

Appendix B

Town of Erin Traffic Operations Study

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Consulting Engineers

-30-

Traffic Operations Review

Existing and Future Traffic Operations Review | December 2025



TOWN OF ERIN

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1 Introduction and Background

As part of the Town of Erin's Transportation Master Plan Update, it was requested that a traffic operations assessment be undertaken for eleven (11) intersections within the Town. The following graphic (**Figure 1-1**) shows the location of each intersection, marked with a yellow circle and numbered according to the order they are addressed in the report; the northwest / southeast roads are considered north / south for the purposes of this report (which is consistent with the conventions used by the third-party traffic data collection team):

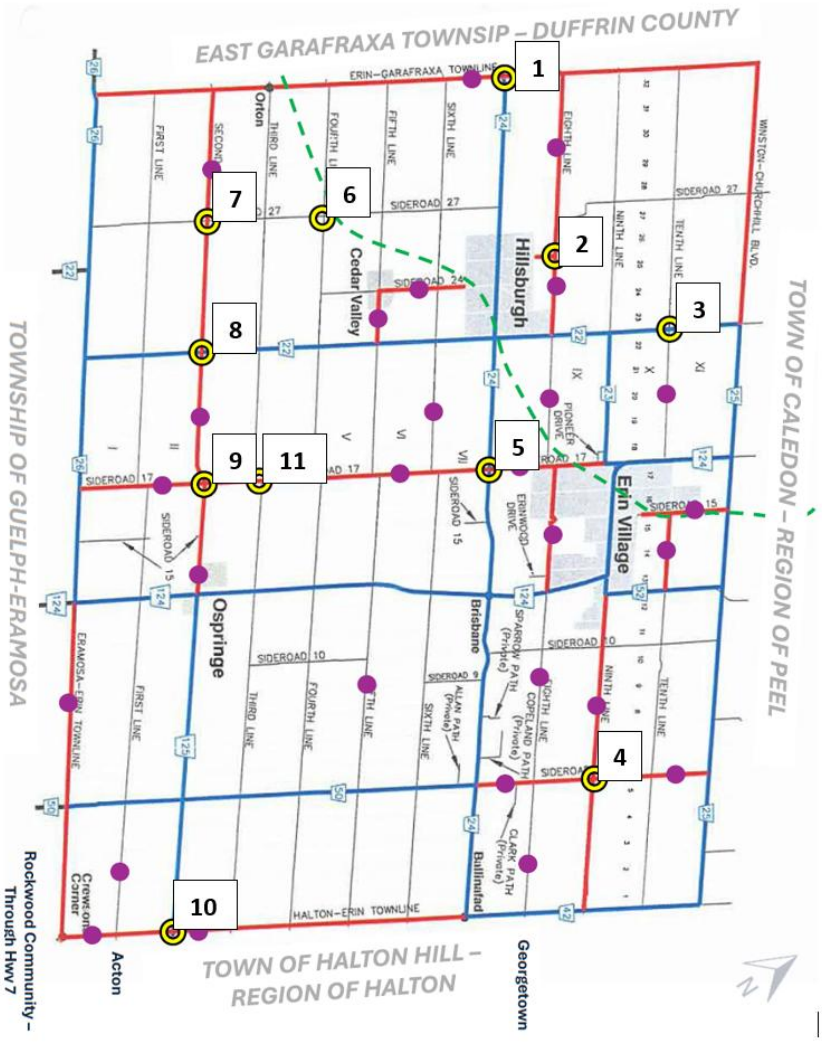


Figure 1-1: Town of Erin Intersection Locations

2 Traffic Data Collection

The purpose of this study is to examine existing intersection traffic conditions and to offer potential geometric and / or traffic control improvements that may mitigate adverse impacts to intersection operations and safety.

3 Methodology

The existing traffic data provided the basis for an industry-standard traffic operations analysis; the software package utilized for the analysis (Synchro 12) calculates various parameters of intersection performance, such as level of service (LOS), intersection capacity utilization (ICU), control delay, and queue lengths on individual approaches. The traffic modelling is based on the Highway Capacity Manual (7th Edition). Unsignalized level of service results are reported based on the following industry standard:

Level of Service	Average Control Delay (sec/veh)
A	0 - 10
B	>10 - 15
C	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

Signalized level of service results are based on the following industry standard:

Level of Service	Average Control Delay (sec/veh)	General Description (Signalized Intersections)
A	≤10	Free Flow
B	>10 - 20	Stable Flow (slight delays)
C	>20 - 35	Stable flow (acceptable delays)
D	>35 - 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 - 80	Unstable flow (intolerable delay)
F	>80	Forced flow (jammed)

4 Wellington Road 24 at Erin Garafraxa Townline

4.1 Wellington Road 24 At Erin Garafraxa Townline – Existing Conditions

The intersection of Wellington Road 24 (Trafalgar Road) at Erin Garafraxa Townline is stop-controlled on the eastbound and westbound approaches. Wellington Road 24 is an arterial road; Erin Garafraxa Townline is a collector road. The eastbound, westbound, and southbound approaches consist of a shared approach lane, while the northbound approach consists of a shared left-turn / through lane and a dedicated right-turn lane. There are vertical curves on the eastbound and westbound approaches and slight horizontal curves on the arterial road. Illumination is provided on the southwest corner; an overhead flashing amber / red beacon is also provided at the intersection.

Figure 4-1 exhibits the current AM and PM peak hour traffic volumes:

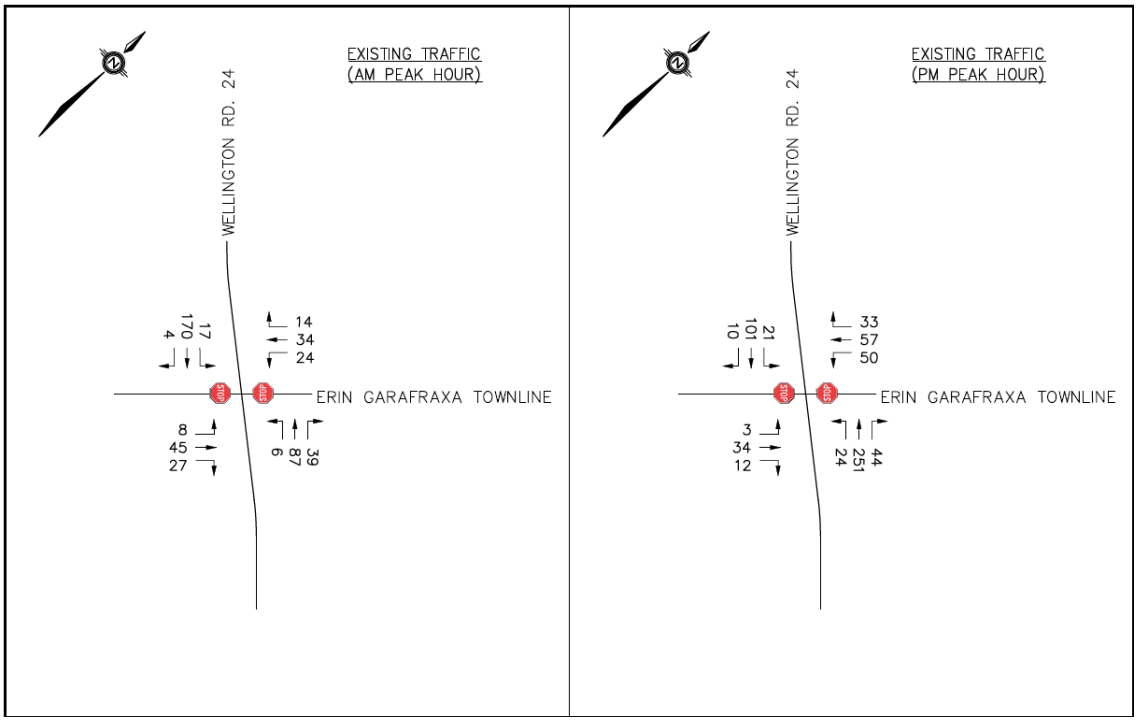


Figure 4-1: Wellington Road 24 at Erin Garafraxa Townline – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:30 a.m. and 8:30 a.m.; the PM peak hour occurred between 4:30 p.m. and 5:30 p.m. From the collected turning movement counts, it was also observed that the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 37.5% during the AM peak hour and between 0% and 14.3% during the PM peak hour. The detailed modelling outputs are reported in **Appendix A-1**.

The following **Table 4-1** provides a summary of the level of service for each intersection approach:

Table 4-1: Existing Level of Service by Approach – Wellington Road 24 at Erin Garafraxa Townline

Scenario	Wellington Road 24 at Erin Garafraxa Townline							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	B	B	A	A	B	C	A	A

As identified in the above table, the existing level of service for the critical westbound approach is reported to be a satisfactory LOS C in the PM peak hour, with a corresponding control delay of up to 15.9 seconds. The northbound and southbound approaches are currently operating at an excellent level of service, and sufficient gaps are provided within the main street traffic stream. The queue on the westbound approach never exceeds two vehicle lengths.

4.1.1 Potential Geometric and / or Traffic Control Improvements

Left-turn lane warrants (provided in **Appendix A-1**) were considered for the northbound and southbound approaches to the intersection; the speed limit on all approaches is 80 km/h, so a design speed of 100 km/h was applied. Based on the estimated turning movements in each scenario, although southbound left turns in the AM and PM peak hours are expected to be approximately 8.9%, and 15.9% of the southbound approach volumes, the traffic volumes fall below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane. The northbound left turns in the AM peak hour are expected to be less than the MTO's

minimum requirement of 5%, and the volumes in each peak hour fall below the minimum threshold. Left-turn lanes are not warranted.

Although a northbound right-turn lane and taper is provided, the highest volume of right turns (44), which occurs during the PM peak hour, indicates that this lane is not required.

An all-way stop condition was evaluated for this intersection. The north / south Wellington Road 24 is the "major street", and the stop-controlled east / west Erin Garafraxa Townline is the "minor street." The all-way stop control condition was reviewed with respect to the provincial warrants. According to Ontario Traffic Manual (OTM) Book 5 (December 2021), page 26, there are three conditions that must be met to warrant an all-way stop control on "Collector Roads and Rural Arterial Roads":

> The first condition states that the *"total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the busiest eight hours of the day."* A total of 3421 vehicles were observed over the busiest hours (see **Appendix A-1**). The traffic volumes per hour varied, with the lowest recorded hour being from 11:00 a.m. – 12:00 p.m.; during this hour, 286 vehicles approached the intersection. The highest recorded hour was from 4:00 – 5:00 p.m., which exhibited a total intersection volume of 598 vehicles. The collected traffic volumes exceeded 375 vehicles per hour in four of the busiest eight hours. Therefore, the first condition is not met.
>
> The second condition states that the *"combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period.*" Each of the same eight hours record between 75 and 183 vehicles per hour and a total count of 0 pedestrians on the minor street during these eight hours. The collected traffic volumes exceeded 150 vehicles and pedestrians

per hour on the minor street in three of the busiest eight hours. Therefore, the second condition is not met.

The third condition states that the *"volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible."* The 8-hour vehicle volumes totalled 3421; the east / west vehicle volumes totalled 1048, and the north / south volumes totalled 2373, so the split is approximately 69.4 (major street) / 30.6 (minor street). Therefore, the third condition is met.

Since all required volume conditions are not met for this intersection, it is the engineers' opinion that the intersection of Wellington Road 24 at Erin Garafraxa Townline is not a suitable candidate for implementation of an all-way stop control.

A further examination of the traffic signal control warrant was considered for the subject intersection. The warrants are provided in **Appendix A-1**. Justification 1 is 79% satisfied, while Justification 2 is 60% satisfied. Therefore, the intersection does not meet the warrants for signalization, and no further geometric and / or traffic control alternatives were explored.

4.2 Wellington Road 24 At Erin Garafraxa Townline – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix A-2**.

Figure 4-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

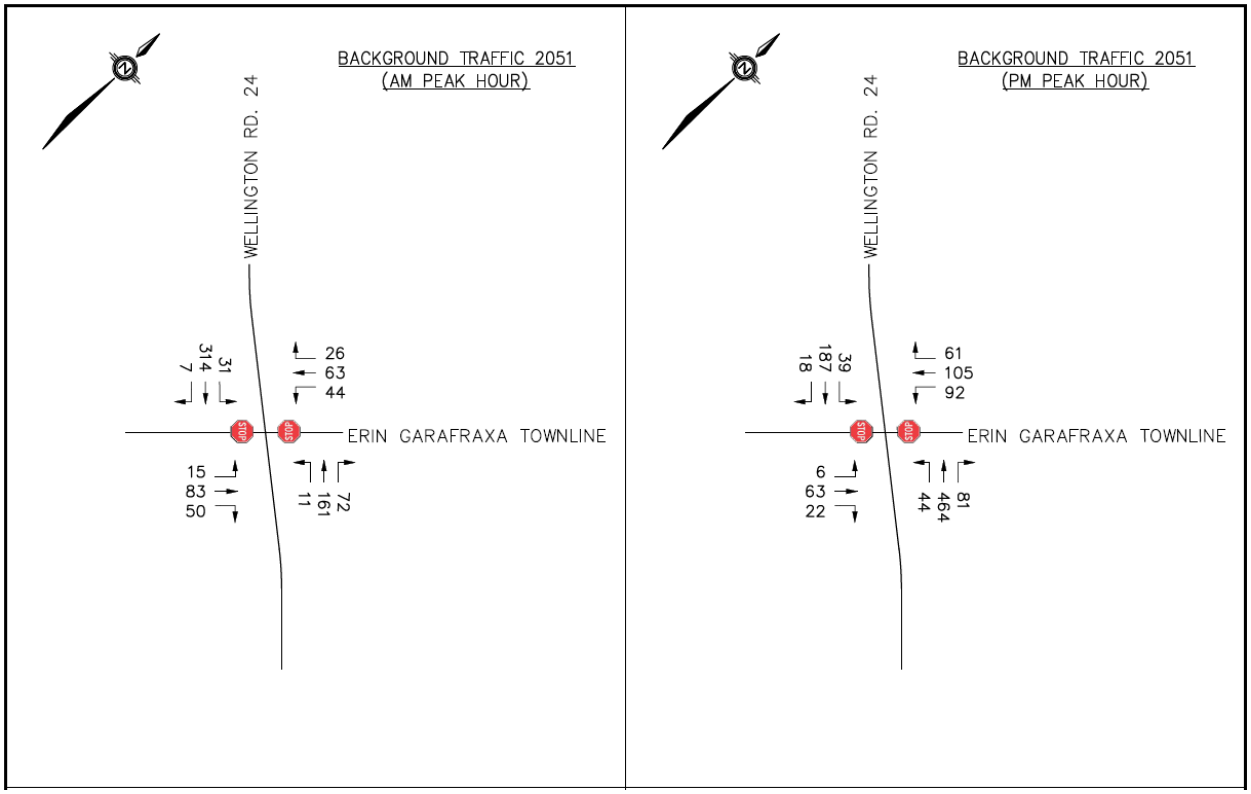


Figure 4-2: Wellington Road 24 at Erin Garafraxa Townline - Background Traffic 2051

Left-turn lane warrants (provided in **Appendix A-2**) were reconsidered for the northbound and southbound approaches to the intersection. Based on the estimated turning movements in each scenario, southbound left turns in the AM and PM peak hours are expected to be approximately 8.8% and 16.0% of the southbound approach volumes, respectively; therefore, due to the projected future traffic volumes, a southbound left-turn lane with a storage length of 15 m could be required. The northbound left turns in the AM peak hour are expected to be less than the MTO's minimum requirement of 5%; however, the 7.5% left turns and the PM peak hour volumes indicate that a northbound left-turn lane with a storage length of 15 m could also be required.

Although a northbound right-turn lane and taper is already provided, the highest volume of right turns (81), which occurs during the PM peak hour, indicates that this lane is still unwarranted.

The all-way stop condition warrant was also readdressed. The first condition could be met because the total volume approaching the intersection in each of the highest eight hours could exceed 375 vehicles. It is expected that the second condition will not be met because the total minor street volumes approaching the intersection could exceed 150 vehicles in just seven of the highest eight hours. Finally, it is expected that the third condition (which was the only condition met for the existing volumes) will still be met. Since all required volume conditions are not met for this intersection, the intersection of Wellington Road 24 at Erin Garafraxa Townline is not a suitable candidate for implementation of an all-way stop control by the 2051 horizon year.

A further examination of the traffic signal control warrant was considered for the subject intersection. The warrants for the 2051 horizon year are provided in **Appendix A-2**. Justification 7 is 57% satisfied relative to the "Combination Warrant." Therefore, the intersection does not meet the provincial warrants for future signalization.

Since the intersection only met the warrants for northbound and southbound left turn lanes, the future analysis was completed based on the future traffic volumes for each horizon year and the existing geometric and traffic control conditions. The detailed Synchro 12 results are provided in **Appendix A-2**. The summary of the levels of service are provided in the following **Table 4-2:**

Table 4-2: Level of Service by Approach – Wellington Road 24 at Erin Garafraxa Townline

Scenario	Control	Wellington Road 24 at Erin Garafraxa Townline							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	EB/WB SC	B	B	A	A	B	C	A	A
2031 Horizon Traffic	EB/WB SC	B	B	A	A	B	C	A	A
2041 Horizon Traffic	EB/WB SC	C	C	A	A	C	E	A	A
2051 Horizon Traffic	EB/WB SC	C	C	A	A	D	F	A	A

As identified in the summary table, by the 2051 horizon year, the level of service for the critical westbound approach is reported to be LOS F in the PM peak hour, with a corresponding control delay of up to 187.79 seconds. The queue on the westbound approach may exceed 14 vehicle lengths, but the northbound and southbound approaches continue to operate at an excellent level of service.

Since the future volumes indicate that a left-turn lane should be implemented, and given that the all-way stop-control warrant may be close to being met, it is recommended that the intersection be monitored in the 2041 horizon year to determine whether dedicated left-turn lanes or all-way stop-control should be implemented.

Of note, provincial best practices suggest that a dedicated left-turn lane should not be combined with an all-way stop control.

5 Eighth Line at Orangeville Street

5.1 Eighth Line at Orangeville Street – Existing Conditions

All approaches to this tee intersection consist of a shared approach lane. The intersection is stop-controlled on the eastbound approach. Eighth Line is a collector roadway. No illumination is provided at the intersection. The speed limit on all approaches is posted or assumed as 60 km/h.

5.1.1 Existing Intersection Performance

Figure 5-1 exhibits the current AM and PM peak hour traffic volumes:

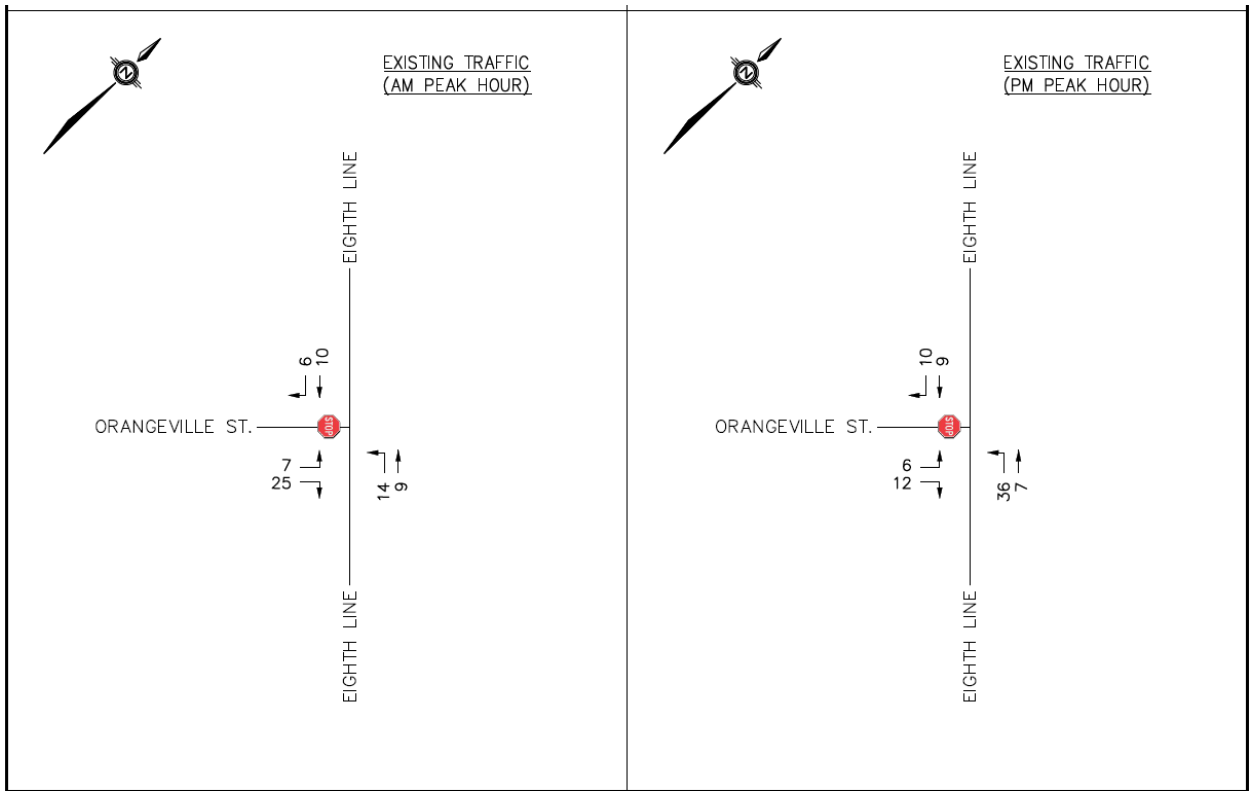


Figure 5-1: Eighth Line at Orangeville Street – Existing Traffic

The AM peak hour occurred between 8:00 a.m. and 9:00 a.m.; the PM peak hour occurred between 3:30 p.m. and 4:30 p.m. From the collected turning movement counts, it was also observed that the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 4.0% and 21.4% during the AM peak hour and between 0% and 28.6% during the PM peak hour. The detailed modelling outputs are reported in **Appendix B-1**.

The following **Table 5-1** provides a level of service summary for each intersection approach:

Table 5-1: Existing Level of Service by Approach – Eighth Line at Orangeville Street

Scenario	Eighth Line at Orangeville Street							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	A	-	A	A	A	-	A	A

As identified in the above table, the existing levels of service for all approaches are reported to be LOS A in the AM and PM peak hours, with a corresponding control delay of less than 10 seconds. Sufficient gaps are provided within the main street traffic stream; the queue on the eastbound approach never exceeds one vehicle length.

5.1.2 Potential Geometric and / or Traffic Control Improvements

Left-turn lane warrants (provided in **Appendix B-1.**) were considered for the northbound approach to the intersection; the speed limit on all approaches is 60 km/h, so a design speed of 80 km/h was applied. Based on the estimated turning movements in each scenario, although northbound left turns in the AM and PM peak hours are expected to be approximately 60.9%, and 83.7% of the northbound approach volumes, the traffic volumes fall far below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane. A northbound left-turn lane is not warranted.

An all-way stop condition was evaluated for this tee intersection. The north / south Eighth Line is the "major street," and the stop-controlled eastbound Orangeville Street is the "minor street." The all-way stop control condition was reviewed with respect to the provincial warrants. According to Ontario Traffic Manual (OTM) Book 5 (December 2021), page 26, there are three conditions that must be met to warrant an all-way stop control on "Collector Roads and Rural Arterial Roads":

> The first condition states that the *"total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day"*. Traffic volumes of 485 vehicles were observed over the

highest eight hours (see **Appendix B-1**). The traffic volumes per hour varied, with the lowest recorded hour being from 12:00 p.m. – 1:00 p.m.; during this hour, 40 vehicles approached the intersection. The highest recorded hour was from 4:00 – 5:00 p.m., which exhibited a total intersection volume of 73 vehicles. The collected traffic volumes exceeded 375 vehicles per hour in none of the highest eight hours. Therefore, the first condition is not met.

The second condition states that the *"combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period.*" Each of the same eight hours record between 12 and 36 vehicles per hour and a total count of 0 pedestrians on the minor street during these eight hours. The collected traffic volumes exceeded 150 vehicles and pedestrians per hour on the minor street in none of the highest eight hours. Therefore, the second condition is not met.

The third condition states that the *"volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible."* The 8-hour vehicle volumes totalled 485; the east / west vehicle volumes totalled 174, and the north / south volumes totalled 311, so the split is approximately 64.1 (major street) / 35.9 (minor street). Therefore, the third condition is met.

Since all required volume conditions are not met for this intersection, it is the engineers' opinion that the intersection of Eighth Line at Orangeville Street is not a suitable candidate for implementation of an all-way stop control.

A further examination of the traffic signal control warrant was considered for the subject intersection. The traffic volumes are very low; therefore, the intersection does not meet the warrants for signalization, and no further geometric and / or traffic control alternatives were explored.

5.2 Eighth Line at Orangeville Street – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix B-2**.

Figure 5-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

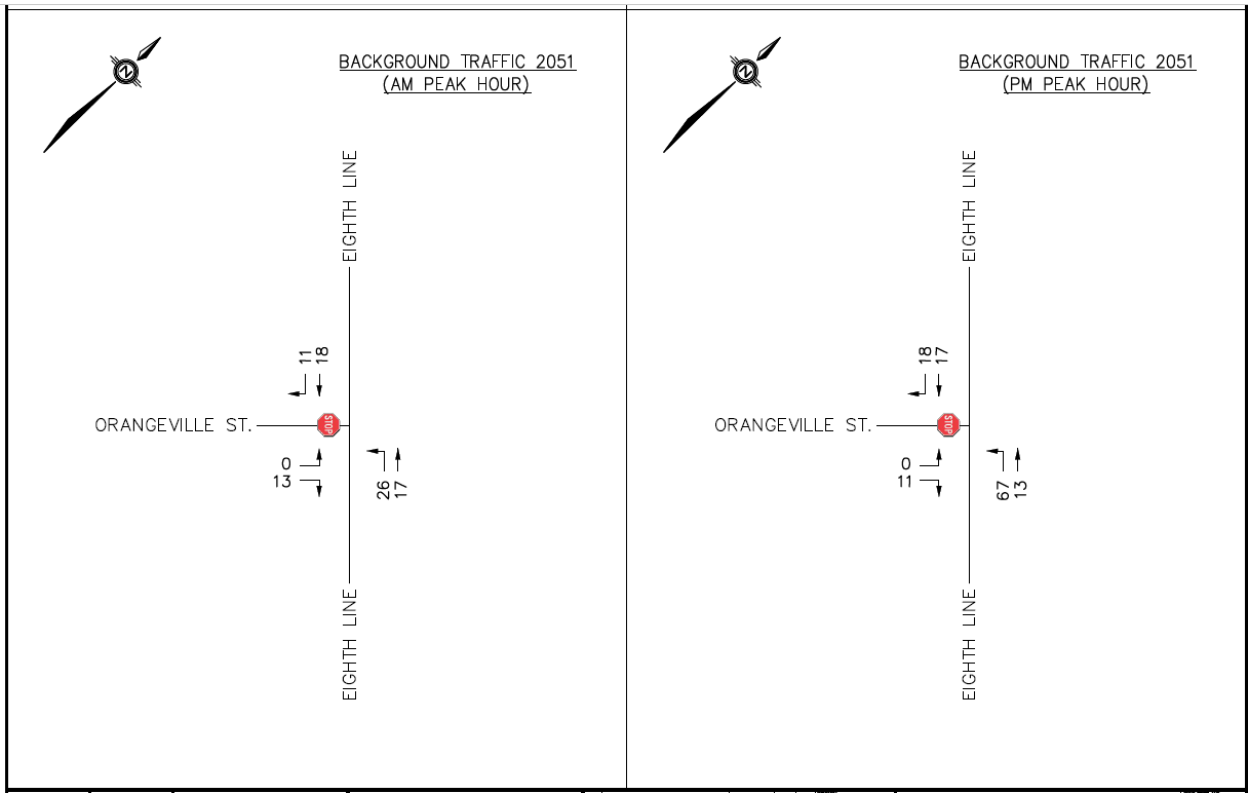


Figure 5-2: Eighth Line at Orangeville Street – Background Traffic 2051

At the subject intersection, the anticipated 2051 traffic volumes are less than 100 vehicles on each approach during each peak hour, so the prior conclusions (regarding the requirement for left-turn lanes, a change of stop control, or signalization) are expected to remain unchanged.

Since the intersection does not meet any warrants, the future analysis was completed based on the future traffic volumes for each horizon year and the existing geometric and traffic control conditions. The detailed Synchro 12 results are provided in **Appendix B-2**. The summary of the levels of service are provided in the following **Table 5-2**:

Table 5-2: Level of Service by Approach – Eighth Line at Orangeville Street

Scenario	Control	Eighth Line at Orangeville Street							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	EB SC	A	-	A	A	A	-	A	A
2031 Horizon Traffic	EB SC	A	-	A	A	A	-	A	A
2041 Horizon Traffic	EB SC	A	-	A	A	A	-	A	A
2051 Horizon Traffic	EB SC	A	-	A	A	A	-	A	A

As identified in the above table, by the 2051 horizon year, the level of service for all approaches will maintain a LOS A. No further geometric or traffic control improvements are required.

6 Wellington Road 22 at Tenth Line

6.1 Wellington Road 22 at Tenth Line – Existing Conditions

All approaches consist of a shared approach lane; the north and south legs are comprised of gravel at only a short distance away from the intersection. Wellington Road 22 is an arterial road; Tenth Line is a local road. Stop control is implemented on the northbound and southbound approaches. No illumination is provided at the intersection. The speed limit on all approaches is posted at (or assumed to be) 60 km/h.

6.1.1 Existing Intersection Performance

Figure 6-1 exhibits the current AM and PM peak hour traffic volumes:

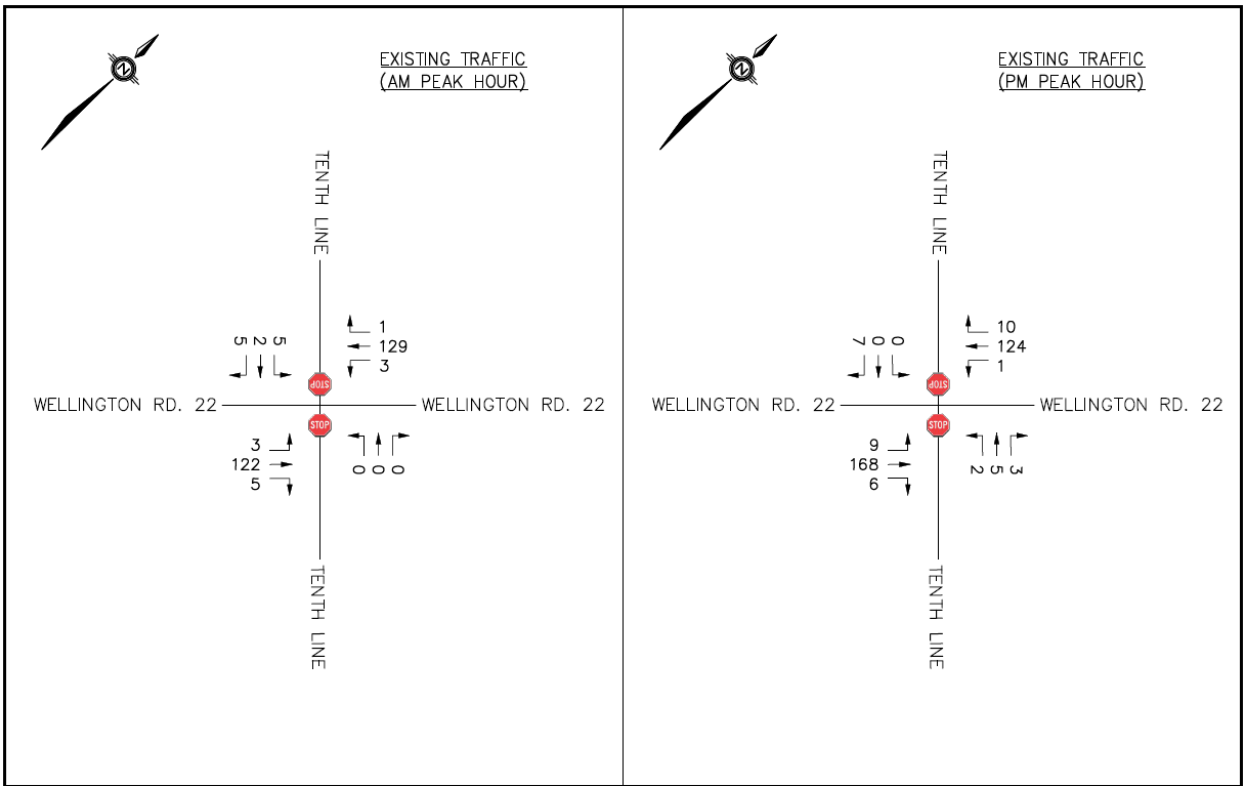


Figure 6-1: Wellington Road 22 at Tenth Line – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:15 a.m. and 8:15 a.m.; the PM peak hour occurred between 4:15 p.m. and 5:15 p.m. From the collected turning movement counts, it was also observed that the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 66.7% during the AM peak hour and between 0% and 14.3% during the PM peak hour. The detailed modelling outputs are reported in **Appendix C-1**.

The following **Table 6-1** provides a level of service summary for each intersection approach:

Table 6-1: Existing Level of Service by Approach – Wellington Road 22 at Tenth Line

Scenario	Wellington Road 22 at Tenth Line							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	A	A	A	A	A	A	B	A

As identified in the above table, the existing levels of service for all approaches are reported to be LOS A and LOS A / B in the AM and PM peak hours, respectively, with a corresponding control delay of up to 10.73 seconds in the critical PM peak hour northbound movement. Sufficient gaps are provided within the main street traffic stream. The queue on the northbound approach never exceeds one vehicle length.

6.1.2 Potential Geometric and / or Traffic Control Improvements

Left-turn lane warrants (provided in **Appendix C-1**) were considered for the eastbound and westbound approaches to the intersection; the speed limit on Wellington Road 22 is 60 km/h, so a design speed of 80 km/h was applied. Based on the estimated turning movements in each scenario, eastbound left turns in the AM and PM peak hours are expected to be approximately 2.3%, and 4.9% of the eastbound approach volumes (less than the 5% MTO left turn threshold), and the traffic volumes fall below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane. The westbound left turns in the AM and PM peak hours are expected to be less than the MTO's minimum requirement of 5% (2.3% and 0.7% in the AM and PM peak hours, respectively). Left-turn lanes are not warranted.

An all-way stop condition was evaluated for this intersection. The east / west Wellington Road 22 is the "major street," and the stop-controlled north / south Tenth Line is the "minor street". According to Ontario Traffic Manual (OTM) Book 5 (December 2021), page 26, there are three conditions that must be met to warrant an all-way stop control on "Collector Roads and Rural Arterial Roads":

> The first condition states that the *"total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day."* Traffic volumes of 1822 vehicles were observed over the

highest eight hours (see **Appendix C-1**). The traffic volumes per hour varied, with the lowest recorded hour being from 11:00 a.m. – 12:00 p.m.; during this hour, 134 vehicles approached the intersection. The highest recorded hour was from 4:00 – 5:00 p.m., which exhibited a total intersection volume of 324 vehicles. The collected traffic volumes exceeded 375 vehicles per hour in none of the highest eight hours. Therefore, the first condition is not met.

The second condition states that the *"combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period.*" Each of the same eight hours record between 9 and 20 vehicles per hour and a total count of 0 pedestrians on the minor street during these eight hours. The collected traffic volumes exceeded 150 vehicles and pedestrians per hour on the minor street in none of the highest eight hours. Therefore, the second condition is not met.

The third condition states that the *"volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible."* The 8-hour vehicle volumes totalled 1822; the east / west vehicle volumes totalled 1705, and the north / south volumes totalled 117, so the split is approximately 93.6 (major street) / 6.4 (minor street). Therefore, the third condition is not met.

Since all required volume conditions are not met for this intersection, it is the engineers' opinion that the intersection of Wellington Road 22 at Tenth Line is not a suitable candidate for implementation of an all-way stop control.

A further examination of the traffic signal control warrant was considered for the subject intersection. The traffic volumes are low; therefore, the intersection does not meet the warrants for signalization, and no further geometric and / or traffic control alternatives were explored.

6.2 Wellington Road 22 at Tenth Line – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix C-2**.

Figure 6-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

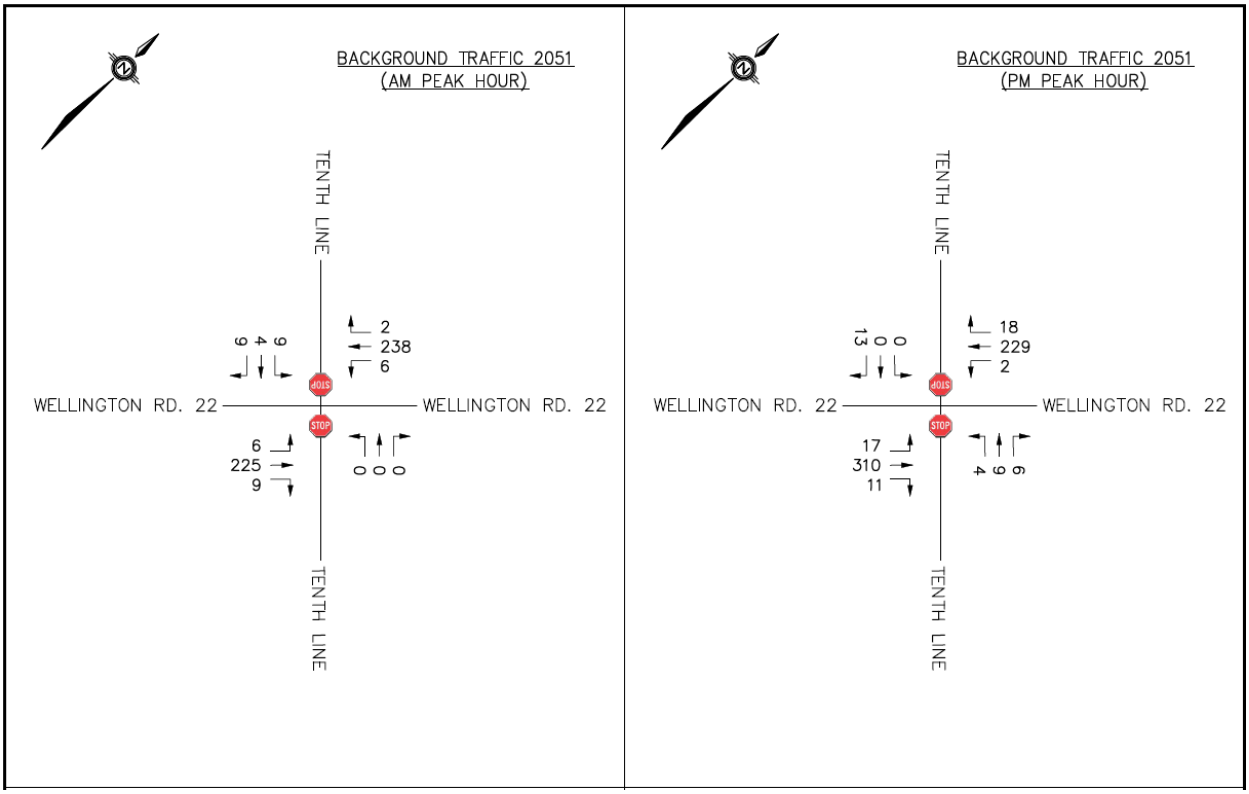


Figure 6-2: Wellington Road 22 at Tenth Line – Background Traffic 2051

The 2051 traffic volumes at the subject intersection are anticipated to be fewer vehicles than required to meet the previously addressed warrants on each approach during each peak period. Therefore, the previous conclusions regarding the potential requirement for left-turn lanes, a change of stop control, or signalization are expected to remain unchanged. By the 2051 horizon year, the level of service for all approaches will maintain LOS A and LOS B.

Since the intersection does not meet any warrants, the future analysis was completed based on the future traffic volumes for each horizon year and the existing geometric and traffic control conditions. The detailed Synchro 12 results are provided in **Appendix C-2**. The summary of the levels of service are provided in the following **Table 6-2**.

Table 6-2: Level of Service by Approach – Sideroad 5 at Ninth Line

Scenario	Control	Sideroad 5 at Ninth Line							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	AWSC	A	A	A	A	A	A	A	A
2031 Horizon Traffic	AWSC	A	A	A	A	A	A	A	A
2041 Horizon Traffic	AWSC	A	A	A	A	A	A	A	A
2051 Horizon Traffic	AWSC	A	A	A	A	B	B	A	B

As identified in the above table, by the 2051 horizon year, the level of service for all approaches will maintain LOS A and LOS B. No further geometric or traffic control improvements are required.

7 Wellington Road 24 at Sideroad 17

7.1 Wellington Road 24 at Sideroad 17 – Existing Conditions

The eastbound and westbound stop-controlled approaches each consist of a shared approach lane; the northbound and southbound approaches have a shared left-turn / through lane and a dedicated right-turn lane. Illumination is provided on the southwest corner of the intersection. The speed limit on the arterial road approaches is 80 km/h; the speed limit on the collector road is 60 km/h.

7.1.1 Existing Intersection Performance

Figure 7-1 exhibits the current AM and PM peak hour traffic volumes:

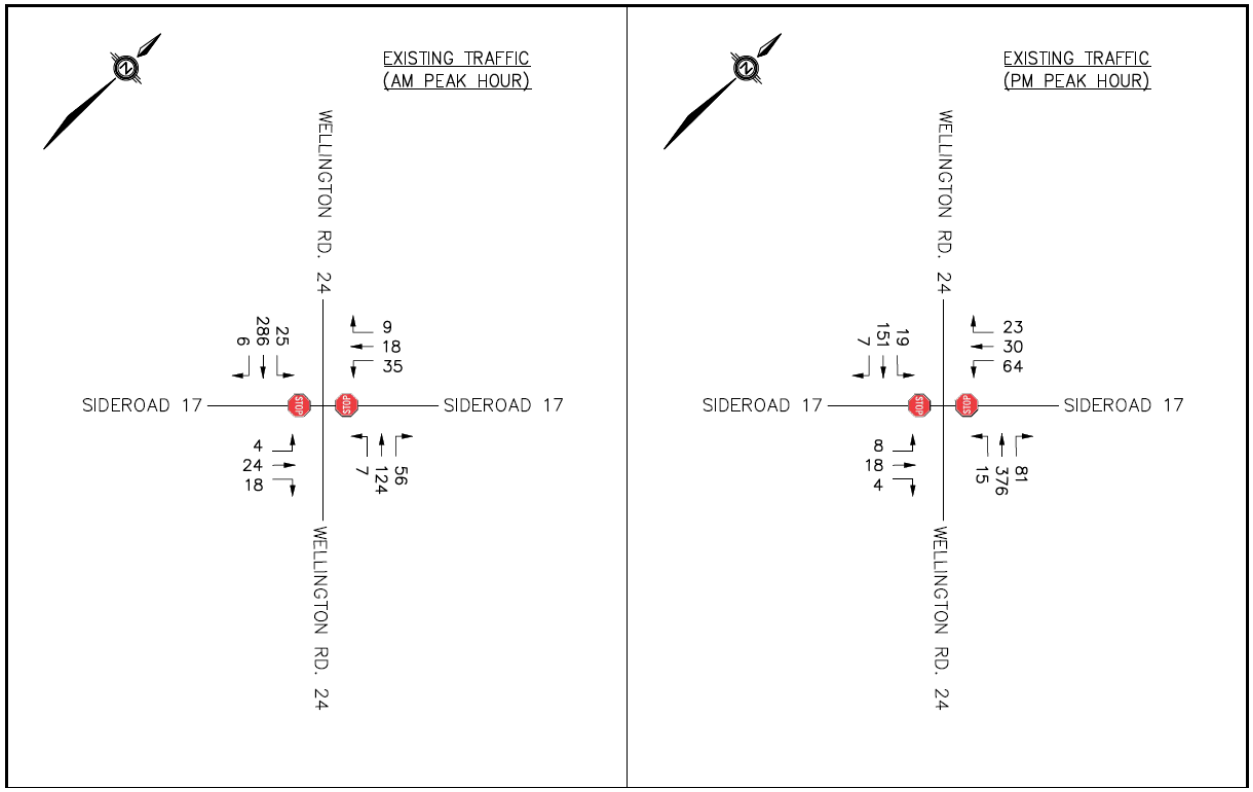


Figure 7-1: Wellington Road 24 at Sideroad 17 – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:45 a.m. and 8:45 a.m.; the PM peak hour occurred between 4:30 p.m. and 5:30 p.m. The percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 28.6% during the AM peak hour and between 0% and 50.0% during the PM peak hour. The detailed modelling outputs are reported in **Appendix E-1**. The following **Table 7-1** provides a summary of the level of service for each intersection approach:

Table 7-1: Existing Level of Service by Approach – Wellington Road 24 at Sideroad 17

Scenario	Wellington Road 24 at Sideroad 17							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	B	B	A	A	C	C	A	A

As identified in the above table, the existing levels of service for the eastbound and westbound approaches are both reported to be satisfactory in the AM and PM peak hours, with a corresponding control delay of up to 19.03 seconds in the critical PM peak hour. The northbound and southbound approaches are currently operating at an excellent level of service, and sufficient gaps are provided within the main street traffic stream. The queue on the eastbound approach never exceeds two vehicle lengths.

7.1.2 Potential Geometric and / or Traffic Control Improvements

Left-turn lane warrants (provided in **Appendix E-1**) were considered for the northbound and southbound approaches to the intersection; the speed limit on the arterial road approaches is 80 km/h, so a design speed of 100 km/h was applied. Based on the estimated turning movements in each scenario, although southbound left turns in the AM and PM peak hours are expected to be approximately 7.9%, and 10.7% of the southbound approach volumes, the traffic volumes fall below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane during the PM period; however, they fall on the warrant line for a 15 m dedicated left-turn lane during the AM peak hour. The northbound left turns in the AM and PM peak hours are expected to be less than the MTO's minimum requirement of 5%; however, since a 15 m dedicated southbound left-turn lane is warranted, an opposing (directly offsetting) northbound left-turn lane should also be implemented.

Although northbound and southbound right-turn lanes and tapers are provided, the highest volume of northbound right turns (81) and southbound right turns (6), which occur during the PM peak hour, indicates that these lanes are not required. When the right-turn volume reaches 200 vehicles in a peak hour, a dedicated right-turn lane should be considered.

An all-way stop condition was evaluated for this intersection. The arterial Wellington Road 24 is the "major street," and the collector Sideroad 17 is the "minor street." The all-way stop control condition was reviewed with respect to the provincial warrants. According to Ontario Traffic Manual (OTM) Book 5 (December 2021), page 26, there are three conditions that must be met to warrant an all-way stop control on "Collector Roads and Rural Arterial Roads":

The first condition states that the "total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day". Traffic volumes of 4549 vehicles were observed over the highest eight hours (see **Appendix E-1**). The traffic volumes per hour varied, with the lowest recorded hour being from 12:00 p.m. – 1:00 p.m.; during this hour, 385 vehicles approached the intersection. The highest recorded hour was from 4:00 – 5:00 p.m., which exhibited a total intersection volume of 774 vehicles. The collected traffic volumes exceeded 375 vehicles per hour in all of the highest eight hours. Therefore, the first condition is met.

The second condition states that the "combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period." Each of the same eight hours record between 109 and 163 vehicles per hour and a total count of 0 pedestrians on the minor street during these eight hours. The collected traffic volumes exceeded 150 vehicles and pedestrians per hour on the minor street in two of the highest eight hours. Therefore, the second condition is not met.

The third condition states that the "volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major

roadway. For three-legged intersections a volume split of 75/25 is permissible." The 8-hour vehicle volumes totalled 4549; the east / west vehicle volumes totalled 1042, and the north / south volumes totalled 3507, so the split is approximately 77.1 (major street) / 22.9 (minor street). Therefore, the third condition is not met.

Since all required volume conditions are not met for this intersection, it is the engineers' opinion that the intersection of Wellington Road 24 at Sideroad 17 is not a suitable candidate for implementation of an all-way stop control.

A further examination of the traffic signal control warrant was considered for the subject intersection. The warrants are provided in **Appendix E-1**. Justification 1 was 90% satisfied; Justification 2 was 81%. Therefore, Justification 3 is satisfied, and the intersection meets the warrants for signalization.

Detailed Synchro 12 analysis was completed for the implementation of a traffic signal condition and supplementary northbound and southbound left-turn lanes. The existing right-turn lanes were retained in the modelling. Signal timings were optimized. The results (in **Appendix E-1** and the below **Table 7-2**) show that the levels of service on the eastbound / westbound approaches improve to LOS A / B.

Table 7-2: Existing Level of Service by Approach – Wellington Road 24 at Sideroad 17

Scenario	Wellington Road 24 at Sideroad 17							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic (Signalized + NB / SB LTLs)	A	B	A	A	B	B	A	A

If the road authority chooses to implement signalization, in the interim, an all-way stop condition could be implemented, as recommended on page 25 of the Ontario Traffic Manual (OTM) Book 5 (2021); OTM Book 6 should be referenced when applying a "new" condition at an intersection:

"*The purpose of the NEW sign is to alert drivers of a new STOP sign* […] *The NEW sign must be used in conjunction with: "The STOP AHEAD sign (Wb-1, Wb-101, Wb-1101)* […] *to warn motorists of new installations of STOP signs*

> […] *For this application, the NEW warning sign (Wb-3) must be mounted above the STOP AHEAD sign* […] *on the same sign support. The combination of the NEW sign and the primary traffic regulations ahead sign should remain in place for a period of at least 30 days until motorists become familiar with the new installation. (The maximum installation period should generally not exceed 60 days.)"*

Effectively, the "new" sign should be erected on all approaches to the new traffic control; the sign should be mounted directly above the existing (and proposed) "stop sign ahead" signs for 30 to 60 days (until it is "no longer new"). It is the engineers' opinion that an all-way stop control condition could be implemented at the intersection in advance of signalization.

7.2 Wellington Road 24 At Sideroad 17 – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix E-2**.

Figure 7-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes (along with the proposed traffic signal control):

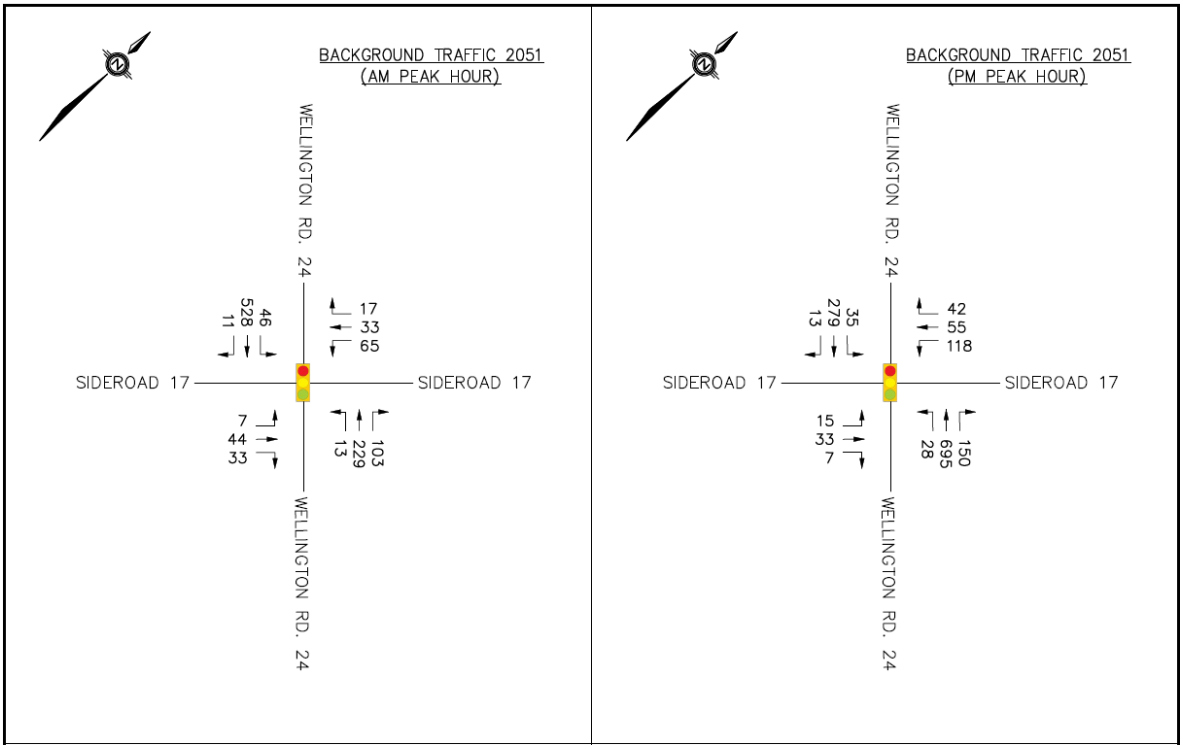


Figure 7-2: Wellington Road 24 at Sideroad 17 - Background Traffic 2051

Since the intersection previously met the warrants for eastbound and westbound left-turn lanes and signalization, the future analysis was completed based on the future traffic volumes for each horizon year and the recommended geometric and traffic control conditions. The detailed Synchro 12 results are provided in **Appendix E-2**. The summary of the levels of service are provided in the following **Table 7-3**.

Table 7-3: Level of Service by Approach - Wellington Road 24 at Sideroad 17

Scenario	Control	Wellington Road 24 at Sideroad 17							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	EB/WB SC	B	B	A	A	C	C	A	A
Existing Traffic	Signal / LTLs	A	B	A	A	B	B	A	A
2031 Horizon Traffic	Signal / LTLs	A	B	A	A	B	B	A	A
2041 Horizon Traffic	Signal / LTLs	B	B	A	A	B	B	B	A
2051 Horizon Traffic	Signal / LTLs	B	B	A	B	B	C	C	B

As identified in the above table, by the 2051 horizon year, the level of service for all approaches remains satisfactory with the recommended geometric and traffic control improvements.

8 Sideroad 27 At Fourth Line

8.1 Sideroad 27 at Fourth Line – Existing Conditions

This is an intersection of two local roads. All approaches consist of a shared approach lane. The speed limit is assumed to be 60 km/h.

8.1.1 Existing Intersection Performance

Figure 8-1 exhibits the current AM and PM peak hour traffic volumes:

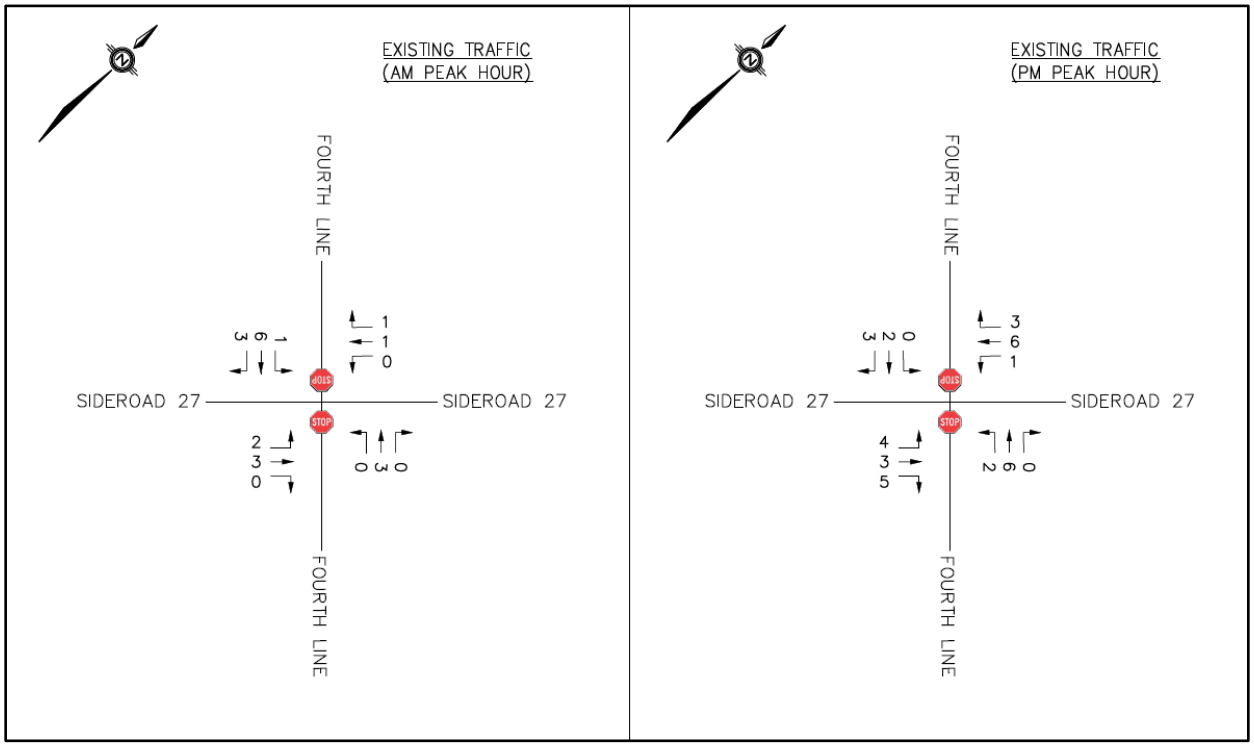


Figure 8-1: Sideroad 27 at Fourth Line – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:00 a.m. and 8:00 a.m.; the PM peak hour occurred between 4:00 p.m. and 5:00 p.m. From the collected turning movement counts, it was also observed that the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 33.3% during the AM peak hour and between 0% and 100.0% during the PM peak hour. Only 20 vehicles utilized the intersection during the AM peak hour; only 35 vehicles were observed during the PM peak hour. The detailed modelling outputs are reported in **Appendix F-1**.

The following **Table 8-1** provides a level of service summary for each intersection approach:

Table 8-1: Existing Level of Service by Approach – Sideroad 27 at Fourth Line

Scenario	Sideroad 27 at Fourth Line							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	A	A	A	A	A	A	A	A

As identified in the above table, due to the very low traffic volumes, the existing levels of service are excellent.

8.1.2 Potential Geometric and / or Traffic Control Improvements

Although left-turn lane warrants (provided in **Appendix F-1**) were considered for the intersection; the eastbound and westbound approaches do not exceed 12 vehicles in either direction during each peak hour. The percentage of left turns is substantial; however, the traffic volumes fall well below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane. Left-turn lanes are not warranted.

An all-way stop condition was considered for this intersection; however, as with the left-turn lane warrant, the volumes fall well below all warrant condition thresholds, except for the third condition indicating a 53.8% / 41.2% split on the major / minor streets. All-way stop-control is not warranted.

Due to very low traffic volumes, the intersection does not meet the warrants for signalization, so no further geometric and / or traffic control alternatives were explored.

8.2 Sideroad 27 at Fourth Line – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix F-2**.

Figure 8-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

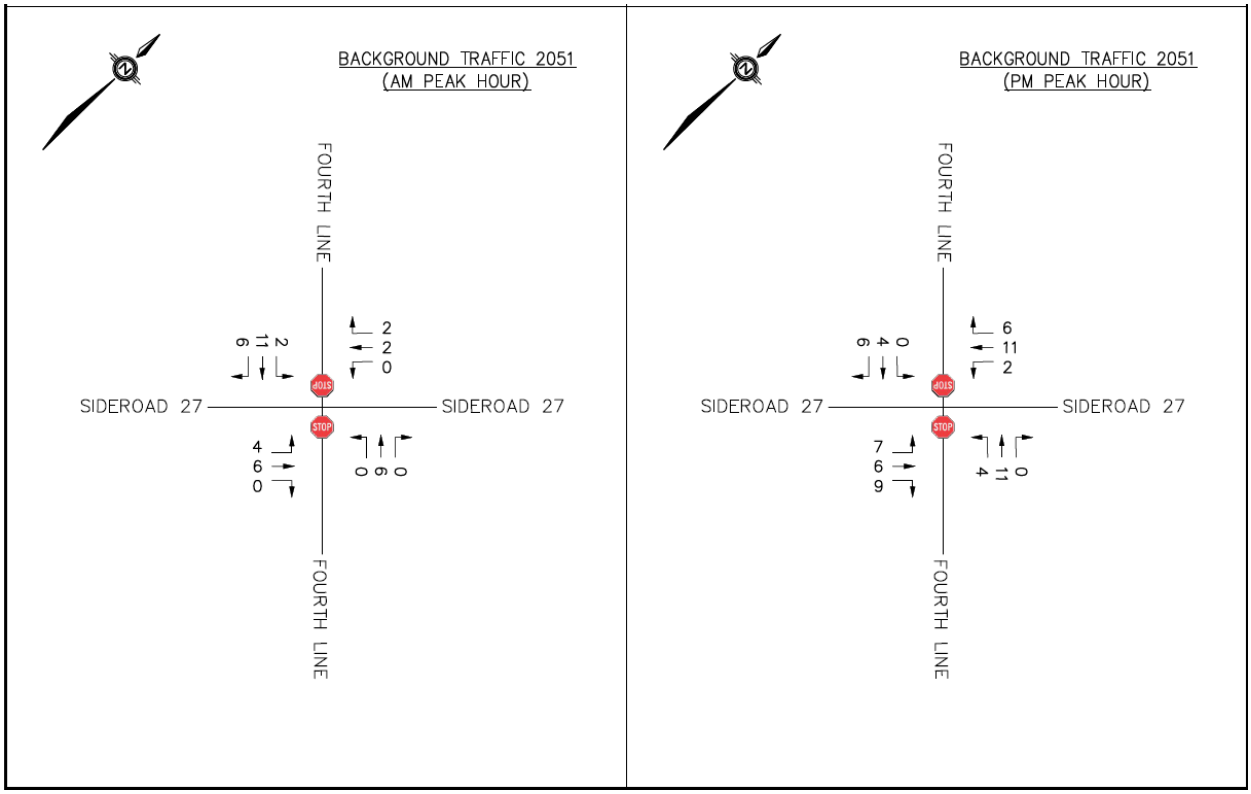


Figure 8-2: Sideroad 27 at Fourth Line – Background Traffic 2051

The 2051 traffic volumes at the subject intersection are anticipated to be fewer vehicles than required to meet the previously addressed warrants on each approach during each peak period. Therefore, the previous conclusions regarding the potential requirement for left-turn lanes, a change of stop control, or signalization are expected to remain unchanged.

Since the intersection does not meet any warrants, the future analysis was completed based on the future traffic volumes for each horizon year and the existing geometric and traffic control conditions. The detailed Synchro 12 results are provided in **Appendix F-2**. The summary of the levels of service are provided in the following **Table 8-2**.

Table 8-2: Level of Service by Approach – Sideroad 27 at Fourth Line

Scenario	Control	Sideroad 27 at Fourth Line							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	NB/SB SC	A	A	A	A	A	A	A	A
2031 Horizon Traffic	NB/SB SC	A	A	A	A	A	A	A	A
2041 Horizon Traffic	NB/SB SC	A	A	A	A	A	A	A	A
2051 Horizon Traffic	NB/SB SC	A	A	A	A	A	A	A	A

As identified in the above table, by the 2051 horizon year, the level of service for all approaches will maintain LOS A. No further geometric or traffic control improvements are required.

9 Sideroad 27 at Second Line

9.1 Sideroad 27 at Second Line – Existing Conditions

All approaches consist of a shared approach lane. Second Line is a collector road; Sideroad 27 is a local road. The east, west, and north legs are gravel, although the east / west local road, Sideroad 27, is considered the major street, with the collector road, Second Line, being the currently stop-controlled minor

street. There is no illumination provided at this intersection. The posted or assumed speed limit (on all legs) is 60 km/h.

9.1.1 Existing Intersection Performance

Figure 9-1 exhibits the current AM and PM peak hour traffic volumes:

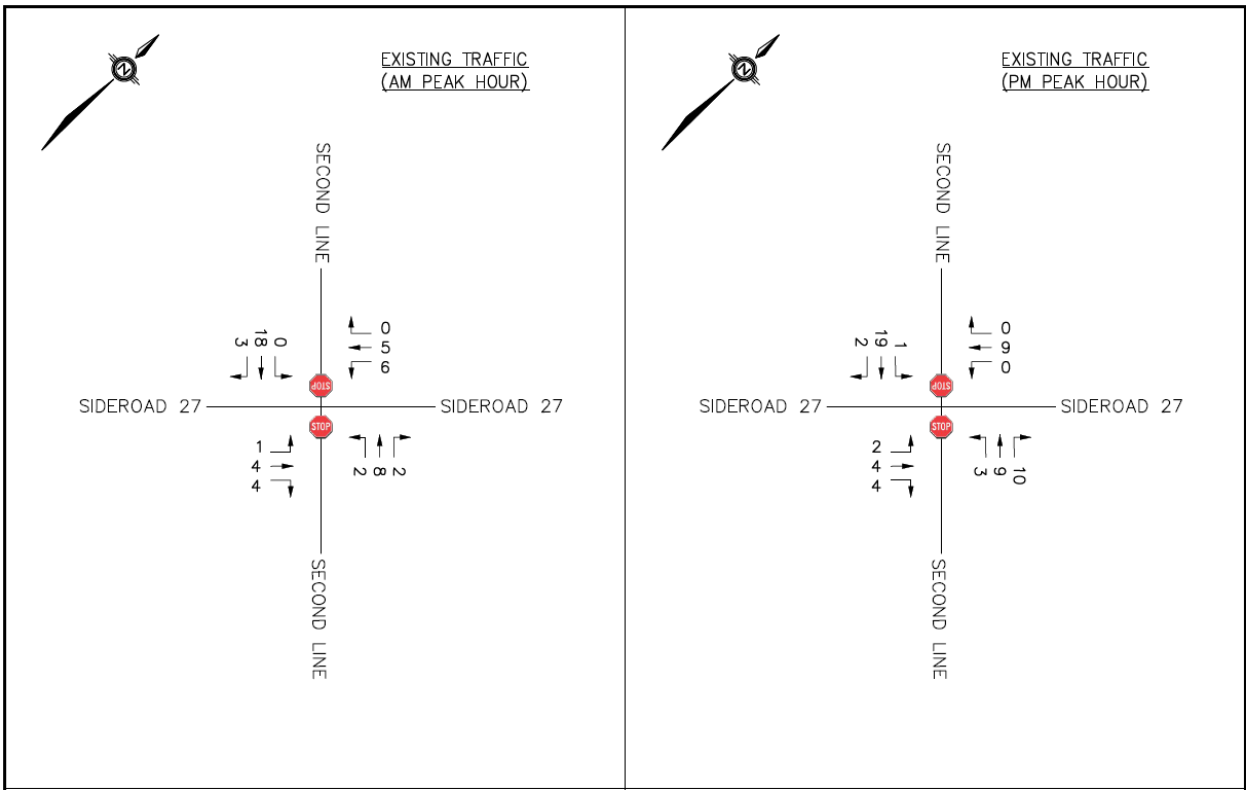


Figure 9-1: Sideroad 27 at Second Line – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:00 a.m. and 8:00 a.m.; the PM peak hour occurred between 4:00 p.m. and 5:00 p.m. From the collected turning movement counts, it was also observed that the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 50.0% during the AM peak hour and between 0% and 50.0% during the PM peak hour. Only 53 vehicles utilized the intersection during the AM peak hour and 63 vehicles

during the PM peak hour. The detailed modelling outputs are reported in **Appendix G-1**.

Table 9-1 provides a summary of the level of service for each intersection approach:

Table 9-1: Existing Level of Service by Approach –Sideroad 27 at Second Line

Scenario	Sideroad 27 at Second Line							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic (Existing N/S stop-control)	A	A	A	A	A	A	A	A

As identified in the above table, due to the very low traffic volumes, the existing levels of service are excellent.

9.1.2 Potential Geometric and / or Traffic Control Improvements

Although left-turn lane warrants (provided in **Appendix G-1**) were considered for the intersection; the eastbound and westbound approaches do not exceed 11 vehicles in either direction during each peak hour. The percentage of left turns is substantial; however, the traffic volumes fall well below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane. Left-turn lanes are not warranted.

Since the traffic volumes are higher on the stop-controlled collector roadway, left-turn lane warrants were reconsidered for the northbound and southbound approaches to the intersection; the eastbound and westbound approaches do not exceed 22 vehicles in either direction during each peak hour. The percentage of left turns varies; however, the traffic volumes fall well below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane. Left-turn lanes are not warranted with the alternative traffic control.

An all-way stop condition was considered for this intersection; however, as with the left-turn lane warrant, the volumes fall well below all warrant condition thresholds, except for the third condition showing a 65.5% / 34.5% split on the

minor / major streets, indicating that the stop-control should be implemented on the east / west roadway. All-way stop-control is not warranted.

According to the Ontario Traffic Manual Book 5 (December 2021), "Where right-of-way is being reassigned from one roadway to another crossing roadway, through the elimination of an existing STOP sign control and the installation of STOP sign control on the previously uncontrolled roadway, an introductory period is required to safely carry out the transition."

The following procedure is recommended for reversing / reassigning the stop-control condition:

> *(1) Install new STOP signs on the previously uncontrolled approaches along with stop lines and crosswalk markings, if required. Oversize STOP signs and/or additional left side installations may be provided where conditions warrant. Install ALL-WAY tabs on all approaches. A painted "STOP" legend on the roadway, in advance of the stop line, may be added for additional emphasis.*
>
> *Install 900 mm x 900 mm CROSS TRAFFIC DOES NOT STOP signs (Wa-19), on the newly controlled roadway, in advance of the STOP signs. This is the standard size of sign. A larger size sign may be used where prevailing traffic conditions warrant greater visibility or emphasis, e.g., in complex visual environments where many signs and other devices compete for driver attention.*
>
> *Install NEW signs (Wb-3) above, and AFTER (month and day) tab signs (Wa-19t) below the CROSS TRAFFIC DOES NOT STOP signs, in black letters on a yellow reflective background, stating the date that the old control will be removed. The warning sign positions must be such that they do not block the approaching motorist's view of the STOP signs but command attention and should be read as the driver approaches the stop line. A location approximately 30 m in advance of the stop line is recommended, in low-speed applications.*

Install STOP AHEAD (Wb-1) signs, with NEW signs above, at the proper location in advance of the intersection on the newly controlled approaches. An oversize STOP AHEAD sign, and a STOP AHEAD roadway marking legend may be provided for additional warning where warranted.

(2) After at least 15 days, remove the STOP AHEAD signs, if any, the STOP signs, stop lines and any crosswalk lines from the previously controlled roadway. Remove the ALL-WAY tabs from all approaches. Remove the NEW signs attached to the CROSS TRAFFIC DOES NOT STOP signs, and the STOP AHEAD signs. Remove the AFTER tabs. Any roadway marking legends, if provided, should be allowed to fade and not be replenished unless local conditions warrant the continued provision of this additional warning.

(3) After an additional period of at least 15 days, the CROSS TRAFFIC DOES NOT STOP signs should be removed. Any oversize STOP signs may now be replaced with standard sized signs unless the continued additional emphasis is warranted. STOP AHEAD signs should be reduced from oversize to standard size or removed if their continued presence is unwarranted.

A further examination of the traffic signal control warrant was considered for the subject intersection; however, due to low traffic volumes, the intersection does not meet the warrants for signalization, so no further geometric and / or traffic control alternatives were explored.

Detailed Synchro 12 analysis was completed for the implementation of an east / west stop-control condition. The results (provided in **Appendix G-1** and the below **Table 9-2**) show that there is no discernible difference in the levels of service due to the nominal traffic volumes.

Table 9-2: Existing Level of Service by Approach –Sideroad 27 at Second Line

Scenario	Sideroad 27 at Second Line							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic (Proposed E/W stop-control)	A	A	A	A	A	A	A	A

9.2 Sideroad 27 at Second Line – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix G-2**.

Figure 9-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

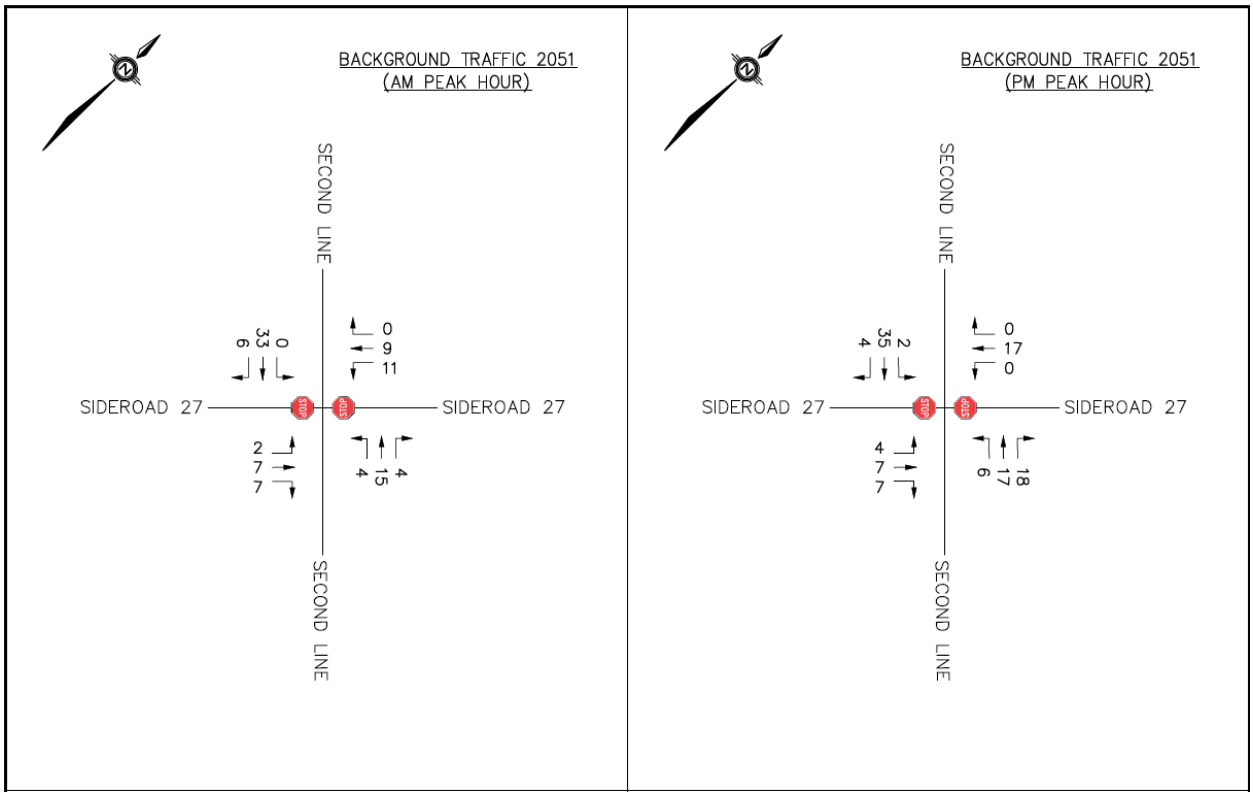


Figure 9-2: Sideroad 27 at Second Line - Background Traffic 2051

The 2051 traffic volumes at the subject intersection are anticipated to be fewer vehicles than required to meet the previously addressed warrants on each approach during each peak period. Therefore, the previous conclusions regarding the potential requirement for left-turn lanes, a change of stop control, or signalization are expected to remain unchanged.

Since the intersection does not meet any warrants, the future analysis was completed based on the future traffic volumes for each horizon year, the existing geometric conditions, and the recommended traffic control improvements. The detailed Synchro 12 results are provided in **Appendix G-2**. The summary of the levels of service are provided in the following **Table 9-3**.

Table 9-3: Level of Service by Approach – Sideroad 27 at Second Line

Scenario	Control	Sideroad 27 at Second Line							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	NB/SB SC	A	A	A	A	A	A	A	A
Existing Traffic	EB/WB SC	A	A	A	A	A	A	A	A
2031 Horizon Traffic	EB/WB SC	A	A	A	A	A	A	A	A
2041 Horizon Traffic	EB/WB SC	A	A	A	A	A	A	A	A
2051 Horizon Traffic	EB/WB SC	A	A	A	A	A	A	A	A

As identified in the above table, by the 2051 horizon year, the level of service for all approaches will maintain LOS A. No further geometric or traffic control improvements are required.

10 Wellington Road 22 at Second Line

10.1 Wellington Road 22 at Second Line – Existing Conditions

All approaches consist of a shared approach lane. The north / south collector road (Second Line) is considered the major street, while the east / west arterial road (Wellington Road 22) is currently stop-controlled. Illumination is provided at the northeast and southwest corners of the intersection. The speed limit on the northbound and southbound approaches is 60 km/h, while the speed limit on the arterial road approaches is posted or assumed to be 80 km/h.

10.1.1 Existing Intersection Performance

Figure 10-1 exhibits the current AM and PM peak hour traffic volumes:

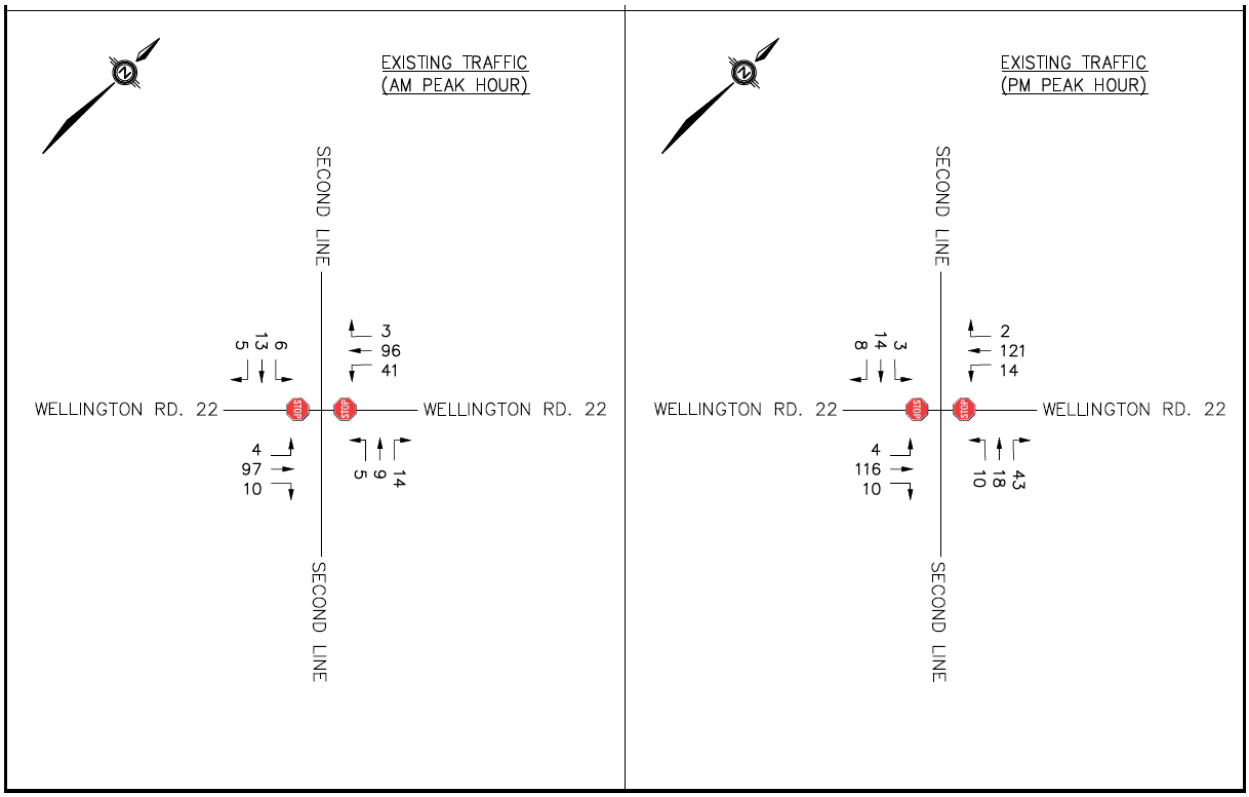


Figure 10-1: Wellington Road 22 at Second Line – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:15 a.m. and 8:15 a.m.; the PM peak hour occurred between 4:00 p.m. and 5:00 p.m. From the collected turning movement counts, the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 16.7% during the AM peak hour and between 0% and 20.0% during the PM peak hour. The modelling outputs are reported in **Appendix H-1**.

The following **Table 10-1** provides a summary of the level of service for each intersection approach:

Table 10-1: Existing Level of Service by Approach – Wellington Road 22 at Second Line

Scenario	Wellington Road 22 at Second Line							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic (Existing E/W stop-control)	B	B	A	A	B	B	A	A

As identified in the above table, the existing peak hour levels of service are good on all approaches; however, the arterial road exhibits LOS B while the collector road exhibits LOS A.

10.1.2 Potential Geometric And / Or Traffic Control Improvements

Left-turn lane warrants (provided in **Appendix H-1**) were considered for the northbound and southbound approaches to the intersection; the speed limit on the northbound and southbound approaches is 60 km/h, so a design speed of 80 km/h was applied. Based on the estimated turning movements in each scenario, although southbound left turns in the AM and PM peak hours are expected to be approximately 20.8%, and 32.0% of the southbound approach volumes, the traffic volumes fall below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane. Likewise, although the northbound left turns in the AM and PM peak hours are expected to be approximately 17.9%, and 14.1% of the northbound approach volumes, the volumes fall below the minimum threshold. Left-turn lanes are not warranted with the existing control.

Since the traffic volumes are much higher on the stop-controlled arterial roadway, left-turn lane warrants were reconsidered for the eastbound and westbound approaches to the intersection; the speed limit on the eastbound and westbound approaches is assumed to be 80 km/h, so a design speed of 100 km/h was applied.

Based on the estimated turning movements in each scenario, although eastbound left turns in the AM and PM peak hours are expected to be approximately 3.6% and 3.1% of the eastbound approach volumes, the traffic volumes fall below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane and the percentage of left turns does not meet the MTO minimum of 5%.

Likewise, although the westbound left turns in the AM and PM peak hours are expected to be approximately 29.3%, and 10.2% of the westbound approach volumes, the volumes fall below the minimum threshold. Left-turn lanes are not warranted with the alternative traffic control.

An all-way stop condition was evaluated for this intersection. The north / south collector Second Line is considered the "major street," and the currently stop-controlled east / west arterial Wellington Road 22 is considered the "minor street." The all-way stop control condition was reviewed with respect to the provincial warrants. According to Ontario Traffic Manual (OTM) Book 5 (December 2021), page 26, there are three conditions that must be met to warrant an all-way stop control on "Collector Roads and Rural Arterial Roads":

> The first condition states that the *"total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day"*. Traffic volumes of 1982 vehicles were observed over the highest eight hours (see **Appendix H-1**). The traffic volumes per hour varied, with the lowest recorded hour being from 11:00 a.m. – 12:00 p.m.; during this hour, 140 vehicles approached the intersection. The highest recorded hour was from 4:00 – 5:00 p.m., which exhibited a total intersection volume of 363 vehicles. The collected traffic volumes exceeded 375 vehicles per hour in one of the highest eight hours. Therefore, the first condition is not met.
>
> The second condition states that the *"combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period.*" Each of the same eight hours record between 105 and 267 vehicles per hour and a total count of 0 pedestrians on the minor street during these eight hours. The collected traffic volumes exceeded 150 vehicles and pedestrians per hour on the minor street in six of the highest eight hours. If the lower

volume Second Line is considered the minor street, the collected traffic volumes exceed the 150 vehicles and pedestrians per hour in none of the highest eight hours. Therefore, the second condition is not met.

The third condition states that the *"volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible."* The 8-hour vehicle volumes totalled 1982; the east / west vehicle volumes totalled 1531, and the north / south volumes totalled 451, so the split is approximately 22.8 (major street) / 77.2 (minor street). Therefore, the third condition is not met.

Since all required volume conditions are not met for this intersection, the intersection of Wellington Road 22 at Second Line is not a suitable candidate for implementation of an all-way stop control. However, considering the volumes on the arterial / collector roadways, the road authorities should implement a minor street stop control condition on the lower volume north / south approaches (and decommission the existing east / west stop control condition).

According to the Ontario Traffic Manual Book 5 (December 2021), "Where right-of-way is being reassigned from one roadway to another crossing roadway, through the elimination of an existing STOP sign control and the installation of STOP sign control on the previously uncontrolled roadway, an introductory period is required to safely carry out the transition." The following procedure is recommended for reversing / reassigning the stop-control condition:

(1) Install new STOP signs on the previously uncontrolled approaches along with stop lines and crosswalk markings, if required. Oversize STOP signs and/or additional left side installations may be provided where conditions warrant. Install ALL-WAY tabs on all approaches. A painted "STOP" legend on the roadway, in advance of the stop line, may be added for additional emphasis.

Install 900 mm x 900 mm CROSS TRAFFIC DOES NOT STOP signs (Wa-19), on the newly controlled roadway, in advance of the STOP signs. This is the standard size of sign. A larger size sign may be used where prevailing traffic conditions warrant greater visibility or emphasis, e.g., in complex visual environments where many signs and other devices compete for driver attention.

Install NEW signs (Wb-3) above, and AFTER (month and day) tab signs (Wa-19t) below the CROSS TRAFFIC DOES NOT STOP signs, in black letters on a yellow reflective background, stating the date that the old control will be removed. The warning sign positions must be such that they do not block the approaching motorist's view of the STOP signs but command attention and should be read as the driver approaches the stop line. A location approximately 30 m in advance of the stop line is recommended, in low-speed applications.

Install STOP AHEAD (Wb-1) signs, with NEW signs above, at the proper location in advance of the intersection on the newly controlled approaches. An oversize STOP AHEAD sign, and a STOP AHEAD roadway marking legend may be provided for additional warning where warranted.

(2) After at least 15 days, remove the STOP AHEAD signs, if any, the STOP signs, stop lines and any crosswalk lines from the previously controlled roadway. Remove the ALL-WAY tabs from all approaches. Remove the NEW signs attached to the CROSS TRAFFIC DOES NOT STOP signs, and the STOP AHEAD signs. Remove the AFTER tabs. Any roadway marking legends, if provided, should be allowed to fade and not be replenished unless local conditions warrant the continued provision of this additional warning.

(3) After an additional period of at least 15 days, the CROSS TRAFFIC DOES NOT STOP signs should be removed. Any oversize STOP signs may now be replaced with standard sized signs unless the continued additional emphasis is warranted. STOP AHEAD signs should be reduced from oversize to standard size or removed if their continued presence is unwarranted.

A further examination of the traffic signal control warrant was considered for the subject intersection; however, the volumes are far too low to warrant signalization. Therefore, the intersection does not meet the warrants for signalization, and no further geometric and / or traffic control alternatives were explored.

Detailed Synchro 12 analysis was completed for the implementation of a north / south stop-control condition. The results (provided in **Appendix H-1**) show that the arterial road now exhibits a LOS A while the collector road exhibits a LOS B.

Table 10-2: Existing Level of Service by Approach – Wellington Road 22 at Second Line

Scenario	Wellington Road 22 at Second Line							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic (Proposed N/S Stop Control)	A	A	B	B	A	A	B	B

10.2 Wellington Road 22 at Second Line – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix H-2**.

Figure 10-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

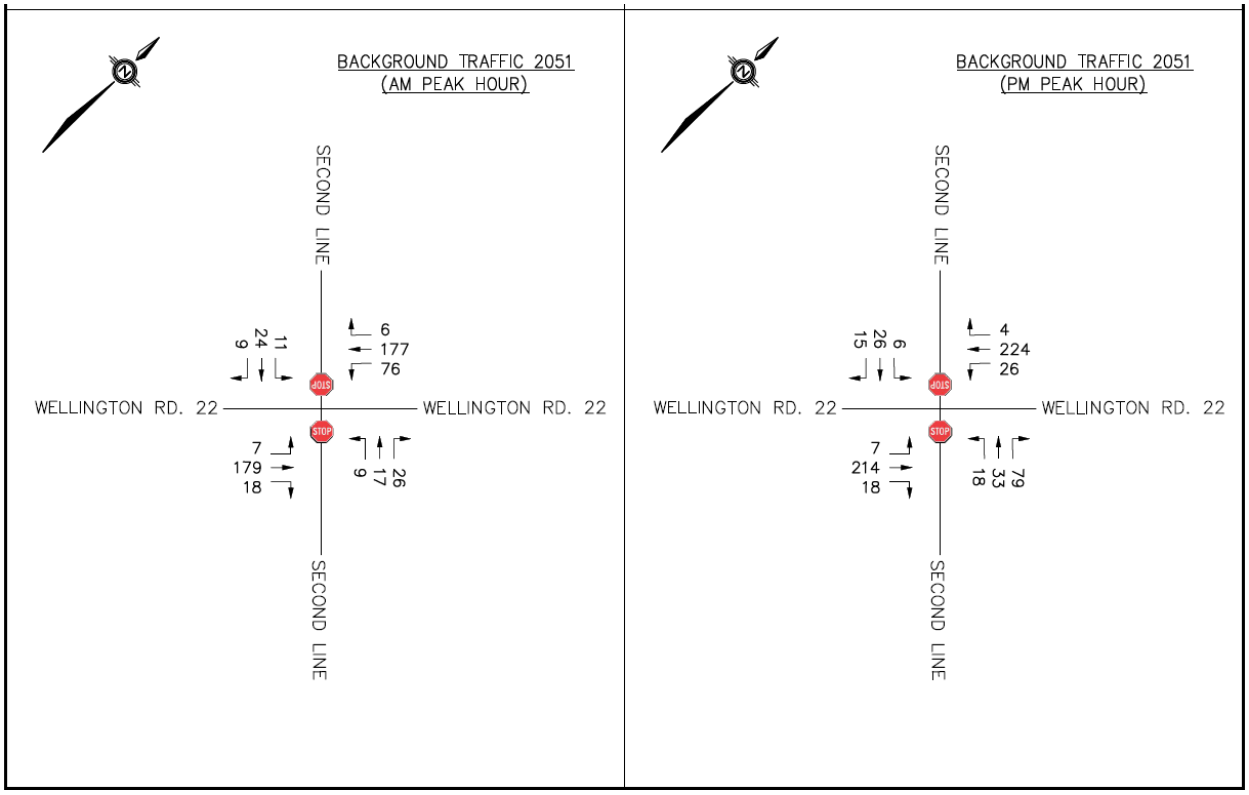


Figure 10-2: Sideroad 27 at Second Line - Background Traffic 2051

The 2051 traffic volumes at the subject intersection are anticipated to be fewer vehicles than required to meet the previously addressed warrants on each approach during each peak period. Therefore, the previous conclusions regarding the potential requirement for left-turn lanes, a change of stop control, or signalization are expected to remain unchanged.

Since the intersection does not meet any warrants, the future analysis was completed based on the future traffic volumes for each horizon year, the existing geometric conditions, and the recommended traffic control improvements. The detailed Synchro 12 results are provided in **Appendix H-2**. The summary of the levels of service are provided in the following **Table 10-3**.

Table 10-3: Level of Service by Approach – Wellington Road 22 at Second Line

Scenario	Control	Wellington Road 22 at Second Line							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	EB/WB SC	B	B	A	A	B	B	A	A
Existing Traffic	NB/SB SC	A	A	B	B	A	A	B	B
2031 Horizon Traffic	NB/SB SC	A	A	B	B	A	A	B	B
2041 Horizon Traffic	NB/SB SC	A	A	B	B	A	A	B	B
2051 Horizon Traffic	NB/SB SC	A	A	B	B	A	A	B	B

As identified in the above table, by the 2051 horizon year, the level of service for all approaches will maintain LOS A and LOS B. No further geometric or traffic control improvements are required.

11 Sideroad 17 at Second Line

11.1 Sideroad 17 at Second Line – Existing Conditions

All approaches consist of a shared approach lane. Both roads are collector roads. The eastbound and westbound approaches are stop-controlled. There is a curve on the north leg, which somewhat limits the sight line to the north (on the eastbound approach). There is no illumination provided at this intersection.

11.1.1 Existing Intersection Performance

Figure 11-1 exhibits the current AM and PM peak hour traffic volumes:

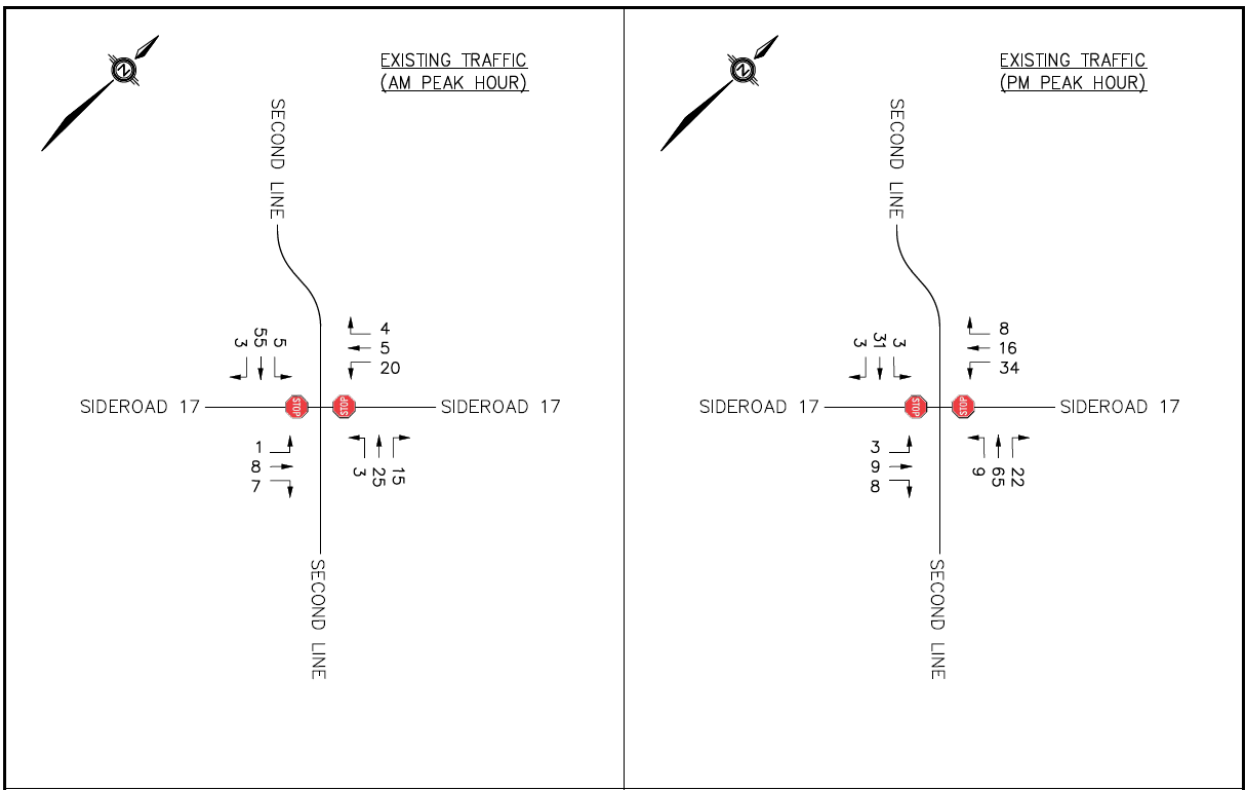


Figure 11-1: Sideroad 17 at Second Line – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:30 a.m. and 8:30 a.m.; the PM peak hour occurred between 3:30 p.m. and 4:30 p.m. From the collected turning movement counts, it was also observed that the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 33.3% during the AM peak hour and between 0% and 33.3% during the PM peak hour. The north / south collector road, Second Line, is considered the major street, with the collector road, Sideroad 17, being the stop-controlled minor street. The detailed modelling outputs are reported in **Appendix I-1**.

The following **Table 11-1** provides a level of service summary for each intersection approach:

Table 11-1: Existing Level of Service by Approach – Sideroad 17 at Second Line

Scenario	Sideroad 17 at Second Line							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	A	A	A	A	A	A	A	A

As identified in the table, the existing levels of service for all approaches is an excellent LOS A due to the low traffic volumes. Adequate gaps are provided for the minor street traffic to turn onto or cross the major street.

11.1.2 Potential Geometric and / or Traffic Control Improvements

Left turn lane warrants (provided in **Appendix I-1**) were considered for the northbound and southbound approaches to the intersection; the speed limit on the northbound and southbound approaches is 60 km/h, so a design speed of 80 km/h was applied. Based on the estimated turning movements in each scenario, although southbound left turns in the AM and PM peak hours are expected to be approximately 20.8%, and 32.0% of the southbound approach volumes, the traffic volumes fall below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane. Likewise, although the northbound left turns in the AM and PM peak hours are expected to be approximately 17.9%, and 14.1% of the northbound approach volumes, the volumes fall below the minimum threshold. Left-turn lanes are not warranted with the existing control.

An all-way stop condition was evaluated for this intersection. The north / south collector Second Line is the "major street," and the stop-controlled east / west collector Sideroad 17 is considered the "minor street." The all-way stop control condition was reviewed with respect to the provincial warrants. According to Ontario Traffic Manual (OTM) Book 5 (December 2021), page 26, there are three conditions that must be met to warrant an all-way stop control on "Collector Roads and Rural Arterial Roads":

The first condition states that the *"total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day"*. Traffic volumes of 1058 vehicles were observed over the highest eight hours (see **Appendix I-1**). The traffic volumes per hour varied, with the lowest recorded hour being from 9:00 a.m. – 10:00 a.m.; during this hour, 91 vehicles approached the intersection. The highest recorded hour was from 4:00 – 5:00 p.m., which exhibited a total intersection volume of 199 vehicles. The collected traffic volumes exceeded 375 vehicles per hour in none of the highest eight hours. Therefore, the first condition is not met.

The second condition states that the *"combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period.*" Each of the same eight hours record between 33 and 65 vehicles per hour and a total count of 0 pedestrians on the minor street during these eight hours. The collected traffic volumes exceeded 150 vehicles and pedestrians per hour on the minor street in none of the highest eight hours. Therefore, the second condition is not met.

The third condition states that the *"volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible."* The 8-hour vehicle volumes totalled 1058; the east / west vehicle volumes totalled 365, and the north / south volumes totalled 693, so the split is approximately 65.5 (major street) / 34.5 (minor street). Therefore, the third condition is met.

Since all required volume conditions are not met for this intersection, it is the engineers' opinion that the intersection of Sideroad 17 at Second Line is not a suitable candidate for implementation of an all-way stop control.

A further examination of the traffic signal control warrant was considered for the subject intersection; however, the volumes are much too low to warrant signalization. Therefore, the intersection does not meet the warrants for signalization, and no further geometric and / or traffic control alternatives were explored.

11.2 Sideroad 17 at Second Line – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix I-2**.

Figure 11-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

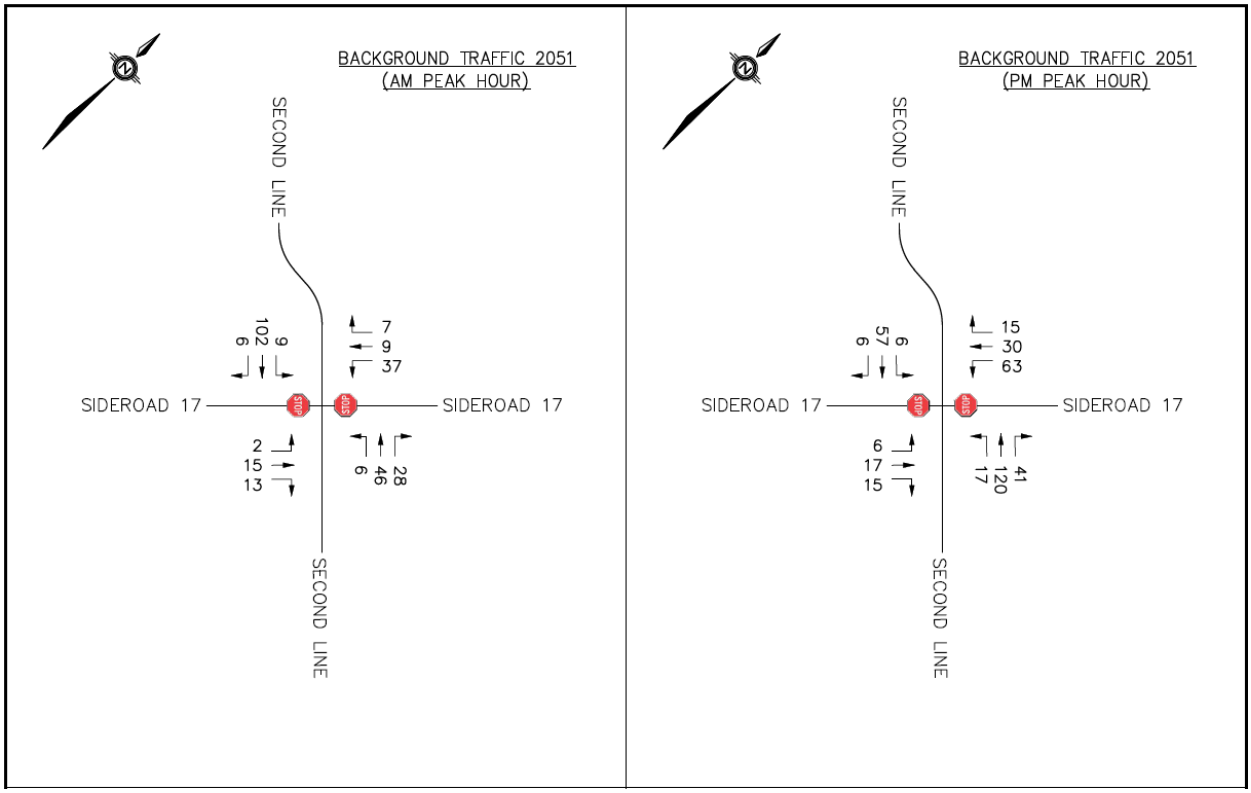


Figure 11-2: Sideroad 17 at Second Line – Background Traffic 2051

The 2051 traffic volumes at the subject intersection are anticipated to be fewer vehicles than required to meet the previously addressed warrants on each approach during each peak period. Therefore, the previous conclusions regarding the potential requirement for left-turn lanes and signalization are expected to remain unchanged.

Since the intersection does not meet any warrants, the future analysis was completed based on the future traffic volumes for each horizon year and the existing geometric and traffic control conditions. The detailed Synchro 12 results are provided in **Appendix I-2**. The summary of the levels of service are provided in the following **Table 11-2**.

Table 11-2: Level of Service by Approach – Sideroad 17 at Second Line

Scenario	Control	Sideroad 17 at Second Line							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	EB/WB SC	A	A	A	A	A	A	A	A
2031 Horizon Traffic	EB/WB SC	A	A	A	A	A	B	A	A
2041 Horizon Traffic	EB/WB SC	A	A	A	A	B	B	A	A
2051 Horizon Traffic	EB/WB SC	A	A	A	A	B	B	A	A

As identified in the above table, by the 2051 horizon year, the level of service for all approaches will maintain LOS A and LOS B. No further geometric or traffic control improvements are required.

12 Wellington Road 125 at Halton-Erin Townline

12.1 Wellington Road 125 at Halton-Erin Townline – Existing Conditions

The eastbound and westbound approaches each consist of a shared approach lane; the northbound and southbound approaches have a shared left turn / through lane and a dedicated right turn lane. The north / south arterial road, Wellinton Road 125, is considered the major street, and the collector road, Halton-Erin Townline, is a stop-controlled minor street. Illumination is provided on the northwest corner of the intersection. The posted speed limit on Wellington Road 125 is 80 km/h; the posted speed limit on Halton-Erin Townline is 60 km/h. All traffic data, operations results, and warrant results are provided in **Appendix J-1**.

12.1.1 Existing Intersection Performance

Figure 12-1 exhibits the current AM and PM peak hour traffic volumes:

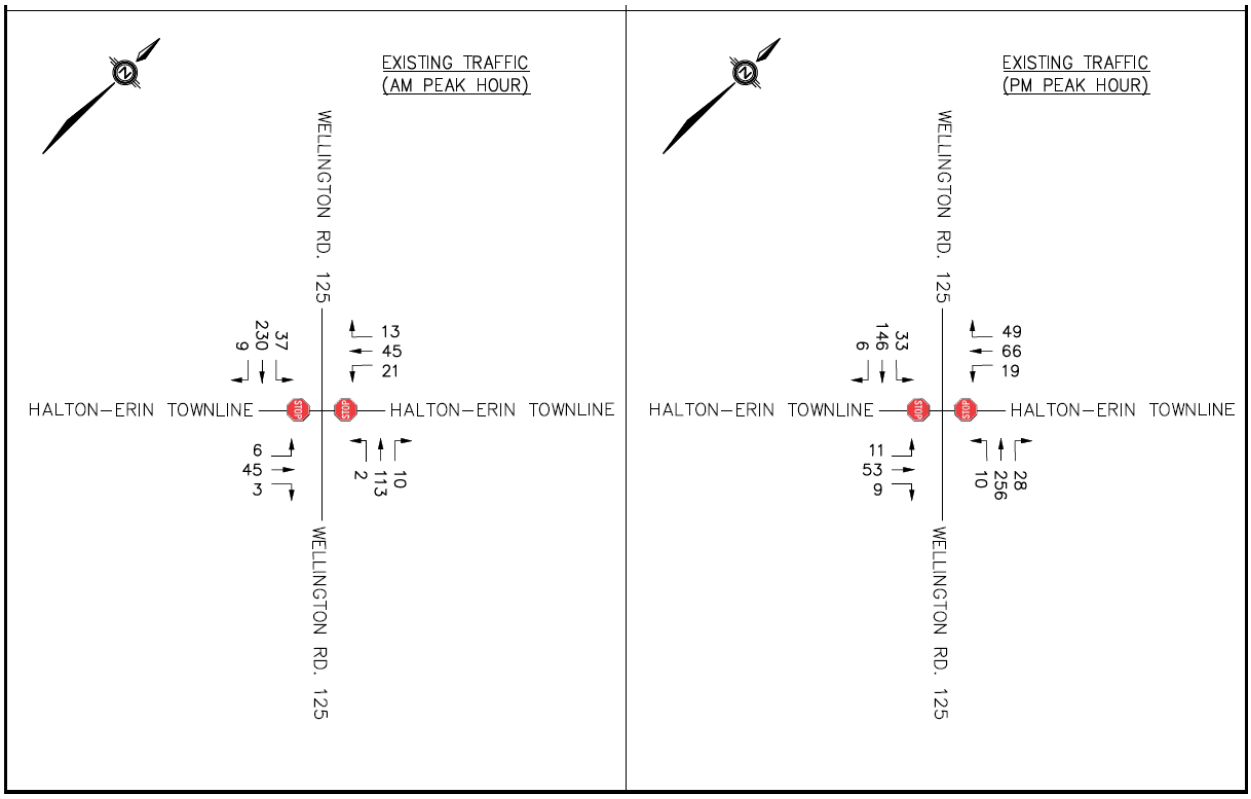


Figure 12-1: Wellington Road 125 at Halton-Erin Townline – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:45 a.m. and 8:45 a.m.; the PM peak hour occurred between 4:15 p.m. and 5:15 p.m. From the collected turning movement counts, it was also observed that the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 33.3% during the AM peak hour and between 0% and 11.1% during the PM peak hour. The detailed modelling outputs are reported in **Appendix J-1**.

The following **Table 12-1** provides a level of service summary for each intersection approach:

Table 12-1:Existing Level of Service by Approach – Wellington Road 125 at Halton-Erin Townline

Scenario	Wellington Road 125 at Halton-Erin Townline							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	B	B	A	A	C	C	A	A

As identified in the above table, the existing levels of service for the critical eastbound and westbound approaches are both reported to be a satisfactory LOS C in the PM peak hours, with a corresponding control delay of up to 15.39 seconds. The northbound and southbound approaches are currently operating at an excellent level of service, and sufficient gaps are provided within the main street traffic stream. The queue on the eastbound approach never exceeds one vehicle length; the queue on the westbound approach does not exceed two lengths.

12.1.2 Potential Geometric and / or Traffic Control Improvements

Left-turn lane warrants (provided in **Appendix J-1**) were considered for the northbound and southbound approaches to the intersection; the speed limit on these approaches is 80 km/h, so a design speed of 100 km/h was applied. Although southbound left turns in the AM and PM peak hours are expected to be approximately 13.4%, and 17.8% of the southbound approach volumes, the traffic volumes fall just below the MTO's minimum volume threshold for implementation of a dedicated left-turn lane during the AM peak hour. The northbound left turns in the AM and PM peak hours are expected to be approximately 1.6%, and 3.4% of the northbound approach volumes; the volumes fall below the minimum threshold, and the percentage of left turns fall below the MTO's minimum 5%. Left-turn lanes are not warranted.

Although northbound and southbound right-turn lanes and tapers are provided, the highest volume of northbound right turns (9) and southbound right turns (28), which occur during the AM and PM peak hours, respectively, indicates that these

lanes are not required. When the right-turn volumes reach 200 vehicles in a peak hour, a dedicated right-turn lane should be considered.

An all-way stop condition was evaluated for this intersection. The north / south arterial Wellington Road 125 is the "major street," and the stop-controlled east / west collector Halton-Erin Townline is the "minor street." According to Ontario Traffic Manual (OTM) Book 5 (December 2021), page 26, there are three conditions that must be met to warrant an all-way stop control on "Collector Roads and Rural Arterial Roads":

> The first condition states that the *"total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day"*. Traffic volumes of 3887 vehicles were observed over the highest eight hours (see **Appendix J-1**). The traffic volumes per hour varied, with the lowest recorded hour being from 12:00 p.m. – 1:00 p.m.; during this hour, 360 vehicles approached the intersection. The highest recorded hour was from 4:00 – 5:00 p.m., which exhibited a total intersection volume of 665 vehicles. The collected traffic volumes exceeded 375 vehicles per hour in six of the highest eight hours. Therefore, the first condition is not met.
>
> The second condition states that the *"combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period.*" Each of the same eight hours record between 77 and 210 vehicles per hour and a total count of 0 pedestrians on the minor street during these eight hours. The collected traffic volumes exceeded 150 vehicles and pedestrians per hour on the minor street in three of the highest eight hours. Therefore, the second condition is not met.

The third condition states that the *"volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible."* The 8-hour vehicle volumes totalled 3887; the east / west vehicle volumes totalled 1096, and the north / south volumes totalled 2791, so the split is approximately 71.8 (major street) / 28.2 (minor street). Therefore, the third condition is not met.

Since all required volume conditions are not met for this intersection, the intersection of Wellington Road 125 at Halton-Erin Townline is not a suitable candidate for implementation of an all-way stop control.

A further examination of the traffic signal control warrant was considered for the subject intersection. The warrants are provided in **Appendix J-1**. Justification 1 was 91% satisfied; Justification 2 was 70% satisfied, so Justification 3 is not satisfied. Therefore, the intersection does not meet the warrants for signalization, and no further geometric and / or traffic control alternatives were explored.

12.2 Wellington Road 125 at Halton-Erin Townline – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix J-2**.

Figure 12-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

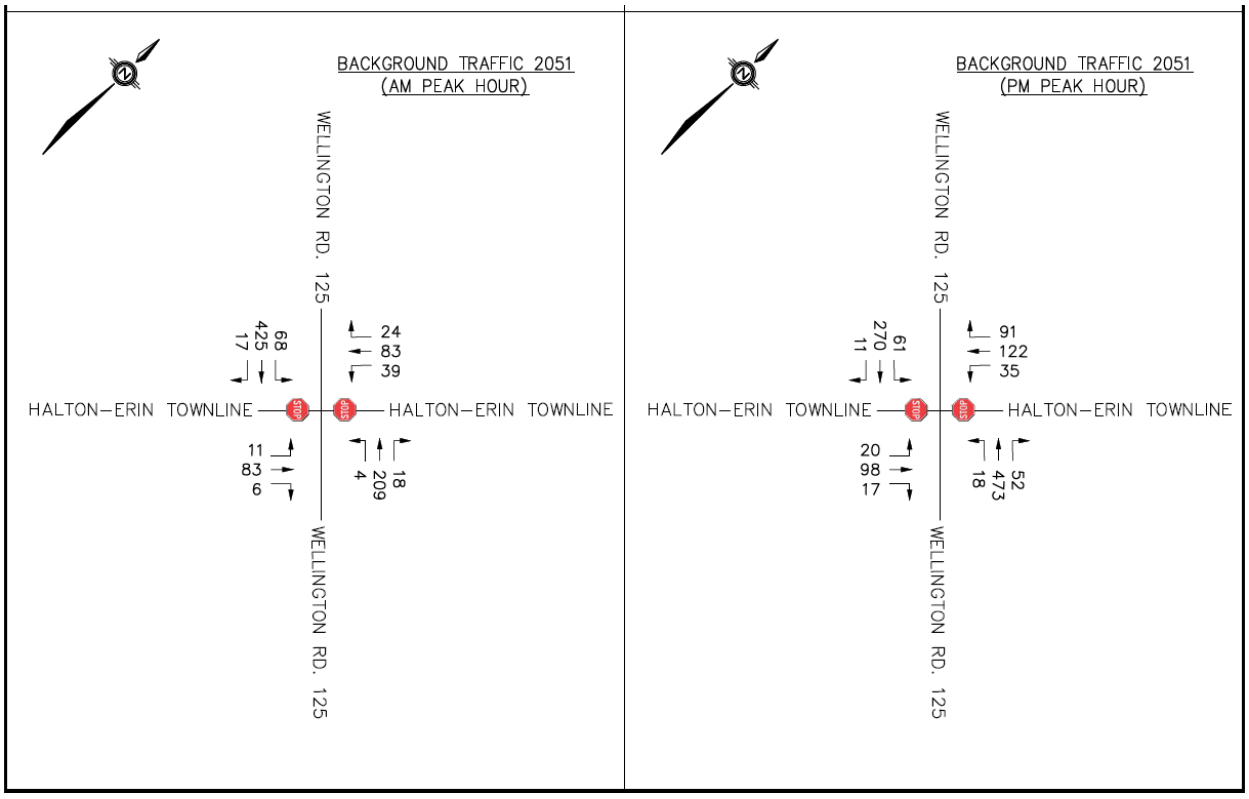


Figure 12-2: Wellington Road 125 at Halton-Erin Townline – Background Traffic 2051

Left-turn lane warrants (provided in **Appendix J-2**) were reconsidered for the northbound and southbound approaches to the intersection. Based on the estimated turning movements in each scenario, southbound left turns in the AM and PM peak hours are expected to be approximately 13.3% and 17.8% of the southbound approach volumes, respectively; therefore, due to the projected future traffic volumes, a southbound left-turn lane with a storage length of 25 m could be required. The northbound left turns in the AM peak hour are expected to be less than the MTO's minimum requirement of 5%; however, the PM peak hour volumes indicate that a northbound left-turn lane with a storage length of 15 m could also be required. If a southbound left-turn lane is implemented, a northbound offset left-turn lane should also be implemented. Although a northbound right-turn lane and taper is already provided, the highest volume of right turns (52), which occurs during the PM peak hour, indicates that this lane is still unwarranted.

The all-way stop condition warrant was also readdressed. The first condition could be met because the total volume approaching the intersection in each of the highest eight hours could exceed 375 vehicles. It is expected that the second condition will not be met because the total minor street volumes approaching the intersection could exceed 150 vehicles in just seven of the highest eight hours. Finally, it is expected that the third condition will not be met, since the same background growth rate was applied to all legs; however, this condition is close to being met. Since all required volume conditions are not met for this intersection, the intersection of Wellington Road 125 at Halton-Erin Townline is not a suitable candidate for implementation of an all-way stop control by the 2051 horizon year.

A further examination of the traffic signal control warrant was considered for the subject intersection. The warrants for the 2051 horizon year are provided in **Appendix J-2**. Justification 7 is 62% satisfied relative to the "Combination Warrant." Therefore, the intersection does not meet the provincial warrants for future signalization.

Since the intersection met only the warrants for northbound and southbound left-turn lanes, the future analysis was completed based on the future traffic volumes for each horizon year and the existing geometric and traffic control conditions. The detailed Synchro 12 results are provided in **Appendix J-2**. The summary of the levels of service are provided in the following **Table 12-2**:

Table 12-2: Level of Service by Approach – Wellington Road 125 at Halton-Erin Townline

Scenario	Control	Wellington Road 125 at Halton-Erin Townline							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	EB/WB SC	B	B	A	A	C	C	A	A
2031 Horizon Traffic	EB/WB SC	C	C	A	A	C	C	A	A
2041 Horizon Traffic	EB/WB SC	C	C	A	A	D	D	A	A
2051 Horizon Traffic	EB/WB SC	D	E	A	A	F	F	A	A

As identified in the above table, by the 2051 horizon year, the level of service for the critical eastbound and westbound approaches is reported to be LOS F in the PM peak hour, with a corresponding control delay of up to 95.2 and 164.4 seconds on each respective approach. The queue on the westbound approach may exceed 13 vehicle lengths, but the northbound and southbound approaches continue to operate at an excellent level of service. Since the future volumes indicated that a left-turn lane should be implemented, and since the all-way stop-control warrant could be close to being met, it is the engineers' opinion that the intersection should be monitored in the 2041 horizon year to determine whether dedicated left-turn lanes or all-way stop-control should be implemented. Of note, provincial best practices suggest that a dedicated left-turn lane should not be combined with an all-way stop control.

13 Sideroad 17 at Third Line (West Leg)

13.1 Sideroad 17 at Third Line (West Leg) – Existing Conditions

All approaches to this southbound stop-controlled tee intersection consist of a shared approach lane. Sideroad 17 is a collector road. No illumination is provided at this intersection. Although the speed limit is not posted on any legs, it is assumed to be 60 km/h.

13.1.1 Existing Intersection Performance

Figure 13-1 exhibits the current AM and PM peak hour traffic volumes:

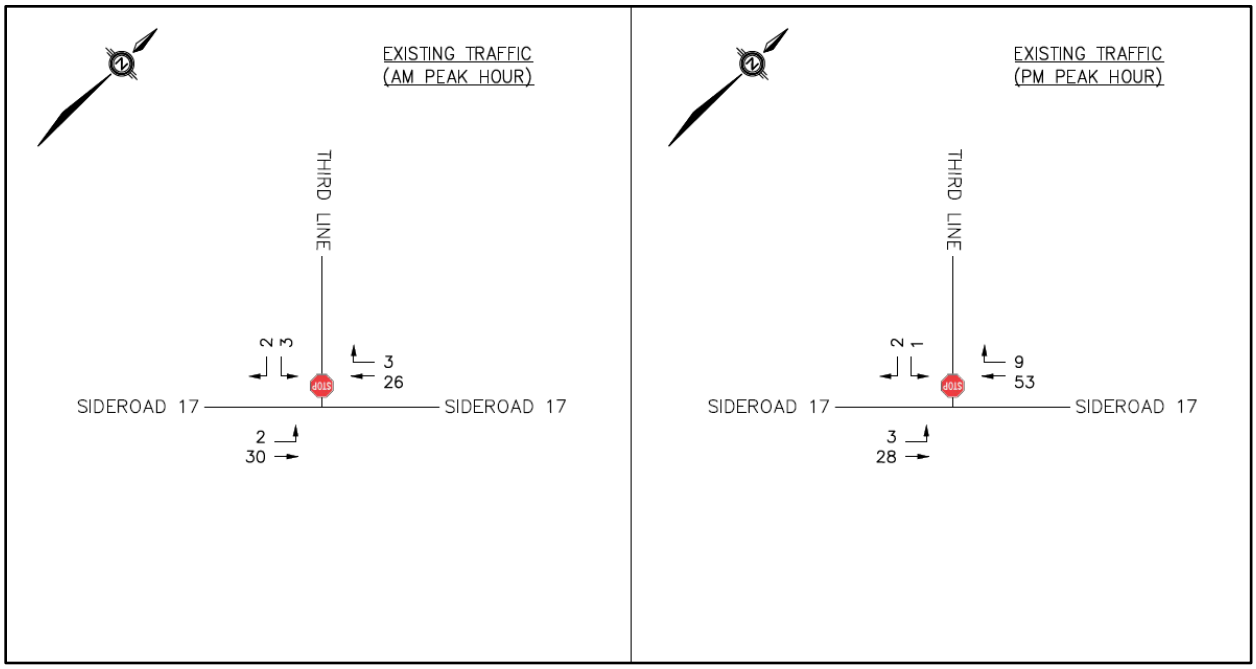


Figure 13-1: Sideroad 17 at Third Line (West Leg) – Existing Traffic

Detailed Synchro 12 traffic operations analysis was undertaken with respect to the existing AM and PM peak hour traffic scenarios. The AM peak hour occurred between 7:45 a.m. and 8:45 a.m.; the PM peak hour occurred between 3:30 p.m. and 4:30 p.m. From the collected turning movement counts, it was also observed that the percentage of heavy vehicles varied substantially on each approach, with individual turning movements ranging between 0% and 66.7% during the AM peak hour and between 0% and 22.2% during the PM peak hour. The detailed modelling outputs are reported in **Appendix K-1**.

The following **Table 13-1** provides a level of service summary for each intersection approach:

Table 13-1: Existing Level of Service by Approach – Sideroad 17 at Third Line (West Leg)

Scenario	Sideroad 17 at Third Line (West Leg)							
	AM Peak Hour				PM Peak Hour			
	E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	A	A	-	A	A	A	-	A

13.1.2 Potential Geometric and / or Traffic Control Improvements

Although left-turn lane warrants (provided in **Appendix K-1**) were considered for the intersection; the major street volumes do not exceed 100 vehicles during the worst-case PM peak hour. The percentage of left turns is low; however, the traffic volumes fall well below the MTO's minimum volume threshold for implementation of a dedicated left turn lane. Left-turn lanes are not warranted.

An all-way stop condition was considered for this intersection; however, as with the left-turn lane warrant, the volumes fall well below all warrant condition thresholds. All-way stop-control is not warranted.

A further examination of the traffic signal control warrant was considered for the subject intersection; however, due to low traffic volumes, the intersection does not meet the warrants for signalization, and no further geometric and / or traffic control alternatives were explored.

13.2 Sideroad 17 at Third Line (West Leg) – Future Conditions

It was requested that the 2031, 2041, and 2051 horizon years be evaluated applying a 2.3% growth rate, compounded annually, to determine the anticipated future operations for the subject intersection. The traffic projection visuals are provided in **Appendix K-2**.

Figure 13-2 illustrates the 2051 horizon year's AM and PM peak hour traffic volumes:

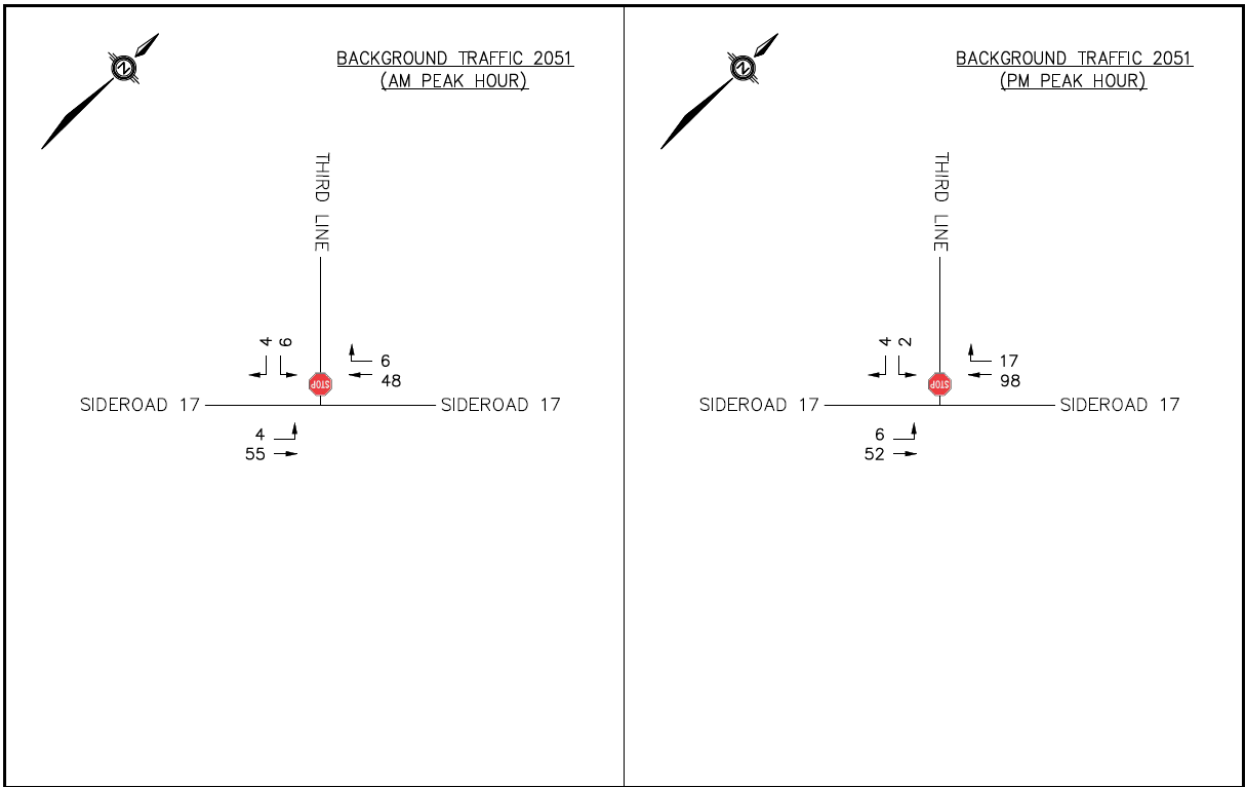


Figure 13-2: Sideroad 17 at Third Line (West Leg) – Background Traffic 2051

At the subject intersection, the anticipated 2051 traffic volumes are less than 100 vehicles on each approach during each peak period, so the previous conclusions regarding the potential requirement for left turn lanes, a change of stop control, or signalization are expected to remain unchanged.

Since the intersection does not meet any warrants, the future analysis was completed based on the future traffic volumes for each horizon year and the existing geometric and traffic control conditions. The detailed Synchro 12 results are provided in **Appendix K-2**. The summary of the levels of service are provided in the following Table 13-2:

Table 13-2: Level of Service by Approach – Sideroad 17 at Third Line (West Leg)

Scenario	Control	Sideroad 17 at Third Line (West Leg)							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Existing Traffic	SB SC	A	-	A	A	A	-	A	A
2031 Horizon Traffic	SB SC	A	-	A	A	A	-	A	A
2041 Horizon Traffic	SB SC	A	-	A	A	A	-	A	A
2051 Horizon Traffic	SB SC	A	-	A	A	A	-	A	A

As identified in the table, by the 2051 horizon year, the level of service for all approaches will maintain a LOS A. No further geometric or traffic control improvements are required.

14 Summary and Conclusions

As part of the Town of Erin's Transportation Master Plan Update, a traffic operations assessment was undertaken for eleven (11) intersections within the Town. Detailed traffic operations analysis was prepared for the respective AM and PM peak hours. Potential geometric and / or traffic control improvements were reviewed to mitigate the effects of collisions and to improve the respective approach levels of service.

Upon review of the existing traffic conditions (and upon identification of the recommended geometric and / or traffic control improvements to the subject intersections), RC Spencer Associates Inc. was additionally tasked with quantifying and qualifying the "future" traffic operations that can be expected; accordingly, levels of service for the respective 2031, 2041, and 2051 horizon years were modelled and reported for the critical AM and PM peak hour scenarios. As directed by the road authority, background traffic was increased by 2.3% per year, compounded annually, for all horizon forecasts.

At intersections where improvements were recommended based on the existing results, the recommended geometry and / or traffic control conditions were applied to the existing and future scenarios (to ensure a compatible comparison). The effect of adding background traffic growth at each intersection (to arrive at the respective "horizon year") and the resulting Synchro 12 simulation reports

have been provided in appendices associated with each intersection. To quantify and qualify the effect of traffic growth on individual intersections within the study area, the “existing” and “future” Synchro 12 results were summarized in **Table 14-1** as follows:

Table 14-1: Level of Service by Approach – Erin TMP Comparison Table

Intersection	Control	Comparison Table							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Wellington Rd 24 at Erin Garafraxa (Ex.)	EB/WB SC	B	B	A	A	B	C	A	A
Wellington Rd 24 at Erin Garafraxa (2031)	EB/WB SC	B	B	A	A	B	C	A	A
Wellington Rd 24 at Erin Garafraxa (2041)	EB/WB SC	C	C	A	A	C	E	A	A
Wellington Rd 24 at Erin Garafraxa (2051)	EB/WB SC	C	C	A	A	D	F	A	A
Orangeville St at Eighth Ln (Ex.)	EB SC	A	-	A	A	A	-	A	A
Orangeville St at Eighth Ln (2031)	EB SC	A	-	A	A	A	-	A	A
Orangeville St at Eighth Ln (2041)	EB SC	A	-	A	A	A	-	A	A
Orangeville St at Eighth Ln (2051)	EB SC	A	-	A	A	A	-	A	A
Tenth Ln at Wellington Rd 22 (Ex.)	NB/SB SC	A	A	A	A	A	A	B	A
Tenth Ln at Wellington Rd 22 (2031)	NB/SB SC	A	A	A	B	A	A	B	A
Tenth Ln at Wellington Rd 22 (2041)	NB/SB SC	A	A	A	B	A	A	B	A
Tenth Ln at Wellington Rd 22 (2051)	NB/SB SC	A	A	A	B	A	A	B	A
Ninth Ln at Sdrd 5 (Ex.)	AWSC	A	A	A	A	A	A	A	A
Ninth Ln at Sdrd 5 (2031)	AWSC	A	A	A	A	A	A	A	A
Ninth Ln at Sdrd 5 (2041)	AWSC	A	A	A	A	A	A	A	A
Ninth Ln at Sdrd 5 (2051)	AWSC	A	A	A	A	B	B	A	B
Sdrd 17 at Wellington Rd 24 (Ex.)	EB/WB SC	B	B	A	A	C	C	A	A
Sdrd 17 at Wellington Rd 24 (Ex.)	Signal/LTL	A	B	A	A	B	B	A	A
Sdrd 17 at Wellington Rd 24 (2031)	Signal/LTL	A	B	A	A	B	B	A	A
Sdrd 17 at Wellington Rd 24 (2041)	Signal/LTL	B	B	A	A	B	B	B	A
Sdrd 17 at Wellington Rd 24 (2051)	Signal/LTL	B	B	A	B	B	C	C	B
Fourth Ln at Sdrd 27 (Ex.)	NB/SB SC	A	A	A	A	A	A	A	A
Fourth Ln at Sdrd 27 (2031)	NB/SB SC	A	A	A	A	A	A	A	A
Fourth Ln at Sdrd 27 (2041)	NB/SB SC	A	A	A	A	A	A	A	A
Fourth Ln at Sdrd 27 (2051)	NB/SB SC	A	A	A	A	A	A	A	A
Second Ln at Sdrd 27 (Ex.)	NB/SB SC	A	A	A	A	A	A	A	A
Second Ln at Sdrd 27 (Ex.)	EB/WB SC	A	A	A	A	A	A	A	A
Second Ln at Sdrd 27 (2031)	EB/WB SC	A	A	A	A	A	A	A	A

Intersection	Control	Comparison Table							
		AM Peak Hour				PM Peak Hour			
		E/B	W/B	N/B	S/B	E/B	W/B	N/B	S/B
Second Ln at Sdrd 27 (2041)	EB/WB SC	A	A	A	A	A	A	A	A
Second Ln at Sdrd 27 (2051)	EB/WB SC	A	A	A	A	A	A	A	A
Second Ln at Wellington 22 (Ex.)	EB/WB SC	B	B	A	A	B	B	A	A
Second Ln at Wellington 22 (Ex.)	NB/SB SC	A	A	B	B	A	A	B	B
Second Ln at Wellington Rd 22 (2031)	NB/SB SC	A	A	B	B	A	A	B	B
Second Ln at Wellington Rd 22 (2041)	NB/SB SC	A	A	B	B	A	A	B	B
Second Ln at Wellington Rd 22 (2051)	NB/SB SC	A	A	B	B	A	A	B	B
Second Ln at Sdrd 17 (Ex.)	EB/WB SC	A	A	A	A	A	A	A	A
Second Ln at Sdrd 17 (2031)	EB/WB SC	A	A	A	A	A	B	A	A
Second Ln at Sdrd 17 (2041)	EB/WB SC	A	A	A	A	B	B	A	A
Second Ln at Sdrd 17 (2051)	EB/WB SC	A	A	A	A	B	B	A	A
Halton-Erin TL at Wellington 125 (Ex.)	EB/WB SC	B	B	A	A	C	C	A	A
Halton-Erin TL at Wellington 125 (2031)	EB/WB SC	C	C	A	A	C	C	A	A
Halton-Erin TL at Wellington 125 (2041)	EB/WB SC	C	C	A	A	D	D	A	A
Halton-Erin TL at Wellington 125 (2051)	EB/WB SC	D	E	A	A	F	F	A	A
Third Ln (W leg) at Sdrd 17 (Ex.)	SB SC	A	A	-	A	A	A	-	A
Third Ln (W leg) at Sdrd 17 (2031)	SB SC	A	A	-	A	A	A	-	A
Third Ln (W leg) at Sdrd 17 (2041)	SB SC	A	A	-	A	A	A	-	A
Third Ln (W leg) at Sdrd 17 (2051)	SB SC	A	A	-	A	A	A	-	A

Additionally, an intersection-specific comparison of the overall levels of service was completed and summarized (comparing the existing traffic to the horizon year 2051 traffic). These results are provided in the following **Table 14-2**:

Table 14-2: Overall Intersection Levels of Service

Intersection	Control	Existing Traffic		Background Traffic 2051	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Wellington Rd. 24 at Erin Garafraxa TL	EB/WB SC	A	A	A	E
Orangeville St. at Eighth Line	EB SC	A	A	A	A
Tenth Line at Wellington Rd. 22	NB/SB SC	A	A	A	A
Ninth Line at Sideroad 5	AWSC	A	A	A	B
Sideroad 17 at Wellington Rd. 24	EB/WB SC	A	A	-	-
Sideroad 17 at Wellington Rd. 24	**Signal**	-	-	B	B
Fourth Line at Sideroad 27	NB/SB SC	A	A	A	A
Second Line at Sideroad 27	NB/SB SC	A	A	-	-
Second Line at Sideroad 27	**EB/WB SC**	-	-	A	A
Second Line at Wellington Rd. 22	EB/WB SC	A	A	-	-
Second Line at Wellington Rd. 22	**NB/SB SC**	-	-	A	A
Second Line at Sideroad 17	EB/WB SC	A	A	A	A
Halton-Erin TL at Wellington Rd. 125	EB/WB SC	A	A	A	E
Third Line at Sideroad 17	SB SC	A	A	A	A

As previously noted in the applicable intersection evaluations, as background traffic volumes increase at the existing minor street stop-controlled intersections of Wellington Road 24 at Erin Garafraxa Townline and Halton-Erin Townline at Wellington Road 125, less time (gap) is available for vehicles on the minor street to enter the main street traffic stream. Therefore, at these two intersections, conditions should be monitored by the road authority, and a re-evaluation of the geometric and traffic control warrants should be undertaken in the identified horizon years.

Based on the modelling outputs and “industry best practices” references, it was concluded that:

- At the intersection of Wellington Road 24 at Erin Garafraxa Townline, the levels of service are satisfactory on the minor street approach, the existing northbound right-turn lane is not required; no geometric or traffic control improvements are recommended;
- At the tee intersection of Eighth Line at Orangeville Street, all levels of service are excellent; no geometric or traffic control improvements are recommended;
- At the intersection of Wellington Road 22 at Tenth Line, all levels of service are excellent; no geometric or traffic control improvements are recommended;
- At the intersection of Sideroad 5 at Ninth Line, the traffic volumes are low, so the intersection does not meet the warrants for signalization, and no further geometric and / or traffic control alternatives were explored;
- At the intersection of Wellington Road 24 at Sideroad 17, the warrant for signalization is met, so traffic signals should be implemented at this intersection; directly offsetting northbound and southbound left-turn lanes is also recommended;
- At the intersection of Sideroad 27 at Fourth Line, all levels of service are excellent; no geometric or traffic control improvements are recommended;
- At the intersection of Sideroad 27 at Second Line, all levels of service are excellent, and no geometric improvements are recommended; however, traffic volumes exhibit a 65.5% / 34.5% split on the minor / major streets, indicating that the road authorities should implement a minor street stop control condition on the lower volume east / west approaches and decommission the existing north / south stop control condition;
- At the intersection of Wellington Road 22 at Second Line, all levels of service are excellent, and no geometric improvements are recommended; however, in consideration of the volumes on the arterial / collector roadways, the road authorities should implement a minor street stop

control condition on the lower volume north / south approaches and decommission the existing east / west stop control condition;

- At the intersection of Sideroad 17 at Second Line, all levels of service are excellent; no geometric or traffic control improvements are recommended;
- At the intersection of Wellington Road 125 at Halton-Erin Townline, the levels of service are satisfactory on the minor street approach; no geometric or traffic control improvements are recommended;
- At the tee intersection of Sideroad 17 at Third Line (West Leg), all levels of service are excellent; no geometric or traffic control improvements are recommended;
- As background traffic volumes increase at the existing minor street stop-controlled intersections of Wellington Road 24 at Erin Garafraxa Townline and Halton-Erin Townline at Wellington Road 125, less time (gap) is available for vehicles on the minor street to enter the main street traffic stream; therefore, at these two intersections, conditions should be monitored by the road authority, and a re-evaluation of the geometric and traffic control warrants should be undertaken in the identified horizon years.

In conclusion, at the eleven subject intersections, it is the engineers' opinion that the above-mentioned geometric and traffic control improvements should be implemented; furthermore, it is recommended that the current lighting levels should be evaluated based on the guidance provided in the Transportation Association of Canada (TAC)'s current "Illumination of Isolated Rural Intersections" reference.

Appendix A-1

01 WELLINGTON ROAD 24 AT ERIN GARAFRAXA TOWNLINE – EXISTING TRAFFIC VOLUME METRICS

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Project #24-485 - 30 Forensic Engineering

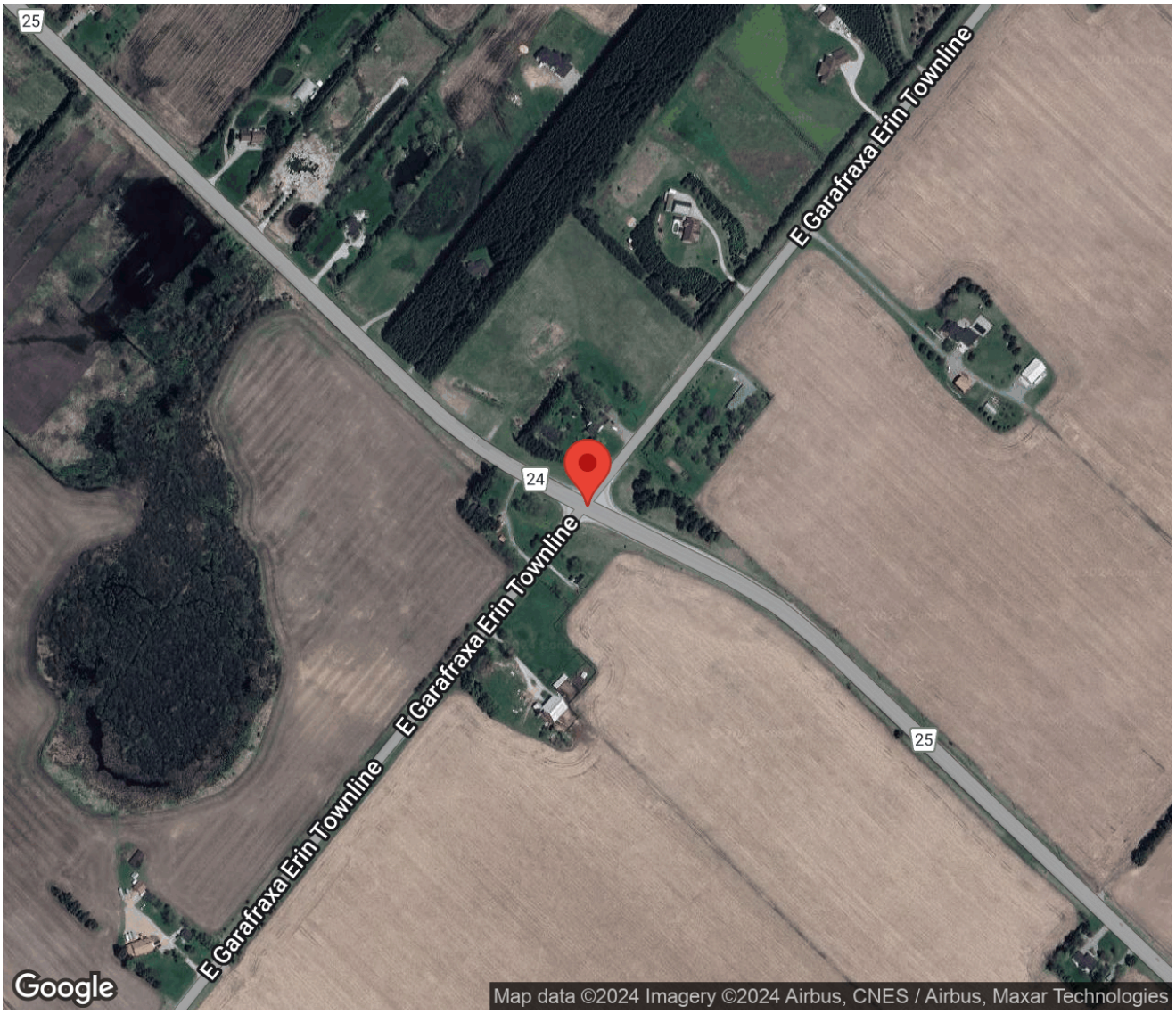
Intersection Count Report

Intersection:	Wellington Rd 24 & Erin Garafraxa Townline
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500001
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Wellington Rd 24 & Erin Garafraxa Townline
Site Code:	2448500001
Municipality:	Erin
Count Date:	Nov 19, 2024



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Traffic Count Summary

Intersection:	Wellington Rd 24 & Erin Garafraxa Townline
Site Code:	2448500001
Municipality:	Erin
Count Date:	Nov 19, 2024

Trafalgar RD - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	21	181	3	1	206	0	3	76	28	0	107	0	313
08:00 - 09:00	19	129	6	0	154	0	9	79	43	0	131	0	285
09:00 - 10:00	10	105	5	0	120	0	8	80	23	0	111	0	231
BREAK													
11:00 - 12:00	9	82	4	0	95	0	9	57	20	0	86	0	181
12:00 - 13:00	7	107	1	0	115	0	12	66	19	0	97	0	212
BREAK													
15:00 - 16:00	18	109	6	0	133	0	18	148	28	0	194	0	327
16:00 - 17:00	20	98	8	0	126	0	18	232	39	0	289	0	415
17:00 - 18:00	19	78	5	0	102	0	23	239	45	0	307	0	409
GRAND TOTAL	**123**	**889**	**38**	**1**	**1051**	**0**	**100**	**977**	**245**	**0**	**1322**	**0**	**2373**

Ontario Traffic Inc.
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Traffic Count Summary

Intersection:	Wellington Rd 24 & Erin Garafraxa Townline
Site Code:	2448500001
Municipality:	Erin
Count Date:	Nov 19, 2024

Erin Garafraxa Townline - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	20	27	16	0	63	0	3	47	17	0	67	0	130
08:00 - 09:00	23	34	20	0	77	0	10	44	21	0	75	0	152
09:00 - 10:00	13	20	16	0	49	0	5	29	11	0	45	0	94
BREAK													
11:00 - 12:00	21	25	6	0	52	0	5	39	9	0	53	0	105
12:00 - 13:00	16	20	12	0	48	0	4	18	5	0	27	0	75
BREAK													
15:00 - 16:00	36	39	22	0	97	0	4	22	17	1	44	0	141
16:00 - 17:00	44	51	38	0	133	0	5	36	9	0	50	0	183
17:00 - 18:00	46	47	26	0	119	0	2	32	15	0	49	0	168
GRAND TOTAL	**219**	**263**	**156**	**0**	**638**	**0**	**38**	**267**	**104**	**1**	**410**	**0**	**1048**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	5	39	0	0	44	0	4	0	0	4	0	0	0	0	0	0
07:15	4	42	0	0	46	0	2	0	0	2	0	0	0	0	0	0
07:30	6	41	1	0	48	0	4	0	1	5	0	0	0	0	0	0
07:45	6	46	2	0	54	0	3	0	0	3	0	0	0	0	0	0
08:00	3	40	0	0	43	0	3	1	0	4	0	0	0	0	0	0
08:15	2	30	0	0	32	0	3	0	0	3	0	0	0	0	0	0
08:30	7	27	1	0	35	0	2	1	0	3	0	0	0	0	0	0
08:45	6	24	2	0	32	1	0	1	0	2	0	0	0	0	0	0
09:00	6	31	1	0	38	0	1	0	0	1	0	0	0	0	0	0
09:15	1	21	3	0	25	2	3	0	0	5	0	0	0	0	0	0
09:30	0	20	1	0	21	0	4	0	0	4	0	0	0	0	0	0
09:45	1	21	0	0	22	0	4	0	0	4	0	0	0	0	0	0
SUBTOTAL	47	382	11	0	440	3	33	3	1	40	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	1	16	0	0	17	0	4	0	0	4	0	0	0	0	0	0
11:15	1	11	0	0	12	2	0	0	0	2	0	0	0	0	0	0
11:30	3	23	1	0	27	1	9	1	0	11	0	0	0	0	0	0
11:45	1	16	1	0	18	0	3	1	0	4	0	0	0	0	0	0
12:00	2	19	1	0	22	0	5	0	0	5	0	0	0	0	0	0
12:15	1	20	0	0	21	0	4	0	0	4	0	0	0	0	0	0
12:30	3	34	0	0	37	1	7	0	0	8	0	0	0	0	0	0
12:45	0	15	0	0	15	0	3	0	0	3	0	0	0	0	0	0
SUBTOTAL	12	154	3	0	169	4	35	2	0	41	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
15:00	4	18	0	0	22	1	7	0	0	8	0	0	0	0	0	0
15:15	4	23	0	0	27	0	6	1	0	7	0	0	0	0	0	0
15:30	6	18	2	0	26	1	5	0	0	6	0	0	0	0	0	0
15:45	2	31	3	0	36	0	1	0	0	1	0	0	0	0	0	0
16:00	2	21	0	0	23	1	0	0	0	1	0	0	0	0	0	0
16:15	4	20	1	0	25	0	0	0	0	0	0	0	0	0	0	0
16:30	4	21	5	0	30	2	1	0	0	3	0	0	0	0	0	0
16:45	6	32	2	0	40	1	3	0	0	4	0	0	0	0	0	0
17:00	4	18	1	0	23	0	1	0	0	1	0	0	0	0	0	0
17:15	4	24	2	0	30	0	1	0	0	1	0	0	0	0	0	0
17:30	3	11	2	0	16	1	0	0	0	1	0	0	0	0	0	0
17:45	5	23	0	0	28	2	0	0	0	2	0	0	0	0	0	0
SUBTOTAL	48	260	18	0	326	9	25	1	0	35	0	0	0	0	0	0
GRAND TOTAL	107	796	32	0	935	16	93	6	1	116	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	1	10	3	0	14	0	1	1	0	2	0	0	0	0	0	0
07:15	0	15	10	0	25	0	3	0	0	3	0	0	0	0	0	0
07:30	2	21	5	0	28	0	3	1	0	4	0	0	0	0	0	0
07:45	0	21	8	0	29	0	2	0	0	2	0	0	0	0	0	0
08:00	0	15	12	0	27	0	1	1	0	2	0	0	0	0	0	0
08:15	3	22	12	0	37	1	2	0	0	3	0	0	0	0	0	0
08:30	0	17	13	0	30	0	0	1	0	1	0	0	0	0	0	0
08:45	3	19	4	0	26	2	3	0	0	5	0	0	0	0	0	0
09:00	4	20	8	0	32	1	2	0	0	3	0	0	0	0	0	0
09:15	2	19	2	0	23	0	5	3	0	8	0	0	0	0	0	0
09:30	1	12	2	0	15	0	5	1	0	6	0	0	0	0	0	0
09:45	0	16	6	0	22	0	1	1	0	2	0	0	0	0	0	0
SUBTOTAL	16	207	85	0	308	4	28	9	0	41	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	4	6	3	0	13	0	1	1	0	2	0	0	0	0	0	0
11:15	1	12	3	0	16	0	2	1	0	3	0	0	0	0	0	0
11:30	1	19	7	0	27	1	4	0	0	5	0	0	0	0	0	0
11:45	2	10	5	0	17	0	3	0	0	3	0	0	0	0	0	0
12:00	3	11	4	0	18	1	2	2	0	5	0	0	0	0	0	0
12:15	3	15	4	0	22	0	1	0	0	1	0	0	0	0	0	0
12:30	0	13	3	0	16	2	4	2	0	8	0	0	0	0	0	0
12:45	2	16	4	0	22	1	4	0	0	5	0	0	0	0	0	0
SUBTOTAL	16	102	33	0	151	5	21	6	0	32	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	2	31	5	0	38	1	2	0	0	3	0	0	0	0	0	0
15:15	1	30	6	0	37	0	3	0	0	3	0	0	0	0	0	0
15:30	9	35	7	0	51	0	8	0	0	8	0	0	0	0	0	0
15:45	4	34	10	0	48	1	5	0	0	6	0	0	0	0	0	0
16:00	4	51	12	0	67	1	2	1	0	4	0	0	0	0	0	0
16:15	2	49	9	0	60	0	2	1	0	3	0	0	0	0	0	0
16:30	4	53	12	0	69	0	3	0	0	3	0	0	0	0	0	0
16:45	7	67	4	0	78	0	5	0	0	5	0	0	0	0	0	0
17:00	7	51	18	0	76	1	1	0	0	2	0	0	0	0	0	0
17:15	4	69	10	0	83	1	2	0	0	3	0	0	0	0	0	0
17:30	7	71	10	0	88	0	6	0	0	6	0	0	0	0	0	0
17:45	2	38	7	0	47	1	1	0	0	2	0	0	0	0	0	0
SUBTOTAL	53	579	110	0	742	6	40	2	0	48	0	0	0	0	0	0
GRAND TOTAL	**85**	**888**	**228**	**0**	**1201**	**15**	**89**	**17**	**0**	**121**	**0**	**0**	**0**	**0**	**0**	**0**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Erin Garafraxa Townline

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	3	4	1	0	8	1	0	2	0	3	0	0	0	0	0	0
07:15	3	6	3	0	12	0	1	3	0	4	0	0	0	0	0	0
07:30	4	6	1	0	11	0	1	0	0	1	0	0	0	0	0	0
07:45	8	7	6	0	21	1	2	0	0	3	0	0	0	0	0	0
08:00	3	7	5	0	15	1	1	0	0	2	0	0	0	0	0	0
08:15	6	9	2	0	17	1	1	0	0	2	0	0	0	0	0	0
08:30	3	9	9	0	21	0	1	0	0	1	0	0	0	0	0	0
08:45	9	6	3	0	18	0	0	1	0	1	0	0	0	0	0	0
09:00	4	5	7	0	16	0	0	0	0	0	0	0	0	0	0	0
09:15	3	10	3	0	16	0	0	1	0	1	0	0	0	0	0	0
09:30	3	2	1	0	6	0	0	0	0	0	0	0	0	0	0	0
09:45	3	3	3	0	9	0	0	1	0	1	0	0	0	0	0	0
SUBTOTAL	52	74	44	0	170	4	7	8	0	19	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Erin Garafraxa Townline

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	7	11	0	0	18	0	0	0	0	0	0	0	0	0	0	0
11:15	1	6	4	0	11	1	1	0	0	2	0	0	0	0	0	0
11:30	5	0	1	0	6	0	1	0	0	1	0	0	0	0	0	0
11:45	5	6	0	0	11	2	0	1	0	3	0	0	0	0	0	0
12:00	3	2	5	0	10	0	0	0	0	0	0	0	0	0	0	0
12:15	7	6	2	0	15	0	1	1	0	2	0	0	0	0	0	0
12:30	4	4	3	0	11	0	0	0	0	0	0	0	0	0	0	0
12:45	1	6	1	0	8	1	1	0	0	2	0	0	0	0	0	0
SUBTOTAL	33	41	16	0	90	4	4	2	0	10	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Erin Garafraxa Townline

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
15:00	6	9	4	0	19	0	0	0	0	0	0	0	0	0	0	0
15:15	10	12	7	0	29	0	1	0	0	1	0	0	0	0	0	0
15:30	9	8	7	0	24	0	1	1	0	2	0	0	0	0	0	0
15:45	9	8	2	0	19	2	0	1	0	3	0	0	0	0	0	0
16:00	10	12	10	0	32	2	1	0	0	3	0	0	0	0	0	0
16:15	6	6	8	0	20	0	1	0	0	1	0	0	0	0	0	0
16:30	10	18	9	0	37	0	0	1	0	1	0	0	0	0	0	0
16:45	13	12	10	0	35	3	1	0	0	4	0	0	0	0	0	0
17:00	10	12	7	0	29	0	1	0	0	1	0	0	0	0	0	0
17:15	13	13	6	0	32	1	0	0	0	1	0	0	0	0	0	0
17:30	7	16	9	0	32	0	0	0	0	0	0	0	0	0	0	0
17:45	15	5	4	0	24	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	118	131	83	0	332	8	6	3	0	17	0	0	0	0	0	0
GRAND TOTAL	**203**	**246**	**143**	**0**	**592**	**16**	**17**	**13**	**0**	**46**	**0**	**0**	**0**	**0**	**0**	**0**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Erin Garafraxa Townline

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	0	11	3	0	14	0	5	0	0	5	0	0	0	0	0	0
07:15	1	8	1	0	10	0	0	0	0	0	0	0	0	0	0	0
07:30	1	10	3	0	14	0	0	0	0	0	0	0	0	0	0	0
07:45	1	8	8	0	17	0	5	2	0	7	0	0	0	0	0	0
08:00	2	10	3	0	15	0	0	1	0	1	0	0	0	0	0	0
08:15	1	12	10	0	23	3	0	0	0	3	0	0	0	0	0	0
08:30	4	8	0	0	12	0	1	0	0	1	0	0	0	0	0	0
08:45	0	11	5	0	16	0	2	2	0	4	0	0	0	0	0	0
09:00	2	5	5	0	12	0	3	0	0	3	0	0	0	0	0	0
09:15	1	8	6	0	15	0	0	0	0	0	0	0	0	0	0	0
09:30	1	7	0	0	8	0	0	0	0	0	0	0	0	0	0	0
09:45	1	6	0	0	7	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	15	104	44	0	163	3	16	5	0	24	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Erin Garafraxa Townline

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	1	6	2	0	9	0	0	0	0	0	0	0	0	0	0	0
11:15	1	10	2	0	13	0	1	0	0	1	0	0	0	0	0	0
11:30	1	13	4	0	18	1	1	0	0	2	0	0	0	0	0	0
11:45	1	7	1	0	9	0	1	0	0	1	0	0	0	0	0	0
12:00	1	2	3	0	6	0	0	0	0	0	0	0	0	0	0	0
12:15	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
12:30	2	6	0	0	8	0	0	0	0	0	0	0	0	0	0	0
12:45	0	8	2	0	10	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	8	54	14	0	76	1	3	0	0	4	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Erin Garafraxa Townline

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	6	7	0	13	0	0	3	0	3	0	0	0	0	0	0
15:15	0	2	2	1	5	0	0	1	0	1	0	0	0	0	0	0
15:30	2	6	0	0	8	0	1	0	0	1	0	0	0	0	0	0
15:45	2	6	4	0	12	0	1	0	0	1	0	0	0	0	0	0
16:00	1	8	0	0	9	0	2	0	0	2	0	0	0	0	0	0
16:15	1	8	3	0	12	0	1	1	0	2	0	0	0	0	0	0
16:30	0	9	2	0	11	0	1	0	0	1	0	0	0	0	0	0
16:45	3	7	3	0	13	0	0	0	0	0	0	0	0	0	0	0
17:00	0	10	3	0	13	0	1	1	0	2	0	0	0	0	0	0
17:15	0	5	3	0	8	0	1	0	0	1	0	0	0	0	0	0
17:30	1	5	4	0	10	0	0	0	0	0	0	0	0	0	0	0
17:45	1	10	4	0	15	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	11	82	35	1	129	0	8	6	0	14	0	0	0	0	0	0
GRAND TOTAL	**34**	**240**	**93**	**1**	**368**	**4**	**27**	**11**	**0**	**42**	**0**	**0**	**0**	**0**	**0**	**0**

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period		One Hour Peak	
From:	07:00:00	From:	07:30:00
To:	10:00:00	To:	08:30:00

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Trafalgar RD runs N/S

North Approach

	Out	In	Total
Cars	177	98	275
Trucks	15	12	27
Bicycles	0	0	0
	192	**110**	**302**

Trafalgar RD

Bicycles	0	0	0	0
Trucks	1	13	0	1
Cars	3	157	17	0
Totals	**4**	**170**	**17**	**1**

East Approach

	Out	In	Total
Cars	64	94	158
Trucks	8	7	15
Bicycles	0	0	0
	72	**101**	**173**

Peds: 0

Erin Garafraxa Townline

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	3	5	**8**
0	5	40	**45**
0	3	24	**27**

Peds: 0



Peds: 0

Erin Garafraxa Townline

Totals	Cars	Trucks	Bicycles
0	0	0	0
14	14	0	0
34	29	5	0
24	21	3	0

Peds: 0

West Approach

	Out	In	Total
Cars	69	37	106
Trucks	11	7	18
Bicycles	0	0	0
	80	**44**	**124**

Trafalgar RD

Totals	**6**	**87**	**39**	**0**
Cars	5	79	37	0
Trucks	1	8	2	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	121	202	323
Trucks	11	19	30
Bicycles	0	0	0
	132	**221**	**353**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

Peak Hour Data (07:30 - 08:30)

Start Time	North Approach Trafalgar RD						South Approach Trafalgar RD						East Approach Erin Garafraxa Townline						West Approach Erin Garafraxa Townline						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:30	6	45	1	1	0	53	2	24	6	0	0	32	4	7	1	0	0	12	1	10	3	0	0	14	111
07:45	6	49	2	0	0	57	0	23	8	0	0	31	9	9	6	0	0	24	1	13	10	0	0	24	136
08:00	3	43	1	0	0	47	0	16	13	0	0	29	4	8	5	0	0	17	2	10	4	0	0	16	109
08:15	2	33	0	0	0	35	4	24	12	0	0	40	7	10	2	0	0	19	4	12	10	0	0	26	120
Grand Total	**17**	**170**	**4**	**1**	**0**	**192**	**6**	**87**	**39**	**0**	**0**	**132**	**24**	**34**	**14**	**0**	**0**	**72**	**8**	**45**	**27**	**0**	**0**	**80**	**476**
Approach %	8.9	88.5	2.1	0.5		-	4.5	65.9	29.5	0		-	33.3	47.2	19.4	0		-	10	56.3	33.8	0		-	
Totals %	3.6	35.7	0.8	0.2		40.3	1.3	18.3	8.2	0		27.7	5	7.1	2.9	0		15.1	1.7	9.5	5.7	0		16.8	
PHF	**0.71**	**0.87**	**0.5**	**0.25**		**0.84**	**0.38**	**0.91**	**0.75**	**0**		**0.83**	**0.67**	**0.85**	**0.58**	**0**		**0.75**	**0.5**	**0.87**	**0.68**	**0**		**0.77**	**0.88**
Cars	17	157	3	0		177	5	79	37	0		121	21	29	14	0		64	5	40	24	0		69	431
% Cars	100	92.4	75	0		92.2	83.3	90.8	94.9	0		91.7	87.5	85.3	100	0		88.9	62.5	88.9	88.9	0		86.3	90.5
Trucks	0	13	1	1		15	1	8	2	0		11	3	5	0	0		8	3	5	3	0		11	45
% Trucks	0	7.6	25	100		7.8	16.7	9.2	5.1	0		8.3	12.5	14.7	0	0		11.1	37.5	11.1	11.1	0		13.8	9.5
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Specified Period
From: 11:00:00
To: 13:00:00

One Hour Peak
From: 11:30:00
To: 12:30:00

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Trafalgar RD runs N/S

North Approach

	Out	In	Total
Cars	88	67	155
Trucks	24	13	37
Bicycles	0	0	0
	112	**80**	**192**

Trafalgar RD

Bicycles	0	0	0	0
Trucks	2	21	1	0
Cars	3	78	7	0
Totals	**5**	**99**	**8**	**0**

East Approach

	Out	In	Total
Cars	42	51	93
Trucks	6	5	11
Bicycles	0	0	0
	48	**56**	**104**

Peds: 0

Erin Garafraxa Townline

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	1	4	**5**
0	2	24	**26**
0	0	8	**8**

Peds: 0



Peds: 0

Erin Garafraxa Townline

Totals	Cars	Trucks	Bicycles
0	0	0	0
10	8	2	0
16	14	2	0
22	20	2	0

Peds: 0

West Approach

	Out	In	Total
Cars	36	26	62
Trucks	3	6	9
Bicycles	0	0	0
	39	**32**	**71**

Trafalgar RD

Totals	**11**	**65**	**22**	**0**
Cars	9	55	20	0
Trucks	2	10	2	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	84	106	190
Trucks	14	23	37
Bicycles	0	0	0
	98	**129**	**227**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (11:30 - 12:30)

Start Time	North Approach Trafalgar RD						South Approach Trafalgar RD						East Approach Erin Garafraxa Townline						West Approach Erin Garafraxa Townline						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
11:30	4	32	2	0	0	38	2	23	7	0	0	32	5	1	1	0	0	7	2	14	4	0	0	20	97
11:45	1	19	2	0	0	22	2	13	5	0	0	20	7	6	1	0	0	14	1	8	1	0	0	10	66
12:00	2	24	1	0	0	27	4	13	6	0	0	23	3	2	5	0	0	10	1	2	3	0	0	6	66
12:15	1	24	0	0	0	25	3	16	4	0	0	23	7	7	3	0	0	17	1	2	0	0	0	3	68
Grand Total	**8**	**99**	**5**	**0**	**0**	**112**	**11**	**65**	**22**	**0**	**0**	**98**	**22**	**16**	**10**	**0**	**0**	**48**	**5**	**26**	**8**	**0**	**0**	**39**	**297**
Approach %	7.1	88.4	4.5	0		-	11.2	66.3	22.4	0		-	45.8	33.3	20.8	0		-	12.8	66.7	20.5	0		-	
Totals %	2.7	33.3	1.7	0		37.7	3.7	21.9	7.4	0		33	7.4	5.4	3.4	0		16.2	1.7	8.8	2.7	0		13.1	
PHF	**0.5**	**0.77**	**0.63**	**0**		**0.74**	**0.69**	**0.71**	**0.79**	**0**		**0.77**	**0.79**	**0.57**	**0.5**	**0**		**0.71**	**0.63**	**0.46**	**0.5**	**0**		**0.49**	**0.77**
Cars	7	78	3	0		88	9	55	20	0		84	20	14	8	0		42	4	24	8	0		36	250
% Cars	87.5	78.8	60	0		78.6	81.8	84.6	90.9	0		85.7	90.9	87.5	80	0		87.5	80	92.3	100	0		92.3	84.2
Trucks	1	21	2	0		24	2	10	2	0		14	2	2	2	0		6	1	2	0	0		3	47
% Trucks	12.5	21.2	40	0		21.4	18.2	15.4	9.1	0		14.3	9.1	12.5	20	0		12.5	20	7.7	0	0		7.7	15.8
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	15:00:00	From:	16:30:00
To:	18:00:00	To:	17:30:00

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Trafalgar RD runs N/S

North Approach

	Out	In	Total
Cars	123	275	398
Trucks	9	12	21
Bicycles	0	0	0
	132	**287**	**419**

Trafalgar RD

Bicycles	0	0	0	0
Trucks	0	6	3	0
Cars	10	95	18	0
Totals	**10**	**101**	**21**	**0**

East Approach

	Out	In	Total
Cars	133	93	226
Trucks	7	6	13
Bicycles	0	0	0
	140	**99**	**239**

Erin Garafraxa Townline

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	0	3	**3**
0	3	31	**34**
0	1	11	**12**

Peds: 0

N
W E
S

Peds: 0

Peds: 0

Erin Garafraxa Townline

Totals	Cars	Trucks	Bicycles
0	0	0	0
33	32	1	0
57	55	2	0
50	46	4	0

West Approach

	Out	In	Total
Cars	45	87	132
Trucks	4	4	8
Bicycles	0	0	0
	49	**91**	**140**

Trafalgar RD

Totals	**24**	**251**	**44**	**0**
Cars	22	240	44	0
Trucks	2	11	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	306	152	458
Trucks	13	11	24
Bicycles	0	0	0
	319	**163**	**482**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 24 & Erin Garafraxa Townline
Site Code: 2448500001
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

Peak Hour Data (16:30 - 17:30)

Start Time	North Approach Trafalgar RD						South Approach Trafalgar RD						East Approach Erin Garafraxa Townline						West Approach Erin Garafraxa Townline						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:30	6	22	5	0	0	33	4	56	12	0	0	72	10	18	10	0	0	38	0	10	2	0	0	12	155
16:45	7	35	2	0	0	44	7	72	4	0	0	83	16	13	10	0	0	39	3	7	3	0	0	13	179
17:00	4	19	1	0	0	24	8	52	18	0	0	78	10	13	7	0	0	30	0	11	4	0	0	15	147
17:15	4	25	2	0	0	31	5	71	10	0	0	86	14	13	6	0	0	33	0	6	3	0	0	9	159
Grand Total	**21**	**101**	**10**	**0**	**0**	**132**	**24**	**251**	**44**	**0**	**0**	**319**	**50**	**57**	**33**	**0**	**0**	**140**	**3**	**34**	**12**	**0**	**0**	**49**	**640**
Approach %	15.9	76.5	7.6	0		-	7.5	78.7	13.8	0		-	35.7	40.7	23.6	0		-	6.1	69.4	24.5	0		-	
Totals %	3.3	15.8	1.6	0		20.6	3.8	39.2	6.9	0		49.8	7.8	8.9	5.2	0		21.9	0.5	5.3	1.9	0		7.7	
PHF	**0.75**	**0.72**	**0.5**	**0**		**0.75**	**0.75**	**0.87**	**0.61**	**0**		**0.93**	**0.78**	**0.79**	**0.83**	**0**		**0.9**	**0.25**	**0.77**	**0.75**	**0**		**0.82**	**0.89**
Cars	18	95	10	0		123	22	240	44	0		306	46	55	32	0		133	3	31	11	0		45	607
% Cars	85.7	94.1	100	0		93.2	91.7	95.6	100	0		95.9	92	96.5	97	0		95	100	91.2	91.7	0		91.8	94.8
Trucks	3	6	0	0		9	2	11	0	0		13	4	2	1	0		7	0	3	1	0		4	33
% Trucks	14.3	5.9	0	0		6.8	8.3	4.4	0	0		4.1	8	3.5	3	0		5	0	8.8	8.3	0		8.2	5.2
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	45	27	24	34	14	6	87	39	17	170	4
Future Vol, veh/h	8	45	27	24	34	14	6	87	39	17	170	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	38	11	11	13	15	2	17	9	5	2	8	25
Mvmt Flow	9	49	29	26	37	15	7	95	42	18	185	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	350	374	187	354	334	95	189	0	0	137	0	0
Stage 1	224	224	-	108	108	-	-	-	-	-	-	-
Stage 2	126	150	-	246	226	-	-	-	-	-	-	-
Critical Hdwy	7.48	6.61	6.31	7.23	6.65	6.22	4.27	-	-	4.12	-	-
Critical Hdwy Stg 1	6.48	5.61	-	6.23	5.65	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.48	5.61	-	6.23	5.65	-	-	-	-	-	-	-
Follow-up Hdwy	3.842	4.099	3.399	3.617	4.135	3.318	2.353	-	-	2.218	-	-
Pot Cap-1 Maneuver	543	543	833	581	566	962	1300	-	-	1447	-	-
Stage 1	704	702	-	872	782	-	-	-	-	-	-	-
Stage 2	798	756	-	734	693	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	489	532	833	500	555	962	1300	-	-	1447	-	-
Mov Cap-2 Maneuver	489	532	-	500	555	-	-	-	-	-	-	-
Stage 1	694	692	-	867	777	-	-	-	-	-	-	-
Stage 2	744	752	-	648	683	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.02	12.15	0.35	0.67
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	116	-	-	600	581	159	-	-
HCM Lane V/C Ratio	0.005	-	-	0.145	0.135	0.013	-	-
HCM Control Delay (s/veh)	7.8	0	-	12	12.2	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.5	0	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	34	12	50	57	33	24	251	44	21	101	10
Future Vol, veh/h	3	34	12	50	57	33	24	251	44	21	101	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	8	8	4	3	8	4	2	14	6	2
Mvmt Flow	3	37	13	54	62	36	26	273	48	23	110	11

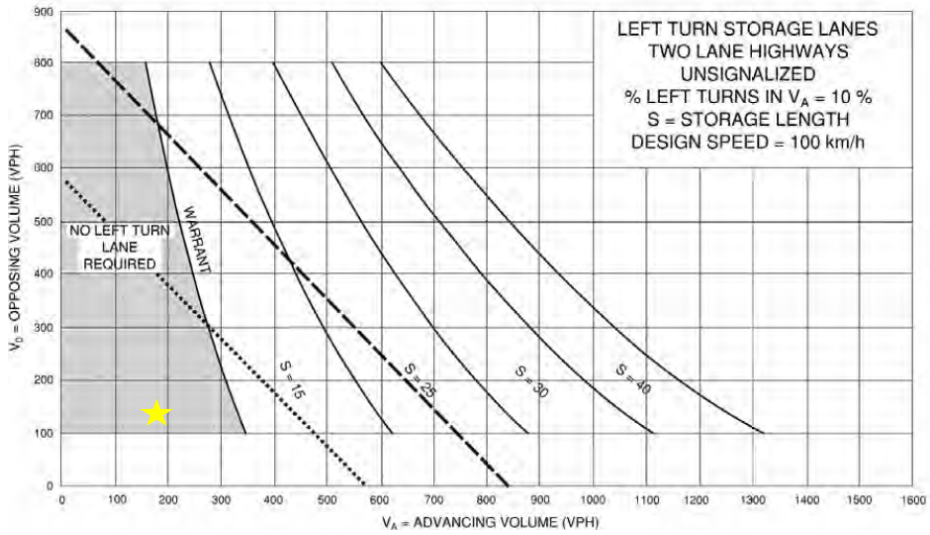
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	517	534	115	499	491	273	121	0	0	321	0	0
Stage 1	161	161	-	325	325	-	-	-	-	-	-	-
Stage 2	356	373	-	174	166	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.59	6.28	7.18	6.54	6.23	4.18	-	-	4.24	-	-
Critical Hdwy Stg 1	6.12	5.59	-	6.18	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.59	-	6.18	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.081	3.372	3.572	4.036	3.327	2.272	-	-	2.326	-	-
Pot Cap-1 Maneuver	469	443	921	472	475	763	1430	-	-	1175	-	-
Stage 1	841	752	-	675	645	-	-	-	-	-	-	-
Stage 2	662	606	-	814	757	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	372	424	921	408	455	763	1430	-	-	1175	-	-
Mov Cap-2 Maneuver	372	424	-	408	455	-	-	-	-	-	-	-
Stage 1	824	736	-	660	631	-	-	-	-	-	-	-
Stage 2	556	593	-	746	741	-	-	-	-	-	-	-

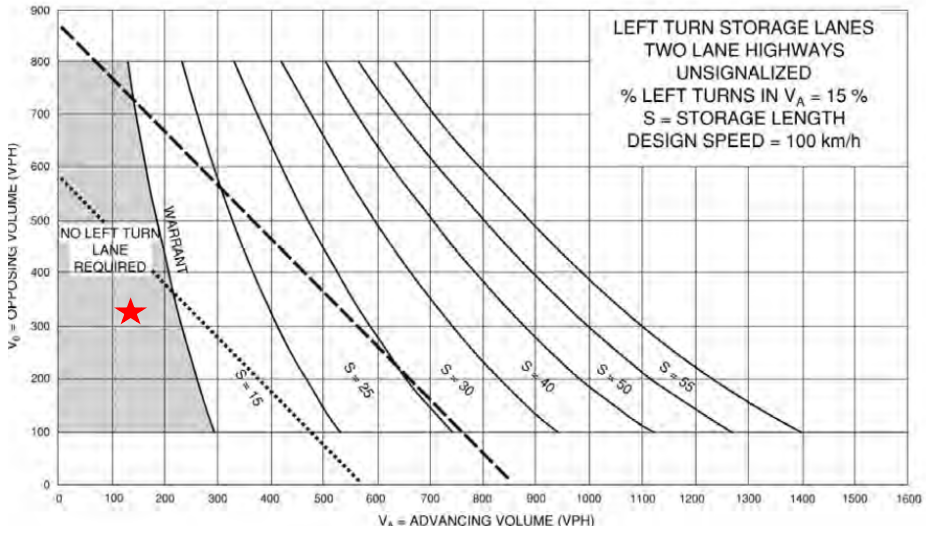
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.37	15.9	0.57	1.29
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	157	-	-	484	481	281	-	-
HCM Lane V/C Ratio	0.018	-	-	0.11	0.316	0.019	-	-
HCM Control Delay (s/veh)	7.6	0	-	13.4	15.9	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	1.3	0.1	-	-

Wellington Road 24 at Erin Garafraxa Townline – Southbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours





AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

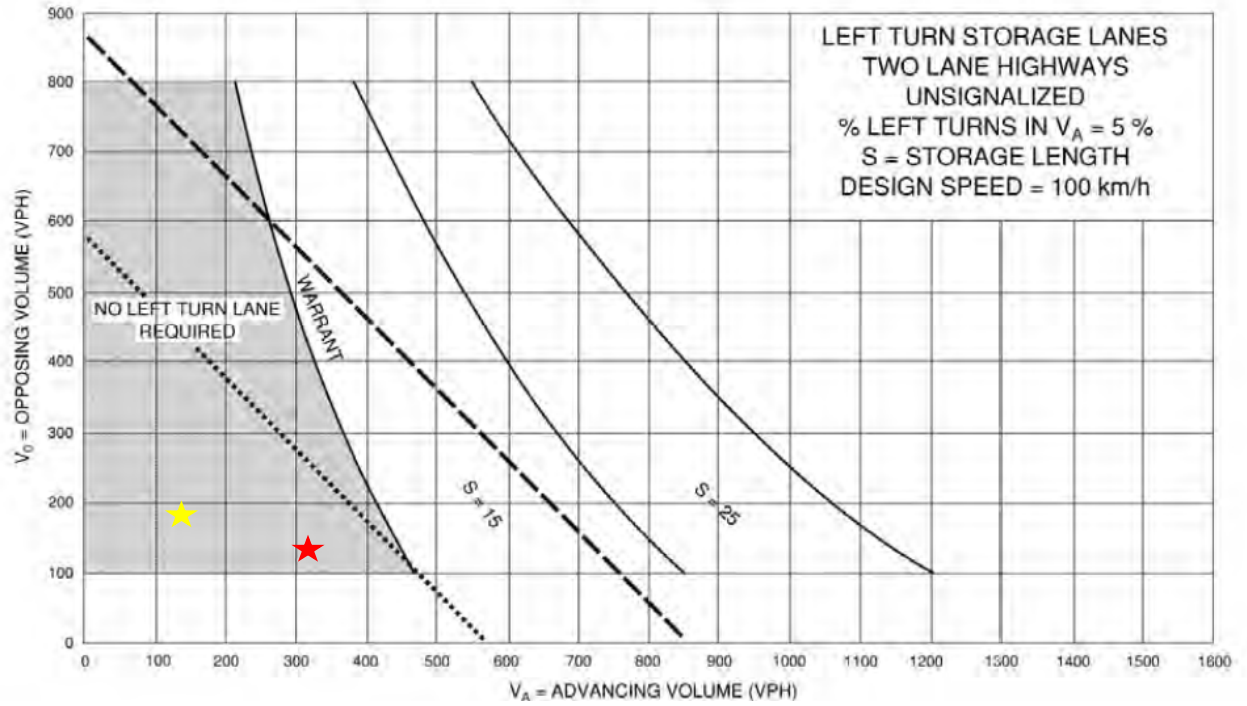
TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	192*	132*	17	8.9	0
PM	132*	319*	21	15.9	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Wellington Road 24 at Erin Garafraxa Townline – Northbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	132*	192*	6	4.5*	0
PM	319*	132*	24	7.5	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

*** traffic volumes do not meet minimum MTO requirement for warrant**

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 1 - Minimum Vehicle Volume

Wellington Rd 24 at Erin Garafraxa Townline (Existing Traffic Volumes)

100% SATISFIED - ☐ Yes ☑ No

80% SATISFIED - ☐ Yes ☑ No

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				PERCENTAGE WARRANT									
APPROACH LANES	1		2 or MORE		HOUR ENDING								TOTAL ACROSS	
FLOW CONDITION	FREE FLOW ☑	RESTR. FLOW ☐	FREE FLOW ☐	RESTR. FLOW ☐	8:00	9:00	10:00	12:00	13:00	16:00	17:00	18:00		
A. ALL APPROACH LANES	480 (385)	720 (575)	600 (480)	900 (720)	442	437	325	286	287	467	598	577		
100% FULFILLED											100	100	200	SECTIONAL PERCENTAGE
80% FULFILLED					80	80				80			240	
ACTUAL % IF BELOW 80% VALUE							68	60	60				188	
												TOTAL DOWN /8 =		79

B. MINOR STREET BOTH APPROACHES	120* (95)*	170* (135)*	120* (95)*	170* (135)*	130	152	94	105	75	140	183	168	TOTAL ACROSS	
100% FULFILLED					100	100				100	100	100	500	SECTIONAL PERCENTAGE
80% FULFILLED								80					80	
ACTUAL % IF BELOW 80% VALUE							78		63				141	
												TOTAL DOWN /8 =		90

*For "T" intersections, these values should be increased by 50%.

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 2 - Delay to Cross Traffic

Wellington Rd 24 at Erin Garafraxa Townline (Existing Traffic Volumes)

100% SATISFIED - ☐ Yes ☑ No

80% SATISFIED - ☐ Yes ☑ No

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				PERCENTAGE WARRANT									
APPROACH LANES	1		2 or MORE		HOUR ENDING								TOTAL ACROSS	
FLOW CONDITION	FREE FLOW ☑	RESTR. FLOW ☐	FREE FLOW ☐	RESTR. FLOW ☐	8:00	9:00	10:00	12:00	13:00	16:00	17:00	18:00		
A. MAJOR STREET BOTH APPROACHES	480 (385)	720 (575)	600 (480)	900 (720)	312	285	231	181	212	327	415	409		
	100% FULFILLED													SECTIONAL PERCENTAGE
	80% FULFILLED										80	80	160	
	ACTUAL % IF BELOW 80% VALUE				65	59	48	38	44	68			322	
												TOTAL DOWN /8 =		60

B. TRAFFIC CROSSING MAJOR STREET	50 (40)	75 (60)	50 (40)	75 (60)	70	77	47	65	40	79	100	95	TOTAL ACROSS	
	100% FULFILLED				100	100		100		100	100	100	600	SECTIONAL PERCENTAGE
	80% FULFILLED						80		80				160	
	ACTUAL % IF BELOW 80% VALUE													
												TOTAL DOWN /8 =		95

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 3 - Volume/Delay Combinations

Wellington Rd 24 at Erin Garafraxa Townline (Existing Traffic Volumes)

Justification Satisfied 80% or More				Two Justifications Satisfied 80% or More	
Justification 1	Minimum Vehicular Volume	☐ Yes	☑ No	☐ Yes	☑ No
Justification 2	Delay to Cross Traffic	☐ Yes	☑ No		

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 1 - Minimum Vehicle Volume

Wellington Rd 24 at Erin Garafraxa Townline (Existing Traffic Volumes)

100% SATISFIED - ☐ Yes ☑ No

80% SATISFIED - ☐ Yes ☑ No

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				PERCENTAGE WARRANT									
APPROACH LANES	1		2 or MORE		HOUR ENDING								TOTAL ACROSS	
FLOW CONDITION	FREE FLOW ☑	RESTR. FLOW ☐	FREE FLOW ☐	RESTR. FLOW ☐	8:00	9:00	10:00	12:00	13:00	16:00	17:00	18:00		
A. ALL APPROACH LANES	480 (385)	720 (575)	600 (480)	900 (720)	442	437	325	286	287	467	598	577		
100% FULFILLED											100	100	200	SECTIONAL PERCENTAGE
80% FULFILLED					80	80				80			240	
ACTUAL % IF BELOW 80% VALUE							68	60	60				188	
												TOTAL DOWN /8 =		79

B. MINOR STREET BOTH APPROACHES	120* (95)*	170* (135)*	120* (95)*	170* (135)*	130	152	94	105	75	140	183	168	TOTAL ACROSS	
100% FULFILLED					100	100				100	100	100	500	SECTIONAL PERCENTAGE
80% FULFILLED								80					80	
ACTUAL % IF BELOW 80% VALUE							78		63				141	
												TOTAL DOWN /8 =		90

*For "T" intersections, these values should be increased by 50%.

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 2 - Delay to Cross Traffic

Wellington Rd 24 at Erin Garafraxa Townline (Existing Traffic Volumes)

100% SATISFIED - ☐ Yes ☑ No

80% SATISFIED - ☐ Yes ☑ No

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				PERCENTAGE WARRANT									
APPROACH LANES	1		2 or MORE		HOUR ENDING								TOTAL ACROSS	
FLOW CONDITION	FREE FLOW ☑	RESTR. FLOW ☐	FREE FLOW ☐	RESTR. FLOW ☐	8:00	9:00	10:00	12:00	13:00	16:00	17:00	18:00		
A. MAJOR STREET BOTH APPROACHES	480 (385)	720 (575)	600 (480)	900 (720)	312	285	231	181	212	327	415	409		
	100% FULFILLED													SECTIONAL PERCENTAGE
	80% FULFILLED										80	80	160	
	ACTUAL % IF BELOW 80% VALUE				65	59	48	38	44	68			322	
												TOTAL DOWN /8 =		60

B. TRAFFIC CROSSING MAJOR STREET	50 (40)	75 (60)	50 (40)	75 (60)	70	77	47	65	40	79	100	95	TOTAL ACROSS	
	100% FULFILLED				100	100		100		100	100	100	600	SECTIONAL PERCENTAGE
	80% FULFILLED						80		80				160	
	ACTUAL % IF BELOW 80% VALUE													
												TOTAL DOWN /8 =		95

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 3 - Volume/Delay Combinations

Wellington Rd 24 at Erin Garafraxa Townline (Existing Traffic Volumes)

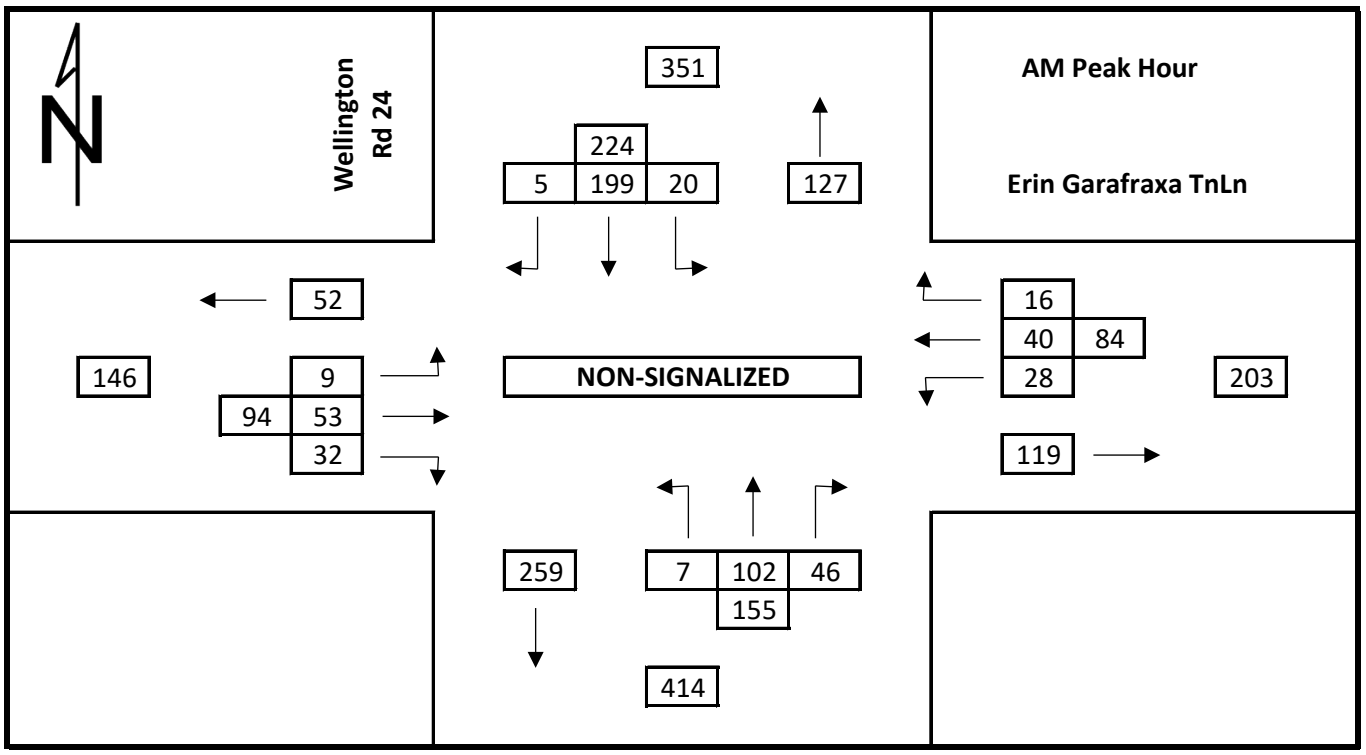
Justification Satisfied 80% or More				Two Justifications Satisfied 80% or More	
Justification 1	Minimum Vehicular Volume	☐ Yes	☑ No	☐ Yes	☑ No
Justification 2	Delay to Cross Traffic	☐ Yes	☑ No		

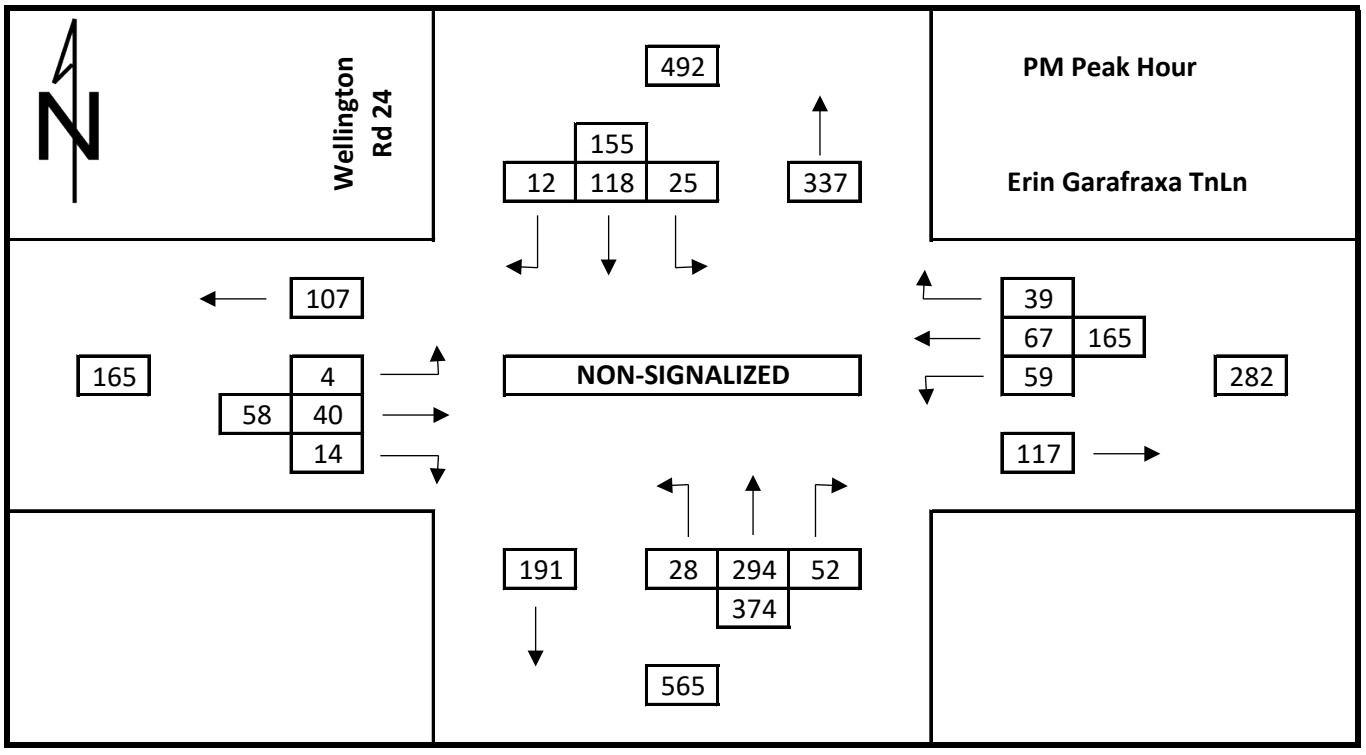
Appendix A-2

01 WELLINGTON ROAD 24 AT ERIN GARAFRAXA TOWNLINE – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

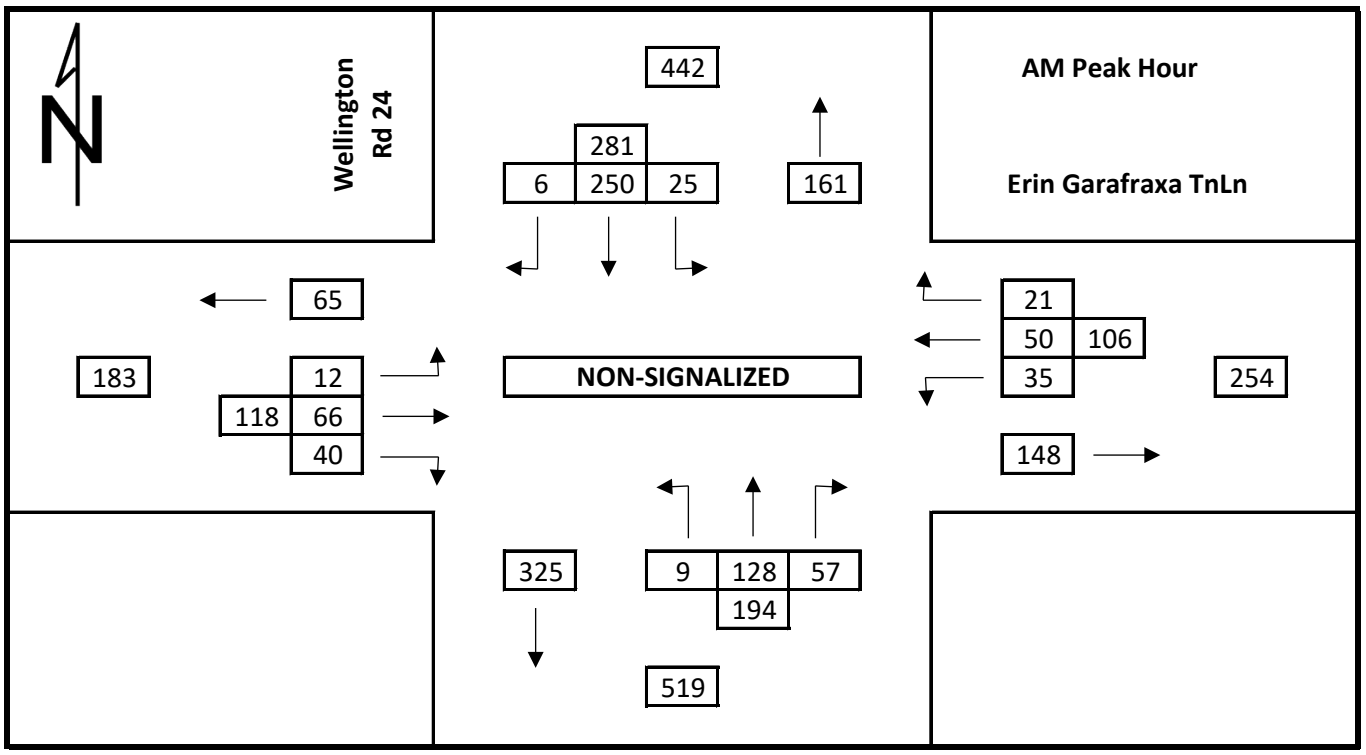
Wellington Rd 24 at Erin Garafraxa Townline

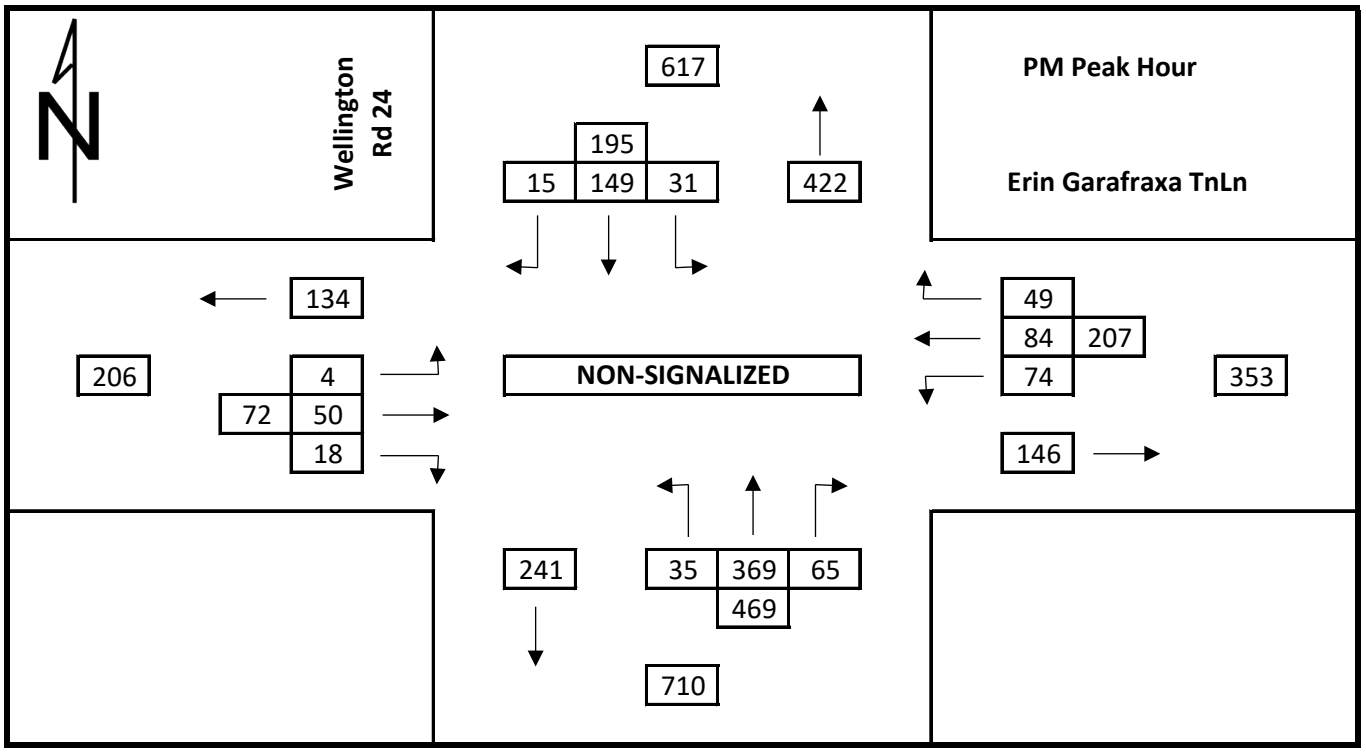




Background Traffic Year 2041

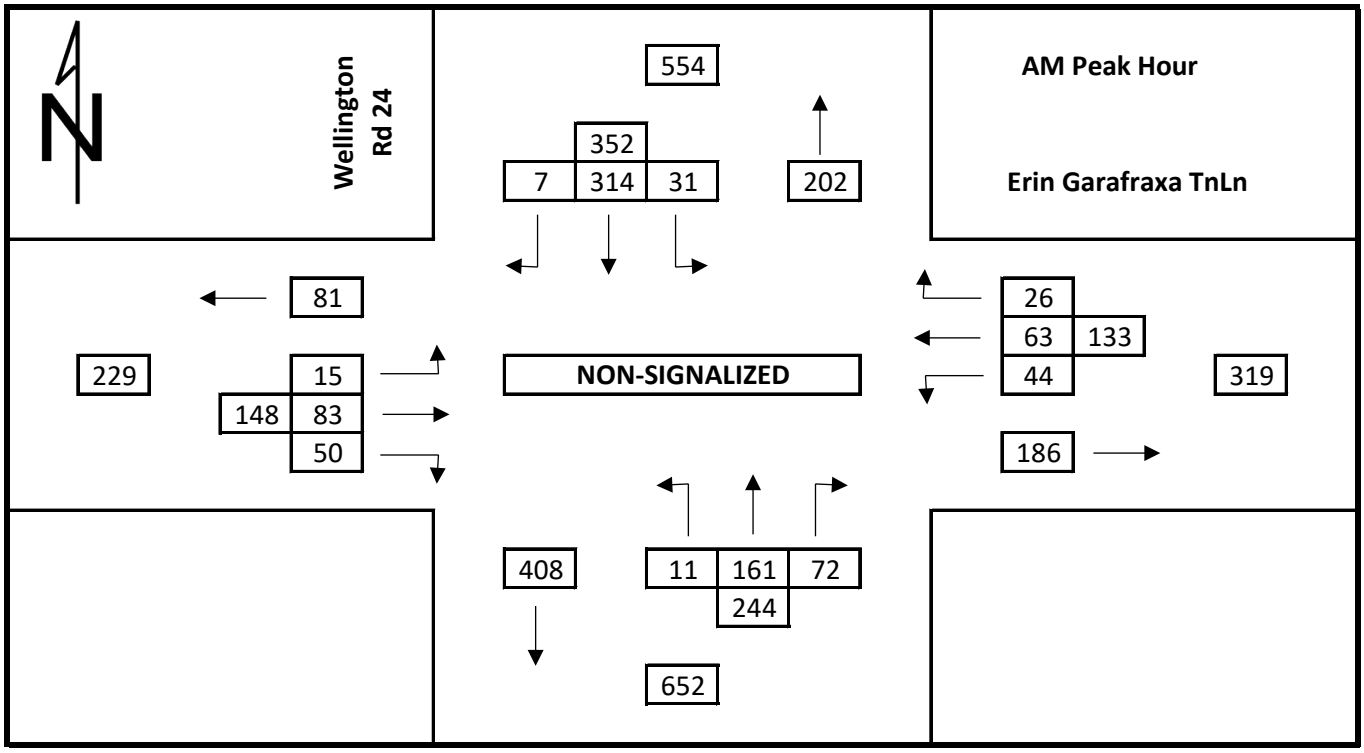
Wellington Rd 24 at Erin Garafraxa Townline

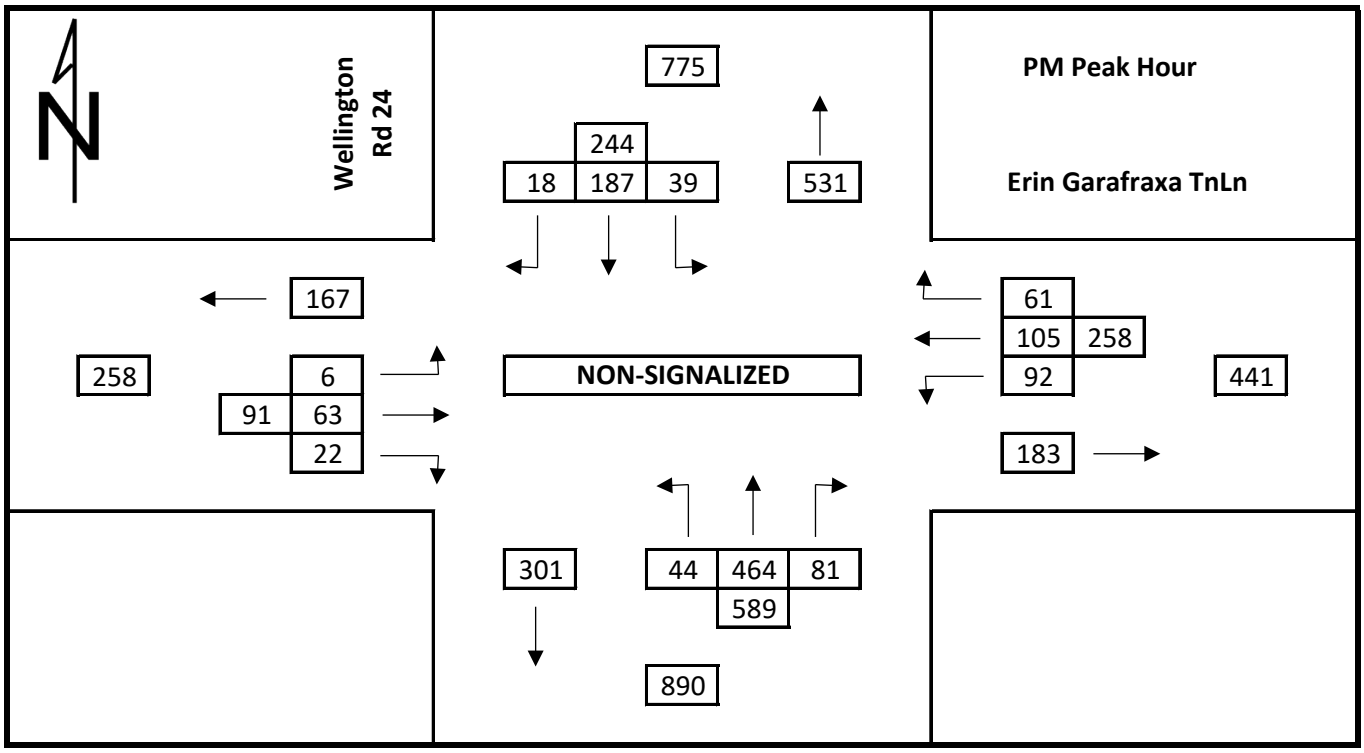




Background Traffic Year 2051

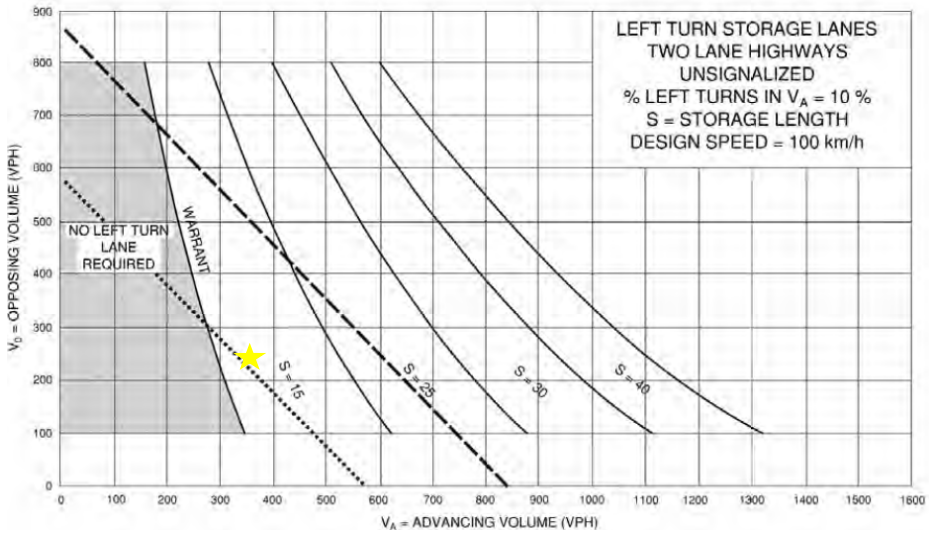
Wellington Rd 24 at Erin Garafraxa Townline

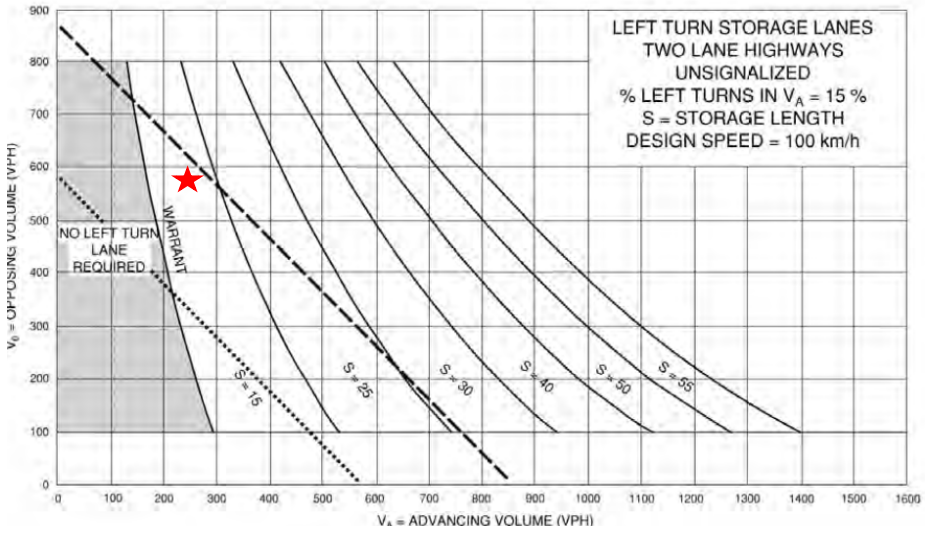




Wellington Road 24 at Erin Garafraxa Townline – Southbound Left Turn Lane Warrants

Background Traffic 2051 – AM & PM Peak Hours





AM Peak Hour

PM Peak Hour

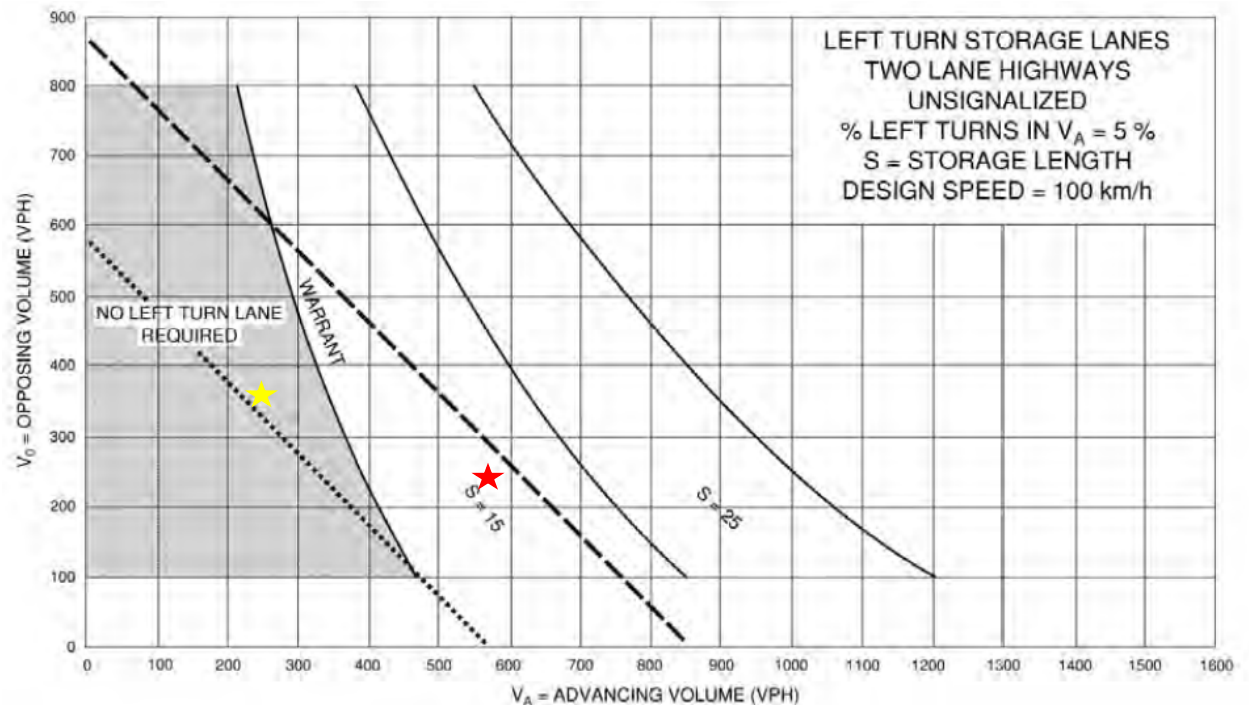
TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	352	244	31	8.8	15
PM	244	589	39	16.0	15

Wellington Road 24 at Erin Garafraxa Townline – Northbound Left Turn Lane Warrants

Background Traffic 2051 – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	244*	352*	11	4.5*	0
PM	589	244	44	7.5	15

*** % left turns does not meet minimum MTO 5% requirement for warrant**

*** traffic volumes do not meet minimum MTO requirement for warrant**

Traffic Signal Warrants – Summary of Justifications (OTM Book 12)

Projected Total Traffic (Horizon Year 2051)

Wellington Rd 24 at Erin Garafraxa Townline

JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENTS FOR TWO-LANE ROADWAYS		COMPLIANCE	
		FREE FLOW	RESTRICTED FLOW		
		OPERATING SPEED GREATER THAN OR EQUAL TO 70 km/h	OPERATING SPEED LESS THAN 70 km/h	SECTIONAL %	ENTIRE %**
1. MINIMUM VEHICULAR VOLUME	A*. Vehicle Volume, All Approaches for Each of the Heaviest 8 Hours of an Average Day, and	480	720	82 (1)	82
	B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours	120	170	100 (2)	
2. DELAY TO CROSS TRAFFIC	A*. Vehicle Volume, Major Street for Each of the Heaviest 8 Hours of an Average Day, and	480	720	57 (3)	57
	B*. Combined Vehicle and Pedestrian Volume Crossing the Major Street for Each of the Same 8 Hours.	50	75	131 (4)	
3. VOLUME/DELAY COMBINATIONS	The Above Justifications (1 and 2) Both Satisfied to the Extent of 80% or more	YES ☐	NO ☑		57
4. MIN. FOUR HOUR VEHICLE VOLUME	At Plotted Point Representing Hourly Volume for Minor Approach vs. Major Approach for Four Highest Hours of an Average Day Fall above the Applicable Curve	YES ☐	NO ☐		N/A
5. COLLISION EXPERIENCE	A. Total Reported Accidents of Types Susceptible to Correction by a Traffic Signal, per 12 Month Period Averaged over a 36 Month Period, and	5		N/A	N/A
	B. Adequate Trial of Less Restrictive Remedies. Where Satisfactory Observance and Enforcement Have Failed to Reduce the Number of Collisions	YES ☐	NO ☐		
6. PEDESTRIAN VOLUME AND DELAY	A. Plotted Point Representing 8 Hour Pedestrian Volume vs. 8 Hour Vehicular Volume Fall in Justified Zone, and	YES ☐	NO ☐		N/A
	B. Plotted Point Representing 8 Hour Volume of Pedestrian Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian Volume Fall in Justified Zone	YES ☐	NO ☐		

Notes

* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

** The Lowest Sectional Percentage Governs the Entire Warrant.

*** For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

Justification 7 - Future Traffic Volumes

(1) = (668 + 900) / 4 / 480 = 82%

(2) = (214 + 265) / 4 / 120 = 100%

(3) = (454 + 635) / 4 / 480 = 57%

(4) = (108 + 154) / 4 / 50 = 131%

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	53	32	28	40	16	7	102	46	20	199	5
Future Vol, veh/h	9	53	32	28	40	16	7	102	46	20	199	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	38	11	11	13	15	2	17	9	5	2	8	25
Mvmt Flow	10	58	35	30	43	17	8	111	50	22	216	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	410	439	219	415	391	111	222	0	0	161	0	0
Stage 1	262	262	-	126	126	-	-	-	-	-	-	-
Stage 2	148	176	-	289	265	-	-	-	-	-	-	-
Critical Hdwy	7.48	6.61	6.31	7.23	6.65	6.22	4.27	-	-	4.12	-	-
Critical Hdwy Stg 1	6.48	5.61	-	6.23	5.65	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.48	5.61	-	6.23	5.65	-	-	-	-	-	-	-
Follow-up Hdwy	3.842	4.099	3.399	3.617	4.135	3.318	2.353	-	-	2.218	-	-
Pot Cap-1 Maneuver	493	499	799	529	525	942	1263	-	-	1418	-	-
Stage 1	670	675	-	852	767	-	-	-	-	-	-	-
Stage 2	776	737	-	696	666	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	433	487	799	437	512	942	1263	-	-	1418	-	-
Mov Cap-2 Maneuver	433	487	-	437	512	-	-	-	-	-	-	-
Stage 1	658	663	-	846	762	-	-	-	-	-	-	-
Stage 2	714	732	-	597	654	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.97	13.25	0.36	0.68
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	116	-	-	554	528	160	-	-
HCM Lane V/C Ratio	0.006	-	-	0.184	0.173	0.015	-	-
HCM Control Delay (s/veh)	7.9	0	-	13	13.2	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.6	0	-	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	40	14	59	67	39	28	294	52	25	118	12
Future Vol, veh/h	4	40	14	59	67	39	28	294	52	25	118	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	8	8	4	3	8	4	2	14	6	2
Mvmt Flow	4	43	15	64	73	42	30	320	57	27	128	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	606	626	135	585	576	320	141	0	0	376	0	0
Stage 1	189	189	-	380	380	-	-	-	-	-	-	-
Stage 2	417	437	-	204	196	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.59	6.28	7.18	6.54	6.23	4.18	-	-	4.24	-	-
Critical Hdwy Stg 1	6.12	5.59	-	6.18	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.59	-	6.18	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.081	3.372	3.572	4.036	3.327	2.272	-	-	2.326	-	-
Pot Cap-1 Maneuver	409	392	898	414	425	719	1406	-	-	1119	-	-
Stage 1	813	731	-	630	610	-	-	-	-	-	-	-
Stage 2	613	568	-	784	735	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	301	371	898	342	403	719	1406	-	-	1119	-	-
Mov Cap-2 Maneuver	301	371	-	342	403	-	-	-	-	-	-	-
Stage 1	791	711	-	612	593	-	-	-	-	-	-	-
Stage 2	492	552	-	705	716	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.96	19.83	0.57	1.34
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	157	-	-	424	420	285	-	-
HCM Lane V/C Ratio	0.022	-	-	0.149	0.427	0.024	-	-
HCM Control Delay (s/veh)	7.6	0	-	15	19.8	8.3	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	2.1	0.1	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	66	40	35	50	21	9	128	57	25	250	6
Future Vol, veh/h	12	66	40	35	50	21	9	128	57	25	250	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	38	11	11	13	15	2	17	9	5	2	8	25
Mvmt Flow	13	72	43	38	54	23	10	139	62	27	272	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	515	550	275	521	491	139	278	0	0	201	0	0
Stage 1	329	329	-	159	159	-	-	-	-	-	-	-
Stage 2	186	221	-	362	333	-	-	-	-	-	-	-
Critical Hdwy	7.48	6.61	6.31	7.23	6.65	6.22	4.27	-	-	4.12	-	-
Critical Hdwy Stg 1	6.48	5.61	-	6.23	5.65	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.48	5.61	-	6.23	5.65	-	-	-	-	-	-	-
Follow-up Hdwy	3.842	4.099	3.399	3.617	4.135	3.318	2.353	-	-	2.218	-	-
Pot Cap-1 Maneuver	418	430	743	449	460	909	1203	-	-	1371	-	-
Stage 1	614	630	-	818	742	-	-	-	-	-	-	-
Stage 2	739	704	-	635	622	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	347	417	743	341	445	909	1203	-	-	1371	-	-
Mov Cap-2 Maneuver	347	417	-	341	445	-	-	-	-	-	-	-
Stage 1	600	616	-	811	736	-	-	-	-	-	-	-
Stage 2	661	698	-	515	607	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.27	15.9	0.37	0.68
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	118	-	-	478	445	159	-	-
HCM Lane V/C Ratio	0.008	-	-	0.268	0.259	0.02	-	-
HCM Control Delay (s/veh)	8	0	-	15.3	15.9	7.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.1	1	0.1	-	-

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	50	18	74	84	49	35	369	65	31	149	15
Future Vol, veh/h	4	50	18	74	84	49	35	369	65	31	149	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	8	8	4	3	8	4	2	14	6	2
Mvmt Flow	4	54	20	80	91	53	38	401	71	34	162	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	760	785	170	734	723	401	178	0	0	472	0	0
Stage 1	237	237	-	477	477	-	-	-	-	-	-	-
Stage 2	523	548	-	257	246	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.59	6.28	7.18	6.54	6.23	4.18	-	-	4.24	-	-
Critical Hdwy Stg 1	6.12	5.59	-	6.18	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.59	-	6.18	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.081	3.372	3.572	4.036	3.327	2.272	-	-	2.326	-	-
Pot Cap-1 Maneuver	322	316	858	328	350	647	1362	-	-	1030	-	-
Stage 1	766	696	-	558	553	-	-	-	-	-	-	-
Stage 2	537	506	-	735	699	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	201	293	858	246	324	647	1362	-	-	1030	-	-
Mov Cap-2 Maneuver	201	293	-	246	324	-	-	-	-	-	-	-
Stage 1	738	671	-	536	531	-	-	-	-	-	-	-
Stage 2	393	486	-	636	674	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.69	37.5	0.58	1.37
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	156	-	-	341	326	281	-	-
HCM Lane V/C Ratio	0.028	-	-	0.23	0.691	0.033	-	-
HCM Control Delay (s/veh)	7.7	0	-	18.7	37.5	8.6	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	4.8	0.1	-	-

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	83	50	44	63	26	11	161	72	31	314	7
Future Vol, veh/h	15	83	50	44	63	26	11	161	72	31	314	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	38	11	11	13	15	2	17	9	5	2	8	25
Mvmt Flow	16	90	54	48	68	28	12	175	78	34	341	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	646	690	345	653	615	175	349	0	0	253	0	0
Stage 1	412	412	-	199	199	-	-	-	-	-	-	-
Stage 2	233	277	-	454	416	-	-	-	-	-	-	-
Critical Hdwy	7.48	6.61	6.31	7.23	6.65	6.22	4.27	-	-	4.12	-	-
Critical Hdwy Stg 1	6.48	5.61	-	6.23	5.65	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.48	5.61	-	6.23	5.65	-	-	-	-	-	-	-
Follow-up Hdwy	3.842	4.099	3.399	3.617	4.135	3.318	2.353	-	-	2.218	-	-
Pot Cap-1 Maneuver	339	357	678	366	390	868	1131	-	-	1312	-	-
Stage 1	551	579	-	778	713	-	-	-	-	-	-	-
Stage 2	696	665	-	565	570	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	258	342	678	240	373	868	1131	-	-	1312	-	-
Mov Cap-2 Maneuver	258	342	-	240	373	-	-	-	-	-	-	-
Stage 1	534	560	-	769	704	-	-	-	-	-	-	-
Stage 2	600	657	-	422	552	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	20.25	22.54	0.37	0.69
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	115	-	-	395	348	158	-	-
HCM Lane V/C Ratio	0.011	-	-	0.407	0.416	0.026	-	-
HCM Control Delay (s/veh)	8.2	0	-	20.2	22.5	7.8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.9	2	0.1	-	-

Intersection	
Int Delay, s/veh	43.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	6	63	22	92	105	61	44	464	81	39	187	18
Future Vol, veh/h	6	63	22	92	105	61	44	464	81	39	187	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	8	8	4	3	8	4	2	14	6	2
Mvmt Flow	7	68	24	100	114	66	48	504	88	42	203	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	955	986	213	922	908	504	223	0	0	592	0	0
Stage 1	298	298	-	600	600	-	-	-	-	-	-	-
Stage 2	657	688	-	322	308	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.59	6.28	7.18	6.54	6.23	4.18	-	-	4.24	-	-
Critical Hdwy Stg 1	6.12	5.59	-	6.18	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.59	-	6.18	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.081	3.372	3.572	4.036	3.327	2.272	-	-	2.326	-	-
Pot Cap-1 Maneuver	238	241	812	244	273	566	1311	-	-	927	-	-
Stage 1	711	655	-	477	487	-	-	-	-	-	-	-
Stage 2	454	436	-	677	657	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	106	216	812	150	245	566	1311	-	-	927	-	-
Mov Cap-2 Maneuver	106	216	-	150	245	-	-	-	-	-	-	-
Stage 1	674	620	-	451	460	-	-	-	-	-	-	-
Stage 2	285	412	-	554	623	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	29.77	187.79	0.59	1.45
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	156	-	-	242	224	283	-	-
HCM Lane V/C Ratio	0.036	-	-	0.408	1.25	0.046	-	-
HCM Control Delay (s/veh)	7.8	0	-	29.8	187.8	9.1	0	-
HCM Lane LOS	A	A	-	D	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.9	14.3	0.1	-	-

Appendix B-1

02 EIGHTH LINE AT ORANGEVILLE STREET – EXISTING TRAFFIC VOLUME METRICS

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Project #24-485 - 30 Forensic Engineering

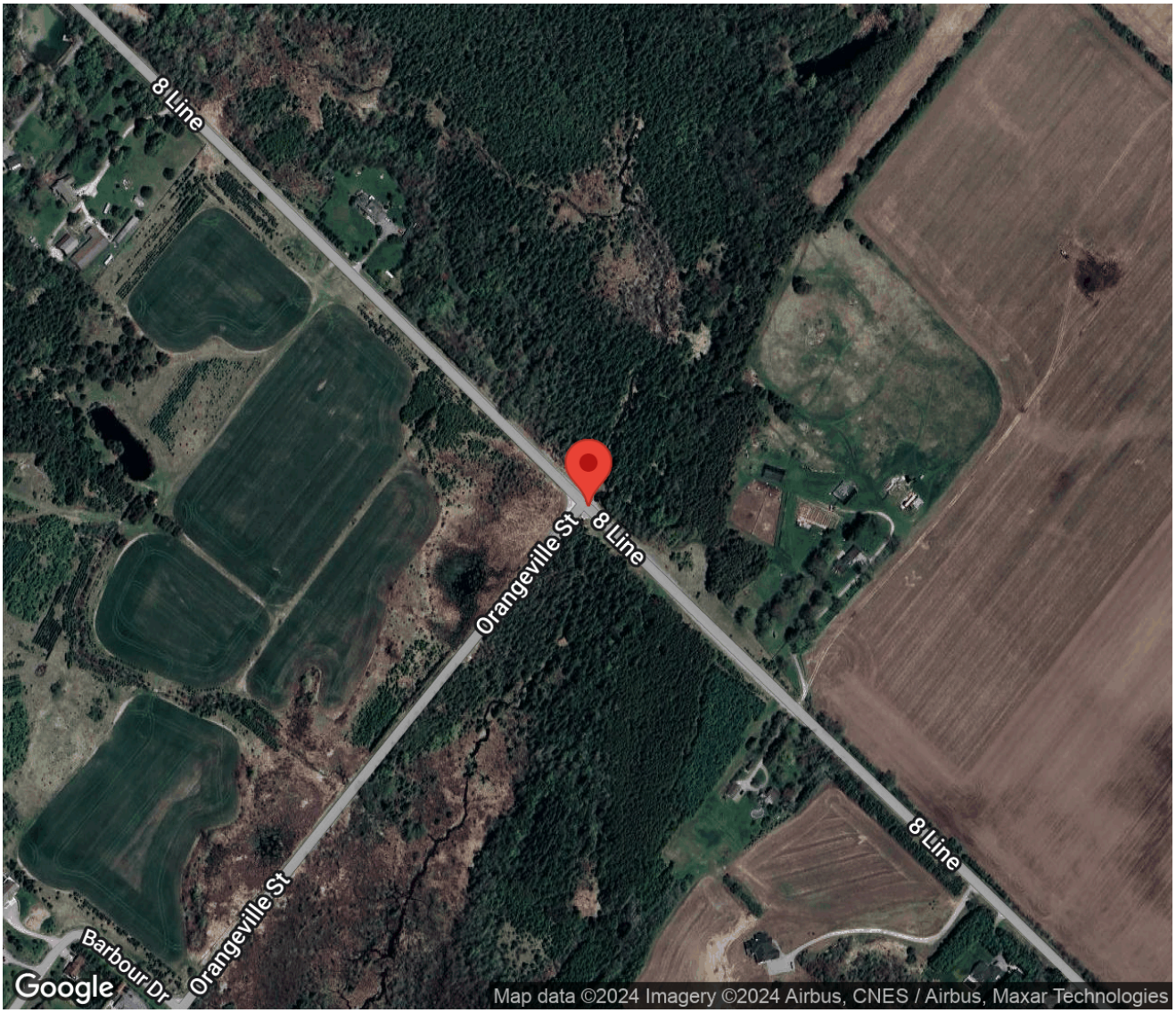
Intersection Count Report

Intersection:	Eighth Line & Orangeville St
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500002
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Eighth Line & Orangeville St
Site Code:	2448500002
Municipality:	Erin
Count Date:	Nov 19, 2024



Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

Eighth Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	0	10	3	0	13	0	5	6	0	0	11	0	24
08:00 - 09:00	0	10	6	0	16	0	14	9	0	0	23	0	39
09:00 - 10:00	0	11	1	0	12	0	11	5	0	0	16	0	28
BREAK													
11:00 - 12:00	0	6	8	0	14	0	18	8	0	0	26	0	40
12:00 - 13:00	0	6	5	0	11	0	7	7	0	0	14	0	25
BREAK													
15:00 - 16:00	0	2	10	0	12	0	30	9	0	0	39	0	51
16:00 - 17:00	0	12	5	0	17	0	30	7	0	0	37	0	54
17:00 - 18:00	0	7	2	1	10	0	26	14	0	0	40	0	50
GRAND TOTAL	**0**	**64**	**40**	**1**	**105**	**0**	**141**	**65**	**0**	**0**	**206**	**0**	**311**

Ontario Traffic Inc.
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Traffic Count Summary

Intersection:	Eighth Line & Orangeville St
Site Code:	2448500002
Municipality:	Erin
Count Date:	Nov 19, 2024

Orangeville St - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	0	0	0	0	0	0	6	0	30	0	36	0	36
08:00 - 09:00	0	0	0	0	0	0	7	0	25	0	32	0	32
09:00 - 10:00	0	0	0	0	0	0	3	0	19	0	22	0	22
BREAK													
11:00 - 12:00	0	0	0	0	0	0	2	0	10	0	12	0	12
12:00 - 13:00	0	0	0	0	0	0	6	0	9	0	15	0	15
BREAK													
15:00 - 16:00	0	0	0	0	0	0	8	0	10	0	18	0	18
16:00 - 17:00	0	0	0	0	0	0	4	0	15	0	19	0	19
17:00 - 18:00	0	0	0	0	0	0	3	0	17	0	20	0	20
GRAND TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**	**135**	**0**	**174**	**0**	**174**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Eighth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
07:15	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
07:30	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0
07:45	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
08:00	0	5	1	0	6	0	0	0	0	0	0	0	0	0	0	0
08:15	0	1	1	0	2	0	1	1	0	2	0	0	0	0	0	0
08:30	0	1	3	0	4	0	1	0	0	1	0	0	0	0	0	0
08:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
09:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:30	0	3	1	0	4	0	1	0	0	1	0	0	0	0	0	0
09:45	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	0	27	9	0	36	0	4	1	0	5	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Eighth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
11:15	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
11:30	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0
11:45	0	3	2	0	5	0	0	0	0	0	0	0	2	0	2	0
12:00	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:15	0	3	4	0	7	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
12:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	12	11	0	23	0	0	0	0	0	0	0	2	0	2	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Eighth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
15:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	3	0	3	0	0	0	0	0	0	0	1	0	1	0
15:45	0	1	2	0	3	0	0	1	0	1	0	0	0	0	0	0
16:00	0	5	2	0	7	0	0	0	0	0	0	0	0	0	0	0
16:15	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0
16:30	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
16:45	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
17:00	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	4	1	1	6	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	21	15	1	37	0	0	1	0	1	0	0	1	0	1	0
GRAND TOTAL	0	60	35	1	96	0	4	2	0	6	0	0	3	0	3	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Eighth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	2	1	0	0	3	1	1	0	0	2	0	0	0	0	0	0
07:45	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0
08:00	1	2	0	0	3	0	1	0	0	1	0	0	0	0	0	0
08:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:30	3	1	0	0	4	1	0	0	0	1	0	0	0	0	0	0
08:45	7	3	0	0	10	2	0	0	0	2	0	0	0	0	0	0
09:00	5	2	0	0	7	0	0	0	0	0	0	0	0	0	0	0
09:15	4	2	0	0	6	0	0	0	0	0	0	0	0	0	0	0
09:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:45	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	26	18	0	0	44	4	2	0	0	6	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Eighth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	3	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0
11:15	9	2	0	0	11	0	0	0	0	0	0	0	0	0	0	0
11:30	4	2	0	0	6	0	0	0	0	0	0	0	0	0	0	0
11:45	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0
12:00	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0
12:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:30	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0
12:45	3	3	0	0	6	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	25	14	0	0	39	0	1	0	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Eighth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	7	2	0	0	9	0	0	0	0	0	0	0	0	0	0	0
15:15	6	1	0	0	7	0	2	0	0	2	0	0	0	0	0	0
15:30	6	1	0	0	7	1	0	0	0	1	0	0	0	0	0	0
15:45	10	2	0	0	12	0	1	0	0	1	0	0	0	0	0	0
16:00	12	1	0	0	13	0	0	0	0	0	0	0	0	0	0	0
16:15	7	1	0	0	8	0	1	0	0	1	0	0	0	0	0	0
16:30	6	2	0	0	8	0	0	0	0	0	0	0	0	0	0	0
16:45	5	2	0	0	7	0	0	0	0	0	0	0	0	0	0	0
17:00	12	2	0	0	14	0	0	0	0	0	0	0	0	0	0	0
17:15	4	5	0	0	9	0	0	0	0	0	0	0	0	0	0	0
17:30	8	2	0	0	10	0	0	0	0	0	0	0	0	0	0	0
17:45	2	5	0	0	7	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	85	26	0	0	111	1	4	0	0	5	0	0	0	0	0	0
GRAND TOTAL	136	58	0	0	194	5	7	0	0	12	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Orangeville St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0
07:15	1	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0
07:30	1	0	6	0	7	0	0	0	0	0	0	0	0	0	0	0
07:45	4	0	6	0	10	0	0	1	0	1	0	0	0	0	0	0
08:00	3	0	3	0	6	0	0	0	0	0	0	0	0	0	0	0
08:15	1	0	4	0	5	1	0	1	0	2	0	0	0	0	0	0
08:30	1	0	10	0	11	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0
09:00	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0
09:15	1	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0
09:30	1	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	15	0	72	0	87	1	0	2	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Orangeville St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
11:15	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0
12:15	2	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0
12:30	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
12:45	2	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	8	0	19	0	27	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Orangeville St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	3	0	3	0	6	0	0	0	0	0	0	0	0	0	0	0
15:15	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0
15:30	2	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0
15:45	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
16:00	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0
16:30	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0
16:45	1	0	4	0	5	0	0	0	0	0	0	0	0	0	0	0
17:00	1	0	6	0	7	0	0	0	0	0	0	0	0	0	0	0
17:15	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	14	0	42	0	56	1	0	0	0	1	0	0	0	0	0	0
GRAND TOTAL	37	0	133	0	170	2	0	2	0	4	0	0	0	0	0	0

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Peak Hour Diagram

Specified Period		One Hour Peak	
From:	07:00:00	From:	08:00:00
To:	10:00:00	To:	09:00:00

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Eighth Line runs N/S

North Approach

	Out	In	Total
Cars	13	14	27
Trucks	3	2	5
Bicycles	0	0	0
	16	**16**	**32**

Eighth Line

Bicycles	0	0	0
Trucks	1	2	0
Cars	5	8	0
Totals	**6**	**10**	**0**

Peds: 0

Orangeville St

			Totals
0	0	0	**0**
0	1	6	**7**
0	1	24	**25**

Peds: 0



Peds: 0

Peds: 0

West Approach

	Out	In	Total
Cars	30	16	46
Trucks	2	4	6
Bicycles	0	0	0
	32	**20**	**52**

Totals	**14**	**9**	**0**
Cars	11	8	0
Trucks	3	1	0
Bicycles	0	0	0

Eighth Line

South Approach

	Out	In	Total
Cars	19	32	51
Trucks	4	3	7
Bicycles	0	0	0
	23	**35**	**58**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

Peak Hour Data (08:00 - 09:00)

Start Time	North Approach Eighth Line						South Approach Eighth Line						East Approach						West Approach Orangeville St						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
08:00		5	1	0	0	6	1	3		0	0	4					0		3		3	0	0	6	16
08:15		2	2	0	0	4	0	2		0	0	2					0		2		5	0	0	7	13
08:30		2	3	0	0	5	4	1		0	0	5					0		1		10	0	0	11	21
08:45		1	0	0	0	1	9	3		0	0	12					0		1		7	0	0	8	21
Grand Total		**10**	**6**	**0**	**0**	**16**	**14**	**9**		**0**	**0**	**23**					**0**	**0**	**7**		**25**	**0**	**0**	**32**	**71**
Approach %		62.5	37.5	0		-	60.9	39.1		0		-						-	21.9		78.1	0		-	
Totals %		14.1	8.5	0		22.5	19.7	12.7		0		32.4						0	9.9		35.2	0		45.1	
PHF		**0.5**	**0.5**	**0**		**0.67**	**0.39**	**0.75**		**0**		**0.48**						**0**	**0.58**		**0.63**	**0**		**0.73**	**0.85**
Cars		8	5	0		13	11	8		0		19						0	6		24	0		30	62
% Cars		80	83.3	0		81.3	78.6	88.9		0		82.6						0	85.7		96	0		93.8	87.3
Trucks		2	1	0		3	3	1		0		4						0	1		1	0		2	9
% Trucks		20	16.7	0		18.8	21.4	11.1		0		17.4						0	14.3		4	0		6.3	12.7
Bicycles		0	0	0		0	0	0		0		0						0	0		0	0		0	0
% Bicycles		0	0	0		0	0	0		0		0						0	0		0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	11:00:00	From:	11:00:00
To:	13:00:00	To:	12:00:00

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Eighth Line runs N/S

North Approach

	Out	In	Total
Cars	12	10	22
Trucks	0	0	0
Bicycles	2	0	2
	14	**10**	**24**

Eighth Line

Bicycles	2	0	0
Trucks	0	0	0
Cars	6	6	0
Totals	**8**	**6**	**0**

Peds: 0

Orangeville St

			Totals
0	0	0	**0**
0	0	2	**2**
0	0	10	**10**

Peds: 0



Peds: 0

Peds: 0

West Approach

	Out	In	Total
Cars	12	24	36
Trucks	0	0	0
Bicycles	0	2	2
	12	**26**	**38**

Totals	**18**	**8**	**0**
Cars	18	8	0
Trucks	0	0	0
Bicycles	0	0	0

Eighth Line

South Approach

	Out	In	Total
Cars	26	16	42
Trucks	0	0	0
Bicycles	0	0	0
	26	**16**	**42**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection:	Eighth Line & Orangeville St
Site Code:	2448500002
Count Date:	Nov 19, 2024
Period:	11:00 - 13:00

Peak Hour Data (11:00 - 12:00)

Start Time	North Approach Eighth Line						South Approach Eighth Line						East Approach						West Approach Orangeville St						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
11:00		1	1	0	0	2	3	2		0	0	5					0		1		2	0	0	3	10
11:15		1	1	0	0	2	9	2		0	0	11					0		1		1	0	0	2	15
11:30		1	2	0	0	3	4	2		0	0	6					0		0		3	0	0	3	12
11:45		3	4	0	0	7	2	2		0	0	4					0		0		4	0	0	4	15
Grand Total		**6**	**8**	**0**	**0**	**14**	**18**	**8**		**0**	**0**	**26**					**0**	**0**	**2**		**10**	**0**	**0**	**12**	**52**
Approach %		42.9	57.1	0		-	69.2	30.8		0		-						-	16.7		83.3	0		-	
Totals %		11.5	15.4	0		26.9	34.6	15.4		0		50						0	3.8		19.2	0		23.1	
PHF		**0.5**	**0.5**	**0**		**0.5**	**0.5**	**1**		**0**		**0.59**						**0**	**0.5**		**0.63**	**0**		**0.75**	**0.87**
Cars		6	6	0		12	18	8		0		26						0	2		10	0		12	50
% Cars		100	75	0		85.7	100	100		0		100						0	100		100	0		100	96.2
Trucks		0	0	0		0	0	0		0		0						0	0		0	0		0	0
% Trucks		0	0	0		0	0	0		0		0						0	0		0	0		0	0
Bicycles		0	2	0		2	0	0		0		0						0	0		0	0		0	2
% Bicycles		0	25	0		14.3	0	0		0		0						0	0		0	0		0	3.8
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	15:00:00	From:	15:30:00
To:	18:00:00	To:	16:30:00

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Eighth Line runs N/S

North Approach

	Out	In	Total
Cars	17	10	27
Trucks	1	3	4
Bicycles	1	0	1
	19	**13**	**32**

Eighth Line

Bicycles	1	0	0
Trucks	1	0	0
Cars	8	9	0
Totals	**10**	**9**	**0**

Peds: 0

Orangeville St

			Totals
0	0	0	**0**
0	1	5	**6**
0	0	12	**12**

Peds: 0



Peds: 0

Peds: 0

West Approach

	Out	In	Total
Cars	17	43	60
Trucks	1	2	3
Bicycles	0	1	1
	18	**46**	**64**

Totals	**36**	**7**	**0**
Cars	35	5	0
Trucks	1	2	0
Bicycles	0	0	0

Eighth Line

South Approach

	Out	In	Total
Cars	40	21	61
Trucks	3	0	3
Bicycles	0	0	0
	43	**21**	**64**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Eighth Line & Orangeville St
Site Code: 2448500002
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

Peak Hour Data (15:30 - 16:30)

Start Time	North Approach Eighth Line						South Approach Eighth Line						East Approach						West Approach Orangeville St						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
15:30		0	4	0	0	4	7	1		0	0	8					0		2		4	0	0	6	18
15:45		1	3	0	0	4	10	3		0	0	13					0		2		0	0	0	2	19
16:00		5	2	0	0	7	12	1		0	0	13					0		1		5	0	0	6	26
16:15		3	1	0	0	4	7	2		0	0	9					0		1		3	0	0	4	17
Grand Total		**9**	**10**	**0**	**0**	**19**	**36**	**7**		**0**	**0**	**43**					**0**	**0**	**6**		**12**	**0**	**0**	**18**	**80**
Approach %		47.4	52.6	0		-	83.7	16.3		0		-						-	33.3		66.7	0		-	
Totals %		11.3	12.5	0		23.8	45	8.8		0		53.8						0	7.5		15	0		22.5	
PHF		**0.45**	**0.63**	**0**		**0.68**	**0.75**	**0.58**		**0**		**0.83**						**0**	**0.75**		**0.6**	**0**		**0.75**	**0.77**
Cars		9	8	0		17	35	5		0		40						0	5		12	0		17	74
% Cars		100	80	0		89.5	97.2	71.4		0		93						0	83.3		100	0		94.4	92.5
Trucks		0	1	0		1	1	2		0		3						0	1		0	0		1	5
% Trucks		0	10	0		5.3	2.8	28.6		0		7						0	16.7		0	0		5.6	6.3
Bicycles		0	1	0		1	0	0		0		0						0	0		0	0		0	1
% Bicycles		0	10	0		5.3	0	0		0		0						0	0		0	0		0	1.3
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	25	14	9	10	6
Future Vol, veh/h	7	25	14	9	10	6
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	4	21	11	20	17
Mvmt Flow	8	27	15	10	11	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	54	14	17	0	-	0
Stage 1	14	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.54	6.24	4.31	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.336	2.389	-	-	-
Pot Cap-1 Maneuver	924	1060	1484	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	915	1060	1484	-	-	-
Mov Cap-2 Maneuver	915	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.64	4.54	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1096	-	1024	-	-
HCM Lane V/C Ratio	0.01	-	0.034	-	-
HCM Control Delay (s/veh)	7.5	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	12	36	7	10	9
Future Vol, veh/h	6	12	36	7	10	9
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	17	2	3	29	2	10
Mvmt Flow	7	13	39	8	11	10

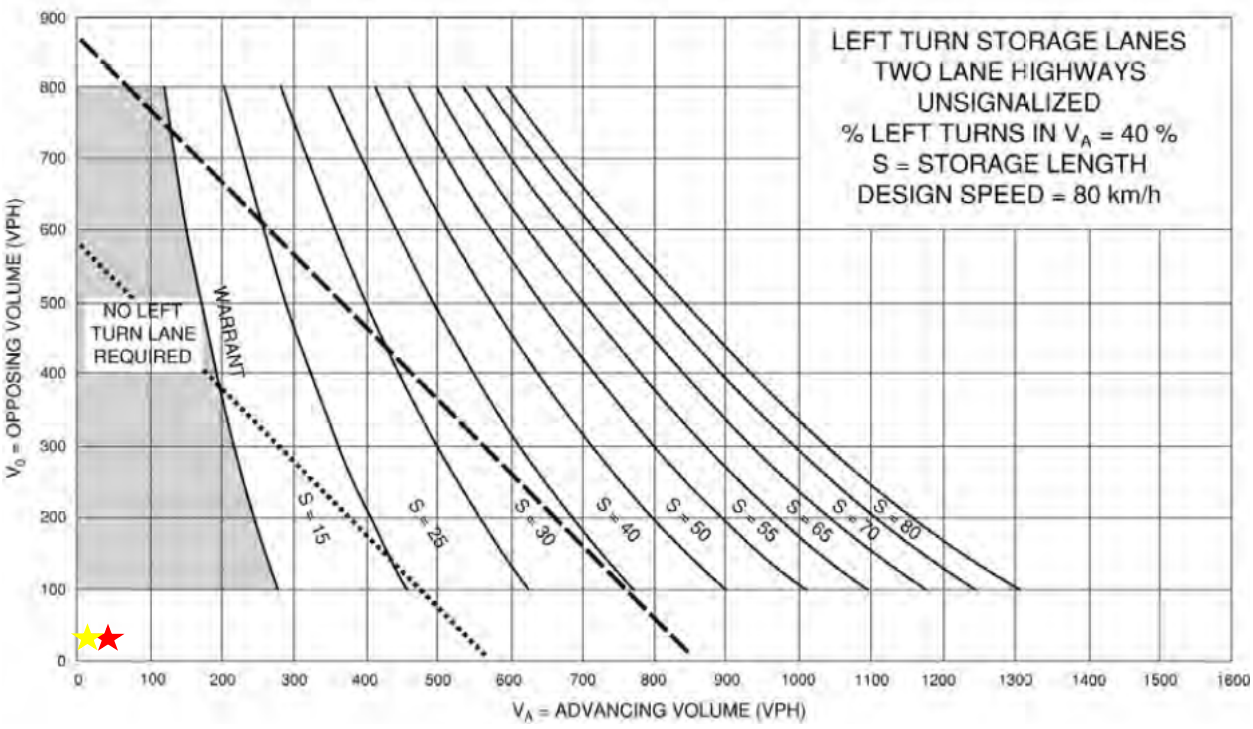
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	102	16	21	0	-	0
Stage 1	16	-	-	-	-	-
Stage 2	86	-	-	-	-	-
Critical Hdwy	6.57	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	862	1064	1589	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	840	1064	1589	-	-	-
Mov Cap-2 Maneuver	840	-	-	-	-	-
Stage 1	945	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.76	6.13	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1507	-	977	-	-
HCM Lane V/C Ratio	0.025	-	0.02	-	-
HCM Control Delay (s/veh)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Eighth Line at Orangeville Street – Northbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	23*	16*	14	60.9	0
PM	43*	19*	36	83.7	0

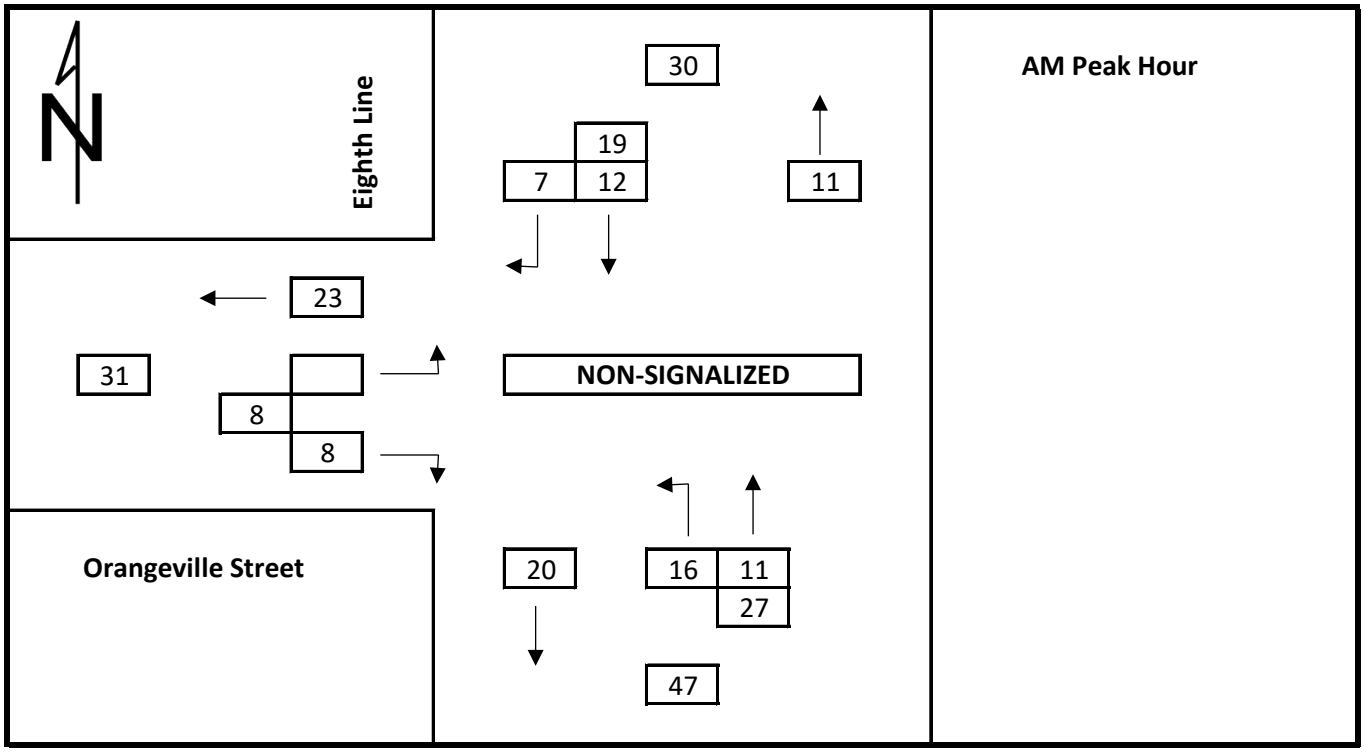
*** traffic volumes do not meet minimum MTO requirement for warrant**

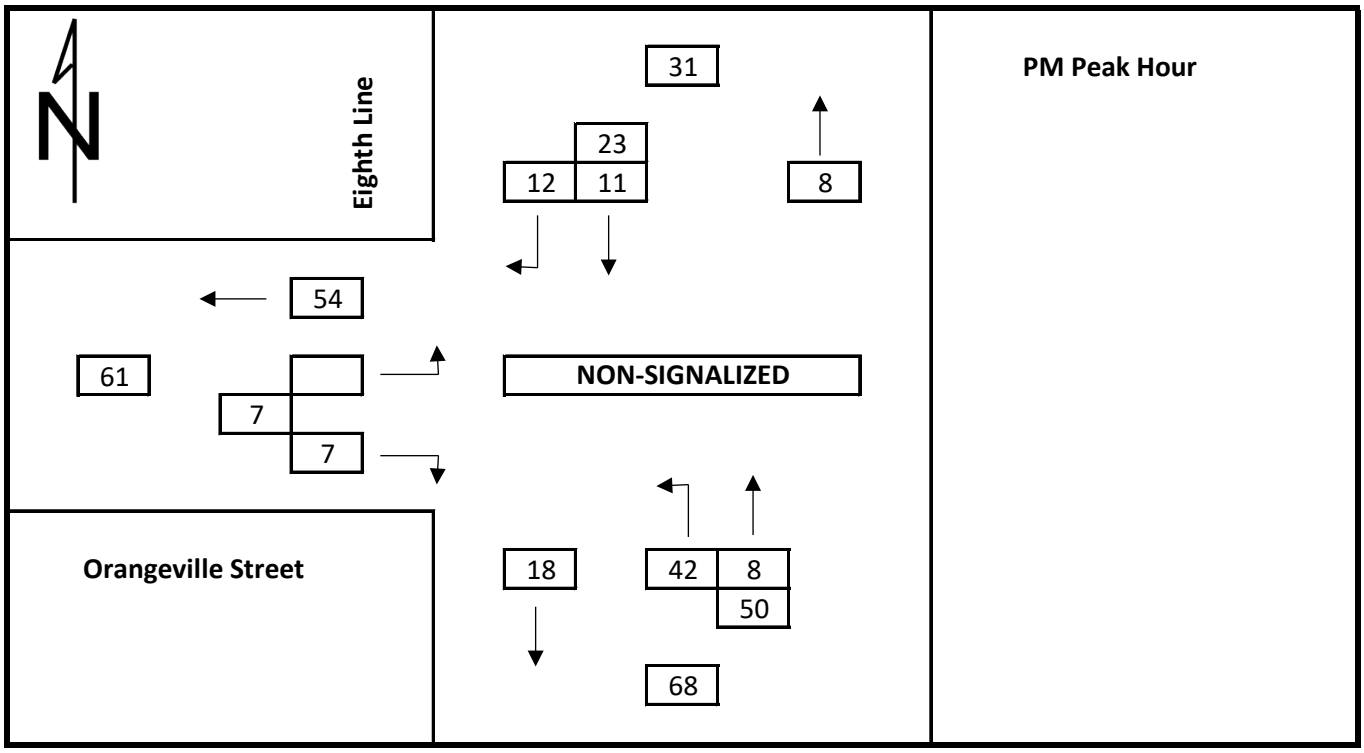
Appendix B-2

02 EIGHTH LINE AT ORANGEVILLE STREET – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

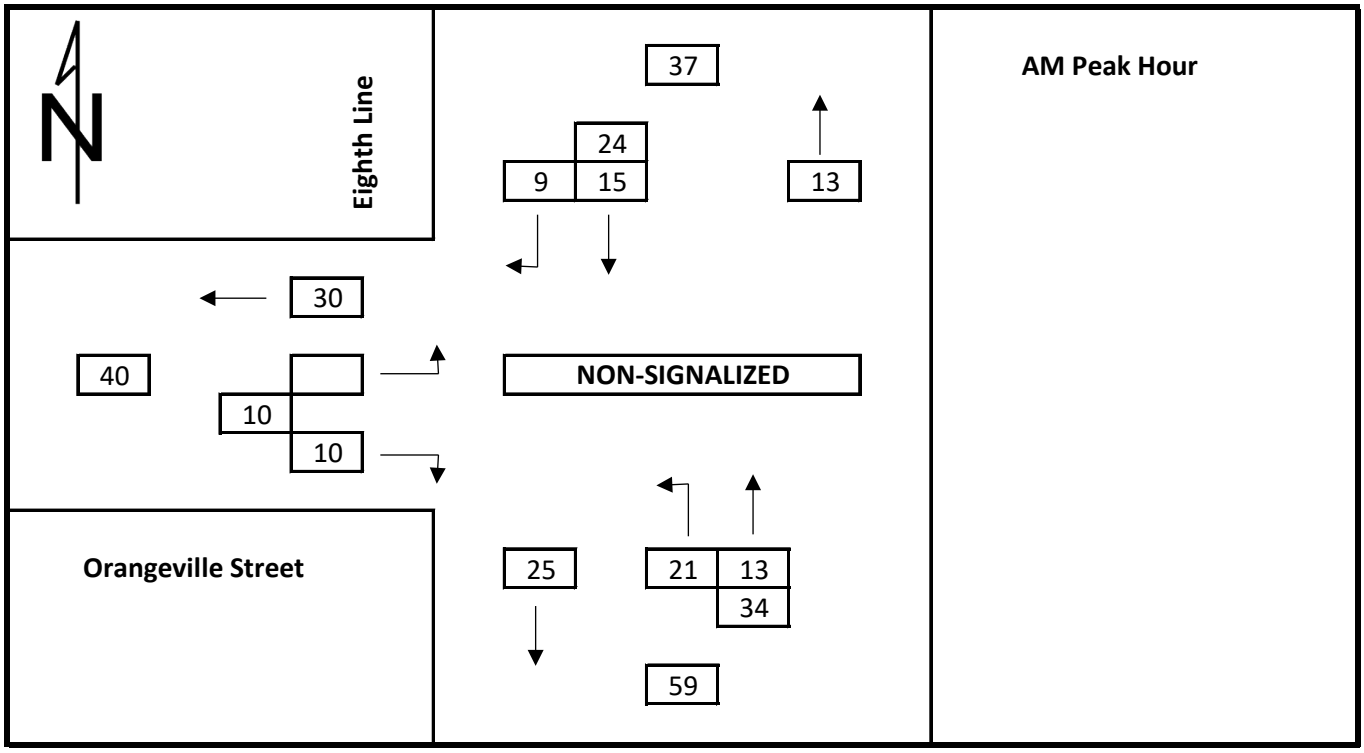
Eighth Line at Orangeville Street

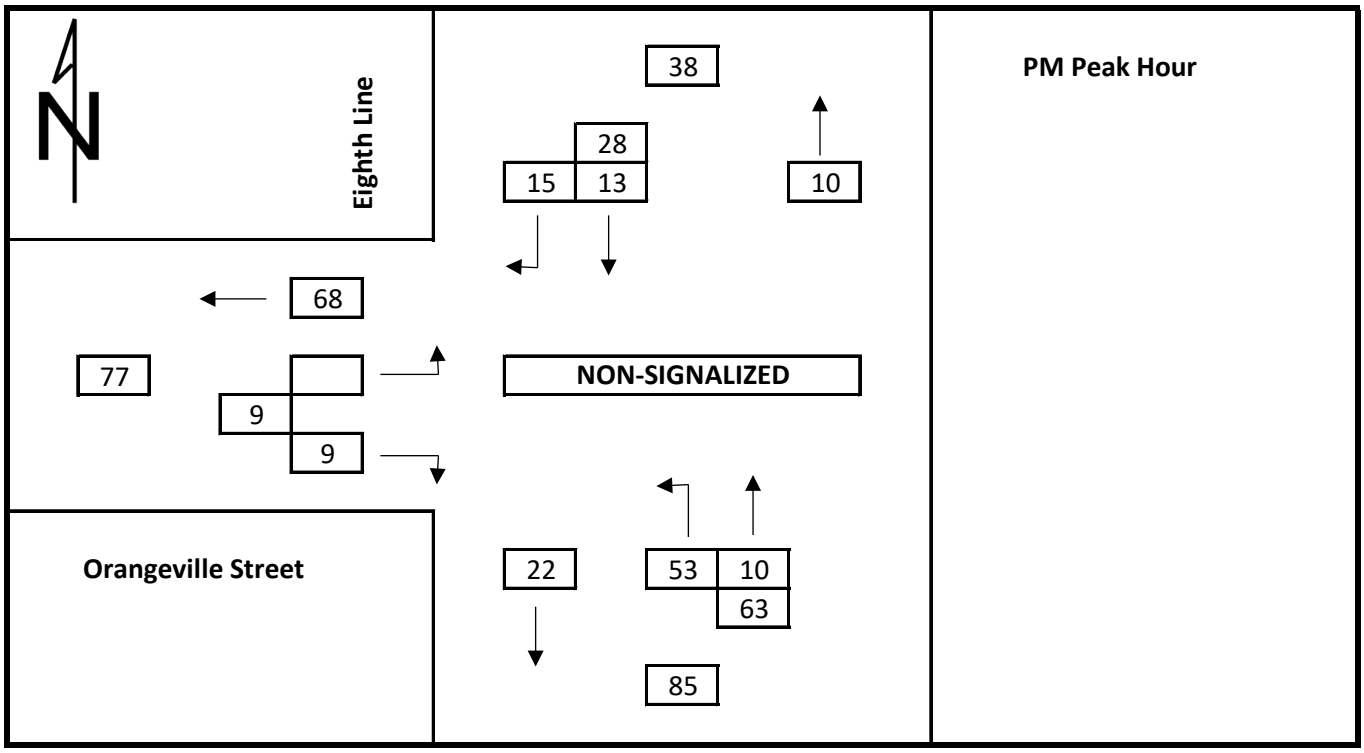




Background Traffic Year 2041

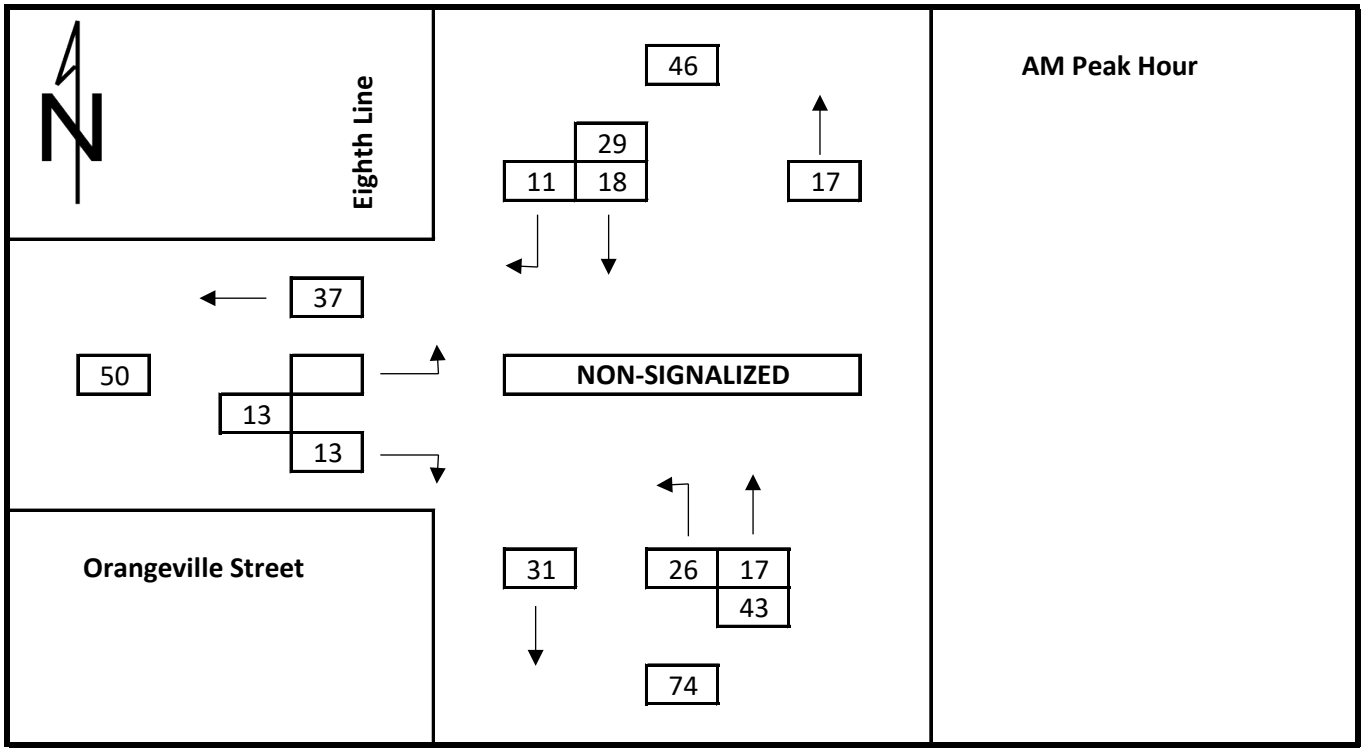
Eighth Line at Orangeville Street

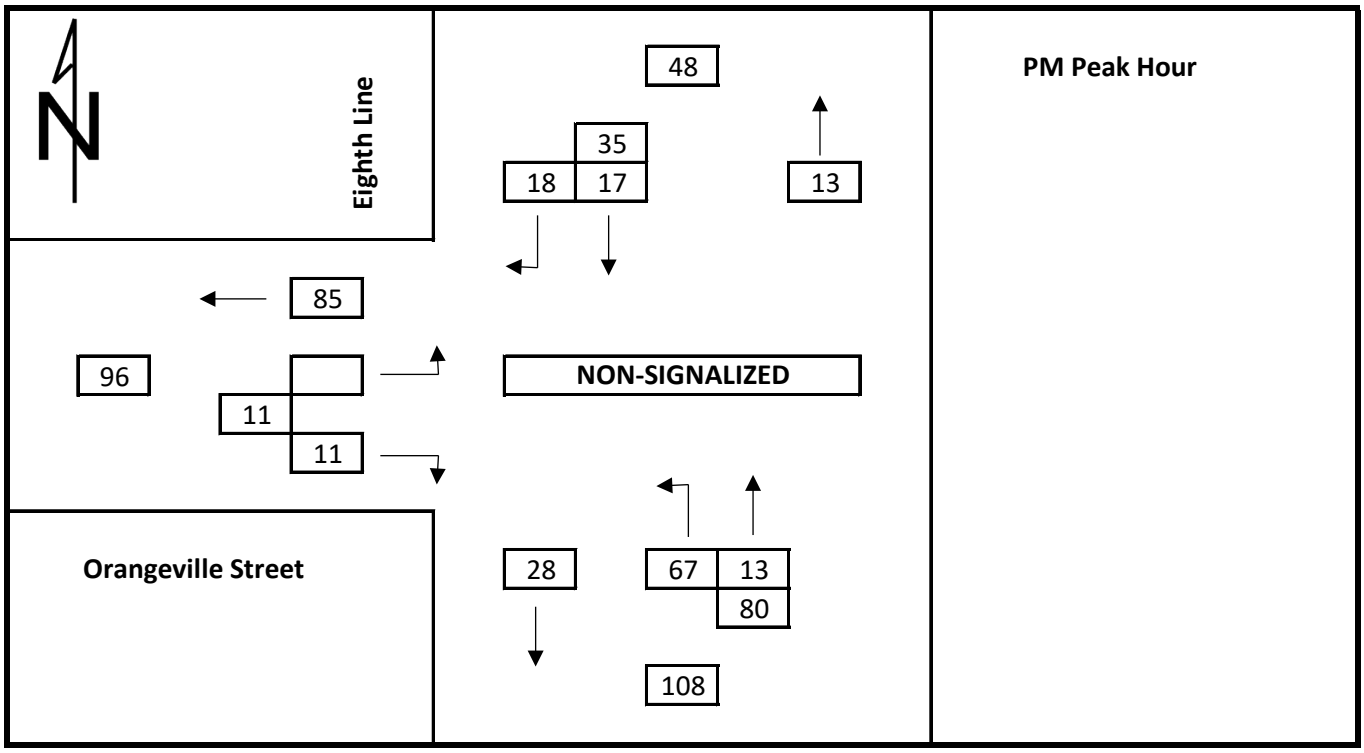




Background Traffic Year 2051

Eighth Line at Orangeville Street





Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	16	11	12	7
Future Vol, veh/h	0	8	16	11	12	7
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	4	21	11	20	17
Mvmt Flow	0	9	17	12	13	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	64	17	21	0	-	0
Stage 1	17	-	-	-	-	-
Stage 2	47	-	-	-	-	-
Critical Hdwy	6.54	6.24	4.31	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.336	2.389	-	-	-
Pot Cap-1 Maneuver	913	1056	1480	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	902	1056	1480	-	-	-
Mov Cap-2 Maneuver	902	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.44	4.42	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1067	-	1056	-	-
HCM Lane V/C Ratio	0.012	-	0.008	-	-
HCM Control Delay (s/veh)	7.5	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	42	8	11	12
Future Vol, veh/h	0	7	42	8	11	12
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	17	2	3	29	2	10
Mvmt Flow	0	8	46	9	12	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	118	18	25	0	-	0
Stage 1	18	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.57	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	843	1060	1583	-	-	-
Stage 1	967	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	818	1060	1583	-	-	-
Mov Cap-2 Maneuver	818	-	-	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	888	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.42	6.17	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1512	-	1060	-	-
HCM Lane V/C Ratio	0.029	-	0.007	-	-
HCM Control Delay (s/veh)	7.3	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	21	13	15	9
Future Vol, veh/h	0	10	21	13	15	9
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	4	21	11	20	17
Mvmt Flow	0	11	23	14	16	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	81	21	26	0	-	0
Stage 1	21	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.54	6.24	4.31	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.336	2.389	-	-	-
Pot Cap-1 Maneuver	892	1050	1473	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	933	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	878	1050	1473	-	-	-
Mov Cap-2 Maneuver	878	-	-	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	933	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.46	4.62	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1112	-	1050	-	-
HCM Lane V/C Ratio	0.015	-	0.01	-	-
HCM Control Delay (s/veh)	7.5	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	9	53	10	13	15
Future Vol, veh/h	0	9	53	10	13	15
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	17	2	3	29	2	10
Mvmt Flow	0	10	58	11	14	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	148	22	30	0	-	0
Stage 1	22	-	-	-	-	-
Stage 2	126	-	-	-	-	-
Critical Hdwy	6.57	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	810	1055	1576	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	864	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	780	1055	1576	-	-	-
Mov Cap-2 Maneuver	780	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	864	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.45	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1514	-	1055	-	-
HCM Lane V/C Ratio	0.037	-	0.009	-	-
HCM Control Delay (s/veh)	7.4	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	13	26	17	18	11
Future Vol, veh/h	0	13	26	17	18	11
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	4	21	11	20	17
Mvmt Flow	0	14	28	18	20	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	101	26	32	0	-	0
Stage 1	26	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.54	6.24	4.31	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.336	2.389	-	-	-
Pot Cap-1 Maneuver	870	1045	1466	-	-	-
Stage 1	967	-	-	-	-	-
Stage 2	918	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	853	1045	1466	-	-	-
Mov Cap-2 Maneuver	853	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	918	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.49	4.54	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1088	-	1045	-	-
HCM Lane V/C Ratio	0.019	-	0.014	-	-
HCM Control Delay (s/veh)	7.5	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	11	67	13	17	18
Future Vol, veh/h	0	11	67	13	17	18
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	17	2	3	29	2	10
Mvmt Flow	0	12	73	14	18	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	188	28	38	0	-	0
Stage 1	28	-	-	-	-	-
Stage 2	160	-	-	-	-	-
Critical Hdwy	6.57	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	768	1047	1566	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	732	1047	1566	-	-	-
Mov Cap-2 Maneuver	732	-	-	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	834	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.48	6.21	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1508	-	1047	-	-
HCM Lane V/C Ratio	0.047	-	0.011	-	-
HCM Control Delay (s/veh)	7.4	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Appendix C-1

03 WELLINGTON ROAD 22 AT TENTH LINE – EXISTING TRAFFIC VOLUME METRICS

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Project #24-485 - 30 Forensic Engineering

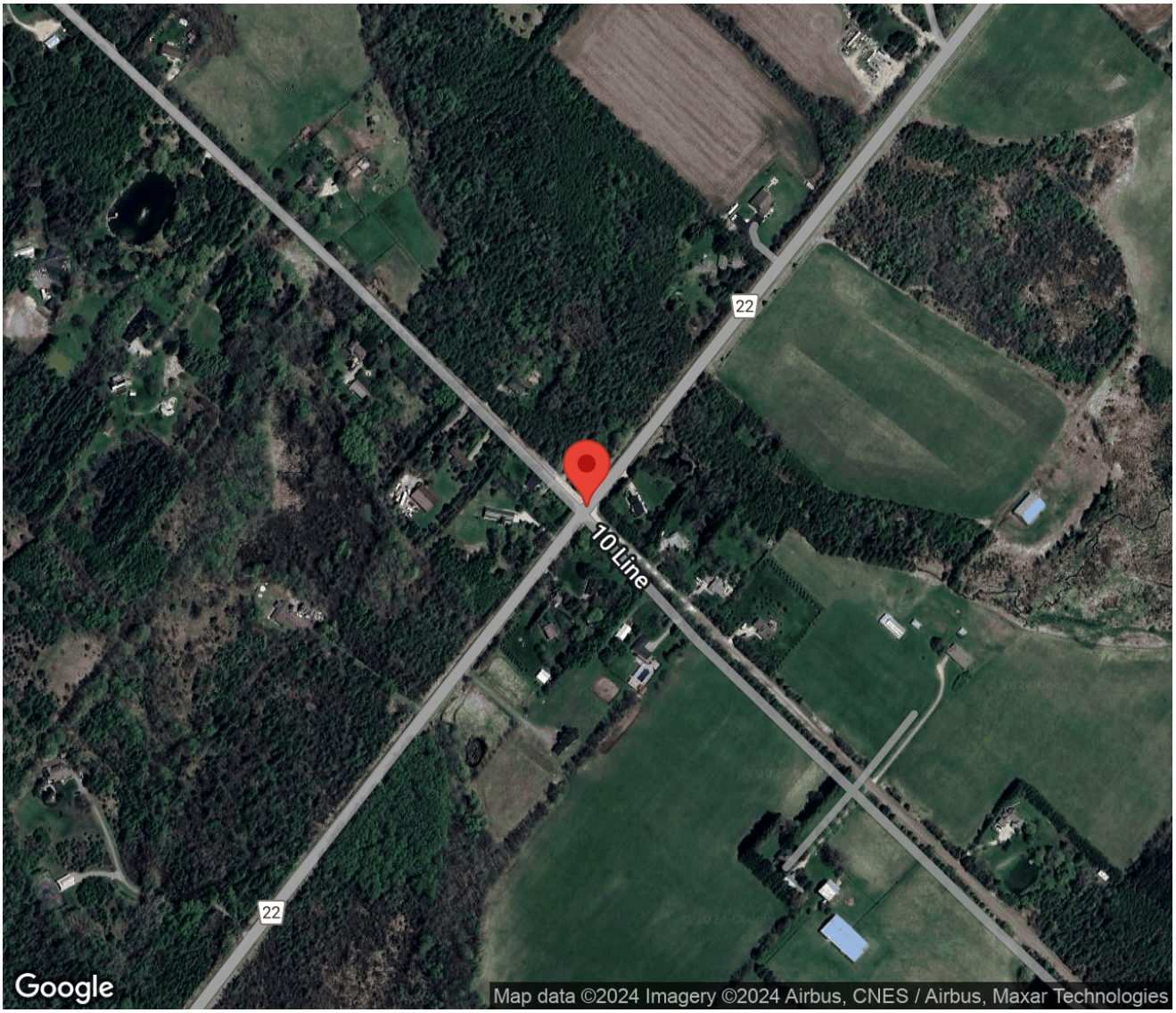
Intersection Count Report

Intersection:	Wellington Rd 22 & Tenth Line
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500003
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Wellington Rd 22 & Tenth Line
Site Code:	2448500003
Municipality:	Erin
Count Date:	Nov 19, 2024



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Traffic Count Summary

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

Tenth Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	5	2	3	0	10	0	1	0	0	0	1	0	11
08:00 - 09:00	2	3	10	0	15	0	0	0	5	0	5	0	20
09:00 - 10:00	2	3	4	0	9	0	0	0	2	0	2	0	11
BREAK													
11:00 - 12:00	0	1	4	0	5	0	1	3	4	0	8	0	13
12:00 - 13:00	2	3	4	0	9	0	1	5	0	0	6	0	15
BREAK													
15:00 - 16:00	6	0	8	0	14	0	3	3	0	0	6	0	20
16:00 - 17:00	0	0	6	0	6	0	2	5	5	0	12	0	18
17:00 - 18:00	0	2	5	0	7	0	1	1	0	0	2	0	9
GRAND TOTAL	**17**	**14**	**44**	**0**	**75**	**0**	**9**	**17**	**16**	**0**	**42**	**0**	**117**

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Traffic Count Summary

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

Wellington Rd 22 - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	3	128	0	0	131	0	3	114	3	0	120	0	251
08:00 - 09:00	2	87	4	0	93	0	4	118	2	0	124	0	217
09:00 - 10:00	2	70	4	0	76	0	5	89	0	0	94	0	170
BREAK													
11:00 - 12:00	3	69	0	0	72	0	3	43	2	1	49	0	121
12:00 - 13:00	1	60	3	0	64	0	1	62	0	1	64	0	128
BREAK													
15:00 - 16:00	3	142	6	0	151	0	3	88	0	0	91	0	242
16:00 - 17:00	0	126	10	0	136	0	11	155	4	0	170	0	306
17:00 - 18:00	3	128	2	0	133	0	6	127	4	0	137	0	270
GRAND TOTAL	**17**	**810**	**29**	**0**	**856**	**0**	**36**	**796**	**15**	**2**	**849**	**0**	**1705**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Tenth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
07:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
07:15	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
07:45	3	1	1	0	5	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
08:15	1	3	2	0	6	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	0
08:45	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
09:15	2	1	1	0	4	0	1	0	0	1	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	9	7	16	0	32	0	1	1	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Tenth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
11:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
12:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:30	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0
12:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	4	8	0	14	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Tenth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
15:00	2	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0
15:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
15:30	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0
16:45	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
17:15	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	6	2	17	0	25	0	0	2	0	2	0	0	0	0	0	0
GRAND TOTAL	17	13	41	0	71	0	1	3	0	4	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Tenth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Tenth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
11:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	0
12:00	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0
12:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:45	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	6	4	0	12	0	2	0	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Tenth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
15:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
15:30	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	1	0	2	0	3	0	1	0	0	1	0	0	0	0	0	0
16:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:30	1	1	2	0	4	0	0	0	0	0	0	0	0	0	0	0
16:45	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
17:00	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	6	8	5	0	19	0	1	0	0	1	0	0	0	0	0	0
GRAND TOTAL	9	14	16	0	39	0	3	0	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	0	20	0	0	20	0	2	0	0	2	0	0	0	0	0	0
07:15	1	32	0	0	33	0	3	0	0	3	0	0	0	0	0	0
07:30	0	41	0	0	41	0	1	0	0	1	0	0	0	0	0	0
07:45	1	23	0	0	24	1	6	0	0	7	0	0	0	0	0	0
08:00	0	23	0	0	23	0	0	1	0	1	0	0	0	0	0	0
08:15	1	18	1	0	20	0	0	0	0	0	0	0	0	0	0	0
08:30	0	15	0	0	15	0	4	0	0	4	0	0	0	0	0	0
08:45	1	26	1	0	28	0	1	1	0	2	0	0	0	0	0	0
09:00	0	22	1	0	23	0	1	0	0	1	0	0	0	0	0	0
09:15	1	20	0	0	21	0	2	0	0	2	0	0	0	0	0	0
09:30	0	8	2	0	10	0	1	0	0	1	0	0	0	0	0	0
09:45	1	14	1	0	16	0	2	0	0	2	0	0	0	0	0	0
SUBTOTAL	6	262	6	0	274	1	23	2	0	26	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	13	0	0	13	0	1	0	0	1	0	0	0	0	0	0
11:15	0	9	0	0	9	0	1	0	0	1	0	0	0	0	0	0
11:30	2	21	0	0	23	0	2	0	0	2	0	0	0	0	0	0
11:45	1	20	0	0	21	0	2	0	0	2	0	0	0	0	0	0
12:00	0	12	0	0	12	0	1	0	0	1	0	0	0	0	0	0
12:15	1	7	0	0	8	0	1	0	0	1	0	0	0	0	0	0
12:30	0	20	1	0	21	0	2	0	0	2	0	0	0	0	0	0
12:45	0	14	2	0	16	0	3	0	0	3	0	0	0	0	0	0
SUBTOTAL	4	116	3	0	123	0	13	0	0	13	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
15:00	1	36	1	0	38	0	1	0	0	1	0	0	0	0	0	0
15:15	0	34	1	0	35	0	0	0	0	0	0	0	0	0	0	0
15:30	0	42	3	0	45	1	0	0	0	1	0	0	0	0	0	0
15:45	0	28	1	0	29	1	1	0	0	2	0	0	0	0	0	0
16:00	0	36	0	0	36	0	0	0	0	0	0	0	0	0	0	0
16:15	0	35	3	0	38	0	2	0	0	2	0	0	0	0	0	0
16:30	0	28	4	0	32	0	0	0	0	0	0	0	0	0	0	0
16:45	0	25	3	0	28	0	0	0	0	0	0	0	0	0	0	0
17:00	1	34	0	0	35	0	0	0	0	0	0	0	0	0	0	0
17:15	1	24	0	0	25	0	0	0	0	0	0	0	0	0	0	0
17:30	0	39	1	0	40	0	0	0	0	0	0	0	0	0	0	0
17:45	1	31	1	0	33	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	4	392	18	0	414	2	4	0	0	6	0	0	0	0	0	0
GRAND TOTAL	14	770	27	0	811	3	40	2	0	45	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	1	27	0	0	28	0	0	0	0	0	0	0	0	0	0	0
07:15	0	28	1	0	29	0	0	0	0	0	0	0	0	0	0	0
07:30	0	29	1	0	30	1	2	0	0	3	0	0	0	0	0	0
07:45	0	27	1	0	28	1	1	0	0	2	0	0	0	0	0	0
08:00	1	34	1	0	36	0	1	1	0	2	0	0	0	0	0	0
08:15	0	24	0	0	24	0	3	0	0	3	0	0	0	0	0	0
08:30	1	32	0	0	33	0	2	0	0	2	0	0	0	0	0	0
08:45	2	18	0	0	20	0	4	0	0	4	0	0	0	0	0	0
09:00	3	24	0	0	27	0	1	0	0	1	0	0	0	0	0	0
09:15	2	20	0	0	22	0	0	0	0	0	0	0	0	0	0	0
09:30	0	22	0	0	22	0	1	0	0	1	0	0	0	0	0	0
09:45	0	21	0	0	21	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	10	306	4	0	320	2	15	1	0	18	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	5	0	0	5	0	2	0	0	2	0	0	0	0	0	0
11:15	2	13	1	1	17	0	1	0	0	1	0	0	0	0	0	0
11:30	0	12	0	0	12	0	0	0	0	0	0	0	0	0	0	0
11:45	0	10	1	0	11	1	0	0	0	1	0	0	0	0	0	0
12:00	0	13	0	0	13	0	0	0	0	0	0	0	0	0	0	0
12:15	0	15	0	1	16	0	3	0	0	3	0	0	0	0	0	0
12:30	0	14	0	0	14	0	2	0	0	2	0	0	0	0	0	0
12:45	1	13	0	0	14	0	2	0	0	2	0	0	0	0	0	0
SUBTOTAL	3	95	2	2	102	1	10	0	0	11	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	1	18	0	0	19	0	1	0	0	1	0	0	0	0	0	0
15:15	0	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0
15:30	0	28	0	0	28	2	0	0	0	2	0	0	0	0	0	0
15:45	0	25	0	0	25	0	0	0	0	0	0	0	0	0	0	0
16:00	2	30	0	0	32	1	0	0	0	1	0	0	0	0	0	0
16:15	2	40	1	0	43	0	1	0	0	1	0	0	0	0	0	0
16:30	4	37	0	0	41	0	0	0	0	0	0	0	0	0	0	0
16:45	2	45	3	0	50	0	2	0	0	2	0	0	0	0	0	0
17:00	1	41	2	0	44	0	2	0	0	2	0	0	0	0	0	0
17:15	0	28	0	0	28	0	0	0	0	0	0	0	0	0	0	0
17:30	3	35	0	0	38	0	0	0	0	0	0	0	0	0	0	0
17:45	2	21	2	0	25	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	17	364	8	0	389	3	6	0	0	9	0	0	0	0	0	0
GRAND TOTAL	**30**	**765**	**14**	**2**	**811**	**6**	**31**	**1**	**0**	**38**	**0**	**0**	**0**	**0**	**0**	**0**

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period		One Hour Peak	
From:	07:00:00	From:	07:15:00
To:	10:00:00	To:	08:15:00

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Wellington Rd 22 runs E/W

North Approach

	Out	In	Total
Cars	12	1	13
Trucks	0	3	3
Bicycles	0	0	0
	12	**4**	**16**

Tenth Line

Bicycles	0	0	0	0
Trucks	0	0	0	0
Cars	5	2	5	0
Totals	**5**	**2**	**5**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	121	123	244
Trucks	12	4	16
Bicycles	0	0	0
	133	**127**	**260**

Wellington Rd 22

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	2	1	**3**
0	4	118	**122**
0	1	4	**5**

Peds: 0



Peds: 0

Wellington Rd 22

Totals	Cars	Trucks	Bicycles
0	0	0	0
1	0	1	0
129	119	10	0
3	2	1	0

Peds: 0

West Approach

	Out	In	Total
Cars	123	124	247
Trucks	7	10	17
Bicycles	0	0	0
	130	**134**	**264**

Tenth Line

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

South Approach

	Out	In	Total
Cars	0	8	8
Trucks	0	2	2
Bicycles	0	0	0
	0	**10**	**10**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

Peak Hour Data (07:15 - 08:15)

Start Time	North Approach Tenth Line						South Approach Tenth Line						East Approach Wellington Rd 22						West Approach Wellington Rd 22						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:15	2	1	0	0	0	3	0	0	0	0	0	0	1	35	0	0	0	36	0	28	1	0	0	29	68
07:30	0	0	1	0	0	1	0	0	0	0	0	0	0	42	0	0	0	42	1	31	1	0	0	33	76
07:45	3	1	1	0	0	5	0	0	0	0	0	0	2	29	0	0	0	31	1	28	1	0	0	30	66
08:00	0	0	3	0	0	3	0	0	0	0	0	0	0	23	1	0	0	24	1	35	2	0	0	38	65
Grand Total	**5**	**2**	**5**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**129**	**1**	**0**	**0**	**133**	**3**	**122**	**5**	**0**	**0**	**130**	**275**
Approach %	41.7	16.7	41.7	0		-	0	0	0	0		-	2.3	97	0.8	0		-	2.3	93.8	3.8	0		-	
Totals %	1.8	0.7	1.8	0		4.4	0	0	0	0		0	1.1	46.9	0.4	0		48.4	1.1	44.4	1.8	0		47.3	
PHF	**0.42**	**0.5**	**0.42**	**0**		**0.6**	**0**	**0**	**0**	**0**		**0**	**0.38**	**0.77**	**0.25**	**0**		**0.79**	**0.75**	**0.87**	**0.63**	**0**		**0.86**	**0.9**
Cars	5	2	5	0		12	0	0	0	0		0	2	119	0	0		121	1	118	4	0		123	256
% Cars	100	100	100	0		100	0	0	0	0		0	66.7	92.2	0	0		91	33.3	96.7	80	0		94.6	93.1
Trucks	0	0	0	0		0	0	0	0	0		0	1	10	1	0		12	2	4	1	0		7	19
% Trucks	0	0	0	0		0	0	0	0	0		0	33.3	7.8	100	0		9	66.7	3.3	20	0		5.4	6.9
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period		One Hour Peak	
From:	11:00:00	From:	11:45:00
To:	13:00:00	To:	12:45:00

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Wellington Rd 22 runs E/W

North Approach

	Out	In	Total
Cars	8	4	12
Trucks	0	3	3
Bicycles	0	0	0
	8	**7**	**15**

Tenth Line

Bicycles	0	0	0	0
Trucks	0	0	0	0
Cars	4	2	2	0
Totals	**4**	**2**	**2**	**0**

East Approach

	Out	In	Total
Cars	62	56	118
Trucks	6	5	11
Bicycles	0	0	0
	68	**61**	**129**

Peds: 0

Wellington Rd 22

Bicycles	Trucks	Cars	Totals	
0	0	1	**1**	
0	1	0	**1**	
0	5	52	**57**	
0	0	1	**1**	

Peds: 0



Peds: 0

Wellington Rd 22

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	1	1	0	0
	65	59	6	0
	2	2	0	0

Peds: 0

West Approach

	Out	In	Total
Cars	54	64	118
Trucks	6	6	12
Bicycles	0	0	0
	60	**70**	**130**

Tenth Line

Totals	**0**	**5**	**2**	**0**
Cars	0	3	2	0
Trucks	0	2	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	5	5	10
Trucks	2	0	2
Bicycles	0	0	0
	7	**5**	**12**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (11:45 - 12:45)

Start Time	North Approach Tenth Line						South Approach Tenth Line						East Approach Wellington Rd 22						West Approach Wellington Rd 22						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
11:45	0	0	0	0	0	0	0	1	2	0	0	3	1	22	0	0	0	23	1	10	1	0	0	12	38
12:00	0	1	1	0	0	2	0	2	0	0	0	2	0	13	0	0	0	13	0	13	0	0	0	13	30
12:15	1	1	0	0	0	2	0	1	0	0	0	1	1	8	0	0	0	9	0	18	0	1	0	19	31
12:30	1	0	3	0	0	4	0	1	0	0	0	1	0	22	1	0	0	23	0	16	0	0	0	16	44
Grand Total	**2**	**2**	**4**	**0**	**0**	**8**	**0**	**5**	**2**	**0**	**0**	**7**	**2**	**65**	**1**	**0**	**0**	**68**	**1**	**57**	**1**	**1**	**0**	**60**	**143**
Approach %	25	25	50	0		-	0	71.4	28.6	0		-	2.9	95.6	1.5	0		-	1.7	95	1.7	1.7		-	
Totals %	1.4	1.4	2.8	0		5.6	0	3.5	1.4	0		4.9	1.4	45.5	0.7	0		47.6	0.7	39.9	0.7	0.7		42	
PHF	**0.5**	**0.5**	**0.33**	**0**		**0.5**	**0**	**0.63**	**0.25**	**0**		**0.58**	**0.5**	**0.74**	**0.25**	**0**		**0.74**	**0.25**	**0.79**	**0.25**	**0.25**		**0.79**	**0.81**
Cars	2	2	4	0		8	0	3	2	0		5	2	59	1	0		62	0	52	1	1		54	129
% Cars	100	100	100	0		100	0	60	100	0		71.4	100	90.8	100	0		91.2	0	91.2	100	100		90	90.2
Trucks	0	0	0	0		0	0	2	0	0		2	0	6	0	0		6	1	5	0	0		6	14
% Trucks	0	0	0	0		0	0	40	0	0		28.6	0	9.2	0	0		8.8	100	8.8	0	0		10	9.8
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period		One Hour Peak	
From:	15:00:00	From:	16:15:00
To:	18:00:00	To:	17:15:00

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Wellington Rd 22 runs E/W

North Approach

	Out	In	Total
Cars	6	24	30
Trucks	1	0	1
Bicycles	0	0	0
	7	**24**	**31**

Tenth Line

Bicycles	0	0	0	0
Trucks	1	0	0	0
Cars	6	0	0	0
Totals	**7**	**0**	**0**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	133	166	299
Trucks	2	5	7
Bicycles	0	0	0
	135	**171**	**306**

Wellington Rd 22

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	9	**9**	
0	5	163	**168**	
0	0	6	**6**	

Peds: 0



Peds: 0

Wellington Rd 22

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	10	10	0	0
	124	122	2	0
	1	1	0	0

Peds: 0

West Approach

	Out	In	Total
Cars	178	130	308
Trucks	5	3	8
Bicycles	0	0	0
	183	**133**	**316**

Totals	**2**	**5**	**3**	**0**
Cars	2	5	3	0
Trucks	0	0	0	0
Bicycles	0	0	0	0

Tenth Line

South Approach

	Out	In	Total
Cars	10	7	17
Trucks	0	0	0
Bicycles	0	0	0
	10	**7**	**17**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 22 & Tenth Line
Site Code: 2448500003
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

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

Start Time	North Approach Tenth Line						South Approach Tenth Line						East Approach Wellington Rd 22						West Approach Wellington Rd 22						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:15	0	0	0	0	0	0	0	1	0	0	0	1	0	37	3	0	0	40	2	41	1	0	0	44	85
16:30	0	0	2	0	0	2	1	1	2	0	0	4	0	28	4	0	0	32	4	37	0	0	0	41	79
16:45	0	0	2	0	0	2	0	2	1	0	0	3	0	25	3	0	0	28	2	47	3	0	0	52	85
17:00	0	0	3	0	0	3	1	1	0	0	0	2	1	34	0	0	0	35	1	43	2	0	0	46	86
Grand Total	**0**	**0**	**7**	**0**	**0**	**7**	**2**	**5**	**3**	**0**	**0**	**10**	**1**	**124**	**10**	**0**	**0**	**135**	**9**	**168**	**6**	**0**	**0**	**183**	**335**
Approach %	0	0	100	0		-	20	50	30	0		-	0.7	91.9	7.4	0		-	4.9	91.8	3.3	0		-	
Totals %	0	0	2.1	0		2.1	0.6	1.5	0.9	0		3	0.3	37	3	0		40.3	2.7	50.1	1.8	0		54.6	
PHF	**0**	**0**	**0.58**	**0**		**0.58**	**0.5**	**0.63**	**0.38**	**0**		**0.63**	**0.25**	**0.84**	**0.63**	**0**		**0.84**	**0.56**	**0.89**	**0.5**	**0**		**0.88**	**0.97**
Cars	0	0	6	0		6	2	5	3	0		10	1	122	10	0		133	9	163	6	0		178	327
% Cars	0	0	85.7	0		85.7	100	100	100	0		100	100	98.4	100	0		98.5	100	97	100	0		97.3	97.6
Trucks	0	0	1	0		1	0	0	0	0		0	0	2	0	0		2	0	5	0	0		5	8
% Trucks	0	0	14.3	0		14.3	0	0	0	0		0	0	1.6	0	0		1.5	0	3	0	0		2.7	2.4
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	122	5	3	129	1	0	0	0	5	2	5
Future Vol, veh/h	3	122	5	3	129	1	0	0	0	5	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	67	3	20	33	8	100	2	2	2	2	2	2
Mvmt Flow	3	133	5	3	140	1	0	0	0	5	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	141	0	0	138	0	0	290	290	135	286	292	141
Stage 1	-	-	-	-	-	-	142	142	-	147	147	-
Stage 2	-	-	-	-	-	-	148	148	-	139	145	-
Critical Hdwy	4.77	-	-	4.43	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.803	-	-	2.497	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1125	-	-	1276	-	-	663	621	913	666	619	907
Stage 1	-	-	-	-	-	-	861	779	-	855	775	-
Stage 2	-	-	-	-	-	-	855	775	-	864	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1125	-	-	1276	-	-	652	617	913	662	615	907
Mov Cap-2 Maneuver	-	-	-	-	-	-	652	617	-	662	615	-
Stage 1	-	-	-	-	-	-	858	777	-	853	773	-
Stage 2	-	-	-	-	-	-	845	773	-	861	775	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.19	0.18	0	9.98
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	41	-	-	41	-	-	735
HCM Lane V/C Ratio	-	0.003	-	-	0.003	-	-	0.018
HCM Control Delay (s/veh)	0	8.2	0	-	7.8	0	-	10
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	168	6	1	124	10	2	5	3	0	0	7
Future Vol, veh/h	9	168	6	1	124	10	2	5	3	0	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	14
Mvmt Flow	10	183	7	1	135	11	2	5	3	0	0	8

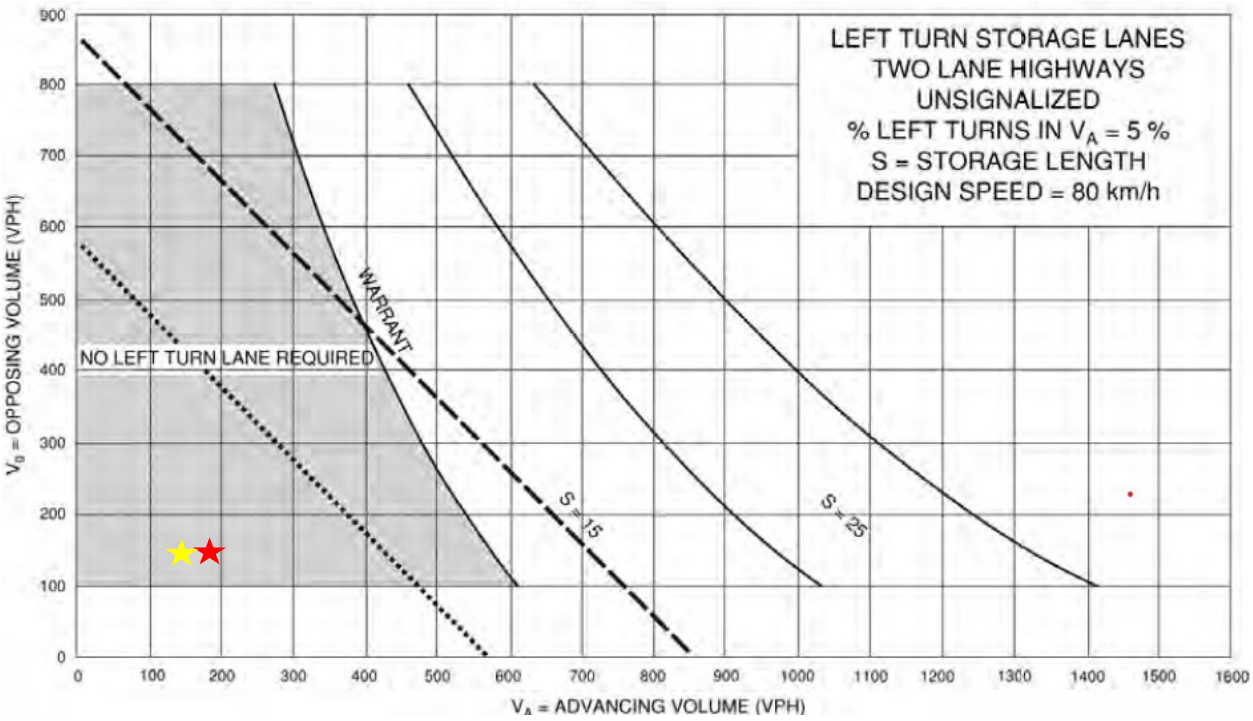
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	146	0	0	189	0	0	342	353	186	347	351	140
Stage 1	-	-	-	-	-	-	205	205	-	142	142	-
Stage 2	-	-	-	-	-	-	137	148	-	205	209	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.34
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.426
Pot Cap-1 Maneuver	1436	-	-	1385	-	-	612	572	856	607	573	877
Stage 1	-	-	-	-	-	-	797	732	-	860	779	-
Stage 2	-	-	-	-	-	-	866	775	-	797	729	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1436	-	-	1385	-	-	601	567	856	594	569	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	601	567	-	594	569	-
Stage 1	-	-	-	-	-	-	790	726	-	860	778	-
Stage 2	-	-	-	-	-	-	858	774	-	782	724	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.37	0.06	10.73	9.14
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	639	88	-	-	13	-	-	877
HCM Lane V/C Ratio	0.017	0.007	-	-	0.001	-	-	0.009
HCM Control Delay (s/veh)	10.7	7.5	0	-	7.6	0	-	9.1
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Wellington Road 22 at Tenth Line – Eastbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

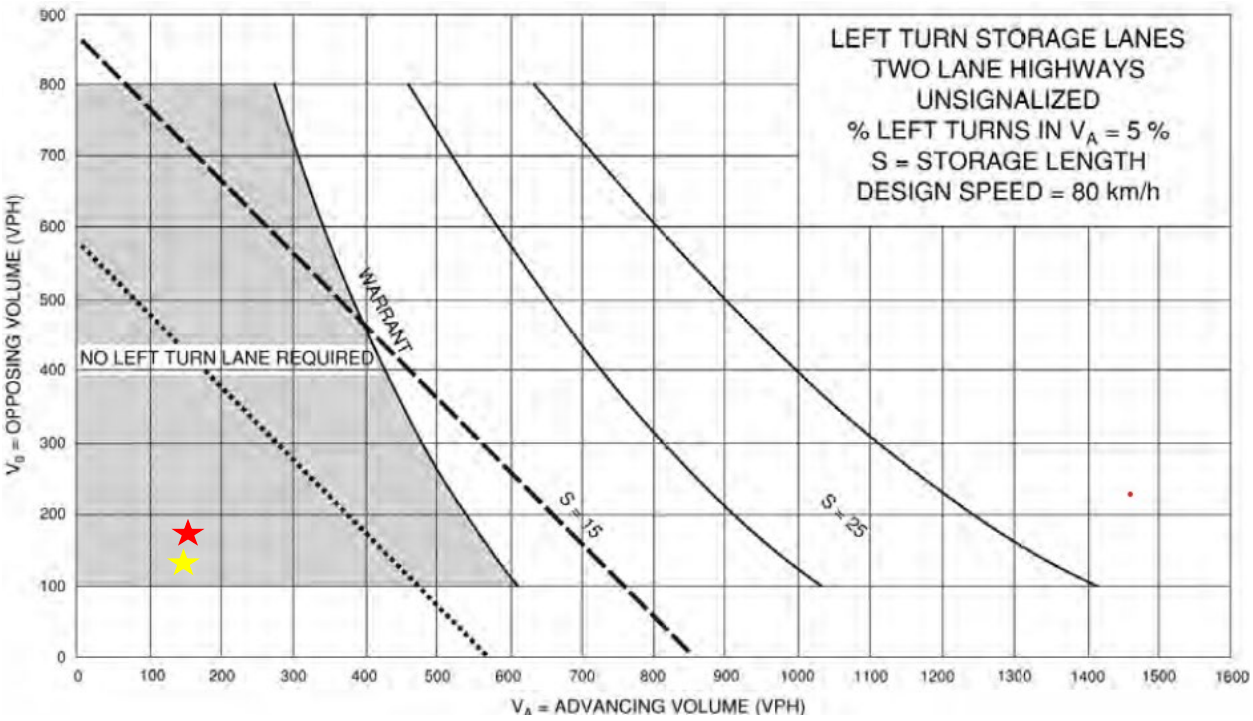
Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	130*	133*	3	2.3*	0
PM	183*	135*	9	4.9*	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

*** traffic volumes do not meet minimum MTO requirement for warrant**

Wellington Road 22 at Tenth Line – Westbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	133*	130*	3	2.3*	0
PM	135*	183*	1	0.7*	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

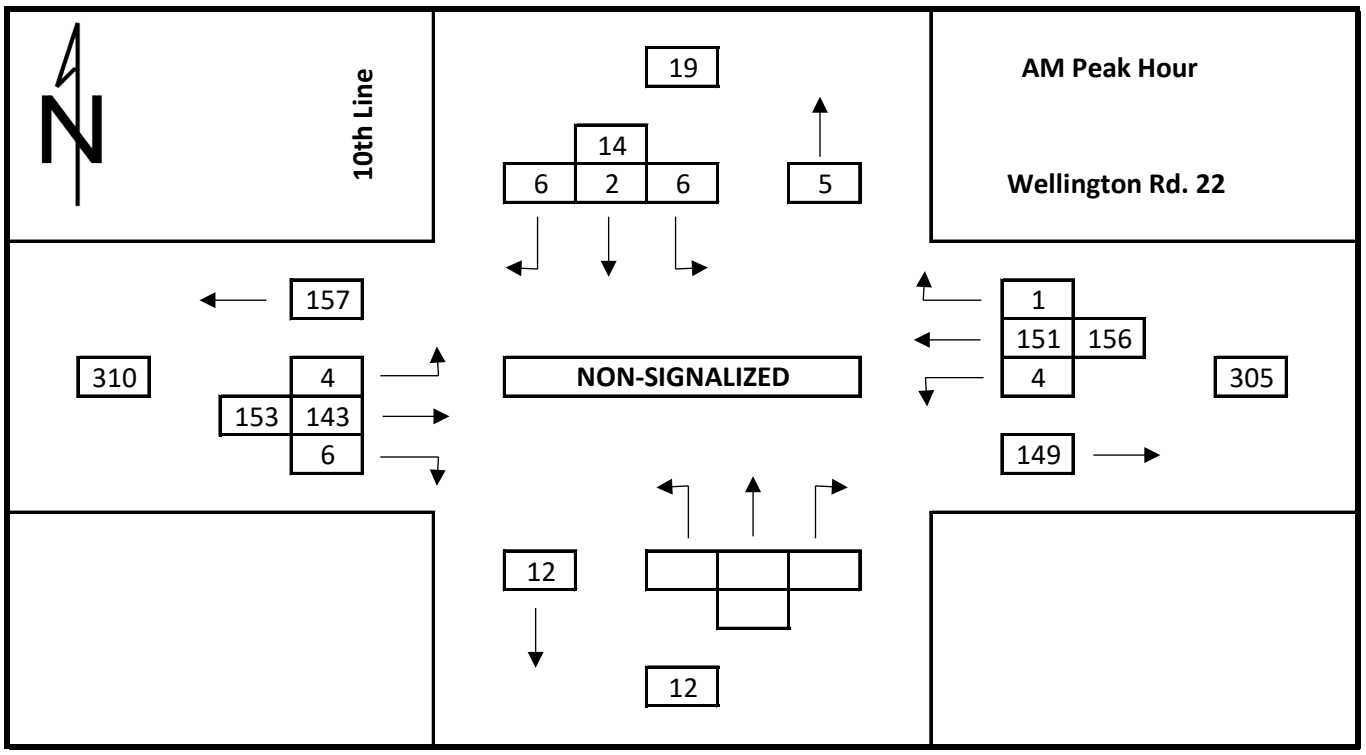
*** traffic volumes do not meet minimum MTO requirement for warrant**

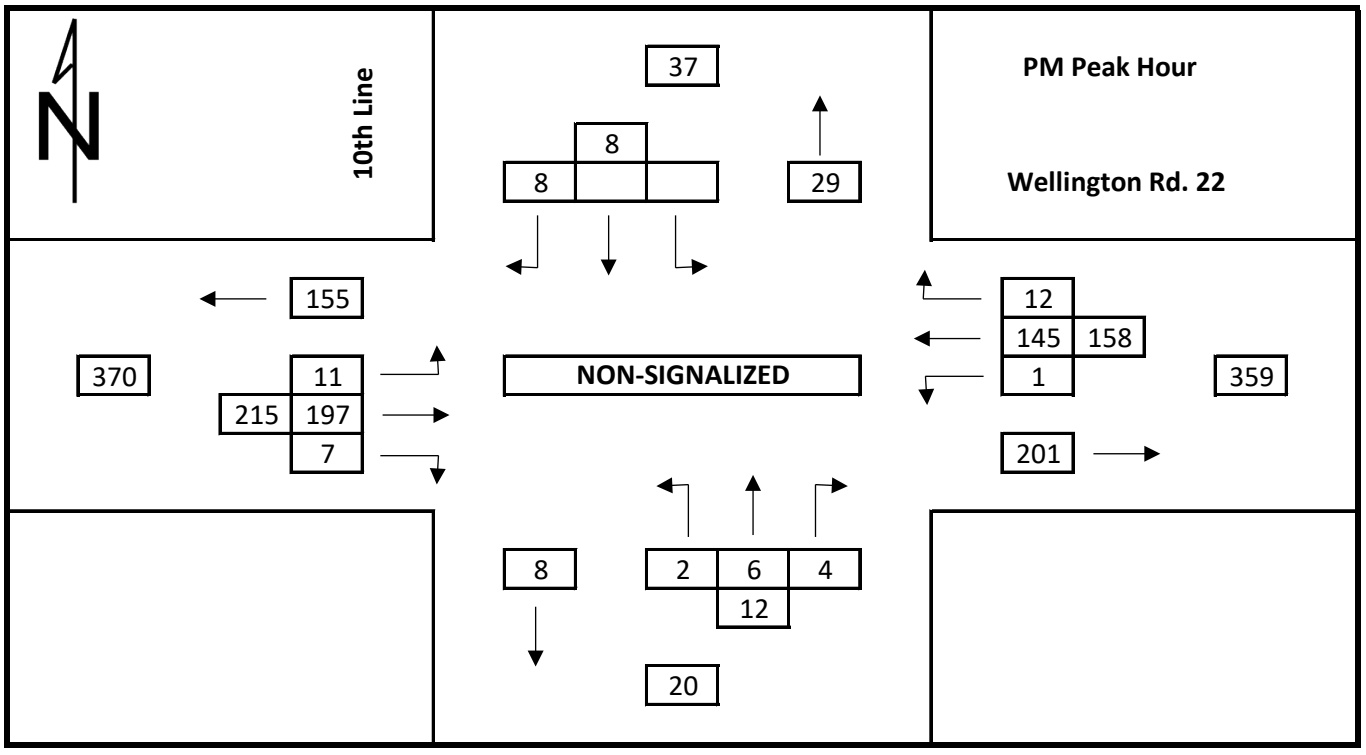
Appendix C-2

03 WELLINGTON ROAD 22 AT TENTH LINE – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

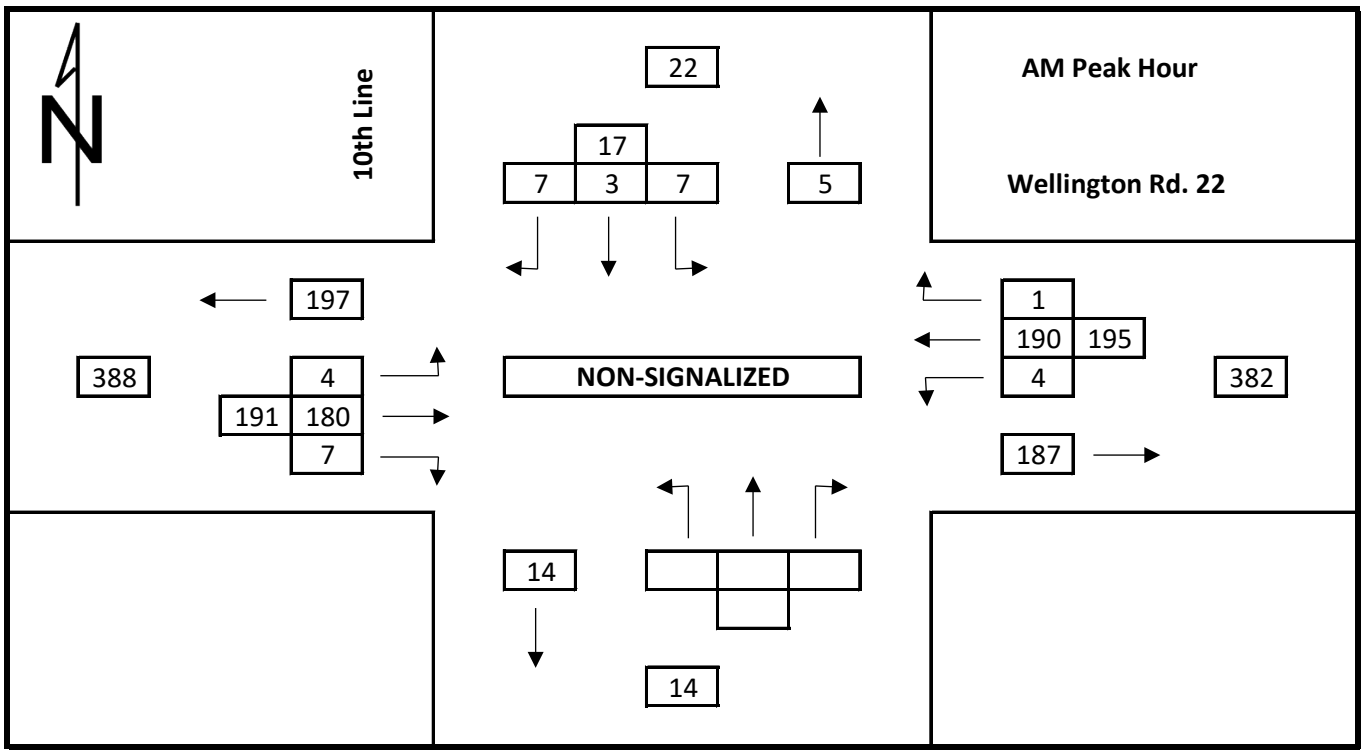
Wellington Rd 22 at 10th Line

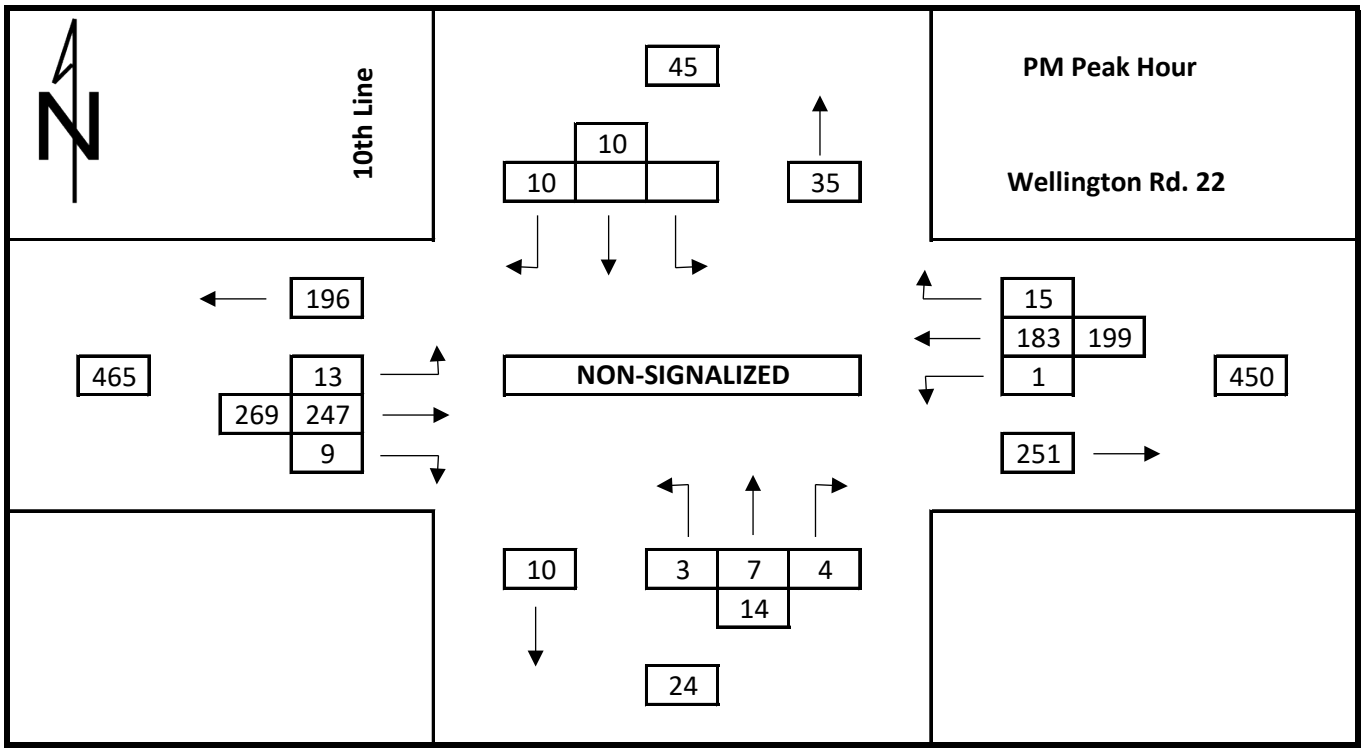




Background Traffic Year 2041

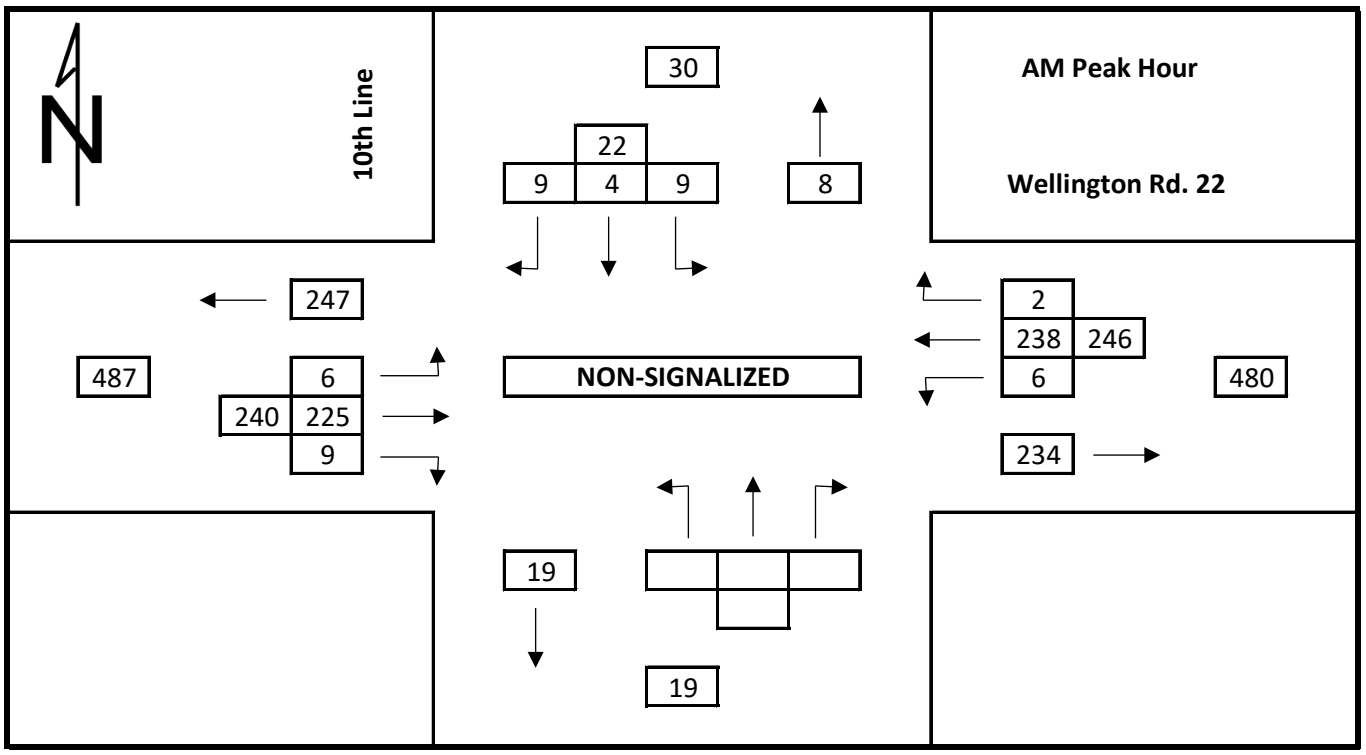
Wellington Rd 22 at 10th Line

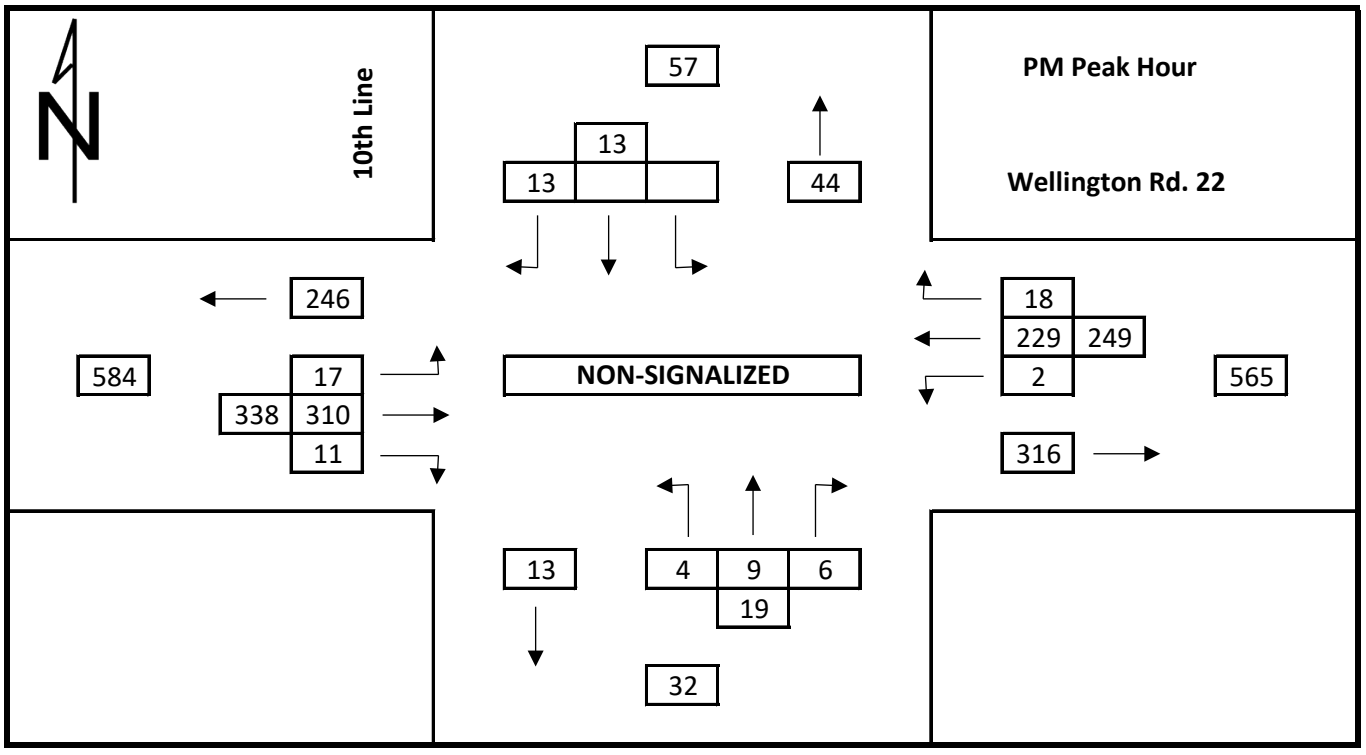




Background Traffic Year 2051

Wellington Rd 22 at 10th Line





Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	143	6	4	151	1	0	0	0	6	2	6
Future Vol, veh/h	4	143	6	4	151	1	0	0	0	6	2	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	67	3	20	33	8	100	2	2	2	2	2	2
Mvmt Flow	4	155	7	4	164	1	0	0	0	7	2	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	165	0	0	162	0	0	341	341	159	338	344	165
Stage 1	-	-	-	-	-	-	167	167	-	173	173	-
Stage 2	-	-	-	-	-	-	174	174	-	164	171	-
Critical Hdwy	4.77	-	-	4.43	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.803	-	-	2.497	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1100	-	-	1249	-	-	613	581	887	616	579	880
Stage 1	-	-	-	-	-	-	835	760	-	828	755	-
Stage 2	-	-	-	-	-	-	828	755	-	838	757	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1100	-	-	1249	-	-	601	576	887	611	574	880
Mov Cap-2 Maneuver	-	-	-	-	-	-	601	576	-	611	574	-
Stage 1	-	-	-	-	-	-	831	757	-	825	753	-
Stage 2	-	-	-	-	-	-	816	752	-	834	754	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.22	0.2	0	10.29
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	47	-	-	46	-	-	696
HCM Lane V/C Ratio	-	0.004	-	-	0.003	-	-	0.022
HCM Control Delay (s/veh)	0	8.3	0	-	7.9	0	-	10.3
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	197	7	1	145	12	2	6	4	0	0	8
Future Vol, veh/h	11	197	7	1	145	12	2	6	4	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	14
Mvmt Flow	12	214	8	1	158	13	2	7	4	0	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	171	0	0	222	0	0	402	415	218	408	412	164
Stage 1	-	-	-	-	-	-	242	242	-	166	166	-
Stage 2	-	-	-	-	-	-	160	173	-	241	246	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.34
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.426
Pot Cap-1 Maneuver	1407	-	-	1347	-	-	559	528	822	554	530	850
Stage 1	-	-	-	-	-	-	762	706	-	836	761	-
Stage 2	-	-	-	-	-	-	842	756	-	762	703	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1407	-	-	1347	-	-	548	523	822	539	524	850
Mov Cap-2 Maneuver	-	-	-	-	-	-	548	523	-	539	524	-
Stage 1	-	-	-	-	-	-	754	699	-	835	760	-
Stage 2	-	-	-	-	-	-	833	755	-	744	696	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.39	0.05	11.13	9.28
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	600	91	-	-	11	-	-	850
HCM Lane V/C Ratio	0.022	0.009	-	-	0.001	-	-	0.01
HCM Control Delay (s/veh)	11.1	7.6	0	-	7.7	0	-	9.3
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	180	7	4	190	1	0	0	0	7	3	7
Future Vol, veh/h	4	180	7	4	190	1	0	0	0	7	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	67	3	20	33	8	100	2	2	2	2	2	2
Mvmt Flow	4	196	8	4	207	1	0	0	0	8	3	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	208	0	0	203	0	0	425	424	199	420	428	207
Stage 1	-	-	-	-	-	-	208	208	-	216	216	-
Stage 2	-	-	-	-	-	-	217	216	-	204	212	-
Critical Hdwy	4.77	-	-	4.43	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.803	-	-	2.497	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1056	-	-	1204	-	-	540	521	842	544	519	833
Stage 1	-	-	-	-	-	-	794	730	-	786	724	-
Stage 2	-	-	-	-	-	-	785	724	-	798	727	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1056	-	-	1204	-	-	527	517	842	539	515	833
Mov Cap-2 Maneuver	-	-	-	-	-	-	527	517	-	539	515	-
Stage 1	-	-	-	-	-	-	790	726	-	783	721	-
Stage 2	-	-	-	-	-	-	772	721	-	794	724	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0.16	0	10.94
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	37	-	-	37	-	-	625
HCM Lane V/C Ratio	-	0.004	-	-	0.004	-	-	0.03
HCM Control Delay (s/veh)	0	8.4	0	-	8	0	-	10.9
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	247	9	1	183	15	3	7	4	0	0	10
Future Vol, veh/h	13	247	9	1	183	15	3	7	4	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	14
Mvmt Flow	14	268	10	1	199	16	3	8	4	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	215	0	0	278	0	0	503	519	273	510	516	207
Stage 1	-	-	-	-	-	-	302	302	-	209	209	-
Stage 2	-	-	-	-	-	-	201	217	-	301	307	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.34
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.426
Pot Cap-1 Maneuver	1355	-	-	1284	-	-	479	461	765	474	463	804
Stage 1	-	-	-	-	-	-	708	664	-	793	729	-
Stage 2	-	-	-	-	-	-	801	723	-	708	661	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1355	-	-	1284	-	-	466	455	765	457	457	804
Mov Cap-2 Maneuver	-	-	-	-	-	-	466	455	-	457	457	-
Stage 1	-	-	-	-	-	-	699	656	-	792	728	-
Stage 2	-	-	-	-	-	-	789	722	-	688	653	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.37	0.04	12.16	9.54
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	518	86	-	-	9	-	-	804
HCM Lane V/C Ratio	0.029	0.01	-	-	0.001	-	-	0.014
HCM Control Delay (s/veh)	12.2	7.7	0	-	7.8	0	-	9.5
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	225	9	6	238	2	0	0	0	9	4	9
Future Vol, veh/h	6	225	9	6	238	2	0	0	0	9	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	67	3	20	33	8	100	2	2	2	2	2	2
Mvmt Flow	7	245	10	7	259	2	0	0	0	10	4	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	261	0	0	254	0	0	536	536	249	530	540	260
Stage 1	-	-	-	-	-	-	263	263	-	273	273	-
Stage 2	-	-	-	-	-	-	274	274	-	258	267	-
Critical Hdwy	4.77	-	-	4.43	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.803	-	-	2.497	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1004	-	-	1150	-	-	455	451	789	459	448	779
Stage 1	-	-	-	-	-	-	743	691	-	733	684	-
Stage 2	-	-	-	-	-	-	732	683	-	747	688	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1004	-	-	1150	-	-	439	444	789	453	442	779
Mov Cap-2 Maneuver	-	-	-	-	-	-	439	444	-	453	442	-
Stage 1	-	-	-	-	-	-	737	686	-	728	679	-
Stage 2	-	-	-	-	-	-	714	679	-	741	683	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.22	0.2	0	11.93
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	45	-	-	44	-	-	543
HCM Lane V/C Ratio	-	0.006	-	-	0.006	-	-	0.044
HCM Control Delay (s/veh)	0	8.6	0	-	8.1	0	-	11.9
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	310	11	2	229	18	4	9	6	0	0	13
Future Vol, veh/h	17	310	11	2	229	18	4	9	6	0	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	14
Mvmt Flow	18	337	12	2	249	20	4	10	7	0	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	268	0	0	349	0	0	633	653	343	642	649	259
Stage 1	-	-	-	-	-	-	380	380	-	263	263	-
Stage 2	-	-	-	-	-	-	253	273	-	379	386	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.34
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.426
Pot Cap-1 Maneuver	1295	-	-	1210	-	-	392	387	700	387	389	752
Stage 1	-	-	-	-	-	-	642	614	-	742	691	-
Stage 2	-	-	-	-	-	-	751	684	-	643	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1295	-	-	1210	-	-	377	379	700	366	381	752
Mov Cap-2 Maneuver	-	-	-	-	-	-	377	379	-	366	381	-
Stage 1	-	-	-	-	-	-	631	603	-	740	689	-
Stage 2	-	-	-	-	-	-	735	683	-	616	599	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.39	0.06	13.53	9.88
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	443	90	-	-	14	-	-	752
HCM Lane V/C Ratio	0.047	0.014	-	-	0.002	-	-	0.019
HCM Control Delay (s/veh)	13.5	7.8	0	-	8	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Appendix D-1

04 SIDEROAD 5 AT NINTH LINE – EXISTING TRAFFIC VOLUME METRICS

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Project #24-485 - 30 Forensic Engineering

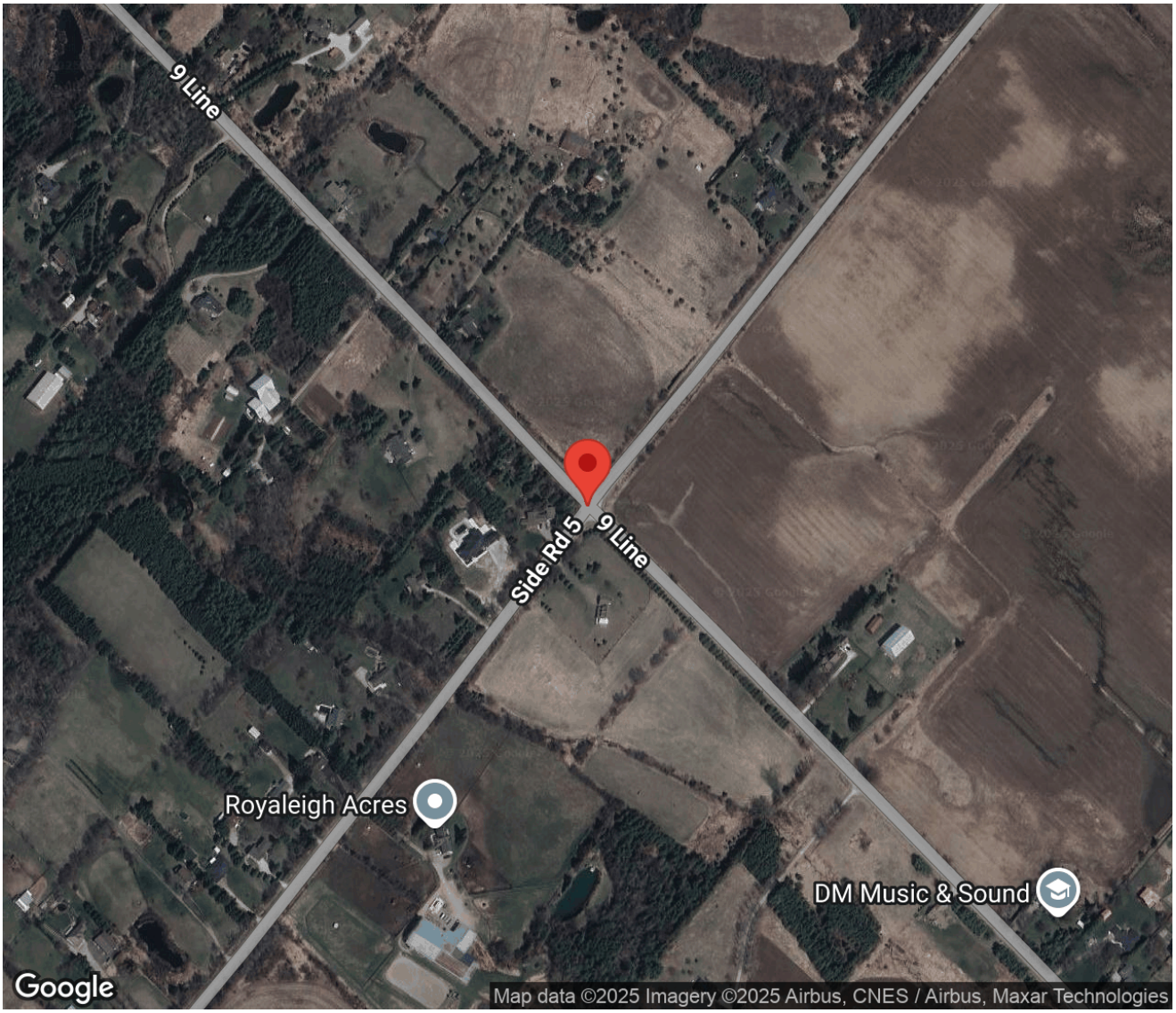
Intersection Count Report

Intersection:	Sideroad 5 & Ninth Line
Municipality:	Erin
Count Date:	Wednesday, Apr 23, 2025
Site Code:	2448500012
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Sideroad 5 & Ninth Line
Site Code:	2448500012
Municipality:	Erin
Count Date:	Apr 23, 2025



Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

Ninth Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	21	57	15	0	93	0	2	15	0	0	17	0	110
08:00 - 09:00	17	48	9	0	74	0	3	20	0	0	23	0	97
09:00 - 10:00	11	38	14	0	63	0	3	27	0	0	30	0	93
BREAK													
11:00 - 12:00	9	29	7	0	45	0	2	25	3	0	30	0	75
12:00 - 13:00	16	34	9	0	59	0	2	25	1	0	28	0	87
BREAK													
15:00 - 16:00	20	38	18	0	76	0	7	44	2	0	53	0	129
16:00 - 17:00	17	38	22	0	77	1	4	69	5	0	78	0	155
17:00 - 18:00	10	40	15	0	65	0	0	61	4	0	65	1	130
GRAND TOTAL	**121**	**322**	**109**	**0**	**552**	**1**	**23**	**286**	**15**	**0**	**324**	**1**	**876**

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Traffic Count Summary

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

Sideroad 5 - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	1	39	5	0	45	0	12	91	5	0	108	0	153
08:00 - 09:00	0	47	6	0	53	0	22	69	2	0	93	0	146
09:00 - 10:00	4	32	8	0	44	0	15	25	5	0	45	0	89
BREAK													
11:00 - 12:00	2	36	9	0	47	0	7	23	0	0	30	0	77
12:00 - 13:00	3	27	7	0	37	0	10	19	4	0	33	0	70
BREAK													
15:00 - 16:00	1	79	19	0	99	0	14	39	2	0	55	0	154
16:00 - 17:00	6	92	25	0	123	0	21	51	2	0	74	0	197
17:00 - 18:00	6	96	14	0	116	0	14	54	3	0	71	0	187
GRAND TOTAL	**23**	**448**	**93**	**0**	**564**	**0**	**115**	**371**	**23**	**0**	**509**	**0**	**1073**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

North Approach - Ninth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	6	14	2	0	22	0	0	0	0	0	0	0	0	0	0	0
07:15	8	13	4	0	25	0	0	0	0	0	0	0	0	0	0	0
07:30	2	16	4	0	22	1	1	0	0	2	0	0	0	0	0	0
07:45	4	13	5	0	22	0	0	0	0	0	0	0	0	0	0	0
08:00	4	6	2	0	12	0	1	0	0	1	0	0	0	0	0	0
08:15	7	11	1	0	19	0	0	0	0	0	0	0	0	0	0	0
08:30	0	9	3	0	12	0	1	0	0	1	0	0	0	0	0	0
08:45	6	20	3	0	29	0	0	0	0	0	0	0	0	0	0	0
09:00	4	11	7	0	22	0	1	0	0	1	0	0	0	0	0	0
09:15	3	7	2	0	12	0	0	0	0	0	0	0	0	0	0	0
09:30	1	10	3	0	14	0	0	0	0	0	0	0	0	0	0	0
09:45	3	9	2	0	14	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	48	139	38	0	225	1	4	0	0	5	0	0	0	0	0	0

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Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

North Approach - Ninth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	1	5	0	0	6	0	1	0	0	1	0	0	0	0	0	0
11:15	3	6	2	0	11	0	0	1	0	1	0	0	0	0	0	0
11:30	3	7	0	0	10	0	0	0	0	0	0	0	0	0	0	0
11:45	2	10	2	0	14	0	0	0	0	0	0	0	2	0	2	0
12:00	6	9	1	0	16	0	0	0	0	0	0	0	0	0	0	0
12:15	3	6	4	0	13	0	0	0	0	0	1	0	0	0	1	0
12:30	1	8	1	0	10	0	0	0	0	0	2	0	0	0	2	0
12:45	3	11	3	0	17	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	22	62	13	0	97	0	1	1	0	2	3	0	2	0	5	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

North Approach - Ninth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	7	8	3	0	18	0	1	1	0	2	0	0	0	0	0	0
15:15	6	14	7	0	27	0	0	0	0	0	0	0	0	0	0	0
15:30	5	5	2	0	12	0	1	0	0	1	0	0	0	0	0	0
15:45	2	8	4	0	14	0	1	1	0	2	0	0	0	0	0	0
16:00	2	8	2	0	12	1	1	0	0	2	0	0	0	0	0	0
16:15	6	7	8	0	21	0	0	0	0	0	1	0	0	0	1	0
16:30	2	13	7	0	22	0	0	0	0	0	0	0	0	0	0	0
16:45	4	9	5	0	18	1	0	0	0	1	0	0	0	0	0	1
17:00	1	11	4	0	16	0	0	0	0	0	0	0	0	0	0	0
17:15	7	14	4	0	25	0	0	0	0	0	0	0	0	0	0	0
17:30	2	9	2	0	13	0	0	0	0	0	0	0	0	0	0	0
17:45	0	5	5	0	10	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	44	111	53	0	208	2	5	2	0	9	1	0	0	0	1	1
GRAND TOTAL	114	312	104	0	530	3	10	3	0	16	4	0	2	0	6	1

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

South Approach - Ninth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0
07:30	1	2	0	0	3	0	1	0	0	1	0	0	0	0	0	0
07:45	1	6	0	0	7	0	0	0	0	0	0	0	0	0	0	0
08:00	0	5	0	0	5	0	1	0	0	1	0	0	0	0	0	0
08:15	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0
08:30	1	6	0	0	7	0	0	0	0	0	0	0	0	0	0	0
08:45	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	0
09:00	1	7	0	0	8	0	0	0	0	0	0	0	0	0	0	0
09:15	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0
09:30	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
09:45	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	8	59	0	0	67	0	3	0	0	3	0	0	0	0	0	0

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Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

South Approach - Ninth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	1	9	1	0	11	0	0	0	0	0	0	0	1	0	1	0
11:15	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
11:30	1	5	1	0	7	0	0	0	0	0	0	0	0	0	0	0
11:45	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0
12:00	1	7	1	0	9	0	0	0	0	0	0	0	0	0	0	0
12:15	1	7	0	0	8	0	0	0	0	0	0	0	0	0	0	0
12:30	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0
12:45	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	4	50	3	0	57	0	0	0	0	0	0	0	1	0	1	0

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Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

South Approach - Ninth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	3	12	0	0	15	0	0	0	0	0	0	0	0	0	0	0
15:15	1	4	1	0	6	0	0	0	0	0	0	0	0	0	0	0
15:30	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
15:45	3	19	1	0	23	0	1	0	0	1	0	0	0	0	0	0
16:00	2	16	2	0	20	0	1	0	0	1	0	0	0	0	0	0
16:15	0	23	0	0	23	1	0	0	0	1	0	0	0	0	0	0
16:30	0	13	2	0	15	0	1	0	0	1	0	0	0	0	0	0
16:45	1	14	1	0	16	0	1	0	0	1	0	0	0	0	0	0
17:00	0	11	1	0	12	0	0	0	0	0	0	0	0	0	0	1
17:15	0	21	0	0	21	0	0	0	0	0	0	1	0	0	1	0
17:30	0	12	0	0	12	0	0	0	0	0	0	0	0	0	0	0
17:45	0	16	3	0	19	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	10	169	11	0	190	1	4	0	0	5	0	1	0	0	1	1
GRAND TOTAL	22	278	14	0	314	1	7	0	0	8	0	1	1	0	2	1

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

East Approach - Sideroad 5

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	0	7	1	0	8	1	1	0	0	2	0	0	0	0	0	0
07:15	0	9	2	0	11	0	1	0	0	1	0	0	0	0	0	0
07:30	0	12	0	0	12	0	1	2	0	3	0	0	0	0	0	0
07:45	0	7	0	0	7	0	1	0	0	1	0	0	0	0	0	0
08:00	0	9	0	0	9	0	1	0	0	1	0	0	0	0	0	0
08:15	0	15	2	0	17	0	1	0	0	1	0	0	0	0	0	0
08:30	0	11	2	0	13	0	0	0	0	0	0	0	0	0	0	0
08:45	0	9	2	0	11	0	1	0	0	1	0	0	0	0	0	0
09:00	0	5	2	0	7	0	0	0	0	0	1	0	0	0	1	0
09:15	3	8	4	0	15	0	1	0	0	1	0	0	0	0	0	0
09:30	0	8	2	0	10	0	0	0	0	0	0	0	0	0	0	0
09:45	0	9	0	0	9	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	3	109	17	0	129	1	9	2	0	12	1	0	0	0	1	0

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Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

East Approach - Sideroad 5

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	0	5	3	0	8	0	0	0	0	0	0	0	0	0	0	0
11:15	1	17	1	0	19	0	0	0	0	0	0	0	0	0	0	0
11:30	1	6	3	0	10	0	0	0	0	0	0	0	0	0	0	0
11:45	0	6	2	0	8	0	2	0	0	2	0	0	0	0	0	0
12:00	1	3	2	0	6	0	1	0	0	1	0	0	0	0	0	0
12:15	0	5	2	0	7	1	0	0	0	1	0	0	0	0	0	0
12:30	1	8	2	0	11	0	0	0	0	0	0	0	0	0	0	0
12:45	0	8	1	0	9	0	2	0	0	2	0	0	0	0	0	0
SUBTOTAL	4	58	16	0	78	1	5	0	0	6	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

East Approach - Sideroad 5

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	13	4	0	17	0	0	0	0	0	0	0	0	0	0	0
15:15	0	14	7	0	21	0	0	0	0	0	0	0	0	0	0	0
15:30	0	28	3	0	31	0	1	0	0	1	0	0	0	0	0	0
15:45	1	22	5	0	28	0	1	0	0	1	0	0	0	0	0	0
16:00	2	23	4	0	29	1	1	0	0	2	0	0	0	0	0	0
16:15	0	17	9	0	26	0	1	0	0	1	0	0	0	0	0	0
16:30	2	27	6	0	35	0	0	1	0	1	0	0	0	0	0	0
16:45	1	23	5	0	29	0	0	0	0	0	0	0	0	0	0	0
17:00	2	30	6	0	38	0	0	0	0	0	1	0	0	0	1	0
17:15	0	29	2	0	31	0	0	0	0	0	0	0	0	0	0	0
17:30	1	23	2	0	26	0	0	0	0	0	0	0	0	0	0	0
17:45	1	12	4	0	17	1	1	0	0	2	0	1	0	0	1	0
SUBTOTAL	10	261	57	0	328	2	5	1	0	8	1	1	0	0	2	0
GRAND TOTAL	**17**	**428**	**90**	**0**	**535**	**4**	**19**	**3**	**0**	**26**	**2**	**1**	**0**	**0**	**3**	**0**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

West Approach - Sideroad 5

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	5	18	1	0	24	0	1	0	0	1	0	0	0	0	0	0
07:15	1	28	0	0	29	0	0	0	0	0	0	0	0	0	0	0
07:30	4	29	0	0	33	0	0	1	0	1	0	0	0	0	0	0
07:45	2	14	3	0	19	0	1	0	0	1	0	0	0	0	0	0
08:00	4	15	0	0	19	0	1	0	0	1	0	0	0	0	0	0
08:15	8	18	1	0	27	0	1	0	0	1	0	0	0	0	0	0
08:30	6	19	0	0	25	0	0	0	0	0	0	0	0	0	0	0
08:45	4	12	1	0	17	0	3	0	0	3	0	0	0	0	0	0
09:00	3	7	3	0	13	0	0	0	0	0	0	0	0	0	0	0
09:15	3	4	1	0	8	0	1	0	0	1	0	0	0	0	0	0
09:30	5	6	1	0	12	0	0	0	0	0	0	0	0	0	0	0
09:45	4	7	0	0	11	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	49	177	11	0	237	0	8	1	0	9	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

West Approach - Sideroad 5

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	1	6	0	0	7	0	0	0	0	0	2	0	0	0	2	0
11:15	2	7	0	0	9	0	0	0	0	0	0	0	0	0	0	0
11:30	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
11:45	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
12:00	3	5	0	0	8	0	0	0	0	0	0	0	0	0	0	0
12:15	4	5	0	0	9	0	0	0	0	0	0	0	0	0	0	0
12:30	1	2	1	0	4	0	0	0	0	0	0	1	0	0	1	0
12:45	2	6	3	0	11	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	15	41	4	0	60	0	0	0	0	0	2	1	0	0	3	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Municipality: Erin
Count Date: Apr 23, 2025

West Approach - Sideroad 5

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	4	8	0	0	12	2	0	0	0	2	0	0	0	0	0	0
15:15	3	7	1	0	11	0	0	0	0	0	0	0	0	0	0	0
15:30	1	8	0	0	9	0	0	0	0	0	0	0	0	0	0	0
15:45	4	16	1	0	21	0	0	0	0	0	0	0	0	0	0	0
16:00	2	7	1	0	10	0	2	0	0	2	0	0	0	0	0	0
16:15	4	11	0	0	15	0	0	0	0	0	0	0	0	0	0	0
16:30	9	18	0	0	27	0	1	0	0	1	0	0	0	0	0	0
16:45	5	12	1	0	18	1	0	0	0	1	0	0	0	0	0	0
17:00	2	15	1	0	18	0	0	0	0	0	0	0	0	0	0	0
17:15	4	16	1	0	21	0	0	0	0	0	0	0	0	0	0	0
17:30	3	15	1	0	19	0	0	0	0	0	0	0	0	0	0	0
17:45	5	8	0	0	13	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	46	141	7	0	194	3	3	0	0	6	0	0	0	0	0	0
GRAND TOTAL	110	359	22	0	491	3	11	1	0	15	2	1	0	0	3	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

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

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Count Date: Apr 23, 2025

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Sideroad 5 runs E/W

North Approach

	Out	In	Total
Cars	91	29	120
Trucks	2	3	5
Bicycles	0	0	0
	93	**32**	**125**

Ninth Line

Bicycles	0	0	0	0
Trucks	0	1	1	0
Cars	15	56	20	0
Totals	**15**	**57**	**21**	**0**

East Approach

	Out	In	Total
Cars	38	109	147
Trucks	7	3	10
Bicycles	0	0	0
	45	**112**	**157**

Sideroad 5

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	0	12	**12**
0	2	89	**91**
0	1	4	**5**

Peds: 0

N
W E
S

Peds: 0

Peds: 0

Sideroad 5

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	5	3	2	0
	39	35	4	0
	1	0	1	0

West Approach

	Out	In	Total
Cars	105	52	157
Trucks	3	4	7
Bicycles	0	0	0
	108	**56**	**164**

Ninth Line

Totals	**2**	**15**	**0**	**0**
Cars	2	14	0	0
Trucks	0	1	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	16	60	76
Trucks	1	3	4
Bicycles	0	0	0
	17	**63**	**80**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Count Date: Apr 23, 2025
Period: 07:00 - 10:00

Peak Hour Data (07:00 - 08:00)

Start Time	North Approach Ninth Line						South Approach Ninth Line						East Approach Sideroad 5						West Approach Sideroad 5						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:00	6	14	2	0	0	22	0	0	0	0	0	0	1	8	1	0	0	10	5	19	1	0	0	25	57
07:15	8	13	4	0	0	25	0	6	0	0	0	6	0	10	2	0	0	12	1	28	0	0	0	29	72
07:30	3	17	4	0	0	24	1	3	0	0	0	4	0	13	2	0	0	15	4	29	1	0	0	34	77
07:45	4	13	5	0	0	22	1	6	0	0	0	7	0	8	0	0	0	8	2	15	3	0	0	20	57
Grand Total	**21**	**57**	**15**	**0**	**0**	**93**	**2**	**15**	**0**	**0**	**0**	**17**	**1**	**39**	**5**	**0**	**0**	**45**	**12**	**91**	**5**	**0**	**0**	**108**	**263**
Approach %	22.6	61.3	16.1	0		-	11.8	88.2	0	0		-	2.2	86.7	11.1	0		-	11.1	84.3	4.6	0		-	
Totals %	8	21.7	5.7	0		35.4	0.8	5.7	0	0		6.5	0.4	14.8	1.9	0		17.1	4.6	34.6	1.9	0		41.1	
PHF	**0.66**	**0.84**	**0.75**	**0**		**0.93**	**0.5**	**0.63**	**0**	**0**		**0.61**	**0.25**	**0.75**	**0.63**	**0**		**0.75**	**0.6**	**0.78**	**0.42**	**0**		**0.79**	**0.85**
Cars	20	56	15	0		91	2	14	0	0		16	0	35	3	0		38	12	89	4	0		105	250
% Cars	95.2	98.2	100	0		97.8	100	93.3	0	0		94.1	0	89.7	60	0		84.4	100	97.8	80	0		97.2	95.1
Trucks	1	1	0	0		2	0	1	0	0		1	1	4	2	0		7	0	2	1	0		3	13
% Trucks	4.8	1.8	0	0		2.2	0	6.7	0	0		5.9	100	10.3	40	0		15.6	0	2.2	20	0		2.8	4.9
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Specified Period
From: 11:00:00
To: 13:00:00

One Hour Peak
From: 12:00:00
To: 13:00:00

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Count Date: Apr 23, 2025

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Sideroad 5 runs E/W

North Approach

	Out	In	Total
Cars	56	42	98
Trucks	0	0	0
Bicycles	3	0	3
	59	**42**	**101**

Ninth Line

Bicycles	0	0	3	0
Trucks	0	0	0	0
Cars	9	34	13	0
Totals	**9**	**34**	**16**	**0**

East Approach

	Out	In	Total
Cars	33	32	65
Trucks	4	0	4
Bicycles	0	4	4
	37	**36**	**73**

Peds: 0

Sideroad 5

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	0	10	**10**
1	0	18	**19**
0	0	4	**4**

Peds: 0



Peds: 0

Sideroad 5

Totals	Cars	Trucks	Bicycles
0	0	0	0
7	7	0	0
27	24	3	0
3	2	1	0

Peds: 0

West Approach

	Out	In	Total
Cars	32	35	67
Trucks	0	3	3
Bicycles	1	0	1
	33	**38**	**71**

Ninth Line

Totals	**2**	**25**	**1**	**0**
Cars	2	25	1	0
Trucks	0	0	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	28	40	68
Trucks	0	1	1
Bicycles	0	0	0
	28	**41**	**69**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Count Date: Apr 23, 2025
Period: 11:00 - 13:00

Peak Hour Data (12:00 - 13:00)

Start Time	North Approach Ninth Line						South Approach Ninth Line						East Approach Sideroad 5						West Approach Sideroad 5						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
12:00	6	9	1	0	0	16	1	7	1	0	0	9	1	4	2	0	0	7	3	5	0	0	0	8	40
12:15	4	6	4	0	0	14	1	7	0	0	0	8	1	5	2	0	0	8	4	5	0	0	0	9	39
12:30	3	8	1	0	0	12	0	6	0	0	0	6	1	8	2	0	0	11	1	3	1	0	0	5	34
12:45	3	11	3	0	0	17	0	5	0	0	0	5	0	10	1	0	0	11	2	6	3	0	0	11	44
Grand Total	**16**	**34**	**9**	**0**	**0**	**59**	**2**	**25**	**1**	**0**	**0**	**28**	**3**	**27**	**7**	**0**	**0**	**37**	**10**	**19**	**4**	**0**	**0**	**33**	**157**
Approach %	27.1	57.6	15.3	0		-	7.1	89.3	3.6	0		-	8.1	73	18.9	0		-	30.3	57.6	12.1	0		-	
Totals %	10.2	21.7	5.7	0		37.6	1.3	15.9	0.6	0		17.8	1.9	17.2	4.5	0		23.6	6.4	12.1	2.5	0		21	
PHF	**0.67**	**0.77**	**0.56**	**0**		**0.87**	**0.5**	**0.89**	**0.25**	**0**		**0.78**	**0.75**	**0.68**	**0.88**	**0**		**0.84**	**0.63**	**0.79**	**0.33**	**0**		**0.75**	**0.89**
Cars	13	34	9	0		56	2	25	1	0		28	2	24	7	0		33	10	18	4	0		32	149
% Cars	81.3	100	100	0		94.9	100	100	100	0		100	66.7	88.9	100	0		89.2	100	94.7	100	0		97	94.9
Trucks	0	0	0	0		0	0	0	0	0		0	1	3	0	0		4	0	0	0	0		0	4
% Trucks	0	0	0	0		0	0	0	0	0		0	33.3	11.1	0	0		10.8	0	0	0	0		0	2.5
Bicycles	3	0	0	0		3	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	4
% Bicycles	18.8	0	0	0		5.1	0	0	0	0		0	0	0	0	0		0	0	5.3	0	0		3	2.5
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	15:00:00	From:	16:30:00
To:	18:00:00	To:	17:30:00

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Count Date: Apr 23, 2025

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Sideroad 5 runs E/W

North Approach

	Out	In	Total
Cars	81	98	179
Trucks	1	4	5
Bicycles	0	1	1
	82	**103**	**185**

Ninth Line

Bicycles	0	0	0	0
Trucks	0	0	1	0
Cars	20	47	14	0
Totals	**20**	**47**	**15**	**0**

Peds: 1

East Approach

	Out	In	Total
Cars	133	79	212
Trucks	1	2	3
Bicycles	1	0	1
	135	**81**	**216**

Sideroad 5

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	1	20	**21**
0	1	61	**62**
0	0	3	**3**

Peds: 0



Peds: 0

Sideroad 5

Totals	Cars	Trucks	Bicycles
0	0	0	0
20	19	1	0
109	109	0	0
6	5	0	1

Peds: 1

West Approach

	Out	In	Total
Cars	84	130	214
Trucks	2	0	2
Bicycles	0	0	0
	86	**130**	**216**

Totals	**1**	**62**	**4**	**0**
Cars	1	59	4	0
Trucks	0	2	0	0
Bicycles	0	1	0	0

Ninth Line

South Approach

	Out	In	Total
Cars	64	55	119
Trucks	2	0	2
Bicycles	1	1	2
	67	**56**	**123**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 5 & Ninth Line
Site Code: 2448500012
Count Date: Apr 23, 2025
Period: 15:00 - 18:00

Peak Hour Data (16:30 - 17:30)

Start Time	North Approach Ninth Line						South Approach Ninth Line						East Approach Sideroad 5						West Approach Sideroad 5						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:30	2	13	7	0	0	22	0	14	2	0	0	16	2	27	7	0	0	36	9	19	0	0	0	28	102
16:45	5	9	5	0	1	19	1	15	1	0	0	17	1	23	5	0	0	29	6	12	1	0	0	19	84
17:00	1	11	4	0	0	16	0	11	1	0	1	12	3	30	6	0	0	39	2	15	1	0	0	18	85
17:15	7	14	4	0	0	25	0	22	0	0	0	22	0	29	2	0	0	31	4	16	1	0	0	21	99
Grand Total	**15**	**47**	**20**	**0**	**1**	**82**	**1**	**62**	**4**	**0**	**1**	**67**	**6**	**109**	**20**	**0**	**0**	**135**	**21**	**62**	**3**	**0**	**0**	**86**	**370**
Approach %	18.3	57.3	24.4	0		-	1.5	92.5	6	0		-	4.4	80.7	14.8	0		-	24.4	72.1	3.5	0		-	
Totals %	4.1	12.7	5.4	0		22.2	0.3	16.8	1.1	0		18.1	1.6	29.5	5.4	0		36.5	5.7	16.8	0.8	0		23.2	
PHF	**0.54**	**0.84**	**0.71**	**0**		**0.82**	**0.25**	**0.7**	**0.5**	**0**		**0.76**	**0.5**	**0.91**	**0.71**	**0**		**0.87**	**0.58**	**0.82**	**0.75**	**0**		**0.77**	**0.91**
Cars	14	47	20	0		81	1	59	4	0		64	5	109	19	0		133	20	61	3	0		84	362
% Cars	93.3	100	100	0		98.8	100	95.2	100	0		95.5	83.3	100	95	0		98.5	95.2	98.4	100	0		97.7	97.8
Trucks	1	0	0	0		1	0	2	0	0		2	0	0	1	0		1	1	1	0	0		2	6
% Trucks	6.7	0	0	0		1.2	0	3.2	0	0		3	0	0	5	0		0.7	4.8	1.6	0	0		2.3	1.6
Bicycles	0	0	0	0		0	0	1	0	0		1	1	0	0	0		1	0	0	0	0		0	2
% Bicycles	0	0	0	0		0	0	1.6	0	0		1.5	16.7	0	0	0		0.7	0	0	0	0		0	0.5
Peds					1	-					1	-					0	-					0	-	2
% Peds					50	-					50	-					0	-					0	-	

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	91	5	1	39	5	2	15	0	21	57	15
Future Vol, veh/h	12	91	5	1	39	5	2	15	0	21	57	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	25	40	2	20	2	9	2	2	5	10
Mvmt Flow	13	99	5	1	42	5	2	16	0	23	62	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	7.9	8.3	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	11%	2%	23%
Vol Thru, %	88%	84%	87%	61%
Vol Right, %	0%	5%	11%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	108	45	93
LT Vol	2	12	1	21
Through Vol	15	91	39	57
RT Vol	0	5	5	15
Lane Flow Rate	18	117	49	101
Geometry Grp	1	1	1	1
Degree of Util (X)	0.023	0.136	0.067	0.12
Departure Headway (Hd)	4.454	4.173	4.921	4.291
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	807	845	732	840
Service Time	2.461	2.267	2.921	2.295
HCM Lane V/C Ratio	0.022	0.138	0.067	0.12
HCM Control Delay, s/veh	7.6	7.9	8.3	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.5	0.2	0.4

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

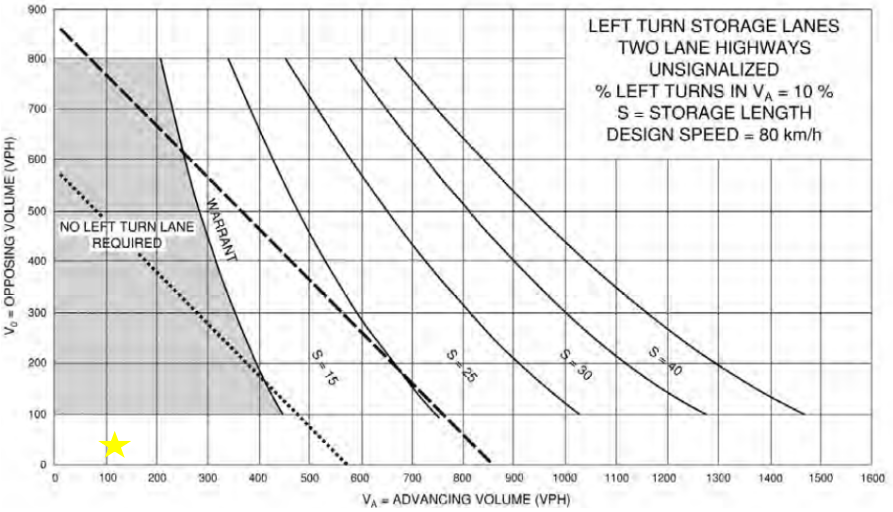
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	62	3	6	109	20	1	62	4	15	47	20
Future Vol, veh/h	21	62	3	6	109	20	1	62	4	15	47	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	2	2	2	2	2	2	4	2	25	3	2
Mvmt Flow	23	67	3	7	118	22	1	67	4	16	51	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

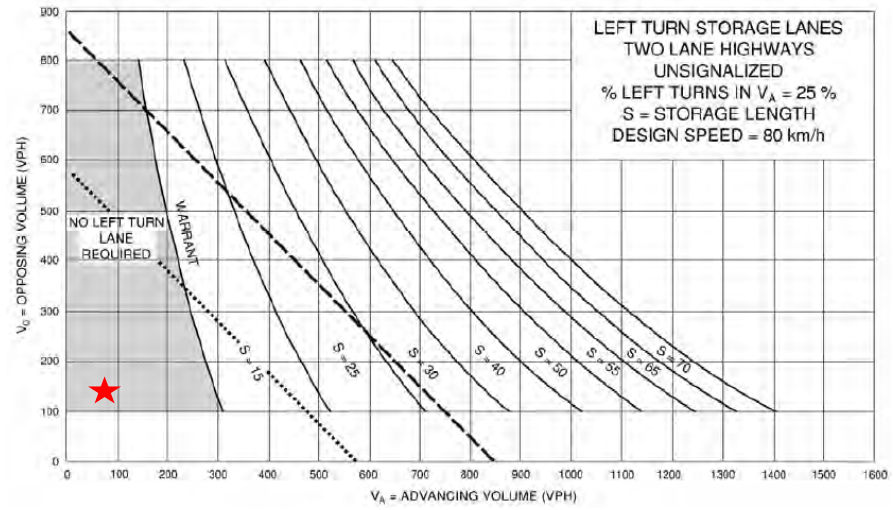
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.2	8.3	8.1	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	24%	4%	18%
Vol Thru, %	93%	72%	81%	57%
Vol Right, %	6%	3%	15%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	67	86	135	82
LT Vol	1	21	6	15
Through Vol	62	62	109	47
RT Vol	4	3	20	20
Lane Flow Rate	73	93	147	89
Geometry Grp	1	1	1	1
Degree of Util (X)	0.092	0.119	0.178	0.12
Departure Headway (Hd)	4.559	4.568	4.355	4.849
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	786	786	826	740
Service Time	2.587	2.588	2.373	2.875
HCM Lane V/C Ratio	0.093	0.118	0.178	0.12
HCM Control Delay, s/veh	8.1	8.2	8.3	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.6	0.4

Sideroad 5 at Ninth Line – Eastbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours





AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

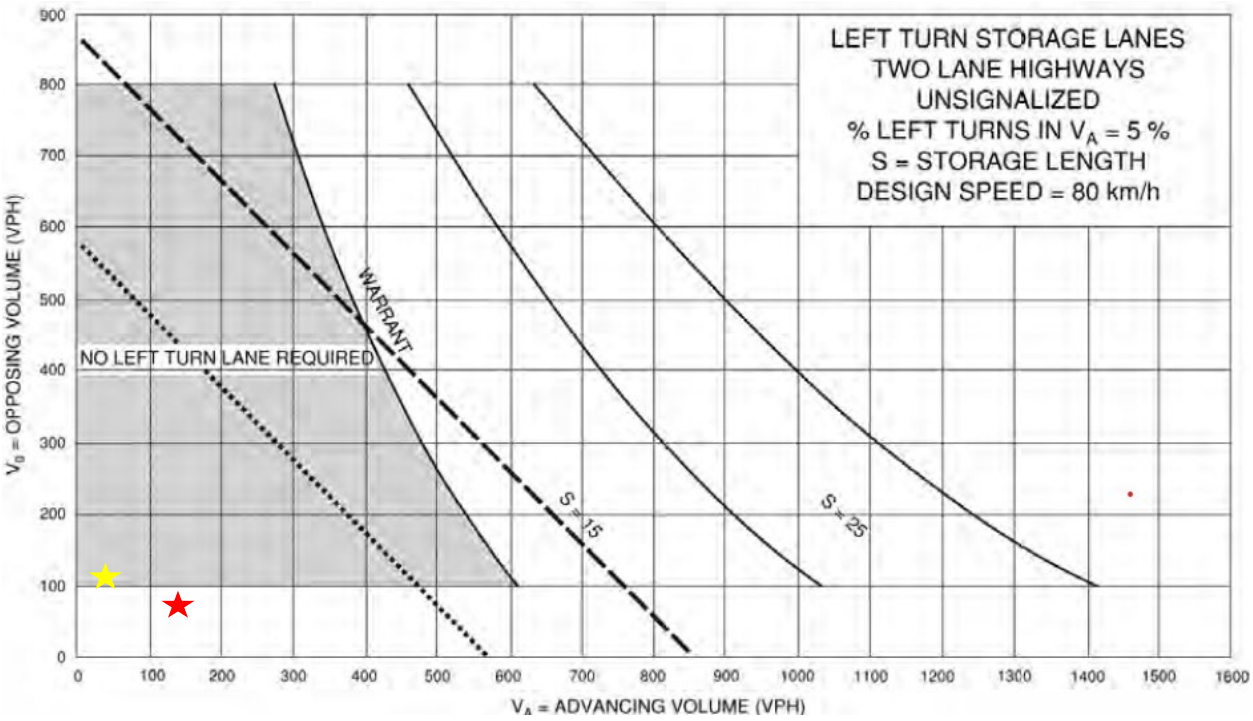
TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	108	45	12	11.1	0
PM	86	135	21	24.4	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Sideroad 5 at Ninth Line – Westbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



★ **AM Peak Hour**

★ **PM Peak Hour**

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	45	108	1	2.2	0
PM	135	86	6	4.4	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

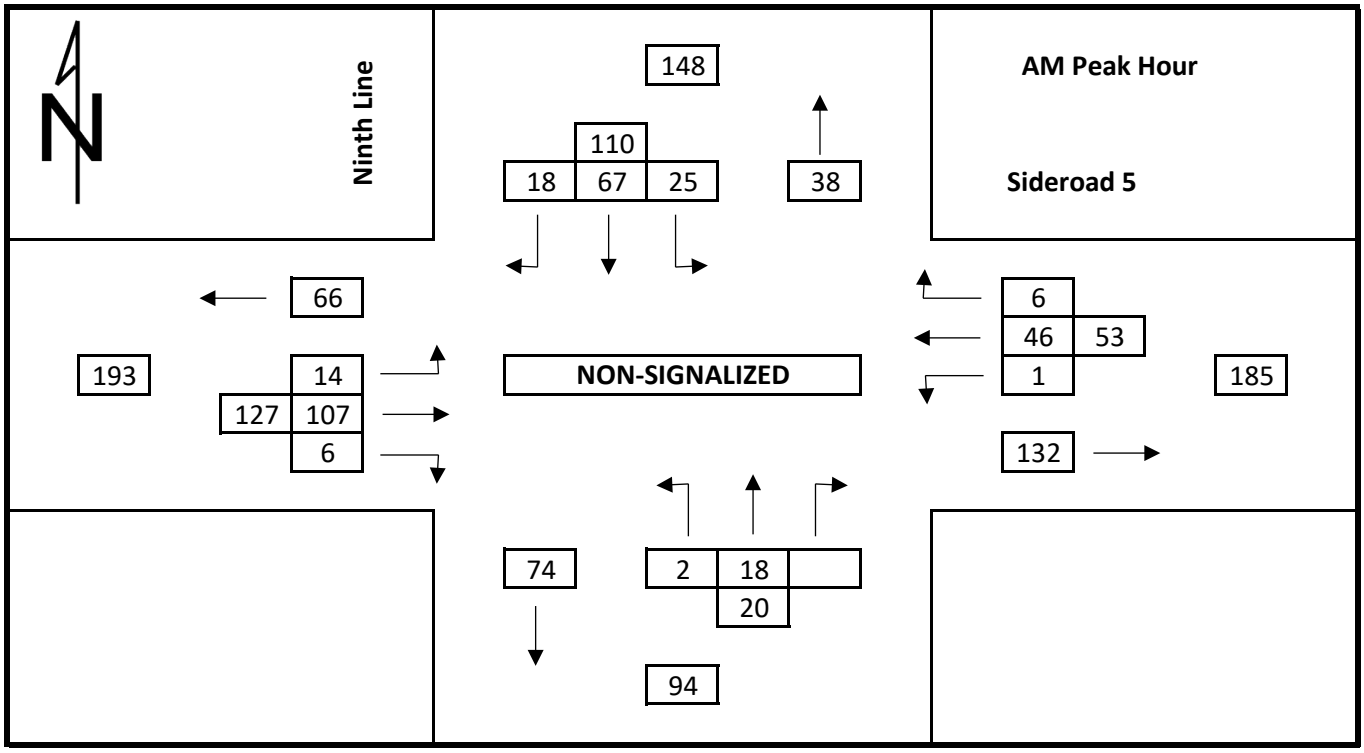
*** traffic volumes do not meet minimum MTO requirement for warrant**

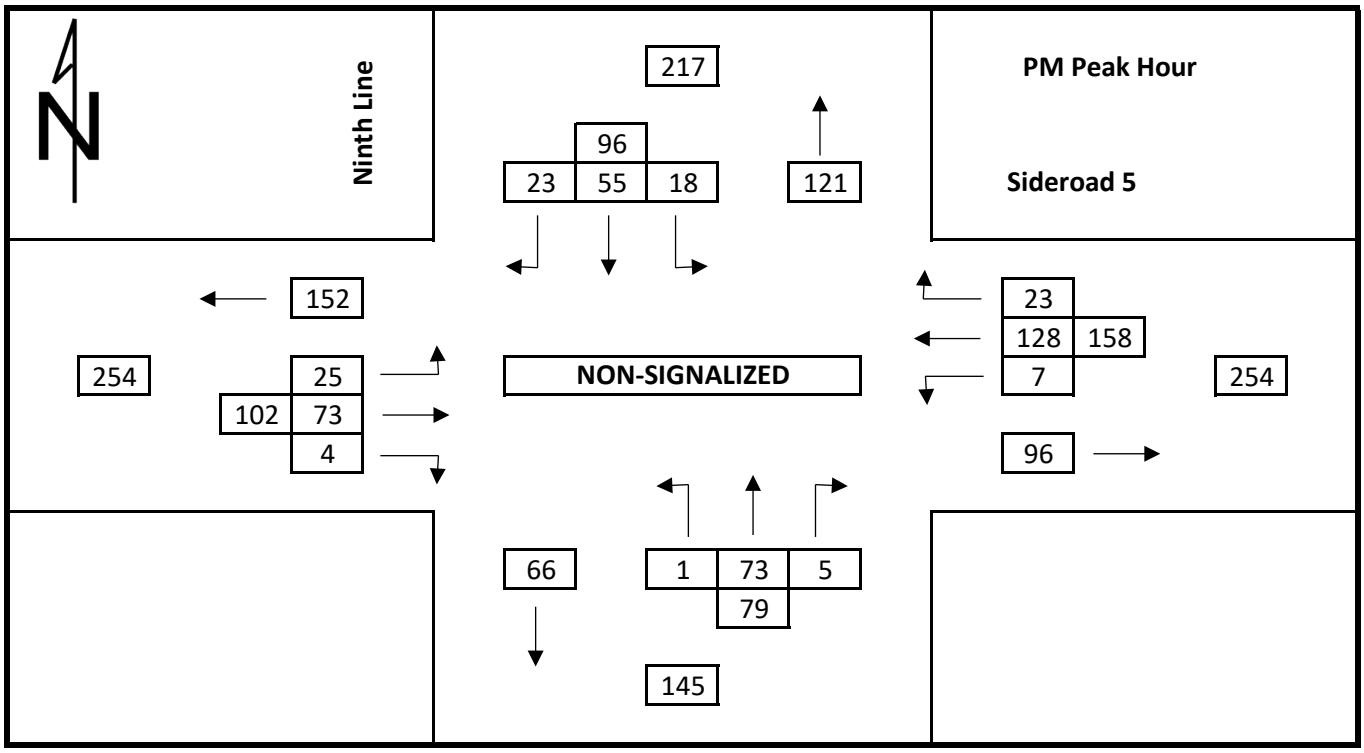
Appendix D-2

04 SIDEROAD 5 AT NINTH LINE – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

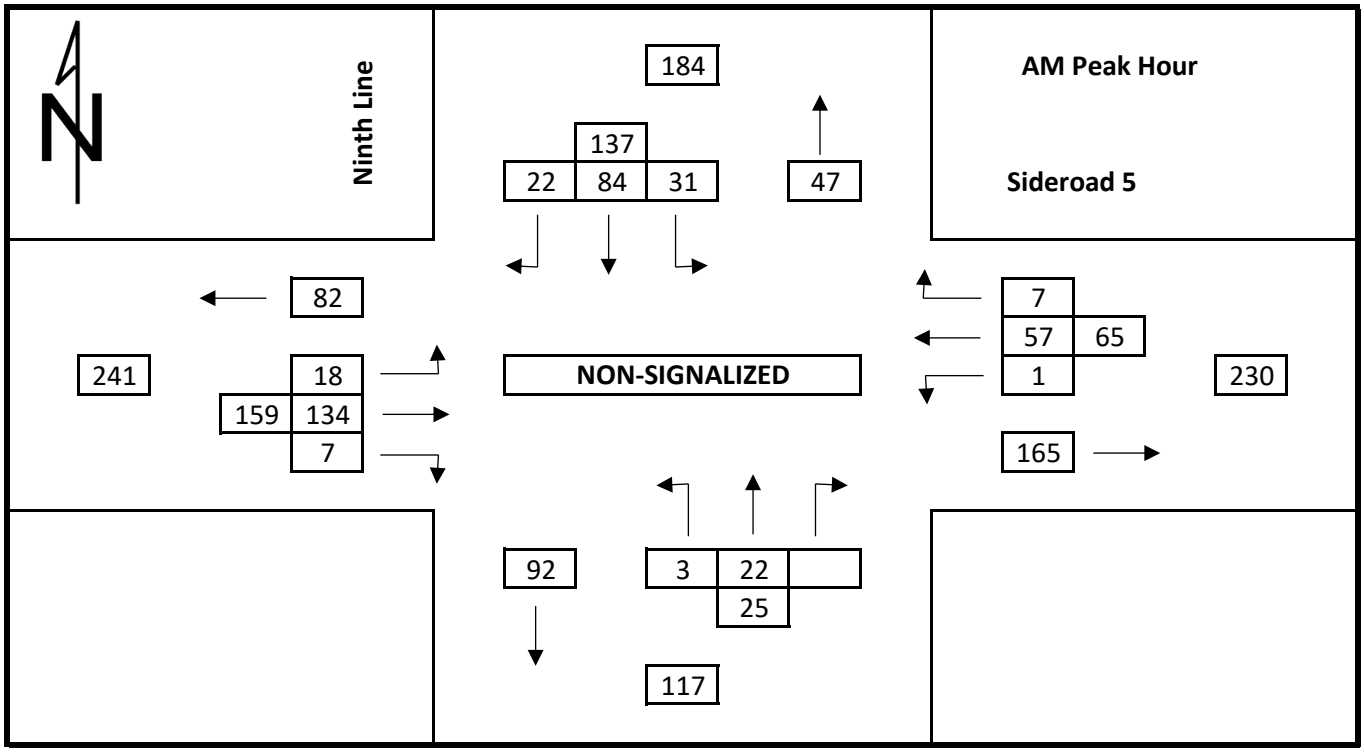
Sideroad 5 at Ninth Line

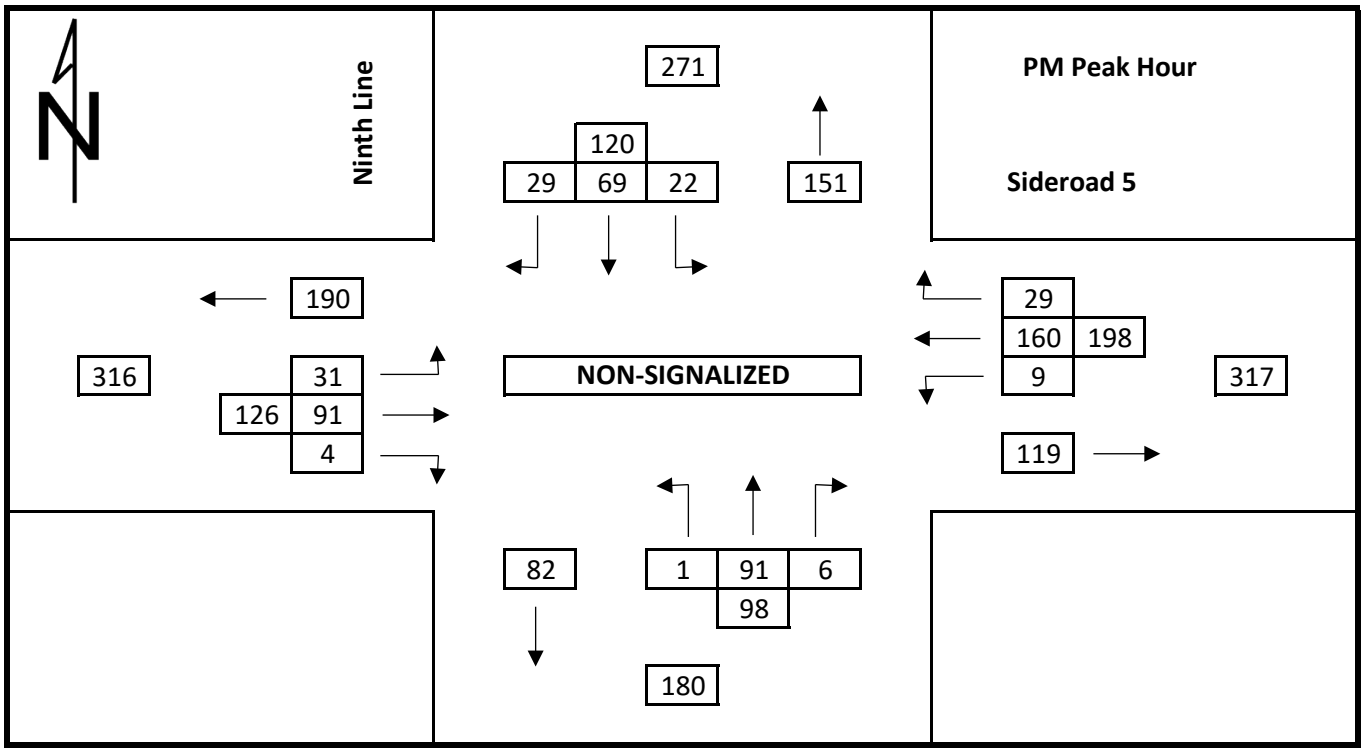




Background Traffic Year 2041

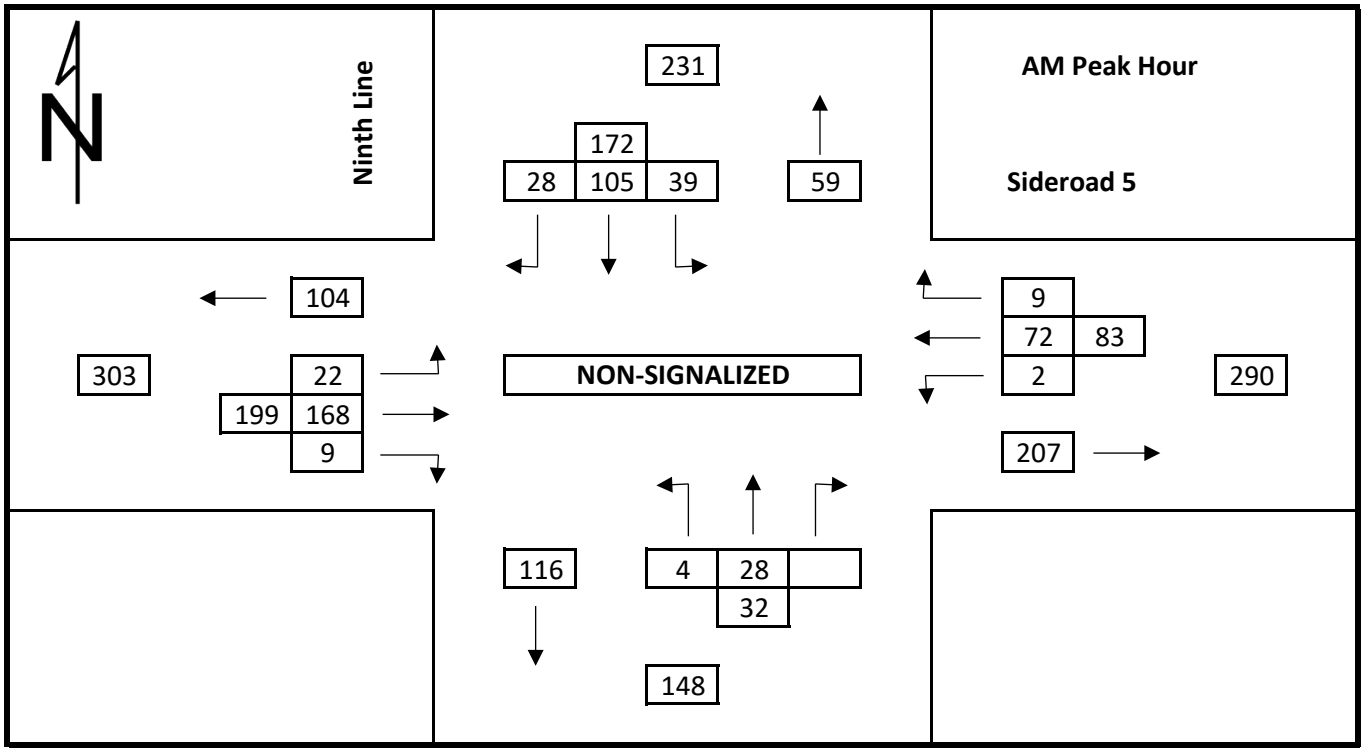
Sideroad 5 at Ninth Line

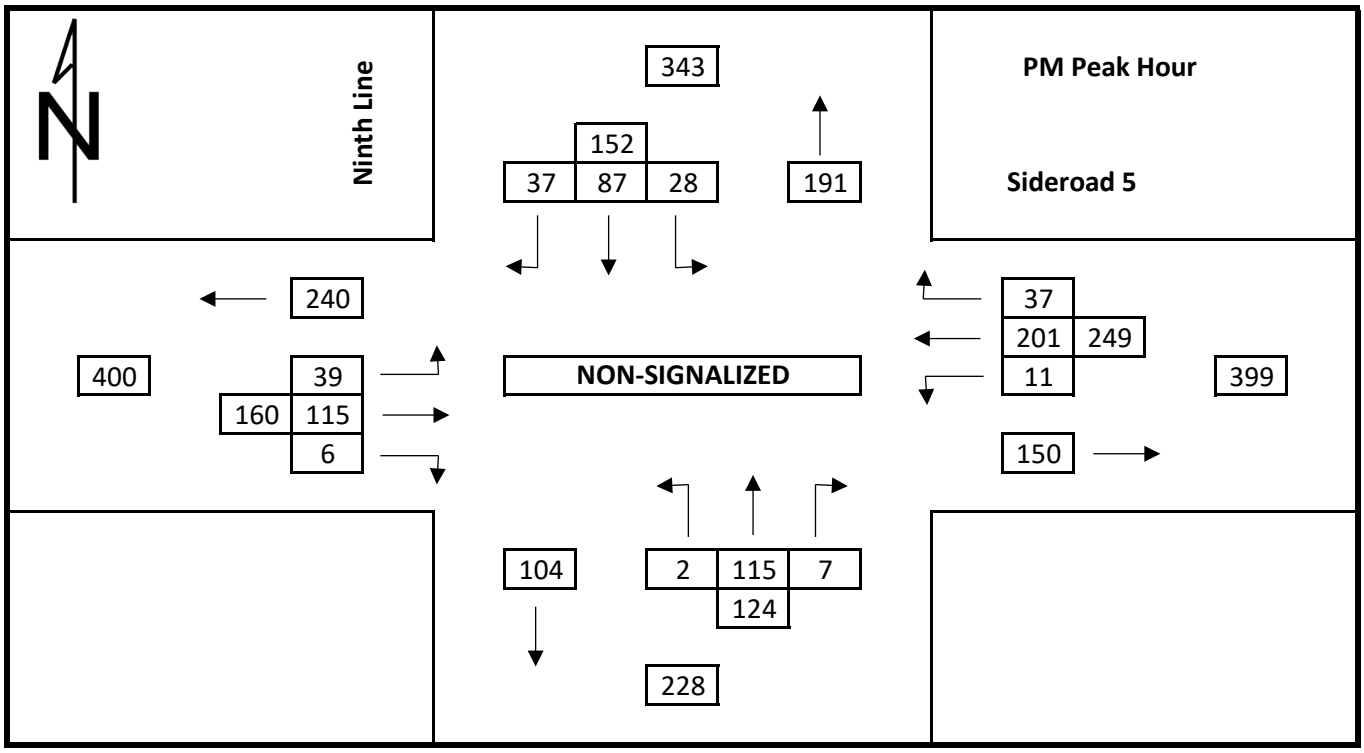




Background Traffic Year 2051

Sideroad 5 at Ninth Line





Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	107	6	1	46	6	2	18	0	25	67	18
Future Vol, veh/h	14	107	6	1	46	6	2	18	0	25	67	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	25	40	2	20	2	9	2	2	5	10
Mvmt Flow	15	116	7	1	50	7	2	20	0	27	73	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.2	8.4	7.7	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	11%	2%	23%
Vol Thru, %	90%	84%	87%	61%
Vol Right, %	0%	5%	11%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	127	53	110
LT Vol	2	14	1	25
Through Vol	18	107	46	67
RT Vol	0	6	6	18
Lane Flow Rate	22	138	58	120
Geometry Grp	1	1	1	1
Degree of Util (X)	0.027	0.166	0.08	0.145
Departure Headway (Hd)	4.55	4.323	4.991	4.368
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	789	832	720	824
Service Time	2.565	2.335	3.004	2.38
HCM Lane V/C Ratio	0.028	0.166	0.081	0.146
HCM Control Delay, s/veh	7.7	8.2	8.4	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.3	0.5

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	73	4	7	128	23	1	73	5	18	55	23
Future Vol, veh/h	25	73	4	7	128	23	1	73	5	18	55	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	2	2	2	2	2	2	4	2	25	3	2
Mvmt Flow	27	79	4	8	139	25	1	79	5	20	60	25
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.5	8.7	8.3	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	25%	4%	19%
Vol Thru, %	92%	72%	81%	57%
Vol Right, %	6%	4%	15%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	79	102	158	96
LT Vol	1	25	7	18
Through Vol	73	73	128	55
RT Vol	5	4	23	23
Lane Flow Rate	86	111	172	104
Geometry Grp	1	1	1	1
Degree of Util (X)	0.112	0.144	0.213	0.144
Departure Headway (Hd)	4.689	4.676	4.457	4.98
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	763	766	805	720
Service Time	2.724	2.706	2.484	3.014
HCM Lane V/C Ratio	0.113	0.145	0.214	0.144
HCM Control Delay, s/veh	8.3	8.5	8.7	8.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.5	0.8	0.5

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	134	7	1	57	7	3	22	0	31	84	22
Future Vol, veh/h	18	134	7	1	57	7	3	22	0	31	84	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	25	40	2	20	2	9	2	2	5	10
Mvmt Flow	20	146	8	1	62	8	3	24	0	34	91	24
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.7	8.7	7.9	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	11%	2%	23%
Vol Thru, %	88%	84%	88%	61%
Vol Right, %	0%	4%	11%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	25	159	65	137
LT Vol	3	18	1	31
Through Vol	22	134	57	84
RT Vol	0	7	7	22
Lane Flow Rate	27	173	71	149
Geometry Grp	1	1	1	1
Degree of Util (X)	0.036	0.213	0.101	0.186
Departure Headway (Hd)	4.715	4.434	5.127	4.496
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	760	811	700	798
Service Time	2.743	2.455	3.152	2.519
HCM Lane V/C Ratio	0.036	0.213	0.101	0.187
HCM Control Delay, s/veh	7.9	8.7	8.7	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.8	0.3	0.7

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	91	4	9	160	29	1	91	6	22	69	29
Future Vol, veh/h	31	91	4	9	160	29	1	91	6	22	69	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	2	2	2	2	2	2	4	2	25	3	2
Mvmt Flow	34	99	4	10	174	32	1	99	7	24	75	32
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9	9.5	8.8	9.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	25%	5%	18%
Vol Thru, %	93%	72%	81%	57%
Vol Right, %	6%	3%	15%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	98	126	198	120
LT Vol	1	31	9	22
Through Vol	91	91	160	69
RT Vol	6	4	29	29
Lane Flow Rate	107	137	215	130
Geometry Grp	1	1	1	1
Degree of Util (X)	0.145	0.185	0.277	0.188
Departure Headway (Hd)	4.914	4.875	4.627	5.19
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	725	733	773	689
Service Time	2.973	2.928	2.674	3.247
HCM Lane V/C Ratio	0.148	0.187	0.278	0.189
HCM Control Delay, s/veh	8.8	9	9.5	9.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.7	1.1	0.7

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	168	9	2	72	9	4	28	0	39	105	28
Future Vol, veh/h	22	168	9	2	72	9	4	28	0	39	105	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	25	40	2	20	2	9	2	2	5	10
Mvmt Flow	24	183	10	2	78	10	4	30	0	42	114	30
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.4	9.2	8.2	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	11%	2%	23%
Vol Thru, %	88%	84%	87%	61%
Vol Right, %	0%	5%	11%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	199	83	172
LT Vol	4	22	2	39
Through Vol	28	168	72	105
RT Vol	0	9	9	28
Lane Flow Rate	35	216	90	187
Geometry Grp	1	1	1	1
Degree of Util (X)	0.048	0.275	0.133	0.243
Departure Headway (Hd)	4.941	4.583	5.31	4.671
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	722	783	674	768
Service Time	2.988	2.621	3.354	2.706
HCM Lane V/C Ratio	0.048	0.276	0.134	0.243
HCM Control Delay, s/veh	8.2	9.4	9.2	9.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	1.1	0.5	1

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	115	6	11	201	37	2	115	7	28	87	37
Future Vol, veh/h	39	115	6	11	201	37	2	115	7	28	87	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	2	2	2	2	2	2	4	2	25	3	2
Mvmt Flow	42	125	7	12	218	40	2	125	8	30	95	40
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.1	11	9.7	10.6
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	24%	4%	18%
Vol Thru, %	93%	72%	81%	57%
Vol Right, %	6%	4%	15%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	160	249	152
LT Vol	2	39	11	28
Through Vol	115	115	201	87
RT Vol	7	6	37	37
Lane Flow Rate	135	174	271	165
Geometry Grp	1	1	1	1
Degree of Util (X)	0.2	0.255	0.375	0.257
Departure Headway (Hd)	5.347	5.27	4.983	5.597
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	671	685	725	643
Service Time	3.38	3.278	2.989	3.629
HCM Lane V/C Ratio	0.201	0.254	0.374	0.257
HCM Control Delay, s/veh	9.7	10.1	11	10.6
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.7	1	1.7	1

Appendix E-1

05 WELLINGTON ROAD 24 AT SIDEROAD 17 – EXISTING TRAFFIC VOLUME METRICS

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Project #24-485 - 30 Forensic Engineering

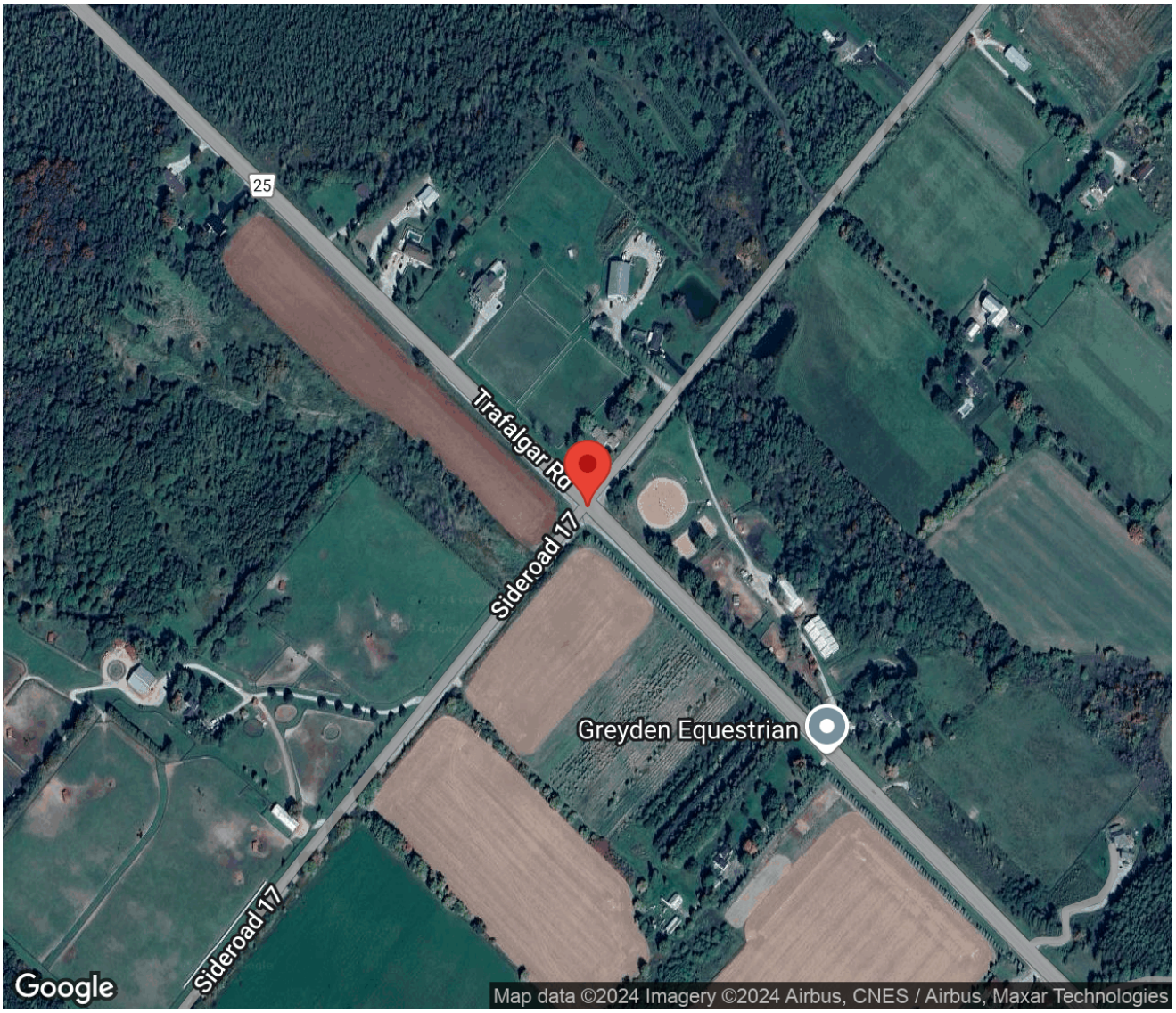
Intersection Count Report

Intersection:	Wellington Rd 24 & Sideroad 17
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500005
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Wellington Rd 24 & Sideroad 17
Site Code:	2448500005
Municipality:	Erin
Count Date:	Nov 19, 2024



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Traffic Count Summary

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

Trafalgar RD - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	17	282	5	0	304	0	4	102	52	0	158	0	462
08:00 - 09:00	25	247	4	0	276	0	5	125	64	0	194	0	470
09:00 - 10:00	19	151	1	0	171	0	3	116	66	0	185	0	356
BREAK													
11:00 - 12:00	25	114	6	1	146	0	5	84	55	0	144	0	290
12:00 - 13:00	17	106	5	0	128	0	5	85	52	0	142	0	270
BREAK													
15:00 - 16:00	25	137	9	0	171	0	14	241	59	0	314	0	485
16:00 - 17:00	26	155	7	0	188	0	9	342	74	0	425	0	613
17:00 - 18:00	15	111	4	0	130	0	14	341	76	0	431	0	561
GRAND TOTAL	**169**	**1303**	**41**	**1**	**1514**	**0**	**59**	**1436**	**498**	**0**	**1993**	**0**	**3507**

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Traffic Count Summary

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

Sideroad 17 - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	50	20	7	0	77	0	3	24	11	0	38	0	115
08:00 - 09:00	37	21	14	0	72	0	4	31	12	0	47	0	119
09:00 - 10:00	35	28	28	0	91	0	6	15	8	0	29	0	120
BREAK													
11:00 - 12:00	37	23	19	0	79	0	3	20	7	0	30	0	109
12:00 - 13:00	32	28	24	0	84	0	7	20	4	0	31	0	115
BREAK													
15:00 - 16:00	44	53	24	0	121	0	13	21	8	0	42	0	163
16:00 - 17:00	54	49	29	0	132	0	8	17	4	0	29	0	161
17:00 - 18:00	62	26	22	0	110	0	5	22	3	0	30	0	140
GRAND TOTAL	**351**	**248**	**167**	**0**	**766**	**0**	**49**	**170**	**57**	**0**	**276**	**0**	**1042**

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Traffic Count Data

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	3	57	2	0	62	0	8	0	0	8	0	0	0	0	0	0
07:15	3	65	1	0	69	0	5	0	0	5	0	0	0	0	0	0
07:30	4	59	0	0	63	0	4	0	0	4	0	0	0	0	0	0
07:45	7	81	2	0	90	0	3	0	0	3	0	0	0	0	0	0
08:00	5	63	0	0	68	0	9	1	0	10	0	0	0	0	0	0
08:15	4	73	1	0	78	0	5	0	0	5	0	0	0	0	0	0
08:30	9	44	2	0	55	0	8	0	0	8	0	0	0	0	0	0
08:45	5	40	0	0	45	2	5	0	0	7	0	0	0	0	0	0
09:00	6	35	1	0	42	0	4	0	0	4	0	0	0	0	0	0
09:15	3	44	0	0	47	1	1	0	0	2	0	0	0	0	0	0
09:30	3	35	0	0	38	0	4	0	0	4	0	0	0	0	0	0
09:45	6	23	0	0	29	0	5	0	0	5	0	0	0	0	0	0
SUBTOTAL	58	619	9	0	686	3	61	1	0	65	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	4	18	2	1	25	0	6	0	0	6	0	0	0	0	0	0
11:15	4	24	1	0	29	1	4	0	0	5	0	0	0	0	0	0
11:30	10	17	1	0	28	0	9	0	0	9	0	0	0	0	0	0
11:45	6	30	2	0	38	0	6	0	0	6	0	0	0	0	0	0
12:00	6	16	0	0	22	0	3	1	0	4	0	0	0	0	0	0
12:15	3	29	1	0	33	1	5	0	0	6	0	0	0	0	0	0
12:30	3	23	2	0	28	0	5	0	0	5	0	0	0	0	0	0
12:45	4	23	0	0	27	0	2	1	0	3	0	0	0	0	0	0
SUBTOTAL	40	180	9	1	230	2	40	2	0	44	0	0	0	0	0	0

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Traffic Count Data

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Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
15:00	8	26	3	0	37	0	10	1	0	11	0	0	0	0	0	0
15:15	8	27	1	0	36	1	2	1	0	4	0	0	0	0	0	0
15:30	5	29	2	0	36	0	7	0	0	7	0	0	0	0	0	0
15:45	2	31	1	0	34	1	5	0	0	6	0	0	0	0	0	0
16:00	8	39	1	0	48	0	0	0	0	0	0	0	0	0	0	0
16:15	10	31	1	0	42	1	3	0	0	4	0	0	0	0	0	0
16:30	4	41	0	0	45	0	1	1	0	2	0	0	0	0	0	0
16:45	2	36	4	0	42	1	4	0	0	5	0	0	0	0	0	0
17:00	6	23	1	0	30	1	2	0	0	3	0	0	0	0	0	0
17:15	5	43	1	0	49	0	1	0	0	1	0	0	0	0	0	0
17:30	1	20	0	0	21	0	1	0	0	1	0	0	0	0	0	0
17:45	2	21	2	0	25	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	61	367	17	0	445	5	36	3	0	44	0	0	0	0	0	0
GRAND TOTAL	159	1166	35	1	1361	10	137	6	0	153	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	0	13	11	0	24	0	6	0	0	6	0	0	0	0	0	0
07:15	0	26	15	0	41	0	3	2	0	5	0	0	0	0	0	0
07:30	1	16	15	0	32	0	6	2	0	8	0	0	0	0	0	0
07:45	3	29	7	0	39	0	3	0	0	3	0	0	0	0	0	0
08:00	1	25	13	0	39	0	1	0	0	1	0	0	0	0	0	0
08:15	1	32	14	0	47	1	4	2	0	7	0	0	0	0	0	0
08:30	0	26	19	0	45	1	4	1	0	6	0	0	0	0	0	0
08:45	1	30	13	0	44	0	3	2	0	5	0	0	0	0	0	0
09:00	1	32	10	0	43	0	3	2	0	5	0	0	0	0	0	0
09:15	1	19	21	0	41	1	5	2	0	8	0	0	0	0	0	0
09:30	0	21	12	0	33	0	3	3	0	6	0	0	0	0	0	0
09:45	0	24	13	0	37	0	9	3	0	12	0	0	0	0	0	0
SUBTOTAL	9	293	163	0	465	3	50	19	0	72	0	0	0	0	0	0

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Site Code: 2448500005
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Count Date: Nov 19, 2024

South Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	2	8	12	0	22	0	3	1	0	4	0	0	0	0	0	0
11:15	1	20	7	0	28	0	4	2	0	6	0	0	0	0	0	0
11:30	0	20	17	0	37	1	2	2	0	5	0	0	0	0	0	0
11:45	0	24	14	0	38	1	3	0	0	4	0	0	0	0	0	0
12:00	1	15	7	0	23	0	1	1	0	2	0	0	0	0	0	0
12:15	0	19	13	0	32	1	5	2	0	8	0	0	0	0	0	0
12:30	2	17	11	0	30	0	2	3	0	5	0	0	0	0	0	0
12:45	1	23	15	0	39	0	3	0	0	3	0	0	0	0	0	0
SUBTOTAL	7	146	96	0	249	3	23	11	0	37	0	0	0	0	0	0

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Count Date: Nov 19, 2024

South Approach - Trafalgar RD

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	2	48	11	0	61	1	3	1	0	5	0	0	0	0	0	0
15:15	9	53	17	0	79	0	9	2	0	11	0	0	0	0	0	0
15:30	0	40	11	0	51	0	4	1	0	5	0	0	0	0	0	0
15:45	1	80	15	0	96	1	4	1	0	6	0	0	0	0	0	0
16:00	2	61	12	0	75	0	2	2	0	4	0	0	0	0	0	0
16:15	2	89	17	0	108	0	6	2	0	8	0	0	0	0	0	0
16:30	3	82	22	0	107	0	6	4	0	10	0	0	0	0	0	0
16:45	2	91	15	0	108	0	5	0	0	5	0	0	0	0	0	0
17:00	5	95	19	0	119	0	2	1	0	3	0	0	0	0	0	0
17:15	5	93	19	0	117	0	2	1	0	3	0	0	0	0	0	0
17:30	2	75	17	0	94	0	2	0	0	2	0	0	0	0	0	0
17:45	2	69	19	0	90	0	3	0	0	3	0	0	0	0	0	0
SUBTOTAL	35	876	194	0	1105	2	48	15	0	65	0	0	0	0	0	0
GRAND TOTAL	51	1315	453	0	1819	8	121	45	0	174	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	10	8	1	0	19	0	0	0	0	0	0	0	0	0	0	0
07:15	11	4	2	0	17	5	0	0	0	5	0	0	0	0	0	0
07:30	12	4	3	0	19	1	0	0	0	1	0	0	0	0	0	0
07:45	11	4	1	0	16	0	0	0	0	0	0	0	0	0	0	0
08:00	7	7	3	0	17	2	0	0	0	2	0	0	0	0	0	0
08:15	5	3	1	0	9	2	1	1	0	4	0	0	0	0	0	0
08:30	7	3	3	0	13	1	0	0	0	1	0	0	0	0	0	0
08:45	12	7	4	0	23	1	0	2	0	3	0	0	0	0	0	0
09:00	5	8	2	0	15	0	0	1	0	1	0	0	0	0	0	0
09:15	10	4	1	0	15	1	0	0	0	1	0	0	0	0	0	0
09:30	10	9	10	0	29	3	0	0	0	3	0	0	0	0	0	0
09:45	6	6	11	0	23	0	1	3	0	4	0	0	0	0	0	0
SUBTOTAL	106	67	42	0	215	16	2	7	0	25	0	0	0	0	0	0

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Traffic Count Data

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Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	8	5	3	0	16	1	0	1	0	2	0	0	0	0	0	0
11:15	5	3	5	0	13	0	0	0	0	0	0	0	0	0	0	0
11:30	5	3	6	0	14	3	0	0	0	3	0	0	0	0	0	0
11:45	13	12	4	0	29	2	0	0	0	2	0	0	0	0	0	0
12:00	6	10	4	0	20	2	0	1	0	3	0	0	0	0	0	0
12:15	9	3	5	0	17	1	0	0	0	1	0	0	0	0	0	0
12:30	6	4	7	0	17	1	1	0	0	2	0	0	0	0	0	0
12:45	5	10	7	0	22	2	0	0	0	2	0	0	0	0	0	0
SUBTOTAL	57	50	41	0	148	12	1	2	0	15	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	10	7	4	0	21	2	0	0	0	2	0	0	0	0	0	0
15:15	10	19	4	0	33	2	0	1	0	3	0	0	0	0	0	0
15:30	11	11	5	0	27	0	1	4	0	5	0	0	0	0	0	0
15:45	9	15	5	0	29	0	0	1	0	1	0	0	0	0	0	0
16:00	17	16	11	0	44	0	0	0	0	0	0	0	0	0	0	0
16:15	9	13	5	0	27	1	1	0	0	2	0	0	0	0	0	0
16:30	12	9	6	0	27	1	0	0	0	1	0	0	0	0	0	0
16:45	14	9	5	0	28	0	1	2	0	3	0	0	0	0	0	0
17:00	25	3	6	0	34	1	0	0	0	1	0	0	0	0	0	0
17:15	11	8	4	0	23	0	0	0	0	0	0	0	0	0	0	0
17:30	10	9	3	0	22	1	0	1	0	2	0	0	0	0	0	0
17:45	14	6	8	0	28	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	152	125	66	0	343	8	3	9	0	20	0	0	0	0	0	0
GRAND TOTAL	315	242	149	0	706	36	6	18	0	60	0	0	0	0	0	0

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Traffic Count Data

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	2	6	0	0	8	0	0	0	0	0	0	0	0	0	0	0
07:15	0	6	2	0	8	0	0	0	0	0	0	0	0	0	0	0
07:30	1	8	2	0	11	0	0	0	0	0	0	0	0	0	0	0
07:45	0	3	7	0	10	0	1	0	0	1	0	0	0	0	0	0
08:00	1	7	2	0	10	0	0	0	0	0	0	0	0	0	0	0
08:15	1	9	3	0	13	1	0	0	0	1	0	0	0	0	0	0
08:30	1	4	5	0	10	0	0	1	0	1	0	0	0	0	0	0
08:45	0	11	1	0	12	0	0	0	0	0	0	0	0	0	0	0
09:00	2	2	1	0	5	0	1	0	0	1	0	0	0	0	0	0
09:15	1	4	2	0	7	0	0	0	0	0	0	0	0	0	0	0
09:30	2	6	1	0	9	0	0	0	0	0	0	0	0	0	0	0
09:45	1	2	4	0	7	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	12	68	30	0	110	1	2	1	0	4	0	0	0	0	0	0

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Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	6	1	0	7	0	1	1	0	2	0	0	0	0	0	0
11:15	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0
11:30	1	3	1	0	5	0	0	0	0	0	0	0	0	0	0	0
11:45	2	6	2	0	10	0	0	1	0	1	0	0	0	0	0	0
12:00	2	5	0	0	7	1	0	0	0	1	0	0	0	0	0	0
12:15	1	3	1	0	5	0	1	0	0	1	0	0	0	0	0	0
12:30	2	7	3	0	12	0	0	0	0	0	0	0	0	0	0	0
12:45	0	3	0	0	3	1	1	0	0	2	0	0	0	0	0	0
SUBTOTAL	8	37	9	0	54	2	3	2	0	7	0	0	0	0	0	0

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Site Code: 2448500005
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	1	5	1	0	7	0	0	0	0	0	0	0	0	0	0	0
15:15	4	7	2	0	13	1	0	0	0	1	0	0	0	0	0	0
15:30	2	5	0	0	7	2	0	0	0	2	0	0	0	0	0	0
15:45	1	4	5	0	10	2	0	0	0	2	0	0	0	0	0	0
16:00	1	2	3	0	6	0	0	0	0	0	0	0	0	0	0	0
16:15	2	7	0	0	9	0	0	0	0	0	0	0	0	0	0	0
16:30	2	1	1	0	4	3	0	0	0	3	0	0	0	0	0	0
16:45	0	6	0	0	6	0	1	0	0	1	0	0	0	0	0	0
17:00	1	6	1	0	8	0	0	0	0	0	0	0	0	0	0	0
17:15	1	4	2	0	7	1	0	0	0	1	0	0	0	0	0	0
17:30	1	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0
17:45	1	7	0	0	8	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	17	59	15	0	91	9	1	0	0	10	0	0	0	0	0	0
GRAND TOTAL	37	164	54	0	255	12	6	3	0	21	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

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

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Trafalgar RD runs N/S

North Approach

	Out	In	Total
Cars	291	123	414
Trucks	26	14	40
Bicycles	0	0	0
	317	**137**	**454**

Trafalgar RD

Bicycles	0	0	0	0
Trucks	1	25	0	0
Cars	5	261	25	0
Totals	**6**	**286**	**25**	**0**

East Approach

	Out	In	Total
Cars	55	101	156
Trucks	7	4	11
Bicycles	0	0	0
	62	**105**	**167**

Sideroad 17

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	1	3	**4**
0	1	23	**24**
0	1	17	**18**

Peds: 0



Peds: 0

Peds: 0

Sideroad 17

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	9	8	1	0
	18	17	1	0
	35	30	5	0

West Approach

	Out	In	Total
Cars	43	27	70
Trucks	3	4	7
Bicycles	0	0	0
	46	**31**	**77**

Trafalgar RD

Totals	**7**	**124**	**56**	**0**
Cars	5	112	53	0
Trucks	2	12	3	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	170	308	478
Trucks	17	31	48
Bicycles	0	0	0
	187	**339**	**526**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

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

Start Time	North Approach Trafalgar RD						South Approach Trafalgar RD						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:45	7	84	2	0	0	93	3	32	7	0	0	42	11	4	1	0	0	16	0	4	7	0	0	11	162
08:00	5	72	1	0	0	78	1	26	13	0	0	40	9	7	3	0	0	19	1	7	2	0	0	10	147
08:15	4	78	1	0	0	83	2	36	16	0	0	54	7	4	2	0	0	13	2	9	3	0	0	14	164
08:30	9	52	2	0	0	63	1	30	20	0	0	51	8	3	3	0	0	14	1	4	6	0	0	11	139
Grand Total	**25**	**286**	**6**	**0**	**0**	**317**	**7**	**124**	**56**	**0**	**0**	**187**	**35**	**18**	**9**	**0**	**0**	**62**	**4**	**24**	**18**	**0**	**0**	**46**	**612**
Approach %	7.9	90.2	1.9	0		-	3.7	66.3	29.9	0		-	56.5	29	14.5	0		-	8.7	52.2	39.1	0		-	
Totals %	4.1	46.7	1	0		51.8	1.1	20.3	9.2	0		30.6	5.7	2.9	1.5	0		10.1	0.7	3.9	2.9	0		7.5	
PHF	**0.69**	**0.85**	**0.75**	**0**		**0.85**	**0.58**	**0.86**	**0.7**	**0**		**0.87**	**0.8**	**0.64**	**0.75**	**0**		**0.82**	**0.5**	**0.67**	**0.64**	**0**		**0.82**	**0.93**
Cars	25	261	5	0		291	5	112	53	0		170	30	17	8	0		55	3	23	17	0		43	559
% Cars	100	91.3	83.3	0		91.8	71.4	90.3	94.6	0		90.9	85.7	94.4	88.9	0		88.7	75	95.8	94.4	0		93.5	91.3
Trucks	0	25	1	0		26	2	12	3	0		17	5	1	1	0		7	1	1	1	0		3	53
% Trucks	0	8.7	16.7	0		8.2	28.6	9.7	5.4	0		9.1	14.3	5.6	11.1	0		11.3	25	4.2	5.6	0		6.5	8.7
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	11:00:00	From:	11:30:00
To:	13:00:00	To:	12:30:00

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Trafalgar RD runs N/S

North Approach

	Out	In	Total
Cars	121	103	224
Trucks	25	13	38
Bicycles	0	0	0
	146	**116**	**262**

Trafalgar RD

Bicycles	0	0	0	0
Trucks	1	23	1	0
Cars	4	92	25	0
Totals	**5**	**115**	**26**	**0**

East Approach

	Out	In	Total
Cars	80	93	173
Trucks	9	7	16
Bicycles	0	0	0
	89	**100**	**189**

Sideroad 17

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	1	6	**7**
0	1	17	**18**
0	1	4	**5**

Peds: 0

Peds: 0

Peds: 0

Sideroad 17

Totals	Cars	Trucks	Bicycles
0	0	0	0
20	19	1	0
28	28	0	0
41	33	8	0

West Approach

	Out	In	Total
Cars	27	33	60
Trucks	3	4	7
Bicycles	0	0	0
	30	**37**	**67**

Trafalgar RD

Totals	**4**	**89**	**56**	**0**
Cars	1	78	51	0
Trucks	3	11	5	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	130	129	259
Trucks	19	32	51
Bicycles	0	0	0
	149	**161**	**310**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (11:30 - 12:30)

Start Time	North Approach Trafalgar RD						South Approach Trafalgar RD						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
11:30	10	26	1	0	0	37	1	22	19	0	0	42	8	3	6	0	0	17	1	3	1	0	0	5	101
11:45	6	36	2	0	0	44	1	27	14	0	0	42	15	12	4	0	0	31	2	6	3	0	0	11	128
12:00	6	19	1	0	0	26	1	16	8	0	0	25	8	10	5	0	0	23	3	5	0	0	0	8	82
12:15	4	34	1	0	0	39	1	24	15	0	0	40	10	3	5	0	0	18	1	4	1	0	0	6	103
Grand Total	**26**	**115**	**5**	**0**	**0**	**146**	**4**	**89**	**56**	**0**	**0**	**149**	**41**	**28**	**20**	**0**	**0**	**89**	**7**	**18**	**5**	**0**	**0**	**30**	**414**
Approach %	17.8	78.8	3.4	0		-	2.7	59.7	37.6	0		-	46.1	31.5	22.5	0		-	23.3	60	16.7	0		-	
Totals %	6.3	27.8	1.2	0		35.3	1	21.5	13.5	0		36	9.9	6.8	4.8	0		21.5	1.7	4.3	1.2	0		7.2	
PHF	**0.65**	**0.8**	**0.63**	**0**		**0.83**	**1**	**0.82**	**0.74**	**0**		**0.89**	**0.68**	**0.58**	**0.83**	**0**		**0.72**	**0.58**	**0.75**	**0.42**	**0**		**0.68**	**0.81**
Cars	25	92	4	0		121	1	78	51	0		130	33	28	19	0		80	6	17	4	0		27	358
% Cars	96.2	80	80	0		82.9	25	87.6	91.1	0		87.2	80.5	100	95	0		89.9	85.7	94.4	80	0		90	86.5
Trucks	1	23	1	0		25	3	11	5	0		19	8	0	1	0		9	1	1	1	0		3	56
% Trucks	3.8	20	20	0		17.1	75	12.4	8.9	0		12.8	19.5	0	5	0		10.1	14.3	5.6	20	0		10	13.5
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	15:00:00	From:	16:30:00
To:	18:00:00	To:	17:30:00

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Trafalgar RD runs N/S

North Approach

	Out	In	Total
Cars	166	386	552
Trucks	11	21	32
Bicycles	0	0	0
	177	**407**	**584**

Trafalgar RD

Bicycles	0	0	0	0
Trucks	1	8	2	0
Cars	6	143	17	0
Totals	**7**	**151**	**19**	**0**

East Approach

	Out	In	Total
Cars	112	109	221
Trucks	5	9	14
Bicycles	0	0	0
	117	**118**	**235**

Sideroad 17

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	4	4	**8**	
0	1	17	**18**	
0	0	4	**4**	

Peds: 0



Peds: 0

Peds: 0

Sideroad 17

Totals	Cars	Trucks	Bicycles
0	0	0	0
23	21	2	0
30	29	1	0
64	62	2	0

West Approach

	Out	In	Total
Cars	25	50	75
Trucks	5	2	7
Bicycles	0	0	0
	30	**52**	**82**

Trafalgar RD

Totals	**15**	**376**	**81**	**0**
Cars	15	361	75	0
Trucks	0	15	6	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	451	209	660
Trucks	21	10	31
Bicycles	0	0	0
	472	**219**	**691**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 24 & Sideroad 17
Site Code: 2448500005
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

Peak Hour Data (16:30 - 17:30)

Start Time	North Approach Trafalgar RD						South Approach Trafalgar RD						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:30	4	42	1	0	0	47	3	88	26	0	0	117	13	9	6	0	0	28	5	1	1	0	0	7	199
16:45	3	40	4	0	0	47	2	96	15	0	0	113	14	10	7	0	0	31	0	7	0	0	0	7	198
17:00	7	25	1	0	0	33	5	97	20	0	0	122	26	3	6	0	0	35	1	6	1	0	0	8	198
17:15	5	44	1	0	0	50	5	95	20	0	0	120	11	8	4	0	0	23	2	4	2	0	0	8	201
Grand Total	**19**	**151**	**7**	**0**	**0**	**177**	**15**	**376**	**81**	**0**	**0**	**472**	**64**	**30**	**23**	**0**	**0**	**117**	**8**	**18**	**4**	**0**	**0**	**30**	**796**
Approach %	10.7	85.3	4	0		-	3.2	79.7	17.2	0		-	54.7	25.6	19.7	0		-	26.7	60	13.3	0		-	
Totals %	2.4	19	0.9	0		22.2	1.9	47.2	10.2	0		59.3	8	3.8	2.9	0		14.7	1	2.3	0.5	0		3.8	
PHF	**0.68**	**0.86**	**0.44**	**0**		**0.89**	**0.75**	**0.97**	**0.78**	**0**		**0.97**	**0.62**	**0.75**	**0.82**	**0**		**0.84**	**0.4**	**0.64**	**0.5**	**0**		**0.94**	**0.99**
Cars	17	143	6	0		166	15	361	75	0		451	62	29	21	0		112	4	17	4	0		25	754
% Cars	89.5	94.7	85.7	0		93.8	100	96	92.6	0		95.6	96.9	96.7	91.3	0		95.7	50	94.4	100	0		83.3	94.7
Trucks	2	8	1	0		11	0	15	6	0		21	2	1	2	0		5	4	1	0	0		5	42
% Trucks	10.5	5.3	14.3	0		6.2	0	4	7.4	0		4.4	3.1	3.3	8.7	0		4.3	50	5.6	0	0		16.7	5.3
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	24	18	35	18	9	7	124	56	25	286	6
Future Vol, veh/h	4	24	18	35	18	9	7	124	56	25	286	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	44	-	-	40
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	25	4	6	14	6	11	29	10	5	2	9	17
Mvmt Flow	4	26	20	38	20	10	8	135	61	27	311	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	525	576	311	528	522	135	317	0	0	196	0	0
Stage 1	365	365	-	150	150	-	-	-	-	-	-	-
Stage 2	160	211	-	378	372	-	-	-	-	-	-	-
Critical Hdwy	7.35	6.54	6.26	7.24	6.56	6.31	4.39	-	-	4.12	-	-
Critical Hdwy Stg 1	6.35	5.54	-	6.24	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.35	5.54	-	6.24	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.725	4.036	3.354	3.626	4.054	3.399	2.461	-	-	2.218	-	-
Pot Cap-1 Maneuver	429	425	720	442	454	891	1105	-	-	1377	-	-
Stage 1	609	620	-	825	766	-	-	-	-	-	-	-
Stage 2	791	724	-	620	612	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	393	412	720	391	439	891	1105	-	-	1377	-	-
Mov Cap-2 Maneuver	393	412	-	391	439	-	-	-	-	-	-	-
Stage 1	595	605	-	818	760	-	-	-	-	-	-	-
Stage 2	756	718	-	563	597	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.14	14.62	0.31	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	96	-	-	492	441	145	-	-
HCM Lane V/C Ratio	0.007	-	-	0.102	0.153	0.02	-	-
HCM Control Delay (s/veh)	8.3	0	-	13.1	14.6	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.5	0.1	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	18	4	64	30	23	15	376	81	19	151	7
Future Vol, veh/h	8	18	4	64	30	23	15	376	81	19	151	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	44	-	-	40
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	50	6	2	3	3	9	2	4	7	11	5	14
Mvmt Flow	9	20	4	70	33	25	16	409	88	21	164	8

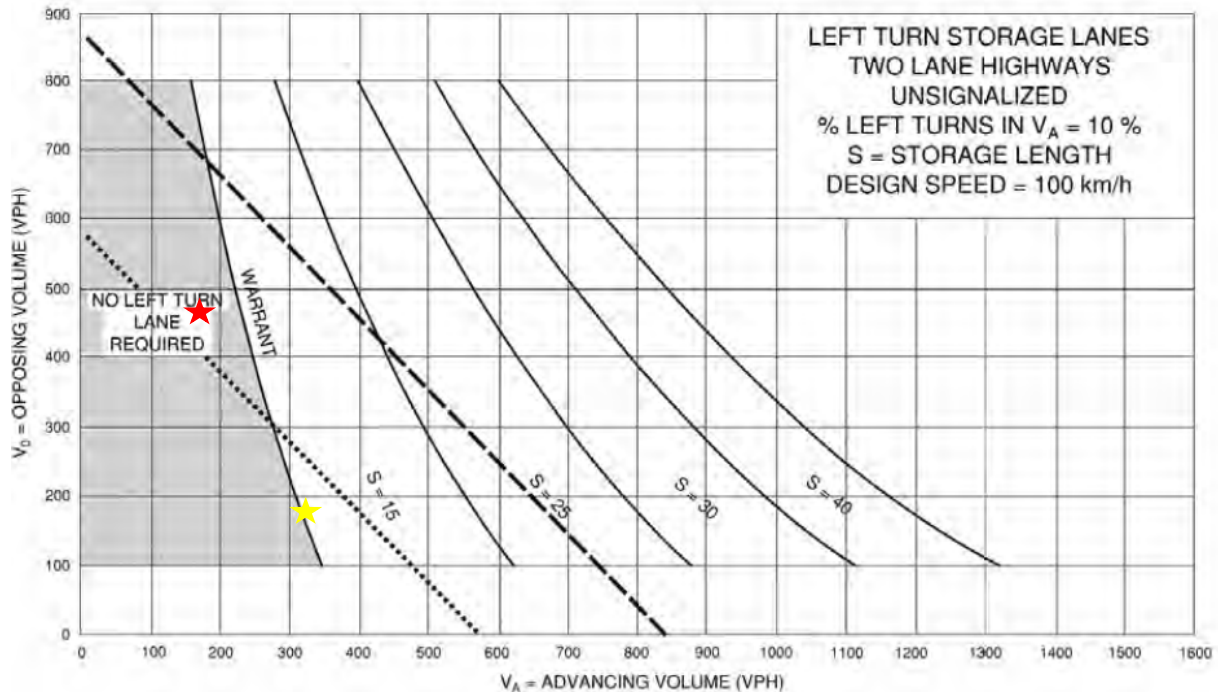
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	663	735	164	657	654	409	172	0	0	497	0	0
Stage 1	205	205	-	441	441	-	-	-	-	-	-	-
Stage 2	458	529	-	215	213	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.56	6.22	7.13	6.53	6.29	4.12	-	-	4.21	-	-
Critical Hdwy Stg 1	6.6	5.56	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.56	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.054	3.318	3.527	4.027	3.381	2.218	-	-	2.299	-	-
Pot Cap-1 Maneuver	316	342	880	377	385	628	1405	-	-	1022	-	-
Stage 1	698	724	-	593	575	-	-	-	-	-	-	-
Stage 2	501	520	-	785	724	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	267	329	880	340	370	628	1405	-	-	1022	-	-
Mov Cap-2 Maneuver	267	329	-	340	370	-	-	-	-	-	-	-
Stage 1	683	708	-	583	566	-	-	-	-	-	-	-
Stage 2	446	512	-	742	708	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.84	19.03	0.24	0.92
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	69	-	-	336	383	201	-	-
HCM Lane V/C Ratio	0.012	-	-	0.097	0.332	0.02	-	-
HCM Control Delay (s/veh)	7.6	0	-	16.8	19	8.6	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	1.4	0.1	-	-

Wellington Road 24 at Sideroad 17 – Southbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

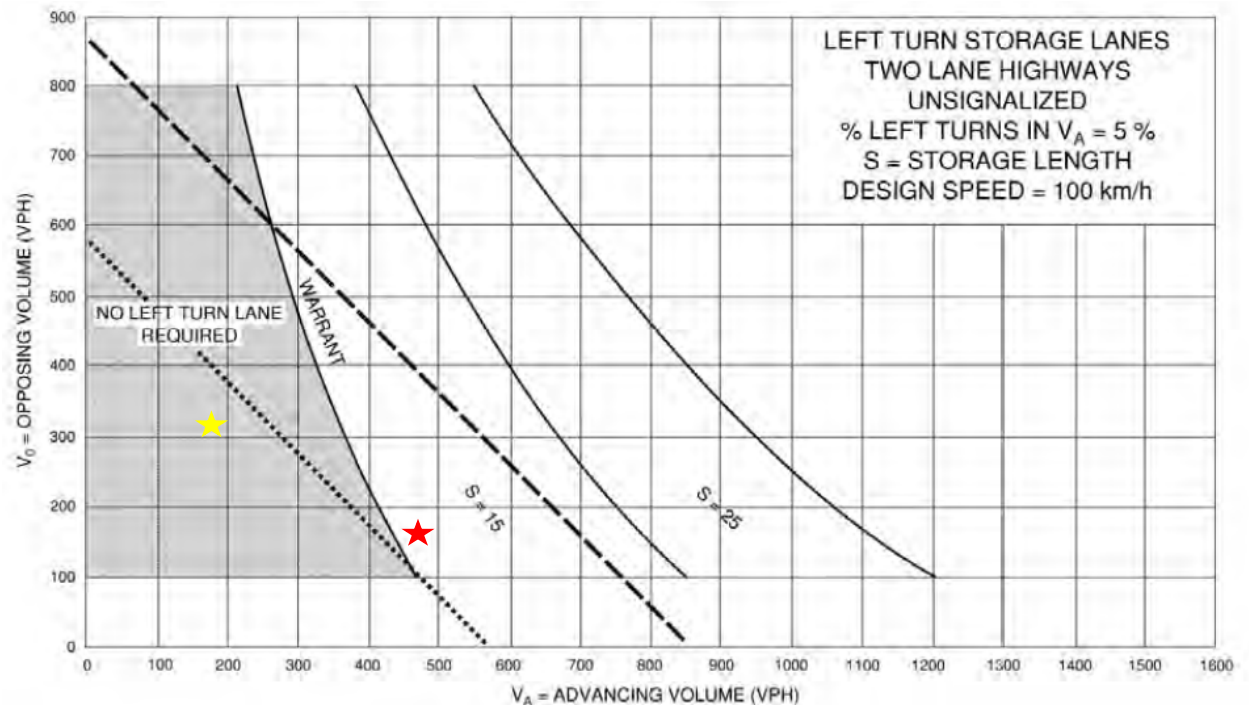
TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	317	187	25	7.9	15
PM	177	472	19	10.7	0

Wellington Road 24 at Sideroad 17 – Northbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	187	317	7	0.4*	0
PM	472	177	15	3.2*	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 1 - Minimum Vehicle Volume

Wellington Rd 24 at Sideroad 17 (Existing Traffic Volumes)

100% SATISFIED - ☐ Yes ☑ No

80% SATISFIED - ☑ Yes ☐ No

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				PERCENTAGE WARRANT									
APPROACH LANES	1		2 or MORE		HOUR ENDING								TOTAL ACROSS	
FLOW CONDITION	FREE FLOW ☑	RESTR. FLOW ☐	FREE FLOW ☐	RESTR. FLOW ☐	8:00	9:00	10:00	12:00	13:00	16:00	17:00	18:00		
A. ALL APPROACH LANES	480 (385)	720 (575)	600 (480)	900 (720)	577	589	476	398	385	648	774	701		
100% FULFILLED					100	100				100	100	100	500	SECTIONAL PERCENTAGE
80% FULFILLED							80	80	80				240	
ACTUAL % IF BELOW 80% VALUE														
												TOTAL DOWN /8 =		93

B. MINOR STREET BOTH APPROACHES	120* (95)*	170* (135)*	120* (95)*	170* (135)*	115	119	120	109	115	163	161	140	TOTAL ACROSS	
100% FULFILLED							100			100	100	100	400	SECTIONAL PERCENTAGE
80% FULFILLED					80	80		80	80				320	
ACTUAL % IF BELOW 80% VALUE														
												TOTAL DOWN /8 =		90

*For "T" intersections, these values should be increased by 50%.

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 2 - Delay to Cross Traffic

Wellington Rd 24 at Sideroad 17 (Existing Traffic Volumes)

100% SATISFIED - ☐ Yes ☑ No

80% SATISFIED - ☑ Yes ☐ No

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				PERCENTAGE WARRANT									
APPROACH LANES	1		2 or MORE		HOUR ENDING								TOTAL ACROSS	
FLOW CONDITION	FREE FLOW ☑	RESTR. FLOW ☐	FREE FLOW ☐	RESTR. FLOW ☐	8:00	9:00	10:00	12:00	13:00	16:00	17:00	18:00		
A. MAJOR STREET BOTH APPROACHES	480 (385)	720 (575)	600 (480)	900 (720)	462	470	356	289	270	485	613	561		
100% FULFILLED										100	100	100	300	SECTIONAL PERCENTAGE
80% FULFILLED					80	80							160	
ACTUAL % IF BELOW 80% VALUE							74	60	56				190	
												TOTAL DOWN /8 =		81

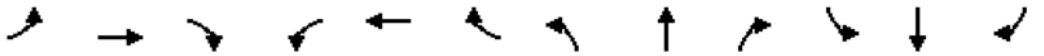
B. TRAFFIC CROSSING MAJOR STREET	50 (40)	75 (60)	50 (40)	75 (60)	77	72	69	63	67	110	111	93	TOTAL ACROSS	
100% FULFILLED					100	100	100	100	100	100	100	100	800	SECTIONAL PERCENTAGE
80% FULFILLED														
ACTUAL % IF BELOW 80% VALUE														
												TOTAL DOWN /8 =		100

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 3 - Volume/Delay Combinations

Wellington Rd 24 at Sideroad 17 (Existing Traffic Volumes)

Justification Satisfied 80% or More				Two Justifications Satisfied 80% or More	
Justification 1	Minimum Vehicular Volume	☑ Yes	☐ No	☑ Yes	☐ No
Justification 2	Delay to Cross Traffic	☑ Yes	☐ No		



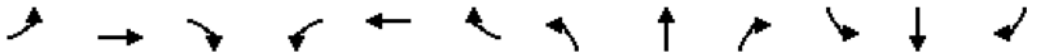
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	24	18	35	18	9	7	124	56	25	286	6
Future Volume (vph)	4	24	18	35	18	9	7	124	56	25	286	6
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (m)	0.0		0.0	0.0		0.0	15.0		44.0	15.0		40.0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (m)	2.5			2.5			10.0			10.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.946			0.980				0.850			0.850
Flt Protected		0.996			0.973		0.950			0.950		
Satd. Flow (prot)	0	1566	0	0	1517	0	1303	1609	1432	1648	1623	1285
Flt Permitted		0.963					0.571			0.671		
Satd. Flow (perm)	0	1514	0	0	1559	0	783	1609	1432	1164	1623	1285
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			10				65			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		464.8			334.8			589.9			482.2	
Travel Time (s)		27.9			20.1			35.4			28.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	25%	4%	6%	14%	6%	11%	29%	10%	5%	2%	9%	17%
Adj. Flow (vph)	4	26	20	38	20	10	8	135	61	27	311	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	50	0	0	68	0	8	135	61	27	311	7
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		26.0	26.0	26.0	26.0	26.0	26.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		6.9			7.1		23.9	23.9	23.9	23.9	23.9	23.9
Actuated g/C Ratio		0.22			0.23		0.77	0.77	0.77	0.77	0.77	0.77
v/c Ratio		0.14			0.19		0.01	0.11	0.05	0.03	0.25	0.01
Control Delay (s/veh)		8.9			10.7		5.7	5.1	2.5	5.5	5.6	0.0
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)		8.9			10.7		5.7	5.1	2.5	5.5	5.6	0.0
LOS		A			B		A	A	A	A	A	A
Approach Delay (s/veh)		8.9			10.7			4.3			5.4	
Approach LOS		A			B			A			A	
Queue Length 50th (m)		1.0			1.9		0.0	0.0	0.0	0.0	0.0	0.0
Queue Length 95th (m)		6.7			9.3		1.7	11.6	3.6	3.6	26.2	0.0
Internal Link Dist (m)		440.8			310.8			565.9			458.2	
Turn Bay Length (m)							15.0		44.0	15.0		40.0
Base Capacity (vph)		902			924		644	1324	1190	958	1335	1069
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.06			0.07		0.01	0.10	0.05	0.03	0.23	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 31.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.25			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 42.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Trafalgar Road (C.R. 24) & Sideroad 17





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	18	4	64	30	23	15	376	81	19	151	7
Future Volume (vph)	8	18	4	64	30	23	15	376	81	19	151	7
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (m)	0.0		0.0	0.0		0.0	15.0		44.0	15.0		40.0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (m)	2.5			2.5			10.0			10.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.974				0.850			0.850
Flt Protected		0.987			0.973		0.950			0.950		
Satd. Flow (prot)	0	1462	0	0	1610	0	1648	1701	1406	1514	1685	1319
Flt Permitted		0.864			0.812		0.653			0.522		
Satd. Flow (perm)	0	1280	0	0	1343	0	1133	1701	1406	832	1685	1319
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			25				88			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		407.7			485.4			573.2			487.7	
Travel Time (s)		24.5			29.1			34.4			29.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	6%	2%	3%	3%	9%	2%	4%	7%	11%	5%	14%
Adj. Flow (vph)	9	20	4	70	33	25	16	409	88	21	164	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	128	0	16	409	88	21	164	8
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		26.0	26.0	26.0	26.0	26.0	26.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		8.6			8.6		22.0	22.0	22.0	22.0	22.0	22.0
Actuated g/C Ratio		0.23			0.23		0.58	0.58	0.58	0.58	0.58	0.58
v/c Ratio		0.11			0.40		0.02	0.42	0.10	0.04	0.17	0.01
Control Delay (s/veh)		11.6			14.8		6.8	9.2	2.6	7.1	7.4	0.0
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)		11.6			14.8		6.8	9.2	2.6	7.1	7.4	0.0
LOS		B			B		A	A	A	A	A	A
Approach Delay (s/veh)		11.6			14.8			8.0			7.0	
Approach LOS		B			B			A			A	
Queue Length 50th (m)		1.4			5.0		0.5	16.1	0.0	0.7	5.5	0.0
Queue Length 95th (m)		6.1			16.2		2.8	39.7	4.9	3.4	15.3	0.0
Internal Link Dist (m)		383.7			461.4			549.2			463.7	
Turn Bay Length (m)							15.0		44.0	15.0		40.0
Base Capacity (vph)		625			667		703	1055	905	516	1045	843
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.05			0.19		0.02	0.39	0.10	0.04	0.16	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 38.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 45.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Trafalgar Road (C.R. 24) & Sideroad 17

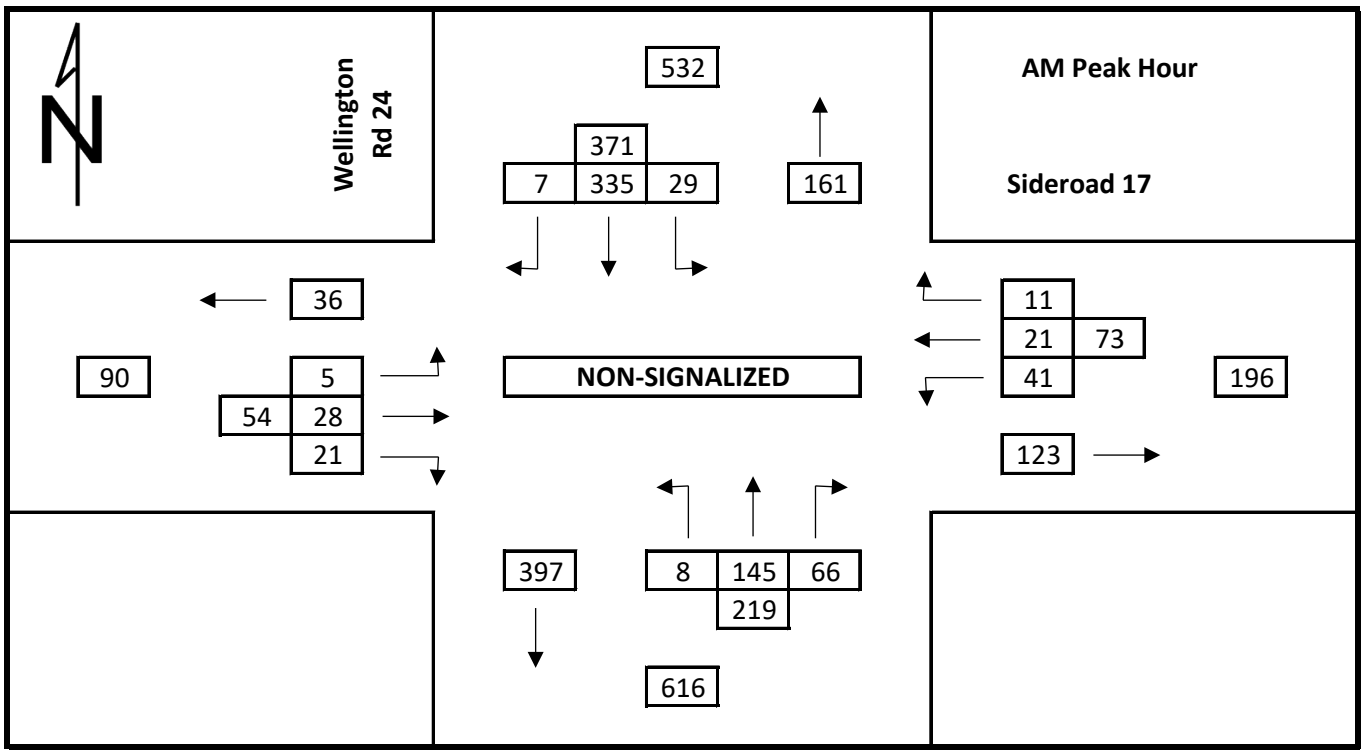


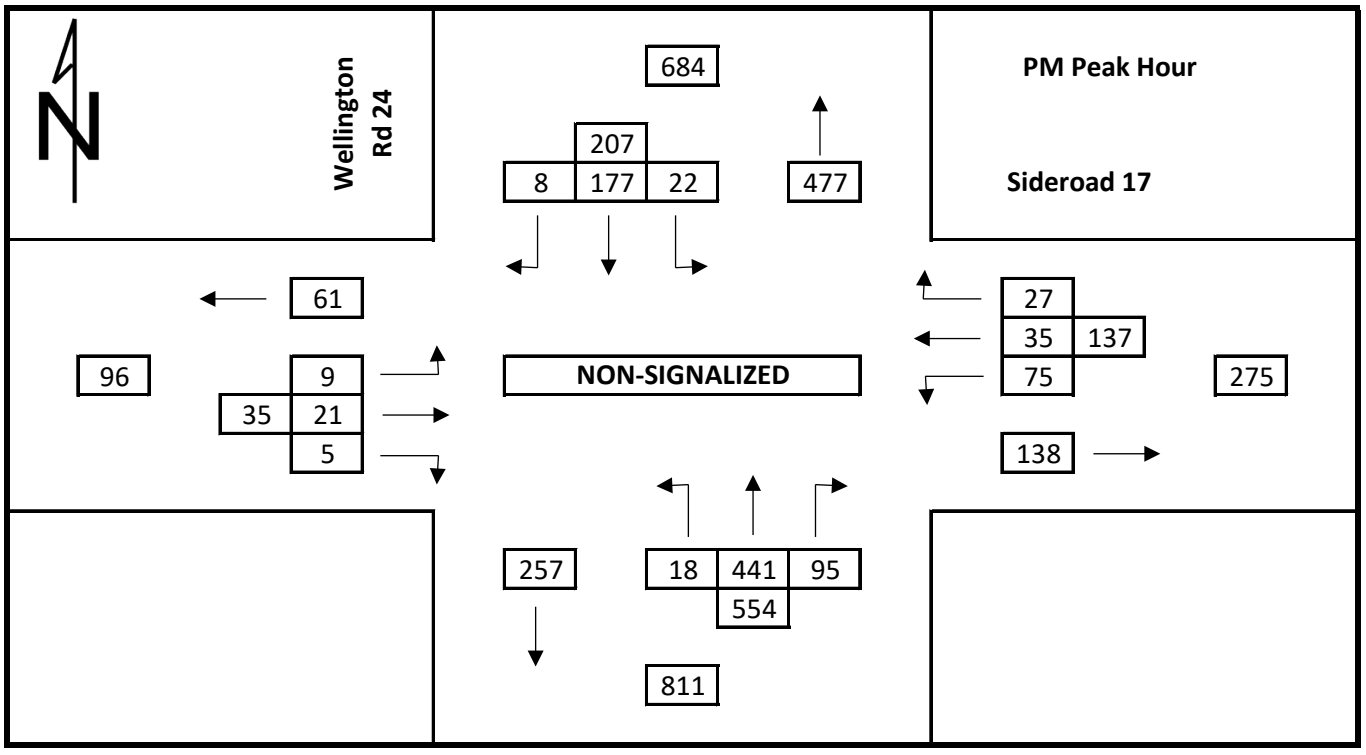
Appendix E-2

05 WELLINGTON ROAD 24 AT SIDEROAD 17 – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

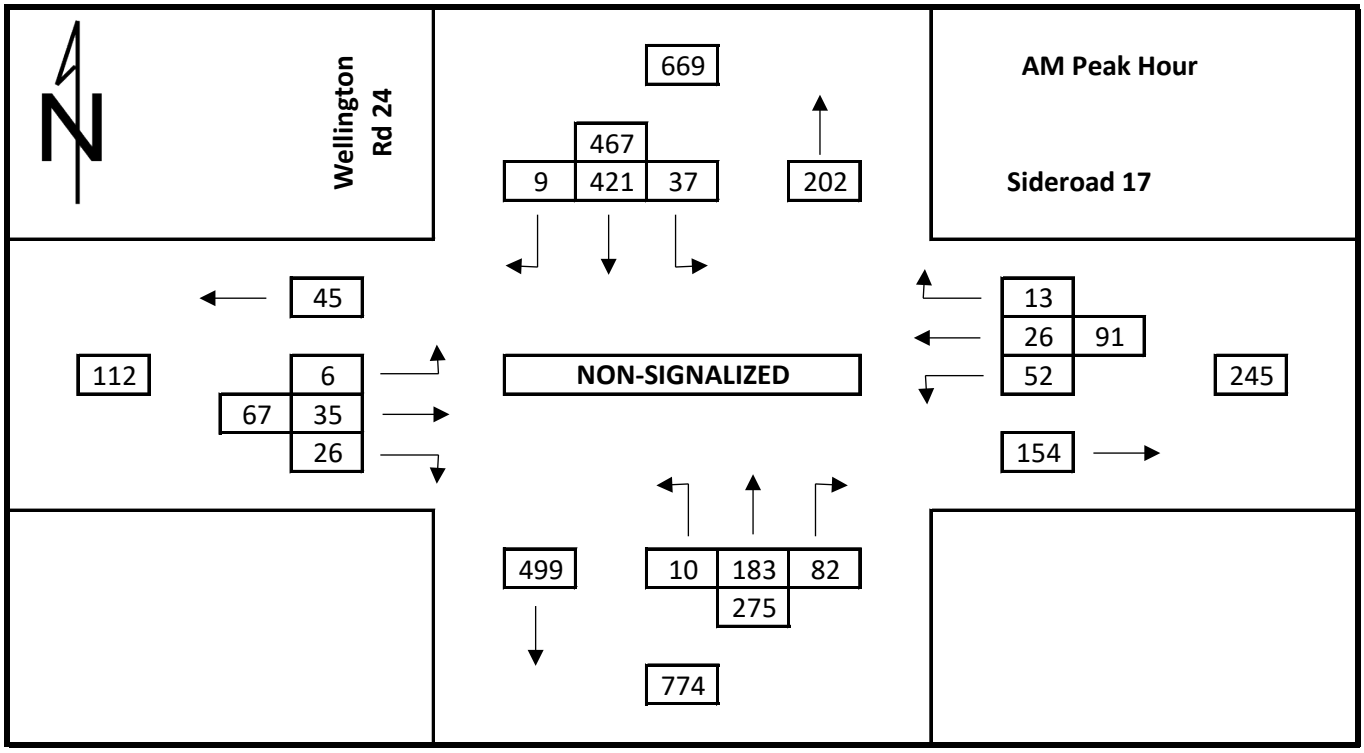
Wellington Rd 24 at Sideroad 17

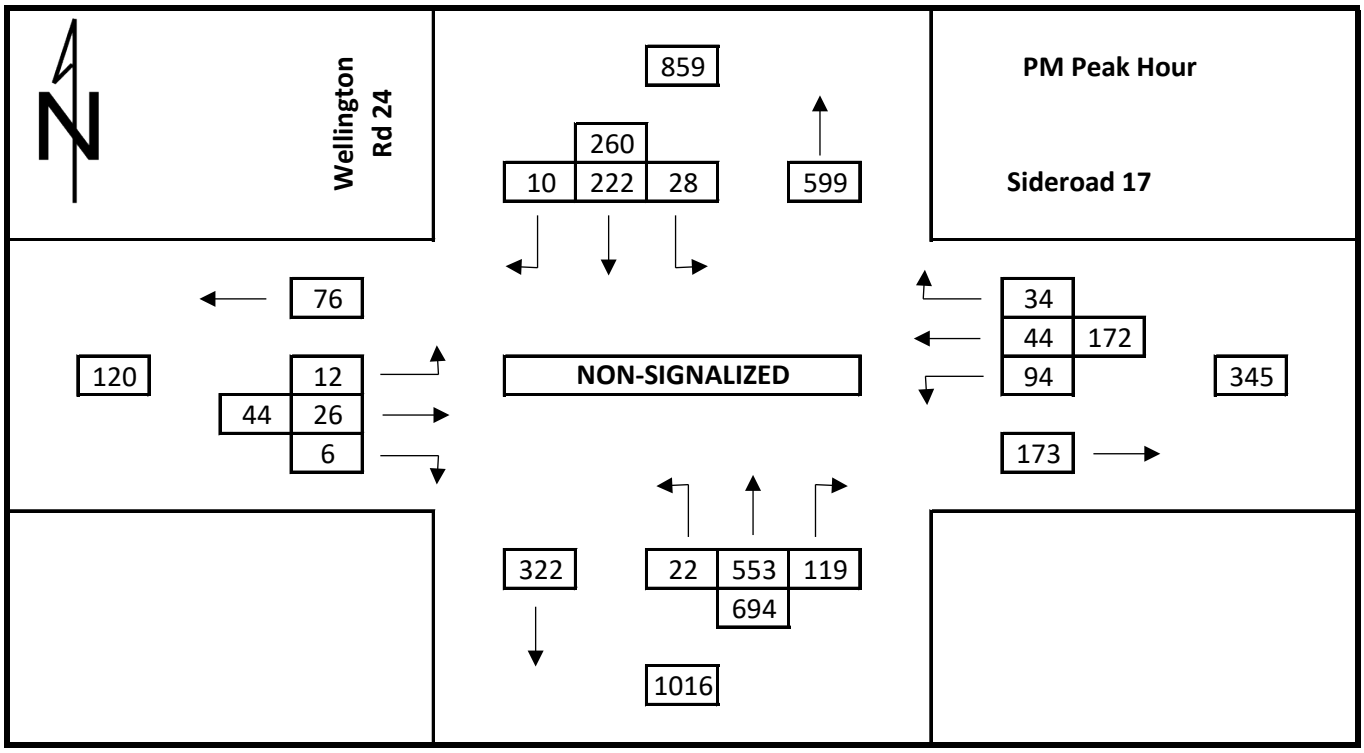




Background Traffic Year 2041

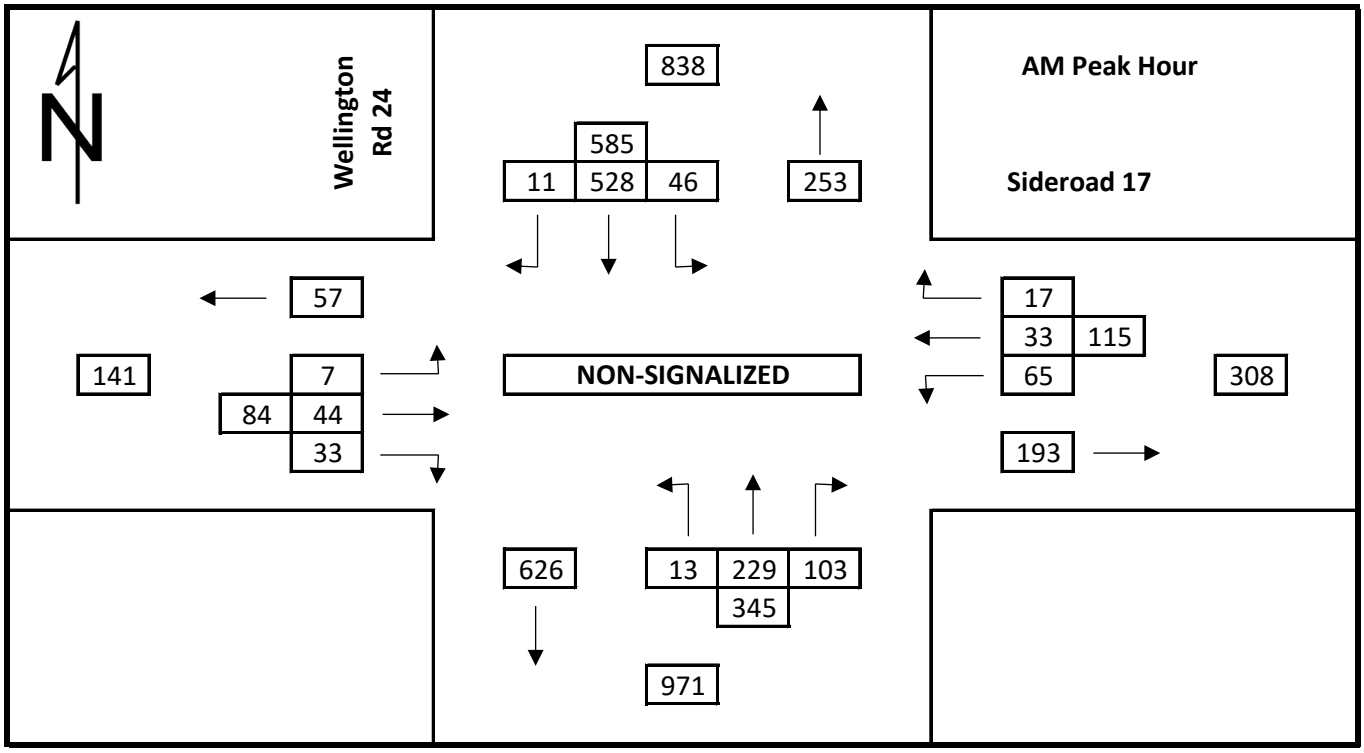
Wellington Rd 24 at Sideroad 17

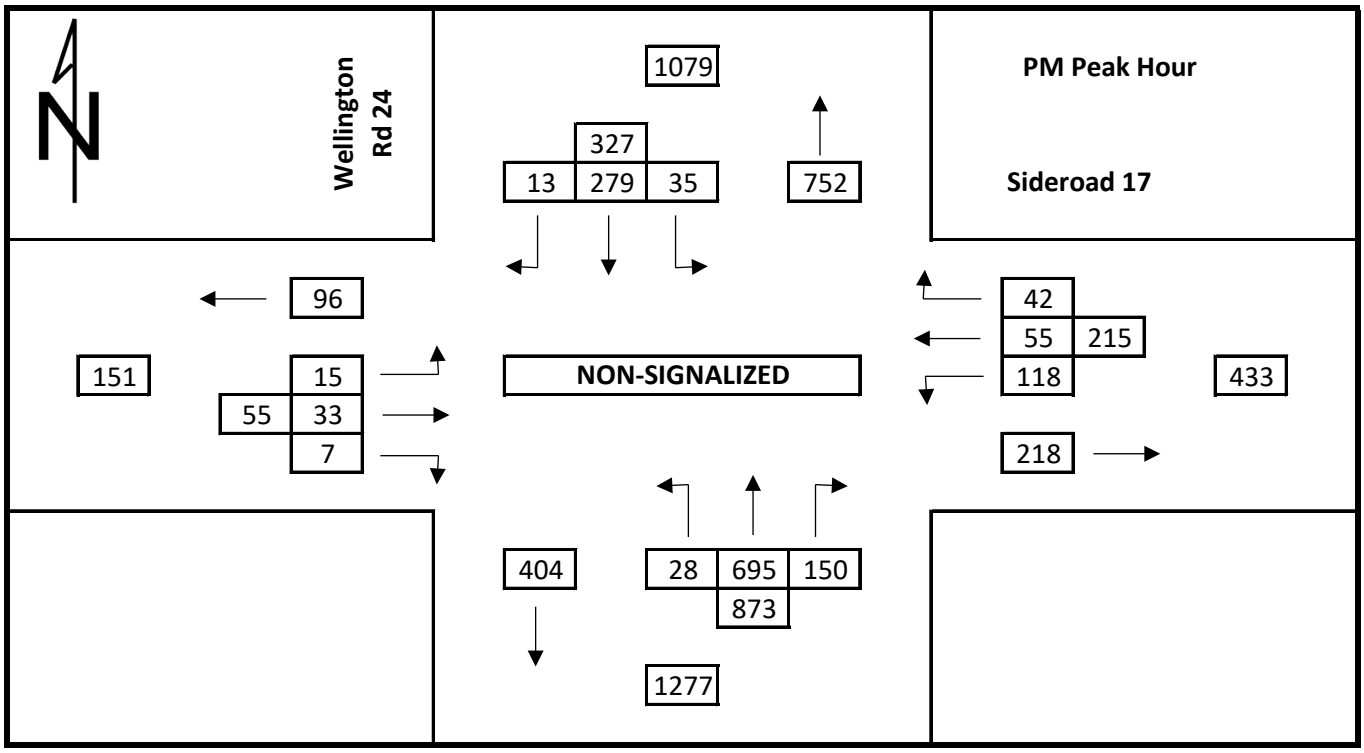


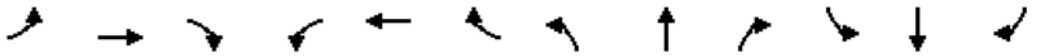


Background Traffic Year 2051

Wellington Rd 24 at Sideroad 17





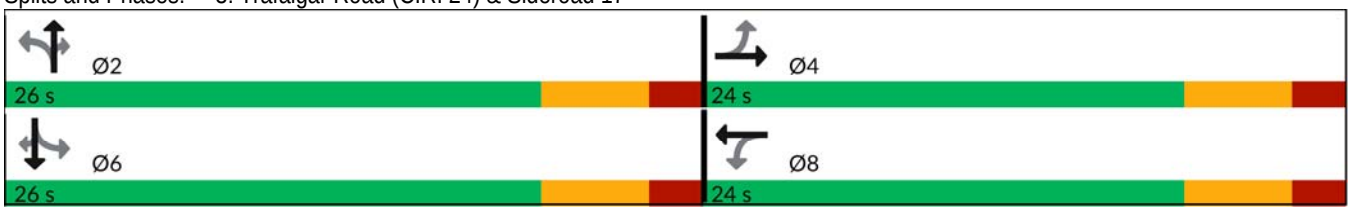


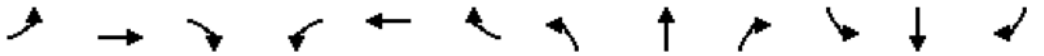
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	28	21	41	21	11	8	145	66	29	335	7
Future Volume (vph)	5	28	21	41	21	11	8	145	66	29	335	7
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (m)	0.0		0.0	0.0		0.0	15.0		44.0	15.0		40.0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (m)	2.5			2.5			10.0			10.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.946			0.980				0.850			0.850
Flt Protected		0.996			0.973		0.950			0.950		
Satd. Flow (prot)	0	1564	0	0	1517	0	1303	1609	1432	1648	1623	1285
Flt Permitted		0.959			0.793		0.544			0.657		
Satd. Flow (perm)	0	1506	0	0	1236	0	746	1609	1432	1140	1623	1285
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			12				72			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		464.8			334.8			589.9			482.2	
Travel Time (s)		27.9			20.1			35.4			28.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	25%	4%	6%	14%	6%	11%	29%	10%	5%	2%	9%	17%
Adj. Flow (vph)	5	30	23	45	23	12	9	158	72	32	364	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	0	0	80	0	9	158	72	32	364	8
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		26.0	26.0	26.0	26.0	26.0	26.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		7.4			7.5		22.9	22.9	22.9	22.9	22.9	22.9
Actuated g/C Ratio		0.22			0.22		0.67	0.67	0.67	0.67	0.67	0.67
v/c Ratio		0.17			0.28		0.02	0.15	0.07	0.04	0.33	0.01
Control Delay (s/veh)		9.9			13.7		6.1	6.2	2.5	6.2	7.3	0.0
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)		9.9			13.7		6.1	6.2	2.5	6.2	7.3	0.0
LOS		A			B		A	A	A	A	A	A
Approach Delay (s/veh)		9.9			13.7			5.1			7.0	
Approach LOS		A			B			A			A	
Queue Length 50th (m)		1.7			3.5		0.3	5.0	0.0	0.9	13.3	0.0
Queue Length 95th (m)		8.0			11.7		1.8	13.6	4.1	4.1	32.2	0.0
Internal Link Dist (m)		440.8			310.8			565.9			458.2	
Turn Bay Length (m)							15.0		44.0	15.0		40.0
Base Capacity (vph)		826			675		534	1151	1045	816	1161	938
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.07			0.12		0.02	0.14	0.07	0.04	0.31	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 34.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 7.3		Intersection LOS: A	
Intersection Capacity Utilization 47.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Trafalgar Road (C.R. 24) & Sideroad 17





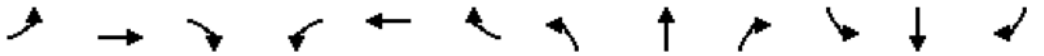
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	21	5	75	35	27	18	441	95	22	177	8
Future Volume (vph)	9	21	5	75	35	27	18	441	95	22	177	8
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (m)	0.0		0.0	0.0		0.0	15.0		44.0	15.0		40.0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (m)	2.5			2.5			10.0			10.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.974				0.850			0.850
Flt Protected		0.987			0.973		0.950			0.950		
Satd. Flow (prot)	0	1465	0	0	1610	0	1648	1701	1406	1514	1685	1319
Flt Permitted		0.864			0.808		0.637			0.464		
Satd. Flow (perm)	0	1283	0	0	1337	0	1105	1701	1406	740	1685	1319
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			27				103			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		407.7			485.4			573.2			487.7	
Travel Time (s)		24.5			29.1			34.4			29.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	6%	2%	3%	3%	9%	2%	4%	7%	11%	5%	14%
Adj. Flow (vph)	10	23	5	82	38	29	20	479	103	24	192	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	0	0	149	0	20	479	103	24	192	9
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		26.0	26.0	26.0	26.0	26.0	26.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		9.1			9.1		22.6	22.6	22.6	22.6	22.6	22.6
Actuated g/C Ratio		0.23			0.23		0.58	0.58	0.58	0.58	0.58	0.58
v/c Ratio		0.13			0.45		0.03	0.49	0.12	0.06	0.20	0.01
Control Delay (s/veh)		11.9			16.0		7.1	10.4	2.6	7.5	7.7	0.0
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)		11.9			16.0		7.1	10.4	2.6	7.5	7.7	0.0
LOS		B			B		A	B	A	A	A	A
Approach Delay (s/veh)		11.9			16.0			8.9			7.4	
Approach LOS		B			B			A			A	
Queue Length 50th (m)		1.6			6.4		0.6	21.0	0.0	0.8	6.8	0.0
Queue Length 95th (m)		6.6			18.4		3.5	51.7	5.6	4.0	18.7	0.0
Internal Link Dist (m)		383.7			461.4			549.2			463.7	
Turn Bay Length (m)							15.0		44.0	15.0		40.0
Base Capacity (vph)		608			645		658	1013	879	441	1004	812
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.06			0.23		0.03	0.47	0.12	0.05	0.19	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 39.2			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 9.7		Intersection LOS: A	
Intersection Capacity Utilization 50.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Trafalgar Road (C.R. 24) & Sideroad 17





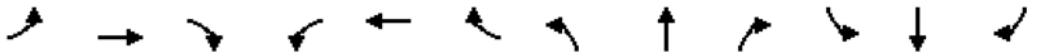
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	35	26	52	26	13	10	183	82	37	421	9
Future Volume (vph)	6	35	26	52	26	13	10	183	82	37	421	9
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (m)	0.0		0.0	0.0		0.0	15.0		44.0	15.0		40.0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (m)	2.5			2.5			10.0			10.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.948			0.981				0.850			0.850
Flt Protected		0.995			0.972		0.950			0.950		
Satd. Flow (prot)	0	1563	0	0	1516	0	1303	1609	1432	1648	1623	1285
Flt Permitted		0.952			0.781		0.499			0.633		
Satd. Flow (perm)	0	1496	0	0	1218	0	684	1609	1432	1098	1623	1285
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			14				89			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		464.8			334.8			589.9			482.2	
Travel Time (s)		27.9			20.1			35.4			28.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	25%	4%	6%	14%	6%	11%	29%	10%	5%	2%	9%	17%
Adj. Flow (vph)	7	38	28	57	28	14	11	199	89	40	458	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	73	0	0	99	0	11	199	89	40	458	10
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		26.0	26.0	26.0	26.0	26.0	26.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		7.9			8.1		24.1	24.1	24.1	24.1	24.1	24.1
Actuated g/C Ratio		0.22			0.23		0.68	0.68	0.68	0.68	0.68	0.68
v/c Ratio		0.21			0.35		0.02	0.18	0.09	0.05	0.42	0.01
Control Delay (s/veh)		10.3			15.0		6.5	6.5	2.4	6.4	8.4	0.0
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)		10.3			15.0		6.5	6.5	2.4	6.4	8.4	0.0
LOS		B			B		A	A	A	A	A	A
Approach Delay (s/veh)		10.3			15.0			5.3			8.0	
Approach LOS		B			B			A			A	
Queue Length 50th (m)		2.2			4.3		0.3	6.7	0.0	1.2	18.9	0.0
Queue Length 95th (m)		9.4			13.9		2.2	17.9	4.8	5.1	46.0	0.0
Internal Link Dist (m)		440.8			310.8			565.9			458.2	
Turn Bay Length (m)							15.0		44.0	15.0		40.0
Base Capacity (vph)		788			638		479	1126	1029	768	1136	919
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.09			0.16		0.02	0.18	0.09	0.05	0.40	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 35.7			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 8.1		Intersection LOS: A	
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Trafalgar Road (C.R. 24) & Sideroad 17



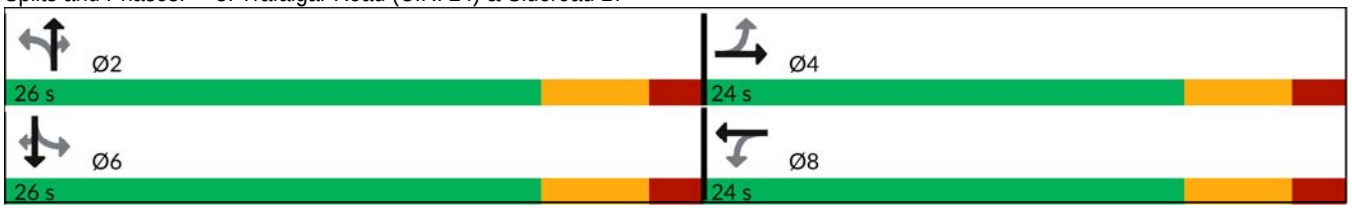


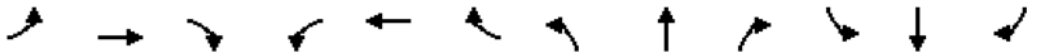
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	26	6	94	44	34	22	553	119	28	222	10
Future Volume (vph)	12	26	6	94	44	34	22	553	119	28	222	10
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (m)	0.0		0.0	0.0		0.0	15.0		44.0	15.0		40.0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (m)	2.5			2.5			10.0			10.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.980			0.973				0.850			0.850
Flt Protected		0.987			0.973		0.950			0.950		
Satd. Flow (prot)	0	1459	0	0	1608	0	1648	1701	1406	1514	1685	1319
Flt Permitted		0.877			0.804		0.609			0.350		
Satd. Flow (perm)	0	1296	0	0	1329	0	1056	1701	1406	558	1685	1319
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			28				129			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		407.7			485.4			573.2			487.7	
Travel Time (s)		24.5			29.1			34.4			29.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	6%	2%	3%	3%	9%	2%	4%	7%	11%	5%	14%
Adj. Flow (vph)	13	28	7	102	48	37	24	601	129	30	241	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	0	0	187	0	24	601	129	30	241	11
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		26.0	26.0	26.0	26.0	26.0	26.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		10.3			10.4		24.1	24.1	24.1	24.1	24.1	24.1
Actuated g/C Ratio		0.25			0.25		0.57	0.57	0.57	0.57	0.57	0.57
v/c Ratio		0.15			0.54		0.04	0.62	0.15	0.09	0.25	0.01
Control Delay (s/veh)		11.8			17.8		7.9	15.3	2.7	8.9	8.7	0.0
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)		11.8			17.8		7.9	15.3	2.7	8.9	8.7	0.0
LOS		B			B		A	B	A	A	A	A
Approach Delay (s/veh)		11.8			17.8			12.9			8.4	
Approach LOS		B			B			B			A	
Queue Length 50th (m)		2.3			9.9		0.9	31.9	0.0	1.1	9.6	0.0
Queue Length 95th (m)		7.6			22.9		4.3	#93.5	6.9	5.5	25.8	0.0
Internal Link Dist (m)		383.7			461.4			549.2			463.7	
Turn Bay Length (m)							15.0		44.0	15.0		40.0
Base Capacity (vph)		571			597		606	976	861	320	966	784
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.08			0.31		0.04	0.62	0.15	0.09	0.25	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 42			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 12.6		Intersection LOS: B	
Intersection Capacity Utilization 58.7%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Trafalgar Road (C.R. 24) & Sideroad 17



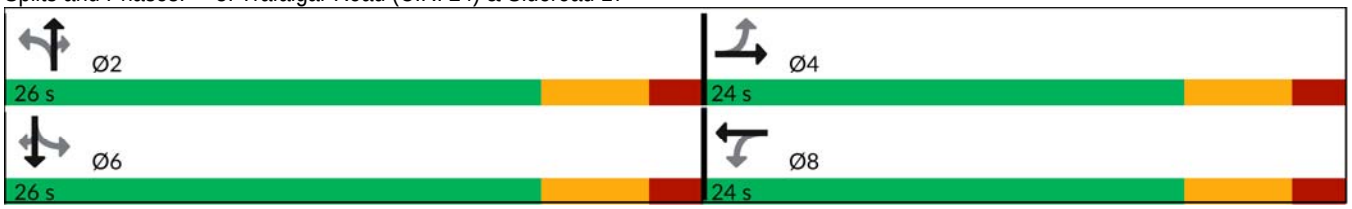


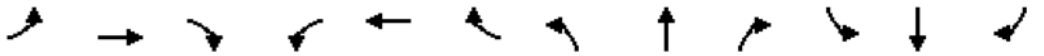
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	44	33	65	33	17	13	229	103	46	528	11
Future Volume (vph)	7	44	33	65	33	17	13	229	103	46	528	11
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (m)	0.0		0.0	0.0		0.0	15.0		44.0	15.0		40.0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (m)	2.5			2.5			10.0			10.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.947			0.981				0.850			0.850
Flt Protected		0.996			0.972		0.950			0.950		
Satd. Flow (prot)	0	1566	0	0	1516	0	1303	1609	1432	1648	1623	1285
Flt Permitted		0.954			0.773		0.385			0.605		
Satd. Flow (perm)	0	1499	0	0	1206	0	528	1609	1432	1050	1623	1285
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			18				112			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		464.8			334.8			589.9			482.2	
Travel Time (s)		27.9			20.1			35.4			28.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	25%	4%	6%	14%	6%	11%	29%	10%	5%	2%	9%	17%
Adj. Flow (vph)	8	48	36	71	36	18	14	249	112	50	574	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	92	0	0	125	0	14	249	112	50	574	12
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		26.0	26.0	26.0	26.0	26.0	26.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		9.0			9.0		24.1	24.1	24.1	24.1	24.1	24.1
Actuated g/C Ratio		0.22			0.22		0.59	0.59	0.59	0.59	0.59	0.59
v/c Ratio		0.26			0.45		0.04	0.26	0.13	0.08	0.60	0.02
Control Delay (s/veh)		10.7			17.6		7.4	7.9	2.5	7.2	13.9	0.0
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)		10.7			17.6		7.4	7.9	2.5	7.2	13.9	0.0
LOS		B			B		A	A	A	A	B	A
Approach Delay (s/veh)		10.7			17.6			6.3			13.1	
Approach LOS		B			B			A			B	
Queue Length 50th (m)		3.2			6.5		0.5	9.2	0.0	1.6	27.7	0.0
Queue Length 95th (m)		10.8			16.7		2.9	24.2	5.8	6.6	#83.2	0.0
Internal Link Dist (m)		440.8			310.8			565.9			458.2	
Turn Bay Length (m)							15.0		44.0	15.0		40.0
Base Capacity (vph)		692			550		312	951	893	621	960	787
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.13			0.23		0.04	0.26	0.13	0.08	0.60	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 40.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 11.3		Intersection LOS: B	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Trafalgar Road (C.R. 24) & Sideroad 17



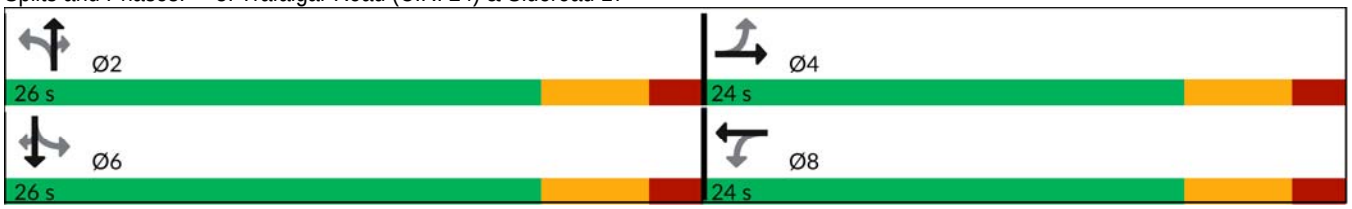


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	33	7	118	55	42	28	695	150	35	279	13
Future Volume (vph)	15	33	7	118	55	42	28	695	150	35	279	13
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (m)	0.0		0.0	0.0		0.0	15.0		44.0	15.0		40.0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (m)	2.5			2.5			10.0			10.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.973				0.850			0.850
Flt Protected		0.987			0.973		0.950			0.950		
Satd. Flow (prot)	0	1463	0	0	1608	0	1648	1701	1406	1514	1685	1319
Flt Permitted		0.885			0.797		0.575			0.213		
Satd. Flow (perm)	0	1312	0	0	1317	0	997	1701	1406	340	1685	1319
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			28				163			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		407.7			485.4			573.2			487.7	
Travel Time (s)		24.5			29.1			34.4			29.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	6%	2%	3%	3%	9%	2%	4%	7%	11%	5%	14%
Adj. Flow (vph)	16	36	8	128	60	46	30	755	163	38	303	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	0	0	234	0	30	755	163	38	303	14
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	4	4		8	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		26.0	26.0	26.0	26.0	26.0	26.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	0
Act Effct Green (s)		11.7			12.0		24.7	24.7	24.7	24.7	24.7	24.7
Actuated g/C Ratio		0.26			0.27		0.55	0.55	0.55	0.55	0.55	0.55
v/c Ratio		0.17			0.63		0.05	0.80	0.19	0.20	0.33	0.02
Control Delay (s/veh)		11.6			20.1		8.9	24.9	2.9	13.1	10.2	0.1
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)		11.6			20.1		8.9	24.9	2.9	13.1	10.2	0.1
LOS		B			C		A	C	A	B	B	A
Approach Delay (s/veh)		11.6			20.1			20.6			10.1	
Approach LOS		B			C			C			B	
Queue Length 50th (m)		3.0			13.4		1.2	51.7	0.0	1.6	14.1	0.0
Queue Length 95th (m)		8.8			29.2		5.3	#133.2	8.1	8.5	35.2	0.0
Internal Link Dist (m)		383.7			461.4			549.2			463.7	
Turn Bay Length (m)							15.0		44.0	15.0		40.0
Base Capacity (vph)		535			549		551	940	850	188	932	758
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.11			0.43		0.05	0.80	0.19	0.20	0.33	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 44.7			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Trafalgar Road (C.R. 24) & Sideroad 17



Appendix F-1

06 SIDEROAD 27 AT FOURTH LINE – EXISTING TRAFFIC VOLUME METRICS

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Project #24-485 - 30 Forensic Engineering

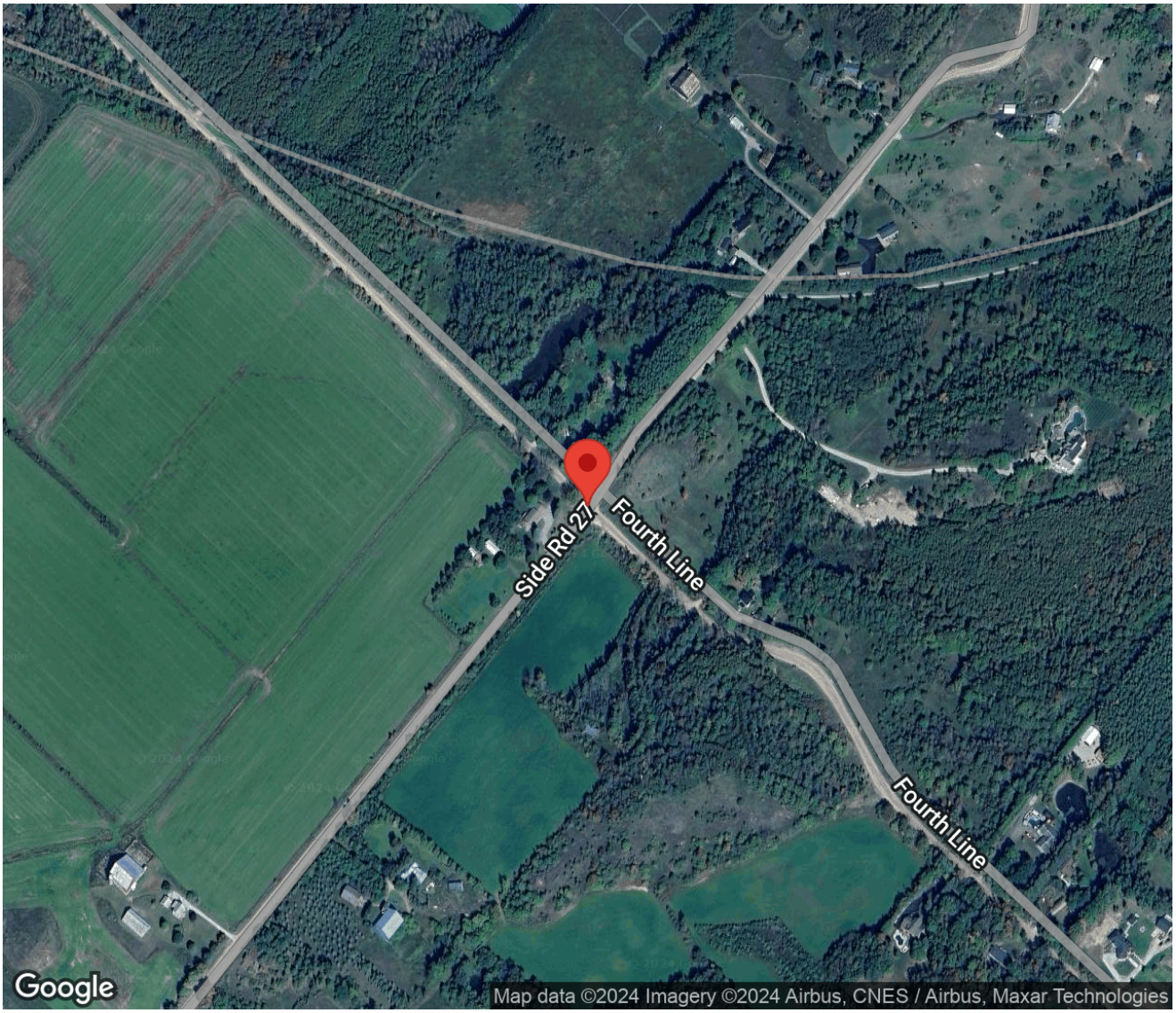
Intersection Count Report

Intersection:	Sideroad 27 & Fourth Line
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500006
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Sideroad 27 & Fourth Line
Site Code:	2448500006
Municipality:	Erin
Count Date:	Nov 19, 2024



Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

Fourth Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	1	6	3	0	10	0	0	3	0	0	3	0	13
08:00 - 09:00	1	6	1	0	8	0	1	2	1	0	4	0	12
09:00 - 10:00	0	3	0	0	3	0	1	4	1	0	6	0	9
BREAK													
11:00 - 12:00	0	3	4	0	7	0	0	0	1	0	1	0	8
12:00 - 13:00	1	3	0	0	4	0	0	2	1	0	3	0	7
BREAK													
15:00 - 16:00	1	3	0	0	4	0	1	3	1	0	5	0	9
16:00 - 17:00	0	2	3	0	5	0	2	6	0	0	8	0	13
17:00 - 18:00	2	2	4	0	8	0	2	3	0	0	5	0	13
GRAND TOTAL	**6**	**28**	**15**	**0**	**49**	**0**	**7**	**23**	**5**	**0**	**35**	**0**	**84**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

Sideroad 27 - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	0	1	1	0	2	0	2	3	0	0	5	0	7
08:00 - 09:00	0	2	1	0	3	0	1	0	2	0	3	0	6
09:00 - 10:00	2	3	0	0	5	0	3	1	0	0	4	0	9
BREAK													
11:00 - 12:00	0	1	1	0	2	0	0	6	1	0	7	0	9
12:00 - 13:00	0	3	1	0	4	0	1	0	0	0	1	0	5
BREAK													
15:00 - 16:00	1	2	0	0	3	0	2	1	1	0	4	0	7
16:00 - 17:00	1	6	3	0	10	0	4	3	5	0	12	0	22
17:00 - 18:00	0	1	1	0	2	0	1	3	1	0	5	0	7
GRAND TOTAL	**4**	**19**	**8**	**0**	**31**	**0**	**14**	**17**	**10**	**0**	**41**	**0**	**72**

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Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Fourth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	0
07:45	0	1	1	0	2	0	1	0	0	1	0	0	0	0	0	0
08:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
08:15	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0
09:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	12	4	0	17	1	3	0	0	4	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Fourth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0
11:30	0	1	1	0	2	0	0	1	0	1	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:45	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	6	3	0	10	0	0	1	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Fourth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
15:30	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
15:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:15	1	1	2	0	4	0	0	0	0	0	0	0	0	0	0	0
17:30	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0
17:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	3	7	6	0	16	0	0	1	0	1	0	0	0	0	0	0
GRAND TOTAL	5	25	13	0	43	1	3	2	0	6	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Fourth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
07:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
09:45	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	9	2	0	13	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Fourth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	2	1	0	3	0	0	1	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Fourth Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
16:30	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0
16:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17:00	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	5	12	1	0	18	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	**7**	**23**	**4**	**0**	**34**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 27

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

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
12:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	4	2	0	6	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
15:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	3	1	0	4	1	0	1	0	2	0	0	0	0	0	0
16:15	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
16:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	9	3	0	13	1	0	1	0	2	0	0	0	0	0	0
GRAND TOTAL	3	18	7	0	28	1	1	1	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
07:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:30	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	6	3	2	0	11	0	1	0	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
11:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
11:30	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	5	1	0	7	0	1	0	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
16:00	0	2	3	0	5	0	0	1	0	1	0	0	0	0	0	0
16:15	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
16:30	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
16:45	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
17:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:30	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	6	7	6	0	19	1	0	1	0	2	0	0	0	0	0	0
GRAND TOTAL	13	15	9	0	37	1	2	1	0	4	0	0	0	0	0	0

Peak Hour Diagram

Specified Period
From: 07:00:00
To: 10:00:00

One Hour Peak
From: 07:00:00
To: 08:00:00

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Fourth Line runs N/S

North Approach

	Out	In	Total
Cars	8	6	14
Trucks	2	0	2
Bicycles	0	0	0
	10	**6**	**16**

Fourth Line

Bicycles	0	0	0	0
Trucks	0	2	0	0
Cars	3	4	1	0
Totals	**3**	**6**	**1**	**0**

East Approach

	Out	In	Total
Cars	2	3	5
Trucks	0	1	1
Bicycles	0	0	0
	2	**4**	**6**

Peds: 0

Sideroad 27

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

Peds: 0



Peds: 0

Sideroad 27

Totals	Cars	Trucks	Bicycles
0	0	0	0
1	1	0	0
1	1	0	0
0	0	0	0

Peds: 0

West Approach

	Out	In	Total
Cars	4	4	8
Trucks	1	0	1
Bicycles	0	0	0
	5	**4**	**9**

Fourth Line

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

South Approach

	Out	In	Total
Cars	3	4	7
Trucks	0	2	2
Bicycles	0	0	0
	3	**6**	**9**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

Peak Hour Data (07:00 - 08:00)

Start Time	North Approach Fourth Line						South Approach Fourth Line						East Approach Sideroad 27						West Approach Sideroad 27						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	1	0	0	0	1	3
07:15	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5
07:30	0	1	2	0	0	3	0	2	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	2	7
07:45	0	2	1	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	5
Grand Total	**1**	**6**	**3**	**0**	**0**	**10**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**1**	**1**	**0**	**0**	**2**	**2**	**3**	**0**	**0**	**0**	**5**	**20**
Approach %	10	60	30	0		-	0	100	0	0		-	0	50	50	0		-	40	60	0	0		-	
Totals %	5	30	15	0		50	0	15	0	0		15	0	5	5	0		10	10	15	0	0		25	
PHF	**0.25**	**0.5**	**0.38**	**0**		**0.63**	**0**	**0.38**	**0**	**0**		**0.38**	**0**	**0.25**	**0.25**	**0**		**0.25**	**0.25**	**0.75**	**0**	**0**		**0.63**	**0.71**
Cars	1	4	3	0		8	0	3	0	0		3	0	1	1	0		2	2	2	0	0		4	17
% Cars	100	66.7	100	0		80	0	100	0	0		100	0	100	100	0		100	100	66.7	0	0		80	85
Trucks	0	2	0	0		2	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	3
% Trucks	0	33.3	0	0		20	0	0	0	0		0	0	0	0	0		0	0	33.3	0	0		20	15
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	11:00:00	From:	11:15:00
To:	13:00:00	To:	12:15:00

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Fourth Line runs N/S

North Approach

	Out	In	Total
Cars	7	1	8
Trucks	1	0	1
Bicycles	0	0	0
	8	**1**	**9**

Fourth Line

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

Peds: 0

East Approach

	Out	In	Total
Cars	5	3	8
Trucks	0	2	2
Bicycles	0	0	0
	5	**5**	**10**

Sideroad 27

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

Peds: 0



Peds: 0

Sideroad 27

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

Peds: 0

West Approach

	Out	In	Total
Cars	4	7	11
Trucks	1	1	2
Bicycles	0	0	0
	5	**8**	**13**

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

Fourth Line

South Approach

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

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (11:15 - 12:15)

Start Time	North Approach Fourth Line						South Approach Fourth Line						East Approach Sideroad 27						West Approach Sideroad 27						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
11:15	0	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	6
11:30	0	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	5
11:45	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	0	2	0	1	0	0	0	1	4
12:00	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	4
Grand Total	**0**	**4**	**4**	**0**	**0**	**8**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**4**	**1**	**0**	**0**	**5**	**0**	**4**	**1**	**0**	**0**	**5**	**19**
Approach %	0	50	50	0		-	0	0	100	0		-	0	80	20	0		-	0	80	20	0		-	
Totals %	0	21.1	21.1	0		42.1	0	0	5.3	0		5.3	0	21.1	5.3	0		26.3	0	21.1	5.3	0		26.3	
PHF	**0**	**0.5**	**0.5**	**0**		**0.5**	**0**	**0**	**0.25**	**0**		**0.25**	**0**	**0.33**	**0.25**	**0**		**0.42**	**0**	**0.5**	**0.25**	**0**		**0.63**	**0.79**
Cars	0	4	3	0		7	0	0	0	0		0	0	4	1	0		5	0	3	1	0		4	16
% Cars	0	100	75	0		87.5	0	0	0	0		0	0	100	100	0		100	0	75	100	0		80	84.2
Trucks	0	0	1	0		1	0	0	1	0		1	0	0	0	0		0	0	1	0	0		1	3
% Trucks	0	0	25	0		12.5	0	0	100	0		100	0	0	0	0		0	0	25	0	0		20	15.8
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	15:00:00	From:	16:00:00
To:	18:00:00	To:	17:00:00

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Fourth Line runs N/S

North Approach

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

Fourth Line

Bicycles	0	0	0	0
Trucks	0	0	0	0
Cars	3	2	0	0
Totals	**3**	**2**	**0**	**0**

East Approach

	Out	In	Total
Cars	8	3	11
Trucks	2	0	2
Bicycles	0	0	0
	10	**3**	**13**

Sideroad 27

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	4	**4**	
0	0	3	**3**	
0	1	4	**5**	

Peds: 0



Peds: 0

Peds: 0

Sideroad 27

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	3	2	1	0
	6	6	0	0
	1	0	1	0

West Approach

	Out	In	Total
Cars	11	11	22
Trucks	1	0	1
Bicycles	0	0	0
	12	**11**	**23**

Totals	**2**	**6**	**0**	**0**
Cars	2	6	0	0
Trucks	0	0	0	0
Bicycles	0	0	0	0

Fourth Line

South Approach

	Out	In	Total
Cars	8	6	14
Trucks	0	2	2
Bicycles	0	0	0
	8	**8**	**16**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 27 & Fourth Line
Site Code: 2448500006
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

Peak Hour Data (16:00 - 17:00)

Start Time	North Approach Fourth Line						South Approach Fourth Line						East Approach Sideroad 27						West Approach Sideroad 27						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:00	0	1	0	0	0	1	0	0	0	0	0	0	1	3	2	0	0	6	0	2	4	0	0	6	13
16:15	0	1	0	0	0	1	0	2	0	0	0	2	0	1	1	0	0	2	2	0	0	0	0	2	7
16:30	0	0	1	0	0	1	2	3	0	0	0	5	0	1	0	0	0	1	1	1	0	0	0	2	9
16:45	0	0	2	0	0	2	0	1	0	0	0	1	0	1	0	0	0	1	1	0	1	0	0	2	6
Grand Total	**0**	**2**	**3**	**0**	**0**	**5**	**2**	**6**	**0**	**0**	**0**	**8**	**1**	**6**	**3**	**0**	**0**	**10**	**4**	**3**	**5**	**0**	**0**	**12**	**35**
Approach %	0	40	60	0		-	25	75	0	0		-	10	60	30	0		-	33.3	25	41.7	0		-	
Totals %	0	5.7	8.6	0		14.3	5.7	17.1	0	0		22.9	2.9	17.1	8.6	0		28.6	11.4	8.6	14.3	0		34.3	
PHF	**0**	**0.5**	**0.38**	**0**		**0.63**	**0.25**	**0.5**	**0**	**0**		**0.4**	**0.25**	**0.5**	**0.38**	**0**		**0.42**	**0.5**	**0.38**	**0.31**	**0**		**0.5**	**0.67**
Cars	0	2	3	0		5	2	6	0	0		8	0	6	2	0		8	4	3	4	0		11	32
% Cars	0	100	100	0		100	100	100	0	0		100	0	100	66.7	0		80	100	100	80	0		91.7	91.4
Trucks	0	0	0	0		0	0	0	0	0		0	1	0	1	0		2	0	0	1	0		1	3
% Trucks	0	0	0	0		0	0	0	0	0		0	100	0	33.3	0		20	0	0	20	0		8.3	8.6
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	3	0	0	1	1	0	3	0	1	6	3
Future Vol, veh/h	2	3	0	0	1	1	0	3	0	1	6	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	33	2	2	2	2	2	2	2	2	33	2
Mvmt Flow	2	3	0	0	1	1	0	3	0	1	7	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	3	0	0	12	10	3	11	9	2
Stage 1	-	-	-	-	-	-	8	8	-	2	2	-
Stage 2	-	-	-	-	-	-	4	2	-	9	8	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.83	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.297	3.318
Pot Cap-1 Maneuver	1620	-	-	1619	-	-	1005	885	1081	1007	828	1083
Stage 1	-	-	-	-	-	-	1014	889	-	1021	836	-
Stage 2	-	-	-	-	-	-	1018	894	-	1012	831	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1620	-	-	1619	-	-	993	884	1081	1002	827	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-	993	884	-	1002	827	-
Stage 1	-	-	-	-	-	-	1013	888	-	1021	836	-
Stage 2	-	-	-	-	-	-	1007	894	-	1007	830	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.89	0	9.09	9.02
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	884	720	-	-	1619	-	-	907
HCM Lane V/C Ratio	0.004	0.001	-	-	-	-	-	0.012
HCM Control Delay (s/veh)	9.1	7.2	0	-	0	-	-	9
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	3	5	1	6	3	2	6	0	0	2	3
Future Vol, veh/h	4	3	5	1	6	3	2	6	0	0	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	20	100	2	33	2	2	2	2	2	2
Mvmt Flow	4	3	5	1	7	3	2	7	0	0	2	3

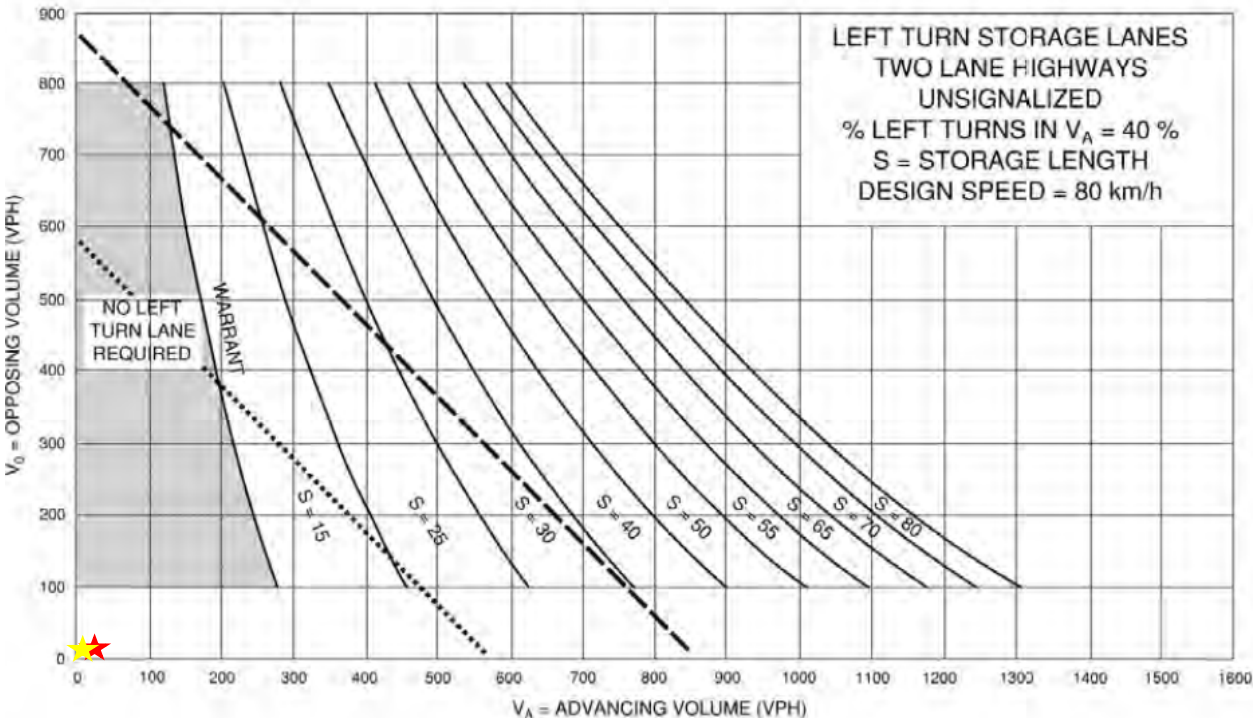
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	10	0	0	9	0	0	24	27	6	26	28	8
Stage 1	-	-	-	-	-	-	15	15	-	10	10	-
Stage 2	-	-	-	-	-	-	10	12	-	15	17	-
Critical Hdwy	4.12	-	-	5.1	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	3.1	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1610	-	-	1151	-	-	987	867	1077	985	865	1074
Stage 1	-	-	-	-	-	-	1005	883	-	1011	887	-
Stage 2	-	-	-	-	-	-	1011	886	-	1005	881	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1610	-	-	1151	-	-	978	863	1077	974	862	1074
Mov Cap-2 Maneuver	-	-	-	-	-	-	978	863	-	974	862	-
Stage 1	-	-	-	-	-	-	1003	881	-	1010	886	-
Stage 2	-	-	-	-	-	-	1005	885	-	994	878	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.41	0.81	9.09	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	889	533	-	-	169	-	-	978
HCM Lane V/C Ratio	0.01	0.003	-	-	0.001	-	-	0.006
HCM Control Delay (s/veh)	9.1	7.2	0	-	8.1	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Sideroad 27 at Fourth Line – Eastbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

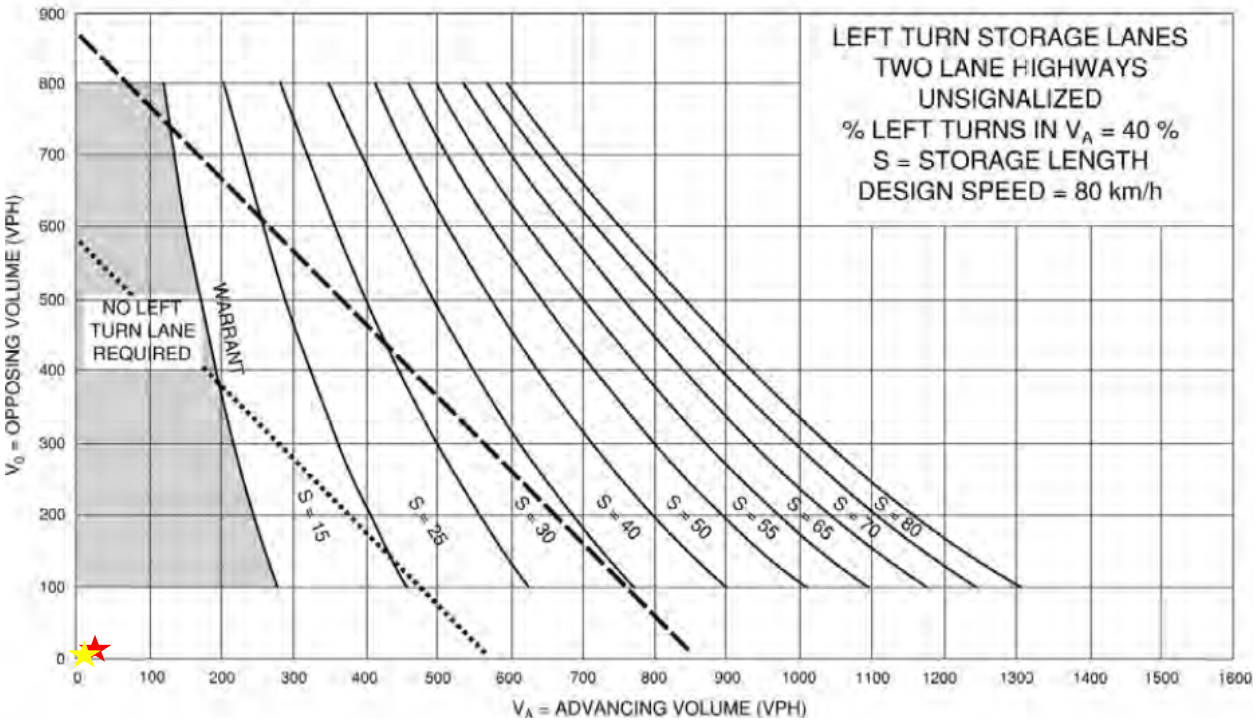
TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	5*	2*	2	40.0	0
PM	12*	10*	4	33.3	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Sideroad 27 at Fourth Line – Westbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	2*	5*	1	50.0	0
PM	10*	12*	1	10.0	0

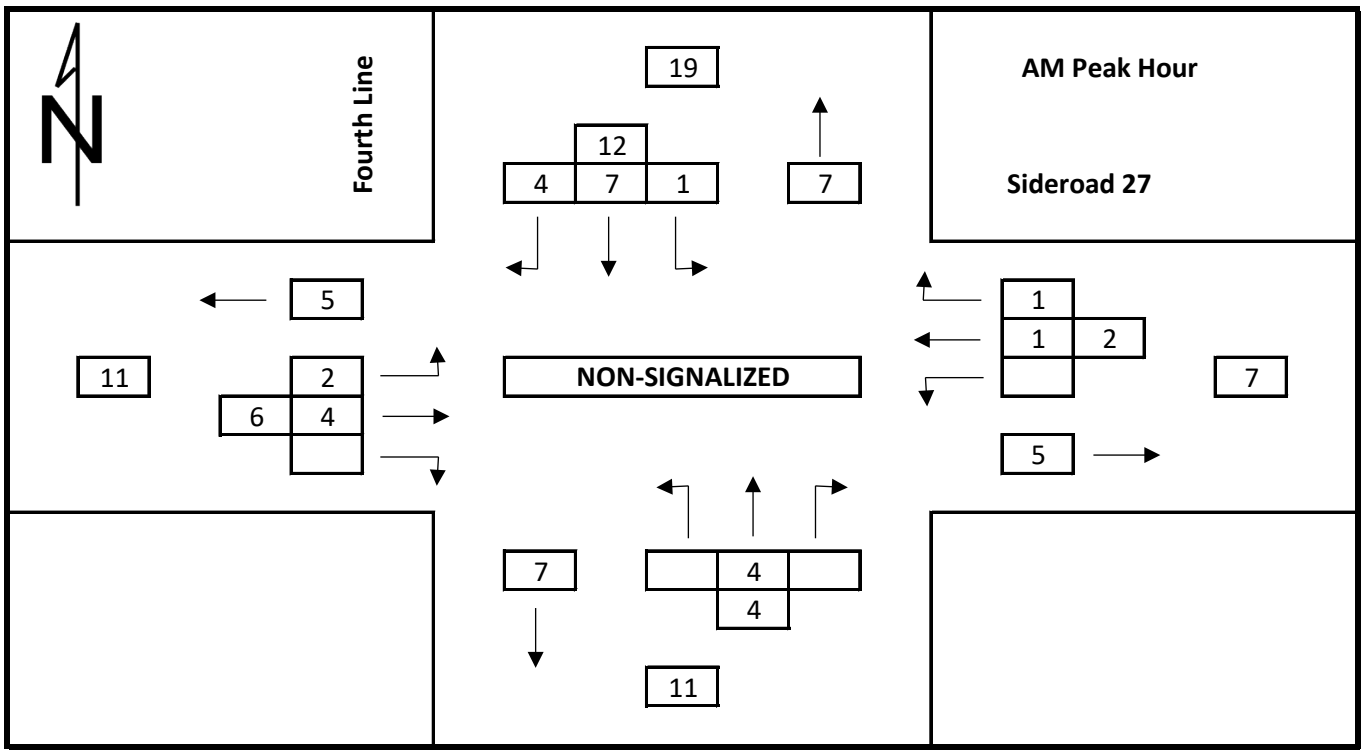
*** traffic volumes do not meet minimum MTO requirement for warrant**

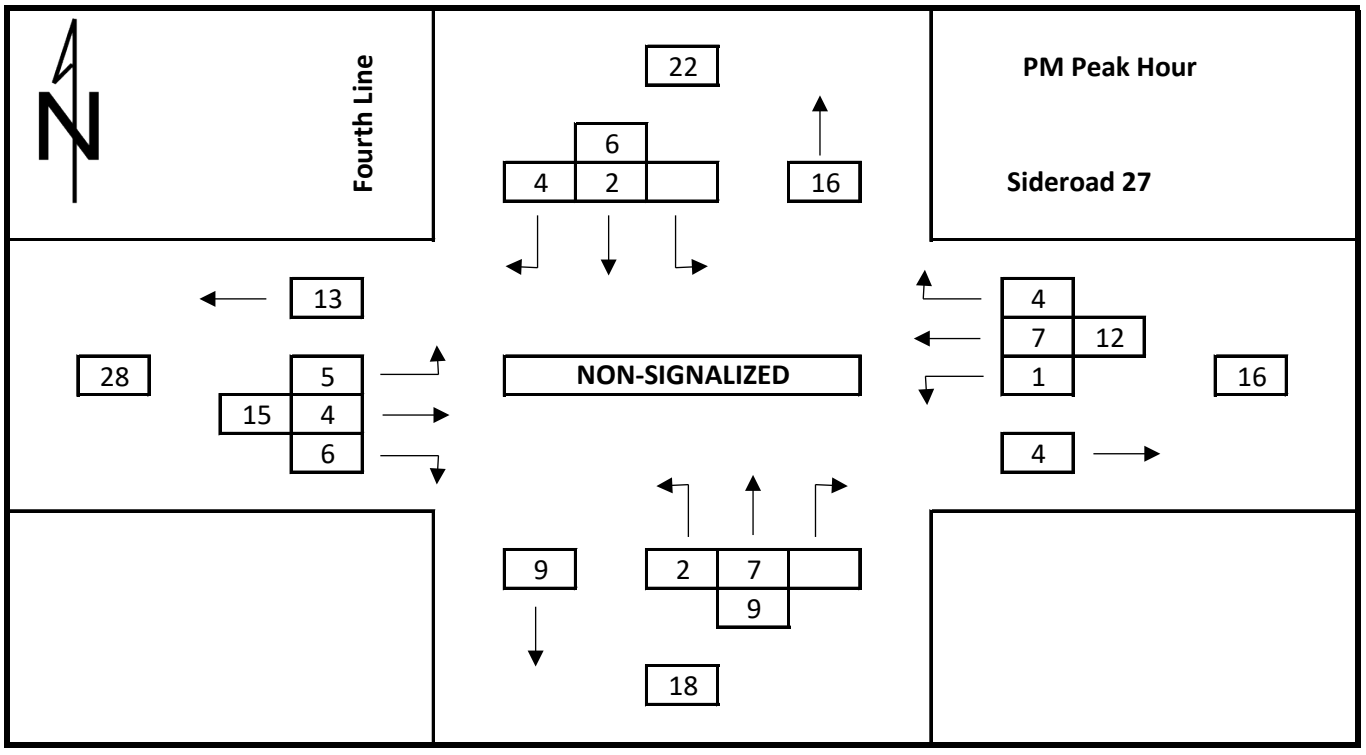
Appendix F-2

06 SIDEROAD 27 AT FOURTH LINE – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

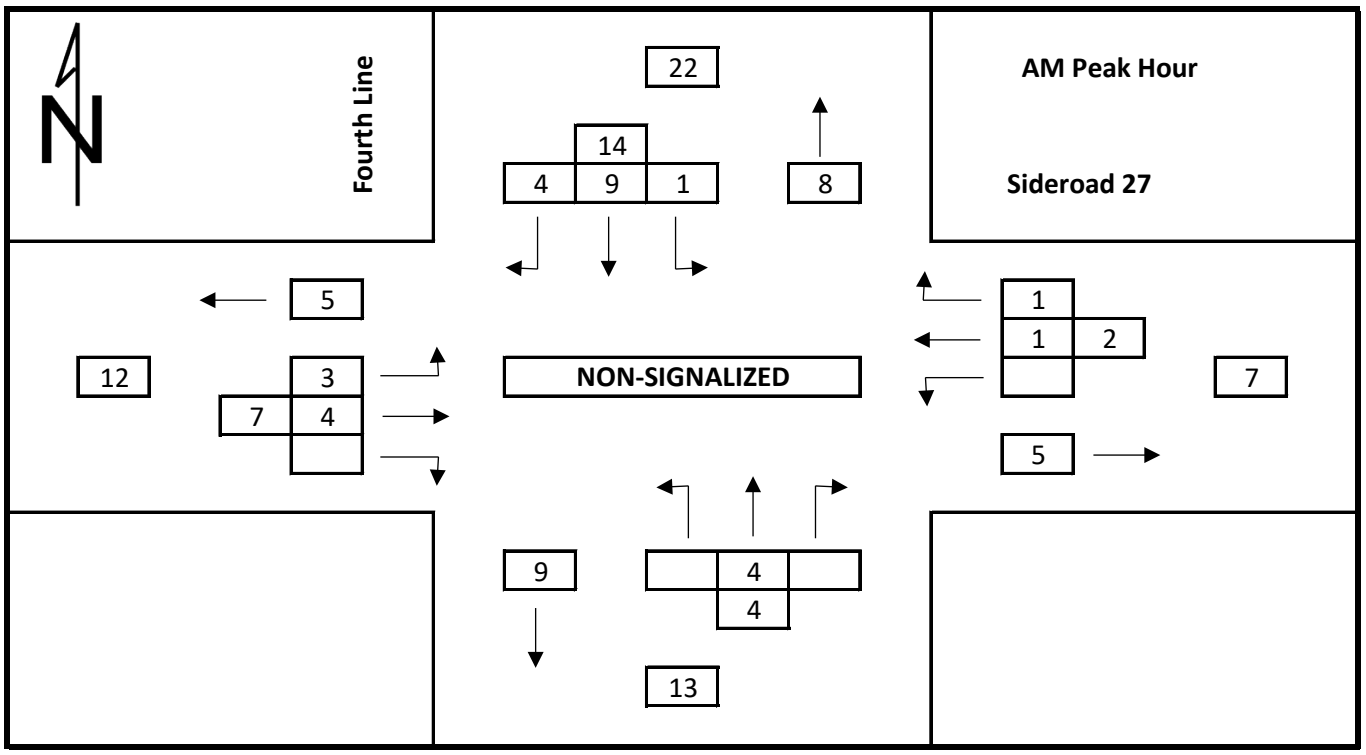
Sideroad 27 at Fourth Line

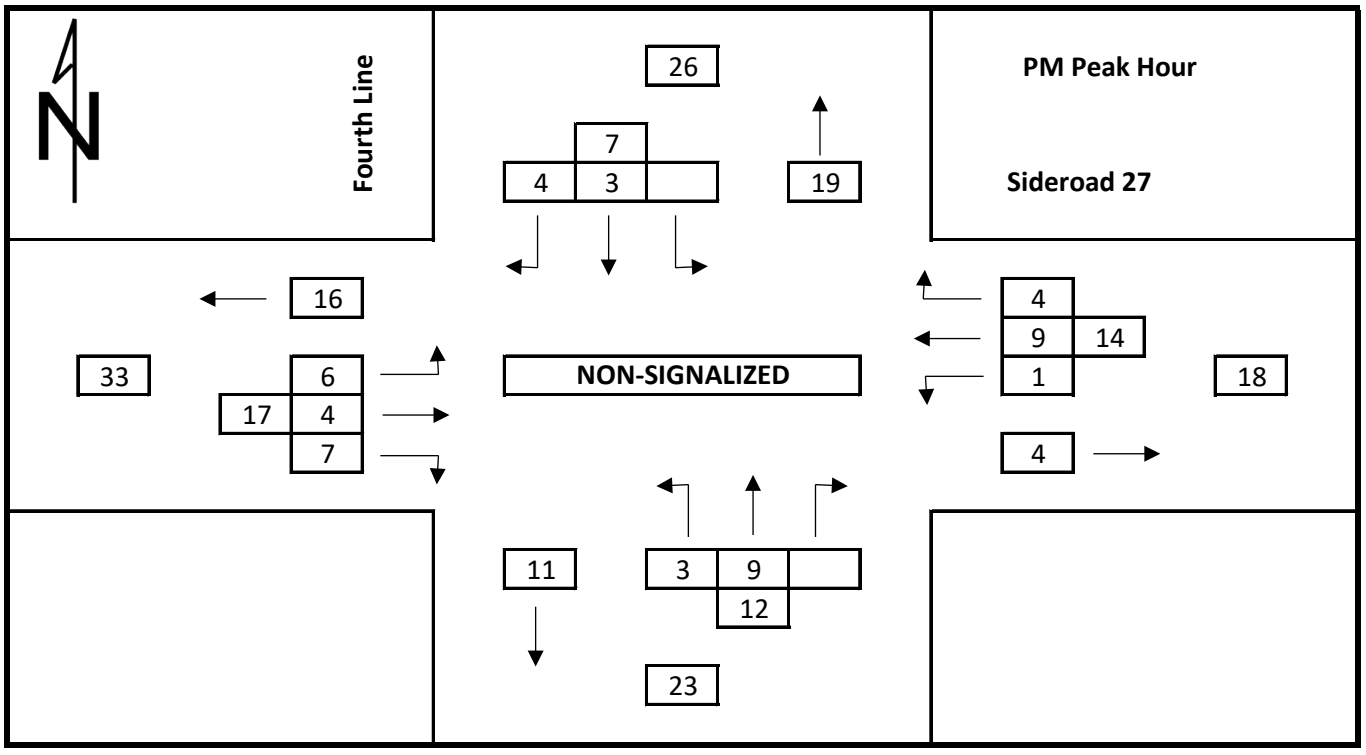




Background Traffic Year 2041

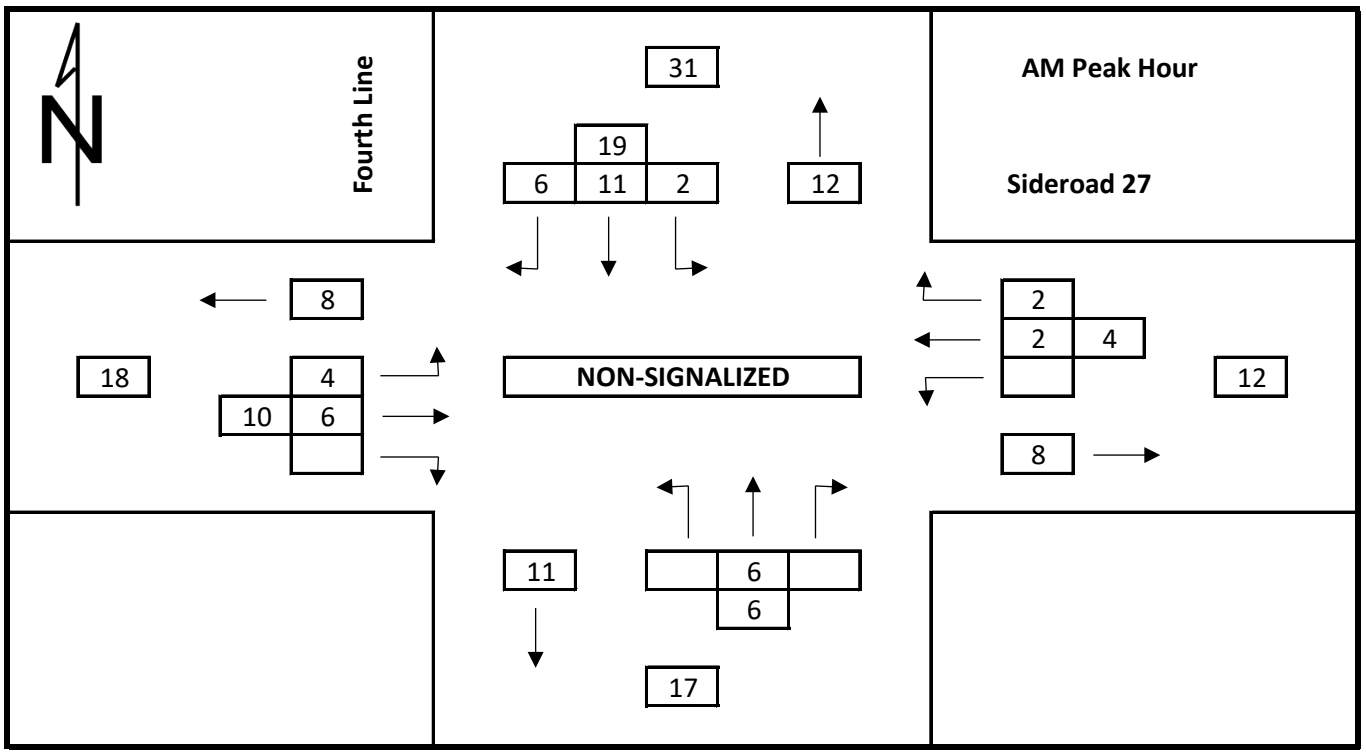
Sideroad 27 at Fourth Line

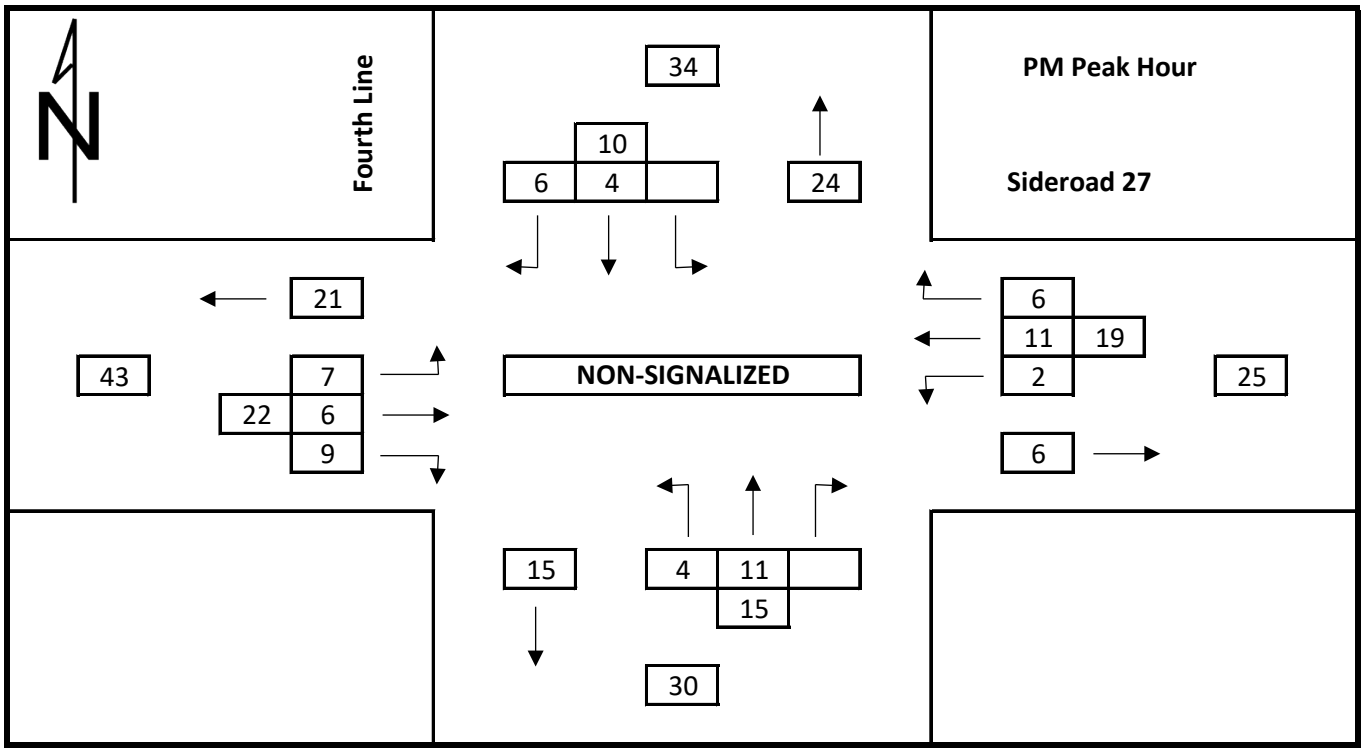




Background Traffic Year 2051

Sideroad 27 at Fourth Line





Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	4	0	0	1	1	0	4	0	1	7	4
Future Vol, veh/h	2	4	0	0	1	1	0	4	0	1	7	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	33	2	2	2	2	2	2	2	2	33	2
Mvmt Flow	2	4	0	0	1	1	0	4	0	1	8	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	4	0	0	14	11	4	13	10	2
Stage 1	-	-	-	-	-	-	9	9	-	2	2	-
Stage 2	-	-	-	-	-	-	5	2	-	11	9	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.83	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.297	3.318
Pot Cap-1 Maneuver	1620	-	-	1617	-	-	1003	884	1079	1004	827	1083
Stage 1	-	-	-	-	-	-	1013	888	-	1021	836	-
Stage 2	-	-	-	-	-	-	1017	894	-	1010	830	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1620	-	-	1617	-	-	988	883	1079	998	826	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-	988	883	-	998	826	-
Stage 1	-	-	-	-	-	-	1011	887	-	1021	836	-
Stage 2	-	-	-	-	-	-	1004	894	-	1004	829	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.41	0	9.1	9.01
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	883	600	-	-	1617	-	-	911
HCM Lane V/C Ratio	0.005	0.001	-	-	-	-	-	0.014
HCM Control Delay (s/veh)	9.1	7.2	0	-	0	-	-	9
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	4	6	1	7	4	2	7	0	0	2	4
Future Vol, veh/h	5	4	6	1	7	4	2	7	0	0	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	20	100	2	33	2	2	2	2	2	2
Mvmt Flow	5	4	7	1	8	4	2	8	0	0	2	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	12	0	0	11	0	0	29	33	8	31	34	10
Stage 1	-	-	-	-	-	-	18	18	-	12	12	-
Stage 2	-	-	-	-	-	-	11	14	-	19	22	-
Critical Hdwy	4.12	-	-	5.1	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	3.1	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1607	-	-	1149	-	-	980	860	1075	977	859	1072
Stage 1	-	-	-	-	-	-	1001	880	-	1009	886	-
Stage 2	-	-	-	-	-	-	1010	884	-	1000	877	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1607	-	-	1149	-	-	969	856	1075	964	855	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	969	856	-	964	855	-
Stage 1	-	-	-	-	-	-	997	877	-	1008	885	-
Stage 2	-	-	-	-	-	-	1002	883	-	988	874	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.42	0.68	9.14	8.67
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	879	536	-	-	140	-	-	988
HCM Lane V/C Ratio	0.011	0.003	-	-	0.001	-	-	0.007
HCM Control Delay (s/veh)	9.1	7.2	0	-	8.1	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	4	0	0	1	1	0	4	0	1	9	4
Future Vol, veh/h	3	4	0	0	1	1	0	4	0	1	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	33	2	2	2	2	2	2	2	2	33	2
Mvmt Flow	3	4	0	0	1	1	0	4	0	1	10	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	4	0	0	17	13	4	15	13	2
Stage 1	-	-	-	-	-	-	11	11	-	2	2	-
Stage 2	-	-	-	-	-	-	6	2	-	13	11	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.83	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.297	3.318
Pot Cap-1 Maneuver	1620	-	-	1617	-	-	998	881	1079	1001	824	1083
Stage 1	-	-	-	-	-	-	1010	887	-	1021	836	-
Stage 2	-	-	-	-	-	-	1016	894	-	1007	829	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1620	-	-	1617	-	-	980	880	1079	994	823	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-	980	880	-	994	823	-
Stage 1	-	-	-	-	-	-	1008	885	-	1021	836	-
Stage 2	-	-	-	-	-	-	1000	894	-	1000	827	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	3.1	0	9.11	9.09
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	880	771	-	-	1617	-	-	895
HCM Lane V/C Ratio	0.005	0.002	-	-	-	-	-	0.017
HCM Control Delay (s/veh)	9.1	7.2	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	4	7	1	9	4	3	9	0	0	3	4
Future Vol, veh/h	6	4	7	1	9	4	3	9	0	0	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	20	100	2	33	2	2	2	2	2	2
Mvmt Flow	7	4	8	1	10	4	3	10	0	0	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	14	0	0	12	0	0	35	38	8	36	39	12
Stage 1	-	-	-	-	-	-	21	21	-	14	14	-
Stage 2	-	-	-	-	-	-	14	16	-	22	25	-
Critical Hdwy	4.12	-	-	5.1	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	3.1	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1604	-	-	1148	-	-	972	855	1074	969	853	1069
Stage 1	-	-	-	-	-	-	997	878	-	1006	884	-
Stage 2	-	-	-	-	-	-	1007	882	-	996	874	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1604	-	-	1148	-	-	959	850	1074	953	849	1069
Mov Cap-2 Maneuver	-	-	-	-	-	-	959	850	-	953	849	-
Stage 1	-	-	-	-	-	-	993	874	-	1005	883	-
Stage 2	-	-	-	-	-	-	998	881	-	981	871	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.56	0.58	9.18	8.77
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	875	564	-	-	121	-	-	962
HCM Lane V/C Ratio	0.015	0.004	-	-	0.001	-	-	0.008
HCM Control Delay (s/veh)	9.2	7.3	0	-	8.1	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	6	0	0	2	2	0	6	0	2	11	6
Future Vol, veh/h	4	6	0	0	2	2	0	6	0	2	11	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	33	2	2	2	2	2	2	2	2	33	2
Mvmt Flow	4	7	0	0	2	2	0	7	0	2	12	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	4	0	0	7	0	0	23	20	7	22	18	3
Stage 1	-	-	-	-	-	-	15	15	-	3	3	-
Stage 2	-	-	-	-	-	-	8	4	-	18	15	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.83	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.83	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.297	3.318
Pot Cap-1 Maneuver	1617	-	-	1614	-	-	988	874	1076	991	818	1081
Stage 1	-	-	-	-	-	-	1005	883	-	1019	835	-
Stage 2	-	-	-	-	-	-	1013	892	-	1001	825	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1617	-	-	1614	-	-	965	872	1076	981	816	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	965	872	-	981	816	-
Stage 1	-	-	-	-	-	-	1002	880	-	1019	835	-
Stage 2	-	-	-	-	-	-	993	892	-	991	823	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.89	0	9.16	9.09
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	872	720	-	-	1614	-	-	901
HCM Lane V/C Ratio	0.007	0.003	-	-	-	-	-	0.023
HCM Control Delay (s/veh)	9.2	7.2	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	6	9	2	11	6	4	11	0	0	4	6
Future Vol, veh/h	7	6	9	2	11	6	4	11	0	0	4	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	20	100	2	33	2	2	2	2	2	2
Mvmt Flow	8	7	10	2	12	7	4	12	0	0	4	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	18	0	0	16	0	0	45	49	11	47	51	15
Stage 1	-	-	-	-	-	-	27	27	-	20	20	-
Stage 2	-	-	-	-	-	-	18	23	-	28	32	-
Critical Hdwy	4.12	-	-	5.1	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	3.1	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1598	-	-	1143	-	-	957	842	1069	954	840	1064
Stage 1	-	-	-	-	-	-	991	873	-	999	879	-
Stage 2	-	-	-	-	-	-	1001	876	-	989	869	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1598	-	-	1143	-	-	940	836	1069	934	835	1064
Mov Cap-2 Maneuver	-	-	-	-	-	-	940	836	-	934	835	-
Stage 1	-	-	-	-	-	-	986	869	-	997	877	-
Stage 2	-	-	-	-	-	-	988	875	-	971	865	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.31	0.86	9.26	8.8
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	862	511	-	-	177	-	-	959
HCM Lane V/C Ratio	0.019	0.005	-	-	0.002	-	-	0.011
HCM Control Delay (s/veh)	9.3	7.3	0	-	8.2	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Appendix G-1

07 SIDEROAD 27 AT SECOND LINE – EXISTING TRAFFIC VOLUME METRICS

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Project #24-485 - 30 Forensic Engineering

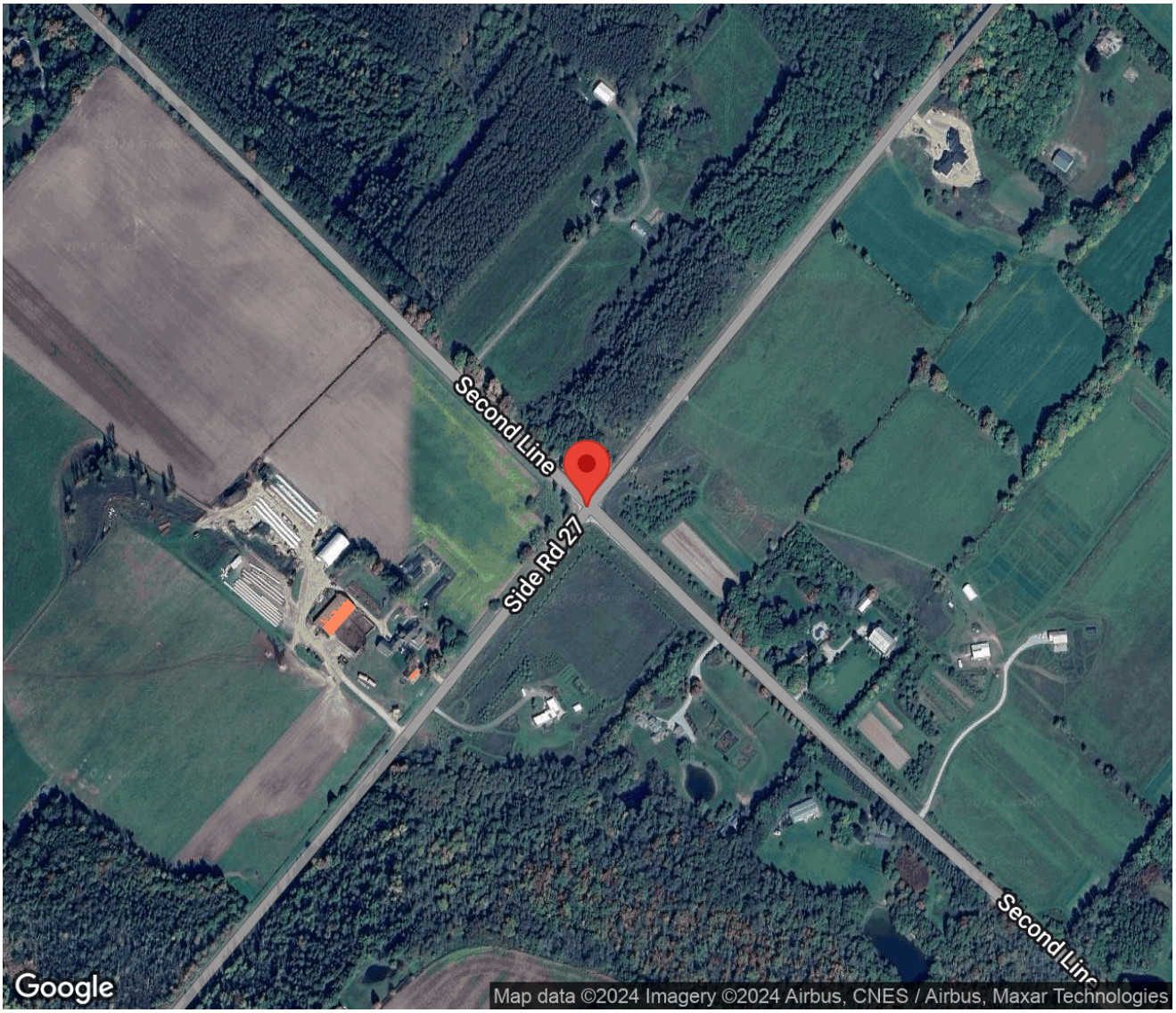
Intersection Count Report

Intersection:	Sideroad 27 & Second Line
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500007
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Sideroad 27 & Second Line
Site Code:	2448500007
Municipality:	Erin
Count Date:	Nov 19, 2024



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Traffic Count Summary

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

Second Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	0	18	3	0	21	0	2	8	2	0	12	0	33
08:00 - 09:00	0	8	1	0	9	0	3	6	1	0	10	0	19
09:00 - 10:00	1	8	2	0	11	0	2	9	6	0	17	0	28
BREAK													
11:00 - 12:00	0	11	0	0	11	0	1	2	0	0	3	0	14
12:00 - 13:00	0	10	1	0	11	0	3	4	0	0	7	0	18
BREAK													
15:00 - 16:00	2	9	1	0	12	0	7	9	9	0	25	0	37
16:00 - 17:00	0	17	2	0	19	0	4	7	10	0	21	0	40
17:00 - 18:00	1	8	1	0	10	0	2	4	4	0	10	0	20
GRAND TOTAL	**4**	**89**	**11**	**0**	**104**	**0**	**24**	**49**	**32**	**0**	**105**	**0**	**209**

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Traffic Count Summary

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

Sideroad 27 - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	6	5	0	0	11	0	1	4	4	0	9	0	20
08:00 - 09:00	3	1	1	0	5	0	1	1	3	0	5	0	10
09:00 - 10:00	0	3	1	0	4	0	2	0	1	0	3	0	7
BREAK													
11:00 - 12:00	2	4	0	0	6	0	1	5	1	0	7	0	13
12:00 - 13:00	3	2	0	0	5	0	2	0	5	0	7	0	12
BREAK													
15:00 - 16:00	0	1	1	0	2	0	1	5	5	0	11	0	13
16:00 - 17:00	2	10	0	0	12	0	2	3	4	0	9	0	21
17:00 - 18:00	4	5	0	0	9	0	1	2	2	0	5	0	14
GRAND TOTAL	**20**	**31**	**3**	**0**	**54**	**0**	**11**	**20**	**25**	**0**	**56**	**0**	**110**

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Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
07:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
07:30	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0
07:45	0	5	0	0	5	0	1	1	0	2	0	0	0	0	0	0
08:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
08:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
08:45	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	5	1	0	6	0	0	1	0	1	0	0	0	0	0	0
09:30	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0
09:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	32	3	0	35	1	2	3	0	6	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
11:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0
12:30	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	0
12:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	19	1	0	20	0	2	0	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	1	1	0	2	0	1	0	0	1	0	0	0	0	0	0
15:15	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
15:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
15:45	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
16:00	0	5	1	0	6	0	0	0	0	0	0	0	0	0	0	0
16:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
16:30	0	8	0	0	8	0	2	1	0	3	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
17:15	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	3	31	3	0	37	0	3	1	0	4	0	0	0	0	0	0
GRAND TOTAL	3	82	7	0	92	1	7	4	0	12	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:30	0	2	2	0	4	1	0	0	0	1	0	0	0	0	0	0
07:45	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0
08:00	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0
08:15	1	1	1	0	3	0	1	0	0	1	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
09:00	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0
09:15	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0
09:30	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	0
09:45	0	1	4	0	5	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	6	21	9	0	36	1	2	0	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:15	1	2	0	0	3	0	2	0	0	2	0	0	0	0	0	0
12:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	4	4	0	0	8	0	2	0	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
15:15	3	4	1	0	8	0	0	0	0	0	0	0	0	0	0	0
15:30	2	1	5	0	8	0	0	0	0	0	0	0	0	0	0	0
15:45	2	3	2	0	7	0	0	0	0	0	0	0	0	0	0	0
16:00	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
16:15	0	3	3	0	6	1	0	0	0	1	0	0	0	0	0	0
16:30	0	1	4	0	5	0	0	0	0	0	0	0	0	0	0	0
16:45	3	1	2	0	6	0	0	0	0	0	0	0	0	0	0	0
17:00	1	3	2	0	6	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	12	20	23	0	55	1	0	0	0	1	0	0	0	0	0	0
GRAND TOTAL	22	45	32	0	99	2	4	0	0	6	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
07:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
07:30	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0
07:45	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	2	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
09:00	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	8	9	1	0	18	1	0	1	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
11:30	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	0
11:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:00	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:30	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	5	5	0	0	10	0	1	0	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	0
16:15	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0
16:30	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
16:45	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
17:00	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0
17:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
17:30	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	6	13	1	0	20	0	3	0	0	3	0	0	0	0	0	0
GRAND TOTAL	19	27	2	0	48	1	4	1	0	6	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
07:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	1	0	2	0	3	0	1	1	0	2	0	0	0	0	0	0
08:00	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0
08:15	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
09:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	4	3	7	0	14	0	2	1	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0
11:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:30	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
12:30	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
12:45	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	3	4	6	0	13	0	1	0	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 27

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	1	1	4	0	6	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
15:45	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
16:00	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
16:30	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	3	10	11	0	24	1	0	0	0	1	0	0	0	0	0	0
GRAND TOTAL	10	17	24	0	51	1	3	1	0	5	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

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

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Second Line runs N/S

North Approach

	Out	In	Total
Cars	19	9	28
Trucks	2	0	2
Bicycles	0	0	0
	21	**9**	**30**

Second Line

Bicycles	0	0	0	0
Trucks	1	1	0	0
Cars	2	17	0	0
Totals	**3**	**18**	**0**	**0**

East Approach

	Out	In	Total
Cars	10	5	15
Trucks	1	1	2
Bicycles	0	0	0
	11	**6**	**17**

Sideroad 27

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	U-turn
0	0	1	**1**	Left
0	1	3	**4**	Right
0	1	3	**4**	Through

Peds: 0



Peds: 0

Peds: 0

Sideroad 27

Totals	Cars	Trucks	Bicycles	
0	0	0	0	U-turn
0	0	0	0	Left
5	5	0	0	Through
6	5	1	0	Right

West Approach

	Out	In	Total
Cars	7	8	15
Trucks	2	2	4
Bicycles	0	0	0
	9	**10**	**19**

Second Line

Totals	**2**	**8**	**2**	**0**
Cars	1	8	2	0
Trucks	1	0	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	11	25	36
Trucks	1	3	4
Bicycles	0	0	0
	12	**28**	**40**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

Peak Hour Data (07:00 - 08:00)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Sideroad 27						West Approach Sideroad 27						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:00	0	8	0	0	0	8	0	0	0	0	0	0	0	3	0	0	0	3	0	1	1	0	0	2	13
07:15	0	2	0	0	0	2	1	0	0	0	0	1	1	1	0	0	0	2	0	2	0	0	0	2	7
07:30	0	2	2	0	0	4	1	2	2	0	0	5	2	1	0	0	0	3	0	0	0	0	0	0	12
07:45	0	6	1	0	0	7	0	6	0	0	0	6	3	0	0	0	0	3	1	1	3	0	0	5	21
Grand Total	**0**	**18**	**3**	**0**	**0**	**21**	**2**	**8**	**2**	**0**	**0**	**12**	**6**	**5**	**0**	**0**	**0**	**11**	**1**	**4**	**4**	**0**	**0**	**9**	**53**
Approach %	0	85.7	14.3	0		-	16.7	66.7	16.7	0		-	54.5	45.5	0	0		-	11.1	44.4	44.4	0		-	
Totals %	0	34	5.7	0		39.6	3.8	15.1	3.8	0		22.6	11.3	9.4	0	0		20.8	1.9	7.5	7.5	0		17	
PHF	**0**	**0.56**	**0.38**	**0**		**0.66**	**0.5**	**0.33**	**0.25**	**0**		**0.5**	**0.5**	**0.42**	**0**	**0**		**0.92**	**0.25**	**0.5**	**0.33**	**0**		**0.45**	**0.63**
Cars	0	17	2	0		19	1	8	2	0		11	5	5	0	0		10	1	3	3	0		7	47
% Cars	0	94.4	66.7	0		90.5	50	100	100	0		91.7	83.3	100	0	0		90.9	100	75	75	0		77.8	88.7
Trucks	0	1	1	0		2	1	0	0	0		1	1	0	0	0		1	0	1	1	0		2	6
% Trucks	0	5.6	33.3	0		9.5	50	0	0	0		8.3	16.7	0	0	0		9.1	0	25	25	0		22.2	11.3
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period		One Hour Peak	
From:	11:00:00	From:	12:00:00
To:	13:00:00	To:	13:00:00

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Second Line runs N/S

North Approach

	Out	In	Total
Cars	9	4	13
Trucks	2	2	4
Bicycles	0	0	0
	11	**6**	**17**

Second Line

Bicycles	0	0	0	0
Trucks	0	2	0	0
Cars	1	8	0	0
Totals	**1**	**10**	**0**	**0**

East Approach

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

Sideroad 27

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	0	2	**2**
0	0	0	**0**
0	0	5	**5**

Peds: 0

N
W E
S

Peds: 0

Peds: 0

Sideroad 27

Totals	Cars	Trucks	Bicycles
0	0	0	0
0	0	0	0
2	2	0	0
3	3	0	0

West Approach

	Out	In	Total
Cars	7	6	13
Trucks	0	0	0
Bicycles	0	0	0
	7	**6**	**13**

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

Second Line

South Approach

	Out	In	Total
Cars	5	16	21
Trucks	2	2	4
Bicycles	0	0	0
	7	**18**	**25**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (12:00 - 13:00)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Sideroad 27						West Approach Sideroad 27						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
12:00	0	3	0	0	0	3	1	0	0	0	0	1	2	0	0	0	0	2	0	0	1	0	0	1	7
12:15	0	1	1	0	0	2	1	4	0	0	0	5	0	1	0	0	0	1	0	0	1	0	0	1	9
12:30	0	5	0	0	0	5	1	0	0	0	0	1	1	1	0	0	0	2	1	0	1	0	0	2	10
12:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	3	4
Grand Total	**0**	**10**	**1**	**0**	**0**	**11**	**3**	**4**	**0**	**0**	**0**	**7**	**3**	**2**	**0**	**0**	**0**	**5**	**2**	**0**	**5**	**0**	**0**	**7**	**30**
Approach %	0	90.9	9.1	0		-	42.9	57.1	0	0		-	60	40	0	0		-	28.6	0	71.4	0		-	
Totals %	0	33.3	3.3	0		36.7	10	13.3	0	0		23.3	10	6.7	0	0		16.7	6.7	0	16.7	0		23.3	
PHF	**0**	**0.5**	**0.25**	**0**		**0.55**	**0.75**	**0.25**	**0**	**0**		**0.35**	**0.38**	**0.5**	**0**	**0**		**0.63**	**0.5**	**0**	**0.63**	**0**		**0.58**	**0.75**
Cars	0	8	1	0		9	3	2	0	0		5	3	2	0	0		5	2	0	5	0		7	26
% Cars	0	80	100	0		81.8	100	50	0	0		71.4	100	100	0	0		100	100	0	100	0		100	86.7
Trucks	0	2	0	0		2	0	2	0	0		2	0	0	0	0		0	0	0	0	0		0	4
% Trucks	0	20	0	0		18.2	0	50	0	0		28.6	0	0	0	0		0	0	0	0	0		0	13.3
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period		One Hour Peak	
From:	15:00:00	From:	15:45:00
To:	18:00:00	To:	16:45:00

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Second Line runs N/S

North Approach

	Out	In	Total
Cars	19	10	29
Trucks	3	1	4
Bicycles	0	0	0
	22	**11**	**33**

Second Line

Bicycles	0	0	0	0
Trucks	1	2	0	0
Cars	1	17	1	0
Totals	**2**	**19**	**1**	**0**

East Approach

	Out	In	Total
Cars	7	15	22
Trucks	2	0	2
Bicycles	0	0	0
	9	**15**	**24**

Peds: 0

Sideroad 27

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

Peds: 0



Peds: 0

Sideroad 27

Totals	Cars	Trucks	Bicycles
0	0	0	0
0	0	0	0
9	7	2	0
0	0	0	0

Peds: 0

West Approach

	Out	In	Total
Cars	9	10	19
Trucks	1	4	5
Bicycles	0	0	0
	10	**14**	**24**

Second Line

Totals	**3**	**9**	**10**	**0**
Cars	2	9	10	0
Trucks	1	0	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	21	21	42
Trucks	1	2	3
Bicycles	0	0	0
	22	**23**	**45**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 27 & Second Line
Site Code: 2448500007
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

Peak Hour Data (15:45 - 16:45)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Sideroad 27						West Approach Sideroad 27						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
15:45	1	2	0	0	0	3	2	3	2	0	0	7	0	0	0	0	0	0	0	1	1	0	0	2	12
16:00	0	5	1	0	0	6	0	2	1	0	0	3	0	4	0	0	0	4	0	1	2	0	0	3	16
16:15	0	2	0	0	0	2	1	3	3	0	0	7	0	2	0	0	0	2	2	0	0	0	0	2	13
16:30	0	10	1	0	0	11	0	1	4	0	0	5	0	3	0	0	0	3	0	2	1	0	0	3	22
Grand Total	**1**	**19**	**2**	**0**	**0**	**22**	**3**	**9**	**10**	**0**	**0**	**22**	**0**	**9**	**0**	**0**	**0**	**9**	**2**	**4**	**4**	**0**	**0**	**10**	**63**
Approach %	4.5	86.4	9.1	0		-	13.6	40.9	45.5	0		-	0	100	0	0		-	20	40	40	0		-	
Totals %	1.6	30.2	3.2	0		34.9	4.8	14.3	15.9	0		34.9	0	14.3	0	0		14.3	3.2	6.3	6.3	0		15.9	
PHF	**0.25**	**0.48**	**0.5**	**0**		**0.5**	**0.38**	**0.75**	**0.63**	**0**		**0.79**	**0**	**0.56**	**0**	**0**		**0.56**	**0.25**	**0.5**	**0.5**	**0**		**0.83**	**0.72**
Cars	1	17	1	0		19	2	9	10	0		21	0	7	0	0		7	1	4	4	0		9	56
% Cars	100	89.5	50	0		86.4	66.7	100	100	0		95.5	0	77.8	0	0		77.8	50	100	100	0		90	88.9
Trucks	0	2	1	0		3	1	0	0	0		1	0	2	0	0		2	1	0	0	0		1	7
% Trucks	0	10.5	50	0		13.6	33.3	0	0	0		4.5	0	22.2	0	0		22.2	50	0	0	0		10	11.1
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	4	4	6	5	0	2	8	2	0	18	3
Future Vol, veh/h	1	4	4	6	5	0	2	8	2	0	18	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	25	25	17	2	2	50	2	2	2	6	33
Mvmt Flow	1	4	4	7	5	0	2	9	2	0	20	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	9	0	0	37	27	7	29	29	5
Stage 1	-	-	-	-	-	-	9	9	-	18	18	-
Stage 2	-	-	-	-	-	-	28	18	-	11	11	-
Critical Hdwy	4.12	-	-	4.27	-	-	7.6	6.52	6.22	7.12	6.56	6.53
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.56	-
Follow-up Hdwy	2.218	-	-	2.353	-	-	3.95	4.018	3.318	3.518	4.054	3.597
Pot Cap-1 Maneuver	1616	-	-	1519	-	-	860	866	1076	980	856	994
Stage 1	-	-	-	-	-	-	901	888	-	1001	872	-
Stage 2	-	-	-	-	-	-	879	880	-	1010	879	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1616	-	-	1519	-	-	834	862	1076	963	851	994
Mov Cap-2 Maneuver	-	-	-	-	-	-	834	862	-	963	851	-
Stage 1	-	-	-	-	-	-	901	888	-	996	868	-
Stage 2	-	-	-	-	-	-	853	876	-	997	878	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.8	4.03	9.12	9.25
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	886	182	-	-	982	-	-	869
HCM Lane V/C Ratio	0.015	0.001	-	-	0.004	-	-	0.026
HCM Control Delay (s/veh)	9.1	7.2	0	-	7.4	0	-	9.3
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	4	4	0	9	0	3	9	10	1	19	2
Future Vol, veh/h	2	4	4	0	9	0	3	9	10	1	19	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	50	2	2	2	22	2	33	2	2	2	11	50
Mvmt Flow	2	4	4	0	10	0	3	10	11	1	21	2

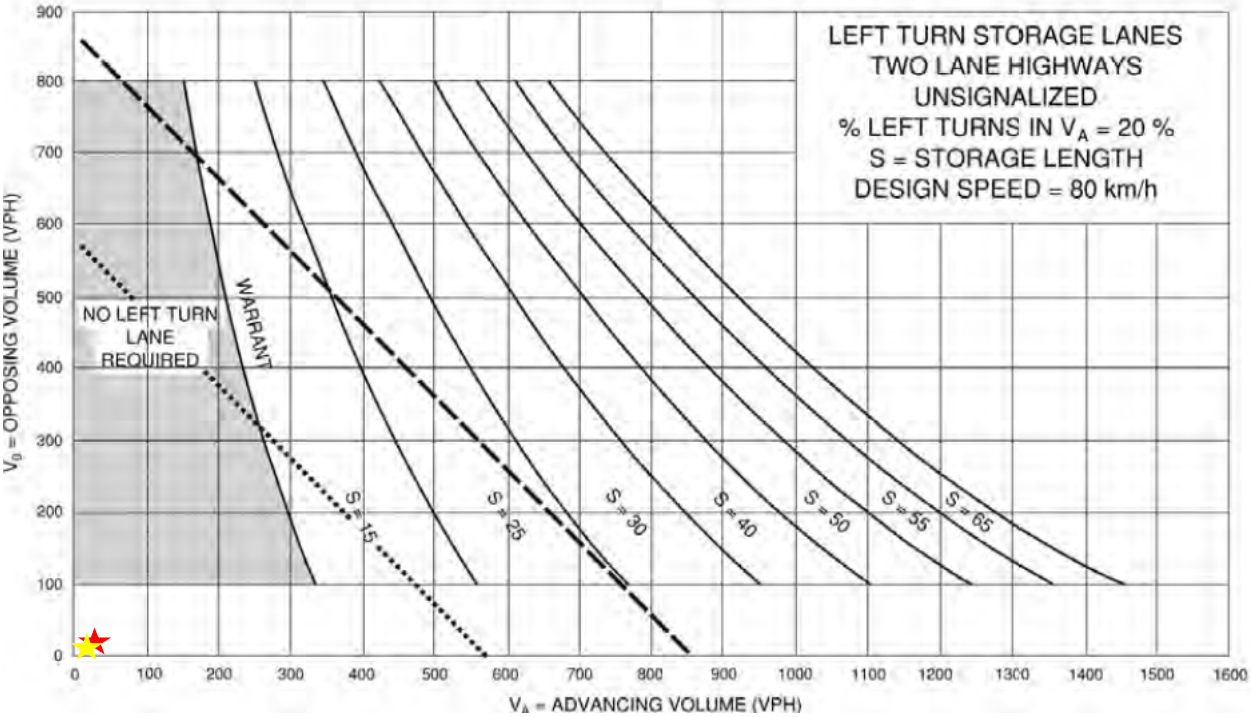
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	10	0	0	9	0	0	31	21	7	23	23	10
Stage 1	-	-	-	-	-	-	11	11	-	10	10	-
Stage 2	-	-	-	-	-	-	20	10	-	14	13	-
Critical Hdwy	4.6	-	-	4.12	-	-	7.43	6.52	6.22	7.12	6.61	6.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.52	-	6.12	5.61	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.52	-	6.12	5.61	-
Follow-up Hdwy	2.65	-	-	2.218	-	-	3.797	4.018	3.318	3.518	4.099	3.75
Pot Cap-1 Maneuver	1346	-	-	1611	-	-	904	873	1076	988	853	947
Stage 1	-	-	-	-	-	-	935	887	-	1011	870	-
Stage 2	-	-	-	-	-	-	924	887	-	1007	867	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1346	-	-	1611	-	-	879	872	1076	966	852	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	879	872	-	966	852	-
Stage 1	-	-	-	-	-	-	934	885	-	1011	870	-
Stage 2	-	-	-	-	-	-	900	887	-	984	866	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.54	0	8.87	9.28
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	955	327	-	-	1611	-	-	864
HCM Lane V/C Ratio	0.025	0.002	-	-	-	-	-	0.028
HCM Control Delay (s/veh)	8.9	7.7	0	-	0	-	-	9.3
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Sideroad 27 at Second Line – Eastbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

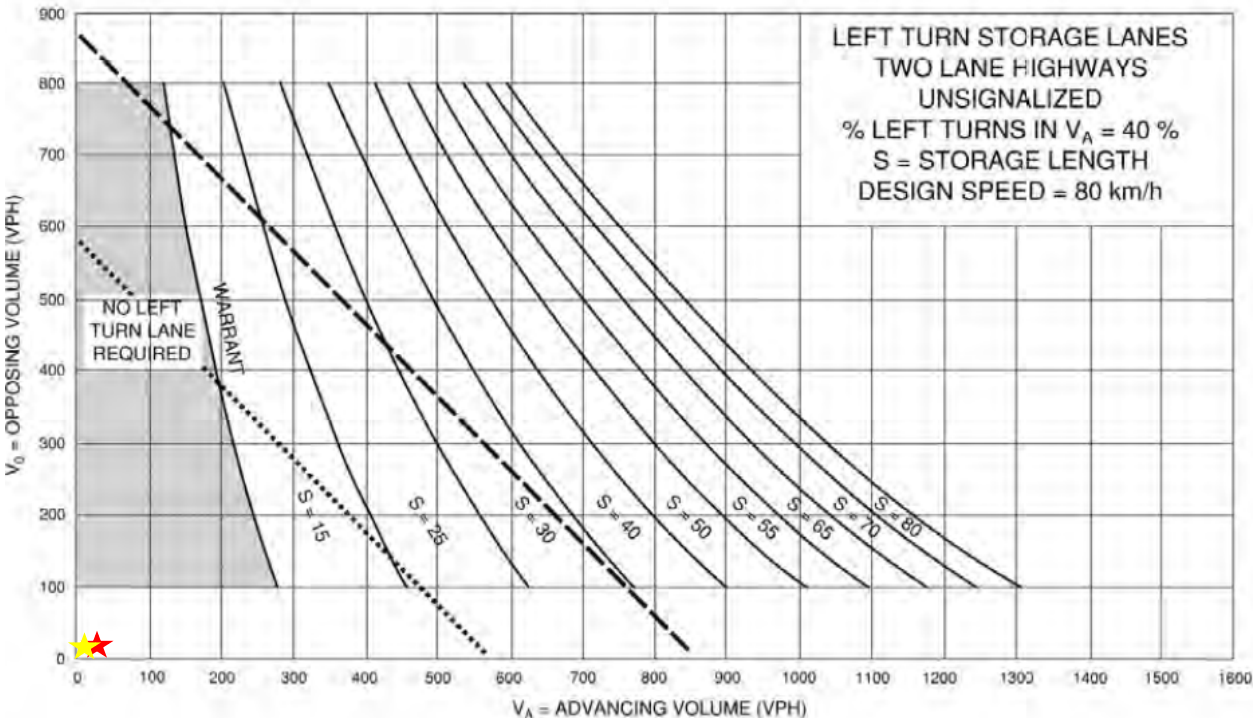
TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	9*	11*	1	11.1	0
PM	10*	9*	2	20.0	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Sideroad 27 at Second Line – Westbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

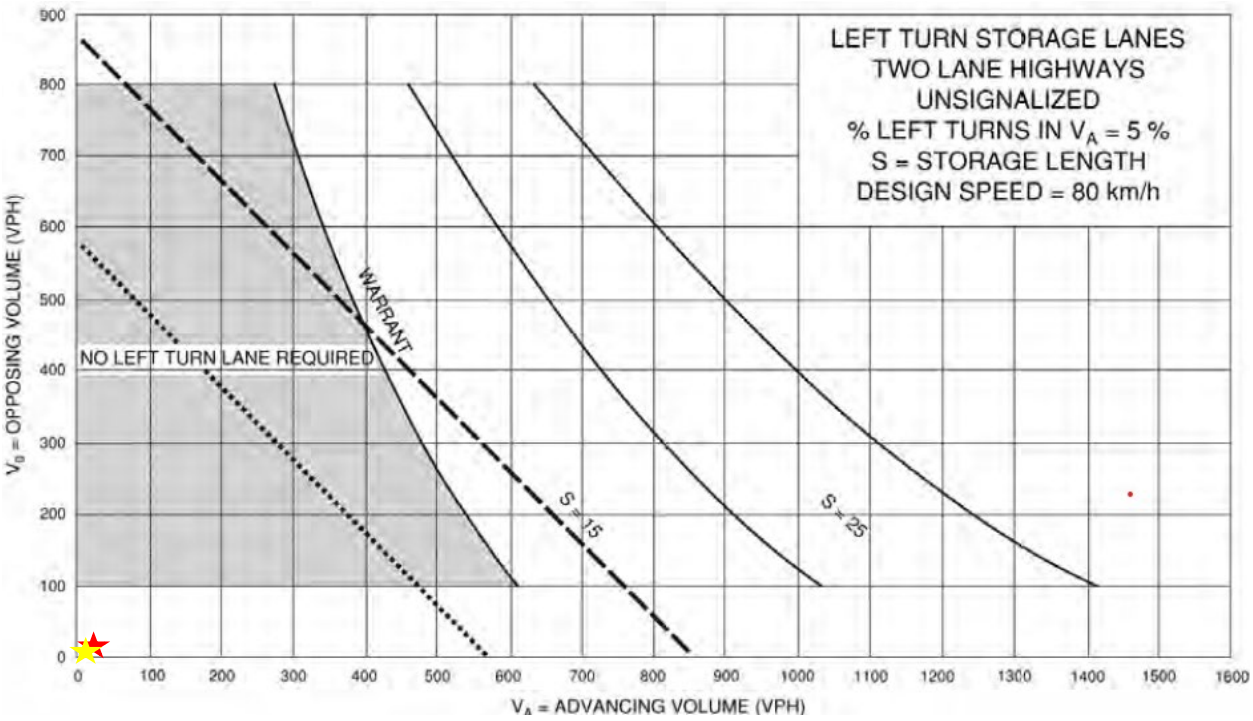
Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	11*	9*	6	54.6	0
PM	9*	10*	0	0.0*	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

*** traffic volumes do not meet minimum MTO requirement for warrant**

Sideroad 27 at Second Line – Southbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

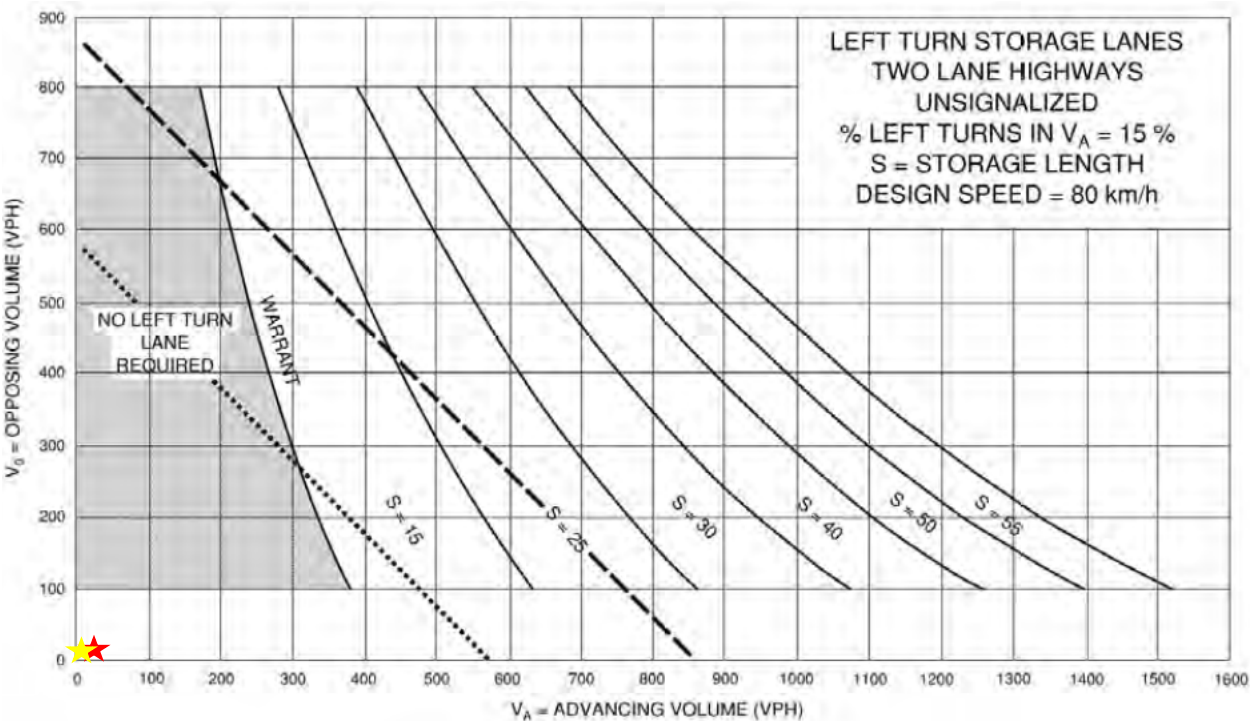
Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	21*	12*	0	0*	0
PM	22*	22*	1	4.5*	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

*** traffic volumes do not meet minimum MTO requirement for warrant**

Sideroad 27 at Second Line – Northbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	12*	21*	2	16.7	0
PM	22*	22*	3	13.6	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	4	4	6	5	0	2	8	2	0	18	3
Future Vol, veh/h	1	4	4	6	5	0	2	8	2	0	18	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	25	25	17	2	2	50	2	2	2	6	33
Mvmt Flow	1	4	4	7	5	0	2	9	2	0	20	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	37	36	21	36	37	10	23	0	0	11	0	0
Stage 1	21	21	-	14	14	-	-	-	-	-	-	-
Stage 2	16	15	-	22	23	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.75	6.45	7.27	6.52	6.22	4.6	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.75	-	6.27	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.75	-	6.27	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.225	3.525	3.653	4.018	3.318	2.65	-	-	2.218	-	-
Pot Cap-1 Maneuver	968	813	993	933	855	1072	1331	-	-	1608	-	-
Stage 1	997	834	-	968	884	-	-	-	-	-	-	-
Stage 2	1004	839	-	959	876	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	961	812	993	923	854	1072	1331	-	-	1608	-	-
Mov Cap-2 Maneuver	961	812	-	923	854	-	-	-	-	-	-	-
Stage 1	997	834	-	967	882	-	-	-	-	-	-	-
Stage 2	996	838	-	950	876	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.04	9.1	1.29	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	288	-	-	900	890	1608	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.013	-	-	-
HCM Control Delay (s/veh)	7.7	0	-	9	9.1	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	4	4	0	9	0	3	9	10	1	19	2
Future Vol, veh/h	2	4	4	0	9	0	3	9	10	1	19	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	50	2	2	2	22	2	33	2	2	2	11	50
Mvmt Flow	2	4	4	0	10	0	3	10	11	1	21	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	45	51	22	47	47	15	23	0	0	21	0	0
Stage 1	24	24	-	22	22	-	-	-	-	-	-	-
Stage 2	21	27	-	25	25	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.52	6.22	7.12	6.72	6.22	4.43	-	-	4.12	-	-
Critical Hdwy Stg 1	6.6	5.52	-	6.12	5.72	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.52	-	6.12	5.72	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.018	3.318	3.518	4.198	3.318	2.497	-	-	2.218	-	-
Pot Cap-1 Maneuver	849	840	1055	954	808	1064	1413	-	-	1595	-	-
Stage 1	884	875	-	997	839	-	-	-	-	-	-	-
Stage 2	887	873	-	993	836	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	836	838	1055	943	805	1064	1413	-	-	1595	-	-
Mov Cap-2 Maneuver	836	838	-	943	805	-	-	-	-	-	-	-
Stage 1	883	875	-	994	837	-	-	-	-	-	-	-
Stage 2	874	870	-	983	836	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.99	9.53	1.03	0.33
HCM LOS	A	A		

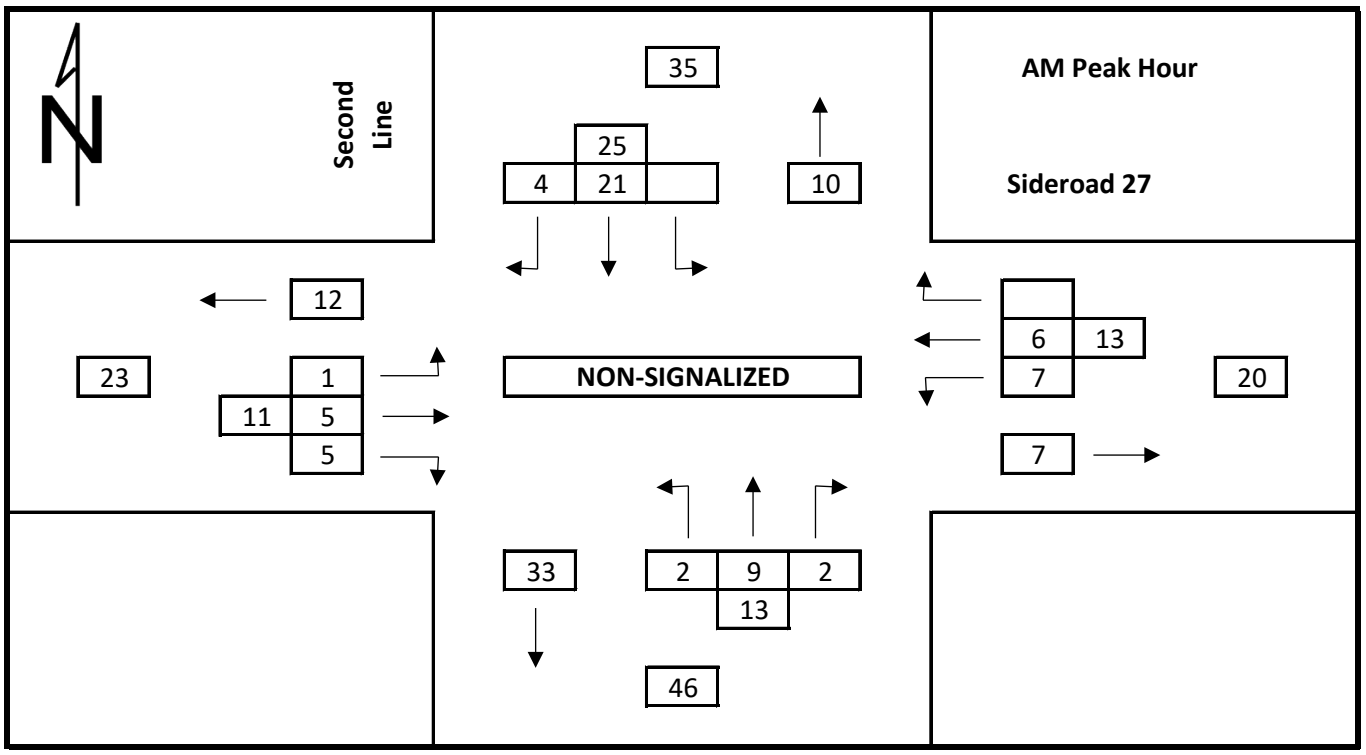
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	222	-	-	913	805	80	-	-
HCM Lane V/C Ratio	0.002	-	-	0.012	0.012	0.001	-	-
HCM Control Delay (s/veh)	7.6	0	-	9	9.5	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

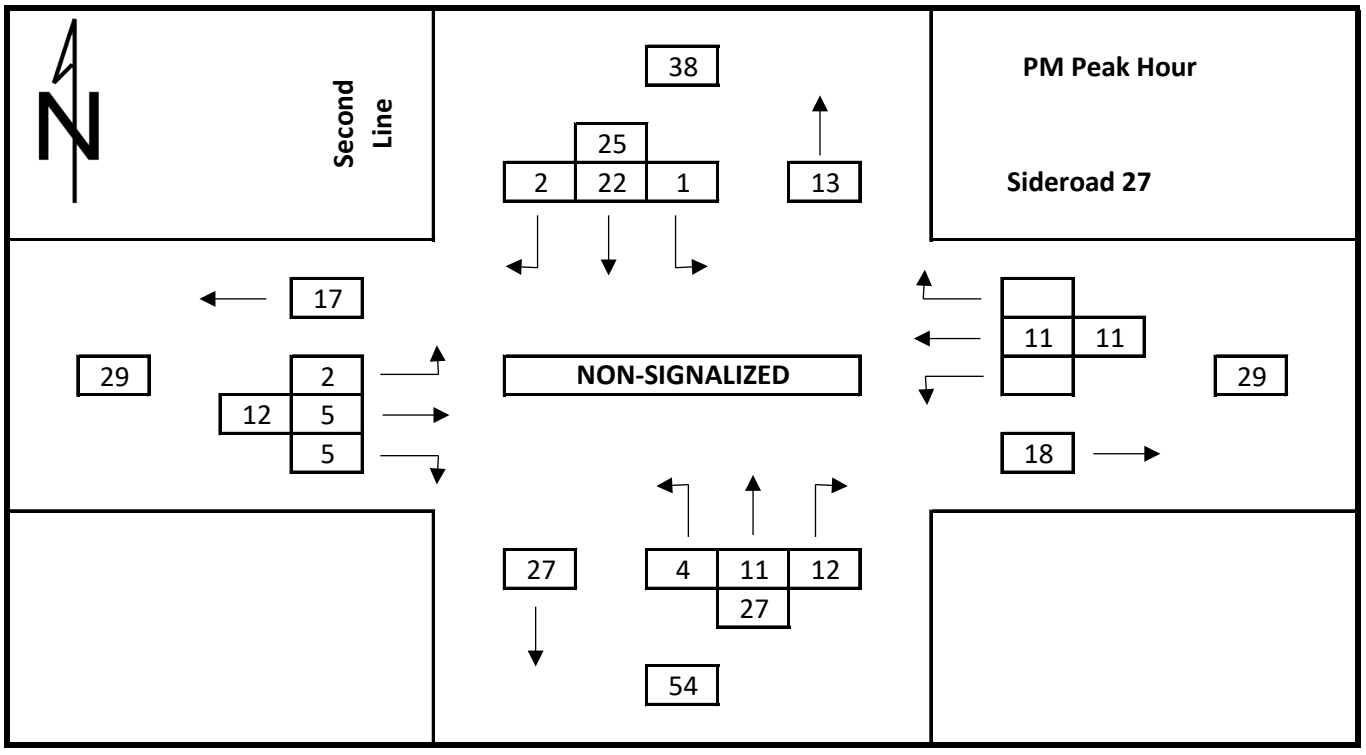
Appendix G-2

07 SIDEROAD 27 AT SECOND LINE – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

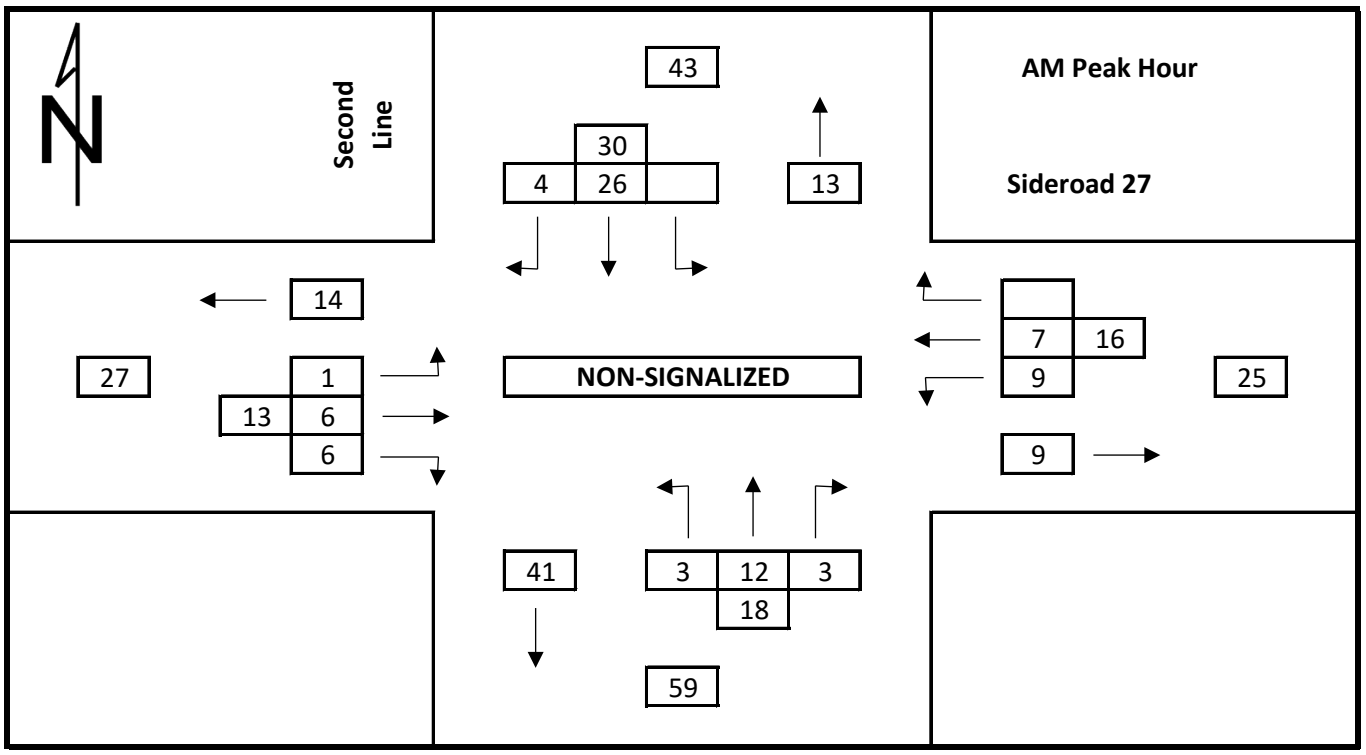
Sideroad 27 at Second Line

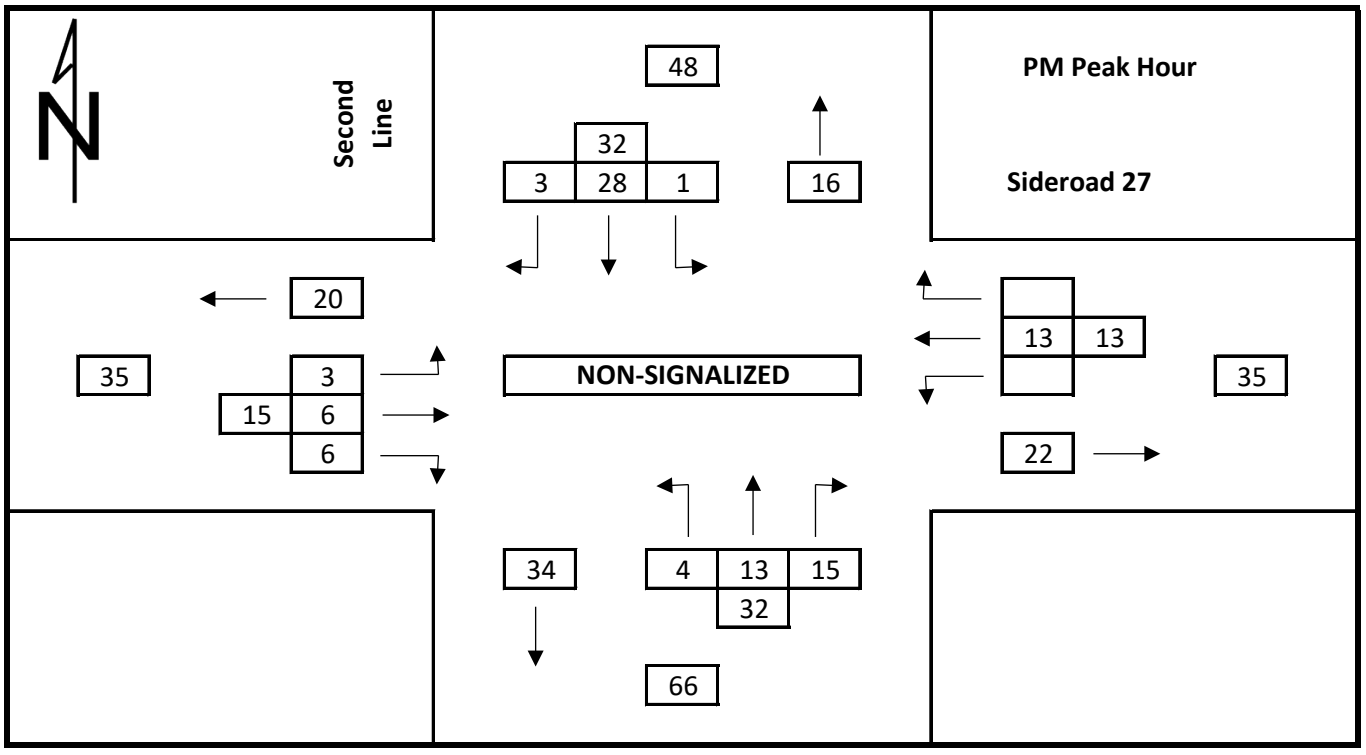




Background Traffic Year 2041

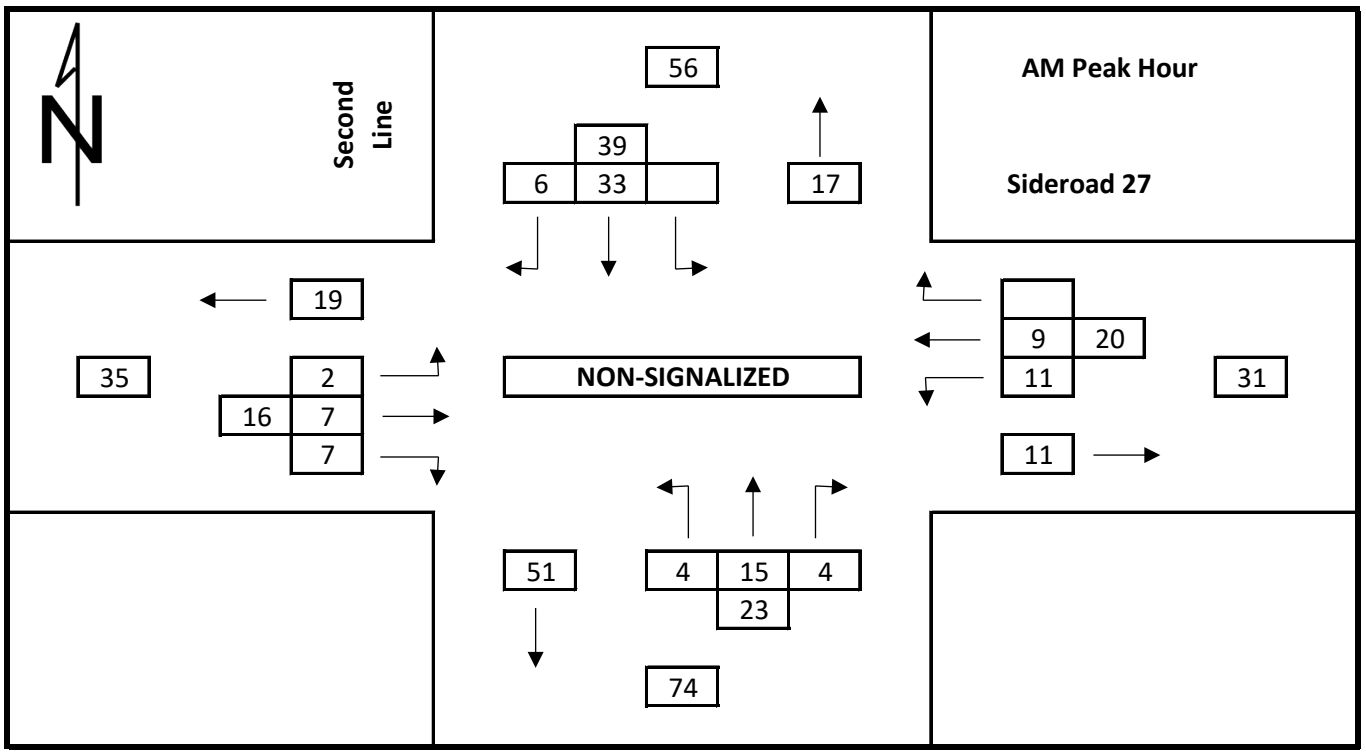
Sideroad 27 at Second Line

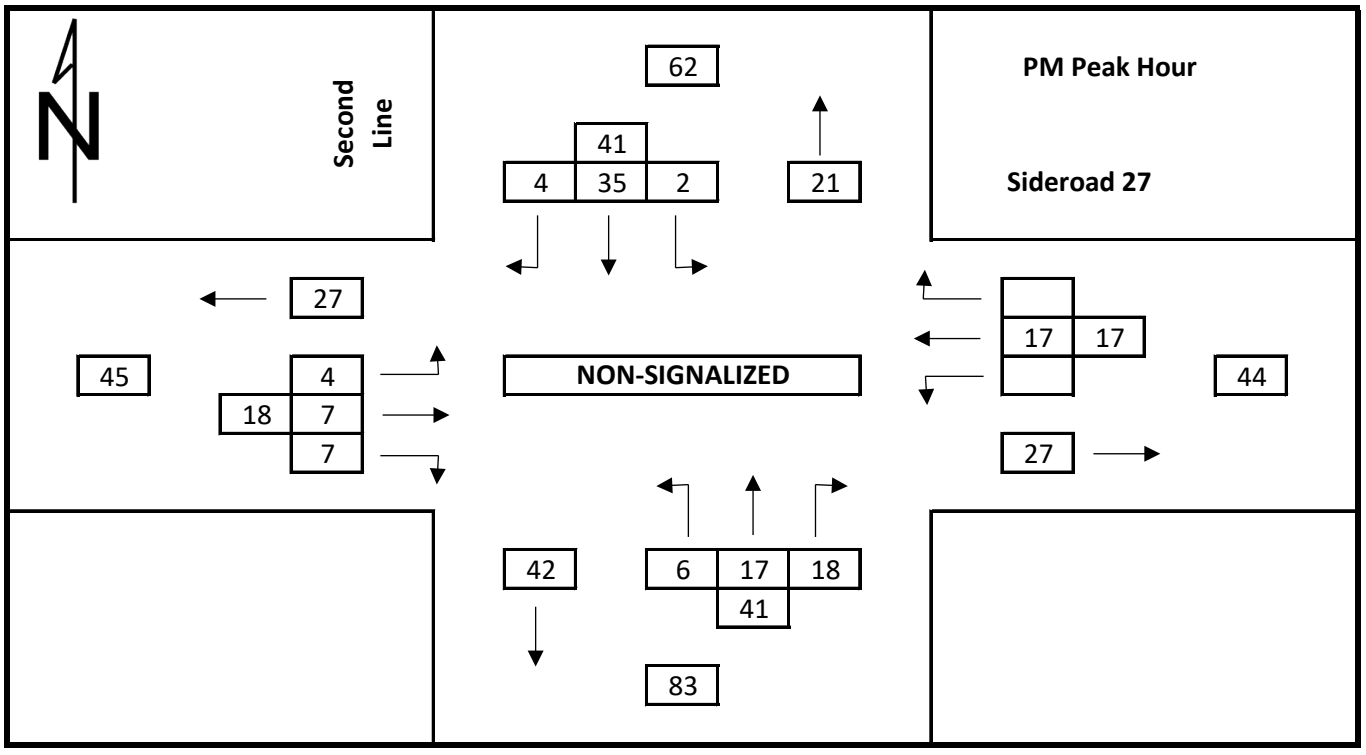




Background Traffic Year 2051

Sideroad 27 at Second Line





Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	5	5	7	6	0	2	9	2	0	21	4
Future Vol, veh/h	1	5	5	7	6	0	2	9	2	0	21	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	25	25	17	2	2	50	2	2	2	6	33
Mvmt Flow	1	5	5	8	7	0	2	10	2	0	23	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	42	41	25	41	42	11	27	0	0	12	0	0
Stage 1	25	25	-	15	15	-	-	-	-	-	-	-
Stage 2	17	16	-	26	27	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.75	6.45	7.27	6.52	6.22	4.6	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.75	-	6.27	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.75	-	6.27	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.225	3.525	3.653	4.018	3.318	2.65	-	-	2.218	-	-
Pot Cap-1 Maneuver	961	808	989	927	850	1070	1325	-	-	1607	-	-
Stage 1	993	831	-	967	883	-	-	-	-	-	-	-
Stage 2	1002	838	-	955	873	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	952	807	989	914	848	1070	1325	-	-	1607	-	-
Mov Cap-2 Maneuver	952	807	-	914	848	-	-	-	-	-	-	-
Stage 1	993	831	-	966	881	-	-	-	-	-	-	-
Stage 2	993	837	-	943	873	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.08	9.15	1.19	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	267	-	-	894	882	1607	-	-
HCM Lane V/C Ratio	0.002	-	-	0.013	0.016	-	-	-
HCM Control Delay (s/veh)	7.7	0	-	9.1	9.1	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	5	0	11	0	4	11	12	1	22	2
Future Vol, veh/h	2	5	5	0	11	0	4	11	12	1	22	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	50	2	2	2	22	2	33	2	2	2	11	50
Mvmt Flow	2	5	5	0	12	0	4	12	13	1	24	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	54	61	25	56	55	18	26	0	0	25	0	0
Stage 1	27	27	-	27	27	-	-	-	-	-	-	-
Stage 2	27	34	-	29	28	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.52	6.22	7.12	6.72	6.22	4.43	-	-	4.12	-	-
Critical Hdwy Stg 1	6.6	5.52	-	6.12	5.72	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.52	-	6.12	5.72	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.018	3.318	3.518	4.198	3.318	2.497	-	-	2.218	-	-
Pot Cap-1 Maneuver	838	830	1051	941	799	1060	1409	-	-	1589	-	-
Stage 1	880	873	-	990	834	-	-	-	-	-	-	-
Stage 2	881	867	-	988	833	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	822	827	1051	927	795	1060	1409	-	-	1589	-	-
Mov Cap-2 Maneuver	822	827	-	927	795	-	-	-	-	-	-	-
Stage 1	879	872	-	987	832	-	-	-	-	-	-	-
Stage 2	865	864	-	976	833	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.03	9.59	1.12	0.29
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	241	-	-	907	795	71	-	-
HCM Lane V/C Ratio	0.003	-	-	0.014	0.015	0.001	-	-
HCM Control Delay (s/veh)	7.6	0	-	9	9.6	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	6	6	9	7	0	3	12	3	0	26	4
Future Vol, veh/h	1	6	6	9	7	0	3	12	3	0	26	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	25	25	17	2	2	50	2	2	2	6	33
Mvmt Flow	1	7	7	10	8	0	3	13	3	0	28	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	54	53	30	53	54	15	33	0	0	16	0	0
Stage 1	30	30	-	21	21	-	-	-	-	-	-	-
Stage 2	23	23	-	32	33	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.75	6.45	7.27	6.52	6.22	4.6	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.75	-	6.27	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.75	-	6.27	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.225	3.525	3.653	4.018	3.318	2.65	-	-	2.218	-	-
Pot Cap-1 Maneuver	944	795	982	910	837	1065	1319	-	-	1601	-	-
Stage 1	986	826	-	960	878	-	-	-	-	-	-	-
Stage 2	995	833	-	948	868	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	933	793	982	894	835	1065	1319	-	-	1601	-	-
Mov Cap-2 Maneuver	933	793	-	894	835	-	-	-	-	-	-	-
Stage 1	986	826	-	958	875	-	-	-	-	-	-	-
Stage 2	984	831	-	934	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.15	9.23	1.29	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	288	-	-	882	867	1601	-	-
HCM Lane V/C Ratio	0.002	-	-	0.016	0.02	-	-	-
HCM Control Delay (s/veh)	7.7	0	-	9.1	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	6	6	0	13	0	4	13	15	1	28	3
Future Vol, veh/h	2	6	6	0	13	0	4	13	15	1	28	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	50	2	2	2	22	2	33	2	2	2	11	50
Mvmt Flow	2	7	7	0	14	0	4	14	16	1	30	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	64	73	32	67	67	22	34	0	0	30	0	0
Stage 1	34	34	-	31	31	-	-	-	-	-	-	-
Stage 2	30	39	-	36	36	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.52	6.22	7.12	6.72	6.22	4.43	-	-	4.12	-	-
Critical Hdwy Stg 1	6.6	5.52	-	6.12	5.72	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.52	-	6.12	5.72	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.018	3.318	3.518	4.198	3.318	2.497	-	-	2.218	-	-
Pot Cap-1 Maneuver	824	817	1042	926	787	1055	1399	-	-	1582	-	-
Stage 1	872	866	-	986	831	-	-	-	-	-	-	-
Stage 2	877	862	-	980	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	806	814	1042	910	784	1055	1399	-	-	1582	-	-
Mov Cap-2 Maneuver	806	814	-	910	784	-	-	-	-	-	-	-
Stage 1	872	866	-	982	829	-	-	-	-	-	-	-
Stage 2	859	860	-	966	827	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.08	9.68	0.95	0.23
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	203	-	-	897	784	55	-	-
HCM Lane V/C Ratio	0.003	-	-	0.017	0.018	0.001	-	-
HCM Control Delay (s/veh)	7.6	0	-	9.1	9.7	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	7	7	11	9	0	4	15	4	0	33	6
Future Vol, veh/h	2	7	7	11	9	0	4	15	4	0	33	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	25	25	17	2	2	50	2	2	2	6	33
Mvmt Flow	2	8	8	12	10	0	4	16	4	0	36	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	69	68	39	67	70	18	42	0	0	21	0	0
Stage 1	39	39	-	27	27	-	-	-	-	-	-	-
Stage 2	30	29	-	40	42	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.75	6.45	7.27	6.52	6.22	4.6	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.75	-	6.27	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.75	-	6.27	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.225	3.525	3.653	4.018	3.318	2.65	-	-	2.218	-	-
Pot Cap-1 Maneuver	923	780	970	891	821	1060	1307	-	-	1595	-	-
Stage 1	976	819	-	953	873	-	-	-	-	-	-	-
Stage 2	987	827	-	938	860	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	909	777	970	872	818	1060	1307	-	-	1595	-	-
Mov Cap-2 Maneuver	909	777	-	872	818	-	-	-	-	-	-	-
Stage 1	976	819	-	950	870	-	-	-	-	-	-	-
Stage 2	972	824	-	922	860	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.23	9.36	1.35	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	300	-	-	869	847	1595	-	-
HCM Lane V/C Ratio	0.003	-	-	0.02	0.026	-	-	-
HCM Control Delay (s/veh)	7.8	0	-	9.2	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	7	7	0	17	0	6	17	18	2	35	4
Future Vol, veh/h	4	7	7	0	17	0	6	17	18	2	35	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	50	2	2	2	22	2	33	2	2	2	11	50
Mvmt Flow	4	8	8	0	18	0	7	18	20	2	38	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	85	96	40	88	88	28	42	0	0	38	0	0
Stage 1	45	45	-	41	41	-	-	-	-	-	-	-
Stage 2	41	51	-	46	47	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.52	6.22	7.12	6.72	6.22	4.43	-	-	4.12	-	-
Critical Hdwy Stg 1	6.6	5.52	-	6.12	5.72	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.52	-	6.12	5.72	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.018	3.318	3.518	4.198	3.318	2.497	-	-	2.218	-	-
Pot Cap-1 Maneuver	797	794	1031	898	766	1047	1389	-	-	1572	-	-
Stage 1	861	858	-	973	823	-	-	-	-	-	-	-
Stage 2	865	852	-	968	818	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	773	789	1031	877	761	1047	1389	-	-	1572	-	-
Mov Cap-2 Maneuver	773	789	-	877	761	-	-	-	-	-	-	-
Stage 1	859	857	-	969	819	-	-	-	-	-	-	-
Stage 2	841	848	-	951	817	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.26	9.85	1.11	0.36
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	239	-	-	864	761	86	-	-
HCM Lane V/C Ratio	0.005	-	-	0.023	0.024	0.001	-	-
HCM Control Delay (s/veh)	7.6	0	-	9.3	9.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Appendix H-1

08 WELLINGTON ROAD 22 AT SECOND LINE – EXISTING TRAFFIC VOLUME METRICS

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Project #24-485 - 30 Forensic Engineering

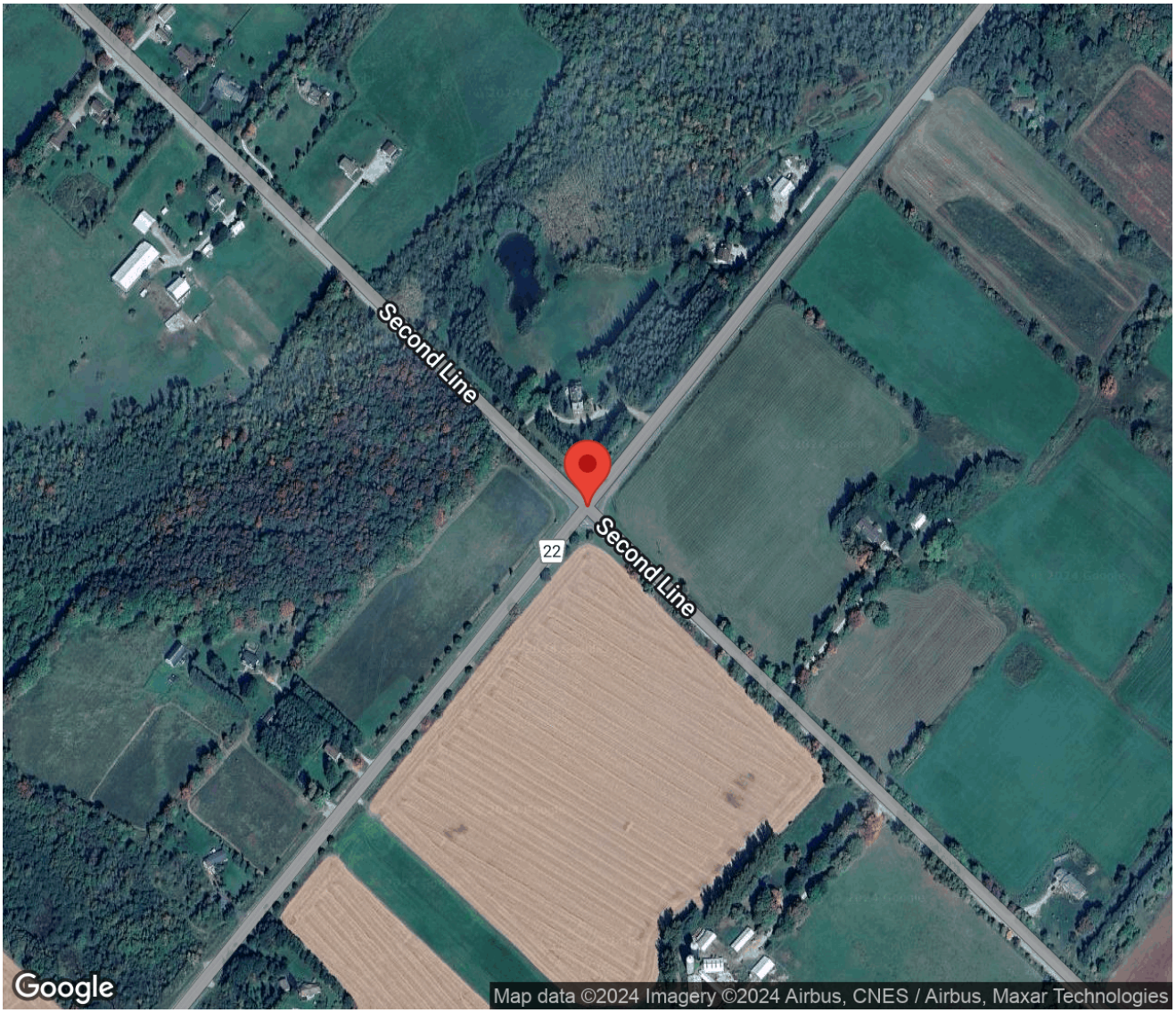
Intersection Count Report

Intersection:	Wellington Rd 22 & Second Line
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500008
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

Ontario Traffic Inc.
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Traffic Count Map

Intersection:	Wellington Rd 22 & Second Line
Site Code:	2448500008
Municipality:	Erin
Count Date:	Nov 19, 2024



Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

Second Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	9	15	6	0	30	0	5	8	15	0	28	0	58
08:00 - 09:00	5	9	1	0	15	0	7	5	9	0	21	0	36
09:00 - 10:00	4	4	2	0	10	0	3	11	6	0	20	0	30
BREAK													
11:00 - 12:00	4	9	3	0	16	0	4	5	10	0	19	0	35
12:00 - 13:00	4	17	1	0	22	0	6	5	12	0	23	0	45
BREAK													
15:00 - 16:00	6	7	4	0	17	0	25	16	23	0	64	0	81
16:00 - 17:00	3	14	8	0	25	0	10	18	43	0	71	0	96
17:00 - 18:00	8	9	3	0	20	0	7	9	34	0	50	0	70
GRAND TOTAL	**43**	**84**	**28**	**0**	**155**	**0**	**67**	**77**	**152**	**0**	**296**	**0**	**451**

Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

Wellington Rd 22 - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	39	98	2	0	139	0	4	88	9	0	101	0	240
08:00 - 09:00	22	67	3	0	92	0	4	93	10	0	107	0	199
09:00 - 10:00	18	65	4	0	87	0	1	66	6	0	73	0	160
BREAK													
11:00 - 12:00	11	49	0	0	60	0	1	41	3	0	45	0	105
12:00 - 13:00	10	56	4	0	70	0	2	35	5	0	42	0	112
BREAK													
15:00 - 16:00	18	113	9	0	140	0	3	72	8	0	83	0	223
16:00 - 17:00	14	121	2	0	137	0	4	116	10	0	130	0	267
17:00 - 18:00	11	104	5	0	120	0	4	92	9	0	105	0	225
GRAND TOTAL	**143**	**673**	**29**	**0**	**845**	**0**	**23**	**603**	**60**	**0**	**686**	**0**	**1531**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	3	5	1	0	9	0	0	0	0	0	0	0	0	0	0	0
07:15	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0
07:30	1	1	1	0	3	0	1	0	0	1	0	0	0	0	0	0
07:45	4	5	2	0	11	1	1	0	0	2	0	0	0	0	0	0
08:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
08:15	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0
08:30	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0
08:45	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0
09:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:15	3	3	0	0	6	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
09:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	16	26	9	0	51	2	2	0	0	4	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	2	4	2	0	8	0	0	0	0	0	0	0	0	0	0	0
11:15	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
11:30	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	1	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0
12:15	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	0
12:30	2	6	1	0	9	0	0	0	0	0	0	0	0	0	0	0
12:45	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	8	25	4	0	37	0	1	0	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	1	3	2	0	6	1	0	0	0	1	0	0	0	0	0	0
15:15	3	1	1	0	5	0	0	0	0	0	0	0	0	0	0	0
15:30	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
15:45	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
16:00	1	5	1	0	7	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:30	2	4	4	0	10	0	2	0	0	2	0	0	0	0	0	0
16:45	0	2	3	0	5	0	0	0	0	0	0	0	0	0	0	0
17:00	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0
17:15	4	3	0	0	7	0	0	0	0	0	0	0	0	0	0	0
17:30	3	3	0	0	6	0	0	0	0	0	0	0	0	0	0	0
17:45	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	16	28	15	0	59	1	2	0	0	3	0	0	0	0	0	0
GRAND TOTAL	**40**	**79**	**28**	**0**	**147**	**3**	**5**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	2	0	3	0	5	0	0	0	0	0	0	0	0	0	0	0
07:15	1	2	2	0	5	0	0	0	0	0	0	0	0	0	0	0
07:30	1	2	4	0	7	0	0	0	0	0	0	0	0	0	0	0
07:45	1	4	6	0	11	0	0	0	0	0	0	0	0	0	0	0
08:00	2	1	1	0	4	0	0	1	0	1	0	0	0	0	0	0
08:15	3	3	2	0	8	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0
08:45	0	1	2	0	3	1	0	0	0	1	0	0	0	0	0	0
09:00	2	2	2	0	6	0	0	0	0	0	0	0	0	0	0	0
09:15	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
09:30	1	5	1	0	7	0	0	0	0	0	0	0	0	0	0	0
09:45	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	13	24	29	0	66	2	0	1	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	1	2	2	0	5	0	0	0	0	0	0	0	0	0	0	0
11:15	1	1	3	0	5	0	0	0	0	0	0	0	0	0	0	0
11:30	2	0	4	0	6	0	0	1	0	1	0	0	0	0	0	0
11:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:00	1	1	4	0	6	0	0	0	0	0	0	0	0	0	0	0
12:15	1	1	6	0	8	0	0	0	0	0	0	0	0	0	0	0
12:30	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0
12:45	2	2	1	0	5	1	0	0	0	1	0	0	0	0	0	0
SUBTOTAL	9	10	21	0	40	1	0	1	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	5	2	5	0	12	0	0	0	0	0	0	0	0	0	0	0
15:15	4	5	3	0	12	0	0	0	0	0	0	0	0	0	0	0
15:30	9	4	6	0	19	0	0	1	0	1	0	0	0	0	0	0
15:45	5	5	7	0	17	2	0	1	0	3	0	0	0	0	0	0
16:00	3	3	10	0	16	0	0	0	0	0	0	0	0	0	0	0
16:15	2	5	13	0	20	0	0	0	0	0	0	0	0	0	0	0
16:30	2	5	9	0	16	0	0	0	0	0	0	0	0	0	0	0
16:45	3	5	11	0	19	0	0	0	0	0	0	0	0	0	0	0
17:00	0	3	13	0	16	0	0	0	0	0	0	0	0	0	0	0
17:15	2	3	8	0	13	0	0	0	0	0	0	0	0	0	0	0
17:30	1	2	4	0	7	0	0	0	0	0	0	0	0	0	0	0
17:45	4	1	9	0	14	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	40	43	98	0	181	2	0	2	0	4	0	0	0	0	0	0
GRAND TOTAL	**62**	**77**	**148**	**0**	**287**	**5**	**0**	**4**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	7	18	0	0	25	1	0	0	0	1	0	0	0	0	0	0
07:15	10	27	0	0	37	0	1	0	0	1	0	0	0	0	0	0
07:30	12	15	1	0	28	0	1	0	0	1	0	0	0	0	0	0
07:45	8	36	1	0	45	1	0	0	0	1	0	0	0	0	0	0
08:00	10	16	1	0	27	0	0	0	0	0	0	0	0	0	0	0
08:15	7	18	0	0	25	0	1	1	0	2	0	0	0	0	0	0
08:30	2	17	1	0	20	0	1	0	0	1	0	0	0	0	0	0
08:45	2	12	0	0	14	1	2	0	0	3	0	0	0	0	0	0
09:00	4	14	2	0	20	0	2	0	0	2	0	0	0	0	0	0
09:15	5	22	1	0	28	0	2	0	0	2	0	0	0	0	0	0
09:30	6	13	1	0	20	0	0	0	0	0	0	0	0	0	0	0
09:45	3	12	0	0	15	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	76	220	8	0	304	3	10	1	0	14	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	3	9	0	0	12	0	1	0	0	1	0	0	0	0	0	0
11:15	3	12	0	0	15	0	1	0	0	1	0	0	0	0	0	0
11:30	2	10	0	0	12	0	1	0	0	1	0	0	0	0	0	0
11:45	3	14	0	0	17	0	1	0	0	1	0	0	0	0	0	0
12:00	5	14	0	0	19	1	0	0	0	1	0	0	0	0	0	0
12:15	1	10	3	0	14	0	3	1	0	4	0	0	0	0	0	0
12:30	0	12	0	0	12	0	1	0	0	1	0	0	0	0	0	0
12:45	3	15	0	0	18	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	20	96	3	0	119	1	9	1	0	11	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	4	16	1	0	21	0	2	0	0	2	0	0	0	0	0	0
15:15	7	30	1	0	38	0	1	0	0	1	0	0	0	0	0	0
15:30	2	26	4	0	32	2	0	0	0	2	0	0	0	0	0	0
15:45	3	35	3	0	41	0	3	0	0	3	0	0	0	0	0	0
16:00	3	36	0	0	39	0	0	1	0	1	0	0	0	0	0	0
16:15	5	28	0	0	33	0	1	0	0	1	0	0	0	0	0	0
16:30	4	22	1	0	27	0	0	0	0	0	0	0	0	0	0	0
16:45	2	33	0	0	35	0	1	0	0	1	0	0	0	0	0	0
17:00	2	33	1	0	36	1	1	0	0	2	0	0	0	0	0	0
17:15	5	26	1	0	32	0	0	0	0	0	0	0	0	0	0	0
17:30	3	20	1	0	24	0	1	0	0	1	0	0	0	0	0	0
17:45	0	23	2	0	25	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	40	328	15	0	383	3	10	1	0	14	0	0	0	0	0	0
GRAND TOTAL	136	644	26	0	806	7	29	3	0	39	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	0	20	3	0	23	0	1	0	0	1	0	0	0	0	0	0
07:15	0	27	1	0	28	0	0	0	0	0	0	0	0	0	0	0
07:30	2	13	1	0	16	0	0	0	0	0	0	0	0	0	0	0
07:45	2	25	4	0	31	0	2	0	0	2	0	0	0	0	0	0
08:00	0	30	3	0	33	0	0	1	0	1	0	0	0	0	0	0
08:15	1	25	1	0	27	1	2	1	0	4	0	0	0	0	0	0
08:30	1	17	1	0	19	0	1	0	0	1	0	0	0	0	0	0
08:45	1	18	3	0	22	0	0	0	0	0	0	0	0	0	0	0
09:00	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0
09:15	0	16	1	0	17	0	1	1	0	2	0	0	0	0	0	0
09:30	1	12	0	0	13	0	2	0	0	2	0	0	0	0	0	0
09:45	0	11	4	0	15	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	8	238	22	0	268	1	9	3	0	13	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	12	1	0	13	0	0	0	0	0	0	0	0	0	0	0
11:15	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0
11:30	0	14	1	0	15	0	0	0	0	0	0	0	0	0	0	0
11:45	0	12	1	0	13	0	0	0	0	0	0	0	0	0	0	0
12:00	0	8	1	0	9	0	0	0	0	0	0	0	0	0	0	0
12:15	0	10	1	0	11	1	1	0	0	2	0	0	0	0	0	0
12:30	1	8	0	0	9	0	1	0	0	1	0	0	0	0	0	0
12:45	0	6	3	0	9	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	2	73	8	0	83	1	3	0	0	4	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Wellington Rd 22

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	1	19	2	0	22	0	1	0	0	1	0	0	0	0	0	0
15:15	0	15	3	0	18	0	2	0	0	2	0	0	0	0	0	0
15:30	1	15	1	0	17	0	0	0	0	0	0	0	0	0	0	0
15:45	1	19	1	0	21	0	1	1	0	2	0	0	0	0	0	0
16:00	0	24	4	0	28	0	3	2	0	5	0	0	0	0	0	0
16:15	1	14	2	0	17	0	0	0	0	0	0	0	0	0	0	0
16:30	2	39	1	0	42	0	1	0	0	1	0	0	0	0	0	0
16:45	1	33	1	0	35	0	2	0	0	2	0	0	0	0	0	0
17:00	1	24	5	0	30	0	2	0	0	2	0	0	0	0	0	0
17:15	3	19	1	0	23	0	2	0	0	2	0	0	0	0	0	0
17:30	0	21	3	0	24	0	0	0	0	0	0	0	0	0	0	0
17:45	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	11	266	24	0	301	0	14	3	0	17	0	0	0	0	0	0
GRAND TOTAL	**21**	**577**	**54**	**0**	**652**	**2**	**26**	**6**	**0**	**34**	**0**	**0**	**0**	**0**	**0**	**0**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	07:00:00	From:	07:15:00
To:	10:00:00	To:	08:15:00

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Wellington Rd 22 runs E/W

North Approach

	Out	In	Total
Cars	21	16	37
Trucks	3	0	3
Bicycles	0	0	0
	24	**16**	**40**

Second Line

Bicycles	0	0	0	0
Trucks	0	2	1	0
Cars	5	11	5	0
Totals	**5**	**13**	**6**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	137	113	250
Trucks	3	4	7
Bicycles	0	0	0
	140	**117**	**257**

Wellington Rd 22

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	4	**4**	
0	2	95	**97**	
0	1	9	**10**	

Peds: 0



Peds: 0

Peds: 0

Wellington Rd 22

Totals	Cars	Trucks	Bicycles
0	0	0	0
3	3	0	0
96	94	2	0
41	40	1	0

West Approach

	Out	In	Total
Cars	108	104	212
Trucks	3	2	5
Bicycles	0	0	0
	111	**106**	**217**

Totals	**5**	**9**	**14**	**0**
Cars	5	9	13	0
Trucks	0	0	1	0
Bicycles	0	0	0	0

Second Line

South Approach

	Out	In	Total
Cars	27	60	87
Trucks	1	4	5
Bicycles	0	0	0
	28	**64**	**92**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

Peak Hour Data (07:15 - 08:15)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Wellington Rd 22						West Approach Wellington Rd 22						Total Vehicles
	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	
07:15	0	2	2	0	0	4	1	2	2	0	0	5	10	28	0	0	0	38	0	27	1	0	0	28	75
07:30	1	2	1	0	0	4	1	2	4	0	0	7	12	16	1	0	0	29	2	13	1	0	0	16	56
07:45	5	6	2	0	0	13	1	4	6	0	0	11	9	36	1	0	0	46	2	27	4	0	0	33	103
08:00	0	3	0	0	0	3	2	1	2	0	0	5	10	16	1	0	0	27	0	30	4	0	0	34	69
Grand Total	**6**	**13**	**5**	**0**	**0**	**24**	**5**	**9**	**14**	**0**	**0**	**28**	**41**	**96**	**3**	**0**	**0**	**140**	**4**	**97**	**10**	**0**	**0**	**111**	**303**
Approach %	25	54.2	20.8	0		-	17.9	32.1	50	0		-	29.3	68.6	2.1	0		-	3.6	87.4	9	0		-	
Totals %	2	4.3	1.7	0		7.9	1.7	3	4.6	0		9.2	13.5	31.7	1	0		46.2	1.3	32	3.3	0		36.6	
PHF	**0.3**	**0.54**	**0.63**	**0**		**0.46**	**0.63**	**0.56**	**0.58**	**0**		**0.64**	**0.85**	**0.67**	**0.75**	**0**		**0.76**	**0.5**	**0.81**	**0.63**	**0**		**0.82**	**0.74**
Cars	5	11	5	0		21	5	9	13	0		27	40	94	3	0		137	4	95	9	0		108	293
% Cars	83.3	84.6	100	0		87.5	100	100	92.9	0		96.4	97.6	97.9	100	0		97.9	100	97.9	90	0		97.3	96.7
Trucks	1	2	0	0		3	0	0	1	0		1	1	2	0	0		3	0	2	1	0		3	10
% Trucks	16.7	15.4	0	0		12.5	0	0	7.1	0		3.6	2.4	2.1	0	0		2.1	0	2.1	10	0		2.7	3.3
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period		One Hour Peak	
From:	11:00:00	From:	12:00:00
To:	13:00:00	To:	13:00:00

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Wellington Rd 22 runs E/W

North Approach

	Out	In	Total
Cars	21	9	30
Trucks	1	2	3
Bicycles	0	0	0
	22	**11**	**33**

Second Line

Bicycles	0	0	0	0
Trucks	0	1	0	0
Cars	1	16	4	0
Totals	**1**	**17**	**4**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	63	48	111
Trucks	7	3	10
Bicycles	0	0	0
	70	**51**	**121**

Wellington Rd 22

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	1	1	**2**	
0	3	32	**35**	
0	0	5	**5**	

Peds: 0



Peds: 0

Wellington Rd 22

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	4	3	1	0
	56	51	5	0
	10	9	1	0

Peds: 0

West Approach

	Out	In	Total
Cars	38	57	95
Trucks	4	6	10
Bicycles	0	0	0
	42	**63**	**105**

Second Line

Totals	**6**	**5**	**12**	**0**
Cars	5	5	12	0
Trucks	1	0	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	22	30	52
Trucks	1	2	3
Bicycles	0	0	0
	23	**32**	**55**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (12:00 - 13:00)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Wellington Rd 22						West Approach Wellington Rd 22						Total Vehicles
	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	
12:00	1	5	0	0	0	6	1	1	4	0	0	6	6	14	0	0	0	20	0	8	1	0	0	9	41
12:15	1	2	0	0	0	3	1	1	6	0	0	8	1	13	4	0	0	18	1	11	1	0	0	13	42
12:30	2	6	1	0	0	9	1	1	1	0	0	3	0	13	0	0	0	13	1	9	0	0	0	10	35
12:45	0	4	0	0	0	4	3	2	1	0	0	6	3	16	0	0	0	19	0	7	3	0	0	10	39
Grand Total	**4**	**17**	**1**	**0**	**0**	**22**	**6**	**5**	**12**	**0**	**0**	**23**	**10**	**56**	**4**	**0**	**0**	**70**	**2**	**35**	**5**	**0**	**0**	**42**	**157**
Approach %	18.2	77.3	4.5	0		-	26.1	21.7	52.2	0		-	14.3	80	5.7	0		-	4.8	83.3	11.9	0		-	
Totals %	2.5	10.8	0.6	0		14	3.8	3.2	7.6	0		14.6	6.4	35.7	2.5	0		44.6	1.3	22.3	3.2	0		26.8	
PHF	**0.5**	**0.71**	**0.25**	**0**		**0.61**	**0.5**	**0.63**	**0.5**	**0**		**0.72**	**0.42**	**0.88**	**0.25**	**0**		**0.88**	**0.5**	**0.8**	**0.42**	**0**		**0.81**	**0.93**
Cars	4	16	1	0		21	5	5	12	0		22	9	51	3	0		63	1	32	5	0		38	144
% Cars	100	94.1	100	0		95.5	83.3	100	100	0		95.7	90	91.1	75	0		90	50	91.4	100	0		90.5	91.7
Trucks	0	1	0	0		1	1	0	0	0		1	1	5	1	0		7	1	3	0	0		4	13
% Trucks	0	5.9	0	0		4.5	16.7	0	0	0		4.3	10	8.9	25	0		10	50	8.6	0	0		9.5	8.3
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	15:00:00	From:	16:00:00
To:	18:00:00	To:	17:00:00

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Wellington Rd 22 runs E/W

North Approach

	Out	In	Total
Cars	23	23	46
Trucks	2	1	3
Bicycles	0	0	0
	25	**24**	**49**

Second Line

Bicycles	0	0	0	0
Trucks	0	2	0	0
Cars	8	12	3	0
Totals	**8**	**14**	**3**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	134	156	290
Trucks	3	6	9
Bicycles	0	0	0
	137	**162**	**299**

Wellington Rd 22

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	0	4	**4**
0	6	110	**116**
0	2	8	**10**

Peds: 0



Peds: 0

Peds: 0

Wellington Rd 22

Totals	Cars	Trucks	Bicycles
0	0	0	0
2	1	1	0
121	119	2	0
14	14	0	0

West Approach

	Out	In	Total
Cars	122	137	259
Trucks	8	2	10
Bicycles	0	0	0
	130	**139**	**269**

Totals	**10**	**18**	**43**	**0**
Cars	10	18	43	0
Trucks	0	0	0	0
Bicycles	0	0	0	0

Second Line

South Approach

	Out	In	Total
Cars	71	34	105
Trucks	0	4	4
Bicycles	0	0	0
	71	**38**	**109**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 22 & Second Line
Site Code: 2448500008
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

Peak Hour Data (16:00 - 17:00)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Wellington Rd 22						West Approach Wellington Rd 22						Total Vehicles
	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	
16:00	1	5	1	0	0	7	3	3	10	0	0	16	3	36	1	0	0	40	0	27	6	0	0	33	96
16:15	0	1	0	0	0	1	2	5	13	0	0	20	5	29	0	0	0	34	1	14	2	0	0	17	72
16:30	2	6	4	0	0	12	2	5	9	0	0	16	4	22	1	0	0	27	2	40	1	0	0	43	98
16:45	0	2	3	0	0	5	3	5	11	0	0	19	2	34	0	0	0	36	1	35	1	0	0	37	97
Grand Total	**3**	**14**	**8**	**0**	**0**	**25**	**10**	**18**	**43**	**0**	**0**	**71**	**14**	**121**	**2**	**0**	**0**	**137**	**4**	**116**	**10**	**0**	**0**	**130**	**363**
Approach %	12	56	32	0		-	14.1	25.4	60.6	0		-	10.2	88.3	1.5	0		-	3.1	89.2	7.7	0		-	
Totals %	0.8	3.9	2.2	0		6.9	2.8	5	11.8	0		19.6	3.9	33.3	0.6	0		37.7	1.1	32	2.8	0		35.8	
PHF	**0.38**	**0.58**	**0.5**	**0**		**0.52**	**0.83**	**0.9**	**0.83**	**0**		**0.89**	**0.7**	**0.84**	**0.5**	**0**		**0.86**	**0.5**	**0.73**	**0.42**	**0**		**0.76**	**0.93**
Cars	3	12	8	0		23	10	18	43	0		71	14	119	1	0		134	4	110	8	0		122	350
% Cars	100	85.7	100	0		92	100	100	100	0		100	100	98.3	50	0		97.8	100	94.8	80	0		93.8	96.4
Trucks	0	2	0	0		2	0	0	0	0		0	0	2	1	0		3	0	6	2	0		8	13
% Trucks	0	14.3	0	0		8	0	0	0	0		0	0	1.7	50	0		2.2	0	5.2	20	0		6.2	3.6
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	97	10	41	96	3	5	9	14	6	13	5
Future Vol, veh/h	4	97	10	41	96	3	5	9	14	6	13	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	10	2	2	2	2	2	7	17	15	2
Mvmt Flow	4	105	11	45	104	3	5	10	15	7	14	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	103	66	17	108	61	17	20	0	0	25	0	0
Stage 1	30	30	-	28	28	-	-	-	-	-	-	-
Stage 2	73	36	-	80	33	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.3	7.12	6.52	6.22	4.12	-	-	4.27	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.39	3.518	4.018	3.318	2.218	-	-	2.353	-	-
Pot Cap-1 Maneuver	878	825	1039	871	830	1061	1597	-	-	1497	-	-
Stage 1	987	870	-	989	872	-	-	-	-	-	-	-
Stage 2	937	865	-	929	868	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	759	818	1039	745	823	1061	1597	-	-	1497	-	-
Mov Cap-2 Maneuver	759	818	-	745	823	-	-	-	-	-	-	-
Stage 1	983	866	-	985	869	-	-	-	-	-	-	-
Stage 2	819	862	-	804	864	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.06	10.53	1.3	1.85
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	287	-	-	832	803	426	-	-
HCM Lane V/C Ratio	0.003	-	-	0.145	0.19	0.004	-	-
HCM Control Delay (s/veh)	7.3	0	-	10.1	10.5	7.4	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.7	0	-	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	116	10	14	121	2	10	18	43	3	14	8
Future Vol, veh/h	4	116	10	14	121	2	10	18	43	3	14	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	5	20	2	2	50	2	2	2	2	14	2
Mvmt Flow	4	126	11	15	132	2	11	20	47	3	15	9

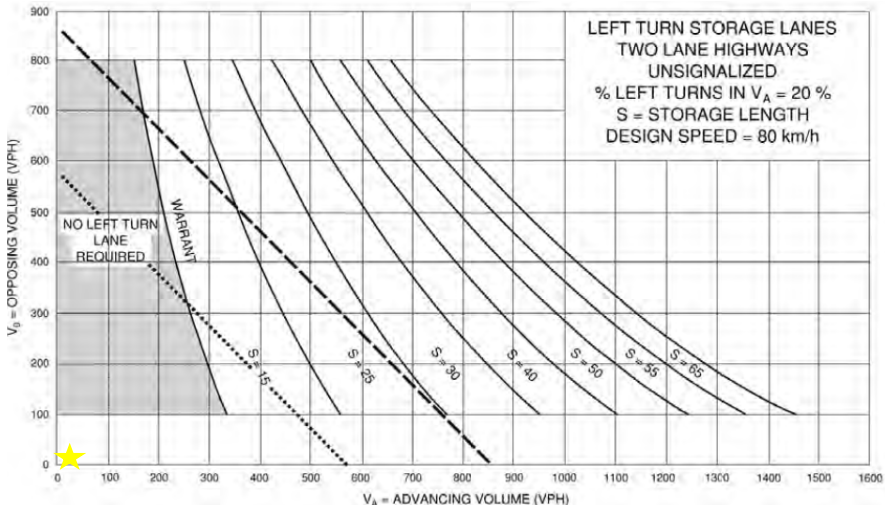
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	133	114	20	149	95	43	24	0	0	66	0	0
Stage 1	26	26	-	65	65	-	-	-	-	-	-	-
Stage 2	107	88	-	85	30	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.55	6.4	7.12	6.52	6.7	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.55	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.55	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.045	3.48	3.518	4.018	3.75	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	839	770	1009	818	795	906	1591	-	-	1535	-	-
Stage 1	991	867	-	946	841	-	-	-	-	-	-	-
Stage 2	898	816	-	923	870	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	692	763	1009	671	788	906	1591	-	-	1535	-	-
Mov Cap-2 Maneuver	692	763	-	671	788	-	-	-	-	-	-	-
Stage 1	989	866	-	939	835	-	-	-	-	-	-	-
Stage 2	750	810	-	779	868	-	-	-	-	-	-	-

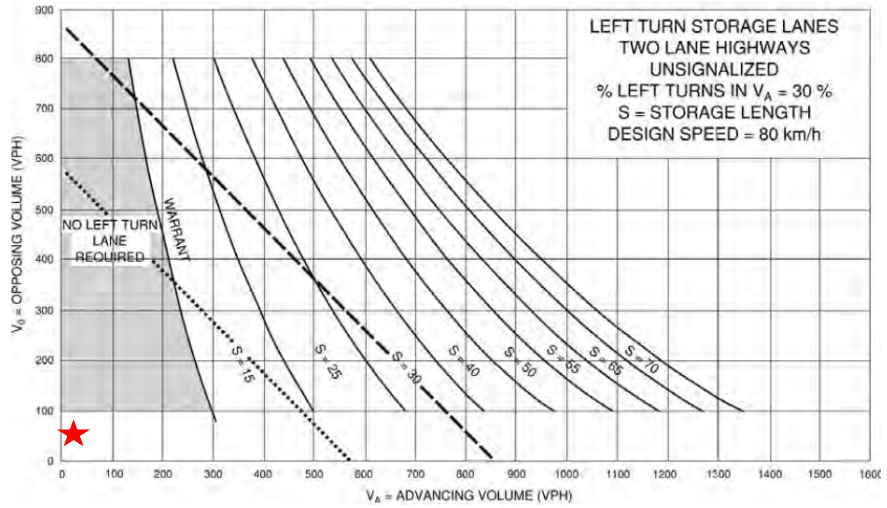
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.67	10.74	1.03	0.88
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	222	-	-	775	775	201	-	-
HCM Lane V/C Ratio	0.007	-	-	0.182	0.192	0.002	-	-
HCM Control Delay (s/veh)	7.3	0	-	10.7	10.7	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.7	0	-	-

Wellington Road 22 at Second Line – Southbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours





★ **AM Peak Hour**

★ **PM Peak Hour**

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

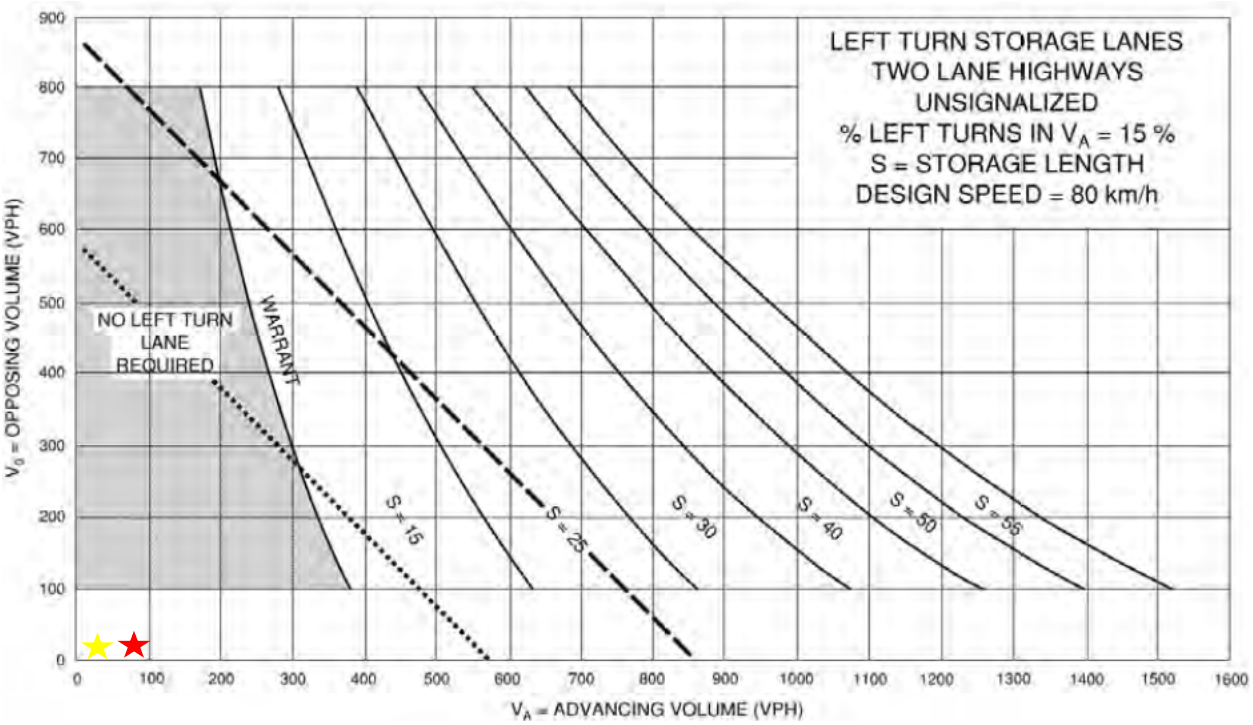
TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	24*	28*	5	20.8	0
PM	25*	71*	8	32.0	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Wellington Road 22 at Second Line – Northbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

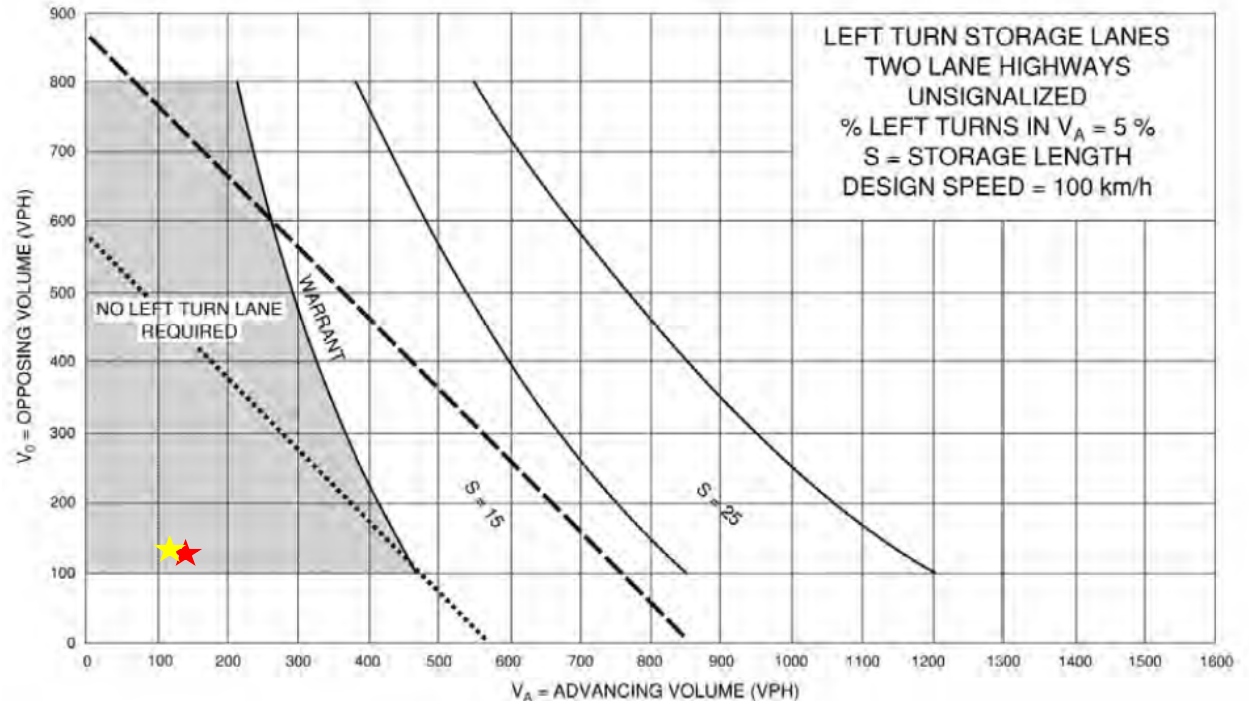
TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	28*	24*	5	17.9	0
PM	71*	25*	10	14.1	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Wellington Road 22 at Second Line – Eastbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

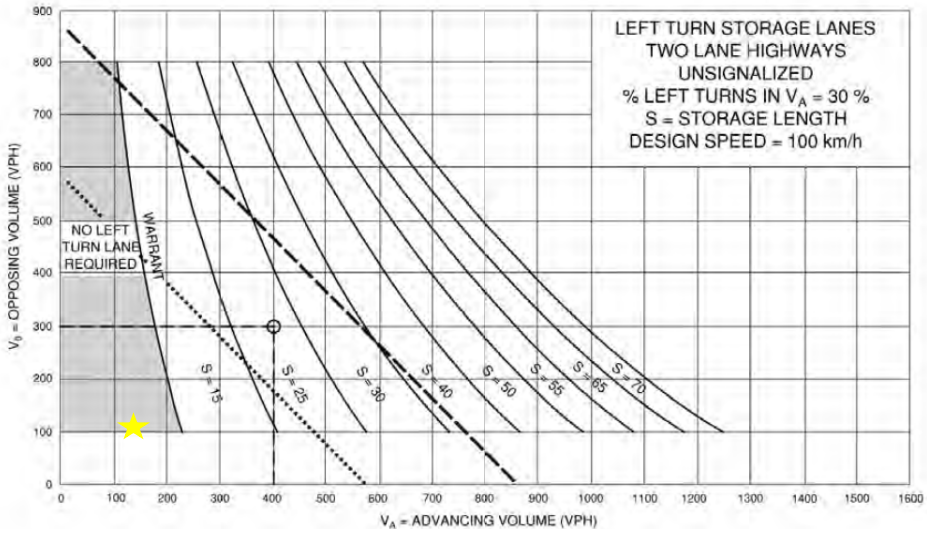
Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	111*	140*	4	3.6*	0
PM	130*	137*	4	3.1*	0

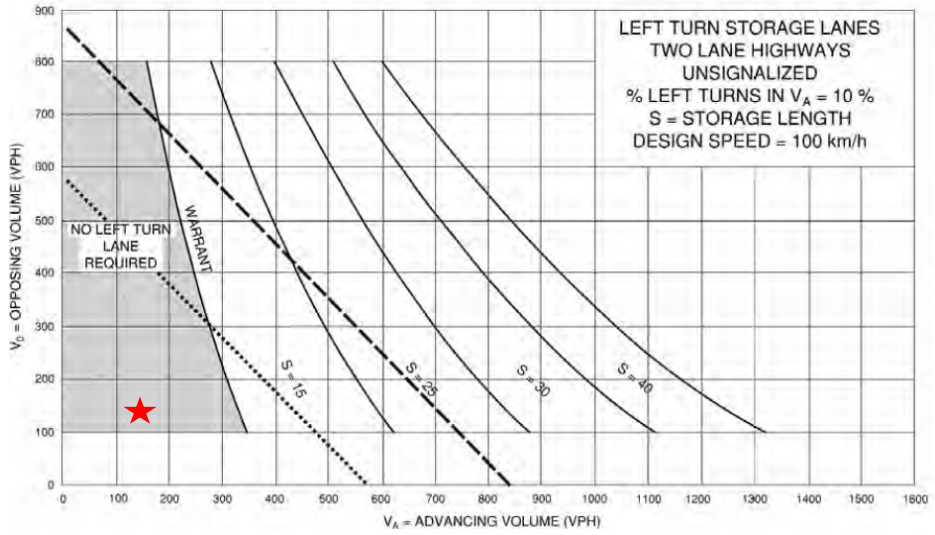
*** % left turns does not meet minimum MTO 5% requirement for warrant**

*** traffic volumes do not meet minimum MTO requirement for warrant**

Wellington Road 22 at Second Line – Westbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours





★ **AM Peak Hour**

★ **PM Peak Hour**

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	140*	111*	41	29.3	0
PM	137*	130*	14	10.2	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	97	10	41	96	3	5	9	14	6	13	5
Future Vol, veh/h	4	97	10	41	96	3	5	9	14	6	13	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	10	2	2	2	2	2	7	17	15	2
Mvmt Flow	4	105	11	45	104	3	5	10	15	7	14	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	108	0	0	116	0	0	320	316	111	314	320	106
Stage 1	-	-	-	-	-	-	120	120	-	195	195	-
Stage 2	-	-	-	-	-	-	201	197	-	119	125	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.27	7.27	6.65	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.27	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.27	5.65	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.363	3.653	4.135	3.318
Pot Cap-1 Maneuver	1483	-	-	1472	-	-	633	600	929	610	576	948
Stage 1	-	-	-	-	-	-	885	797	-	773	715	-
Stage 2	-	-	-	-	-	-	801	738	-	850	768	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1483	-	-	1472	-	-	592	579	929	570	556	948
Mov Cap-2 Maneuver	-	-	-	-	-	-	592	579	-	570	556	-
Stage 1	-	-	-	-	-	-	882	794	-	748	692	-
Stage 2	-	-	-	-	-	-	755	714	-	824	766	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.27	2.2	10.25	11.14
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	717	64	-	-	524	-	-	612
HCM Lane V/C Ratio	0.042	0.003	-	-	0.03	-	-	0.043
HCM Control Delay (s/veh)	10.2	7.4	0	-	7.5	0	-	11.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	116	10	14	121	2	10	18	43	3	14	8
Future Vol, veh/h	4	116	10	14	121	2	10	18	43	3	14	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	5	20	2	2	50	2	2	2	2	14	2
Mvmt Flow	4	126	11	15	132	2	11	20	47	3	15	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	134	0	0	137	0	0	310	304	132	308	309	133
Stage 1	-	-	-	-	-	-	140	140	-	163	163	-
Stage 2	-	-	-	-	-	-	170	164	-	145	146	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.64	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.64	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.64	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.126	3.318
Pot Cap-1 Maneuver	1451	-	-	1447	-	-	643	609	918	645	586	917
Stage 1	-	-	-	-	-	-	863	781	-	839	741	-
Stage 2	-	-	-	-	-	-	832	762	-	858	754	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1451	-	-	1447	-	-	611	600	918	584	578	917
Mov Cap-2 Maneuver	-	-	-	-	-	-	611	600	-	584	578	-
Stage 1	-	-	-	-	-	-	860	778	-	829	733	-
Stage 2	-	-	-	-	-	-	798	754	-	791	752	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.23	0.77	10.26	10.72
HCM LOS			B	B

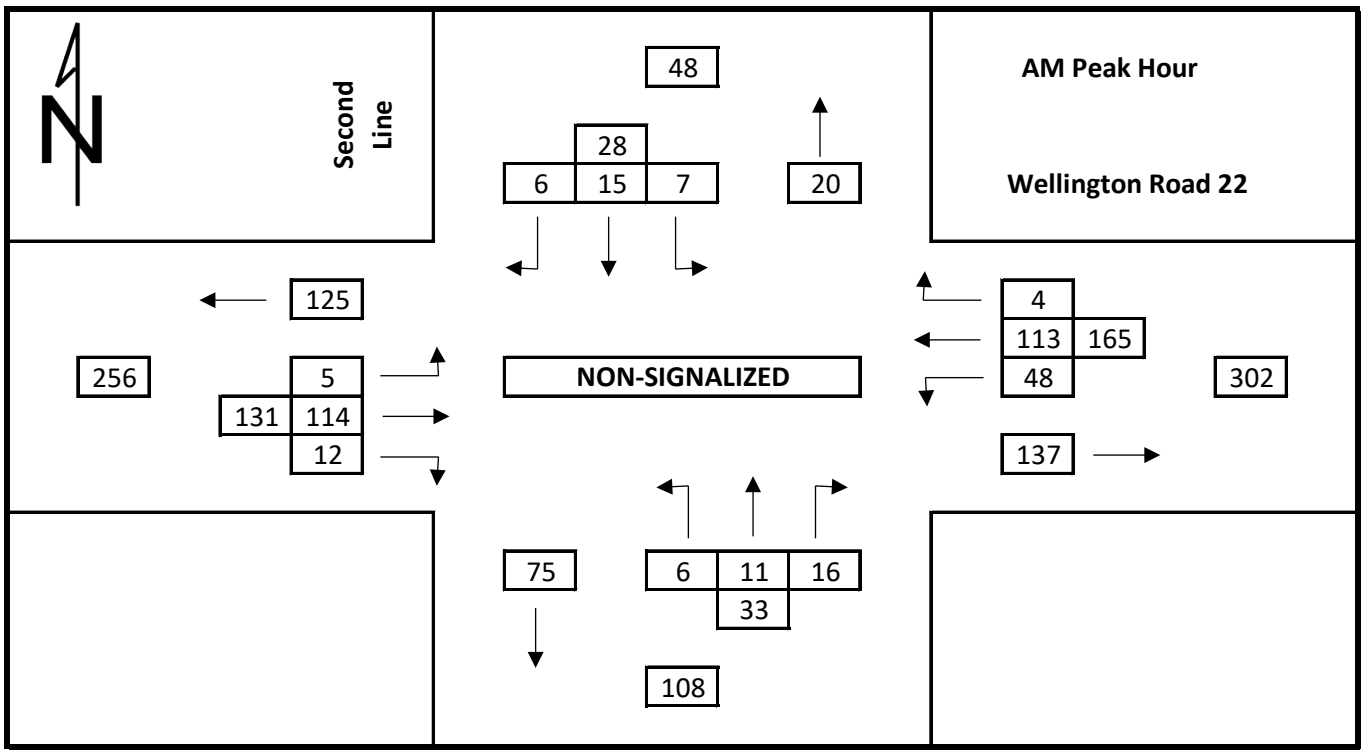
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	762	55	-	-	183	-	-	656
HCM Lane V/C Ratio	0.101	0.003	-	-	0.011	-	-	0.041
HCM Control Delay (s/veh)	10.3	7.5	0	-	7.5	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

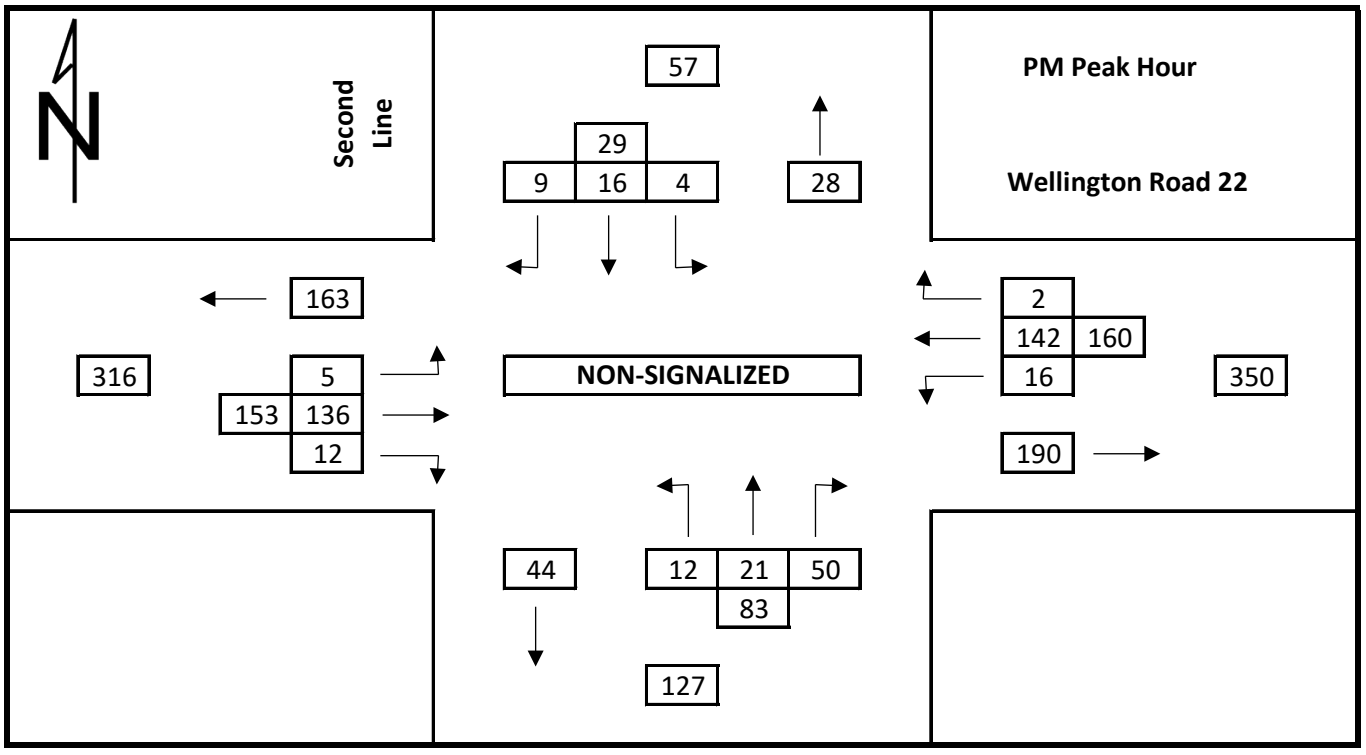
Appendix H-2

08 WELLINGTON ROAD 22 AT SECOND LINE – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

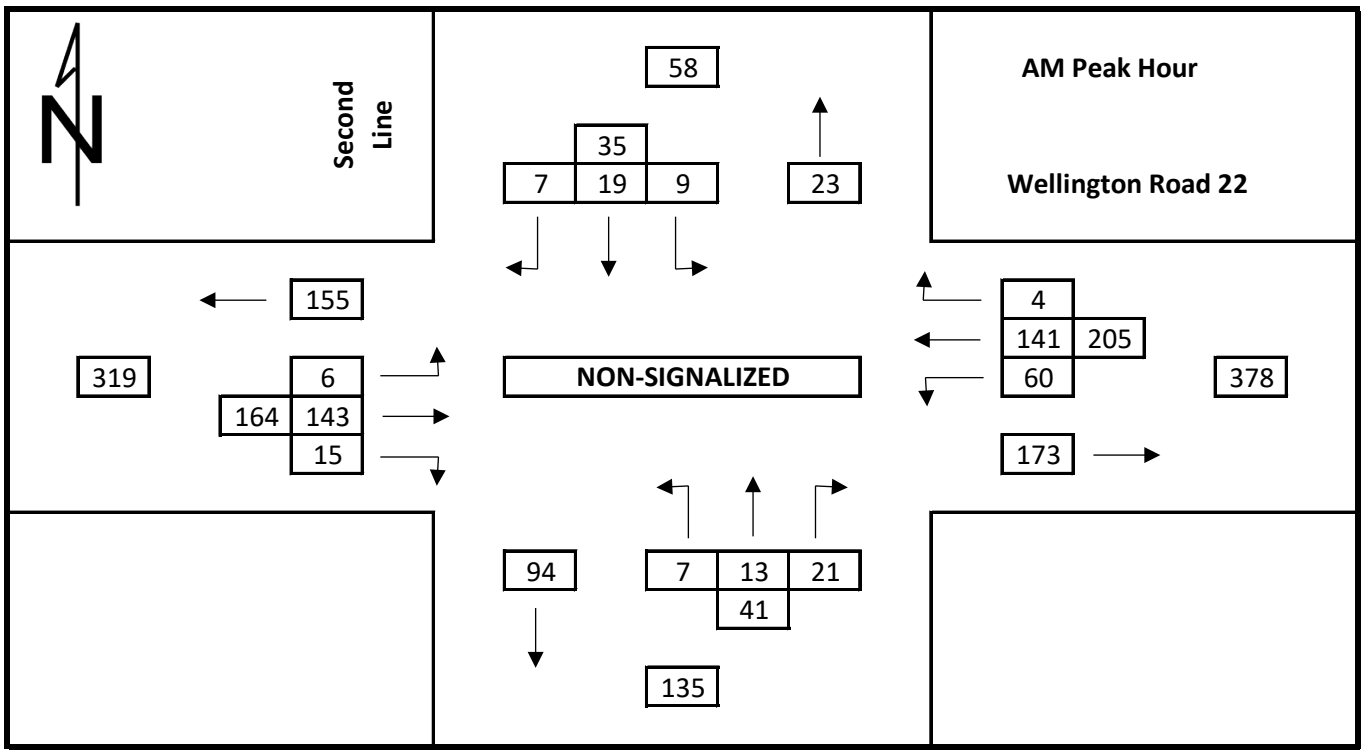
Wellington Road 22 at Second Line

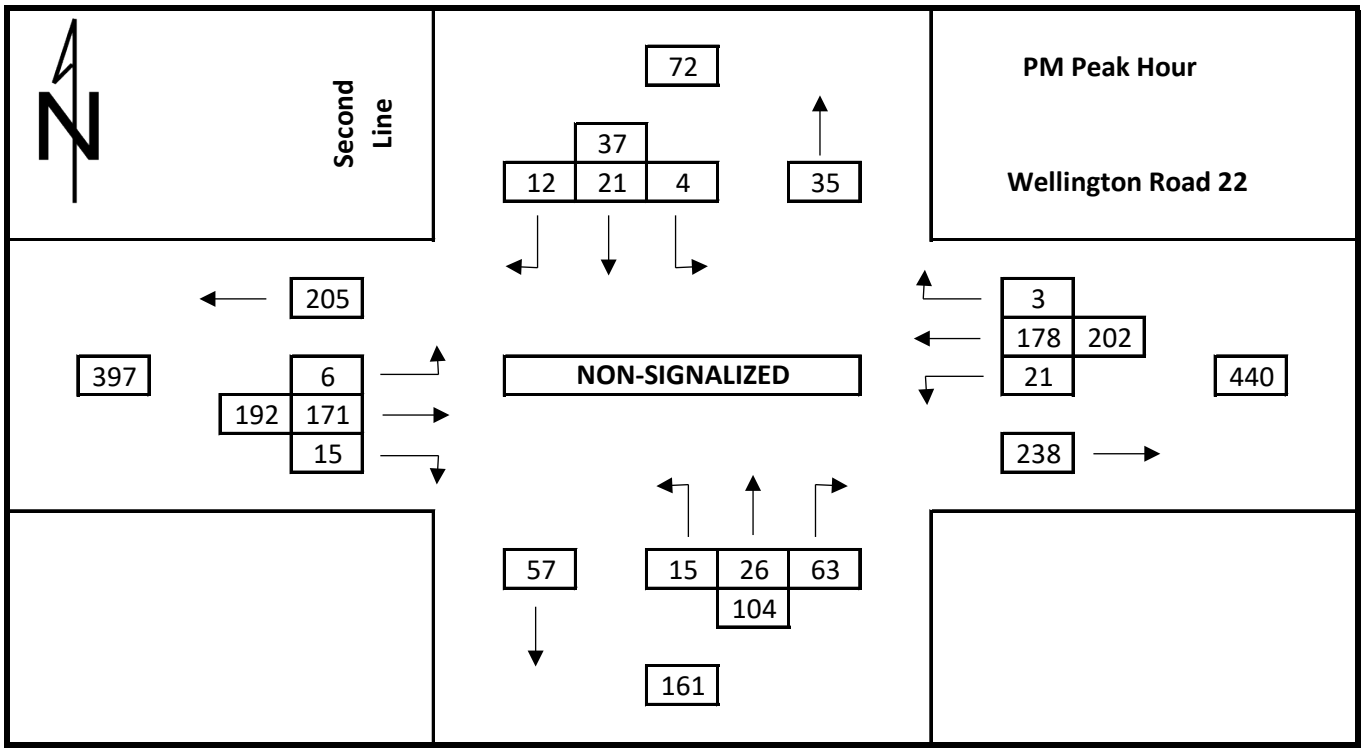




Background Traffic Year 2041

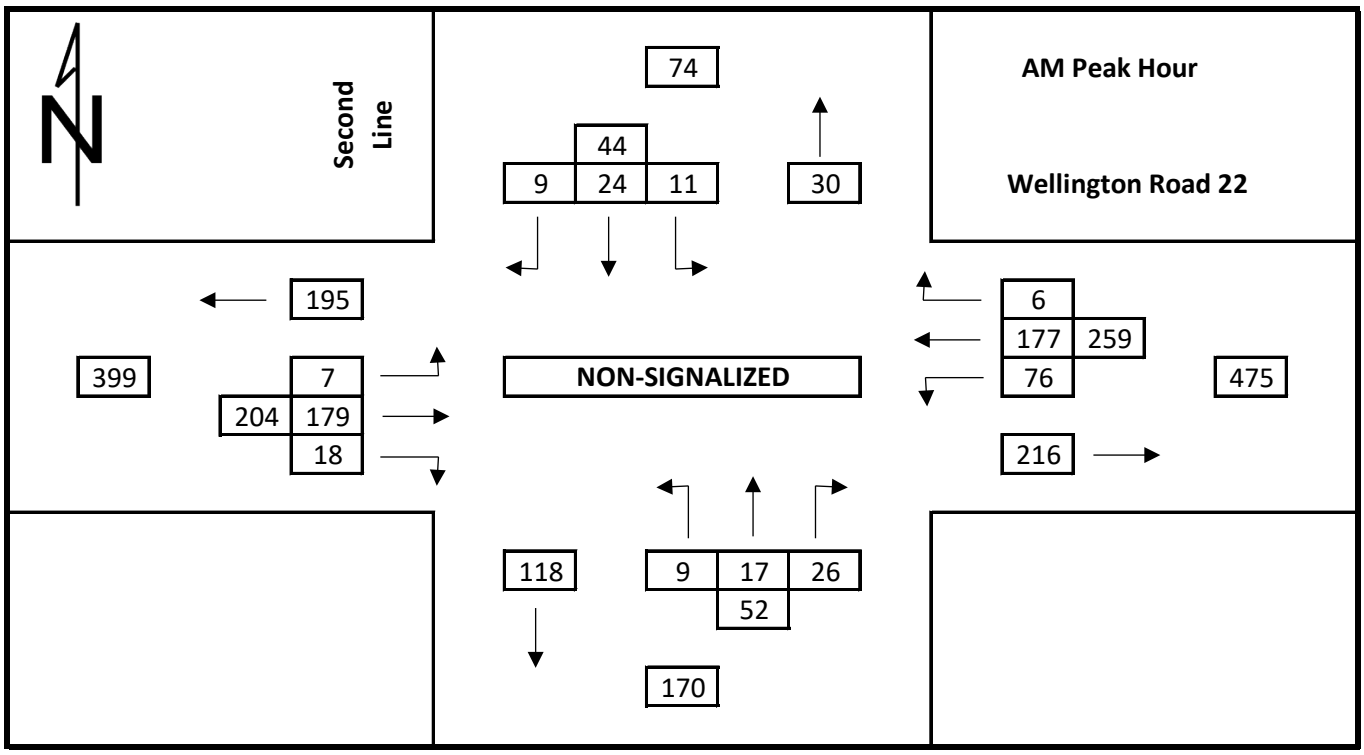
Wellington Road 22 at Second Line

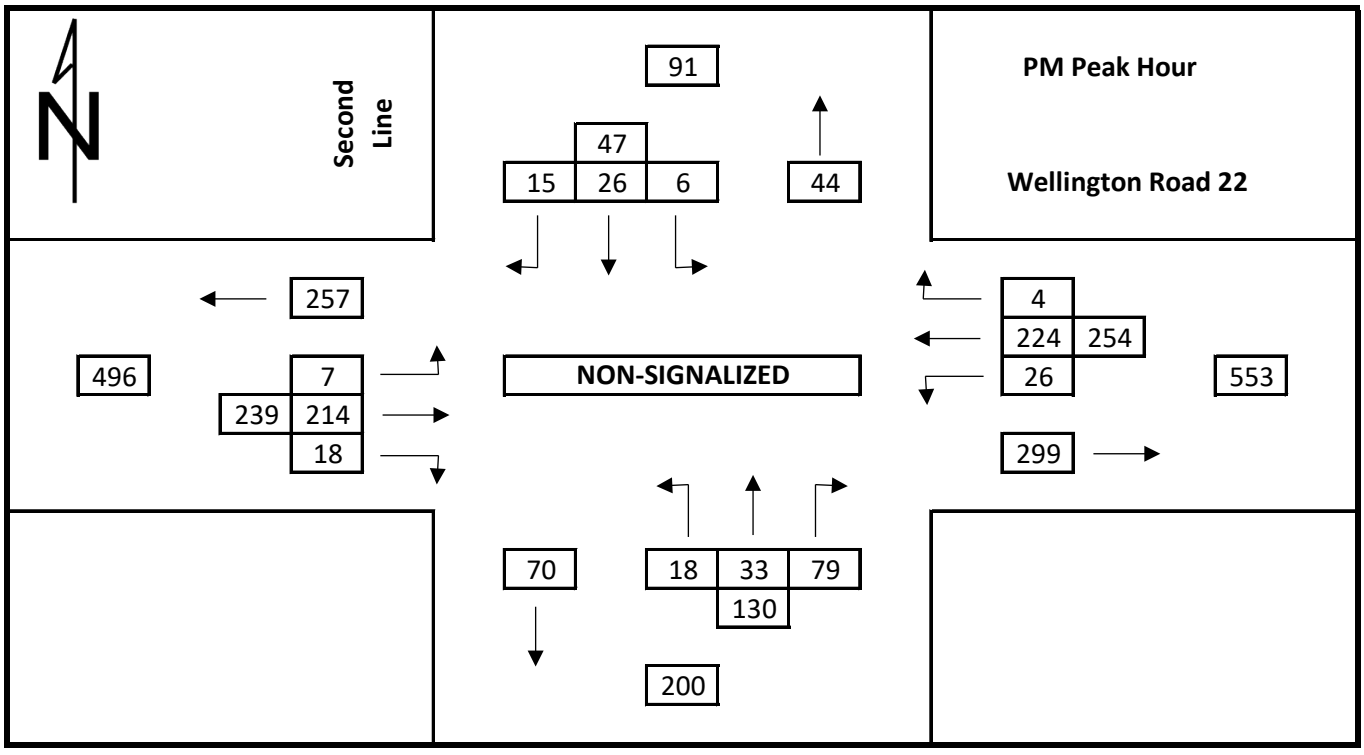




Background Traffic Year 2051

Wellington Road 22 at Second Line





Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	114	12	48	113	4	6	11	16	7	15	6
Future Vol, veh/h	5	114	12	48	113	4	6	11	16	7	15	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	10	2	2	2	2	2	7	17	15	2
Mvmt Flow	5	124	13	52	123	4	7	12	17	8	16	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	127	0	0	137	0	0	377	373	130	370	377	125
Stage 1	-	-	-	-	-	-	141	141	-	229	229	-
Stage 2	-	-	-	-	-	-	235	232	-	141	148	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.27	7.27	6.65	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.27	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.27	5.65	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.363	3.653	4.135	3.318
Pot Cap-1 Maneuver	1459	-	-	1447	-	-	581	558	906	560	534	926
Stage 1	-	-	-	-	-	-	862	780	-	741	691	-
Stage 2	-	-	-	-	-	-	768	713	-	828	751	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1459	-	-	1447	-	-	535	534	906	514	512	926
Mov Cap-2 Maneuver	-	-	-	-	-	-	535	534	-	514	512	-
Stage 1	-	-	-	-	-	-	858	777	-	712	664	-
Stage 2	-	-	-	-	-	-	715	685	-	796	748	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.29	2.21	10.7	11.71
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	667	67	-	-	520	-	-	567
HCM Lane V/C Ratio	0.054	0.004	-	-	0.036	-	-	0.054
HCM Control Delay (s/veh)	10.7	7.5	0	-	7.6	0	-	11.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	136	12	16	142	2	12	21	50	4	16	9
Future Vol, veh/h	5	136	12	16	142	2	12	21	50	4	16	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	5	20	2	2	50	2	2	2	2	14	2
Mvmt Flow	5	148	13	17	154	2	13	23	54	4	17	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	157	0	0	161	0	0	363	357	154	360	362	155
Stage 1	-	-	-	-	-	-	165	165	-	190	190	-
Stage 2	-	-	-	-	-	-	198	191	-	170	172	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.64	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.64	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.64	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.126	3.318
Pot Cap-1 Maneuver	1423	-	-	1418	-	-	593	569	892	595	547	890
Stage 1	-	-	-	-	-	-	837	762	-	812	721	-
Stage 2	-	-	-	-	-	-	804	742	-	832	734	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1423	-	-	1418	-	-	558	559	892	527	537	890
Mov Cap-2 Maneuver	-	-	-	-	-	-	558	559	-	527	537	-
Stage 1	-	-	-	-	-	-	833	758	-	801	711	-
Stage 2	-	-	-	-	-	-	765	732	-	754	731	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.25	0.76	10.71	11.22
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	721	58	-	-	180	-	-	611
HCM Lane V/C Ratio	0.125	0.004	-	-	0.012	-	-	0.052
HCM Control Delay (s/veh)	10.7	7.5	0	-	7.6	0	-	11.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	143	15	60	141	4	7	13	21	9	19	7
Future Vol, veh/h	6	143	15	60	141	4	7	13	21	9	19	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	10	2	2	2	2	2	7	17	15	2
Mvmt Flow	7	155	16	65	153	4	8	14	23	10	21	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	158	0	0	172	0	0	471	465	164	461	471	155
Stage 1	-	-	-	-	-	-	177	177	-	286	286	-
Stage 2	-	-	-	-	-	-	294	288	-	176	185	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.27	7.27	6.65	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.27	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.27	5.65	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.363	3.653	4.135	3.318
Pot Cap-1 Maneuver	1422	-	-	1405	-	-	503	495	868	486	472	890
Stage 1	-	-	-	-	-	-	825	753	-	690	652	-
Stage 2	-	-	-	-	-	-	714	674	-	792	723	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1422	-	-	1405	-	-	451	467	868	434	446	890
Mov Cap-2 Maneuver	-	-	-	-	-	-	451	467	-	434	446	-
Stage 1	-	-	-	-	-	-	821	749	-	655	619	-
Stage 2	-	-	-	-	-	-	650	639	-	753	719	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.28	2.25	11.4	12.93
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	607	65	-	-	524	-	-	492
HCM Lane V/C Ratio	0.073	0.005	-	-	0.046	-	-	0.077
HCM Control Delay (s/veh)	11.4	7.5	0	-	7.7	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.3

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	171	15	21	178	3	15	26	63	4	21	12
Future Vol, veh/h	6	171	15	21	178	3	15	26	63	4	21	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	5	20	2	2	50	2	2	2	2	14	2
Mvmt Flow	7	186	16	23	193	3	16	28	68	4	23	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	197	0	0	202	0	0	458	449	194	454	456	195
Stage 1	-	-	-	-	-	-	207	207	-	241	241	-
Stage 2	-	-	-	-	-	-	251	242	-	213	215	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.64	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.64	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.64	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.126	3.318
Pot Cap-1 Maneuver	1376	-	-	1370	-	-	513	505	847	516	483	846
Stage 1	-	-	-	-	-	-	795	731	-	763	685	-
Stage 2	-	-	-	-	-	-	754	705	-	789	703	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1376	-	-	1370	-	-	470	493	847	437	472	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	470	493	-	437	472	-
Stage 1	-	-	-	-	-	-	791	727	-	748	672	-
Stage 2	-	-	-	-	-	-	703	692	-	693	699	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.24	0.8	11.65	12.13
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	654	55	-	-	187	-	-	545
HCM Lane V/C Ratio	0.173	0.005	-	-	0.017	-	-	0.074
HCM Control Delay (s/veh)	11.7	7.6	0	-	7.7	0	-	12.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	179	18	76	177	6	9	17	26	11	24	9
Future Vol, veh/h	7	179	18	76	177	6	9	17	26	11	24	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	10	2	2	2	2	2	7	17	15	2
Mvmt Flow	8	195	20	83	192	7	10	18	28	12	26	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	199	0	0	214	0	0	590	584	204	580	590	196
Stage 1	-	-	-	-	-	-	220	220	-	361	361	-
Stage 2	-	-	-	-	-	-	371	364	-	219	229	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.27	7.27	6.65	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.27	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.27	5.65	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.363	3.653	4.135	3.318
Pot Cap-1 Maneuver	1373	-	-	1356	-	-	419	424	824	404	403	846
Stage 1	-	-	-	-	-	-	783	721	-	628	604	-
Stage 2	-	-	-	-	-	-	650	624	-	751	691	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1373	-	-	1356	-	-	358	392	824	345	373	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	392	-	345	373	-
Stage 1	-	-	-	-	-	-	778	717	-	585	562	-
Stage 2	-	-	-	-	-	-	570	581	-	702	687	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.26	2.3	12.77	14.89
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	520	61	-	-	525	-	-	412
HCM Lane V/C Ratio	0.109	0.006	-	-	0.061	-	-	0.116
HCM Control Delay (s/veh)	12.8	7.6	0	-	7.8	0	-	14.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.2	-	-	0.4

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	214	18	26	224	4	18	33	79	6	26	15
Future Vol, veh/h	7	214	18	26	224	4	18	33	79	6	26	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	5	20	2	2	50	2	2	2	2	14	2
Mvmt Flow	8	233	20	28	243	4	20	36	86	7	28	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	248	0	0	252	0	0	572	562	242	568	570	246
Stage 1	-	-	-	-	-	-	258	258	-	302	302	-
Stage 2	-	-	-	-	-	-	314	304	-	266	267	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.64	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.64	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.64	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.126	3.318
Pot Cap-1 Maneuver	1318	-	-	1313	-	-	431	436	796	434	416	793
Stage 1	-	-	-	-	-	-	747	695	-	707	643	-
Stage 2	-	-	-	-	-	-	697	663	-	740	666	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1318	-	-	1313	-	-	381	422	796	344	402	793
Mov Cap-2 Maneuver	-	-	-	-	-	-	381	422	-	344	402	-
Stage 1	-	-	-	-	-	-	742	690	-	689	627	-
Stage 2	-	-	-	-	-	-	635	646	-	621	662	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.23	0.8	13.22	13.69
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	579	52	-	-	184	-	-	465
HCM Lane V/C Ratio	0.244	0.006	-	-	0.022	-	-	0.11
HCM Control Delay (s/veh)	13.2	7.7	0	-	7.8	0	-	13.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1	0	-	-	0.1	-	-	0.4

Appendix I-1

09 SIDEROAD 17 AT SECOND LINE – EXISTING TRAFFIC VOLUME METRICS

Ontario Traffic Inc.
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Project #24-485 - 30 Forensic Engineering

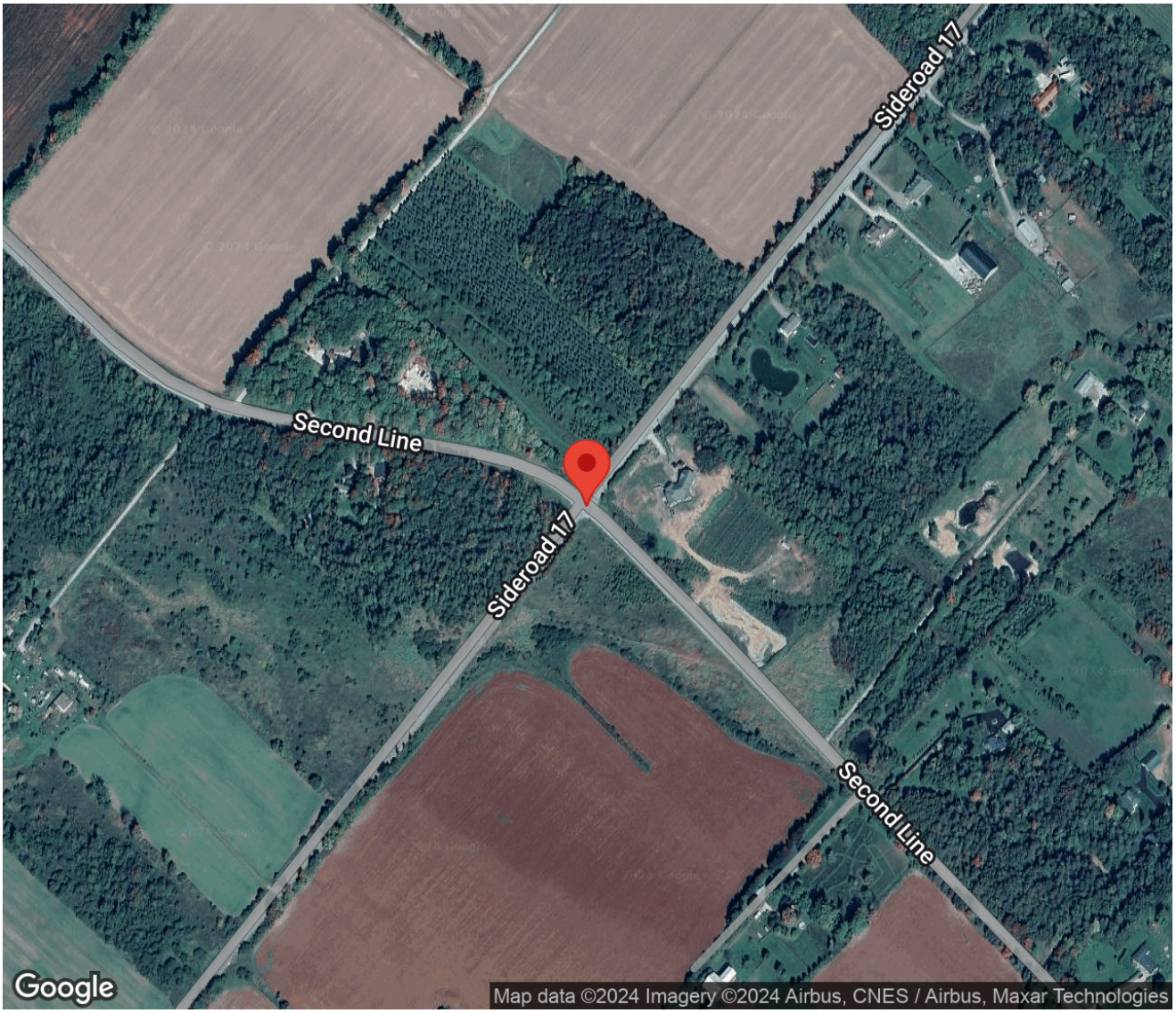
Intersection Count Report

Intersection:	Sideroad 17 & Second Line
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500009
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Sideroad 17 & Second Line
Site Code:	2448500009
Municipality:	Erin
Count Date:	Nov 19, 2024



Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

Second Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	3	57	3	0	63	0	1	23	12	0	36	0	99
08:00 - 09:00	4	34	2	0	40	0	2	18	20	0	40	0	80
09:00 - 10:00	1	29	0	0	30	0	0	17	7	0	24	1	54
BREAK													
11:00 - 12:00	1	23	0	0	24	0	3	18	9	0	30	0	54
12:00 - 13:00	2	29	1	0	32	0	4	20	9	0	33	0	65
BREAK													
15:00 - 16:00	3	30	3	0	36	0	5	48	18	0	71	0	107
16:00 - 17:00	2	31	3	0	36	0	10	67	23	0	100	0	136
17:00 - 18:00	3	22	4	0	29	0	8	46	15	0	69	0	98
GRAND TOTAL	**19**	**255**	**16**	**0**	**290**	**0**	**33**	**257**	**113**	**0**	**403**	**1**	**693**

Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

Sideroad 17 - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	19	4	2	0	25	0	2	9	7	0	18	0	43
08:00 - 09:00	17	9	3	0	29	0	0	10	7	0	17	0	46
09:00 - 10:00	15	11	3	0	29	0	0	2	6	0	8	0	37
BREAK													
11:00 - 12:00	17	7	3	0	27	0	0	7	7	0	14	0	41
12:00 - 13:00	22	7	1	0	30	0	1	2	0	0	3	0	33
BREAK													
15:00 - 16:00	29	10	11	0	50	0	5	6	4	0	15	0	65
16:00 - 17:00	33	15	2	0	50	0	2	6	5	0	13	0	63
17:00 - 18:00	14	8	4	0	26	0	2	6	3	0	11	0	37
GRAND TOTAL	**166**	**71**	**29**	**0**	**266**	**0**	**12**	**48**	**39**	**0**	**99**	**0**	**365**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	13	1	0	14	0	0	0	0	0	0	0	0	0	0	0
07:15	0	14	0	0	14	0	1	0	0	1	0	0	0	0	0	0
07:30	0	12	1	0	13	0	1	0	0	1	0	0	0	0	0	0
07:45	3	15	0	0	18	0	1	1	0	2	0	0	0	0	0	0
08:00	1	14	1	0	16	0	1	0	0	1	0	0	0	0	0	0
08:15	1	10	0	0	11	0	1	0	0	1	0	0	0	0	0	0
08:30	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0
08:45	0	5	1	0	6	0	0	0	0	0	0	0	0	0	0	0
09:00	0	6	0	0	6	0	1	0	0	1	0	0	0	0	0	0
09:15	0	7	0	0	7	0	1	0	0	1	0	0	0	0	0	0
09:30	1	8	0	0	9	0	0	0	0	0	0	0	0	0	0	0
09:45	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	8	113	4	0	125	0	7	1	0	8	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	1	7	0	0	8	0	0	0	0	0	0	0	0	0	0	0
11:15	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
11:30	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
11:45	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
12:00	0	11	0	0	11	0	1	0	0	1	0	0	0	0	0	0
12:15	0	3	1	0	4	1	0	0	0	1	0	0	0	0	0	0
12:30	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0
12:45	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	51	1	0	54	1	1	0	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	9	0	0	9	1	0	1	0	2	0	0	0	0	0	0
15:15	1	9	1	0	11	0	0	0	0	0	0	0	0	0	0	0
15:30	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	0
15:45	1	6	1	0	8	0	2	0	0	2	0	0	0	0	0	0
16:00	2	12	0	0	14	0	1	0	0	1	0	0	0	0	0	0
16:15	0	6	2	0	8	0	0	0	0	0	0	0	0	0	0	0
16:30	0	7	0	0	7	0	1	0	0	1	0	0	0	0	0	0
16:45	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0
17:00	2	10	0	0	12	0	0	1	0	1	0	0	0	0	0	0
17:15	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
17:30	1	2	3	0	6	0	0	0	0	0	0	0	0	0	0	0
17:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	7	78	8	0	93	1	5	2	0	8	0	0	0	0	0	0
GRAND TOTAL	17	242	13	0	272	2	13	3	0	18	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0
07:15	0	5	3	0	8	0	0	0	0	0	0	0	0	0	0	0
07:30	0	6	4	0	10	0	0	0	0	0	0	0	0	0	0	0
07:45	1	8	3	0	12	0	0	1	0	1	0	0	0	0	0	0
08:00	1	2	4	0	7	0	1	0	0	1	0	0	0	0	0	0
08:15	1	8	3	0	12	0	0	0	0	0	0	0	0	0	0	0
08:30	0	2	9	0	11	0	0	0	0	0	0	0	0	0	0	0
08:45	0	4	4	0	8	0	1	0	0	1	0	0	0	0	0	0
09:00	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0
09:15	0	4	2	0	6	0	0	0	0	0	0	0	0	0	0	0
09:30	0	8	2	0	10	0	0	0	0	0	0	0	0	0	0	1
09:45	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	3	56	38	0	97	0	2	1	0	3	0	0	0	0	0	1

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	1	7	1	0	9	0	0	0	0	0	0	0	0	0	0	0
11:15	1	5	3	0	9	0	0	1	0	1	0	0	0	0	0	0
11:30	1	4	1	0	6	0	1	0	0	1	0	0	0	0	0	0
11:45	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0
12:00	1	5	2	0	8	0	0	1	0	1	0	0	0	0	0	0
12:15	1	7	4	0	12	0	0	0	0	0	0	0	0	0	0	0
12:30	1	3	1	0	5	0	0	0	0	0	0	0	0	0	0	0
12:45	1	4	1	0	6	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	7	36	16	0	59	0	2	2	0	4	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Second Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	2	7	3	0	12	0	0	0	0	0	0	0	0	0	0	0
15:15	0	11	5	0	16	0	0	0	0	0	0	0	0	0	0	0
15:30	1	15	4	0	20	0	1	0	0	1	0	0	0	0	0	0
15:45	2	13	6	0	21	0	1	0	0	1	0	0	0	0	0	0
16:00	1	15	5	0	21	0	0	0	0	0	0	0	0	0	0	0
16:15	5	20	7	0	32	0	0	0	0	0	0	0	0	0	0	0
16:30	1	15	5	0	21	0	0	0	0	0	0	0	0	0	0	0
16:45	3	17	5	0	25	0	0	1	0	1	0	0	0	0	0	0
17:00	1	16	3	0	20	0	0	0	0	0	0	0	0	0	0	0
17:15	1	12	4	0	17	0	0	0	0	0	0	0	0	0	0	0
17:30	1	6	4	0	11	0	0	0	0	0	0	0	0	0	0	0
17:45	5	12	4	0	21	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	23	159	55	0	237	0	2	1	0	3	0	0	0	0	0	0
GRAND TOTAL	**33**	**251**	**109**	**0**	**393**	**0**	**6**	**4**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**1**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	7	3	0	0	10	0	0	0	0	0	0	0	0	0	0	0
07:15	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
07:30	4	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0
07:45	6	1	1	0	8	0	0	0	0	0	0	0	0	0	0	0
08:00	5	2	2	0	9	1	0	0	0	1	0	0	0	0	0	0
08:15	4	2	0	0	6	0	0	0	0	0	0	0	0	0	0	0
08:30	1	1	0	0	2	0	0	1	0	1	0	0	0	0	0	0
08:45	6	4	0	0	10	0	0	0	0	0	0	0	0	0	0	0
09:00	3	3	3	0	9	0	0	0	0	0	0	0	0	0	0	0
09:15	3	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0
09:30	4	3	0	0	7	0	0	0	0	0	0	0	0	0	0	0
09:45	4	3	0	0	7	1	0	0	0	1	0	0	0	0	0	0
SUBTOTAL	49	24	7	0	80	2	0	1	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	5	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0
11:15	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0
11:30	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
11:45	4	5	2	0	11	0	0	0	0	0	0	0	0	0	0	0
12:00	10	1	0	0	11	0	0	0	0	0	0	0	0	0	0	0
12:15	2	3	0	0	5	1	0	0	0	1	0	0	0	0	0	0
12:30	4	2	1	0	7	0	0	0	0	0	0	0	0	0	0	0
12:45	4	1	0	0	5	1	0	0	0	1	0	0	0	0	0	0
SUBTOTAL	37	14	4	0	55	2	0	0	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	8	2	1	0	11	0	0	0	0	0	0	0	0	0	0	0
15:15	8	2	3	0	13	0	0	0	0	0	0	0	0	0	0	0
15:30	6	3	4	0	13	0	0	1	0	1	0	0	0	0	0	0
15:45	7	3	2	0	12	0	0	0	0	0	0	0	0	0	0	0
16:00	11	5	0	0	16	0	0	0	0	0	0	0	0	0	0	0
16:15	9	5	1	0	15	1	0	0	0	1	0	0	0	0	0	0
16:30	6	2	1	0	9	0	0	0	0	0	0	0	0	0	0	0
16:45	6	3	0	0	9	0	0	0	0	0	0	0	0	0	0	0
17:00	2	3	1	0	6	1	0	0	0	1	0	0	0	0	0	0
17:15	3	3	0	0	6	0	0	0	0	0	0	0	0	0	0	0
17:30	4	2	2	0	8	0	0	0	0	0	0	0	0	0	0	0
17:45	4	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	74	33	16	0	123	2	0	1	0	3	0	0	0	0	0	0
GRAND TOTAL	160	71	27	0	258	6	0	2	0	8	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
07:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
07:15	1	4	3	0	8	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
07:45	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0
08:00	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0
08:15	0	2	2	0	4	0	1	0	0	1	0	0	0	0	0	0
08:30	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0
08:45	0	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0
09:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
09:15	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	1	0	1	0	0	3	0	3	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	20	17	0	39	0	1	3	0	4	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
11:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
11:15	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	1	0	1	0	0	3	0	3	0	0	0	0	0	0
11:45	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
12:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	9	4	0	14	0	0	3	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
15:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
15:30	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0
15:45	1	2	2	0	5	1	0	1	0	2	0	0	0	0	0	0
16:00	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
16:15	0	2	2	0	4	0	3	0	0	3	0	0	0	0	0	0
16:30	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
16:45	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
17:00	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0
17:45	1	1	0	0	2	0	0	1	0	1	0	0	0	0	0	0
SUBTOTAL	8	15	10	0	33	1	3	2	0	6	0	0	0	0	0	0
GRAND TOTAL	11	44	31	0	86	1	4	8	0	13	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	07:00:00	From:	07:30:00
To:	10:00:00	To:	08:30:00

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Second Line runs N/S

North Approach

	Out	In	Total
Cars	58	29	87
Trucks	5	1	6
Bicycles	0	0	0
	63	**30**	**93**

Second Line

Bicycles	0	0	0	0
Trucks	1	4	0	0
Cars	2	51	5	0
Totals	**3**	**55**	**5**	**0**

East Approach

	Out	In	Total
Cars	28	26	54
Trucks	1	2	3
Bicycles	0	0	0
	29	**28**	**57**

Peds: 0

Sideroad 17

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	0	1	**1**
0	1	7	**8**
0	0	7	**7**

Peds: 0



Peds: 0

Sideroad 17

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	4	4	0	0
	5	5	0	0
	20	19	1	0

Peds: 0

West Approach

	Out	In	Total
Cars	15	10	25
Trucks	1	1	2
Bicycles	0	0	0
	16	**11**	**27**

Second Line

Totals	**3**	**25**	**15**	**0**
Cars	3	24	14	0
Trucks	0	1	1	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	41	77	118
Trucks	2	5	7
Bicycles	0	0	0
	43	**82**	**125**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

Peak Hour Data (07:30 - 08:30)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:30	0	13	1	0	0	14	0	6	4	0	0	10	4	0	1	0	0	5	0	0	3	0	0	3	32
07:45	3	16	1	0	0	20	1	8	4	0	0	13	6	1	1	0	0	8	1	2	1	0	0	4	45
08:00	1	15	1	0	0	17	1	3	4	0	0	8	6	2	2	0	0	10	0	3	1	0	0	4	39
08:15	1	11	0	0	0	12	1	8	3	0	0	12	4	2	0	0	0	6	0	3	2	0	0	5	35
Grand Total	**5**	**55**	**3**	**0**	**0**	**63**	**3**	**25**	**15**	**0**	**0**	**43**	**20**	**5**	**4**	**0**	**0**	**29**	**1**	**8**	**7**	**0**	**0**	**16**	**151**
Approach %	7.9	87.3	4.8	0		-	7	58.1	34.9	0		-	69	17.2	13.8	0		-	6.3	50	43.8	0		-	
Totals %	3.3	36.4	2	0		41.7	2	16.6	9.9	0		28.5	13.2	3.3	2.6	0		19.2	0.7	5.3	4.6	0		10.6	
PHF	**0.42**	**0.86**	**0.75**	**0**		**0.79**	**0.75**	**0.78**	**0.94**	**0**		**0.83**	**0.83**	**0.63**	**0.5**	**0**		**0.73**	**0.25**	**0.67**	**0.58**	**0**		**0.8**	**0.84**
Cars	5	51	2	0		58	3	24	14	0		41	19	5	4	0		28	1	7	7	0		15	142
% Cars	100	92.7	66.7	0		92.1	100	96	93.3	0		95.3	95	100	100	0		96.6	100	87.5	100	0		93.8	94
Trucks	0	4	1	0		5	0	1	1	0		2	1	0	0	0		1	0	1	0	0		1	9
% Trucks	0	7.3	33.3	0		7.9	0	4	6.7	0		4.7	5	0	0	0		3.4	0	12.5	0	0		6.3	6
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	11:00:00	From:	11:15:00
To:	13:00:00	To:	12:15:00

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Second Line runs N/S

North Approach

	Out	In	Total
Cars	27	17	44
Trucks	1	1	2
Bicycles	0	0	0
	28	**18**	**46**

Second Line

Bicycles	0	0	0	0
Trucks	0	1	0	0
Cars	0	27	0	0
Totals	**0**	**28**	**0**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	32	16	48
Trucks	0	2	2
Bicycles	0	0	0
	32	**18**	**50**

Sideroad 17

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	0	**0**	
0	0	7	**7**	
0	3	3	**6**	

Peds: 0



Peds: 0

Sideroad 17

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	2	2	0	0
	8	8	0	0
	22	22	0	0

Peds: 0

West Approach

	Out	In	Total
Cars	10	11	21
Trucks	3	0	3
Bicycles	0	0	0
	13	**11**	**24**

Totals	**3**	**16**	**11**	**0**
Cars	3	15	9	0
Trucks	0	1	2	0
Bicycles	0	0	0	0

Second Line

South Approach

	Out	In	Total
Cars	27	52	79
Trucks	3	4	7
Bicycles	0	0	0
	30	**56**	**86**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (11:15 - 12:15)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
11:15	0	4	0	0	0	4	1	5	4	0	0	10	2	2	0	0	0	4	0	4	1	0	0	5	23
11:30	0	8	0	0	0	8	1	5	1	0	0	7	6	0	0	0	0	6	0	0	4	0	0	4	25
11:45	0	4	0	0	0	4	0	1	3	0	0	4	4	5	2	0	0	11	0	2	1	0	0	3	22
12:00	0	12	0	0	0	12	1	5	3	0	0	9	10	1	0	0	0	11	0	1	0	0	0	1	33
Grand Total	**0**	**28**	**0**	**0**	**0**	**28**	**3**	**16**	**11**	**0**	**0**	**30**	**22**	**8**	**2**	**0**	**0**	**32**	**0**	**7**	**6**	**0**	**0**	**13**	**103**
Approach %	0	100	0	0		-	10	53.3	36.7	0		-	68.8	25	6.3	0		-	0	53.8	46.2	0		-	
Totals %	0	27.2	0	0		27.2	2.9	15.5	10.7	0		29.1	21.4	7.8	1.9	0		31.1	0	6.8	5.8	0		12.6	
PHF	**0**	**0.58**	**0**	**0**		**0.58**	**0.75**	**0.8**	**0.69**	**0**		**0.75**	**0.55**	**0.4**	**0.25**	**0**		**0.73**	**0**	**0.44**	**0.38**	**0**		**0.65**	**0.78**
Cars	0	27	0	0		27	3	15	9	0		27	22	8	2	0		32	0	7	3	0		10	96
% Cars	0	96.4	0	0		96.4	100	93.8	81.8	0		90	100	100	100	0		100	0	100	50	0		76.9	93.2
Trucks	0	1	0	0		1	0	1	2	0		3	0	0	0	0		0	0	0	3	0		3	7
% Trucks	0	3.6	0	0		3.6	0	6.3	18.2	0		10	0	0	0	0		0	0	0	50	0		23.1	6.8
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period		One Hour Peak	
From:	15:00:00	From:	15:30:00
To:	18:00:00	To:	16:30:00

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Second Line runs N/S

North Approach

	Out	In	Total
Cars	33	72	105
Trucks	4	4	8
Bicycles	0	0	0
	37	**76**	**113**

Second Line

Bicycles	0	0	0	0
Trucks	0	4	0	0
Cars	3	27	3	0
Totals	**3**	**31**	**3**	**0**

Peds: 0

East Approach

	Out	In	Total
Cars	56	31	87
Trucks	2	3	5
Bicycles	0	0	0
	58	**34**	**92**

Sideroad 17

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	1	2	**3**
0	3	6	**9**
0	1	7	**8**

Peds: 0



Peds: 0

Peds: 0

Sideroad 17

Totals	Cars	Trucks	Bicycles
0	0	0	0
8	7	1	0
16	16	0	0
34	33	1	0

West Approach

	Out	In	Total
Cars	15	28	43
Trucks	5	0	5
Bicycles	0	0	0
	20	**28**	**48**

Second Line

Totals	**9**	**65**	**22**	**0**
Cars	9	63	22	0
Trucks	0	2	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	94	67	161
Trucks	2	6	8
Bicycles	0	0	0
	96	**73**	**169**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 17 & Second Line
Site Code: 2448500009
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

Peak Hour Data (15:30 - 16:30)

Start Time	North Approach Second Line						South Approach Second Line						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
15:30	0	4	0	0	0	4	1	16	4	0	0	21	6	3	5	0	0	14	1	2	1	0	0	4	43
15:45	1	8	1	0	0	10	2	14	6	0	0	22	7	3	2	0	0	12	2	2	3	0	0	7	51
16:00	2	13	0	0	0	15	1	15	5	0	0	21	11	5	0	0	0	16	0	0	2	0	0	2	54
16:15	0	6	2	0	0	8	5	20	7	0	0	32	10	5	1	0	0	16	0	5	2	0	0	7	63
Grand Total	**3**	**31**	**3**	**0**	**0**	**37**	**9**	**65**	**22**	**0**	**0**	**96**	**34**	**16**	**8**	**0**	**0**	**58**	**3**	**9**	**8**	**0**	**0**	**20**	**211**
Approach %	8.1	83.8	8.1	0		-	9.4	67.7	22.9	0		-	58.6	27.6	13.8	0		-	15	45	40	0		-	
Totals %	1.4	14.7	1.4	0		17.5	4.3	30.8	10.4	0		45.5	16.1	7.6	3.8	0		27.5	1.4	4.3	3.8	0		9.5	
PHF	**0.38**	**0.6**	**0.38**	**0**		**0.62**	**0.45**	**0.81**	**0.79**	**0**		**0.75**	**0.77**	**0.8**	**0.4**	**0**		**0.91**	**0.38**	**0.45**	**0.67**	**0**		**0.71**	**0.84**
Cars	3	27	3	0		33	9	63	22	0		94	33	16	7	0		56	2	6	7	0		15	198
% Cars	100	87.1	100	0		89.2	100	96.9	100	0		97.9	97.1	100	87.5	0		96.6	66.7	66.7	87.5	0		75	93.8
Trucks	0	4	0	0		4	0	2	0	0		2	1	0	1	0		2	1	3	1	0		5	13
% Trucks	0	12.9	0	0		10.8	0	3.1	0	0		2.1	2.9	0	12.5	0		3.4	33.3	33.3	12.5	0		25	6.2
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	8	7	20	5	4	3	25	15	5	55	3
Future Vol, veh/h	1	8	7	20	5	4	3	25	15	5	55	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	13	2	5	2	2	2	4	7	2	7	33
Mvmt Flow	1	9	8	22	5	4	3	27	16	5	60	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	109	122	61	117	116	35	63	0	0	43	0	0
Stage 1	72	72	-	42	42	-	-	-	-	-	-	-
Stage 2	36	50	-	75	74	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.63	6.22	7.15	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.63	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.63	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.117	3.318	3.545	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	870	748	1004	852	774	1037	1540	-	-	1565	-	-
Stage 1	937	814	-	965	860	-	-	-	-	-	-	-
Stage 2	979	832	-	927	833	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	855	744	1004	831	770	1037	1540	-	-	1565	-	-
Mov Cap-2 Maneuver	855	744	-	831	770	-	-	-	-	-	-	-
Stage 1	934	811	-	963	858	-	-	-	-	-	-	-
Stage 2	967	830	-	907	830	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.34	9.44	0.51	0.58
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	117	-	-	847	843	141	-	-
HCM Lane V/C Ratio	0.002	-	-	0.021	0.037	0.003	-	-
HCM Control Delay (s/veh)	7.3	0	-	9.3	9.4	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	9	8	34	16	8	9	65	22	3	31	3
Future Vol, veh/h	3	9	8	34	16	8	9	65	22	3	31	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	33	33	13	3	2	13	2	3	2	2	13	2
Mvmt Flow	3	10	9	37	17	9	10	71	24	3	34	3

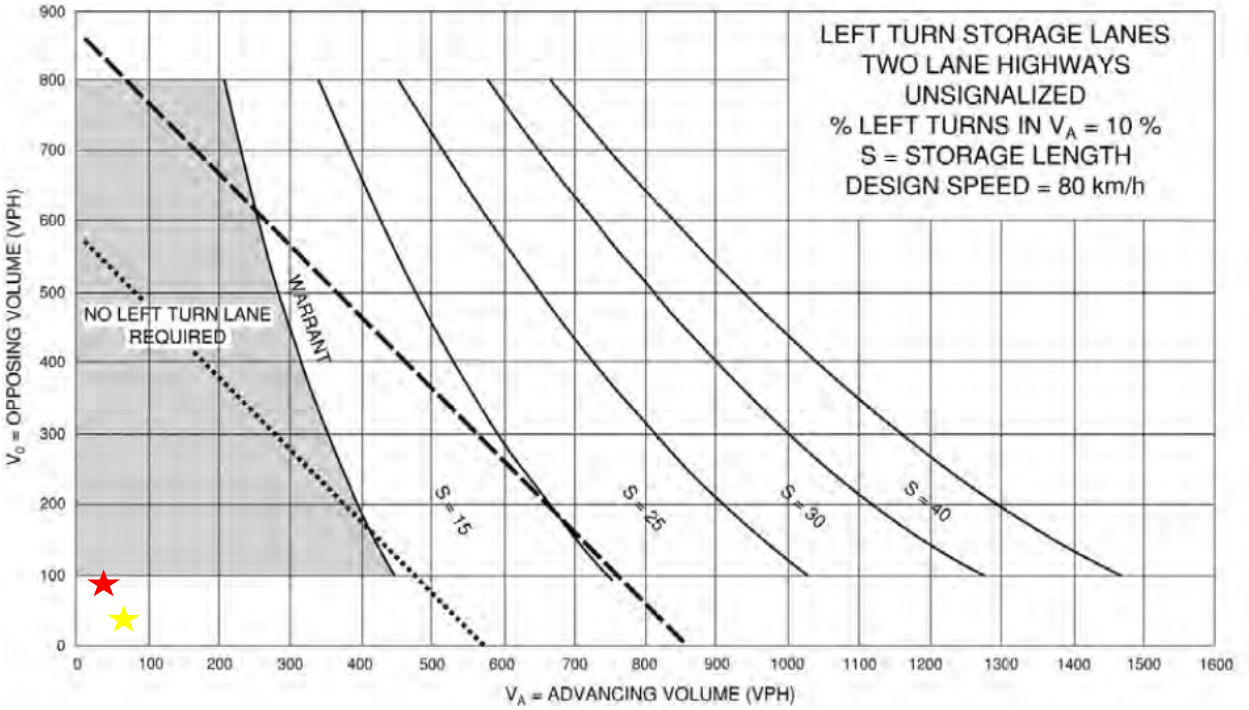
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	141	156	35	147	146	83	37	0	0	95	0	0
Stage 1	42	42	-	102	102	-	-	-	-	-	-	-
Stage 2	99	114	-	45	43	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.83	6.33	7.13	6.52	6.33	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.43	5.83	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.83	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4.297	3.417	3.527	4.018	3.417	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	763	683	1007	819	746	947	1574	-	-	1499	-	-
Stage 1	899	803	-	901	811	-	-	-	-	-	-	-
Stage 2	837	745	-	966	859	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	732	677	1007	793	739	947	1574	-	-	1499	-	-
Mov Cap-2 Maneuver	732	677	-	793	739	-	-	-	-	-	-	-
Stage 1	897	801	-	895	805	-	-	-	-	-	-	-
Stage 2	806	740	-	944	857	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.69	9.92	0.68	0.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	161	-	-	789	795	143	-	-
HCM Lane V/C Ratio	0.006	-	-	0.028	0.079	0.002	-	-
HCM Control Delay (s/veh)	7.3	0	-	9.7	9.9	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Sideroad 17 at Second Line – Southbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

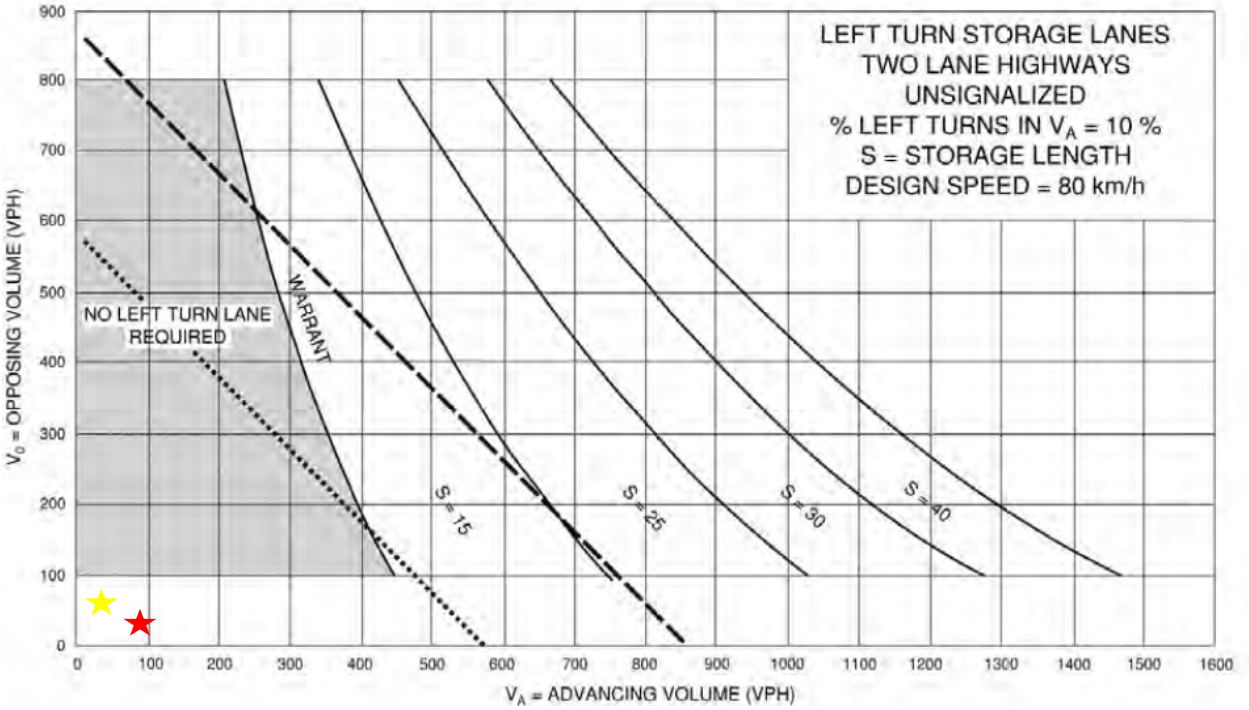
Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	63*	43*	3	4.8*	0
PM	37*	96*	3	8.1	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

*** traffic volumes do not meet minimum MTO requirement for warrant**

Sideroad 17 at Second Line – Northbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	43*	63*	3	7.0	0
PM	96*	37*	9	9.4	0

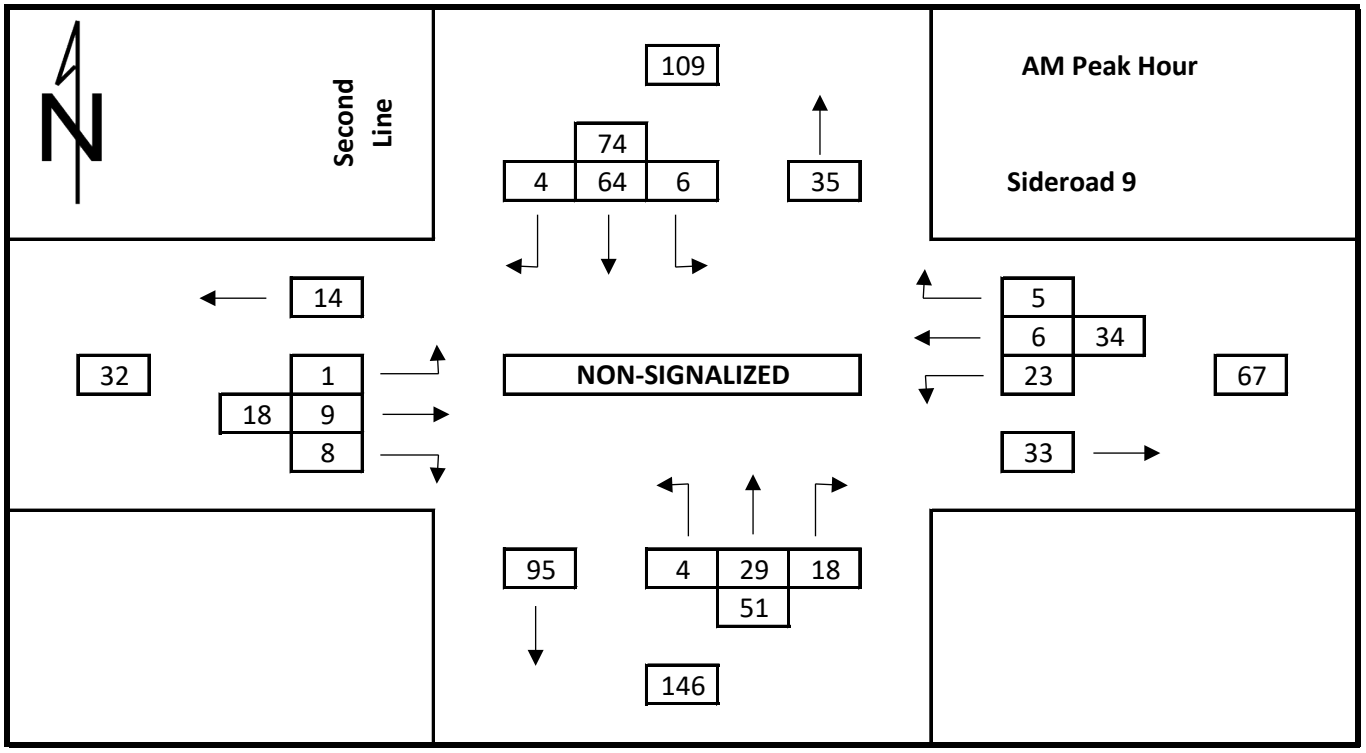
*** traffic volumes do not meet minimum MTO requirement for warrant**

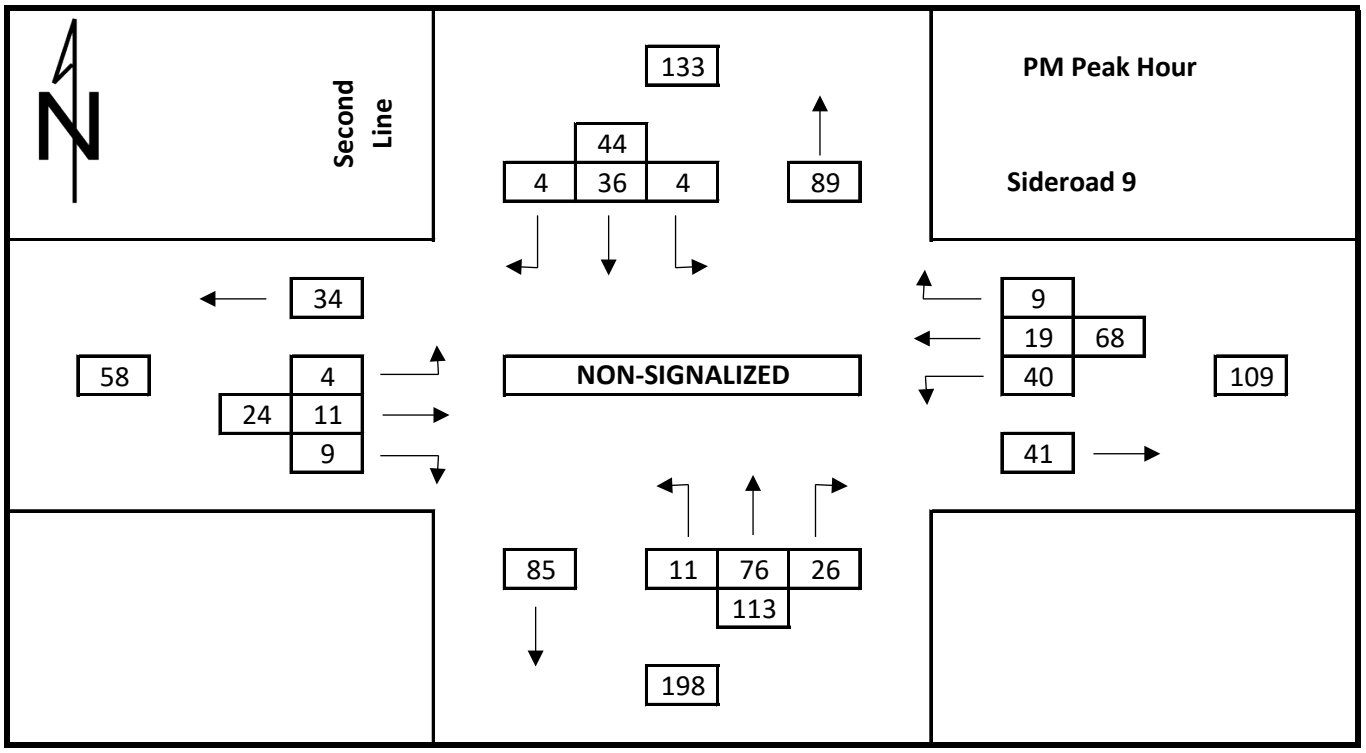
Appendix I-2

09 SIDEROAD 17 AT SECOND LINE – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

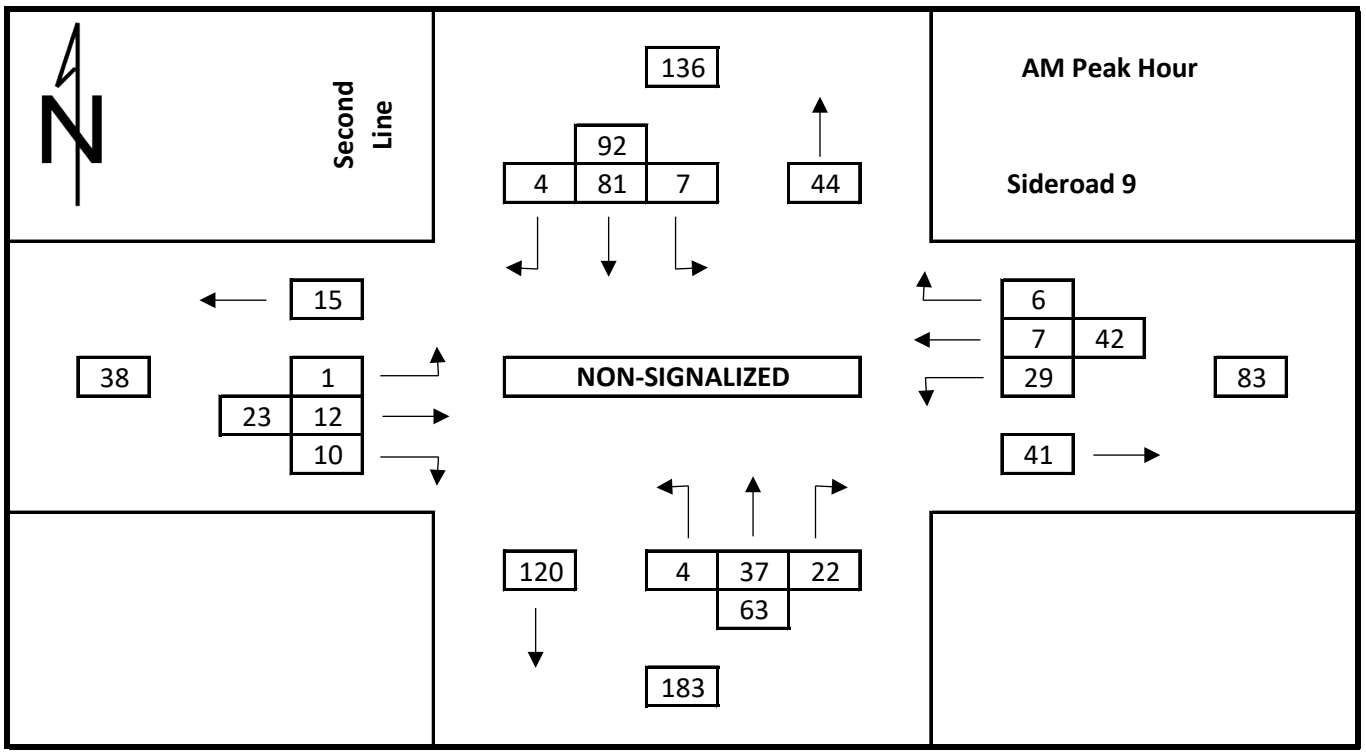
Sideroad 17 at Second Line

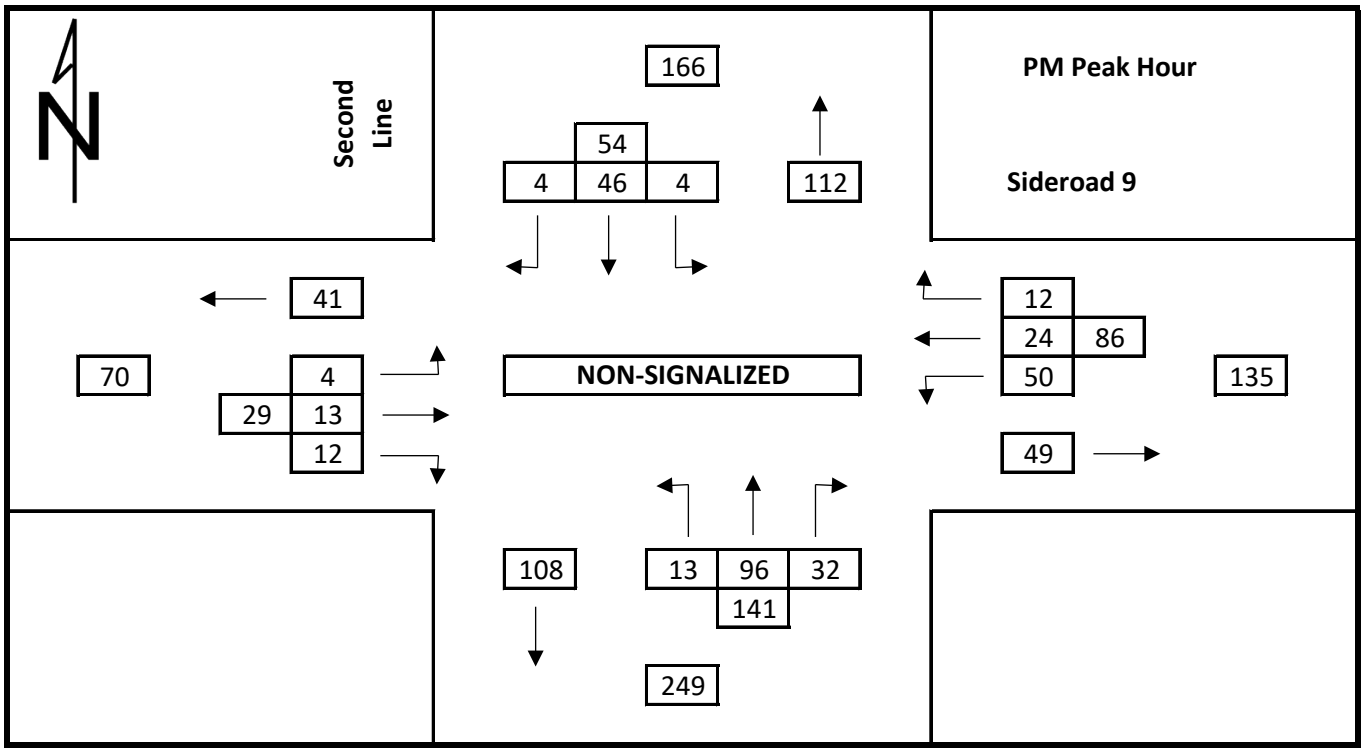




Background Traffic Year 2041

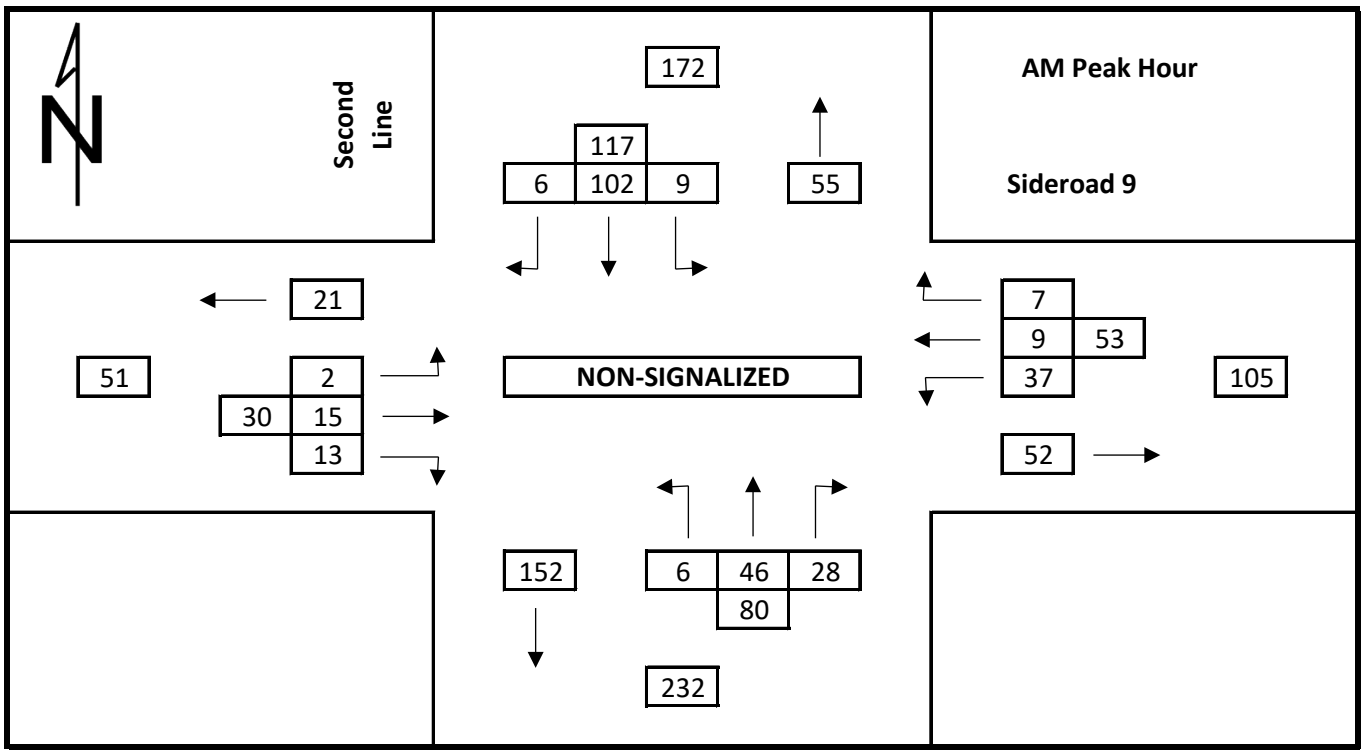
Sideroad 17 at Second Line

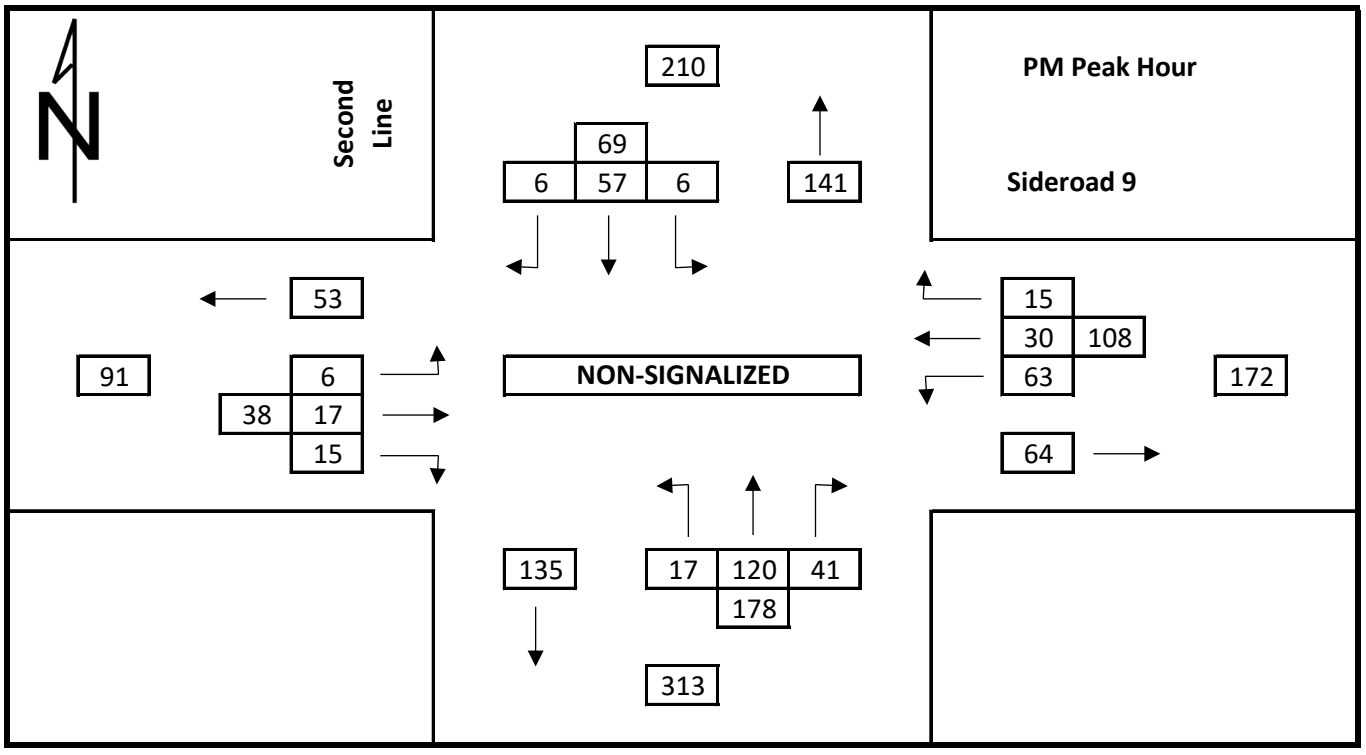




Background Traffic Year 2051

Sideroad 17 at Second Line





Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	9	8	23	6	5	4	29	18	6	64	4
Future Vol, veh/h	1	9	8	23	6	5	4	29	18	6	64	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	13	2	5	2	2	2	4	7	2	7	33
Mvmt Flow	1	10	9	25	7	5	4	32	20	7	70	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	128	145	72	138	137	41	74	0	0	51	0	0
Stage 1	85	85	-	50	50	-	-	-	-	-	-	-
Stage 2	43	60	-	88	87	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.63	6.22	7.15	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.63	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.63	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.117	3.318	3.545	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	845	727	991	826	754	1030	1526	-	-	1555	-	-
Stage 1	923	804	-	956	853	-	-	-	-	-	-	-
Stage 2	971	824	-	913	823	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	827	722	991	802	748	1030	1526	-	-	1555	-	-
Mov Cap-2 Maneuver	827	722	-	802	748	-	-	-	-	-	-	-
Stage 1	919	800	-	953	851	-	-	-	-	-	-	-
Stage 2	955	821	-	890	819	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.46	9.61	0.58	0.59
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	131	-	-	827	818	144	-	-
HCM Lane V/C Ratio	0.003	-	-	0.024	0.045	0.004	-	-
HCM Control Delay (s/veh)	7.4	0	-	9.5	9.6	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	11	9	40	19	9	11	76	26	4	36	4
Future Vol, veh/h	4	11	9	40	19	9	11	76	26	4	36	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	33	33	13	3	2	13	2	3	2	2	13	2
Mvmt Flow	4	12	10	43	21	10	12	83	28	4	39	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	167	185	41	174	173	97	43	0	0	111	0	0
Stage 1	50	50	-	121	121	-	-	-	-	-	-	-
Stage 2	117	135	-	54	52	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.83	6.33	7.13	6.52	6.33	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.43	5.83	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.83	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4.297	3.417	3.527	4.018	3.417	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	733	658	999	786	720	930	1565	-	-	1479	-	-
Stage 1	890	796	-	881	796	-	-	-	-	-	-	-
Stage 2	818	729	-	956	851	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	696	650	999	756	712	930	1565	-	-	1479	-	-
Mov Cap-2 Maneuver	696	650	-	756	712	-	-	-	-	-	-	-
Stage 1	887	794	-	874	789	-	-	-	-	-	-	-
Stage 2	782	723	-	930	849	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.92	10.23	0.71	0.68
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	167	-	-	758	762	160	-	-
HCM Lane V/C Ratio	0.008	-	-	0.034	0.097	0.003	-	-
HCM Control Delay (s/veh)	7.3	0	-	9.9	10.2	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	12	10	29	7	6	4	37	22	7	81	4
Future Vol, veh/h	1	12	10	29	7	6	4	37	22	7	81	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	13	2	5	2	2	2	4	7	2	7	33
Mvmt Flow	1	13	11	32	8	7	4	40	24	8	88	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	158	178	90	171	168	52	92	0	0	64	0	0
Stage 1	105	105	-	61	61	-	-	-	-	-	-	-
Stage 2	53	73	-	110	108	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.63	6.22	7.15	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.63	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.63	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.117	3.318	3.545	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	808	696	968	786	724	1015	1502	-	-	1538	-	-
Stage 1	900	787	-	943	844	-	-	-	-	-	-	-
Stage 2	960	813	-	888	806	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	788	690	968	756	718	1015	1502	-	-	1538	-	-
Mov Cap-2 Maneuver	788	690	-	756	718	-	-	-	-	-	-	-
Stage 1	896	783	-	940	842	-	-	-	-	-	-	-
Stage 2	942	811	-	859	802	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.68	9.92	0.47	0.56
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	106	-	-	793	778	136	-	-
HCM Lane V/C Ratio	0.003	-	-	0.032	0.059	0.005	-	-
HCM Control Delay (s/veh)	7.4	0	-	9.7	9.9	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	13	12	50	24	12	13	96	32	4	46	4
Future Vol, veh/h	4	13	12	50	24	12	13	96	32	4	46	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	33	33	13	3	2	13	2	3	2	2	13	2
Mvmt Flow	4	14	13	54	26	13	14	104	35	4	50	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	207	228	52	216	213	122	54	0	0	139	0	0
Stage 1	61	61	-	150	150	-	-	-	-	-	-	-
Stage 2	146	167	-	66	63	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.83	6.33	7.13	6.52	6.33	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.43	5.83	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.83	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4.297	3.417	3.527	4.018	3.417	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	689	621	985	739	684	901	1551	-	-	1444	-	-
Stage 1	878	787	-	850	773	-	-	-	-	-	-	-
Stage 2	789	705	-	942	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	645	613	985	703	676	901	1551	-	-	1444	-	-
Mov Cap-2 Maneuver	645	613	-	703	676	-	-	-	-	-	-	-
Stage 1	875	785	-	842	765	-	-	-	-	-	-	-
Stage 2	743	698	-	910	840	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.14	10.77	0.68	0.56
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	158	-	-	732	717	131	-	-
HCM Lane V/C Ratio	0.009	-	-	0.043	0.13	0.003	-	-
HCM Control Delay (s/veh)	7.3	0	-	10.1	10.8	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.4	0	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	15	13	37	9	7	6	46	28	9	102	6
Future Vol, veh/h	2	15	13	37	9	7	6	46	28	9	102	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	13	2	5	2	2	2	4	7	2	7	33
Mvmt Flow	2	16	14	40	10	8	7	50	30	10	111	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	202	227	114	217	215	65	117	0	0	80	0	0
Stage 1	134	134	-	78	78	-	-	-	-	-	-	-
Stage 2	68	93	-	139	137	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.63	6.22	7.15	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.63	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.63	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.117	3.318	3.545	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	757	653	938	733	683	999	1471	-	-	1517	-	-
Stage 1	870	765	-	923	830	-	-	-	-	-	-	-
Stage 2	942	797	-	857	783	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	732	646	938	696	675	999	1471	-	-	1517	-	-
Mov Cap-2 Maneuver	732	646	-	696	675	-	-	-	-	-	-	-
Stage 1	864	760	-	919	826	-	-	-	-	-	-	-
Stage 2	920	793	-	821	778	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.99	10.43	0.56	0.57
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	126	-	-	754	721	137	-	-
HCM Lane V/C Ratio	0.004	-	-	0.043	0.08	0.006	-	-
HCM Control Delay (s/veh)	7.5	0	-	10	10.4	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	17	15	63	30	15	17	120	41	6	57	6
Future Vol, veh/h	6	17	15	63	30	15	17	120	41	6	57	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	33	33	13	3	2	13	2	3	2	2	13	2
Mvmt Flow	7	18	16	68	33	16	18	130	45	7	62	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	262	290	65	274	271	153	68	0	0	175	0	0
Stage 1	78	78	-	190	190	-	-	-	-	-	-	-
Stage 2	184	212	-	84	82	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.83	6.33	7.13	6.52	6.33	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.43	5.83	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.83	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4.297	3.417	3.527	4.018	3.417	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	632	572	969	676	635	865	1533	-	-	1401	-	-
Stage 1	859	773	-	810	743	-	-	-	-	-	-	-
Stage 2	751	673	-	921	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	577	561	969	632	624	865	1533	-	-	1401	-	-
Mov Cap-2 Maneuver	577	561	-	632	624	-	-	-	-	-	-	-
Stage 1	855	769	-	799	733	-	-	-	-	-	-	-
Stage 2	695	664	-	880	823	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.67	11.7	0.7	0.66
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	164	-	-	677	654	154	-	-
HCM Lane V/C Ratio	0.012	-	-	0.061	0.179	0.005	-	-
HCM Control Delay (s/veh)	7.4	0	-	10.7	11.7	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.6	0	-	-

Appendix J-1

10 WELLINGTON ROAD 125 AT HALTON-ERIN TOWNLINE – EXISTING TRAFFIC VOLUME METRICS

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Project #24-485 - 30 Forensic Engineering

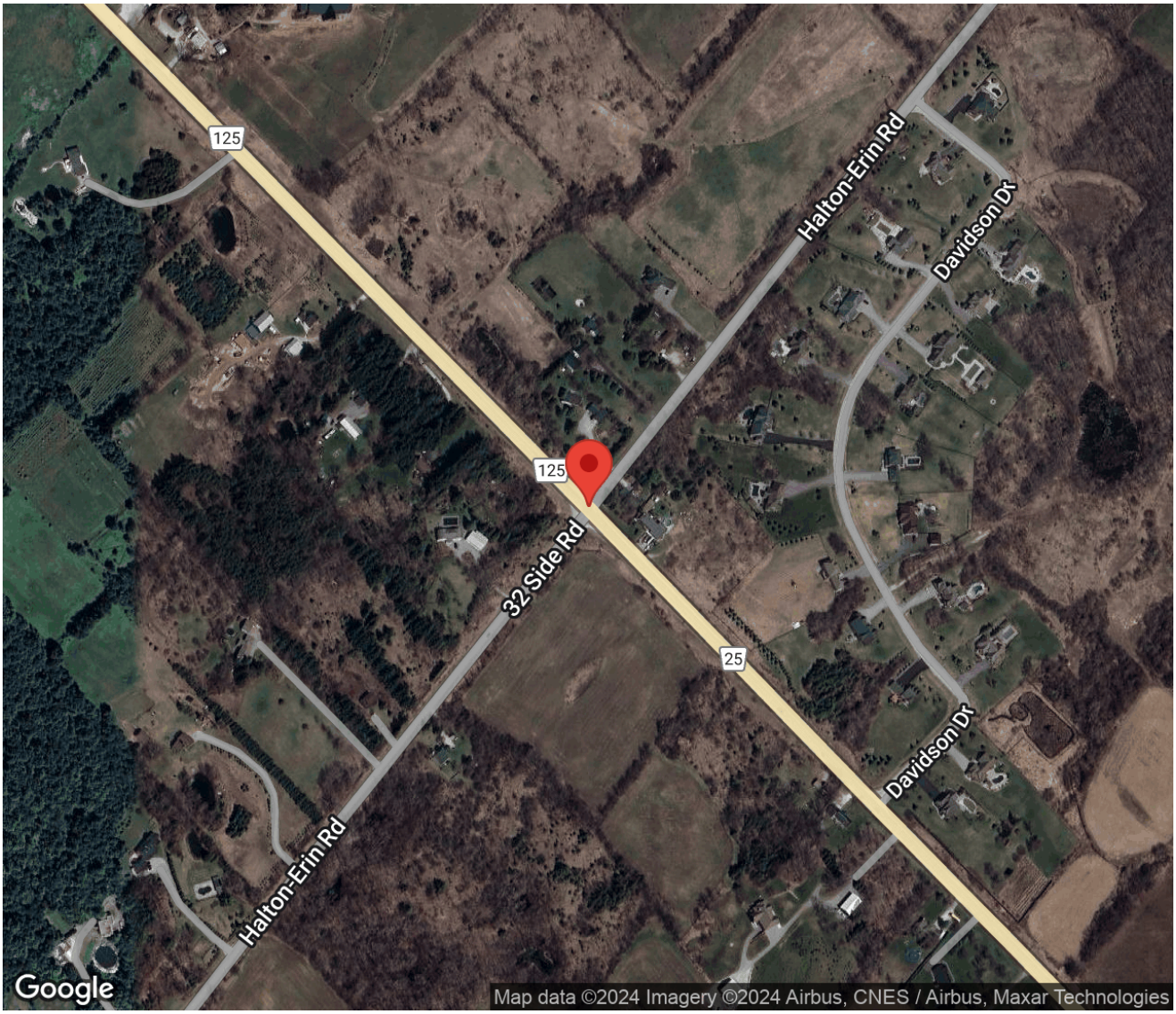
Intersection Count Report

Intersection:	Wellington Rd 125 & Halton-Erin Townline
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500010
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

Ontario Traffic Inc.
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Traffic Count Map

Intersection:	Wellington Rd 125 & Halton-Erin Townline
Site Code:	2448500010
Municipality:	Erin
Count Date:	Nov 19, 2024



Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

Hwy 25 - Traffic Summary

Hour	North Approach Totals (Includes Cars, Trucks, Bicycles)						South Approach Totals (Includes Cars, Trucks, Bicycles)						Total
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	33	200	7	0	240	0	2	109	16	0	127	0	367
08:00 - 09:00	33	197	9	0	239	0	4	105	9	0	118	0	357
09:00 - 10:00	25	125	3	0	153	0	5	102	16	0	123	0	276
BREAK													
11:00 - 12:00	18	140	6	0	164	0	4	108	15	0	127	0	291
12:00 - 13:00	18	114	6	0	138	0	7	101	17	0	125	0	263
BREAK													
15:00 - 16:00	24	117	6	0	147	0	16	192	18	0	226	1	373
16:00 - 17:00	30	126	4	0	160	0	10	260	25	0	295	0	455
17:00 - 18:00	16	144	7	0	167	0	4	218	20	0	242	0	409
GRAND TOTAL	**197**	**1163**	**48**	**0**	**1408**	**0**	**52**	**1195**	**136**	**0**	**1383**	**1**	**2791**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

Halton-Erin Rd - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	19	35	23	0	77	0	9	44	5	0	58	0	135
08:00 - 09:00	20	42	10	1	73	0	7	47	4	0	58	0	131
09:00 - 10:00	20	34	24	0	78	0	4	18	4	0	26	0	104
BREAK													
11:00 - 12:00	9	21	18	0	48	0	2	19	8	0	29	0	77
12:00 - 13:00	14	33	26	0	73	0	1	17	6	0	24	0	97
BREAK													
15:00 - 16:00	10	62	39	0	111	0	3	32	5	0	40	0	151
16:00 - 17:00	21	66	51	0	138	0	13	53	6	0	72	0	210
17:00 - 18:00	13	62	49	0	124	0	10	51	6	0	67	0	191
GRAND TOTAL	**126**	**355**	**240**	**1**	**722**	**0**	**49**	**281**	**44**	**0**	**374**	**0**	**1096**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Hwy 25

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	2	32	2	0	36	1	4	0	0	5	0	0	0	0	0	0
07:15	14	36	4	0	54	0	3	0	0	3	0	0	0	0	0	0
07:30	4	42	1	0	47	0	10	0	0	10	0	0	0	0	0	0
07:45	11	68	0	0	79	1	5	0	0	6	0	0	0	0	0	0
08:00	5	46	3	0	54	1	5	0	0	6	0	0	0	0	0	0
08:15	10	51	5	0	66	0	6	0	0	6	0	0	0	0	0	0
08:30	9	40	1	0	50	0	9	0	0	9	0	0	0	0	0	0
08:45	8	34	0	0	42	0	6	0	0	6	0	0	0	0	0	0
09:00	4	27	2	0	33	0	7	0	0	7	0	0	0	0	0	0
09:15	7	23	1	0	31	0	3	0	0	3	0	0	0	0	0	0
09:30	7	25	0	0	32	0	9	0	0	9	0	0	0	0	0	0
09:45	7	24	0	0	31	0	7	0	0	7	0	0	0	0	0	0
SUBTOTAL	88	448	19	0	555	3	74	0	0	77	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Hwy 25

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	4	26	2	0	32	0	7	0	0	7	0	0	0	0	0	0
11:15	3	38	1	0	42	1	8	0	0	9	0	0	0	0	0	0
11:30	8	21	0	0	29	1	6	0	0	7	0	0	0	0	0	0
11:45	1	27	3	0	31	0	7	0	0	7	0	0	0	0	0	0
12:00	3	26	1	0	30	0	5	0	0	5	0	0	0	0	0	0
12:15	6	24	2	0	32	0	4	0	0	4	0	0	0	0	0	0
12:30	3	25	0	0	28	1	5	1	0	7	0	0	0	0	0	0
12:45	5	21	2	0	28	0	4	0	0	4	0	0	0	0	0	0
SUBTOTAL	33	208	11	0	252	3	46	1	0	50	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Hwy 25

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
15:00	7	24	4	0	35	0	6	0	0	6	0	0	0	0	0	0
15:15	5	24	1	0	30	0	3	0	0	3	0	0	0	0	0	0
15:30	10	31	1	0	42	0	8	0	0	8	0	0	0	0	0	0
15:45	2	19	0	0	21	0	2	0	0	2	0	0	0	0	0	0
16:00	3	25	0	0	28	0	0	0	0	0	0	0	0	0	0	0
16:15	10	37	1	0	48	0	3	0	0	3	0	0	0	0	0	0
16:30	9	29	2	0	40	1	5	0	0	6	0	0	0	0	0	0
16:45	7	23	1	0	31	0	4	0	0	4	0	0	0	0	0	0
17:00	6	44	2	0	52	0	1	0	0	1	0	0	0	0	0	0
17:15	3	38	0	0	41	0	4	0	0	4	0	0	0	0	0	0
17:30	4	29	4	0	37	0	5	0	0	5	0	0	0	0	0	0
17:45	3	21	1	0	25	0	2	0	0	2	0	0	0	0	0	0
SUBTOTAL	69	344	17	0	430	1	43	0	0	44	0	0	0	0	0	0
GRAND TOTAL	190	1000	47	0	1237	7	163	1	0	171	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Hwy 25

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	21	4	0	25	0	1	0	0	1	0	0	0	0	0	0
07:15	0	21	3	0	24	0	5	1	0	6	0	0	0	0	0	0
07:30	2	28	4	0	34	0	6	0	0	6	0	0	0	0	0	0
07:45	0	22	4	0	26	0	5	0	0	5	0	0	0	0	0	0
08:00	0	22	1	0	23	0	5	1	0	6	0	0	0	0	0	0
08:15	1	19	2	0	22	0	5	1	0	6	0	0	0	0	0	0
08:30	1	30	1	0	32	0	5	0	0	5	0	0	0	0	0	0
08:45	1	16	3	0	20	1	3	0	0	4	0	0	0	0	0	0
09:00	2	18	3	0	23	0	5	1	0	6	0	0	0	0	0	0
09:15	0	17	8	0	25	0	7	0	0	7	0	0	0	0	0	0
09:30	1	24	2	0	27	0	12	0	0	12	0	0	0	0	0	0
09:45	2	13	2	0	17	0	6	0	0	6	0	0	0	0	0	0
SUBTOTAL	10	251	37	0	298	1	65	4	0	70	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Hwy 25

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	1	27	3	0	31	0	8	1	0	9	0	0	0	0	0	0
11:15	1	21	2	0	24	0	5	0	0	5	0	0	0	0	0	0
11:30	0	19	3	0	22	0	5	0	0	5	0	0	0	0	0	0
11:45	2	21	6	0	29	0	2	0	0	2	0	0	0	0	0	0
12:00	4	24	5	0	33	0	5	0	0	5	0	0	0	0	0	0
12:15	0	19	4	0	23	0	5	0	0	5	0	0	0	0	0	0
12:30	2	19	3	0	24	0	11	0	0	11	0	0	0	0	0	0
12:45	1	15	4	0	20	0	3	1	0	4	0	0	0	0	0	0
SUBTOTAL	11	165	30	0	206	0	44	2	0	46	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Hwy 25

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	1	41	5	0	47	0	7	0	0	7	0	0	0	0	0	0
15:15	3	43	5	0	51	3	4	1	0	8	0	0	0	0	0	1
15:30	2	40	1	0	43	1	6	0	0	7	0	0	0	0	0	0
15:45	5	48	6	0	59	1	3	0	0	4	0	0	0	0	0	0
16:00	1	59	4	0	64	0	5	1	0	6	0	0	0	0	0	0
16:15	1	48	3	0	52	0	3	1	0	4	0	0	0	0	0	0
16:30	3	64	11	0	78	0	4	1	0	5	0	0	0	0	0	0
16:45	5	71	3	0	79	0	6	1	0	7	0	0	0	0	0	0
17:00	1	58	8	0	67	0	2	0	0	2	0	0	0	0	0	0
17:15	3	47	4	0	54	0	2	0	0	2	0	0	0	0	0	0
17:30	0	55	4	0	59	0	2	0	0	2	0	0	0	0	0	0
17:45	0	50	4	0	54	0	2	0	0	2	0	0	0	0	0	0
SUBTOTAL	25	624	58	0	707	5	46	5	0	56	0	0	0	0	0	1
GRAND TOTAL	46	1040	125	0	1211	6	155	11	0	172	0	0	0	0	0	1

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Halton-Erin Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	1	6	5	0	12	1	0	0	0	1	0	0	0	0	0	0
07:15	5	10	6	0	21	1	0	0	0	1	0	0	0	0	0	0
07:30	3	10	5	0	18	2	0	0	0	2	0	0	0	0	0	0
07:45	6	9	6	0	21	0	0	1	0	1	0	0	0	0	0	0
08:00	5	13	1	0	19	0	0	0	0	0	0	0	0	0	0	0
08:15	5	12	1	0	18	0	0	0	0	0	0	0	0	0	0	0
08:30	4	11	3	0	18	1	0	1	1	3	0	0	0	0	0	0
08:45	5	6	4	0	15	0	0	0	0	0	0	0	0	0	0	0
09:00	3	8	9	0	20	1	0	0	0	1	0	0	0	0	0	0
09:15	6	6	3	0	15	1	1	0	0	2	0	0	0	0	0	0
09:30	4	12	2	0	18	0	1	0	0	1	0	0	0	0	0	0
09:45	5	6	10	0	21	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	52	109	55	0	216	7	2	2	1	12	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Halton-Erin Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	1	7	5	0	13	0	1	0	0	1	0	0	0	0	0	0
11:15	5	3	5	0	13	0	0	0	0	0	0	0	0	0	0	0
11:30	1	7	2	0	10	0	0	0	0	0	0	0	0	0	0	0
11:45	2	2	6	0	10	0	1	0	0	1	0	0	0	0	0	0
12:00	4	9	8	0	21	0	0	2	0	2	0	0	0	0	0	0
12:15	2	7	8	0	17	0	1	0	0	1	0	0	0	0	0	0
12:30	4	10	4	0	18	0	0	0	0	0	0	0	0	0	0	0
12:45	4	6	4	0	14	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	23	51	42	0	116	0	3	2	0	5	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Halton-Erin Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	3	11	7	0	21	0	0	2	0	2	0	0	0	0	0	0
15:15	3	18	9	0	30	0	0	0	0	0	0	0	0	0	0	0
15:30	1	20	9	0	30	0	2	1	0	3	0	0	0	0	0	0
15:45	3	9	10	0	22	0	2	1	0	3	0	0	0	0	0	0
16:00	4	11	14	0	29	1	0	1	0	2	0	0	0	0	0	0
16:15	7	15	10	0	32	0	1	0	0	1	0	0	0	0	0	0
16:30	5	16	12	0	33	0	1	0	0	1	0	0	0	0	0	0
16:45	3	22	13	0	38	1	0	1	0	2	0	0	0	0	0	0
17:00	3	11	13	0	27	0	0	0	0	0	0	0	0	0	0	0
17:15	4	21	11	0	36	0	0	1	0	1	0	0	0	0	0	0
17:30	2	18	9	0	29	0	0	0	0	0	0	0	0	0	0	0
17:45	4	12	15	0	31	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	42	184	132	0	358	2	6	7	0	15	0	0	0	0	0	0
GRAND TOTAL	117	344	229	0	690	9	11	11	1	32	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Halton-Erin Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	2	10	2	0	14	0	1	0	0	1	0	0	0	0	0	0
07:15	2	10	3	0	15	0	0	0	0	0	0	0	0	0	0	0
07:30	3	15	0	0	18	0	0	0	0	0	0	0	0	0	0	0
07:45	2	7	0	0	9	0	1	0	0	1	0	0	0	0	0	0
08:00	2	8	0	0	10	0	1	0	0	1	0	0	0	0	0	0
08:15	0	12	0	0	12	0	2	0	0	2	0	0	0	0	0	0
08:30	2	14	2	0	18	0	0	1	0	1	0	0	0	0	0	0
08:45	2	10	1	0	13	1	0	0	0	1	0	0	0	0	0	0
09:00	0	3	1	0	4	0	1	0	0	1	0	0	0	0	0	0
09:15	1	6	1	0	8	0	0	0	0	0	0	0	0	0	0	0
09:30	1	2	0	0	3	0	1	0	0	1	0	0	0	0	0	0
09:45	2	4	2	0	8	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	19	101	12	0	132	1	8	1	0	10	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Halton-Erin Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	1	2	3	0	6	0	0	0	0	0	0	0	0	0	0	0
11:15	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0	0
11:30	0	5	4	0	9	0	0	0	0	0	0	0	0	0	0	0
11:45	0	9	1	0	10	0	1	0	0	1	0	0	0	0	0	0
12:00	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0
12:15	1	5	3	0	9	0	0	0	0	0	0	0	0	0	0	0
12:30	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
12:45	0	3	2	0	5	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	2	33	14	0	49	1	3	0	0	4	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Halton-Erin Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	2	6	1	0	9	0	0	0	0	0	0	0	0	0	0	0
15:15	0	8	1	0	9	0	1	0	0	1	0	0	0	0	0	0
15:30	1	7	0	0	8	0	2	0	0	2	0	0	0	0	0	0
15:45	0	7	3	0	10	0	1	0	0	1	0	0	0	0	0	0
16:00	4	18	0	0	22	0	1	0	0	1	0	0	0	0	0	0
16:15	3	12	1	0	16	0	1	0	0	1	0	0	0	0	0	0
16:30	3	9	4	0	16	0	1	0	0	1	0	0	0	0	0	0
16:45	3	11	0	0	14	0	0	1	0	1	0	0	0	0	0	0
17:00	2	19	3	0	24	0	0	0	0	0	0	0	0	0	0	0
17:15	4	13	0	0	17	0	0	0	0	0	0	0	0	0	0	0
17:30	3	7	1	0	11	0	0	0	0	0	0	0	0	0	0	0
17:45	1	12	2	0	15	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	26	129	16	0	171	0	7	1	0	8	0	0	0	0	0	0
GRAND TOTAL	47	263	42	0	352	2	18	2	0	22	0	0	0	0	0	0

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period
From: 07:00:00
To: 10:00:00

One Hour Peak
From: 07:45:00
To: 08:45:00

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Hwy 25 runs N/S

North Approach

	Out	In	Total
Cars	249	110	359
Trucks	27	22	49
Bicycles	0	0	0
	276	**132**	**408**

Hwy 25

Bicycles	0	0	0	0
Trucks	0	25	2	0
Cars	9	205	35	0
Totals	**9**	**230**	**37**	**0**

East Approach

	Out	In	Total
Cars	76	84	160
Trucks	4	9	13
Bicycles	0	0	0
	80	**93**	**173**

Halton-Erin Rd

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	6	**6**	
0	4	41	**45**	
0	1	2	**3**	

Peds: 0

Peds: 0



Peds: 0

Halton-Erin Rd

	Totals	Cars	Trucks	Bicycles
	1	0	1	0
	13	11	2	0
	45	45	0	0
	21	20	1	0

West Approach

	Out	In	Total
Cars	49	56	105
Trucks	5	0	5
Bicycles	0	0	0
	54	**56**	**110**

Hwy 25

Totals	**2**	**113**	**10**	**0**
Cars	2	93	8	0
Trucks	0	20	2	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	103	227	330
Trucks	22	27	49
Bicycles	0	0	0
	125	**254**	**379**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

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

Start Time	North Approach Hwy 25						South Approach Hwy 25						East Approach Halton-Erin Rd						West Approach Halton-Erin Rd						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:45	12	73	0	0	0	85	0	27	4	0	0	31	6	9	7	0	0	22	2	8	0	0	0	10	148
08:00	6	51	3	0	0	60	0	27	2	0	0	29	5	13	1	0	0	19	2	9	0	0	0	11	119
08:15	10	57	5	0	0	72	1	24	3	0	0	28	5	12	1	0	0	18	0	14	0	0	0	14	132
08:30	9	49	1	0	0	59	1	35	1	0	0	37	5	11	4	1	0	21	2	14	3	0	0	19	136
Grand Total	**37**	**230**	**9**	**0**	**0**	**276**	**2**	**113**	**10**	**0**	**0**	**125**	**21**	**45**	**13**	**1**	**0**	**80**	**6**	**45**	**3**	**0**	**0**	**54**	**535**
Approach %	13.4	83.3	3.3	0		-	1.6	90.4	8	0		-	26.3	56.3	16.3	1.3		-	11.1	83.3	5.6	0		-	
Totals %	6.9	43	1.7	0		51.6	0.4	21.1	1.9	0		23.4	3.9	8.4	2.4	0.2		15	1.1	8.4	0.6	0		10.1	
PHF	**0.77**	**0.79**	**0.45**	**0**		**0.81**	**0.5**	**0.81**	**0.63**	**0**		**0.84**	**0.88**	**0.87**	**0.46**	**0.25**		**0.91**	**0.75**	**0.8**	**0.25**	**0**		**0.71**	**0.9**
Cars	35	205	9	0		249	2	93	8	0		103	20	45	11	0		76	6	41	2	0		49	477
% Cars	94.6	89.1	100	0		90.2	100	82.3	80	0		82.4	95.2	100	84.6	0		95	100	91.1	66.7	0		90.7	89.2
Trucks	2	25	0	0		27	0	20	2	0		22	1	0	2	1		4	0	4	1	0		5	58
% Trucks	5.4	10.9	0	0		9.8	0	17.7	20	0		17.6	4.8	0	15.4	100		5	0	8.9	33.3	0		9.3	10.8
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period
From: 11:00:00
To: 13:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Hwy 25 runs N/S

North Approach

	Out	In	Total
Cars	121	110	231
Trucks	23	25	48
Bicycles	0	0	0
	144	**135**	**279**

Hwy 25

Bicycles	0	0	0	0
Trucks	1	21	1	0
Cars	6	102	13	0
Totals	**7**	**123**	**14**	**0**

East Approach

	Out	In	Total
Cars	66	53	119
Trucks	4	2	6
Bicycles	0	0	0
	70	**55**	**125**

Halton-Erin Rd

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	1	**1**	
0	1	22	**23**	
0	0	5	**5**	

Peds: 0



Peds: 0

Peds: 0

Halton-Erin Rd

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	28	26	2	0
	30	28	2	0
	12	12	0	0

West Approach

	Out	In	Total
Cars	28	42	70
Trucks	1	3	4
Bicycles	0	0	0
	29	**45**	**74**

Totals	**8**	**106**	**18**	**0**
Cars	8	83	18	0
Trucks	0	23	0	0
Bicycles	0	0	0	0

Hwy 25

South Approach

	Out	In	Total
Cars	109	119	228
Trucks	23	21	44
Bicycles	0	0	0
	132	**140**	**272**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (11:45 - 12:45)

Start Time	North Approach Hwy 25						South Approach Hwy 25						East Approach Halton-Erin Rd						West Approach Halton-Erin Rd						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
11:45	1	34	3	0	0	38	2	23	6	0	0	31	2	3	6	0	0	11	0	10	1	0	0	11	91
12:00	3	31	1	0	0	35	4	29	5	0	0	38	4	9	10	0	0	23	0	4	1	0	0	5	101
12:15	6	28	2	0	0	36	0	24	4	0	0	28	2	8	8	0	0	18	1	5	3	0	0	9	91
12:30	4	30	1	0	0	35	2	30	3	0	0	35	4	10	4	0	0	18	0	4	0	0	0	4	92
Grand Total	**14**	**123**	**7**	**0**	**0**	**144**	**8**	**106**	**18**	**0**	**0**	**132**	**12**	**30**	**28**	**0**	**0**	**70**	**1**	**23**	**5**	**0**	**0**	**29**	**375**
Approach %	9.7	85.4	4.9	0		-	6.1	80.3	13.6	0		-	17.1	42.9	40	0		-	3.4	79.3	17.2	0		-	
Totals %	3.7	32.8	1.9	0		38.4	2.1	28.3	4.8	0		35.2	3.2	8	7.5	0		18.7	0.3	6.1	1.3	0		7.7	
PHF	**0.58**	**0.9**	**0.58**	**0**		**0.95**	**0.5**	**0.88**	**0.75**	**0**		**0.87**	**0.75**	**0.75**	**0.7**	**0**		**0.76**	**0.25**	**0.58**	**0.42**	**0**		**0.66**	**0.93**
Cars	13	102	6	0		121	8	83	18	0		109	12	28	26	0		66	1	22	5	0		28	324
% Cars	92.9	82.9	85.7	0		84	100	78.3	100	0		82.6	100	93.3	92.9	0		94.3	100	95.7	100	0		96.6	86.4
Trucks	1	21	1	0		23	0	23	0	0		23	0	2	2	0		4	0	1	0	0		1	51
% Trucks	7.1	17.1	14.3	0		16	0	21.7	0	0		17.4	0	6.7	7.1	0		5.7	0	4.3	0	0		3.4	13.6
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Specified Period
From: 15:00:00
To: 18:00:00

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

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Hwy 25 runs N/S

North Approach

	Out	In	Total
Cars	171	300	471
Trucks	14	16	30
Bicycles	0	0	0
	185	**316**	**501**

Hwy 25

Bicycles	0	0	0	0
Trucks	0	13	1	0
Cars	6	133	32	0
Totals	**6**	**146**	**33**	**0**

East Approach

	Out	In	Total
Cars	130	108	238
Trucks	4	6	10
Bicycles	0	0	0
	134	**114**	**248**

Halton-Erin Rd

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	0	11	**11**
0	2	51	**53**
0	1	8	**9**

Peds: 0



Peds: 0

Peds: 0

Halton-Erin Rd

Totals	Cars	Trucks	Bicycles
0	0	0	0
49	48	1	0
66	64	2	0
19	18	1	0

West Approach

	Out	In	Total
Cars	70	80	150
Trucks	3	2	5
Bicycles	0	0	0
	73	**82**	**155**

Totals	**10**	**256**	**28**	**0**
Cars	10	241	25	0
Trucks	0	15	3	0
Bicycles	0	0	0	0

Hwy 25

South Approach

	Out	In	Total
Cars	276	159	435
Trucks	18	15	33
Bicycles	0	0	0
	294	**174**	**468**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Wellington Rd 125 & Halton-Erin Townline
Site Code: 2448500010
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

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

Start Time	North Approach Hwy 25						South Approach Hwy 25						East Approach Halton-Erin Rd						West Approach Halton-Erin Rd						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:15	10	40	1	0	0	51	1	51	4	0	0	56	7	16	10	0	0	33	3	13	1	0	0	17	157
16:30	10	34	2	0	0	46	3	68	12	0	0	83	5	17	12	0	0	34	3	10	4	0	0	17	180
16:45	7	27	1	0	0	35	5	77	4	0	0	86	4	22	14	0	0	40	3	11	1	0	0	15	176
17:00	6	45	2	0	0	53	1	60	8	0	0	69	3	11	13	0	0	27	2	19	3	0	0	24	173
Grand Total	**33**	**146**	**6**	**0**	**0**	**185**	**10**	**256**	**28**	**0**	**0**	**294**	**19**	**66**	**49**	**0**	**0**	**134**	**11**	**53**	**9**	**0**	**0**	**73**	**686**
Approach %	17.8	78.9	3.2	0		-	3.4	87.1	9.5	0		-	14.2	49.3	36.6	0		-	15.1	72.6	12.3	0		-	
Totals %	4.8	21.3	0.9	0		27	1.5	37.3	4.1	0		42.9	2.8	9.6	7.1	0		19.5	1.6	7.7	1.3	0		10.6	
PHF	**0.83**	**0.81**	**0.75**	**0**		**0.87**	**0.5**	**0.83**	**0.58**	**0**		**0.85**	**0.68**	**0.75**	**0.88**	**0**		**0.84**	**0.92**	**0.7**	**0.56**	**0**		**0.76**	**0.95**
Cars	32	133	6	0		171	10	241	25	0		276	18	64	48	0		130	11	51	8	0		70	647
% Cars	97	91.1	100	0		92.4	100	94.1	89.3	0		93.9	94.7	97	98	0		97	100	96.2	88.9	0		95.9	94.3
Trucks	1	13	0	0		14	0	15	3	0		18	1	2	1	0		4	0	2	1	0		3	39
% Trucks	3	8.9	0	0		7.6	0	5.9	10.7	0		6.1	5.3	3	2	0		3	0	3.8	11.1	0		4.1	5.7
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	45	3	21	45	13	2	113	10	37	230	9
Future Vol, veh/h	6	45	3	21	45	13	2	113	10	37	230	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	62	-	-	33
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	33	5	2	15	2	18	20	5	11	2
Mvmt Flow	7	49	3	23	49	14	2	123	11	40	250	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	482	468	250	482	467	123	260	0	0	134	0	0
Stage 1	330	330	-	127	127	-	-	-	-	-	-	-
Stage 2	152	138	-	355	340	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.59	6.53	7.15	6.52	6.35	4.12	-	-	4.15	-	-
Critical Hdwy Stg 1	6.12	5.59	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.59	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.081	3.597	3.545	4.018	3.435	2.218	-	-	2.245	-	-
Pot Cap-1 Maneuver	495	482	719	490	493	894	1305	-	-	1433	-	-
Stage 1	683	633	-	869	791	-	-	-	-	-	-	-
Stage 2	851	769	-	656	639	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	423	466	719	423	476	894	1305	-	-	1433	-	-
Mov Cap-2 Maneuver	423	466	-	423	476	-	-	-	-	-	-	-
Stage 1	660	612	-	868	789	-	-	-	-	-	-	-
Stage 2	784	768	-	581	618	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.76	13.74	0.12	1.02
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	31	-	-	470	498	249	-	-
HCM Lane V/C Ratio	0.002	-	-	0.125	0.173	0.028	-	-
HCM Control Delay (s/veh)	7.8	0	-	13.8	13.7	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	53	9	19	66	49	10	256	28	33	146	6
Future Vol, veh/h	11	53	9	19	66	49	10	256	28	33	146	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	62	-	-	33
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	4	11	5	3	2	2	6	11	3	9	2
Mvmt Flow	12	58	10	21	72	53	11	278	30	36	159	7

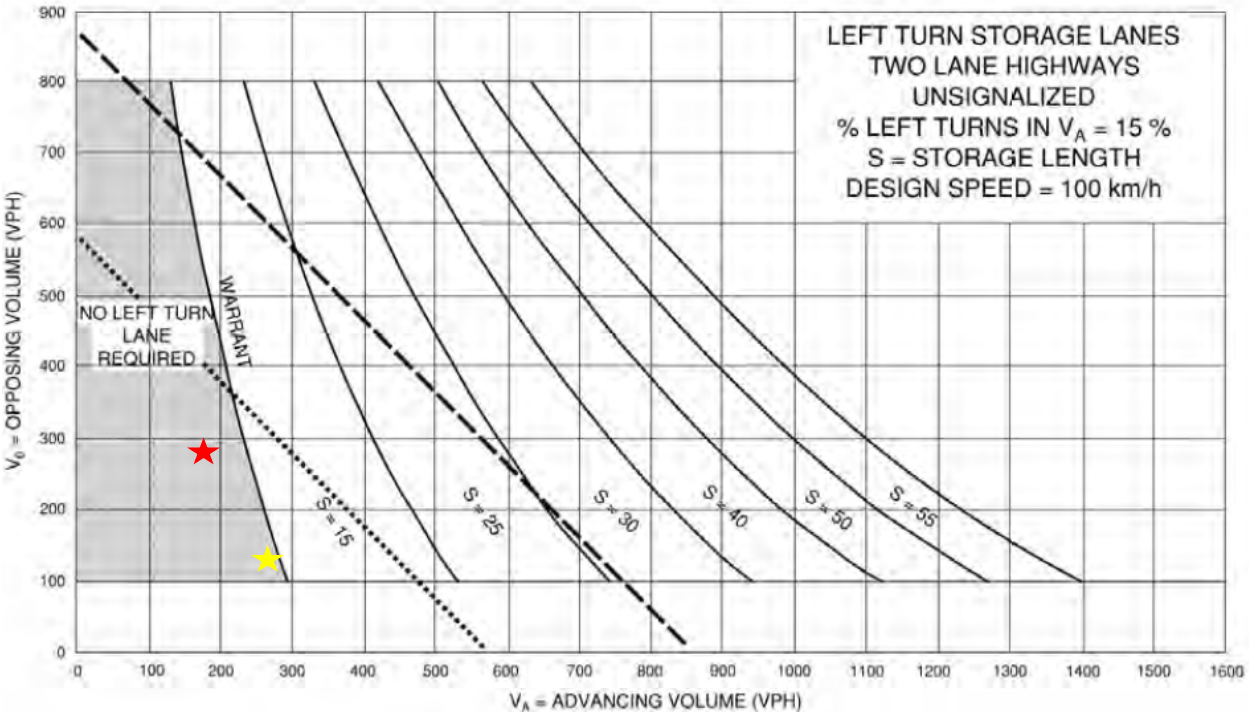
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	566	561	159	559	537	278	165	0	0	309	0	0
Stage 1	230	230	-	300	300	-	-	-	-	-	-	-
Stage 2	336	330	-	259	237	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.54	6.31	7.15	6.53	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.12	5.54	-	6.15	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.54	-	6.15	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.036	3.399	3.545	4.027	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	435	434	864	435	449	761	1413	-	-	1246	-	-
Stage 1	772	710	-	703	664	-	-	-	-	-	-	-
Stage 2	678	642	-	739	707	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	325	416	864	357	431	761	1413	-	-	1246	-	-
Mov Cap-2 Maneuver	325	416	-	357	431	-	-	-	-	-	-	-
Stage 1	748	687	-	696	658	-	-	-	-	-	-	-
Stage 2	557	636	-	648	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.39	15.28	0.26	1.42
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	68	-	-	425	495	332	-	-
HCM Lane V/C Ratio	0.008	-	-	0.187	0.294	0.029	-	-
HCM Control Delay (s/veh)	7.6	0	-	15.4	15.3	8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	1.2	0.1	-	-

Wellington Road 125 at Halton-Erin Townline – Southbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

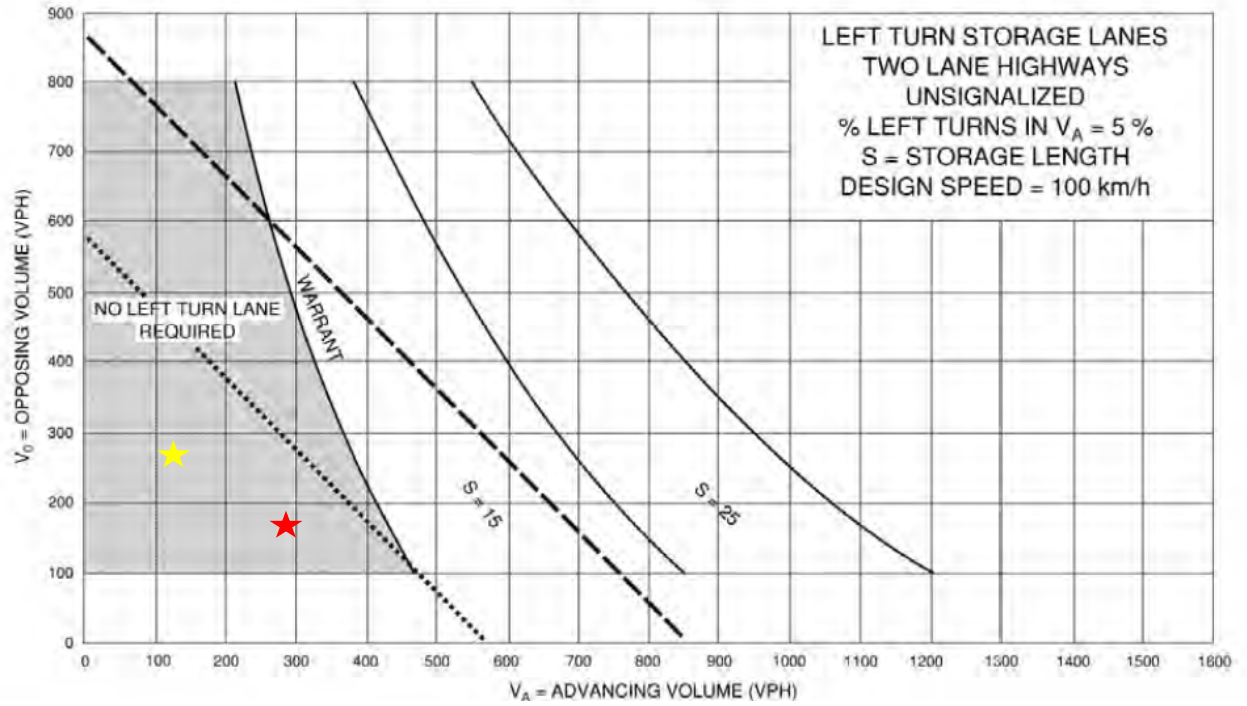
TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	276*	125*	37	13.4	0
PM	185*	294*	33	17.8	0

*** traffic volumes do not meet minimum MTO requirement for warrant**

Wellington Road 125 at Halton-Erin Townline – Northbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	125*	276*	2	1.6*	0
PM	294*	185*	10	3.4*	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

*** traffic volumes do not meet minimum MTO requirement for warrant**

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 1 - Minimum Vehicle Volume

Wellington Rd 125 at Halton-Erin Townline (Existing Traffic Volumes)

100% SATISFIED - ☐ Yes ☑ No

80% SATISFIED - ☑ Yes ☐ No

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				PERCENTAGE WARRANT									
APPROACH LANES	1		2 or MORE		HOUR ENDING								TOTAL ACROSS	
FLOW CONDITION	FREE FLOW ☑	RESTR. FLOW ☐	FREE FLOW ☐	RESTR. FLOW ☐	8:00	9:00	10:00	12:00	13:00	16:00	17:00	18:00		
A. ALL APPROACH LANES	480 (385)	720 (575)	600 (480)	900 (720)	502	487	380	368	360	524	665	600		
100% FULFILLED					100	100				100	100	100	500	SECTIONAL PERCENTAGE
80% FULFILLED														
ACTUAL % IF BELOW 80% VALUE							79	77	75				231	
												TOTAL DOWN /8 =		91

B. MINOR STREET BOTH APPROACHES	120* (95)*	170* (135)*	120* (95)*	170* (135)*	135	130	104	77	97	151	210	191	TOTAL ACROSS	
100% FULFILLED					100	100				100	100	100	500	SECTIONAL PERCENTAGE
80% FULFILLED							80		80				160	
ACTUAL % IF BELOW 80% VALUE								64					64	
												TOTAL DOWN /8 =		91

*For "T" intersections, these values should be increased by 50%.

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 2 - Delay to Cross Traffic

Wellington Rd 125 at Halton-Erin Townline (Existing Traffic Volumes)

100% SATISFIED - ☐ Yes ☑ No

80% SATISFIED - ☐ Yes ☑ No

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				PERCENTAGE WARRANT									
APPROACH LANES	1		2 or MORE		HOUR ENDING								TOTAL ACROSS	
FLOW CONDITION	FREE FLOW ☑	RESTR. FLOW ☐	FREE FLOW ☐	RESTR. FLOW ☐	8:00	9:00	10:00	12:00	13:00	16:00	17:00	18:00		
A. MAJOR STREET BOTH APPROACHES	480 (385)	720 (575)	600 (480)	900 (720)	367	357	276	291	263	373	455	409		
100% FULFILLED														SECTIONAL PERCENTAGE
80% FULFILLED											80	80	160	
ACTUAL % IF BELOW 80% VALUE					76	74	58	61	55	78			402	
												TOTAL DOWN /8 =		70

B. TRAFFIC CROSSING MAJOR STREET	50 (40)	75 (60)	50 (40)	75 (60)	72	74	58	32	48	75	100	85	TOTAL ACROSS	
100% FULFILLED					100	100	100			100	100	100	600	SECTIONAL PERCENTAGE
80% FULFILLED									80				80	
ACTUAL % IF BELOW 80% VALUE								64					64	
												TOTAL DOWN /8 =		93

RC SPENCER ASSOCIATES INC.
Consulting Engineers

Justification 3 - Volume/Delay Combinations

Wellington Rd 125 at Halton-Erin Townline (Existing Traffic Volumes)

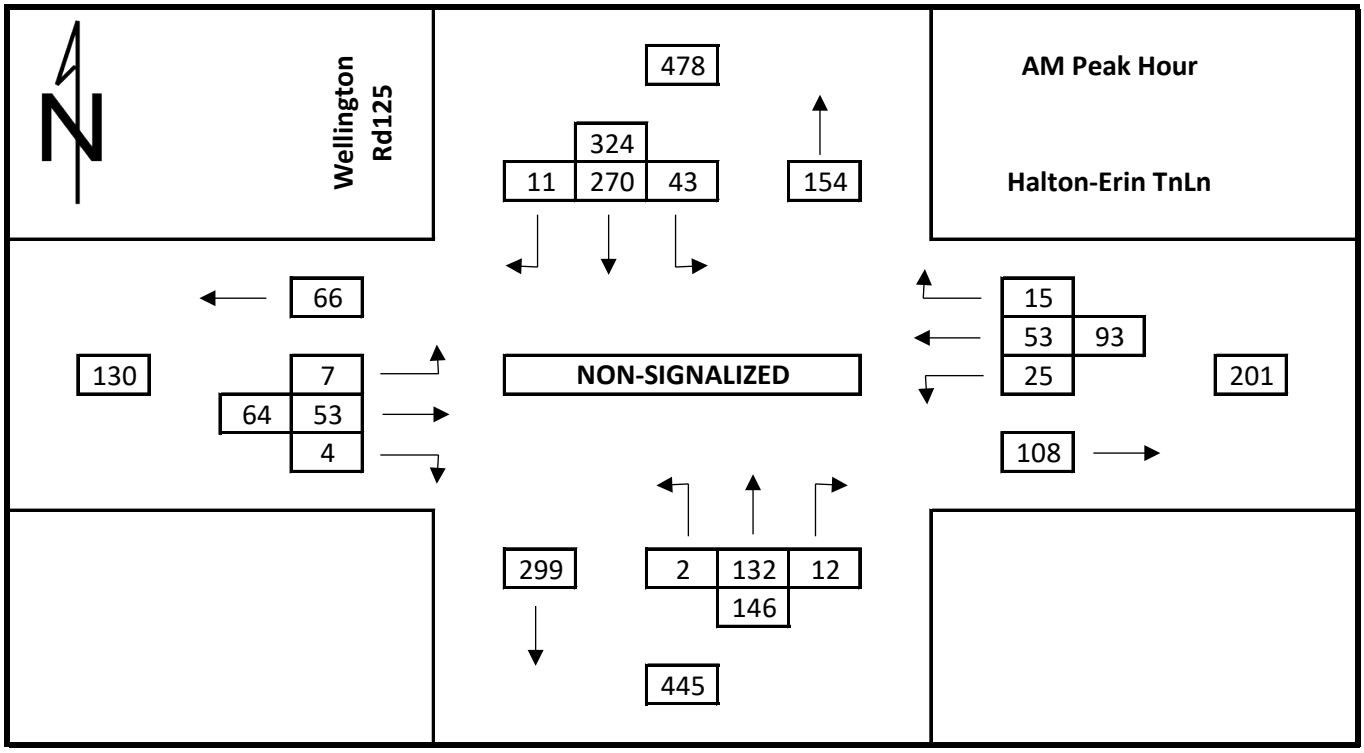
Justification Satisfied 80% or More				Two Justifications Satisfied 80% or More	
Justification 1	Minimum Vehicular Volume	☑ Yes	☐ No	☐ Yes	☑ No
Justification 2	Delay to Cross Traffic	☐ Yes	☑ No		

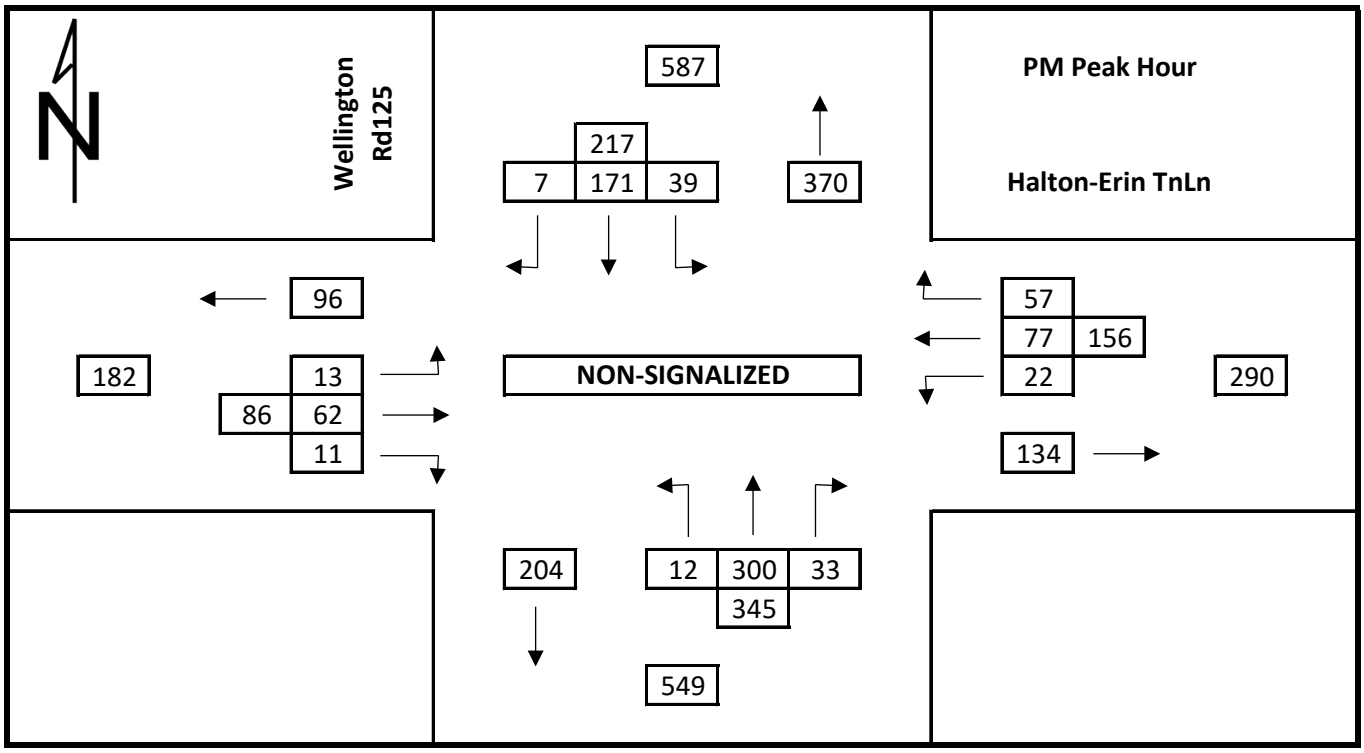
Appendix J-2

10 WELLINGTON ROAD 125 AT HALTON-ERIN TOWNLINE – HORIZON TRAFFIC VOLUME METRICS

Background Traffic Year 2031

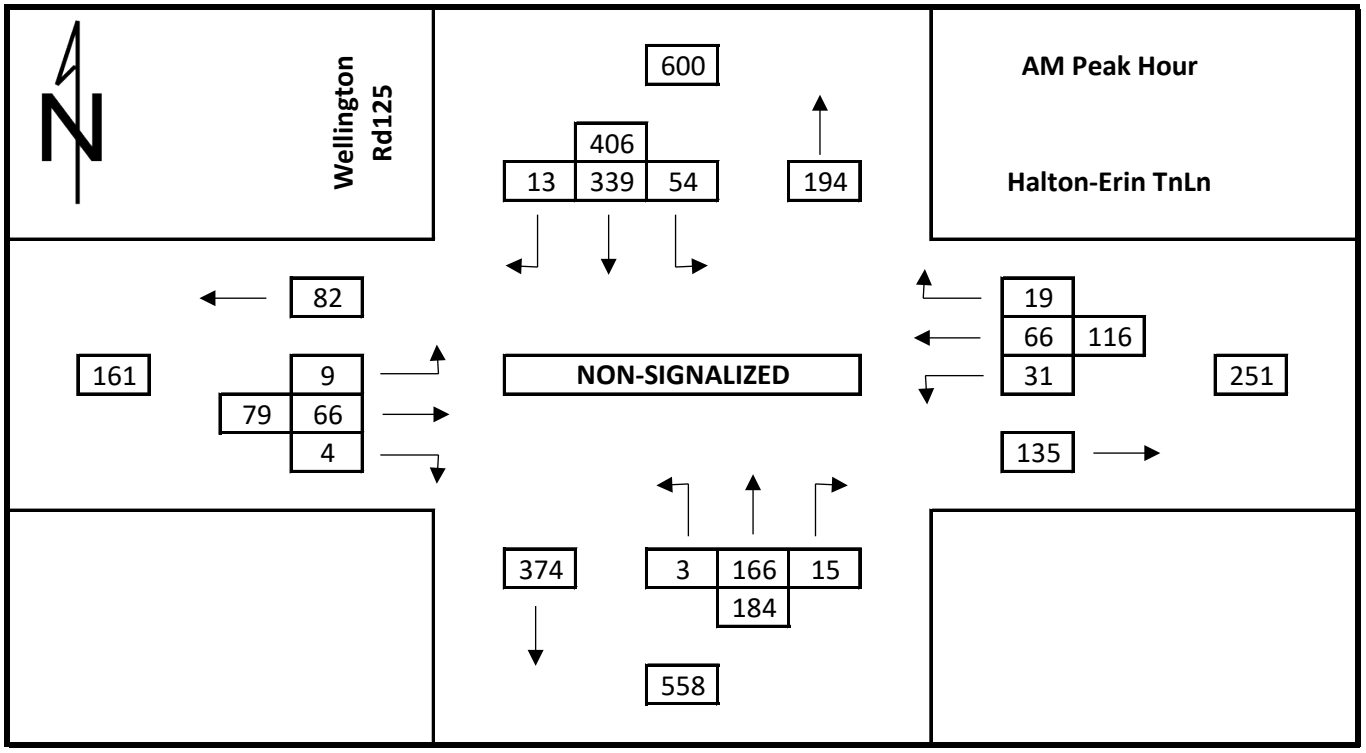
Wellington Rd 125 at Halton-Erin Townline

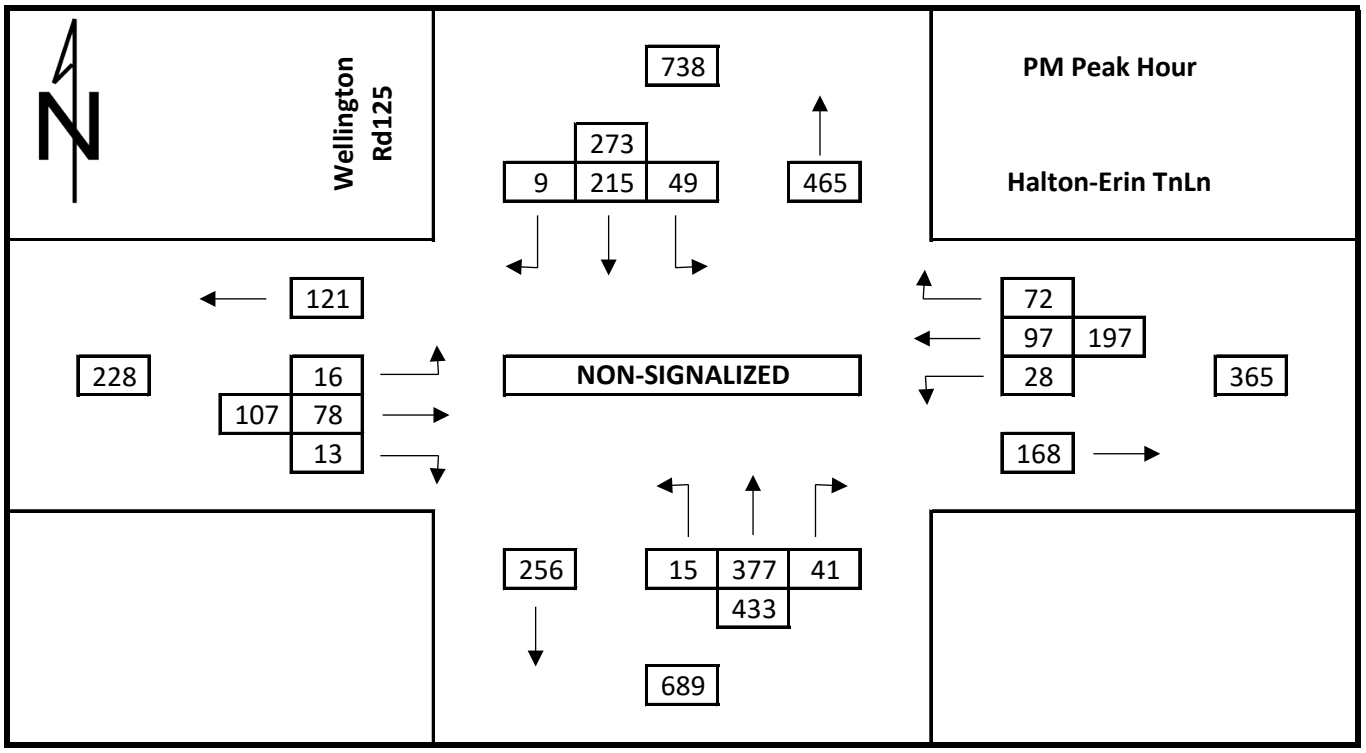




Background Traffic Year 2041

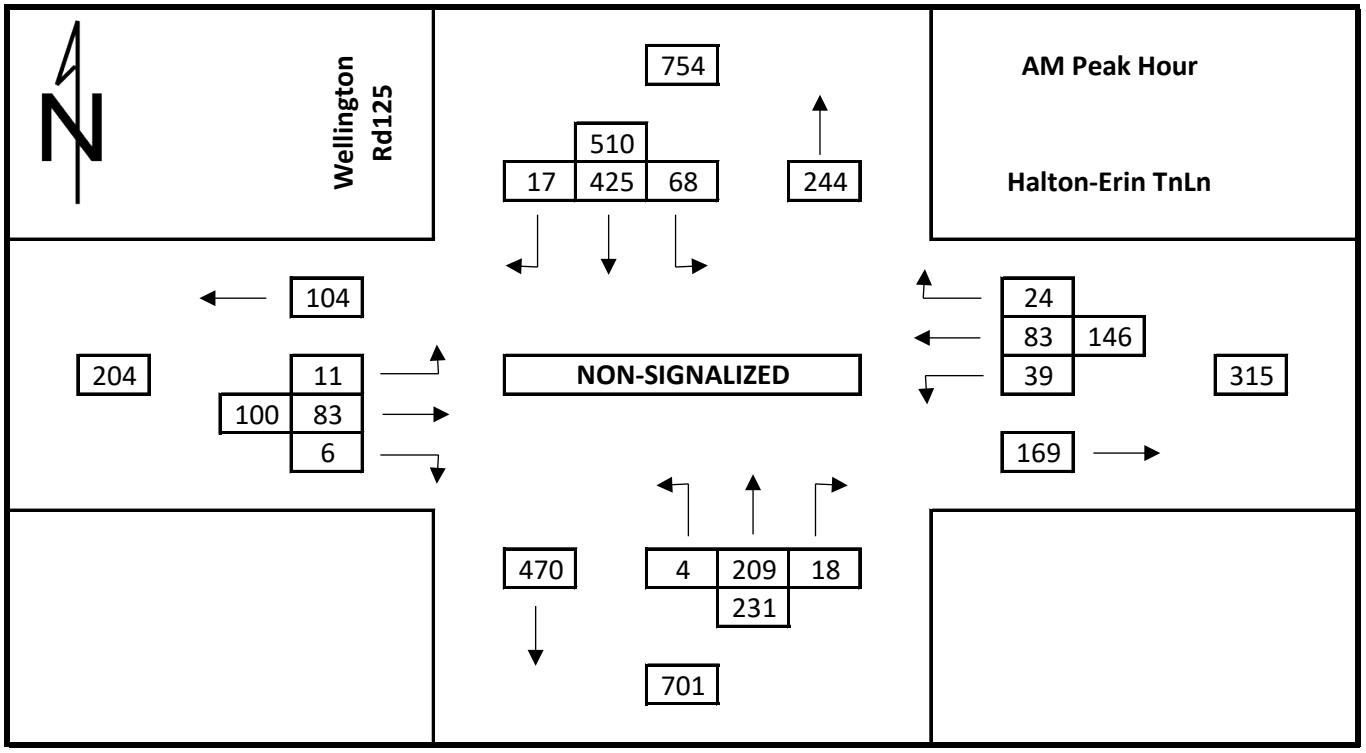
Wellington Rd 125 at Halton-Erin Townline

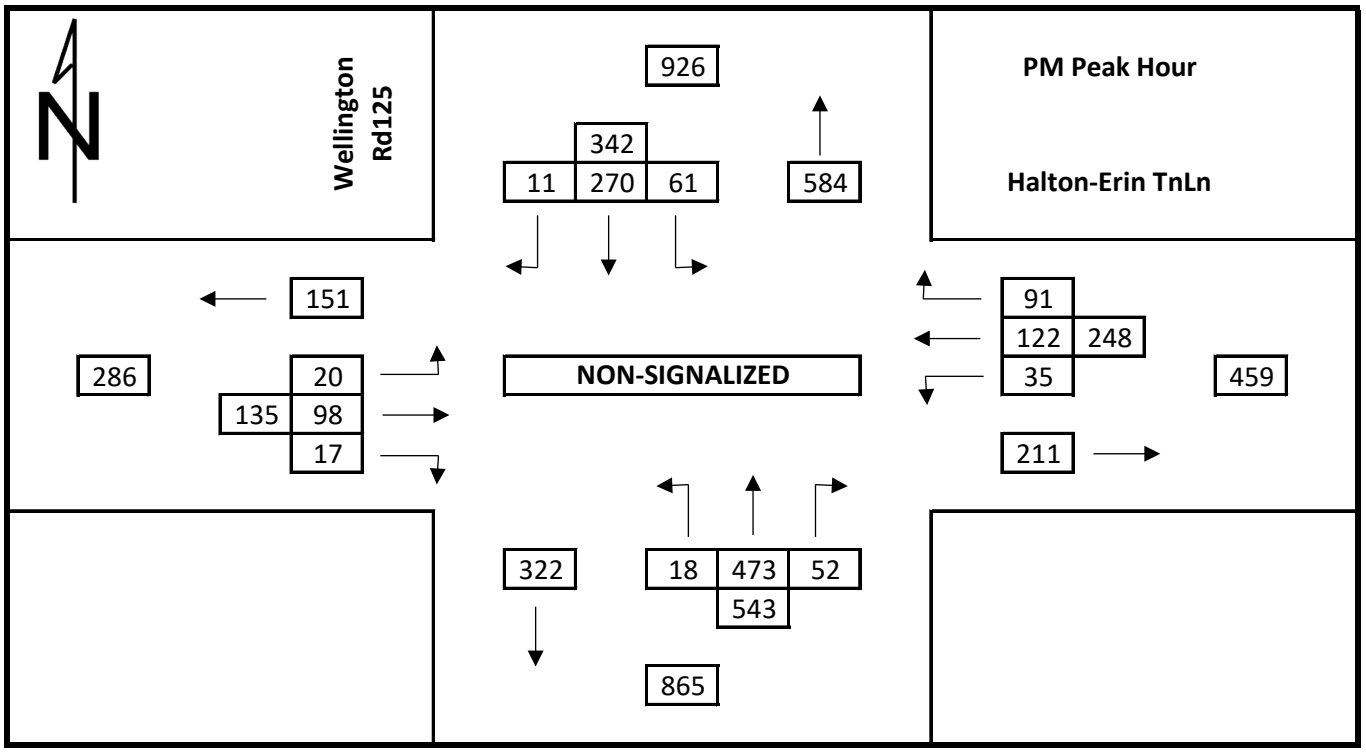




Background Traffic Year 2051

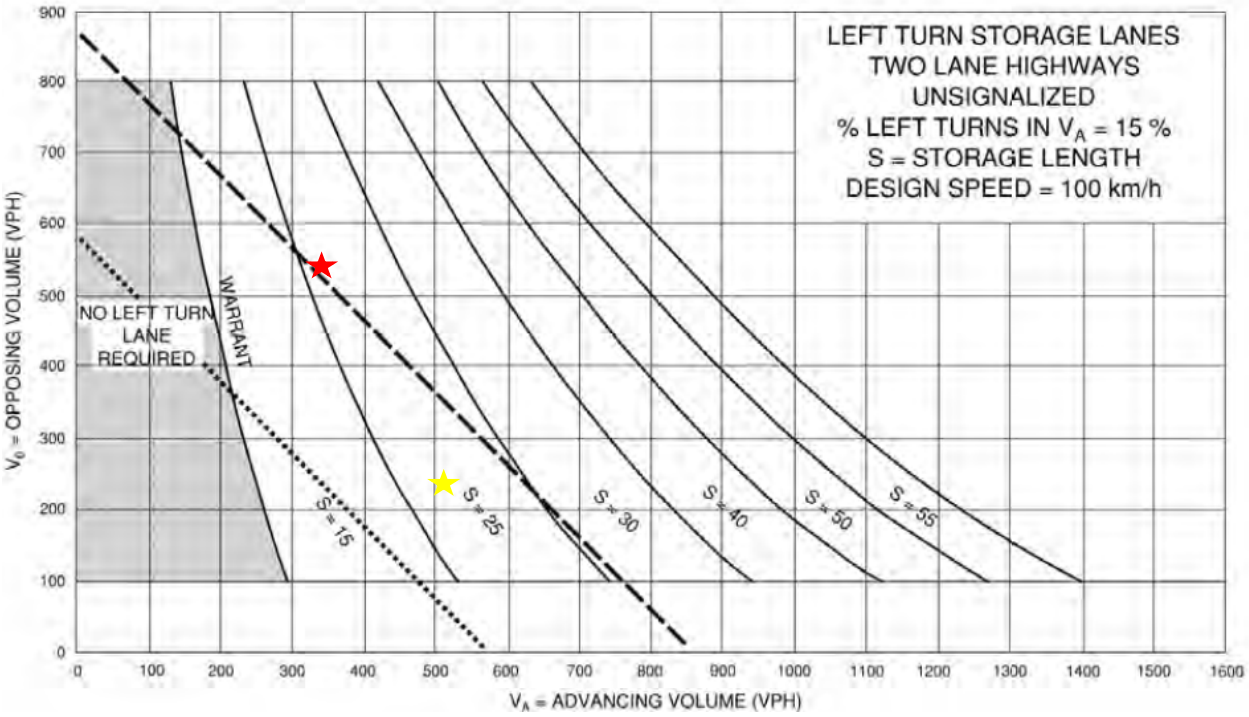
Wellington Rd 125 at Halton-Erin Townline





Wellington Road 125 at Halton-Erin Townline – Southbound Left Turn Lane Warrants

Background Traffic 2051 – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

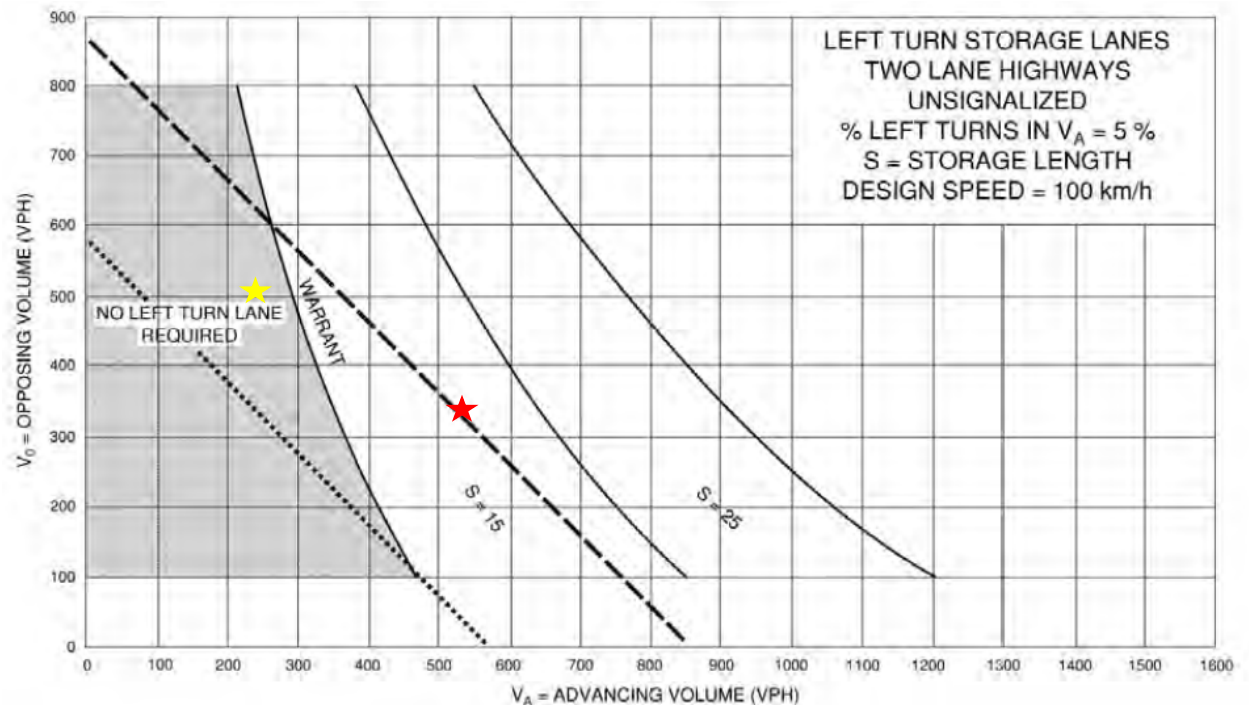
TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	510	231	68	13.3	25
PM	342	543	61	17.8	25

Wellington Road 125 at Halton-Erin Townline – Northbound Left Turn Lane Warrants

Background Traffic 2051 – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	231	510	4	1.7*	0
PM	543	342	18	3.3*	0

*** % left turns does not meet minimum MTO 5% requirement for warrant**

Traffic Signal Warrants – Summary of Justifications (OTM Book 12)

Projected Total Traffic (Horizon Year 2051)

Wellington Rd 125 at Halton-Erin Townline

JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENTS FOR TWO-LANE ROADWAYS		COMPLIANCE	
		FREE FLOW	RESTRICTED FLOW		
		OPERATING SPEED GREATER THAN OR EQUAL TO 70 km/h	OPERATING SPEED LESS THAN 70 km/h	SECTIONAL %	ENTIRE %**
1. MINIMUM VEHICULAR VOLUME	A*. Vehicle Volume, All Approaches for Each of the Heaviest 8 Hours of an Average Day, and	480	720	86 (1)	86
	B***. Vehicle Volume, Along Minor Streets for Each of the Same 8 Hours	120	170	95 (2)	
2. DELAY TO CROSS TRAFFIC	A*. Vehicle Volume, Major Street for Each of the Heaviest 8 Hours of an Average Day, and	480	720	62 (3)	62
	B*. Combined Vehicle and Pedestrian Volume Crossing the Major Street for Each of the Same 8 Hours.	50	75	114 (4)	
3. VOLUME/DELAY COMBINATIONS	The Above Justifications (1 and 2) Both Satisfied to the Extent of 80% or more	YES ☐	NO ☑		62
4. MIN. FOUR HOUR VEHICLE VOLUME	At Plotted Point Representing Hourly Volume for Minor Approach vs. Major Approach for Four Highest Hours of an Average Day Fall above the Applicable Curve	YES ☐	NO ☐		N/A
5. COLLISION EXPERIENCE	A. Total Reported Accidents of Types Susceptible to Correction by a Traffic Signal, per 12 Month Period Averaged over a 36 Month Period, and	5		N/A	N/A
	B. Adequate Trial of Less Restrictive Remedies. Where Satisfactory Observance and Enforcement Have Failed to Reduce the Number of Collisions	YES ☐	NO ☐		
6. PEDESTRIAN VOLUME AND DELAY	A. Plotted Point Representing 8 Hour Pedestrian Volume vs. 8 Hour Vehicular Volume Fall in Justified Zone, and	YES ☐	NO ☐		N/A
	B. Plotted Point Representing 8 Hour Volume of Pedestrian Experiencing Delays of 10 s or more vs. 8 Hour Pedestrian Volume Fall in Justified Zone	YES ☐	NO ☐		

Notes

* Vehicle Volume Warrants 1A and 2A for Roadways Having Two or More Moving Lanes in One Direction Should be 25% Higher than Values Given Above.

** The Lowest Sectional Percentage Governs the Entire Warrant.

*** For "T" Intersections, the Values for Warrant (1B) should be increased by 50%.

Justification 7 - Future Traffic Volumes

(1) = (719 + 923) / 4 / 480 = 86%

(2) = (179 + 279) / 4 / 120 = 95%

(3) = (540 + 644) / 4 / 480 = 62%

(4) = (97 + 130) / 4 / 50 = 114%

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	53	4	25	53	15	2	132	12	43	270	11
Future Vol, veh/h	7	53	4	25	53	15	2	132	12	43	270	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	62	-	-	33
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	33	5	2	15	2	18	20	5	11	2
Mvmt Flow	8	58	4	27	58	16	2	143	13	47	293	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	564	548	293	564	547	143	305	0	0	157	0	0
Stage 1	387	387	-	148	148	-	-	-	-	-	-	-
Stage 2	177	161	-	416	399	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.59	6.53	7.15	6.52	6.35	4.12	-	-	4.15	-	-
Critical Hdwy Stg 1	6.12	5.59	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.59	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.081	3.597	3.545	4.018	3.435	2.218	-	-	2.245	-	-
Pot Cap-1 Maneuver	437	434	678	432	445	871	1255	-	-	1405	-	-
Stage 1	637	598	-	848	775	-	-	-	-	-	-	-
Stage 2	825	752	-	608	602	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	357	416	678	356	426	871	1255	-	-	1405	-	-
Mov Cap-2 Maneuver	357	416	-	356	426	-	-	-	-	-	-	-
Stage 1	611	574	-	846	773	-	-	-	-	-	-	-
Stage 2	748	750	-	522	578	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.3	15.63	0.11	1.02
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	27	-	-	419	439	247	-	-
HCM Lane V/C Ratio	0.002	-	-	0.166	0.23	0.033	-	-
HCM Control Delay (s/veh)	7.9	0	-	15.3	15.6	7.6	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.9	0.1	-	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	62	11	22	77	57	12	300	33	39	171	7
Future Vol, veh/h	13	62	11	22	77	57	12	300	33	39	171	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	62	-	-	33
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	4	11	5	3	2	2	6	11	3	9	2
Mvmt Flow	14	67	12	24	84	62	13	326	36	42	186	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	665	659	186	657	630	326	193	0	0	362	0	0
Stage 1	271	271	-	352	352	-	-	-	-	-	-	-
Stage 2	394	388	-	304	278	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.54	6.31	7.15	6.53	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.12	5.54	-	6.15	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.54	-	6.15	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.036	3.399	3.545	4.027	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	374	381	834	374	397	715	1380	-	-	1191	-	-
Stage 1	735	682	-	658	630	-	-	-	-	-	-	-
Stage 2	631	605	-	699	678	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	255	362	834	288	377	715	1380	-	-	1191	-	-
Mov Cap-2 Maneuver	255	362	-	288	377	-	-	-	-	-	-	-
Stage 1	706	655	-	651	622	-	-	-	-	-	-	-
Stage 2	493	598	-	593	651	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.23	18.59	0.27	1.46
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	69	-	-	365	433	334	-	-
HCM Lane V/C Ratio	0.009	-	-	0.256	0.392	0.036	-	-
HCM Control Delay (s/veh)	7.6	0	-	18.2	18.6	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	1.8	0.1	-	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	66	4	31	66	19	3	166	15	54	339	13
Future Vol, veh/h	9	66	4	31	66	19	3	166	15	54	339	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	62	-	-	33
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	33	5	2	15	2	18	20	5	11	2
Mvmt Flow	10	72	4	34	72	21	3	180	16	59	368	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	709	689	368	709	687	180	383	0	0	197	0	0
Stage 1	486	486	-	187	187	-	-	-	-	-	-	-
Stage 2	223	203	-	522	500	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.59	6.53	7.15	6.52	6.35	4.12	-	-	4.15	-	-
Critical Hdwy Stg 1	6.12	5.59	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.59	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.081	3.597	3.545	4.018	3.435	2.218	-	-	2.245	-	-
Pot Cap-1 Maneuver	349	360	613	345	370	830	1176	-	-	1358	-	-
Stage 1	563	540	-	808	745	-	-	-	-	-	-	-
Stage 2	780	720	-	533	543	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	258	339	613	258	348	830	1176	-	-	1358	-	-
Mov Cap-2 Maneuver	258	339	-	258	348	-	-	-	-	-	-	-
Stage 1	532	510	-	805	743	-	-	-	-	-	-	-
Stage 2	685	718	-	429	513	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	19.43	21.06	0.13	1.03
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	32	-	-	335	349	247	-	-
HCM Lane V/C Ratio	0.003	-	-	0.257	0.362	0.043	-	-
HCM Control Delay (s/veh)	8.1	0	-	19.4	21.1	7.8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	1.6	0.1	-	-

Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	78	13	28	97	72	15	377	41	49	215	9
Future Vol, veh/h	16	78	13	28	97	72	15	377	41	49	215	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	62	-	-	33
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	4	11	5	3	2	2	6	11	3	9	2
Mvmt Flow	17	85	14	30	105	78	16	410	45	53	234	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	835	827	234	825	792	410	243	0	0	454	0	0
Stage 1	340	340	-	442	442	-	-	-	-	-	-	-
Stage 2	495	487	-	383	350	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.54	6.31	7.15	6.53	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.12	5.54	-	6.15	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.54	-	6.15	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.036	3.399	3.545	4.027	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	287	305	784	288	320	642	1323	-	-	1101	-	-
Stage 1	675	636	-	588	574	-	-	-	-	-	-	-
Stage 2	556	547	-	634	631	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	155	283	784	188	297	642	1323	-	-	1101	-	-
Mov Cap-2 Maneuver	155	283	-	188	297	-	-	-	-	-	-	-
Stage 1	637	600	-	579	565	-	-	-	-	-	-	-
Stage 2	391	538	-	505	596	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	28	32.89	0.27	1.51
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	69	-	-	270	335	334	-	-
HCM Lane V/C Ratio	0.012	-	-	0.43	0.639	0.048	-	-
HCM Control Delay (s/veh)	7.8	0	-	28	32.9	8.4	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2	4.2	0.2	-	-

Intersection	
Int Delay, s/veh	9.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	83	6	39	83	24	4	209	18	68	425	17
Future Vol, veh/h	11	83	6	39	83	24	4	209	18	68	425	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	62	-	-	33
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	33	5	2	15	2	18	20	5	11	2
Mvmt Flow	12	90	7	42	90	26	4	227	20	74	462	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	891	865	462	891	864	227	480	0	0	247	0	0
Stage 1	610	610	-	236	236	-	-	-	-	-	-	-
Stage 2	281	255	-	655	628	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.59	6.53	7.15	6.52	6.35	4.12	-	-	4.15	-	-
Critical Hdwy Stg 1	6.12	5.59	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.59	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.081	3.597	3.545	4.018	3.435	2.218	-	-	2.245	-	-
Pot Cap-1 Maneuver	263	284	541	260	292	781	1082	-	-	1302	-	-
Stage 1	482	474	-	761	710	-	-	-	-	-	-	-
Stage 2	726	683	-	450	476	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	159	261	541	159	268	781	1082	-	-	1302	-	-
Mov Cap-2 Maneuver	159	261	-	159	268	-	-	-	-	-	-	-
Stage 1	444	437	-	757	706	-	-	-	-	-	-	-
Stage 2	609	680	-	326	439	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	29.87	41.77	0.14	1.06
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	34	-	-	251	249	248	-	-
HCM Lane V/C Ratio	0.004	-	-	0.433	0.637	0.057	-	-
HCM Control Delay (s/veh)	8.3	0	-	29.9	41.8	7.9	0	-
HCM Lane LOS	A	A	-	D	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.1	3.9	0.2	-	-

Intersection	
Int Delay, s/veh	42.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	98	17	35	122	91	18	473	52	61	270	11
Future Vol, veh/h	20	98	17	35	122	91	18	473	52	61	270	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	62	-	-	33
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	4	11	5	3	2	2	6	11	3	9	2
Mvmt Flow	22	107	18	38	133	99	20	514	57	66	293	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1046	1036	293	1033	991	514	305	0	0	571	0	0
Stage 1	426	426	-	553	553	-	-	-	-	-	-	-
Stage 2	620	610	-	479	438	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.54	6.31	7.15	6.53	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.12	5.54	-	6.15	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.54	-	6.15	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.036	3.399	3.545	4.027	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	207	230	725	208	245	560	1255	-	-	997	-	-
Stage 1	606	582	-	512	513	-	-	-	-	-	-	-
Stage 2	476	482	-	562	577	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	65	206	725	93	220	560	1255	-	-	997	-	-
Mov Cap-2 Maneuver	65	206	-	93	220	-	-	-	-	-	-	-
Stage 1	558	536	-	500	501	-	-	-	-	-	-	-
Stage 2	281	471	-	403	531	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	95.18	164.4	0.26	1.58
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	66	-	-	167	227	332	-	-
HCM Lane V/C Ratio	0.016	-	-	0.877	1.188	0.067	-	-
HCM Control Delay (s/veh)	7.9	0	-	95.2	164.4	8.9	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	6.2	13.1	0.2	-	-

Appendix K-1

11 SIDEROAD 17 AT THIRD LINE (WEST LEG) – EXISTING TRAFFIC VOLUME METRICS

Ontario Traffic Inc.
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Project #24-485 - 30 Forensic Engineering

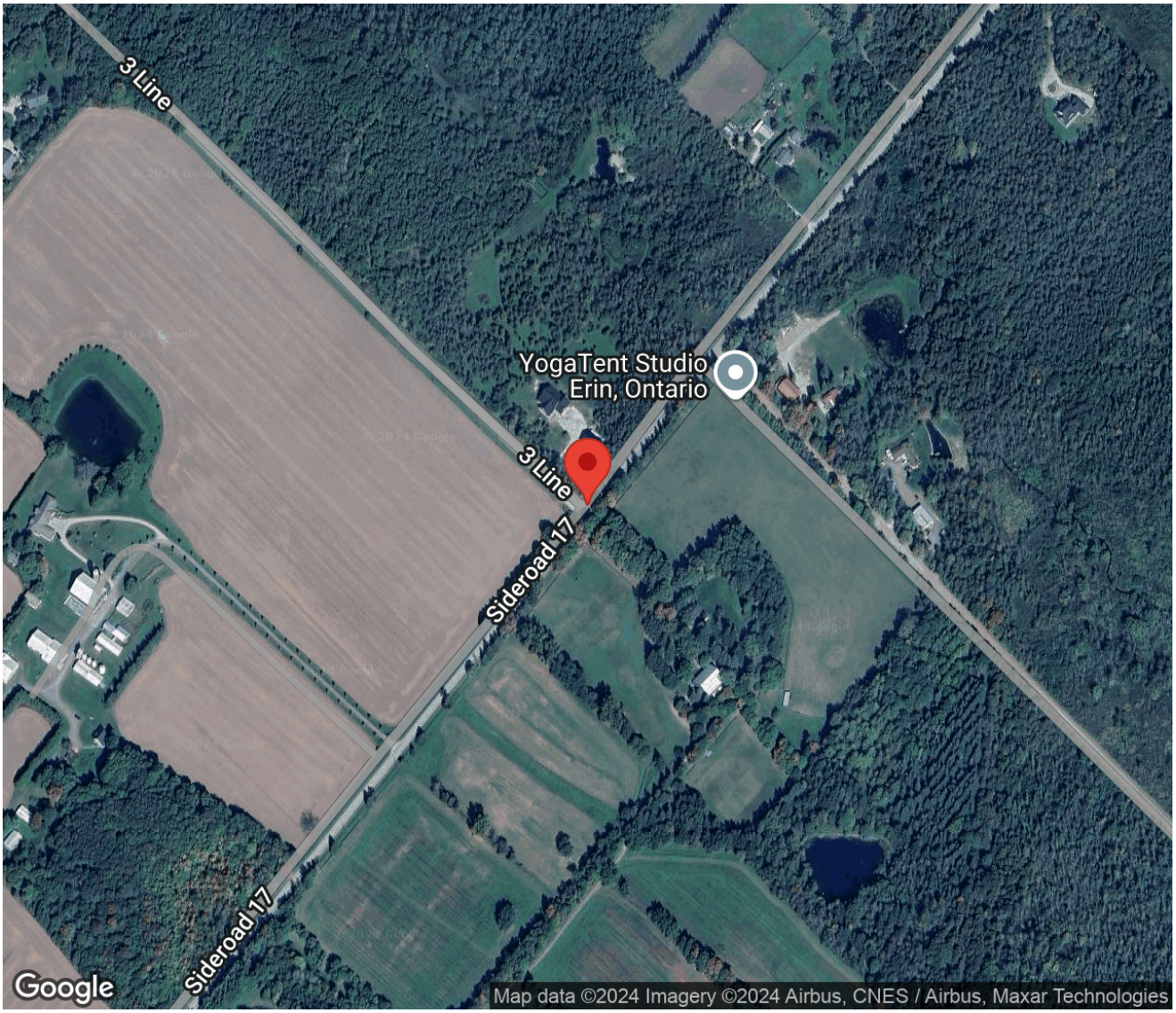
Intersection Count Report

Intersection:	Sideroad 17 & Third Line (West Leg)
Municipality:	Erin
Count Date:	Tuesday, Nov 19, 2024
Site Code:	2448500011
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-10:00, 11:00-13:00, 15:00-18:00
Weather:	Clear
Comments:	

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Traffic Count Map

Intersection:	Sideroad 17 & Third Line (West Leg)
Site Code:	2448500011
Municipality:	Erin
Count Date:	Nov 19, 2024



Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

Third Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	4	0	2	0	6	0	0	0	0	0	0	0	6
08:00 - 09:00	1	0	3	0	4	0	0	0	0	0	0	0	4
09:00 - 10:00	2	0	0	0	2	0	1	0	0	0	1	0	3
BREAK													
11:00 - 12:00	1	0	2	0	3	0	0	0	1	0	1	0	4
12:00 - 13:00	4	0	2	0	6	0	1	0	0	0	1	0	7
BREAK													
15:00 - 16:00	2	0	1	0	3	0	0	0	0	0	0	0	3
16:00 - 17:00	3	0	2	0	5	0	0	0	0	0	0	0	5
17:00 - 18:00	4	0	1	0	5	0	0	0	0	0	0	0	5
GRAND TOTAL	**21**	**0**	**13**	**0**	**34**	**0**	**2**	**0**	**1**	**0**	**3**	**0**	**37**

Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

Sideroad 17 - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	0	24	1	0	25	0	2	23	0	0	25	0	50
08:00 - 09:00	0	25	2	0	27	0	2	33	1	0	36	0	63
09:00 - 10:00	0	28	1	0	29	0	0	11	0	0	11	0	40
BREAK													
11:00 - 12:00	0	23	0	0	23	0	1	12	1	0	14	0	37
12:00 - 13:00	0	25	3	0	28	0	1	12	0	0	13	0	41
BREAK													
15:00 - 16:00	0	50	5	0	55	0	2	25	0	0	27	0	82
16:00 - 17:00	0	46	6	0	52	0	1	27	0	0	28	0	80
17:00 - 18:00	0	27	2	0	29	0	4	20	0	0	24	0	53
GRAND TOTAL	**0**	**248**	**20**	**0**	**268**	**0**	**13**	**163**	**2**	**0**	**178**	**0**	**446**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Third Line

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

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Third Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:00	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0
12:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:30	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	4	0	4	0	8	1	0	0	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

North Approach - Third Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
15:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:30	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:15	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	9	0	4	0	13	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	18	0	13	0	31	3	0	0	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Private Access

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Private Access

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

South Approach - Private Access

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

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
07:15	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
07:30	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
07:45	0	9	0	0	9	0	0	1	0	1	0	0	0	0	0	0
08:00	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
08:15	0	6	1	0	7	0	0	0	0	0	0	0	0	0	0	0
08:30	0	1	1	0	2	0	1	0	0	1	0	0	0	0	0	0
08:45	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
09:00	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
09:15	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
09:30	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
09:45	0	5	1	0	6	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	0	75	3	0	78	0	2	1	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
11:00	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0
11:15	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
11:30	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
11:45	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
12:00	0	9	1	0	10	0	0	0	0	0	0	0	0	0	0	0
12:15	0	4	0	0	4	0	1	1	0	2	0	0	0	0	0	0
12:30	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
12:45	0	5	1	0	6	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	0	46	2	0	48	0	2	1	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

East Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	11	1	0	12	0	0	0	0	0	0	0	0	0	0	0
15:15	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0	0
15:30	0	11	2	0	13	0	1	1	0	2	0	0	0	0	0	0
15:45	0	12	1	0	13	0	0	0	0	0	0	0	0	0	0	0
16:00	0	14	2	0	16	0	0	1	0	1	0	0	0	0	0	0
16:15	0	14	2	0	16	0	1	0	0	1	0	0	0	0	0	0
16:30	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
16:45	0	9	1	0	10	0	0	0	0	0	0	0	0	0	0	0
17:00	0	5	1	0	6	0	1	0	0	1	0	0	0	0	0	0
17:15	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
17:30	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
17:45	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	120	11	0	131	0	3	2	0	5	0	0	0	0	0	0
GRAND TOTAL	0	241	16	0	257	0	7	4	0	11	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
07:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
07:15	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
07:30	1	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0
07:45	1	7	0	0	8	0	1	0	0	1	0	0	0	0	0	0
08:00	0	6	1	0	7	0	0	0	0	0	0	0	0	0	0	0
08:15	0	6	0	0	6	0	1	0	0	1	0	0	0	0	0	0
08:30	1	9	0	0	10	0	0	0	0	0	0	0	0	0	0	0
08:45	1	11	0	0	12	0	0	0	0	0	0	0	0	0	0	0
09:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:15	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
09:30	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
09:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	4	65	1	0	70	0	2	0	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
11:00	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
11:15	0	7	0	0	7	0	0	1	0	1	0	0	0	0	0	0
11:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:00	0	4	0	0	4	1	0	0	0	1	0	0	0	0	0	0
12:15	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	0
12:30	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	23	0	0	24	1	1	1	0	3	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Municipality: Erin
Count Date: Nov 19, 2024

West Approach - Sideroad 17

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
15:00	0	5	0	0	5	0	1	0	0	1	0	0	0	0	0	0
15:15	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
15:30	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0
15:45	1	8	0	0	9	0	0	0	0	0	0	0	0	0	0	0
16:00	1	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0
16:15	0	7	0	0	7	0	4	0	0	4	0	0	0	0	0	0
16:30	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
16:45	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
17:00	1	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0
17:15	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0
17:30	1	8	0	0	9	0	0	0	0	0	0	0	0	0	0	0
17:45	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	7	67	0	0	74	0	5	0	0	5	0	0	0	0	0	0
GRAND TOTAL	12	155	1	0	168	1	8	1	0	10	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

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

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Sideroad 17 runs E/W

North Approach

	Out	In	Total
Cars	3	4	7
Trucks	2	1	3
Bicycles	0	0	0
	5	**5**	**10**

Third Line

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

East Approach

	Out	In	Total
Cars	27	29	56
Trucks	2	4	6
Bicycles	0	0	0
	29	**33**	**62**

Sideroad 17

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	2	**2**	
0	2	28	**30**	
0	0	1	**1**	

Peds: 0

Peds: 0

Peds: 0

Sideroad 17

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	3	2	1	0
	26	25	1	0
	0	0	0	0

West Approach

	Out	In	Total
Cars	31	27	58
Trucks	2	1	3
Bicycles	0	0	0
	33	**28**	**61**

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

Private Access

South Approach

	Out	In	Total
Cars	0	1	1
Trucks	0	0	0
Bicycles	0	0	0
	0	**1**	**1**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Count Date: Nov 19, 2024
Period: 07:00 - 10:00

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

Start Time	North Approach Third Line						South Approach Private Access						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:45	2	0	0	0	0	2	0	0	0	0	0	0	0	9	1	0	0	10	1	8	0	0	0	9	21
08:00	1	0	0	0	0	1	0	0	0	0	0	0	0	9	0	0	0	9	0	6	1	0	0	7	17
08:15	0	0	1	0	0	1	0	0	0	0	0	0	0	6	1	0	0	7	0	7	0	0	0	7	15
08:30	0	0	1	0	0	1	0	0	0	0	0	0	0	2	1	0	0	3	1	9	0	0	0	10	14
Grand Total	**3**	**0**	**2**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**26**	**3**	**0**	**0**	**29**	**2**	**30**	**1**	**0**	**0**	**33**	**67**
Approach %	60	0	40	0		-	0	0	0	0		-	0	89.7	10.3	0		-	6.1	90.9	3	0		-	
Totals %	4.5	0	3	0		7.5	0	0	0	0		0	0	38.8	4.5	0		43.3	3	44.8	1.5	0		49.3	
PHF	**0.38**	**0**	**0.5**	**0**		**0.63**	**0**	**0**	**0**	**0**		**0**	**0**	**0.72**	**0.75**	**0**		**0.73**	**0.5**	**0.83**	**0.25**	**0**		**0.83**	**0.8**
Cars	1	0	2	0		3	0	0	0	0		0	0	25	2	0		27	2	28	1	0		31	61
% Cars	33.3	0	100	0		60	0	0	0	0		0	0	96.2	66.7	0		93.1	100	93.3	100	0		93.9	91
Trucks	2	0	0	0		2	0	0	0	0		0	0	1	1	0		2	0	2	0	0		2	6
% Trucks	66.7	0	0	0		40	0	0	0	0		0	0	3.8	33.3	0		6.9	0	6.7	0	0		6.1	9
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Specified Period
From: 11:00:00
To: 13:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Sideroad 17 runs E/W

North Approach

	Out	In	Total
Cars	6	1	7
Trucks	1	2	3
Bicycles	0	0	0
	7	**3**	**10**

Third Line

Bicycles	0	0	0	0
Trucks	0	0	1	0
Cars	2	0	4	0
Totals	**2**	**0**	**5**	**0**

East Approach

	Out	In	Total
Cars	28	17	45
Trucks	2	2	4
Bicycles	0	0	0
	30	**19**	**49**

Sideroad 17

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	1	0	**1**	
0	1	13	**14**	
0	0	0	**0**	

Peds: 0



Peds: 0

Peds: 0

Sideroad 17

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	2	1	1	0
	28	27	1	0
	0	0	0	0

West Approach

	Out	In	Total
Cars	13	30	43
Trucks	2	1	3
Bicycles	0	0	0
	15	**31**	**46**

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

Private Access

South Approach

	Out	In	Total
Cars	1	0	1
Trucks	0	0	0
Bicycles	0	0	0
	1	**0**	**1**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Count Date: Nov 19, 2024
Period: 11:00 - 13:00

Peak Hour Data (11:45 - 12:45)

Start Time	North Approach Third Line						South Approach Private Access						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
11:45	1	0	0	0	0	1	0	0	0	0	0	0	0	9	0	0	0	9	0	2	0	0	0	2	12
12:00	2	0	1	0	0	3	0	0	0	0	0	0	0	9	1	0	0	10	1	4	0	0	0	5	18
12:15	1	0	0	0	0	1	1	0	0	0	0	1	0	5	1	0	0	6	0	5	0	0	0	5	13
12:30	1	0	1	0	0	2	0	0	0	0	0	0	0	5	0	0	0	5	0	3	0	0	0	3	10
Grand Total	**5**	**0**	**2**	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**28**	**2**	**0**	**0**	**30**	**1**	**14**	**0**	**0**	**0**	**15**	**53**
Approach %	71.4	0	28.6	0		-	100	0	0	0		-	0	93.3	6.7	0		-	6.7	93.3	0	0		-	
Totals %	9.4	0	3.8	0		13.2	1.9	0	0	0		1.9	0	52.8	3.8	0		56.6	1.9	26.4	0	0		28.3	
PHF	**0.63**	**0**	**0.5**	**0**		**0.58**	**0.25**	**0**	**0**	**0**		**0.25**	**0**	**0.78**	**0.5**	**0**		**0.75**	**0.25**	**0.7**	**0**	**0**		**0.75**	**0.74**
Cars	4	0	2	0		6	1	0	0	0		1	0	27	1	0		28	0	13	0	0		13	48
% Cars	80	0	100	0		85.7	100	0	0	0		100	0	96.4	50	0		93.3	0	92.9	0	0		86.7	90.6
Trucks	1	0	0	0		1	0	0	0	0		0	0	1	1	0		2	1	1	0	0		2	5
% Trucks	20	0	0	0		14.3	0	0	0	0		0	0	3.6	50	0		6.7	100	7.1	0	0		13.3	9.4
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
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Peak Hour Diagram

Specified Period		One Hour Peak	
From:	15:00:00	From:	15:30:00
To:	18:00:00	To:	16:30:00

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Count Date: Nov 19, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Sideroad 17 runs E/W

North Approach

	Out	In	Total
Cars	3	10	13
Trucks	0	2	2
Bicycles	0	0	0
	3	**12**	**15**

Third Line

Bicycles	0	0	0	0
Trucks	0	0	0	0
Cars	2	0	1	0
Totals	**2**	**0**	**1**	**0**

East Approach

	Out	In	Total
Cars	58	25	83
Trucks	4	4	8
Bicycles	0	0	0
	62	**29**	**91**

Sideroad 17

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	3	**3**	
0	4	24	**28**	
0	0	0	**0**	

Peds: 0



Peds: 0

Peds: 0

Sideroad 17

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	9	7	2	0
	53	51	2	0
	0	0	0	0

West Approach

	Out	In	Total
Cars	27	53	80
Trucks	4	2	6
Bicycles	0	0	0
	31	**55**	**86**

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

Private Access

South Approach

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

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Sideroad 17 & Third Line (West Leg)
Site Code: 2448500011
Count Date: Nov 19, 2024
Period: 15:00 - 18:00

Peak Hour Data (15:30 - 16:30)

Start Time	North Approach Third Line						South Approach Private Access						East Approach Sideroad 17						West Approach Sideroad 17						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	12	3	0	0	15	1	4	0	0	0	5	20
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	13	1	8	0	0	0	9	22
16:00	0	0	2	0	0	2	0	0	0	0	0	0	0	14	3	0	0	17	1	5	0	0	0	6	25
16:15	1	0	0	0	0	1	0	0	0	0	0	0	0	15	2	0	0	17	0	11	0	0	0	11	29
Grand Total	**1**	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**53**	**9**	**0**	**0**	**62**	**3**	**28**	**0**	**0**	**0**	**31**	**96**
Approach %	33.3	0	66.7	0		-	0	0	0	0		-	0	85.5	14.5	0		-	9.7	90.3	0	0		-	
Totals %	1	0	2.1	0		3.1	0	0	0	0		0	0	55.2	9.4	0		64.6	3.1	29.2	0	0		32.3	
PHF	**0.25**	**0**	**0.25**	**0**		**0.38**	**0**	**0**	**0**	**0**		**0**	**0**	**0.88**	**0.75**	**0**		**0.91**	**0.75**	**0.64**	**0**	**0**		**0.7**	**0.83**
Cars	1	0	2	0		3	0	0	0	0		0	0	51	7	0		58	3	24	0	0		27	88
% Cars	100	0	100	0		100	0	0	0	0		0	0	96.2	77.8	0		93.5	100	85.7	0	0		87.1	91.7
Trucks	0	0	0	0		0	0	0	0	0		0	0	2	2	0		4	0	4	0	0		4	8
% Trucks	0	0	0	0		0	0	0	0	0		0	0	3.8	22.2	0		6.5	0	14.3	0	0		12.9	8.3
Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	30	26	3	3	2
Future Vol, veh/h	2	30	26	3	3	2
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	92	92	92	92	92	92
Heavy Vehicles, %	2	7	4	33	67	2
Mvmt Flow	2	33	28	3	3	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	32	0	-	0	67	30
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	37	-
Critical Hdwy	4.12	-	-	-	7.07	6.22
Critical Hdwy Stg 1	-	-	-	-	6.07	-
Critical Hdwy Stg 2	-	-	-	-	6.07	-
Follow-up Hdwy	2.218	-	-	-	4.103	3.318
Pot Cap-1 Maneuver	1581	-	-	-	799	1045
Stage 1	-	-	-	-	849	-
Stage 2	-	-	-	-	842	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1581	-	-	-	798	1045
Mov Cap-2 Maneuver	-	-	-	-	798	-
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	842	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.46	0	9.11
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	113	-	-	-	881
HCM Lane V/C Ratio	0.001	-	-	-	0.006
HCM Control Delay (s/veh)	7.3	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	28	53	9	1	2
Future Vol, veh/h	3	28	53	9	1	2
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	92	92	92	92	92	92
Heavy Vehicles, %	2	14	4	22	2	2
Mvmt Flow	3	30	58	10	1	2

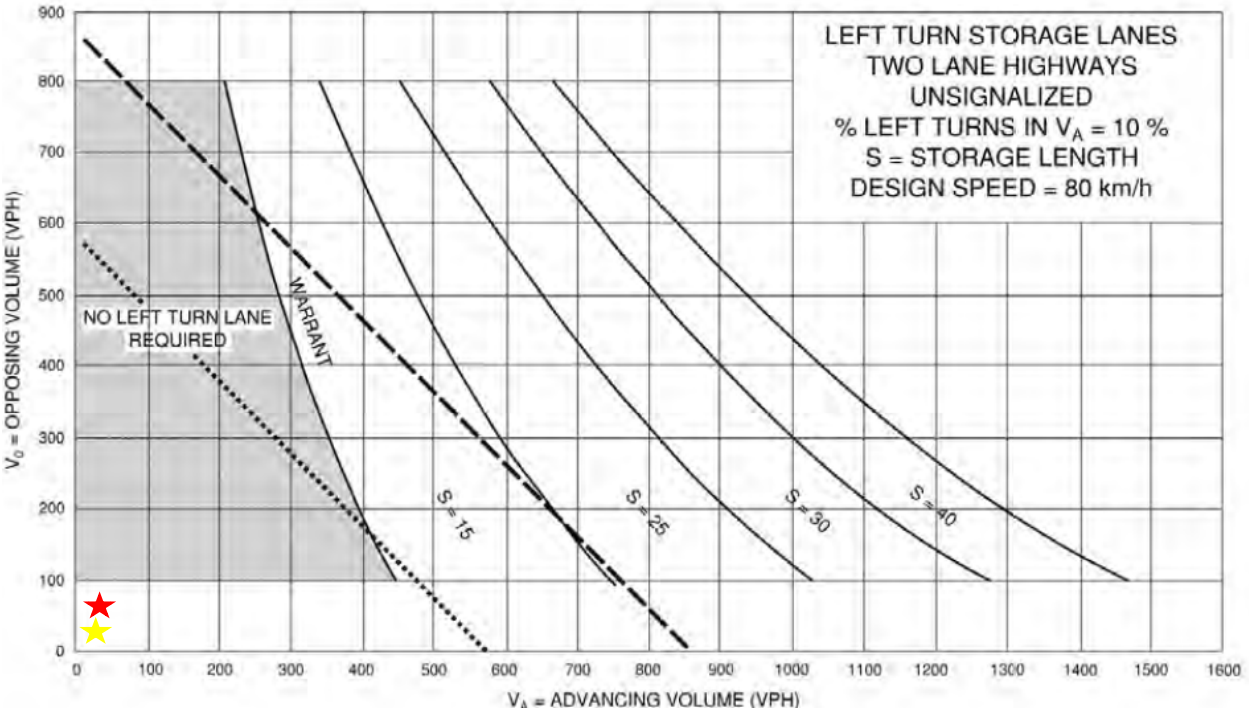
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	67	0	-	0	99	63
Stage 1	-	-	-	-	63	-
Stage 2	-	-	-	-	37	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1534	-	-	-	899	1002
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	986	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1534	-	-	-	897	1002
Mov Cap-2 Maneuver	-	-	-	-	897	-
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	986	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.71	0	8.74
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	174	-	-	-	965
HCM Lane V/C Ratio	0.002	-	-	-	0.003
HCM Control Delay (s/veh)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Sideroad 17 at Third Line (West Leg) – Eastbound Left Turn Lane Warrants

Existing Traffic – AM & PM Peak Hours



AM Peak Hour

PM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

Peak Period	Approaching Volume	Opposing Volume	# Left Turns	% Left Turns	Storage Required (m)
AM	33*	29*	2	6.1	0
PM	31*	62*	3	9.7	0

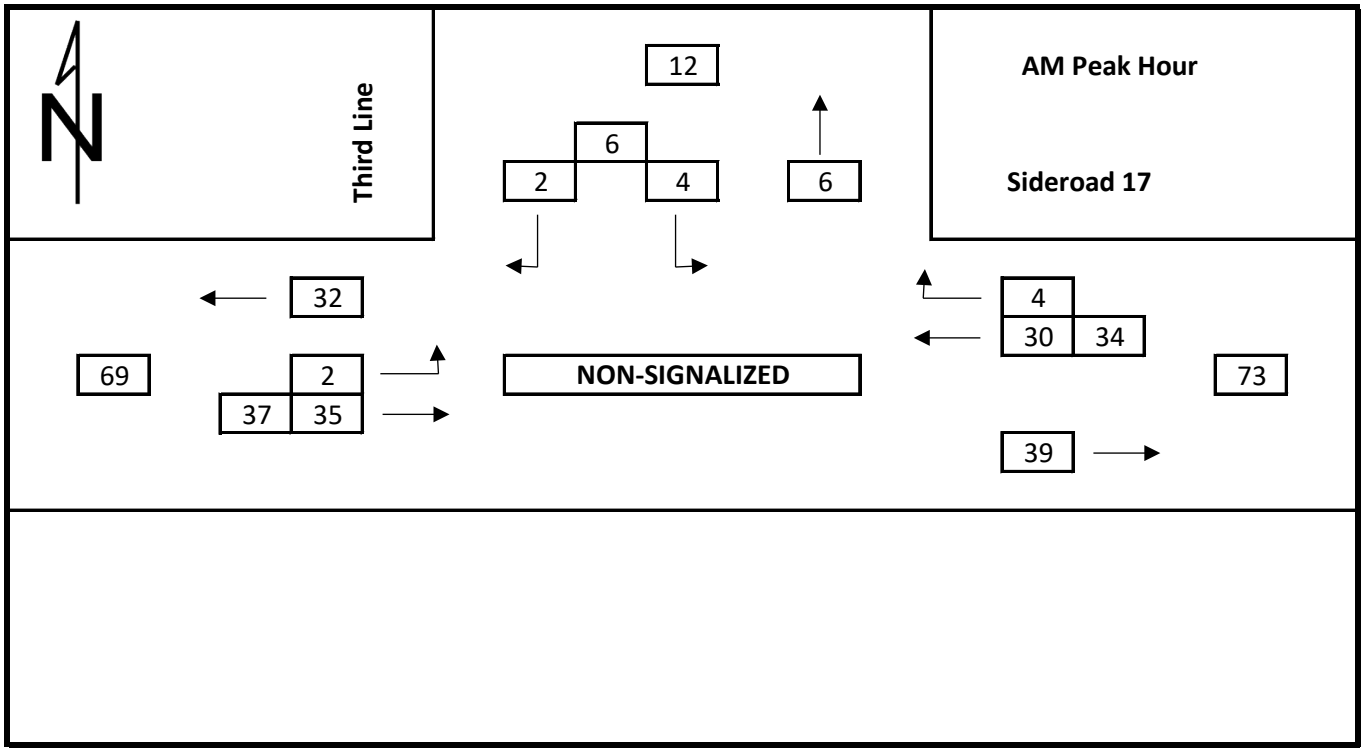
*** traffic volumes do not meet minimum MTO requirement for warrant**

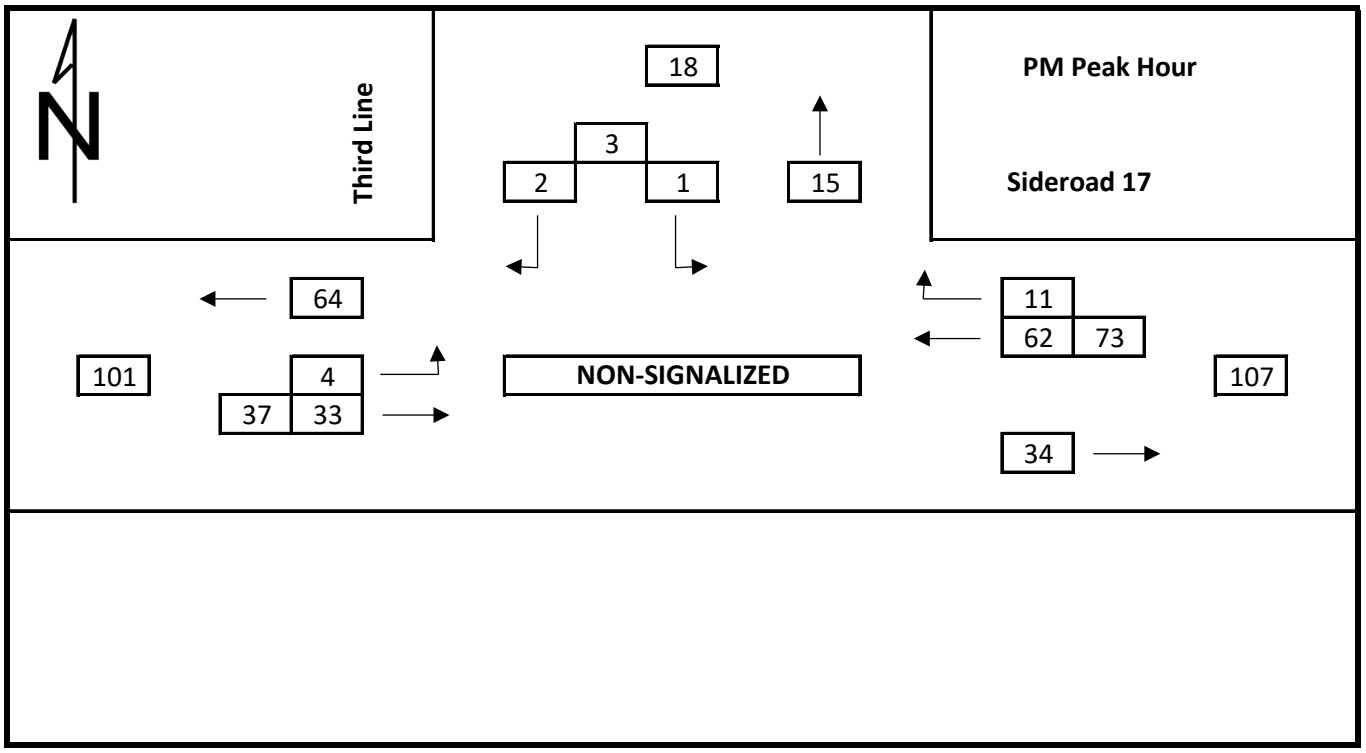
Appendix K-2

11 SIDEROAD 17 AT THIRD LINE (WEST LEG) – HORIZON TRAFFIC VOLUME METRICS

Background Traffic 2031

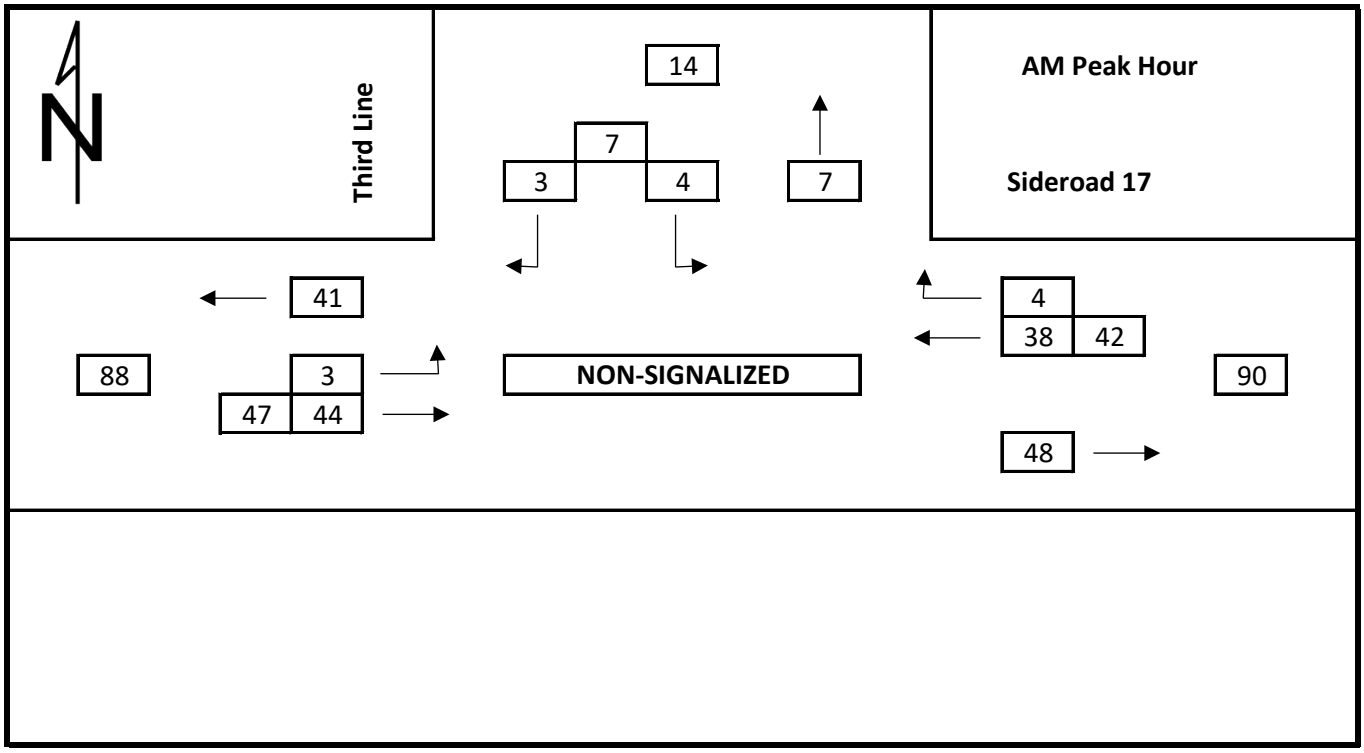
Sideroad 17 at Third Line

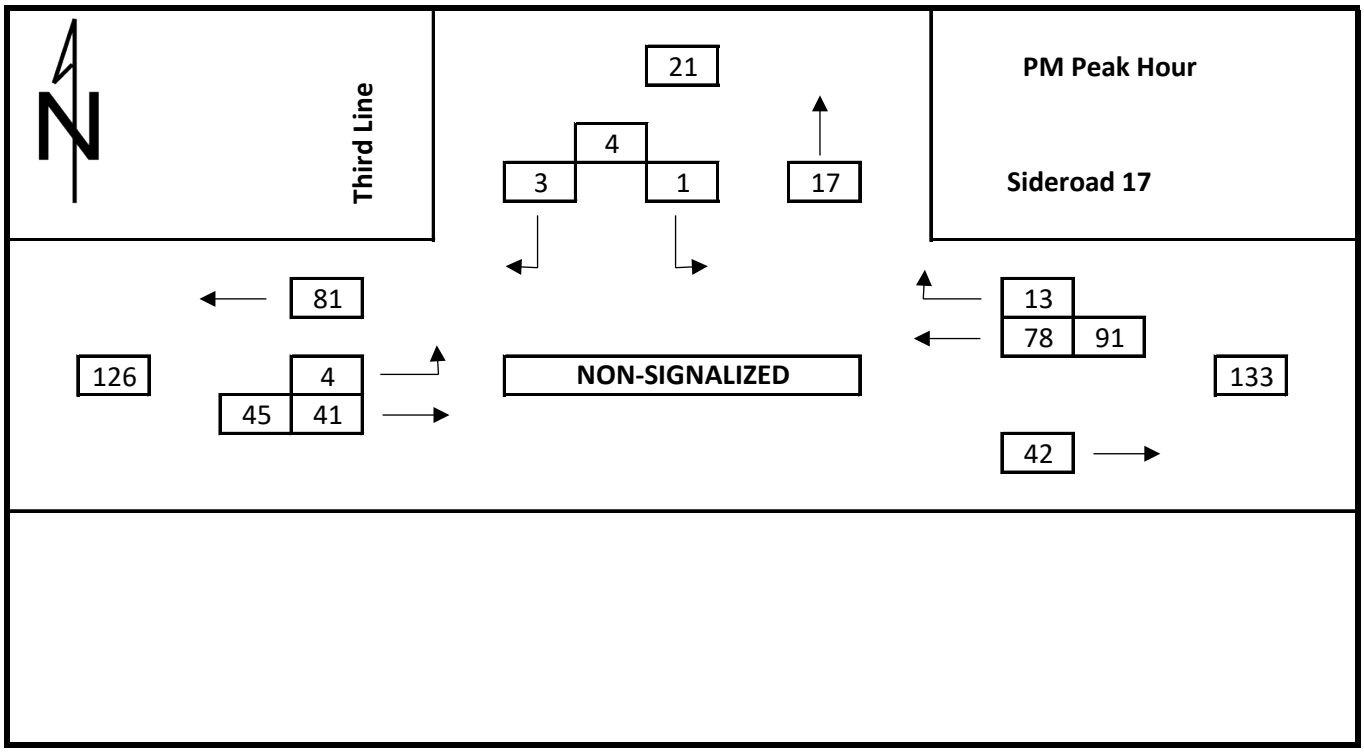




Background Traffic 2041

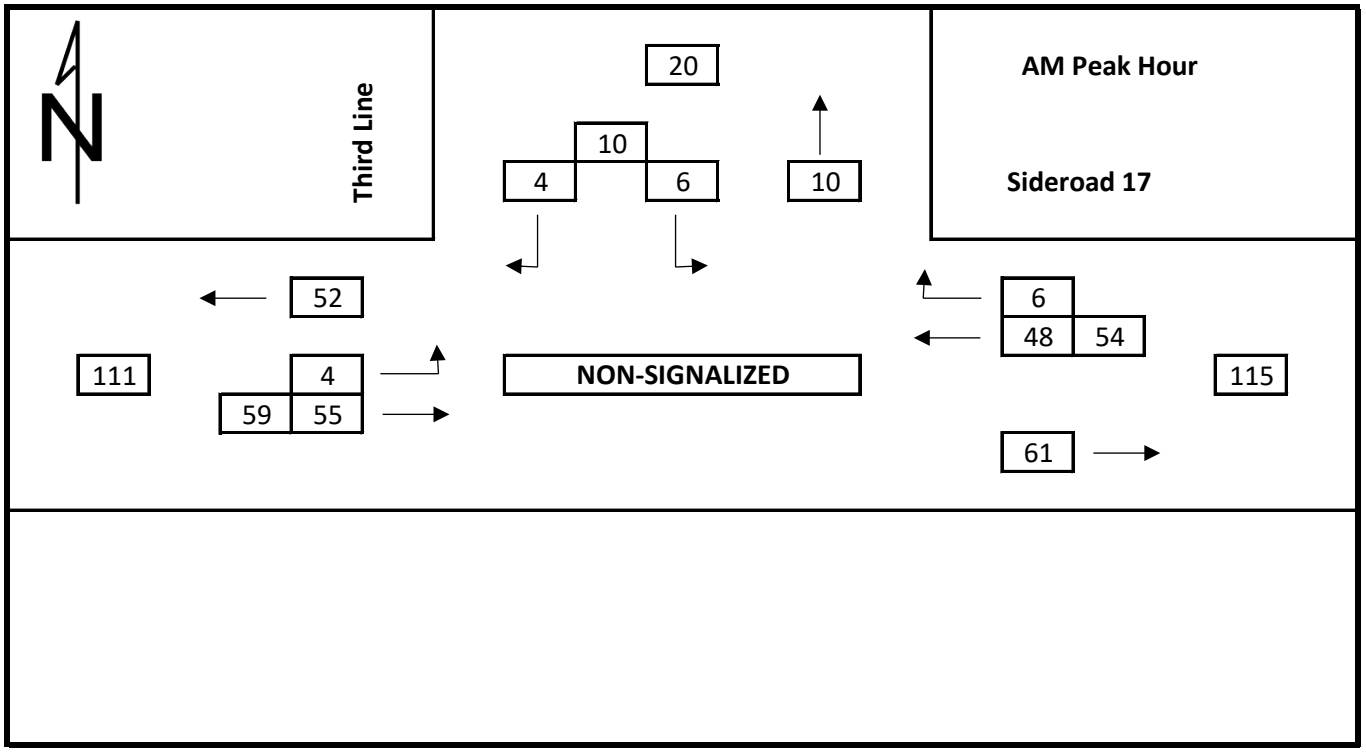
Sideroad 17 at Third Line

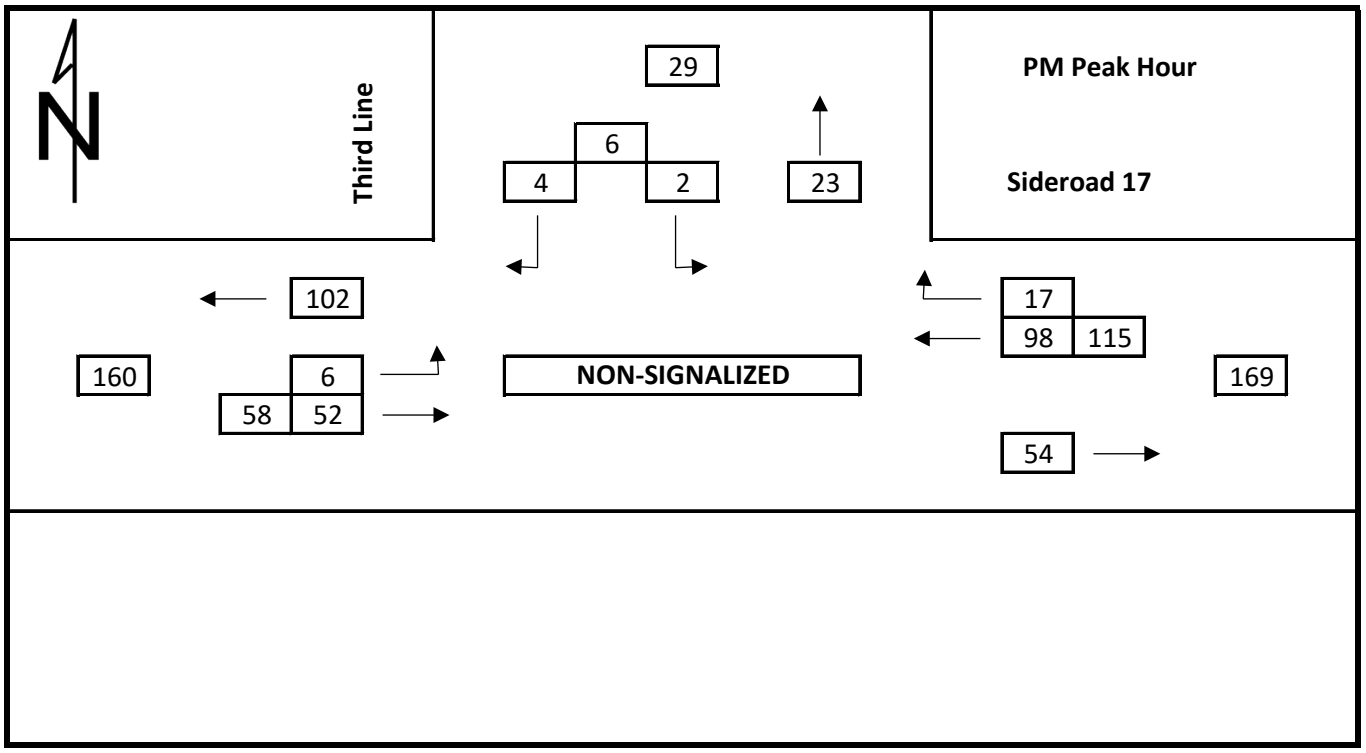




Background Traffic 2051

Sideroad 17 at Third Line





Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	35	30	4	4	2
Future Vol, veh/h	2	35	30	4	4	2
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	92	92	92	92	92	92
Heavy Vehicles, %	2	7	4	33	67	2
Mvmt Flow	2	38	33	4	4	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	37	0	-	0	77	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	42	-
Critical Hdwy	4.12	-	-	-	7.07	6.22
Critical Hdwy Stg 1	-	-	-	-	6.07	-
Critical Hdwy Stg 2	-	-	-	-	6.07	-
Follow-up Hdwy	2.218	-	-	-	4.103	3.318
Pot Cap-1 Maneuver	1574	-	-	-	788	1038
Stage 1	-	-	-	-	844	-
Stage 2	-	-	-	-	837	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1574	-	-	-	787	1038
Mov Cap-2 Maneuver	-	-	-	-	787	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	837	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.39	0	9.24
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	97	-	-	-	856
HCM Lane V/C Ratio	0.001	-	-	-	0.008
HCM Control Delay (s/veh)	7.3	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	33	62	11	1	2
Future Vol, veh/h	4	33	62	11	1	2
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	92	92	92	92	92	92
Heavy Vehicles, %	2	14	4	22	2	2
Mvmt Flow	4	36	67	12	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	79	0	-	0	118	73
Stage 1	-	-	-	-	73	-
Stage 2	-	-	-	-	45	-
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	1519	-	-	-	878	988
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	978	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1519	-	-	-	875	988
Mov Cap-2 Maneuver	-	-	-	-	875	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	978	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.8	0	8.81
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	195	-	-	-	948
HCM Lane V/C Ratio	0.003	-	-	-	0.003
HCM Control Delay (s/veh)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	44	38	4	4	3
Future Vol, veh/h	3	44	38	4	4	3
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	92	92	92	92	92	92
Heavy Vehicles, %	2	7	4	33	67	2
Mvmt Flow	3	48	41	4	4	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	98	43
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	54	-
Critical Hdwy	4.12	-	-	-	7.07	6.22
Critical Hdwy Stg 1	-	-	-	-	6.07	-
Critical Hdwy Stg 2	-	-	-	-	6.07	-
Follow-up Hdwy	2.218	-	-	-	4.103	3.318
Pot Cap-1 Maneuver	1562	-	-	-	765	1027
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	826	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	764	1027
Mov Cap-2 Maneuver	-	-	-	-	764	-
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	826	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.47	0	9.23
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	115	-	-	-	858
HCM Lane V/C Ratio	0.002	-	-	-	0.009
HCM Control Delay (s/veh)	7.3	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	41	78	13	1	3
Future Vol, veh/h	4	41	78	13	1	3
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	92	92	92	92	92	92
Heavy Vehicles, %	2	14	4	22	2	2
Mvmt Flow	4	45	85	14	1	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	99	0	-	0	145	92
Stage 1	-	-	-	-	92	-
Stage 2	-	-	-	-	53	-
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	1494	-	-	-	847	966
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	969	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1494	-	-	-	845	966
Mov Cap-2 Maneuver	-	-	-	-	845	-
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	969	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.66	0	8.88
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	160	-	-	-	932
HCM Lane V/C Ratio	0.003	-	-	-	0.005
HCM Control Delay (s/veh)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	55	48	6	6	4
Future Vol, veh/h	4	55	48	6	6	4
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	92	92	92	92	92	92
Heavy Vehicles, %	2	7	4	33	67	2
Mvmt Flow	4	60	52	7	7	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	59	0	-	0	124	55
Stage 1	-	-	-	-	55	-
Stage 2	-	-	-	-	68	-
Critical Hdwy	4.12	-	-	-	7.07	6.22
Critical Hdwy Stg 1	-	-	-	-	6.07	-
Critical Hdwy Stg 2	-	-	-	-	6.07	-
Follow-up Hdwy	2.218	-	-	-	4.103	3.318
Pot Cap-1 Maneuver	1545	-	-	-	738	1011
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	813	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1545	-	-	-	735	1011
Mov Cap-2 Maneuver	-	-	-	-	735	-
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	813	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.5	0	9.42
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	122	-	-	-	826
HCM Lane V/C Ratio	0.003	-	-	-	0.013
HCM Control Delay (s/veh)	7.3	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	52	98	17	2	4
Future Vol, veh/h	6	52	98	17	2	4
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	92	92	92	92	92	92
Heavy Vehicles, %	2	14	4	22	2	2
Mvmt Flow	7	57	107	18	2	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	125	0	-	0	185	116
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	70	-
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	1462	-	-	-	804	937
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	953	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1462	-	-	-	800	937
Mov Cap-2 Maneuver	-	-	-	-	800	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	953	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.77	0	9.09
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	186	-	-	-	886
HCM Lane V/C Ratio	0.004	-	-	-	0.007
HCM Control Delay (s/veh)	7.5	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0