TRAFFIC IMPACT STUDY

1144 1ST AVENUE WEST
CITY OF OWEN SOUND

PREPARED FOR:
HANSA FINANCIAL & PROPERTY MANAGEMENT INC.
1144 1ST AVENUE WEST MID-RISE

PREPARED BY:

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1ST SUBMISSION: NOVEMBER 2021

CFCA FILE NO. 2141-6058

CROZIER
CONSULTING ENGINEERS

REVISION NUMBER	DATE	COMMENTS
Rev. 0	November 2021	First Submission to the City of Owen Sound

1.0 Executive Summary

C.F. Crozier & Associates Inc. (Crozier) was retained by Hansa Financial and Property Management Inc. to complete a Traffic Impact Study (TIS) for the proposed residential development at 1144 1st Avenue West, City of Owen Sound, Grey County

The residential development is proposed to consist of six 4-storey apartment buildings with a total of 224 residential units, an amenity building, and an at-grade parking lot. The Site Plan prepared by Premier Project Consultants (July 15, 2021) proposes a full move access on12th Street West and another access on 11th Street West. Both entrances are located at the western limits of the property. The northern access shall be referred to as 'Access A' and the southern access shall be referred to as 'Access B' herein.

The following intersections were assessed in the TIS:

- 14th Street West and 2nd Avenue West (County Road 1)
- 12th Street West and 2nd Avenue West (County Road 1)
- 11th Street West and 2nd Avenue West (County Road 1)
- 10th Street West and 2nd Avenue West (County Road 1)
- 10th Street West and 1st Avenue West
- 10th Street West and 2nd Avenue East

Intersection analysis of the 2021 existing traffic volumes indicates the following:

- All study intersections are operating at a Level of Service (LOS) "C" or better during the weekday a.m. and p.m. peak hours.
- The signal timings at the intersection of 10th Street West and 2nd Avenue West were optimized to provide additional green time to the north and southbound movements. This improves the volume-to-capacity ratio to 0.74 from 0.97 in the p.m. peak hour. The optimized signal timings were carried through the future background and future total operations.
- The 95th percentile queues of some movements on the boundary road network exceed the available storage lengths.
    - 1st Avenue West is 11 m wide or greater for the first 70 m north of 10th Street West. After that point, the roadway tapers to approximately 9 m. This width is sufficient to accommodate queues beyond the available storage length and allows for through/right-turning vehicles to manoeuvre past queued vehicles.
    - The northbound left-turn 95th percentile queue on 2nd Avenue East at 10th Street East exceeds the available storage by less than one vehicle. As the intersection of 10th Street East and 2nd Avenue East operates with a LOS 'B', the operations are acceptable.

Intersection analysis of the 2026 future background traffic volumes indicates the following:

- The study intersections are expected to continue operating with a LOS "C" or better in the weekday a.m. and p.m. peak hours under 2026 future background traffic volume conditions.
- The maximum control delay of 28.3 s and volume to capacity ratio of 0.82 (NBTR), both forecasted for 10th Street West and 2nd Avenue West in the a.m. peak hour, indicate that the boundary road network is operating acceptably with excess capacity for increases in traffic volumes.
- As noted in the existing conditions, some movements are anticipated to operate with 95th percentile queues exceeding the available storage.
    - 1st Avenue West has sufficient width to accommodate queues beyond the available

storage length, allowing through/right-turning vehicles to manoeuvre past queued vehicles. The northbound and southbound left-turn 95th percentile queues on 2nd Avenue East at 10th Street East exceed the available storage by less than one vehicle.

- The southbound right-turn movement at 10th Street East and 2nd Avenue East is limited by the presence of on-street parking on 2nd Avenue East. In instances where vehicles are parked adjacent to the intersection, vehicles will extend into the through lane. This is not unreasonable as there is a higher proportion of right-turning vehicles compared to the volume of through vehicles. As the intersection of 10th Street East and 2nd Avenue East is anticipated to continue operating with a LOS 'B', the operations are acceptable.

The proposed development is forecasted to generate 87 and 88 external two-way trips in the weekday a.m. and p.m. peak hours, respectively.

The requirement for auxiliary left-turn lanes were reviewed for the southbound left-turn movements on 2nd Avenue West at 11th Street West and 12th Street West. The analysis was completed based on the 2026 traffic volumes and no improvements were warranted.

Intersection analysis of the 2026 future total traffic volumes indicates the following:

- The study intersections are anticipated to continue operating with an LOS "C" or better in the a.m. and p.m. peak hours, except for 11th Street and 2nd Avenue West which is anticipated to operate at a LOS "D" in the a.m. peak hour.
- The site generated traffic is anticipated to result in a maximum increase in control delay of 8 s at the intersection of 11th Street West and 2nd Avenue. This is a result of the increased volume of westbound left-turns.
    - It is noted that the operations of 12th Street West and 2nd Avenue West are anticipated to improve slightly. This is a result of the additional right-turning vehicles generated by the proposed development which is a lower delay movement.
- The site generated traffic is not anticipated to impact the north and southbound queues at 10th Street East and 2nd Avenue East and is anticipated to extend the southbound left-turn movement at 10th Street West and 1st Avenue West by less than one vehicle.
- The proposed Site Accesses are expected to operate at a LOS "A". The Accesses are expected to operate with a maximum control delay of 8.8 s and volume-to-capacity ratio of 0.03.
- The above metrics indicate that the study intersections are anticipated to continue operating acceptably under 2026 future total traffic volume conditions. Accordingly, the boundary road network can accommodate the site generated traffic.

There are no anticipated sight distance issues at the site accesses and vehicles can safely ingress and egress the proposed development. The site accesses can be supported from a sight distance perspective.

Active transportation facilities including sidewalks, multi-use trails and transit stops are located in close proximity to the site. The proposed development will include a new sidewalk on the north side of 11th Street West, as well as sidewalks throughout the development. Crossings are being contemplated on 1st Avenue West to provide connections between the site and the bus stops and the Waterfront Trail on the east side of 1st Avenue West. These details will be confirmed through detailed design and discussions with City staff. 28 bicycle parking spaces will also be provided through two racks, each with capacity for 14 bicycles. One rack will be located between Buildings 2 and 3 and the second rack will be located between Buildings 4 and 5.

The sidewalks proposed throughout the site will be designed to meet the minimum requirements detailed in the Accessibility for Ontarians with Disabilities Act (AODA). This includes a minimum sidewalk width of 1.5 metres, and maximum running slope of 5%. 8 barrier free parking spaces are proposed, which exceed the minimum requirement of 7 spaces. Geometrics, pavement markings and signage will be confirmed through detailed design.

The analysis contained within this report was completed based on the Site Plan dated July 15, 2021. Any minor changes to the Site Plan will not affect the conclusions contained within this report.

It is concluded that the traffic generated by the 1144 1st Avenue West development can be supported by the boundary road network, and the Site Plan can be supported from a traffic operations perspective.

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2.0 Introduction

2.1 Background

C.F. Crozier & Associates Inc. (Crozier) was retained by Hansa Financial & property Management Inc. to complete a Traffic Impact Study (TIS) for the proposed residential development at 1144 1st Avenue in the City of Owen Sound, Grey County.

2.2 Development Proposal

The Owen Sound Midrise development is proposed to consist of six 4-storey apartment buildings with a total of 224 residential units, an amenity building, and an at-grade parking lot.

A Site Plan prepared by Premier Project Consultants (July 15, 2021) proposes a full move access on12th Street West and another access on 11th Street West. Both entrances are located at the western limits of the property. The northern access shall be referred to as 'Access A' and the southern access shall be referred to as 'Access B' herein.

Figure 1 contains the Site Plan (Premier Project Consultants, July 15, 2021).

2.3 Purpose and Scope

The purpose of the study was to assess the impacts of the proposed development on the boundary road network and to recommend warranted mitigation measures.

The study reviewed the following aspects of the proposed development from a transportation engineering perspective:

- Existing, future background, and future total traffic operations at the study intersections.
- Forecasted trip generation of the proposed development.
- Auxiliary turn-lane warrants
- Sight distance at the proposed site accesses.

The Traffic Impact Study was conducted in accordance with the terms of reference confirmed with City. **Appendix A** contains correspondence with City and the Client.

3.0 Existing Conditions

3.1 Development Lands

The proposed Site is 3.16 ha (31, 641.28 m^2), and is currently vacant. The site is bounded by 12th Street West to the north, 1st Avenue West to the east, 11th Street West to the south, and 2nd Avenue West (County Road 1) to the west. The location of the site is reflected on the development Site Location Plan included as **Figure 2**.

3.2 Key Intersections

The following key intersections within the study area have been analysed under existing, future background and future total traffic volume conditions. **Figure 3** illustrates the existing traffic controls and lane configurations at each intersection.

- 14th Street West and 2nd Avenue West (County Road 1)
- 12th Street West and 2nd Avenue West (County Road 1)
- 11th Street West and 2nd Avenue West (County Road 1)
- 10th Street West and 2nd Avenue West (County Road 1)
- 10th Street West and 1st Avenue West
- 10th Street West and 2nd Avenue East

3.3 Boundary Road Network

The boundary road network is described in **Table 1.** The information included below was obtained from the City of Owen Sound's Official Plan "Schedule C – Transportation", included in **Appendix B**.

Table 1: Boundary Road Network

Roadway	1st Avenue West	2nd Avenue West (County Road 1)	10th Street West	11th Street West	12th Street West
Direction	North-South	North-South	East-West	East-West	East-West
Classification	Arterial	County Road	Arterial & Connecting Link	Local	Local
Jurisdiction	City of Owen Sound	Grey County	City of Owen Sound	City of Owen Sound	City of Owen Sound
Posted Speed Limit	50 km/h (Assumed)	50 km/h	50 km/h	50 km/h (Assumed)	50 km/h (Assumed)
Number of Lanes Per Direction	1	1	2	1	1

Note: Pedestrian, cycling, and Transit information has been compiled in Section 8.0.

3.4 Traffic Data

Turning movement counts at the intersections of 14th Street West and 2nd Avenue West; 12th Street West and 2nd Avenue West; and 11th Street West and 2nd Avenue West were undertaken by Spectrum Traffic Data Inc. staff from 6:00 a.m. to 10:00 a.m. and from 3:00 p.m. to 7:00 p.m. on Tuesday, September 28th, 2021.

Turning movement counts for 10th Street West and 2nd Avenue West; and 10th Street West and 1st Avenue West were undertaken by the City of Owen Sound all day from Tuesday, September 14th, 2021 to Thursday, September 16th, 2021. Turning movement counts at 10th Street West and 1st Avenue East were undertaken by the City of Owen Sound all day from Tuesday, September 7th, 2021 to Thursday, September 9th, 2021. To make these data sources comparable the average volumes were taken for the Cities three-day counts, and the peak hours were determined within the 6:00 -10:00 a.m. and 3:00 – 7:00 pm peak periods. Additionally, through volumes were balanced across the network.

The turning movement count data is included in **Appendix C**. **Figure 4** illustrates the 2021 existing traffic volumes.

Peak hour factors (PHF) associated with the weekday a.m. and p.m. peak hours were calculated for each intersection within the study area based on the 2021 existing traffic volumes. **Table 2** outlines the

PHFs as calculated and applied to the model for their respective intersections.

Table 2: Peak Hour Factors

Intersection	Peak Hour	Peak Hour Factor
14th Street West and 2nd Avenue West	8:00 – 9:00 a.m.	0.90
	4:30 – 5:30 p.m.	0.95
12th Street West and 2nd Avenue West	8:00 – 9:00 a.m.	0.86
	4:30 – 5:30 p.m.	0.92
11th Street West and 2nd Avenue West	8:00 – 9:00 a.m.	0.91
	4:00 – 5:00 p.m.	0.91
10th Street West and 2nd Avenue West	8:15 – 9:15 a.m.	0.91
	4:15 – 5:15p.m.	0.99
10th Street West and 1st Avenue West	8:00 – 9:00 a.m.	0.91
	4:30– 5:30p.m.	0.96
10th Street East and 2nd Avenue East	8:00 – 9:00 a.m.	0.94
	4:15 – 5:15p.m.	0.98

For the intersections of the future site accesses, the Synchro Modelling Software default PHF of 0.92 was used.

3.5 Intersection Operations

The operations of the study intersections were analyzed based on the traffic volumes illustrated in **Figure 4**. **Table 3** outlines the 2021 traffic levels of service for the counts taken at the subject intersections under existing conditions and geometric configurations. Level of Service (LOS) definitions have been included in **Appendix D**. Detailed Capacity Analyses Worksheets are included in **Appendix E**.

Table 3: 2021 Existing Levels of Service

Intersection	Control	Peak Hour	Level of Service	Control Delay[1]	Maximum v/c Ratio	95th %ile Queue> Storage
14th Street West and 2nd Avenue West	Signal	A.M.	B	12.6 s	0.67 (EB)	None
		P.M.	B	16.0 s	0.79 (WB)	None
12th Street West and 2nd Avenue West	Stop	A.M.	C	17.1 s (WB)	0.07 (EB)	N/A
		P.M.	C	15.1 s (WB)	0.11 (WB)	N/A
11th Street West and 2nd Avenue West	Stop	A.M.	C	15.1 s (EB)	0.07 (EB)	N/A
		P.M.	B	14.8 s (WB)	0.08 (EB)	N/A
10th Street West and 2nd Avenue West	Signal	A.M.	C	27.1 s	0.80 (SBT)	None
		P.M.	C	25.8 s	0.97 (NBTR)	70.9m > 65m (SBL)
	Signal (Optimized)	A.M.	C	26.9 s	0.80 (SBT)	None
		P.M.	C	21.1 s	0.74 (NBTR)	None
10th Street West and 1st Avenue West	Signal	A.M.	B	17.2 s	0.57 (SBL)	61.1m > 50m (SBL)
		P.M.	B	15.3 s	0.59 (SBL)	54.3m > 50m (SBL)
10th Street East and 2nd Avenue East	Signal	A.M.	B	12.9 s	0.64 (NBTR)	None
		P.M.	B	12.5 s	0.71 (SBR)	20.1m > 16m (NBL)

Note[1]: The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road approach. The Level of Service of a signalized intersection is based on the average control delay per vehicle.

As presented in **Table 3**, under existing traffic volume conditions, the intersection of 10th Street West and 2nd Avenue West operates with a LOS "C" in the weekday a.m. and p.m. peak hours. The maximum control delay is 27.1 s and maximum volume-to-capacity ratio is 0.97 for the northbound movements. The signal timings were optimized for both the a.m. and p.m. peak hour. Providing additional green time to the north and southbound movements improves the volume-to-capacity ratio to 0.74 in the p.m. peak hour. The optimized signal timings were carried through the future background and future total operations.

The remaining intersections on the boundary road network operate with a LOS "C" or better in the weekday a.m. and p.m. peak hours. The maximum control delay of 17.2 s (10th Street West and 1st Avenue West) and maximum volume-to-capacity ratio of 0.79 (WB, 14th Street West and 2nd Avenue West) indicate that the boundary road network has capacity for increases in traffic volumes.

As noted in **Table 3**, the 95th percentile queues of some movements on the boundary road network exceed the available storage lengths. 1st Avenue West is 11 m wide or greater for the first 70 m north of 10th Street West. After that point, the roadway tapers to approximately 9 m. This width is sufficient to accommodate queues beyond the available storage length and allows for through/right-turning vehicles to manoeuvre past queued vehicles. The northbound left-turn 95th percentile queue on 2nd Avenue East at 10th Street East exceeds the available storage by less than one vehicle. As the intersection of 10th Street East and 2nd Avenue East operates with a LOS 'B', the operations are acceptable.

4.0 Future Background Conditions

4.1 Horizon Years & Growth Rate

In accordance with the agreed upon Terms of Reference, the horizon year of 5-years from the date of study (2026) was reviewed. Additionally, a growth rate of 2% was utilized to forecast background growth on the road network.

4.2 Future Roadway Improvements

No specific roadway improvements have been identified in the City's or County's Official Plan, Transportation Master Plan, or road construction notices. It should be noted that our development will not have any proposed access onto 1st Avenue West, therefore will not conflict with the areas reserved for potential bridge locations (to the east of 1st Avenue West).

4.3 Intersection Operations

The operations of the study intersections were analyzed based on the 2026 future background traffic volumes illustrated in **Figures 5**. The intersection of 10th Street West and 2nd Avenue West was modelled with optimized signal timings. The optimized timings are consistent through existing, future background and future total conditions. **Table 4** outlines the 2026 future background traffic level of service. Level of Service definitions have been included in **Appendix D**. Detailed Capacity Analyses Worksheets are included in **Appendix E**.

Table 4: 2026 Future Background Levels of Service

Intersection	Control	Peak Hour	Level of Service	Control Delay[1]	Maximum Volume-to-Capacity Ratio	95th Percentile Que > Storage
14th Street West and 2nd Avenue West	Signal	A.M.	B	12.9 s	0.70 (EB)	None
		P.M.	B	16.2 s	0.81 (WB)	None
12th Street West and 2nd Avenue West	Stop	A.M.	C	19.2 s (WB)	0.09 (EB)	N/A
		P.M.	C	16.5 s (WB)	0.13 (WB)	N/A
11th Street West and 2nd Avenue West	Stop	A.M.	C	17.1 s (WB)	0.09 (EB)	N/A
		P.M.	C	16.5 s (WB)	0.11 (EB)	N/A
10th Street West and 2nd Avenue West	Signal (Optimized)	A.M.	C	28.3 s	0.82 (NBTR)	None
		P.M.	C	22.3 s	0.77 (NBTR)	None
10th Street West and 1st Avenue West	Signal	A.M.	B	18.6 s	0.60 (SBL)	67.3m > 50m (SBL)
		P.M.	B	15.8 s	0.65 (SBL)	59.0m > 50m (SBL)
10th Street East and 2nd Avenue East	Signal	A.M.	B	14.8 s	0.67 (NBTR)	22.0m > 11m (SBR)
		P.M.	B	13.2 s	0.76 (SBR)	20.9m > 16m (NBL) 15.4m > 14m (SBL) 39. m > 11m (SBR)

Note[1]: The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road approach. The Level of Service of a signalized intersection is based on the average control delay per vehicle.

The study intersections are expected to continue operating with a LOS "C" or better in the weekday a.m. and p.m. peak hours under 2026 future background traffic volume conditions. The maximum control delay of 28.3 s and volume to capacity ratio of 0.82 (NBTR), both forecasted for 10th Street West and 2nd Avenue West in the a.m. peak hour, indicate that the boundary road network is operating acceptably with excess capacity for increases in traffic volumes.

As noted in the existing conditions, some movements are anticipated to operate with 95th percentile queues exceeding the available storage. 1st Avenue West has sufficient width to accommodate queues beyond the available storage length, allowing through/right-turning vehicles to manoeuvre past queued vehicles. The northbound and southbound left-turn 95th percentile queues on 2nd Avenue East at 10th Street East exceed the available storage by less than one vehicle.

The southbound right-turn movement at 10th Street East and 2nd Avenue East is limited by the presence of on-street parking on 2nd Avenue East. In instances where vehicles are parked adjacent to the intersection, vehicles will extend into the through lane. This is not unreasonable as there is a higher proportion of right-turning vehicles compared to the volume of through vehicles. As the intersection of 10th Street East and 2nd Avenue East is anticipated to continue operating with a LOS 'B', the operations are acceptable.

5.0 Site Generated Traffic

5.1 Trip Generation

The development will result in additional vehicles on the boundary road network that previously did not exist. The trip generation of the development was forecasted using the fitted curve equations provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. It is noted that the original Terms of Reference stipulated the 10th Edition, however since the Terms of Reference were established, the 11th Edition was released. Per the Site Plan, the development is proposed to consist of 224 apartment units. Accordingly, LUC 221 "Multifamily Housing (Mid-Rise)" was used to forecast trips generated by the combined total of 224 units. The forecasted trip generation of the site is summarized in **Table 5** and ITE excerpts have been included as **Appendix F**.

Table 5: Trip Generation

Land Use	Peak Hour	Number of Trips		
		Inbound	Outbound	Total
LUC 221 "Multifamily Housing (Mid-Rise)" (224 units)	Weekday A.M.	20	67	87
	Weekday P.M.	53	35	88

5.2 Trip Distribution and Assignment

The trips generated by the residential development were distributed to the boundary road network based on the existing travel patterns observed on the boundary road network as well as a review of the anticipated trip origins and destinations. The following distribution was applied for both the a.m. and p.m. peak hours:

- 20% north via 2nd Avenue West
- 10% west via 14th Street West
- 30% west via 10th Street West
- 10% south via 2nd Avenue West
- 30% east via 10th Street East
    - 15% northeast on 2nd Avenue East
    - 15% continue east on 10th Street East

The residential trip distribution is illustrated in **Figure 6**, with the corresponding trip assignment illustrated in **Figure 7**.

6.0 Total Future Conditions

6.1 Basis of Assessment

The traffic impacts arising from the proposed development were assessed based on the site generated traffic illustrated in **Figure 7** being superimposed on the future background traffic volumes in **Figure 5**. The resulting 2026 total traffic volumes for the weekday a.m. and p.m. peak hours are illustrated in **Figure 8**.

6.2 Auxiliary Lane Analysis

Left-turn lane warrants were undertaken for the intersections of 2nd Avenue West with 12th Street West and 11th Street West using the Ministry of Transportation Ontario (MTO) Design Supplement to the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (GDGCR). The warrants were undertaken during the weekday a.m. and p.m. peak periods for the southbound left-turn movements.

The warrants were completed based on the 2026 future total traffic volumes for a design speed roadway of 60 km/h. Auxiliary left-turn lane warrant charts have been included as **Appendix G**. **Table 6** summarizes the results of the left-turn lane warrants.

Table 6: Auxiliary Turn-Lane Warrants

Intersection	Year	Peak Hour	V_A	V_O	%LT in V_A	Warranted?	Reference
12th Street West and 2nd Avenue West	2026	A.M.	574	214	2%	**No**	Exhibit 9A-7
		P.M	404	350	5%	**No**	Exhibit 9A-7
11th Street West and 2nd Avenue West		A.M.	576	235	2%	**No**	Exhibit 9A-7
		P.M	398	383	2%	**No**	Exhibit 9A-7

As summarized in **Table 6**, southbound auxiliary left-turn lanes are not warranted 2nd Avenue West at 12th Street West and 11th Street West.

6.3 Intersection Operations

The operations of the study intersections were analyzed based on the 2026 total traffic volumes illustrated in **Figure 8**. The intersection of 10th Street West and 2nd Avenue West was modelled with optimized signal timings. The optimized timings are consistent through existing, future background and future total conditions. **Table 7** outlines the respective horizon year future total traffic levels of service. Level of Service definitions have been included in **Appendix D** and detailed capacity analyses worksheets are included in **Appendix E.**

Table 7: 2026 Future Total Levels of Service

Intersection	Control	Peak Hour	Level of Service	Control Delay[1]	Maximum Volume-to-Capacity Ratio	95th Percent Queue > Storage Length
14th Street West and 2nd Avenue West	Signal	A.M.	B	12.7 s	0.70 (EB)	None
		P.M.	B	16.1 s	0.81 (WB)	None
12th Street West and 2nd Avenue West	Stop	A.M.	C	16.9 s (EB)	0.10 (EB)	N/A
		P.M.	C	16.3 s (WB)	0.16 (WB)	N/A
11th Street West and 2nd Avenue West	Stop	A.M.	D	25.1 s (WB)	0.26 (WB)	N/A
		P.M.	C	20.4 s (WB)	0.17 (WB)	N/A
10th Street West and 2nd Avenue West	Signal (Optimized)	A.M.	C	29.1 s	0.83 (SBT)	None
		P.M.	C	22.8 s	0.78 (NBTR)	None
10th Street West and 1st Avenue West	Signal	A.M.	B	18.9 s	0.62 (SBL)	70.5m > 50m (SBL)
		P.M.	B	16.0 s	0.67 (SBL)	60.8m < 50m (SBL)
10th Street East and 2nd Avenue East	Signal	A.M.	B	15.2 s	0.67 (NBTR)	22.5m > 11m (SBR)
		P.M.	B	13.1 s	0.76 (SBR)	20.9m > 16m (NBL) 15.4m > 14m (SBL) 39.4m > 11m (SBR)
11th Street West and Site Access B	Stop	A.M.	A	8.7 s (SB)	0.05 (SB)	N/A
		P.M.	A	8.6 s (SB)	0.02 (SB)	N/A
12th Street West and Site Access A	Stop	A.M.	A	8.8 s (NB)	0.03 (NB)	N/A
		P.M.	A	8.8 s (NB)	0.01 (NB)	N/A

Note[1]: The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road approach. The Level of Service of a signalized intersection is based on the average control delay per vehicle.

The study intersections are anticipated to continue operating with an LOS "C" or better in the a.m. and p.m. peak hours, except for 11th Street and 2nd Avenue West which is anticipated to operate at a LOS "D" in the a.m. peak hour. The site generated traffic is anticipated to result in a maximum increase in control delay of 8 s at the intersection of 11th Street West and 2nd Avenue. This is a result of the increased volume of westbound left-turns. It is noted that the operations of 12th Street West and 2nd Avenue West are anticipated to improve with the addition of the site generated traffic as additional right-turning vehicles are forecasted which is a lower delay movement than left-turn and through movements.

The site generated traffic is not anticipated to impact the north and southbound queues at 10th Street East and 2nd Avenue East and is anticipated to extend the southbound left-turn movement at 10th Street West and 1st Avenue West by less than one vehicle.

The above metrics indicate that the study intersections are anticipated to continue operating acceptably under 2026 future total traffic volume conditions. Accordingly, the boundary road network can accommodate the site generated traffic.

7.0 Sight Distance Assessment

A sight distance assessment was completed to demonstrate that the proposed accesses provide sufficient stopping and intersection sight distances on 11th Street West and 12th Street West. The minimum stopping sight distance and the minimum intersection sight distance requirements were obtained from the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (GDGCR).

As noted previously GIS mapping indicates that 11th Street West and 12th Street West have speed limits of 50 km/h thus a design speed of 60 km/h is used.

Section 2.5 of the TAC GDGCR provides stopping sight distances for various design speeds on level roadways. For a design speed of 60 km/h, a stopping sight distance of 85 metres is required. Section 9.9 of the TAC GDGCR provides intersection sight distance for different intersection control types. For these accesses, the applicable cases include "Case B1 – Left turns from the minor road", and "Case B2 – Right turns from the minor road". Comparing these cases, Case B1 has the greatest sight distance requirement of 130 metres for 60 km/h design speed roads. The required intersection sight distance and stopping sight distance was taken from "Table 9.9.4" as outlined in **Appendix H.**

Table 8: Sight Distance

Access	Oncoming Traffic	Stopping Sight Distance		Intersection Sight Distance	
		Minimum Standard	Available Distance	Minimum Standard	Available Distance
12th Street West	Eastbound	85 m	>130m	130 m	>130m
	Westbound	85 m	>400m	130 m	>400m[1]
11th Street West	Eastbound	85 m	>130m	130 m	>130m
	Westbound	85 m	>350m	130 m	>350m[1]

Note[1]: The street continues in a straight path after intersection, the site access is located 30 m from the intersections.

As summarized above, the available sight distance exceeds the minimum sight distance requirements and both site accesses are approximately the same distance from existing roadways. To the east, there is available sight distance to the t-intersections at 1st Avenue West. To the west, sight distance is available past 4th Avenue West.

Accordingly, the proposed development can be supported from a sight distance perspective.

8.0 Transportation Study

8.0 Active Transportation Facilities

8.0.1. Pedestrian Facilities

Current pedestrian facilities have been summarized in **Table 9**. Of note is the opportunity for improvement through construction of a sidewalk on the north side of 11th Street West.

Table 9: Location and Types of Pedestrian Facilities

Roadway	Facility Type	Width	Sides of Roadway	Surface Type
1st Avenue West	Sidewalk	2.0 m	West	Concrete
	Multi Use Waterfront Trail	3.0 - 6.0 m	East	Concrete or Gravel
2nd Avenue West	Sidewalk	1.5 m	Both	Concrete
11th Street West	Sidewalk	1.5 m	South	Concrete
12th Street West	Sidewalk	1.5 m	Both	Concrete
10th Street West	Sidewalk	1.5 - 2.5 m	Both	Concrete
14th Street West	Sidewalk	1.5	Both	Concrete
1st Avenue East	Sidewalk	1.5 m	One side continuous, west side discontinuous/ MUT	Varies

8.0.2. Municipal Transit Services

Owen Sound Transit operates four bus routes at 30 min headways between 6:30 a.m. to 6:00 p.m. Monday to Friday, and 9 a.m. to 4 p.m. on Saturdays. The Site is located approximately 600 m from the Owen Sound Transit Terminal where all local bus routes convene, these routes cover the entire City.

The bus stop for the Core and Brooke bus routes are located near the site. The Brook route has bus stops at 1st Avenue West at 11th Street West and 12th Street West. The Core route has bus stops at 2nd Avenue West and 11th Street West and 12th Street West.

These routes run in east-west loop patterns and connect to the high school, Georgian College, Hospital, recreation center, mall, eastern commercial area, and transit terminal. Owen Sound Transit route maps have been attached as **Appendix I**.

8.0.3. Regional Transit Services

All Regional Transit services depart from the Owen Sound Transit terminal. As this development is located within less than a ten-minute walk to the transit terminal, it is a prime housing location for regional transit commuters.

Grey Transit Route 1 runs from Owen Sound south to Dundalk with Route 2 continuing from Dundalk to Orangeville. Grey Transit Routes 1 and 2 run twice in the morning and twice in the afternoon with slight adjustments to timings on the weekends. Grey Transit Routes 3 and 4 connect Owen Sound to the Town of the Blue Mountains and runs Wednesday to Sunday departing three times in the morning and

three times in the afternoon. Route 5 connects Owen Sound to Wiarton and Suable Beach; it runs Friday to Monday departing three times throughout the day. Grey Transit Route maps and schedules have been included as **Appendix J.**

8.0.4. Cycling Facilities, Routes, and Trails

Per Schedule D of the City's Official Plan, 1st Avenue West, 11th Street West and 12th Street West are identified as bicycle routes with shared on-road facilities. In addition to the bicycle routes, there is a recreational trail to the east of 1st Avenue West that runs north-south along the water.

The noted bicycle routes and recreational trail provide connectivity to other bicycle and multi-use routes and trails throughout Owen Sound and Grey County. These include:

- Nine Bends Trail
- The Bruce Trail
- Georgian Bluffs Trail
- CP Rail Trail
- Waterfront Trail
- Tom Thomson Trail
- 8th Street bike lanes

Some sections of hiking trails also permit cycling/ mountain biking including the Bruce Trail. The Bruce trail is located along the Niagara Escarpment in parks and private property. Some parks along the Bruce trail include Harrison Park, Inglis Falls Conservation Area, West Rocks Management Area, and the Pottawatomi Conservation Area. This footpath runs from Tobermory, though Owen Sound, then on to the St. Catherine's area. The closest connection to the Bruce Trail is in the West Rock Management Area on 7th Avenue West approximately 2 km southwest of the Site.

Appendix K includes the Owen Sound Trails Brochure and excerpts from the Grey County Cycling and Trails Master Plan.

8.1 City, and County Multimodal Planning

The City of Owen Sound identified the importance of Transportation Demand Management and highlighted specific objectives in its Transportation Master Plan (2010) and the Official Plan (2017). Key objectives include transit improvements, paid parking, pedestrian facilities improvements, cycling support, and the promotion of working from home. Key future roadway improvements include the addition of on road cycling facilities to 4th Avenue East, and 3rd Avenue West.

Grey County supports transportation demand management through their 2015 Transportation Master Plan which recommended the launch of their regional transit service and updating of the Paved Shoulder Policy. Additionally, the Grey County Trails and Cycling Master plan recommended potential paved shoulders on Regional Roads just outside Owen Sound including Grey Road 18, and a portion of Grey Road 1.

8.2 Site Specific TDM Measures for Residents, Visitors and Staff

A key sustainability feature of this development is its central location in the City as most downtown destinations can be walked to. Key very close destinations include a non-urgent medical center, Service Ontario, various pharmacies, lawyers' offices, daycare centers, laundromat, and various restaurants. Other nearby destinations within a fifteen-minute walk include a grocery store, library, recreation center, transit terminal, farmers market, and City Hall.

Active transportation will be supported though the construction of a sidewalk on the north side of 11th Street West and internal pathways connecting all buildings. Crossings are being contemplated on 1st Avenue West to provide connections between the site and the bus stops and the Waterfront Trail on the east side of 1st Avenue West. These details will be confirmed through detailed design and discussions with City staff.

28 bicycle parking spaces will also be provided through two racks, each with capacity for 14 bicycles. One rack will be located between Buildings 2 and 3 and the second rack will be located between Buildings 4 and 5.

8.3 AODA Compliance

As per the City's Accessibility Improvement Guidelines and AODA requirements it is recommended that the developer ensure the site meet standard while the city monitors and upgrades the existing roadway infrastructure such as sidewalks, streetlights, and traffic signals.

As indicated in the general requirements for exterior paths of travel the ground surface must be level, there must be adequate exterior lighting, tactile pads must be provided where appropriate to indicate intersections and curb ramps. Sidewalks should be a minimum of 1.5 m wide with a maximum running slope of 5% (1:20). It is noted that sidewalks can have slopes greater than 1:20, but it cannot be steeper than the slope of the adjacent roadway. These details will be confirmed through detailed design.

Pedestrian crossings must meet standard for sloping, tonal contrast, textile plates, and geometry. Indoor path elements such as accessible power door operations would be required for the various buildings proposed throughout the site. These items would be confirmed through detailed design.

On-site assessable parking stalls should be provided by the developer as per Cities Zoning By-Law with the standard additional space for the deployment of a lift or a ramp. Assessable parking stalls should be located closest to the buildings with immediate access to a barrier free walkway. The developer has provided 8 barrier free parking spaces exceeding the 7 required per the City's Zoning By-Law. Details regarding assessable space sizing, signage, and placement are summarized in the City of Owen Sound's Development Engineering Standards, AODA standards, and the City's Zoning Bylaw. Pavement markings and signage will be confirmed during detailed design.

9.0 Conclusions

The analysis contained within this report has resulted in the following key findings:

- Under existing traffic volume conditions, all study intersections are operating at a Level of Service (LOS) "C" or better during the weekday a.m. and p.m. peak hours.
    - The signal timings at the intersection of 10th Street West and 2nd Avenue West were optimized to provide additional green time to the north and southbound movements. This improves the volume-to-capacity ratio to 0.74 from 0.97 in the p.m. peak hour. The optimized signal timings were carried through the future background and future total operations.
    - The 95th percentile queues of some movements on the boundary road network exceed the available storage lengths.
        - 1st Avenue West is 11 m wide or greater for the first 70 m north of 10th Street West. After that point, the roadway tapers to approximately 9 m. This width is sufficient to accommodate queues beyond the available storage length and allows for through/right-turning vehicles to manoeuvre past queued vehicles.

through/right-turning vehicles to manoeuvre past queued vehicles.
    - The northbound left-turn 95th percentile queue on 2nd Avenue East at 10th Street East exceeds the available storage by less than one vehicle. As the intersection of 10th Street East and 2nd Avenue East operates with a LOS 'B', the operations are acceptable.

- The study intersections are expected to continue operating with a LOS "C" or better in the weekday a.m. and p.m. peak hours under 2026 future background traffic volume conditions.
    - The maximum control delay of 28.3 s and volume to capacity ratio of 0.82 (NBTR), both forecasted for 10th Street West and 2nd Avenue West in the a.m. peak hour, indicate that the boundary road network is operating acceptably with excess capacity for increases in traffic volumes.
    - As noted in the existing conditions, some movements are anticipated to operate with 95th percentile queues exceeding the available storage.
        - 1st Avenue West has sufficient width to accommodate queues beyond the available storage length, allowing through/right-turning vehicles to manoeuvre past queued vehicles. The northbound and southbound left-turn 95th percentile queues on 2nd Avenue East at 10th Street East exceed the available storage by less than one vehicle.
        - The southbound right-turn movement at 10th Street East and 2nd Avenue East is limited by the presence of on-street parking on 2nd Avenue East. In instances where vehicles are parked adjacent to the intersection, vehicles will extend into the through lane. This is not unreasonable as there is a higher proportion of right-turning vehicles compared to the volume of through vehicles. As the intersection of 10th Street East and 2nd Avenue East is anticipated to continue operating with a LOS 'B', the operations are acceptable.

- The proposed development is expected to generate 87 and 88 external two-way trips in the weekday a.m. and p.m. peak hours, respectively.

- The requirement for auxiliary left-turn lanes were reviewed for the southbound left-turn movements on 2nd Avenue West at 11th Street West and 12th Street West. The analysis was completed based on the 2026 traffic volumes and no improvements were warranted.

- The study intersections are anticipated to continue operating with an LOS "C" or better in the a.m. and p.m. peak hours under 2026 future total traffic volume conditions, except for 11th Street and 2nd Avenue West which is anticipated to operate at a LOS "D" in the a.m. peak hour.
    - The site generated traffic is anticipated to result in a maximum increase in control delay of 8 s at the intersection of 11th Street West and 2nd Avenue. This is a result of the increased volume of westbound left-turns.
        - It is noted that the operations of 12th Street West and 2nd Avenue West are anticipated to improve slightly. This is a result of the additional right-turning vehicles generated by the proposed development which is a lower delay movement.
    - The site generated traffic is not anticipated to impact the north and southbound queues at 10th Street East and 2nd Avenue East and is anticipated to extend the southbound left-turn movement at 10th Street West and 1st Avenue West by less than one vehicle.
    - The proposed Site Accesses are expected to operate at a LOS "A". The Accesses are expected to operate with a maximum control delay of 8.8 s and volume-to-capacity ratio of 0.03.

operating acceptably under 2026 future total traffic volume conditions. Accordingly, the boundary road network can accommodate the site generated traffic.

- There are no anticipated sight distance issues at the site accesses and vehicles can safely ingress and egress the proposed development. The site accesses can be supported from a sight distance perspective.

- Active transportation facilities including sidewalks, multi-use trails and transit stops are located in close proximity to the site. The proposed development will include a new sidewalk on the north side of 11th Street West, as well as sidewalks throughout the development. Crossings are being contemplated on 1st Avenue West to provide connections between the site and the bus stops and the Waterfront Trail on the east side of 1st Avenue West. These details will be confirmed through detailed design and discussions with City staff. 28 bicycle parking spaces will also be provided through two racks, each with capacity for 15 bicycles. One rack will be located between Buildings 2 and 3 and the second rack will be located between Buildings 4 and 5.

- The sidewalks proposed throughout the site will be designed to meet the minimum requirements detailed in the Accessibility for Ontarians with Disabilities Act (AODA). This includes a minimum sidewalk width of 1.5 metres, and maximum running slope of 5%. 8 barrier free parking spaces are proposed, which exceed the minimum requirement of 7 spaces. Geometrics, pavement markings and signage will be confirmed through detailed design.

The analysis contained within this report was completed based on the Site Plan dated July 15, 2021. Any minor changes to the Site Plan will not affect the conclusions contained within this report.

It is concluded that the traffic generated by the 1144 1st Avenue West development can be supported by the boundary road network, and the Site Plan can be supported from a traffic operations perspective.

Prepared by,

C.F. CROZIER & ASSOCIATES INC.

Madeleine Ferguson, P.Eng.
Manager of Transportation

C.F. CROZIER & ASSOCIATES INC.

Emma Howlett, E.I.T
Engineering Intern, Transportation

MF/eh

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APPENDIX A

Terms of Reference

Madeleine Ferguson

From: Madeleine Ferguson
Sent: October 29, 2021 2:22 PM
To: Madeleine Ferguson
Subject: FW: 1144 1st Avenue West, Owen Sound - Cost Sharing Discussion Request

Madeleine Ferguson, P.Eng. | Manager of Transportation
DID: 705.434.3418

From: Chris Webb <cwebb@owensound.ca>
Sent: Monday, September 20, 2021 12:40 PM
To: Danny Carreiro <DCarreiro@ppcltd.ca>
Cc: Peter Paquette <ppaquette@owensound.ca>
Subject: RE: 1144 1st Avenue West, Owen Sound - Cost Sharing Discussion Request ments

Hi Danny,

The City has Miovision traffic cameras and data capture at the three intersections on 10th Street (2nd Ave W, 1st Ave W and 2nd Ave E). If you would like specific traffic counts and vehicle counts, turning movements, bicycle and pedestrian movements at these intersections, please have your Traffic Engineer contact Peter Paquette, Traffic Engineering Technologist, with the City.

This may affect the pricing (reduce) for the TIS and intersections requested.

Chris Webb, P.Eng.
Manager of Engineering Services
City of Owen Sound

From: Chris Webb
Sent: September 17, 2021 4:39 PM
To: dcarreiro@ppcltd.ca; ajw@kingsleyca.com
Cc: Dennis Kefalas <dkefalas@owensound.ca>; Pam Coulter <pcoulter@owensound.ca>; Amy Cann <acann@owensound.ca>; Dana Goetz <dgoetz@owensound.ca>; Marck,Matt <Matt.Marck@grey.ca>; Jim Stevenson <Jim.Stevenson@grey.ca>; Jacklyn Iezzi <jiezzi@owensound.ca>; Spencer Hammill <shammill@owensound.ca>
Subject: 1144 1st Avenue West, Owen Sound - Cost Sharing Discussion Request

Hi Danny and Al,

Thank you for meeting with City and County staff today to discuss the potential of cost sharing for elements of the Traffic Impact Study related to the redevelopment of the 1144 1st Avenue West property.

We are excited about this project because the redevelopment of the former BCK site will be a transformative project for the West Harbour Planning Area of the City of Owen Sound.

This planning area is proximate to a Provincial Connecting Link (10th Street/Highway 6/21), County Road (2nd Ave W/Grey Road 1) and local City streets.

I have attached a few schedules from the City's updated Official Plan (OP) for your convenient reference.

During our discussion, Pam Coulter, Director of Community Services, noted that the City's OP has a secondary planning policy for the West Harbour Planning Area.

While the OP should be read in its entirety – here is an excerpt of particular relevance to our discussion:

5.3.3 Road System
5.3.3.1 Where significant redevelopment is proposed for former industrial lands or major development with a regional focus is proposed within the West Harbour Planning Area, the City may require a comprehensive traffic analysis to assess impacts on the area. To that end the City may require the developer to execute an agreement with the City and/or the County providing for financial contributions to provide for any improvements to the traffic system necessary to support the development.
5.3.3.2 Traffic improvements that may be required by the City and/or the County may include, but are not limited to, intersection improvements, road widening and contributions to future bridge construction. The City shall ensure bridge corridors, consistent with the Transportation Plan, are maintained, free of significant development, through the lands east of 1st Avenue West at the end of 14th Street West and north of 11th Street West so as to leave various options open for a future bridge across the inner harbour.

The City had already agreed to eliminate requested intersection analysis for three intersections - 1st Avenue West at 11th St W, 12th St W and 14th St W – and today we agreed further to eliminate the need for the Saturday peak hour analysis.

With the reduced requirements and the excerpts from the City's OP noted above in mind, we believe the requested scope of the TIS to include the six remaining intersections is reasonable, the cost of which should be borne by the Developer.

We confirm that the intersections include:

1. 10th Street West (Highway 6/21) and 2nd Avenue West (Grey Road 1)
2. 10th Street West (Highway 6/21) and 1st Avenue West
3. 10th Street East (Highway 6/21) and 2nd Avenue East
4. 2nd Avenue West (Grey Road 1) and 11th Street West
5. 2nd Avenue West (Grey Road 1) and 12th Street West
6. 2nd Avenue West (Grey Road 1) and 14th Street West

Attached is a GIS image to identify these intersections.

Please contact me should you have any further questions or comments.

As well, Jacklyn Iezzi will follow up with further information about the City's Community Improvement Plan.

Thank you.

Chris Webb, P.Eng.
Manager of Engineering Services
City of Owen Sound

Madeleine Ferguson

From: Kerianne Hagan
Sent: October 29, 2021 2:40 PM
To: Emma Howlett; Madeleine Ferguson
Subject: FW: Traffic and Transportation Study Scope Inquiry

Kerianne Hagan | Engineering Intern
DID: 705.434.3407

From: Chris Webb <cwebb@owensound.ca>
Sent: August 26, 2021 12:20 PM
To: Kerianne Hagan <khagan@cfcrozier.ca>
Cc: Dana Goetz <dgoetz@owensound.ca>; Jim Stevenson <Jim.Stevenson@grey.ca>; Marck,Matt <Matt.Marck@grey.ca>; Amy Cann <acann@owensound.ca>; George Cooper <gcooper@cfcrozier.ca>; Alexander Fleming <afleming@cfcrozier.ca>; Madeleine Ferguson <mferguson@cfcrozier.ca>; dcarreiro@ppcltd.ca; ajw@kingsleyca.com; canderson@kingsleyca.com
Subject: RE: Traffic and Transportation Study Scope Inquiry

Hi Kerianne,

This meets the City's expectations.

Thanks for facilitating this.

Chris Webb, P.Eng.
Manager of Engineering Services
City of Owen Sound

From: Kerianne Hagan <khagan@cfcrozier.ca>
Sent: August 25, 2021 12:55 PM
To: Chris Webb <cwebb@owensound.ca>
Cc: Dana Goetz <dgoetz@owensound.ca>; Jim Stevenson <Jim.Stevenson@grey.ca>; Marck,Matt <Matt.Marck@grey.ca>; Amy Cann <acann@owensound.ca>; George Cooper <gcooper@cfcrozier.ca>; Alexander Fleming <afleming@cfcrozier.ca>; Madeleine Ferguson <mferguson@cfcrozier.ca>; dcarreiro@ppcltd.ca; ajw@kingsleyca.com; canderson@kingsleyca.com
Subject: RE: Traffic and Transportation Study Scope Inquiry

Hello Chris,

Following up from the meeting with the City and County on Wednesday August 18th, we have prepared a revised terms of reference.
If the City and County could please confirm the following for our records:

Traffic Impact Study

- The Traffic Impact Study (TIS) will review the following intersections:

    - The proposed site accesses;
    - 10th Street East and 2nd Avenue East;
    - 10th Street West and 1st Avenue West;
    - 10th Street West and 2nd Avenue West/Grey Road 1;
    - 14th Street West and 2nd Avenue West/Grey Road 1;
    - 11th Street West and 2nd Avenue West/Grey Road 1;
    - 12th Street West and 2nd Avenue West/Grey Road 1; and
- The TIS will analyse the existing conditions, as well as, future background and future total conditions during the a.m. and p.m. weekday, and Saturday peak hours for the 5-year horizon (2026) from the date of this study.
    - A background growth rate of 2% per year will be applied.
    - Background road improvements will be considered.
- ITE Trip Generation 10th Edition will be used to compile the expected trip generation for the development.
    - Assignment of site generated traffic on the boundary road network based on existing travel patterns and expected employment catchment areas.
- Site distance availability at the site assess(es) will be reviewed based on TAC GDGCR. Auxiliary turn lanes warrants will be conducted based on criteria outlined in OTM and the MTO Design Supplement for TAC.

Transportation Study (carryover from previous discussion)

- The Transportation Study (TS) will adhere to the goals and recommendations set forth in the City's Official Plan, Transportation Master Plan and Trails Master Plan.
- The TS will review availability of pedestrian and cyclist connections, as well as connections with the Owen Sound Transit System.
- The TS will review the accessibility of pedestrian connections in accordance with AODA.
- The TS will be included within the TIS report.

Thank you,

Kerianne Hagan | Engineering Intern
1 First Street, Suite 200 | Collingwood, ON L9Y 1A1
T: 705.446.3510

Crozier Connections:

Read our latest news and announcements here.

From: Chris Webb <cwebb@owensound.ca>
Sent: July 26, 2021 9:20 AM
To: Kerianne Hagan <khagan@cfcrozier.ca>

Cc: Dana Goetz <dgoetz@owensound.ca>; Jim Stevenson <Jim.Stevenson@grey.ca>; Marck,Matt <Matt.Marck@grey.ca>; Amy Cann <acann@owensound.ca>
Subject: Traffic and Transportation Study Scope Inquiry

Hi Kerianne,

The TIS should include the following:

- Weekday AM and PM peak hours and Saturday peak hours of adjacent roads for analysis.
- Study area to include the following signalized intersections:
  - 10th Street East and 2nd Avenue East;
  - 10th Street West and 1st Avenue West;
  - 10th Street West and 2nd Avenue West/Grey Road 1;
  - 14th Street West and 1st Avenue West
  - 14th Street West and 2nd Avenue West/Grey Road 1;

- The following unsignalized intersections:
  - 11th Street West and 2nd Avenue West/Grey Road 1;
  - 11th Street West and 1st Avenue West;
  - 12th Street West and 2nd Avenue West/Grey Road 1;
  - 12th Street West and 1st Avenue West

- Proposed Site driveway connections to 11th Street West & 12th Street West.

- Horizon Year: Five years from TIS submission (2026).
- Background Growth Rate: 2% per annum
- Background roadway improvements.
- Trip Generation: ITE Trip Generation Manual 10th Edition.
- Trip Distribution: Existing traffic patterns.
- TIA Guidelines: City of Owen Sound Municipal Engineering Design Standards.

The required Transportation Study must demonstrate regard for the goals and intent of the City's Official Plan, Transportation Master Plan, Accessibility for Ontarians with Disabilities Act and the Trails Master Plan to ensure pedestrian access and compatibility with transit routes, bicycle routes and multiuse trails. The Transportation Study may be incorporated with the Traffic Impact Study.

Please note that this scope has been reviewed and approved by the County of Grey Transportation Services Department.

Chris Webb, P.Eng.
Manager of Engineering Services
City of Owen Sound

From: Kerianne Hagan <khagan@cfcrozier.ca>
Sent: July 15, 2021 12:00 PM
To: Chris Webb <cwebb@owensound.ca>
Cc: Madeleine Ferguson <mferguson@cfcrozier.ca>
Subject: Traffic and Transportation Study Scope Inquiry

Good Morning Chris,

I hope this email finds you well. C.F. Crozier & Associates has been retained to provide transportation engineering services for a residential development in Owen Sound located at 1144 1st Avenue West. While compiling our Terms of Reference, we had some questions arise that we hope you can answer. Then we will be able to send our completed TOR for your review.

The development is planned for 224 residential units, making it a "moderate size" development based on the City's Site Plan Standards. At this size a reduced traffic study is acceptable which would only require the analysis of the site accesses. Can you please clarify what the main differences and considerations are for a reduced traffic study?

The pre-consultation notes also request a Transportation Study be conducted. We were unable to locate any information regarding the scope of a Transportation Study for the City of Owen Sound and were wondering if you could provide us a sample report or a table of contents example so that we may include all information in our TOR and submission. Additionally, would incorporating the Transportation Study within the TIS be accepted?

Once we have some clarification for these questions we will circulate our terms of reference for your review.

Thank you,

Kerianne Hagan | Engineering Intern
40 Huron Street, Suite 301 | Collingwood, ON L9Y 4R3
T: 705.446.3510

CROZIER
CONSULTING ENGINEERS

Crozier Connections:

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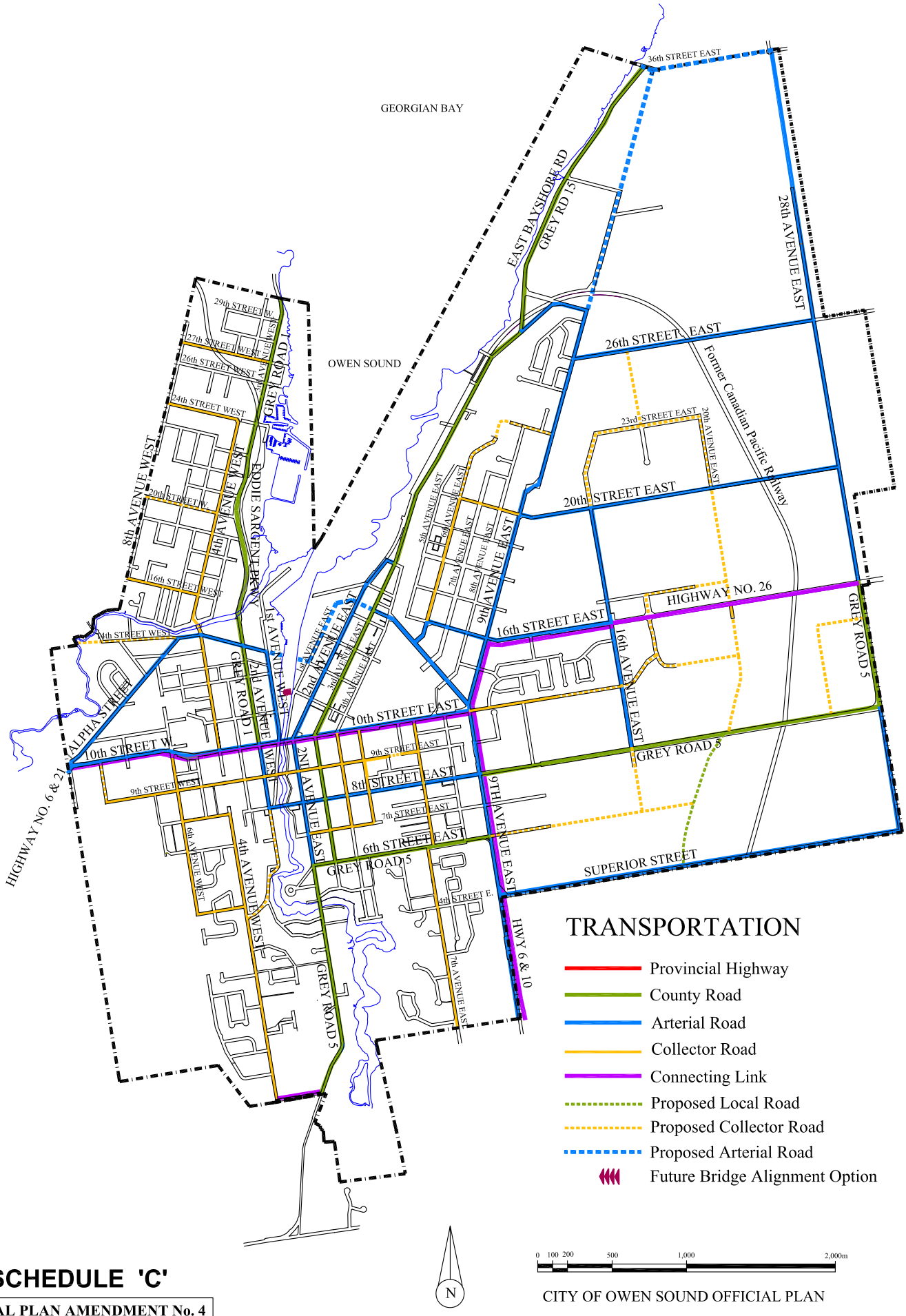
APPENDIX B

Owen Sound's Official Plan - Transportation



SCHEDULE 'C'

OFFICIAL PLAN AMENDMENT No. 4
BY-LAW No. 2012-112

APPENDIX C

Traffic Data

Spectrum

Turning Movement Count
Location Name: 11TH ST W & 2ND AVE W / GREY RD 1
Date: Tue, Sep 28, 2021 Deployment Lead: Theo Daglis

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Turning Movement Count (3 . 11TH ST W & 2ND AVE W / GREY RD 1)

Start Time	N Approach 2ND AVE W						E Approach 11TH ST W						S Approach 2ND AVE W						W Approach 11TH ST W						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:00:00	1	62	0	0	0	63	2	0	0	0	2	2	1	18	1	0	1	20	1	0	0	0	0	1	86	
07:15:00	0	72	0	0	0	72	0	0	0	0	0	0	0	11	0	0	1	11	2	0	0	0	2	2	85	
07:30:00	0	87	0	0	0	87	0	0	2	0	3	2	0	25	0	0	0	25	4	2	0	0	1	6	120	
07:45:00	1	95	0	0	0	96	0	1	0	0	0	1	0	39	1	0	0	40	4	3	1	0	0	8	145	436
08:00:00	0	106	0	0	1	106	1	1	0	0	1	2	3	28	1	0	9	32	4	2	1	0	3	7	147	497
08:15:00	3	131	3	0	0	137	1	0	0	1	0	2	1	61	0	0	7	62	1	3	0	0	6	4	205	617
08:30:00	1	144	2	0	1	147	2	0	2	0	3	4	2	30	4	0	4	36	3	1	1	0	2	5	192	689
08:45:00	2	125	4	0	1	131	2	4	3	0	3	9	2	52	4	0	1	58	7	1	0	0	0	8	206	750
09:00:00	2	76	2	0	1	80	3	2	1	0	0	6	1	41	1	0	4	43	2	0	0	0	3	2	131	734
09:15:00	4	81	3	0	2	88	0	2	1	0	3	3	1	36	1	0	0	38	2	1	0	0	0	3	132	661
09:30:00	1	78	0	0	1	79	1	2	0	0	1	3	2	27	3	0	0	32	1	1	2	0	0	4	118	587
09:45:00	0	61	1	0	0	62	0	3	0	0	0	3	1	45	1	0	2	47	4	8	0	0	0	12	124	505
BREAK																										
16:00:00	2	80	0	0	1	82	4	3	2	0	1	9	1	72	4	0	2	77	6	2	0	0	2	8	176	
16:15:00	2	75	1	0	0	78	1	1	0	0	1	2	1	50	3	0	1	54	5	3	3	0	2	11	145	
16:30:00	0	88	3	0	3	91	2	1	1	0	7	4	3	76	2	0	3	81	1	0	2	0	1	3	179	
16:45:00	3	87	3	0	0	93	1	4	2	0	0	7	1	75	2	0	7	78	5	4	1	0	1	10	188	688
17:00:00	1	85	1	0	3	87	1	0	0	0	1	1	1	70	1	0	8	72	6	0	4	0	2	10	170	682
17:15:00	2	70	2	0	1	74	1	4	2	0	0	7	5	56	1	0	3	62	3	0	1	0	0	4	147	684
17:30:00	1	81	1	0	0	83	2	2	0	0	1	4	1	54	2	0	1	57	3	0	4	0	0	7	151	656
17:45:00	1	56	2	0	1	59	0	3	0	0	0	3	0	51	1	0	4	52	4	2	0	0	3	6	120	588
18:00:00	0	77	2	0	4	79	2	1	0	0	1	3	1	61	0	0	1	62	4	2	2	0	0	8	152	570
18:15:00	1	63	0	0	0	64	0	1	1	0	0	2	0	44	1	0	1	45	0	3	3	0	0	6	117	540
18:30:00	0	53	3	0	0	56	0	3	1	0	1	4	2	44	2	0	2	48	2	4	0	0	0	6	114	503
18:45:00	1	68	2	0	0	71	3	1	0	0	2	4	0	40	1	0	3	41	3	2	0	0	0	5	121	504
Grand Total	29	2001	35	0	20	2065	29	39	18	1	31	87	30	1106	37	0	65	1173	77	44	25	0	28	146	**3471**	-
Approach%	1.4%	96.9%	1.7%	0%		-	33.3%	44.8%	20.7%	1.1%		-	2.6%	94.3%	3.2%	0%		-	52.7%	30.1%	17.1%	0%		-	-	-
Totals %	0.8%	57.6%	1%	0%		59.5%	0.8%	1.1%	0.5%	0%		2.5%	0.9%	31.9%	1.1%	0%		33.8%	2.2%	1.3%	0.7%	0%		4.2%	-	-
Heavy	0	48	0	0		-	0	1	0	1		-	0	31	2	0		-	4	2	0	0		-	-	-
Heavy %	0%	2.4%	0%	0%		-	0%	2.6%	0%	100%		-	0%	2.8%	5.4%	0%		-	5.2%	4.5%	0%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: 11TH ST W & 2ND AVE W / GREY RD 1
Date: Tue, Sep 28, 2021 Deployment Lead: Theo Daglis

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 08:00 AM - 09:00 AM **Weather:**

Start Time	N Approach 2ND AVE W						E Approach 11TH ST W						S Approach 2ND AVE W						W Approach 11TH ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:00:00	0	106	0	0	1	106	1	1	0	0	1	2	3	28	1	0	9	32	4	2	1	0	3	7	147
08:15:00	3	131	3	0	0	137	1	0	0	1	0	2	1	61	0	0	7	62	1	3	0	0	6	4	205
08:30:00	1	144	2	0	1	147	2	0	2	0	3	4	2	30	4	0	4	36	3	1	1	0	2	5	192
08:45:00	2	125	4	0	1	131	2	4	3	0	3	9	2	52	4	0	1	58	7	1	0	0	0	8	206
Grand Total	6	506	9	0	3	521	6	5	5	1	7	17	8	171	9	0	21	188	15	7	2	0	11	24	**750**
Approach%	1.2%	97.1%	1.7%	0%		-	35.3%	29.4%	29.4%	5.9%		-	4.3%	91%	4.8%	0%		-	62.5%	29.2%	8.3%	0%		-	**-**
Totals %	0.8%	67.5%	1.2%	0%		69.5%	0.8%	0.7%	0.7%	0.1%		2.3%	1.1%	22.8%	1.2%	0%		25.1%	2%	0.9%	0.3%	0%		3.2%	**-**
PHF	0.5	0.88	0.56	0		0.89	0.75	0.31	0.42	0.25		0.47	0.67	0.7	0.56	0		0.76	0.54	0.58	0.5	0		0.75	**-**
Heavy	0	9	0	0		9	0	0	0	1		1	0	11	2	0		13	0	1	0	0		1	**-**
Heavy %	0%	1.8%	0%	0%		1.7%	0%	0%	0%	100%		5.9%	0%	6.4%	22.2%	0%		6.9%	0%	14.3%	0%	0%		4.2%	**-**
Lights	6	497	8	0		511	5	5	5	0		15	8	160	7	0		175	15	6	2	0		23	**-**
Lights %	100%	98.2%	88.9%	0%		98.1%	83.3%	100%	100%	0%		88.2%	100%	93.6%	77.8%	0%		93.1%	100%	85.7%	100%	0%		95.8%	**-**
Single-Unit Trucks	0	2	0	0		2	0	0	0	1		1	0	4	1	0		5	0	1	0	0		1	**-**
Single-Unit Trucks %	0%	0.4%	0%	0%		0.4%	0%	0%	0%	100%		5.9%	0%	2.3%	11.1%	0%		2.7%	0%	14.3%	0%	0%		4.2%	**-**
Buses	0	7	0	0		7	0	0	0	0		0	0	6	1	0		7	0	0	0	0		0	**-**
Buses %	0%	1.4%	0%	0%		1.3%	0%	0%	0%	0%		0%	0%	3.5%	11.1%	0%		3.7%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.6%	0%	0%		0.5%	0%	0%	0%	0%		0%	**-**
Bicycles on Road	0	0	1	0		1	1	0	0	0		1	0	0	0	0		0	0	0	0	0		0	**-**
Bicycles on Road %	0%	0%	11.1%	0%		0.2%	16.7%	0%	0%	0%		5.9%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	3	-	-	-	-	-	7	-	-	-	-	-	21	-	-	-	-	-	11	-	**-**
Pedestrians%	-	-	-	-	7.1%		-	-	-	-	16.7%		-	-	-	-	50%		-	-	-	-	26.2%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

Turning Movement Count
Location Name: 11TH ST W & 2ND AVE W / GREY RD 1
Date: Tue, Sep 28, 2021 Deployment Lead: Theo Daglis

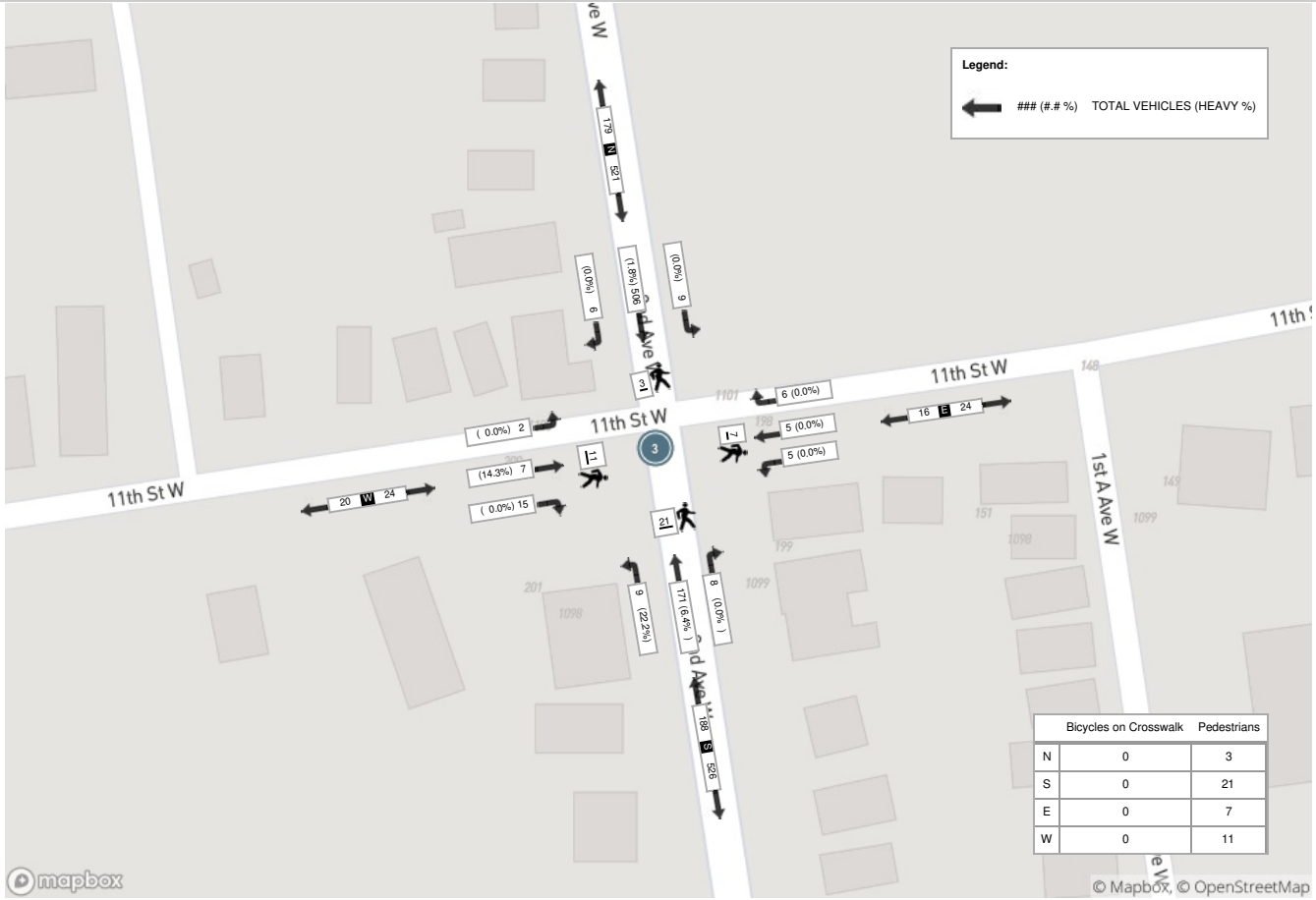
Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 04:00 PM - 05:00 PM Weather: Overcast Clouds (15.21 °C)

Start Time	N Approach 2ND AVE W						E Approach 11TH ST W						S Approach 2ND AVE W						W Approach 11TH ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:00:00	2	80	0	0	1	82	4	3	2	0	1	9	1	72	4	0	2	77	6	2	0	0	2	8	176
16:15:00	2	75	1	0	0	78	1	1	0	0	1	2	1	50	3	0	1	54	5	3	3	0	2	11	145
16:30:00	0	88	3	0	3	91	2	1	1	0	7	4	3	76	2	0	3	81	1	0	2	0	1	3	179
16:45:00	3	87	3	0	0	93	1	4	2	0	0	7	1	75	2	0	7	78	5	4	1	0	1	10	188
Grand Total	7	330	7	0	4	344	8	9	5	0	9	22	6	273	11	0	13	290	17	9	6	0	6	32	**688**
Approach%	2%	95.9%	2%	0%		-	36.4%	40.9%	22.7%	0%		-	2.1%	94.1%	3.8%	0%		-	53.1%	28.1%	18.8%	0%		-	**-**
Totals %	1%	48%	1%	0%		50%	1.2%	1.3%	0.7%	0%		3.2%	0.9%	39.7%	1.6%	0%		42.2%	2.5%	1.3%	0.9%	0%		4.7%	**-**
PHF	0.58	0.94	0.58	0		0.92	0.5	0.56	0.63	0		0.61	0.5	0.9	0.69	0		0.9	0.71	0.56	0.5	0		0.73	**-**
Heavy	0	11	0	0		11	0	0	0	0		0	0	3	0	0		3	1	0	0	0		1	**-**
Heavy %	0%	3.3%	0%	0%		3.2%	0%	0%	0%	0%		0%	0%	1.1%	0%	0%		1%	5.9%	0%	0%	0%		3.1%	**-**
Lights	7	318	7	0		332	8	9	4	0		21	6	270	11	0		287	16	8	6	0		30	**-**
Lights %	100%	96.4%	100%	0%		96.5%	100%	100%	80%	0%		95.5%	100%	98.9%	100%	0%		99%	94.1%	88.9%	100%	0%		93.8%	**-**
Single-Unit Trucks	0	6	0	0		6	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	1.8%	0%	0%		1.7%	0%	0%	0%	0%		0%	0%	1.1%	0%	0%		1%	0%	0%	0%	0%		0%	**-**
Buses	0	5	0	0		5	0	0	0	0		0	0	0	0	0		0	1	0	0	0		1	**-**
Buses %	0%	1.5%	0%	0%		1.5%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	5.9%	0%	0%	0%		3.1%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Bicycles on Road	0	1	0	0		1	0	0	1	0		1	0	0	0	0		0	0	1	0	0		1	**-**
Bicycles on Road %	0%	0.3%	0%	0%		0.3%	0%	0%	20%	0%		4.5%	0%	0%	0%	0%		0%	0%	11.1%	0%	0%		3.1%	**-**
Pedestrians	-	-	-	-	4	-	-	-	-	-	9	-	-	-	-	-	13	-	-	-	-	-	6	-	**-**
Pedestrians%	-	-	-	-	12.5%		-	-	-	-	28.1%		-	-	-	-	40.6%		-	-	-	-	18.8%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

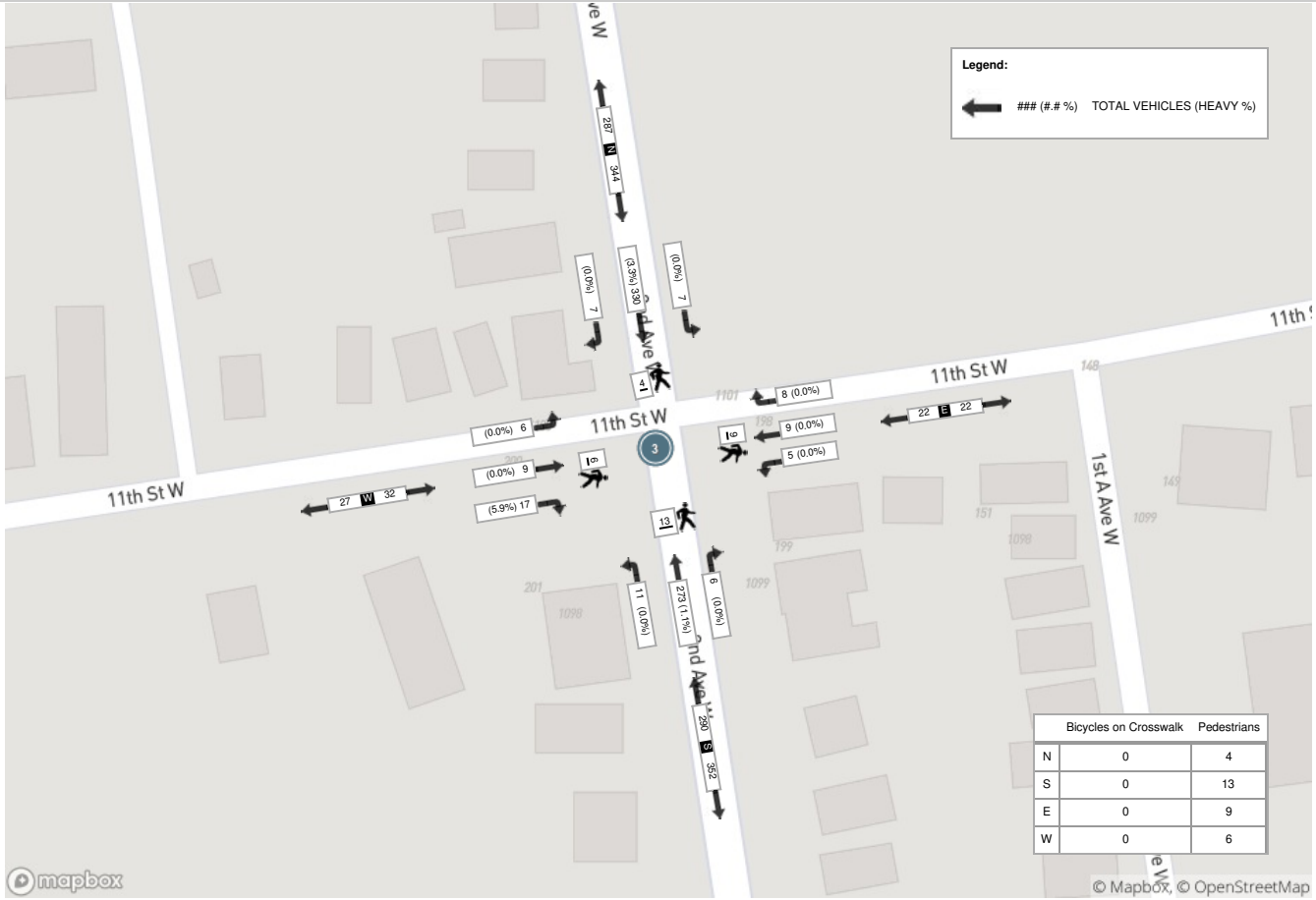
Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 08:00 AM - 09:00 AM Weather:



Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 04:00 PM - 05:00 PM Weather: Overcast Clouds (15.21 °C)



Spectrum

Turning Movement Count
Location Name: 12TH ST W & 2ND AVE W / GREY RD 1
Date: Tue, Sep 28, 2021 Deployment Lead: Theo Daglis

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Turning Movement Count (2 . 12TH ST W & 2ND AVE W / GREY RD 1)

Start Time	N Approach 2ND AVE W						E Approach 12TH ST W						S Approach 2ND AVE W						W Approach 12TH ST W						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:00:00	0	57	0	0	1	57	0	2	0	0	1	2	0	19	0	0	2	19	3	0	0	0	0	3	81	
07:15:00	0	70	0	0	0	70	0	0	1	0	0	1	2	8	1	0	0	11	1	1	0	0	1	2	84	
07:30:00	1	78	1	0	0	80	0	1	0	0	0	1	1	23	0	0	0	24	3	0	1	0	0	4	109	
07:45:00	0	94	1	0	1	95	1	3	0	0	0	4	4	35	1	0	1	40	2	0	1	0	0	3	142	416
08:00:00	0	105	2	0	0	107	0	2	0	0	0	2	0	25	4	0	1	29	2	1	0	0	0	3	141	476
08:15:00	0	132	2	0	0	134	1	1	1	0	0	3	2	57	3	0	0	62	7	2	1	0	0	10	209	601
08:30:00	1	135	2	0	0	138	0	2	0	1	0	3	1	30	2	0	4	33	5	2	1	0	0	8	182	674
08:45:00	3	123	1	0	0	127	1	1	1	0	3	3	1	48	3	0	0	52	1	0	2	0	0	3	185	717
09:00:00	1	74	0	0	0	75	0	1	0	0	2	1	3	41	0	0	2	44	4	0	0	0	0	4	124	700
09:15:00	1	80	0	0	2	81	2	4	2	0	0	8	2	32	1	0	2	35	0	2	0	0	0	2	126	617
09:30:00	1	76	0	0	0	77	0	2	0	0	0	2	2	25	3	0	0	30	3	0	0	0	0	3	112	547
09:45:00	1	60	1	0	0	62	2	4	0	1	0	7	1	41	3	0	1	45	3	0	0	0	1	3	117	479
BREAK																										
16:00:00	2	80	1	0	0	83	0	8	1	0	0	9	1	73	3	0	3	77	1	1	1	0	0	3	172	
16:15:00	1	69	1	0	0	71	1	6	2	0	0	9	1	47	6	0	1	54	3	1	1	0	3	5	139	
16:30:00	2	88	2	0	2	92	4	3	1	0	3	8	0	76	4	0	1	80	3	0	2	0	1	5	185	
16:45:00	2	90	3	0	0	95	3	8	1	0	0	12	2	73	4	0	0	79	3	1	1	0	2	5	191	687
17:00:00	1	85	0	0	4	86	4	5	0	0	0	9	1	68	6	0	1	75	5	0	2	0	3	7	177	692
17:15:00	0	75	0	0	0	75	2	9	0	0	0	11	0	54	3	0	0	57	4	0	0	0	0	4	147	700
17:30:00	0	78	0	0	0	78	3	5	0	0	0	8	0	52	5	0	0	57	1	0	2	0	2	3	146	661
17:45:00	3	56	2	0	0	61	2	2	2	0	0	6	0	50	3	0	0	53	2	0	1	0	0	3	123	593
18:00:00	0	76	0	0	0	76	2	2	0	0	1	4	0	59	6	0	1	65	2	1	2	0	2	5	150	566
18:15:00	0	68	1	0	2	69	0	7	0	0	1	7	2	43	2	0	1	47	0	2	0	0	0	2	125	544
18:30:00	1	51	0	0	0	52	0	7	0	0	0	7	0	39	4	0	1	43	1	2	0	0	0	3	105	503
18:45:00	0	71	0	0	5	71	2	9	0	0	2	11	1	35	5	0	1	41	1	0	0	0	0	1	124	504
Grand Total	21	1971	20	0	17	2012	30	94	12	2	13	138	27	1053	72	0	23	1152	60	16	18	0	15	94	**3396**	-
Approach%	1%	98%	1%	0%		-	21.7%	68.1%	8.7%	1.4%		-	2.3%	91.4%	6.3%	0%		-	63.8%	17%	19.1%	0%		-	**-**	-
Totals %	0.6%	58%	0.6%	0%		59.2%	0.9%	2.8%	0.4%	0.1%		4.1%	0.8%	31%	2.1%	0%		33.9%	1.8%	0.5%	0.5%	0%		2.8%	**-**	-
Heavy	2	48	0	0		-	0	1	0	2		-	1	31	1	0		-	1	2	0	0		-	**-**	-
Heavy %	9.5%	2.4%	0%	0%		-	0%	1.1%	0%	100%		-	3.7%	2.9%	1.4%	0%		-	1.7%	12.5%	0%	0%		-	**-**	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-

Spectrum

Turning Movement Count
Location Name: 12TH ST W & 2ND AVE W / GREY RD 1
Date: Tue, Sep 28, 2021 Deployment Lead: Theo Daglis

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 08:00 AM - 09:00 AM **Weather:**

Start Time	N Approach 2ND AVE W						E Approach 12TH ST W						S Approach 2ND AVE W						W Approach 12TH ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:00:00	0	105	2	0	0	107	0	2	0	0	0	2	0	25	4	0	1	29	2	1	0	0	0	3	141
08:15:00	0	132	2	0	0	134	1	1	1	0	0	3	2	57	3	0	0	62	7	2	1	0	0	10	209
08:30:00	1	135	2	0	0	138	0	2	0	1	0	3	1	30	2	0	4	33	5	2	1	0	0	8	182
08:45:00	3	123	1	0	0	127	1	1	1	0	3	3	1	48	3	0	0	52	1	0	2	0	0	3	185
Grand Total	4	495	7	0	0	506	2	6	2	1	3	11	4	160	12	0	5	176	15	5	4	0	0	24	**717**
Approach%	0.8%	97.8%	1.4%	0%		-	18.2%	54.5%	18.2%	9.1%		-	2.3%	90.9%	6.8%	0%		-	62.5%	20.8%	16.7%	0%		-	**-**
Totals %	0.6%	69%	1%	0%		70.6%	0.3%	0.8%	0.3%	0.1%		1.5%	0.6%	22.3%	1.7%	0%		24.5%	2.1%	0.7%	0.6%	0%		3.3%	**-**
PHF	0.33	0.92	0.88	0		0.92	0.5	0.75	0.5	0.25		0.92	0.5	0.7	0.75	0		0.71	0.54	0.63	0.5	0		0.6	**-**
Heavy	0	9	0	0		9	0	1	0	1		2	1	9	1	0		11	0	1	0	0		1	**-**
Heavy %	0%	1.8%	0%	0%		1.8%	0%	16.7%	0%	100%		18.2%	25%	5.6%	8.3%	0%		6.3%	0%	20%	0%	0%		4.2%	**-**
Lights	4	486	7	0		497	2	5	2	0		9	3	151	10	0		164	15	3	4	0		22	**-**
Lights %	100%	98.2%	100%	0%		98.2%	100%	83.3%	100%	0%		81.8%	75%	94.4%	83.3%	0%		93.2%	100%	60%	100%	0%		91.7%	**-**
Single-Unit Trucks	0	2	0	0		2	0	1	0	1		2	0	4	0	0		4	0	1	0	0		1	**-**
Single-Unit Trucks %	0%	0.4%	0%	0%		0.4%	0%	16.7%	0%	100%		18.2%	0%	2.5%	0%	0%		2.3%	0%	20%	0%	0%		4.2%	**-**
Buses	0	7	0	0		7	0	0	0	0		0	0	5	1	0		6	0	0	0	0		0	**-**
Buses %	0%	1.4%	0%	0%		1.4%	0%	0%	0%	0%		0%	0%	3.1%	8.3%	0%		3.4%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	1	0	0	0		1	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	25%	0%	0%	0%		0.6%	0%	0%	0%	0%		0%	**-**
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	1	0		1	0	1	0	0		1	**-**
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	8.3%	0%		0.6%	0%	20%	0%	0%		4.2%	**-**
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	5	-	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	37.5%		-	-	-	-	62.5%		-	-	-	-	0%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

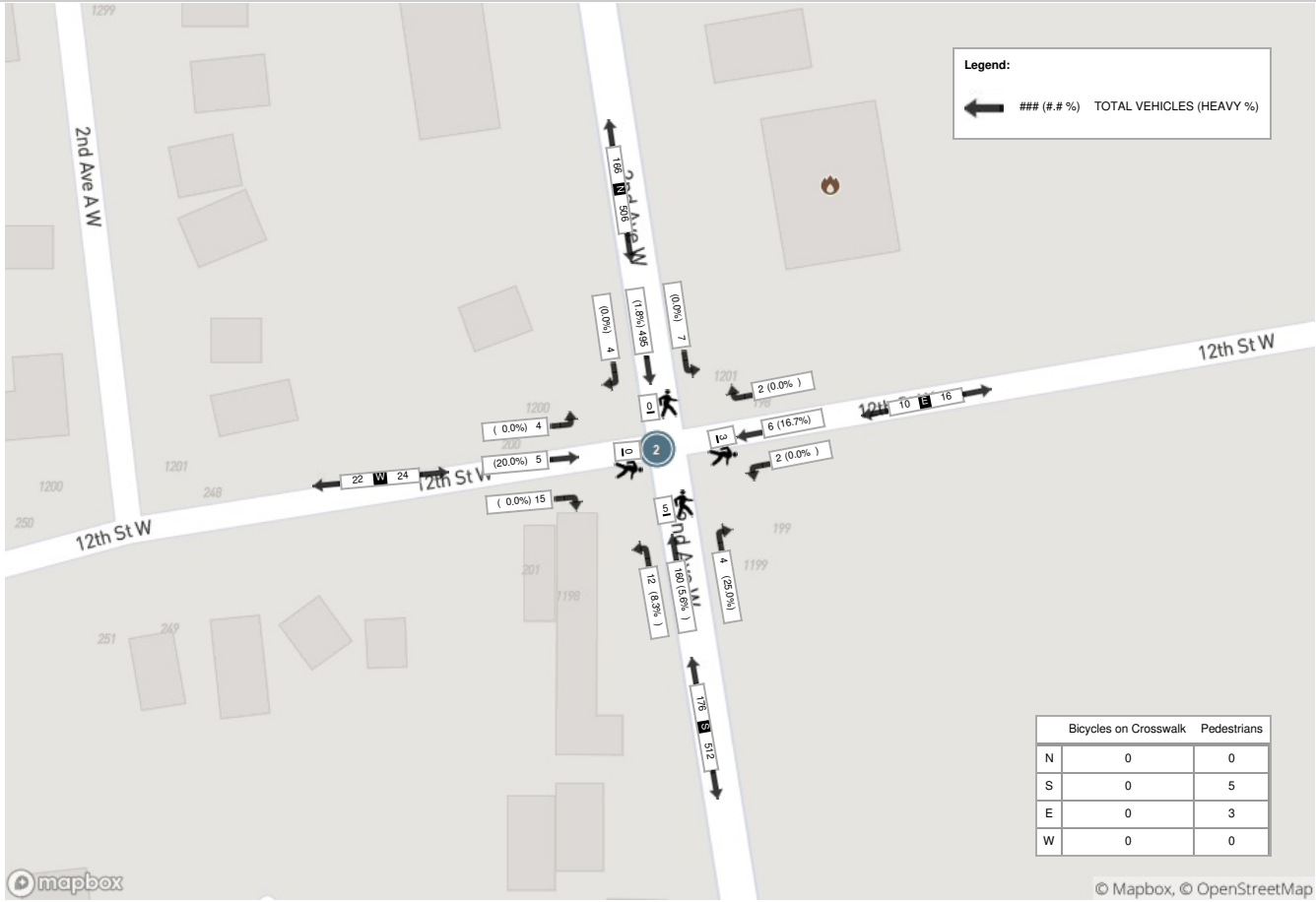
Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (15.21 °C)

Start Time	N Approach 2ND AVE W						E Approach 12TH ST W						S Approach 2ND AVE W						W Approach 12TH ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:30:00	2	88	2	0	2	92	4	3	1	0	3	8	0	76	4	0	1	80	3	0	2	0	1	5	185
16:45:00	2	90	3	0	0	95	3	8	1	0	0	12	2	73	4	0	0	79	3	1	1	0	2	5	191
17:00:00	1	85	0	0	4	86	4	5	0	0	0	9	1	68	6	0	1	75	5	0	2	0	3	7	177
17:15:00	0	75	0	0	0	75	2	9	0	0	0	11	0	54	3	0	0	57	4	0	0	0	0	4	147
Grand Total	5	338	5	0	6	348	13	25	2	0	3	40	3	271	17	0	2	291	15	1	5	0	6	21	**700**
Approach%	1.4%	97.1%	1.4%	0%		-	32.5%	62.5%	5%	0%		-	1%	93.1%	5.8%	0%		-	71.4%	4.8%	23.8%	0%		-	**-**
Totals %	0.7%	48.3%	0.7%	0%		49.7%	1.9%	3.6%	0.3%	0%		5.7%	0.4%	38.7%	2.4%	0%		41.6%	2.1%	0.1%	0.7%	0%		3%	**-**
PHF	0.63	0.94	0.42	0		0.92	0.81	0.69	0.5	0		0.83	0.38	0.89	0.71	0		0.91	0.75	0.25	0.63	0		0.75	**-**
Heavy	0	6	0	0		6	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Heavy %	0%	1.8%	0%	0%		1.7%	0%	0%	0%	0%		0%	0%	1.1%	0%	0%		1%	0%	0%	0%	0%		0%	**-**
Lights	5	332	5	0		342	13	25	2	0		40	3	268	17	0		288	15	1	5	0		21	**-**
Lights %	100%	98.2%	100%	0%		98.3%	100%	100%	100%	0%		100%	100%	98.9%	100%	0%		99%	100%	100%	100%	0%		100%	**-**
Single-Unit Trucks	0	2	0	0		2	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0.6%	0%	0%		0.6%	0%	0%	0%	0%		0%	0%	0.7%	0%	0%		0.7%	0%	0%	0%	0%		0%	**-**
Buses	0	4	0	0		4	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Buses %	0%	1.2%	0%	0%		1.1%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.4%	0%	0%		0.3%	0%	0%	0%	0%		0%	**-**
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	6	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	6	-	**-**
Pedestrians%	-	-	-	-	35.3%		-	-	-	-	17.6%		-	-	-	-	11.8%		-	-	-	-	35.3%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

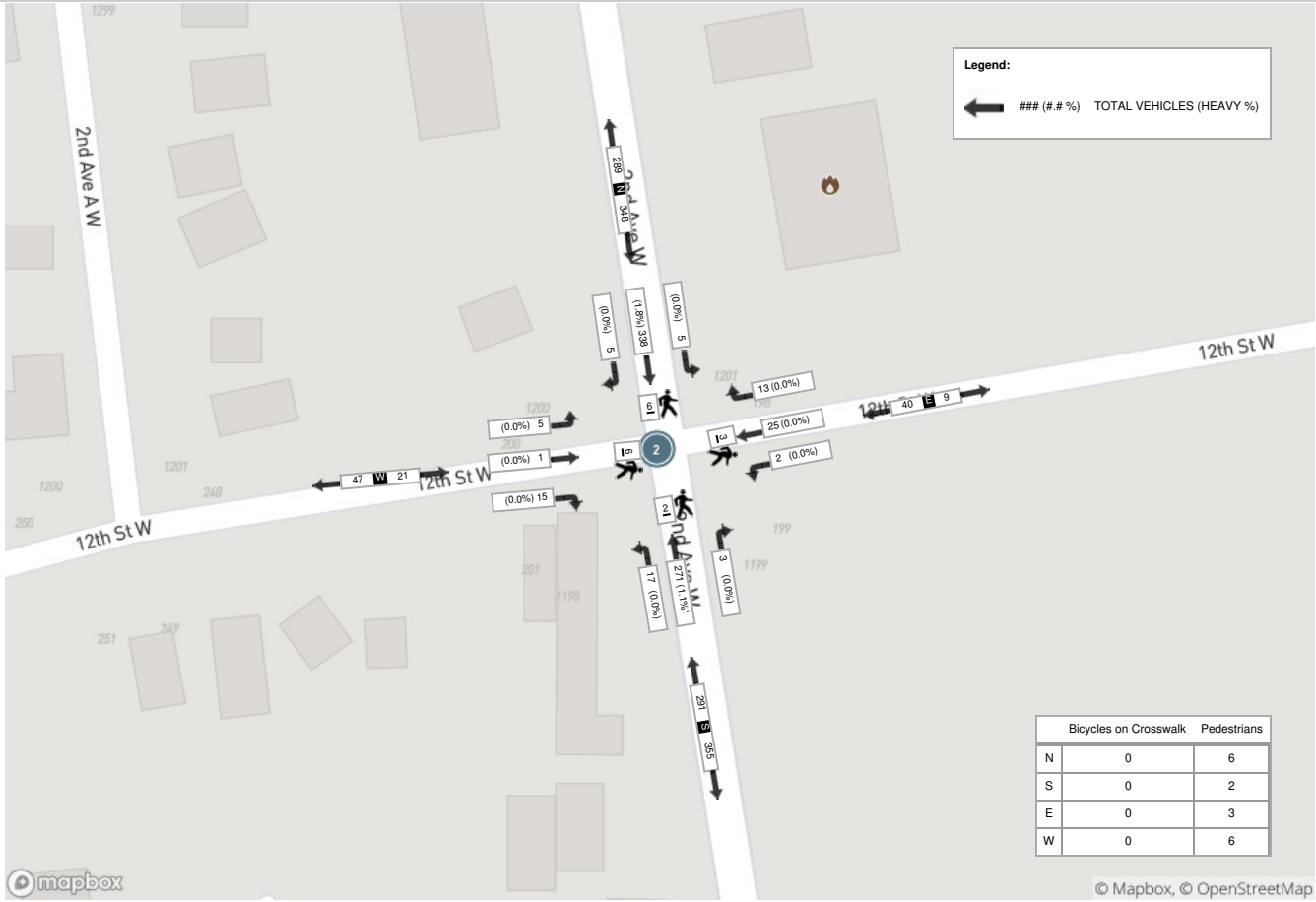
Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 08:00 AM - 09:00 AM **Weather:**



Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (15.21 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	6
S	0	2
E	0	3
W	0	6

Spectrum

Turning Movement Count
Location Name: 14TH ST W & 2ND AVE W / GREY RD 1
Date: Tue, Sep 28, 2021 Deployment Lead: Theo Daglis

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Turning Movement Count (4 . 14TH ST W & 2ND AVE W / GREY RD 1)

Start Time	N Approach 2ND AVE W						E Approach 14TH ST W						S Approach 2ND AVE W						W Approach 14TH ST W						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:00:00	6	49	11	0	2	66	12	7	0	0	1	19	0	13	3	0	2	16	9	9	4	0	0	22	123	
07:15:00	4	55	14	0	0	73	12	17	3	0	0	32	0	8	1	0	2	9	7	8	4	0	0	19	133	
07:30:00	12	65	26	0	0	103	23	10	0	0	1	33	3	18	4	0	2	25	10	13	5	0	1	28	189	
07:45:00	11	66	25	0	1	102	27	12	3	0	0	42	3	26	8	0	1	37	16	22	4	0	0	42	223	668
08:00:00	13	84	40	0	1	137	15	15	1	0	3	31	1	20	3	0	4	24	19	24	6	0	0	49	241	786
08:15:00	20	100	31	0	4	151	34	15	2	0	0	51	3	42	13	0	0	58	30	37	3	0	1	70	330	983
08:30:00	10	99	50	0	2	159	22	19	0	0	1	41	1	23	7	0	5	31	37	29	9	0	0	75	306	1100
08:45:00	13	88	26	0	3	127	33	27	3	0	1	63	2	39	8	0	4	49	28	32	10	0	1	70	309	1186
09:00:00	4	50	25	0	4	79	32	17	3	0	0	52	3	29	10	0	1	42	17	20	10	0	1	47	220	1165
09:15:00	4	64	17	0	3	85	20	23	1	0	0	44	7	17	5	0	5	29	12	23	4	0	1	39	197	1032
09:30:00	9	54	18	0	2	81	31	28	1	0	1	60	1	26	5	0	1	32	18	25	3	0	0	46	219	945
09:45:00	8	42	31	0	0	81	27	21	3	0	0	51	3	31	8	0	4	42	16	19	13	0	0	48	222	858
BREAK																										
16:00:00	5	58	21	0	4	84	55	57	3	0	4	115	4	51	20	0	4	75	17	21	12	0	6	50	324	
16:15:00	17	41	18	0	3	76	76	39	2	0	13	117	4	39	11	0	12	54	23	11	19	0	2	53	300	
16:30:00	11	66	18	0	1	95	75	51	6	0	3	132	6	55	18	0	8	79	13	15	10	0	1	38	344	
16:45:00	12	65	16	0	5	93	74	56	3	0	2	133	5	48	23	0	4	76	20	22	8	0	1	50	352	1320
17:00:00	9	63	23	0	6	95	70	48	5	0	1	123	2	63	8	0	2	73	18	14	13	0	6	45	336	1332
17:15:00	7	56	16	0	1	79	75	42	3	0	0	120	1	47	6	0	4	54	15	15	22	0	0	52	305	1337
17:30:00	7	57	26	0	0	90	66	42	1	0	0	109	3	37	16	0	0	56	14	18	8	0	2	40	295	1288
17:45:00	15	40	20	0	1	75	58	35	2	0	0	95	0	38	12	0	2	50	12	20	12	0	1	44	264	1200
18:00:00	4	63	19	0	4	86	45	33	0	0	2	78	3	44	15	0	4	62	13	14	9	0	0	36	262	1126
18:15:00	7	47	16	0	2	70	50	32	1	0	0	83	4	27	8	0	5	39	15	8	8	0	0	31	223	1044
18:30:00	9	40	22	0	2	71	58	28	2	0	3	88	5	31	5	0	4	41	11	14	10	0	2	35	235	984
18:45:00	7	50	9	0	1	66	42	15	2	0	1	59	1	29	4	0	5	34	14	14	6	0	0	34	193	913
Grand Total	224	1462	538	0	52	2224	1032	689	50	0	37	1771	65	801	221	0	85	1087	404	447	212	0	26	1063	**6145**	-
Approach%	10.1%	65.7%	24.2%	0%		-	58.3%	38.9%	2.8%	0%		-	6%	73.7%	20.3%	0%		-	38%	42.1%	19.9%	0%		-	**-**	-
Totals %	3.6%	23.8%	8.8%	0%		36.2%	16.8%	11.2%	0.8%	0%		28.8%	1.1%	13%	3.6%	0%		17.7%	6.6%	7.3%	3.4%	0%		17.3%	**-**	-
Heavy	8	33	9	0		-	23	20	0	0		-	2	25	4	0		-	16	11	6	0		-	**-**	-
Heavy %	3.6%	2.3%	1.7%	0%		-	2.2%	2.9%	0%	0%		-	3.1%	3.1%	1.8%	0%		-	4%	2.5%	2.8%	0%		-	**-**	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-

Spectrum

Turning Movement Count
Location Name: 14TH ST W & 2ND AVE W / GREY RD 1
Date: Tue, Sep 28, 2021 Deployment Lead: Theo Daglis

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 08:00 AM - 09:00 AM **Weather:**

Start Time	N Approach 2ND AVE W						E Approach 14TH ST W						S Approach 2ND AVE W						W Approach 14TH ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:00:00	13	84	40	0	1	137	15	15	1	0	3	31	1	20	3	0	4	24	19	24	6	0	0	49	241
08:15:00	20	100	31	0	4	151	34	15	2	0	0	51	3	42	13	0	0	58	30	37	3	0	1	70	330
08:30:00	10	99	50	0	2	159	22	19	0	0	1	41	1	23	7	0	5	31	37	29	9	0	0	75	306
08:45:00	13	88	26	0	3	127	33	27	3	0	1	63	2	39	8	0	4	49	28	32	10	0	1	70	309
Grand Total	56	371	147	0	10	574	104	76	6	0	5	186	7	124	31	0	13	162	114	122	28	0	2	264	**1186**
Approach%	9.8%	64.6%	25.6%	0%		-	55.9%	40.9%	3.2%	0%		-	4.3%	76.5%	19.1%	0%		-	43.2%	46.2%	10.6%	0%		-	**-**
Totals %	4.7%	31.3%	12.4%	0%		48.4%	8.8%	6.4%	0.5%	0%		15.7%	0.6%	10.5%	2.6%	0%		13.7%	9.6%	10.3%	2.4%	0%		22.3%	**-**
PHF	0.7	0.93	0.74	0		0.9	0.76	0.7	0.5	0		0.74	0.58	0.74	0.6	0		0.7	0.77	0.82	0.7	0		0.88	**-**
Heavy	3	5	3	0		11	7	5	0	0		12	0	8	2	0		10	3	3	1	0		7	**-**
Heavy %	5.4%	1.3%	2%	0%		1.9%	6.7%	6.6%	0%	0%		6.5%	0%	6.5%	6.5%	0%		6.2%	2.6%	2.5%	3.6%	0%		2.7%	**-**
Lights	53	366	144	0		563	97	71	6	0		174	7	116	29	0		152	110	119	27	0		256	**-**
Lights %	94.6%	98.7%	98%	0%		98.1%	93.3%	93.4%	100%	0%		93.5%	100%	93.5%	93.5%	0%		93.8%	96.5%	97.5%	96.4%	0%		97%	**-**
Single-Unit Trucks	2	2	1	0		5	4	2	0	0		6	0	4	1	0		5	1	2	0	0		3	**-**
Single-Unit Trucks %	3.6%	0.5%	0.7%	0%		0.9%	3.8%	2.6%	0%	0%		3.2%	0%	3.2%	3.2%	0%		3.1%	0.9%	1.6%	0%	0%		1.1%	**-**
Buses	1	3	2	0		6	3	0	0	0		3	0	4	1	0		5	2	0	0	0		2	**-**
Buses %	1.8%	0.8%	1.4%	0%		1%	2.9%	0%	0%	0%		1.6%	0%	3.2%	3.2%	0%		3.1%	1.8%	0%	0%	0%		0.8%	**-**
Articulated Trucks	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	0	1	1	0		2	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	3.9%	0%	0%		1.6%	0%	0%	0%	0%		0%	0%	0.8%	3.6%	0%		0.8%	**-**
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	1	0	0	0		1	**-**
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0.9%	0%	0%	0%		0.4%	**-**
Pedestrians	-	-	-	-	10	-	-	-	-	-	5	-	-	-	-	-	12	-	-	-	-	-	2	-	**-**
Pedestrians%	-	-	-	-	33.3%		-	-	-	-	16.7%		-	-	-	-	40%		-	-	-	-	6.7%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	3.3%		-	-	-	-	0%		**-**

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (15.21 °C)

Start Time	N Approach 2ND AVE W						E Approach 14TH ST W						S Approach 2ND AVE W						W Approach 14TH ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:30:00	11	66	18	0	1	95	75	51	6	0	3	132	6	55	18	0	8	79	13	15	10	0	1	38	344
16:45:00	12	65	16	0	5	93	74	56	3	0	2	133	5	48	23	0	4	76	20	22	8	0	1	50	352
17:00:00	9	63	23	0	6	95	70	48	5	0	1	123	2	63	8	0	2	73	18	14	13	0	6	45	336
17:15:00	7	56	16	0	1	79	75	42	3	0	0	120	1	47	6	0	4	54	15	15	22	0	0	52	305
Grand Total	39	250	73	0	13	362	294	197	17	0	6	508	14	213	55	0	18	282	66	66	53	0	8	185	**1337**
Approach%	10.8%	69.1%	20.2%	0%		-	57.9%	38.8%	3.3%	0%		-	5%	75.5%	19.5%	0%		-	35.7%	35.7%	28.6%	0%		-	**-**
Totals %	2.9%	18.7%	5.5%	0%		27.1%	22%	14.7%	1.3%	0%		38%	1%	15.9%	4.1%	0%		21.1%	4.9%	4.9%	4%	0%		13.8%	**-**
PHF	0.81	0.95	0.79	0		0.95	0.98	0.88	0.71	0		0.95	0.58	0.85	0.6	0		0.89	0.83	0.75	0.6	0		0.89	**-**
Heavy	2	4	0	0		6	4	1	0	0		5	0	3	0	0		3	2	0	1	0		3	**-**
Heavy %	5.1%	1.6%	0%	0%		1.7%	1.4%	0.5%	0%	0%		1%	0%	1.4%	0%	0%		1.1%	3%	0%	1.9%	0%		1.6%	**-**
Lights	37	246	73	0		356	290	196	17	0		503	14	209	55	0		278	64	66	52	0		182	**-**
Lights %	94.9%	98.4%	100%	0%		98.3%	98.6%	99.5%	100%	0%		99%	100%	98.1%	100%	0%		98.6%	97%	100%	98.1%	0%		98.4%	**-**
Single-Unit Trucks	1	3	0	0		4	2	0	0	0		2	0	2	0	0		2	0	0	1	0		1	**-**
Single-Unit Trucks %	2.6%	1.2%	0%	0%		1.1%	0.7%	0%	0%	0%		0.4%	0%	0.9%	0%	0%		0.7%	0%	0%	1.9%	0%		0.5%	**-**
Buses	0	1	0	0		1	2	0	0	0		2	0	0	0	0		0	2	0	0	0		2	**-**
Buses %	0%	0.4%	0%	0%		0.3%	0.7%	0%	0%	0%		0.4%	0%	0%	0%	0%		0%	3%	0%	0%	0%		1.1%	**-**
Articulated Trucks	1	0	0	0		1	0	1	0	0		1	0	1	0	0		1	0	0	0	0		0	**-**
Articulated Trucks %	2.6%	0%	0%	0%		0.3%	0%	0.5%	0%	0%		0.2%	0%	0.5%	0%	0%		0.4%	0%	0%	0%	0%		0%	**-**
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	**-**
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.5%	0%	0%		0.4%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	11	-	-	-	-	-	6	-	-	-	-	-	17	-	-	-	-	-	8	-	**-**
Pedestrians%	-	-	-	-	24.4%		-	-	-	-	13.3%		-	-	-	-	37.8%		-	-	-	-	17.8%		**-**
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	4.4%		-	-	-	-	0%		-	-	-	-	2.2%		-	-	-	-	0%		**-**

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 08:00 AM - 09:00 AM **Weather:**

	Bicycles on Crosswalk	Pedestrians
N	0	10
S	1	12
E	0	5
W	0	2

Crozier & Associates
SUITE 301 40 HURON STREET
COLLINGWOOD ONTARIO, L9Y 4R3
CANADA

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (15.21 °C)

	Bicycles on Crosswalk	Pedestrians
N	2	11
S	1	17
E	0	6
W	0	8

Summary

Bin Size	15 minutes
Time Zone	America/Toronto
Start Time	2021-09-14 0:00
End Time	2021-09-16 23:59
Location	2nd Avenue W and 10th Street West
Latitude and Long	44.56741627,-80.9461557

AM

PEAK HR VOLUME	TIME		PHF
1903	8:15	9:15 AM	0.91

	North						East						South						West					
	Southbound						Westbound						Northbound						Eastbound					
	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC
VOLUME HR TOT	20	235	219	0	4	6	46	459	26	0	0	1	11	143	110	0	4	5	73	547	14	0	2	2
VOL TRUCKS	1	0	4	0	0	0	5	21	0	0	0	0	0	2	1	0	0	0	1	11	0	0	0	0
% trucks	5%	0%	2%	0%	0%	0%	11%	5%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	1%	2%	0%	0%	0%	0%

PM

PEAK HR VOLUME	TIME		PHF
2143	4:15	5:15 PM	0.99

	North						East						South						West					
	Southbound						Westbound						Northbound						Eastbound					
	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC
VOLUME HR TOT	21	167	180	0	4	2	89	652	40	0	1	2	13	216	168	0	6	4	54	528	15	0	3	1
VOL TRUCKS	0	2	4	0	0	0	1	10	0	0	0	0	0	1	2	0	0	0	2	14	0	0	0	0
% trucks	0%	1%	2%	0%	0%	0%	1%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	4%	3%	0%	0%	0%	0%

Summary

Bin Size	15 minutes
Time Zone	America/Toronto
Start Time	2021-09-14 0:00
End Time	2021-09-16 23:59
Location	1st Avenue W and 10th Street West
Latitude and Long	44.56758426,-80.94455594
Lights	
Entry	North
Direction	Southbound

AM

PEAK HR VOLUME	TIME		PHF
1637	8	9:00:00 AM	0.91

	North Southbound						East Westbound						South Northbound						West Eastbound					
	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	
VOLUME HR TOT	12	36	197	0	9	8	42	510	2	0	2	5	14	49	3	0	3	8	11	754	7	0	9	
VOL TRUCKS	1	0	2	0	0	0	3	27	1	0	0	0	1	1	0	0	0	0	1	21	0	0	0	
% trucks	8%	0%	1%	0%	0%	0%	7%	5%	50%	0%	0%	0%	7%	2%	0%	0%	0%	0%	9%	3%	0%	0%	0%	

PM

PEAK HR VOLUME	TIME		PHF
1799	4:30	5:30:00 PM	0.96

	North Southbound						East Westbound						South Northbound						West Eastbound					
	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	
VOLUME HR TOT	26	38	159	0	6	8	63	689	2	0	7	8	13	68	8	0	10	4	8	718	7	0	7	
VOL TRUCKS	0	0	2	0	0	0	1	11	0	0	0	0	1	1	1	0	0	0	0	18	0	0	0	
% trucks	0%	0%	1%	0%	0%	0%	2%	2%	0%	0%	0%	0%	8%	1%	13%	0%	0%	0%	0%	3%	0%	0%	0%	

Summary

Bin Size	15 minutes
Time Zone	America/Toronto
Start Time	2021-09-07 0:00
End Time	2021-09-09 23:59
Location	2nd Avenue E and 10th Street East
Latitude and Long	44.56770672,-80.94322136
Lights	

AM

PEAK HR VOLUME		TIME	PHF
1986	8	9:00:00 AM	0.94

	Southbound						Westbound						Northbound						Eastbound					
	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	
VOLUME HR TOT	192	61	10	0	9	9	23	504	19	0	11	5	30	104	25	0	8	8	19	764	235	0	15	
VOL TRUCKS	6	1	1	0	0	0	0	21	0	0	0	0	1	2	1	0	0	0	1	23	3	0	0	
% trucks	3%	2%	10%	0%	0%	0%	0%	4%	0%	0%	0%	0%	3%	2%	4%	0%	0%	0%	5%	3%	1%	0%	0%	

PM

PEAK HR VOLUME		TIME	PHF
2248	4:15	5:15 PM	0.98

	North						East						South						West					
	Southbound						Westbound						Northbound						Eastbound					
	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	Peds CC	Right	Thru	Left	U-Turn	Peds CW	
VOLUME HR TOT	295	102	25	0	55	11	16	739	32	0	18	16	45	91	39	0	12	13	36	692	136	0	65	
VOL TRUCKS	5	0	0	0	0	0	0	14	0	0	0	0	1	0	1	0	0	0	0	21	1	0	0	
% trucks	2%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	2%	0%	3%	0%	0%	0%	0%	3%	1%	0%	0%	

w

w

20. EPAC300 PROGRAM LOG

Prepared By .....: _Joel Merswolke_ Date: Jan 22 2013

Approved By.....: _____ Date: ____ / ____ / ____

Intersection Name .....: ____2nd Ave West @ 14th St West

UTILITIES - ACCESS

Access Code ..... : _____ Codes: Four Digits (0000 - 9999)

PHASE DATA - VEHICLE TIMINGS

Basic Times Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	___	8	___	8	___	___	___	___	___	___	___	___	___	___	___	___
Passage Time	___	3.0	___	3.0	___	___	___	___	___	___	___	___	___	___	___	___
Maximum No 1	___	30	___	30	___	___	___	___	___	___	___	___	___	___	___	___
Maximum No 2	___	0	___	0	___	___	___	___	___	___	___	___	___	___	___	___
Yellow Change	___	4.0	___	4.0	___	___	___	___	___	___	___	___	___	___	___	___
Red Clearance	___	2.0	___	2.0	___	___	___	___	___	___	___	___	___	___	___	___

Density Times Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Maximum Initial	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Time B4 Reduction	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cars B4 Reduction	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Time To Reduce	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Minimum Gap	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

PHASE DATA - PEDESTRIAN TIMINGS & CONTROL

Pedestrian Times Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk	___	14	___	15	___	___	___	___	___	___	___	___	___	___	___	___
Pedestrian Clearance	___	15	___	15	___	___	___	___	___	___	___	___	___	___	___	___

Pedestrian Control Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Extended Pedestrian Clear	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Act Rest In Walk	___		___	___	___	___	___	___	___	___	___	___	___	___	___	___

Pedestrian Control Entry: “1” = Yes & “0” = No

PHASE DATA - VEHICLE CONTROL

Veh Control Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory	___	1	___		___	___	___		___	___	___	___	___	___	___	___
Dual Entry	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Last Car Passage	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Conditional Service	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Simultaneous Gap	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Vehicle Control Entry: “1” = Yes & “0” = No

PHASE DATA - GENERAL CONTROL

General Control Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Initialization :	0	3	0	1	0	0	0	0	___	___	___	___	___	___	___	___
Non-Act Response :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Vehicle Recall :	___	3	___	3	___	___	___	___	___	___	___	___	___	___	___	___
Pedestrian Recall :	___	2	___	2	___	___	___	___	___	___	___	___	___	___	___	___
Recall Delay :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes :	0	1	2	3	4
Initialization :	NONE	INACTIVE	RED	YELLOW	GREEN
Non-Act Response :	NONE	TO NA I	TO NA II	TO BOTH	-----
Vehicle Recall :	NONE	1 CALL	MINIMUM	MAXIMUM	SOFT
Pedestrian Recall :	NONE	1 CALL	PED	NA	NA+

PHASE DATA - SEQUENCE CONTROL

Sequence Control Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase Omit :	__	___	__	___	__	___	__	___	___	___	___	___	___	___	___	___
Phase - Yellow :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Phase Omit Call :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes :	0	01 TO 16 (# - PHASE)
Phase Omit :	NONE	Phase Is Omitted By # - Phase On
Phase - Yellow :	NONE	Phase Yellow Is Omitted By # - Phase Yellow
Phase Omit Call :	NONE	When Omitted, Dets Call # Phase

PHASE DATA - VEH DETECTOR CONTROL

Control Detector:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Assigned Phase :	_1_	_2_	_3_	_4_	_5_	_6_	_7_	_8_	___	___	___	___	___	___	___	___
Operation Mode :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Switch :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Extend Time :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Delay Time :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Control Detector:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Assigned Phase :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Operation Mode :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Switch :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Extend Time :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Delay Time :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes :	0	1	2	3	4
Operation Mode :	NORM VEH	NORM PED	ONE CALL	ST BAR A	ST BAR B
Assigned Phase :	NONE	Detector Is Assigned To # - Phase			
Switch :	NONE	Detector Is Switched To # - Phase When The Assigned Phase Is Yellow / Red & # - Phase Is Green			

PHASE DATA - VEH DETECTOR CONTROL

Control	Detector:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Assigned Phase	:																
Operation Mode	:																
Switch	:																
Extend Time	:																
Delay Time	:																

Control	Detector:	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Assigned Phase	:																
Operation Mode	:																
Switch	:																
Extend Time	:																
Delay Time	:																

Codes	:	0	1	2	3	4
Operation Mode	:	NORM VEH	NORM PED	ONE CALL	ST BAR A	ST BAR B
Assigned Phase	:	NONE	Detector Is Assigned To # - Phase			
Switch	:	NONE	Detector Is Switched To # - Phase When The Assigned Phase Is Yellow / Red & # - Phase Is Green			

PHASE DATA - PED DETECTOR CONTROL

Control	Detector:	1	2	3	4	5	6	7	8
Assigned Phase	:		2		4		6		8
Operation Mode	:								
Switch	:								
Extend Time	:								
Delay Time	:								

Codes	:	0	1	2	3	4
Operation Mode	:	NORM VEH	NORM PED	ONE CALL	ST BAR A	ST BAR B
Assigned Phase	:	NONE	Detector Is Assigned To # - Phase			
Switch	:	NONE	Detector Is Switched To # - Phase When The Assigned Phase Is Yellow / Red & # - Phase Is Green			

PHASE DATA - SPC DETECTOR CONTROL

Control	Detector:	1	2	3	4	5	6	7	8
Assigned Phase	:								
Operation Mode	:								
Switch	:								
Extend Time	:								
Delay Time	:								

Codes	:	0	1	2	3	4
Operation Mode	:	NORM VEH	NORM PED	ONE CALL	ST BAR A	ST BAR B
Assigned Phase	:	NONE	Detector Is Assigned To # - Phase			
Switch	:	NONE	Detector Is Switched To # - Phase When The Assigned Phase Is Yellow / Red & # - Phase Is Green			

UNIT DATA - STARTUP & MISC

Startup Time	__5_	Time In Seconds
Startup State	____	0-Flash 1-Red
Red Revert	_40_	Time In Tenth Second
Auto Pedestrian Clear	____	0-No 1-Yes
Stop Time Reset	____	0-No 1-Yes
Alternate Sequence	____	00-15 Alt Sequence ##

UNIT DATA - AUTOMATIC FLASH

TST A = Flash ..... : ____ 0 - NO / 1 - YES For TEST A Input For An Automatic Flash Input

Control Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Flash ..... :	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Alt Flash ..... :	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__

Control Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Entry Phase ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Flash Exit Phase ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes ..... :	0	1	2	
Flash ..... :	NO	RED	YEL	All = 0 Then Voltage Monitor Flash
Alt Flash ..... :	NO	YES	--	Used To Provide Wig-Wag Flashing
Flash Entry Phase ..... :	NO	YES	--	Phase(s) To Precede Automatic Flash
Flash Exit Phase ..... :	NO	YES	--	Phase(s) To Follow Automatic Flash

UNIT DATA – OVERLAP

Control Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
OL A Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL B Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL C Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL D Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL E Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL F Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL G Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL H Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL I Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL J Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL K Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL L Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL M Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL N Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL O Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
OL P Phase(s) ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes: 0 – NO 1 - YES Phase Is Included In Overlap

UNIT DATA - OVERLAP

Control Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
OL A Channel(s):																								
OL B Channel(s):																								
OL C Channel(s):																								
OL D Channel(s):																								
OL E Channel(s):																								
OL F Channel(s):																								
OL G Channel(s):																								
OL H Channel(s):																								
OL I Channel(s):																								
OL J Channel(s):																								
OL K Channel(s):																								
OL L Channel(s):																								
OL M Channel(s):																								
OL N Channel(s):																								
OL O Channel(s):																								
OL P Channel(s):																								

Codes: 0 – NO 1 - YES Overlap Outputs To Channel

Overlap Controls MUST First Be Assigned To Channels. Once Assigned, They Must Also Be Assigned To Hardware Output Pins.

UNIT DATA – OVERLAP

Control :	TRL GRN	TRL YEL	TRL RED	-GRN/YEL	+GRN
Overlap A:					
Overlap B:					
Overlap C:					
Overlap D:					
Overlap E:					
Overlap F:					
Overlap G:					
Overlap H:					
Overlap I:					
Overlap J:					
Overlap K:					
Overlap L:					
Overlap M:					
Overlap N:					
Overlap O:					
Overlap P:					

Codes :

- TRL GRN : Time In Seconds
- TRL YEL : Time In Tenth Seconds
- TRL RED : Time In Tenth Seconds
- -GRN / YEL :
- +GRN :

UNIT DATA - RING STRUCTURE

Control Channel:	RING	NXT	CONCUR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase 1 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 2 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 3 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 4 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 5 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 6 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 7 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 8 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 11 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 12 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 13 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 14 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 15 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Phase 16 ....:	___	___		__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__

Codes .....:

RING	Ring Number For Phase (1-4)
PH NXT	Phase Next In Ring (1-16)
CONCUR PH	Phase(s) To Run Concurrent (0-NO / 1-YES)

UNIT DATA - RING STRUCTURE

Control Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Ph 01 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 01 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 02 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 02 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 03 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 03 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 04 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 04 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 05 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 05 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 06 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 06 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 07 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 07 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 08 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 08 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 09 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 09 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 10 Veh Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 10 Ped Channel(s).....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__

UNIT DATA - RING STRUCTURE

Control Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Ph 12 Veh Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 12 Ped Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 13 Veh Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 13 Ped Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 14 Veh Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 14 Ped Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 15 Veh Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 15 Ped Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 16 Veh Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Ph 16 Ped Channel(s):	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__

Codes: 0 – NO 1 - YES Phase Vehicle / Pedest Outputs To Channel

Phase Controls MUST First Be Assigned To Channels. Once Assigned, They Must Also Be Assigned To Hardware Output Pins.

UNIT DATA - ALTERNATE SEQUENCE

Control	REVERSE PHASES
Alternate Sequence 00:	NONE
Alternate Sequence 01:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 02:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 03:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 04:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 05:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 06:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 07:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 08:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 09:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 10:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 11:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 12:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 13:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 14:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __
Alternate Sequence 15:	__ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __ __ / __

Reverse Phases Must Be In The Same Ring And Next To Each Other

UNIT DATA - PORT 1

ADDRESS	DESCRIPTION	PRES	M40
00	T&F BIU # 1 TS2 :	___	___
01	T&F BIU # 2 TS2 :	___	___
02	T&F BIU # 3 TS2 :	___	___
03	T&F BIU # 4 TS2 :	___	___
04	T&F BIU # 5 RESERVED :	___	___
05	T&F BIU # 6 RESERVED :	___	___
06	T&F BIU # 7 MFG USE :	___	___
07	T&F BIU # 8 MFG USE :	___	___
08	DET BIU # 1 TS2 :	___	___
09	DET BIU # 2 TS2 :	___	___
10	DET BIU # 3 TS2 :	___	___
11	DET BIU # 4 TS2 :	___	___
12	DET BIU # 5 RESERVED :	___	___
13	DET BIU # 6 RESERVED :	___	___
14	DET BIU # 7 MFG USE :	___	___
15	DET BIU # 8 MFG USE :	___	___
16	MALFUNCTION UNIT :	___	___
17	DIAGNOSTIC (MSG 30) :	___	___
18	CONTROLLER UNIT :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___
___	_____ :	___	___

PRES: 0-NO / 1-YES; this Port 1 device is present.
M40: 0-NO / 1-YES; this Port 1 device is to receive Message 40 to query same for peer to peer messages.

UNIT DATA - I/O MISC

Ring I/O ..... Ring:	1	2	3	4	
Input Response ..... :	____	____	____	____	Ring # (1-4)
Output Select ..... :	____	____	____	____	Ring # (1-4)

I/O Modes ..... :	INPUT	OUTPUT
"ABC" Connector ..... :	____	____
"D" Connector ..... :	____	____

UNIT DATA - SIGNAL DRIVER OUTPUTS

SIGNAL DRIVER GROUP	CHN	HARDWARE OUTPUT PIN	SET	Reference SET ## Function
_____	01	_____	____	01 - Ph 1 Red/Yel/Grn
_____	02	_____	____	02 - Ph 2 Red/Yel/Grn
_____	03	_____	____	03 - Ph 3 Red/Yel/Grn
_____	04	_____	____	04 - Ph 4 Red/Yel/Grn
_____	05	_____	____	05 - Ph 5 Red/Yel/Grn
_____	06	_____	____	06 - Ph 6 Red/Yel/Grn
_____	07	_____	____	07 - Ph 7 Red/Yel/Grn
_____	08	_____	____	08 - Ph 8 Red/Yel/Grn
_____	09	_____	____	09 - Ph 1 DW/PC/WK
_____	10	_____	____	10 - Ph 2 DW/PC/WK
_____	11	_____	____	11 - Ph 3 DW/PC/WK
_____	12	_____	____	12 - Ph 4 DW/PC/WK
_____	13	_____	____	13 - Ph 5 DW/PC/WK
_____	14	_____	____	14 - Ph 6 DW/PC/WK
_____	15	_____	____	15 - Ph 7 DW/PC/WK
_____	16	_____	____	16 - Ph 8 DW/PC/WK
_____	17	_____	____	17 - OL A Red/Yel/Grn
_____	18	_____	____	18 - OL B Red/Yel/Grn
_____	19	_____	____	19 - OL C Red/Yel/Grn
_____	20	_____	____	20 - OL D Red/Yel/Grn
_____	21	_____	____	21 - Ph 1 On/Nxt/Chk
_____	22	_____	____	22 - Ph 2 On/Nxt/Chk
_____	23	_____	____	23 - Ph 3 On/Nxt/Chk
_____	24	_____	____	24 - Ph 4 On/Nxt/Chk
	X			25 - Ph 5 On/Nxt/Chk
	X			26 - Ph 6 On/Nxt/Chk
	X			27 - Ph 7 On/Nxt/Chk
	X			28 - Ph 8 On/Nxt/Chk

SIGNAL DRIVER GROUP column is automatic & indicates the assigned Channels in Ring Structure & Overlap database.
CHN column is a list of the available channels 01-24 in numerical order.
HARDWARE OUTPUT PIN column is automatic & indicates the assigned SET entered here.
SET column is for user entry of the hardware outputs to receive a channels outputs.

COORD DATA – MODE

Control		Codes:	0	1	2	3	4	5
Operation ..... :	___1		FRE	AUT	MAN	---	---	---
Mode ..... :	___0		PRM	YLD	PYL	POM	SOM	FAC
Maximum..... :	___0		INH	MX1	MX2	---	---	---
Correction..... :	___3		DW	MDW	SWY	SW+	---	---
Offset (?? Of Green) ..... :	___0		BEGIN	END OF GREEN				
Force ..... :	___0		PLAN	CYCLE TIME				
Max Dwell Time..... :	___0		Time In Seconds					
Yield Period..... :	___0		Time In Seconds					
Manual Pattern (Dial/Split/Offset)	1_/1_/1_							

COORD DATA - TIMING PLANS

Control Timing Plan:	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length ..... :	__72	____	____	____	____	____	____	____
Phase 01 Time/Mode ..... :	_0_ / _6	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 02 Time/Mode ..... :	_36 / _1	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 03 Time/Mode ..... :	__0 / _6	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 04 Time/Mode ..... :	_36 / _5	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 05 Time/Mode ..... :	_0_ / _6	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 06 Time/Mode ..... :	_0_ / _6	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 07 Time/Mode ..... :	_0_ / _6	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 08 Time/Mode ..... :	_0_ / _6	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 09 Time/Mode ..... :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 10 Time/Mode ..... :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 11 Time/Mode ..... :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 12 Time/Mode ..... :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 13 Time/Mode ..... :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 14 Time/Mode ..... :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 15 Time/Mode ..... :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 16 Time/Mode ..... :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Offset 1..... :	___0	____	____	____	____	____	____	____
Offset 1 Alt Sequence ..... :	____	____	____	____	____	____	____	____
Offset 1 Pattern Mode ..... :	____	____	____	____	____	____	____	____
Offset 1 Ring 2 Lag ..... :	____	____	____	____	____	____	____	____
Offset 1 Ring 3 Lag ..... :	____	____	____	____	____	____	____	____
Offset 1 Ring 4 Lag ..... :	____	____	____	____	____	____	____	____
Offset 2..... :	____	____	____	____	____	____	____	____
Offset 2 Alt Sequence ..... :	____	____	____	____	____	____	____	____
Offset 2 Pattern Mode ..... :	____	____	____	____	____	____	____	____
Offset 2 Ring 2 Lag ..... :	____	____	____	____	____	____	____	____
Offset 2 Ring 3 Lag ..... :	____	____	____	____	____	____	____	____
Offset 2 Ring 4 Lag ..... :	____	____	____	____	____	____	____	____
Offset 3..... :	____	____	____	____	____	____	____	____
Offset 3 Alt Sequence ..... :	____	____	____	____	____	____	____	____
Offset 3 Pattern Mode ..... :	____	____	____	____	____	____	____	____
Offset 3 Ring 2 Lag ..... :	____	____	____	____	____	____	____	____
Offset 3 Ring 3 Lag ..... :	____	____	____	____	____	____	____	____
Offset 3 Ring 4 Lag ..... :	____	____	____	____	____	____	____	____

COORD DATA - TIMING PLANS

Control Timing Plan:	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length :	____	____	____	____	____	____	____	____
Phase 01 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 02 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 03 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 04 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 05 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 06 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 07 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 08 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 09 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 10 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 11 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 12 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 13 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 14 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 15 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Phase 16 Time/Mode :	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __	___ / __
Offset 1 Time :	____	____	____	____	____	____	____	____
Offset 1 Alt Sequence :	____	____	____	____	____	____	____	____
Offset 1 Pattern Mode :	____	____	____	____	____	____	____	____
Offset 1 Ring 2 Lag :	____	____	____	____	____	____	____	____
Offset 1 Ring 3 Lag :	____	____	____	____	____	____	____	____
Offset 1 Ring 4 Lag :	____	____	____	____	____	____	____	____
Offset 2 :	____	____	____	____	____	____	____	____
Offset 2 Alt Sequence :	____	____	____	____	____	____	____	____
Offset 2 Pattern Mode :	____	____	____	____	____	____	____	____
Offset 2 Ring 2 Lag :	____	____	____	____	____	____	____	____
Offset 2 Ring 3 Lag :	____	____	____	____	____	____	____	____
Offset 2 Ring 4 Lag :	____	____	____	____	____	____	____	____
Offset 3 :	____	____	____	____	____	____	____	____
Offset 3 Alt Sequence :	____	____	____	____	____	____	____	____
Offset 3 Pattern Mode :	____	____	____	____	____	____	____	____
Offset 3 Ring 2 Lag :	____	____	____	____	____	____	____	____
Offset 3 Ring 3 Lag :	____	____	____	____	____	____	____	____
Offset 3 Ring 4 Lag :	____	____	____	____	____	____	____	____

Codes :

Phase Mode :	0-Actuated	1-Coord Phase	2-Min Rec	3-Max Rec
	4-Ped Rec	5-Max+Ped Recall	6-Phase Omitted	7-Dual Coord Phase
Pattern Mode :	00-15 (Unit Data Has Definition)			
Alternate Sequence :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Act			
R# LAG :	Time In Seconds Of The Ring Offset To Lcl Cycle 0 When Not Barrier Locked To Ring 1			

TIME BASE DATA – MISCELLANEOUS

DST: BEGIN: MONTH _02_ WEEK _03_
DST: END: MONTH _11_ WEEK _01_

DST: Daylight Savings Time
Month = 01 to 12 (Begin < End)
Week = 1 to 5 (5 = Last Week)

COORD CYCLE ZERO ___ : ___

CYCLE ZERO: Time (HH:MM) Sets Reference For Coord Sync
00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINED DAY = DAY)

____	=	____	____	____	____	____	____	____
____	=	____	____	____	____	____	____	____
____	=	____	____	____	____	____	____	____
____	=	____	____	____	____	____	____	____
____	=	____	____	____	____	____	____	____
____	=	____	____	____	____	____	____	____
____	=	____	____	____	____	____	____	____
____	=	____	____	____	____	____	____	____
____	=	____	____	____	____	____	____	____
____	=							

DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. Result Will Be A Day Without Events To Run.

TIME BASE DATA - TRAFFIC EVENTS

DAY	TIME		TRAFFIC EVENT FUNCTIONS															
PDAY	HH : MM	PATTERN	P	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
__1	00_ : _00	_1 / _1 / _1	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ :___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
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___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
___	___ : ___	__ / __ / __	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__

REFERENCE DATA:
PDAY - 01-99 Program Day
HH:MM - 24 Hour Clock
PATTERN: (D / S / O)
Flash - 5 / 5 / 0
Free - 0 / 0 / 4
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0

TIME BASE DATA - AUXILIARY EVENTS

DAY	TIME	AUXILIARY EVENT FUNCTIONS			
PDAY	HH : MM	A: 1 2 3	D: 1 2 3	DIM	S. 1 2 3 4 5 6 7 8
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _
___	___ : ___	_ _ _	_ _ _	___	_ _ _ _ _ _ _ _

REFERENCE DATA:
- PDAY - 01-99 Program Day
- HH:MM - 24 Hour Clock
- A.123 - Auxiliary Output
- D.123 - Detector
- 1 - Det Diag Vaule
- 2 - Enables Report
- 3 - Rep Multiplier
- DIM - Dimming Enable
- S.1>8 - Special Function Output
- ALL - 0-OFF / 1-ON

TIME BASE DATA - TIME OF YEAR EVENTS

DATE	SPECIAL		DATE	SPECIAL	
MM / DD / YY	DAY	WEEK	MM / DD / YY	DAY	WEEK
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___
___ / ___ / ___	___	___	___ / ___ / ___	___	___

Reference Data:
- Special Day - Any Program Day 00-99
- Special Week -
  - Week 0 = Program Day 01-07
  - Week 1 = Program Day 11-17
  - Week 2 = Program Day 21-27
  - | | |
  - Week 9 = Program Day 91-97

TIME BASE DATA - DIMMING

DIM OUTPUTS Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Channel Red .....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Channel Yellow .....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Channel Green.....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__
Dim Alternate .....:	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__	__

CODES: 0-NO DIMMING / 1-DIMMING

TIME BASE DATA - PHASE FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHS 01 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 02 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 03 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 04 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 05 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 06 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 07 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 08 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

CODES: 0-OFF / 1-ON

PHS 09 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 10 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 11 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 12 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 13 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 14 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 15 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 16 MAX # 2 ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

CODES: 0-OFF / 1-ON

PHS 01 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 02 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 03 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 04 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 05 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 06 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 07 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 08 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

CODES: 0-OFF / 1-ON

PHS 09 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 10 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 11 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 12 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 13 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 14 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 15 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 16 PHS OMIT ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

CODES: 0-OFF / 1-ON

TIME BASE DATA - PHASE FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHS 01 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 02 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 03 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 04 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 05 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 06 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 07 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 08 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 09 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 10 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 11 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 12 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 13 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 14 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 15 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 16 PED OMIT..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 01 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 02 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 03 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 04 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 05 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 06 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 07 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 08 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 09 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 10 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 11 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 12 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 13 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 14 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 15 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 16 MAX RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 01 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 02 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 03 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 04 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 05 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 06 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 07 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 08 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 09 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 10 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 11 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 12 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 13 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 14 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 15 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 16 MIN RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 01 PED RECALL..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 02 PED RECALL..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

TIME BASE DATA - PHASE FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHS 03 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 04 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 05 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 06 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 07 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 08 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 09 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 10 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 11 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 12 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 13 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 14 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 15 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 16 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 01 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 02 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 03 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 04 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 05 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 06 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 07 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 08 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																
PHS 09 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 10 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 11 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 12 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 13 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 14 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 15 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
PHS 16 PED RECALL ..... :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
CODES: 0-OFF / 1-ON																

TIME BASE DATA - SPECIAL FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8	CODES:
Special Function 1..... :	___	___	___	___	___	___	___	___	0-OFF
Special Function 2..... :	___	___	___	___	___	___	___	___	1-ON
Special Function 3..... :	___	___	___	___	___	___	___	___	
Special Function 4..... :	___	___	___	___	___	___	___	___	
Special Function 5..... :	___	___	___	___	___	___	___	___	
Special Function 6..... :	___	___	___	___	___	___	___	___	
Special Function 7..... :	___	___	___	___	___	___	___	___	
Special Function 8..... :	___	___	___	___	___	___	___	___	
PAS3+MAX3=VEH 33-48 TIME:	___	___	___	___	___	___	___	___	
PAS4+MAX4=VEH 49-64 TIME:	___	___	___	___	___	___	___	___	
PAS5+MAX5=SPC+PED TIME:	___	___	___	___	___	___	___	___	
DYNA MAX3=VEH 33-48 TIME:	___	___	___	___	___	___	___	___	
DYNA MAX4=VEH 49-64 TIME:	___	___	___	___	___	___	___	___	
DYNA MAX5=SPC+PED TIME:	___	___	___	___	___	___	___	___	
DISABLE PROT/PERM OMITS:	___	___	___	___	___	___	___	___	
PHASE 2 SIGN CONTROL..... :	___	___	___	___	___	___	___	___	
PHASE 4 SIGN CONTROL..... :	___	___	___	___	___	___	___	___	

TIME BASE DATA - SPECIAL FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8
PHASE 6 SIGN CONTROL..... :	___	___	___	___	___	___	___	___
PHASE 8 SIGN CONTROL..... :	___	___	___	___	___	___	___	___
TX DIAMOND - 4 PHASE ..... :	___	___	___	___	___	___	___	___
TX DIAMOND - 3 PHASE ..... :	___	___	___	___	___	___	___	___
TX DIAMOND -SEPARATE .... :	___	___	___	___	___	___	___	___
QUE1/LVL1 CONTROLS ..... :	___	___	___	___	___	___	___	___
QUE1/LVL2 CONTROLS ..... :	___	___	___	___	___	___	___	___
QUE2/LVL1 CONTROLS ..... :	___	___	___	___	___	___	___	___
QUE2/LVL2 CONTROLS ..... :	___	___	___	___	___	___	___	___
AS8-15=OLI-P FL G PHS ..... :	___	___	___	___	___	___	___	___
AS8-15=OLI-P FL R PHS..... :	___	___	___	___	___	___	___	___
	___	___	___	___	___	___	___	___

CODES:

PREEMPTION DATA – MISCELLANEOUS

Ring:	1	2	3	4	
Minimum Green / Walk Time	__10	__10	__10	__10	Time In Seconds

PRIORITIES

Preemption > Automatic Flash :	___1
Preempt 1 > Preempt 2 ..... :	___1
Preempt 2 > Preempt 3 ..... :	___1
Preempt 3 > Preempt 4 ..... :	___1
Preempt 4 > Preempt 5 ..... :	___1
Preempt 5 > Preempt 6 ..... :	___1

PRIORITY: 0-NO (Equal Priority)
1-1st Has Priority
When A Function Has Priority Over Another,
The Function Of Lower Priority Will Terminate
And The Higher Priority Will Assume Control.

PREEMPT DATA - PREEMPT 1

CONTROL

Non-Lock	_1_	0-NO / 1-YES
Link PE #	____	0-6 Preempt #
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

INTERVAL TIMES

Selective Ped Clear	_10	0-999 Seconds
Selective Yel Chg	40	0-99.9 Seconds
Selective Red Clear	_20	0-99.9 Seconds
Track Green	____	0-999 Seconds
Track Ped Clear	____	0-999 Seconds
Track Yel Chg	__40	0-99.9 Seconds
Track Red Clear	__20	0-99.9 Seconds
Dwell Green	__ 0	0-999 Seconds
Return Ped Clear	___0	0-999 Seconds
Return Yel Chg	__ 0	0-99.9 Seconds
Return Red Clear	__ 0	0-99.9 Seconds

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)	___	___	___	1	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s)	___	1	___	1	___	___	___	___	___	___	___	___	___	___	___	___

Codes	0	1	
Non-Lock	NO	YES	Preempt Memory To Be Non-Locking
Exit Phase(s)	NO	YES	Phase(s) To Be Serviced First Following Preempt
Exit Call(s)	NO	YES	Phase(s) To Receive Calls On Preempt Exit

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.
Set Max Call = 0 To Disable
Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 1 - OUTPUT STATUS

Phase Vehicle Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	1	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Phase Pedest Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Overlap Vehicle Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes	0	1	2	3	4
Vehicle	RED	GRN	FL R	FL Y	DARK
Pedest	DT WK	WALK	FL WK	DARK	----
Cycle Vehicle	NO	ACT'D	MIN REC	MAX REC	----
Cycle Pedest	NO	ACT'D	REC	----	----
Cycle Overlap	NO	ACT'D	----	----	----

PREEMPT 1 - LOW PRIORITY ROUTINE

Non-Lock	____	0-NO / 1-YES
Skip	____	0-NO / 1-YES
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Dwell	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

- When No Dwell Phases Are Set, This Routine Is Disabled.
- Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases
- Set Max Call = 0 To Disable
- Lock Out Duration Will Be Dependent On Calls If = 0
- Calls (Yes) Will Place A Ped Call On Exit From Routine

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 2

CONTROL

Non-Lock	__1	0-NO / 1-YES
Link PE #	____	0-6 Preempt #
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

INTERVAL TIMES

Selective Ped Clear	_10	0-999 Seconds
Selective Yel Chg	_40	0-99.9 Seconds
Selective Red Clear	_20	0-99.9 Seconds
Track Green	__0	0-999 Seconds
Track Ped Clear	__0	0-999 Seconds
Track Yel Chg	__40	0-99.9 Seconds
Track Red Clear	__20	0-99.9 Seconds
Dwell Green	__ 0	0-999 Seconds
Return Ped Clear	___0	0-999 Seconds
Return Yel Chg	__ 0	0-99.9 Seconds
Return Red Clear	__ 0	0-99.9 Seconds

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s) :	___	1	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s) :	___	1	___	1	___	___	___	___	___	___	___	___	___	___	___	___

Codes : 0 1

Non-Lock :	NO	YES — Preempt Memory To Be Non-Locking
Exit Phase(s) :	NO	YES — Phase(s) To Be Serviced First Following Preempt
Exit Call(s) :	NO	YES — Phase(s) To Receive Calls On Preempt Exit

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.
Set Max Call = 0 To Disable
Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 2 - OUTPUT STATUS

Phase Vehicle Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status :	___	___	___	1	___	___	___	___	___	___	___	___	___	___	___	___
Cycle :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Phase Pedest Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Overlap Vehicle Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status :	___	___	___	___	___	___	___	___	___	___	_1_	___	___	___	___	___
Cycle :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes :	0	1	2	3	4
Vehicle :	RED	GRN	FL R	FL Y	DARK
Pedest :	DT WK	WALK	FL WK	DARK	----
Cycle Vehicle :	NO	ACT'D	MIN REC	MAX REC	----
Cycle Pedest :	NO	ACT'D	REC	----	----
Cycle Overlap :	NO	ACT'D	----	----	----

PREEMPT 2 - LOW PRIORITY ROUTINE

Non-Lock	____	0-NO / 1-YES
Skip	____	0-NO / 1-YES
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Dwell	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

- When No Dwell Phases Are Set, This Routine Is Disabled.
- Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases
- Set Max Call = 0 To Disable
- Lock Out Duration Will Be Dependent On Calls If = 0
- Calls (Yes) Will Place A Ped Call On Exit From Routine

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s) :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s) :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 3

CONTROL

Non-Lock	____	0-NO / 1-YES
Link PE #	____	0-6 Preempt #
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

INTERVAL TIMES

Selective Ped Clear	____	0-999 Seconds
Selective Yel Chg	____	0-99.9 Seconds
Selective Red Clear	____	0-99.9 Seconds
Track Green	____	0-999 Seconds
Track Ped Clear	____	0-999 Seconds
Track Yel Chg	____	0-99.9 Seconds
Track Red Clear	____	0-99.9 Seconds
Dwell Green	____	0-999 Seconds
Return Ped Clear	____	0-999 Seconds
Return Yel Chg	____	0-99.9 Seconds
Return Red Clear	____	0-99.9 Seconds

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes	0	1	
Non-Lock	NO	YES	Preempt Memory To Be Non-Locking
Exit Phase(s)	NO	YES	Phase(s) To Be Serviced First Following Preempt
Exit Call(s)	NO	YES	Phase(s) To Receive Calls On Preempt Exit

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.
Set Max Call = 0 To Disable
Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 3 - OUTPUT STATUS

Phase Vehicle Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Phase Pedest Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Overlap Vehicle Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes	0	1	2	3	4
Vehicle	RED	GRN	FL R	FL Y	DARK
Pedest	DT WK	WALK	FL WK	DARK	----
Cycle Vehicle	NO	ACT'D	MIN REC	MAX REC	----
Cycle Pedest	NO	ACT'D	REC	----	----
Cycle Overlap	NO	ACT'D	----	----	----

PREEMPT 3 - LOW PRIORITY ROUTINE

Non-Lock	____	0-NO / 1-YES
Skip	____	0-NO / 1-YES
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Dwell	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

- When No Dwell Phases Are Set, This Routine Is Disabled.
- Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases
- Set Max Call = 0 To Disable
- Lock Out Duration Will Be Dependent On Calls If = 0
- Calls (Yes) Will Place A Ped Call On Exit From Routine

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 4

CONTROL

Non-Lock	____	0-NO / 1-YES
Link PE #	____	0-6 Preempt #
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

INTERVAL TIMES

Selective Ped Clear	____	0-999 Seconds
Selective Yel Chg	____	0-99.9 Seconds
Selective Red Clear	____	0-99.9 Seconds
Track Green	____	0-999 Seconds
Track Ped Clear	____	0-999 Seconds
Track Yel Chg	____	0-99.9 Seconds
Track Red Clear	____	0-99.9 Seconds
Dwell Green	____	0-999 Seconds
Return Ped Clear	____	0-999 Seconds
Return Yel Chg	____	0-99.9 Seconds
Return Red Clear	____	0-99.9 Seconds

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes	0	1	
Non-Lock	NO	YES	Preempt Memory To Be Non-Locking
Exit Phase(s)	NO	YES	Phase(s) To Be Serviced First Following Preempt
Exit Call(s)	NO	YES	Phase(s) To Receive Calls On Preempt Exit

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.
Set Max Call = 0 To Disable
Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 4 - OUTPUT STATUS

Phase Vehicle Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Phase Pedest Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Overlap Vehicle Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes	0	1	2	3	4
Vehicle	RED	GRN	FL R	FL Y	DARK
Pedest	DT WK	WALK	FL WK	DARK	----
Cycle Vehicle	NO	ACT'D	MIN REC	MAX REC	----
Cycle Pedest	NO	ACT'D	REC	----	----
Cycle Overlap	NO	ACT'D	----	----	----

PREEMPT 4 - LOW PRIORITY ROUTINE

Non-Lock	____	0-NO / 1-YES
Skip	____	0-NO / 1-YES
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Dwell	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

- When No Dwell Phases Are Set, This Routine Is Disabled.
- Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases
- Set Max Call = 0 To Disable
- Lock Out Duration Will Be Dependent On Calls If = 0
- Calls (Yes) Will Place A Ped Call On Exit From Routine

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 5

CONTROL

Non-Lock	____	0-NO / 1-YES
Link PE #	____	0-6 Preempt #
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

INTERVAL TIMES

Selective Ped Clear	____	0-999 Seconds
Selective Yel Chg	____	0-99.9 Seconds
Selective Red Clear	____	0-99.9 Seconds
Track Green	____	0-999 Seconds
Track Ped Clear	____	0-999 Seconds
Track Yel Chg	____	0-99.9 Seconds
Track Red Clear	____	0-99.9 Seconds
Dwell Green	____	0-999 Seconds
Return Ped Clear	____	0-999 Seconds
Return Yel Chg	____	0-99.9 Seconds
Return Red Clear	____	0-99.9 Seconds

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s) :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s) :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes :	0	1	
Non-Lock :	NO	YES	Preempt Memory To Be Non-Locking
Exit Phase(s) :	NO	YES	Phase(s) To Be Serviced First Following Preempt
Exit Call(s) :	NO	YES	Phase(s) To Receive Calls On Preempt Exit

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.
Set Max Call = 0 To Disable
Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 5 - OUTPUT STATUS

Phase Vehicle Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Phase Pedest Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Overlap Vehicle Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes :	0	1	2	3	4
Vehicle :	RED	GRN	FL R	FL Y	DARK
Pedest :	DT WK	WALK	FL WK	DARK	----
Cycle Vehicle :	NO	ACT'D	MIN REC	MAX REC	----
Cycle Pedest :	NO	ACT'D	REC	----	----
Cycle Overlap :	NO	ACT'D	----	----	----

PREEMPT 5 - LOW PRIORITY ROUTINE

Non-Lock	____	0-NO / 1-YES
Skip	____	0-NO / 1-YES
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Dwell	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

- When No Dwell Phases Are Set, This Routine Is Disabled.
- Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases
- Set Max Call = 0 To Disable
- Lock Out Duration Will Be Dependent On Calls If = 0
- Calls (Yes) Will Place A Ped Call On Exit From Routine

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s) :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s) :	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 6

CONTROL

Non-Lock	____	0-NO / 1-YES
Link PE #	____	0-6 Preempt #
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

INTERVAL TIMES

Selective Ped Clear	____	0-999 Seconds
Selective Yel Chg	____	0-99.9 Seconds
Selective Red Clear	____	0-99.9 Seconds
Track Green	____	0-999 Seconds
Track Ped Clear	____	0-999 Seconds
Track Yel Chg	____	0-99.9 Seconds
Track Red Clear	____	0-99.9 Seconds
Dwell Green	____	0-999 Seconds
Return Ped Clear	____	0-999 Seconds
Return Yel Chg	____	0-99.9 Seconds
Return Red Clear	____	0-99.9 Seconds

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes	0	1	
Non-Lock	NO	YES	Preempt Memory To Be Non-Locking
Exit Phase(s)	NO	YES	Phase(s) To Be Serviced First Following Preempt
Exit Call(s)	NO	YES	Phase(s) To Receive Calls On Preempt Exit

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.
Set Max Call = 0 To Disable
Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 6 - OUTPUT STATUS

Phase Vehicle Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Phase Pedest Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Overlap Vehicle Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Dwell Status	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Cycle	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Codes	0	1	2	3	4
Vehicle	RED	GRN	FL R	FL Y	DARK
Pedest	DT WK	WALK	FL WK	DARK	----
Cycle Vehicle	NO	ACT'D	MIN REC	MAX REC	----
Cycle Pedest	NO	ACT'D	REC	----	----
Cycle Overlap	NO	ACT'D	----	----	----

PREEMPT 6 - LOW PRIORITY ROUTINE

Non-Lock	____	0-NO / 1-YES
Skip	____	0-NO / 1-YES
Delay	____	0-999 Seconds
Extend	____	0-999 Seconds
Duration	____	0-999 Seconds
Dwell	____	0-999 Seconds
Max Call	____	0-999 Seconds
Lock Out	____	0-999 Seconds

- When No Dwell Phases Are Set, This Routine Is Disabled.
- Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases
- Set Max Call = 0 To Disable
- Lock Out Duration Will Be Dependent On Calls If = 0
- Calls (Yes) Will Place A Ped Call On Exit From Routine

Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Exit Call(s)	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

SYSTEM DATA - GENERAL

Local Address ..... : _____ Three Digits (000 - 032)
Revert To Backup ..... : _____ Time In Minutes (000- 255)

1) An Address Other Than "000" Transfers Local "D" Connector I/O To It's System Definition
2) On Loss Of Communications, The Local Will Revert To It's Time Base Events After The Revert To Backup Time

SYSTEM DATA - SYSTEM DETECTORS

ASSIGN System Detector	1	2	3	4	5	6	7	8
Assigned Detector ..... :	____	____	____	____	____	____	____	____

To Assign : VEH 01-64 Enter 01-64 / SPC 01-08 Enter 65-72 / PED 01-08 Enter 73-80

V+O System Detector	1	2	3	4	5	6	7	8
VPHR X 100 ..... :	____	____	____	____	____	____	____	____
AVGT (Minutes) ..... :	____	____	____	____	____	____	____	____
CTFC / 10 ..... :	____	____	____	____	____	____	____	____
MVOL ..... :	____	____	____	____	____	____	____	____

V+O PARAMETERS:
VPHR - Lane Capacity
AVGT - Averaging Time
CTFC - Correct Factor
MVOL - Min Vol b4 Occ Add

Report Interval ..... : ____ Time In Minutes (00- 99) / Time Base Aux D2 Starts A Report

SYSTEM DATA - QUEUE ROUTINES

QUEUE 1

ASSIGN Detector:	1	2	3	4
System Detector ..... :	___	___	___	___
WTFC Factor ..... :	___	___	___	___
Input Select ..... :	___			
Failed Level ..... :	___			

SELECT Level:	A	B
Enter (UP) ..... :	____	____
Leave (DN) ..... :	____	____

PATTERN	D / S / O	D / S / O
Called ..... :	_ / _ / _	_ / _ / _

QUEUE 2

ASSIGN Detector:	1	2	3	4	
System Detector ..... :	___	___	___	___	Det # 1 To 8
WTFC Factor ..... :	___	___	___	___	Factor 1 To 100
Input Select ..... :	___				0-AVG / 1-HIGH
Failed Level ..... :	___				# To Fail Channel

SELECT Level:	A	B
Enter (UP) ..... :	____	____
Leave (DN) ..... :	____	____

PATTERN	D / S / O	D / S / O
Pattern Called ..... :	_ / _ / _	_ / _ / _

Queue Pattern or Partial Pattern Selection Is Made When The V+O Of Assigned System Detectors Exceeds The Level To Enter.

SYSTEM DATA - VEH DETECTOR DIAGNOSTICS

VALUE 0	Detector:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Max Presence	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

VALUE 1	Detector:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Max Presence	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

VALUE 0	Detector:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Max Presence	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

VALUE 1	Detector:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Max Presence	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

VALUE 0	Detector:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Max Presence	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

VALUE 1	Detector:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Max Presence	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

VALUE 0	Detector:	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Max Presence	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

VALUE 1	Detector:	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Max Presence	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

Time Base Auxiliary “D1” Enables Value 1 diagnostic Parameters

SYSTEM DATA - PED DETECTOR DIAGNOSTICS

VALUE 0	Detector:	1	2	3	4	5	6	7	8
Max Presence	:	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___

VALUE 1	Detector:	1	2	3	4	5	6	7	8
Max Presence	:	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___

Time Base Auxiliary “D1” Enables Value 1 diagnostic Parameters

SYSTEM DATA - SPC DETECTOR DIAGNOSTICS

VALUE 0	Detector:	1	2	3	4	5	6	7	8
Max Presence	:	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___

VALUE 1	Detector:	1	2	3	4	5	6	7	8
Max Presence	:	___	___	___	___	___	___	___	___
No Activity	:	___	___	___	___	___	___	___	___
Erratic Counts	:	___	___	___	___	___	___	___	___

Time Base Auxiliary “D1” Enables Value 1 diagnostic Parameters

SYSTEM DATA - SPEED

Measurement .....: ____ 0-Miles Per Hour / 1-Kilometers Per Hour

SPEED TRAP 1 Detector:	1	2
Assigned Detector	____	____
Distance	____	

SPEED TRAP 2 Detector:	1	2
Assigned Detector	____	____
Distance	____	

1) Each Speed Trap Needs Two Detectors Assigned, Any Vehicle, Special, or Pedestrian Detector May Be Assigned.
To Assign : VEH 01-64 Enter 01-64 / SPC 01-08 Enter 65-72 / PED 01-08 Enter 73-80
2) The Distance Between Det 1 and Det 2 May Be Either 11 Feet or 22 Feet. Enter '1' For 11 Ft or '2' for 22 Ft.

RANGES / PATTERN

PATTERN		OFFSET 1		OFFSET 2		OFFSET 3	
Dial	Split	Low	High	Low	High	Low	High
1	1	____	____	____	____	____	____
1	2	____	____	____	____	____	____
1	3	____	____	____	____	____	____
1	4	____	____	____	____	____	____
2	1	____	____	____	____	____	____
2	2	____	____	____	____	____	____
2	3	____	____	____	____	____	____
2	4	____	____	____	____	____	____
3	1	____	____	____	____	____	____
3	2	____	____	____	____	____	____
3	3	____	____	____	____	____	____
3	4	____	____	____	____	____	____
4	1	____	____	____	____	____	____
4	2	____	____	____	____	____	____
4	3	____	____	____	____	____	____
4	4	____	____	____	____	____	____

RANGES:
Enter The Low & High Speed In MPH or KPH For Each Pattern To Enable A Report Of % Lower, Within, & Above It

Owen Sound - AM & PM Updating Signal Timing Plans

Optimized Conditions - AM

AM Peak Coordination: 3AM to 3 PM

1: 3rd Avenue West and 10th Street				
Cycle Length	120s			
Control Type	Actuated Coordinated			
Offset: 0, Referenced to Phase 2&6 Begin of Green, Master Intersection				
Phase Number	2	4	6	8
Movement	EB	NB	WB	SB
Lead/Lag				
Max Split	82	38	82	38
Min Split	NC	NC	NC	NC
Yellow Time	NC	NC	NC	NC
All Red	NC	NC	NC	NC
Walk Time	10	10	10	10
FDW	13	13	13	13

NC: Not Changed

Phasing Sequence:

2	4
6	8

2: 2nd Avenue West and 10th Street								
Cycle Length	120s							
Control Type	Actuated Coordinated							
Offset: 110, Referenced to Phase 2 & 6 Begin of Green								
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EB	NBL	SB	EBL	WB	SBL	NB
Lead/Lag	Lead		Lead		Lead		Lead	
Max Split	9	58	12	41	9	58	14	39
Min Split		NC		NC		NC	NC	NC
Yellow Time		NC		NC		NC	NC	NC
All Red		NC		NC		NC	NC	NC
Walk Time		21		10		21		10
FDW		18		15		18		15

NC: Not Changed

Phasing Sequence:

1	2	3	4
5	6	7	8

3: 1st Avenue West and 10th Street					
Cycle Length	120s				
Control Type	Actuated Coordinated				
Offset: 94, Referenced to Phase 2 Begin of Green					
Phase Number	2	4	6	7	8
Movement	EB	SB	WB	SBL	NB
Lead/Lag					
Max Split	58	62	58	30	32
Min Split	NC	NC	NC		NC
Yellow Time	NC	NC	NC		NC
All Red	NC	NC	NC		NC
Walk Time	15	10	15		10
FDW	20	18	20		18

NC: Not Changed

Phasing Sequence:

2	4	
6	7	8

4: 2nd Avenue East and 10th Street						
Cycle Length			120s			
Control Type			Actuated Coordinated			
Offset: 107, Referenced to Phase 2&5 Begin of Green						
Phase Number	1	2	4	5	6	8
Movement	WBL	EB	SB	EBL	WBT	NBT
Lead/Lag						
Max Split	10	72	38	16	66	38
Min Split						
Yellow Time	3	NC	NC	3	NC	NC
All Red	1	NC	NC	1	NC	NC
Walk Time		10	10		10	10
FDW		15	17		19	17

NC: Not Changed

Phasing Sequence:

1	2	4
5	6	8

Optimized Conditions - PM

PM Peak Coordination: 3PM to 3 AM

1: 3rd Avenue West and 10th Street				
Cycle Length	120s			
Control Type	Actuated Coordinated			
Offset: 0, Referenced to Phase 2&6 Begin of Green, Master Intersection				
Phase Number	2	4	6	8
Movement	EB	NB	WB	SB
Lead/Lag				
Max Split	86	34	86	34
Min Split	NC	NC	NC	NC
Yellow Time	NC	NC	NC	NC
All Red	NC	NC	NC	NC
Walk Time	10	10	10	10
FDW	13	13	13	13

NC: Not Changed

Phasing Sequence:

2	4
6	8

2: 2nd Avenue West and 10th Street								
Cycle Length	120s							
Control Type	Actuated Coordinated							
Offset: 110, Referenced to Phase 2& 6 Begin of Green								
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EB	NBL	SB	EBL	WB	SBL	NB
Lead/Lag	Lead		Lead		Lead		Lead	
Max Split	9	62	11	38	9	62	11	38
Min Split		NC		NC	NC	NC	NC	NC
Yellow Time		NC		NC	NC	NC	NC	NC
All Red		NC		NC	NC	NC	NC	NC
Walk Time		21		10		21		10
FDW		18		15		18		15

NC: Not Changed
New Split (Previous Split)

Phasing Sequence:

1	2	3	4
5	6	7	8

SBL queueing issues? Time limited by pedestrian minimums

3: 1st Avenue West and 10th Street					
Cycle Length	120s				
Control Type	Actuated Coordinated				
Offset: 116, Referenced to Phase 2&6 Begin of Green					
Phase Number	2	4	6	7	8
Movement	EB	SB	WB	SBL	NB
Lead/Lag					
Max Split	64	56	64	18	38
Min Split	NC	NC	NC	NC	NC
Yellow Time	NC	NC	NC	NC	NC
All Red	NC	NC	NC	NC	NC
Walk Time	15	10	15		10
FDW	20	18	20		18

NC: Not Changed

Phasing Sequence:

2	4	
6	7	8

4: 2nd Avenue East and 10th Street						
Cycle Length			120s			
Control Type			Actuated Coordinated			
Offset: 75, Referenced to Phase 2&5 Begin of Green						
Phase Number	1	2	4	5	6	8
Movement	WBL	EB	SB	EBL	WBT	NBT
Lead/Lag						
Max Split	10	70	40	30	50	40
Min Split	5	30	27	15	30	27
Yellow Time	3	NC	NC	3	NC	NC
All Red	1	NC	NC	1	NC	NC
Walk Time		10	10		10	10
FDW		15	17		19	17

NC: Not Changed

Phasing Sequence:

1	2	4
5	6	8

APPENDIX D

Level of Service Definitions

Level of Service Definitions

Two-Way Stop Controlled Intersections

Level of Service	Control Delay per Vehicle (seconds)	Interpretation
A	≤ 10	EXCELLENT. Large and frequent gaps in traffic on the main roadway. Queuing on the minor street is rare.
B	> 10 and ≤ 15	VERY GOOD. Many gaps exist in traffic on the main roadway. Queuing on the minor street is minimal.
C	> 15 and ≤ 25	GOOD. Fewer gaps exist in traffic on the main roadway. Delay on minor approach becomes more noticeable.
D	> 25 and ≤ 35	FAIR. Infrequent and shorter gaps in traffic on the main roadway. Queue lengths develop on the minor street.
E	> 35 and ≤ 50	POOR. Very infrequent gaps in traffic on the main roadway. Queue lengths become noticeable.
F	> 50	UNSATISFACTORY. Very few gaps in traffic on the main roadway. Excessive delay with significant queue lengths on the minor street.

Adapted from Highway Capacity Manual 2000, Transportation Research Board

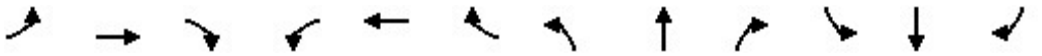
Signalized Intersections

Level of Service	Control Delay per Vehicle (seconds)	Interpretation
A	≤ 10	EXCELLENT. Extremely favourable progression with most vehicles arriving during the green phase. Most vehicles do not stop and short cycle lengths may contribute to low delay.
B	> 10 and ≤ 20	VERY GOOD. Very good progression and/or short cycle lengths with slightly more vehicles stopping than LOS "A" causing slightly higher levels of average delay.
C	> 20 and ≤ 35	GOOD. Fair progression and longer cycle lengths lead to a greater number of vehicles stopping than LOS "B".
D	> 35 and ≤ 55	FAIR. Congestion becomes noticeable with higher average delays resulting from a combination of long cycle lengths, high volume-to-capacity ratios and unfavourable progression.
E	> 55 and ≤ 80	POOR. Lengthy delays values are indicative of poor progression, long cycle lengths and high volume-to-capacity ratios. Individual cycle failures are common with individual movement failures also common.
F	> 80	UNSATISFACTORY. Indicative of oversaturated conditions with vehicular demand greater than the capacity of the intersection.

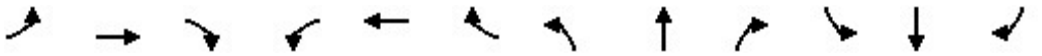
Adapted from Highway Capacity Manual 2000, Transportation Research Board

APPENDIX E

Detailed Capacity Analysis



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	122	114	6	76	104	31	146	7	147	395	56
Future Volume (vph)	28	122	114	6	76	104	31	146	7	147	395	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	20.0		0.0	22.0		0.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			45.0			30.0		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.99		1.00	1.00		1.00		0.99
Frt		0.935			0.916			0.993				0.850
Flt Protected		0.995			0.998		0.950			0.950		
Satd. Flow (prot)	0	3190	0	0	3048	0	1687	1767	0	1770	1881	1538
Flt Permitted		0.887			0.933		0.497			0.650		
Satd. Flow (perm)	0	2841	0	0	2848	0	882	1767	0	1205	1881	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		127			116			3				61
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		101.9			79.4			210.0			157.3	
Travel Time (s)		7.3			5.7			15.1			11.3	
Confl. Peds. (#/hr)	10		13	13		10	2		5	5		2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92
Heavy Vehicles (%)	4%	3%	3%	0%	7%	7%	7%	7%	0%	2%	1%	5%
Adj. Flow (vph)	31	136	127	7	84	116	34	162	8	163	439	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	294	0	0	207	0	34	170	0	163	439	61
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

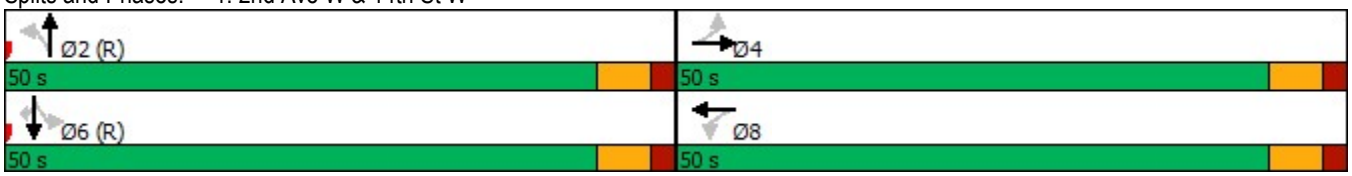


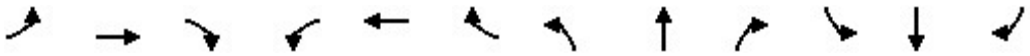
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	50.0	50.0		50.0	50.0		50.0	50.0		50.0	50.0	50.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		44.0	44.0		44.0	44.0	44.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		9.0	9.0		9.0	9.0	9.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		11.5			11.5		76.5	76.5		76.5	76.5	76.5
Actuated g/C Ratio		0.12			0.12		0.76	0.76		0.76	0.76	0.76
v/c Ratio		0.67			0.48		0.05	0.13		0.18	0.31	0.05
Control Delay		31.2			21.8		3.8	3.7		4.2	4.6	1.2
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		31.2			21.8		3.8	3.7		4.2	4.6	1.2
LOS		C			C		A	A		A	A	A
Approach Delay		31.2			21.8			3.7			4.2	
Approach LOS		C			C			A			A	
Queue Length 50th (m)		17.1			9.1		1.4	7.1		7.3	22.2	0.0
Queue Length 95th (m)		29.8			19.3		4.6	15.5		16.4	41.6	3.3
Internal Link Dist (m)		77.9			55.4			186.0			133.3	
Turn Bay Length (m)							20.0			22.0		
Base Capacity (vph)		1321			1318		675	1353		922	1439	1174
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.22			0.16		0.05	0.13		0.18	0.31	0.05

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 55 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 12.6	Intersection LOS: B

Intersection Capacity Utilization 70.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: 2nd Ave W & 14th St W

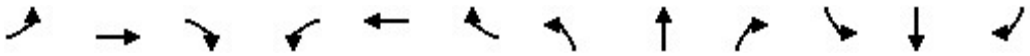




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	5	15	2	6	2	12	178	4	7	504	4
Future Volume (Veh/h)	4	5	15	2	6	2	12	178	4	7	504	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	5	6	17	2	7	2	14	207	5	8	586	5
Pedestrians					3			5				
Lane Width (m)					3.6			3.6				
Walking Speed (m/s)					1.2			1.2				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)											210	
pX, platoon unblocked	0.94	0.94	0.94	0.94	0.94		0.94					
vC, conflicting volume	848	848	594	870	848	212	591			215		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	803	803	532	827	803	212	529			215		
tC, single (s)	7.1	6.7	6.2	7.1	6.7	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.2	3.3	3.5	4.2	3.3	2.3			2.2		
p0 queue free %	98	98	97	99	97	100	99			99		
cM capacity (veh/h)	274	272	514	254	275	831	944			1364		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	28	11	226	599
Volume Left	5	2	14	8
Volume Right	17	2	5	5
cSH	381	308	944	1364
Volume to Capacity	0.07	0.04	0.01	0.01
Queue Length 95th (m)	1.9	0.9	0.4	0.1
Control Delay (s)	15.2	17.1	0.7	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	15.2	17.1	0.7	0.2
Approach LOS	C	C		

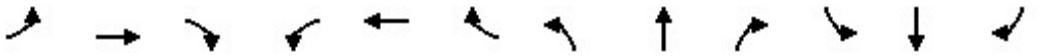
Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	40.3%	ICU Level of Service	A	
Analysis Period (min)	15			



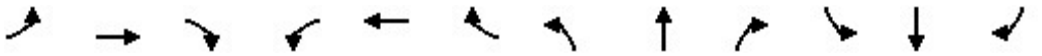
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	7	15	5	5	6	9	186	8	9	506	6
Future Volume (Veh/h)	2	7	15	5	5	6	9	186	8	9	506	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	2	8	16	5	5	7	10	204	9	10	556	7
Pedestrians		11			7			21			3	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			1			2			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								205				
pX, platoon unblocked	0.94	0.94		0.94	0.94	0.94				0.94		
vC, conflicting volume	832	830	592	856	830	218	574			220		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	786	785	592	812	784	131	574			133		
tC, single (s)	7.1	6.6	6.2	7.1	6.5	6.2	4.3			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.1	3.3	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	99	97	97	98	98	99	99			99		
cM capacity (veh/h)	276	282	497	253	296	857	899			1363		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	26	17	223	573
Volume Left	2	5	10	10
Volume Right	16	7	9	7
cSH	383	380	899	1363
Volume to Capacity	0.07	0.04	0.01	0.01
Queue Length 95th (m)	1.7	1.1	0.3	0.2
Control Delay (s)	15.1	14.9	0.5	0.2
Lane LOS	C	B	A	A
Approach Delay (s)	15.1	14.9	0.5	0.2
Approach LOS	C	B		

Intersection Summary				
Average Delay	1.1			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	606	73	26	631	46	110	143	11	219	287	20
Future Volume (vph)	14	606	73	26	631	46	110	143	11	219	287	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	70.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			65.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.984			0.990			0.989			0.990	
Flt Protected		0.999			0.998		0.950			0.950		
Satd. Flow (prot)	0	3476	0	0	3385	0	1787	1859	0	1770	1872	0
Flt Permitted		0.934			0.901		0.221			0.472		
Satd. Flow (perm)	0	3249	0	0	3056	0	414	1859	0	875	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			8			3			3	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		76.1			129.9			112.3			205.3	
Travel Time (s)		5.5			9.4			8.1			14.8	
Confl. Peds. (#/hr)	1		2	2		1	6		5	5		6
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	2%	1%	0%	5%	11%	1%	1%	0%	2%	0%	5%
Adj. Flow (vph)	15	666	80	29	693	51	121	157	12	241	315	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	761	0	0	773	0	121	169	0	241	337	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

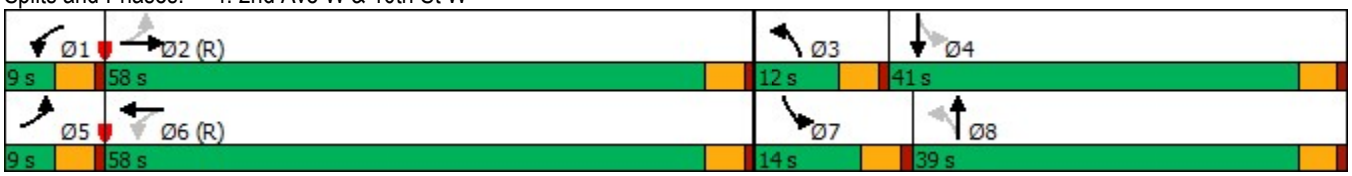


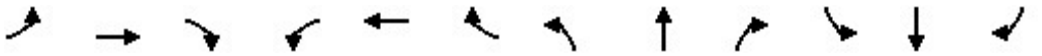
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.5	5.0		4.5	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	43.5		9.0	43.5		9.5	29.5		9.5	29.5	
Total Split (s)	9.0	58.0		9.0	58.0		12.0	39.0		14.0	41.0	
Total Split (%)	7.5%	48.3%		7.5%	48.3%		10.0%	32.5%		11.7%	34.2%	
Maximum Green (s)	4.5	53.5		4.5	53.5		7.5	34.5		9.5	36.5	
Yellow Time (s)	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		1.0	1.0	
Lost Time Adjust (s)		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	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	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	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		21.0			21.0			10.0			10.0	
Flash Dont Walk (s)		18.0			18.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)		72.2			72.2		32.3	24.8		36.3	26.8	
Actuated g/C Ratio		0.60			0.60		0.27	0.21		0.30	0.22	
v/c Ratio		0.39			0.42		0.62	0.44		0.72	0.80	
Control Delay		13.7			14.3		42.7	43.2		45.2	58.0	
Queue Delay		0.0			0.9		0.0	0.0		0.0	0.0	
Total Delay		13.7			15.1		42.7	43.2		45.2	58.0	
LOS		B			B		D	D		D	E	
Approach Delay		13.7			15.1			43.0			52.7	
Approach LOS		B			B			D			D	
Queue Length 50th (m)		47.5			50.0		21.7	36.2		46.7	78.9	
Queue Length 95th (m)		72.2			76.1		33.3	53.2		63.7	104.3	
Internal Link Dist (m)		52.1			105.9			88.3			181.3	
Turn Bay Length (m)							70.0			65.0		
Base Capacity (vph)		1961			1842		196	536		335	571	
Starvation Cap Reductn		0			722		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.39			0.69		0.62	0.32		0.72	0.59	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 110 (92%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 27.1	Intersection LOS: C

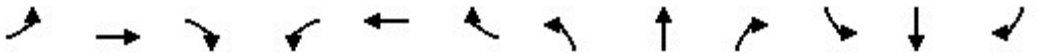
Intersection Capacity Utilization 72.6% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 4: 2nd Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	818	11	2	677	42	14	49	3	197	36	12
Future Volume (vph)	7	818	11	2	677	42	14	49	3	197	36	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	11.0		11.0	50.0		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			12.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99		0.98	0.99	0.99	
Frt		0.998			0.991				0.850		0.963	
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	3494	0	0	3398	0	1805	1863	1509	1787	1784	0
Flt Permitted		0.948			0.954		0.722			0.456		
Satd. Flow (perm)	0	3313	0	0	3241	0	1357	1863	1476	850	1784	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				54		13	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		129.9			53.7			113.2			90.7	
Travel Time (s)		9.4			3.9			8.2			6.5	
Confl. Peds. (#/hr)	5		9	9		5	9		8	8		9
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	9%	5%	5%	7%	0%	2%	7%	1%	0%	8%
Adj. Flow (vph)	8	899	12	2	744	46	15	54	3	216	40	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	919	0	0	792	0	15	54	3	216	53	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

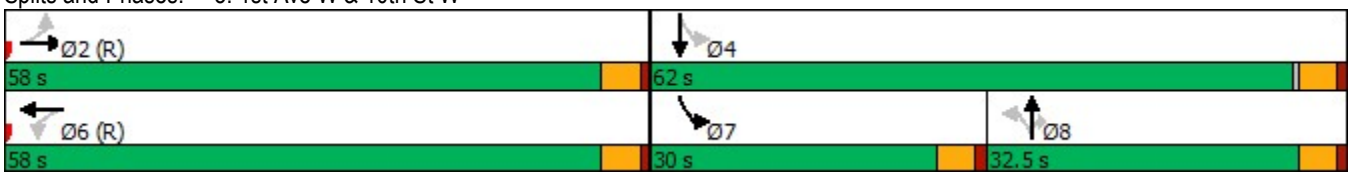


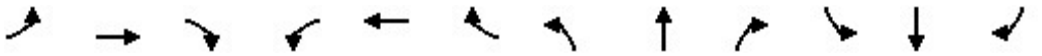
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6			8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	2	2		6	6		8	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	39.5	39.5		39.5	39.5		32.5	32.5	32.5	9.5	32.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.5	32.5	32.5	30.0	62.0	
Total Split (%)	48.1%	48.1%		48.1%	48.1%		27.0%	27.0%	27.0%	24.9%	51.5%	
Maximum Green (s)	53.5	53.5		53.5	53.5		28.0	28.0	28.0	25.5	57.5	
Yellow Time (s)	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	1.0	1.0	1.0	
Lost Time Adjust (s)		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	4.5	
Lead/Lag							Lag	Lag	Lag	Lead		
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	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	15.0	15.0		15.0	15.0		10.0	10.0	10.0		10.0	
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		18.0	18.0	18.0		18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0		0	
Act Effct Green (s)		80.2			80.2		8.9	8.9	8.9	31.3	31.3	
Actuated g/C Ratio		0.67			0.67		0.07	0.07	0.07	0.26	0.26	
v/c Ratio		0.42			0.37		0.15	0.40	0.02	0.57	0.11	
Control Delay		11.5			10.8		54.3	60.9	0.3	41.8	23.7	
Queue Delay		0.8			1.3		0.0	0.0	0.0	0.0	0.0	
Total Delay		12.3			12.1		54.3	60.9	0.3	41.8	23.7	
LOS		B			B		D	E	A	D	C	
Approach Delay		12.3			12.1			57.0			38.3	
Approach LOS		B			B			E			D	
Queue Length 50th (m)		54.7			44.7		3.6	13.1	0.0	44.1	7.3	
Queue Length 95th (m)		83.7			69.4		10.6	26.1	0.0	61.1	15.8	
Internal Link Dist (m)		105.9			29.7			89.2			66.7	
Turn Bay Length (m)							11.0		11.0	50.0		
Base Capacity (vph)		2204			2158		315	432	384	436	865	
Starvation Cap Reductn		902			1089		0	0	0	0	0	
Spillback Cap Reductn		0			0		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.71			0.74		0.05	0.13	0.01	0.50	0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 94 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 17.2		Intersection LOS: B	

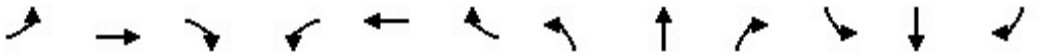
Intersection Capacity Utilization 60.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: 1st Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	764	19	19	504	23	25	104	30	10	61	192
Future Volume (vph)	235	764	19	19	504	23	25	104	30	10	61	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	16.0		0.0	14.0		11.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99	0.99		0.99		0.98
Frt		0.997			0.994			0.966				0.850
Flt Protected		0.989			0.998		0.950			0.950		
Satd. Flow (prot)	0	3467	0	0	3447	0	1736	1786	0	1787	1863	1568
Flt Permitted		0.682			0.896		0.715			0.449		
Satd. Flow (perm)	0	2385	0	0	3094	0	1292	1786	0	838	1863	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			6			12				204
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		45.3			78.6			97.5			156.3	
Travel Time (s)		3.3			5.7			7.0			11.3	
Confl. Peds. (#/hr)	11		15	15		11	9		8	8		9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	3%	5%	0%	4%	0%	4%	2%	3%	1%	2%	3%
Adj. Flow (vph)	250	813	20	20	536	24	27	111	32	11	65	204
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1083	0	0	580	0	27	143	0	11	65	204
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

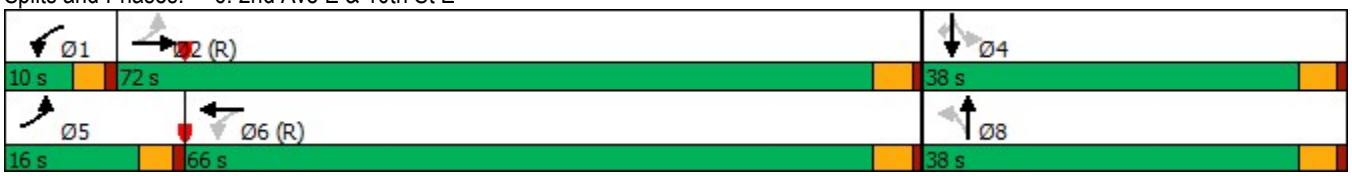


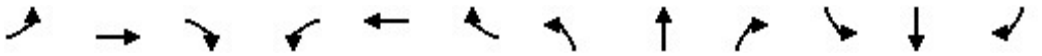
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	29.5		9.5	33.5		31.5	31.5		31.5	31.5	31.5
Total Split (s)	16.0	72.0		10.0	66.0		38.0	38.0		38.0	38.0	38.0
Total Split (%)	13.3%	60.0%		8.3%	55.0%		31.7%	31.7%		31.7%	31.7%	31.7%
Maximum Green (s)	12.0	67.5		6.0	61.5		33.5	33.5		33.5	33.5	33.5
Yellow Time (s)	3.0	3.5		3.0	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		1.0	1.0	1.0
Lost Time Adjust (s)		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	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
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		10.0			10.0		10.0	10.0		10.0	10.0	10.0
Flash Dont Walk (s)		15.0			19.0		17.0	17.0		17.0	17.0	17.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)		96.8			96.8		14.2	14.2		14.2	14.2	14.2
Actuated g/C Ratio		0.81			0.81		0.12	0.12		0.12	0.12	0.12
v/c Ratio		0.56			0.23		0.18	0.64		0.11	0.30	0.57
Control Delay		5.9			3.3		48.2	59.0		47.2	50.2	12.6
Queue Delay		2.7			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		8.6			3.3		48.2	59.0		47.2	50.2	12.6
LOS		A			A		D	E		D	D	B
Approach Delay		8.6			3.3			57.2			22.7	
Approach LOS		A			A			E			C	
Queue Length 50th (m)		39.8			14.2		6.1	31.4		2.5	15.0	0.0
Queue Length 95th (m)		69.2			24.7		14.8	51.1		8.1	27.8	21.7
Internal Link Dist (m)		21.3			54.6			73.5			132.3	
Turn Bay Length (m)							16.0			14.0		11.0
Base Capacity (vph)		1924			2496		360	507		233	520	574
Starvation Cap Reductn		693			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.88			0.23		0.07	0.28		0.05	0.13	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 107 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 12.9		Intersection LOS: B	

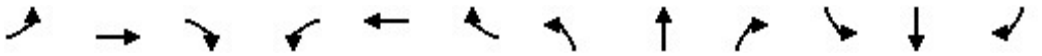
Intersection Capacity Utilization 76.0% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 6: 2nd Ave E & 10th St E





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	66	66	17	197	294	56	245	14	73	268	39
Future Volume (vph)	53	66	66	17	197	294	56	245	14	73	268	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	20.0		0.0	22.0		0.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			45.0			30.0		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.98		1.00	1.00		1.00		0.99
Frt		0.947			0.913			0.992				0.850
Flt Protected		0.986			0.998		0.950			0.950		
Satd. Flow (prot)	0	3208	0	0	3037	0	1687	1766	0	1770	1881	1538
Flt Permitted		0.591			0.936		0.587			0.591		
Satd. Flow (perm)	0	1920	0	0	2846	0	1041	1766	0	1097	1881	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		69			309			4				41
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		101.9			79.4			210.0			157.3	
Travel Time (s)		7.3			5.7			15.1			11.3	
Confl. Peds. (#/hr)	10		13	13		10	2		5	5		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	3%	3%	0%	7%	7%	7%	7%	0%	2%	1%	5%
Adj. Flow (vph)	56	69	69	18	207	309	59	258	15	77	282	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	194	0	0	534	0	59	273	0	77	282	41
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

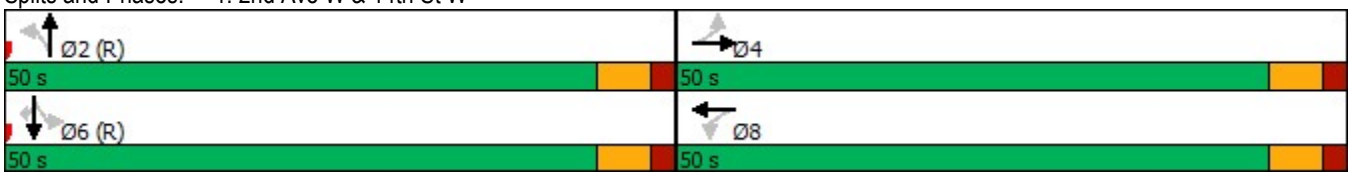


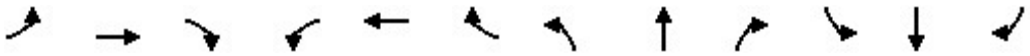
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	50.0	50.0		50.0	50.0		50.0	50.0		50.0	50.0	50.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		44.0	44.0		44.0	44.0	44.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		9.0	9.0		9.0	9.0	9.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		14.5			14.5		73.5	73.5		73.5	73.5	73.5
Actuated g/C Ratio		0.14			0.14		0.74	0.74		0.74	0.74	0.74
v/c Ratio		0.58			0.79		0.08	0.21		0.10	0.20	0.04
Control Delay		31.1			25.4		5.2	5.3		5.2	5.3	1.9
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		31.1			25.4		5.2	5.3		5.2	5.3	1.9
LOS		C			C		A	A		A	A	A
Approach Delay		31.1			25.4			5.3			4.9	
Approach LOS		C			C			A			A	
Queue Length 50th (m)		12.4			23.1		2.8	14.3		3.8	15.0	0.0
Queue Length 95th (m)		22.1			38.7		8.7	31.5		10.8	32.4	3.5
Internal Link Dist (m)		77.9			55.4			186.0			133.3	
Turn Bay Length (m)							20.0			22.0		
Base Capacity (vph)		883			1425		765	1298		806	1382	1125
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.22			0.37		0.08	0.21		0.10	0.20	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 55 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 16.0	Intersection LOS: B

Intersection Capacity Utilization 71.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: 2nd Ave W & 14th St W

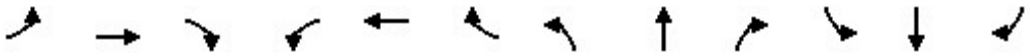




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	15	2	25	13	17	297	3	3	343	5
Future Volume (Veh/h)	5	1	15	2	25	13	17	297	3	3	343	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	1	16	2	27	14	18	323	3	3	373	5
Pedestrians		6			3			2			6	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			0			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)											210	
pX, platoon unblocked	0.98	0.98	0.98	0.98	0.98		0.98					
vC, conflicting volume	782	752	384	764	754	334	384			329		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	766	737	360	748	738	334	361			329		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	98	99	92	98	98			100		
cM capacity (veh/h)	281	333	670	308	332	708	1178			1239		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	22	43	344	381
Volume Left	5	2	18	3
Volume Right	16	14	3	5
cSH	493	400	1178	1239
Volume to Capacity	0.04	0.11	0.02	0.00
Queue Length 95th (m)	1.1	2.9	0.4	0.1
Control Delay (s)	12.6	15.1	0.6	0.1
Lane LOS	B	C	A	A
Approach Delay (s)	12.6	15.1	0.6	0.1
Approach LOS	B	C		

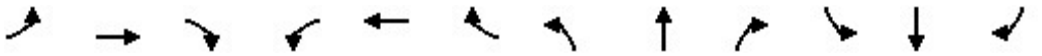
Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	38.8%	ICU Level of Service	A	
Analysis Period (min)	15			



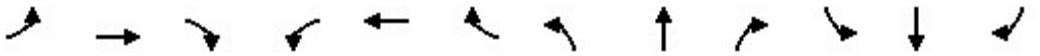
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	9	17	5	9	8	11	303	6	7	346	7
Future Volume (Veh/h)	6	9	17	5	9	8	11	303	6	7	346	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	7	10	19	5	10	9	12	333	7	8	380	8
Pedestrians		6			9			13			4	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								205				
pX, platoon unblocked	0.89	0.89		0.89	0.89	0.89				0.89		
vC, conflicting volume	784	779	403	806	780	350	394			349		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	697	691	403	722	692	209	394			209		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	97	97	98	97	99	99			99		
cM capacity (veh/h)	298	320	631	279	320	737	1170			1216		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	36	24	352	396
Volume Left	7	5	12	8
Volume Right	19	9	7	8
cSH	425	391	1170	1216
Volume to Capacity	0.08	0.06	0.01	0.01
Queue Length 95th (m)	2.2	1.6	0.2	0.2
Control Delay (s)	14.3	14.8	0.4	0.2
Lane LOS	B	B	A	A
Approach Delay (s)	14.3	14.8	0.4	0.2
Approach LOS	B	B		

Intersection Summary				
Average Delay	1.4			
Intersection Capacity Utilization	35.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	540	54	40	913	89	168	216	13	180	167	21
Future Volume (vph)	15	540	54	40	913	89	168	216	13	180	167	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	70.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			65.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.987			0.987			0.992			0.983	
Flt Protected		0.999			0.998		0.950			0.950		
Satd. Flow (prot)	0	3487	0	0	3447	0	1787	1883	0	1770	1848	0
Flt Permitted		0.918			0.904		0.405			0.300		
Satd. Flow (perm)	0	3204	0	0	3122	0	759	1883	0	556	1848	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			12			2			5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		76.1			129.9			112.3			205.3	
Travel Time (s)		5.5			9.4			8.1			14.8	
Confl. Peds. (#/hr)	2		3	3		2	4		6	6		4
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	2%	1%	0%	3%	4%	1%	0%	0%	2%	1%	0%
Adj. Flow (vph)	15	545	55	40	922	90	170	218	13	182	169	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	615	0	0	1052	0	170	231	0	182	190	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.5	5.0		4.5	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	43.5		9.0	43.5		9.5	29.5		9.5	29.5	
Total Split (s)	9.0	62.0		9.0	62.0		11.0	38.0		11.0	38.0	
Total Split (%)	7.5%	51.7%		7.5%	51.7%		9.2%	31.7%		9.2%	31.7%	
Maximum Green (s)	4.5	57.5		4.5	57.5		6.5	33.5		6.5	33.5	
Yellow Time (s)	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		1.0	1.0	
Lost Time Adjust (s)		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	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	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	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		21.0			21.0			10.0			10.0	
Flash Dont Walk (s)		18.0			18.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)		80.0			80.0		26.5	20.0		26.5	20.0	
Actuated g/C Ratio		0.67			0.67		0.22	0.17		0.22	0.17	
v/c Ratio		0.29			0.50		0.76	0.74		0.97	0.61	
Control Delay		9.0			4.8		60.4	60.5		99.1	52.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		9.0			4.8		60.4	60.5		99.1	52.9	
LOS		A			A		E	E		F	D	
Approach Delay		9.0			4.8			60.4			75.5	
Approach LOS		A			A			E			E	
Queue Length 50th (m)		29.5			15.2		34.7	54.5		37.4	43.0	
Queue Length 95th (m)		46.0			28.5		51.1	77.4		#70.9	63.6	
Internal Link Dist (m)		52.1			105.9			88.3			181.3	
Turn Bay Length (m)							70.0			65.0		
Base Capacity (vph)		2141			2086		223	527		188	519	
Starvation Cap Reductn		0			64		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.29			0.52		0.76	0.44		0.97	0.37	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 110 (92%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 25.8	Intersection LOS: C

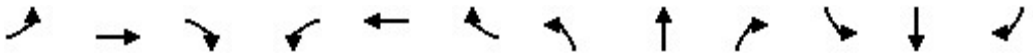
Intersection Capacity Utilization 92.7% ICU Level of Service F

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: 2nd Ave W & 10th St W

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	718	8	2	1008	63	13	68	8	159	38	26
Future Volume (vph)	7	718	8	2	1008	63	13	68	8	159	38	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	11.0		11.0	50.0		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			12.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99		0.98	0.99	0.99	
Frt		0.998			0.991				0.850		0.940	
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	3499	0	0	3501	0	1597	1881	1495	1787	1770	0
Flt Permitted		0.944			0.954		0.713			0.465		
Satd. Flow (perm)	0	3303	0	0	3340	0	1188	1881	1459	865	1770	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			8				55		27	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		129.9			53.7			113.2			90.7	
Travel Time (s)		9.4			3.9			8.2			6.5	
Confl. Peds. (#/hr)	8		7	7		8	8		10	10		8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	0%	2%	2%	13%	1%	8%	1%	0%	0%
Adj. Flow (vph)	7	748	8	2	1050	66	14	71	8	166	40	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	763	0	0	1118	0	14	71	8	166	67	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6			8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	2	2		6	6		8	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	39.5	39.5		39.5	39.5		32.5	32.5	32.5	9.5	32.5	
Total Split (s)	64.0	64.0		64.0	64.0		38.0	38.0	38.0	18.0	56.0	
Total Split (%)	53.3%	53.3%		53.3%	53.3%		31.7%	31.7%	31.7%	15.0%	46.7%	
Maximum Green (s)	59.5	59.5		59.5	59.5		33.5	33.5	33.5	13.5	51.5	
Yellow Time (s)	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	1.0	1.0	1.0	
Lost Time Adjust (s)		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	4.5	
Lead/Lag							Lag	Lag	Lag	Lead		
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	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	15.0	15.0		15.0	15.0		10.0	10.0	10.0		10.0	
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		18.0	18.0	18.0		18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0		0	
Act Effct Green (s)		85.8			85.8		9.9	9.9	9.9	25.2	25.2	
Actuated g/C Ratio		0.72			0.72		0.08	0.08	0.08	0.21	0.21	
v/c Ratio		0.32			0.47		0.14	0.46	0.05	0.59	0.17	
Control Delay		7.1			11.6		52.8	61.2	0.5	48.8	23.8	
Queue Delay		0.2			0.4		0.0	0.0	0.0	0.0	0.0	
Total Delay		7.3			12.0		52.8	61.2	0.5	48.8	23.8	
LOS		A			B		D	E	A	D	C	
Approach Delay		7.3			12.0			54.7			41.6	
Approach LOS		A			B			D			D	
Queue Length 50th (m)		29.8			77.1		3.3	17.1	0.0	35.0	7.8	
Queue Length 95th (m)		m34.4			96.4		10.0	31.7	0.0	54.3	19.4	
Internal Link Dist (m)		105.9			29.7			89.2			66.7	
Turn Bay Length (m)							11.0		11.0	50.0		
Base Capacity (vph)		2362			2391		331	525	446	289	775	
Starvation Cap Reductn		718			693		0	0	0	0	0	
Spillback Cap Reductn		0			0		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.46			0.66		0.04	0.14	0.02	0.57	0.09	

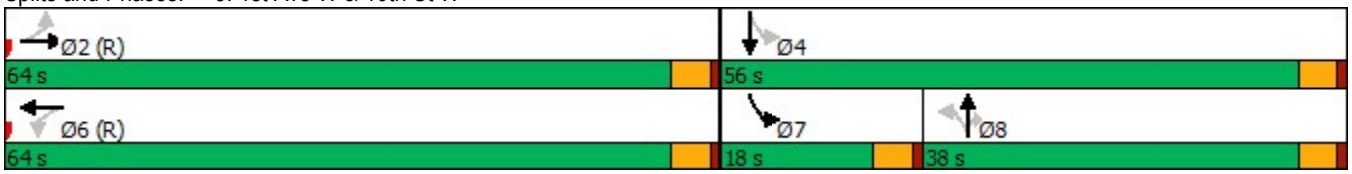
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 116 (97%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 15.3		Intersection LOS: B	

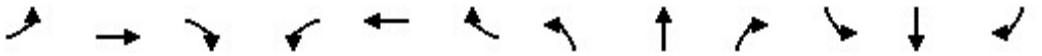
Intersection Capacity Utilization 58.8% ICU Level of Service B

Analysis Period (min) 15

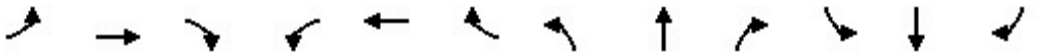
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: 1st Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	713	36	32	739	16	39	91	45	25	102	295
Future Volume (vph)	136	713	36	32	739	16	39	91	45	25	102	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	16.0		0.0	14.0		11.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00		0.94	0.99		0.99		0.92
Frt		0.994			0.997			0.950				0.850
Flt Protected		0.992			0.998		0.950			0.950		
Satd. Flow (prot)	0	3446	0	0	3522	0	1752	1764	0	1805	1900	1583
Flt Permitted		0.683			0.881		0.586			0.450		
Satd. Flow (perm)	0	2368	0	0	3103	0	1013	1764	0	843	1900	1451
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			2			21				293
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		45.3			78.6			97.5			156.3	
Travel Time (s)		3.3			5.7			7.0			11.3	
Confl. Peds. (#/hr)	18		65	65		18	55		13	13		55
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	3%	0%	0%	2%	0%	3%	0%	4%	0%	0%	2%
Adj. Flow (vph)	139	728	37	33	754	16	40	93	46	26	104	301
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	904	0	0	803	0	40	139	0	26	104	301
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

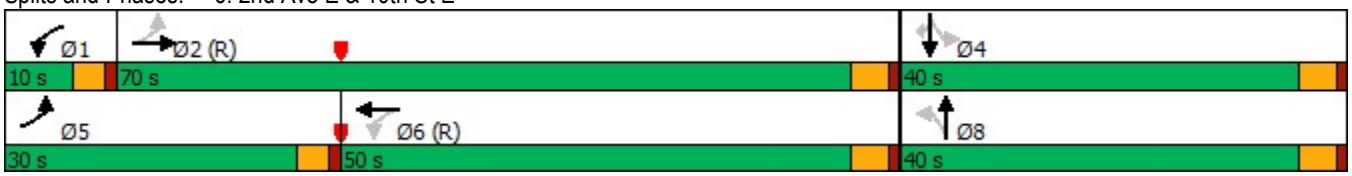


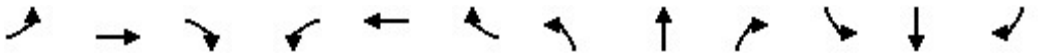
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	29.5		9.5	33.5		31.5	31.5		31.5	31.5	31.5
Total Split (s)	30.0	70.0		10.0	50.0		40.0	40.0		40.0	40.0	40.0
Total Split (%)	25.0%	58.3%		8.3%	41.7%		33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	26.0	65.5		6.0	45.5		35.5	35.5		35.5	35.5	35.5
Yellow Time (s)	3.0	3.5		3.0	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		1.0	1.0	1.0
Lost Time Adjust (s)		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	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
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		10.0			10.0		10.0	10.0		10.0	10.0	10.0
Flash Dont Walk (s)		15.0			19.0		17.0	17.0		17.0	17.0	17.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)		97.5			97.5		13.5	13.5		13.5	13.5	13.5
Actuated g/C Ratio		0.81			0.81		0.11	0.11		0.11	0.11	0.11
v/c Ratio		0.47			0.32		0.35	0.64		0.28	0.49	0.71
Control Delay		4.1			3.5		56.1	55.9		54.3	56.6	16.0
Queue Delay		0.2			0.0		0.0	0.0		0.0	0.0	0.1
Total Delay		4.3			3.6		56.1	55.9		54.3	56.6	16.1
LOS		A			A		E	E		D	E	B
Approach Delay		4.3			3.6			56.0			28.2	
Approach LOS		A			A			E			C	
Queue Length 50th (m)		14.8			20.8		9.3	28.3		6.0	24.6	1.8
Queue Length 95th (m)		22.6			35.6		20.1	47.9		14.9	40.9	29.3
Internal Link Dist (m)		21.3			54.6			73.5			132.3	
Turn Bay Length (m)							16.0			14.0		11.0
Base Capacity (vph)		1925			2521		299	536		249	562	635
Starvation Cap Reductn		339			0		0	0		0	0	0
Spillback Cap Reductn		0			284		0	0		0	0	26
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.57			0.36		0.13	0.26		0.10	0.19	0.49

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 107 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 12.5	Intersection LOS: B

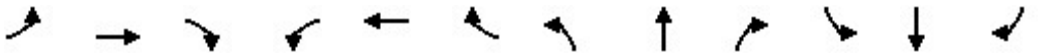
Intersection Capacity Utilization 82.6% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 6: 2nd Ave E & 10th St E





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	122	114	6	76	104	31	146	7	147	395	56
Future Volume (vph)	28	122	114	6	76	104	31	146	7	147	395	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	20.0		0.0	22.0		0.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			45.0			30.0		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.99		1.00	1.00		1.00		0.99
Frt		0.935			0.916			0.993				0.850
Flt Protected		0.995			0.998		0.950			0.950		
Satd. Flow (prot)	0	3190	0	0	3048	0	1687	1767	0	1770	1881	1538
Flt Permitted		0.887			0.933		0.497			0.650		
Satd. Flow (perm)	0	2841	0	0	2848	0	882	1767	0	1205	1881	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		127			116			3				61
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		101.9			79.4			210.0			157.3	
Travel Time (s)		7.3			5.7			15.1			11.3	
Confl. Peds. (#/hr)	10		13	13		10	2		5	5		2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92
Heavy Vehicles (%)	4%	3%	3%	0%	7%	7%	7%	7%	0%	2%	1%	5%
Adj. Flow (vph)	31	136	127	7	84	116	34	162	8	163	439	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	294	0	0	207	0	34	170	0	163	439	61
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

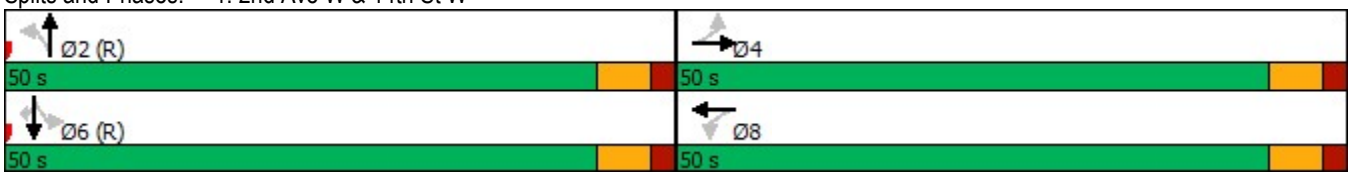


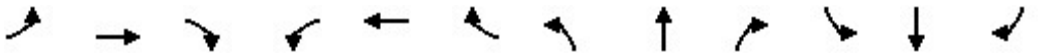
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	50.0	50.0		50.0	50.0		50.0	50.0		50.0	50.0	50.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		44.0	44.0		44.0	44.0	44.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		9.0	9.0		9.0	9.0	9.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		11.5			11.5		76.5	76.5		76.5	76.5	76.5
Actuated g/C Ratio		0.12			0.12		0.76	0.76		0.76	0.76	0.76
v/c Ratio		0.67			0.48		0.05	0.13		0.18	0.31	0.05
Control Delay		31.2			21.8		3.8	3.7		4.2	4.6	1.2
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		31.2			21.8		3.8	3.7		4.2	4.6	1.2
LOS		C			C		A	A		A	A	A
Approach Delay		31.2			21.8			3.7			4.2	
Approach LOS		C			C			A			A	
Queue Length 50th (m)		17.1			9.1		1.4	7.1		7.3	22.2	0.0
Queue Length 95th (m)		29.8			19.3		4.6	15.5		16.4	41.6	3.3
Internal Link Dist (m)		77.9			55.4			186.0			133.3	
Turn Bay Length (m)							20.0			22.0		
Base Capacity (vph)		1321			1318		675	1353		922	1439	1174
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.22			0.16		0.05	0.13		0.18	0.31	0.05

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 55 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 12.6	Intersection LOS: B

Intersection Capacity Utilization 70.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: 2nd Ave W & 14th St W

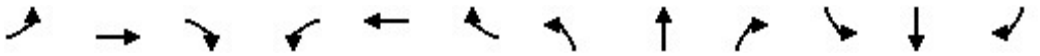




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	5	15	2	6	2	12	178	4	7	504	4
Future Volume (Veh/h)	4	5	15	2	6	2	12	178	4	7	504	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	5	6	17	2	7	2	14	207	5	8	586	5
Pedestrians					3			5				
Lane Width (m)					3.6			3.6				
Walking Speed (m/s)					1.2			1.2				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)											210	
pX, platoon unblocked	0.94	0.94	0.94	0.94	0.94		0.94					
vC, conflicting volume	848	848	594	870	848	212	591			215		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	803	803	532	827	803	212	529			215		
tC, single (s)	7.1	6.7	6.2	7.1	6.7	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.2	3.3	3.5	4.2	3.3	2.3			2.2		
p0 queue free %	98	98	97	99	97	100	99			99		
cM capacity (veh/h)	274	272	514	254	275	831	944			1364		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	28	11	226	599
Volume Left	5	2	14	8
Volume Right	17	2	5	5
cSH	381	308	944	1364
Volume to Capacity	0.07	0.04	0.01	0.01
Queue Length 95th (m)	1.9	0.9	0.4	0.1
Control Delay (s)	15.2	17.1	0.7	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	15.2	17.1	0.7	0.2
Approach LOS	C	C		

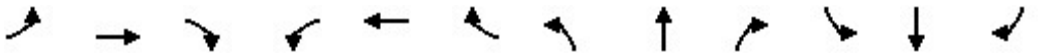
Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	40.3%	ICU Level of Service	A	
Analysis Period (min)	15			



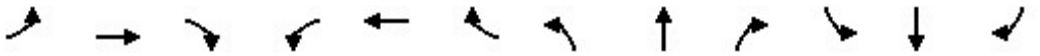
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	7	15	5	5	6	9	186	8	9	506	6
Future Volume (Veh/h)	2	7	15	5	5	6	9	186	8	9	506	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	2	8	16	5	5	7	10	204	9	10	556	7
Pedestrians		11			7			21			3	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			1			2			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								205				
pX, platoon unblocked	0.93	0.93		0.93	0.93	0.93				0.93		
vC, conflicting volume	832	830	592	856	830	218	574			220		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	785	784	592	811	783	129	574			130		
tC, single (s)	7.1	6.6	6.2	7.1	6.5	6.2	4.3			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.1	3.3	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	99	97	97	98	98	99	99			99		
cM capacity (veh/h)	276	282	497	253	296	859	899			1363		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	26	17	223	573
Volume Left	2	5	10	10
Volume Right	16	7	9	7
cSH	383	380	899	1363
Volume to Capacity	0.07	0.04	0.01	0.01
Queue Length 95th (m)	1.7	1.1	0.3	0.2
Control Delay (s)	15.1	14.9	0.5	0.2
Lane LOS	C	B	A	A
Approach Delay (s)	15.1	14.9	0.5	0.2
Approach LOS	C	B		

Intersection Summary				
Average Delay	1.1			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	606	73	26	631	46	110	143	11	219	287	20
Future Volume (vph)	14	606	73	26	631	46	110	143	11	219	287	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	70.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			65.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.984			0.990			0.989			0.990	
Flt Protected		0.999			0.998		0.950			0.950		
Satd. Flow (prot)	0	3476	0	0	3385	0	1787	1859	0	1770	1872	0
Flt Permitted		0.933			0.901		0.242			0.419		
Satd. Flow (perm)	0	3246	0	0	3056	0	453	1859	0	777	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			8			3			3	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		76.1			129.9			112.3			205.3	
Travel Time (s)		5.5			9.4			8.1			14.8	
Confl. Peds. (#/hr)	1		2	2		1	6		5	5		6
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	2%	1%	0%	5%	11%	1%	1%	0%	2%	0%	5%
Adj. Flow (vph)	15	666	80	29	693	51	121	157	12	241	315	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	761	0	0	773	0	121	169	0	241	337	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

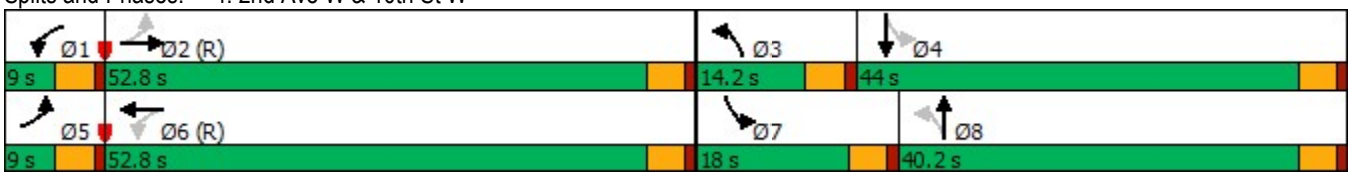


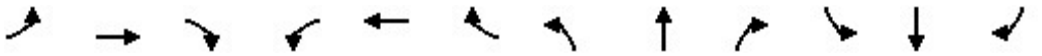
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.5	5.0		4.5	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	43.5		9.0	43.5		9.5	29.5		9.5	29.5	
Total Split (s)	9.0	52.8		9.0	52.8		14.2	40.2		18.0	44.0	
Total Split (%)	7.5%	44.0%		7.5%	44.0%		11.8%	33.5%		15.0%	36.7%	
Maximum Green (s)	4.5	48.3		4.5	48.3		9.7	35.7		13.5	39.5	
Yellow Time (s)	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		1.0	1.0	
Lost Time Adjust (s)		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	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	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	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		21.0			21.0			10.0			10.0	
Flash Dont Walk (s)		18.0			18.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)		70.3			70.3		32.2	22.9		40.2	26.9	
Actuated g/C Ratio		0.59			0.59		0.27	0.19		0.34	0.22	
v/c Ratio		0.40			0.43		0.54	0.47		0.65	0.80	
Control Delay		14.9			15.6		36.0	45.5		38.2	57.4	
Queue Delay		0.0			0.9		0.0	0.0		0.0	0.0	
Total Delay		14.9			16.4		36.0	45.5		38.2	57.4	
LOS		B			B		D	D		D	E	
Approach Delay		14.9			16.4			41.5			49.4	
Approach LOS		B			B			D			D	
Queue Length 50th (m)		50.4			52.9		21.0	36.8		45.2	78.7	
Queue Length 95th (m)		75.9			79.8		32.1	54.2		61.3	103.9	
Internal Link Dist (m)		52.1			105.9			88.3			181.3	
Turn Bay Length (m)							70.0			65.0		
Base Capacity (vph)		1905			1792		231	555		371	618	
Starvation Cap Reductn		0			678		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.40			0.69		0.52	0.30		0.65	0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 110 (92%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 26.9		Intersection LOS: C	

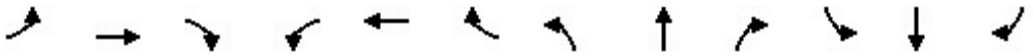
Intersection Capacity Utilization 72.6% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 4: 2nd Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	818	11	2	677	42	14	49	3	197	36	12
Future Volume (vph)	7	818	11	2	677	42	14	49	3	197	36	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	11.0		11.0	50.0		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			12.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99		0.98	0.99	0.99	
Frt		0.998			0.991				0.850		0.963	
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	3494	0	0	3398	0	1805	1863	1509	1787	1784	0
Flt Permitted		0.948			0.954		0.722			0.456		
Satd. Flow (perm)	0	3313	0	0	3241	0	1357	1863	1476	850	1784	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				54		13	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		129.9			53.7			113.2			90.7	
Travel Time (s)		9.4			3.9			8.2			6.5	
Confl. Peds. (#/hr)	5		9	9		5	9		8	8		9
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	9%	5%	5%	7%	0%	2%	7%	1%	0%	8%
Adj. Flow (vph)	8	899	12	2	744	46	15	54	3	216	40	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	919	0	0	792	0	15	54	3	216	53	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

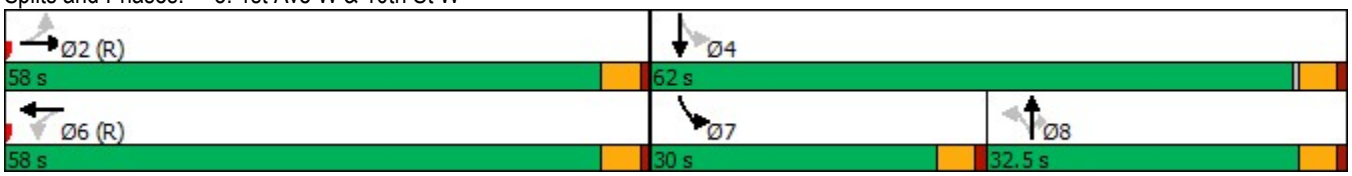


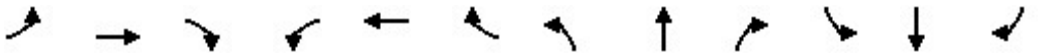
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6			8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	2	2		6	6		8	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	39.5	39.5		39.5	39.5		32.5	32.5	32.5	9.5	32.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.5	32.5	32.5	30.0	62.0	
Total Split (%)	48.1%	48.1%		48.1%	48.1%		27.0%	27.0%	27.0%	24.9%	51.5%	
Maximum Green (s)	53.5	53.5		53.5	53.5		28.0	28.0	28.0	25.5	57.5	
Yellow Time (s)	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	1.0	1.0	1.0	
Lost Time Adjust (s)		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	4.5	
Lead/Lag							Lag	Lag	Lag	Lead		
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	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	15.0	15.0		15.0	15.0		10.0	10.0	10.0		10.0	
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		18.0	18.0	18.0		18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0		0	
Act Effct Green (s)		80.2			80.2		8.9	8.9	8.9	31.3	31.3	
Actuated g/C Ratio		0.67			0.67		0.07	0.07	0.07	0.26	0.26	
v/c Ratio		0.42			0.37		0.15	0.40	0.02	0.57	0.11	
Control Delay		11.5			10.8		54.3	60.9	0.3	41.8	23.7	
Queue Delay		0.8			1.3		0.0	0.0	0.0	0.0	0.0	
Total Delay		12.3			12.1		54.3	60.9	0.3	41.8	23.7	
LOS		B			B		D	E	A	D	C	
Approach Delay		12.3			12.1			57.0			38.3	
Approach LOS		B			B			E			D	
Queue Length 50th (m)		54.7			44.7		3.6	13.1	0.0	44.1	7.3	
Queue Length 95th (m)		83.7			69.4		10.6	26.1	0.0	61.1	15.8	
Internal Link Dist (m)		105.9			29.7			89.2			66.7	
Turn Bay Length (m)							11.0		11.0	50.0		
Base Capacity (vph)		2204			2158		315	432	384	436	865	
Starvation Cap Reductn		902			1089		0	0	0	0	0	
Spillback Cap Reductn		0			0		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.71			0.74		0.05	0.13	0.01	0.50	0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 94 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 17.2		Intersection LOS: B	

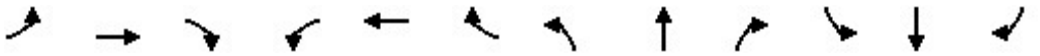
Intersection Capacity Utilization 60.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: 1st Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	764	19	19	504	23	25	104	30	10	61	192
Future Volume (vph)	235	764	19	19	504	23	25	104	30	10	61	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	16.0		0.0	14.0		11.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99	0.99		0.99		0.98
Frt		0.997			0.994			0.966				0.850
Flt Protected		0.989			0.998		0.950			0.950		
Satd. Flow (prot)	0	3467	0	0	3447	0	1736	1786	0	1787	1863	1568
Flt Permitted		0.682			0.896		0.715			0.449		
Satd. Flow (perm)	0	2385	0	0	3094	0	1292	1786	0	838	1863	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			6			12				204
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		45.3			78.6			97.5			156.3	
Travel Time (s)		3.3			5.7			7.0			11.3	
Confl. Peds. (#/hr)	11		15	15		11	9		8	8		9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	3%	5%	0%	4%	0%	4%	2%	3%	1%	2%	3%
Adj. Flow (vph)	250	813	20	20	536	24	27	111	32	11	65	204
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1083	0	0	580	0	27	143	0	11	65	204
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

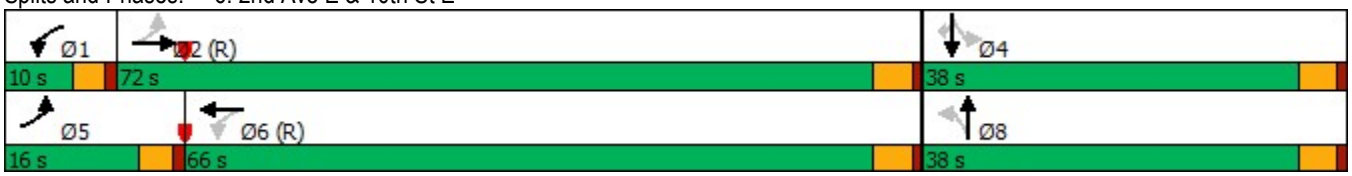


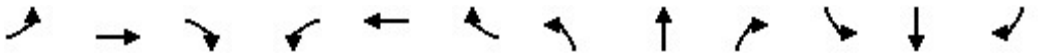
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	29.5		9.5	33.5		31.5	31.5		31.5	31.5	31.5
Total Split (s)	16.0	72.0		10.0	66.0		38.0	38.0		38.0	38.0	38.0
Total Split (%)	13.3%	60.0%		8.3%	55.0%		31.7%	31.7%		31.7%	31.7%	31.7%
Maximum Green (s)	12.0	67.5		6.0	61.5		33.5	33.5		33.5	33.5	33.5
Yellow Time (s)	3.0	3.5		3.0	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		1.0	1.0	1.0
Lost Time Adjust (s)		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	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
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		10.0			10.0		10.0	10.0		10.0	10.0	10.0
Flash Dont Walk (s)		15.0			19.0		17.0	17.0		17.0	17.0	17.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)		96.8			96.8		14.2	14.2		14.2	14.2	14.2
Actuated g/C Ratio		0.81			0.81		0.12	0.12		0.12	0.12	0.12
v/c Ratio		0.56			0.23		0.18	0.64		0.11	0.30	0.57
Control Delay		5.9			3.3		48.2	59.0		47.2	50.2	12.6
Queue Delay		2.7			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		8.6			3.3		48.2	59.0		47.2	50.2	12.6
LOS		A			A		D	E		D	D	B
Approach Delay		8.6			3.3			57.2			22.7	
Approach LOS		A			A			E			C	
Queue Length 50th (m)		39.8			14.2		6.1	31.4		2.5	15.0	0.0
Queue Length 95th (m)		69.2			24.7		14.8	51.1		8.1	27.8	21.7
Internal Link Dist (m)		21.3			54.6			73.5			132.3	
Turn Bay Length (m)							16.0			14.0		11.0
Base Capacity (vph)		1924			2496		360	507		233	520	574
Starvation Cap Reductn		693			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.88			0.23		0.07	0.28		0.05	0.13	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 107 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 12.9		Intersection LOS: B	

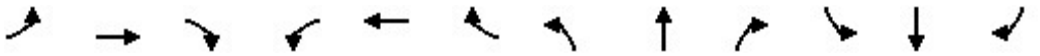
Intersection Capacity Utilization 76.0% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 6: 2nd Ave E & 10th St E





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	66	66	17	197	294	56	245	14	73	268	39
Future Volume (vph)	53	66	66	17	197	294	56	245	14	73	268	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	20.0		0.0	22.0		0.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			45.0			30.0		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.98		1.00	1.00		1.00		0.99
Frt		0.947			0.913			0.992				0.850
Flt Protected		0.986			0.998		0.950			0.950		
Satd. Flow (prot)	0	3208	0	0	3037	0	1687	1766	0	1770	1881	1538
Flt Permitted		0.591			0.936		0.587			0.591		
Satd. Flow (perm)	0	1920	0	0	2846	0	1041	1766	0	1097	1881	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		69			309			4				41
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		101.9			79.4			210.0			157.3	
Travel Time (s)		7.3			5.7			15.1			11.3	
Confl. Peds. (#/hr)	10		13	13		10	2		5	5		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	3%	3%	0%	7%	7%	7%	7%	0%	2%	1%	5%
Adj. Flow (vph)	56	69	69	18	207	309	59	258	15	77	282	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	194	0	0	534	0	59	273	0	77	282	41
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

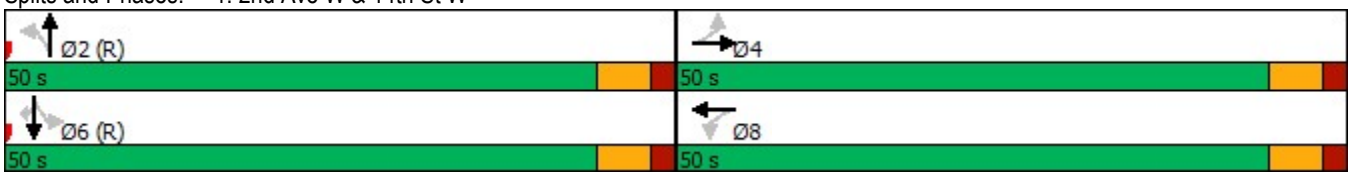


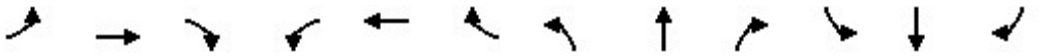
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	50.0	50.0		50.0	50.0		50.0	50.0		50.0	50.0	50.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		44.0	44.0		44.0	44.0	44.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		9.0	9.0		9.0	9.0	9.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		14.5			14.5		73.5	73.5		73.5	73.5	73.5
Actuated g/C Ratio		0.14			0.14		0.74	0.74		0.74	0.74	0.74
v/c Ratio		0.58			0.79		0.08	0.21		0.10	0.20	0.04
Control Delay		31.1			25.4		5.2	5.3		5.2	5.3	1.9
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		31.1			25.4		5.2	5.3		5.2	5.3	1.9
LOS		C			C		A	A		A	A	A
Approach Delay		31.1			25.4			5.3			4.9	
Approach LOS		C			C			A			A	
Queue Length 50th (m)		12.4			23.1		2.8	14.3		3.8	15.0	0.0
Queue Length 95th (m)		22.1			38.7		8.7	31.5		10.8	32.4	3.5
Internal Link Dist (m)		77.9			55.4			186.0			133.3	
Turn Bay Length (m)							20.0			22.0		
Base Capacity (vph)		883			1425		765	1298		806	1382	1125
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.22			0.37		0.08	0.21		0.10	0.20	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 55 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 16.0	Intersection LOS: B

Intersection Capacity Utilization 71.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: 2nd Ave W & 14th St W

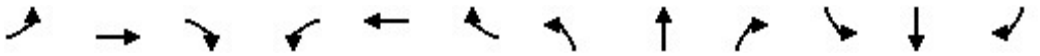




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	15	2	25	13	17	297	3	3	343	5
Future Volume (Veh/h)	5	1	15	2	25	13	17	297	3	3	343	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	1	16	2	27	14	18	323	3	3	373	5
Pedestrians		6			3			2			6	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			0			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)											210	
pX, platoon unblocked	0.98	0.98	0.98	0.98	0.98		0.98					
vC, conflicting volume	782	752	384	764	754	334	384			329		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	766	737	360	748	738	334	361			329		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	98	99	92	98	98			100		
cM capacity (veh/h)	281	333	670	308	332	708	1178			1239		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	22	43	344	381
Volume Left	5	2	18	3
Volume Right	16	14	3	5
cSH	493	400	1178	1239
Volume to Capacity	0.04	0.11	0.02	0.00
Queue Length 95th (m)	1.1	2.9	0.4	0.1
Control Delay (s)	12.6	15.1	0.6	0.1
Lane LOS	B	C	A	A
Approach Delay (s)	12.6	15.1	0.6	0.1
Approach LOS	B	C		

Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	38.8%	ICU Level of Service	A	
Analysis Period (min)	15			

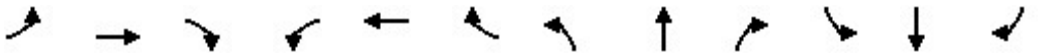


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	9	17	5	9	8	11	303	6	7	346	7
Future Volume (Veh/h)	6	9	17	5	9	8	11	303	6	7	346	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	7	10	19	5	10	9	12	333	7	8	380	8
Pedestrians		6			9			13			4	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								205				
pX, platoon unblocked	0.89	0.89		0.89	0.89	0.89				0.89		
vC, conflicting volume	784	779	403	806	780	350	394			349		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	697	691	403	722	691	209	394			208		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	97	97	98	97	99	99			99		
cM capacity (veh/h)	298	320	631	279	320	737	1170			1216		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	36	24	352	396
Volume Left	7	5	12	8
Volume Right	19	9	7	8
cSH	425	391	1170	1216
Volume to Capacity	0.08	0.06	0.01	0.01
Queue Length 95th (m)	2.2	1.6	0.2	0.2
Control Delay (s)	14.3	14.8	0.4	0.2
Lane LOS	B	B	A	A
Approach Delay (s)	14.3	14.8	0.4	0.2
Approach LOS	B	B		

Intersection Summary				
Average Delay	1.4			
Intersection Capacity Utilization	35.6%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	540	54	40	913	89	168	216	13	180	167	21
Future Volume (vph)	15	540	54	40	913	89	168	216	13	180	167	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	70.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			65.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.987			0.987			0.992			0.983	
Flt Protected		0.999			0.998		0.950			0.950		
Satd. Flow (prot)	0	3487	0	0	3447	0	1787	1883	0	1770	1848	0
Flt Permitted		0.918			0.903		0.532			0.251		
Satd. Flow (perm)	0	3204	0	0	3118	0	996	1883	0	465	1848	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			12			2			5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		76.1			129.9			112.3			205.3	
Travel Time (s)		5.5			9.4			8.1			14.8	
Confl. Peds. (#/hr)	2		3	3		2	4		6	6		4
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	2%	1%	0%	3%	4%	1%	0%	0%	2%	1%	0%
Adj. Flow (vph)	15	545	55	40	922	90	170	218	13	182	169	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	615	0	0	1052	0	170	231	0	182	190	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



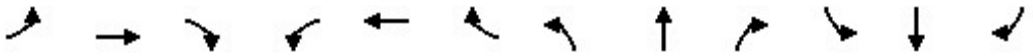
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.5	5.0		4.5	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	43.5		9.0	43.5		9.5	29.5		9.5	29.5	
Total Split (s)	9.0	60.8		9.0	60.8		14.6	31.0		19.2	35.6	
Total Split (%)	7.5%	50.7%		7.5%	50.7%		12.2%	25.8%		16.0%	29.7%	
Maximum Green (s)	4.5	56.3		4.5	56.3		10.1	26.5		14.7	31.1	
Yellow Time (s)	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		1.0	1.0	
Lost Time Adjust (s)		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	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	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	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		21.0			21.0			10.0			10.0	
Flash Dont Walk (s)		18.0			18.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)		73.1			73.1		29.8	19.8		36.9	23.4	
Actuated g/C Ratio		0.61			0.61		0.25	0.16		0.31	0.20	
v/c Ratio		0.31			0.55		0.54	0.74		0.63	0.52	
Control Delay		12.5			7.0		37.4	61.1		40.1	46.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		12.5			7.0		37.4	61.1		40.1	46.2	
LOS		B			A		D	E		D	D	
Approach Delay		12.5			7.0			51.1			43.2	
Approach LOS		B			A			D			D	
Queue Length 50th (m)		36.5			18.7		31.3	54.6		33.8	41.0	
Queue Length 95th (m)		55.1			30.2		45.8	77.7		49.3	60.5	
Internal Link Dist (m)		52.1			105.9			88.3			181.3	
Turn Bay Length (m)							70.0			65.0		
Base Capacity (vph)		1956			1904		314	417		306	482	
Starvation Cap Reductn		0			52		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.31			0.57		0.54	0.55		0.59	0.39	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 110 (92%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 21.1	Intersection LOS: C

Intersection Capacity Utilization 92.7% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 4: 2nd Ave W & 10th St W

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	718	8	2	1008	63	13	68	8	159	38	26
Future Volume (vph)	7	718	8	2	1008	63	13	68	8	159	38	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	11.0		11.0	50.0		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			12.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99		0.98	0.99	0.99	
Frt		0.998			0.991				0.850		0.940	
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	3499	0	0	3501	0	1597	1881	1495	1787	1770	0
Flt Permitted		0.944			0.954		0.713			0.465		
Satd. Flow (perm)	0	3303	0	0	3340	0	1188	1881	1459	865	1770	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			8				55		27	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		129.9			53.7			113.2			90.7	
Travel Time (s)		9.4			3.9			8.2			6.5	
Confl. Peds. (#/hr)	8		7	7		8	8		10	10		8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	0%	2%	2%	13%	1%	8%	1%	0%	0%
Adj. Flow (vph)	7	748	8	2	1050	66	14	71	8	166	40	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	763	0	0	1118	0	14	71	8	166	67	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

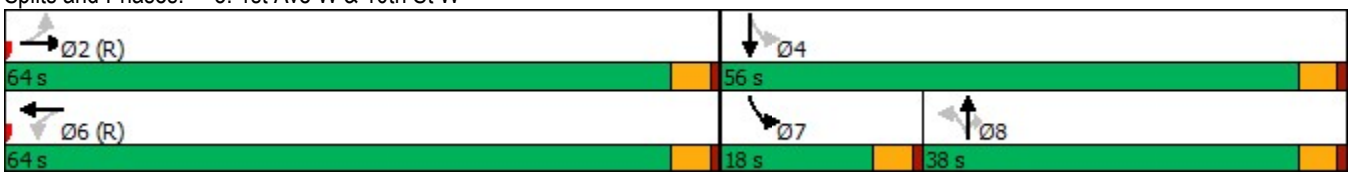


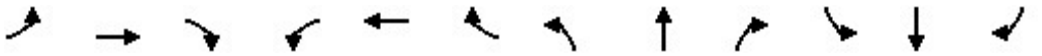
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6			8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	2	2		6	6		8	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	39.5	39.5		39.5	39.5		32.5	32.5	32.5	9.5	32.5	
Total Split (s)	64.0	64.0		64.0	64.0		38.0	38.0	38.0	18.0	56.0	
Total Split (%)	53.3%	53.3%		53.3%	53.3%		31.7%	31.7%	31.7%	15.0%	46.7%	
Maximum Green (s)	59.5	59.5		59.5	59.5		33.5	33.5	33.5	13.5	51.5	
Yellow Time (s)	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	1.0	1.0	1.0	
Lost Time Adjust (s)		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	4.5	
Lead/Lag							Lag	Lag	Lag	Lead		
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	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	15.0	15.0		15.0	15.0		10.0	10.0	10.0		10.0	
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		18.0	18.0	18.0		18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0		0	
Act Effct Green (s)		85.8			85.8		9.9	9.9	9.9	25.2	25.2	
Actuated g/C Ratio		0.72			0.72		0.08	0.08	0.08	0.21	0.21	
v/c Ratio		0.32			0.47		0.14	0.46	0.05	0.59	0.17	
Control Delay		6.7			11.6		52.8	61.2	0.5	48.8	23.8	
Queue Delay		0.1			0.4		0.0	0.0	0.0	0.0	0.0	
Total Delay		6.9			12.0		52.8	61.2	0.5	48.8	23.8	
LOS		A			B		D	E	A	D	C	
Approach Delay		6.9			12.0			54.7			41.6	
Approach LOS		A			B			D			D	
Queue Length 50th (m)		27.7			77.1		3.3	17.1	0.0	35.0	7.8	
Queue Length 95th (m)		32.6			96.4		10.0	31.7	0.0	54.3	19.4	
Internal Link Dist (m)		105.9			29.7			89.2			66.7	
Turn Bay Length (m)							11.0		11.0	50.0		
Base Capacity (vph)		2362			2391		331	525	446	289	775	
Starvation Cap Reductn		634			693		0	0	0	0	0	
Spillback Cap Reductn		0			34		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.44			0.66		0.04	0.14	0.02	0.57	0.09	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 116 (97%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 15.2		Intersection LOS: B	

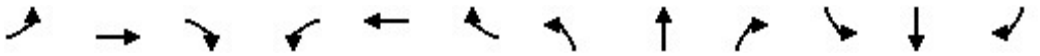
Intersection Capacity Utilization 58.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: 1st Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	713	36	32	739	16	39	91	45	25	102	295
Future Volume (vph)	136	713	36	32	739	16	39	91	45	25	102	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	16.0		0.0	14.0		11.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00		0.94	0.99		0.99		0.92
Frt		0.994			0.997			0.950				0.850
Flt Protected		0.992			0.998		0.950			0.950		
Satd. Flow (prot)	0	3446	0	0	3522	0	1752	1764	0	1805	1900	1583
Flt Permitted		0.683			0.881		0.586			0.450		
Satd. Flow (perm)	0	2368	0	0	3103	0	1013	1764	0	843	1900	1451
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			2			21				293
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		45.3			78.6			97.5			156.3	
Travel Time (s)		3.3			5.7			7.0			11.3	
Confl. Peds. (#/hr)	18		65	65		18	55		13	13		55
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	3%	0%	0%	2%	0%	3%	0%	4%	0%	0%	2%
Adj. Flow (vph)	139	728	37	33	754	16	40	93	46	26	104	301
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	904	0	0	803	0	40	139	0	26	104	301
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

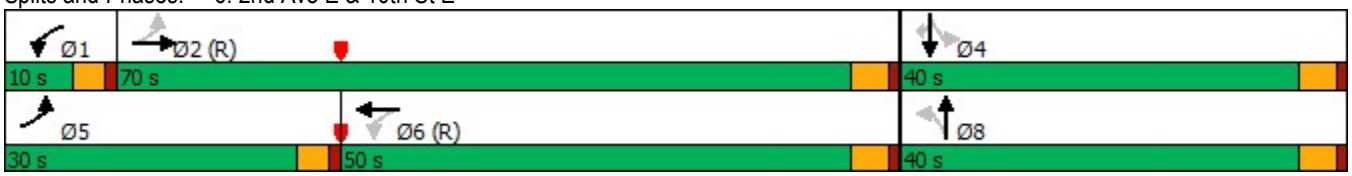


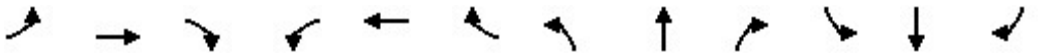
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	29.5		9.5	33.5		31.5	31.5		31.5	31.5	31.5
Total Split (s)	30.0	70.0		10.0	50.0		40.0	40.0		40.0	40.0	40.0
Total Split (%)	25.0%	58.3%		8.3%	41.7%		33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	26.0	65.5		6.0	45.5		35.5	35.5		35.5	35.5	35.5
Yellow Time (s)	3.0	3.5		3.0	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		1.0	1.0	1.0
Lost Time Adjust (s)		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	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
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		10.0			10.0		10.0	10.0		10.0	10.0	10.0
Flash Dont Walk (s)		15.0			19.0		17.0	17.0		17.0	17.0	17.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)		97.5			97.5		13.5	13.5		13.5	13.5	13.5
Actuated g/C Ratio		0.81			0.81		0.11	0.11		0.11	0.11	0.11
v/c Ratio		0.47			0.32		0.35	0.64		0.28	0.49	0.71
Control Delay		3.2			3.5		56.1	55.9		54.3	56.6	16.0
Queue Delay		0.2			0.0		0.0	0.0		0.0	0.0	0.1
Total Delay		3.4			3.6		56.1	55.9		54.3	56.6	16.1
LOS		A			A		E	E		D	E	B
Approach Delay		3.4			3.6			56.0			28.2	
Approach LOS		A			A			E			C	
Queue Length 50th (m)		13.8			20.8		9.3	28.3		6.0	24.6	1.8
Queue Length 95th (m)		22.6			35.6		20.1	47.9		14.9	40.9	29.3
Internal Link Dist (m)		21.3			54.6			73.5			132.3	
Turn Bay Length (m)							16.0			14.0		11.0
Base Capacity (vph)		1925			2521		299	536		249	562	635
Starvation Cap Reductn		339			0		0	0		0	0	0
Spillback Cap Reductn		0			284		0	0		0	0	26
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.57			0.36		0.13	0.26		0.10	0.19	0.49

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 107 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 12.1	Intersection LOS: B

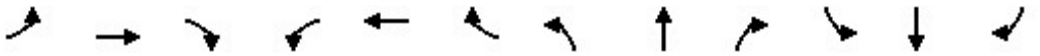
Intersection Capacity Utilization 82.6% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 6: 2nd Ave E & 10th St E





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	135	126	7	84	115	34	161	8	162	436	62
Future Volume (vph)	31	135	126	7	84	115	34	161	8	162	436	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	20.0		0.0	22.0		0.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			45.0			30.0		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.99		1.00	1.00		1.00		0.99
Frt		0.935			0.916			0.993				0.850
Flt Protected		0.995			0.998		0.950			0.950		
Satd. Flow (prot)	0	3190	0	0	3048	0	1687	1767	0	1770	1881	1538
Flt Permitted		0.871			0.925		0.469			0.639		
Satd. Flow (perm)	0	2790	0	0	2824	0	832	1767	0	1185	1881	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		140			128			3				67
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		101.9			79.4			210.0			157.3	
Travel Time (s)		7.3			5.7			15.1			11.3	
Confl. Peds. (#/hr)	10		13	13		10	2		5	5		2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92
Heavy Vehicles (%)	4%	3%	3%	0%	7%	7%	7%	7%	0%	2%	1%	5%
Adj. Flow (vph)	34	150	140	8	93	128	38	179	9	180	484	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	324	0	0	229	0	38	188	0	180	484	67
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

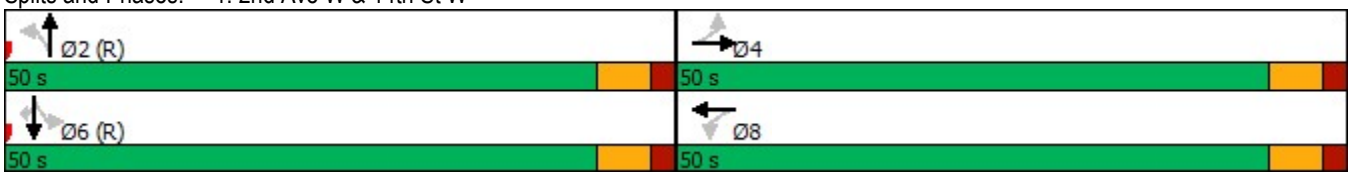


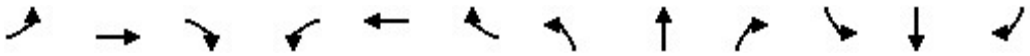
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	50.0	50.0		50.0	50.0		50.0	50.0		50.0	50.0	50.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		44.0	44.0		44.0	44.0	44.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		9.0	9.0		9.0	9.0	9.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		12.2			12.2		75.8	75.8		75.8	75.8	75.8
Actuated g/C Ratio		0.12			0.12		0.76	0.76		0.76	0.76	0.76
v/c Ratio		0.70			0.50		0.06	0.14		0.20	0.34	0.06
Control Delay		31.6			21.5		4.1	4.0		4.6	5.1	1.2
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		31.6			21.5		4.1	4.0		4.6	5.1	1.2
LOS		C			C		A	A		A	A	A
Approach Delay		31.6			21.5			4.0			4.6	
Approach LOS		C			C			A			A	
Queue Length 50th (m)		18.8			10.0		1.6	8.3		8.6	26.3	0.0
Queue Length 95th (m)		32.2			20.6		5.2	17.8		19.1	49.2	3.6
Internal Link Dist (m)		77.9			55.4			186.0			133.3	
Turn Bay Length (m)							20.0			22.0		
Base Capacity (vph)		1306			1314		631	1340		898	1426	1165
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.25			0.17		0.06	0.14		0.20	0.34	0.06

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 55 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 12.9	Intersection LOS: B

Intersection Capacity Utilization 72.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: 2nd Ave W & 14th St W

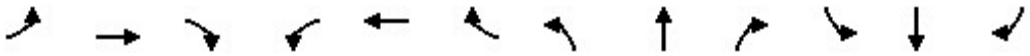




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	6	17	2	7	2	13	197	4	8	556	4
Future Volume (Veh/h)	4	6	17	2	7	2	13	197	4	8	556	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	5	7	20	2	8	2	15	229	5	9	647	5
Pedestrians					3			5				
Lane Width (m)					3.6			3.6				
Walking Speed (m/s)					1.2			1.2				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)											210	
pX, platoon unblocked	0.92	0.92	0.92	0.92	0.92		0.92					
vC, conflicting volume	935	934	654	960	934	234	652			237		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	884	884	579	912	884	234	576			237		
tC, single (s)	7.1	6.7	6.2	7.1	6.7	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.2	3.3	3.5	4.2	3.3	2.3			2.2		
p0 queue free %	98	97	96	99	97	100	98			99		
cM capacity (veh/h)	234	238	474	215	240	808	889			1339		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	32	12	249	661
Volume Left	5	2	15	9
Volume Right	20	2	5	5
cSH	344	266	889	1339
Volume to Capacity	0.09	0.05	0.02	0.01
Queue Length 95th (m)	2.4	1.1	0.4	0.2
Control Delay (s)	16.5	19.2	0.7	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	16.5	19.2	0.7	0.2
Approach LOS	C	C		

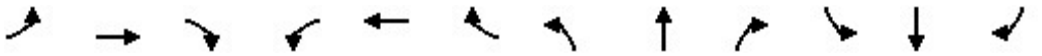
Intersection Summary				
Average Delay	1.1			
Intersection Capacity Utilization	43.3%	ICU Level of Service	A	
Analysis Period (min)	15			



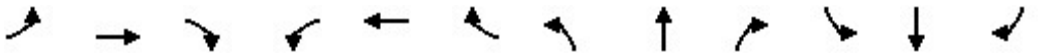
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	8	17	6	6	7	10	205	9	10	559	7
Future Volume (Veh/h)	2	8	17	6	6	7	10	205	9	10	559	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	2	9	19	7	7	8	11	225	10	11	614	8
Pedestrians		11			7			21			3	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			1			2			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								205				
pX, platoon unblocked	0.93	0.93		0.93	0.93	0.93				0.93		
vC, conflicting volume	918	915	650	944	914	240	633			242		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	871	868	650	899	867	138	633			141		
tC, single (s)	7.1	6.6	6.2	7.1	6.5	6.2	4.3			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.1	3.3	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	99	96	96	97	97	99	99			99		
cM capacity (veh/h)	236	248	460	215	262	840	853			1339		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	30	22	246	633
Volume Left	2	7	11	11
Volume Right	19	8	10	8
cSH	349	319	853	1339
Volume to Capacity	0.09	0.07	0.01	0.01
Queue Length 95th (m)	2.2	1.8	0.3	0.2
Control Delay (s)	16.3	17.1	0.5	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	16.3	17.1	0.5	0.2
Approach LOS	C	C		

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	48.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	669	81	29	697	51	121	158	12	242	317	22
Future Volume (vph)	15	669	81	29	697	51	121	158	12	242	317	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	70.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			65.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.984			0.990			0.990			0.990	
Flt Protected		0.999			0.998		0.950			0.950		
Satd. Flow (prot)	0	3476	0	0	3385	0	1787	1861	0	1770	1872	0
Flt Permitted		0.931			0.891		0.214			0.406		
Satd. Flow (perm)	0	3239	0	0	3022	0	401	1861	0	753	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			8			3			3	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		76.1			129.9			112.3			205.3	
Travel Time (s)		5.5			9.4			8.1			14.8	
Confl. Peds. (#/hr)	1		2	2		1	6		5	5		6
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	2%	1%	0%	5%	11%	1%	1%	0%	2%	0%	5%
Adj. Flow (vph)	16	735	89	32	766	56	133	174	13	266	348	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	840	0	0	854	0	133	187	0	266	372	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

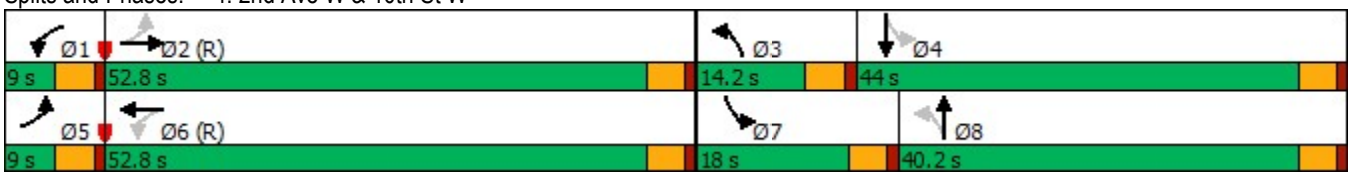


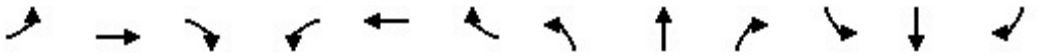
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.5	5.0		4.5	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	43.5		9.0	43.5		9.5	29.5		9.5	29.5	
Total Split (s)	9.0	52.8		9.0	52.8		14.2	40.2		18.0	44.0	
Total Split (%)	7.5%	44.0%		7.5%	44.0%		11.8%	33.5%		15.0%	36.7%	
Maximum Green (s)	4.5	48.3		4.5	48.3		9.7	35.7		13.5	39.5	
Yellow Time (s)	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		1.0	1.0	
Lost Time Adjust (s)		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	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	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	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		21.0			21.0			10.0			10.0	
Flash Dont Walk (s)		18.0			18.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)		68.0			68.0		34.4	25.0		42.4	29.1	
Actuated g/C Ratio		0.57			0.57		0.29	0.21		0.35	0.24	
v/c Ratio		0.46			0.50		0.60	0.48		0.70	0.82	
Control Delay		16.9			17.9		37.0	43.9		38.9	56.7	
Queue Delay		0.0			1.2		0.0	0.0		0.0	0.0	
Total Delay		16.9			19.1		37.0	43.9		38.9	56.7	
LOS		B			B		D	D		D	E	
Approach Delay		16.9			19.1			41.1			49.3	
Approach LOS		B			B			D			D	
Queue Length 50th (m)		60.4			64.0		22.6	40.2		49.2	86.7	
Queue Length 95th (m)		89.8			95.4		33.6	58.0		65.4	112.5	
Internal Link Dist (m)		52.1			105.9			88.3			181.3	
Turn Bay Length (m)							70.0			65.0		
Base Capacity (vph)		1841			1715		228	555		380	618	
Starvation Cap Reductn		0			596		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.46			0.76		0.58	0.34		0.70	0.60	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 110 (92%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 28.3	Intersection LOS: C

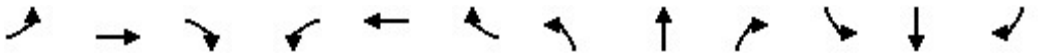
Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 4: 2nd Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	903	12	2	747	46	15	54	3	218	40	13
Future Volume (vph)	8	903	12	2	747	46	15	54	3	218	40	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	11.0		11.0	50.0		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			12.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99		0.98	0.99	0.99	
Frt		0.998			0.991				0.850		0.964	
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	3495	0	0	3398	0	1805	1863	1509	1787	1787	0
Flt Permitted		0.946			0.954		0.719			0.460		
Satd. Flow (perm)	0	3306	0	0	3241	0	1351	1863	1476	858	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				54		14	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		129.9			53.7			113.2			90.7	
Travel Time (s)		9.4			3.9			8.2			6.5	
Confl. Peds. (#/hr)	5		9	9		5	9		8	8		9
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	9%	5%	5%	7%	0%	2%	7%	1%	0%	8%
Adj. Flow (vph)	9	992	13	2	821	51	16	59	3	240	44	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1014	0	0	874	0	16	59	3	240	58	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

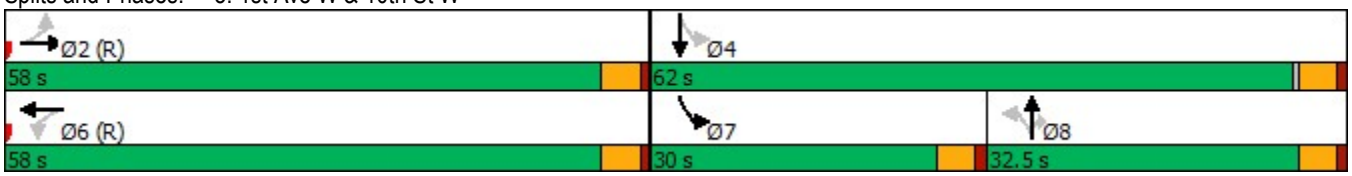


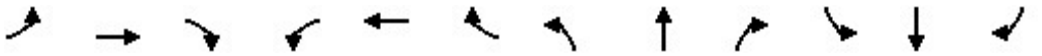
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6			8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	2	2		6	6		8	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	39.5	39.5		39.5	39.5		32.5	32.5	32.5	9.5	32.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.5	32.5	32.5	30.0	62.0	
Total Split (%)	48.1%	48.1%		48.1%	48.1%		27.0%	27.0%	27.0%	24.9%	51.5%	
Maximum Green (s)	53.5	53.5		53.5	53.5		28.0	28.0	28.0	25.5	57.5	
Yellow Time (s)	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	1.0	1.0	1.0	
Lost Time Adjust (s)		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	4.5	
Lead/Lag							Lag	Lag	Lag	Lead		
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	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	15.0	15.0		15.0	15.0		10.0	10.0	10.0		10.0	
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		18.0	18.0	18.0		18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0		0	
Act Effct Green (s)		78.6			78.6		9.2	9.2	9.2	32.9	32.9	
Actuated g/C Ratio		0.65			0.65		0.08	0.08	0.08	0.27	0.27	
v/c Ratio		0.47			0.41		0.16	0.42	0.02	0.60	0.12	
Control Delay		12.9			12.1		54.0	61.1	0.3	41.6	22.8	
Queue Delay		1.1			1.7		0.0	0.0	0.0	0.0	0.0	
Total Delay		14.0			13.8		54.0	61.1	0.3	41.6	22.8	
LOS		B			B		D	E	A	D	C	
Approach Delay		14.0			13.8			57.3			37.9	
Approach LOS		B			B			E			D	
Queue Length 50th (m)		66.5			53.9		3.8	14.3	0.0	48.5	7.9	
Queue Length 95th (m)		96.4			79.5		11.0	27.7	0.0	67.3	16.8	
Internal Link Dist (m)		105.9			29.7			89.2			66.7	
Turn Bay Length (m)							11.0		11.0	50.0		
Base Capacity (vph)		2155			2115		313	432	384	446	867	
Starvation Cap Reductn		832			1021		0	0	0	0	0	
Spillback Cap Reductn		0			0		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.77			0.80		0.05	0.14	0.01	0.54	0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 94 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 18.6		Intersection LOS: B	

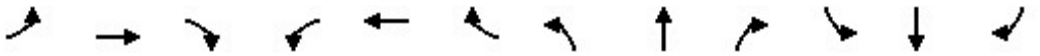
Intersection Capacity Utilization 61.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: 1st Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	844	21	21	556	25	28	115	33	11	67	212
Future Volume (vph)	259	844	21	21	556	25	28	115	33	11	67	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	16.0		0.0	14.0		11.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99	0.99		0.99		0.98
Frt		0.997			0.994			0.967				0.850
Flt Protected		0.989			0.998		0.950			0.950		
Satd. Flow (prot)	0	3467	0	0	3447	0	1736	1788	0	1787	1863	1568
Flt Permitted		0.663			0.884		0.711			0.417		
Satd. Flow (perm)	0	2319	0	0	3053	0	1285	1788	0	778	1863	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			6			12				226
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		45.3			78.6			97.5			156.3	
Travel Time (s)		3.3			5.7			7.0			11.3	
Confl. Peds. (#/hr)	11		15	15		11	9		8	8		9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	3%	5%	0%	4%	0%	4%	2%	3%	1%	2%	3%
Adj. Flow (vph)	276	898	22	22	591	27	30	122	35	12	71	226
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1196	0	0	640	0	30	157	0	12	71	226
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

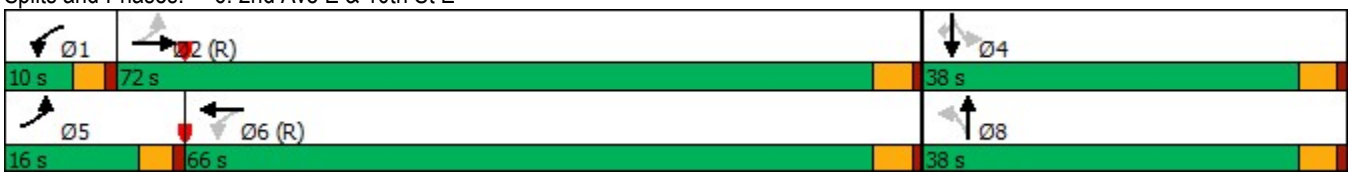


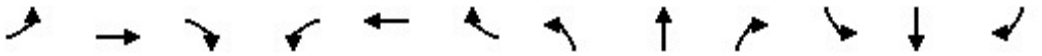
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	29.5		9.5	33.5		31.5	31.5		31.5	31.5	31.5
Total Split (s)	16.0	72.0		10.0	66.0		38.0	38.0		38.0	38.0	38.0
Total Split (%)	13.3%	60.0%		8.3%	55.0%		31.7%	31.7%		31.7%	31.7%	31.7%
Maximum Green (s)	12.0	67.5		6.0	61.5		33.5	33.5		33.5	33.5	33.5
Yellow Time (s)	3.0	3.5		3.0	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		1.0	1.0	1.0
Lost Time Adjust (s)		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	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
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		10.0			10.0		10.0	10.0		10.0	10.0	10.0
Flash Dont Walk (s)		15.0			19.0		17.0	17.0		17.0	17.0	17.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)		95.9			95.9		15.1	15.1		15.1	15.1	15.1
Actuated g/C Ratio		0.80			0.80		0.13	0.13		0.13	0.13	0.13
v/c Ratio		0.65			0.26		0.19	0.67		0.12	0.30	0.58
Control Delay		7.6			3.7		47.4	59.2		46.7	49.4	12.0
Queue Delay		4.7			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		12.3			3.7		47.4	59.2		46.7	49.4	12.0
LOS		B			A		D	E		D	D	B
Approach Delay		12.3			3.7			57.4			22.0	
Approach LOS		B			A			E			C	
Queue Length 50th (m)		52.3			16.9		6.8	34.8		2.7	16.2	0.0
Queue Length 95th (m)		92.0			29.3		15.5	55.0		8.5	29.3	22.2
Internal Link Dist (m)		21.3			54.6			73.5			132.3	
Turn Bay Length (m)							16.0			14.0		11.0
Base Capacity (vph)		1853			2440		358	507		217	520	590
Starvation Cap Reductn		575			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.94			0.26		0.08	0.31		0.06	0.14	0.38

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 107 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 14.8		Intersection LOS: B	

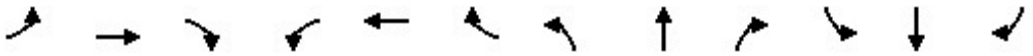
Intersection Capacity Utilization 79.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 6: 2nd Ave E & 10th St E





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	73	73	19	218	325	62	270	15	81	296	43
Future Volume (vph)	59	73	73	19	218	325	62	270	15	81	296	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	20.0		0.0	22.0		0.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			45.0			30.0		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.98		1.00	1.00		1.00		0.99
Frt		0.947			0.913			0.992				0.850
Flt Protected		0.986			0.998		0.950			0.950		
Satd. Flow (prot)	0	3208	0	0	3037	0	1687	1766	0	1770	1881	1538
Flt Permitted		0.587			0.934		0.571			0.577		
Satd. Flow (perm)	0	1907	0	0	2840	0	1012	1766	0	1071	1881	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		77			342			4				45
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		101.9			79.4			210.0			157.3	
Travel Time (s)		7.3			5.7			15.1			11.3	
Confl. Peds. (#/hr)	10		13	13		10	2		5	5		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	3%	3%	0%	7%	7%	7%	7%	0%	2%	1%	5%
Adj. Flow (vph)	62	77	77	20	229	342	65	284	16	85	312	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	216	0	0	591	0	65	300	0	85	312	45
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

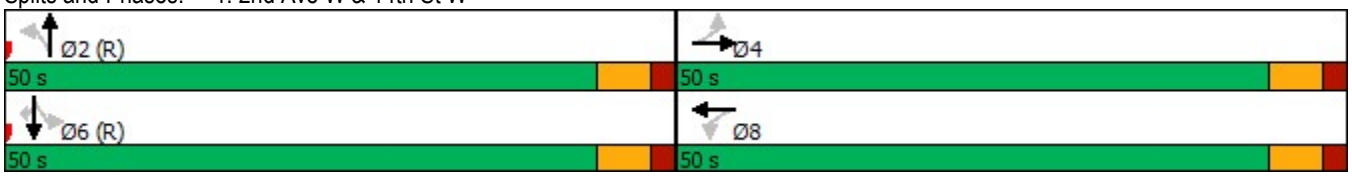


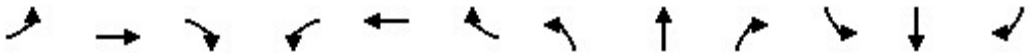
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	50.0	50.0		50.0	50.0		50.0	50.0		50.0	50.0	50.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		44.0	44.0		44.0	44.0	44.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		9.0	9.0		9.0	9.0	9.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		15.6			15.6		72.4	72.4		72.4	72.4	72.4
Actuated g/C Ratio		0.16			0.16		0.72	0.72		0.72	0.72	0.72
v/c Ratio		0.60			0.81		0.09	0.23		0.11	0.23	0.04
Control Delay		30.6			25.3		5.7	5.9		5.8	5.9	2.0
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		30.6			25.3		5.7	5.9		5.8	5.9	2.0
LOS		C			C		A	A		A	A	A
Approach Delay		30.6			25.3			5.9			5.5	
Approach LOS		C			C			A			A	
Queue Length 50th (m)		13.7			25.8		3.3	17.0		4.4	17.8	0.0
Queue Length 95th (m)		23.8			41.8		10.0	36.8		12.4	37.9	3.8
Internal Link Dist (m)		77.9			55.4			186.0			133.3	
Turn Bay Length (m)							20.0			22.0		
Base Capacity (vph)		882			1441		732	1278		774	1360	1109
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.24			0.41		0.09	0.23		0.11	0.23	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 55 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 16.2	Intersection LOS: B

Intersection Capacity Utilization 73.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: 2nd Ave W & 14th St W

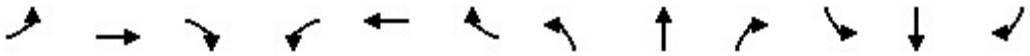




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1	17	2	28	14	19	328	3	3	379	6
Future Volume (Veh/h)	6	1	17	2	28	14	19	328	3	3	379	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	1	18	2	30	15	21	357	3	3	412	7
Pedestrians		6			3			2			6	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			0			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)											210	
pX, platoon unblocked	0.97	0.97	0.97	0.97	0.97		0.97					
vC, conflicting volume	864	832	424	846	834	368	425			363		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	841	808	384	822	810	368	386			363		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	100	97	99	90	98	98			100		
cM capacity (veh/h)	242	297	640	269	296	677	1136			1204		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	26	47	381	422
Volume Left	7	2	21	3
Volume Right	18	15	3	7
cSH	430	359	1136	1204
Volume to Capacity	0.06	0.13	0.02	0.00
Queue Length 95th (m)	1.5	3.6	0.5	0.1
Control Delay (s)	13.9	16.5	0.6	0.1
Lane LOS	B	C	A	A
Approach Delay (s)	13.9	16.5	0.6	0.1
Approach LOS	B	C		

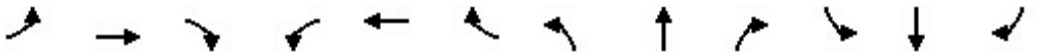
Intersection Summary				
Average Delay	1.6			
Intersection Capacity Utilization	42.0%	ICU Level of Service	A	
Analysis Period (min)	15			



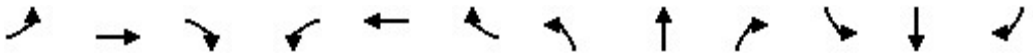
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	10	19	6	10	9	12	335	7	8	382	8
Future Volume (Veh/h)	7	10	19	6	10	9	12	335	7	8	382	8
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	8	11	21	7	11	10	13	368	8	9	420	9
Pedestrians		6			9			13			4	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								205				
pX, platoon unblocked	0.88	0.88		0.88	0.88	0.88				0.88		
vC, conflicting volume	866	860	444	889	860	385	435			385		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	778	770	444	804	771	230	435			230		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	96	96	97	96	99	99			99		
cM capacity (veh/h)	257	283	598	239	283	707	1130			1176		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	40	28	389	438
Volume Left	8	7	13	9
Volume Right	21	10	8	9
cSH	381	340	1130	1176
Volume to Capacity	0.11	0.08	0.01	0.01
Queue Length 95th (m)	2.8	2.1	0.3	0.2
Control Delay (s)	15.6	16.5	0.4	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	15.6	16.5	0.4	0.2
Approach LOS	C	C		

Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	37.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	596	60	44	1008	98	185	238	14	199	184	23
Future Volume (vph)	17	596	60	44	1008	98	185	238	14	199	184	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	70.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			65.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.987			0.987			0.992			0.983	
Flt Protected		0.999			0.998		0.950			0.950		
Satd. Flow (prot)	0	3487	0	0	3447	0	1787	1883	0	1770	1848	0
Flt Permitted		0.908			0.895		0.500			0.222		
Satd. Flow (perm)	0	3169	0	0	3091	0	937	1883	0	412	1848	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			12			2			5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		76.1			129.9			112.3			205.3	
Travel Time (s)		5.5			9.4			8.1			14.8	
Confl. Peds. (#/hr)	2		3	3		2	4		6	6		4
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	2%	1%	0%	3%	4%	1%	0%	0%	2%	1%	0%
Adj. Flow (vph)	17	602	61	44	1018	99	187	240	14	201	186	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	680	0	0	1161	0	187	254	0	201	209	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



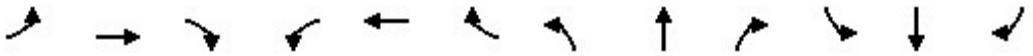
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.5	5.0		4.5	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	43.5		9.0	43.5		9.5	29.5		9.5	29.5	
Total Split (s)	9.0	60.8		9.0	60.8		14.6	31.0		19.2	35.6	
Total Split (%)	7.5%	50.7%		7.5%	50.7%		12.2%	25.8%		16.0%	29.7%	
Maximum Green (s)	4.5	56.3		4.5	56.3		10.1	26.5		14.7	31.1	
Yellow Time (s)	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		1.0	1.0	
Lost Time Adjust (s)		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	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	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	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		21.0			21.0			10.0			10.0	
Flash Dont Walk (s)		18.0			18.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)		71.7			71.7		31.0	20.9		38.6	24.7	
Actuated g/C Ratio		0.60			0.60		0.26	0.17		0.32	0.21	
v/c Ratio		0.36			0.63		0.60	0.77		0.69	0.54	
Control Delay		13.6			8.2		38.9	62.3		42.6	46.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		13.6			8.2		38.9	62.3		42.6	46.0	
LOS		B			A		D	E		D	D	
Approach Delay		13.6			8.2			52.4			44.3	
Approach LOS		B			A			D			D	
Queue Length 50th (m)		43.1			23.9		34.1	60.0		37.0	45.0	
Queue Length 95th (m)		62.4			31.2		50.2	85.5		54.0	66.1	
Internal Link Dist (m)		52.1			105.9			88.3			181.3	
Turn Bay Length (m)							70.0			65.0		
Base Capacity (vph)		1897			1851		313	417		301	482	
Starvation Cap Reductn		0			19		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.36			0.63		0.60	0.61		0.67	0.43	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 110 (92%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 22.3	Intersection LOS: C

Intersection Capacity Utilization 100.6% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 4: 2nd Ave W & 10th St W

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	793	9	2	1113	70	14	75	9	176	42	29
Future Volume (vph)	8	793	9	2	1113	70	14	75	9	176	42	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	11.0		11.0	50.0		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			12.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99		0.98	0.99	0.99	
Frt		0.998			0.991				0.850		0.939	
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	3499	0	0	3501	0	1597	1881	1495	1787	1768	0
Flt Permitted		0.941			0.954		0.709			0.445		
Satd. Flow (perm)	0	3292	0	0	3339	0	1181	1881	1459	828	1768	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			8				55		30	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		129.9			53.7			113.2			90.7	
Travel Time (s)		9.4			3.9			8.2			6.5	
Confl. Peds. (#/hr)	8		7	7		8	8		10	10		8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	0%	2%	2%	13%	1%	8%	1%	0%	0%
Adj. Flow (vph)	8	826	9	2	1159	73	15	78	9	183	44	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	843	0	0	1234	0	15	78	9	183	74	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

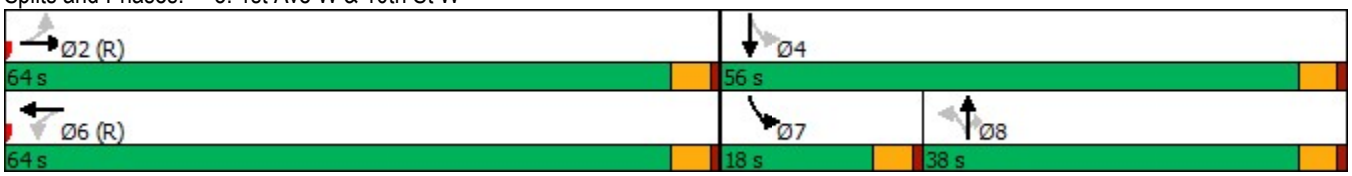


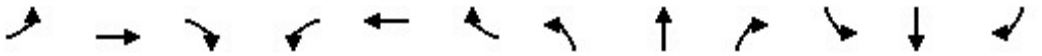
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6			8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	2	2		6	6		8	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	39.5	39.5		39.5	39.5		32.5	32.5	32.5	9.5	32.5	
Total Split (s)	64.0	64.0		64.0	64.0		38.0	38.0	38.0	18.0	56.0	
Total Split (%)	53.3%	53.3%		53.3%	53.3%		31.7%	31.7%	31.7%	15.0%	46.7%	
Maximum Green (s)	59.5	59.5		59.5	59.5		33.5	33.5	33.5	13.5	51.5	
Yellow Time (s)	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	1.0	1.0	1.0	
Lost Time Adjust (s)		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	4.5	
Lead/Lag							Lag	Lag	Lag	Lead		
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	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	15.0	15.0		15.0	15.0		10.0	10.0	10.0		10.0	
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		18.0	18.0	18.0		18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0		0	
Act Effct Green (s)		85.3			85.3		10.3	10.3	10.3	25.7	25.7	
Actuated g/C Ratio		0.71			0.71		0.09	0.09	0.09	0.21	0.21	
v/c Ratio		0.36			0.52		0.15	0.48	0.05	0.65	0.18	
Control Delay		6.9			12.4		52.4	61.5	0.6	51.1	23.3	
Queue Delay		0.1			0.4		0.0	0.0	0.0	0.0	0.0	
Total Delay		7.0			12.8		52.4	61.5	0.6	51.1	23.3	
LOS		A			B		D	E	A	D	C	
Approach Delay		7.0			12.8			54.8			43.1	
Approach LOS		A			B			D			D	
Queue Length 50th (m)		30.5			87.8		3.5	18.8	0.0	38.8	8.6	
Queue Length 95th (m)		36.2			116.5		10.4	34.0	0.0	59.0	20.7	
Internal Link Dist (m)		105.9			29.7			89.2			66.7	
Turn Bay Length (m)							11.0		11.0	50.0		
Base Capacity (vph)		2340			2375		329	525	446	288	775	
Starvation Cap Reductn		521			591		0	0	0	0	0	
Spillback Cap Reductn		21			33		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.46			0.69		0.05	0.15	0.02	0.64	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 116 (97%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 15.8		Intersection LOS: B	

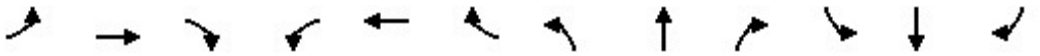
Intersection Capacity Utilization 60.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: 1st Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	787	40	35	816	18	43	100	50	28	113	326
Future Volume (vph)	150	787	40	35	816	18	43	100	50	28	113	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	16.0		0.0	14.0		11.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00		0.94	0.99		0.99		0.92
Frt		0.994			0.997			0.950				0.850
Flt Protected		0.992			0.998		0.950			0.950		
Satd. Flow (prot)	0	3446	0	0	3522	0	1752	1764	0	1805	1900	1583
Flt Permitted		0.649			0.869		0.563			0.431		
Satd. Flow (perm)	0	2251	0	0	3062	0	975	1764	0	808	1900	1451
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			2			21				293
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		45.3			78.6			97.5			156.3	
Travel Time (s)		3.3			5.7			7.0			11.3	
Confl. Peds. (#/hr)	18		65	65		18	55		13	13		55
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	3%	0%	0%	2%	0%	3%	0%	4%	0%	0%	2%
Adj. Flow (vph)	153	803	41	36	833	18	44	102	51	29	115	333
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	997	0	0	887	0	44	153	0	29	115	333
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

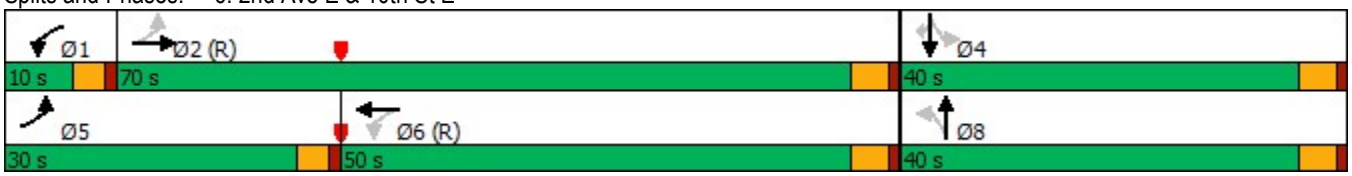


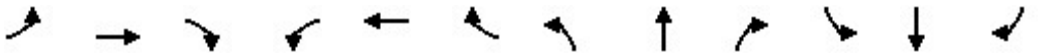
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	29.5		9.5	33.5		31.5	31.5		31.5	31.5	31.5
Total Split (s)	30.0	70.0		10.0	50.0		40.0	40.0		40.0	40.0	40.0
Total Split (%)	25.0%	58.3%		8.3%	41.7%		33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	26.0	65.5		6.0	45.5		35.5	35.5		35.5	35.5	35.5
Yellow Time (s)	3.0	3.5		3.0	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		1.0	1.0	1.0
Lost Time Adjust (s)		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	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
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		10.0			10.0		10.0	10.0		10.0	10.0	10.0
Flash Dont Walk (s)		15.0			19.0		17.0	17.0		17.0	17.0	17.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)		95.9			95.9		15.1	15.1		15.1	15.1	15.1
Actuated g/C Ratio		0.80			0.80		0.13	0.13		0.13	0.13	0.13
v/c Ratio		0.55			0.36		0.36	0.64		0.29	0.48	0.76
Control Delay		4.5			4.4		54.0	54.0		52.3	54.2	20.1
Queue Delay		0.2			0.1		0.0	0.0		0.0	0.0	0.2
Total Delay		4.6			4.4		54.0	54.0		52.3	54.2	20.3
LOS		A			A		D	D		D	D	C
Approach Delay		4.6			4.4			54.0			30.4	
Approach LOS		A			A			D			C	
Queue Length 50th (m)		17.0			25.5		10.2	31.6		6.7	27.0	9.1
Queue Length 95th (m)		30.2			48.8		20.9	50.1		15.4	42.6	39.1
Internal Link Dist (m)		21.3			54.6			73.5			132.3	
Turn Bay Length (m)							16.0			14.0		11.0
Base Capacity (vph)		1800			2447		288	536		239	562	635
Starvation Cap Reductn		194			0		0	0		0	0	0
Spillback Cap Reductn		0			425		0	0		0	0	40
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.62			0.44		0.15	0.29		0.12	0.20	0.56

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 107 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 13.2	Intersection LOS: B

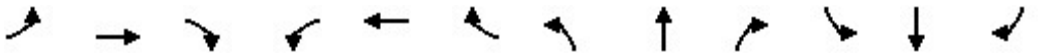
Intersection Capacity Utilization 86.3% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 6: 2nd Ave E & 10th St E





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	135	128	7	84	115	41	174	8	162	440	62
Future Volume (vph)	31	135	128	7	84	115	41	174	8	162	440	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	20.0		0.0	22.0		0.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			45.0			30.0		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.99		1.00	1.00		1.00		0.99
Frt		0.935			0.916			0.993				0.850
Flt Protected		0.995			0.998		0.950			0.950		
Satd. Flow (prot)	0	3190	0	0	3048	0	1687	1767	0	1770	1881	1538
Flt Permitted		0.872			0.923		0.466			0.631		
Satd. Flow (perm)	0	2793	0	0	2818	0	827	1767	0	1170	1881	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		142			128			3				67
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		101.9			79.4			210.0			157.3	
Travel Time (s)		7.3			5.7			15.1			11.3	
Confl. Peds. (#/hr)	10		13	13		10	2		5	5		2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92
Heavy Vehicles (%)	4%	3%	3%	0%	7%	7%	7%	7%	0%	2%	1%	5%
Adj. Flow (vph)	34	150	142	8	93	128	46	193	9	180	489	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	326	0	0	229	0	46	202	0	180	489	67
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

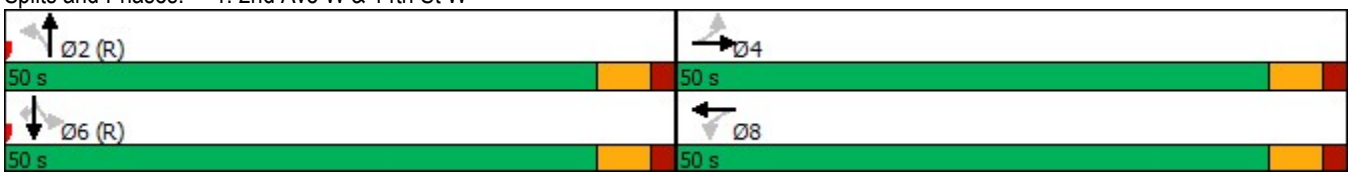


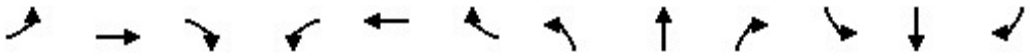
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	50.0	50.0		50.0	50.0		50.0	50.0		50.0	50.0	50.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		44.0	44.0		44.0	44.0	44.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		9.0	9.0		9.0	9.0	9.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		12.2			12.2		75.8	75.8		75.8	75.8	75.8
Actuated g/C Ratio		0.12			0.12		0.76	0.76		0.76	0.76	0.76
v/c Ratio		0.70			0.50		0.07	0.15		0.20	0.34	0.06
Control Delay		31.4			21.5		4.2	4.0		4.6	5.2	1.2
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		31.4			21.5		4.2	4.0		4.6	5.2	1.2
LOS		C			C		A	A		A	A	A
Approach Delay		31.4			21.5			4.1			4.7	
Approach LOS		C			C			A			A	
Queue Length 50th (m)		18.8			10.0		2.0	9.0		8.6	26.6	0.0
Queue Length 95th (m)		32.2			20.5		6.1	19.2		19.2	50.1	3.6
Internal Link Dist (m)		77.9			55.4			186.0			133.3	
Turn Bay Length (m)							20.0			22.0		
Base Capacity (vph)		1308			1311		627	1340		887	1426	1165
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.25			0.17		0.07	0.15		0.20	0.34	0.06

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 55 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 12.7	Intersection LOS: B

Intersection Capacity Utilization 72.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: 2nd Ave W & 14th St W

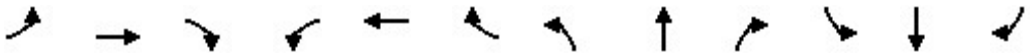




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	6	17	2	7	22	13	197	4	14	556	4
Future Volume (Veh/h)	4	6	17	2	7	22	13	197	4	14	556	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	5	7	20	2	8	26	15	229	5	16	647	5
Pedestrians					3			5				
Lane Width (m)					3.6			3.6				
Walking Speed (m/s)					1.2			1.2				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)											210	
pX, platoon unblocked	0.92	0.92	0.92	0.92	0.92		0.92					
vC, conflicting volume	973	948	654	974	948	234	652			237		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	925	898	577	926	898	234	574			237		
tC, single (s)	7.1	6.7	6.2	7.1	6.7	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.2	3.3	3.5	4.2	3.3	2.3			2.2		
p0 queue free %	98	97	96	99	97	97	98			99		
cM capacity (veh/h)	212	231	474	209	234	808	888			1339		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	32	36	249	668
Volume Left	5	2	15	16
Volume Right	20	26	5	5
cSH	333	474	888	1339
Volume to Capacity	0.10	0.08	0.02	0.01
Queue Length 95th (m)	2.5	2.0	0.4	0.3
Control Delay (s)	16.9	13.2	0.7	0.3
Lane LOS	C	B	A	A
Approach Delay (s)	16.9	13.2	0.7	0.3
Approach LOS	C	B		

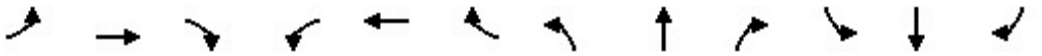
Intersection Summary				
Average Delay	1.4			
Intersection Capacity Utilization	45.1%	ICU Level of Service	A	
Analysis Period (min)	15			



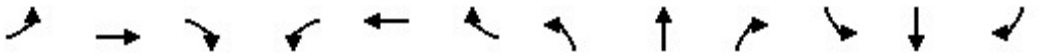
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	8	17	43	6	7	10	205	20	10	559	7
Future Volume (Veh/h)	2	8	17	43	6	7	10	205	20	10	559	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	2	9	19	47	7	8	11	225	22	11	614	8
Pedestrians		11			7			21			3	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			1			2			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								205				
pX, platoon unblocked	0.93	0.93		0.93	0.93	0.93				0.93		
vC, conflicting volume	924	927	650	950	920	246	633			254		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	877	881	650	906	874	146	633			155		
tC, single (s)	7.1	6.6	6.2	7.1	6.5	6.2	4.3			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.1	3.3	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	99	96	96	78	97	99	99			99		
cM capacity (veh/h)	234	244	460	213	259	833	853			1324		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	30	62	258	633
Volume Left	2	47	11	11
Volume Right	19	8	22	8
cSH	346	241	853	1324
Volume to Capacity	0.09	0.26	0.01	0.01
Queue Length 95th (m)	2.3	8.0	0.3	0.2
Control Delay (s)	16.4	25.1	0.5	0.2
Lane LOS	C	D	A	A
Approach Delay (s)	16.4	25.1	0.5	0.2
Approach LOS	C	D		

Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	50.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	669	81	29	697	54	121	160	12	252	324	42
Future Volume (vph)	21	669	81	29	697	54	121	160	12	252	324	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	70.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			65.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.984			0.990			0.990			0.983	
Flt Protected		0.999			0.998		0.950			0.950		
Satd. Flow (prot)	0	3476	0	0	3385	0	1787	1861	0	1770	1853	0
Flt Permitted		0.913			0.891		0.194			0.422		
Satd. Flow (perm)	0	3177	0	0	3022	0	364	1861	0	783	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			8			3			6	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		76.1			129.9			112.3			205.3	
Travel Time (s)		5.5			9.4			8.1			14.8	
Confl. Peds. (#/hr)	1		2	2		1	6		5	5		6
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	2%	1%	0%	5%	11%	1%	1%	0%	2%	0%	5%
Adj. Flow (vph)	23	735	89	32	766	59	133	176	13	277	356	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	847	0	0	857	0	133	189	0	277	402	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

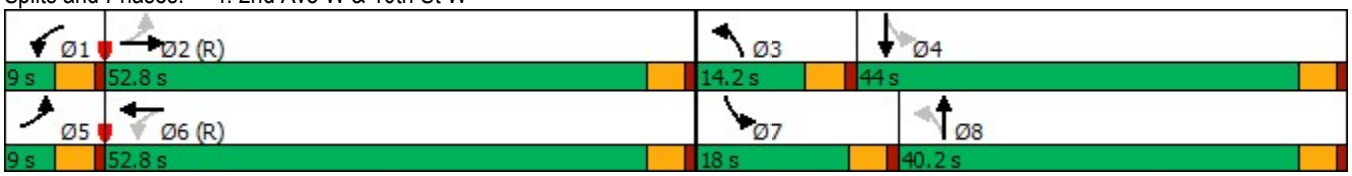


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.5	5.0		4.5	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	43.5		9.0	43.5		9.5	29.5		9.5	29.5	
Total Split (s)	9.0	52.8		9.0	52.8		14.2	40.2		18.0	44.0	
Total Split (%)	7.5%	44.0%		7.5%	44.0%		11.8%	33.5%		15.0%	36.7%	
Maximum Green (s)	4.5	48.3		4.5	48.3		9.7	35.7		13.5	39.5	
Yellow Time (s)	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		1.0	1.0	
Lost Time Adjust (s)		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	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	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	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		21.0			21.0			10.0			10.0	
Flash Dont Walk (s)		18.0			18.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)		66.1			66.1		36.3	26.9		44.3	31.0	
Actuated g/C Ratio		0.55			0.55		0.30	0.22		0.37	0.26	
v/c Ratio		0.48			0.51		0.60	0.45		0.69	0.83	
Control Delay		18.5			19.2		36.1	41.6		36.9	56.0	
Queue Delay		0.0			1.3		0.0	0.0		0.0	0.0	
Total Delay		18.5			20.5		36.1	41.6		36.9	56.0	
LOS		B			C		D	D		D	E	
Approach Delay		18.5			20.5			39.3			48.2	
Approach LOS		B			C			D			D	
Queue Length 50th (m)		64.2			67.1		21.9	39.8		50.1	93.0	
Queue Length 95th (m)		95.1			99.5		32.4	57.2		65.8	119.9	
Internal Link Dist (m)		52.1			105.9			88.3			181.3	
Turn Bay Length (m)							70.0			65.0		
Base Capacity (vph)		1755			1668		226	555		400	613	
Starvation Cap Reductn		0			559		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.48			0.77		0.59	0.34		0.69	0.66	

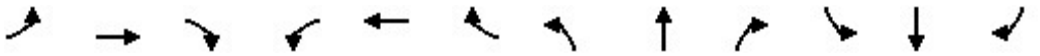
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 110 (92%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 29.1		Intersection LOS: C	

Intersection Capacity Utilization 80.2% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 4: 2nd Ave W & 10th St W



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	913	12	2	750	49	15	54	3	228	40	13
Future Volume (vph)	8	913	12	2	750	49	15	54	3	228	40	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	11.0		11.0	50.0		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			12.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99		0.98	0.99	0.99	
Frt		0.998			0.991				0.850		0.964	
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	3495	0	0	3397	0	1805	1863	1509	1787	1787	0
Flt Permitted		0.946			0.954		0.719			0.460		
Satd. Flow (perm)	0	3306	0	0	3241	0	1351	1863	1476	858	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				54		14	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		129.9			53.7			113.2			90.7	
Travel Time (s)		9.4			3.9			8.2			6.5	
Confl. Peds. (#/hr)	5		9	9		5	9		8	8		9
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	9%	5%	5%	7%	0%	2%	7%	1%	0%	8%
Adj. Flow (vph)	9	1003	13	2	824	54	16	59	3	251	44	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1025	0	0	880	0	16	59	3	251	58	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

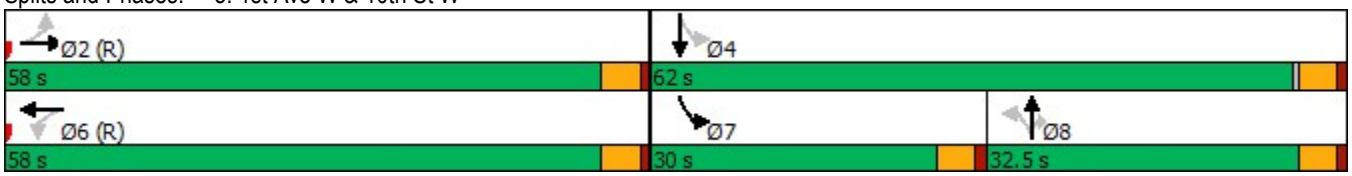


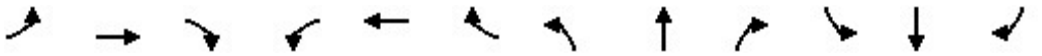
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6			8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	2	2		6	6		8	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	39.5	39.5		39.5	39.5		32.5	32.5	32.5	9.5	32.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.5	32.5	32.5	30.0	62.0	
Total Split (%)	48.1%	48.1%		48.1%	48.1%		27.0%	27.0%	27.0%	24.9%	51.5%	
Maximum Green (s)	53.5	53.5		53.5	53.5		28.0	28.0	28.0	25.5	57.5	
Yellow Time (s)	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	1.0	1.0	1.0	
Lost Time Adjust (s)		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	4.5	
Lead/Lag							Lag	Lag	Lag	Lead		
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	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	15.0	15.0		15.0	15.0		10.0	10.0	10.0		10.0	
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		18.0	18.0	18.0		18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0		0	
Act Effct Green (s)		78.1			78.1		9.2	9.2	9.2	33.4	33.4	
Actuated g/C Ratio		0.65			0.65		0.08	0.08	0.08	0.28	0.28	
v/c Ratio		0.48			0.42		0.16	0.42	0.02	0.62	0.12	
Control Delay		13.2			12.3		54.0	61.1	0.3	42.0	22.7	
Queue Delay		1.1			1.8		0.0	0.0	0.0	0.0	0.0	
Total Delay		14.4			14.1		54.0	61.1	0.3	42.0	22.7	
LOS		B			B		D	E	A	D	C	
Approach Delay		14.4			14.1			57.3			38.3	
Approach LOS		B			B			E			D	
Queue Length 50th (m)		68.9			55.5		3.8	14.3	0.0	50.5	7.8	
Queue Length 95th (m)		98.0			80.1		11.0	27.7	0.0	70.5	16.8	
Internal Link Dist (m)		105.9			29.7			89.2			66.7	
Turn Bay Length (m)							11.0		11.0	50.0		
Base Capacity (vph)		2143			2103		313	432	384	449	867	
Starvation Cap Reductn		818			1007		0	0	0	0	0	
Spillback Cap Reductn		0			0		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.77			0.80		0.05	0.14	0.01	0.56	0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 94 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 18.9		Intersection LOS: B	

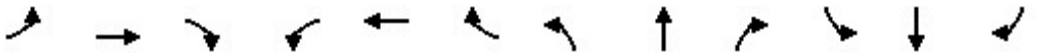
Intersection Capacity Utilization 61.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: 1st Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	262	861	21	21	561	25	28	115	33	11	67	213
Future Volume (vph)	262	861	21	21	561	25	28	115	33	11	67	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	16.0		0.0	14.0		11.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99	0.99		0.99		0.98
Frt		0.997			0.994			0.967				0.850
Flt Protected		0.989			0.998		0.950			0.950		
Satd. Flow (prot)	0	3467	0	0	3447	0	1736	1788	0	1787	1863	1568
Flt Permitted		0.662			0.883		0.711			0.417		
Satd. Flow (perm)	0	2316	0	0	3050	0	1285	1788	0	778	1863	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			6			12				227
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		45.3			78.6			97.5			156.3	
Travel Time (s)		3.3			5.7			7.0			11.3	
Confl. Peds. (#/hr)	11		15	15		11	9		8	8		9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	3%	5%	0%	4%	0%	4%	2%	3%	1%	2%	3%
Adj. Flow (vph)	279	916	22	22	597	27	30	122	35	12	71	227
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1217	0	0	646	0	30	157	0	12	71	227
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

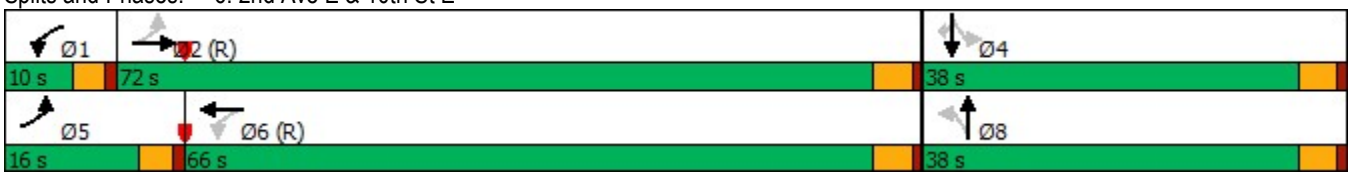


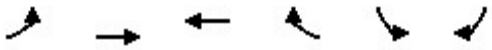
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	29.5		9.5	33.5		31.5	31.5		31.5	31.5	31.5
Total Split (s)	16.0	72.0		10.0	66.0		38.0	38.0		38.0	38.0	38.0
Total Split (%)	13.3%	60.0%		8.3%	55.0%		31.7%	31.7%		31.7%	31.7%	31.7%
Maximum Green (s)	12.0	67.5		6.0	61.5		33.5	33.5		33.5	33.5	33.5
Yellow Time (s)	3.0	3.5		3.0	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		1.0	1.0	1.0
Lost Time Adjust (s)		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	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
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		10.0			10.0		10.0	10.0		10.0	10.0	10.0
Flash Dont Walk (s)		15.0			19.0		17.0	17.0		17.0	17.0	17.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)		95.9			95.9		15.1	15.1		15.1	15.1	15.1
Actuated g/C Ratio		0.80			0.80		0.13	0.13		0.13	0.13	0.13
v/c Ratio		0.66			0.27		0.19	0.67		0.12	0.30	0.58
Control Delay		7.9			3.7		47.4	59.2		46.7	49.4	12.0
Queue Delay		5.2			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		13.1			3.7		47.4	59.2		46.7	49.4	12.0
LOS		B			A		D	E		D	D	B
Approach Delay		13.1			3.7			57.4			21.9	
Approach LOS		B			A			E			C	
Queue Length 50th (m)		54.2			17.1		6.8	34.8		2.7	16.2	0.0
Queue Length 95th (m)		95.8			29.6		15.5	55.0		8.5	29.3	22.5
Internal Link Dist (m)		21.3			54.6			73.5			132.3	
Turn Bay Length (m)							16.0			14.0		11.0
Base Capacity (vph)		1850			2437		358	507		217	520	591
Starvation Cap Reductn		561			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.94			0.27		0.08	0.31		0.06	0.14	0.38

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 107 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 15.2		Intersection LOS: B	

Intersection Capacity Utilization 80.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 6: 2nd Ave E & 10th St E





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	26	18	2	7	37
Future Volume (Veh/h)	11	26	18	2	7	37
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	28	20	2	8	40
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	22				73	21
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	22				73	21
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				99	96
cM capacity (veh/h)	1593				924	1056

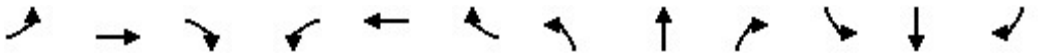
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	40	22	48
Volume Left	12	0	8
Volume Right	0	2	40
cSH	1593	1700	1032
Volume to Capacity	0.01	0.01	0.05
Queue Length 95th (m)	0.2	0.0	1.2
Control Delay (s)	2.2	0.0	8.7
Lane LOS	A		A
Approach Delay (s)	2.2	0.0	8.7
Approach LOS			A

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	18.6%	ICU Level of Service	A
Analysis Period (min)	15		

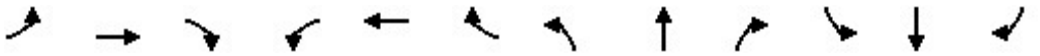
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	18	6	1	11	20	3
Future Volume (Veh/h)	18	6	1	11	20	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	7	1	12	22	3
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			27		38	24
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			27		38	24
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	100
cM capacity (veh/h)			1587		974	1053

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	27	13	25
Volume Left	0	1	22
Volume Right	7	0	3
cSH	1700	1587	983
Volume to Capacity	0.02	0.00	0.03
Queue Length 95th (m)	0.0	0.0	0.6
Control Delay (s)	0.0	0.6	8.8
Lane LOS		A	A
Approach Delay (s)	0.0	0.6	8.8
Approach LOS			A

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	73	78	19	218	325	66	277	15	81	307	43
Future Volume (vph)	59	73	78	19	218	325	66	277	15	81	307	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	20.0		0.0	22.0		0.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			45.0			30.0		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.98		1.00	1.00		1.00		0.99
Frt		0.944			0.913			0.992				0.850
Flt Protected		0.986			0.998		0.950			0.950		
Satd. Flow (prot)	0	3196	0	0	3037	0	1687	1766	0	1770	1881	1538
Flt Permitted		0.586			0.934		0.565			0.573		
Satd. Flow (perm)	0	1897	0	0	2840	0	1002	1766	0	1064	1881	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		82			342			4				45
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		101.9			79.4			210.0			157.3	
Travel Time (s)		7.3			5.7			15.1			11.3	
Confl. Peds. (#/hr)	10		13	13		10	2		5	5		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	3%	3%	0%	7%	7%	7%	7%	0%	2%	1%	5%
Adj. Flow (vph)	62	77	82	20	229	342	69	292	16	85	323	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	221	0	0	591	0	69	308	0	85	323	45
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

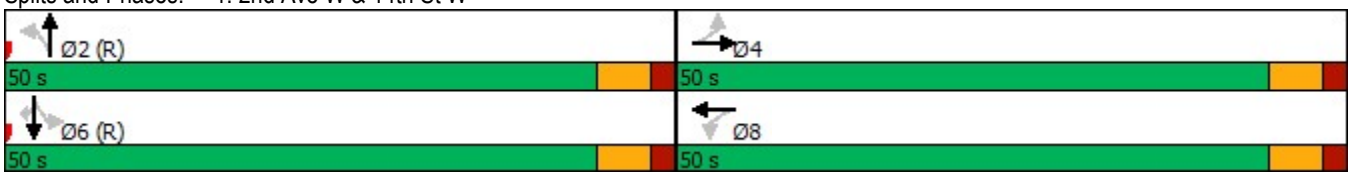


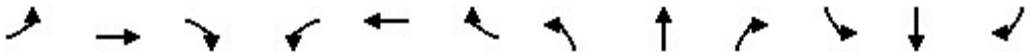
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	50.0	50.0		50.0	50.0		50.0	50.0		50.0	50.0	50.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		44.0	44.0		44.0	44.0	44.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		9.0	9.0		9.0	9.0	9.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		15.6			15.6		72.4	72.4		72.4	72.4	72.4
Actuated g/C Ratio		0.16			0.16		0.72	0.72		0.72	0.72	0.72
v/c Ratio		0.61			0.81		0.10	0.24		0.11	0.24	0.04
Control Delay		30.4			25.3		5.8	6.0		5.8	6.0	2.0
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		30.4			25.3		5.8	6.0		5.8	6.0	2.0
LOS		C			C		A	A		A	A	A
Approach Delay		30.4			25.3			5.9			5.5	
Approach LOS		C			C			A			A	
Queue Length 50th (m)		13.8			25.8		3.6	17.5		4.4	18.6	0.0
Queue Length 95th (m)		24.0			41.8		10.5	37.9		12.4	39.5	3.8
Internal Link Dist (m)		77.9			55.4			186.0			133.3	
Turn Bay Length (m)							20.0			22.0		
Base Capacity (vph)		880			1441		725	1278		769	1360	1109
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.25			0.41		0.10	0.24		0.11	0.24	0.04

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 55 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.81		
Intersection Signal Delay: 16.1	Intersection LOS: B	

Intersection Capacity Utilization 73.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: 2nd Ave W & 14th St W

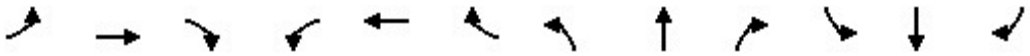




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1	17	2	28	25	19	328	3	19	379	6
Future Volume (Veh/h)	6	1	17	2	28	25	19	328	3	19	379	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	1	18	2	30	27	21	357	3	21	412	7
Pedestrians		6			3			2			6	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			0			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)											210	
pX, platoon unblocked	0.96	0.96	0.96	0.96	0.96		0.96					
vC, conflicting volume	912	868	424	882	870	368	425			363		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	888	843	380	856	845	368	381			363		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	100	97	99	89	96	98			98		
cM capacity (veh/h)	216	278	641	251	278	677	1136			1204		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	26	59	381	440
Volume Left	7	2	21	21
Volume Right	18	27	3	7
cSH	406	378	1136	1204
Volume to Capacity	0.06	0.16	0.02	0.02
Queue Length 95th (m)	1.6	4.4	0.5	0.4
Control Delay (s)	14.5	16.3	0.6	0.6
Lane LOS	B	C	A	A
Approach Delay (s)	14.5	16.3	0.6	0.6
Approach LOS	B	C		

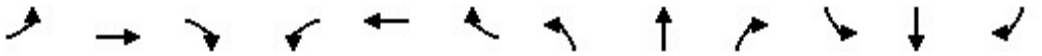
Intersection Summary				
Average Delay	2.0			
Intersection Capacity Utilization	38.4%	ICU Level of Service	A	
Analysis Period (min)	15			



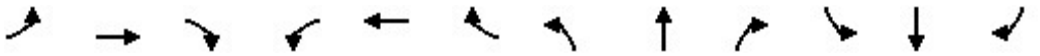
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	10	19	25	10	9	12	335	36	8	382	8
Future Volume (Veh/h)	7	10	19	25	10	9	12	335	36	8	382	8
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	8	11	21	27	11	10	13	368	40	9	420	9
Pedestrians		6			9			13			4	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								205				
pX, platoon unblocked	0.87	0.87		0.87	0.87	0.87				0.87		
vC, conflicting volume	882	892	444	905	876	401	435			417		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	793	804	444	820	787	244	435			262		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	96	96	88	96	99	99			99		
cM capacity (veh/h)	250	270	598	232	276	692	1130			1141		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	40	48	421	438
Volume Left	8	27	13	9
Volume Right	21	10	40	9
cSH	371	281	1130	1141
Volume to Capacity	0.11	0.17	0.01	0.01
Queue Length 95th (m)	2.9	4.8	0.3	0.2
Control Delay (s)	15.9	20.4	0.4	0.3
Lane LOS	C	C	A	A
Approach Delay (s)	15.9	20.4	0.4	0.3
Approach LOS	C	C		

Intersection Summary				
Average Delay	2.0			
Intersection Capacity Utilization	39.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	596	60	44	1008	106	185	243	14	204	187	34
Future Volume (vph)	33	596	60	44	1008	106	185	243	14	204	187	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	70.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			65.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.987			0.986			0.992			0.977	
Flt Protected		0.998			0.998		0.950			0.950		
Satd. Flow (prot)	0	3485	0	0	3442	0	1787	1883	0	1770	1836	0
Flt Permitted		0.843			0.894		0.471			0.215		
Satd. Flow (perm)	0	2944	0	0	3083	0	883	1883	0	399	1836	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			13			2			7	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		76.1			129.9			112.3			205.3	
Travel Time (s)		5.5			9.4			8.1			14.8	
Confl. Peds. (#/hr)	2		3	3		2	4		6	6		4
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	2%	1%	0%	3%	4%	1%	0%	0%	2%	1%	0%
Adj. Flow (vph)	33	602	61	44	1018	107	187	245	14	206	189	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	696	0	0	1169	0	187	259	0	206	223	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



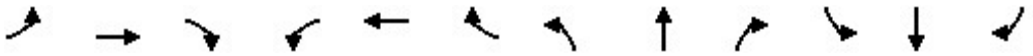
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.5	5.0		4.5	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	43.5		9.0	43.5		9.5	29.5		9.5	29.5	
Total Split (s)	9.0	60.8		9.0	60.8		14.6	31.0		19.2	35.6	
Total Split (%)	7.5%	50.7%		7.5%	50.7%		12.2%	25.8%		16.0%	29.7%	
Maximum Green (s)	4.5	56.3		4.5	56.3		10.1	26.5		14.7	31.1	
Yellow Time (s)	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		1.0	1.0	
Lost Time Adjust (s)		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	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	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	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		21.0			21.0			10.0			10.0	
Flash Dont Walk (s)		18.0			18.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)		71.4			71.4		31.2	21.1		39.0	25.0	
Actuated g/C Ratio		0.60			0.60		0.26	0.18		0.32	0.21	
v/c Ratio		0.40			0.64		0.61	0.78		0.71	0.57	
Control Delay		14.3			8.3		39.4	62.5		43.6	46.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		14.3			8.3		39.4	62.5		43.6	46.4	
LOS		B			A		D	E		D	D	
Approach Delay		14.3			8.3			52.8			45.1	
Approach LOS		B			A			D			D	
Queue Length 50th (m)		45.8			23.8		34.0	61.2		37.9	47.9	
Queue Length 95th (m)		65.9			31.1		50.2	87.2		55.4	70.2	
Internal Link Dist (m)		52.1			105.9			88.3			181.3	
Turn Bay Length (m)							70.0			65.0		
Base Capacity (vph)		1755			1838		306	417		299	481	
Starvation Cap Reductn		0			23		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.40			0.64		0.61	0.62		0.69	0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 110 (92%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 22.8		Intersection LOS: C	

Intersection Capacity Utilization 101.4% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 4: 2nd Ave W & 10th St W

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	798	9	2	1121	78	14	75	9	181	42	29
Future Volume (vph)	8	798	9	2	1121	78	14	75	9	181	42	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	11.0		11.0	50.0		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			12.0			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		0.99		0.98	0.99	0.99	
Frt		0.998			0.990				0.850		0.939	
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	3499	0	0	3496	0	1597	1881	1495	1787	1768	0
Flt Permitted		0.941			0.954		0.709			0.445		
Satd. Flow (perm)	0	3292	0	0	3335	0	1181	1881	1459	828	1768	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			8				55		30	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		129.9			53.7			113.2			90.7	
Travel Time (s)		9.4			3.9			8.2			6.5	
Confl. Peds. (#/hr)	8		7	7		8	8		10	10		8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	0%	2%	2%	13%	1%	8%	1%	0%	0%
Adj. Flow (vph)	8	831	9	2	1168	81	15	78	9	189	44	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	848	0	0	1251	0	15	78	9	189	74	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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

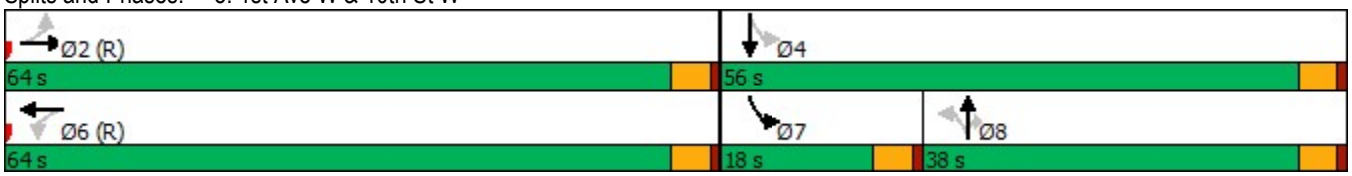


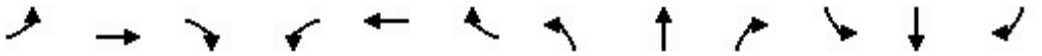
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6			8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	2	2		6	6		8	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	39.5	39.5		39.5	39.5		32.5	32.5	32.5	9.5	32.5	
Total Split (s)	64.0	64.0		64.0	64.0		38.0	38.0	38.0	18.0	56.0	
Total Split (%)	53.3%	53.3%		53.3%	53.3%		31.7%	31.7%	31.7%	15.0%	46.7%	
Maximum Green (s)	59.5	59.5		59.5	59.5		33.5	33.5	33.5	13.5	51.5	
Yellow Time (s)	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	1.0	1.0	1.0	
Lost Time Adjust (s)		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	4.5	
Lead/Lag							Lag	Lag	Lag	Lead		
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	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	15.0	15.0		15.0	15.0		10.0	10.0	10.0		10.0	
Flash Dont Walk (s)	20.0	20.0		20.0	20.0		18.0	18.0	18.0		18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0		0	
Act Effct Green (s)		85.2			85.2		10.3	10.3	10.3	25.8	25.8	
Actuated g/C Ratio		0.71			0.71		0.09	0.09	0.09	0.22	0.22	
v/c Ratio		0.36			0.53		0.15	0.48	0.05	0.67	0.18	
Control Delay		6.9			12.5		52.4	61.5	0.6	52.1	23.3	
Queue Delay		0.1			0.4		0.0	0.0	0.0	0.0	0.0	
Total Delay		7.1			13.0		52.4	61.5	0.6	52.1	23.3	
LOS		A			B		D	E	A	D	C	
Approach Delay		7.1			13.0			54.8			44.0	
Approach LOS		A			B			D			D	
Queue Length 50th (m)		31.1			89.8		3.5	18.8	0.0	40.3	8.6	
Queue Length 95th (m)		36.9			119.3		10.4	34.0	0.0	60.8	20.7	
Internal Link Dist (m)		105.9			29.7			89.2			66.7	
Turn Bay Length (m)							11.0		11.0	50.0		
Base Capacity (vph)		2338			2370		329	525	446	288	775	
Starvation Cap Reductn		519			575		0	0	0	0	0	
Spillback Cap Reductn		26			34		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.47			0.70		0.05	0.15	0.02	0.66	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 116 (97%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 16.0		Intersection LOS: B	

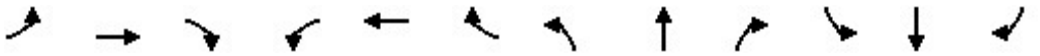
Intersection Capacity Utilization 60.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: 1st Ave W & 10th St W





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	796	40	35	829	18	43	100	50	28	113	329
Future Volume (vph)	151	796	40	35	829	18	43	100	50	28	113	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	16.0		0.0	14.0		11.0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00		0.94	0.99		0.99		0.92
Frt		0.994			0.997			0.950				0.850
Flt Protected		0.992			0.998		0.950			0.950		
Satd. Flow (prot)	0	3446	0	0	3522	0	1752	1764	0	1805	1900	1583
Flt Permitted		0.645			0.869		0.563			0.431		
Satd. Flow (perm)	0	2237	0	0	3062	0	975	1764	0	808	1900	1451
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			2			21				296
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		45.3			78.6			97.5			156.3	
Travel Time (s)		3.3			5.7			7.0			11.3	
Confl. Peds. (#/hr)	18		65	65		18	55		13	13		55
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	3%	0%	0%	2%	0%	3%	0%	4%	0%	0%	2%
Adj. Flow (vph)	154	812	41	36	846	18	44	102	51	29	115	336
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1007	0	0	900	0	44	153	0	29	115	336
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)		0.0			0.0			3.6			3.6	
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
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

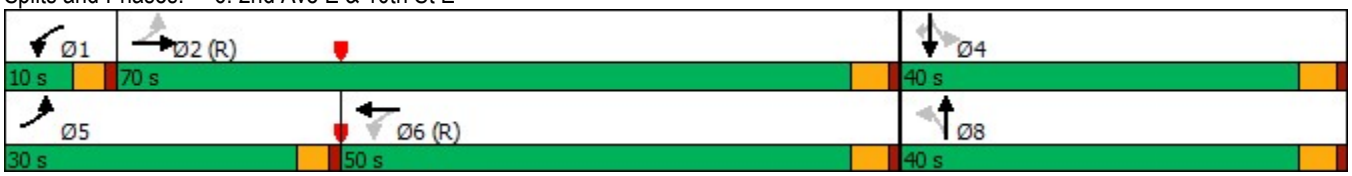


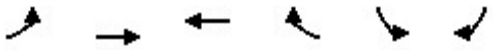
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	29.5		9.5	33.5		31.5	31.5		31.5	31.5	31.5
Total Split (s)	30.0	70.0		10.0	50.0		40.0	40.0		40.0	40.0	40.0
Total Split (%)	25.0%	58.3%		8.3%	41.7%		33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	26.0	65.5		6.0	45.5		35.5	35.5		35.5	35.5	35.5
Yellow Time (s)	3.0	3.5		3.0	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		1.0	1.0	1.0
Lost Time Adjust (s)		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	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
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		10.0			10.0		10.0	10.0		10.0	10.0	10.0
Flash Dont Walk (s)		15.0			19.0		17.0	17.0		17.0	17.0	17.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)		95.9			95.9		15.1	15.1		15.1	15.1	15.1
Actuated g/C Ratio		0.80			0.80		0.13	0.13		0.13	0.13	0.13
v/c Ratio		0.56			0.37		0.36	0.64		0.29	0.48	0.76
Control Delay		4.3			4.4		53.9	53.8		52.2	54.1	20.1
Queue Delay		0.2			0.1		0.0	0.0		0.0	0.0	0.2
Total Delay		4.5			4.5		53.9	53.8		52.2	54.1	20.3
LOS		A			A		D	D		D	D	C
Approach Delay		4.5			4.5			53.8			30.3	
Approach LOS		A			A			D			C	
Queue Length 50th (m)		17.0			26.0		10.2	31.6		6.7	27.0	9.1
Queue Length 95th (m)		31.3			50.2		20.9	50.0		15.4	42.5	39.4
Internal Link Dist (m)		21.3			54.6			73.5			132.3	
Turn Bay Length (m)							16.0			14.0		11.0
Base Capacity (vph)		1788			2446		288	536		239	562	637
Starvation Cap Reductn		188			0		0	0		0	0	0
Spillback Cap Reductn		0			438		0	0		0	0	42
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.63			0.45		0.15	0.29		0.12	0.20	0.56

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 107 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 13.1		Intersection LOS: B	

Intersection Capacity Utilization 86.9% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 6: 2nd Ave E & 10th St E





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	29	24	24	5	3	19
Future Volume (Veh/h)	29	24	24	5	3	19
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	31	25	25	5	3	20
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	30				114	28
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	30				114	28
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				100	98
cM capacity (veh/h)	1583				865	1048

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	56	30	23
Volume Left	31	0	3
Volume Right	0	5	20
cSH	1583	1700	1020
Volume to Capacity	0.02	0.02	0.02
Queue Length 95th (m)	0.5	0.0	0.6
Control Delay (s)	4.1	0.0	8.6
Lane LOS	A		A
Approach Delay (s)	4.1	0.0	8.6
Approach LOS			A

Intersection Summary			
Average Delay		3.9	
Intersection Capacity Utilization		19.5%	ICU Level of Service A
Analysis Period (min)		15	

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	8	16	3	44	11	2
Future Volume (Veh/h)	8	16	3	44	11	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	8	17	3	46	12	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			25		68	16
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			25		68	16
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1589		935	1063

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	25	49	14
Volume Left	0	3	12
Volume Right	17	0	2
cSH	1700	1589	951
Volume to Capacity	0.01	0.00	0.01
Queue Length 95th (m)	0.0	0.0	0.4
Control Delay (s)	0.0	0.5	8.8
Lane LOS		A	A
Approach Delay (s)	0.0	0.5	8.8
Approach LOS			A

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	14.8%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX F

ITE 11th Edition Excerpts

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076

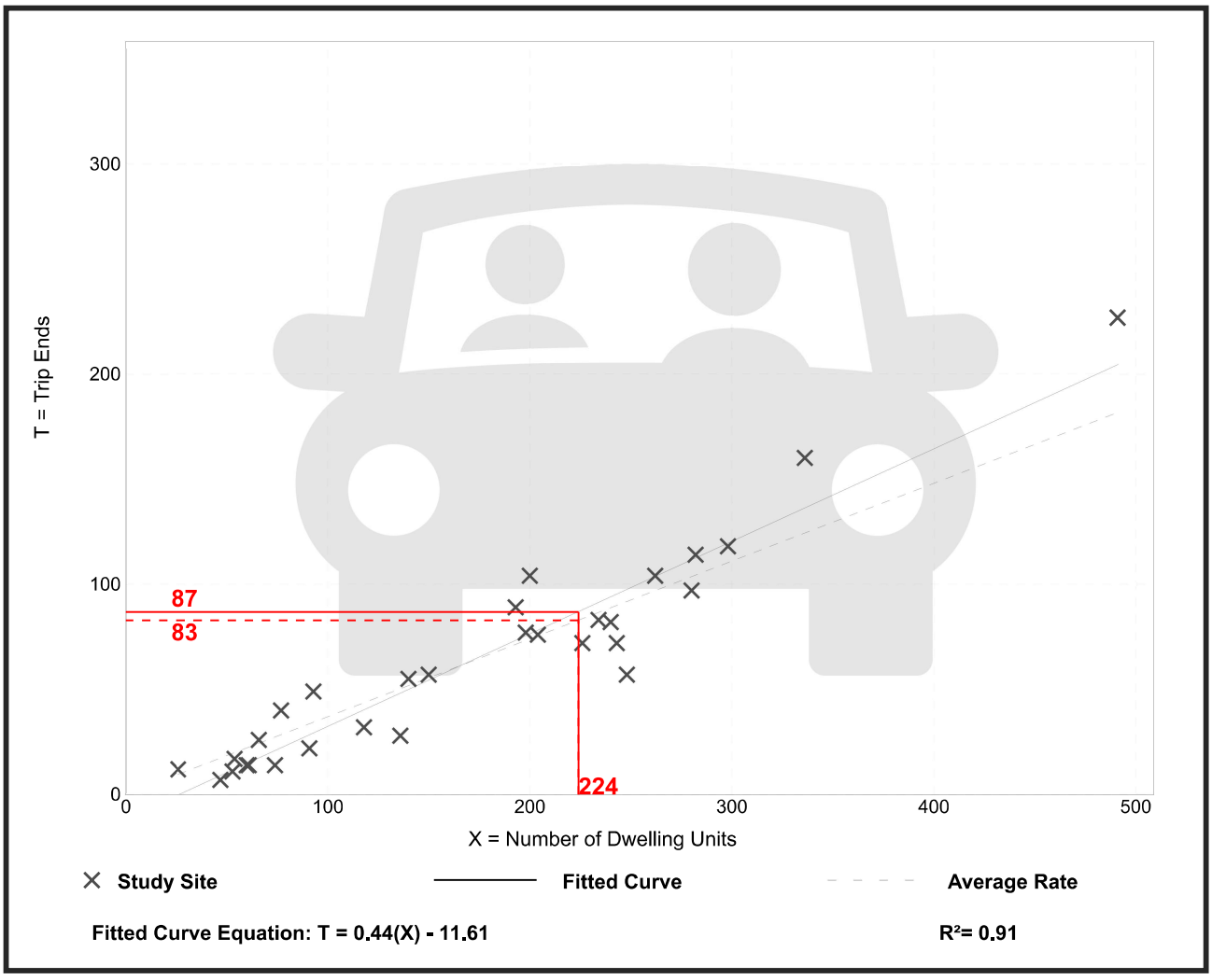
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 30
Avg. Num. of Dwelling Units: 173
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



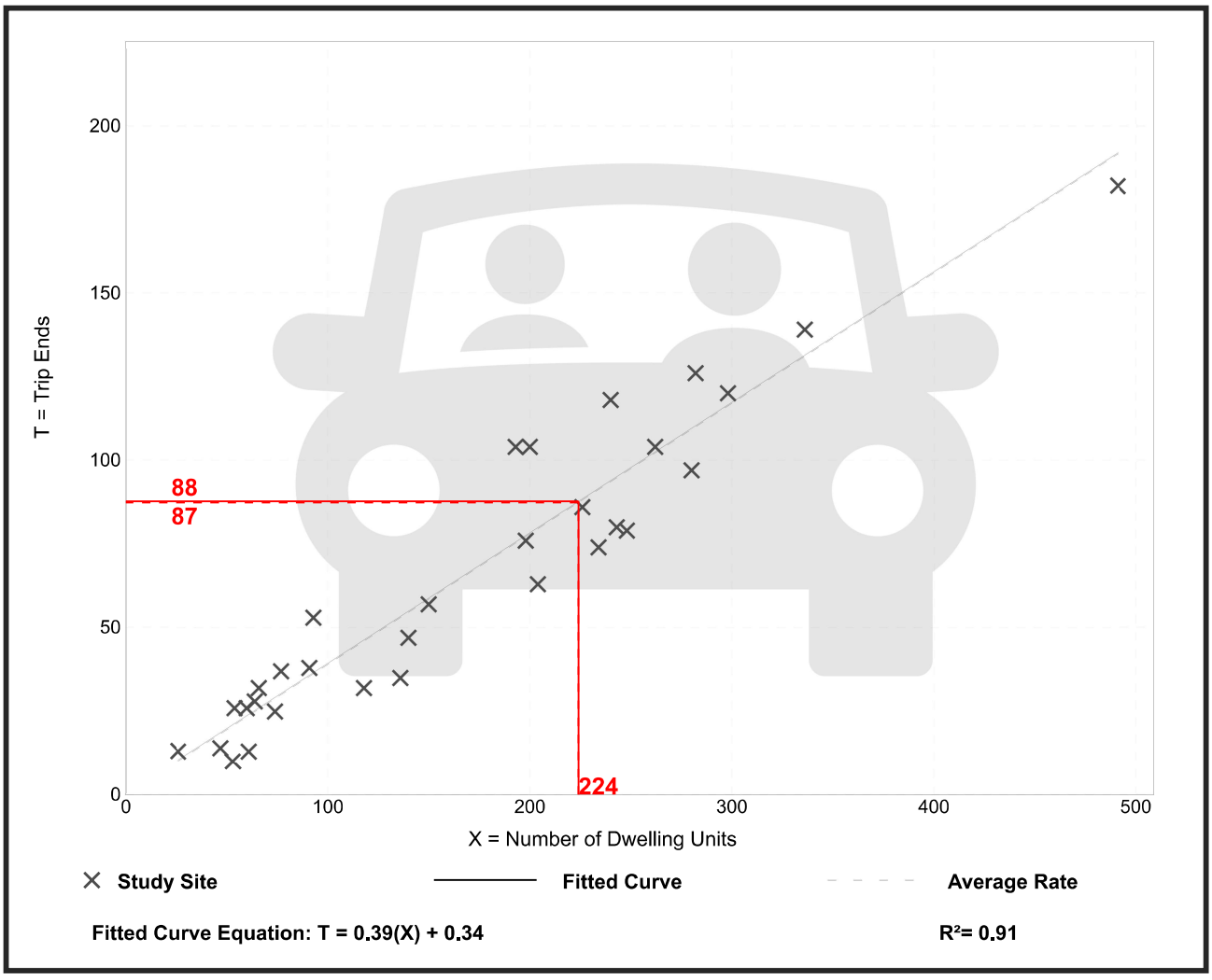
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	31
Avg. Num. of Dwelling Units:	169
Directional Distribution:	61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



APPENDIX G

Auxiliary Left-Turn Warrants

FT 2026 PM - SBL 11th Street and 2nd Avenue West

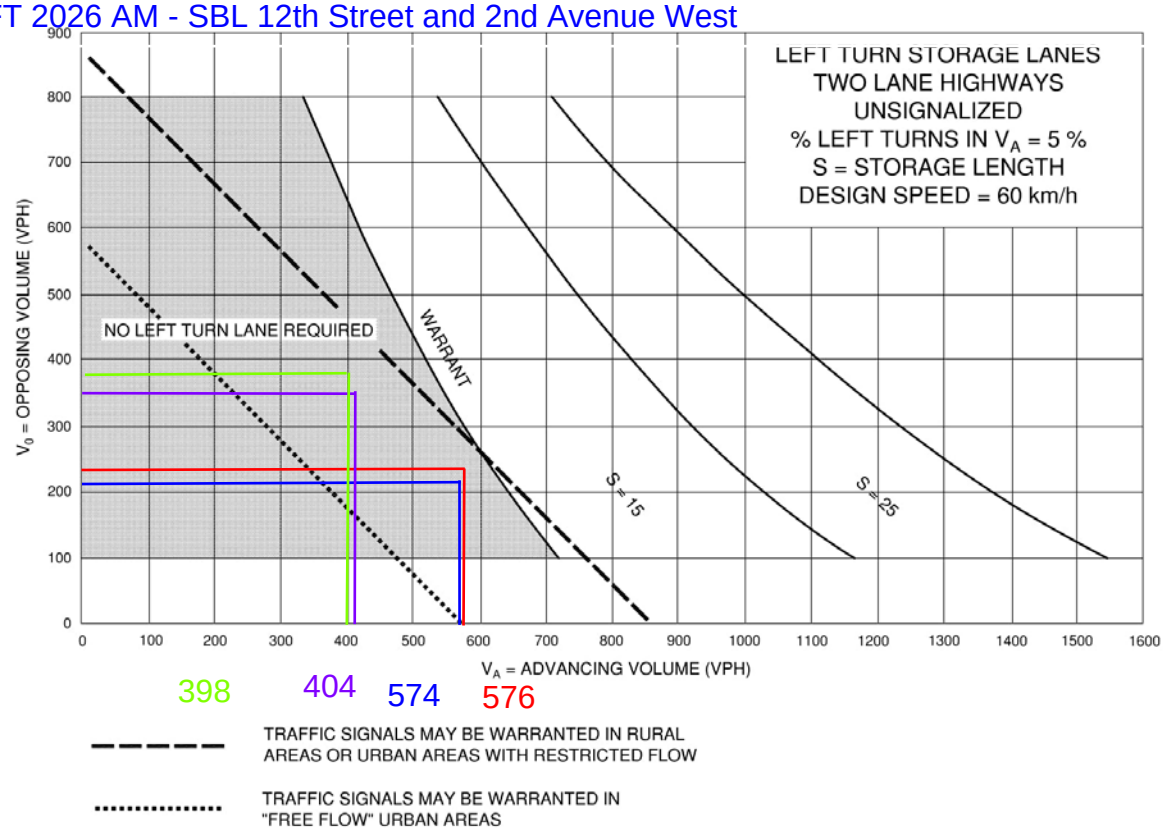
FT 2026 PM - SBL 12th Street and 2nd Avenue West

FT 2026 AM - SBL 11th Street and 2nd Avenue West

Exhibit 9A-7

FT 2026 AM - SBL 12th Street and 2nd Avenue West

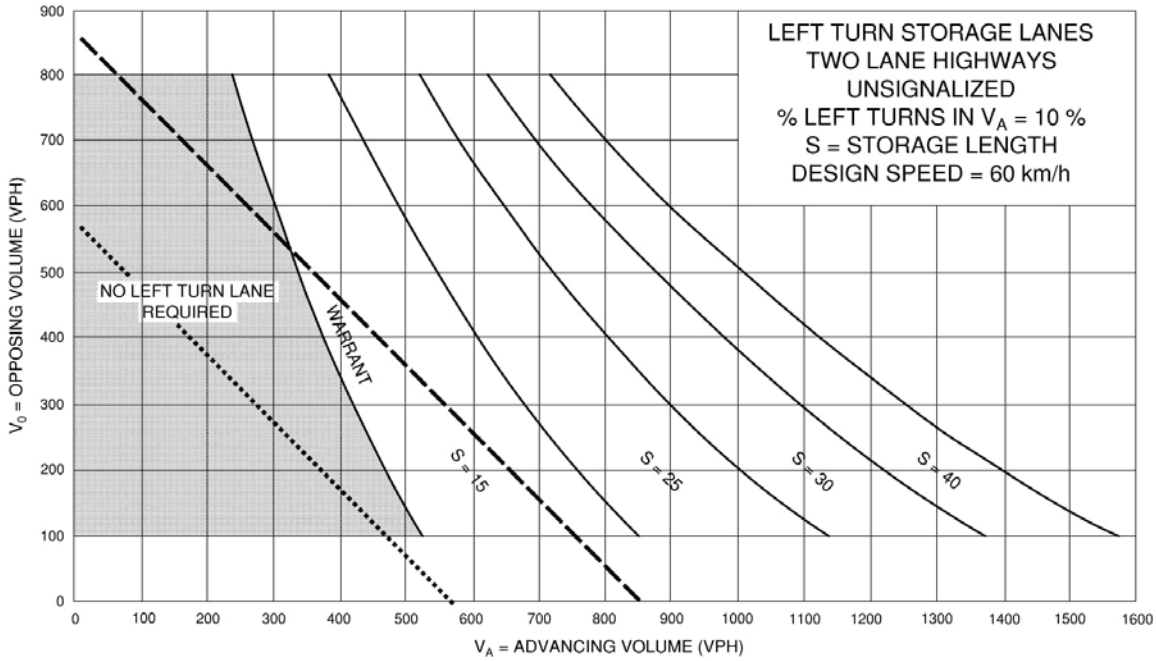
383
350
235
214



398 404 574 576

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

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



APPENDIX H

TAC GDGCR Stopping Sight Distance

Stopping sight distance is the sum of the distance travelled during the perception and reaction time and the braking distance.

$$SSD = 0.278Vt + 0.039 \frac{V^2}{a} \quad (2.5.2)$$

Where:

SSD = Stopping sight distance (m)
t = Brake reaction time, 2.5 s
V = Design speed (km/h)
a = Deceleration rate (m/s^2)

Table 2.5.2 gives the minimum stopping sight distances on level grade, on wet pavement, for a range of design speeds. These values are used for vertical curve design, intersection geometry and the placement of traffic control devices. The stopping sight distances quoted in **Table 2.5.2** may need to be increased for a variety of reasons related to grade and vehicle type as noted below.

Table 2.5.2: Stopping Sight Distance on level roadways for Automobiles[54]

Design speed (km/h)	Brake reaction distance (m)	Braking distance on level (m)	Stopping sight distance	
			Calculated (m)	Design (m)
20	13.9	4.6	18.5	20
30	20.9	10.3	31.2	35
40	27.8	18.4	46.2	50
50	34.8	28.7	63.5	65
60	41.7	41.3	83.0	85
70	48.7	56.2	104.9	105
80	55.6	73.4	129.0	130
90	62.6	92.9	155.5	160
100	69.5	114.7	184.2	185
110	76.5	138.8	215.3	220
120	83.4	165.2	248.6	250
130	90.4	193.8	284.2	285

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 3.4 m/s^2 used to determine calculated sight distance.

Table 9.9.3: Time Gap for Case B1, Left Turn from Stop

Design Vehicle	Time Gap (t_g)(s) at Design Speed of Major Road
Passenger car	7.5
Single-unit truck	9.5
Combination truck (WB 19 and WB 20)	11.5
Longer truck	To be established by road authority

Notes: Time gaps are for a stopped vehicle to turn left onto a two-lane highway with no median and with grades of 3% or less. The table values should be adjusted as follows:

- For multi-lane highways: For left turns onto two-lane highways with more than two lanes, add 0.5 s for passenger cars and 0.7 s for trucks for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle.
- For minor approach grades: If the approach grade is an upgrade that exceeds 3%, add 0.2 s for each percent grade for left turns.
- Some road authorities use higher values for certain specialized vehicles (e.g., Alberta uses 22 s for very long log trucks).

The intersection sight distance along the major road (distance b in **Figure 9.9.2**) is determined by:

$$ISD = 0.278\ V_{major}\ t_g \qquad (9.9.1)$$

Where:

ISD = intersection sight distance (length of the leg of sight triangle along the major road) (m)
V_{major} = design speed of the major road (km/h)
t_g = time gap for minor road vehicle to enter the major road (s)

For example, a passenger car turning left onto a two-lane major road should be provided sight distance equivalent to a time gap of 7.5 s in major-road traffic. If the design speed of the major road is 100 km/h, this corresponds to a sight distance of 0.278(100)(7.5) = 208.5 or 210 m, rounded for design.

A passenger car turning left onto a four-lane undivided roadway will need to cross two near lanes, rather than one. This increases the recommended gap in major-road traffic from 7.5 to 8.0 s. The corresponding value of sight distance for this example would be 223 m. If the minor-road approach to such an intersection is located on a 4% upgrade, then the time gap selected for intersection sight distance design for left turns should be increased from 8.0 to 8.8 s, equivalent to an increase of 0.2 s for each percent grade.

The design values for intersection sight distance for passenger cars are shown in **Table 9.9.4**. **Figure 9.9.4** includes design values, based on the time gaps for the design vehicles included in **Table 9.9.3**.

No adjustment of the recommended sight distance values for the major-road grade is generally needed because both the major- and minor-road vehicle will be on the same grade when departing from the intersection. However, if the minor-road design vehicle is a heavy truck and the intersection is located near a sag vertical curve with grades over 3%, then an adjustment to extend the recommended sight distance based on the major-road grade should be considered.

Table 9.9.4: Design Intersection Sight Distance – Case B1, Left Turn From Stop

Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	41.7	45
30	35	62.6	65
40	50	83.4	85
50	65	104.3	105
60	85	125.1	130
70	105	146.0	150
80	130	166.8	170
90	160	187.7	190
100	185	208.5	210
110	220	229.4	230
120	250	250.2	255
130	285	271.1	275

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3% or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Sight distance design for left turns at divided-highway intersections should consider multiple design vehicles and median width. If the design vehicle used to determine sight distance for a divided-highway intersection is larger than a passenger car, then sight distance for left turns will need to be checked for that selected design vehicle and for smaller design vehicles as well. If the divided-highway median is wide enough to store the design vehicle with a clearance to the through lanes of approximately 1 m at both ends of the vehicle, no separate analysis for the departure sight triangle for left turns is needed on the minor-road approach for the near roadway to the left. In most cases, the departure sight triangle for right turns (case B2) will provide sufficient sight distance for a passenger car to cross the near roadway to reach the median. Possible exceptions are addressed in the discussion of case B3.

The time gaps in **Table 9.9.3** can be decreased by 1.0 s for right-turn maneuvers without undue interference with major-road traffic. These adjusted time gaps for the right turn from the minor road are shown in **Table 9.9.5**. Design values based on these adjusted time gaps are shown in **Table 9.9.6** for passenger cars. **Figure 9.9.5** includes the design values for the design vehicles for each of the time gaps in **Table 9.9.5**.

Table 9.9.5: Time Gap for Case B2—Right Turn from Stop and Case B3—Crossing Maneuver

Design Vehicle	Time Gap (t_g)(s) at Design Speed of Major Road
Passenger car	6.5
Single-unit truck	8.5
Combination truck (WB 19 and WB 20)	10.5

Note: Time gaps are for a stopped vehicle to turn left onto a two-lane highway with no median and with grades of 3% or less. The table values should be adjusted as follows:

- For multi-lane highways: For left turns onto two-lane highways with more than two lanes, add 0.5 s for passenger cars and 0.7 s for trucks for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle.
- For minor approach grades: If the approach grade is an upgrade that exceeds 3%, add 0.1 s for each percent grade for left turns.

Table 9.9.6: Design Intersection Sight Distance – Case B2, Right Turn from Stop, and Case B3, Crossing Maneuver

Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	36.1	40
30	35	54.2	55
40	50	72.3	75
50	65	90.4	95
60	85	108.4	110
70	105	126.5	130
80	130	144.6	145
90	160	162.6	165
100	185	180.7	185
110	220	198.8	200
120	250	216.8	220
130	285	234.9	235

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane highway with no median and with grades of 3% or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

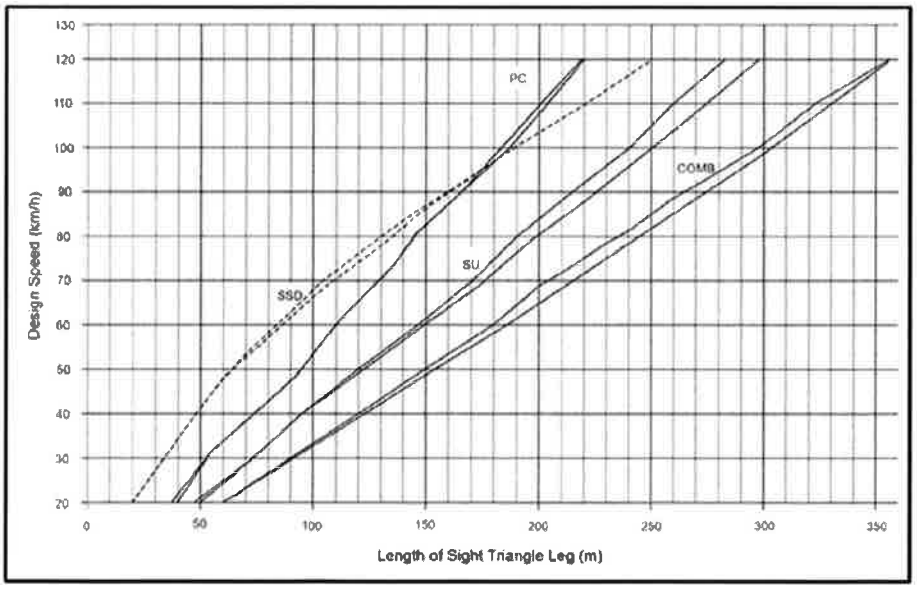
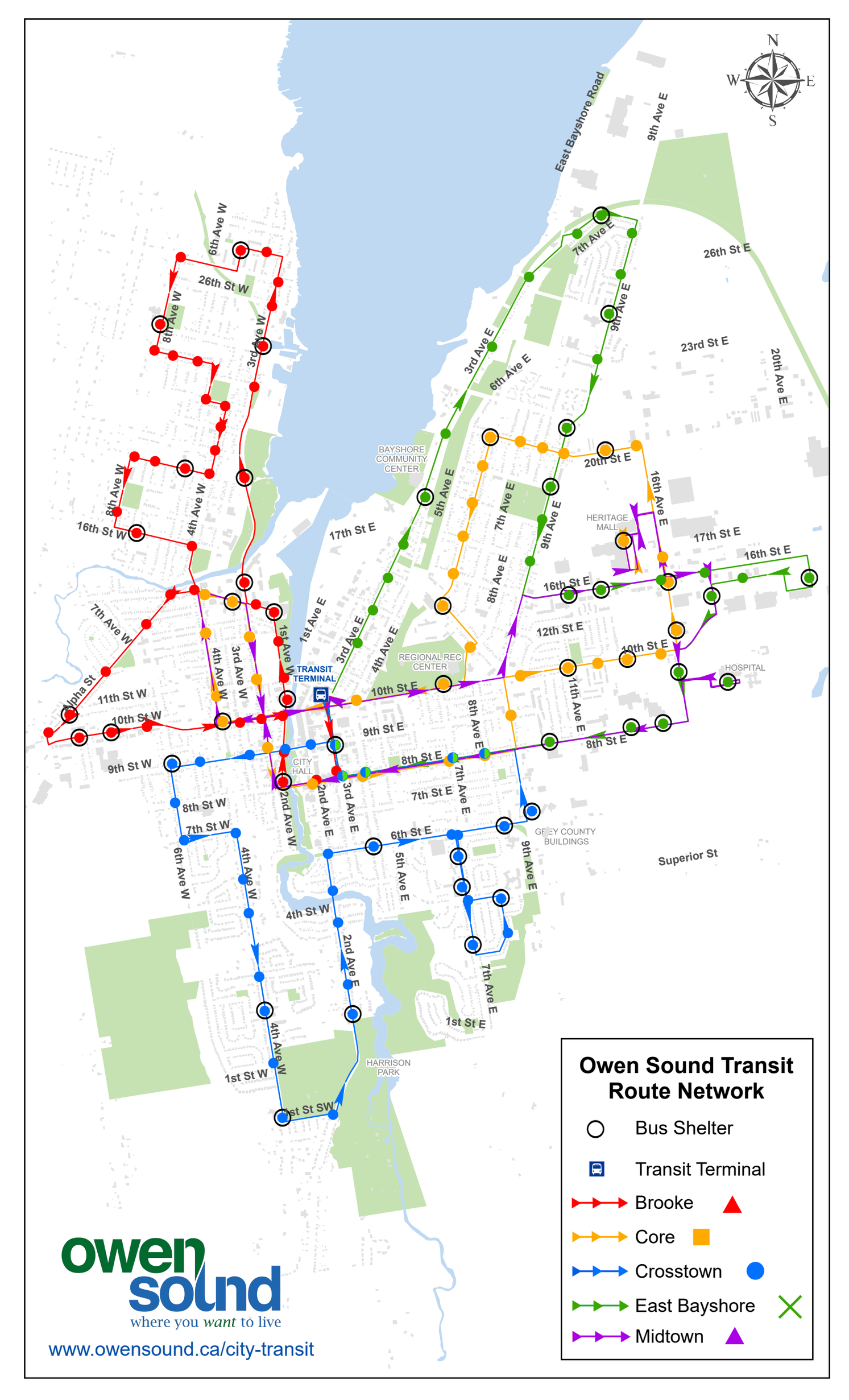


Figure 9.9.5: Intersection Sight Distance – Case B2, Right Turn from Stop, and Case B3, Crossing Maneuver (Calculated and Design Values Plotted)

APPENDIX I

Owen Sound Transit Route Maps


N
W
E
S
East Bayshore Road
9th Ave E
26th St E
23rd St E
20th Ave E
7th Ave E
3rd Ave E
6th Ave E
9th Ave E
20th St E
16th Ave E
17th St E
16th St E
12th St E
10th St E
11th Ave E
8th Ave E
8th St E
7th St E
6th St E
5th Ave E
4th Ave E
3rd Ave E
2nd Ave E
1st Ave E
1st St E
BAYSHORE COMMUNITY CENTER
HERITAGE MALL
REGIONAL REC CENTER
HOSPITAL
TRANSIT TERMINAL
CITY HALL
GREY COUNTY BUILDINGS
Superior St
HARRISON PARK
6th Ave W
26th St W
8th Ave W
3rd Ave W
16th St W
4th Ave W
7th Ave W
Alpha St
11th St W
10th St W
9th St W
8th St W
7th St W
6th Ave W
4th Ave W
3rd Ave W
2nd Ave W
1st Ave W
4th St W
1st St W
1st St SW
Owen Sound Transit Route Network
Bus Shelter
Transit Terminal
Brooke
Core
Crosstown
East Bayshore
Midtown
owen sound
where you want to live
www.owensound.ca/city-transit

APPENDIX J

Grey Transit Route Maps and Schedules

Grey Transit Route - Schedules

ROUTE 1 SOUTHBOUND
(Owen Sound to Dundalk)

Monday - Friday

Owen Sound Transit Terminal 1020 3rd Ave E, Owen Sound	**Departure** **6:45 AM**	**Departure** **10:44 AM**	**Departure** **5:47 PM**
Stone Tree 318085 Hwy 6-10, Owen Sound	**6:54 AM**	**10:53 AM**	**5:56 PM**
Chatsworth Arena 5Toronto St., Chatsworth	**7:08 AM**	**11:07 AM**	**6:10 PM**
King Edward Park 75 Walker St, Markdale	**7:32 AM**	**11:31 AM**	**6:34 PM**
Trail Parking Lot Main St West, @ Scotland St, Markdale	**7:39 AM**	**11:38 AM**	**6:41 PM**
Grey Gables 206 Toronto St S, Markdale	**7:46 AM**	**11:45 AM**	**6:48 PM**
Huron Bay Co-Operative 774794 ON-10, Flesherton	**7:54 AM**	**11:53 AM**	**6:56 PM**
Flesherton Arena 103 ON-10, Flesherton	**8:05 AM**	**12:04 PM**	**7:07 PM**
Dundalk Arena 550 Main St E, Dundalk	**Arrival** **8:19 AM**	**Arrival** **12:18 PM**	**Arrival** **7:21 PM**

ROUTE 1 NORTHBOUND
(Dundalk to Owen Sound)

Monday - Friday

Dundalk Arena 550 Main St E, Dundalk	**Departure** **8:34 AM**	**Departure** **12:22 PM**	**Departure** **7:25 PM**
Flesherton Arena 103 ON-10, Flesherton	**8:52 AM**	**12:40 PM**	**7:43 PM**
Huron Bay Co-Operative 774794 ON-10, Flesherton	**9:03 AM**	**12:51 PM**	**7:54 PM**
Grey Gables 206 Toronto St S, Markdale	**9:11 AM**	**12:59 PM**	**8:02 PM**
Trail Parking Lot Main St West, @ Scotland St, Markdale	**9:18 AM**	**1:06 PM**	**8:09 PM**
King Edward Park 75 Walker St, Markdale	**9:25 AM**	**1:13 PM**	**8:16 PM**
Chatsworth Arena 5 Toronto St., Chatsworth	**9:49 AM**	**1:37 PM**	**8:40 PM**
Stone Tree 318085 Hwy 6-10, Owen Sound	**10:03 AM**	**1:51 PM**	**8:54 PM**
Owen Sound Transit Terminal 1020 3rd Ave E, Owen Sound	**Arrival** **10:08 AM**	**Arrival** **1:56 PM**	**Arrival** **8:59 PM**

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ROUTE 2 SOUTHBOUND
(Dundalk to Orangeville)

Monday - Friday

Dundalk Arena 550 Main St E, **Dundalk**	**Departure** **6:30 AM**	**Departure** **8:34 AM**	**Departure** **12:22 PM**	**Departure** **5:21 PM**
Fiddle Park Ln @ GreenwoodCrescent, Shelburne	**6:49 AM**	**8:53 AM**	**12:41 PM**	**5:40 PM**
Victoria St.@ Red Front Store Ln. Shelburne	**6:56 AM**	**9:00 AM**	**12:48 PM**	**5:47 PM**
Hansen Blvd. @ First St. (Orangeville Mall & GO Bus) Orangeville	**7:22 AM**	**9:26 AM**	**1:14 PM**	**6:13 PM**
Broadway & Fourth Street (TransitTransfer Station) Orangeville	**Arrival** **7:28 AM**	**Arrival** **9:32 AM**	**Arrival** **1:20 PM**	**Arrival** **6:19 PM**

ROUTE 2 SOUTHBOUND – WEEKEND SERVICE
(Dundalk to Orangeville)

Saturday & Sunday
(July 10 to December 12, 2021)

Owen Sound Transit Terminal 1020 3rd Ave. E., Owen Sound	**Departure** **7:00 AM**			
Dundalk Arena 550 Main St E, Dundalk	**7:56 AM**	**Departure** **10:40 AM**	**Departure** **2:02 PM**	**Departure** **4:46 PM**
Col Phillips Dr. & Armstrong Rd. Shelburne	**8:13 AM**	**10:57 AM**	**2:19 PM**	**5:03 PM**
Fiddle Park Ln @ Greenwood Crescent, Shelburne	**8:20 AM**	**11:04 AM**	**2:26 PM**	**5:10 PM**
Victoria St.@ Red Front Store Ln. Shelburne	**8:25 AM**	**11:09 AM**	**2:31 PM**	**5:15 PM**
Simon Street @ School Road Shelburne	**8:32 AM**	**11:16 AM**	**2:38 PM**	**5:22 PM**
Hansen Blvd. @ First St. (Orangeville Mall & GO Bus) Orangeville	**8:54 AM**	**11:38 AM**	**3:00 PM**	**5:44 PM**
Broadway & Fourth Street (TransitTransfer Station) Orangeville	**Arrival** **9:00 AM**	**Arrival** **11:44 AM**	**Arrival** **3:06 PM**	**Arrival** **5:50 PM**

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Grey Transit Route

ROUTE 2 NORTHBOUND
(Orangeville to Dundalk)

Monday - Friday

Broadway & Fourth Street (TransitTransfer Station) Orangeville	Departure 7:32 AM	Departure 9:36 AM	Departure 1:24 PM	Departure 6:23 PM
Hansen Blvd. @ First St. (Orangeville Mall & GO Bus) Orangeville	7:42 AM	9:46 AM	1:34 PM	6:33 PM
Victoria St. @ Red Front Store Ln. Shelburne	8:08 AM	10:12 AM	2:00 PM	6:59 PM
Fiddle Park Ln @ Greenwood Crescent Shelburne	8:15 AM	10:19 AM	2:07 PM	7:06 PM
Dundalk Arena 550 Main St. E., Dundalk	Arrival 8:30 AM	Arrival 10:34 AM	Arrival 2:22 PM	Arrival 7:21 PM

ROUTE 2 NORTHBOUND – WEEKEND SERVICE
(Dundalk to Orangeville)

Saturday & Sunday
(July 10 to December 12, 2021)

Broadway & Fourth Street (TransitTransfer Station) Orangeville	Departure 9:02 AM	Departure 11:46 AM	Departure 3:08 PM	Departure 5:52 PM
Hansen Blvd. @ First St. (Orangeville Mall & GO Bus) Orangeville	9:10 AM	11:54 AM	3:16 PM	6:03 PM
Simon Street @ School Road Shelburne	9:32 AM	12:16 PM	3:38 PM	6:25 PM
Victoria St.@ Red Front Store Ln. Shelburne	9:39 AM	12:23 PM	3:45 PM	6:32 PM
Fiddle Park Ln @ Greenwood Crescent, Shelburne	9:44 AM	12:28 PM	3:50 PM	6:37 PM
Col Phillips Dr. & Armstrong Rd. Shelburne	9:51 AM	12:35 PM	3:57 PM	6:44 PM
Dundalk Arena 550 Main St E, Dundalk	Arrival 10:06 AM	Arrival 12:50 PM	Arrival 4:12 PM	Departure 7:01 PM
Owen Sound Transit Terminal 1020 3rd Ave. E., Owen Sound				Arrival 7:55 PM

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ROUTE 3 EASTBOUND
(Meaford to Owen Sound)

Wednesday - Sunday

Owen Sound Transit Terminal 1020 3rd Ave. E., Owen Sound	**Departure 6:30 AM**	**Departure 8:06 AM**	**Departure 9:39 AM**	**Departure 11:21 AM**	**Departure 4:30 PM**	**Departure 6:06 PM**
Woodford Community Center 107 Woodford Cres, Owen Sound	**express (no stop)**	**8:27 AM**	**10:00 AM**	**express (no stop)**	**express (no stop)**	**6:27 PM**
Don Bumstead & Family Medical Clinic 206106, ON-26 Meaford	**express (no stop)**	**8:39 AM**	**10:12 AM**	**express (no stop)**	**express (no stop)**	**6:39 PM**
N Sykes St. @ Nelson St W. Meaford	**Arrival 7:00 AM**	**Arrival 8:42 AM**	**Arrival 10:15 AM**	**Arrival 11:51 AM**	**Arrival 5:00 PM**	**Arrival 6:42 PM**

ROUTE 3 WESTBOUND
(Meaford to Owen Sound)

Wednesday - Sunday

N Sykes St. @ Nelson St W, Meaford	**Departure 8:46 AM**	**Departure 10:28 AM**	**Departure 11:55 AM**	**No Stop**	**Departure 6:46 PM**
Don Bumstead & Family Medical Centre 206106, ON-26, Meaford	**8:53 AM**	**10:35 AM**	**12:02 PM**	**No Stop**	**6:53 PM**
Smart Centres Bus Stop 16th St E @ 18th Ave E, Owen Sound	**9:16 AM**	**10:58 AM**	**12:25 PM**	**Pick Up Only 4:15 PM**	**7:16 PM**
Grey Bruce Health Services Owen Sound Hospital 1800 8th St E, Owen Sound	**9:23 AM**	**11:05 AM**	**12:32 PM**	**Pick Up Only 4:18 PM**	**7:23 PM**
Georgian College 8th St. E., Owen Sound	**9:30 AM**	**11:12 AM**	**12:39 PM**	**Pick Up Only 4:21 PM**	**7:30 PM**
Owen Sound Transit Terminal 1020 3rd Ave. E., Owen Sound	**Arrival 9:35 AM**	**Arrival 11:17 AM**	**Arrival 12:44 PM**	**Arrival 4:26 PM**	**Arrival 7:35 PM**

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Grey Transit Route

ROUTE 4 EASTBOUND
(Meaford to Town of the Blue Mountains)

Wednesday - Sunday

Downtown Meaford N Sykes St. @ Nelson St W, Meaford	**Departure** **7:04 AM**	**Departure** **8:46 AM**	**Departure** **5:04 PM**	**Departure** **6:46 PM**
Masse's Independent 206497 ON-26, Meaford	**7:11 AM**	**8:53 AM**	**5:11 PM**	**6:53 PM**
Thornbury Foodland 105 Arthur St W, Thornbury	**7:21 AM**	**9:03 AM**	**5:21 PM**	**7:03 PM**
Town of Blue Mountains Municipal Office 32 Mill St, The Blue Mountains	**7:27 AM**	**9:09 AM**	**5:27 PM**	**7:09 PM**
Blue Mountain Community Health Centre 78 King St E, Thornbury	**7:34 AM**	**9:16 AM**	**5:34 PM**	**7:16 PM**
Blue Mountain Village 156 Jozo Weider Blvd.	**Arrival** **7:51 AM**	**Arrival** **9:33 AM**	**Arrival** **5:51 PM**	**Arrival** **7:33 PM**

ROUTE 4 WESTBOUND
(Town of the Blue Mountains to Meaford)

Wednesday - Sunday

Blue Mountain Village 156 Jozo Weider Blvd.	**Departure** **7:55 AM**	**Departure** **9:37 AM**	**Departure** **5:55 PM**	**Departure** **7:37 PM**
Blue Mountain Community Health Centre 78 King St E, Thornbury	**8:16 AM**	**9:58 AM**	**6:16 PM**	**7:58 PM**
Town of Blue Mountains Municipal Office 32 Mill St, The Blue Mountains	**8:23 AM**	**10:05 AM**	**6:23 PM**	**8:05 PM**
Thornbury Foodland 105 Arthur St W, Thornbury	**8:29 AM**	**10:11 AM**	**6:29 PM**	**8:11 PM**
Masse's Independent 206497 ON-26, Meaford	**8:39 AM**	**10:21 AM**	**6:39 PM**	**8:21 PM**
Downtown Meaford N Sykes St. @ Nelson St W, Meaford	**Arrival** **8:42 AM**	**Arrival** **10:24 AM**	**Arrival** **6:42 PM**	**8:28 PM**
Owen Sound Transit Terminal 1020 3rd Ave. E., Owen Sound				**Arrival** **8:58 PM**

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ROUTE 5 NORTHBOUND
(Owen Sound to Wiarton to Sauble Beach)

Friday – Monday
(May 21 to September 6, 2021 *Including Holiday Mondays*)

Owen Sound Transit Terminal 1020 3rd Ave E, Owen Sound	**Departure** **7:17 AM**	**Departure** **12:17 PM**	**Departure** **8:17 PM**
Bergen's No Frills 1020 10th St W, Owen Sound	**7:27 AM**	**12:27 PM**	**8:27 PM**
Shallow Lake & District Community Centre 550 Princess St, Shallow Lake	**7:41 AM**	**12:41 PM**	**8:41 PM**
South Bruce Peninsula Visitor Centre 50 ON-6, Hepworth	**7:47 AM**	**12:47 PM**	**8:47 PM**
Wiarton Foodland 425 Berford St, Wiarton	**7:59 AM**	**12:59 PM**	**express** **(no stop)**
Downtown Wiarton Louisa St, @ George St, Wiarton	**8:07 AM**	**1:07 PM**	**express** **(no stop)**
Sauble Beach 104 2nd Ave N, Sauble Beach	**Arrival** **8:31 AM**	**Arrival** **1:31 PM**	**Arrival** **9:02 PM**

ROUTE 5 SOUTHBOUND
(Sauble Beach to Wiarton to Owen Sound)

Friday – Monday
(May 21 to September 6, 2021 *Including Holiday Mondays*)

Sauble Beach 104 2nd Ave N, Sauble Beach	**Departure** **8:33 AM**	**Departure** **1:33 PM**	**Departure** **9:04 PM**
Downtown Wiarton Louisa St, @ George St, Wiarton	**express** **(no stop)**	**1:59 PM**	**9:30 PM**
Wiarton Foodland 425 Berford St, Wiarton	**express** **(no stop)**	**2:07 PM**	**9:38 PM**
South Bruce Peninsula Visitor Centre 50 ON-6, Hepworth	**8:45 AM**	**2:19 PM**	**9:50 PM**
Shallow Lake & District Community Centre 550 Princess St, Shallow Lake	**8:51 AM**	**2:25 PM**	**9:56 PM**
Bergen's No Frills 1020 10th St W, Owen Sound	**9:05 AM**	**2:39 PM**	**10:10 PM**
Owen Sound Transit Terminal 1020 3rd Ave E, Owen Sound	**Arrival** **9:13 AM**	**Arrival** **2:47 PM**	**Arrival** **10:18 PM**

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Grey Transit Route

ROUTE 6 WESTBOUND
(Flesherton / Durham - Walkerton)

Monday and Friday

Flesherton Arena 103 ON-10, Flesherton	**Departure** **8:05 AM**	**Departure** **12:41 PM**	**Departure** **5:04 PM**
Durham Credit Union 118 Queen St S, Durham	**8:29 AM**	**1:05 PM**	**5:25 PM**
Hanover Municipal Office 341 10th St, Hanover	**8:50 AM**	**1:26 PM**	**5:46 PM**
Downtown Walkerton 306 Scott St, Walkerton	**Arrival** **9:03 AM**	**Arrival** **1:39 PM**	**Arrival** **5:59 PM**

ROUTE 6 EASTBOUND
(Walkerton - Durham / Flesherton)

Monday and Friday

Downtown Walkerton 306 Scott St, Walkerton	**Departure** **7:03 AM**	**Departure** **9:07 AM**	**Departure** **1:43 PM**	**Departure** **6:03 PM**
Hanover Municipal Office 341 10th St, Hanover	**7:20 AM**	**9:24 AM**	**2:00 PM**	**6:20 PM**
Durham Credit Union 118 Queen St S, Durham	**7:41 AM**	**9:45 AM**	**2:21 PM**	**6:41 PM**
Flesherton Arena 103 ON-10, Flesherton	**Arrival** **8:01 AM**	**Arrival** **10:05 AM**	**Arrival** **2:41 PM**	**Arrival** **7:01 PM**

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GTR

The Grey't Way To Travel

Route 5

6

Highway 6

Owen Sound to Wiarton to Sauble Beach

Adult (18+): $3.00
Adult (55+) and student (6-17): $2.50
Children 5 and under: Free
Operating: Friday to Monday

Telephone Number: 226-910-1001
Website: www.grey.ca/gtr

GTR

The Grey't Way To Travel

Route 1 & 2

Highway 10

Owen Sound to Orangeville

Adult (18+): $5.00
Adult (55+) and student (6-17): $4.50
Children 5 and under: Free

Operating:
Monday to Friday

Telephone Number: 226-910-1001
Website: www.grey.ca/gtr

GTR

The Grey't Way To Travel

Route 3 & 4

Highway 26

Owen Sound to The Blue Mountains

Adult (18+): $5.00
Adult (55+) and student (6-17): $4.50
Children 5 and under: Free

Operating:
Wednesday to Sunday

Telephone Number: 226-910-1001
Website: www.grey.ca/gtr

APPENDIX K

Owen Sound Trails Brochure and Grey County Cycling Map

Grey County
Colour It Your Way

Grey County
Cycling and Trails Master Plan

Draft October 2020

In addition to Maps 1a and 1b, the County's cycling loops were reviewed to understand roads and trails that are already promoted by the County as desirable routes for cyclists. These cycling loops are illustrated on the County's map of bike routes (here). Though most of these cycling loops do not have a formal facility, they were used as a starting point of the network development process. The County's cycling loops are organized into three categories – easy, moderate and advanced – and typically include a series of roads and / or trails that take advantage of the surrounding landscapes and views. **Figure 9** illustrates the County's cycling loops.

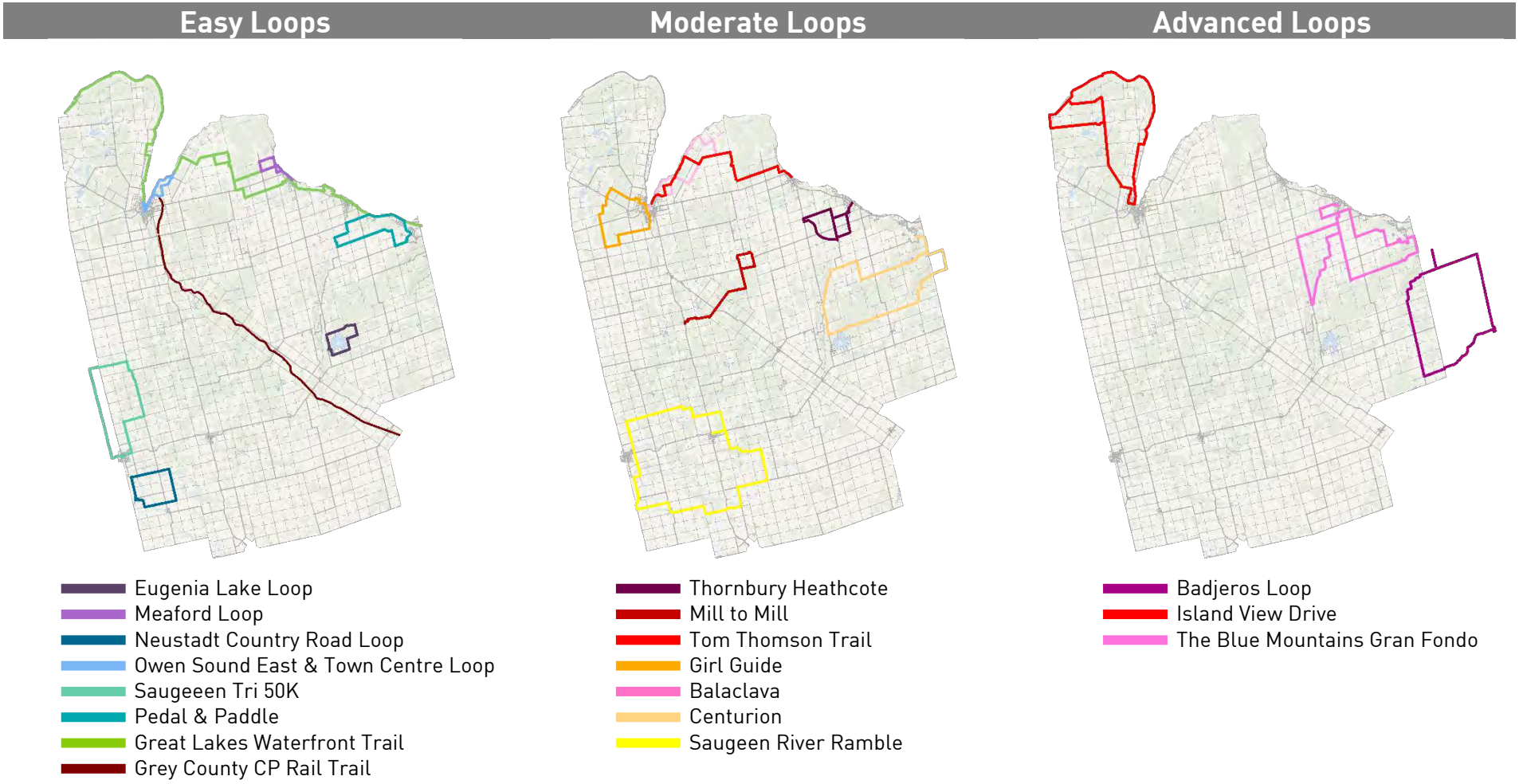


Figure 9 - Overview of Grey County's Cycling Loops

FEATURED HIKE
HARRISON PARK

(HIGHLIGHTED ON THE MAP)

Distance: 2.5km **Difficulty:** Easy

The Harrison Park loop is a beautiful walk through hardwood forest and open parkland on wide, hard-packed trails following the Sydenham River. It's accessible in all seasons and a popular place to snowshoe or cross-country ski in winter. The loop begins at the trail head and kiosk just east of the park entrance off 2nd Avenue East. It follows the river south to the Freedom Trail, commemorating the first black settlers of Owen Sound, the most northern "station" on the Underground Railway. Stop to view the Black History Cairn, and the interpretive plaques around it.

The trail continues south towards Harrison Park Inn, crossing the bridge near the duck pond to the east of it. Here, you will see blue blazes marking the Bruce Side Trail. Follow the trail south and across another bridge leading into the campground. Continue west past the pool to the Weaver's Creek Boardwalk and discover one of Owen Sound's treasured waterfalls, just beyond the boundary of Harrison Park. Be mindful that this is on private property. Quiet roads will take you back to the playgrounds and Harrison Park Inn, where you can fuel up with a meal or snack. The trails will lead you back to your starting point.

NINE BENDS

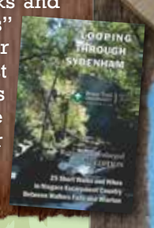
Distance: 0.5km
Difficulty: Moderate to Difficult

The Nine Bends Trail is one of many paths in Owen Sound that offer pedestrians a short-cut through the escarpment from one street to another. The Nine Bends is a steep, windy path that connects 1st Street West near Harrison Park to the Greenwood Cemetery.

THE BRUCE TRAIL

Distance: 45 km **Difficulty:** Various

The Bruce Trail is the longest and oldest footpath in Canada, stretching 886 kilometres from Niagara Falls to Tobermory along the Niagara Escarpment – a recognized world biosphere reserve. The trail forms a ribbon around Owen Sound, linking the Centennial Tower, Harrison Park, Inglis Falls, the West Rocks and Jones Falls. Look for white painted "blazes" on trees along the Bruce Trail to mark your path. Blue blazes denote a side trail. Most of the trails with white blazes are for hikers only. Bruce Trail guides are available at the Owen Sound Visitor Information Centre or from www.brucetrail.org.



FEATURED HIKE
PALISADES LOOP

(HIGHLIGHTED ON THE MAP)

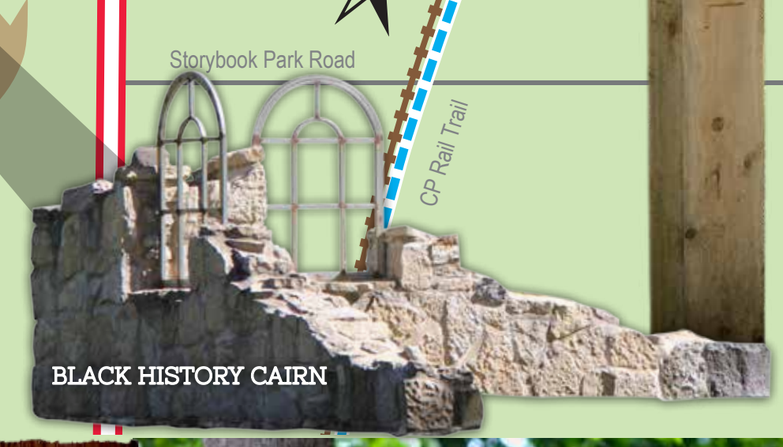
Distance: 1.8km
Difficulty: Moderate to Difficult

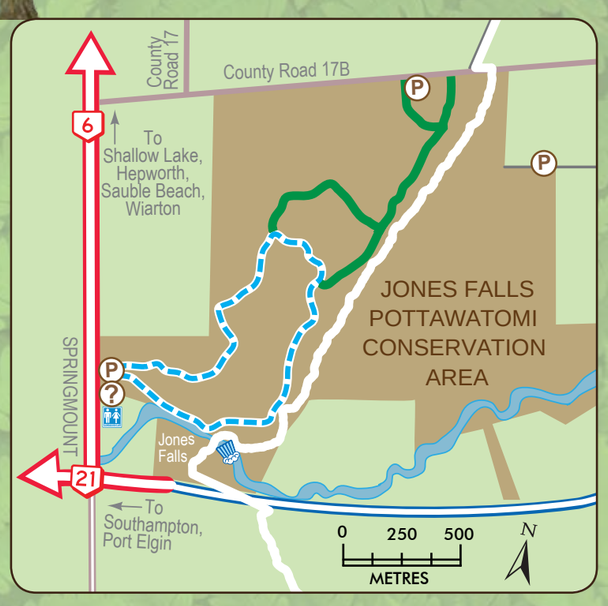
The Palisades loop of the Bruce Trail offers a rare chance to hike the lower talus of the Niagara Escarpment, hugging cliff walls that slope down to the Owen Sound valley below. The trail is rugged in areas, but showcases a spectacular range of flora, fauna and rock formations.

Access the trail from the south end of 7th Avenue East where the pavement ends. From the trail head on the east side of the street, walk a short 75 metres and turn right onto the Palisades Side Trail, marked with blue blazes. The trail climbs to an intersection with the Bruce Trail; turn left to complete a shorter loop back to the trail head, or continue on the Palisades Side Trail south, where it meets the main, trail again. Turn left to continue the Palisades loop, heading uphill over rocky terrain to a spectacular canyon with cliffs towering over you on both sides. You can reach the summit of the escarpment – the Raven's Nest – by taking a short side trail to the lookout.

Back on the main trail heading north keep your eyes open for an unmarked, narrow opening in the cliff face on your right. It leads to the "Devil's Playhouse," an enclave with rock "benches" and an overhang serving as a roof -- one of nature's many wonders on this loop.

The trail continues north to the Harrison Park Side Trail on your left; follow the blue blazes back to the trail head.





JONES FALLS
CONSERVATION AREA

Distance: 6 km of looped trails
Difficulty: Varied

The Pottawatomi River cascades 12 metres over the escarpment at Jones Falls, just west of Owen Sound. The trail cuts through large clusters of White Trillium in the spring and leads to a wonderful view of the surrounding lowlands. Cross the bridge for the best views, but watch your footing on the rocky terrain. Parking available at the Grey-Bruce Visitor Centre on Highway 6.

HIBOU
CONSERVATION AREA

Distance: 4.5 km of looped trails
Difficulty: Easy

The Hibou Conservation Area sports a natural, sandy beach and 4.5 kilometres of gentle, flat trails and boardwalks. Enjoy the 1.2-km Point Loop on the waterfront or the Main Trail, on the other side of the road. Park at the trail head on County Road 15 a short drive east of Owen Sound. Also accessible by bike via the Tom Thomson Trail. Open year-round, with snowshoeing and cross-country skiing in winter. Nominal parking fee in peak season.

INDIAN FALLS
CONSERVATION AREA

Distance: .7 km **Difficulty:** Challenging

The 20-minute hike along Indian Creek is vigorous, with steep hills and rocky terrain, but you are rewarded with sheer beauty when you reach Indian Falls, a 15-metre bridal veil falls at the end. The horseshoe-shaped waterfall is similar in formation to Niagara Falls. Parking available at the trail head off County Road 1 north of Owen Sound. Trail not maintained in winter.

RAIL TRAILS

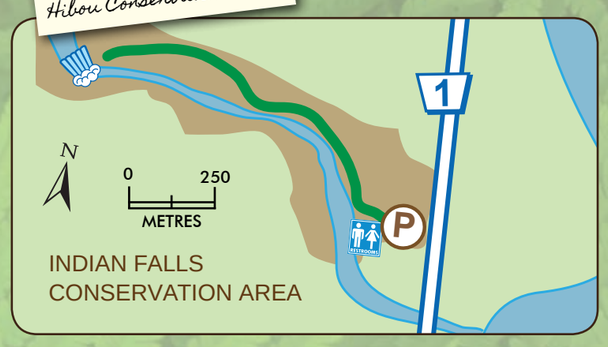
Distance: Various **Difficulty:** Moderate

The Georgian Bluffs Trail and the CP Rail Trail are two former railway trails open to the public. The hard-packed dirt and gravel trails are used primarily by off-road cyclists and snowmobilers. Access the Georgian Bluffs Trail from County Road 1 just north of the Georgian Shores Marina, where it continues 16 kilometres through scenic farmland to Park Head. The CP Rail Trail is 77 kilometres long, with coarse gravel in the southern sections.

INGLIS FALLS
CONSERVATION AREA

Distance: 7.4km of looped trails
Difficulty: Varied - Easy to Difficult

Severals trails fan out from Inglis Falls, the most popular waterfall in the region, with linkages to Harrison Park, West Rocks, Jones Falls and the city's Centennial Tower. The Bruce Trail is the main artery with side trails offering shorter, looped hikes within the Inglis Falls Conservation Area. Features include more than 20 species of ferns, bird watching, glacial potholes and an expansive view of the Owen Sound valley and harbour. Salmon and trout spawn in the Sydenham River below. Open year-round for hiking, snowshoeing and cross-country skiing with a nominal parking fee. Access off Inglis Falls Road, north of Country Road 18.



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OWEN SOUND TRAILS NETWORK

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OWEN SOUND TRAILS NETWORK

LEGEND

- Trail Kiosk
- Washrooms
- Parking
- Campground
- Boat Launch
- Parks & Recreational Land
- Grey Sauble Conservation Land
- Grey County Forests Land
- Waterfall
- Lookout Point
- Salmon Tour Viewing
- Paddle Access
- Skateboard Park
- Visitor Information
- Bridge

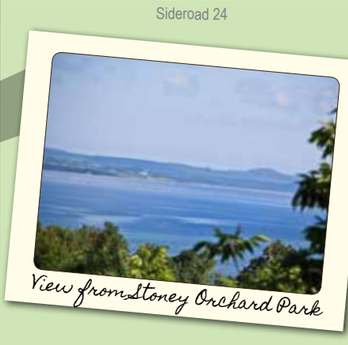
TRAILS

- Bruce Trail
- Bruce Side Trail
- Grey Sauble Conservation Trails
- Rail Trail
- City of Owen Sound Trails
- Catwalks & Connector Paths
- Derby Forest Trails
- Tom Thomson Trail
- Featured Cycling Route
- Featured Hiking Routes

OWEN SOUND TRAILS link to key attractions throughout and near the city, such as the Centennial Lookout Tower, Black History Cairn, Weavers Creek Falls, Inglis Falls and Jones Falls Conservation Areas, Harrison Park and Greenwood Cemetery, the burial ground of three Victoria Cross winners and many of the city's luminaries. The very short trails on the maps show pedestrian links between city streets, the so-called "catwalks" of Owen Sound that offer short-cuts through the rocky escarpment. Whatever your mode of transport, enjoy and respect our public trails.


Indian Falls


Waterfront Trail


View from Stoney Orchard Park

WATERFRONT TRAIL

Distance: 3km Difficulty: Easy

Explore Owen Sound's harbour along this 3-kilometre trail that stretches from Kelso Beach Park to the city's East Boat Launch, with historic interpretive plaques along the way. The trail passes by the Visitor Information Centre, the Owen Sound Marine & Rail Museum and the Harry Lumley Bayshore Community Centre, gardens, playground and beach. Cyclists can continue along the Tom Thomson Trail to the east or the Georgian Bluffs Rail Trail beyond Kelso Beach Park to the west. Kelso Beach has a playground and splash pad for youngsters. The Waterfront Trail is not maintained in winter.

STONEY ORCHARD PARK

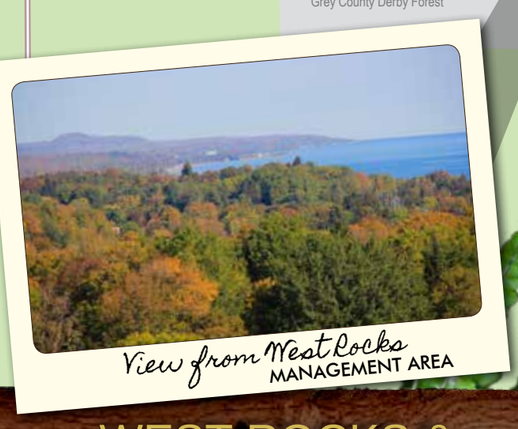
Distance: 2km looped trails Difficulty: Easy

Stoney Orchard Park offers access to kilometres of flat, wide stone dust trails accessible to all recreational users. Along the western edge, marvel at the cliff-top views of Georgian Bay below. The trail system links with quiet city streets and paths to offer access to a number of other areas, including the Kiwanis Soccer Complex, the Tom Thomson Trail, the Harbourfront Trail, Heritage Place Mall, the Julie McArthur Regional Recreation Centre and downtown Owen Sound. Parking available off 23rd Ave. East near Ecole St. Dominique Savio. Open all seasons.

TOM THOMSON TRAIL

Distance: 43.4 km Difficulty: Easy to Challenging

Named after the iconic Canadian painter Tom Thomson, this recreational cycling trail leads from Owen Sound to Leith, the small village that Thomson called home during his childhood years, and the place he is now buried. The Hibou Conservation Area and trails are just south of the village. The Tom Thomson Trail continues on to Meaford, where it connects with the Georgian Trail to Collingwood.


View from West Rocks MANAGEMENT AREA

WEST ROCKS & DERBY FOREST TRAILS

Distance: 13km **Difficulty:** Moderate

The West Rocks trail system consists of the Bruce Trail, offering spectacular views of the City and beyond from the western bluffs, and the Derby Forest trails that loop behind the main trail and are often used by off-road cyclists. A feature of the West Rocks trail is the former limestone quarry that provided the foundation of many historic homes in Owen Sound. You can access the West Rocks Trails on foot at 7th Street West and 7th Avenue West.

CATWALKS & PATHS

The City of Owen Sound lies in a river valley carved deep into the Niagara Escarpment, which is hilly itself, and that presents challenges in terms of getting around. The solution: pedestrian "catwalks" or paths linking streets to one another. Owen Sound has many of these short-cuts, some iron stairways (maintenance-free in winter), and some paved pathways. Most are steep and not for the faint of heart.

FEATURED CYCLE ROUTE

(HIGHLIGHTED ON THE MAP)

Distance: 21km

Difficulty:
Moderate to challenging

There are numerous cycling routes in and around Owen Sound, for both road riders and those who prefer to hit the trail. Here is a route that incorporates both roads and trails, urban and rural scenery, forest paths and harbour views. The Keeling Side Trail near Inglis Falls is rugged and not suitable for road bikes. The route can be started at any point, but keep in mind there are steep hills heading south along the Nine Bends Trail and south on Inglis Falls Road towards the falls. The CP Rail Trail from Rockford to Owen Sound Harbour has a nice downhill grade. Parking and washrooms are available at Inglis Falls and the Bayshore Community Centre.


Inglis Falls

List of Figures

BUILDING 1								
TYPE (B) GFA & SUITE DATA CHART					TOTAL DEDUCTIONS - TYPE B		NET TSA - TYPE B		EFFICIENCY
LEVEL	# SUITES	# BEDROOMS	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	
Level 1	8	16	1001.16 m²	10,776.40 SF	117.43 m²	1,263.99 SF	883.73 m²	9,512.41 SF	88.27%
Level 2	8	16	985.25 m²	10,605.18 SF	66.85 m²	719.59 SF	918.40 m²	9,885.59 SF	93.21%
Level 3	8	16	983.17 m²	10,582.80 SF	66.85 m²	719.59 SF	916.32 m²	9,863.22 SF	93.20%
Level 4	8	16	972.87 m²	10,471.85 SF	66.85 m²	719.59 SF	906.02 m²	9,752.27 SF	93.13%
ROOF	0	0	8.82 m²	94.90 SF	8.82 m²	94.90 SF	0	0	0%
TOTAL	32	64	3951.27 m²	42,531.13 SF	326.80 m²	3,517.65 SF	3624.47 m²	39,013.48 SF	91.73%

BUILDING 2								
TYPE (A) GFA & SUITE DATA CHART					TOTAL DEDUCTIONS - TYPE A		NET TSA - TYPE A		EFFICIENCY
LEVEL	# SUITES	# BEDROOMS	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	
Level 1	10	20	1248.38 m²	13,437.49 SF	131.03 m²	1,410.40 SF	1117.35 m²	12,027.09 SF	89.50%
Level 2	10	20	1232.36 m²	13,265.04 SF	81.58 m²	878.10 SF	1150.79 m²	12,386.95 SF	93.38%
Level 3	10	20	1229.14 m²	13,230.33 SF	81.58 m²	878.10 SF	1147.56 m²	12,352.24 SF	93.36%
Level 4	10	20	1217.58 m²	13,105.87 SF	81.58 m²	878.10 SF	1136.00 m²	12,227.78 SF	93.30%
ROOF	0	0	8.82 m²	94.91 SF	8.82 m²	94.91 SF	0	0	0%
TOTAL	40	80	4936.28 m²	53,133.65 SF	384.58 m²	4,139.60 SF	4551.70 m²	48,994.05 SF	92.21%

BUILDING 3								
TYPE (A) GFA & SUITE DATA CHART					TOTAL DEDUCTIONS - TYPE A		NET TSA - TYPE A		EFFICIENCY
LEVEL	# SUITES	# BEDROOMS	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	
Level 1	10	20	1248.38 m²	13,437.49 SF	131.03 m²	1,410.40 SF	1117.35 m²	12,027.09 SF	89.50%
Level 2	10	20	1232.36 m²	13,265.04 SF	81.58 m²	878.10 SF	1150.79 m²	12,386.95 SF	93.38%
Level 3	10	20	1229.14 m²	13,230.33 SF	81.58 m²	878.10 SF	1147.56 m²	12,352.24 SF	93.36%
Level 4	10	20	1217.58 m²	13,105.87 SF	81.58 m²	878.10 SF	1136.00 m²	12,227.78 SF	93.30%
ROOF	0	0	8.82 m²	94.91 SF	8.82 m²	94.91 SF	0	0	0%
TOTAL	40	80	4936.28 m²	53,133.65 SF	384.58 m²	4,139.60 SF	4551.70 m²	48,994.05 SF	92.21%

BUILDING 4								
TYPE (A) GFA & SUITE DATA CHART					TOTAL DEDUCTIONS - TYPE A		NET TSA - TYPE A		EFFICIENCY
LEVEL	# SUITES	# BEDROOMS	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	
Level 1	10	20	1248.38 m²	13,437.49 SF	131.03 m²	1,410.40 SF	1117.35 m²	12,027.09 SF	89.50%
Level 2	10	20	1232.36 m²	13,265.04 SF	81.58 m²	878.10 SF	1150.79 m²	12,386.95 SF	93.38%
Level 3	10	20	1229.14 m²	13,230.33 SF	81.58 m²	878.10 SF	1147.56 m²	12,352.24 SF	93.36%
Level 4	10	20	1217.58 m²	13,105.87 SF	81.58 m²	878.10 SF	1136.00 m²	12,227.78 SF	93.30%
ROOF	0	0	8.82 m²	94.91 SF	8.82 m²	94.91 SF	0	0	0%
TOTAL	40	80	4936.28 m²	53,133.65 SF	384.58 m²	4,139.60 SF	4551.70 m²	48,994.05 SF	92.21%

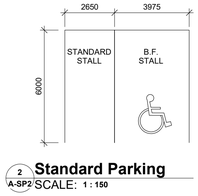
BUILDING 5								
TYPE (A) GFA & SUITE DATA CHART					TOTAL DEDUCTIONS - TYPE A		NET TSA - TYPE A		EFFICIENCY
LEVEL	# SUITES	# BEDROOMS	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	
Level 1	10	20	1248.38 m²	13,437.49 SF	131.03 m²	1,410.40 SF	1117.35 m²	12,027.09 SF	89.50%
Level 2	10	20	1232.36 m²	13,265.04 SF	81.58 m²	878.10 SF	1150.79 m²	12,386.95 SF	93.38%
Level 3	10	20	1229.14 m²	13,230.33 SF	81.58 m²	878.10 SF	1147.56 m²	12,352.24 SF	93.36%
Level 4	10	20	1217.58 m²	13,105.87 SF	81.58 m²	878.10 SF	1136.00 m²	12,227.78 SF	93.30%
ROOF	0	0	8.82 m²	94.91 SF	8.82 m²	94.91 SF	0	0	0%
TOTAL	40	80	4936.28 m²	53,133.65 SF	384.58 m²	4,139.60 SF	4551.70 m²	48,994.05 SF	92.21%

BUILDING 6								
TYPE (B) GFA & SUITE DATA CHART					TOTAL DEDUCTIONS - TYPE B		NET TSA - TYPE B		EFFICIENCY
LEVEL	# SUITES	# BEDROOMS	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	
Level 1	8	16	1001.16 m²	10,776.40 SF	117.43 m²	1,263.99 SF	883.73 m²	9,512.41 SF	88.27%
Level 2	8	16	985.25 m²	10,605.18 SF	66.85 m²	719.59 SF	918.40 m²	9,885.59 SF	93.21%
Level 3	8	16	983.17 m²	10,582.80 SF	66.85 m²	719.59 SF	916.32 m²	9,863.22 SF	93.20%
Level 4	8	16	972.87 m²	10,471.85 SF	66.85 m²	719.59 SF	906.02 m²	9,752.27 SF	93.13%
ROOF	0	0	8.82 m²	94.90 SF	8.82 m²	94.90 SF	0	0	0%
TOTAL	32	64	3951.27 m²	42,531.13 SF	326.80 m²	3,517.65 SF	3624.47 m²	39,013.48 SF	91.73%

TOTAL GFA DATA CHART					TOTAL DEDUCTIONS		NET TSA		
BUILDING NAME	# SUITES	# BEDROOMS	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	AREA(m²)	AREA (SF)	EFFICIENCY
BUILDING 1	32	64	3951.27 m²	42,531.13 SF	326.80 m²	3,517.65 SF	3624.47 m²	39,013.48 SF	91.73%
BUILDING 2	40	80	4936.28 m²	53,133.65 SF	384.58 m²	4,139.60 SF	4551.70 m²	48,994.05 SF	92.21%
BUILDING 3	40	80	4936.28 m²	53,133.65 SF	384.58 m²	4,139.60 SF	4551.70 m²	48,994.05 SF	92.21%
BUILDING 4	40	80	4936.28 m²	53,133.65 SF	384.58 m²	4,139.60 SF	4551.70 m²	48,994.05 SF	92.21%
BUILDING 5	40	80	4936.28 m²	53,133.65 SF	384.58 m²	4,139.60 SF	4551.70 m²	48,994.05 SF	92.21%
BUILDING 6	32	64	3951.27 m²	42,531.13 SF	326.80 m²	3,517.65 SF	3624.47 m²	39,013.48 SF	91.73%
AMENITY	0	0	383.25	4125.27	383.25	4125.27	0	0	0%
TOTAL	224	448	28,030.91 m²	306,224.1 SF	2,992.63 m²	32,212.23 SF	25,455.74 m²	274,000.3 SF	90.81%

SITE PLAN LEGEND

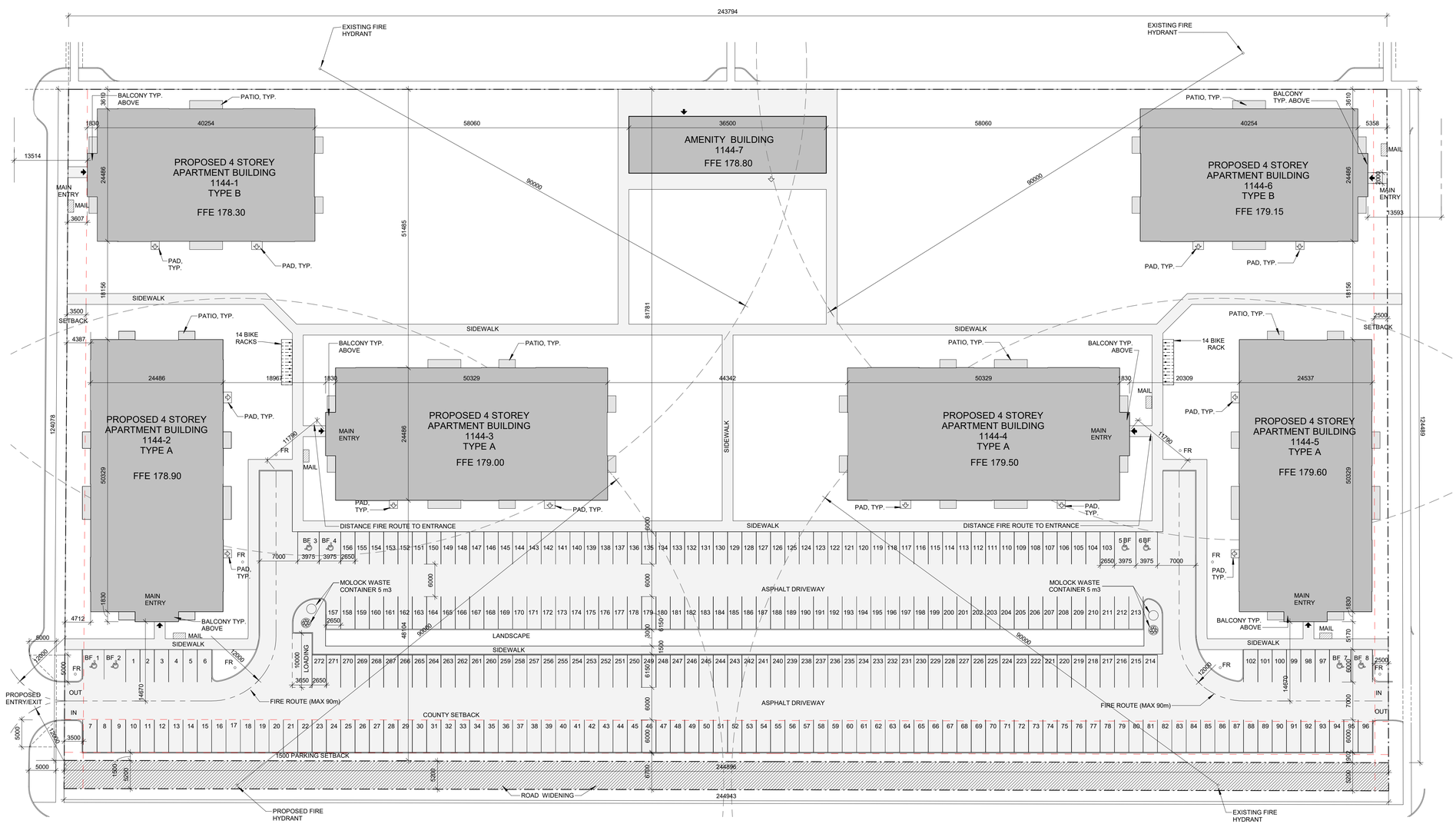
- PROPERTY BOUNDARIES
- PRINCIPAL FIRE FIGHTERS ENTRANCE
- MAN DOOR LOCATION
- FIRE — FIRE ROUTE
- HYD — FIRE HYDRANT
- FDC — FIRE DEPARTMENT CONNECTION
- REQUIRED PROPERTY SETBACKS
- LS — LIGHT STANDARD
- FR — FIRE ROUTE SIGN
- B — BOLLARD
- BL — LED BOLLARD
- CATCH BASIN
- BR — BIKE RACK (POST AND HOOP)
- W — WATER METER ROOM
- G — GARBAGE ROOM
- M — MECHANICAL ROOM
- E — ELECTRICAL ROOM



2 Standard Parking
A-SP2 SCALE: 1 : 150

GENERAL NOTES

1. LEGAL DESCRIPTION:
2. TREE PROTECTION WILL REMAIN ON SITE FOR THE DURATION OF CONSTRUCTION.
3. PARKING AND SITE LIGHTING FIXTURES WILL BE FULL CUT-OF DIRECTED AWAY FROM ABUTTING PROPERTIES WITH NO GLARE.
4. ALL EXCESS SNOW REMOVAL TO BE PRIVATELY REMOVED OFF SITE.
5. HANDICAP ACCESSIBLE ENTRANCE TO BE LOCATED AT THE FRONT ENTRANCE.
6. BICYCLE STORAGE AREA WILL BE PROVIDED OUTSIDE THE BUILDING.
7. ALL LEVELS ARE BARRIER FREE ACCESSIBLE.
8. SITE PLAN, SITE GRADING AND LANDSCAPE PLANS HAVE BEEN COORDINATED.
9. ALL MECHANICAL EQUIPMENT TO BE FULLY SCREENED FROM PUBLIC VIEW. ROOF TOP UNITS SHALL NOT BE VISIBLE FROM PUBLIC REALM OR RESIDENTIAL PROPERTIES AND ALL VENTING EQUIPMENT SHALL BE ARCHITECTURALLY INTEGRATED INTO BUILDING FACADE WITH NO EXTERNAL UNITS LOCATED ON BUILDING WALLS.
10. GARBAGE WILL BE STORED OUTSIDE FOR PRIVATE PICKUP. GARBAGE WILL BE COLLECTED BY MOLOCK WASTER SYSTEM ON SITE.
11. EXTERIOR WALKS THAT FORM PART OF A BARRIER-FREE PATH OF TRAVEL SHALL HAVE A PERMANENT, FIRM AND SLIP-RESISTANT SURFACE AND A TACTILE ATTENTION INDICATOR THAT IS LOCATED TO IDENTIFY AN ENTRY INTO A VEHICULAR ROUTE OR AREA WHERE NO CURBS OR ANY OTHER ELEMENT SEPARATE THE VEHICULAR ROUTE OR AREA FROM A PEDESTRIAN ROUTE.



1 Site Plan
A-SP2 SCALE: 1 : 400

IMPORTANT

NO.	DATE	REVISED FOR	CH	BY

REVISIONS:

NO.	DATE	ISSUED FOR	CH	BY
B	2020.XX.XX	SPA		
A	2020.07.07	PRE-CONSULTATION		

ISSUES:

STAMP:

TN

ARCHITECT:

CONSULTANT:

PPC PREMIER PROJECT CONSULTANTS
201-2085 Shirley Dr. Kitchener, Ontario
Tel: 519-745 6417
Fax: 519-745 1271

KEY PLAN:

PROJECT:

HANSA FINANCIAL & PROPERTY MANAGEMENT Inc.

RESIDENTIAL RENTAL APARTMENT COMPLEX

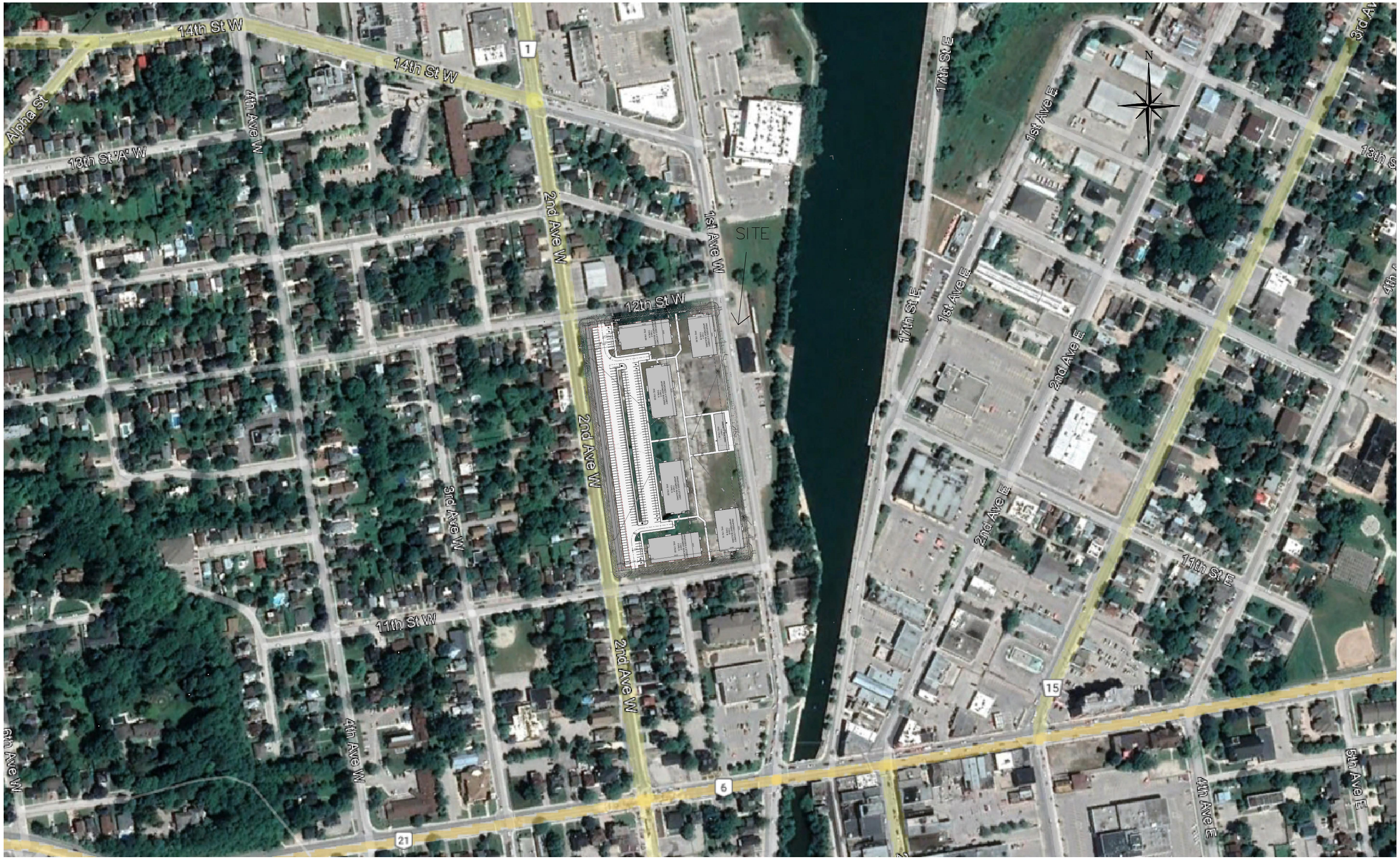
1144 1st Street West, Owensound, Ontario

DRAWING:

SITE PLAN

DRAWN:	CHECKED:	APPROVED:
KG/AZ	DC	AW
DATE (MM.DD.YY):	SCALE:	JOB NUMBER:
06.01.2020	As indicated	08030P
DRAWING NUMBER:		REVISION NUMBER:
A-SP2		

C:\Users\kguo\Documents\Revit Local\08030P - Site Plan_KGuoEZTHL.rvt



Project
1144 1ST AVENUE WEST MID-RISE
CITY OF OWEN SOUND

Drawing
SITE LOCATION PLAN

CROZIER CONSULTING ENGINEERS
Admiral Building
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Collingwood, ON, L9Y 1A1
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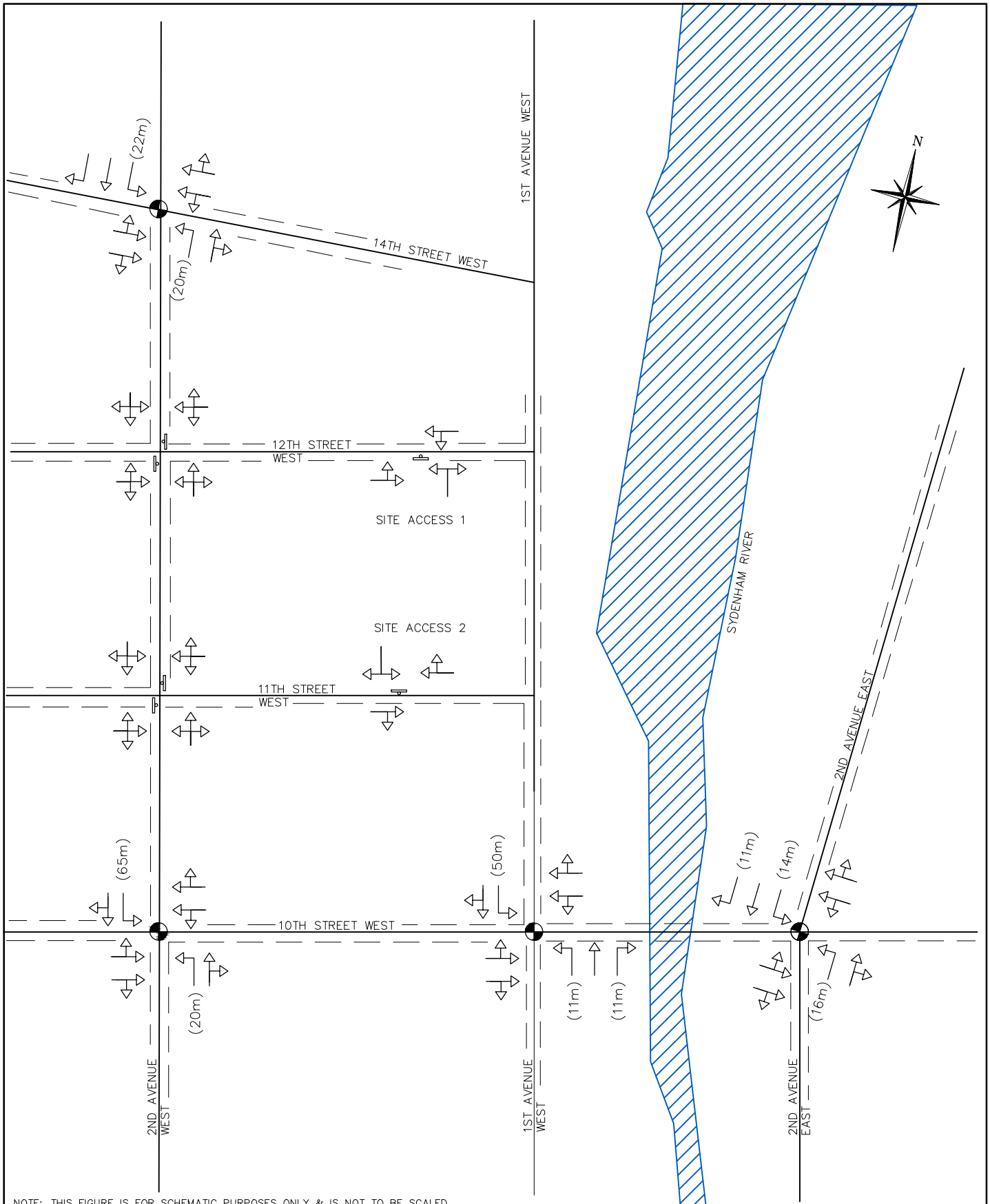
Drawn By	T.K.	Design By	E.H.	Project	2141-6058
Scale	N.T.S.	Date	NOV/01/2021	Check By	E.H.	Drawing	FIG.02



NOTE: THIS FIGURE IS FOR SCHEMATIC PURPOSES ONLY & IS NOT TO BE SCALED.
OBSERVED WBL VOLUMES AT 1ST STRRET WEST AND 10TH STREET HAVE BEEN INCLUDED BUT SITE GENERATED TRAFFIC WAS NOT ASSIGNED THIS ILLEGAL MANEUVERER.

Legend

- SIGNAL CONTROL
- STOP CONTROL
- (#) STORAGE LENGTH
- PEDESTRIAN WALK

Project

PROJECT TOWN

Drawing

SITE LOCATION

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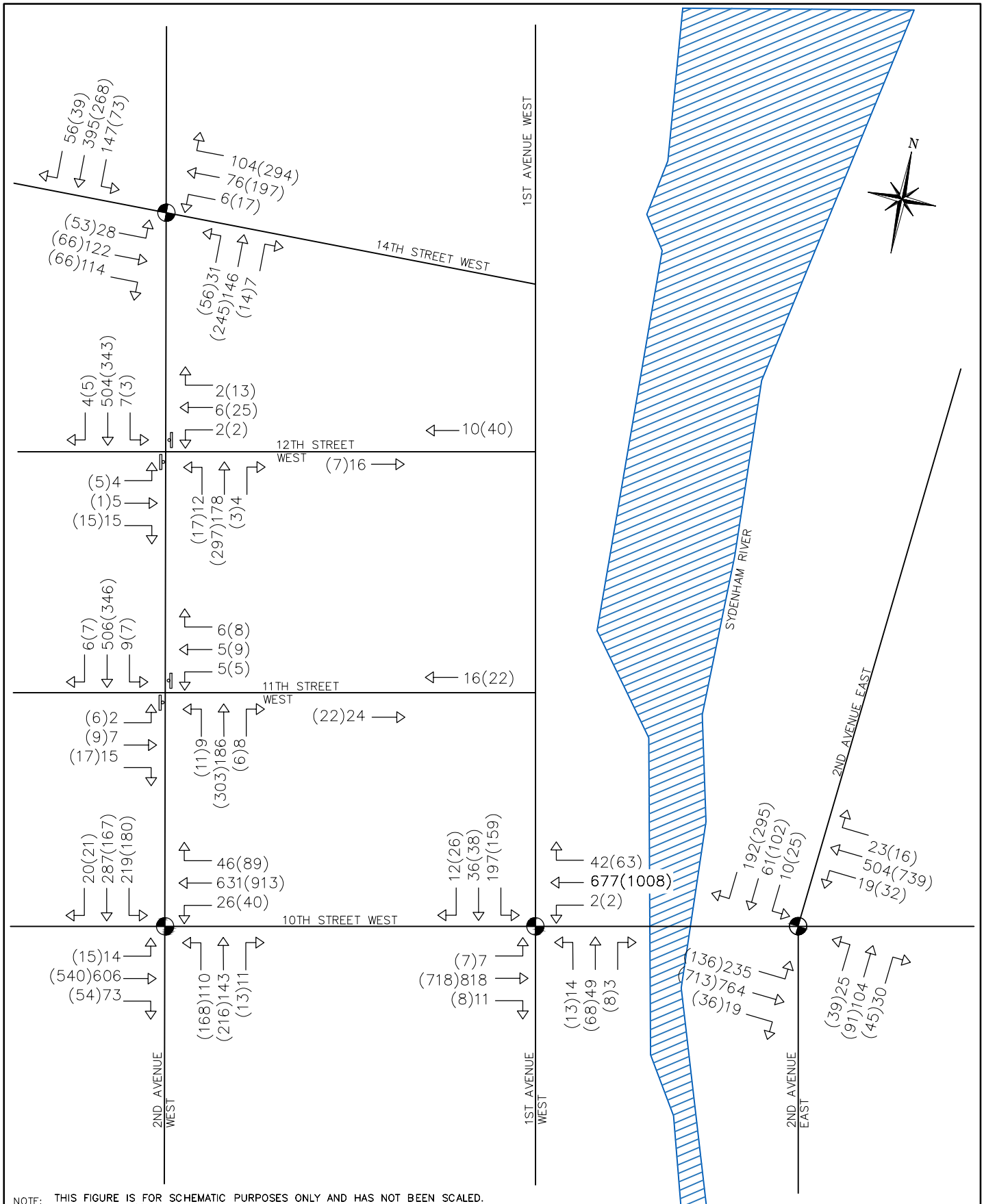
Scale	Date	Check By	Drawing
N.T.S.	NOV/01/2021	E.H.	FIG.03



NOTE: THIS FIGURE IS FOR SCHEMATIC PURPOSES ONLY AND HAS NOT BEEN SCALED.
THROUGH VOLUMES ON 2ND AVENUE WEST AND 10TH STREET HAVE BEEN BALANCED

Legend

- SIGNAL CONTROL
- STOP CONTROL
- XX(YY) WEEKDAY A.M. (WEEKDAY P.M.) PEAK HOUR VOLUMES

Project: 1144 1ST AVENUE WEST MID-RISE
CITY OF OWEN SOUND

Drawing: 2021 TRAFFIC VOLUMES

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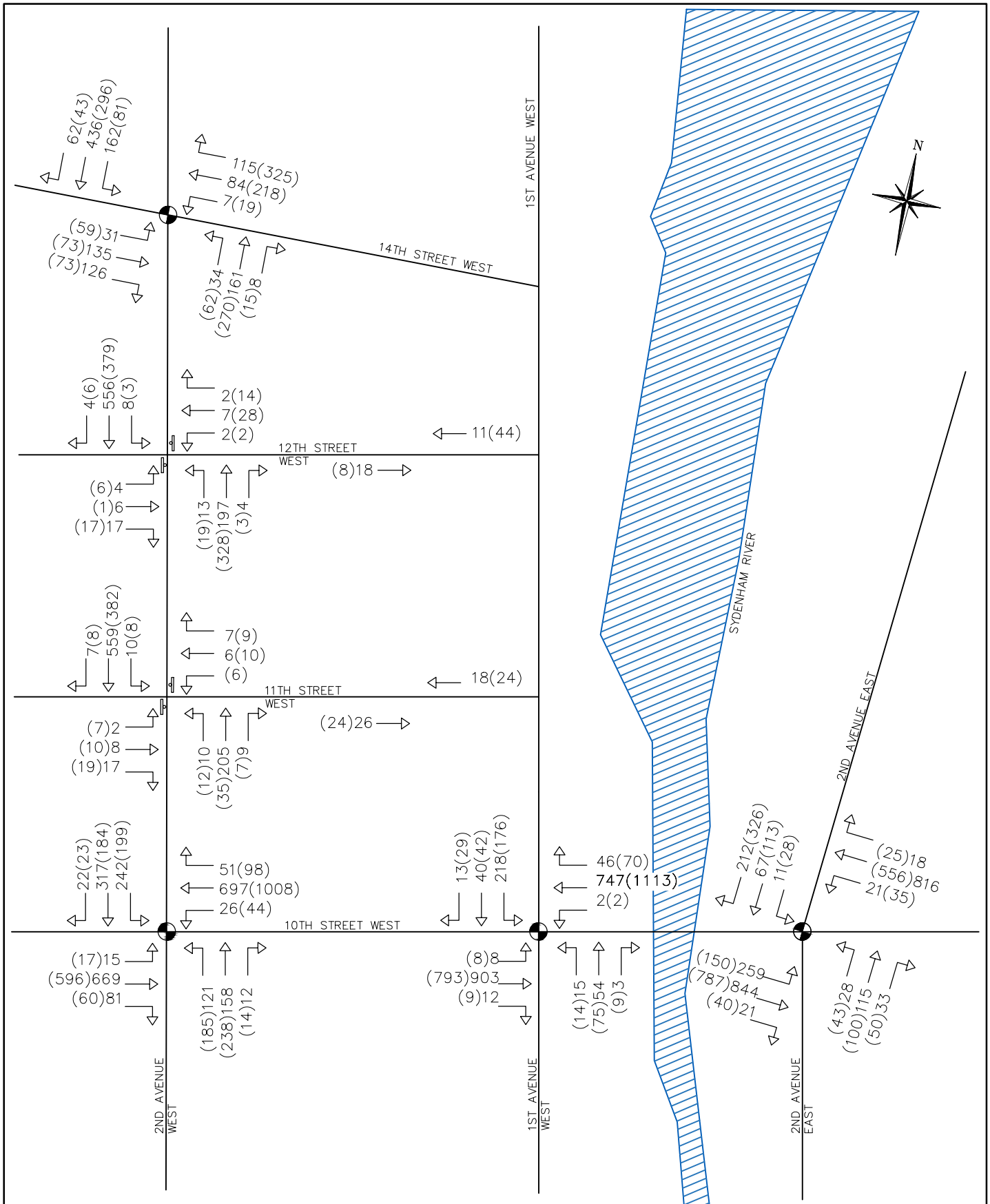
Scale	Date	Check By	Drawing
N.T.S.	NOV/01/2021	E.H.	FIG.04



NOTE: THIS FIGURE IS FOR SCHEMATIC PURPOSES ONLY & IS NOT TO BE SCALED.

Legend

- SIGNAL CONTROL
- STOP CONTROL
- XX(YY) WEEKDAY A.M. (WEEKDAY P.M.) PEAK HOUR VOLUMES

Project: 1144 1ST AVENUE WEST MID-RISE
CITY OF OWEN SOUND

Drawing: FUTURE BACKGROUND 2026 TRAFFIC VOLUMES

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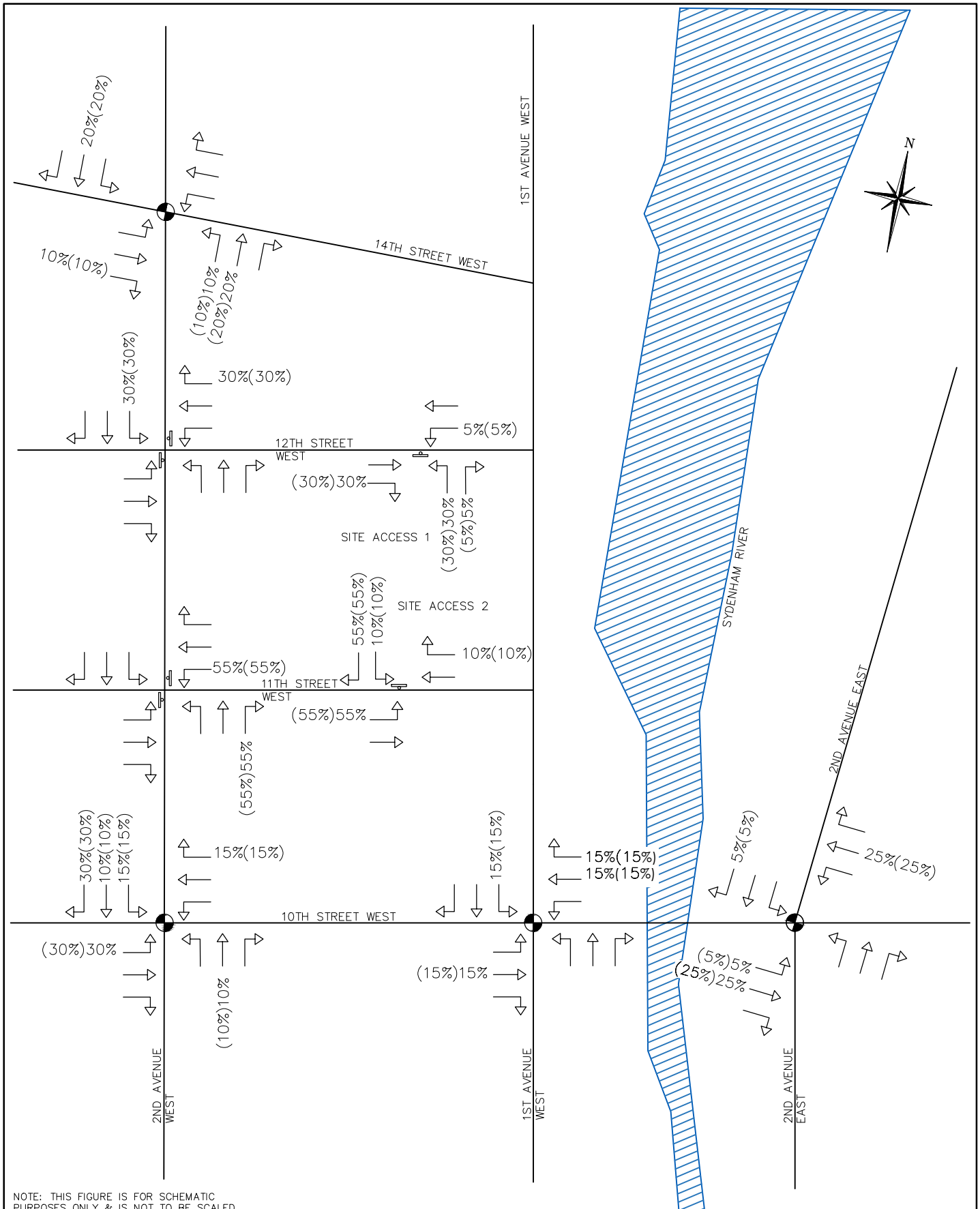
T.K.	E.H.	2141-6058

Scale	Date	Check By	Drawing
N.T.S.	NOV/01/2021	E.H.	FIG.05



NOTE: THIS FIGURE IS FOR SCHEMATIC PURPOSES ONLY & IS NOT TO BE SCALED.

Legend

- SIGNAL CONTROL
- STOP CONTROL
- XX%(YY%) WEEKDAY A.M. DISTRIBUTION (WEEKDAY P.M. DISTRIBUTION)

Project

1144 1ST AVENUE WEST MID-RISE
CITY OF OWEN SOUND

Drawing

TRIP DISTRIBUTION

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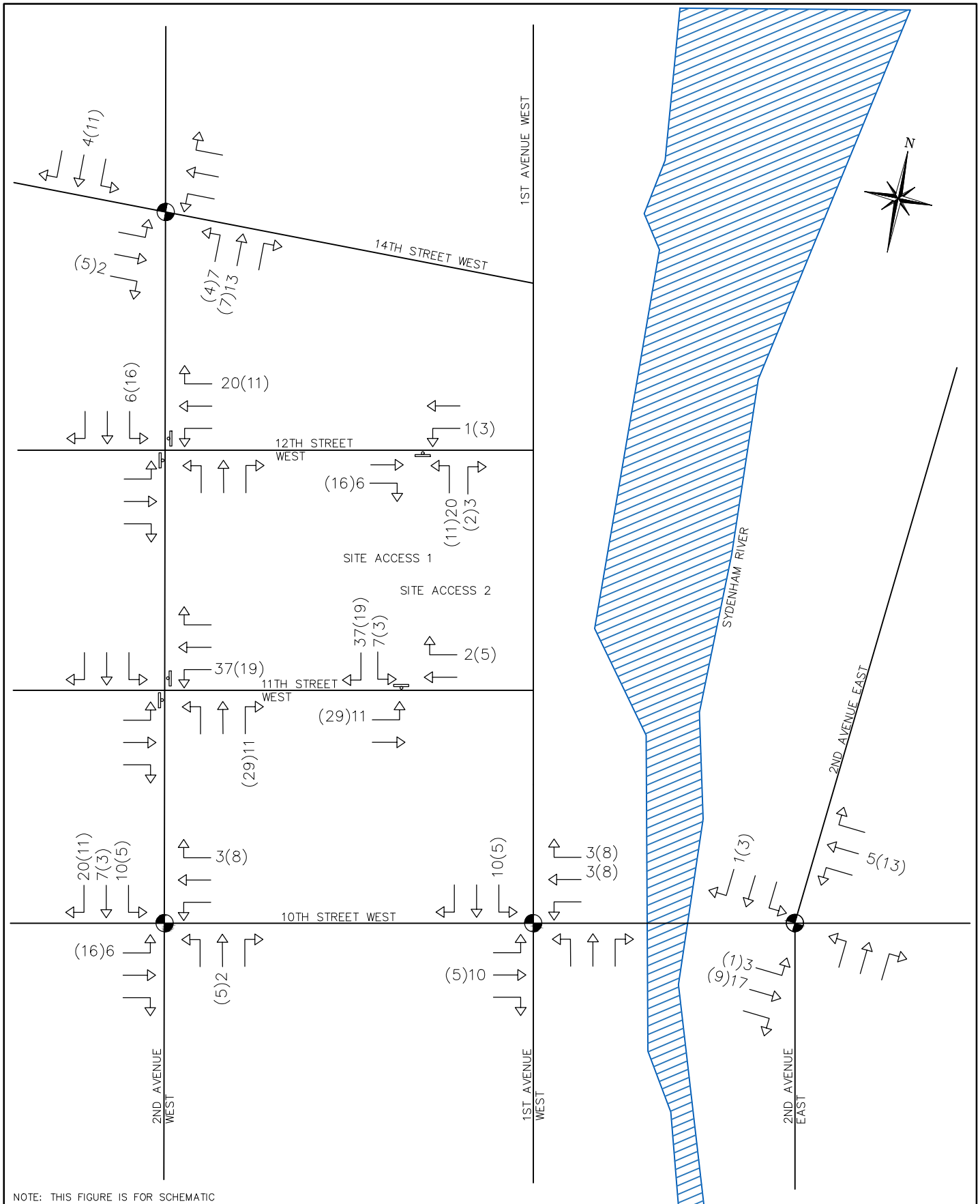
Drawn By	Design By	Project
T.K.	E.H.	2141-6058

Scale	Date	Check By	Drawing
N.T.S.	NOV/01/2021	E.H.	FIG.06



NOTE: THIS FIGURE IS FOR SCHEMATIC PURPOSES ONLY & IS NOT TO BE SCALED.

Legend

- SIGNAL CONTROL
- STOP CONTROL
- XX(YY) WEEKDAY A.M. (WEEKDAY P.M.) PEAK HOUR VOLUMES

Project: 1144 1ST AVENUE WEST MID-RISE
CITY OF OWEN SOUND

Drawing: TRIP ASSIGNMENT

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Drawn By	Design By	Project
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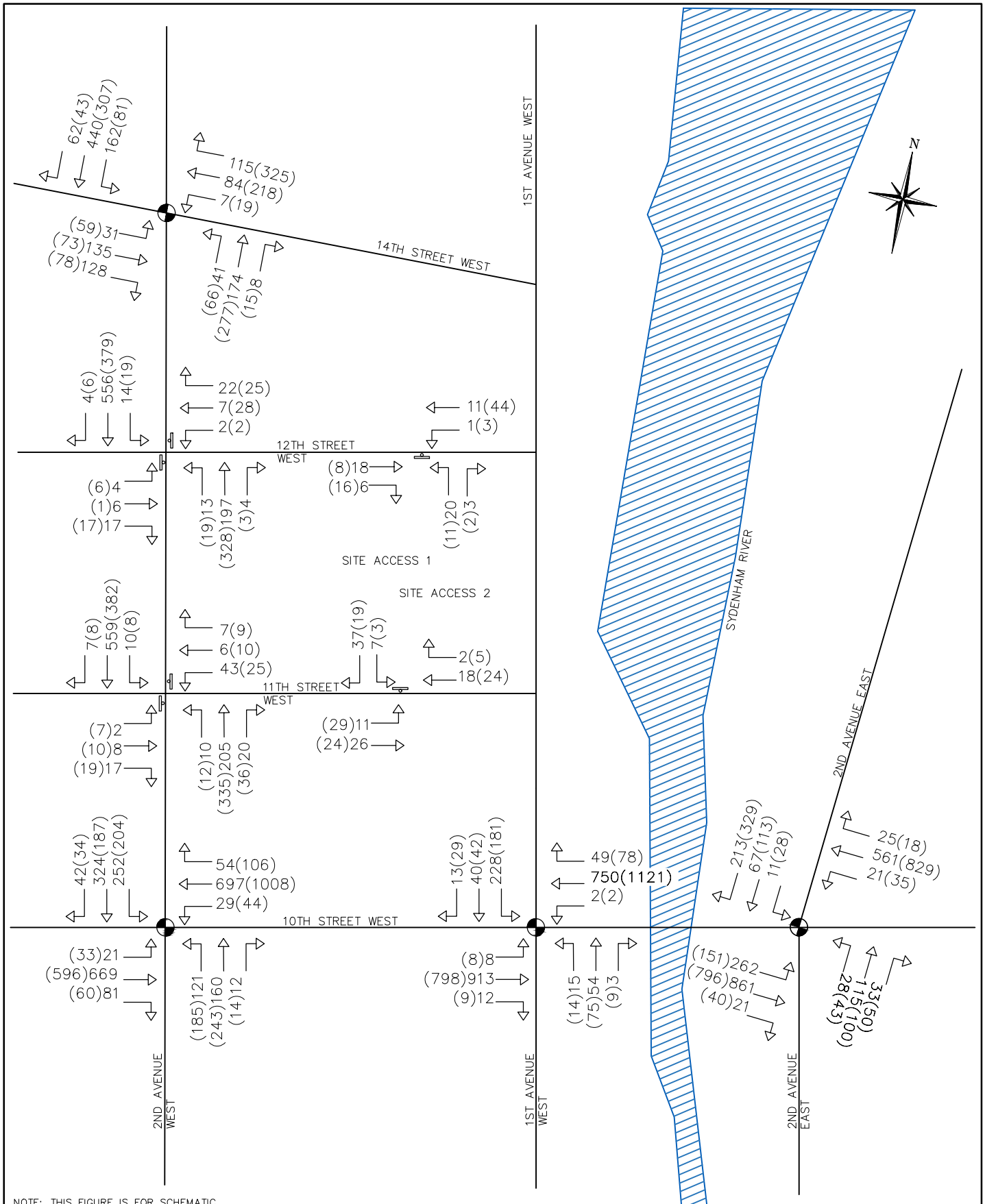
Scale	Date	Check By	Drawing
N.T.S.	NOV/01/2021	E.H.	FIG.07



NOTE: THIS FIGURE IS FOR SCHEMATIC PURPOSES ONLY & IS NOT TO BE SCALED.

Legend

- SIGNAL CONTROL
- STOP CONTROL
- XX(YY) WEEKDAY A.M. (WEEKDAY P.M.) PEAK HOUR VOLUMES

Project: 1144 1ST AVENUE WEST MID-RISE
CITY OF OWEN SOUND

Drawing: FUTURE TOTAL 2026 TRAFFIC VOLUMES

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Drawn By	Design By	Project	Scale	Date	Check By	Drawing
T.K.	E.H.	2141-6058	N.T.S.	NOV/01/2021	E.H.	FIG.08