		0	0	0
Totals						0		0	0	0		0	0	0	0	0	0		0	0	0

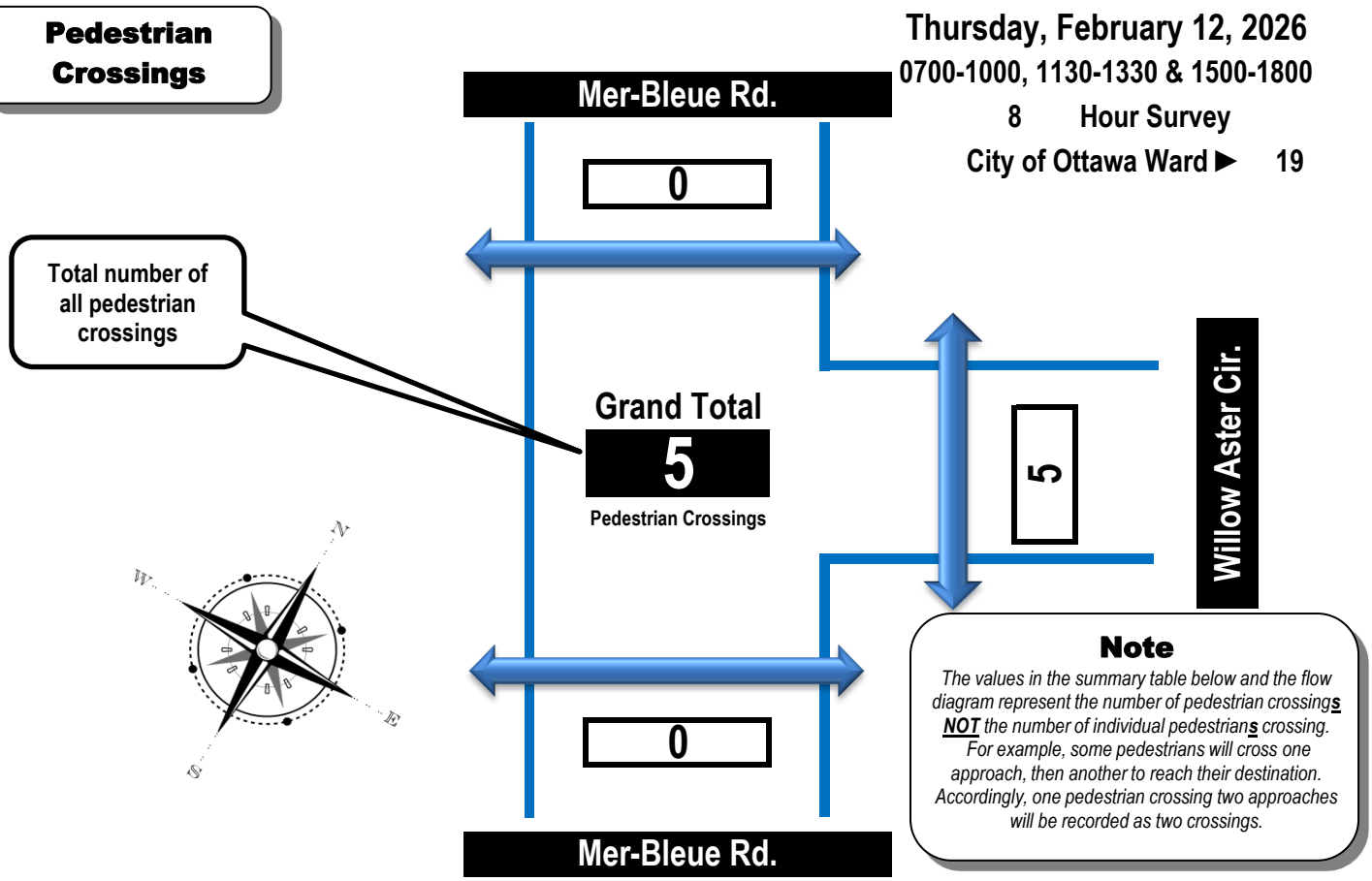
Comments:
School buses comprise 38.11% of the heavy vehicle traffic. Much of the heavy vehicle traffic consisted of snow removal tractors. No cyclists were observed.

Turning Movement Count
Pedestrian Crossings Summary and Flow Diagram

Mer-Bleue Road & Willow Aster Circle — Orléans, ON

Pedestrian Crossings

Thursday, February 12, 2026
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► 19



Note
*The values in the summary table below and the flow diagram represent the number of pedestrian crossing**s** **NOT** the number of individual pedestrian**s** crossing. For example, some pedestrians will cross one approach, then another to reach their destination. Accordingly, one pedestrian crossing two approaches will be recorded as two crossings.*

Time Period	West Side Crossing N/A	East Side Crossing Willow Aster Cir.	Street Total	South Side Crossing Mer-Bleue Rd.	North Side Crossing Mer-Bleue Rd.	Street Total	Grand Total
0700-0800		0	0	0	0	0	0
0800-0900		0	0	0	0	0	0
0900-1000		0	0	0	0	0	0
1130-1230		2	2	0	0	0	2
1230-1330		3	3	0	0	0	3
1500-1600		0	0	0	0	0	0
1600-1700		0	0	0	0	0	0
1700-1800		0	0	0	0	0	0
Totals	**0**	**5**	**5**	**0**	**0**	**0**	**5**

Comments:
School buses comprise 38.11% of the heavy vehicle traffic. Much of the heavy vehicle traffic consisted of snow removal tractors. No cyclists were observed.

Appendix C

Synchro and Sidra Worksheets – Existing Conditions

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive Existing AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	34	6.0	34	6.0	0.120	4.9	LOS A	0.4	3.2	0.27	0.14	0.27	46.9
2	T1	All MCs	39	6.0	39	6.0	0.120	4.9	LOS A	0.4	3.2	0.27	0.14	0.27	44.8
3	R2	All MCs	41	5.0	41	5.0	0.120	4.8	LOS A	0.4	3.2	0.27	0.14	0.27	47.5
Approach			114	5.6	114	5.6	0.120	4.9	LOS A	0.4	3.2	0.27	0.14	0.27	46.3
East: Decoeur Drive															
4	L2	All MCs	62	4.0	62	4.0	0.369	7.3	LOS A	1.8	13.2	0.28	0.13	0.28	46.2
5	T1	All MCs	301	2.0	301	2.0	0.369	7.2	LOS A	1.8	13.2	0.28	0.13	0.28	50.3
6	R2	All MCs	12	18.0	12	18.0	0.369	8.0	LOS A	1.8	13.2	0.28	0.13	0.28	46.5
Approach			376	2.9	376	2.9	0.369	7.2	LOS A	1.8	13.2	0.28	0.13	0.28	49.4
North: Jerome Jodoin Drive															
7	L2	All MCs	21	5.0	21	5.0	0.160	6.8	LOS A	0.6	4.1	0.47	0.37	0.47	46.3
8	T1	All MCs	40	3.0	40	3.0	0.160	6.6	LOS A	0.6	4.1	0.47	0.37	0.47	44.2
9	R2	All MCs	57	2.0	57	2.0	0.160	6.5	LOS A	0.6	4.1	0.47	0.37	0.47	46.9
Approach			118	2.9	118	2.9	0.160	6.6	LOS A	0.6	4.1	0.47	0.37	0.47	45.8
West: Decoeur Drive															
10	L2	All MCs	11	2.0	11	2.0	0.126	4.7	LOS A	0.5	3.4	0.25	0.13	0.25	47.8
11	T1	All MCs	104	3.0	104	3.0	0.126	4.8	LOS A	0.5	3.4	0.25	0.13	0.25	52.2
12	R2	All MCs	7	33.0	7	33.0	0.126	6.3	LOS A	0.5	3.4	0.25	0.13	0.25	48.1
Approach			122	4.5	122	4.5	0.126	4.8	LOS A	0.5	3.4	0.25	0.13	0.25	51.6
All Vehicles			730	3.6	730	3.6	0.369	6.4	LOS A	1.8	13.2	0.30	0.17	0.30	48.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive Existing PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	16	2.0	16	2.0	0.143	5.7	LOS A	0.5	3.7	0.41	0.29	0.41	46.8
2	T1	All MCs	36	13.0	36	13.0	0.143	6.5	LOS A	0.5	3.7	0.41	0.29	0.41	44.5
3	R2	All MCs	63	2.0	63	2.0	0.143	5.7	LOS A	0.5	3.7	0.41	0.29	0.41	47.3
Approach			114	5.4	114	5.4	0.143	6.0	LOS A	0.5	3.7	0.41	0.29	0.41	46.4
East: Decoeur Drive															
4	L2	All MCs	52	2.0	52	2.0	0.209	5.3	LOS A	0.9	6.1	0.20	0.08	0.20	47.0
5	T1	All MCs	147	2.0	147	2.0	0.209	5.3	LOS A	0.9	6.1	0.20	0.08	0.20	51.3
6	R2	All MCs	19	2.0	19	2.0	0.209	5.3	LOS A	0.9	6.1	0.20	0.08	0.20	47.5
Approach			218	2.0	218	2.0	0.209	5.3	LOS A	0.9	6.1	0.20	0.08	0.20	49.9
North: Jerome Jodoin Drive															
7	L2	All MCs	21	11.0	21	11.0	0.113	5.5	LOS A	0.4	2.9	0.34	0.21	0.34	47.0
8	T1	All MCs	52	2.0	52	2.0	0.113	5.0	LOS A	0.4	2.9	0.34	0.21	0.34	45.0
9	R2	All MCs	27	4.0	27	4.0	0.113	5.1	LOS A	0.4	2.9	0.34	0.21	0.34	47.7
Approach			100	4.4	100	4.4	0.113	5.1	LOS A	0.4	2.9	0.34	0.21	0.34	46.1
West: Decoeur Drive															
10	L2	All MCs	14	2.0	14	2.0	0.304	6.7	LOS A	1.4	9.8	0.31	0.16	0.31	46.9
11	T1	All MCs	267	2.0	267	2.0	0.304	6.7	LOS A	1.4	9.8	0.31	0.16	0.31	51.1
12	R2	All MCs	17	7.0	17	7.0	0.304	6.9	LOS A	1.4	9.8	0.31	0.16	0.31	47.2
Approach			298	2.3	298	2.3	0.304	6.7	LOS A	1.4	9.8	0.31	0.16	0.31	50.6
All Vehicles			730	3.0	730	3.0	0.304	5.9	LOS A	1.4	9.8	0.30	0.17	0.30	49.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	95	71	399	19	16	299
Future Vol, veh/h	95	71	399	19	16	299
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	6	16	2	8
Mvmt Flow	106	79	443	21	18	332

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	822	454	0	0	464	0
Stage 1	454	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.218	-
Pot Cap-1 Maneuver	342	604	-	-	1097	-
Stage 1	638	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	337	604	-	-	1097	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	687	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.4	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	416	1097	-
HCM Lane V/C Ratio	-	-	0.443	0.016	-
HCM Control Delay (s)	-	-	20.4	8.3	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	2.2	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	42	594	42	51	328
Future Vol, veh/h	30	42	594	42	51	328
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	2	2	2	2	3
Mvmt Flow	33	47	660	47	57	364

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1162	684	0	0	707	0
Stage 1	684	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	215	449	-	-	891	-
Stage 1	499	-	-	-	-	-
Stage 2	622	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	201	449	-	-	891	-
Mov Cap-2 Maneuver	201	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	582	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.5	0	1.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	297	891	-
HCM Lane V/C Ratio	-	-	0.269	0.064	-
HCM Control Delay (s)	-	-	21.5	9.3	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.2	-

Appendix D

Collision Data

Accident Date	Accident Year	Accident Time	Location	Environment Condition	Light	Traffic Control	Traffic Control Condition	Classification Of Accident	Initial Impact Type	Road Surface Condition	# Vehicles	# Motorcycles	# Bicycles	# Pedestrians
2021-05-22	2021	17:01	DECOEUR DR @ JEROME JODOIN DR (0015769)	01 - Clear	01 - Daylight	02 - Stop sign	0	03 - P.D. only	02 - Angle	01 - Dry	2	0	0	0
2019-09-03	2019	15:13	JEROME JODOIN DR btwn DE L'ESTURGEON ST/GARDENPOST TERR & DECOEUR DR (86L67Q)	01 - Clear	01 - Daylight	10 - No control	0	03 - P.D. only	06 - SMV unattended vehicle	01 - Dry	1	0	0	0
2019-10-10	2019	19:00	WILLOW ASTER CIR btwn JEROME JODOIN DR & WILLOW ASTER CIR (e___2HC9)	01 - Clear	05 - Dusk	10 - No control	0	03 - P.D. only	06 - SMV unattended vehicle	01 - Dry	1	0	0	0
2019-12-14	2019	3:00	WILLOW ASTER CIR btwn JEROME JODOIN DR & WILLOW ASTER CIR (e___2HC9)	04 - Freezing Rain	07 - Dark	10 - No control	0	03 - P.D. only	06 - SMV unattended vehicle	02 - Wet	1	0	0	0
2020-03-19	2020	17:10	WILLOW ASTER CIR btwn JEROME JODOIN DR & WILLOW ASTER CIR (e___2HC9)	01 - Clear	01 - Daylight	10 - No control	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2021-10-10	2021	19:05	WILLOW ASTER CIR btwn JEROME JODOIN DR & WILLOW ASTER CIR (e___2HC9)	01 - Clear	05 - Dusk	10 - No control	0	03 - P.D. only	06 - SMV unattended vehicle	01 - Dry	1	0	0	0
2018-10-23	2018	11:55	HELENIUM LANE @ WILLOW ASTER CIR (0017582)	01 - Clear	01 - Daylight	10 - No control	0	03 - P.D. only	99 - Other	08 - Loose sand or gravel	2	0	0	0

Appendix E

TDM Checklist

CGH TRANSPORTATION

TDM-Supportive Development Design and Infrastructure Checklist:
Non-Residential Developments (office, institutional, retail or industrial)

Legend

REQUIRED	The Official Plan or Zoning By-law provides related guidance that must be followed
BASIC	The measure is generally feasible and effective, and in most cases would benefit the development and its users
BETTER	The measure could maximize support for users of sustainable modes, and optimize development performance

		TDM-supportive design & infrastructure measures: *Non-residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	1.	**WALKING & CYCLING: ROUTES**	
	1.1	**Building location & access points**	
BASIC	1.1.1	Locate building close to the street, and do not locate parking areas between the street and building entrances	☑
BASIC	1.1.2	Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	☑
BASIC	1.1.3	Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort	☑
	1.2	**Facilities for walking & cycling**	
REQUIRED	1.2.1	Provide convenient, direct access to stations or major stops along rapid transit routes within 600 metres; minimize walking distances from buildings to rapid transit; provide pedestrian-friendly, weather-protected (where possible) environment between rapid transit accesses and building entrances; ensure quality linkages from sidewalks through building entrances to integrated stops/stations *(see Official Plan policy 4.3.3)*	☑
REQUIRED	1.2.2	Provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible *(see Official Plan policy 4.3.12)*	☑

		TDM-supportive design & infrastructure measures: *Non-residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
REQUIRED	1.2.3	Provide sidewalks of smooth, well-drained walking surfaces of contrasting materials or treatments to differentiate pedestrian areas from vehicle areas, and provide marked pedestrian crosswalks at intersection sidewalks *(see Official Plan policy 4.3.10)*	☑
REQUIRED	1.2.4	Make sidewalks and open space areas easily accessible through features such as gradual grade transition, depressed curbs at street corners and convenient access to extra-wide parking spaces and ramps *(see Official Plan policy 4.3.10)*	☑
REQUIRED	1.2.5	Include adequately spaced inter-block/street cycling and pedestrian connections to facilitate travel by active transportation. Provide links to the existing or planned network of public sidewalks, multi-use pathways and on-road cycle routes. Where public sidewalks and multi-use pathways intersect with roads, consider providing traffic control devices to give priority to cyclists and pedestrians *(see Official Plan policy 4.3.11)*	☑
BASIC	1.2.6	Provide safe, direct and attractive walking routes from building entrances to nearby transit stops	☑
BASIC	1.2.7	Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible	☐
BASIC	1.2.8	Design roads used for access or circulation by cyclists using a target operating speed of no more than 30 km/h, or provide a separated cycling facility	☐
	1.3	**Amenities for walking & cycling**	
BASIC	1.3.1	Provide lighting, landscaping and benches along walking and cycling routes between building entrances and streets, sidewalks and trails	☐
BASIC	1.3.2	Provide wayfinding signage for site access (where required, e.g. when multiple buildings or entrances exist) and egress (where warranted, such as when directions to reach transit stops/stations, trails or other common destinations are not obvious)	☐

		TDM-supportive design & infrastructure measures: *Non-residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	2.	**WALKING & CYCLING: END-OF-TRIP FACILITIES**	
	2.1	**Bicycle parking**	
REQUIRED	2.1.1	Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible *(see Official Plan policy 4.3.6)*	☑
REQUIRED	2.1.2	Provide the number of bicycle parking spaces specified for various land uses in different parts of Ottawa; provide convenient access to main entrances or well-used areas *(see Zoning By-law Section 111)*	☑
REQUIRED	2.1.3	Ensure that bicycle parking spaces and access aisles meet minimum dimensions; that no more than 50% of spaces are vertical spaces; and that parking racks are securely anchored *(see Zoning By-law Section 111)*	☑
BASIC	2.1.4	Provide bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met), plus the expected peak number of customer/visitor cyclists	☑
BETTER	2.1.5	Provide bicycle parking spaces equivalent to the expected number of commuter and customer/visitor cyclists, plus an additional buffer (e.g. 25 percent extra) to encourage other cyclists and ensure adequate capacity in peak cycling season	☐
	2.2	**Secure bicycle parking**	
REQUIRED	2.2.1	Where more than 50 bicycle parking spaces are provided for a single office building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers *(see Zoning By-law Section 111)*	☐
BETTER	2.2.2	Provide secure bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met)	☐
	2.3	**Shower & change facilities**	
BASIC	2.3.1	Provide shower and change facilities for the use of active commuters	☐
BETTER	2.3.2	In addition to shower and change facilities, provide dedicated lockers, grooming stations, drying racks and laundry facilities for the use of active commuters	☐
	2.4	**Bicycle repair station**	
BETTER	2.4.1	Provide a permanent bike repair station, with commonly used tools and an air pump, adjacent to the main bicycle parking area (or secure bicycle parking area, if provided)	☐

	TDM-supportive design & infrastructure measures: *Non-residential developments*		Check if completed & add descriptions, explanations or plan/drawing references
	3.	**TRANSIT**	
	3.1	**Customer amenities**	
BASIC	3.1.1	Provide shelters, lighting and benches at any on-site transit stops	☐
BASIC	3.1.2	Where the site abuts an off-site transit stop and insufficient space exists for a transit shelter in the public right-of-way, protect land for a shelter and/or install a shelter	☐
BETTER	3.1.3	Provide a secure and comfortable interior waiting area by integrating any on-site transit stops into the building	☐
	4.	**RIDESHARING**	
	4.1	**Pick-up & drop-off facilities**	
BASIC	4.1.1	Provide a designated area for carpool drivers (plus taxis and ride-hailing services) to drop off or pick up passengers without using fire lanes or other no-stopping zones	☐
	4.2	**Carpool parking**	
BASIC	4.2.1	Provide signed parking spaces for carpools in a priority location close to a major building entrance, sufficient in number to accommodate the mode share target for carpools	☐
BETTER	4.2.2	At large developments, provide spaces for carpools in a separate, access-controlled parking area to simplify enforcement	☐
	5.	**CARSHARING & BIKESHARING**	
	5.1	**Carshare parking spaces**	
BETTER	5.1.1	Provide carshare parking spaces in permitted non-residential zones, occupying either required or provided parking spaces *(see Zoning By-law Section 94)*	☐
	5.2	**Bikeshare station location**	
BETTER	5.2.1	Provide a designated bikeshare station area near a major building entrance, preferably lighted and sheltered with a direct walkway connection	☐

		TDM-supportive design & infrastructure measures: *Non-residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	6.	**PARKING**	
	6.1	**Number of parking spaces**	
REQUIRED	6.1.1	Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for	☑
BASIC	6.1.2	Provide parking for long-term and short-term users that is consistent with mode share targets, considering the potential for visitors to use off-site public parking	☐
BASIC	6.1.3	Where a site features more than one use, provide shared parking and reduce the cumulative number of parking spaces accordingly *(see Zoning By-law Section 104)*	☐
BETTER	6.1.4	Reduce the minimum number of parking spaces required by zoning by one space for each 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other facilities for cyclists in conjunction with bicycle parking *(see Zoning By-law Section 111)*	☐
	6.2	**Separate long-term & short-term parking areas**	
BETTER	6.2.1	Separate short-term and long-term parking areas using signage or physical barriers, to permit access controls and simplify enforcement (i.e. to discourage employees from parking in visitor spaces, and vice versa)	☐
	7.	**OTHER**	
	7.1	**On-site amenities to minimize off-site trips**	
BETTER	7.1.1	Provide on-site amenities to minimize mid-day or mid-commute errands	☐

TDM Measures Checklist:
Non-Residential Developments (office, institutional, retail or industrial)

Legend

BASIC — The measure is generally feasible and effective, and in most cases would benefit the development and its users

BETTER — The measure could maximize support for users of sustainable modes, and optimize development performance

★ — The measure is one of the most dependably effective tools to encourage the use of sustainable modes

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
	1.	**TDM PROGRAM MANAGEMENT**	
	1.1	**Program coordinator**	
BASIC ★	1.1.1	Designate an internal coordinator, or contract with an external coordinator	☑
	1.2	**Travel surveys**	
BETTER	1.2.1	Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress	☐
	2.	**WALKING AND CYCLING**	
	2.1	**Information on walking/cycling routes & destinations**	
BASIC	2.1.1	Display local area maps with walking/cycling access routes and key destinations at major entrances	☑
	2.2	**Bicycle skills training**	
		Commuter travel	
BETTER ★	2.2.1	Offer on-site cycling courses for commuters, or subsidize off-site courses	☐
	2.3	**Valet bike parking**	
		Visitor travel	
BETTER	2.3.1	Offer secure valet bike parking during public events when demand exceeds fixed supply (e.g. for festivals, concerts, games)	☐

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		3. TRANSIT	
		3.1 Transit information	
BASIC	3.1.1	Display relevant transit schedules and route maps at entrances	☐
BASIC	3.1.2	Provide online links to OC Transpo and STO information	☐
BETTER	3.1.3	Provide real-time arrival information display at entrances	☐
		3.2 Transit fare incentives	
		Commuter travel	
BETTER	3.2.1	Offer preloaded PRESTO cards to encourage commuters to use transit	☐
BETTER ★	3.2.2	Subsidize or reimburse monthly transit pass purchases by employees	☐
		Visitor travel	
BETTER	3.2.3	Arrange inclusion of same-day transit fare in price of tickets (e.g. for festivals, concerts, games)	☐
		3.3 Enhanced public transit service	
		Commuter travel	
BETTER	3.3.1	Contract with OC Transpo to provide enhanced transit services (e.g. for shift changes, weekends)	☐
		Visitor travel	
BETTER	3.3.2	Contract with OC Transpo to provide enhanced transit services (e.g. for festivals, concerts, games)	☐
		3.4 Private transit service	
		Commuter travel	
BETTER	3.4.1	Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for shift changes, weekends)	☐
		Visitor travel	
BETTER	3.4.2	Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for festivals, concerts, games)	☐

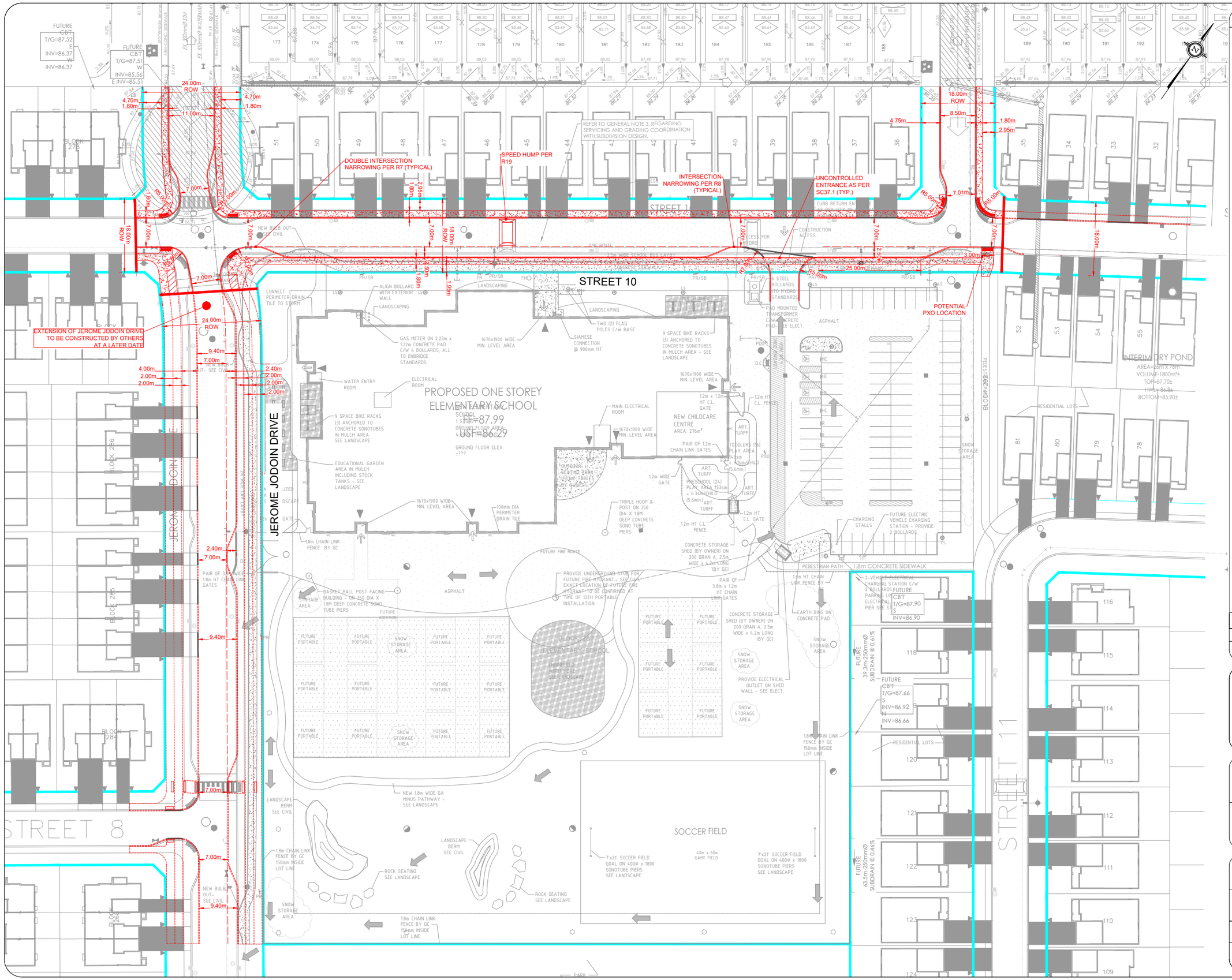
		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		4. RIDESHARING	
		4.1 Ridematching service	
		Commuter travel	
BASIC	★ 4.1.1	Provide a dedicated ridematching portal at OttawaRideMatch.com	☐
		4.2 Carpool parking price incentives	
		Commuter travel	
BETTER	4.2.1	Provide discounts on parking costs for registered carpools	☐
		4.3 Vanpool service	
		Commuter travel	
BETTER	4.3.1	Provide a vanpooling service for long-distance commuters	☐
		5. CARSHARING & BIKESHARING	
		5.1 Bikeshare stations & memberships	
BETTER	5.1.1	Contract with provider to install on-site bikeshare station for use by commuters and visitors	☐
		Commuter travel	
BETTER	5.1.2	Provide employees with bikeshare memberships for local business travel	☐
		5.2 Carshare vehicles & memberships	
		Commuter travel	
BETTER	5.2.1	Contract with provider to install on-site carshare vehicles and promote their use by tenants	☐
BETTER	5.2.2	Provide employees with carshare memberships for local business travel	☐
		6. PARKING	
		6.1 Priced parking	
		Commuter travel	
BASIC	★ 6.1.1	Charge for long-term parking (daily, weekly, monthly)	☐
BASIC	6.1.2	Unbundle parking cost from lease rates at multi-tenant sites	☐
		Visitor travel	
BETTER	6.1.3	Charge for short-term parking (hourly)	☐

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		7. TDM MARKETING & COMMUNICATIONS	
		7.1 Multimodal travel information	
		Commuter travel	
BASIC	★	7.1.1 Provide a multimodal travel option information package to new/relocating employees and students	☑
		Visitor travel	
BETTER	★	7.1.2 Include multimodal travel option information in invitations or advertising that attract visitors or customers (e.g. for festivals, concerts, games)	☐
		7.2 Personalized trip planning	
		Commuter travel	
BETTER	★	7.2.1 Offer personalized trip planning to new/relocating employees	☐
		7.3 Promotions	
		Commuter travel	
BETTER		7.3.1 Deliver promotions and incentives to maintain awareness, build understanding, and encourage trial of sustainable modes	☐
		8. OTHER INCENTIVES & AMENITIES	
		8.1 Emergency ride home	
		Commuter travel	
BETTER	★	8.1.1 Provide emergency ride home service to non-driving commuters	☐
		8.2 Alternative work arrangements	
		Commuter travel	
BASIC	★	8.2.1 Encourage flexible work hours	☐
BETTER		8.2.2 Encourage compressed workweeks	☐
BETTER	★	8.2.3 Encourage telework	☐
		8.3 Local business travel options	
		Commuter travel	
BASIC	★	8.3.1 Provide local business travel options that minimize the need for employees to bring a personal car to work	☐
		8.4 Commuter incentives	
		Commuter travel	
BETTER		8.4.1 Offer employees a taxable, mode-neutral commuting allowance	☐
		8.5 On-site amenities	
		Commuter travel	
BETTER		8.5.1 Provide on-site amenities/services to minimize mid-day or mid-commute errands	☐

Appendix F

Conceptual Traffic Calming Plan

CGH TRANSPORTATION



Notes:

LEGEND:

- CONCRETE SIDEWALK
- TACTILE WALKING SURFACE INDICATOR
- 2.00m ASPHALT CYCLE TRACK
- DEPRESSED CURB
- PROPERTY LINES

NOTES:

1. THIS TRAFFIC CALMING CONCEPT IS SUBJECT TO SERVICING AND ILLUSTRATES THE PHILOSOPHY OF THE 30KM/H TRAFFIC CALMING GUIDELINES.

REV:	DESCRIPTION:	BY:	DATE:
01	Issued to Client:	EA	2026-03-18

STATUS:

CGH Transportation
6 Plaza Court
Ottawa, ON
K2H 7W1
(343) 999-9117

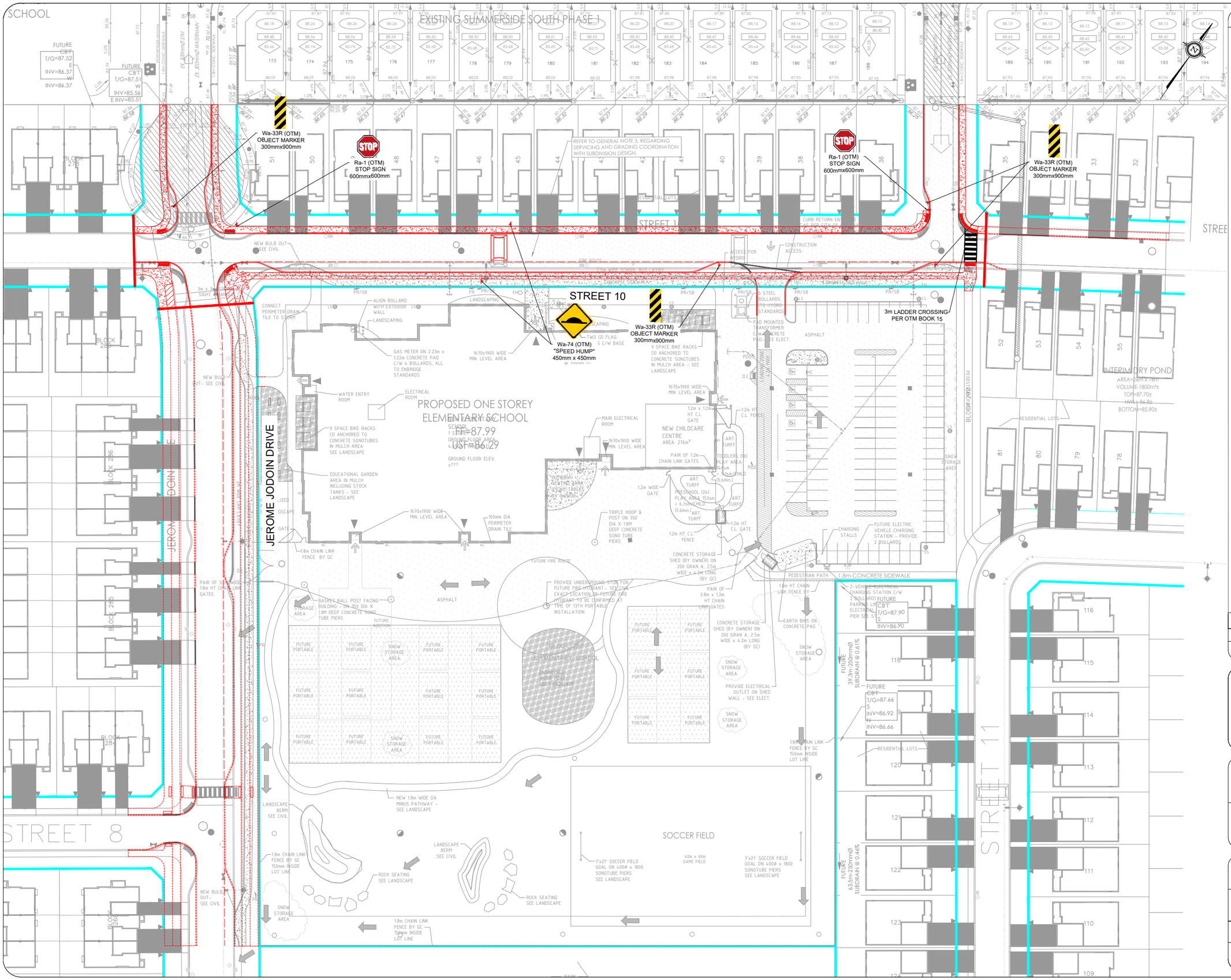
CLIENT: Ottawa Catholic School Board

ARCHITECT:

SITE: Jerome Jodoin Drive and Street 10

TITLE: GRDD Redlines

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2026-03-18	EA	AH
PROJECT NO: 2025-211	DRAWING NO: 001		REVISION: 01



Notes:

LEGEND:

- CONCRETE SIDEWALK
- TACTILE WALKING SURFACE INDICATOR
- 2.00m ASPHALT CYCLE TRACK
- DEPRESSED CURB
- PROPERTY LINES

NOTES:

1. ALL PAVEMENT MARKING AND SIGNAGE TO BE INSTALLED PER OTM GUIDANCE.

REV:	DESCRIPTION:	BY:	DATE:
01	Issued to Client:	EA	2026-03-18

STATUS:

CGH Transportation
6 Plaza Court
Ottawa, ON
K2H 7W1
(343) 999-9117

CLIENT: Ottawa Catholic School Board

ARCHITECT:

SITE: Jerome Jodoin Drive and Street 10

TITLE: GRDD Redlines and Signage

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2026-03-18	EA	AH

PROJECT NO:	DRAWING NO:	REVISION:
2025-211	002	01

Appendix G

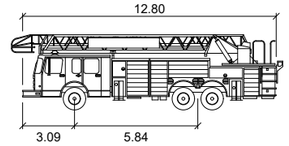
Turning Templates

CGH TRANSPORTATION

Notes:

LEGEND:

- CONCRETE SIDEWALK
- TACTILE WALKING SURFACE INDICATOR
- 2.00m ASPHALT CYCLE TRACK
- DEPRESSED CURB
- PROPERTY LINES



Aerial Fire

	meters
Width	: 2.54
Track	: 2.54
Lock to Lock Time	: 6.0
Steering Angle	: 37.0

REV:	DESCRIPTION:	BY:	DATE:
01	Issued to Client:	EA	2026-03-18

STATUS:

CGH Transportation
6 Plaza Court
Ottawa, ON
K2H 7W1
(343) 999-9117

CLIENT: Ottawa Catholic School Board

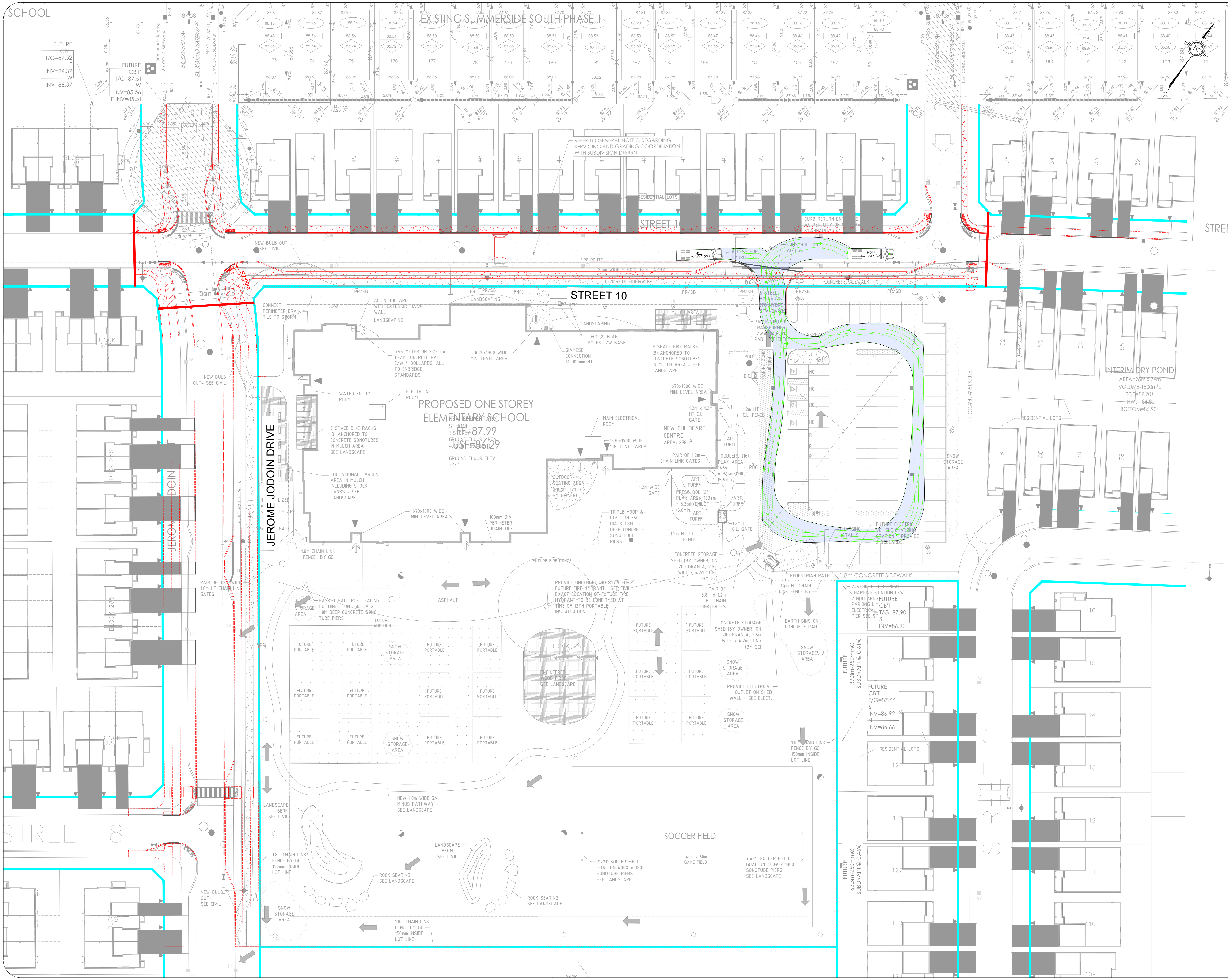
ARCHITECT:

SITE: Jerome Jodoin Drive and Street 10

TITLE: Fire Truck Movement Analysis

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2026-03-18	EA	AH

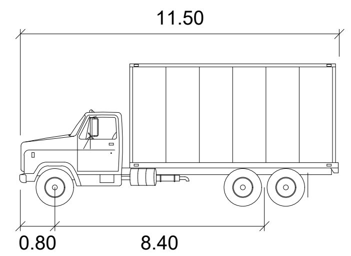
PROJECT NO:	DRAWING NO:	REVISION:
2025-211	001	01



Notes:

LEGEND:

- CONCRETE SIDEWALK
- TACTILE WALKING SURFACE INDICATOR
- 2.00m ASPHALT CYCLE TRACK
- DEPRESSED CURB
- PROPERTY LINES



HSU

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

REV:	DESCRIPTION:	BY:	DATE:
01	Issued to Client:	EA	2026-03-18

STATUS:

CGH Transportation
6 Plaza Court
Ottawa, ON
K2H 7W1
(343) 999-9117

CLIENT: Ottawa Catholic School Board

ARCHITECT:

SITE: Jerome Jodoin Drive and Street 10

TITLE: HSU Movement Analysis

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2026-03-18	EA	AH

PROJECT NO:	DRAWING NO:	REVISION:
2025-211	002	01

Appendix H

MMLOS Analysis

CGH TRANSPORTATION

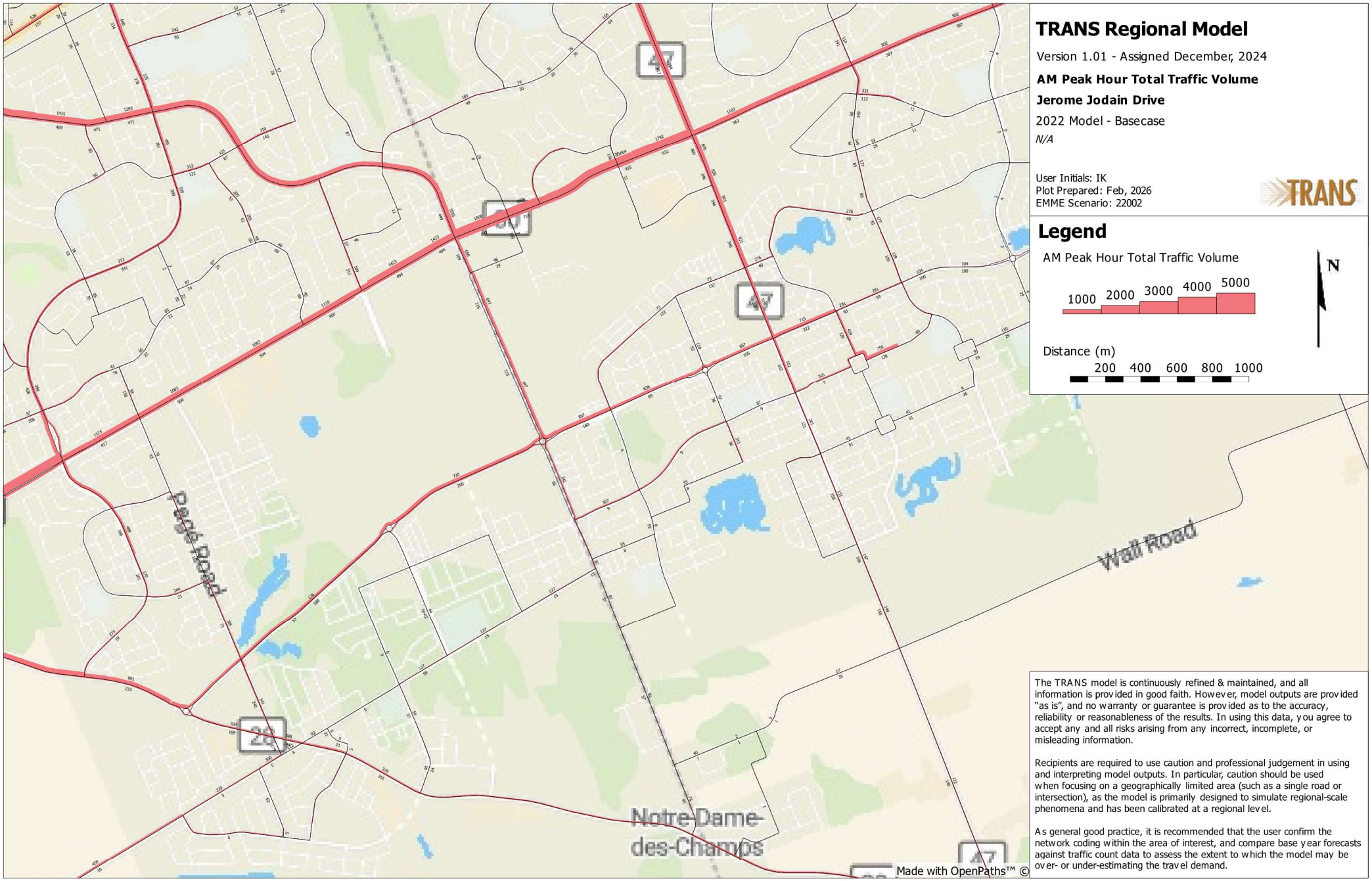
Multi-Modal Level of Service - Segments Form

Project: Mer Bleue Elementary School
Consultant: CGH Transportation Inc.
Date: 2026-03-17
Scenario: Future

		Segment Name	Jerome Jodoin		Street 10	
		OP Transect / Policy Area	Within 300m of school		Within 300m of school	
		Segment Component	Majority (>50%)		Majority (>50%)	
		Side of Street	W		S	
Pedestrian		PLOS Inputs				
		Posted Speed (km/h)	50 km/h		40 km/h	
		Two-Way ADT	3,000		2,800	
		Pedestrian Facility	Sidewalk		Sidewalk	
		Does the facility meet the TMP Sidewalk or MUP Policy? If not, for MUPs, does the location have a low volume of peak daily users AND are pedestrian volumes likely less than 20% of total users?	Yes		Yes	
		Facility Width (m)	2.00m		1.80m	
		Offset from Motor Vehicle Travel Lanes (m)	≥ 3.0m		1.5-2.99m	
		Presence of Adjacent Parking?	Yes		-	
		General Purpose Curb Lane ADT	≤ 3000		≤ 3000	
		Max. Distance between Controlled Crossings (m)	> 400m		≤ 200m	
		Score	3.75	-	-	5.00
		PLOS	B	-	-	A
		Target PLOS	B		B	
Bicycle		BLOS Inputs				
		Cycling Route Classification	Elsewhere		Elsewhere	
		Cycling Facility	Cycle Track	Input PLOS First	Input PLOS First	Shared Operating Space
		Is the minimum level of separation provided according to OTM Book 18 Pre-Selection Nomograph - Rural Context (Figure 5.6)? (for paved shoulders)	-			-
		Facility Operation	Unidirectional			-
		Pedestrian/Cyclist Volume	-			-
		Facility Width	1.8m-2.09m			-
		Boulevard/Buffer Width (excluding curb)	≥ 1.0m			-
		Unsignalized Roadway Crossing Type (where cyclists are required to yield)	None			Cross-Street
		Number of Travel Lanes at Crossing	-			≤ 2
		Crossing includes Median Refuge (≥ 2.7m)	-			No
		Cross-street Posted Speed (km/h)	-			50 km/h
		Cycling Path Blockages (e.g. bus stops and/or loading zones)	-			Rare
		Score	4.50	-	-	3.30
		BLOS	A	-	-	C
		Target BLOS	C		C	
Transit		TLOS Inputs				
		Transit Facility	Select Transit Designation		Select Transit Designation	
		Facility Type				
		Expected Transit Running Time				
		Transit Travel Speed (if available)				
		TLOS	-	-	-	-
		Target TLOS	-		-	
Public Realm		PRLOS Inputs				
		Context	Other Streets	Input PLOS and BLOS First	Input PLOS and BLOS First	Other Streets
		Inner Boulevard Width	2.0-3.99m			2.0-3.99m
		Middle Boulevard Width	≤ 0.5m			≤ 0.5m
		Outer Boulevard (Frontage) Width	≤ 0.5m			1.5-1.99m
		Transit Route on Segment?	No			No
		Bus Stop Elements	-			-
		Number of Midblock Traffic Lanes (both travel directions)	≤ 2		≤ 2	
		Score	22.20	-	-	23.10
		PRLOS	B	-	-	B
			B		B	

Appendix I

TRANS Model



TRANS Regional Model

Version 1.01 - Assigned December, 2024

AM Peak Hour Total Traffic Volume

Jerome Jodain Drive

2022 Model - Basecase

N/A

User Initials: IK
Plot Prepared: Feb, 2026
EMME Scenario: 22002

TRANS

Legend

AM Peak Hour Total Traffic Volume

1000 2000 3000 4000 5000

N

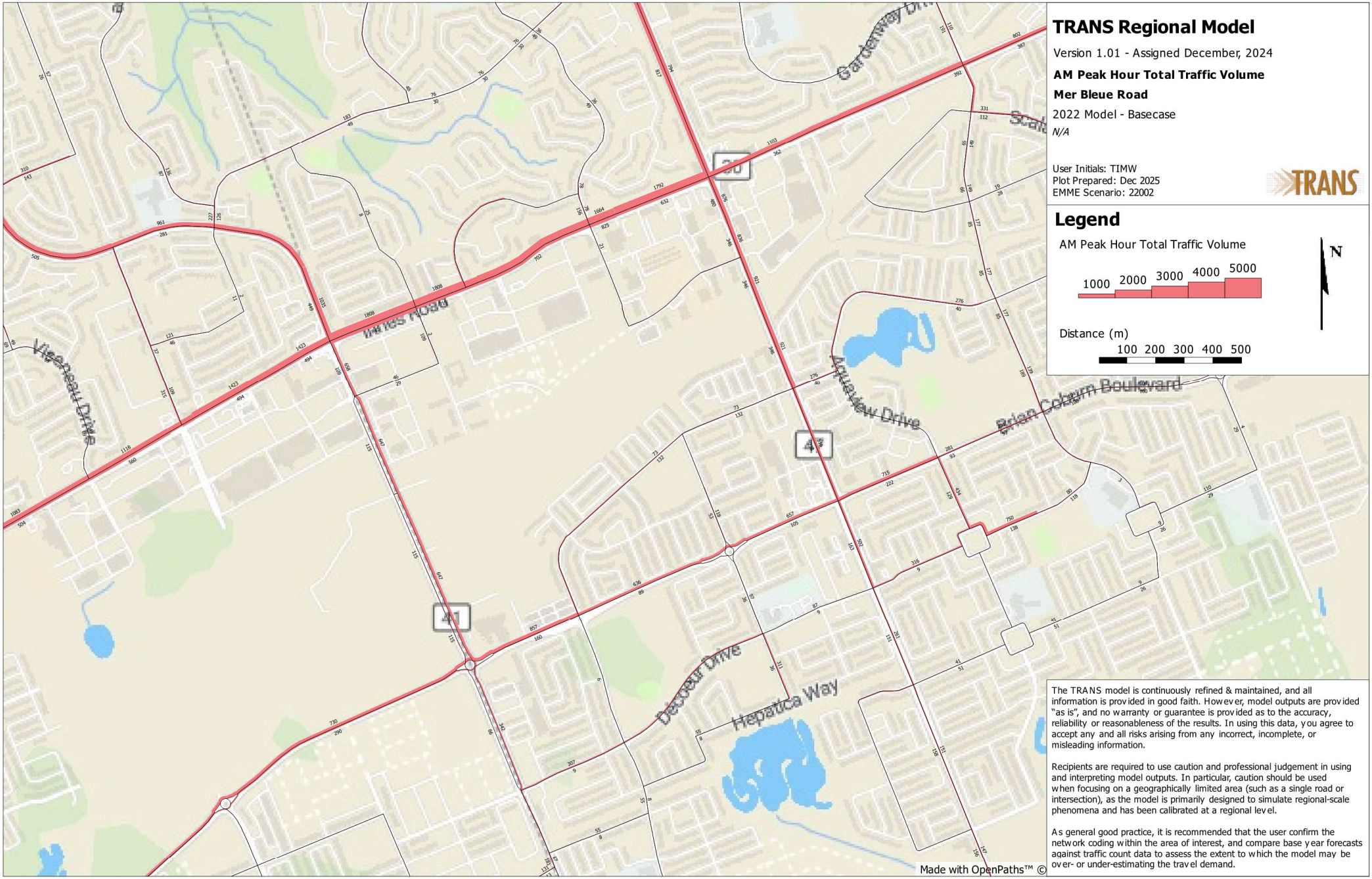
Distance (m)

200 400 600 800 1000

The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.



TRANS Regional Model

Version 1.01 - Assigned December, 2024

AM Peak Hour Total Traffic Volume

Mer Bleue Road

2022 Model - Basecase

N/A

User Initials: TIMW
Plot Prepared: Dec 2025
EMME Scenario: 22002

TRANS

Legend

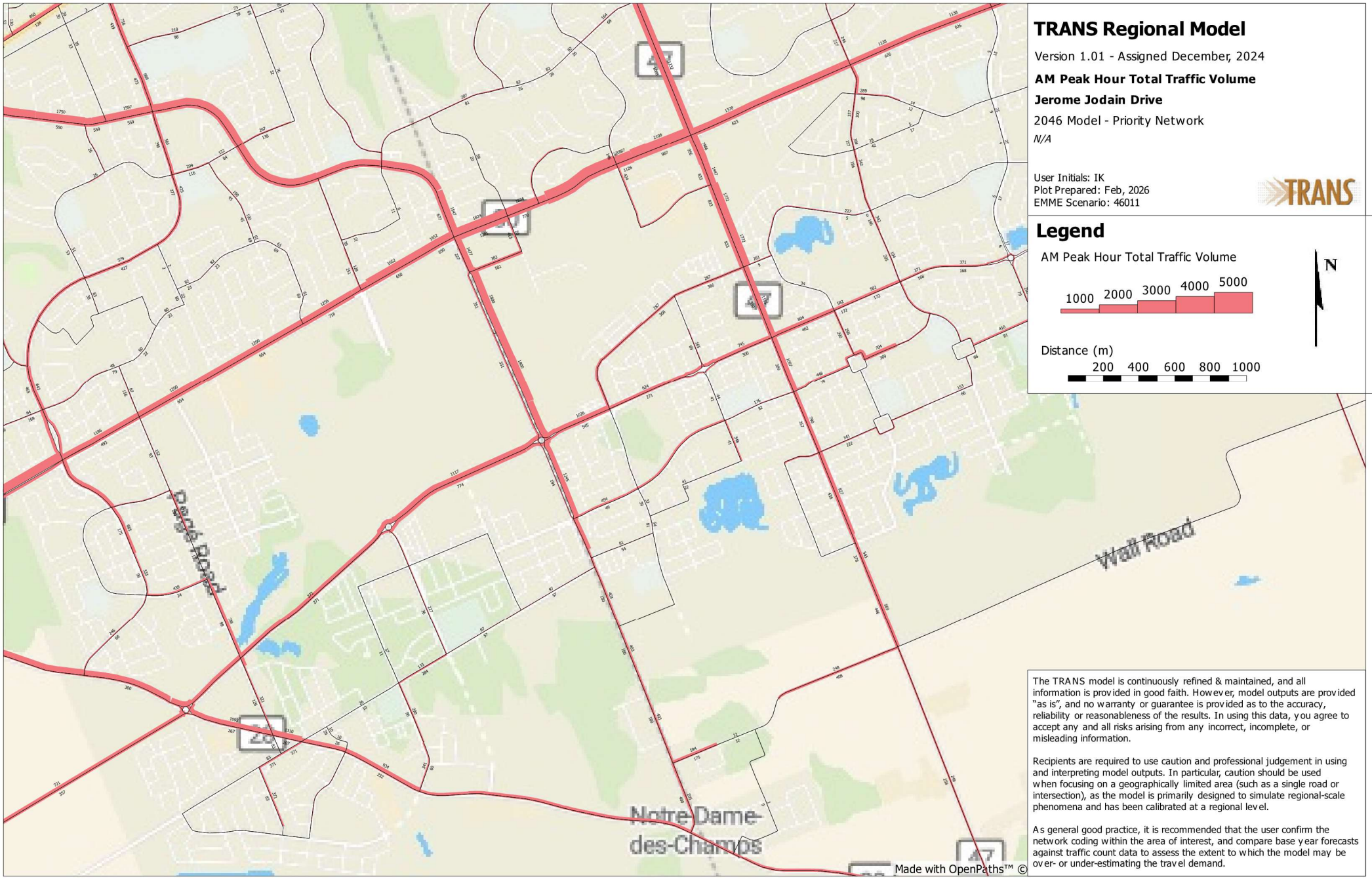
AM Peak Hour Total Traffic Volume

1000 2000 3000 4000 5000

Distance (m)

100 200 300 400 500

N



TRANS Regional Model

Version 1.01 - Assigned December, 2024

AM Peak Hour Total Traffic Volume

Jerome Jodain Drive

2046 Model - Priority Network

N/A

User Initials: IK
Plot Prepared: Feb, 2026
EMME Scenario: 46011

Legend

AM Peak Hour Total Traffic Volume

1000 2000 3000 4000 5000

N

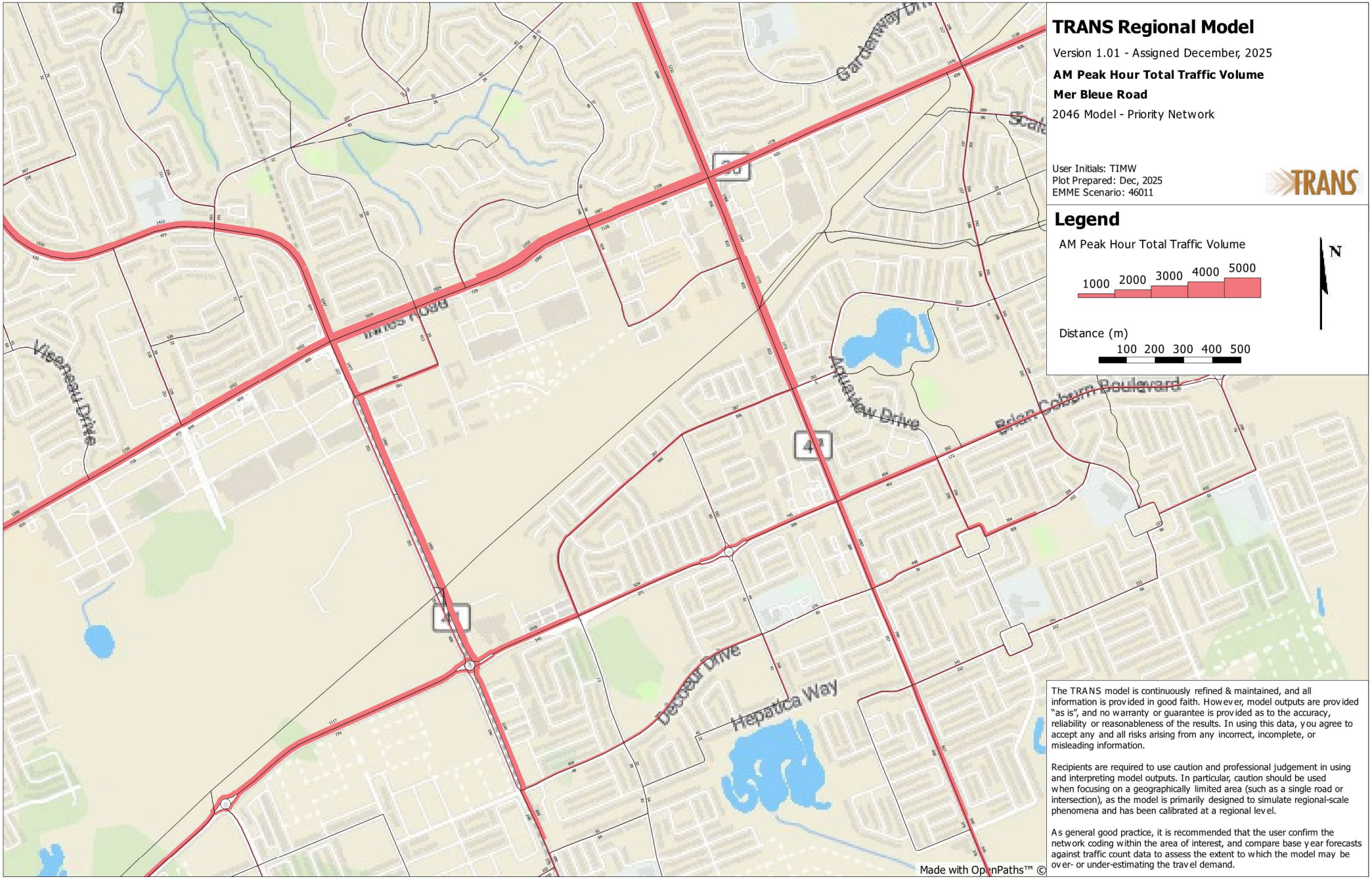
Distance (m)

200 400 600 800 1000

The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.



TRANS Regional Model

Version 1.01 - Assigned December, 2025

AM Peak Hour Total Traffic Volume

Mer Bleue Road

2046 Model - Priority Network

User Initials: TIMW
Plot Prepared: Dec, 2025
EMME Scenario: 46011

TRANS

Legend

AM Peak Hour Total Traffic Volume

1000 2000 3000 4000 5000

N

Distance (m)

100 200 300 400 500

The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

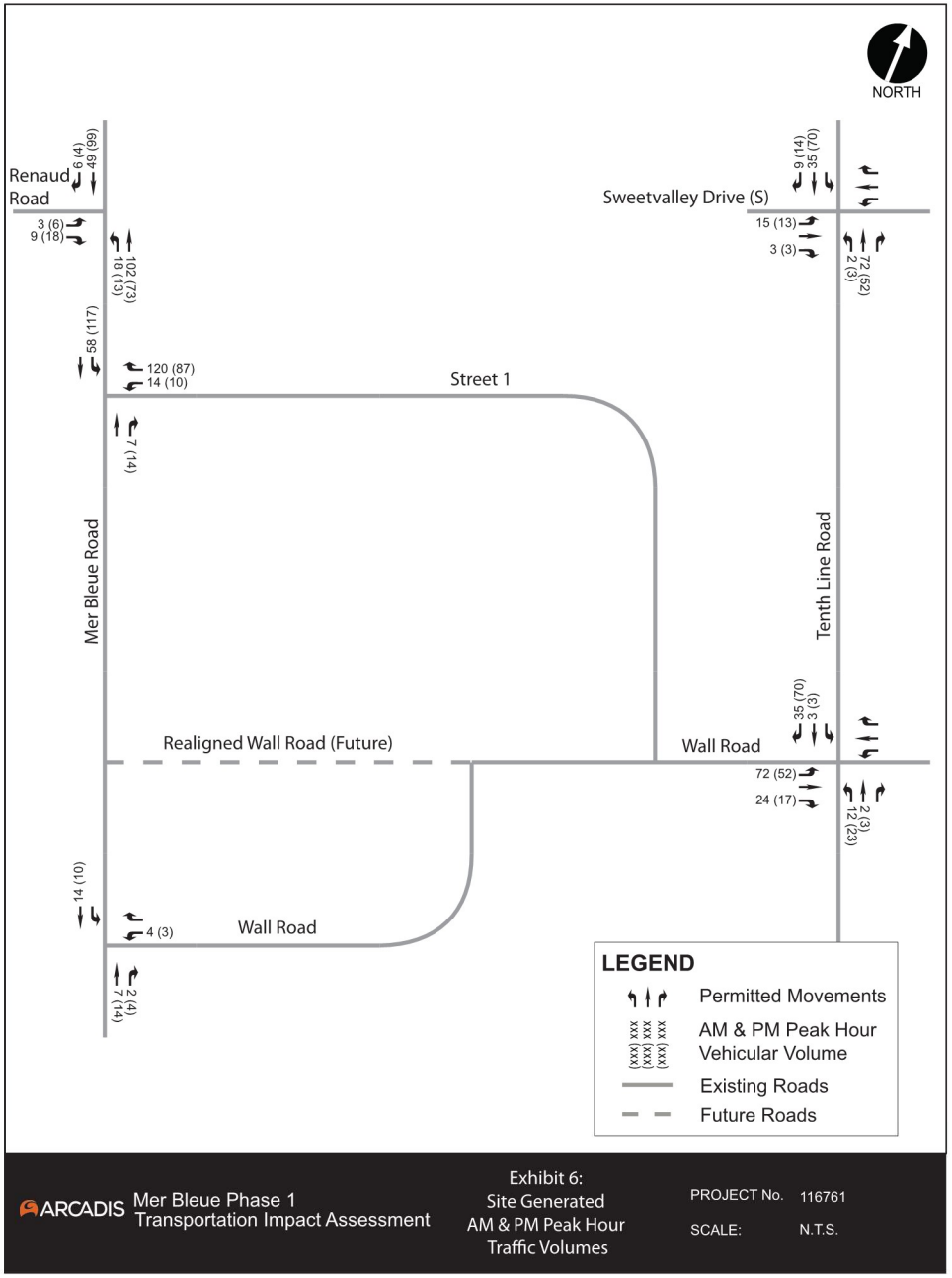
As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.

Appendix J

Background Development

CGH TRANSPORTATION

2503, 2559 Mer Bleue Road and 2666 Tenth Line Road



2666 Tenth Line Road

Figure 14: Site Generated Traffic Volumes

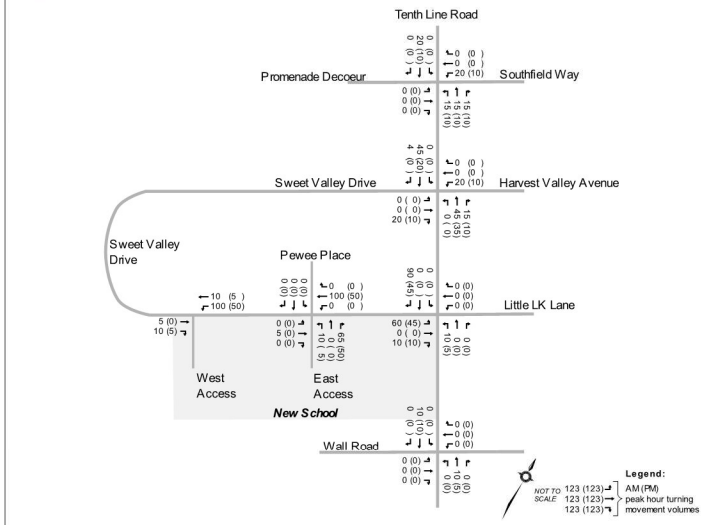
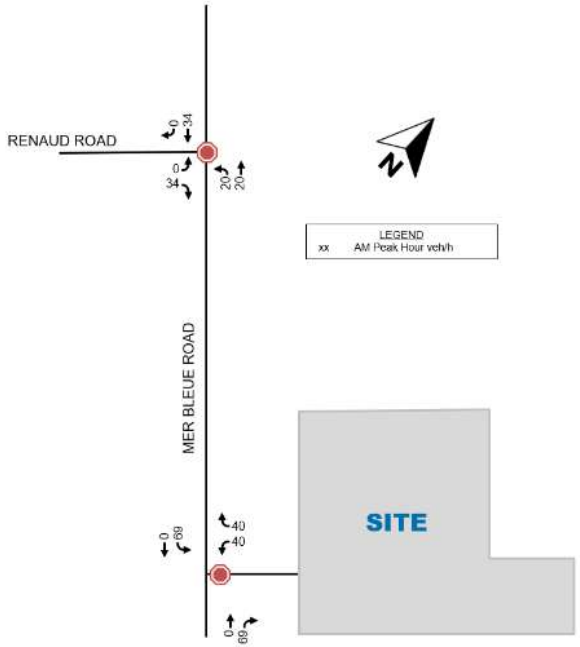


Figure 17: 'New' Projected Site-Generated Traffic



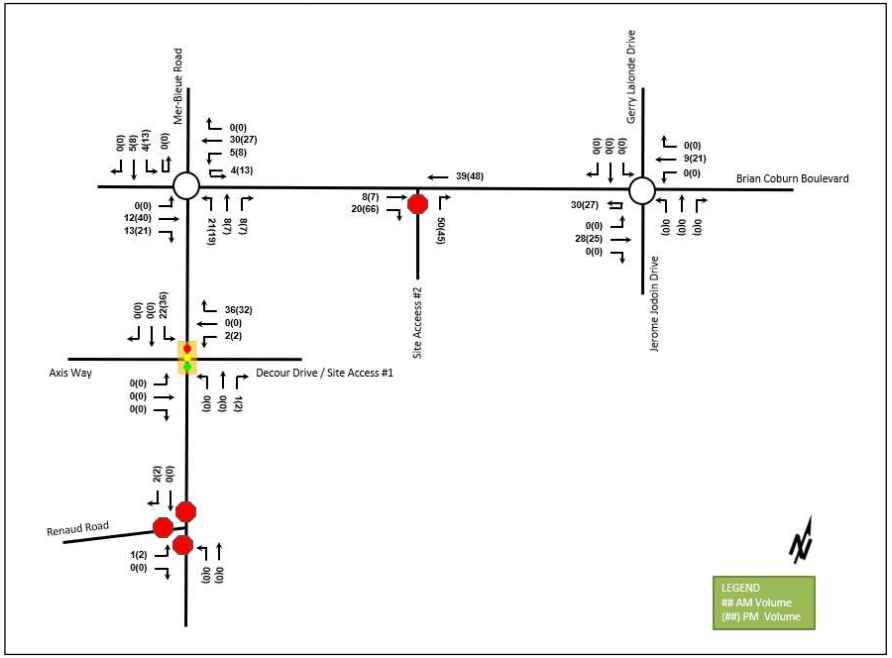
3.2 Exemptions Review

Given the size and nature of the proposed subject development site, **Table 7** outlines which elements identified in the 2023 Transportation Impact Assessment Guidelines that can be exempt from this analysis and that which is required in the Final Strategy Report.

5.3 Trip Assignment

Using the distribution outlined above, turning movement splits, and access to major transportation infrastructure, the trips generated by the site have been assigned to the Study Area road network. Figure 23 illustrates the new site generated volumes.

Figure 23: New Site Generated Auto Volumes



Appendix K

Synchro and Sidra Worksheets – 2027 Future Background Conditions

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive FB 2027 AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	31	6.0	31	6.0	0.107	4.7	LOS A	0.4	2.8	0.25	0.13	0.25	47.0
2	T1	All MCs	35	6.0	35	6.0	0.107	4.7	LOS A	0.4	2.8	0.25	0.13	0.25	44.9
3	R2	All MCs	37	5.0	37	5.0	0.107	4.6	LOS A	0.4	2.8	0.25	0.13	0.25	47.6
Approach			103	5.6	103	5.6	0.107	4.7	LOS A	0.4	2.8	0.25	0.13	0.25	46.5
East: Decoeur Drive															
4	L2	All MCs	56	4.0	56	4.0	0.347	6.9	LOS A	1.7	12.1	0.25	0.11	0.25	46.4
5	T1	All MCs	289	2.0	289	2.0	0.347	6.8	LOS A	1.7	12.1	0.25	0.11	0.25	50.6
6	R2	All MCs	11	18.0	11	18.0	0.347	7.6	LOS A	1.7	12.1	0.25	0.11	0.25	46.7
Approach			356	2.8	356	2.8	0.347	6.9	LOS A	1.7	12.1	0.25	0.11	0.25	49.7
North: Jerome Jodoin Drive															
7	L2	All MCs	19	5.0	19	5.0	0.141	6.4	LOS A	0.5	3.6	0.45	0.35	0.45	46.5
8	T1	All MCs	36	3.0	36	3.0	0.141	6.2	LOS A	0.5	3.6	0.45	0.35	0.45	44.3
9	R2	All MCs	51	2.0	51	2.0	0.141	6.2	LOS A	0.5	3.6	0.45	0.35	0.45	47.1
Approach			106	2.9	106	2.9	0.141	6.2	LOS A	0.5	3.6	0.45	0.35	0.45	46.0
West: Decoeur Drive															
10	L2	All MCs	10	2.0	10	2.0	0.112	4.5	LOS A	0.4	2.9	0.24	0.12	0.24	47.9
11	T1	All MCs	94	3.0	94	3.0	0.112	4.6	LOS A	0.4	2.9	0.24	0.12	0.24	52.4
12	R2	All MCs	6	33.0	6	33.0	0.112	6.0	LOS A	0.4	2.9	0.24	0.12	0.24	48.2
Approach			110	4.5	110	4.5	0.112	4.6	LOS A	0.4	2.9	0.24	0.12	0.24	51.7
All Vehicles			675	3.5	675	3.5	0.347	6.1	LOS A	1.7	12.1	0.28	0.15	0.28	48.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive FB 2027 PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	14	2.0	14	2.0	0.125	5.4	LOS A	0.4	3.2	0.38	0.27	0.38	47.0
2	T1	All MCs	32	13.0	32	13.0	0.125	6.1	LOS A	0.4	3.2	0.38	0.27	0.38	44.7
3	R2	All MCs	57	2.0	57	2.0	0.125	5.4	LOS A	0.4	3.2	0.38	0.27	0.38	47.5
Approach			103	5.4	103	5.4	0.125	5.6	LOS A	0.4	3.2	0.38	0.27	0.38	46.6
East: Decoeur Drive															
4	L2	All MCs	47	2.0	47	2.0	0.196	5.1	LOS A	0.8	5.7	0.18	0.07	0.18	47.2
5	T1	All MCs	142	2.0	142	2.0	0.196	5.1	LOS A	0.8	5.7	0.18	0.07	0.18	51.5
6	R2	All MCs	17	2.0	17	2.0	0.196	5.1	LOS A	0.8	5.7	0.18	0.07	0.18	47.6
Approach			206	2.0	206	2.0	0.196	5.1	LOS A	0.8	5.7	0.18	0.07	0.18	50.1
North: Jerome Jodoin Drive															
7	L2	All MCs	19	11.0	19	11.0	0.101	5.3	LOS A	0.4	2.6	0.32	0.20	0.32	47.1
8	T1	All MCs	47	2.0	47	2.0	0.101	4.8	LOS A	0.4	2.6	0.32	0.20	0.32	45.1
9	R2	All MCs	24	4.0	24	4.0	0.101	4.9	LOS A	0.4	2.6	0.32	0.20	0.32	47.8
Approach			90	4.4	90	4.4	0.101	5.0	LOS A	0.4	2.6	0.32	0.20	0.32	46.2
West: Decoeur Drive															
10	L2	All MCs	13	2.0	13	2.0	0.273	6.2	LOS A	1.2	8.5	0.29	0.14	0.29	47.1
11	T1	All MCs	243	2.0	243	2.0	0.273	6.2	LOS A	1.2	8.5	0.29	0.14	0.29	51.4
12	R2	All MCs	15	7.0	15	7.0	0.273	6.5	LOS A	1.2	8.5	0.29	0.14	0.29	47.5
Approach			271	2.3	271	2.3	0.273	6.3	LOS A	1.2	8.5	0.29	0.14	0.29	51.0
All Vehicles			670	3.0	670	3.0	0.273	5.6	LOS A	1.2	8.5	0.27	0.15	0.27	49.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	95	71	424	19	16	333
Future Vol, veh/h	95	71	424	19	16	333
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	6	16	2	8
Mvmt Flow	95	71	424	19	16	333

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	799	434	0	0	443	0
Stage 1	434	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.218	-
Pot Cap-1 Maneuver	353	620	-	-	1117	-
Stage 1	651	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	348	620	-	-	1117	-
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	651	-	-	-	-	-
Stage 2	690	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.6	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	428	1117	-
HCM Lane V/C Ratio	-	-	0.388	0.014	-
HCM Control Delay (s)	-	-	18.6	8.3	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.8	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	42	594	42	51	332
Future Vol, veh/h	30	42	594	42	51	332
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	2	2	2	2	3
Mvmt Flow	30	42	594	42	51	332

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1049	615	0	0	636	0
Stage 1	615	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	251	491	-	-	947	-
Stage 1	537	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	237	491	-	-	947	-
Mov Cap-2 Maneuver	237	-	-	-	-	-
Stage 1	537	-	-	-	-	-
Stage 2	616	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.5	0	1.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	339	947	-
HCM Lane V/C Ratio	-	-	0.212	0.054	-
HCM Control Delay (s)	-	-	18.5	9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0.2	-

Appendix L

Synchro and Sidra Worksheets – 2032 Future Background Conditions

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive FB 2032 AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	31	6.0	31	6.0	0.107	4.7	LOS A	0.4	2.8	0.25	0.13	0.25	47.0
2	T1	All MCs	35	6.0	35	6.0	0.107	4.7	LOS A	0.4	2.8	0.25	0.13	0.25	44.9
3	R2	All MCs	37	5.0	37	5.0	0.107	4.6	LOS A	0.4	2.8	0.25	0.13	0.25	47.6
Approach			103	5.6	103	5.6	0.107	4.7	LOS A	0.4	2.8	0.25	0.13	0.25	46.5
East: Decoeur Drive															
4	L2	All MCs	56	4.0	56	4.0	0.364	7.2	LOS A	1.8	13.0	0.26	0.11	0.26	46.3
5	T1	All MCs	307	2.0	307	2.0	0.364	7.1	LOS A	1.8	13.0	0.26	0.11	0.26	50.4
6	R2	All MCs	11	18.0	11	18.0	0.364	7.9	LOS A	1.8	13.0	0.26	0.11	0.26	46.6
Approach			374	2.8	374	2.8	0.364	7.1	LOS A	1.8	13.0	0.26	0.11	0.26	49.7
North: Jerome Jodoin Drive															
7	L2	All MCs	19	5.0	19	5.0	0.143	6.6	LOS A	0.5	3.6	0.46	0.36	0.46	46.4
8	T1	All MCs	36	3.0	36	3.0	0.143	6.4	LOS A	0.5	3.6	0.46	0.36	0.46	44.3
9	R2	All MCs	51	2.0	51	2.0	0.143	6.3	LOS A	0.5	3.6	0.46	0.36	0.46	47.0
Approach			106	2.9	106	2.9	0.143	6.4	LOS A	0.5	3.6	0.46	0.36	0.46	45.9
West: Decoeur Drive															
10	L2	All MCs	10	2.0	10	2.0	0.112	4.5	LOS A	0.4	2.9	0.24	0.12	0.24	47.9
11	T1	All MCs	94	3.0	94	3.0	0.112	4.6	LOS A	0.4	2.9	0.24	0.12	0.24	52.4
12	R2	All MCs	6	33.0	6	33.0	0.112	6.0	LOS A	0.4	2.9	0.24	0.12	0.24	48.2
Approach			110	4.5	110	4.5	0.112	4.6	LOS A	0.4	2.9	0.24	0.12	0.24	51.7
All Vehicles			693	3.5	693	3.5	0.364	6.2	LOS A	1.8	13.0	0.29	0.15	0.29	48.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive FB 2032 PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	14	2.0	14	2.0	0.127	5.5	LOS A	0.4	3.3	0.40	0.28	0.40	47.0
2	T1	All MCs	32	13.0	32	13.0	0.127	6.2	LOS A	0.4	3.3	0.40	0.28	0.40	44.7
3	R2	All MCs	57	2.0	57	2.0	0.127	5.5	LOS A	0.4	3.3	0.40	0.28	0.40	47.5
Approach			103	5.4	103	5.4	0.127	5.7	LOS A	0.4	3.3	0.40	0.28	0.40	46.5
East: Decoeur Drive															
4	L2	All MCs	47	2.0	47	2.0	0.196	5.1	LOS A	0.8	5.7	0.18	0.07	0.18	47.2
5	T1	All MCs	142	2.0	142	2.0	0.196	5.1	LOS A	0.8	5.7	0.18	0.07	0.18	51.5
6	R2	All MCs	17	2.0	17	2.0	0.196	5.1	LOS A	0.8	5.7	0.18	0.07	0.18	47.6
Approach			206	2.0	206	2.0	0.196	5.1	LOS A	0.8	5.7	0.18	0.07	0.18	50.1
North: Jerome Jodoin Drive															
7	L2	All MCs	19	11.0	19	11.0	0.101	5.3	LOS A	0.4	2.6	0.32	0.20	0.32	47.1
8	T1	All MCs	47	2.0	47	2.0	0.101	4.8	LOS A	0.4	2.6	0.32	0.20	0.32	45.1
9	R2	All MCs	24	4.0	24	4.0	0.101	4.9	LOS A	0.4	2.6	0.32	0.20	0.32	47.8
Approach			90	4.4	90	4.4	0.101	5.0	LOS A	0.4	2.6	0.32	0.20	0.32	46.2
West: Decoeur Drive															
10	L2	All MCs	13	2.0	13	2.0	0.290	6.4	LOS A	1.3	9.2	0.29	0.15	0.29	47.0
11	T1	All MCs	259	2.0	259	2.0	0.290	6.4	LOS A	1.3	9.2	0.29	0.15	0.29	51.3
12	R2	All MCs	15	7.0	15	7.0	0.290	6.7	LOS A	1.3	9.2	0.29	0.15	0.29	47.4
Approach			287	2.3	287	2.3	0.290	6.4	LOS A	1.3	9.2	0.29	0.15	0.29	50.9
All Vehicles			686	2.9	686	2.9	0.290	5.7	LOS A	1.3	9.2	0.28	0.15	0.28	49.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	95	71	516	19	16	368
Future Vol, veh/h	95	71	516	19	16	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	6	16	2	8
Mvmt Flow	95	71	516	19	16	368

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	926	526	0	0	535	0
Stage 1	526	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.218	-
Pot Cap-1 Maneuver	297	550	-	-	1033	-
Stage 1	591	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	293	550	-	-	1033	-
Mov Cap-2 Maneuver	293	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.7	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	366	1033	-
HCM Lane V/C Ratio	-	-	0.454	0.015	-
HCM Control Delay (s)	-	-	22.7	8.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	2.3	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	42	642	42	51	415
Future Vol, veh/h	30	42	642	42	51	415
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	2	2	2	2	3
Mvmt Flow	30	42	642	42	51	415

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1180	663	0	0	684	0
Stage 1	663	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	209	461	-	-	909	-
Stage 1	511	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	197	461	-	-	909	-
Mov Cap-2 Maneuver	197	-	-	-	-	-
Stage 1	511	-	-	-	-	-
Stage 2	563	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	296	909	-
HCM Lane V/C Ratio	-	-	0.243	0.056	-
HCM Control Delay (s)	-	-	21	9.2	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.9	0.2	-

Appendix M

Synchro and Sidra Worksheets – 2027 Future Total Conditions

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive FT 2027 AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	60	6.0	60	6.0	0.186	5.5	LOS A	0.7	5.3	0.27	0.14	0.27	46.5
2	T1	All MCs	64	6.0	64	6.0	0.186	5.5	LOS A	0.7	5.3	0.27	0.14	0.27	44.4
3	R2	All MCs	55	5.0	55	5.0	0.186	5.4	LOS A	0.7	5.3	0.27	0.14	0.27	47.0
Approach			179	5.7	179	5.7	0.186	5.5	LOS A	0.7	5.3	0.27	0.14	0.27	45.9
East: Decoeur Drive															
4	L2	All MCs	81	4.0	81	4.0	0.395	8.0	LOS A	2.0	14.1	0.36	0.20	0.36	45.6
5	T1	All MCs	289	2.0	289	2.0	0.395	7.9	LOS A	2.0	14.1	0.36	0.20	0.36	49.6
6	R2	All MCs	11	18.0	11	18.0	0.395	8.8	LOS A	2.0	14.1	0.36	0.20	0.36	45.9
Approach			381	2.9	381	2.9	0.395	8.0	LOS A	2.0	14.1	0.36	0.20	0.36	48.6
North: Jerome Jodoin Drive															
7	L2	All MCs	19	5.0	19	5.0	0.207	7.6	LOS A	0.8	5.4	0.50	0.41	0.50	46.1
8	T1	All MCs	77	3.0	77	3.0	0.207	7.4	LOS A	0.8	5.4	0.50	0.41	0.50	44.0
9	R2	All MCs	51	2.0	51	2.0	0.207	7.3	LOS A	0.8	5.4	0.50	0.41	0.50	46.6
Approach			147	2.9	147	2.9	0.207	7.4	LOS A	0.8	5.4	0.50	0.41	0.50	45.1
West: Decoeur Drive															
10	L2	All MCs	10	2.0	10	2.0	0.173	5.3	LOS A	0.6	4.8	0.32	0.19	0.32	47.2
11	T1	All MCs	94	3.0	94	3.0	0.173	5.3	LOS A	0.6	4.8	0.32	0.19	0.32	51.5
12	R2	All MCs	47	33.0	47	33.0	0.173	7.0	LOS A	0.6	4.8	0.32	0.19	0.32	47.5
Approach			151	12.3	151	12.3	0.173	5.8	LOS A	0.6	4.8	0.32	0.19	0.32	49.9
All Vehicles			858	5.1	858	5.1	0.395	7.0	LOS A	2.0	14.1	0.36	0.22	0.36	47.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive FT 2027 PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	36	2.0	36	2.0	0.195	6.1	LOS A	0.7	5.3	0.41	0.29	0.41	46.3
2	T1	All MCs	54	13.0	54	13.0	0.195	6.9	LOS A	0.7	5.3	0.41	0.29	0.41	44.1
3	R2	All MCs	70	2.0	70	2.0	0.195	6.1	LOS A	0.7	5.3	0.41	0.29	0.41	46.8
Approach			160	5.7	160	5.7	0.195	6.4	LOS A	0.7	5.3	0.41	0.29	0.41	45.7
East: Decoeur Drive															
4	L2	All MCs	53	2.0	53	2.0	0.212	5.5	LOS A	0.9	6.1	0.26	0.13	0.26	46.9
5	T1	All MCs	142	2.0	142	2.0	0.212	5.5	LOS A	0.9	6.1	0.26	0.13	0.26	51.1
6	R2	All MCs	17	2.0	17	2.0	0.212	5.5	LOS A	0.9	6.1	0.26	0.13	0.26	47.3
Approach			212	2.0	212	2.0	0.212	5.5	LOS A	0.9	6.1	0.26	0.13	0.26	49.7
North: Jerome Jodoin Drive															
7	L2	All MCs	19	11.0	19	11.0	0.115	5.6	LOS A	0.4	3.0	0.35	0.23	0.35	47.0
8	T1	All MCs	57	2.0	57	2.0	0.115	5.1	LOS A	0.4	3.0	0.35	0.23	0.35	45.0
9	R2	All MCs	24	4.0	24	4.0	0.115	5.2	LOS A	0.4	3.0	0.35	0.23	0.35	47.7
Approach			100	4.2	100	4.2	0.115	5.2	LOS A	0.4	3.0	0.35	0.23	0.35	46.0
West: Decoeur Drive															
10	L2	All MCs	13	2.0	13	2.0	0.288	6.5	LOS A	1.3	9.1	0.31	0.16	0.31	46.9
11	T1	All MCs	243	2.0	243	2.0	0.288	6.5	LOS A	1.3	9.1	0.31	0.16	0.31	51.2
12	R2	All MCs	25	7.0	25	7.0	0.288	6.8	LOS A	1.3	9.1	0.31	0.16	0.31	47.3
Approach			281	2.4	281	2.4	0.288	6.5	LOS A	1.3	9.1	0.31	0.16	0.31	50.6
All Vehicles			753	3.2	753	3.2	0.288	6.1	LOS A	1.3	9.1	0.32	0.19	0.32	48.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Intersection	
Int Delay, s/veh	5.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	113	94	424	44	49	333
Future Vol, veh/h	113	94	424	44	49	333
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	6	16	2	8
Mvmt Flow	113	94	424	44	49	333

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	877	446	0	0	468	0
Stage 1	446	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.218	-
Pot Cap-1 Maneuver	318	610	-	-	1094	-
Stage 1	643	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	304	610	-	-	1094	-
Mov Cap-2 Maneuver	304	-	-	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	624	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.8	0	1.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	394	1094	-
HCM Lane V/C Ratio	-	-	0.525	0.045	-
HCM Control Delay (s)	-	-	23.8	8.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	2.9	0.1	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	164	0	0	117	0
Future Vol, veh/h	0	164	0	0	117	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	164	0	0	117	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	164	0	83	82
Stage 1	-	-	-	-	82	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1414	-	919	978
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1414	-	919	978
Mov Cap-2 Maneuver	-	-	-	-	919	-
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	919	-	-	1414	-
HCM Lane V/C Ratio	0.127	-	-	-	-
HCM Control Delay (s)	9.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	59	594	48	59	332
Future Vol, veh/h	43	59	594	48	59	332
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	2	2	2	2	3
Mvmt Flow	43	59	594	48	59	332

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1068	618	0	0	642	0
Stage 1	618	-	-	-	-	-
Stage 2	450	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	244	489	-	-	943	-
Stage 1	536	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	229	489	-	-	943	-
Mov Cap-2 Maneuver	229	-	-	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	600	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.6	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	331	943	-
HCM Lane V/C Ratio	-	-	0.308	0.063	-
HCM Control Delay (s)	-	-	20.6	9.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.2	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	39	0	0	86	0
Future Vol, veh/h	0	39	0	0	86	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	39	0	0	86	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	39	0	21	20
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1571	-	996	1058
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1571	-	996	1058
Mov Cap-2 Maneuver	-	-	-	-	996	-
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	996	-	-	1571	-
HCM Lane V/C Ratio	0.086	-	-	-	-
HCM Control Delay (s)	9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Appendix N

Synchro and Sidra Worksheets – 2032 Future Total Conditions

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive FT 2032 AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	60	6.0	60	6.0	0.186	5.5	LOS A	0.7	5.3	0.27	0.14	0.27	46.5
2	T1	All MCs	64	6.0	64	6.0	0.186	5.5	LOS A	0.7	5.3	0.27	0.14	0.27	44.4
3	R2	All MCs	55	5.0	55	5.0	0.186	5.4	LOS A	0.7	5.3	0.27	0.14	0.27	47.0
Approach			179	5.7	179	5.7	0.186	5.5	LOS A	0.7	5.3	0.27	0.14	0.27	45.9
East: Decoeur Drive															
4	L2	All MCs	81	4.0	81	4.0	0.413	8.3	LOS A	2.1	15.2	0.37	0.20	0.37	45.5
5	T1	All MCs	307	2.0	307	2.0	0.413	8.2	LOS A	2.1	15.2	0.37	0.20	0.37	49.5
6	R2	All MCs	11	18.0	11	18.0	0.413	9.1	LOS A	2.1	15.2	0.37	0.20	0.37	45.8
Approach			399	2.8	399	2.8	0.413	8.2	LOS A	2.1	15.2	0.37	0.20	0.37	48.5
North: Jerome Jodoin Drive															
7	L2	All MCs	19	5.0	19	5.0	0.210	7.7	LOS A	0.8	5.5	0.51	0.42	0.51	46.0
8	T1	All MCs	77	3.0	77	3.0	0.210	7.5	LOS A	0.8	5.5	0.51	0.42	0.51	43.9
9	R2	All MCs	51	2.0	51	2.0	0.210	7.5	LOS A	0.8	5.5	0.51	0.42	0.51	46.5
Approach			147	2.9	147	2.9	0.210	7.5	LOS A	0.8	5.5	0.51	0.42	0.51	45.0
West: Decoeur Drive															
10	L2	All MCs	10	2.0	10	2.0	0.173	5.3	LOS A	0.6	4.8	0.32	0.19	0.32	47.2
11	T1	All MCs	94	3.0	94	3.0	0.173	5.3	LOS A	0.6	4.8	0.32	0.19	0.32	51.5
12	R2	All MCs	47	33.0	47	33.0	0.173	7.0	LOS A	0.6	4.8	0.32	0.19	0.32	47.5
Approach			151	12.3	151	12.3	0.173	5.8	LOS A	0.6	4.8	0.32	0.19	0.32	49.9
All Vehicles			876	5.1	876	5.1	0.413	7.1	LOS A	2.1	15.2	0.37	0.22	0.37	47.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [Jerome Jodoin Drive at Decoeur Drive FT 2032 PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Jerome Jodoin Drive															
1	L2	All MCs	36	2.0	36	2.0	0.198	6.3	LOS A	0.7	5.4	0.42	0.30	0.42	46.2
2	T1	All MCs	54	13.0	54	13.0	0.198	7.0	LOS A	0.7	5.4	0.42	0.30	0.42	44.0
3	R2	All MCs	70	2.0	70	2.0	0.198	6.3	LOS A	0.7	5.4	0.42	0.30	0.42	46.7
Approach			160	5.7	160	5.7	0.198	6.5	LOS A	0.7	5.4	0.42	0.30	0.42	45.7
East: Decoeur Drive															
4	L2	All MCs	53	2.0	53	2.0	0.212	5.5	LOS A	0.9	6.1	0.26	0.13	0.26	46.9
5	T1	All MCs	142	2.0	142	2.0	0.212	5.5	LOS A	0.9	6.1	0.26	0.13	0.26	51.1
6	R2	All MCs	17	2.0	17	2.0	0.212	5.5	LOS A	0.9	6.1	0.26	0.13	0.26	47.3
Approach			212	2.0	212	2.0	0.212	5.5	LOS A	0.9	6.1	0.26	0.13	0.26	49.7
North: Jerome Jodoin Drive															
7	L2	All MCs	19	11.0	19	11.0	0.115	5.6	LOS A	0.4	3.0	0.35	0.23	0.35	47.0
8	T1	All MCs	57	2.0	57	2.0	0.115	5.1	LOS A	0.4	3.0	0.35	0.23	0.35	45.0
9	R2	All MCs	24	4.0	24	4.0	0.115	5.2	LOS A	0.4	3.0	0.35	0.23	0.35	47.7
Approach			100	4.2	100	4.2	0.115	5.2	LOS A	0.4	3.0	0.35	0.23	0.35	46.0
West: Decoeur Drive															
10	L2	All MCs	13	2.0	13	2.0	0.305	6.7	LOS A	1.4	9.8	0.32	0.17	0.32	46.8
11	T1	All MCs	259	2.0	259	2.0	0.305	6.7	LOS A	1.4	9.8	0.32	0.17	0.32	51.1
12	R2	All MCs	25	7.0	25	7.0	0.305	7.0	LOS A	1.4	9.8	0.32	0.17	0.32	47.2
Approach			297	2.4	297	2.4	0.305	6.7	LOS A	1.4	9.8	0.32	0.17	0.32	50.5
All Vehicles			769	3.2	769	3.2	0.305	6.2	LOS A	1.4	9.8	0.33	0.19	0.33	48.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 2010 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	113	94	516	44	49	368
Future Vol, veh/h	113	94	516	44	49	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	6	16	2	8
Mvmt Flow	113	94	516	44	49	368

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1004	538	0	0	560	0
Stage 1	538	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.218	-
Pot Cap-1 Maneuver	267	541	-	-	1011	-
Stage 1	583	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	254	541	-	-	1011	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	583	-	-	-	-	-
Stage 2	600	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.7	0	1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	335	1011	-
HCM Lane V/C Ratio	-	-	0.618	0.048	-
HCM Control Delay (s)	-	-	31.7	8.7	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	3.9	0.2	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	164	0	0	117	0
Future Vol, veh/h	0	164	0	0	117	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	164	0	0	117	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	164	0	83	82
Stage 1	-	-	-	-	82	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1414	-	919	978
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1414	-	919	978
Mov Cap-2 Maneuver	-	-	-	-	919	-
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	919	-	-	1414	-
HCM Lane V/C Ratio	0.127	-	-	-	-
HCM Control Delay (s)	9.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	59	642	48	59	415
Future Vol, veh/h	43	59	642	48	59	415
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	45	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	2	2	2	2	3
Mvmt Flow	43	59	642	48	59	415

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1199	666	0	0	690	0
Stage 1	666	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	204	459	-	-	905	-
Stage 1	509	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	191	459	-	-	905	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	509	-	-	-	-	-
Stage 2	548	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.2	0	1.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	288	905	-
HCM Lane V/C Ratio	-	-	0.354	0.065	-
HCM Control Delay (s)	-	-	24.2	9.3	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.2	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	39	0	0	86	0
Future Vol, veh/h	0	39	0	0	86	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	39	0	0	86	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	39	0	21	20
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1571	-	996	1058
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1571	-	996	1058
Mov Cap-2 Maneuver	-	-	-	-	996	-
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	996	-	-	1571	-
HCM Lane V/C Ratio	0.086	-	-	-	-
HCM Control Delay (s)	9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-