CARLETON PLACE SUBDIVISION BLOCK 213, TRAFFIC IMPACT STUDY

Project No.: 0CP-19-0595-01

Prepared for:

Pegasus Development Corporation
1914 Merivale Road
Ottawa, ON
K2G 1E9

Prepared by:

Egis Canada Ltd.
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April 7, 2025

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Pegasus Development Corporation
1914 Merivale Road
Ottawa, ON
K2G 1E8

Dear Mr. Angelosante

Re: Carleton Place Block 213 Subdivision Expansion Traffic Impact Study

Enclosed is the Traffic Impact Study (TIS) report for the expansion of the residential subdivision located south of Cavanagh Road, east of McNeely Avenue, in Carleton Place, Ontario. The new development will include 88 single unit homes. This study will assess and review the impact of forecasted site generated traffic on the boundary roads and its intersections.

The report has been prepared based the Terms of Reference submitted to the Town of Carleton Place and further discussions with City Staff. The study focused on determining the impact of the proposed development on the surrounding transportation network and provides recommendations for mitigation measures as required.

If you have any questions, do not hesitate to contact us.

Sincerely,

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EXECUTIVE SUMMARY

Egis was retained by Pegasus Development Corporation c/o John Angelosante for the completion of a Traffic Impact Study (TIS) in support of the expansion of the residential subdivision located south of Cavanagh Road, east of McNeely Avenue, in Carleton Place, Ontario. The proposed development is located on vacant land within the existing subdivision in the southeast quadrant of the McNeely Avenue and Cavanagh Road intersection and will contain a total of 88 single unit homes split over two (2) locations.

This study will be prepared based on the MTO General Guidelines for the Preparation of Traffic Impact Studies (March 2023). Analysis consisted of network growth and two (2) background developments consisting of 30 single unit homes, approved under the previous application but yet to be constructed.

The study was assessed with a buildout horizon of 2026 and 5-year post buildout 2031 horizon. Egis reviewed a total of four (4) intersections for both the background and total traffic scenarios. Development related impacts of the proposed development were reviewed and the study intersections are listed below:

- Cavanagh Road and Hooper Street intersection;
- Cavanagh Road and Dunlop Road intersection;
- McNeely Avenue and Cavanagh Road / Coleman Street, and
- McNeely Avenue and Highway 7.

Turning movement count (TMC) data used in the study was commissioned by Egis and collected Thursday January 23, 2025, while additional data was taken from the Town of Carleton Place Transportation Master Plan, October 2022.

The proposed site is anticipated to generate 66 trips during the AM peak hour (17 inbound and 49 outbound) and 88 trips during the PM peak hour (56 inbound and 32 outbound). Using the data collected and existing travel patterns, Egis assigned the generated trips to the proposed road network accordingly. Egis conducted traffic analysis to identify capacity concerns at the study intersections using Synchro 11 software at all study horizons.

Based on the analysis, it is anticipated that the proposed development will have minimal impact on the boundary transportation network, which are expected to adequately support site generated traffic.

Construction of a pedestrian cross-over (PXO) has been identified as a requirement for Phase 6 of the development and will be constructed on Cavanagh Road, east of Dunlop Road, providing a connection between the pedestrian network within the subdivision and adjacent facilities.

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1.0 INTRODUCTION

Egis has been retained by Pegasus Development Corporation c/o John Angelosante (hereinafter referred to as the 'Client') for the completion of a Traffic Impact Study (TIS) in support of the expansion of the residential subdivision located south of Cavanagh Road, east of McNeely Avenue, in Carleton Place, Ontario (hereinafter referred to as the 'Site').

This study will be prepared based on the MTO General Guidelines for the Preparation of Traffic Impact Studies (March 2023). The study will review and address the traffic impacts associated with the proposed development. It will focus on determining the impact of the proposed development on the surrounding transportation network and will provide recommendations for mitigation measures as required. This report is based on the latest site plan that was provided to Egis, last updated December 2024.

2.0 PROPOSED DEVELOPMENT

The proposed development is located on vacant land within the existing subdivision in the southeast quadrant of the McNeely Avenue and Cavanagh Road intersection. The new development will include 88 single unit homes, with 77 located within Block 213 on Private Street No. 1 and Private Street No. 2, and 11 located on Eastwood Drive.

The location and surround areas of the development has been illustrated in **Figure 2-1**.

Two (2) existing intersections provide ingress and egress for the development:

- Cavanagh Road and Hooper Street intersection, and
- Cavanagh Road and Dunlop Road intersection.

The site plan, identifying the proposed development and access locations is illustrated in **Figure 2-2** and detail site plan provided in **Appendix A**.

Figure 2-1: Site Location and Surrounding Area

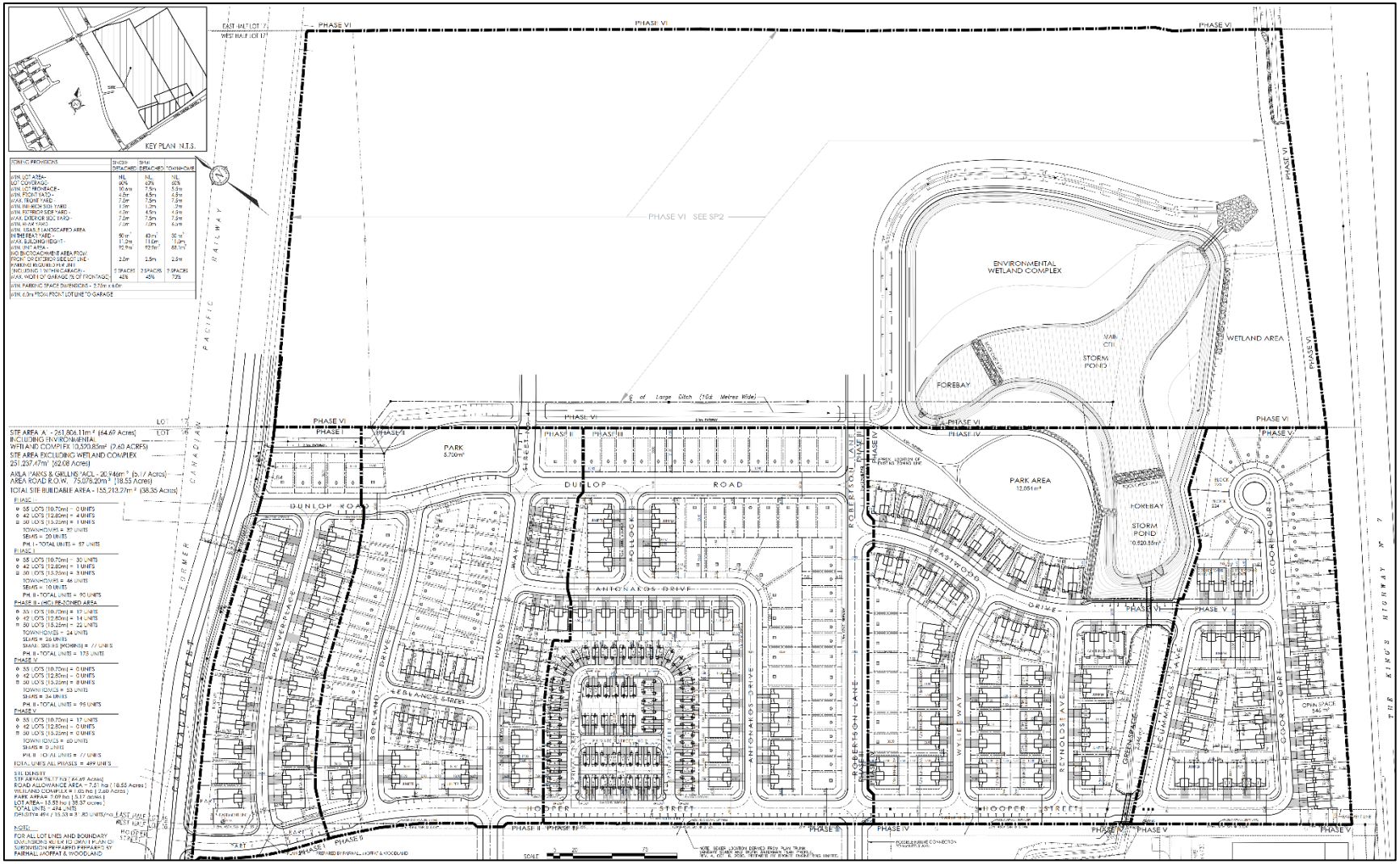


Figure 2-2: Site Plan

3.0 EXISTING CONDITIONS

3.1 Existing Transportation Network

3.1.1 Road Network

The existing study area network surrounding the proposed development consists of the following roadways:

Hooper Street is classified as a local road under the jurisdiction of the Town of Carleton Place. Hooper Street has an unposted speed limit of 40 km/h and has a two-lane cross section, with one lane in each direction. Hooper Street runs north-south and provided access into the proposed development.

Dunlop Road is classified as a local road under the jurisdiction of the Town of Carleton Place. Dunlop Road has an unposted speed limit of 40 km/h and has a two-lane cross section, with one lane in each direction. Dunlop Road runs north-south and provided access into the proposed development.

Cavanagh Road is classified as a collector road under the jurisdiction of the Town of Carleton Place. Cavanagh Road has a posted speed limit of 50 km/h and has a two-lane cross section, with one lane in each direction. Cavanagh Road runs east-west and lies to the north of the proposed development.

McNeely Avenue is classified as an arterial road under the jurisdiction of Lanark County. McNeely Avenue has a posted speed limit of 60 km/h and has a four-lane cross section, with two lanes in each direction. McNeely Avenue runs north-south and lies to the west of the proposed development.

Highway 7 is classified as an undivided urban freeway under the jurisdiction of the MTO. Highway 7 has a posted speed limit of 60 km/h and has a four-lane cross section, with two lanes in each direction. Highway 7 runs east-west and lies to the south of the proposed development.

3.1.2 Intersections

The traffic control and lane configurations for the existing intersections to be included in the analysis are discussed in this section. The following intersections are included in the analysis for this report:

- Cavanagh Road and Hooper Street intersection;
- Cavanagh Road and Dunlop Road intersection;
- McNeely Avenue and Cavanagh Road / Coleman Street, and
- McNeely Avenue and Highway 7.

3.1.2.1 Cavanagh Road and Hooper Street Intersection

The intersection of Cavanagh Road and Hooper Street, illustrated in **Figure 3-1**, is a four-leg unsignalized intersection with stop-control on the minor approaches (Hooper Street). The northbound and southbound approaches both have a shared left-through-right lane while the eastbound and westbound approaches have a left-through and a through-right lane. Pedestrian crossings are not provided on any approach.

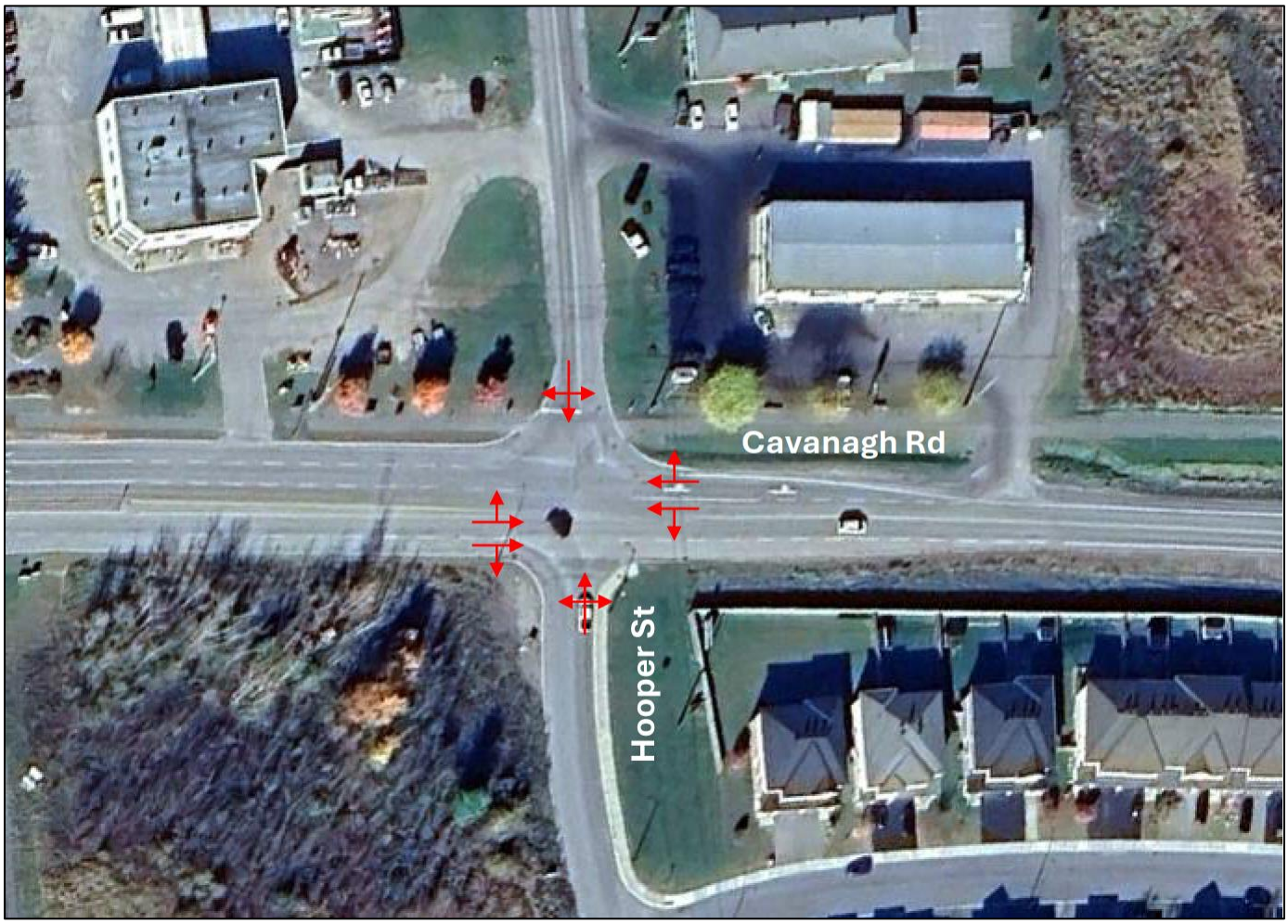


Figure 3-1: Cavanagh Road and Hooper Street Intersection

3.1.2.2 Cavanagh Road and Dunlop Road Intersection

The intersection of Cavanagh Road and Dunlop Road, illustrated in **Figure 3-2**, is a four-leg unsignalized intersection with stop-control on the minor approaches (Dunlop Road and communications tower access). All four (4) approaches have a shared left-through-right lane. The northbound and southbound approaches are offset by approximately 15 m. Pedestrian crossings are not provided on any approach.

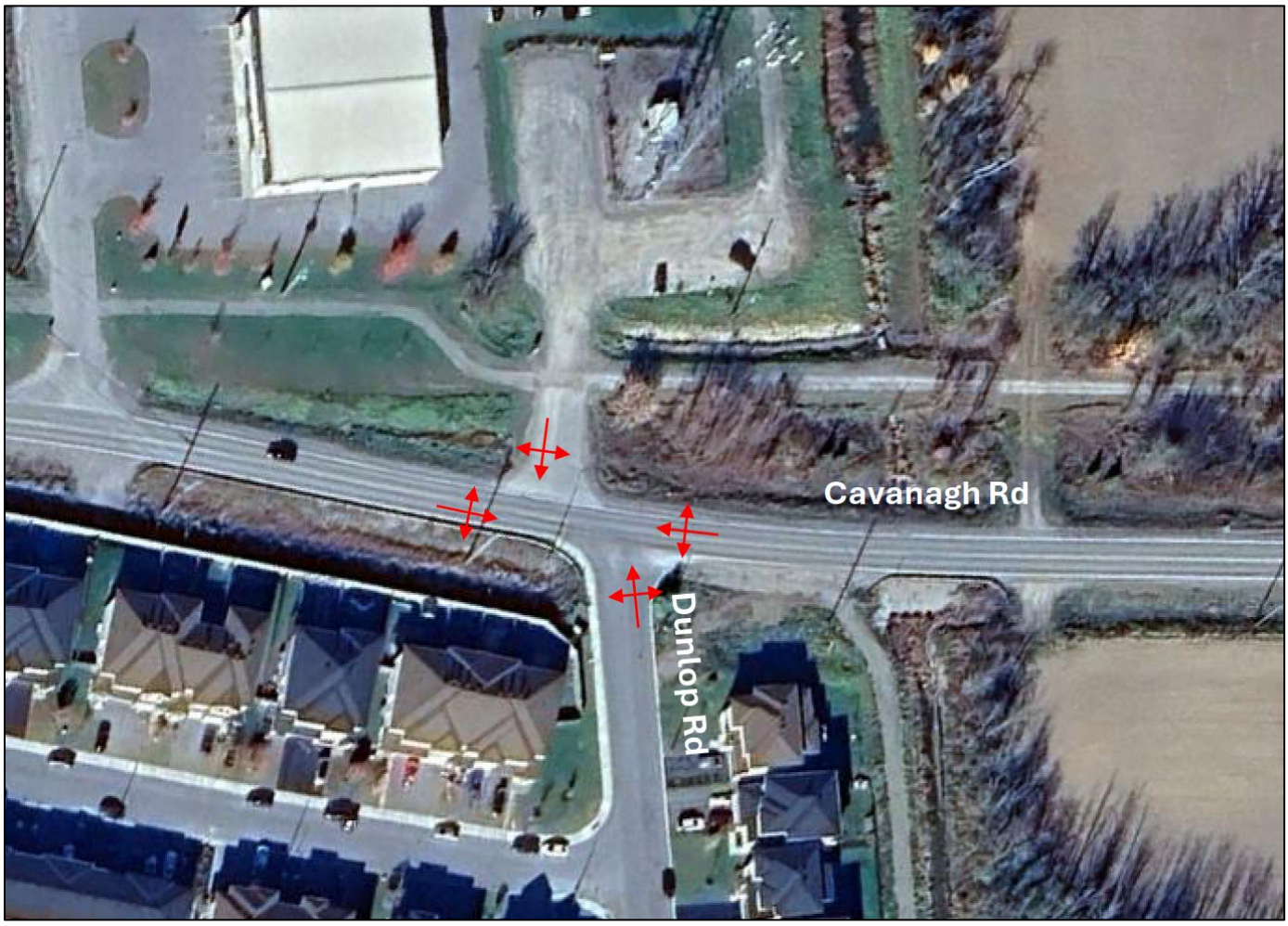


Figure 3-2: Cavanagh Road and Dunlop Road Intersection

3.1.2.3 McNeely Avenue and Cavanagh Road Intersection

The intersection of McNeely Avenue and Cavanagh Road, illustrated in **Figure 3-3**, is a four-leg signalized intersection. Both the northbound and southbound approaches contain a left lane, through lane, and through-right lane, while the eastbound and westbound approaches contain a left lane, through lane, and right lane. Signalized pedestrian crossings with push-button activation are provided across all approaches.

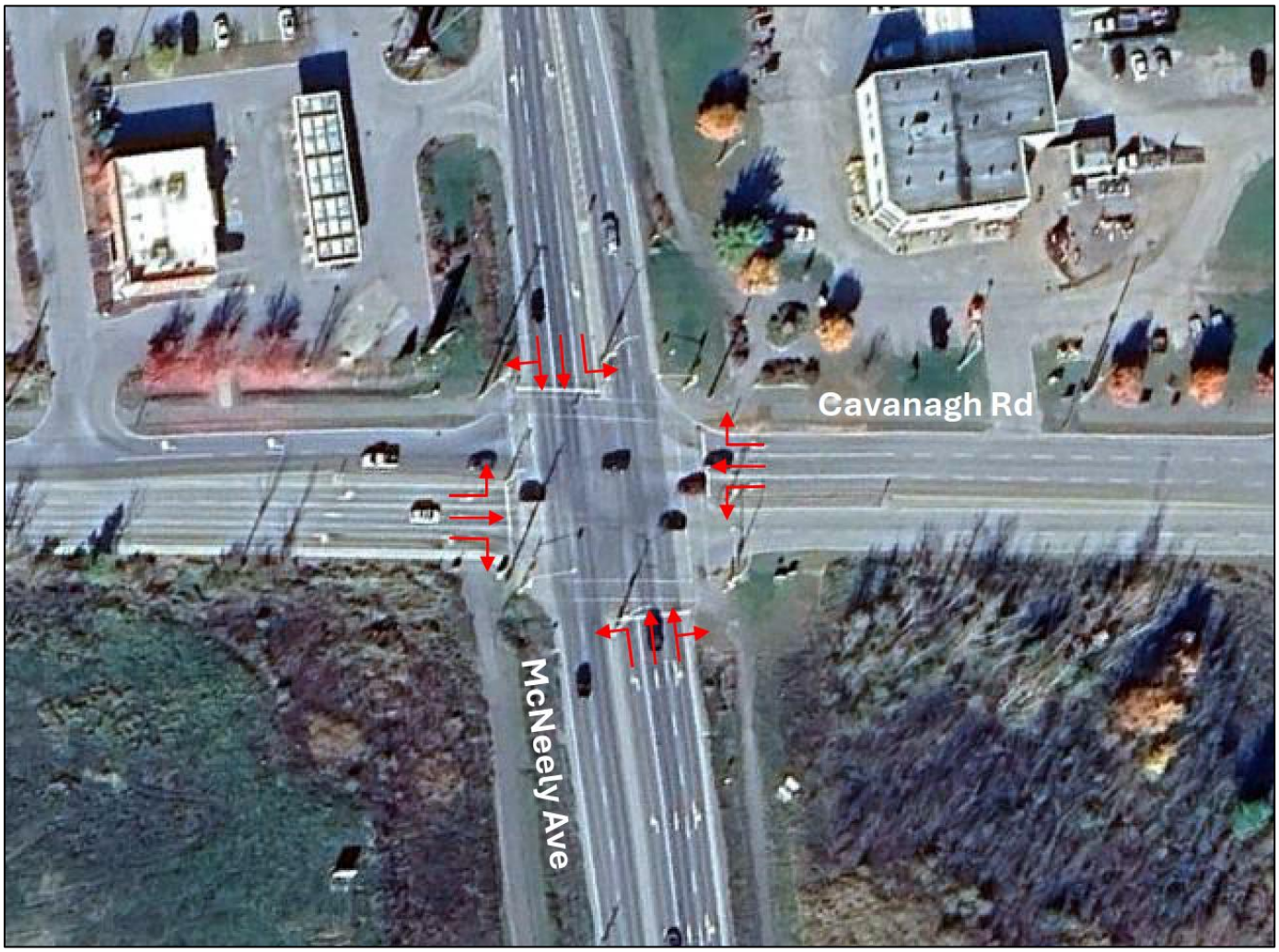


Figure 3-3: McNeely Avenue and Cavanagh Road Intersection

3.1.2.4 McNeely Avenue and Highway 7 Intersection

The intersection of McNeely Avenue and Highway 7, illustrated in **Figure 3-4**, is a four-leg signalized intersection. The northbound approach contains a left lane, through lane, and through-right lane while the southbound and eastbound approaches contain dual left-turn lanes, two (2) through lanes, and a right lane. The westbound approach contains a left lane, two (2) through lanes, and a right lane. Signalized pedestrian crossings with push-button activation are provided across all approaches.

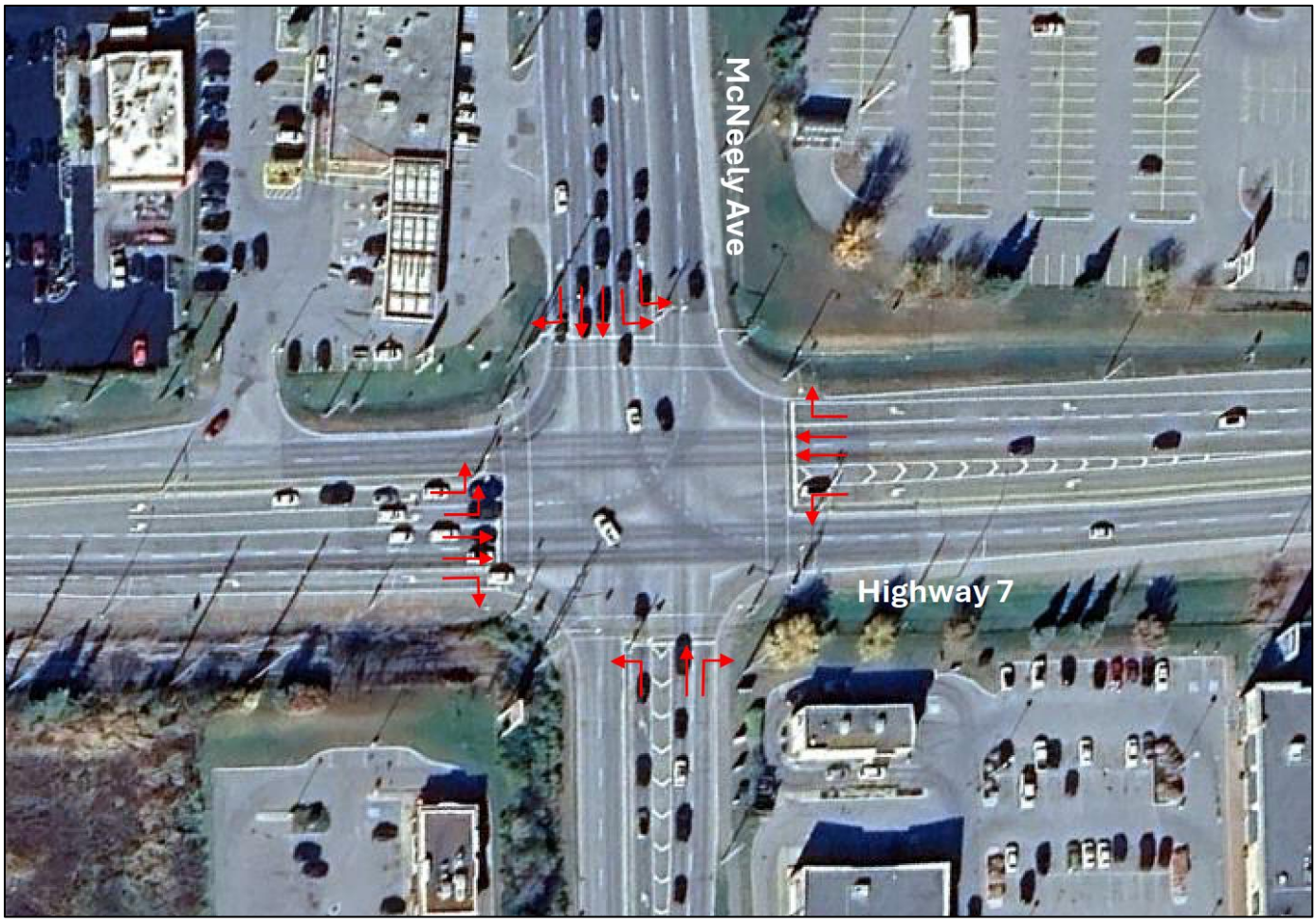


Figure 3-4: McNeely Avenue and Highway 7 Intersection

3.2 Existing Pedestrian and Cyclist Facilities

Pedestrian facilities are provided at the following locations within the study area:

- Concrete sidewalk along the west side of Dunlop Road;
- Concrete sidewalk along the east side of Hooper Street;
- Asphalt Multi-Use Pathway (MUP) along the north side of Cavanagh Road;
- Concrete sidewalk along the south side of Coleman Street;
- Gravel trail along the east side of McNeely Avenue;
- Asphalt MUP along the west side of McNeely Avenue, and
- Gravel trail running north-south along the east side of the existing subdivision.

No dedicated on-road cycling facilities are provided within the study area. The only cycling facilities provided within the study area are shared pedestrian and cycling facilities.

3.3 Existing Transit

There are no transit routes within Carleton Place that can service the proposed development.

3.4 Existing Traffic Volumes

Traffic volumes for existing conditions were obtained via turning movement counts (TMC) commissioned by Egis, conducted on Thursday January 23, 2025, as well as projected traffic volumes taken from Town of Carleton Place Transportation Master Plan, October 2022. As the peak hour varied between intersections adjustment of traffic volumes was applied to develop baseline volumes for analysis for existing 2025 conditions.

Obtained traffic data and the source of the available counts have been summarized in **Table 3-1**. Existing traffic volumes for the assessed study area network for both AM and PM peak hours have been illustrated in **Figure 3-5.** Traffic data used for the purpose of this study have provided in **Appendix B.**

Table 3-1: Available Traffic Data

Location	Source	Count Date
Cavanagh Road and Dunlop Road	Egis	January 23, 2025
Cavanagh Road and Hooper Street	Egis	January 23, 2025
McNeely Avenue and Cavanagh Road / Coleman Street	CP TMP	2026 Projection
McNeely Avenue and Highway 7	CP TMP	2026 Projection

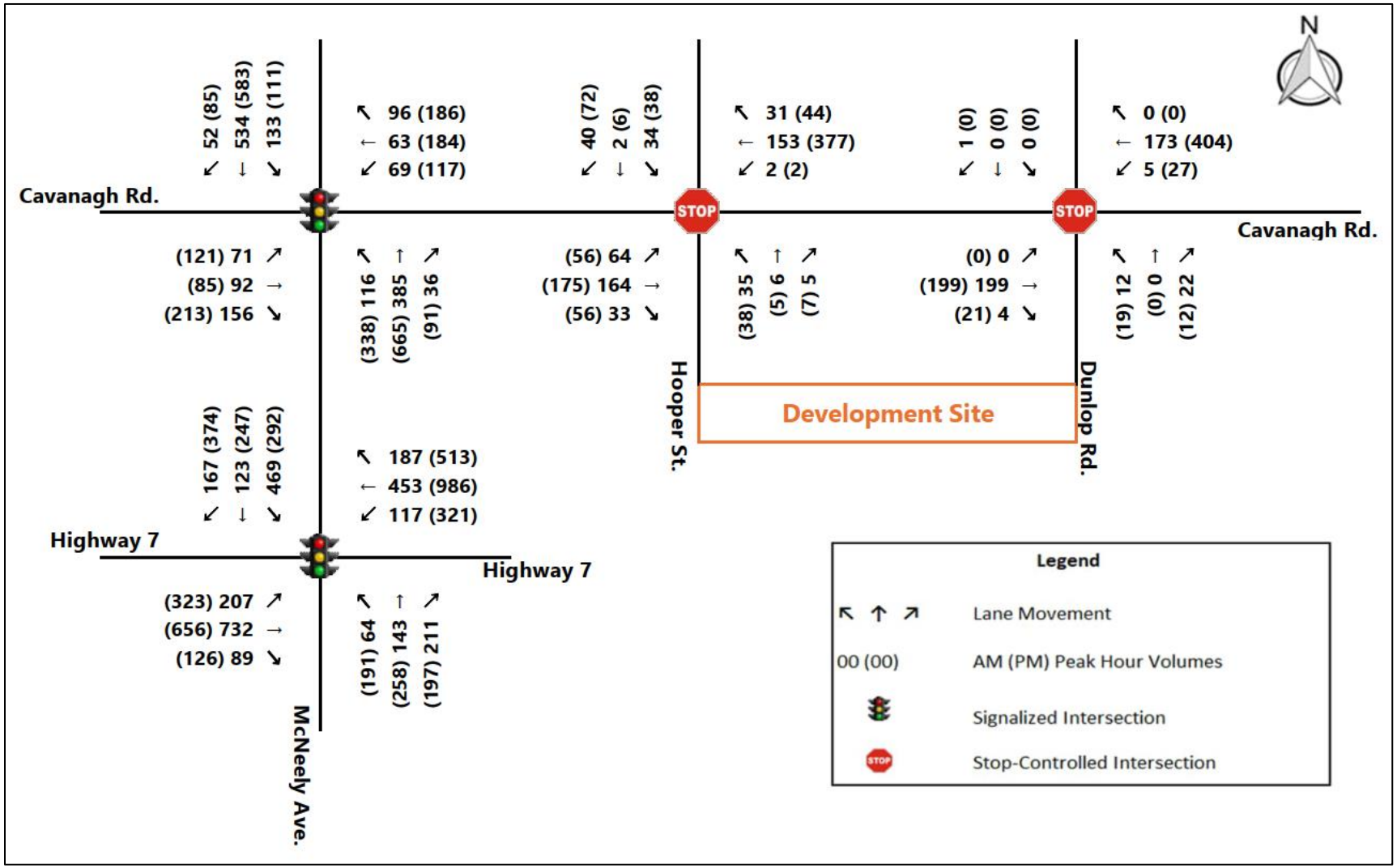


Figure 3-5: Existing 2025 Traffic Volumes

3.5 Existing 2025 Traffic Analysis

3.5.1 Traffic Analysis Methodology

Study area intersection operations were assessed using Synchro 11 software. Intersection operations performance metrics are reported in terms of Level of Service (LOS), volume-to-capacity ratio (V/C), average vehicle delay (Delay), and 95th percentile queue length (Queue). Level of Service is based on the average control delay per vehicle for a given movement and is represented by a letter between 'A' and 'F', with 'F' being the longest delay.

Table 3-2 summarizes the LOS criteria for signalized and unsignalized intersections based on HCM 6th Edition methodology.

Table 3-2: LOS Criteria for Signalized and Unsignalized Intersections

Level of Service	Signalized Intersection Average Delay (s)	Unsignalized Intersection Average Delay (s)
A	<10.0	<10.0
B	10 - <20	10 - <15
C	20 - <35	15 - <25
D	35 - <55	25 - <35
E	55 - <80	35 - <50
F	80+	50+

3.5.2 Existing 2025 Conditions

Existing traffic conditions were analyzed in Synchro 11 software to determine a baseline for traffic operations. Results from the traffic analysis are summarized in **Table 3-3**. Synchro 11 output reports are provided in detail in **Appendix C**.

Table 3-3: 2025 Existing Condition Traffic Analysis

Intersection	Approach - Movement	AM Peak				PM Peak			
		LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Cavanagh Road & Dunlop Road	**Intersection**	**A**	**-**	**1.0**	**-**	**A**	**-**	**1.0**	**-**
	EB - LTR	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LTR	A	0.00	0.2	0	A	0.02	0.5	1
	NB - LTR	B	0.05	10.4	2	B	0.08	14.0	3
	SB - LTR	A	0.00	9.2	0	A	0.00	0.0	0
Cavanagh Road & Hooper Street	**Intersection**	**A**	**-**	**3.6**	**-**	**A**	**-**	**3.9**	**-**
	EB - LT	A	0.05	7.8	2	A	0.06	8.5	2
	EB - R	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LT	A	0.00	7.6	0	A	0.00	7.7	0
	WB - R	A	0.00	0.0	0	A	0.00	0.0	0
	NB - LTR	B	0.11	14.1	4	C	0.19	20.8	7
	SB - LTR	B	0.14	11.9	5	C	0.28	16.3	12
McNeely Avenue & Cavanagh Road / Coleman Street	**Intersection**	**B**	**-**	**10.9**	**-**	**B**	**-**	**15.5**	**-**
	EB - L	C	0.27	20.0	16	C	0.57	32.6	34
	EB - T	B	0.25	18.9	19	C	0.22	21.8	22
	EB - R	A	0.36	6.3	12	A	0.44	6.3	16
	WB - L	C	0.27	20.1	16	C	0.44	26.7	31
	WB - T	B	0.17	18.0	14	C	0.48	25.7	44
	WB - R	A	0.24	5.5	9	A	0.40	6.3	15
	NB - L	A	0.23	4.9	9	B	0.65	12.4	45
	NB - TR	B	0.31	10.3	24	B	0.48	12.4	57
	SB - L	A	0.23	4.9	10	A	0.28	7.8	13
	SB - TR	B	0.43	11.8	37	B	0.58	18.8	62
McNeely Avenue & Highway 7	**Intersection**	**C**	**-**	**24.8**	**-**	**C**	**-**	**32.8**	**-**
	EB - L	D	0.50	36.3	31	D	0.76	48.4	54
	EB - T	C	0.65	25.0	82	D	0.76	35.2	84
	EB - R	A	0.15	1.8	4	A	0.26	5.8	13
	WB - L	D	0.54	41.0	40	D	0.85	51.7	106
	WB - T	C	0.43	21.8	47	C	0.83	31.4	117
	WB - R	A	0.31	4.5	14	B	0.67	11.0	57
	NB - L	D	0.40	41.5	26	E	0.77	56.1	72
	NB - TR	B	0.57	16.7	27	C	0.67	24.7	43
	SB - L	D	0.78	40.9	76	D	0.70	45.1	46
	SB - T	C	0.14	25.2	18	D	0.49	36.2	36
	SB - R	A	0.33	6.5	16	C	0.83	27.3	68

Under the 2025 existing conditions both unsignalized intersections, Cavanagh Road & Dunlop Road and Cavanagh Road & Hooper Street, are expected to operate well with an average intersection delay per vehicle of 1.0 s. Northbound and southbound movements operate at LOS C or better while all movements on Cavanagh Road operate at LOS A. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.28. Queueing on the sideroads is expected to peak at 12 m (2 vehicles) while little to no queueing is expected on Cavanagh Road.

The intersection of McNeely Avenue and Cavanagh Road / Coleman Street is expected to operate at LOS B during the AM and PM peak hours with an average intersection delay of 15.5 s during the PM peak hour. Movements on McNeely Avenue are expected to operate at LOS B or better while movements on Cavanagh Road and Coleman Street are expected to operate at LOS C or better. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.65. The maximum reported queue of 62 m (9 vehicles) occurs in the southbound direction.

The intersection of McNeely Avenue and Highway 7 is expected to operate at LOS C during the AM and PM peak hours with an average intersection delay of 32.8 s during the PM peak hour. Individual movements are expected to operate at LOS D or better, with the exception of the northbound left-turn movement which operates at LOS E during the PM peak hour. Some movements exhibit little excess capacity with a maximum reported V/C ratio of 0.85. The maximum reported queue of 117 m (17 vehicles) occurs in the westbound direction.

4.0 FUTURE CONDITIONS

4.1 Study Horizon

Based on development planning a 1-year buildout horizon (2026) has been assumed and will be assessed for this study. A 5-year post buildout horizon (2031) would also be assessed.

4.2 Network Improvements

Based on a review of the 2010 Transportation Master Plan for the County of Lanark no network improvements are planned or required to be considered for this study network. As such the existing conditions network and lane configurations were maintained for future conditions analysis.

4.3 Background Traffic Growth

Background traffic growth is a function of the projected population growth, changes to employment, roadway network modifications and other external factors. For this study the background traffic growth rate of 1.0% was applied to project future traffic volumes within the study area.

4.4 Background Developments

Approved as part of the previous development, 30 single unit homes, 17 on Coor Court and 13 on Eastwood Drive, have yet to be developed. Construction of these units is expected to be completed prior to the completion of the proposed development. As a result, an additional 30 single unit homes were included in the calculation of site generated trips.

In consultation with the Town of Carleton Place, no additional background developments were identified to be included in the study.

4.5 Future Background Traffic Volumes

Future 2026 and 2031 background weekday AM and PM peak hour traffic volumes were calculated by applying the forecasted background growth rate to the existing conditions traffic volumes. Future 2026 and 2031 background traffic volumes are illustrated in **Figure 4-1** and **Figure 4-2**, respectively.

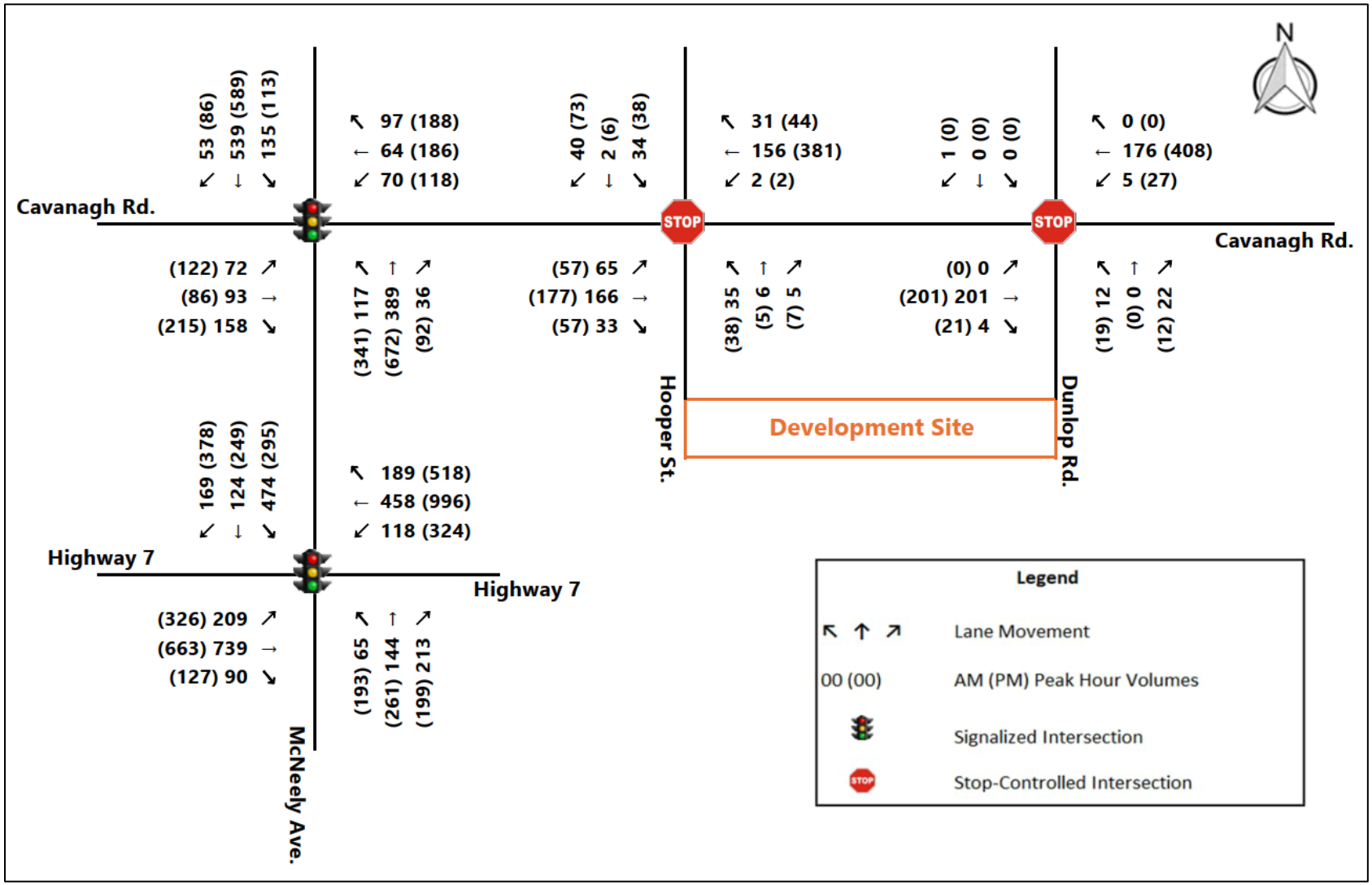


Figure 4-1: Future 2026 Buildout Background Traffic Volumes

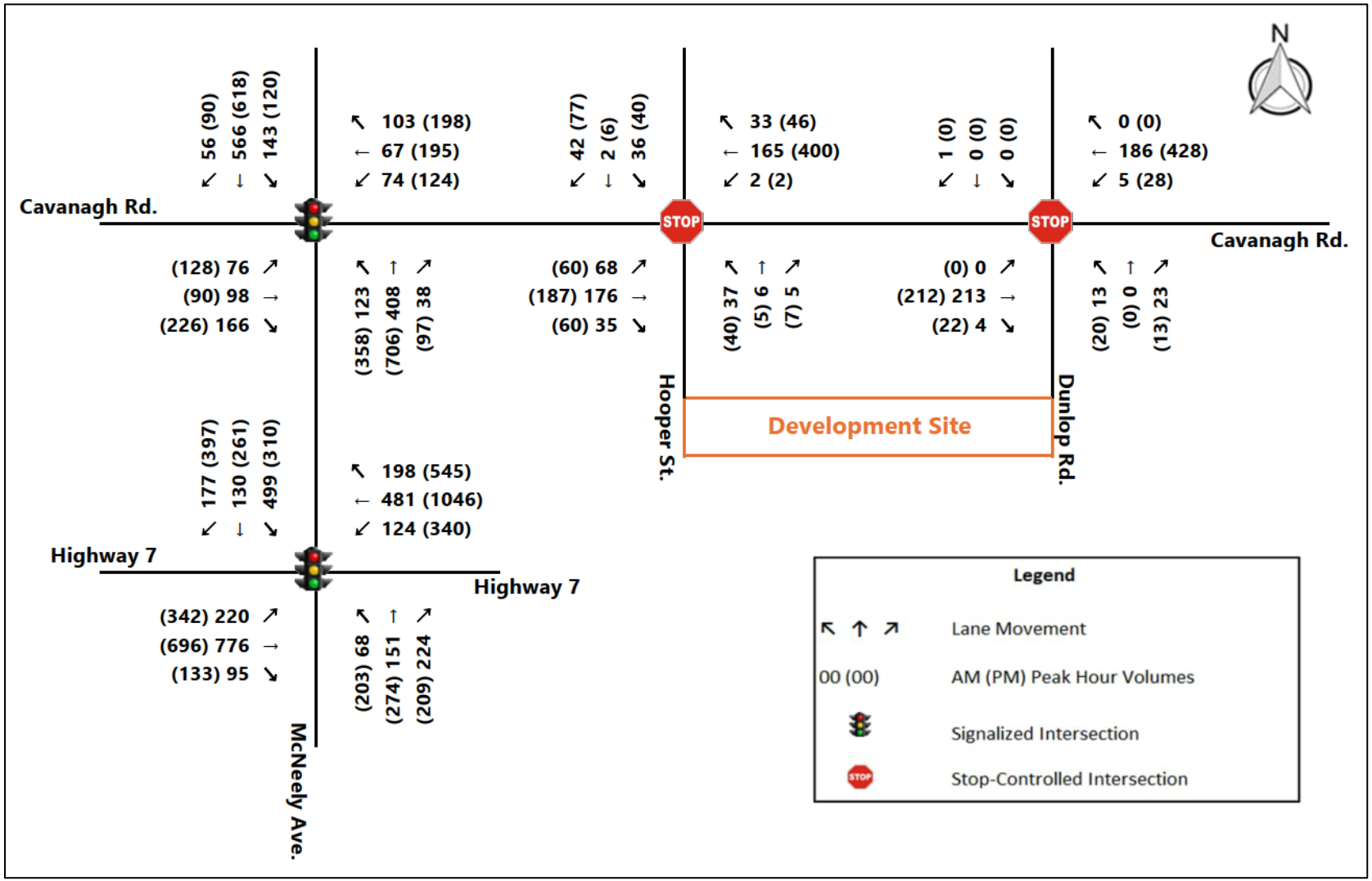


Figure 4-2: Future 2031 Background Traffic Volumes

4.6 Future 2026 Buildout Background Traffic Operations

The assessment of the 2026 buildout background traffic scenario serves as a baseline for comparison for the 2026 buildout year, representing the scenario where there is no development built. Results from the 2026 buildout background traffic analysis are summarized in **Table 4-1**. Synchro 11 output reports are provided in detail in **Appendix C**.

Under the 2026 background conditions intersections are expected to operate similarly to the 2025 existing conditions with background growth having little impact on traffic operations.

Both unsignalized intersections, Cavanagh Road & Dunlop Road and Cavanagh Road & Hooper Street, are expected to operate well with an average intersection delay per vehicle of 0.9 s. Northbound and southbound movements operate at LOS C or better while all movements on Cavanagh Road operate at LOS A. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.29. Queueing on the sideroads is expected to peak at 12 m (2 vehicles) while little to no queueing is expected on Cavanagh Road.

The intersection of McNeely Avenue and Cavanagh Road / Coleman Street is expected to operate at LOS B during the AM and PM peak hours with an average intersection delay of 15.7 s during the PM peak hour. Movements on McNeely Avenue are expected to operate at LOS B or better while movements on Cavanagh Road and Coleman Street are expected to operate at LOS C or better. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.66. The maximum reported queue of 63 m (9 vehicles) occurs in the southbound direction.

The intersection of McNeely Avenue and Highway 7 is expected to operate at LOS C during the AM and PM peak hours with an average intersection delay of 33.3 s during the PM peak hour. Individual movements are expected to operate at LOS D or better, with the exception of the northbound left-turn movement which operates at LOS E during the PM peak hour. Some movements exhibit little excess capacity with a maximum reported V/C ratio of 0.85. The maximum reported queue of 119 m (17 vehicles) occurs in the westbound direction.

Table 4-1: 2026 Background Traffic Analysis

Intersection	Approach - Movement	AM Peak				PM Peak			
		LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Cavanagh Road & Dunlop Road	**Intersection**	**A**	**-**	**0.9**	**-**	**A**	**-**	**0.9**	**-**
	EB - LTR	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LTR	A	0.00	0.2	0	A	0.02	0.5	1
	NB - LTR	B	0.05	10.4	2	B	0.08	14.0	3
	SB - LTR	A	0.00	9.2	0	A	0.00	0.0	0
Cavanagh Road & Hooper Street	**Intersection**	**A**	**-**	**3.6**	**-**	**A**	**-**	**3.9**	**-**
	EB - LT	A	0.05	7.8	2	A	0.06	8.5	2
	EB - R	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LT	A	0.00	7.6	0	A	0.00	7.7	0
	WB - R	A	0.00	0.0	0	A	0.00	0.0	0
	NB - LTR	B	0.11	14.2	4	C	0.20	21.1	7
	SB - LTR	B	0.14	12.0	5	C	0.29	16.4	12
McNeely Avenue & Cavanagh Road / Coleman Street	**Intersection**	**B**	**-**	**11.0**	**-**	**B**	**-**	**15.7**	**-**
	EB - L	C	0.27	20.1	16	C	0.58	33.0	34
	EB - T	B	0.25	19.0	19	C	0.22	21.9	22
	EB - R	A	0.36	6.3	13	A	0.44	6.3	16
	WB - L	C	0.27	20.2	16	C	0.44	26.9	31
	WB - T	B	0.17	18.1	14	C	0.49	25.9	44
	WB - R	A	0.24	5.6	9	A	0.40	6.3	15
	NB - L	A	0.23	4.9	9	B	0.66	12.9	47
	NB - TR	B	0.31	10.3	25	B	0.48	12.4	58
	SB - L	A	0.23	5.0	10	A	0.28	7.9	13
	SB - TR	B	0.44	11.8	38	B	0.59	18.9	63
McNeely Avenue & Highway 7	**Intersection**	**C**	**-**	**24.9**	**-**	**C**	**-**	**33.3**	**-**
	EB - L	D	0.51	36.4	32	D	0.77	49.1	54
	EB - T	C	0.65	25.1	83	D	0.77	35.8	85
	EB - R	A	0.15	1.9	4	A	0.26	5.8	13
	WB - L	D	0.54	41.3	40	D	0.85	52.3	107
	WB - T	C	0.44	21.9	48	C	0.84	31.8	119
	WB - R	A	0.32	4.5	14	B	0.68	11.4	59
	NB - L	D	0.40	41.7	26	E	0.78	56.7	74
	NB - TR	B	0.58	16.8	27	C	0.67	24.8	44
	SB - L	D	0.79	41.4	78	D	0.71	45.8	47
	SB - T	C	0.14	25.2	18	D	0.49	36.3	36
	SB - R	A	0.33	6.5	16	C	0.84	28.4	70

4.7 Future 2031 Background Traffic Conditions

The 2031 background scenario was assessed using the same network configuration and parameters as the 2026 buildout and existing conditions. Results from the 2031 background traffic analysis are summarized in **Table 4-2**. Synchro 11 output reports are provided in detail in **Appendix C.**

Under the 2031 background conditions intersections are expected to operate similarly to the 2026 background buildout horizon and the 2025 existing conditions. Analysis demonstrates that future background growth for the 2031 horizon would having little impact on traffic operations.

Both unsignalized intersections, Cavanagh Road & Dunlop Road and Cavanagh Road & Hooper Street, are expected to operate well with an average intersection delay per vehicle of 1.0 s. Northbound and southbound movements operate at LOS C or better while all movements on Cavanagh Road operate at LOS A. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.32. Queueing on the sideroads is expected to peak at 13 m (2 vehicles) while little to no queueing is expected on Cavanagh Road.

The intersection of McNeely Avenue and Cavanagh Road / Coleman Street is expected to operate at LOS B during the AM and PM peak hours with an average intersection delay of 16.6 s during the PM peak hour. Movements on McNeely Avenue are expected to operate at LOS B or better while movements on Cavanagh Road and Coleman Street are expected to operate at LOS D or better. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.70. The maximum reported queue of 67 m (10 vehicles) occurs in the southbound direction.

The intersection of McNeely Avenue and Highway 7 is expected to operate at LOS C during the AM peak hour and LOS D with an average intersection delay of 36.2 s during the PM peak hour. Individual movements are expected to operate at LOS D or better, with the exception of the northbound and westbound left-turn movements which operate at LOS E during the PM peak hour. Some movements exhibit little excess capacity with a maximum reported V/C ratio of 0.88. The maximum reported queue of 131 m (19 vehicles) occurs in the westbound direction.

Table 4-2: 2031 Background Traffic Analysis

Intersection	Approach - Movement	AM Peak				PM Peak			
		LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Cavanagh Road & Dunlop Road	**Intersection**	**A**	**-**	**1.0**	**-**	**A**	**-**	**1.0**	**-**
	EB - LTR	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LTR	A	0.00	0.2	0	A	0.02	0.5	1
	NB - LTR	B	0.06	10.7	2	B	0.09	14.5	3
	SB - LTR	A	0.00	9.3	0	A	0.00	0.0	0
Cavanagh Road & Hooper Street	**Intersection**	**A**	**-**	**3.7**	**-**	**A**	**-**	**4.2**	**-**
	EB - LT	A	0.06	7.8	2	A	0.06	8.6	2
	EB - R	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LT	A	0.00	7.7	0	A	0.00	7.8	0
	WB - R	A	0.00	0.0	0	A	0.00	0.0	0
	NB - LTR	B	0.12	14.8	4	C	0.22	23.1	8
	SB - LTR	B	0.15	12.3	5	C	0.32	17.5	13
McNeely Avenue & Cavanagh Road / Coleman Street	**Intersection**	**B**	**-**	**11.2**	**-**	**B**	**-**	**16.6**	**-**
	EB - L	C	0.29	20.5	17	D	0.62	36.1	37
	EB - T	B	0.26	19.2	20	C	0.23	22.5	24
	EB - R	A	0.37	9.2	13	A	0.45	6.3	17
	WB - L	C	0.29	20.5	17	C	0.46	27.8	33
	WB - T	B	0.18	18.2	15	C	0.50	26.7	47
	WB - R	A	0.26	6.1	10	A	0.41	6.3	16
	NB - L	A	0.25	5.1	10	B	0.70	16.0	57
	NB - TR	B	0.32	10.5	26	B	0.50	12.8	62
	SB - L	A	0.25	5.2	11	A	0.31	8.3	13
	SB - TR	B	0.46	12.3	41	B	0.62	19.8	67
McNeely Avenue & Highway 7	**Intersection**	**C**	**-**	**26.5**	**-**	**D**	**-**	**36.2**	**-**
	EB - L	D	0.53	37.4	33	D	0.82	53.3	59
	EB - T	C	0.74	28.3	89	D	0.81	38.5	92
	EB - R	A	0.17	2.2	5	A	0.28	6.3	14
	WB - L	D	0.57	42.8	42	E	0.88	56.5	115
	WB - T	C	0.46	22.2	51	C	0.87	34.5	131
	WB - R	A	0.33	4.4	14	B	0.71	13.3	70
	NB - L	D	0.42	42.9	27	E	0.83	62.7	79
	NB - TR	B	0.60	17.1	28	C	0.69	26.1	47
	SB - L	D	0.83	44.9	84	D	0.76	49.1	50
	SB - T	C	0.15	25.6	19	D	0.50	36.7	37
	SB - R	A	0.34	6.5	17	C	0.88	34.3	81

5.0 FUTURE TOTAL TRAFFIC CONDITIONS

5.1 Trip Generation

Trip generation for the proposed development was completed using the methodology identified in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.

The proposed development will contain 88 single-detached home units, for which Land Use Code (LUC) 210 (single-family detached housing) was selected. An additional 30 single-detached home units are identified as background traffic and shall follow the same trip assignment and distribution as site generated trips. As ITE provides an estimate of vehicle trips, additional mode share evaluation was not considered.

The proposed site is anticipated to generate 66 trips during the AM peak hour (17 inbound and 49 outbound) and 88 trips during the PM peak hour (56 inbound and 32 outbound). The projected trip generation for the proposed development is summarized in **Table 5-1**.

Table 5-1: Site Generated Traffic

Location	Units	Type	LUC		AM Peak			PM Peak		
					Inbound	Outbound	Total	Inbound	Outbound	Total
Block 213	77	Single Unit	210	Equation	Ln(T) = 0.91 Ln(X) + 0.12			Ln(T) = 0.94 Ln(X) + 0.27		
Eastwood	11			Distribution	25%	75%	100%	63%	37%	100%
Background	30			**Site Trips**	**17**	**49**	**66**	**56**	**32**	**88**
Total	118			**Total New Trips**	**22**	**65**	**87**	**73**	**43**	**116**

5.2 Trip Distribution

Trip distribution was estimated and based on a combination of the existing travel and traffic patterns at boundary road intersections, and workplace location of Carleton Place residents. **Table 5-2** summarizes the trip distribution within the study area for the weekday AM and PM peak hour.

Table 5-2: Estimated Site Trip Distribution

Distribution	
N	6%
S	4%
E	35%
W	55%

5.3 Site Trip Assignment

Access to the development is provided by two (2) existing intersections. The site-generated trips for the proposed development have been assigned to the road network according to the estimated trip distribution summarized in **Table 5-2**, as well as existing distribution of inbound and outbound trips at the two (2) intersections. Trips generated by the proposed and background development have been illustrated in **Figure 5-1**.

5.4 Future Total Traffic Volumes

Future (2026) buildout background weekday AM and PM peak hour traffic volumes were added to site generated traffic volumes to forecast future (2026) buildout total traffic volumes, illustrated in **Figure 5-2**.

Future (2031) 5-year post buildout total weekday AM, and PM peak hour traffic volumes were similarly forecasted by adding site generated traffic volumes to projected future 2031 background traffic volumes. Future 2031 total traffic volumes are illustrated in **Figure 5-3.**

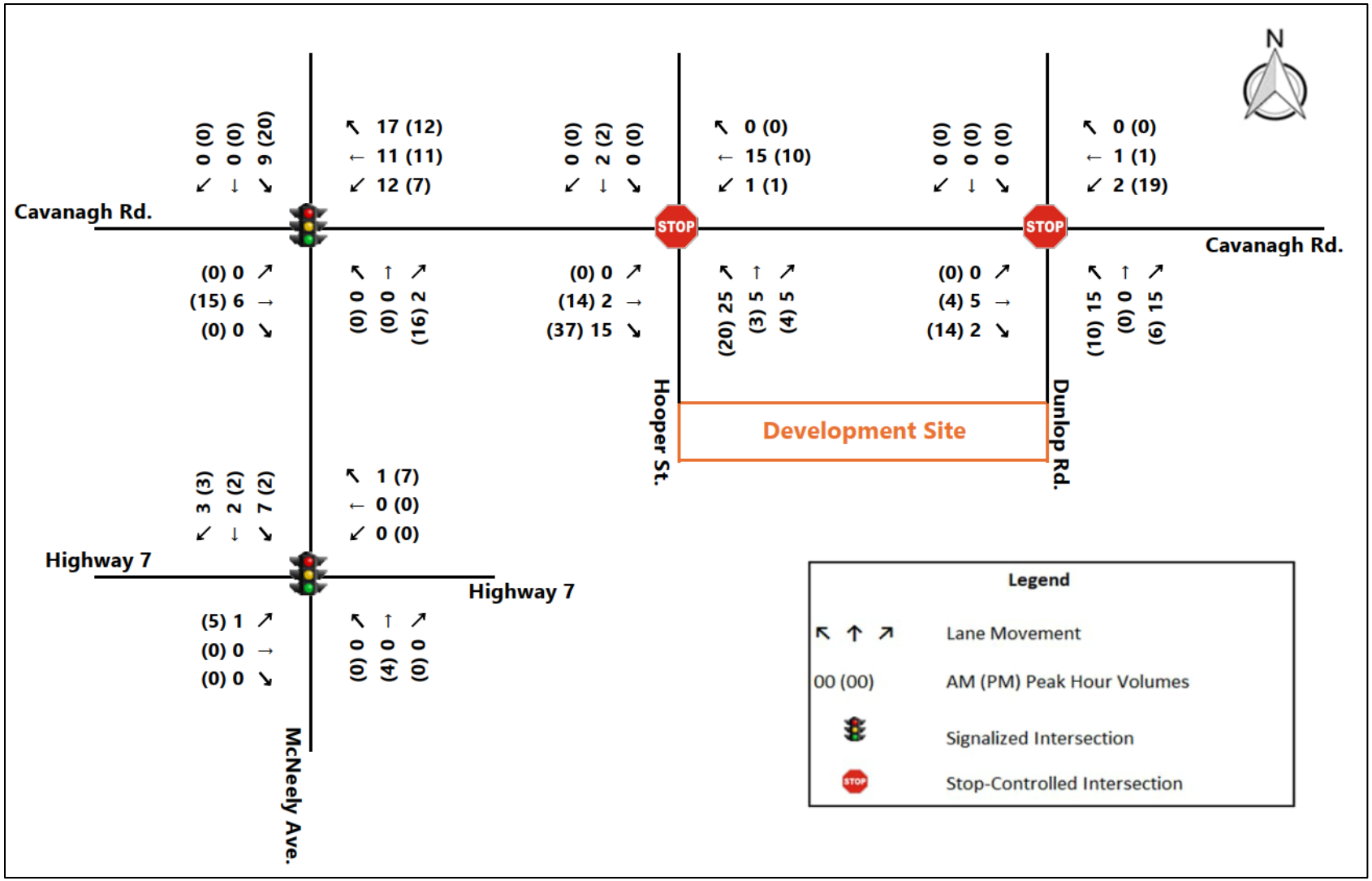


Figure 5-1: New Vehicle Trips (Background and Site Generated)

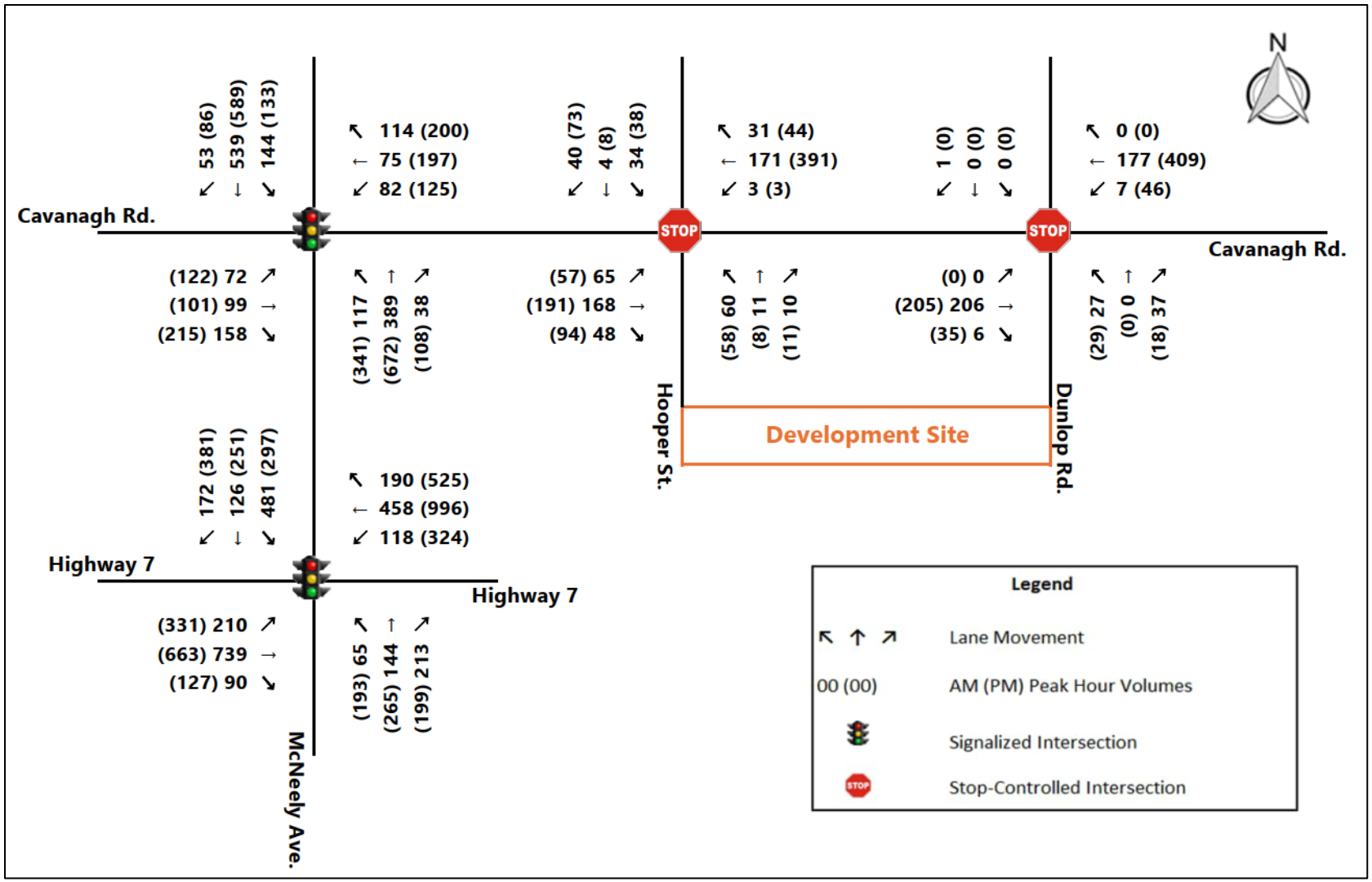


Figure 5-2: Future 2026 Buildout Total Traffic Volumes

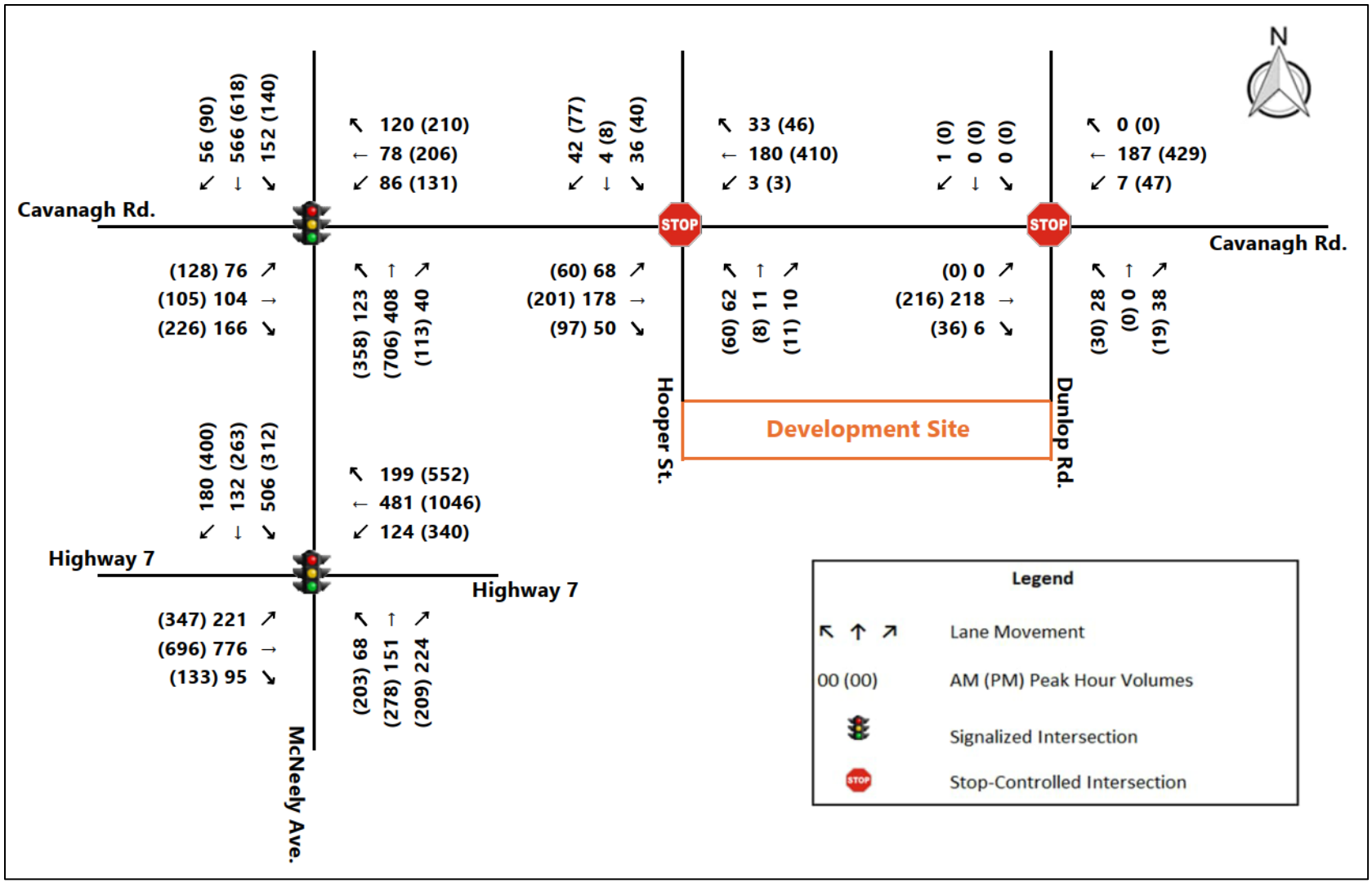


Figure 5-3: Future 2031 Total Traffic Volumes

5.5 Future 2026 Buildout Total Traffic Operations

Results from the 2026 buildout year total traffic analysis are summarized in **Table 5-3**. Synchro 11 output reports are provided in detail in **Appendix C**.

Results from the analysis show that during the 2026 total traffic scenario operate very similarly to the 2026 background traffic scenario with site traffic having little impact on traffic operations.

Both unsignalized intersections, Cavanagh Road & Dunlop Road and Cavanagh Road & Hooper Street, are expected to operate well with an average intersection delay per vehicle of 4.7 s or less. Northbound and southbound movements operate at LOS D or better while all movements on Cavanagh Road operate at LOS A. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.32. Queueing on the sideroads is expected to peak at 13 m (2 vehicles) while little to no queueing is expected on Cavanagh Road. Hooper Street and Dunlop Road are able to accommodate the anticipated queues.

The intersection of McNeely Avenue and Cavanagh Road / Coleman Street is expected to operate at LOS B during the AM and PM peak hours with an average intersection delay of 15.9 s during the PM peak hour. Movements on McNeely Avenue are expected to operate at LOS B or better while movements on Cavanagh Road and Coleman Street are expected to operate at LOS C or better. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.66. The maximum reported queue of 63 m (9 vehicles) occurs in the southbound direction.

The intersection of McNeely Avenue and Highway 7 is expected to operate at LOS C during the AM and PM peak hours with an average intersection delay of 33.5 s during the PM peak hour. Individual movements are expected to operate at LOS D or better, with the exception of the northbound left-turn movement which operates at LOS E during the PM peak hour. Some movements exhibit little excess capacity with a maximum reported V/C ratio of 0.85. The maximum reported queue of 119 m (17 vehicles) occurs in the westbound direction.

Table 5-3: 2026 Total Traffic Analysis

Intersection	Approach - Movement	AM Peak				PM Peak			
		LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Cavanagh Road & Dunlop Road	**Intersection**	**A**	**-**	**1.7**	**-**	**A**	**-**	**1.5**	**-**
	EB - LTR	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LTR	A	0.01	0.3	0	A	0.04	0.8	1
	NB - LTR	B	0.11	11.1	3	C	0.13	15.5	4
	SB - LTR	A	0.00	9.2	0	A	0.00	0.0	0
Cavanagh Road & Hooper Street	**Intersection**	**A**	**-**	**4.3**	**-**	**A**	**-**	**4.7**	**-**
	EB - LT	A	0.05	7.8	2	A	0.06	8.5	2
	EB - R	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LT	A	0.00	7.7	0	A	0.00	7.9	0
	WB - R	A	0.00	0.0	0	A	0.00	0.0	0
	NB - LTR	C	0.21	15.6	8	D	0.32	25.0	13
	SB - LTR	B	0.15	12.6	5	C	0.32	17.8	13
McNeely Avenue & Cavanagh Road / Coleman Street	**Intersection**	**B**	**-**	**11.2**	**-**	**B**	**-**	**15.9**	**-**
	EB - L	C	0.27	20.0	16	C	0.59	34.3	35
	EB - T	B	0.27	19.1	20	C	0.26	22.3	26
	EB - R	A	0.36	6.1	12	A	0.43	6.3	16
	WB - L	C	0.32	20.9	18	C	0.47	27.6	33
	WB - T	B	0.20	18.3	16	C	0.51	26.3	46
	WB - R	A	0.28	6.2	11	A	0.41	6.3	16
	NB - L	A	0.24	5.1	10	B	0.66	13.2	47
	NB - TR	B	0.31	10.5	25	B	0.50	12.7	59
	SB - L	A	0.25	5.2	12	A	0.33	8.4	15
	SB - TR	B	0.44	12.0	39	B	0.59	19.0	63
McNeely Avenue & Highway 7	**Intersection**	**C**	**-**	**25.0**	**-**	**C**	**-**	**33.5**	**-**
	EB - L	D	0.51	36.5	32	D	0.78	49.8	56
	EB - T	C	0.65	25.2	83	D	0.77	35.8	85
	EB - R	A	0.15	1.9	4	A	0.26	5.8	13
	WB - L	D	0.54	41.3	40	D	0.85	52.4	107
	WB - T	C	0.44	21.9	48	C	0.84	32.0	119
	WB - R	A	0.32	4.5	14	B	0.69	12.0	62
	NB - L	D	0.40	41.7	26	E	0.78	56.8	74
	NB - TR	B	0.58	16.8	27	C	0.68	25.3	45
	SB - L	D	0.80	41.8	79	D	0.71	46.1	47
	SB - T	C	0.15	25.3	18	D	0.49	36.3	36
	SB - R	A	0.34	6.5	16	C	0.85	29.0	71

5.6 Future 2031 Horizon Total Traffic Conditions

Results from the 2031 horizon year total traffic analysis are summarized in **Table 5-4**. Synchro 11 output reports are provided in detail in **Appendix C**.

Results from the analysis show that during the 2031 total traffic scenario operate very similarly to the 2031 background traffic scenario with site traffic having little impact on traffic operations.

Both unsignalized intersections, Cavanagh Road & Dunlop Road and Cavanagh Road & Hooper Street, are expected to operate well with an average intersection delay per vehicle of 5.0 s or less. Northbound and southbound movements operate at LOS D or better while all movements on Cavanagh Road operate at LOS A. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.35. Queueing on the sideroads is expected to peak at 15 m (2 vehicles) while little to no queueing is expected on Cavanagh Road. Hooper Street and Dunlop Road are able to accommodate the anticipated queues.

The intersection of McNeely Avenue and Cavanagh Road / Coleman Street is expected to operate at LOS B during the AM and PM peak hours with an average intersection delay of 16.9 s during the PM peak hour. All movements are expected to operate at LOS C or better with the exception of the eastbound left-turn movements which operates at LOS D during the PM peak hour. All movements exhibit excess capacity with a maximum reported V/C ratio of 0.70. The maximum reported queue of 67 m (10 vehicles) occurs in the southbound direction.

The intersection of McNeely Avenue and Highway 7 is expected to operate at LOS C during the AM peak hour and LOS D with an average intersection delay of 36.5 s during the PM peak hour. Individual movements are expected to operate at LOS D or better, with the exception of the northbound and westbound left-turn movements which operate at LOS E during the PM peak hour. Some movements exhibit little excess capacity with a maximum reported V/C ratio of 0.89. The maximum reported queue of 131 m (19 vehicles) occurs in the westbound direction.

Table 5-4: 2031 Total Traffic Analysis

Intersection	Approach - Movement	AM Peak				PM Peak			
		LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Cavanagh Road & Dunlop Road	**Intersection**	**A**	**-**	**1.7**	**-**	**A**	**-**	**1.5**	**-**
	EB - LTR	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LTR	A	0.01	0.3	0	A	0.04	0.8	1
	NB - LTR	B	0.11	11.3	4	C	0.14	16.1	5
	SB - LTR	A	0.00	9.3	0	A	0.00	0.0	0
Cavanagh Road & Hooper Street	**Intersection**	**A**	**-**	**4.4**	**-**	**A**	**-**	**5.0**	**-**
	EB - LT	A	0.06	7.9	2	A	0.06	8.6	2
	EB - R	A	0.00	0.0	0	A	0.00	0.0	0
	WB - LT	A	0.00	7.7	0	A	0.00	7.9	0
	WB - R	A	0.00	0.0	0	A	0.00	0.0	0
	NB - LTR	C	0.22	16.3	8	D	0.35	27.7	15
	SB - LTR	B	0.17	13.0	6	C	0.35	19.0	15
McNeely Avenue & Cavanagh Road / Coleman Street	**Intersection**	**B**	**-**	**11.5**	**-**	**B**	**-**	**16.9**	**-**
	EB - L	C	0.29	20.4	17	D	0.64	37.6	38
	EB - T	B	0.28	19.3	21	C	0.27	22.8	27
	EB - R	A	0.37	6.1	13	A	0.44	6.3	17
	WB - L	C	0.33	21.3	19	C	0.49	28.4	35
	WB - T	B	0.21	18.4	17	C	0.52	27.0	50
	WB - R	A	0.29	6.2	11	A	0.42	6.2	16
	NB - L	A	0.25	5.3	10	B	0.70	16.2	57
	NB - TR	B	0.32	10.7	27	B	0.52	13.1	63
	SB - L	A	0.27	5.5	12	A	0.36	9.1	15
	SB - TR	B	0.46	12.5	43	C	0.62	20.0	67
McNeely Avenue & Highway 7	**Intersection**	**C**	**-**	**26.7**	**-**	**D**	**-**	**36.5**	**-**
	EB - L	D	0.54	37.4	33	D	0.83	54.0	59
	EB - T	C	0.74	28.3	89	D	0.81	38.5	92
	EB - R	A	0.17	2.2	5	A	0.28	6.3	14
	WB - L	D	0.57	42.8	42	E	0.89	56.7	115
	WB - T	C	0.46	22.2	51	C	0.88	34.7	131
	WB - R	A	0.33	4.4	14	B	0.73	13.9	74
	NB - L	D	0.42	42.9	27	E	0.83	62.8	79
	NB - TR	B	0.60	17.1	28	C	0.70	26.6	48
	SB - L	D	0.84	45.9	86	D	0.76	49.4	51
	SB - T	C	0.15	25.6	19	D	0.50	36.7	38
	SB - R	A	0.35	6.4	17	D	0.89	35.0	82

6.0 SITE PLAN REVIEW

6.1 Vehicular Circulation Review

Internal site circulation was reviewed using vehicle tracking software to examine if emergency vehicles can ingress and egress. As access to the subdivision is provided via existing roadways vehicle circulation was only reviewed at the two (2) new connections, Private Roadway 1 and Hooper Street north and south junctions. Due to the size, a fire truck was identified as the governing vehicle and was used to ensure adequate site ingress and egress. Internal site circulation review figures have been provided in **Appendix D**.

Based on the simulations performed it was shown that a fire truck can ingress and egress the site conflict free. As a result, it is also expected that ambulances and passenger cars can also ingress and egress the site conflict free.

6.2 Site Access Sightline Review

Sight distance requirements for development accesses were reviewed using methodology outlined in the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads.

As access to the subdivision is provided via existing roadways vehicle circulation was only reviewed at the two (2) new connections, Private Roadway 1 and Hooper Street north and south junctions. Hooper Street has an unposted speed limit of 40 km/h, as such, sight distance reviews were assessed based on an design speed of 60 km/h.

A desktop sightline review has been completed by Egis for development accesses. A detailed review was undertaken for the two (2) new intersections. The intersections were assessed based on TAC Table 9.9.4 and 9.9.6 which provides minimum intersection sight distance requirements for left and right-turn maneuvers from stop, respectively.

Table 6-1: outlines the requirements and available sight distances for the new intersections.

Table 6-1: Intersection Sight Distance Requirements

Location	Maneuver	Required Stopping Sight Distance (m)	Required Intersection Sight Distance (m)	Available Site Distances (m)	Site Distances Requirement Met
Hooper Street and Private Roadway 1 North Junction	Left-Turn from Stop	85	130	>200	Yes
	Right-Turn from Stop	85	110	>200	Yes
Hooper Street and Private Roadway 1 South Junction	Left-Turn from Stop	85	130	>200	Yes
	Right-Turn from Stop	85	110	>200	Yes

6.3 Pedestrian Connectivity Review

Pedestrian connections are provided within the subdivision; however, no connections are provided to the other facilities within the study area.

Construction of a PXO has been identified as a requirement for Phase 6 of the development and will be constructed on Cavanagh Road, east of Dunlop Road. This will provide adequate connection between the pedestrian network within the subdivision and adjacent facilities. As a result, construction of additional pedestrian facilities as part of the proposed development are not required.

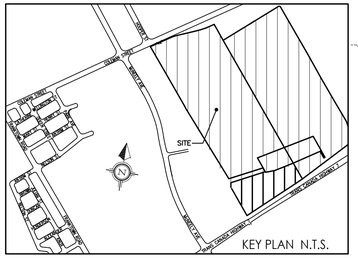
7.0 SUMMARY

7.1 Findings

The findings from this Traffic Impact Study for the proposed addition to the existing Carleton Place subdivision I the south-east quadrant of the McNeely Avenue and Cavanagh Road / Coleman Street intersection is as follows:

- The proposed development will include 118 single unit homes.
- The proposed site is anticipated to generate 87 trips during the AM peak hour and 116 trips during the PM peak hour.
- All study intersections are anticipated to operate at satisfactory level through all analysis periods with no network improvements noted.
- While the intersection of McNeely Avenue and Highway 7 operates at a satisfactory level under the 2031 background and total traffic conditions, it is noted that multiple movements are nearing capacity, with a V/C ratio of near 0.90. Improvements to the intersection are expected to be required in 5-10 years (2036-2041).
- Roadways used to provide access to the proposed sites are anticipated to operate at LOS D or better with an average delay of 27.7 s and a maximum queue of 15 m (2 vehicles). Excess capacity is exhibited with a maximum V/C ratio of 0.35 and the roadways are able to accommodate the anticipated queues.
- Vehicle circulation was performed to ensure a fire truck can ingress and egress the site conflict free.
- A sightline review confirmed the two (2) new intersections, Private Roadway 1 and Hooper Street north and south junctions, meet intersection sight distance requirements.
- Construction of a PXO has been identified as a requirement for Phase 6 of the development and will be constructed on Cavanagh Road, east of Dunlop Road. As such, construction of pedestrian facilities as part of the proposed development are not required.

APPENDIX A – SITE PLAN



KEY PLAN N.T.S.

ZONING PROVISIONS	SINGLE DETACHED	SEMI DETACHED	TOWNHOME
MIN. LOT AREA-	NIL	NIL	NIL
LOT COVERAGE-	60%	60%	60%
MIN. LOT FRONTAGE -	10.6m	7.5m	5.5m
MIN. FRONT YARD -	4.5m	4.5m	4.5m
MAX. FRONT YARD -	7.5m	7.5m	7.5m
MIN. INTERIOR SIDE YARD -	1.2m	1.2m	1.2m
MIN. EXTERIOR SIDE YARD -	4.5m	4.5m	4.5m
MAX. EXTERIOR SIDE YARD -	7.5m	7.5m	7.5m
MIN. REAR YARD -	7.5m	7.0m	6.5m
MIN. USABLE LANDSCAPED AREA IN THE REAR YARD -	50 m^2	40 m^2	30 m^2
MAX. BUILDING HEIGHT -	11.0m	11.0m	11.0m
MIN. UNIT AREA -	92.9m^2	92.9m^2	83.1m^2
NO ENCROACHMENT AREA FROM FRONT OR EXTERIOR SIDE LOT LINE -	2.5m	2.5m	2.5m
PARKING REQUIRED PER UNIT (INCLUDING 1 WITHIN GARAGE) -	2 SPACES	2 SPACES	2 SPACES
MAX. WIDTH OF GARAGE (% OF FRONTAGE)-	45%	45%	70%
MIN. PARKING SPACE DIMENSIONS - 2.75m x 6.0m			
MIN. 6.0m FROM FRONT LOT LINE TO GARAGE			

SITE AREA 'A' - 261,806.11m² (64.69 Acres)
INCLUDING ENVIRONMENTAL
WETLAND COMPLEX 10,520.85m² (2.60 ACRES)
SITE AREA EXCLUDING WETLAND COMPLEX
251,237.47m² (62.08 Acres)

AREA PARKS & GREENSPACE - 20,946m² (5.17 Acres)
AREA ROAD R.O.W. - 75,078.20m² (18.55 Acres)
TOTAL SITE BUILDABLE AREA - 155,213.27m² (38.35 Acres)

PHASE I -
- 35' LOTS (10.70m) = 0 UNITS
- 42' LOTS (12.80m) = 4 UNITS
- 50' LOTS (15.25m) = 1 UNITS

TOWNHOMES = 32 UNITS
SEMIS = 20 UNITS
PH. I - TOTAL UNITS = 57 UNITS

PHASE II
- 35' LOTS (10.70m) = 30 UNITS
- 42' LOTS (12.80m) = 1 UNITS
- 50' LOTS (15.25m) = 3 UNITS

TOWNHOMES = 46 UNITS
SEMIS = 10 UNITS
PH. II - TOTAL UNITS = 90 UNITS

PHASE III - (HC) RE-ZONED AREA
- 35' LOTS (10.70m) = 12 UNITS
- 42' LOTS (12.80m) = 14 UNITS
- 50' LOTS (15.25m) = 22 UNITS

TOWNHOMES = 24 UNITS
SEMIS = 26 UNITS
SMALL SIGLES (ROBINS) = 77 UNITS
PH. II - TOTAL UNITS = 175 UNITS

PHASE IV
- 35' LOTS (10.70m) = 0 UNITS
- 42' LOTS (12.80m) = 0 UNITS
- 50' LOTS (15.25m) = 8 UNITS

TOWNHOMES = 53 UNITS
SEMIS = 34 UNITS
PH. II - TOTAL UNITS = 95 UNITS

PHASE V
- 35' LOTS (10.70m) = 17 UNITS
- 42' LOTS (12.80m) = 0 UNITS
- 50' LOTS (15.25m) = 0 UNITS

TOWNHOMES = 60 UNITS
SEMIS = 0 UNITS
PH. II - TOTAL UNITS = 77 UNITS

TOTAL UNITS ALL PHASES = 499 UNITS

SITE DENSITY
SITE AREA= 26.17 ha (64.69 Acres)
ROAD ALLOWANCE AREA = 7.51 ha (18.55 Acres)
WETLAND COMPLEX = 1.05 ha (2.60 Acres)
PARK AREA= 2.09 ha (5.17 acres)
LOT AREA= 15.53 ha (38.37 acres)
TOTAL UNITS = 494 UNITS
DENSITY= 494 / 15.53 = 31.80 UNITS/ha

NOTE:

FOR ALL LOT LINES AND BOUNDARY DIMENSIONS REFER TO DRAFT PLAN OF SUBDIVISION PREPARED PREPARED BY FAIRHALL MOFFAT & WOODLAND

PLAN 571 PREPARED BY FAIRHALL, MOFFAT & WOODLAND

GENERAL NOTES:

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M. David Blakely
Architect Inc.
2200 Prince of Wales Dr. - Suite 101
Ottawa, Ontario K2E 6Z9
Phone (613) 226-8811 Fax (613) 226-7942

CONSTRUCTION NORTH

SEAL

No.	DATE	DESCRIPTION	INIT.
31.	08/11/17	REVISED UNIT COUNTS/ SITE DENSITY	JB
30.	10/03/17	REVISED PEEVER PLACE LOTS	SM
29.	14/02/17	REVISED UNIT TYPES / LOTTING	SM
28.	22/12/16	NEW STREET NAMES ADDED TO PLAN	SM
27.	21/11/16	PHASE 4, FOR REVIEW	SM
26.	13/11/15	STREET No. 5 - RE-LOTTING AND CAVANAGH STREET - ROAD ALIGNMENT	SM
25.	24/06/15	REVISED AS PER DRAFT PLAN	JB
24.	12/05/14	ISSUED	JB
23.	02/05/14	REVISED AREA 'A' DENSITY CALCULATIONS	JB
22.	17/03/14	REVISED LOTTING	JB

REVISIONS

No.	DATE	DESCRIPTION	INIT.
32.	18/12/24	REVISED UNIT COUNTS/ SITE DENSITY	JB

REVISIONS

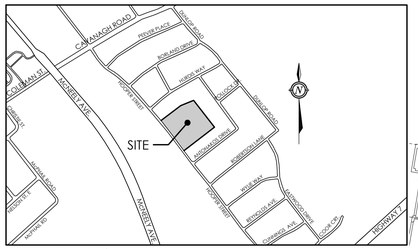
A - DETAIL NUMBER
B - SHEET NUMBER (DETAIL REQUIRED)
C - SHEET NUMBER (DETAIL LOCATION)

PROJECT:
RESIDENTIAL SUBDIVISION
CARLETON PLACE, ONTARIO

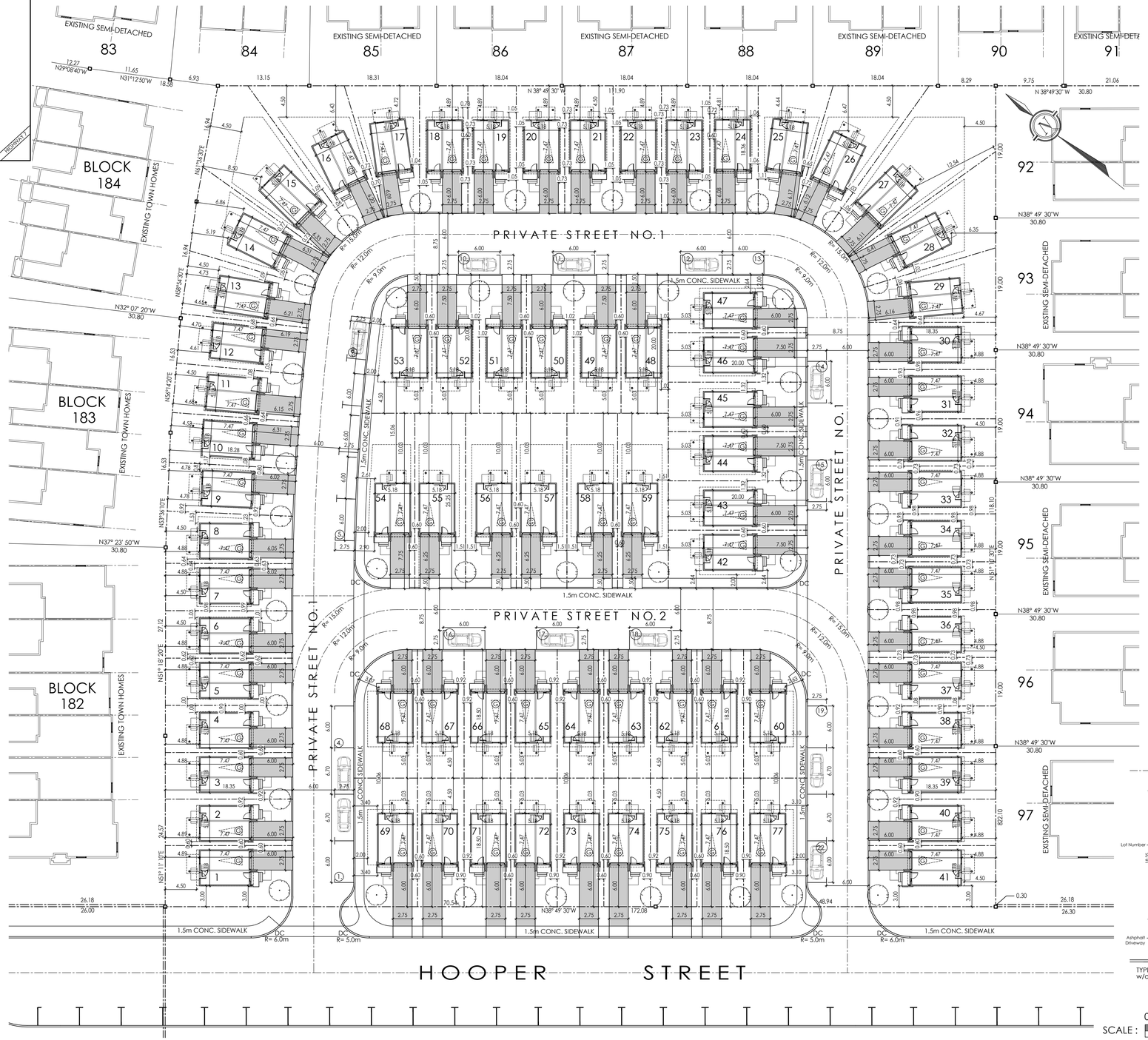
CLIENT:
PEGASUS DEVELOPMENT CORP.
1914 MERIVALE ROAD
OTTAWA, ONTARIO

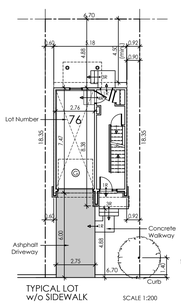
DRAWING TITLE:
DEVELOPMENT PLAN

DATE: OCT. , 2010.
SCALE: 1:1250
DRAWN BY: JB
CHECKED: MDB
SHEET No.: SP-1

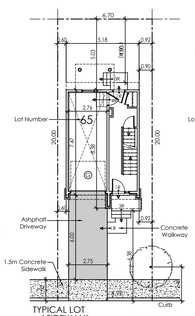


KEY PLAN - NTS

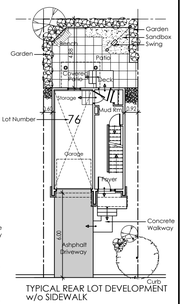




TYPICAL LOT w/o SIDEWALK SCALE 1:200



TYPICAL LOT w/ SIDEWALK SCALE 1:200



TYPICAL REAR LOT DEVELOPMENT w/o SIDEWALK

SCALE : 0 5 10 20 30 40 50M

SITE INFORMATION:

SITE AREA :	13,922 m²	(1.39 ha)	
TOTAL BUILDING AREA :	2,979.90m²		
SITE COVERAGE :		20.10%	
AREA ASPHALT/BUILDING :	5,793.56m²	41.61%	
AREA LANDSCAPING :	8,128.44m²	58.38%	
UNITS PER HECTARE:	77 UNITS / 1.42ha	54.2 UNITS/ha	

SINGLES	UNIT TYPE	No. UNITS	BLDG. AREA	FLOOR AREA
SINGLE LOTS	3 STOREY 2 BEDRM. -	77	38.7m²@ 77 = 2,979.90m²	96.8m²@ 77 = 7,453.60m²

PARKING REQUIRED:
2 SPACES PER DWELLING UNIT = 154 spaces
PARKING SPACE SIZE = 2.75m x 6.00m
PARKING PROVIDED:
PRIVATE GARAGE = 77 spaces
PRIVATE DRIVEWAY = 77 spaces
VISITOR STREET PARKING = 22 spaces
TOTAL = 176 spaces

BICYCLE PARKING PROVIDED: 6 spaces

SITE BOUNDARIES AND TOPOGRAPHIC INFORMATION DERIVED FROM PLAN OF SUBDIVISION PLAN 27M- 81 PREPARED BY FAIRHALL MOFFIT WOODLAND Ltd. DATED: DECEMBER 7, 2017. SURVEYOR TO VERIFY SETBACKS, ZONING REQUIREMENTS & EASEMENTS BEFORE SETTING-OUT FOR CONSTRUCTION.

ZONING INFORMATION
PROPOSED ZONING - _____

		REQUIRED :	PROVIDED :
LOT FRONTAGE :			172.08 m
MIN. LOT FRONTAGE :	SINGLES :	m	6.70m
	TOWNHOME :	m	4.98m
MIN. FRONT YARD SETBACK :	SINGLES :	m	6.00 m
	TOWNHOME :	m	6.00 m
MIN. SETBACK TO GARAGE :	SINGLES :	m	6.00 m
	TOWNHOME :	m	6.00 m
MIN. REAR YARD SETBACK :	SINGLES :	m	4.61 m
	TOWNHOME :	m	4.63 m
MIN. EXTERIOR YARD SETBACK :	SINGLES :	m	3.00 m
	TOWNHOME :	m	N/A
MIN. INTERIOR YARD SETBACK :	SINGLES :	m	0.60 m
	TOWNHOME :	m	1.52 m
MIN. DWELLING AREA :	SINGLES :	m	96.8 m²
	TOWNHOME :	m	96.8 m²
MAX. BUILDING HEIGHT :	SINGLES :	m	9.14 m
	TOWNHOME :	m	9.14 m

NOTE:
REFER TO LANDSCAPE PLAN PREPARED BY _____.
REFER TO SITE SERVICING AND GRADING PLANS PREPARED BY _____.

M. David Blakely
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Phone (613) 226-8811 Fax (613) 226-7942

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8 - THIS REPRODUCTION SHALL NOT BE ALTERED.

CONSTRUCTION NORTH

SEAL

No.	DATE	DESCRIPTION	INIT.
11.			
10.	21/02/24	REVISED FOR ALL SINGLES/ FOR CO-ORD.	JB
9.	29/09/23	FOR CO-ORDINATION	SM
8.	18/05/22	REVISED TOWNHOME BLOCKS	SM
7.	16/03/22	REVISED UNIT SPACING	SM
6.	05/07/21	REVISED ROAD WIDTH / UNIT TYPES	SM
5.	02/12/19	REVISED ROAD WIDTH	SM
4.	05/09/19	REVISED MODEL TYPE	SM
3.	21/09/17	ADDED BLOCK 9	SM
2.	12/09/17	REVISED MODEL TYPE	SM
1.	24/01/17	FOR REVIEW	JB

REVISIONS

No.	DATE	DESCRIPTION	INIT.
22.			
21.			
20.			
19.			
18.			
17.			
16.			
15.			
14.			
13.			
12.			

REVISIONS

A - DETAIL NUMBER
B - SHEET NUMBER (DETAIL REQUIRED)
C - SHEET NUMBER (DETAIL LOCATION)

PROJECT:
BLOCK 213
77 UNIT RESIDENTAL SUBDIVION
SINGLES & TOWNHOMES
CARLETON PLACE, ONTARIO

CLIENT:
OLYMPIA HOMES
1914 MERIVALE ROAD
OTTAWA, ONTARIO

DRAWING TITLE:
SITE PLAN

DATE: JAN., 2017.
SCALE: 1: 300
DRAWN BY: JB
CHECKED: MDB
SHEET No.: SP-1

APPENDIX B – AVAILABLE TRAFFIC DATA

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Project #25-013 - egis

Intersection Count Report

Intersection:	Cavanagh Rd & Hooper St
Municipality:	Carleton Place
Count Date:	Thursday, Jan 23, 2025
Site Code:	2501300001
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	06:00-10:00, 14:30-18:30
Weather:	Clear
Comments:	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Map

Intersection:	Cavanagh Rd & Hooper St
Site Code:	2501300001
Municipality:	Carleton Place
Count Date:	Jan 23, 2025

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

Hooper St - 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
06:00 - 07:00	28	0	32	0	60	0	20	1	6	0	27	0	87
07:00 - 08:00	38	1	23	0	62	3	32	7	8	0	47	0	109
08:00 - 09:00	33	2	47	0	82	0	36	4	5	0	45	0	127
09:00 - 10:00	30	5	30	0	65	0	30	7	4	0	41	0	106
BREAK													
14:30 - 15:00	17	0	22	0	39	0	16	4	1	0	21	0	60
15:00 - 16:00	37	3	62	0	102	1	38	3	4	0	45	0	147
16:00 - 17:00	32	5	73	0	110	3	43	7	11	0	61	0	171
17:00 - 18:00	31	2	62	0	95	0	42	4	4	0	50	0	145
18:00 - 18:30	7	3	26	0	36	0	13	0	6	0	19	0	55
GRAND TOTAL	**253**	**21**	**377**	**0**	**651**	**7**	**270**	**37**	**49**	**0**	**356**	**0**	**1007**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

Cavanagh 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
06:00 - 07:00	0	48	15	0	63	1	41	106	7	0	154	0	217
07:00 - 08:00	4	116	25	0	145	3	56	161	15	0	232	0	377
08:00 - 09:00	2	152	36	0	190	0	54	143	33	0	230	0	420
09:00 - 10:00	2	152	31	0	185	0	55	116	29	0	200	0	385
BREAK													
14:30 - 15:00	1	105	14	0	120	1	23	66	21	0	110	1	230
15:00 - 16:00	2	267	45	0	314	0	56	140	46	0	242	0	556
16:00 - 17:00	4	274	39	0	317	2	57	165	59	0	281	0	598
17:00 - 18:00	7	219	30	0	256	2	30	125	46	0	201	0	457
18:00 - 18:30	2	71	7	0	80	0	6	32	31	0	69	0	149
GRAND TOTAL	**24**	**1404**	**242**	**0**	**1670**	**9**	**378**	**1054**	**287**	**0**	**1719**	**1**	**3389**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

North Approach - Hooper St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
06:00	5	0	4	0	9	0	0	1	0	1	0	0	0	0	0	0
06:15	8	0	6	0	14	0	0	0	0	0	0	0	0	0	0	0
06:30	5	0	13	0	18	0	0	0	0	0	0	0	0	0	0	0
06:45	10	0	7	0	17	0	0	1	0	1	0	0	0	0	0	0
07:00	17	0	7	0	24	0	1	0	0	1	0	0	0	0	0	0
07:15	4	0	4	0	8	0	0	0	0	0	0	0	0	0	0	1
07:30	12	0	7	0	19	0	0	0	0	0	0	0	0	0	0	1
07:45	5	0	5	0	10	0	0	0	0	0	0	0	0	0	0	1
08:00	13	2	12	0	27	0	0	0	0	0	0	0	0	0	0	0
08:15	10	0	15	0	25	0	0	0	0	0	0	0	0	0	0	0
08:30	6	0	8	0	14	0	0	0	0	0	0	0	0	0	0	0
08:45	4	0	12	0	16	0	0	0	0	0	0	0	0	0	0	0
09:00	7	1	5	0	13	0	0	1	0	1	0	0	0	0	0	0
09:15	4	1	12	0	17	0	0	0	0	0	0	0	0	0	0	0
09:30	7	1	5	0	13	0	0	0	0	0	0	0	0	0	0	0
09:45	11	2	7	0	20	1	0	0	0	1	0	0	0	0	0	0
SUBTOTAL	128	7	129	0	264	1	1	3	0	5	0	0	0	0	0	3

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

North Approach - Hooper St

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
14:30	4	0	14	0	18	0	0	0	0	0	0	0	0	0	0	0
14:45	13	0	7	0	20	0	0	1	0	1	0	0	0	0	0	0
15:00	10	1	18	0	29	0	0	0	0	0	0	0	0	0	0	1
15:15	10	0	9	0	19	0	0	0	0	0	0	0	0	0	0	0
15:30	7	1	18	0	26	0	0	0	0	0	0	0	0	0	0	0
15:45	9	1	17	0	27	1	0	0	0	1	0	0	0	0	0	0
16:00	9	2	20	0	31	1	0	0	0	1	0	0	0	0	0	1
16:15	7	2	12	0	21	0	0	1	0	1	0	0	0	0	0	0
16:30	11	1	22	0	34	0	0	0	0	0	0	0	0	0	0	2
16:45	4	0	16	0	20	0	0	2	0	2	0	0	0	0	0	0
17:00	6	1	18	0	25	0	0	0	0	0	0	0	0	0	0	0
17:15	10	0	22	0	32	0	0	0	0	0	0	0	0	0	0	0
17:30	8	0	11	0	19	1	0	0	0	1	0	0	0	0	0	0
17:45	6	1	11	0	18	0	0	0	0	0	0	0	0	0	0	0
18:00	3	2	21	0	26	0	0	0	0	0	0	0	0	0	0	0
18:15	4	1	5	0	10	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	121	13	241	0	375	3	0	4	0	7	0	0	0	0	0	4
GRAND TOTAL	249	20	370	0	639	4	1	7	0	12	0	0	0	0	0	7

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

South Approach - Hooper St

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
06:00	6	0	1	0	7	0	0	0	0	0	0	0	0	0	0	0
06:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
06:30	6	0	1	0	7	0	0	0	0	0	0	0	0	0	0	0
06:45	7	1	4	0	12	0	0	0	0	0	0	0	0	0	0	0
07:00	6	0	2	0	8	1	0	0	0	1	0	0	0	0	0	0
07:15	6	3	0	0	9	0	0	0	0	0	0	0	0	0	0	0
07:30	6	0	5	0	11	1	1	0	0	2	0	0	0	0	0	0
07:45	12	3	1	0	16	0	0	0	0	0	0	0	0	0	0	0
08:00	15	1	1	0	17	0	0	0	0	0	0	0	0	0	0	0
08:15	4	1	2	0	7	0	0	0	0	0	0	0	0	0	0	0
08:30	4	1	1	0	6	0	0	0	0	0	0	0	0	0	0	0
08:45	12	1	1	0	14	1	0	0	0	1	0	0	0	0	0	0
09:00	6	0	1	0	7	0	1	0	0	1	0	0	0	0	0	0
09:15	7	1	1	0	9	0	0	0	0	0	0	0	0	0	0	0
09:30	7	3	0	0	10	0	0	0	0	0	0	0	0	0	0	0
09:45	10	2	2	0	14	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	115	17	23	0	155	3	2	0	0	5	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

South Approach - Hooper St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
14:30	7	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0
14:45	9	3	1	0	13	0	0	0	0	0	0	0	0	0	0	0
15:00	13	0	1	0	14	0	0	0	0	0	0	0	0	0	0	0
15:15	11	1	1	0	13	0	0	0	0	0	0	0	0	0	0	0
15:30	5	1	1	0	7	1	0	0	0	1	0	0	0	0	0	0
15:45	8	1	1	0	10	0	0	0	0	0	0	0	0	0	0	0
16:00	12	2	1	0	15	1	1	0	0	2	0	0	0	0	0	0
16:15	10	0	2	0	12	0	0	0	0	0	0	0	0	0	0	0
16:30	7	1	3	0	11	0	0	0	0	0	0	0	0	0	0	0
16:45	13	3	5	0	21	0	0	0	0	0	0	0	0	0	0	0
17:00	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0
17:15	16	2	2	0	20	0	0	0	0	0	0	0	0	0	0	0
17:30	8	1	1	0	10	0	0	0	0	0	0	0	0	0	0	0
17:45	11	1	1	0	13	0	0	0	0	0	0	0	0	0	0	0
18:00	9	0	1	0	10	0	0	0	0	0	0	0	0	0	0	0
18:15	4	0	5	0	9	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	150	17	26	0	193	2	1	0	0	3	0	0	0	0	0	0
GRAND TOTAL	265	34	49	0	348	5	3	0	0	8	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

East Approach - Cavanagh Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
06:00	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
06:15	0	8	1	0	9	0	1	0	0	1	0	0	0	0	0	0
06:30	0	11	3	0	14	0	2	0	0	2	0	0	0	0	0	1
06:45	0	20	11	0	31	0	1	0	0	1	0	0	0	0	0	0
07:00	0	21	4	0	25	0	1	0	0	1	0	0	0	0	0	0
07:15	1	25	4	0	30	0	2	1	0	3	0	0	0	0	0	1
07:30	1	27	6	0	34	0	1	1	0	2	0	0	0	0	0	1
07:45	2	37	8	0	47	0	2	1	0	3	0	0	0	0	0	1
08:00	0	26	6	0	32	0	3	0	0	3	0	0	0	0	0	0
08:15	0	43	6	0	49	0	1	0	0	1	0	0	0	0	0	0
08:30	0	36	9	0	45	0	2	1	0	3	0	0	0	0	0	0
08:45	2	41	12	0	55	0	0	2	0	2	0	0	0	0	0	0
09:00	0	38	3	0	41	0	0	0	0	0	0	0	0	0	0	0
09:15	1	43	6	0	50	0	1	0	0	1	0	0	0	0	0	0
09:30	0	35	7	0	42	0	1	0	0	1	0	0	0	0	0	0
09:45	1	34	15	0	50	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	8	450	101	0	559	0	18	6	0	24	0	0	0	0	0	4

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

East Approach - Cavanagh Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
14:30	1	54	8	0	63	0	1	0	0	1	0	0	0	0	0	1
14:45	0	50	6	0	56	0	0	0	0	0	0	0	0	0	0	0
15:00	1	54	14	0	69	0	2	0	0	2	0	0	0	0	0	0
15:15	0	69	11	0	80	0	0	0	0	0	0	0	0	0	0	0
15:30	1	67	10	0	78	0	0	0	0	0	0	0	0	0	0	0
15:45	0	74	10	0	84	0	1	0	0	1	0	0	0	0	0	0
16:00	0	72	7	0	79	0	1	0	0	1	0	0	0	0	0	0
16:15	0	71	16	0	87	0	1	0	0	1	0	0	0	0	0	0
16:30	2	64	11	0	77	0	1	0	0	1	0	0	0	0	0	2
16:45	2	63	5	0	70	0	1	0	0	1	0	0	0	0	0	0
17:00	2	56	9	0	67	0	1	0	0	1	0	0	0	0	0	0
17:15	1	56	10	0	67	0	1	0	0	1	0	0	0	0	0	1
17:30	4	57	4	0	65	0	1	0	0	1	0	0	0	0	0	1
17:45	0	47	7	0	54	0	0	0	0	0	0	0	0	0	0	0
18:00	1	44	7	0	52	0	1	0	0	1	0	0	0	0	0	0
18:15	1	26	0	0	27	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	16	924	135	0	1075	0	12	0	0	12	0	0	0	0	0	5
GRAND TOTAL	24	1374	236	0	1634	0	30	6	0	36	0	0	0	0	0	9

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

West Approach - Cavanagh Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
06:00	4	21	1	0	26	1	1	0	0	2	0	0	0	0	0	0
06:15	4	17	3	0	24	0	1	0	0	1	0	0	0	0	0	0
06:30	10	24	1	0	35	0	5	1	0	6	0	0	0	0	0	0
06:45	21	37	1	0	59	1	0	0	0	1	0	0	0	0	0	0
07:00	9	44	4	0	57	0	1	0	0	1	0	0	0	0	0	0
07:15	11	39	3	0	53	0	0	0	0	0	0	0	0	0	0	0
07:30	14	31	2	0	47	0	1	0	0	1	0	0	0	0	0	0
07:45	21	43	6	0	70	1	2	0	0	3	0	0	0	0	0	0
08:00	15	36	11	0	62	0	4	0	0	4	0	0	0	0	0	0
08:15	17	22	11	0	50	0	3	0	0	3	0	0	0	0	0	0
08:30	10	44	5	0	59	0	1	0	0	1	0	0	0	0	0	0
08:45	12	32	6	0	50	0	1	0	0	1	0	0	0	0	0	0
09:00	8	32	8	0	48	1	2	1	0	4	0	0	0	0	0	0
09:15	14	29	7	0	50	0	0	0	0	0	0	0	0	0	0	0
09:30	12	23	4	0	39	0	1	1	0	2	0	0	1	0	1	0
09:45	19	26	6	0	51	1	3	1	0	5	0	0	0	0	0	0
SUBTOTAL	201	500	79	0	780	5	26	4	0	35	0	0	1	0	1	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Municipality: Carleton Place
Count Date: Jan 23, 2025

West Approach - Cavanagh Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
14:30	10	33	11	0	54	0	0	0	0	0	0	0	0	0	0	1
14:45	12	33	10	0	55	1	0	0	0	1	0	0	0	0	0	0
15:00	16	26	9	0	51	0	0	0	0	0	0	0	0	0	0	0
15:15	15	34	12	0	61	0	0	0	0	0	0	0	0	0	0	0
15:30	10	41	13	0	64	1	1	0	0	2	0	0	0	0	0	0
15:45	13	38	12	0	63	1	0	0	0	1	0	0	0	0	0	0
16:00	12	51	16	0	79	0	2	0	0	2	0	0	0	0	0	0
16:15	11	44	15	0	70	0	0	0	0	0	0	0	0	0	0	0
16:30	19	33	13	0	65	0	0	0	0	0	0	0	0	0	0	0
16:45	14	34	15	0	63	1	1	0	0	2	0	0	0	0	0	0
17:00	6	38	11	0	55	0	0	0	0	0	0	0	0	0	0	0
17:15	8	39	11	0	58	0	0	0	0	0	0	0	0	0	0	0
17:30	9	23	17	0	49	0	0	0	0	0	0	0	0	0	0	0
17:45	7	25	7	0	39	0	0	0	0	0	0	0	0	0	0	0
18:00	4	12	16	0	32	0	0	0	0	0	0	0	0	0	0	0
18:15	2	20	15	0	37	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	168	524	203	0	895	4	4	0	0	8	0	0	0	0	0	1
GRAND TOTAL	369	1024	282	0	1675	9	30	4	0	43	0	0	1	0	1	1

Peak Hour Diagram

Specified Period
From: 06:00:00
To: 10:00:00

One Hour Peak
From: 07:45:00
To: 08:45:00

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Count Date: Jan 23, 2025

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Cavanagh Rd runs E/W

North Approach

	Out	In	Total
Cars	76	98	174
Trucks	0	3	3
Bicycles	0	0	0
	76	**101**	**177**

Hooper St

Bicycles	0	0	0	0
Trucks	0	0	0	0
Cars	40	2	34	0
Totals	**40**	**2**	**34**	**0**

Peds: 1

East Approach

	Out	In	Total
Cars	173	184	357
Trucks	10	10	20
Bicycles	0	0	0
	183	**194**	**377**

Cavanagh Rd

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	1	63	**64**	
0	10	145	**155**	
0	0	33	**33**	

Peds: 0

Peds: 1

Cavanagh Rd

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	31	29	2	0
	150	142	8	0
	2	2	0	0

Peds: 0

West Approach

	Out	In	Total
Cars	241	217	458
Trucks	11	8	19
Bicycles	0	0	0
	252	**225**	**477**

Hooper St

Totals	**35**	**6**	**5**	**0**
Cars	35	6	5	0
Trucks	0	0	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	46	37	83
Trucks	0	0	0
Bicycles	0	0	0
	46	**37**	**83**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection:	Cavanagh Rd & Hooper St
Site Code:	2501300001
Count Date:	Jan 23, 2025
Period:	06:00 - 10:00

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

Start Time	North Approach Hooper St						South Approach Hooper St						East Approach Cavanagh Rd						West Approach Cavanagh Rd						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:45	5	0	5	0	1	10	12	3	1	0	0	16	2	39	9	0	1	50	22	45	6	0	0	73	149
08:00	13	2	12	0	0	27	15	1	1	0	0	17	0	29	6	0	0	35	15	40	11	0	0	66	145
08:15	10	0	15	0	0	25	4	1	2	0	0	7	0	44	6	0	0	50	17	25	11	0	0	53	135
08:30	6	0	8	0	0	14	4	1	1	0	0	6	0	38	10	0	0	48	10	45	5	0	0	60	128
Grand Total	**34**	**2**	**40**	**0**	**1**	**76**	**35**	**6**	**5**	**0**	**0**	**46**	**2**	**150**	**31**	**0**	**1**	**183**	**64**	**155**	**33**	**0**	**0**	**252**	**557**
Approach %	44.7	2.6	52.6	0		-	76.1	13	10.9	0		-	1.1	82	16.9	0		-	25.4	61.5	13.1	0		-	
Totals %	6.1	0.4	7.2	0		13.6	6.3	1.1	0.9	0		8.3	0.4	26.9	5.6	0		32.9	11.5	27.8	5.9	0		45.2	
PHF	**0.65**	**0.25**	**0.67**	**0**		**0.7**	**0.58**	**0.5**	**0.63**	**0**		**0.68**	**0.25**	**0.85**	**0.78**	**0**		**0.92**	**0.73**	**0.86**	**0.75**	**0**		**0.86**	**0.93**
Cars	34	2	40	0		76	35	6	5	0		46	2	142	29	0		173	63	145	33	0		241	536
% Cars	100	100	100	0		100	100	100	100	0		100	100	94.7	93.5	0		94.5	98.4	93.5	100	0		95.6	96.2
Trucks	0	0	0	0		0	0	0	0	0		0	0	8	2	0		10	1	10	0	0		11	21
% Trucks	0	0	0	0		0	0	0	0	0		0	0	5.3	6.5	0		5.5	1.6	6.5	0	0		4.4	3.8
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					1	-					0	-					1	-					0	-	2
% Peds					50	-					0	-					50	-					0	-	

Peak Hour Diagram

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Specified Period
From: 14:30:00
To: 18:30:00

One Hour Peak
From: 15:45:00
To: 16:45:00

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Count Date: Jan 23, 2025

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Cavanagh Rd runs E/W

North Approach

	Out	In	Total
Cars	113	103	216
Trucks	3	2	5
Bicycles	0	0	0
Totals	**116**	**105**	**221**

Hooper St

Bicycles	0	0	0	0
Trucks	1	0	2	0
Cars	71	6	36	0
Totals	**72**	**6**	**38**	**0**

East Approach

	Out	In	Total
Cars	327	209	536
Trucks	4	4	8
Bicycles	0	0	0
Totals	**331**	**213**	**544**

Cavanagh Rd

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	1	55	**56**
0	2	166	**168**
0	0	56	**56**

Peds: 3
Peds: 0
Peds: 2
Peds: 0

Cavanagh Rd

Totals	Cars	Trucks	Bicycles
0	0	0	0
44	44	0	0
285	281	4	0
2	2	0	0

West Approach

	Out	In	Total
Cars	277	389	666
Trucks	3	6	9
Bicycles	0	0	0
Totals	**280**	**395**	**675**

Hooper St

Totals	**38**	**5**	**7**	**0**
Cars	37	4	7	0
Trucks	1	1	0	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	48	64	112
Trucks	2	0	2
Bicycles	0	0	0
Totals	**50**	**64**	**114**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Cavanagh Rd & Hooper St
Site Code: 2501300001
Count Date: Jan 23, 2025
Period: 14:30 - 18:30

Peak Hour Data (15:45 - 16:45)

Start Time	North Approach Hooper St						South Approach Hooper St						East Approach Cavanagh Rd						West Approach Cavanagh Rd						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
15:45	10	1	17	0	0	28	8	1	1	0	0	10	0	75	10	0	0	85	14	38	12	0	0	64	187
16:00	10	2	20	0	1	32	13	3	1	0	0	17	0	73	7	0	0	80	12	53	16	0	0	81	210
16:15	7	2	13	0	0	22	10	0	2	0	0	12	0	72	16	0	0	88	11	44	15	0	0	70	192
16:30	11	1	22	0	2	34	7	1	3	0	0	11	2	65	11	0	2	78	19	33	13	0	0	65	188
Grand Total	**38**	**6**	**72**	**0**	**3**	**116**	**38**	**5**	**7**	**0**	**0**	**50**	**2**	**285**	**44**	**0**	**2**	**331**	**56**	**168**	**56**	**0**	**0**	**280**	**777**
Approach %	32.8	5.2	62.1	0		-	76	10	14	0		-	0.6	86.1	13.3	0		-	20	60	20	0		-	
Totals %	4.9	0.8	9.3	0		14.9	4.9	0.6	0.9	0		6.4	0.3	36.7	5.7	0		42.6	7.2	21.6	7.2	0		36	
PHF	**0.86**	**0.75**	**0.82**	**0**		**0.85**	**0.73**	**0.42**	**0.58**	**0**		**0.74**	**0.25**	**0.95**	**0.69**	**0**		**0.94**	**0.74**	**0.79**	**0.88**	**0**		**0.86**	**0.93**
Cars	36	6	71	0		113	37	4	7	0		48	2	281	44	0		327	55	166	56	0		277	765
% Cars	94.7	100	98.6	0		97.4	97.4	80	100	0		96	100	98.6	100	0		98.8	98.2	98.8	100	0		98.9	98.5
Trucks	2	0	1	0		3	1	1	0	0		2	0	4	0	0		4	1	2	0	0		3	12
% Trucks	5.3	0	1.4	0		2.6	2.6	20	0	0		4	0	1.4	0	0		1.2	1.8	1.2	0	0		1.1	1.5
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					3	-					0	-					2	-					0	-	5
% Peds					60	-					0	-					40	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Project #25-013 - egis

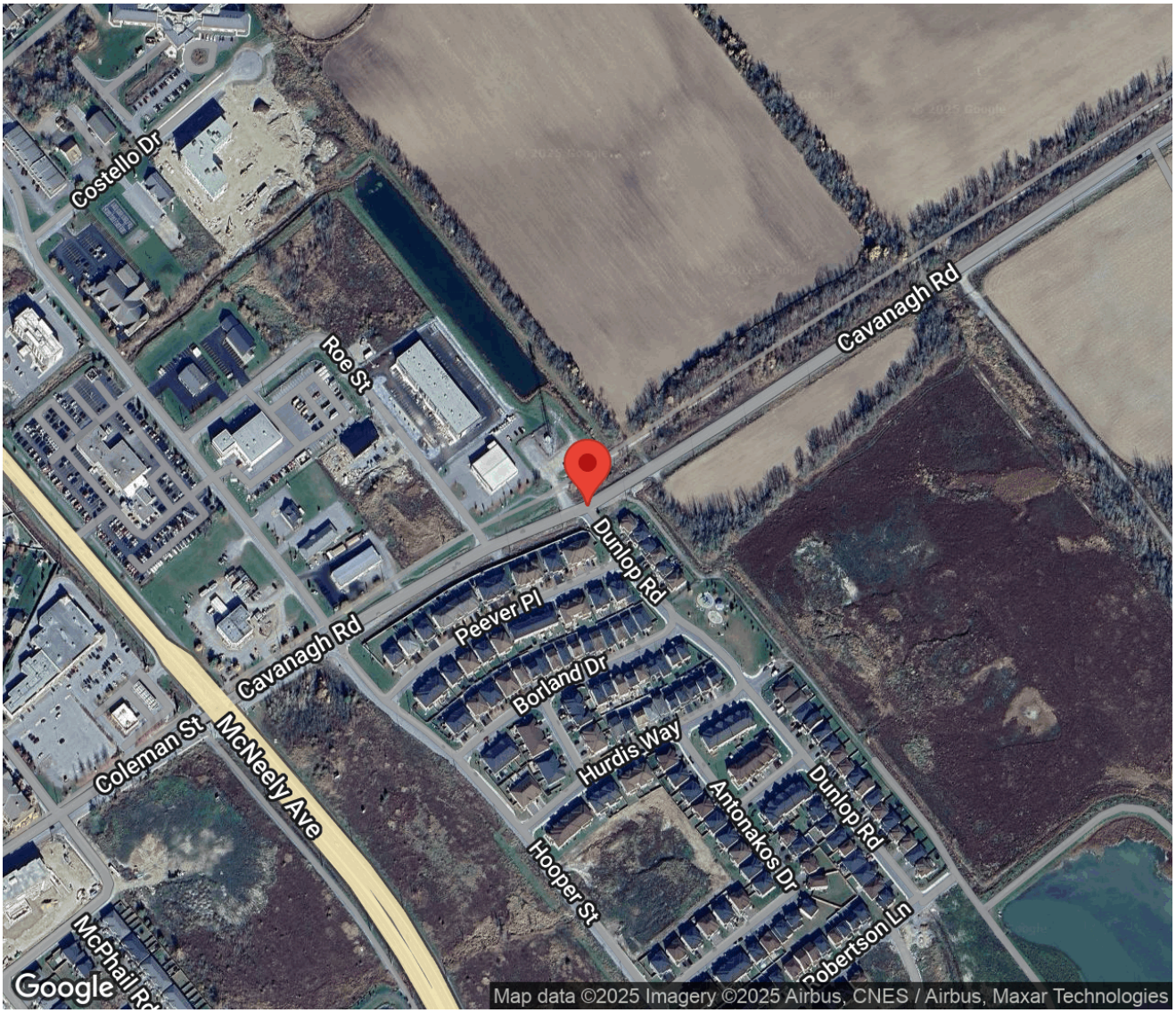
Intersection Count Report

Intersection:	Cavanagh Rd & Dunlop Rd
Municipality:	Carleton Place
Count Date:	Thursday, Jan 23, 2025
Site Code:	2501300002
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	06:00-10:00, 14:30-18:30
Weather:	Clear
Comments:	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Map

Intersection:	Cavanagh Rd & Dunlop Rd
Site Code:	2501300002
Municipality:	Carleton Place
Count Date:	Jan 23, 2025



Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

Dunlop 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
06:00 - 07:00	1	0	2	0	3	0	3	0	19	0	22	0	25
07:00 - 08:00	0	0	1	0	1	0	12	0	22	0	34	0	35
08:00 - 09:00	0	0	2	0	2	0	14	0	17	0	31	0	33
09:00 - 10:00	1	1	0	0	2	0	8	0	13	1	22	0	24
BREAK													
14:30 - 15:00	1	0	1	0	2	0	8	0	8	0	16	0	18
15:00 - 16:00	0	0	2	0	2	0	14	0	5	0	19	0	21
16:00 - 17:00	0	1	0	0	1	0	21	0	16	0	37	0	38
17:00 - 18:00	0	0	0	0	0	0	19	0	14	0	33	0	33
18:00 - 18:30	0	0	0	0	0	0	5	0	2	0	7	0	7
GRAND TOTAL	**3**	**2**	**8**	**0**	**13**	**0**	**104**	**0**	**116**	**1**	**221**	**0**	**234**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

Cavanagh 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
06:00 - 07:00	1	67	0	0	68	0	1	128	1	0	130	0	198
07:00 - 08:00	5	137	0	0	142	0	0	199	4	0	203	3	345
08:00 - 09:00	4	167	0	0	171	0	2	156	10	0	168	1	339
09:00 - 10:00	5	172	0	0	177	0	3	136	5	0	144	0	321
BREAK													
14:30 - 15:00	5	112	0	0	117	0	0	75	8	0	83	0	200
15:00 - 16:00	16	290	1	0	307	0	1	163	13	0	177	1	484
16:00 - 17:00	29	300	0	0	329	0	0	194	20	0	214	1	543
17:00 - 18:00	28	236	0	0	264	0	1	143	16	0	160	3	424
18:00 - 18:30	7	76	0	0	83	0	0	42	3	0	45	0	128
GRAND TOTAL	**100**	**1557**	**1**	**0**	**1658**	**0**	**8**	**1236**	**80**	**0**	**1324**	**9**	**2982**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

North Approach - Dunlop Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
06:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
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	1	0	1	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	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	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	1	5	0	8	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

North Approach - Dunlop Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
14:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
14:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	2	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	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	1	0	0	1	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
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	0	3	0	4	0	0	0	0	0	0	1	0	0	1	0
GRAND TOTAL	3	1	8	0	12	0	0	0	0	0	0	1	0	0	1	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

South Approach - Dunlop Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
06:00	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	6	0	6	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	7	0	7	1	0	0	0	1	0	0	0	0	0	0
06:45	2	0	3	0	5	0	0	0	0	0	0	0	0	0	0	0
07:00	5	0	5	0	10	0	0	0	0	0	0	0	0	0	0	0
07:15	3	0	8	0	11	0	0	0	0	0	0	0	0	0	0	0
07:30	3	0	8	0	11	0	0	0	0	0	0	0	0	0	0	0
07:45	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
08:00	3	0	7	0	10	0	0	0	0	0	0	0	0	0	0	0
08:15	4	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0
08:30	5	0	5	0	10	0	0	0	0	0	0	0	0	0	0	0
08:45	2	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0
09:00	3	0	6	0	9	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0
09:30	3	0	4	0	7	0	0	0	0	0	0	0	0	0	0	0
09:45	2	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	36	0	71	1	108	1	0	0	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

South Approach - Dunlop Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
14:30	2	0	6	0	8	0	0	1	0	1	0	0	0	0	0	0
14:45	6	0	1	0	7	0	0	0	0	0	0	0	0	0	0	0
15:00	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
15:15	4	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0
15:30	4	0	2	0	6	0	0	0	0	0	0	0	0	0	0	0
15:45	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
16:00	3	0	6	0	9	0	0	0	0	0	0	0	0	0	0	0
16:15	7	0	4	0	11	0	0	0	0	0	0	0	0	0	0	0
16:30	6	0	2	0	8	0	0	0	0	0	0	0	0	0	0	0
16:45	5	0	4	0	9	0	0	0	0	0	0	0	0	0	0	0
17:00	2	0	5	0	7	0	0	0	0	0	0	0	0	0	0	0
17:15	7	0	2	0	9	0	0	0	0	0	0	0	0	0	0	0
17:30	7	0	3	0	10	0	0	0	0	0	0	0	0	0	0	0
17:45	3	0	4	0	7	0	0	0	0	0	0	0	0	0	0	0
18:00	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
18:15	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	67	0	44	0	111	0	0	1	0	1	0	0	0	0	0	0
GRAND TOTAL	103	0	115	1	219	1	0	1	0	2	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

East Approach - Cavanagh Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
06:00	1	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0
06:15	0	10	0	0	10	0	1	0	0	1	0	0	0	0	0	0
06:30	0	15	0	0	15	0	1	0	0	1	0	0	0	0	0	0
06:45	0	34	0	0	34	0	1	0	0	1	0	0	0	0	0	0
07:00	0	24	0	0	24	0	1	0	0	1	0	0	0	0	0	0
07:15	1	34	0	0	35	1	2	0	0	3	0	0	0	0	0	0
07:30	1	30	0	0	31	0	3	0	0	3	0	0	0	0	0	0
07:45	2	41	0	0	43	0	2	0	0	2	0	0	0	0	0	0
08:00	1	29	0	0	30	0	3	0	0	3	0	0	0	0	0	0
08:15	1	42	0	0	43	0	1	0	0	1	0	0	0	0	0	0
08:30	0	38	0	0	38	0	3	0	0	3	0	0	0	0	0	0
08:45	2	49	0	0	51	0	2	0	0	2	0	0	0	0	0	0
09:00	0	40	0	0	40	0	0	0	0	0	0	0	0	0	0	0
09:15	1	44	0	0	45	0	1	0	0	1	0	0	0	0	0	0
09:30	2	37	0	0	39	0	0	0	0	0	0	0	0	0	0	0
09:45	2	49	0	0	51	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	14	521	0	0	535	1	22	0	0	23	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

East Approach - Cavanagh Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
14:30	2	57	0	0	59	0	2	0	0	2	0	0	0	0	0	0
14:45	3	53	0	0	56	0	0	0	0	0	0	0	0	0	0	0
15:00	6	70	1	0	77	0	1	0	0	1	0	0	0	0	0	0
15:15	0	72	0	0	72	0	0	0	0	0	0	0	0	0	0	0
15:30	7	69	0	0	76	0	0	0	0	0	0	0	0	0	0	0
15:45	3	77	0	0	80	0	1	0	0	1	0	0	0	0	0	0
16:00	4	81	0	0	85	0	1	0	0	1	0	0	0	0	0	0
16:15	13	80	0	0	93	0	1	0	0	1	0	0	0	0	0	0
16:30	5	71	0	0	76	0	1	0	0	1	0	0	0	0	0	0
16:45	7	65	0	0	72	0	0	0	0	0	0	0	0	0	0	0
17:00	8	62	0	0	70	0	2	0	0	2	0	0	0	0	0	0
17:15	11	64	0	0	75	0	1	0	0	1	0	0	0	0	0	0
17:30	3	51	0	0	54	0	1	0	0	1	0	0	0	0	0	0
17:45	6	55	0	0	61	0	0	0	0	0	0	0	0	0	0	0
18:00	3	48	0	0	51	0	1	0	0	1	0	0	0	0	0	0
18:15	4	25	0	0	29	0	2	0	0	2	0	0	0	0	0	0
SUBTOTAL	85	1000	1	0	1086	0	14	0	0	14	0	0	0	0	0	0
GRAND TOTAL	**99**	**1521**	**1**	**0**	**1621**	**1**	**36**	**0**	**0**	**37**	**0**	**0**	**0**	**0**	**0**	**0**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

West Approach - Cavanagh Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	↰	↑	↱	↷	Total	
06:00	0	26	0	0	26	0	1	0	0	1	0	0	0	0	0	0
06:15	1	25	0	0	26	0	0	0	0	0	0	0	0	0	0	0
06:30	0	26	0	0	26	0	4	0	0	4	0	0	0	0	0	0
06:45	0	46	1	0	47	0	0	0	0	0	0	0	0	0	0	0
07:00	0	59	0	0	59	0	1	0	0	1	0	0	0	0	0	0
07:15	0	43	0	0	43	0	0	0	0	0	0	0	0	0	0	1
07:30	0	44	0	0	44	0	0	1	0	1	0	0	0	0	0	1
07:45	0	50	3	0	53	0	2	0	0	2	0	0	0	0	0	1
08:00	0	47	1	0	48	0	2	0	0	2	0	0	0	0	0	0
08:15	0	29	1	0	30	0	4	0	0	4	0	0	0	0	0	0
08:30	1	43	3	0	47	0	0	1	0	1	0	0	0	0	0	0
08:45	1	31	2	0	34	0	0	2	0	2	0	0	0	0	0	1
09:00	1	40	1	0	42	0	1	0	0	1	0	0	0	0	0	0
09:15	1	30	1	0	32	0	0	0	0	0	0	0	0	0	0	0
09:30	0	29	0	0	29	0	1	0	0	1	0	0	0	0	0	0
09:45	1	32	2	0	35	0	3	1	0	4	0	0	0	0	0	0
SUBTOTAL	6	600	15	0	621	0	19	5	0	24	0	0	0	0	0	4

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Municipality: Carleton Place
Count Date: Jan 23, 2025

West Approach - Cavanagh Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
14:30	0	35	1	0	36	0	0	0	0	0	0	0	0	0	0	0
14:45	0	40	7	0	47	0	0	0	0	0	0	0	0	0	0	0
15:00	1	33	1	0	35	0	0	0	0	0	0	0	0	0	0	1
15:15	0	41	3	0	44	0	0	0	0	0	0	0	0	0	0	0
15:30	0	50	4	0	54	0	1	0	0	1	0	0	0	0	0	0
15:45	0	38	4	0	42	0	0	1	0	1	0	0	0	0	0	0
16:00	0	57	7	0	64	0	1	1	0	2	0	0	0	0	0	0
16:15	0	52	4	0	56	0	0	0	0	0	0	0	0	0	0	1
16:30	0	39	3	0	42	0	0	0	0	0	0	0	0	0	0	0
16:45	0	45	5	0	50	0	0	0	0	0	0	0	0	0	0	0
17:00	0	32	7	0	39	0	0	0	0	0	0	0	0	0	0	2
17:15	0	51	4	0	55	0	0	0	0	0	0	0	0	0	0	0
17:30	1	31	2	0	34	0	2	0	0	2	0	0	0	0	0	1
17:45	0	27	3	0	30	0	0	0	0	0	0	0	0	0	0	0
18:00	0	16	2	0	18	0	0	0	0	0	0	0	0	0	0	0
18:15	0	26	1	0	27	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	613	58	0	673	0	4	2	0	6	0	0	0	0	0	5
GRAND TOTAL	8	1213	73	0	1294	0	23	7	0	30	0	0	0	0	0	9

Peak Hour Diagram

Specified Period
From: 06:00:00
To: 10:00:00

One Hour Peak
From: 07:00:00
To: 08:00:00

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Count Date: Jan 23, 2025

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Cavanagh Rd runs E/W

North Approach

	Out	In	Total
Cars	1	0	1
Trucks	0	0	0
Bicycles	0	0	0
	1	**0**	**1**

Dunlop Rd

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

Peds: 0

East Approach

	Out	In	Total
Cars	133	218	351
Trucks	9	3	12
Bicycles	0	0	0
	142	**221**	**363**

Cavanagh Rd

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	0	**0**	
0	3	196	**199**	
0	1	3	**4**	

Peds: 3

Peds: 0

Cavanagh Rd

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	0	0	0	0
	137	129	8	0
	5	4	1	0

Peds: 0

West Approach

	Out	In	Total
Cars	199	142	341
Trucks	4	8	12
Bicycles	0	0	0
	203	**150**	**353**

Totals	**12**	**0**	**22**	**0**
Cars	12	0	22	0
Trucks	0	0	0	0
Bicycles	0	0	0	0

Dunlop Rd

South Approach

	Out	In	Total
Cars	34	7	41
Trucks	0	2	2
Bicycles	0	0	0
	34	**9**	**43**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Count Date: Jan 23, 2025
Period: 06:00 - 10:00

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

Start Time	North Approach Dunlop Rd						South Approach Dunlop Rd						East Approach Cavanagh Rd						West Approach Cavanagh Rd						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:00	0	0	0	0	0	0	5	0	5	0	0	10	0	25	0	0	0	25	0	60	0	0	0	60	95
07:15	0	0	0	0	0	0	3	0	8	0	0	11	2	36	0	0	0	38	0	43	0	0	1	43	92
07:30	0	0	0	0	0	0	3	0	8	0	0	11	1	33	0	0	0	34	0	44	1	0	1	45	90
07:45	0	0	1	0	0	1	1	0	1	0	0	2	2	43	0	0	0	45	0	52	3	0	1	55	103
Grand Total	**0**	**0**	**1**	**0**	**0**	**1**	**12**	**0**	**22**	**0**	**0**	**34**	**5**	**137**	**0**	**0**	**0**	**142**	**0**	**199**	**4**	**0**	**3**	**203**	**380**
Approach %	0	0	100	0		-	35.3	0	64.7	0		-	3.5	96.5	0	0		-	0	98	2	0		-	
Totals %	0	0	0.3	0		0.3	3.2	0	5.8	0		8.9	1.3	36.1	0	0		37.4	0	52.4	1.1	0		53.4	
PHF	**0**	**0**	**0.25**	**0**		**0.25**	**0.6**	**0**	**0.69**	**0**		**0.77**	**0.63**	**0.8**	**0**	**0**		**0.79**	**0**	**0.83**	**0.33**	**0**		**0.85**	**0.92**
Cars	0	0	1	0		1	12	0	22	0		34	4	129	0	0		133	0	196	3	0		199	367
% Cars	0	0	100	0		100	100	0	100	0		100	80	94.2	0	0		93.7	0	98.5	75	0		98	96.6
Trucks	0	0	0	0		0	0	0	0	0		0	1	8	0	0		9	0	3	1	0		4	13
% Trucks	0	0	0	0		0	0	0	0	0		0	20	5.8	0	0		6.3	0	1.5	25	0		2	3.4
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	-					3	-	3
% Peds					0	-					0	-					0	-					100	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	14:30:00	From:	15:30:00
To:	18:30:00	To:	16:30:00

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Count Date: Jan 23, 2025

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Cavanagh Rd runs E/W

North Approach

	Out	In	Total
	0	0	0
	0	0	0
	0	0	0
	0	**0**	**0**

Dunlop Rd

	0	0	0	0
	0	0	0	0
	0	0	0	0
Totals	**0**	**0**	**0**	**0**

Peds: 0

East Approach

	Out	In	Total
	334	209	543
	3	2	5
	0	0	0
	337	**211**	**548**

Cavanagh Rd

			Totals	
0	0	0	**0**	
0	0	0	**0**	
0	2	197	**199**	
0	2	19	**21**	

Peds: 1

Peds: 0

Cavanagh Rd

Totals			
0	0	0	0
0	0	0	0
310	307	3	0
27	27	0	0

Peds: 0

West Approach

	Out	In	Total
	216	326	542
	4	3	7
	0	0	0
	220	**329**	**549**

Totals	**19**	**0**	**12**	**0**
	19	0	12	0
	0	0	0	0
	0	0	0	0

Dunlop Rd

South Approach

	Out	In	Total
	31	46	77
	0	2	2
	0	0	0
	31	**48**	**79**

- Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Cavanagh Rd & Dunlop Rd
Site Code: 2501300002
Count Date: Jan 23, 2025
Period: 14:30 - 18:30

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

Start Time	North Approach Dunlop Rd						South Approach Dunlop Rd						East Approach Cavanagh Rd						West Approach Cavanagh Rd						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
15:30	0	0	0	0	0	0	4	0	2	0	0	6	7	69	0	0	0	76	0	51	4	0	0	55	137
15:45	0	0	0	0	0	0	5	0	0	0	0	5	3	78	0	0	0	81	0	38	5	0	0	43	129
16:00	0	0	0	0	0	0	3	0	6	0	0	9	4	82	0	0	0	86	0	58	8	0	0	66	161
16:15	0	0	0	0	0	0	7	0	4	0	0	11	13	81	0	0	0	94	0	52	4	0	1	56	161
Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**12**	**0**	**0**	**31**	**27**	**310**	**0**	**0**	**0**	**337**	**0**	**199**	**21**	**0**	**1**	**220**	**588**
Approach %	0	0	0	0		-	61.3	0	38.7	0		-	8	92	0	0		-	0	90.5	9.5	0		-	
Totals %	0	0	0	0		0	3.2	0	2	0		5.3	4.6	52.7	0	0		57.3	0	33.8	3.6	0		37.4	
PHF	**0**	**0**	**0**	**0**		**0**	**0.68**	**0**	**0.5**	**0**		**0.7**	**0.52**	**0.95**	**0**	**0**		**0.9**	**0**	**0.86**	**0.66**	**0**		**0.83**	**0.91**
Cars	0	0	0	0		0	19	0	12	0		31	27	307	0	0		334	0	197	19	0		216	581
% Cars	0	0	0	0		0	100	0	100	0		100	100	99	0	0		99.1	0	99	90.5	0		98.2	98.8
Trucks	0	0	0	0		0	0	0	0	0		0	0	3	0	0		3	0	2	2	0		4	7
% Trucks	0	0	0	0		0	0	0	0	0		0	0	1	0	0		0.9	0	1	9.5	0		1.8	1.2
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	-					1	-	1
% Peds					0	-					0	-					0	-					100	-	

Carleton PLACE

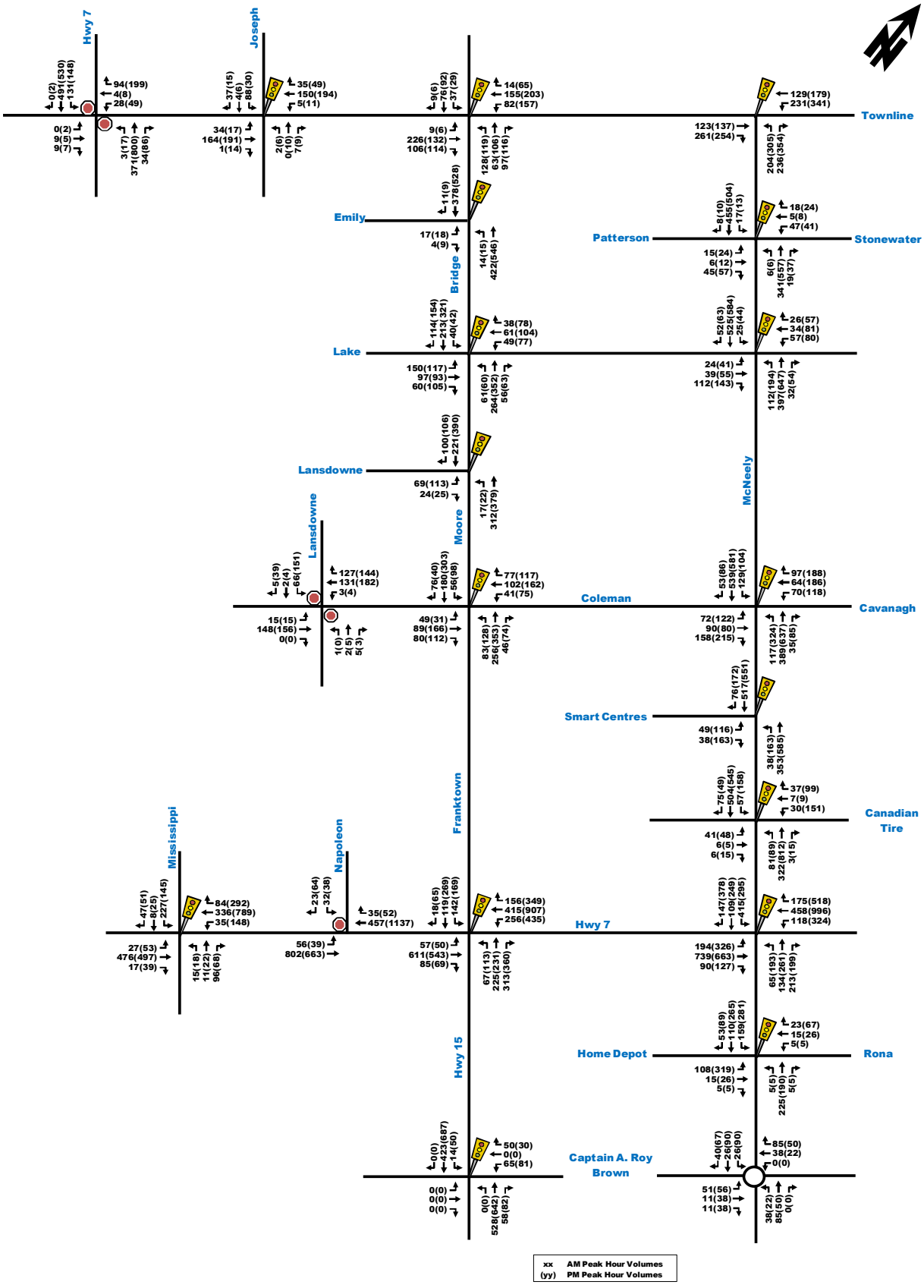
Town of Carleton Place

Transportation Master Plan

October 2022

PARSONS

Figure B3-1: Total Projected 2026 Peak Hour Traffic Volumes



APPENDIX C – SYNCHRO OUTPUT REPORTS

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	199	4	5	173	0	12	0	22	0	0	1
Future Vol, veh/h	0	199	4	5	173	0	12	0	22	0	0	1
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, %	0	2	25	20	6	0	0	0	0	0	0	0
Mvmt Flow	0	216	4	5	188	0	13	0	24	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	188	0	0	220	0	0	417	416	218	428	418	188
Stage 1	-	-	-	-	-	-	218	218	-	198	198	-
Stage 2	-	-	-	-	-	-	199	198	-	230	220	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1398	-	-	1250	-	-	550	530	827	541	529	859
Stage 1	-	-	-	-	-	-	789	726	-	808	741	-
Stage 2	-	-	-	-	-	-	807	741	-	777	725	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1398	-	-	1250	-	-	548	528	827	524	527	859
Mov Cap-2 Maneuver	-	-	-	-	-	-	548	528	-	524	527	-
Stage 1	-	-	-	-	-	-	789	726	-	808	738	-
Stage 2	-	-	-	-	-	-	803	738	-	755	725	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	10.4	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	701	1398	-	-	1250	-	-	859
HCM Lane V/C Ratio	0.053	-	-	-	0.004	-	-	0.001
HCM Control Delay (s)	10.4	0	-	-	7.9	0	-	9.2
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	164	33	2	153	31	35	6	5	34	2	40
Future Vol, veh/h	64	164	33	2	153	31	35	6	5	34	2	40
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	-	-	0	-	-	35	-	-	-	-	-	-
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	6	0	0	5	6	0	0	0	0	0	0
Mvmt Flow	70	178	36	2	166	34	38	7	5	37	2	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	200	0	0	214	0	0	528	522	178	512	524	166
Stage 1	-	-	-	-	-	-	318	318	-	170	170	-
Stage 2	-	-	-	-	-	-	210	204	-	342	354	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1372	-	-	1368	-	-	464	462	870	476	461	884
Stage 1	-	-	-	-	-	-	698	657	-	837	762	-
Stage 2	-	-	-	-	-	-	797	737	-	677	634	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1372	-	-	1368	-	-	419	434	870	446	433	884
Mov Cap-2 Maneuver	-	-	-	-	-	-	419	434	-	446	433	-
Stage 1	-	-	-	-	-	-	658	619	-	788	760	-
Stage 2	-	-	-	-	-	-	754	736	-	627	597	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.1	14.1	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	446	1372	-	-	1368	-	-	603
HCM Lane V/C Ratio	0.112	0.051	-	-	0.002	-	-	0.137
HCM Control Delay (s)	14.1	7.8	0	-	7.6	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	0.5

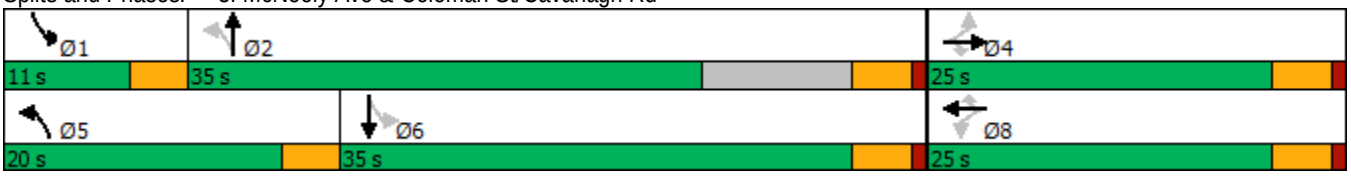
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	92	156	69	63	96	116	385	36	133	534	52
Future Volume (vph)	71	92	156	69	63	96	116	385	36	133	534	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.987			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3493	0	1770	3493	0
Flt Permitted	0.713			0.692			0.365			0.489		
Satd. Flow (perm)	1328	1863	1583	1289	1863	1583	680	3493	0	911	3493	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			170			116		17			15	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	77	100	170	75	68	104	126	418	39	145	580	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	100	170	75	68	104	126	457	0	145	637	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	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	
Act Effct Green (s)	10.4	10.4	10.4	10.4	10.4	10.4	27.3	20.5		26.8	20.3	
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.57	0.43		0.56	0.42	
v/c Ratio	0.27	0.25	0.36	0.27	0.17	0.24	0.23	0.31		0.23	0.43	
Control Delay	20.0	18.9	6.3	20.1	18.0	5.5	4.9	10.3		4.9	11.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.0	18.9	6.3	20.1	18.0	5.5	4.9	10.3		4.9	11.8	
LOS	C	B	A	C	B	A	A	B		A	B	
Approach Delay		13.0			13.4			9.1			10.5	
Approach LOS		B			B			A			B	
Queue Length 50th (m)	6.1	7.9	0.0	6.0	5.3	0.0	3.6	13.8		4.2	20.7	
Queue Length 95th (m)	16.1	19.1	12.3	15.9	14.0	8.7	8.8	24.2		10.0	37.0	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	570	800	777	554	800	746	796	2887		646	2239	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.14	0.13	0.22	0.14	0.09	0.14	0.16	0.16		0.22	0.28	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 48.2
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.43
Intersection Signal Delay: 10.9 Intersection LOS: B
Intersection Capacity Utilization 45.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd



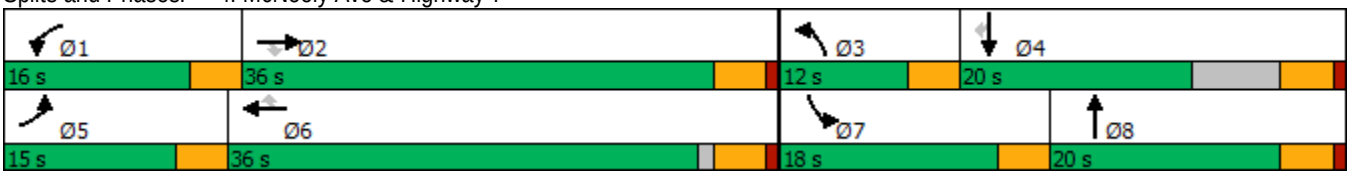
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	207	732	89	117	453	187	64	143	211	469	123	167
Future Volume (vph)	207	732	89	117	453	187	64	143	211	469	123	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.911				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3224	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3224	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			203		229				182
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	225	796	97	127	492	203	70	155	229	510	134	182
Shared Lane Traffic (%)												
Lane Group Flow (vph)	225	796	97	127	492	203	70	384	0	510	134	182
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	36.0	36.0	16.0	36.0	36.0	12.0	20.0		18.0	20.0	20.0
Total Split (%)	16.7%	40.0%	40.0%	17.8%	40.0%	40.0%	13.3%	22.2%		20.0%	22.2%	22.2%
Maximum Green (s)	11.5	31.5	31.5	12.5	31.5	31.5	8.5	15.5		14.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	9.9	26.4	26.4	10.2	24.3	24.3	7.6	11.1		14.4	20.0	20.0
Actuated g/C Ratio	0.13	0.35	0.35	0.13	0.32	0.32	0.10	0.15		0.19	0.26	0.26
v/c Ratio	0.50	0.65	0.15	0.54	0.43	0.31	0.40	0.57		0.78	0.14	0.33
Control Delay	36.3	25.0	1.8	41.0	21.8	4.5	41.5	16.7		40.9	25.2	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	36.3	25.0	1.8	41.0	21.8	4.5	41.5	16.7		40.9	25.2	6.5
LOS	D	C	A	D	C	A	D	B		D	C	A
Approach Delay		25.2			20.5			20.5			30.8	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	15.7	54.2	0.0	17.3	29.8	0.0	9.6	10.9		36.2	8.3	0.0
Queue Length 95th (m)	31.3	81.8	4.1	39.6	47.2	13.8	25.6	26.9		#76.2	18.0	16.3
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	525	1485	748	294	1532	800	200	847		663	1069	605
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.43	0.54	0.13	0.43	0.32	0.25	0.35	0.45		0.77	0.13	0.30

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 75.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 24.8 Intersection LOS: C
Intersection Capacity Utilization 65.0% 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: 4: McNeely Ave & Highway 7



Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	199	21	27	404	0	19	0	12	0	0	0
Future Vol, veh/h	0	199	21	27	404	0	19	0	12	0	0	0
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, %	0	1	10	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	216	23	29	439	0	21	0	13	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	439	0	0	239	0	0	725	725	228	731	736	439
Stage 1	-	-	-	-	-	-	228	228	-	497	497	-
Stage 2	-	-	-	-	-	-	497	497	-	234	239	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1132	-	-	1340	-	-	343	354	816	340	349	622
Stage 1	-	-	-	-	-	-	779	719	-	559	548	-
Stage 2	-	-	-	-	-	-	559	548	-	774	711	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1132	-	-	1340	-	-	335	344	816	327	339	622
Mov Cap-2 Maneuver	-	-	-	-	-	-	335	344	-	327	339	-
Stage 1	-	-	-	-	-	-	779	719	-	559	532	-
Stage 2	-	-	-	-	-	-	543	532	-	762	711	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	14	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	434	1132	-	-	1340	-	-	-
HCM Lane V/C Ratio	0.078	-	-	-	0.022	-	-	-
HCM Control Delay (s)	14	0	-	-	7.7	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	-

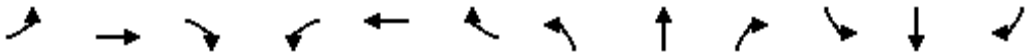
Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	175	56	2	377	44	38	5	7	38	6	72
Future Vol, veh/h	56	175	56	2	377	44	38	5	7	38	6	72
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	-	-	0	-	-	35	-	-	-	-	-	-
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	1	0	0	1	0	3	20	0	5	0	1
Mvmt Flow	61	190	61	2	410	48	41	5	8	41	7	78

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	458	0	0	251	0	0	793	774	190	763	787	410
Stage 1	-	-	-	-	-	-	312	312	-	414	414	-
Stage 2	-	-	-	-	-	-	481	462	-	349	373	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.13	6.7	6.2	7.15	6.5	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.527	4.18	3.3	3.545	4	3.309
Pot Cap-1 Maneuver	1103	-	-	1326	-	-	305	309	857	317	326	644
Stage 1	-	-	-	-	-	-	696	626	-	610	597	-
Stage 2	-	-	-	-	-	-	564	535	-	661	622	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1103	-	-	1326	-	-	250	288	857	294	304	644
Mov Cap-2 Maneuver	-	-	-	-	-	-	250	288	-	294	304	-
Stage 1	-	-	-	-	-	-	651	585	-	570	596	-
Stage 2	-	-	-	-	-	-	489	534	-	607	582	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	20.8	16.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	282	1103	-	-	1326	-	-	445
HCM Lane V/C Ratio	0.193	0.055	-	-	0.002	-	-	0.283
HCM Control Delay (s)	20.8	8.5	0	-	7.7	0	-	16.3
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0	-	-	1.2



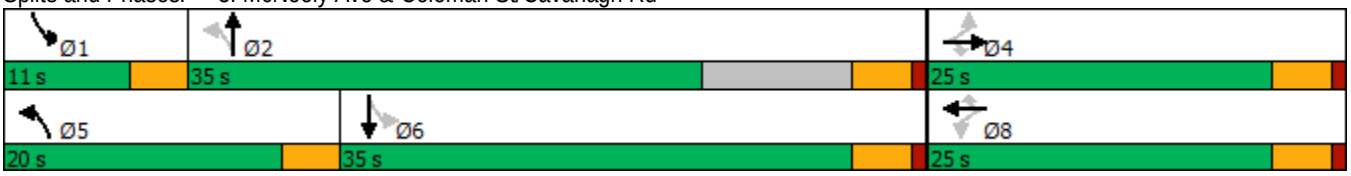
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	85	213	117	184	186	338	665	91	111	583	85
Future Volume (vph)	121	85	213	117	184	186	338	665	91	111	583	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.982			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3476	0	1770	3472	0
Flt Permitted	0.562			0.697			0.238			0.342		
Satd. Flow (perm)	1047	1863	1583	1298	1863	1583	443	3476	0	637	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232			202		26			23	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	132	92	232	127	200	202	367	723	99	121	634	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	132	92	232	127	200	202	367	822	0	121	726	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	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	
Act Effct Green (s)	13.6	13.6	13.6	13.6	13.6	13.6	39.3	30.0		29.6	21.7	
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.49		0.48	0.36	
v/c Ratio	0.57	0.22	0.44	0.44	0.48	0.40	0.65	0.48		0.28	0.58	
Control Delay	32.6	21.8	6.3	26.7	25.7	6.3	12.4	12.4		7.8	18.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	32.6	21.8	6.3	26.7	25.7	6.3	12.4	12.4		7.8	18.8	
LOS	C	C	A	C	C	A	B	B		A	B	
Approach Delay		17.0			18.5			12.4			17.2	
Approach LOS		B			B			B			B	
Queue Length 50th (m)	13.2	8.5	0.0	12.3	19.6	0.0	15.1	31.8		4.3	33.1	
Queue Length 95th (m)	33.8	22.1	16.0	30.8	43.5	15.0	45.4	57.4		12.6	62.4	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	358	638	694	444	638	675	651	2303		458	1781	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.37	0.14	0.33	0.29	0.31	0.30	0.56	0.36		0.26	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 61.1
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 15.5 Intersection LOS: B
Intersection Capacity Utilization 70.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd



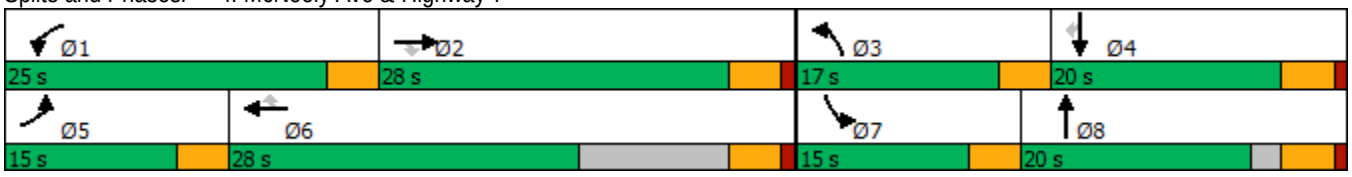
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	323	656	126	321	986	513	191	258	197	292	247	374
Future Volume (vph)	323	656	126	321	986	513	191	258	197	292	247	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.935				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3309	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3309	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			400		190				287
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	351	713	137	349	1072	558	208	280	214	317	268	407
Shared Lane Traffic (%)												
Lane Group Flow (vph)	351	713	137	349	1072	558	208	494	0	317	268	407
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	28.0	28.0	25.0	28.0	28.0	17.0	20.0		15.0	20.0	20.0
Total Split (%)	16.7%	31.1%	31.1%	27.8%	31.1%	31.1%	18.9%	22.2%		16.7%	22.2%	22.2%
Maximum Green (s)	11.5	23.5	23.5	21.5	23.5	23.5	13.5	15.5		11.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	11.2	22.1	22.1	19.5	30.4	30.4	12.7	14.7		11.0	13.0	13.0
Actuated g/C Ratio	0.13	0.26	0.26	0.23	0.36	0.36	0.15	0.18		0.13	0.16	0.16
v/c Ratio	0.76	0.76	0.26	0.85	0.83	0.67	0.77	0.67		0.70	0.49	0.83
Control Delay	48.4	35.2	5.8	51.7	31.4	11.0	56.1	24.7		45.1	36.2	27.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	48.4	35.2	5.8	51.7	31.4	11.0	56.1	24.7		45.1	36.2	27.3
LOS	D	D	A	D	C	B	E	C		D	D	C
Approach Delay		35.7			29.2			34.0			35.4	
Approach LOS		D			C			C			D	
Queue Length 50th (m)	32.0	62.1	0.0	59.5	89.1	19.3	36.4	26.2		28.6	23.2	19.8
Queue Length 95th (m)	#53.5	84.4	12.5	#106.2	117.4	57.2	#72.4	43.2		#45.8	35.5	#67.6
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	477	1005	553	459	1433	879	288	849		477	663	529
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.74	0.71	0.25	0.76	0.75	0.63	0.72	0.58		0.66	0.40	0.77

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 83.5
Natural Cycle: 70
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 32.8 Intersection LOS: C
Intersection Capacity Utilization 72.4% 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: 4: McNeely Ave & Highway 7



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	0	201	4	5	176	0	12	0	22	0	0	1
Future Vol, veh/h	0	201	4	5	176	0	12	0	22	0	0	1
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, %	0	2	25	20	6	0	0	0	0	0	0	0
Mvmt Flow	0	218	4	5	191	0	13	0	24	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	191	0	0	222	0	0	422	421	220	433	423	191
Stage 1	-	-	-	-	-	-	220	220	-	201	201	-
Stage 2	-	-	-	-	-	-	202	201	-	232	222	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1395	-	-	1248	-	-	546	527	825	537	526	856
Stage 1	-	-	-	-	-	-	787	725	-	805	739	-
Stage 2	-	-	-	-	-	-	805	739	-	775	723	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1395	-	-	1248	-	-	544	525	825	520	524	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	544	525	-	520	524	-
Stage 1	-	-	-	-	-	-	787	725	-	805	736	-
Stage 2	-	-	-	-	-	-	801	736	-	753	723	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	10.4	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	698	1395	-	-	1248	-	-	856
HCM Lane V/C Ratio	0.053	-	-	-	0.004	-	-	0.001
HCM Control Delay (s)	10.4	0	-	-	7.9	0	-	9.2
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

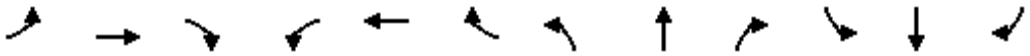
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	166	33	2	156	31	35	6	5	34	2	40
Future Vol, veh/h	65	166	33	2	156	31	35	6	5	34	2	40
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	-	-	0	-	-	35	-	-	-	-	-	-
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	6	0	0	5	6	0	0	0	0	0	0
Mvmt Flow	71	180	36	2	170	34	38	7	5	37	2	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	204	0	0	216	0	0	536	530	180	520	532	170
Stage 1	-	-	-	-	-	-	322	322	-	174	174	-
Stage 2	-	-	-	-	-	-	214	208	-	346	358	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1368	-	-	1366	-	-	459	457	868	470	456	879
Stage 1	-	-	-	-	-	-	694	655	-	833	759	-
Stage 2	-	-	-	-	-	-	793	734	-	674	631	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1368	-	-	1366	-	-	414	429	868	440	428	879
Mov Cap-2 Maneuver	-	-	-	-	-	-	414	429	-	440	428	-
Stage 1	-	-	-	-	-	-	653	616	-	784	757	-
Stage 2	-	-	-	-	-	-	750	733	-	624	594	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.1	14.2	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	441	1368	-	-	1366	-	-	596
HCM Lane V/C Ratio	0.113	0.052	-	-	0.002	-	-	0.139
HCM Control Delay (s)	14.2	7.8	0	-	7.6	0	-	12
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	0.5



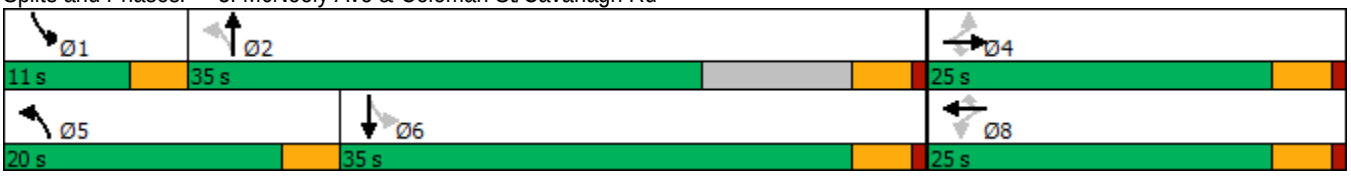
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	93	158	70	64	97	117	389	36	135	539	53
Future Volume (vph)	72	93	158	70	64	97	117	389	36	135	539	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.987			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3493	0	1770	3490	0
Flt Permitted	0.711			0.692			0.361			0.486		
Satd. Flow (perm)	1324	1863	1583	1289	1863	1583	672	3493	0	905	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			172			116		17			15	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	78	101	172	76	70	105	127	423	39	147	586	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	101	172	76	70	105	127	462	0	147	644	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

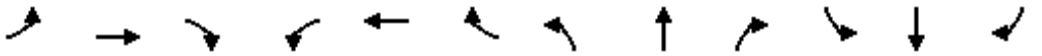
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	10.4	10.4	10.4	10.4	10.4	10.4	27.3	20.6		26.8	20.3	
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.57	0.43		0.55	0.42	
v/c Ratio	0.27	0.25	0.36	0.27	0.17	0.24	0.23	0.31		0.23	0.44	
Control Delay	20.1	19.0	6.3	20.2	18.1	5.6	4.9	10.3		5.0	11.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.1	19.0	6.3	20.2	18.1	5.6	4.9	10.3		5.0	11.8	
LOS	C	B	A	C	B	A	A	B		A	B	
Approach Delay		13.0			13.5			9.2			10.6	
Approach LOS		B			B			A			B	
Queue Length 50th (m)	6.2	8.0	0.0	6.0	5.4	0.0	3.7	14.1		4.3	21.0	
Queue Length 95th (m)	16.3	19.1	12.5	16.1	14.4	8.8	9.0	24.5		10.2	37.7	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	568	800	778	553	800	746	793	2885		643	2236	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.14	0.13	0.22	0.14	0.09	0.14	0.16	0.16		0.23	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 48.3
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 11.0 Intersection LOS: B
Intersection Capacity Utilization 46.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd





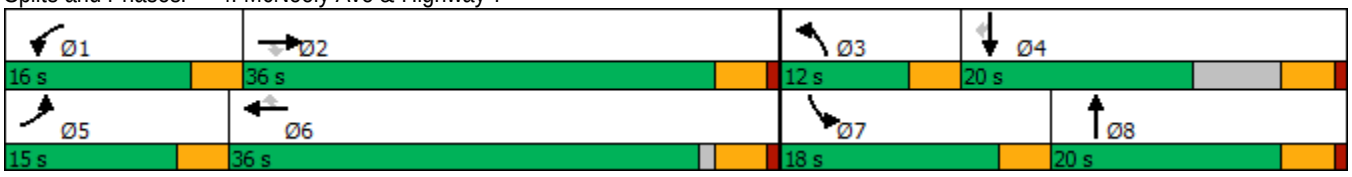
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	209	739	90	118	458	189	65	144	213	474	124	169
Future Volume (vph)	209	739	90	118	458	189	65	144	213	474	124	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.911				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3224	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3224	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			205		232				184
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	227	803	98	128	498	205	71	157	232	515	135	184
Shared Lane Traffic (%)												
Lane Group Flow (vph)	227	803	98	128	498	205	71	389	0	515	135	184
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	36.0	36.0	16.0	36.0	36.0	12.0	20.0		18.0	20.0	20.0
Total Split (%)	16.7%	40.0%	40.0%	17.8%	40.0%	40.0%	13.3%	22.2%		20.0%	22.2%	22.2%
Maximum Green (s)	11.5	31.5	31.5	12.5	31.5	31.5	8.5	15.5		14.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	9.9	26.5	26.5	10.2	24.4	24.4	7.6	11.2		14.5	20.1	20.1
Actuated g/C Ratio	0.13	0.35	0.35	0.13	0.32	0.32	0.10	0.15		0.19	0.26	0.26
v/c Ratio	0.51	0.65	0.15	0.54	0.44	0.32	0.40	0.58		0.79	0.14	0.33
Control Delay	36.4	25.1	1.9	41.3	21.9	4.5	41.7	16.8		41.4	25.2	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	36.4	25.1	1.9	41.3	21.9	4.5	41.7	16.8		41.4	25.2	6.5
LOS	D	C	A	D	C	A	D	B		D	C	A
Approach Delay		25.4			20.6			20.6			31.1	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	15.9	55.0	0.0	17.5	30.3	0.0	9.8	11.1		36.9	8.4	0.0
Queue Length 95th (m)	31.6	82.8	4.4	39.7	47.8	14.0	25.8	27.2		#77.5	18.0	16.3
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	524	1480	746	294	1527	799	199	848		661	1069	606
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.43	0.54	0.13	0.44	0.33	0.26	0.36	0.46		0.78	0.13	0.30

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 76.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 24.9 Intersection LOS: C
Intersection Capacity Utilization 65.5% 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: 4: McNeely Ave & Highway 7



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	0	201	21	27	408	0	19	0	12	0	0	0
Future Vol, veh/h	0	201	21	27	408	0	19	0	12	0	0	0
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, %	0	1	10	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	218	23	29	443	0	21	0	13	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	443	0	0	241	0	0	731	731	230	737	742	443
Stage 1	-	-	-	-	-	-	230	230	-	501	501	-
Stage 2	-	-	-	-	-	-	501	501	-	236	241	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1128	-	-	1337	-	-	340	351	814	337	346	619
Stage 1	-	-	-	-	-	-	777	718	-	556	546	-
Stage 2	-	-	-	-	-	-	556	546	-	772	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1128	-	-	1337	-	-	333	341	814	324	336	619
Mov Cap-2 Maneuver	-	-	-	-	-	-	333	341	-	324	336	-
Stage 1	-	-	-	-	-	-	777	718	-	556	530	-
Stage 2	-	-	-	-	-	-	540	530	-	760	710	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	14	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	432	1128	-	-	1337	-	-	-
HCM Lane V/C Ratio	0.078	-	-	-	0.022	-	-	-
HCM Control Delay (s)	14	0	-	-	7.8	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	-

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	57	177	57	2	381	44	38	5	7	38	6	73
Future Vol, veh/h	57	177	57	2	381	44	38	5	7	38	6	73
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	-	-	0	-	-	35	-	-	-	-	-	-
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	1	0	0	1	0	3	20	0	5	0	1
Mvmt Flow	62	192	62	2	414	48	41	5	8	41	7	79

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	462	0	0	254	0	0	801	782	192	772	796	414
Stage 1	-	-	-	-	-	-	316	316	-	418	418	-
Stage 2	-	-	-	-	-	-	485	466	-	354	378	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.13	6.7	6.2	7.15	6.5	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.527	4.18	3.3	3.545	4	3.309
Pot Cap-1 Maneuver	1099	-	-	1323	-	-	301	306	855	313	322	640
Stage 1	-	-	-	-	-	-	693	624	-	607	594	-
Stage 2	-	-	-	-	-	-	561	533	-	657	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1099	-	-	1323	-	-	246	285	855	290	300	640
Mov Cap-2 Maneuver	-	-	-	-	-	-	246	285	-	290	300	-
Stage 1	-	-	-	-	-	-	647	583	-	567	593	-
Stage 2	-	-	-	-	-	-	485	532	-	603	578	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	0	21.1	16.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	277	1099	-	-	1323	-	-	441
HCM Lane V/C Ratio	0.196	0.056	-	-	0.002	-	-	0.288
HCM Control Delay (s)	21.1	8.5	0	-	7.7	0	-	16.4
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0	-	-	1.2

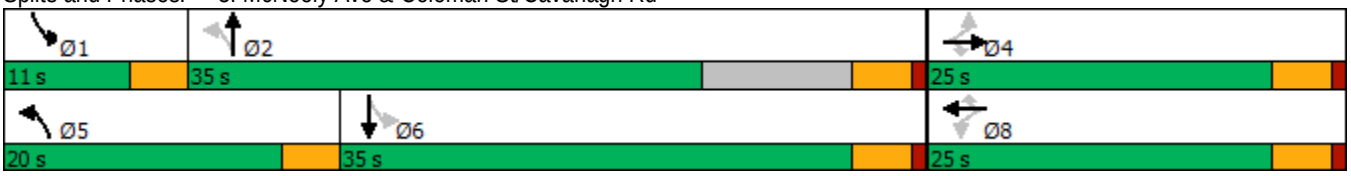
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	86	215	118	186	188	341	672	92	113	589	86
Future Volume (vph)	122	86	215	118	186	188	341	672	92	113	589	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.982			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3476	0	1770	3472	0
Flt Permitted	0.558			0.697			0.234			0.339		
Satd. Flow (perm)	1039	1863	1583	1298	1863	1583	436	3476	0	631	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			234			204		26			23	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	133	93	234	128	202	204	371	730	100	123	640	93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	133	93	234	128	202	204	371	830	0	123	733	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	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	
Act Effct Green (s)	13.7	13.7	13.7	13.7	13.7	13.7	39.5	30.1		29.7	21.8	
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.49		0.48	0.36	
v/c Ratio	0.58	0.22	0.44	0.44	0.49	0.40	0.66	0.48		0.28	0.59	
Control Delay	33.0	21.9	6.3	26.9	25.9	6.3	12.9	12.4		7.9	18.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	33.0	21.9	6.3	26.9	25.9	6.3	12.9	12.4		7.9	18.9	
LOS	C	C	A	C	C	A	B	B		A	B	
Approach Delay		17.2			18.6			12.6			17.3	
Approach LOS		B			B			B			B	
Queue Length 50th (m)	13.4	8.6	0.0	12.5	20.0	0.0	15.5	32.5		4.4	33.8	
Queue Length 95th (m)	34.2	22.4	16.0	31.1	43.9	15.1	47.1	58.2		12.8	63.2	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	354	636	694	443	636	674	647	2295		455	1775	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.38	0.15	0.34	0.29	0.32	0.30	0.57	0.36		0.27	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 61.3
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 15.7 Intersection LOS: B
Intersection Capacity Utilization 70.6% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd



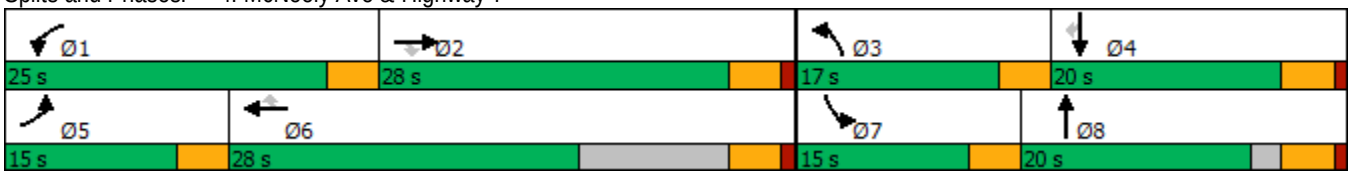
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	326	663	127	324	996	518	193	261	199	295	249	378
Future Volume (vph)	326	663	127	324	996	518	193	261	199	295	249	378
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.935				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3309	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3309	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			398		192				286
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	354	721	138	352	1083	563	210	284	216	321	271	411
Shared Lane Traffic (%)												
Lane Group Flow (vph)	354	721	138	352	1083	563	210	500	0	321	271	411
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	28.0	28.0	25.0	28.0	28.0	17.0	20.0		15.0	20.0	20.0
Total Split (%)	16.7%	31.1%	31.1%	27.8%	31.1%	31.1%	18.9%	22.2%		16.7%	22.2%	22.2%
Maximum Green (s)	11.5	23.5	23.5	21.5	23.5	23.5	13.5	15.5		11.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	11.2	22.2	22.2	19.6	30.6	30.6	12.8	14.9		11.1	13.1	13.1
Actuated g/C Ratio	0.13	0.26	0.26	0.23	0.36	0.36	0.15	0.18		0.13	0.16	0.16
v/c Ratio	0.77	0.77	0.26	0.85	0.84	0.68	0.78	0.67		0.71	0.49	0.84
Control Delay	49.1	35.8	5.8	52.3	31.8	11.4	56.7	24.8		45.8	36.3	28.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	49.1	35.8	5.8	52.3	31.8	11.4	56.7	24.8		45.8	36.3	28.4
LOS	D	D	A	D	C	B	E	C		D	D	C
Approach Delay		36.2			29.7			34.2			36.1	
Approach LOS		D			C			C			D	
Queue Length 50th (m)	32.5	63.4	0.0	60.4	91.1	20.4	37.0	26.6		29.1	23.5	20.7
Queue Length 95th (m)	#54.3	85.4	12.7	#107.3	118.9	59.1	#73.5	43.8		#46.6	35.9	#69.9
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	474	1001	551	457	1427	875	287	848		474	660	527
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.75	0.72	0.25	0.77	0.76	0.64	0.73	0.59		0.68	0.41	0.78

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 83.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 33.3 Intersection LOS: C
Intersection Capacity Utilization 73.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: McNeely Ave & Highway 7



Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	213	4	5	186	0	13	0	23	0	0	1
Future Vol, veh/h	0	213	4	5	186	0	13	0	23	0	0	1
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, %	0	2	25	20	6	0	0	0	0	0	0	0
Mvmt Flow	0	232	4	5	202	0	14	0	25	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	236	0	0	447	446	234	459	448	202
Stage 1	-	-	-	-	-	-	234	234	-	212	212	-
Stage 2	-	-	-	-	-	-	213	212	-	247	236	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1382	-	-	1232	-	-	525	510	810	516	509	844
Stage 1	-	-	-	-	-	-	774	715	-	795	731	-
Stage 2	-	-	-	-	-	-	794	731	-	761	713	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1382	-	-	1232	-	-	522	507	810	498	506	844
Mov Cap-2 Maneuver	-	-	-	-	-	-	522	507	-	498	506	-
Stage 1	-	-	-	-	-	-	774	715	-	795	727	-
Stage 2	-	-	-	-	-	-	789	727	-	738	713	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	10.7	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	675	1382	-	-	1232	-	-	844
HCM Lane V/C Ratio	0.058	-	-	-	0.004	-	-	0.001
HCM Control Delay (s)	10.7	0	-	-	7.9	0	-	9.3
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

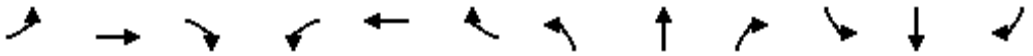
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	68	176	35	2	165	33	37	6	5	36	2	42
Future Vol, veh/h	68	176	35	2	165	33	37	6	5	36	2	42
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	-	-	0	-	-	35	-	-	-	-	-	-
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	6	0	0	5	6	0	0	0	0	0	0
Mvmt Flow	74	191	38	2	179	36	40	7	5	39	2	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	215	0	0	229	0	0	564	558	191	547	560	179
Stage 1	-	-	-	-	-	-	339	339	-	183	183	-
Stage 2	-	-	-	-	-	-	225	219	-	364	377	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1355	-	-	1351	-	-	439	441	856	451	440	869
Stage 1	-	-	-	-	-	-	680	643	-	823	752	-
Stage 2	-	-	-	-	-	-	782	726	-	659	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1355	-	-	1351	-	-	394	412	856	421	411	869
Mov Cap-2 Maneuver	-	-	-	-	-	-	394	412	-	421	411	-
Stage 1	-	-	-	-	-	-	637	602	-	771	750	-
Stage 2	-	-	-	-	-	-	737	725	-	607	580	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.1	14.8	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	420	1355	-	-	1351	-	-	577
HCM Lane V/C Ratio	0.124	0.055	-	-	0.002	-	-	0.151
HCM Control Delay (s)	14.8	7.8	0	-	7.7	0	-	12.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	0.5



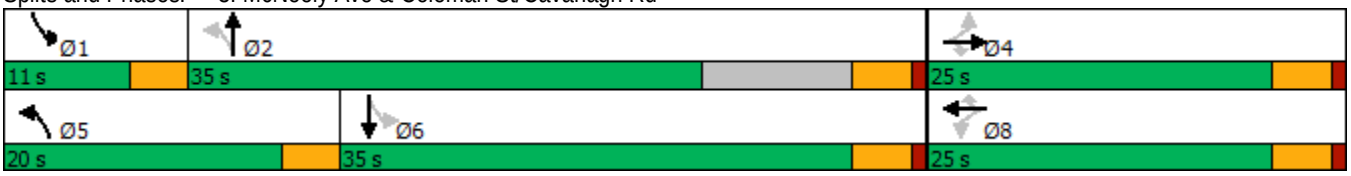
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	98	166	74	67	103	123	408	38	143	566	56
Future Volume (vph)	76	98	166	74	67	103	123	408	38	143	566	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.987			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3493	0	1770	3490	0
Flt Permitted	0.709			0.688			0.337			0.476		
Satd. Flow (perm)	1321	1863	1583	1282	1863	1583	628	3493	0	887	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180			116		17			15	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	83	107	180	80	73	112	134	443	41	155	615	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	107	180	80	73	112	134	484	0	155	676	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	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	
Act Effct Green (s)	10.5	10.5	10.5	10.5	10.5	10.5	27.7	20.7		26.9	20.4	
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.57	0.43		0.55	0.42	
v/c Ratio	0.29	0.26	0.37	0.29	0.18	0.26	0.25	0.32		0.25	0.46	
Control Delay	20.5	19.2	6.2	20.5	18.2	6.1	5.1	10.5		5.2	12.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.5	19.2	6.2	20.5	18.2	6.1	5.1	10.5		5.2	12.3	
LOS	C	B	A	C	B	A	A	B		A	B	
Approach Delay		13.2			13.8			9.3			11.0	
Approach LOS		B			B			A			B	
Queue Length 50th (m)	6.6	8.5	0.0	6.4	5.7	0.0	3.9	15.0		4.5	22.4	
Queue Length 95th (m)	17.3	20.2	12.7	16.8	14.9	9.7	9.7	26.1		11.0	41.1	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	564	796	779	548	796	743	779	2871		632	2225	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.15	0.13	0.23	0.15	0.09	0.15	0.17	0.17		0.25	0.30	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 48.6
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.46
Intersection Signal Delay: 11.2 Intersection LOS: B
Intersection Capacity Utilization 47.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd



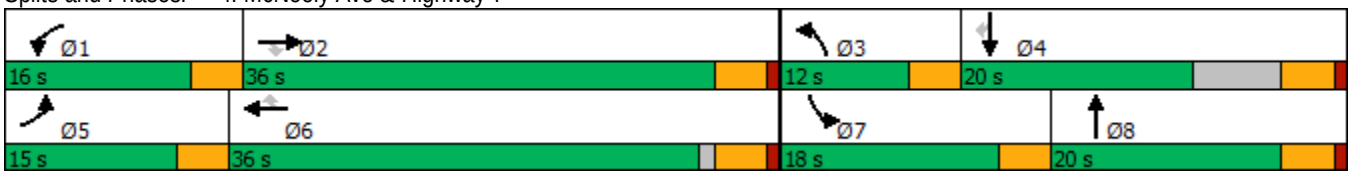
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	776	95	124	481	198	68	151	224	499	130	177
Future Volume (vph)	220	776	95	124	481	198	68	151	224	499	130	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.910				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3221	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3221	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			215		243				192
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	239	843	103	135	523	215	74	164	243	542	141	192
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	843	103	135	523	215	74	407	0	542	141	192
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	36.0	36.0	16.0	36.0	36.0	12.0	20.0		18.0	20.0	20.0
Total Split (%)	16.7%	40.0%	40.0%	17.8%	40.0%	40.0%	13.3%	22.2%		20.0%	22.2%	22.2%
Maximum Green (s)	11.5	31.5	31.5	12.5	31.5	31.5	8.5	15.5		14.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	10.1	24.7	24.7	10.4	25.0	25.0	7.6	11.3		14.6	20.4	20.4
Actuated g/C Ratio	0.13	0.32	0.32	0.13	0.32	0.32	0.10	0.15		0.19	0.26	0.26
v/c Ratio	0.53	0.74	0.17	0.57	0.46	0.33	0.42	0.60		0.83	0.15	0.34
Control Delay	37.4	28.3	2.2	42.8	22.2	4.4	42.9	17.1		44.9	25.6	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	37.4	28.3	2.2	42.8	22.2	4.4	42.9	17.1		44.9	25.6	6.5
LOS	D	C	A	D	C	A	D	B		D	C	A
Approach Delay		27.9			21.0			21.0			33.3	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	17.3	59.0	0.0	18.9	32.3	0.0	10.4	12.0		40.3	9.1	0.0
Queue Length 95th (m)	33.1	88.5	5.1	41.7	50.8	14.2	26.9	28.2		#84.0	18.7	16.6
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	516	1458	737	289	1504	796	196	846		651	1063	609
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.46	0.58	0.14	0.47	0.35	0.27	0.38	0.48		0.83	0.13	0.32

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 77.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 26.5 Intersection LOS: C
Intersection Capacity Utilization 68.1% 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: 4: McNeely Ave & Highway 7



Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	212	22	28	428	0	20	0	13	0	0	0
Future Vol, veh/h	0	212	22	28	428	0	20	0	13	0	0	0
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, %	0	1	10	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	230	24	30	465	0	22	0	14	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	465	0	0	254	0	0	767	767	242	774	779	465
Stage 1	-	-	-	-	-	-	242	242	-	525	525	-
Stage 2	-	-	-	-	-	-	525	525	-	249	254	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1107	-	-	1323	-	-	322	335	802	318	330	602
Stage 1	-	-	-	-	-	-	766	709	-	540	533	-
Stage 2	-	-	-	-	-	-	540	533	-	759	701	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1107	-	-	1323	-	-	314	325	802	305	320	602
Mov Cap-2 Maneuver	-	-	-	-	-	-	314	325	-	305	320	-
Stage 1	-	-	-	-	-	-	766	709	-	540	516	-
Stage 2	-	-	-	-	-	-	523	516	-	746	701	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	14.5	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	413	1107	-	-	1323	-	-	-
HCM Lane V/C Ratio	0.087	-	-	-	0.023	-	-	-
HCM Control Delay (s)	14.5	0	-	-	7.8	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	-

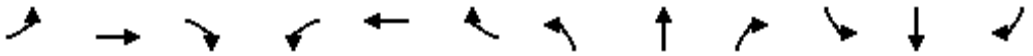
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	187	60	2	400	46	40	5	7	40	6	77
Future Vol, veh/h	60	187	60	2	400	46	40	5	7	40	6	77
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	-	-	0	-	-	35	-	-	-	-	-	-
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	1	0	0	1	0	3	20	0	5	0	1
Mvmt Flow	65	203	65	2	435	50	43	5	8	43	7	84

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	485	0	0	268	0	0	843	822	203	811	837	435
Stage 1	-	-	-	-	-	-	333	333	-	439	439	-
Stage 2	-	-	-	-	-	-	510	489	-	372	398	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.13	6.7	6.2	7.15	6.5	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.527	4.18	3.3	3.545	4	3.309
Pot Cap-1 Maneuver	1078	-	-	1307	-	-	282	289	843	295	305	623
Stage 1	-	-	-	-	-	-	679	613	-	591	582	-
Stage 2	-	-	-	-	-	-	544	520	-	642	606	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1078	-	-	1307	-	-	226	268	843	272	283	623
Mov Cap-2 Maneuver	-	-	-	-	-	-	226	268	-	272	283	-
Stage 1	-	-	-	-	-	-	631	569	-	549	581	-
Stage 2	-	-	-	-	-	-	465	519	-	585	563	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	0	23.1	17.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	255	1078	-	-	1307	-	-	421
HCM Lane V/C Ratio	0.222	0.06	-	-	0.002	-	-	0.318
HCM Control Delay (s)	23.1	8.6	0	-	7.8	0	-	17.5
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0	-	-	1.3



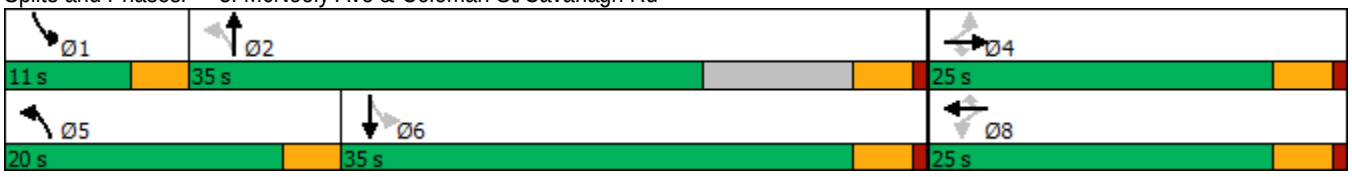
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	90	226	124	195	198	358	706	97	120	618	90
Future Volume (vph)	128	90	226	124	195	198	358	706	97	120	618	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.982			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3476	0	1770	3472	0
Flt Permitted	0.534			0.694			0.215			0.325		
Satd. Flow (perm)	995	1863	1583	1293	1863	1583	400	3476	0	605	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			246			215		26			23	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	139	98	246	135	212	215	389	767	105	130	672	98
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	98	246	135	212	215	389	872	0	130	770	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	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	
Act Effct Green (s)	14.3	14.3	14.3	14.3	14.3	14.3	40.6	31.3		30.3	22.3	
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.23	0.64	0.50		0.48	0.35	
v/c Ratio	0.62	0.23	0.45	0.46	0.50	0.41	0.70	0.50		0.31	0.62	
Control Delay	36.1	22.5	6.3	27.8	26.7	6.3	16.0	12.8		8.3	19.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	36.1	22.5	6.3	27.8	26.7	6.3	16.0	12.8		8.3	19.8	
LOS	D	C	A	C	C	A	B	B		A	B	
Approach Delay		18.2			19.1			13.8			18.2	
Approach LOS		B			B			B			B	
Queue Length 50th (m)	14.7	9.4	0.0	13.7	21.7	0.0	17.4	36.0		4.9	38.6	
Queue Length 95th (m)	36.9	23.8	16.7	33.4	47.1	15.6	#56.9	61.6		13.3	67.0	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	330	618	689	429	618	669	623	2232		438	1725	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.42	0.16	0.36	0.31	0.34	0.32	0.62	0.39		0.30	0.45	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 63.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.70
Intersection Signal Delay: 16.6 Intersection LOS: B
Intersection Capacity Utilization 73.0% 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: McNeely Ave & Coleman St/Cavanagh Rd



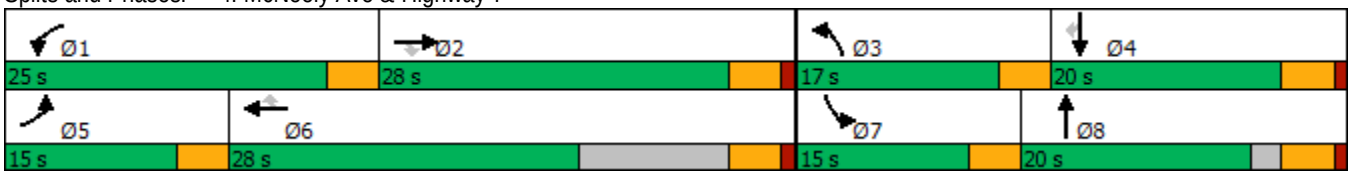
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	342	696	133	340	1046	545	203	274	209	310	261	397
Future Volume (vph)	342	696	133	340	1046	545	203	274	209	310	261	397
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.935				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3309	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3309	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			390		191				280
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	372	757	145	370	1137	592	221	298	227	337	284	432
Shared Lane Traffic (%)												
Lane Group Flow (vph)	372	757	145	370	1137	592	221	525	0	337	284	432
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	28.0	28.0	25.0	28.0	28.0	17.0	20.0		15.0	20.0	20.0
Total Split (%)	16.7%	31.1%	31.1%	27.8%	31.1%	31.1%	18.9%	22.2%		16.7%	22.2%	22.2%
Maximum Green (s)	11.5	23.5	23.5	21.5	23.5	23.5	13.5	15.5		11.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	11.4	22.6	22.6	20.3	31.5	31.5	13.0	15.6		11.1	13.8	13.8
Actuated g/C Ratio	0.13	0.26	0.26	0.24	0.37	0.37	0.15	0.18		0.13	0.16	0.16
v/c Ratio	0.82	0.81	0.28	0.88	0.87	0.71	0.83	0.69		0.76	0.50	0.88
Control Delay	53.3	38.5	6.3	56.5	34.5	13.3	62.7	26.1		49.1	36.7	34.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	53.3	38.5	6.3	56.5	34.5	13.3	62.7	26.1		49.1	36.7	34.3
LOS	D	D	A	E	C	B	E	C		D	D	C
Approach Delay		39.2			32.4			37.0			39.7	
Approach LOS		D			C			D			D	
Queue Length 50th (m)	34.6	68.1	0.0	65.0	99.0	28.1	39.6	29.2		31.0	24.7	26.7
Queue Length 95th (m)	#58.5	#92.4	14.1	#115.3	#130.7	70.3	#78.5	47.0		#50.4	37.4	#80.9
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	462	975	541	446	1390	859	280	831		462	643	517
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.81	0.78	0.27	0.83	0.82	0.69	0.79	0.63		0.73	0.44	0.84

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 85.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 36.2 Intersection LOS: D
Intersection Capacity Utilization 76.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: McNeely Ave & Highway 7



Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	206	6	7	177	0	27	0	37	0	0	1
Future Vol, veh/h	0	206	6	7	177	0	27	0	37	0	0	1
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, %	0	2	25	20	6	0	0	0	0	0	0	0
Mvmt Flow	0	224	7	8	192	0	29	0	40	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	192	0	0	231	0	0	437	436	228	456	439	192
Stage 1	-	-	-	-	-	-	228	228	-	208	208	-
Stage 2	-	-	-	-	-	-	209	208	-	248	231	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1394	-	-	1238	-	-	533	517	816	518	515	855
Stage 1	-	-	-	-	-	-	779	719	-	799	734	-
Stage 2	-	-	-	-	-	-	798	734	-	760	717	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1394	-	-	1238	-	-	529	513	816	490	511	855
Mov Cap-2 Maneuver	-	-	-	-	-	-	529	513	-	490	511	-
Stage 1	-	-	-	-	-	-	779	719	-	799	729	-
Stage 2	-	-	-	-	-	-	791	729	-	723	717	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	11.1	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	664	1394	-	-	1238	-	-	855
HCM Lane V/C Ratio	0.105	-	-	-	0.006	-	-	0.001
HCM Control Delay (s)	11.1	0	-	-	7.9	0	-	9.2
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0

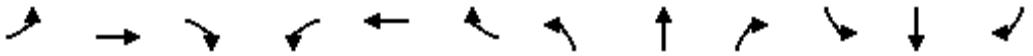
Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	168	48	3	171	31	60	11	10	34	4	40
Future Vol, veh/h	65	168	48	3	171	31	60	11	10	34	4	40
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	-	-	0	-	-	35	-	-	-	-	-	-
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	6	0	0	5	6	0	0	0	0	0	0
Mvmt Flow	71	183	52	3	186	34	65	12	11	37	4	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	220	0	0	235	0	0	558	551	183	555	569	186
Stage 1	-	-	-	-	-	-	325	325	-	192	192	-
Stage 2	-	-	-	-	-	-	233	226	-	363	377	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1349	-	-	1344	-	-	443	445	865	445	435	861
Stage 1	-	-	-	-	-	-	692	653	-	814	745	-
Stage 2	-	-	-	-	-	-	775	721	-	660	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1349	-	-	1344	-	-	397	417	865	409	407	861
Mov Cap-2 Maneuver	-	-	-	-	-	-	397	417	-	409	407	-
Stage 1	-	-	-	-	-	-	650	613	-	764	743	-
Stage 2	-	-	-	-	-	-	729	719	-	600	581	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0.1	15.6	12.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	428	1349	-	-	1344	-	-	559
HCM Lane V/C Ratio	0.206	0.052	-	-	0.002	-	-	0.152
HCM Control Delay (s)	15.6	7.8	0	-	7.7	0	-	12.6
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0	-	-	0.5



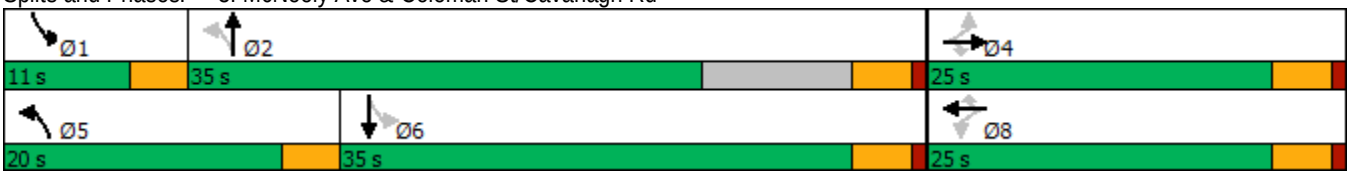
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	99	158	82	75	114	117	389	38	144	539	53
Future Volume (vph)	72	99	158	82	75	114	117	389	38	144	539	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.987			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3493	0	1770	3490	0
Flt Permitted	0.704			0.687			0.358			0.485		
Satd. Flow (perm)	1311	1863	1583	1280	1863	1583	667	3493	0	903	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			172			124		18			15	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	78	108	172	89	82	124	127	423	41	157	586	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	108	172	89	82	124	127	464	0	157	644	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

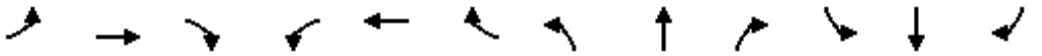
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	10.6	10.6	10.6	10.6	10.6	10.6	27.4	20.6		26.9	20.4	
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.56	0.42		0.55	0.42	
v/c Ratio	0.27	0.27	0.36	0.32	0.20	0.28	0.24	0.31		0.25	0.44	
Control Delay	20.0	19.1	6.1	20.9	18.3	6.2	5.1	10.5		5.2	12.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.0	19.1	6.1	20.9	18.3	6.2	5.1	10.5		5.2	12.0	
LOS	C	B	A	C	B	A	A	B		A	B	
Approach Delay		13.1			14.0			9.3			10.7	
Approach LOS		B			B			A			B	
Queue Length 50th (m)	6.2	8.6	0.0	7.2	6.4	0.0	3.7	14.1		4.6	21.0	
Queue Length 95th (m)	16.3	20.2	12.3	18.3	16.3	10.5	9.5	25.4		11.5	39.1	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	560	796	775	547	796	747	789	2872		639	2225	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.14	0.14	0.22	0.16	0.10	0.17	0.16	0.16		0.25	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 48.6
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 11.2 Intersection LOS: B
Intersection Capacity Utilization 46.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd





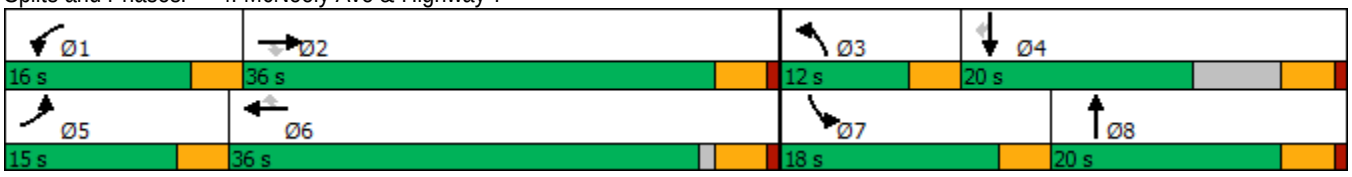
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	739	90	118	458	190	65	144	213	481	126	172
Future Volume (vph)	210	739	90	118	458	190	65	144	213	481	126	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.911				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3224	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3224	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			207		232				187
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	228	803	98	128	498	207	71	157	232	523	137	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	228	803	98	128	498	207	71	389	0	523	137	187
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	36.0	36.0	16.0	36.0	36.0	12.0	20.0		18.0	20.0	20.0
Total Split (%)	16.7%	40.0%	40.0%	17.8%	40.0%	40.0%	13.3%	22.2%		20.0%	22.2%	22.2%
Maximum Green (s)	11.5	31.5	31.5	12.5	31.5	31.5	8.5	15.5		14.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	9.9	26.5	26.5	10.2	24.4	24.4	7.6	11.2		14.6	20.2	20.2
Actuated g/C Ratio	0.13	0.35	0.35	0.13	0.32	0.32	0.10	0.15		0.19	0.27	0.27
v/c Ratio	0.51	0.65	0.15	0.54	0.44	0.32	0.40	0.58		0.80	0.15	0.34
Control Delay	36.5	25.2	1.9	41.3	21.9	4.5	41.7	16.8		41.8	25.3	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	36.5	25.2	1.9	41.3	21.9	4.5	41.7	16.8		41.8	25.3	6.5
LOS	D	C	A	D	C	A	D	B		D	C	A
Approach Delay		25.4			20.6			20.6			31.3	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	16.0	55.0	0.0	17.5	30.3	0.0	9.8	11.1		37.5	8.6	0.0
Queue Length 95th (m)	31.6	82.8	4.4	39.7	47.8	13.8	25.8	27.2		#79.3	18.2	16.4
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	523	1478	745	293	1524	799	199	847		660	1072	609
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.44	0.54	0.13	0.44	0.33	0.26	0.36	0.46		0.79	0.13	0.31

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 76.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 25.0 Intersection LOS: C
Intersection Capacity Utilization 65.7% 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: 4: McNeely Ave & Highway 7



Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	205	35	46	409	0	29	0	18	0	0	0
Future Vol, veh/h	0	205	35	46	409	0	29	0	18	0	0	0
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, %	0	1	10	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	223	38	50	445	0	32	0	20	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	445	0	0	261	0	0	787	787	242	797	806	445
Stage 1	-	-	-	-	-	-	242	242	-	545	545	-
Stage 2	-	-	-	-	-	-	545	545	-	252	261	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1126	-	-	1315	-	-	312	326	802	307	318	617
Stage 1	-	-	-	-	-	-	766	709	-	526	522	-
Stage 2	-	-	-	-	-	-	526	522	-	757	696	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1126	-	-	1315	-	-	300	310	802	288	302	617
Mov Cap-2 Maneuver	-	-	-	-	-	-	300	310	-	288	302	-
Stage 1	-	-	-	-	-	-	766	709	-	526	496	-
Stage 2	-	-	-	-	-	-	500	496	-	739	696	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	15.5	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	395	1126	-	-	1315	-	-	-
HCM Lane V/C Ratio	0.129	-	-	-	0.038	-	-	-
HCM Control Delay (s)	15.5	0	-	-	7.8	0	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	-

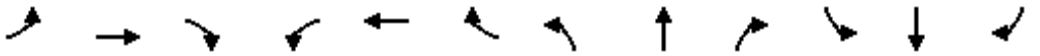
Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	191	94	3	391	44	58	8	11	38	8	73
Future Vol, veh/h	57	191	94	3	391	44	58	8	11	38	8	73
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	-	-	0	-	-	35	-	-	-	-	-	-
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	1	0	0	1	0	3	20	0	5	0	1
Mvmt Flow	62	208	102	3	425	48	63	9	12	41	9	79

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	473	0	0	310	0	0	831	811	208	825	865	425
Stage 1	-	-	-	-	-	-	332	332	-	431	431	-
Stage 2	-	-	-	-	-	-	499	479	-	394	434	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.13	6.7	6.2	7.15	6.5	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.527	4.18	3.3	3.545	4	3.309
Pot Cap-1 Maneuver	1089	-	-	1262	-	-	288	294	837	288	294	631
Stage 1	-	-	-	-	-	-	679	614	-	597	586	-
Stage 2	-	-	-	-	-	-	552	526	-	625	585	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1089	-	-	1262	-	-	232	273	837	262	273	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	273	-	262	273	-
Stage 1	-	-	-	-	-	-	631	571	-	555	584	-
Stage 2	-	-	-	-	-	-	474	524	-	564	544	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.1	25	17.8
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	263	1089	-	-	1262	-	-	410
HCM Lane V/C Ratio	0.318	0.057	-	-	0.003	-	-	0.315
HCM Control Delay (s)	25	8.5	0	-	7.9	0	-	17.8
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.3	0.2	-	-	0	-	-	1.3



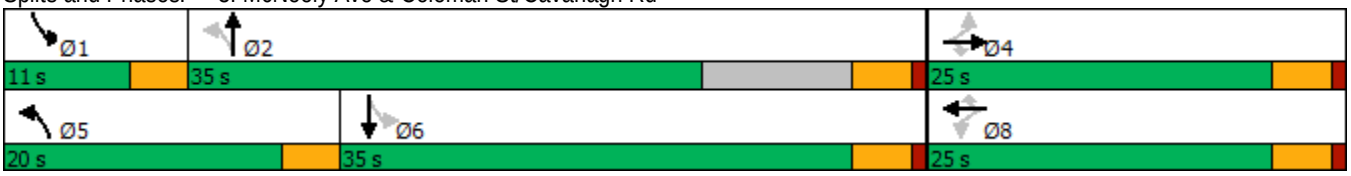
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	101	215	125	197	200	341	672	108	133	589	86
Future Volume (vph)	122	101	215	125	197	200	341	672	108	133	589	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.979			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3465	0	1770	3472	0
Flt Permitted	0.534			0.686			0.233			0.334		
Satd. Flow (perm)	995	1863	1583	1278	1863	1583	434	3465	0	622	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			234			217		32			23	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	133	110	234	136	214	217	371	730	117	145	640	93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	133	110	234	136	214	217	371	847	0	145	733	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

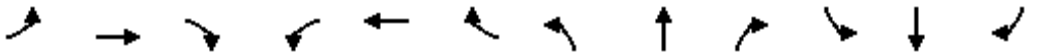
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	13.9	13.9	13.9	13.9	13.9	13.9	39.5	30.0		29.9	21.8	
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.23	0.64	0.49		0.49	0.35	
v/c Ratio	0.59	0.26	0.43	0.47	0.51	0.41	0.66	0.50		0.33	0.59	
Control Delay	34.3	22.3	6.3	27.6	26.3	6.3	13.2	12.7		8.4	19.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	34.3	22.3	6.3	27.6	26.3	6.3	13.2	12.7		8.4	19.0	
LOS	C	C	A	C	C	A	B	B		A	B	
Approach Delay		17.8			18.9			12.8			17.3	
Approach LOS		B			B			B			B	
Queue Length 50th (m)	13.5	10.3	0.0	13.4	21.3	0.0	15.7	34.0		5.3	34.2	
Queue Length 95th (m)	34.6	25.6	16.0	33.0	46.4	15.5	47.3	59.3		14.8	63.2	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	338	633	692	434	633	681	644	2281		450	1767	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.39	0.17	0.34	0.31	0.34	0.32	0.58	0.37		0.32	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 61.6
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 71.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd





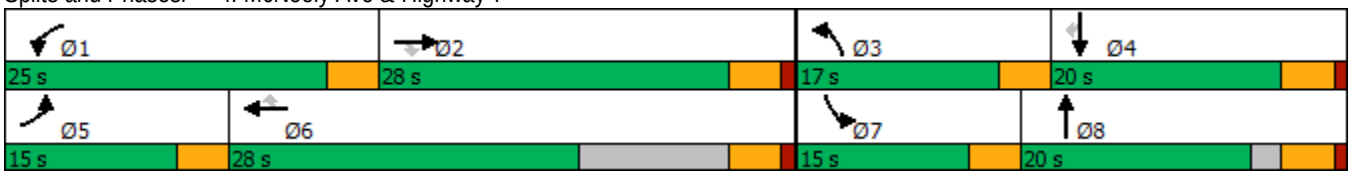
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	331	663	127	324	996	525	193	265	199	297	251	381
Future Volume (vph)	331	663	127	324	996	525	193	265	199	297	251	381
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.936				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3313	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3313	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			395		188				286
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	360	721	138	352	1083	571	210	288	216	323	273	414
Shared Lane Traffic (%)												
Lane Group Flow (vph)	360	721	138	352	1083	571	210	504	0	323	273	414
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	28.0	28.0	25.0	28.0	28.0	17.0	20.0		15.0	20.0	20.0
Total Split (%)	16.7%	31.1%	31.1%	27.8%	31.1%	31.1%	18.9%	22.2%		16.7%	22.2%	22.2%
Maximum Green (s)	11.5	23.5	23.5	21.5	23.5	23.5	13.5	15.5		11.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	11.3	22.2	22.2	19.6	30.5	30.5	12.8	14.9		11.1	13.2	13.2
Actuated g/C Ratio	0.13	0.26	0.26	0.23	0.36	0.36	0.15	0.18		0.13	0.16	0.16
v/c Ratio	0.78	0.77	0.26	0.85	0.84	0.69	0.78	0.68		0.71	0.49	0.85
Control Delay	49.8	35.8	5.8	52.4	32.0	12.0	56.8	25.3		46.1	36.3	29.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	49.8	35.8	5.8	52.4	32.0	12.0	56.8	25.3		46.1	36.3	29.0
LOS	D	D	A	D	C	B	E	C		D	D	C
Approach Delay		36.5			29.9			34.6			36.4	
Approach LOS		D			C			C			D	
Queue Length 50th (m)	33.2	63.7	0.0	60.7	91.6	22.6	37.2	27.4		29.5	23.6	21.2
Queue Length 95th (m)	#55.5	85.4	12.7	#107.3	118.9	62.4	#73.5	44.6		#47.2	36.2	#71.0
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	474	1000	551	457	1426	873	287	845		474	659	527
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.76	0.72	0.25	0.77	0.76	0.65	0.73	0.60		0.68	0.41	0.79

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 83.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 33.5 Intersection LOS: C
Intersection Capacity Utilization 73.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: McNeely Ave & Highway 7



Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	218	6	7	187	0	28	0	38	0	0	1
Future Vol, veh/h	0	218	6	7	187	0	28	0	38	0	0	1
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, %	0	2	25	20	6	0	0	0	0	0	0	0
Mvmt Flow	0	237	7	8	203	0	30	0	41	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	203	0	0	244	0	0	461	460	241	480	463	203
Stage 1	-	-	-	-	-	-	241	241	-	219	219	-
Stage 2	-	-	-	-	-	-	220	219	-	261	244	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1381	-	-	1224	-	-	514	501	803	499	499	843
Stage 1	-	-	-	-	-	-	767	710	-	788	726	-
Stage 2	-	-	-	-	-	-	787	726	-	748	708	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1381	-	-	1224	-	-	510	497	803	471	496	843
Mov Cap-2 Maneuver	-	-	-	-	-	-	510	497	-	471	496	-
Stage 1	-	-	-	-	-	-	767	710	-	788	721	-
Stage 2	-	-	-	-	-	-	780	721	-	710	708	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	11.3	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	646	1381	-	-	1224	-	-	843
HCM Lane V/C Ratio	0.111	-	-	-	0.006	-	-	0.001
HCM Control Delay (s)	11.3	0	-	-	8	0	-	9.3
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0

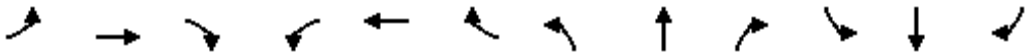
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	68	178	50	3	180	33	62	11	10	36	4	42
Future Vol, veh/h	68	178	50	3	180	33	62	11	10	36	4	42
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	-	-	0	-	-	35	-	-	-	-	-	-
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	6	0	0	5	6	0	0	0	0	0	0
Mvmt Flow	74	193	54	3	196	36	67	12	11	39	4	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	232	0	0	247	0	0	586	579	193	582	597	196
Stage 1	-	-	-	-	-	-	341	341	-	202	202	-
Stage 2	-	-	-	-	-	-	245	238	-	380	395	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1336	-	-	1331	-	-	425	429	854	427	419	850
Stage 1	-	-	-	-	-	-	678	642	-	805	738	-
Stage 2	-	-	-	-	-	-	763	712	-	646	608	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1336	-	-	1331	-	-	378	400	854	391	391	850
Mov Cap-2 Maneuver	-	-	-	-	-	-	378	400	-	391	391	-
Stage 1	-	-	-	-	-	-	634	600	-	753	736	-
Stage 2	-	-	-	-	-	-	716	710	-	584	568	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0.1	16.3	13
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	408	1336	-	-	1331	-	-	540
HCM Lane V/C Ratio	0.221	0.055	-	-	0.002	-	-	0.165
HCM Control Delay (s)	16.3	7.9	0	-	7.7	0	-	13
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0	-	-	0.6



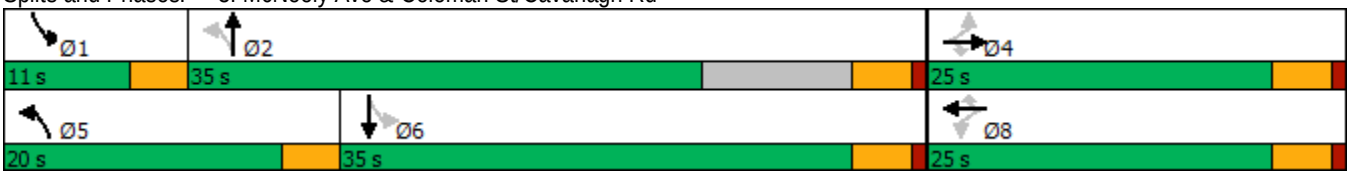
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	104	166	86	78	120	123	408	40	152	566	56
Future Volume (vph)	76	104	166	86	78	120	123	408	40	152	566	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.987			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3493	0	1770	3490	0
Flt Permitted	0.702			0.684			0.336			0.475		
Satd. Flow (perm)	1308	1863	1583	1274	1863	1583	626	3493	0	885	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180			130		18			15	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	83	113	180	93	85	130	134	443	43	165	615	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	113	180	93	85	130	134	486	0	165	676	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	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	
Act Effct Green (s)	10.8	10.8	10.8	10.8	10.8	10.8	27.8	20.8		27.0	20.4	
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.57	0.42		0.55	0.42	
v/c Ratio	0.29	0.28	0.37	0.33	0.21	0.29	0.25	0.32		0.27	0.46	
Control Delay	20.4	19.3	6.1	21.3	18.4	6.2	5.3	10.7		5.5	12.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.4	19.3	6.1	21.3	18.4	6.2	5.3	10.7		5.5	12.5	
LOS	C	B	A	C	B	A	A	B		A	B	
Approach Delay		13.2			14.1			9.5			11.1	
Approach LOS		B			B			A			B	
Queue Length 50th (m)	6.7	9.0	0.0	7.6	6.7	0.0	3.9	15.1		4.9	22.4	
Queue Length 95th (m)	17.3	21.2	12.6	19.1	16.9	10.8	10.3	27.0		12.3	42.5	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	555	790	775	540	790	746	775	2852		628	2209	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.15	0.14	0.23	0.17	0.11	0.17	0.17	0.17		0.26	0.31	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 49
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.46
Intersection Signal Delay: 11.5 Intersection LOS: B
Intersection Capacity Utilization 47.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd



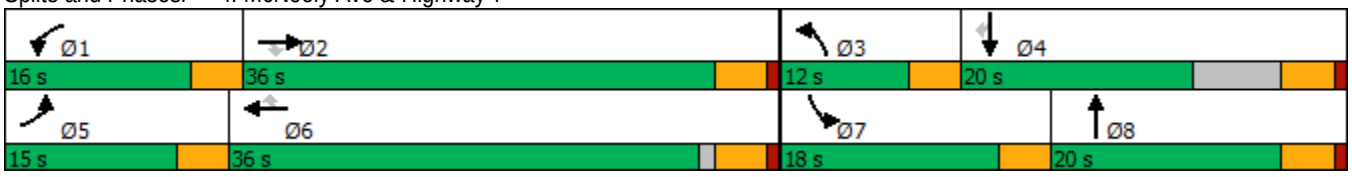
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	776	95	124	481	199	68	151	224	506	132	180
Future Volume (vph)	221	776	95	124	481	199	68	151	224	506	132	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.910				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3221	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3221	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			216		243				196
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	240	843	103	135	523	216	74	164	243	550	143	196
Shared Lane Traffic (%)												
Lane Group Flow (vph)	240	843	103	135	523	216	74	407	0	550	143	196
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	36.0	36.0	16.0	36.0	36.0	12.0	20.0		18.0	20.0	20.0
Total Split (%)	16.7%	40.0%	40.0%	17.8%	40.0%	40.0%	13.3%	22.2%		20.0%	22.2%	22.2%
Maximum Green (s)	11.5	31.5	31.5	12.5	31.5	31.5	8.5	15.5		14.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	10.1	24.7	24.7	10.4	25.0	25.0	7.6	11.3		14.6	20.4	20.4
Actuated g/C Ratio	0.13	0.32	0.32	0.13	0.32	0.32	0.10	0.15		0.19	0.26	0.26
v/c Ratio	0.54	0.74	0.17	0.57	0.46	0.33	0.42	0.60		0.84	0.15	0.35
Control Delay	37.4	28.3	2.2	42.8	22.2	4.4	42.9	17.1		45.9	25.6	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	37.4	28.3	2.2	42.8	22.2	4.4	42.9	17.1		45.9	25.6	6.4
LOS	D	C	A	D	C	A	D	B		D	C	A
Approach Delay		27.9			21.0			21.0			33.9	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	17.3	59.0	0.0	18.9	32.3	0.0	10.4	12.0		41.1	9.3	0.0
Queue Length 95th (m)	33.3	88.5	5.1	41.7	50.8	14.2	26.9	28.2		#85.8	18.9	16.8
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	516	1458	737	289	1504	797	196	846		651	1063	612
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.47	0.58	0.14	0.47	0.35	0.27	0.38	0.48		0.84	0.13	0.32

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 77.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 26.7 Intersection LOS: C
Intersection Capacity Utilization 68.3% 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: 4: McNeely Ave & Highway 7



Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	216	36	47	429	0	30	0	19	0	0	0
Future Vol, veh/h	0	216	36	47	429	0	30	0	19	0	0	0
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, %	0	1	10	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	235	39	51	466	0	33	0	21	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	466	0	0	274	0	0	823	823	255	833	842	466
Stage 1	-	-	-	-	-	-	255	255	-	568	568	-
Stage 2	-	-	-	-	-	-	568	568	-	265	274	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1106	-	-	1301	-	-	295	311	789	290	303	601
Stage 1	-	-	-	-	-	-	754	700	-	511	510	-
Stage 2	-	-	-	-	-	-	511	510	-	745	687	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1106	-	-	1301	-	-	283	295	789	271	287	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	283	295	-	271	287	-
Stage 1	-	-	-	-	-	-	754	700	-	511	483	-
Stage 2	-	-	-	-	-	-	484	483	-	725	687	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	16.1	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	377	1106	-	-	1301	-	-	-
HCM Lane V/C Ratio	0.141	-	-	-	0.039	-	-	-
HCM Control Delay (s)	16.1	0	-	-	7.9	0	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	-

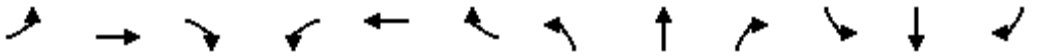
Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	201	97	3	410	46	60	8	11	40	8	77
Future Vol, veh/h	60	201	97	3	410	46	60	8	11	40	8	77
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	-	-	0	-	-	35	-	-	-	-	-	-
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	1	0	0	1	0	3	20	0	5	0	1
Mvmt Flow	65	218	105	3	446	50	65	9	12	43	9	84

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	496	0	0	323	0	0	872	850	218	863	905	446
Stage 1	-	-	-	-	-	-	348	348	-	452	452	-
Stage 2	-	-	-	-	-	-	524	502	-	411	453	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.13	6.7	6.2	7.15	6.5	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.7	-	6.15	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.527	4.18	3.3	3.545	4	3.309
Pot Cap-1 Maneuver	1068	-	-	1248	-	-	270	279	827	272	278	614
Stage 1	-	-	-	-	-	-	666	603	-	581	574	-
Stage 2	-	-	-	-	-	-	535	513	-	612	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1068	-	-	1248	-	-	214	257	827	246	256	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	214	257	-	246	256	-
Stage 1	-	-	-	-	-	-	616	558	-	537	572	-
Stage 2	-	-	-	-	-	-	454	511	-	549	530	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.1	27.7	19
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	243	1068	-	-	1248	-	-	392
HCM Lane V/C Ratio	0.353	0.061	-	-	0.003	-	-	0.347
HCM Control Delay (s)	27.7	8.6	0	-	7.9	0	-	19
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.5	0.2	-	-	0	-	-	1.5



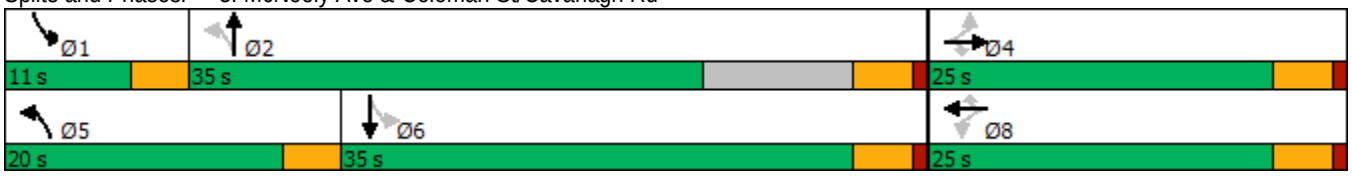
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	105	226	131	206	210	358	706	113	140	618	90
Future Volume (vph)	128	105	226	131	206	210	358	706	113	140	618	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		0.0	95.0		95.0	150.0		0.0	50.0		50.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			5.0			70.0			55.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.979			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3465	0	1770	3472	0
Flt Permitted	0.511			0.684			0.214			0.320		
Satd. Flow (perm)	952	1863	1583	1274	1863	1583	399	3465	0	596	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			246			228		32			23	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		208.3			126.9			986.8			152.6	
Travel Time (s)		15.0			9.1			59.2			9.2	
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
Adj. Flow (vph)	139	114	246	142	224	228	389	767	123	152	672	98
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	114	246	142	224	228	389	890	0	152	770	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	20.0		5.0	20.0	
Minimum Split (s)	14.5	14.5	14.5	14.5	14.5	14.5	9.5	24.5		9.5	24.5	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	20.0	35.0		11.0	35.0	
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	25.0%	43.8%		13.8%	43.8%	
Maximum Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	16.5	30.5		7.5	30.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	4.5		3.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
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	None	None	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0			7.0	

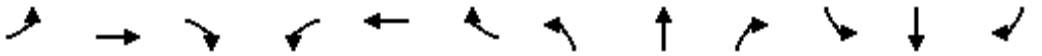
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	14.6	14.6	14.6	14.6	14.6	14.6	40.7	31.3		30.5	22.4	
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.23	0.64	0.49		0.48	0.35	
v/c Ratio	0.64	0.27	0.44	0.49	0.52	0.42	0.70	0.52		0.36	0.62	
Control Delay	37.6	22.8	6.3	28.4	27.0	6.2	16.3	13.1		9.1	20.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.6	22.8	6.3	28.4	27.0	6.2	16.3	13.1		9.1	20.0	
LOS	D	C	A	C	C	A	B	B		A	C	
Approach Delay		18.8			19.4			14.1			18.2	
Approach LOS		B			B			B			B	
Queue Length 50th (m)	14.9	11.1	0.0	14.6	23.2	0.0	17.9	37.7		6.0	39.2	
Queue Length 95th (m)	37.5	27.0	16.7	35.1	49.5	16.0	#57.1	63.0		15.3	67.0	
Internal Link Dist (m)		184.3			102.9			962.8			128.6	
Turn Bay Length (m)	70.0			95.0		95.0	150.0			50.0		
Base Capacity (vph)	314	614	687	420	614	675	619	2215		433	1716	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.44	0.19	0.36	0.34	0.36	0.34	0.63	0.40		0.35	0.45	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 63.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.70
Intersection Signal Delay: 16.9 Intersection LOS: B
Intersection Capacity Utilization 73.5% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: McNeely Ave & Coleman St/Cavanagh Rd





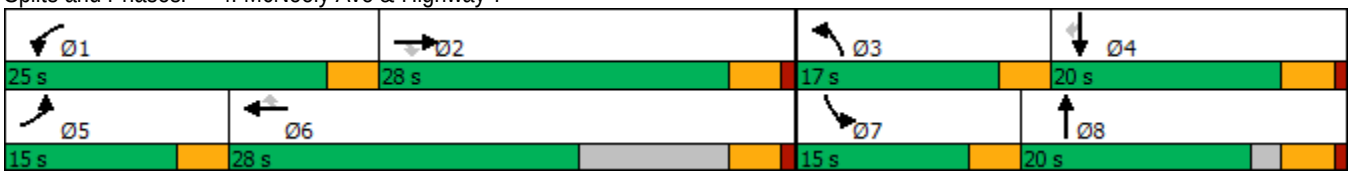
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	696	133	340	1046	552	203	278	209	312	263	400
Future Volume (vph)	347	696	133	340	1046	552	203	278	209	312	263	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		75.0	100.0		140.0	80.0		0.0	85.0		80.0
Storage Lanes	2		1	1		1	1		0	2		1
Taper Length (m)	85.0			80.0			25.0			30.0		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.936				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3313	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3313	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			388		188				280
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		285.0			304.7			235.7			986.8	
Travel Time (s)		17.1			18.3			14.1			59.2	
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
Adj. Flow (vph)	377	757	145	370	1137	600	221	302	227	339	286	435
Shared Lane Traffic (%)												
Lane Group Flow (vph)	377	757	145	370	1137	600	221	529	0	339	286	435
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway 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
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.5	24.5	24.5	9.5	24.5	24.5	9.5	14.5		9.5	14.5	14.5
Total Split (s)	15.0	28.0	28.0	25.0	28.0	28.0	17.0	20.0		15.0	20.0	20.0
Total Split (%)	16.7%	31.1%	31.1%	27.8%	31.1%	31.1%	18.9%	22.2%		16.7%	22.2%	22.2%
Maximum Green (s)	11.5	23.5	23.5	21.5	23.5	23.5	13.5	15.5		11.5	15.5	15.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0		0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	11.4	22.6	22.6	20.3	31.5	31.5	13.0	15.7		11.2	13.9	13.9
Actuated g/C Ratio	0.13	0.26	0.26	0.24	0.37	0.37	0.15	0.18		0.13	0.16	0.16
v/c Ratio	0.83	0.81	0.28	0.89	0.88	0.73	0.83	0.70		0.76	0.50	0.89
Control Delay	54.0	38.5	6.3	56.7	34.7	13.9	62.8	26.6		49.4	36.7	35.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	54.0	38.5	6.3	56.7	34.7	13.9	62.8	26.6		49.4	36.7	35.0
LOS	D	D	A	E	C	B	E	C		D	D	D
Approach Delay		39.4			32.7			37.2			40.1	
Approach LOS		D			C			D			D	
Queue Length 50th (m)	35.2	68.1	0.0	65.0	99.0	30.0	39.6	30.0		31.2	24.9	27.5
Queue Length 95th (m)	#59.4	#92.4	14.1	#115.3	#130.7	73.6	#78.5	47.7		#50.9	37.7	#82.4
Internal Link Dist (m)		261.0			280.7			211.7			962.8	
Turn Bay Length (m)	75.0		75.0	100.0		140.0	80.0			85.0		80.0
Base Capacity (vph)	462	974	540	445	1389	856	279	828		462	642	516
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.82	0.78	0.27	0.83	0.82	0.70	0.79	0.64		0.73	0.45	0.84

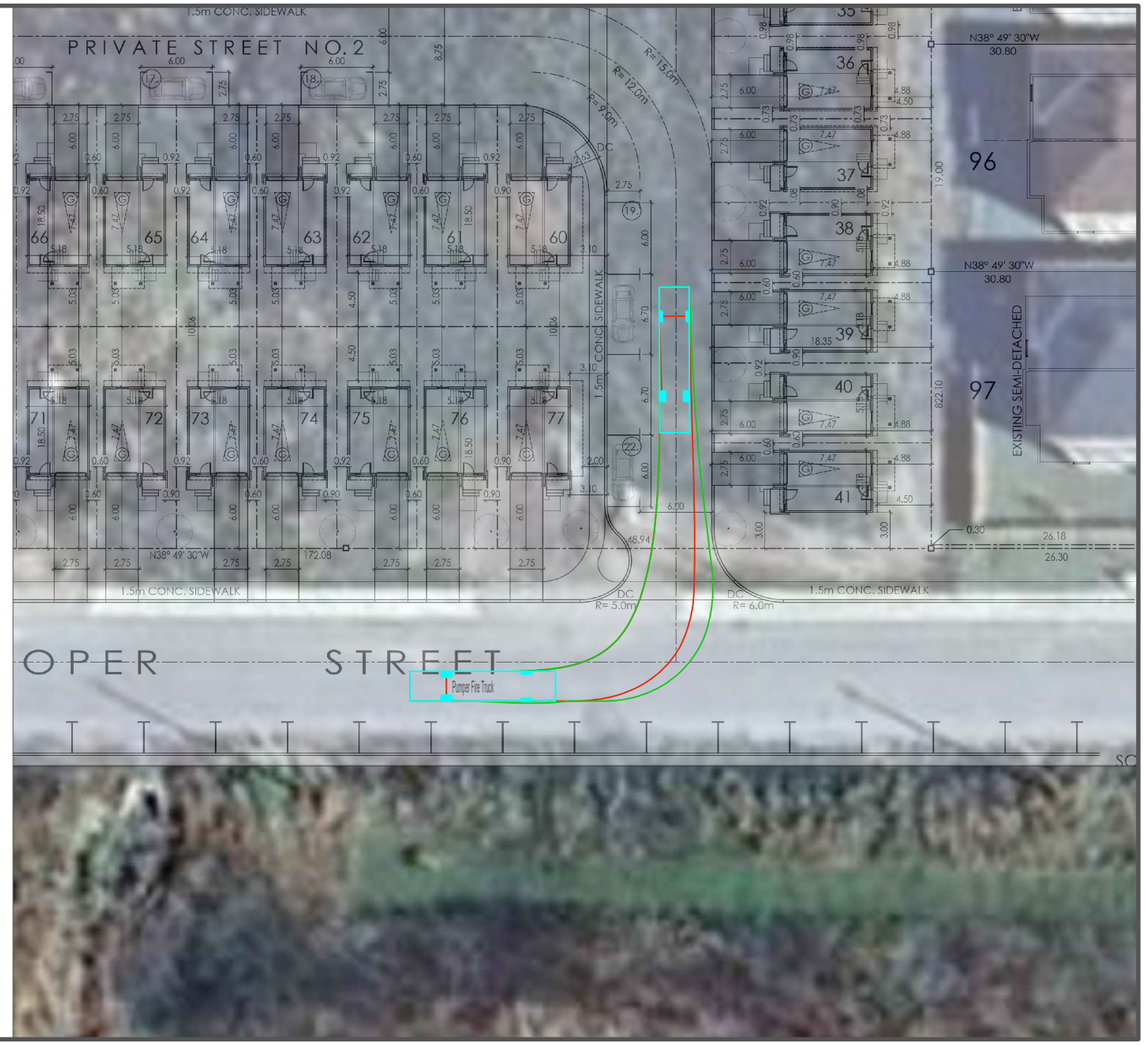
Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 85.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 36.5 Intersection LOS: D
Intersection Capacity Utilization 76.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: McNeely Ave & Highway 7

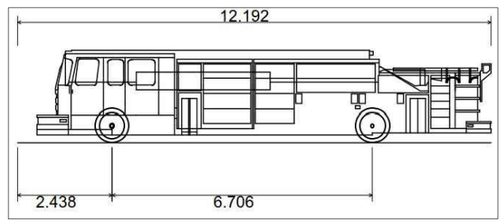


APPENDIX D – VEHICLE CIRCULATION FIGURES



LEGEND

FIRE TRUCK
SITE CIRCULATION



FIRE TRUCK

OPERATION DESCRIPTION

FIRE TRUCK

SITE CIRCULATION:
INGRESS 1 & 2

SCALE **1:250**

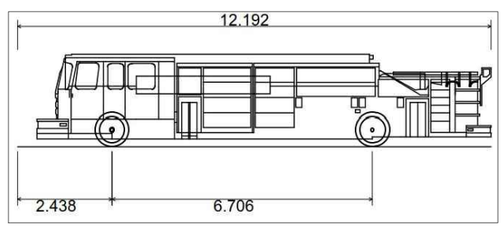
0 5 10 20 30 40

METRIC

egis

DATE	PROJECT No.	FIGURE
MAR 2025	0CP-190595	1

LEGEND



FIRE TRUCK

FIRE TRUCK
SITE CIRCULATION

OPERATION DESCRIPTION

FIRE TRUCK

SITE CIRCULATION:
EGRESS 1 & 2

SCALE **1:250**

0 5 10 20 30 40

METRIC

egis

DATE	PROJECT No.	FIGURE
MAR 2025	0CP-190595	2